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west virginia department of environmental protection

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

Jim Justice , Governor  
Austin Caperton , Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, May 15, 2017  
WELL WORK PERMIT  
Coal Bed Methane Well / Plugging

CONSOL GAS COMPANY (A)  
1000 CONSOL ENERGY DRIVE

CANNONSBURG, PA 163176506

Re: Permit approval for  
47-021-05512-00-00

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:  
Farm Name: COASTAL LUMBER COMPANY  
U.S. WELL NUMBER: 47-021-05512-00-00  
Coal Bed Methane Well / Plugging  
Date Issued: 5/15/2017

Promoting a healthy environment.

05/19/2017

## 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

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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 3-30, 2017  
2) Operator's  
Well No. 15377B  
3) API Well No. 47-021 - 05512 C P

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON A COALBED METHANE WELL.

4) Well Type: Oil \_\_\_/ Gas X/ Liquid injection \_\_\_/ Waste disposal \_\_\_/  
(If "Gas, Production X or Underground storage \_\_\_) Deep \_\_\_/ ShallowX

5) Location: Elevation 1016' Watershed Steer Creek  
District Center County Gilmer Quadrangle Normantown

6) Well Operator Consol Gas Company 7) Designated Agent Christopher Turner  
Address 1000 Consol Energy Drive Address P.O. Box 1248  
Canonsburg, PA 15317 Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified Name Danny Mullins  
Address 220 Jack Acres Rd  
Buckhannon WV 26201  
9) Plugging Contractor Name Coastal Drilling East LLC  
Address 70 Gums Springs Road  
Morgantown, WV 26508

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

THIS IS A COALBED METHANE WELL.

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

Work order approved by inspector



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Office of Oil and Gas  
APR 24 2017

WV Department of  
Environmental Protection

05/19/2017

**Bennett Heirs #15377B**

Normantown, Gilmer County, WV

Original Completion: 11/09/2007

API# 47-021-05512

Elevation = 1016'

**Procedure:**

1. Load Hole/Kill Well. Pump 6% gel if necessary
2. RIH with sand line/CCL to verify TD and depth of 7" casing. (TD@2065')(7" Casing 1863')
3. TIH with 2 3/8" Workstring and set Class A Cement Plug from TD to Surface
4. Install monument with Well Name, API#, & Company Name. Monument must extend <sup>36</sup>30" min. above ground level and be <sup>7</sup>6" in diameter. DM

NOTE: All Cement plugs will be Class A Cement, All Gel Spacers will be 6% Gel, and all Perforations will have 100' spacing/ 4 Holes.

If it becomes necessary to deviate from this method, approval from the WV DEP Oil & Gas Division will be obtained before proceeding.

Work Order Approved By Inspector  Date 4-13-17

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Environmental Protection  
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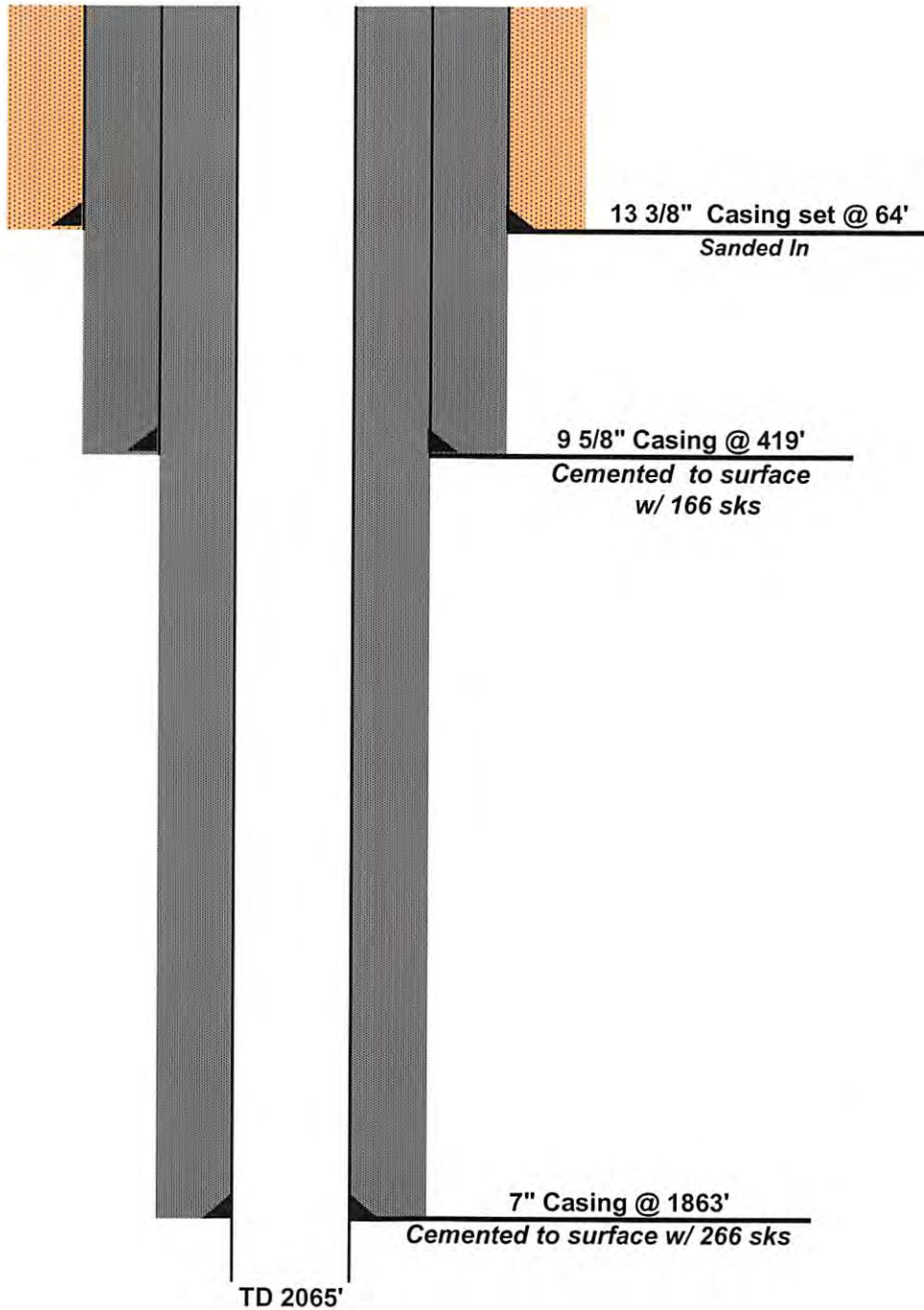
2105512cA

**Louis Bennett Heirs #15377B--Coastal Lumber Company**  
**Normantown, WV--Gilmer County**

Original Completion : 11/09/2007

API # 47-021-05512

Elevation = 1016'



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05/19/2017

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

Farm Name: COASTAL LUMBER COMPANY Operator Well No.: 15377B

LOCATION: Elevation: 1016' Quadrangle: Normantown 7.5'

District: Center County: Gilmer

Latitude: 12,700 Feet South of: 38 Deg. 47 Min. 30 Sec.  
Longitude: 10,800 Feet West of: 81 Deg. 57 Min. 30 Sec.

Company: Dominion Exploration & Production, Inc.

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: P.O. Box 1248 Jane Lew, WV 26378				
Agent: Rodney J. Biggs				
Inspector: David Gilbert				
Date Permit Issued: 9/20/2007				
Date Well Work Commenced: 11/4/2007	13 3/8"	64'	64'	Sand In
Date Well Work Completed: 11/9/2007				
Verbal Plugging:	9 5/8"	419'	419'	166 sks
Date Permission granted on:				
Rotary X Cable Rig	7"	1863'	1863'	266 sks
Total Depth (feet): 2065'				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)?: No				
Coal Depths (ft.): 1230',1246',1260',1346',1356',1418',1446',1562',1616',1684',1825',1914'				
Oil Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation LOWER WAR EAGLE COAL SEAM Pay zone depth (ft) 1974'

Gas: Initial open flow Not Determined MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow - MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 12 Hours  
 Static rock Pressure 100 psig (surface pressure) after 12 Hours

Second Producing formation N/A Pay zone depth (ft)

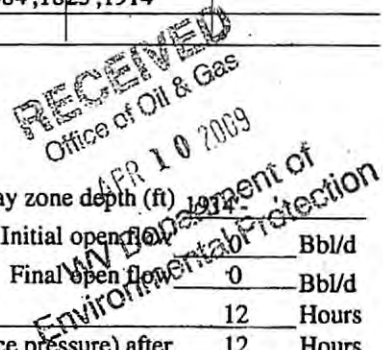
Gas: Initial open flow \* MCF/d Oil: Initial open flow \* Bbl/d  
 Final open flow \* MCF/d Final open flow \* Bbl/d  
 Time of open flow between initial and final tests \* Hours  
 Static rock Pressure \* psig (surface pressure) after \* Hours

**\* COMMINGLED WITH PREVIOUS FORMATIONS**

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

Signed: [Signature]  
By: Rodney J. Biggs  
Date: 4/9/09

MR



APR 09 2009

**Bennett -- 15377 'B' Well**

<u>Formation Description</u>	<u>Top</u>	<u>Bottom</u>	<u>Formation Description</u>	<u>Top</u>	<u>Bottom</u>
Sand	0	70	Coal	1346	1350
Sand / Shale	70	104	Shale	1350	1356
Sand	104	154	Coal	1356	1359
Shale	154	190	Shale	1359	1392
Sand	190	222	Sand	1392	1418
Sand / Shale	222	280	Coal	1418	1420
Sand	280	296	Shale	1420	1446
Shale	296	326	Coal	1446	1448
Sand	326	353	Shale	1448	1454
Shale	353	384	Sand / Shale	1454	1462
Sand	384	406	Sand	1462	1478
Shale	406	454	Shale	1478	1562
Sand	454	464	Coal	1562	1567
Shale	464	646	Shale	1567	1588
Sand	646	658	Sand	1588	1596
Shale	658	693	Shale	1596	1616
Sand / Shale	693	760	Coal	1616	1618
Shale	760	932	Shale	1618	1671
Sand	932	990	Sand	1671	1676
Shale	990	1050	Shale	1676	1684
Sand	1050	1109	Coal	1684	1688
Shale	1109	1137	Shale	1688	1730
Sand	1137	1191	Sand	1730	1804
Shale	1191	1195	Shale	1804	1825
Sand	1195	1230	Coal	1825	1829
Coal	1230	1235	Sand	1829	1840
Sand / Shale	1235	1246	Sand / Shale	1840	1914
Coal	1246	1248	Coal	1914	1918
Sand	1248	1260	Shale	1918	1929
Coal	1260	1264	Sand	1929	2016
Sand	1264	1334	Shale	2016	2035
Shale	1334	1346	Sand	2035	TD

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Office of Oil & Gas

APR 10 2009

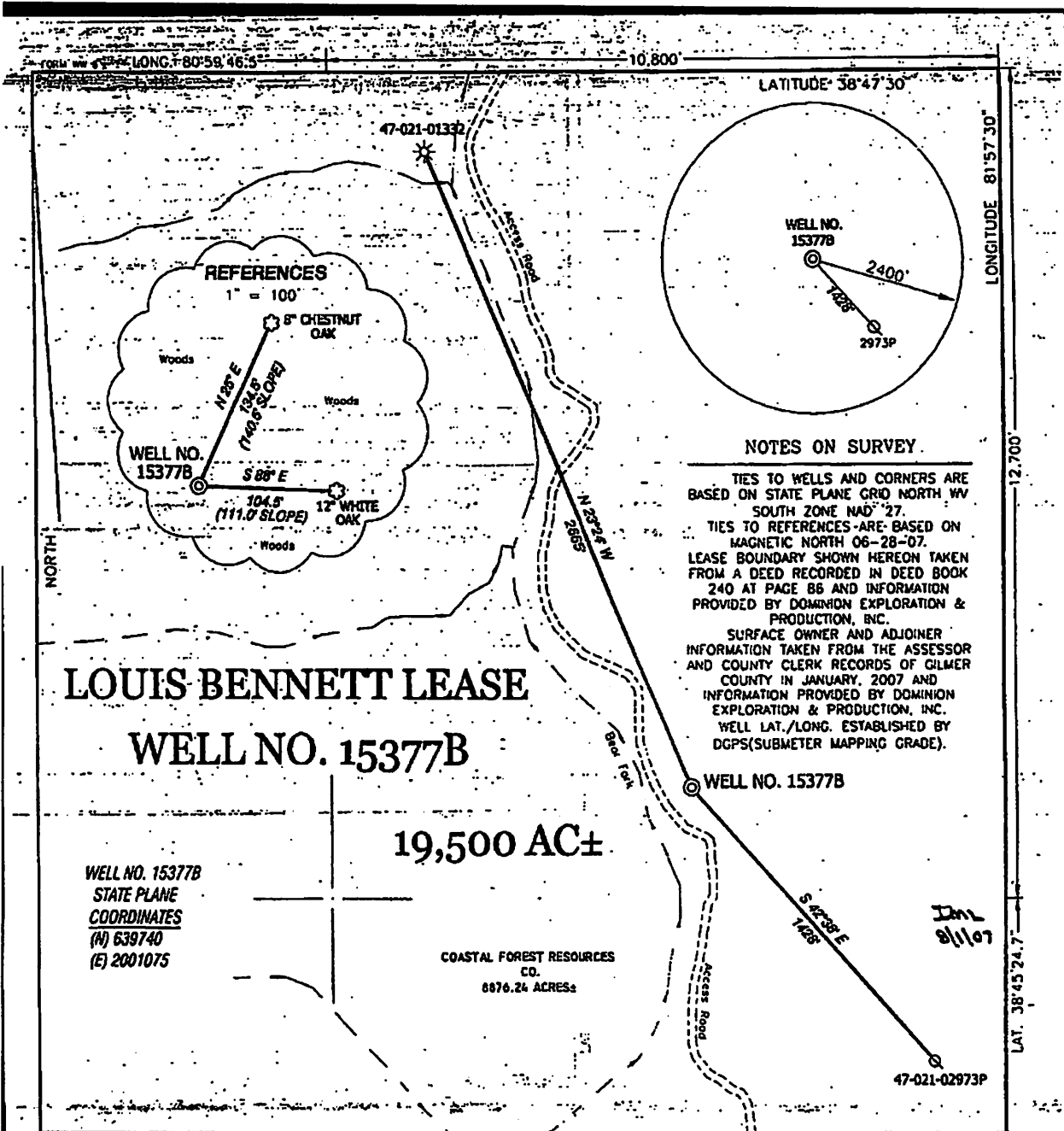
WV Department of  
Environmental Protection

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Office of Oil and Gas

APR 24 2017

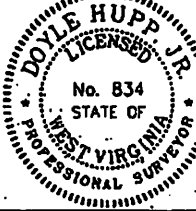
WV Department of  
Environmental Protection 05/19/2017





I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 834 *Doyle Hupp Jr.*  
 HUPP Surveying & Mapping  
 P.O. Box 847 Grantsville, WV 26147  
 (304) 354-7035 EMAIL: hupp@trondernet.net



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE JUNE 28 20 07  
 OPERATORS WELL NO. 15377B  
 API WELL NO. 47-021-05512-C  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. W1481 (BK 33-17)  
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE) SCALE 1" = 500'

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

WELL TYPE: OIL  CBM  LIQUID  WASTE  IF  GAS  INJECTION  DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1,016' WATERSHED BEAR FORK  
 DISTRICT CENTER COUNTY GILMER QUADRANGLE NORMANTOWN 7.5

SURFACE OWNER COASTAL LUMBER ACREAGE 8,876.24±  
 ROYALTY OWNER LOUIS BENNETT HEIRS, et al LEASE ACREAGE 19,500±  
 PROPOSED WORK: LEASE NO. 2817B  
 DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG AND ABANDON

FORMATION  PERFORATE NEW FORMATION  CLEAN OUT AND REPAIR

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION KANAWHA  
 ESTIMATED DEPTH 2000'

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 Office of Oil and Gas  
 APR 24 2007  
 WV Department of Environmental Protection



1) Date: 3-30-17  
2) Operator's Well Number  
15377B  
3) API Well No.: 47 - 021 - 05512 C

**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>Coastal Forest Resources</u>	Name _____
Address <u>P.O. Box 709</u>	Address _____
<u>Buckhannon WV 26201</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Bennett Land Management c/o Hunter M. Bennett, Jr.</u>
_____	Address <u>PO Box 166</u>
_____	<u>Weston, WV 26452</u>
(c) Name _____	Name <u>Diann Andrews Register, Nicholas Edward Mecum, John Samuel Mecum, Audrey Diana Kellar</u>
Address _____	Address <u>PO Box 1382</u>
_____	<u>Conover, NC 28613</u>
6) Inspector <u>Danny Mullins</u>	(c) Coal Lessee with Declaration
Address <u>220 Jack Acres Rd</u>	Name _____
<u>Buckhannon WV 26201</u>	Address _____
Telephone <u>304-932-6844</u>	_____

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

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

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator Consol Gas Company  
 By: Christopher Turner  
 Its: Designated Agent  
 Address 1000 Consol Energy Drive  
Canonsburg, PA 15370  
 Telephone (304) 884-2142

Subscribed and sworn before me this 30th day of March, 2017  
Cindy L. Kovach  
 My Commission Expires 9/26/2021



**Oil and Gas Privacy Notice**

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).



WW-9  
(5/16)

API Number 47 - 021 05512  
Operator's Well No. 15377B

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

Operator Name Consol Gas Company OP Code 494495754

Watershed (HUC 10) Steer Creek Quadrangle Normantown

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No  *ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS.*

If so, please describe anticipated pit waste: \_\_\_\_\_

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Waste Management or Ryan Environmental will use vacuum trucks, and properly dispose of any fluid or waste returns)

Will closed loop system be used? If so, describe: no

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

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

Additives to be used in drilling medium? na

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

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

-Landfill or offsite name/permit number? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Christopher Turner

Company Official (Typed Name) Christopher Turner

Company Official Title Designated Agent

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Office of Oil and Gas

Subscribed and sworn before me this 30th day of March 2017

Cindy L. Kovach

My commission expires 9/26/2021



Proposed Revegetation Treatment: Acres Disturbed less than 1 acre Prevegetation pH \_\_\_\_\_

Lime 2-3 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch hay or straw 2 Tons/acre

**Seed Mixtures**

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	<u>40</u>	Tall Fescue	<u>40</u>
Landino Clover	<u>5</u>	Landino Clover	<u>5</u>
_____	_____	_____	_____

Attach:  
Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_

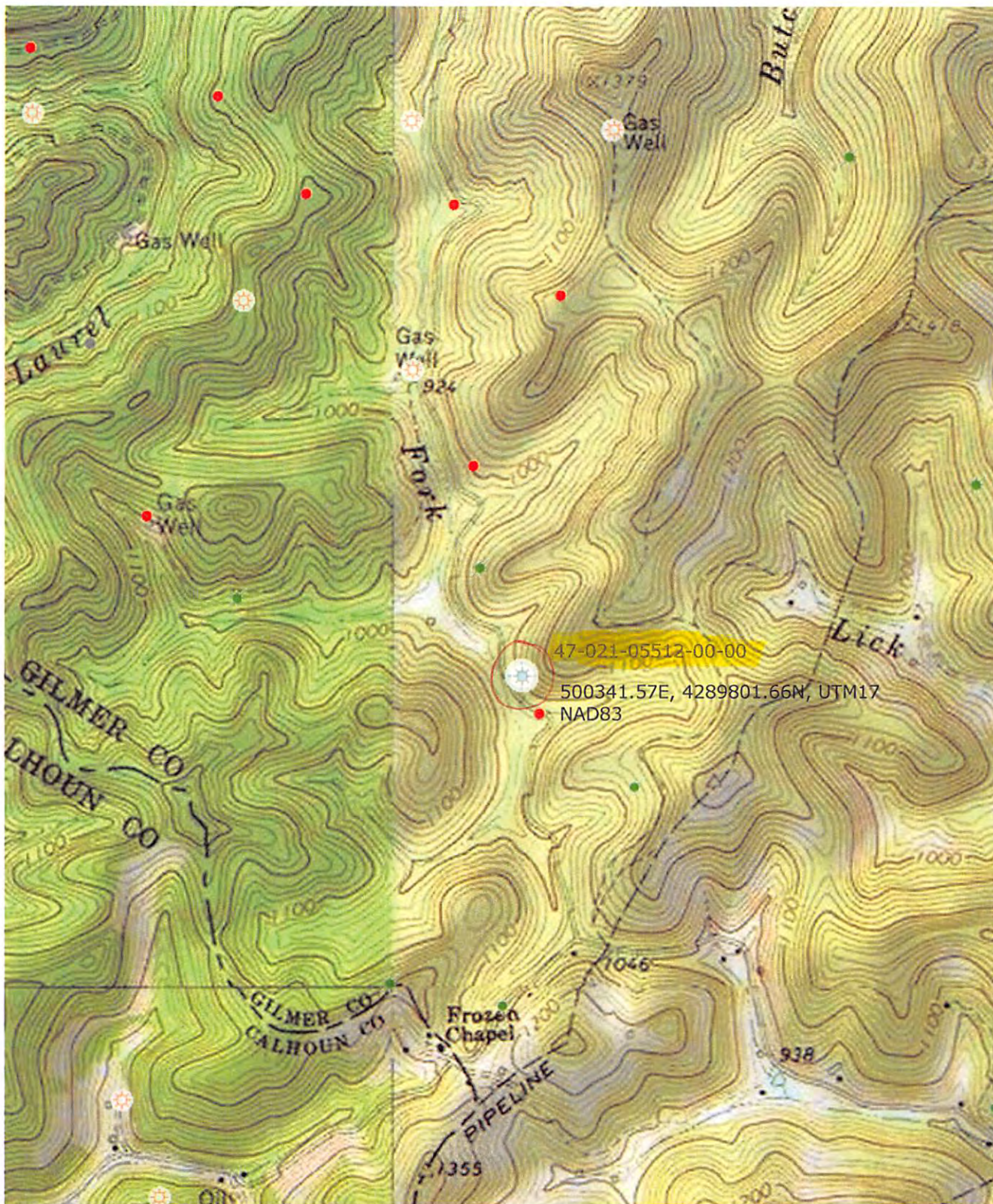
Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: 006 Inspector  Date: 4-13-17

Field Reviewed? ( ) Yes (  ) No





05/19/2017



WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-021-05512 WELL NO.: 15377B

FARM NAME: Coastal Timberland

RESPONSIBLE PARTY NAME: Christopher Turner

COUNTY: Gilmer DISTRICT: Center

QUADRANGLE: Normantown

SURFACE OWNER: Coastal Forest Resources

ROYALTY OWNER: \_\_\_\_\_

UTM GPS NORTHING: 4,289,801.66

UTM GPS EASTING: 500,341.57 GPS ELEVATION: 308.31 (1011.3')

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.

Christopher Turner  
Signature

Designated Agent  
Title

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APR 24 2017  
Date  
Department of Environmental Protection  
05/19/2017