west virginia department of environmental protection

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

Earl Ray Tomblin , Governor
Randy C. Huffman , Cabinet Secretary
www.dep.wv.gov

Friday, September 09, 2016
WELL WORK PERMIT
Vertical / Plugging

ICG TYGART VALLEY, LLC
100 TYGART DR

GRAFTON, WV 26354

Re: Permit approval for 1557
47-091-00474-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: 1557
Farm Name: COLLINS, RUTH STURM
U.S. WELL NUMBER: 47-091-00474-00-00
Vertical / Plugging
Date Issued: 9/9/2016

9100474P

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.

9100474P

WW-4B
Rev. 2/01

1) Date August 3, 2016
2) Operator's
Well No. CNGD 1557
3) API Well No. 47- 91 - 00474

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 1568.70 Watershed Swamp Run
District Knottsville County Taylor Quadrangle Thornton (638)

6) Well Operator ICG Tygart Valley, LLC
Address 100 Tygart Drive
Grafton, WV 26354

7) Designated Agent Charles E. Duckworth
Address 100 Tygart Drive
Grafton, WV 26354

8) Oil and Gas Inspector to be notified
Name Kenneth Greynolds
Address 613 Broad Run Road
Jane Lew, WV 26378

9) Plugging Contractor
Name Coastal Drilling East, LLC
Address 130 Meadows Ridge Road
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
Office of Oil & Gas
AUG 19 2016

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 8-17-16

91 00 474-P

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".

ICG Tygart Valley, LLC
Leer Mine (MSHA ID# 46-09192)
MSHA 101-C Docket No. M-2012-065-C

Approximate coal seam top ~ 689.0'
Approximate coal seam bottom ~ 694.3'

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AUG 19 2016

9100474P

EXHIBIT No. 2

COASTAL DRILLING EAST

"A Shaft Drillers International Company"

Coastal Drilling East LLC • 130 Meadow Ridge Road, Mt. Morris, PA 15349

Phone 304-296-1120 Fax 304-413-0061

05/26/2016

Mr. Chuck Duckworth
Gas Well & Property Manager
Arch Coal, Inc. – Leer Mine Complex
100 Tygart Drive
Grafton, WV 26354

Mr. Duckworth,

Below is the proposed plugging plan we discussed that can be used on wells similar to the wells we have been plugging for the last few years.

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Office of Oil & Gas
AUG 19 2016

Plugging Plan

- Move to site, rig up, mix mud, drill rathole
- Attempt to clean out well to original total depth (TD).
- Run cement bond log on 4 ½" casing to determine top of cement
- Set bottom hole cement plug as required by the WV DEP from TD to top of cement determined by the bond log.
- Tag top of bottom hole plug to insure plug is at correct depth. Re-cement if necessary.
- Cut and pull 4 ½" casing from the free point determined by the bond log.
- Clean out wellbore to top of remaining 4 ½" casing
- Run suite of logs to determine casing size, bottom of casing, depth of coal seams, deviation of wellbore and cement bond to casing.
- Cement hole from top of bottom hole plug to a depth within 25' of the bottom of the 8 5/8" casing.
- If necessary cut and pull any free casing.
- Perforate, cut, rip or mill any remaining casing at depths determined by MSHA's 101C Petition.

91 00474P

- Cement hole from top of intermediate plug to surface using cement required by MSHA's 101C Petition.
- Rig down and set monument as required by WV DEP.

Received
Office of Oil & Gas
AUG 19 2016

COASTAL
DRILLING · EAST

9100474P

IV-35
(Rev 8-81)

Date July 9, 1985
Operator's
Well No. CNGD WN 1557
Farm Sturm Unit
API No. 47 - 091 - 0474

State of West Virginia
Department of Mines
Oil and Gas Division

RECEIVED
AUG 2 - 1985
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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

WELL TYPE: Oil ___ / Gas x / Liquid Injection ___ / Waste Disposal ___
(If "Gas," Production x / Underground Storage ___ / Deep ___ / Shallow x /)

LOCATION: Elevation: 1568.7 Watershed Swamp Run
District: Knottsville County Taylor Quadrangle Thornton WV 7.5

COMPANY CNG Development Company
ADDRESS P. O. Box 15746 Pittsburgh, PA 15244
DESIGNATED AGENT Gary A. Nicholas
ADDRESS Rt. 2 Box 698 Bridgeport, WV 26330
SURFACE OWNER Ruth Sturm Collins
ADDRESS Rt. 1 Box 457A Grafton, WV 26354
MINERAL RIGHTS OWNER Ruth Sturm Collins, et al
ADDRESS Rt. 1 Box 457A Grafton, WV 26354
OIL AND GAS INSPECTOR FOR THIS WORK Donald Ellis ADDRESS 2604 Crab Apple Lane Fairmont, WV 26554
PERMIT ISSUED March 14, 1985
DRILLING COMMENCED June 21, 1985
DRILLING COMPLETED June 27, 1985
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	1222	1222	To Surf.
7			
5 1/2			
4 1/2	5356	5356	550 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Haverty Depth 5750 feet
Depth of completed well 5760 feet Rotary x / Cable Tools ___
Water strata depth: Fresh Damp 720' feet; Salt ___ feet
Coal seam depths: 370 - 375 Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation 3rd Elk / Riley / Balltown Pay zone depth 5192 - 5196 / 4156 - 4162 / 3397 - 3401 feet
Gas: Initial open flow ___ Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow 1,700 Mcf/d Final open flow ___ Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 525 psig (surface measurement) after 1 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

TAY. 0474

(Continue on reverse side)

9100474A

FORM IV-35
(REVERSE)

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

Perfco Ran Corrlog & Perf. 3rd Elk 5192 - 5196, 16 holes; .39 HSC
Halliburton Foam Frac (50Q) 3rd Elk - Break 2600, Avg TPSI 3600, Avg Rate 16 BPM,
Screened off @ 4000, 3# Max Sand Conc, used 500 gals 15% FE acid & 20,000# 20/40 Sand
and 235,000 SCFN2, Blew well back thru 1" and 1/2" Choke
Perfco Perf Riley 4156 - 4162, 16 holes, .39 HSC
Halliburton Foam Frac (75Q) Riley - Break 3000, Avg TPSI 2760, Avg Rate 20 BPM,
ISI 1800, used 500 gals 15% FE acid & 55,000 20/40 Sand and 525,000 SCFN2(3# Max Sand Conc
Perfco Perf Balltown 3397 - 3401, 16 holes HSC
Halliburton Foam Frac (75Q) Balltown - Break 1700, Avg TPSI 2975, Avg Rate 20 BPM,
ISI 1830, used 500 gals 15% FE Acid & 40,000# 20/40 Sand and 340,000 SCFN2 (3# Max Sand Co

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand, Shale	0	370	385' Hole Damp 720' 1/2" stream water
Coal	370	375	
Sand, Shale	375	1440	
Lime & Shale	1440	1470	
Big Lime	1470	1560	
Big Injun	1560	1670	
Sand, Shale & RR	1670	5760	Brallier@ T.D
LOG TOPS			
B. Lime/B. Injun	1440	1624	
Pocono	1725	1770	
50'	1980'	2070	
Gordon Stray/Gordon	2198	2335	
5th/L. 5th	2440	2570	
Speechley	3150	3245	
Balltown	3260	3402	
Bradford	3633	3744	
Riley	4063	4226	
Benson	4383	4394	
1st Elk	4778	4846	
2nd Elk	4932	5138	
3rd Elk	5152	5212	
4th Elk	5410	5525	
Haverty	5600		

Received
Office of Oil & Gas
AUG 19 2016

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY
Well Operator
By: Gary A Nicholas
Date: July 9, 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 coal, encountered in the drilling of a well."

9100474P

POWER OF ATTORNEY

ICG TYGART VALLEY, LLC
TO
GREG NAIR

Dated: January 1, 2016

Expires: December 31, 2016

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 Robert G. Jones, its duly authorized Secretary, 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, 2016, 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 as of the day and year first above written, by the undersigned, Robert G. Jones, duly authorized Secretary of the Company.

ICG TYGART VALLEY, LLC

By: _____
Robert G. Jones
Secretary

Received
Office of Oil & Gas
AUG 19 2016

9100441

STATE OF MISSOURI)
) ss
COUNTY OF ST. LOUIS)

On this 16th day of December, 2015, before me, the undersigned notary public, personally appeared Robert G. Jones, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires: December 1, 2017

PEGGY FELDMANN
Notary Public - Notary Seal
State of Missouri
Commissioned for St. Louis County
My Commission Expires: December 01, 2017
Commission Number: F13552693

Received
Office of Oil & Gas
AUG 19 2016

9100474P

WW-4A
Revised 6-07

1) Date: August 3, 2016
2) Operator's Well Number
CNGD 1557

3) API Well No.: 47 - 91 - 00474

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name John & Janet Kimbrew
Address 2 Shenandoah Drive
Fairmont, West Virginia 26554

(b) Name
Address

(c) Name
Address

6) Inspector Kenneth Greynolds
Address 613 Broad Run Road
Jane Lew, WV 26378
Telephone (304) 206-6613

5) (a) Coal Operator
Name CoalQuest Development, LLC
Address 100 Tygart Drive
Grafton, West Virginia 26354

(b) Coal Owner(s) with Declaration
Name
Address

Name
Address

(c) Coal Lessee with Declaration
Name
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.

Received
Office of Oil & Gas
AUG 19 2016

Well Operator ICG Tygart Valley, LLC
By: Charles E. Duckworth
Its: Designated Agent
Address 100 Tygart Drive
Grafton, West Virginia 26354
Telephone (304) 265-9704

Subscribed and sworn before me this 3rd day of August 2016

Notary Public

My Commission Expires December 22, 2019

Official Seal
Notary Public
State of West Virginia
Thomas Gregory Nair
329 Webster Avenue, Morgantown, WV 26501
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 deprivacyoffier@wv.gov.

9100474P

SURFACE OWNER WAIVER

Operator's Well Number CNGD 1557

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

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

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

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

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

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

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

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

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

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

FOR EXECUTION BY A NATURAL PERSON ~~FOR EXECUTION BY A CORPORATION~~, ETC.

John J. K[illegible] Date 8-10-16 Name Janet K Ambrew

Signature By

Its Date

Received
Office of Oil & Gas
AUG 19 2016

Signature Date

9100474P

WW-4B

API No. 47-91-00474
Farm Name Sturm Unit
Well No. CNGD 1557

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

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: 8/3/16

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

Received
Office of Oil & Gas
AUG 19 2016

WW-9
Rev. 5/08

Page _____ of _____

API Number 47 - 91 - 00474

Operator's Well No. CNGD 1557

9100474P

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 Swamp Run Quadrangle Thornton (638)

Elevation 1568.70 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 Disppposal (Supply form WW-9 for disposal location)
X Other (Explain Tanks - See attached letter

Proposed Work For Which Pit Will Be Used:

_____ Drilling
_____ Workover
_____ Other (Explain _____
_____ Swabbing
X 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.

Received
Office of Oil & Gas
AUG 19 2016

Company Official Signature _____

Company Official (Typed Name) Charles E. Duckworth

Company Official Title Designated Agent

Subscribed and sworn before me this 3rd day of August, 2016

_____ Notory Public

My commission expires December 22, 2019

Official Seal
Notary Public
State of West Virginia
Thomas Gregory Nair
329 Webster Avenue, Morgantown, WV 26501
My Commission Expires December 22, 2019

Form WW-9

Operator's Well No. CNGD 1557 9100474P

LEGEND

Property Boundary
Road
Existing Fence
Planned Fence
Stream
Open Ditch
Rock
North N
Buildings
Water wells W
Drill site

Diversion
Spring
Wet Spot
Drain Pipe with size in inches
Waterway
Cross Drain
Artificial Filter Strip
Pit: cut walls
Pit: compacted fill walls
Area for Land Application of Pit Waste

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

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

Received
Office of Oil & Gas
AUG 19 2016

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, RESEED AND MULCH ASAP

Title: OIL + GAS INSPECTOR Date: 8-17-16

Field Reviewed? (_____) Yes (✓) No

9100474P

A Subsidiary of

ArchCoal

ICG TYGART VALLEY, LLC

100 Tygart Drive, Grafton, West Virginia 26354

August 3, 2016

WV Department of Environmental Protection
Office of Oil and Gas
601 – 57th 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 or to an approved facility that can handle the material.

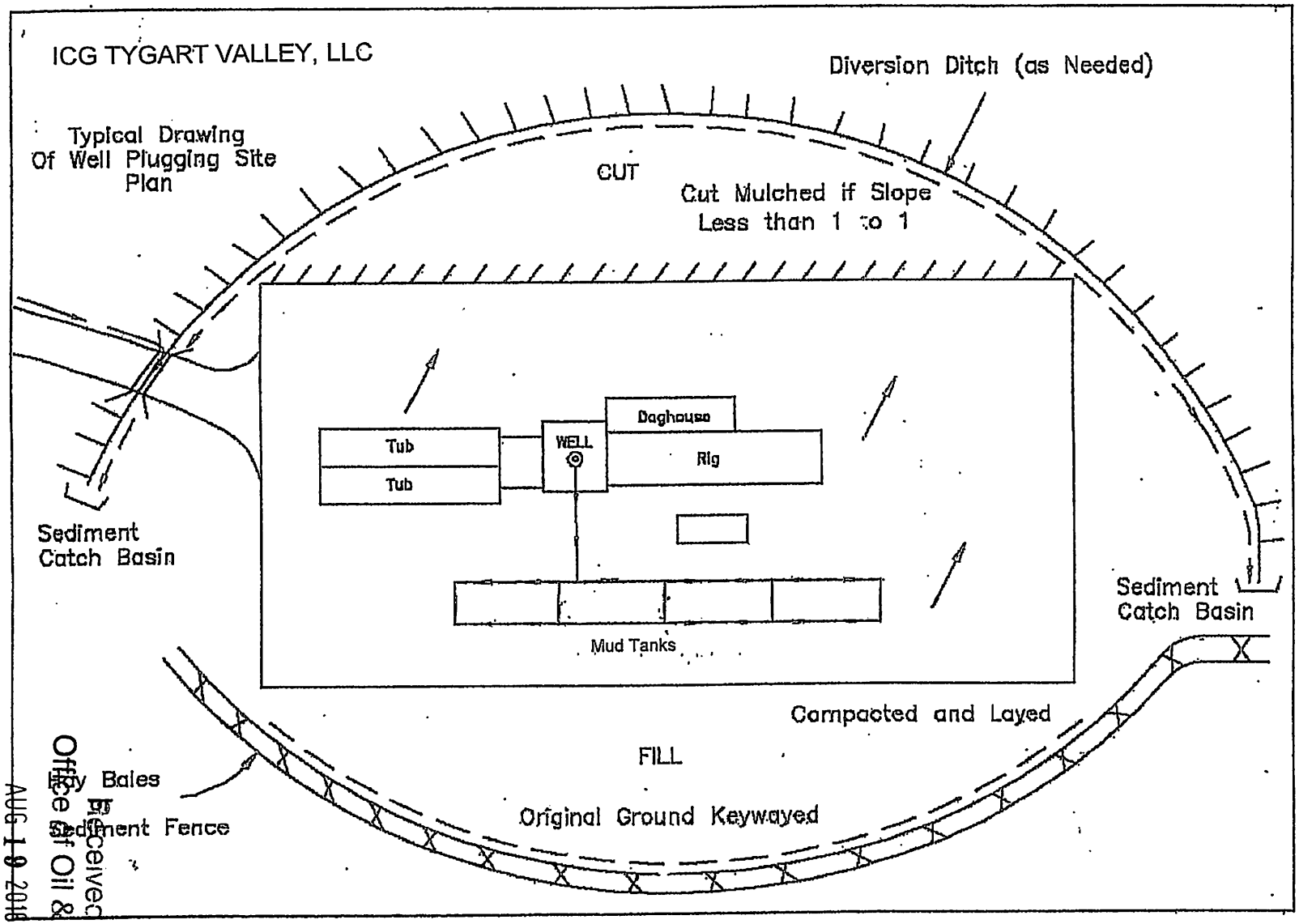
Sincerely,

Charles E. Duckworth
Designated Agent

Received
Office of Oil & Gas
AUG 19 2016

ICG TYGART VALLEY, LLC

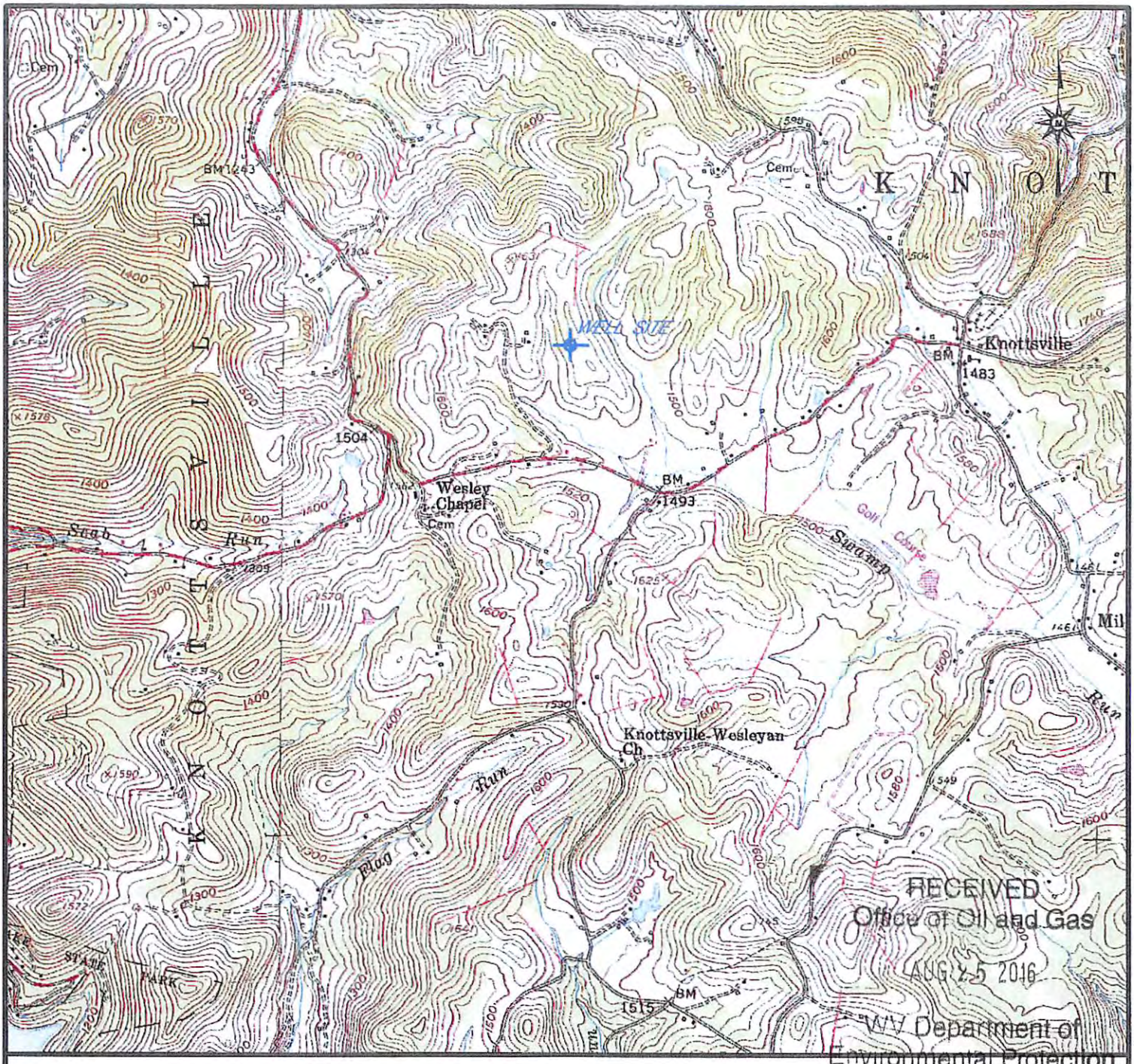
Typical Drawing
Of Well Plugging Site
Plan



Received
Office of Oil & Gas
AUG 10 2018

9160474P

91-00474P



RECEIVED
Office of Oil and Gas
AUG 25 2016
WV Department of Environmental Protection

LATITUDE: 39° 18' 39"
LONGITUDE: 79° 59' 07"
NEARTEST WATERCOURSE: Swamp Run
NEAREST TOWN: Knottsville

OPERATOR'S WELL NO. ____
API WELL NO. CNGD-1557

47 — 091 — 00474
STATE COUNTY PERMIT

WELL TYPE: OIL ____ GAS X LIQUID INJECTION ____ WASTE DISPOSAL ____
(IF "GAS") PRODUCTION X STORAGE ____ DEEP ____ SHALLOW X
LOCATION: ELEVATION 1568.7 WATERSHED Swamp Run
DISTRICT Knottsville COUNTY Taylor
QUADRANGLE Thornton 7 1/2'
SURFACE OWNER: John & Janet Kimbrew ACREAGE 26.05
OIL & GAS ROYALTY OWNER John & Janet Kimbrew LEASE ACREAGE 149
LEASE NO. 75172
PROPOSED WORK: DRILL X CONVERT ____ DRILL DEEPER ____ REDRILL ____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ____ PERFORATE NEW FORMATION ____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ____

PLUG AND ABANDON X CLEAN OUT AND REPLUG ____
TARGET FORMATION Haverty ESTIMATED DEPTH 5750'
WELL OPERATOR ICG Tygart Valley, LLC DESIGNATED AGENT Charles E. Duckworth
ADDRESS 100 Tygart Drive, Grafton, WV 26354 ADDRESS 100 Tygart Drive, Grafton, WV 26354

REVISED BY	DATE	API WELL NO. 47-091-00474 CNGD-1557	
		ICG TYGART VALLEY, LLC	
		DRAWN BY: [signature]	SCALE: 1" = 2000'
		DIRECTORY DWG-TYG-TYG #V WV OIL & GAS PERMIT MAPS	DATE ORIGINATED April 2016
		DRAWING NO.: 47-091-00474 CNGD-1557.dgn	PLOTTING SCALES

PREPARED BY:
ArchCoal
Eastern Operations
100 Tygart Drive, Grafton, WV 26354
Phone: 304-265-9700 Fax: 304-265-2564

9100474P

WW-7
8-30-06

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

API: 47-091-00474 **WELL NO.:** CNGD 1557

FARM NAME: Sturm Unit

RESPONSIBLE PARTY NAME: ICG Tygart Valley, LLC

COUNTY: Taylor **DISTRICT:** Knottsville

QUADRANGLE: Thornton

SURFACE OWNER: John & Janet Kimbrew

ROYALTY OWNER: John & Janet Kimbrew

UTM GPS NORTHING: 4351789.315

UTM GPS EASTING: 587492.591 **GPS ELEVATION:** 1573.80

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 __x__: Post Processed Differential _____

Real-Time Differential _x_

Mapping Grade GPS ____: Post Processed Differential _____

Real-Time Differential _____

Received
Office of Oil & Gas
AUG 19 2016

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	August 3, 2016
	Title	Date