

### 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

March 27, 2014

### WELL WORK PLUGGING PERMIT

### Plugging

This permit, API Well Number: 47-9100988, 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 penalities 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.

Operator's Well No: D. WILSON 4

Farm Name: ICG TYGART VALLEY, LLC

James Martin

API Well Number: 47-9100988

Permit Type: Plugging
Date Issued: 03/27/2014

### **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 February 12	, 2014
2) Operator's Well No. D. Wilson #4	
3) API Well No. 47-9	- 00988

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

### APPLICATION FOR A PERMIT TO PLUG AND ABANDON

	(If "Gas, Production	or Underground storage	Deep/ Shallow X
5)	Location: Elevation 1590	Watershed Three	Fork Creek
3/	District Knottsville		Quadrangle Thornton (638)
	District Monovino	Country rayion	Quadrangie_memen (ess)
6)	Well Operator ICG Tygart Valley, LLC	7) Designated Ac	gent Charles E. Duckworth
	Address 2708 Cranberry Square		cess 1200 Tygart Drive
	Morgantown, WV 26508	I a E	Grafton, WV 26354
8)	Oil and Gas Inspector to be notifi		tractor stal Drilling East, LLC
	Address P.O. Box 157		130 Meadows Ridge Road
	Volga, WV 26238		Mt. Morris, PA 15349
0)	Work Order: The work order for the SEE EXHIBIT NOS. 1 and 2	ne manner of plugging t	chis well is as follows:
		ne manner of plugging t	chis well is as follows:
		ne manner of plugging t	chis well is as follows:

### EXHIBIT NO. 1

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".

03/28/2014

ELEVATION 1590, FEET

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 34" 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. NOT NECESSARY
  - 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. Cut 41/2" CASING AT & 3191' AND TOOK WITH 41/2" CASING LOAD WIGH.
- 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' with 160 sacks of Class A Cement with a gas blocker additive. Circulate hole, condition mud, T.O.H.
- 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
- 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'. 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'.
- Day 9 Continue to clean hole with 7.7/8" bit to top of remaining 4 1/2" casing at 3,185'. Circulate hole. T.O.H with 7 7/8" bit. T.I.H with open ended 3 1/2" drill pipe.
- Day 10 Cement hole from 3,100 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' Received 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'. 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 surfage 28/2014

INSERT

ICG Tygart Valley, LLC

API 47-091-00988 Plugging Methodology

D. Wilson 4

Gel - Fresh water mixed with a minimum of 6% Bentonite (by weight)

Cement Plug - Must be a minimum of 100 feet of Class A Cement with no more than 3% Calcium Chloride and no other additives.

- On Day 4 Cut 4 ½" casing above the top of cement (TOC) which is estimated at 3191'. Trip out of hole (TOOH) with 4 ½" casing. Load hole with gel as you are TOOH with 4 ½" casing. If you are concerned about the wellbore sloughing, then increase the weight of your Gel by adding more Bentonite, making sure the density of the cement will be able to displace the Gel.
- On Day 5 (T. I. H.) with 2 3/8" drill pipe to TD (4596'). Cement hole with Class A cement with no more than 3% Calcium Chloride from 4596' to 3100', a point at least 50' above the casing cut. Cement may include gas blocker if it is on cementing company's approved list. (T. O. O. H.).
- On Day 6 T. I. H. with 3 ½" bit and tag top of cement plug. If plug is not at least 50 feet above the casing cut, re-cement. Make sure hole has gel in it to a point inside the 8 5/8" casing. After plug has set then, T. I. H. with 7 7/8" bit and clean hole to top of 4 ½" casing.
- On Day 7 After open hole is clean, circulate for an hour and TOOH with 7 7/8" bit. TIH with open ended drill pipe. Proceed to Day 10 plugging plan until plugging procedure is completed.

### EXHIBIT NO. 2

### CLEANOUT/PLUGGING PLAN

• Day 15 – Cement hole from 1,031 to surface using 180 sacks of Class A cement with 4% gel and 120 sacks of Thixatropic cement with green dye. Clean out mud tank. Rig down equipment and prepare to move rig to next site.

Received

·. AP	I NUMBE	R: <u>C* 0988 - Taylor</u> R: <u>96025</u>
DATE: 8/28/96		
ZONES STIMULATED  NO. OF STAGES S  1) Ben son  2) Ciley  S) Squechley  F  A  C		SURFACE CASING  8 1/8 "@ 1106 FT.  2.8 SKS. CEMENT
PERFORATIONS:		
13 HOLES FROM 4429 TO 4431 13 4199 4216 16 3220 3244  POTENTIAL-ZONES	P R O D U C F - O Z	2590 FT. CEMENT TOP
	FJB-ZG	PACKER INFORMATION:  TYPE
CASED HOLE TD 4544 FT. LOGGERS TD 4598 FT. DRILLERS TD 4596 FT.		PRODUCTION CASING  4½ CSG. @ 4572 FOIVED  300 SKS. CEMENT

### D. Wilson #4

STAGE	FORMATION		PERFS		80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)	
lst	Benson	13 (	44291	- 4431')	50	400	500	55	
2nd	Riley	13 (	4199'	- 4216')	50	400	500	55	
3rd	Speechley	16 (	3220'	- 3244')	50	400	500	55	
			WEL	L LOG		REMARKS:	FRESH	& SALT	
FORMATI	ON	I	OP FEE	r bottom fe		WATER, CO.			
KB - GL	6.64			0 10	3				
sand, s	hale, RR		1	0 1427					
Little	Lime		142			1/2" stre			
sand, s	hale		144			Coal 83'-	87', 8	62' - 864'	
Big Lim			146						
sand, s	hale		154			Coal 927'	- 930'		
Keener			154						
sand, s	hale		158				Z SIN C		
Big Inj			158			gas chk @	1594'	no show	
sand, s	hale		165						
Weir			175				52.50	10 mg	
sand, s	hale		180			gas chk @	1720'	no show	
Gantz	2024		191						
sand, s	hale		195						
50 ft	S. Const.		200						
sand, s	hale		206						
30 ft			206						
sand, s	hale		211						
4th	2 / 2 /		229						
sand, s	hale		249						
5th			254						
sand, s	hale		257						
Bayard	0.57		258						
sand, s			260				017/7		
Elizabe			276			gas chk @	24/4	no show	
sand, s			281			gas chk @	2662	no snow	
Speechl			292			gas chk @	3629	no snow	
sand, s			331			gas chk @	4005	no snow	
Balltow			334			11.0	105/1		
sand, s			367			gas chk @			
Bradfor			371			gas chk @	43//	no snow	
sand, s	nale		382			gas chk @	44/0	no snow	
Riley	1.1.		410			gas chk @	4230	no snow	
sand, s	naie		433			gas chk @			
Benson	hele.		441					s no show	
sand, s	nate		420	8 4596		Drillers	ID		
				4593		Logger TD			

Received



WR-35 RECEIVED 19-Dec-95 API # 47- 91-00988 WV Division of Protection State of West Virginia Division of Environmental Protection FEH 16 1996 Section of Oil and Gas Well Operator's Report of Well Work Fermitting Office of Oll & Gas. Operator Well No.: D. WILSON #4 Farm name: WILSON, DARREL N. ETAL. Elevation: 1,590.00 Quadrangle: THORNTON LOCATION: KNOTTSVILLE County: TAYLOR
3625 Feet South of 39 Deg. 20Min. 0 Sec.
7775 Feet West of 79 Deg. 57 Min. 30 Sec. District: Latitude: Longitude Company: PETROLEUM DEVELOPMENT COR 103 E. MAIN ST. - P.O. BOX 26 | Casing | Used in | Left BRIDGEPORT, WV 26330-0026 | & | Cement Fill Up Tubing | Drilling | in Well|Cu. Ft. Agent: ERIC STEARNS Size Inspector: PHILLIP TRACY 21' 21' 11 3/4" 12/26/95 Permit Issued: Well work Commenced: 01/04/96 Well work Completed: 01/11/96 1096 | 285 sks 8 5/8" 10961 Verbal Plugging Permission granted on: Rig Rotary Cable
Total Depth (feet)
Fresh water depths (ft) 4562 1 300 sks 4562 4 1/2" 60 Salt water depths (ft) n/a Is coal being mined in area (Y/N)?N Coal Depths (ft): 83-87; 862-864; 927-930 OPEN FLOW DATA Renson Pay zone depth (ft) 4429-4431

NS MCF/d Oil: Initial open flow 0 Bbl/c

223 MCF/d Final open flow 0 Bbl/c Producing formation Gas: Initial open flow Final open flow 223 MCF/d Final open flow 0
Time of open flow between initial and final tests 4 Bb1/d Hours 900 psig (surface pressure) after 72 Static rock Pressure

Second producing formation Riley Pay zone depth (ft)/199-4216

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

Final open flowco-mingled MCF/d Final open flow Time of open flow between initial and final tests

Speechley

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 08/20/20 WALL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

Static rock Pressure

Third producing formation\_

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PETROLEUM DEVELOPMENT CORP. Eric R. Stearns Date: February 8, 1996

psig (surface pressure) after

Final open flow

Pay zone depth (ft) 3220-3244

Bb1/d Hours

Hours

0 Ø

D. Wils	on #4								LOTE	NO.
STAGE	FORMATION		PE	RFS			80/100 SKS	20/40 SKS	GAL	N2 (MCF)
1st	Benson	13	(442	9' -	4431	)	50	400	500	55
2nd	Riley	13	(419	9' -	4216	)	50	400	500	55
			100				50	400	500	55
3rd	Speechley	16	(322	0	3244'		30		****	
			W	E L	L L	O G		REMARKS:		& SALT
FORMATI	ON		TOP	FEET	вотто	M FEE	T	WATER, CO	DAL, OII	L & GAS
KB - GI				0		10				
KD - GL	hale, RR			10		1427			5.25	
Little	I ime			1427		1440		1/2" str	eam H2O	G 60,
sand,	hale			1440		1468		Coal 83'	- 87',	862' - 864'
				1468		1545				
Big Lin	ne nbolo			1545		1547		Coal 927	'- 930'	
Keener	Silare			1547		1580				
sand,	abala			1580		1585			- A.E. M. C	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
				1585		1650		gas chk	a 1594'	no show
Big In	chale			1650		1757				
Weir	31.410			1757		1800			5 10223	
sand,	chale			1800	)	1911		gas chk	@ 1720	no show
Gantz	diazo			1911		1957				
sand,	chale			1957	,	2000				
50 ft	allaro			2000	)	2060				
sand,	shale			2060	)	2069				
30 ft	Siluzo			2069	)	2110				
sand,	chale			2110	)	2298				1
4th	Silvers			2298		2495				
sand,	shale			249	5	2540				
5th				2540		2574				
sand,	shale			257		2581				
Bayard				258		2602				
sand,				260		2768			0 21.74	no show
Elizab				276		2818		gas chk	0 2662	no show
sand,				281		2924		gas chk	0 3630	no show
Speech				292		3310		gas chk	a 4005	no show
sand,				331		3344		gas chk	@ 4003	no snow
Ballto				334		3675		and abk	a 4254	no show
sand,				367		3710		gas chk	@ 4377	no show
Bradfo				371		3820		gas chk	a 4470	no show
sand,	shale			382		4100		gas chk	@ 4596	no show
Riley				410		4334		gas chk	a TD no	show
sand,	shale			433		4417		gas chk	@ Coll:	ars no show
Benson	n.			441		4596		Driller	s TD	3-11-11-11
sand,	shale			420	U					
						4593	3	Logger	1.0	

WW-4A Revised 6-07

1) Date:	February 12,	2014		
<ol> <li>Operator's V</li> <li>Wilson # 4</li> </ol>	Well Numb	er		
3) API Well No	: 47 -	91	÷	00988

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

4)		ner(s) to be served:	w 5) (a)	Coal Operator		11/
	(a) Name	ICG Tygart Valley, LLC	VV	Name	CoalQuest Development, LLC	V
	Address	2708 Cranberry Square		Address	2708 Cranberry Square	
		Morgantown, West Virginia 2650	В		Morgantown, West Virginia 26508	
	(b) Name			(b) Coal Own	ner(s) with Declaration	
	Address			Name		
				Address		
	(c) Name			Name		
	Address			Address		
3) 1	nspector	Kenneth Greynolds		(c) Coal Less	see with Declaration	
	Address	613 Broad Run Road		Name		
		Jane Lew, West Virginia 26378		Address	0	
	Telephone	(304) 206-6613				

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

- 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
By: Charles E. Duckworth

Its: Designated Agent
Address Morgantown, West Virginia 26508
Telephone (304) 594-1616

Subscribed and sworn before me this 18 day of Fiscand Notative Public Inomes Gregory New Morgantown, West Virginia December 22, 2019

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 <a href="mailto:depprivacyoffier@wv.gov">depprivacyoffier@wv.gov</a>.

### 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

olene J. Meymis

Assistant Secretary of the Company

James E. Florczak

Vice President and Treasurer

### SURFACE OWNER WAIVER

Operator's Well Number

D. Wilson #4

### 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:

- 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 objection to a permit being iss FOR EXECUTION BY A NATETC.		planned wo		naterials, and I have no
2.00	Date	Name	ICG Tygart Valley, LLC	
Signature		By Its	Greg Nair Attenny - 1 - Suct	Date 2/13
				03/28/2014

Signature

Date

API No.	47-91-00988	
Farm Name	Darrel N. Wilson et al	
Well No.	D. Wilson # 4	$\equiv$

### 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 then 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

	1117	
has examined this proposed pluggin	work order. The undersigned has no objection to the work proposed to well operator has complied with all applicable requirements of the Wellations.	be
Date: 2/18/14	CoalQuest Development, LLC	
	By: Greg Nair	
	Its Power of Attorney	

703/28/2014

WW-9 Rev. 5/08

	Page		of	
API Number 47	_ 91	116	00988	
Operator's Well 1	No. D. Wilse	on # 4		

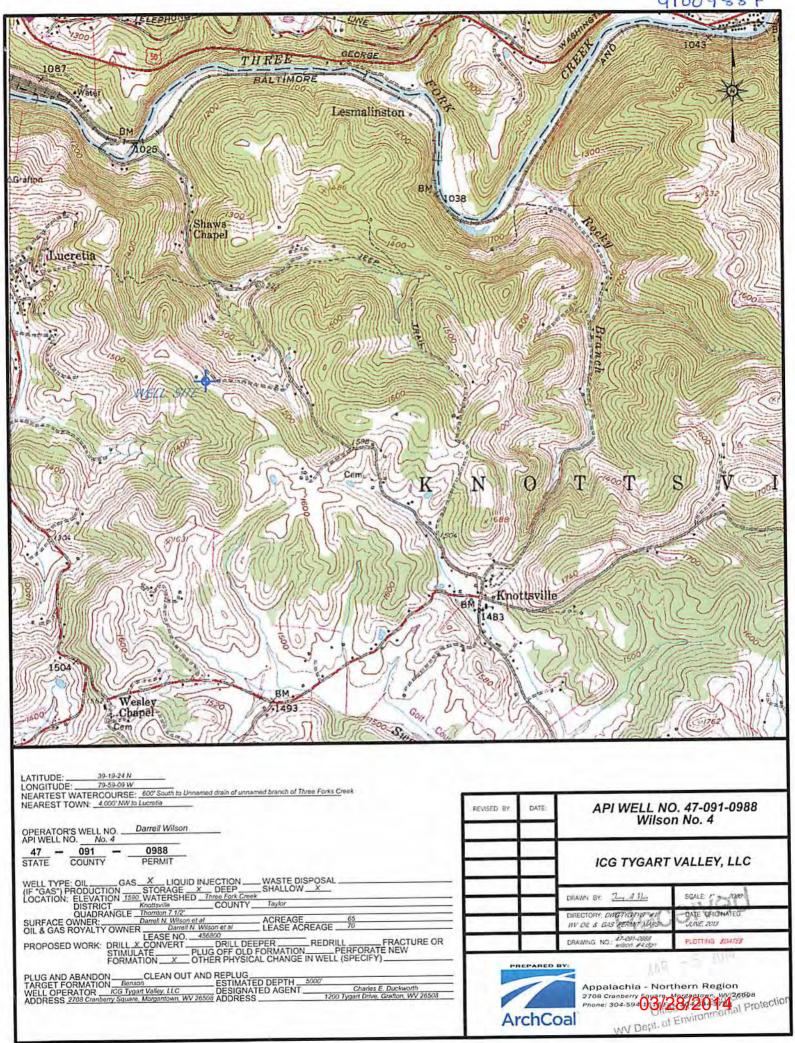
# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

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

Operator Name ICG	Tygart Valley, L	LC		OP Code			
Watershed Three Fo	ork Creek		Quadrangle Thornton (638)				
Elevation 1590		County Taylor	91	District Knottsville	06		
Description of anticip	ated Pit Waste: N/	A					
Will a synthetic liner	be used in the pit?	N/A					
Proposed Disposal Mo							
_	Land Applicati						
_	The second secon	njection (UIC Permit	Number				
	Reuse (at API	Number					
No.	Off Site Disppe	osal (Supply form WV	V-9 for disposal 1	ocation)			
X	Other (Explain	Tanks - See attached	letter				
Proposed Work For W	Which Pit Will Be Us	sed:					
-3.4	Drilling		Swabbir	ng			
	Workover	>	Plugging				
-	Other (Explain	_					
law or regulation can I certify und application form and obtaining the information penalties for submittin Company Official Sig	lead to enforcement der penalty of law t d all attachments th ation, I believe that ng false information gnature Charl	action. hat I have personally ereto and that, based the information is translationary including the possibiles E. Duckworth	examined and a on my inquiry the accurate, and lity of fine or imp	m familiar with the information of those individuals immediated complete. I am aware that torisonment.	n submitted o		
Company Official Tit	le	tgorit.			COCH PLOT		
Subscribed and sworn	before me this	day of Fe	bruary	, 20 <u>14</u>	Citics of City and		
Thomas	Deeguy (	-	-	Notory Public Official Seal Notary Public			
	1	77 7019	3	State of West Virg			
My commission expir	res DECEMBEL	22 2019	- {	Thomas Gregory 323 Webster Avenue, Morgant	num MAZ neent &		
			5	My Commission Expires Dece	03/28/20		

Property Boundary  Road = = = = = = = Spring  Fainting Fence			LEGEND	
Planned Fence X X X Drain Pipe with size in inches  Stream Open Ditch Rock North N Buildings Water wells Drill site  Proposed Revegetation Treatment: Acres Disturbed Lime 3 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum) Mulch Hay Bales Tons/acre Seed Mixtures  Area I Seed Type Orchard Grass 12 Landino Clover 3 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:  Lime A X X X Y X Y X Y X Y X Y X Y X Y X Y X	Property Boundary		Diversion (1:1/11:1/1/1	minimum.
Prianned Fence  Stream Open Ditch Rock North N Buildings Water wells Oprill site  Proposed Revegetation Treatment: Acres Disturbed Lime 3 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) Hay Bales Tons/acre  Seed Mixtures  Area I Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3 Landino Clover 3 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:  Line January Area I Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3  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:  Line January Area II Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3  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:  Line January Artificial Filter Strip Artificial Filte	Road = = = = = =	=====	Spring -	
Open Ditch Rock North N Buildings Water wells Water wells Water wells Drill site  Proposed Revegetation Treatment: Acres Disturbed Lime 3 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) Hay Bales Tons/acre Seed Mixtures  Area I Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3 Landino Clover 3 Landino Clover 3 Timothy  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:  Line  Waterway Cross Drain Artificial Filter Strip Artificial Filter	Existing Fence — X —	- × — × —	Wet Spot	
Open Ditch Rock North N Buildings Water wells Drill site  Proposed Revegetation Treatment: Acres Disturbed Lime 3 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) 500 Ibs/acre (500 lbs minimum) Hay Bales Tons/acre  Seed Mixtures  Area I Seed Type 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:  Lime 3 Tons/acre or to correct to pH 6.5  Seed Mixtures  Area II Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3 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:  Lime 3 Tons/acre or to correct to pH 6.5  Seed Mixtures  Area II Ibs/acre Orchard Grass 12  Landino Clover 3  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:  Lime 3 Tons/acre or to correct to pH 6.5  Seed Mixtures  Area II Ibs/acre Orchard Grass 12  Landino Clover 3  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	Planned Fence /	-/-/-	Drain Pipe with size in inches	— @ —→
Artificial Fitter Strip  Pit: cut walls  Pit: compacted fill walls  Area for Land Application of Pit Waste.  Proposed Revegetation Treatment: Acres Disturbed  Lime  3 Tons/acre or to correct to pH  Fertilizer (10-20-20 or equivalent)  Mulch  Hay Bales  Area I  Seed Mixtures  Area II  Seed Type  Orchard Grass  12  Landino Clover  3 Landino Clover  3 Landino Clover  3 Timothy  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:  Landino Lover  Area II  Bis/acre  Orchard Grass  12  Landino Clover  3 Timothy  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:  Landino Lover  Area II  Bis/acre  Area II  Bis/acre  Area II  Bis/acre  Area II  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:  Landino Lover  Area II  Bis/acre  Orchard Grass  12  Landino Clover  3  Timothy  10  Attach:  Drawing(s) of road, location,pit and proposed area for land application.	Stream		Waterway C+ C+	$\Longrightarrow$ $\Longleftrightarrow$ $\Longleftrightarrow$
North N Buildings Water wells Drill site  Proposed Revegetation Treatment: Acres Disturbed Lime 3 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) 500 Ibs/acre (500 lbs minimum) Mulch Hay Bales Tons/acre  Seed Mixtures  Area I Seed Type Ibs/acre 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:  Lime 4 1.00 Prevegetation pH 6.5  Seed Type Ibs/acre Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3 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:  Lime 4 1.00 Prevegetation of Pit Waste Area II Seed Type Ibs/acre Seed Type Ibs/acre Seed Type Ibs/acre Seed Type Ibs/acre Orchard Grass 12 Landino Clover 3 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:  Lime 4 2.00  Attach: Drawing(s) of road, location,pit and proposed area for land application.	Open Ditch		Cross Drain	
Proposed Revegetation Treatment: Acres Disturbed  Proposed Revegetation Treatment: Acres Disturbed  Lime  3 Tons/acre or to correct to pH  Fertilizer (10-20-20 or equivalent)  Mulch  Hay Bales  Tons/acre  Seed Mixtures  Area I  Seed Type  Orchard Grass  12  Landino Clover  3 Landino Clover  3 Landino Clover  3 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:  Marea II  Seed Type  Orchard Grass  12  Landino Clover  3 Landino Clover  3 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:  Marea II  Seed Type  Ibs/acre  Orchard Grass  12  Landino Clover  3 Timothy  10  Attach:  Drawing(s) of road, location,pit and proposed area for land application.	Rock 635686	₹	ATT-	XXXXXXXXXXXXX
Proposed Revegetation Treatment: Acres Disturbed	North N		die	MILL
Proposed Revegetation Treatment: Acres Disturbed 1.00 Prevegetation pH  Lime 3 Tons/acre or to correct to pH  Fertilizer (10-20-20 or equivalent) 500 Ibs/acre (500 lbs minimum)  Mulch Hay Bales Tons/acre  Seed Mixtures  Area I Seed Type Ibs/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: January Area II Seed Type Ibs/acre  Orchard Grass 12  Landino Clover 3  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: January Area II Seed Type Ibs/acre  Orchard Grass 12  Landino Clover 3  Timothy 10  Attach: Drawing(s) of road, location,pit and proposed area for land application.				Francis
Proposed Revegetation Treatment: Acres Disturbed			Area for Land Application of Fr	T WAR
Proposed Revegetation Treatment: Acres Disturbed Prevegetation principles of the proposed Revegetation Principles of the principles of the proposed Revegetation Principles of the principles	Drill site		(E): 5	
Proposed Revegetation Treatment: Acres Disturbed Prevegetation principles of the proposed Revegetation Frestilizer (10-20-20 or equivalent)   500   10			1.00	
Fertilizer (10-20-20 or equivalent) 500   lbs/acre (500 lbs minimum)   Mulch   Hay Bales   Tons/acre    Seed Mixtures   Seed Type   Seed T		ent: Acres Disturbed	Prevegetation pH	
Mulch Hay Bales Tons/acre  Seed Mixtures  Area I Seed Type Ibs/acre Seed Type Ibs/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:  Mulch Area II Seed Type Ibs/acre  Seed Type Ibs/acre  Orchard Grass 12  Landino Clover 3  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:  Comments:	Lime 3	Tons/acre or to correct to p	н н	
Hay Bales  Seed Mixtures  Area I  Seed Type Orchard Grass 12  Landino Clover 3  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:  Mulch  Seed Mixtures  Area II  Seed Type Ibs/acre Orchard Grass 12  Landino Clover 3  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:  Comments:	Fertilizer (10-20-20 or	equivalent) 500	bs/acre (500 lbs minimum)	
Seed Mixtures  Area I Seed Type   Ibs/acre   Seed Type   Ibs/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:	Hay Ral	OC.	4000	
Area I  Seed Type Orchard Grass 12  Landino Clover 3  Landino Clover 3  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:  Marea II  Seed Type Ibs/acre  Orchard Grass 12  Landino Clover 3  Timothy 10	Mulch	lons	s/acre	
Seed Type Ibs/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:  Mattach: Drawing(s) Of road, location,pit and proposed area for land application.		Se	eed Mixtures	
Orchard Grass 12  Landino Clover 3  Landino Clover 3  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:  Mathematical Managements:  Comments:				
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:  Landino Clover 3 Timothy 10  Tomothy 10  Timothy 10				
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:  Comments:	Orchard Grass	12	Orchard Grass	12
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:  Comments:	Landino Clover	3	Landino Clover	3
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:  Comments:	Timothy	10	Timothy	10
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:  Comments:				
Photocopied section of involved 7.5' topographic sheet.  See attached  Plan Approved by:  Comments:				
See attached  Plan Approved by:	Drawing(s) of road, location,pi	t and proposed area for land a	pplication.	
Plan Approved by:	Photocopied section of involve	d 7.5' topographic sheet.		
Comments:				
Comments:		2/11/1		have
Comments:	Plan Approved by:	muth Sheyrol	02	Decelve
	Comments:			Mos
				100
Title: 011 + 605 1 NSDECTOR Date: 2-28-14 Office of Oil 2				- P. 11
THE DIE OIL TRAPEDION DAIL.	Tida: 011 4 100	INT DECTOR	Date: 7-28-1	Ullice of Dil and Pri
AND Deby	Time: Une F OHS	TIVA PEDICE	Date.	MA Deby Of Ellow

9100988 P



WW-7 8-30-06



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

API: 47-091-0988		D. Wilson # 4
FARM NAME: Darrel N. Wilso	n et al	
RESPONSIBLE PARTY NAME:	ICG Tygart Valley, L	LC
COUNTY: Taylor		
QUADRANGLE: Thornton		
SURFACE OWNER: ICG Tygar	t Valley, LLC	
ROYALTY OWNER: Darrel N	. Wilson et al	
UTM GPS NORTHING: 435316	8.159	
UTM GPS EASTING: 587431.42	22 CDC EL EVA	TION, 1590.699
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Ga	has chosen to submit GPS coor a plugging permit or assigne	ordinates in lieu of d API number on the
The Responsible Party named above preparing a new well location plat fo above well. The Office of Oil and Gathe following requirements:	has chosen to submit GPS coor a plugging permit or assigners will not accept GPS coordinate Units: 77 North, Coordinate Units: 78 (MSL) – meters.	ordinates in lieu of d API number on the nates that do not meet
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gathe following requirements:  1. Datum: NAD 1983, Zone height above mean sea let 2. Accuracy to Datum – 3.0: 3. Data Collection Method: Survey grade GPSx: Post Pro-Real-Ti	has chosen to submit GPS coor a plugging permit or assigners will not accept GPS coordinate Units:  17 North, Coordinate Units:  7el (MSL) – meters.  5 meters  9cessed Differential	ordinates in lieu of d API number on the nates that do not meet
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gathe following requirements:  1. Datum: NAD 1983, Zone height above mean sea let 2. Accuracy to Datum – 3.0: 3. Data Collection Method: Survey grade GPS: Post Pro-Real-Ti-Mapping Grade GPS: Post	has chosen to submit GPS coor a plugging permit or assigners will not accept GPS coordinate Units:  17 North, Coordinate Units:  7 (MSL) – meters.  8 meters  9 cessed Differential  me Differential  Processed Differential	ordinates in lieu of d API number on the nates that do not meet
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gathe following requirements:  1. Datum: NAD 1983, Zone height above mean sea let 2. Accuracy to Datum – 3.0: 3. Data Collection Method: Survey grade GPS: Post Pro-Real-Ti-Mapping Grade GPS: Post Real-Ti-Mapping GPS: Post	has chosen to submit GPS coor a plugging permit or assigners will not accept GPS coordinates will not accept GPS coordinates.  17 North, Coordinate Units: vel (MSL) – meters.  5 meters  18 meters  19 processed Differential  Processed Differential  Processed Differential	ordinates in lieu of d API number on the nates that do not meet meters, Altitude:
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gathe following requirements:  1. Datum: NAD 1983, Zone height above mean sea let 2. Accuracy to Datum – 3.0: 3. Data Collection Method: Survey grade GPS: Post Pro-Real-Ti-Mapping Grade GPS: Post Real-Ti-Mapping GPS: Post	has chosen to submit GPS coor a plugging permit or assigned is will not accept GPS coordinate. 17 North, Coordinate Units: vel (MSL) – meters. Someters  Decessed Differential  Processed Differential	well location.  ny knowledge and



### 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

Peceived

Onice of Oil and Gas Protection

Onice of Oil and Gas Protection

188601b