



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

Jim Justice , Governor
Austin Caperton , Cabinet Secretary
www.dep.wv.gov

Wednesday, August 16, 2017
WELL WORK PERMIT
Vertical / Plugging

CONSOL GAS COMPANY
1000 CONSOL ENERGY DRIVE

CANNONSBURG, PA 163176506

Re: Permit approval for 11307
47-061-00324-00-00

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: 11307
Farm Name: SHAFER, JAMES N.
U.S. WELL NUMBER: 47-061-00324-00-00
Vertical / Plugging
Date Issued: 8/16/2017

Promoting a healthy environment.

08/18/2017

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

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 _____, 2017
2) Operator's
Well No. 7109
3) API Well No. 47-061 - 00324

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 x/ Liquid injection ____/ Waste disposal ____/
(If "Gas, Production x or Underground storage ____) Deep ____/ Shallowx

5) Location: Elevation 1947.28 Watershed Bull Run - Cheat River
District Morgan County Monongalia Quadrangle Masontown

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 Gayne J Knitowski
Address P.O. Box 108
Gormanian WV 26720
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.

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

Work order approved by inspector Gayne J Knitowski Date 7/12/2017

08/18/2017

Garner #7109

Morgan, Monongalia County WV
 Original Completion: 12/19/1970
 API# 47-061-00324
 Elevation = 1955'

Procedure:

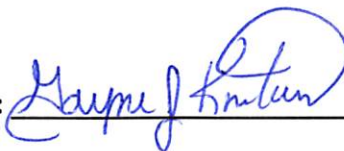
1. Load Hole/Kill Well, Pump 6% gel if necessary
2. RIH with Bond Tool to verify TD, log out to verify 4 ½" TOC (4 1/2" Casing Float @ 8015')
3. TIH with 2 3/8" Workstring and load the well with 6% Gel
4. Pump Class A Cement Plug from TD to 4 ½" TOC (4 ½" TOC est. @ 6600')
5. Verify TOC
6. RIH Jet Cut/Collar Bust 4 ½" Casing above Bottom Hole Plug
7. Attempt to pull 4 ½" Casing
 - a. If unable to pull run bond long/free point and cut where free
8. TIH with 2 3/8" Workstring to 2100' and set Class A Cement Plug from 2100' to surface
 - a. This plug will cover Elevation @ 1955'
9. Install monument with Well Name, API#, & Company Name. Monument must extend 30" min. above ground level and be 6" in diameter.

10. Reclaim site ASAP.

NOTE: All Cement plugs will be Class A Cement, All Spacers between wells will be 6% Gel, Any casing unable to be recovered will be perforated every 100' with 4 shots and 100' cement plugs will be set to cover all cut points.

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: 7/12/2017

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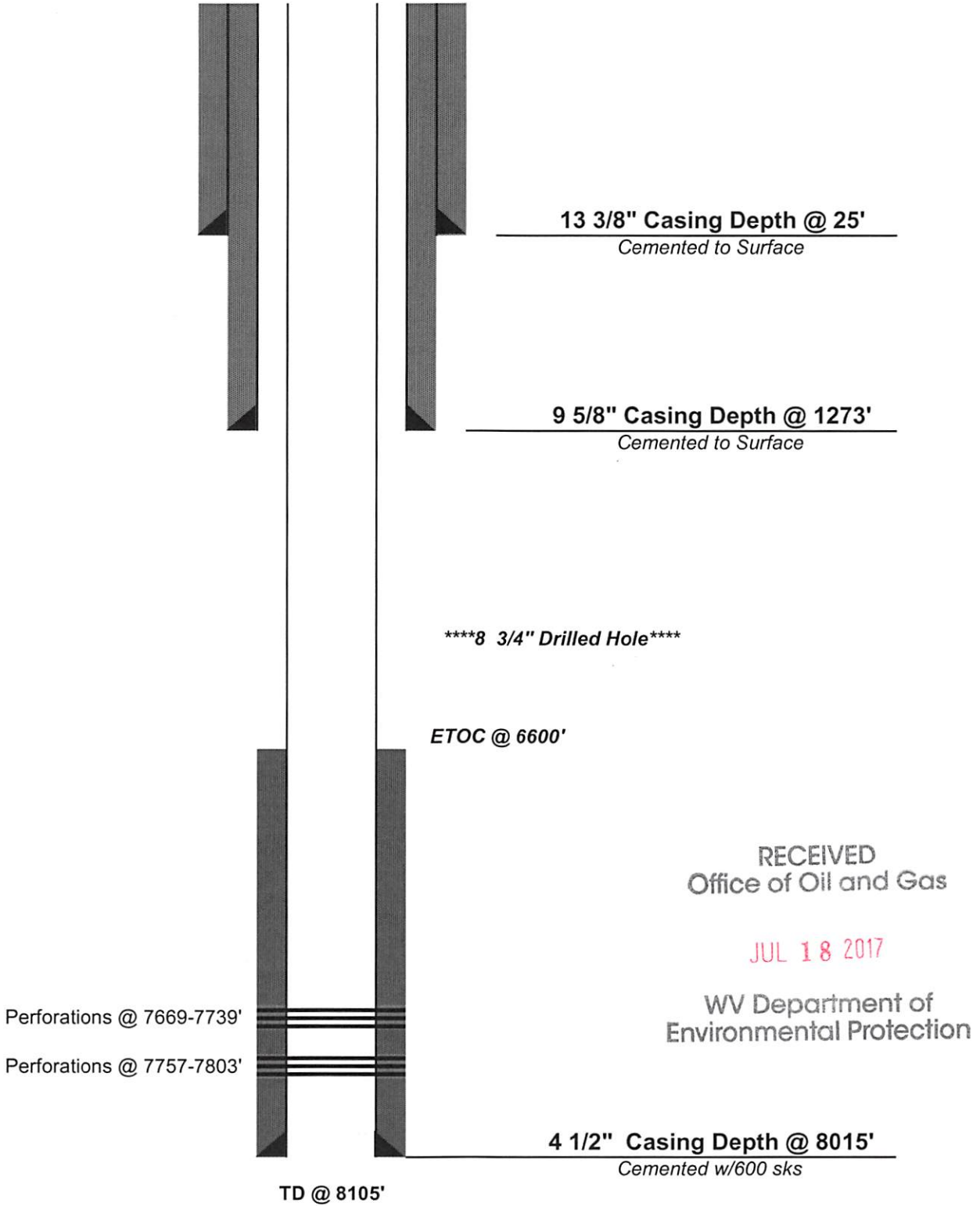
Garner #7109

Morgan, Monongalia County WV

Original Completion : 12/19/1970

API # 47-061-00324

Elevation = 1955'



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6100324P

Form O&G-16



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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

OIL & GAS DIVISION
Rotary Spudder
Cable Tools Storage

Quadrangle MORGANTOWN

Permit No. MON-324

WELL RECORD

Oil or Gas Well Gas
(KIND)

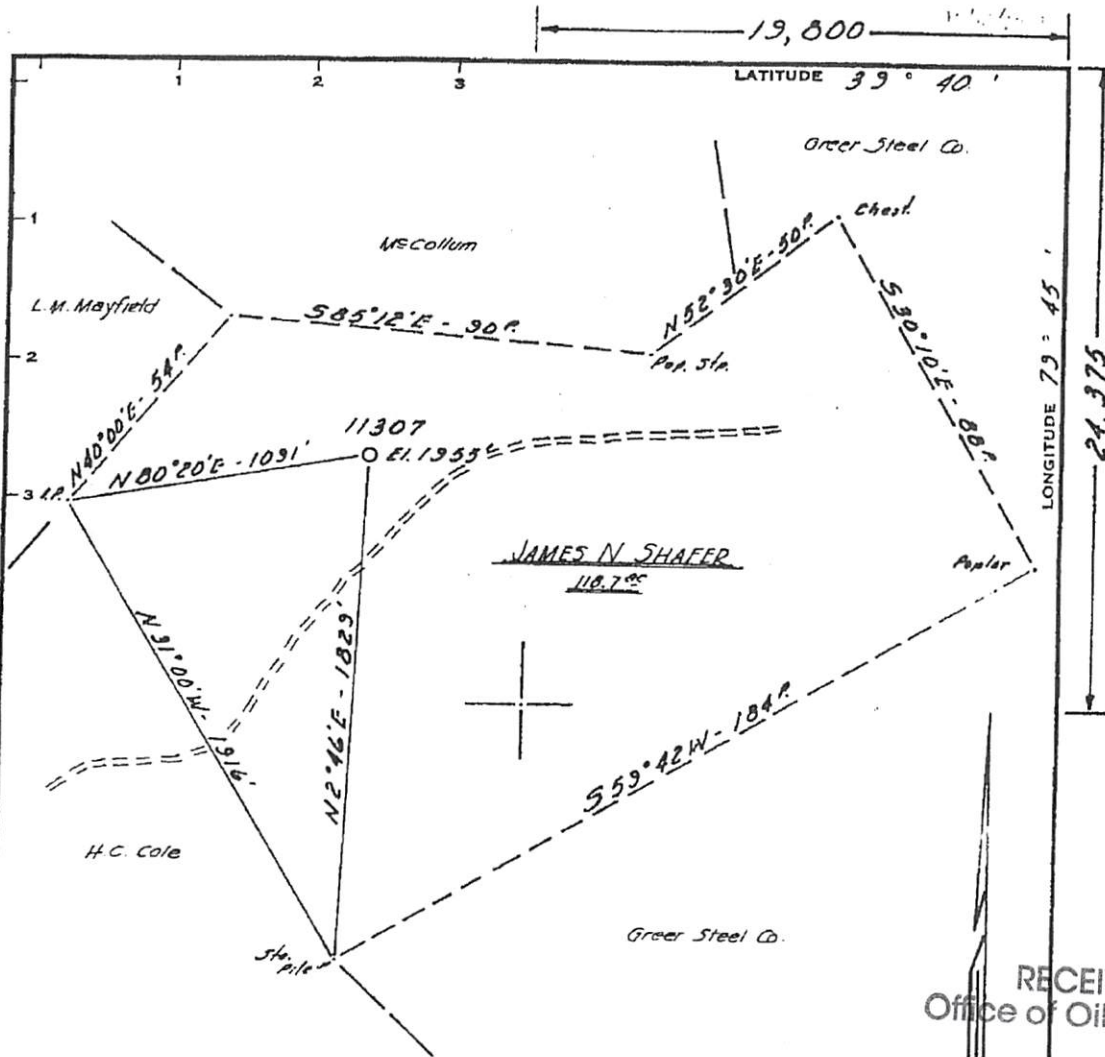
Company <u>Consolidated Gas Supply Corporation</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address <u>Clarksburg, West Virginia 26301</u>	Size			
Farm <u>James N. Shafer</u> Acres <u>117</u>	16			Kind of Packer
Location (waters)	13	25'	25'	
Well No. <u>11307</u> Elev. <u>1955'</u>	<u>10.9 5/8"</u>	<u>1273</u>	<u>1273</u>	Size of
District <u>Morgan</u> County <u>Monongalia</u>	8 1/4			Depth set
The surface of tract is owned in fee by	6 3/4			
Mineral rights are owned by	5 3/16			
Drilling commenced <u>11-11-70</u>	4 1/2	8015	8015	Perf. top <u>7669</u>
Drilling completed <u>12-19-70</u>	3			Perf. bottom <u>7735</u>
Date Shot <u>Not shot</u> From To	2			Perf. top <u>7757</u>
With	Liners Used			Perf. bottom <u>7803</u>
Open Flow /10ths Water in Inch	Attach copy of cementing record <u>13" & 9"</u> to surface			
Volume <u>2,903,000 (Natural)</u> Cu. Ft.	CASING CEMENTED <u>SIZE</u> No. Ft. <u>Date</u>			
Rock Pressure <u>Not Taken</u> lbs. hrs.	Amount of cement used (bags) <u>4 1/2" with 600 bags</u>			
Oil <u>None</u> bbls. 1st 24 hrs.	Name of Service Co. <u>Halliburton</u>			
WELL ACIDIZED (DETAILS) <u>No</u>	COAL WAS ENCOUNTERED AT <u>None</u> FEET INCHES			
WELL FRACTURED (DETAILS) <u>12-29-70 with 1400 bbl. fluid, 50,000# sand, 2000 gal. 28% acid</u>	FEET INCHES FEET INCHES			
RESULT AFTER TREATMENT (Initial open Flow or bbls.) <u>4,795,000 cubic feet</u>	ROCK PRESSURE AFTER TREATMENT <u>3450#</u> HOURS <u>5 days</u>			
Fresh Water <u>55</u> Feet	Salt Water <u>3525</u> Feet			
Producing Sand <u>Chert</u>	Depth <u>7669 - 7803</u>			

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Little Lime			402	413	water	55'	
Big Lime			437	673			
Weir			737	869			
50' sand			1013	1057			
4th sand			1626	1645			
5th sand			1659	1684			
Bayard			1714	1752			
Speechley			2381	2408			
Balltown			2596	2656			
Riley			3539	3649	water gas	3525' 3554'	Show
Tully			7207	7297			
Onondaga			7644	7666			
Chert			7666	7839	gas	7669-7803'	
Oriskany			7839	7914			
Heldeberg			7914				
Total Depth				8105			

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(over)

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Minimum Error of Closure 1" = 200'
 Source of Elevation ROAD FORKS - ELEV. 2224'
 "I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

- New Location
- Drill Deeper
- Abandonment

Map Sheet 933 B-3 CO 1570 P21-24

Company CONSOLIDATED GAS SUPPLY CORP.
 Address 445 W. MAIN ST. - CLARKSBURG, W. VA.
 Farm JAMES N. SHAFER
 Tract Acres 118.7 Lease No. G-124797
 Well (Farm) No. 11307 Serial No. 11307
 Elevation (Spirit Level) 1955'
 Quadrangle MORGANTOWN EC
 County MORGANTOWN District MORGAN
 Engineer Guy H. Bradley
 Engineer's Registration No. 24250
 File No. 9-18-70 Drawing No. 1" = 500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. Mon-324

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by dashed lines as shown.
 - Denotes one inch spaces on latter line at original tracing.

1) Date: _____
2) Operator's Well Number
7109
3) API Well No.: 47 - 061 - 00324

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>WILLIAM A JR, MELANIE E & DOW S DELORENZO</u>	Name <u>N/A</u>
Address <u>8421 RIVERSIDE RD</u>	Address _____
<u>ALEXANDRIA VA 22308-1547</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>WILLIAM A JR, MELANIE E & DOW S DELORENZO</u>
_____	Address <u>8421 RIVERSIDE RD</u>
_____	<u>ALEXANDRIA VA 22308-1547</u>
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Gayne J Knitowski</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 108</u>	Name <u>N/A</u>
<u>Gormanian WV 26720</u>	Address _____
Telephone <u>304-546-8171</u>	_____

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

WV Department of
Environmental Protection

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the well 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: Erika Whetstone
 Its: Permitting Supervisor
 Address 1000 Consol Energy Drive
Canonsburg, PA 15370
 Telephone 724-485-4035

COMMONWEALTH OF PENNSYLVANIA
 NOTARIAL SEAL
 Lori L. Walker, Notary Public
 Richhill Twp., Greene County
 My Commission Expires Feb. 23, 2019
 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 7th day of July 2017
Lori L. Walker Notary Public
 My Commission Expires February 23, 2019

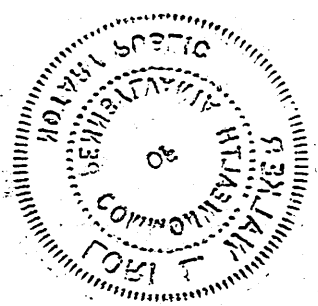


Oil and Gas Privacy Notice

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

08/18/2017

9747 0010



COMMONWEALTH OF PENNSYLVANIA
 NOTARIAL SEAL
 Lon L. Wolff, Notary Public
 Renfrew, Greene County
 My Commission Expires Feb. 23, 2019
 PENNSYLVANIA ASSOCIATION OF NOTARIES

08/18/2017

WW-9
(5/16)

API Number 47 - 061 - 00324
Operator's Well No. _____

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) Bull Run - Cheat River Quadrangle Masontown

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

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 Erika J Whetstone

JUL 18 2017

Company Official (Typed Name) Erika Whetstone

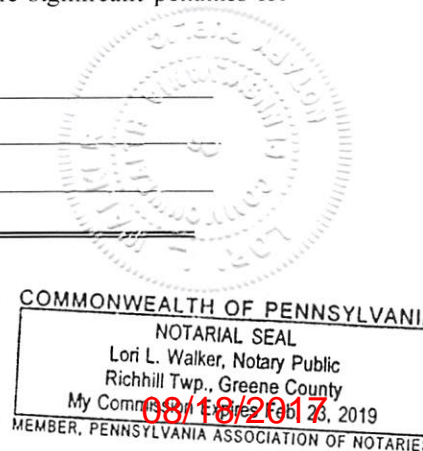
WV Department of Environmental Protection

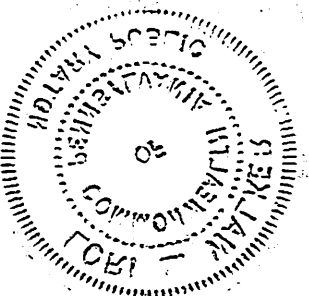
Company Official Title Permitting Supervisor

Subscribed and sworn before me this 7th day of July, 20 17

February 23, 2019 Joni Walker Notary Public

My commission expires February 23, 2019





COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Richard L. [Name], Notary Public
Bucks County, Pennsylvania
My Commission Expires Feb. 22, 2019

[Handwritten Signature]
[Illegible Printed Name]
[Illegible Title]

08/18/2017

Operator's Well No. _____

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	40	Tall Fescue	40
Landino Clover	5	Landino Clover	5

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: Maureen J. Kintner

Comments: Reclaim SITE ASAP

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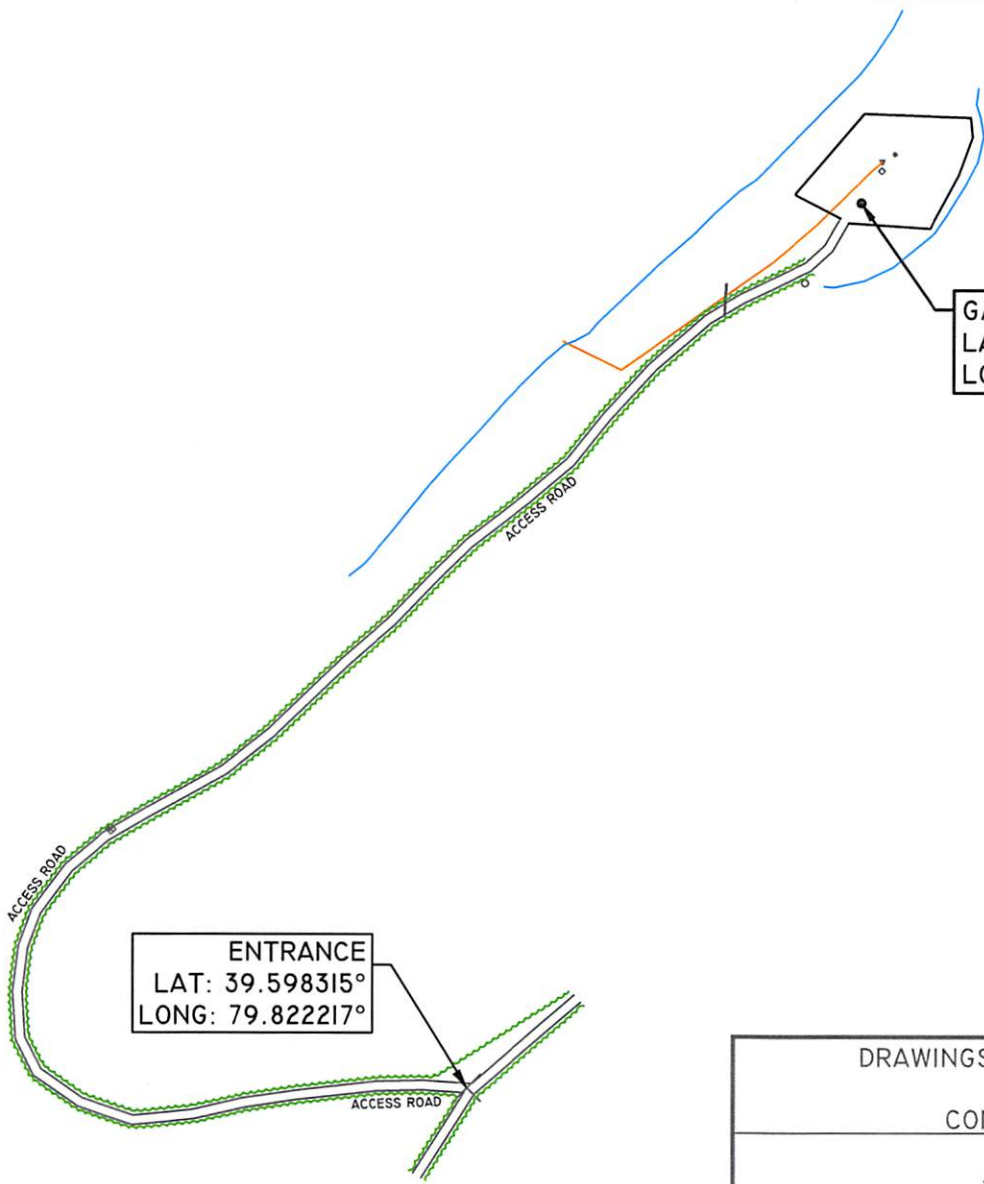
Title: Inspector Date: 7/12/2017

Field Reviewed? () Yes () No

THIS PLAN IS FOR THE PLUGGING OF AN EXISTING WELL. ENTIRE LENGTH OF ACCESS IS EXISTING WELL ROAD. ROCK WILL BE USED WHERE NECESSARY.

LEGEND

- — — — — - EXISTING ROAD
- ~~~~~ - EXISTING TREE LINE



GARNER 7109 WELL
 LAT: 39.600847°
 LONG: 79.820777°

ENTRANCE
 LAT: 39.598315°
 LONG: 79.822217°

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DRAWINGS TO ACCOMPANY FORM WW-9

CONSOL GAS COMPANY

200 HALLAM ROAD

WASHINGTON, PA 15301

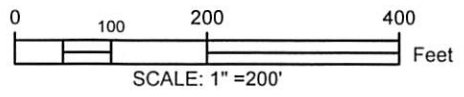
WATERSHED: BULL RUN-CHEAT RIVER

DISTRICT: MORGAN COUNTY: MONONGALIA

QUADRANGLE: MASONTOWN WELL NO: GARNER 7109

DATE: 06/10/2017 PAGE 1 OF 4

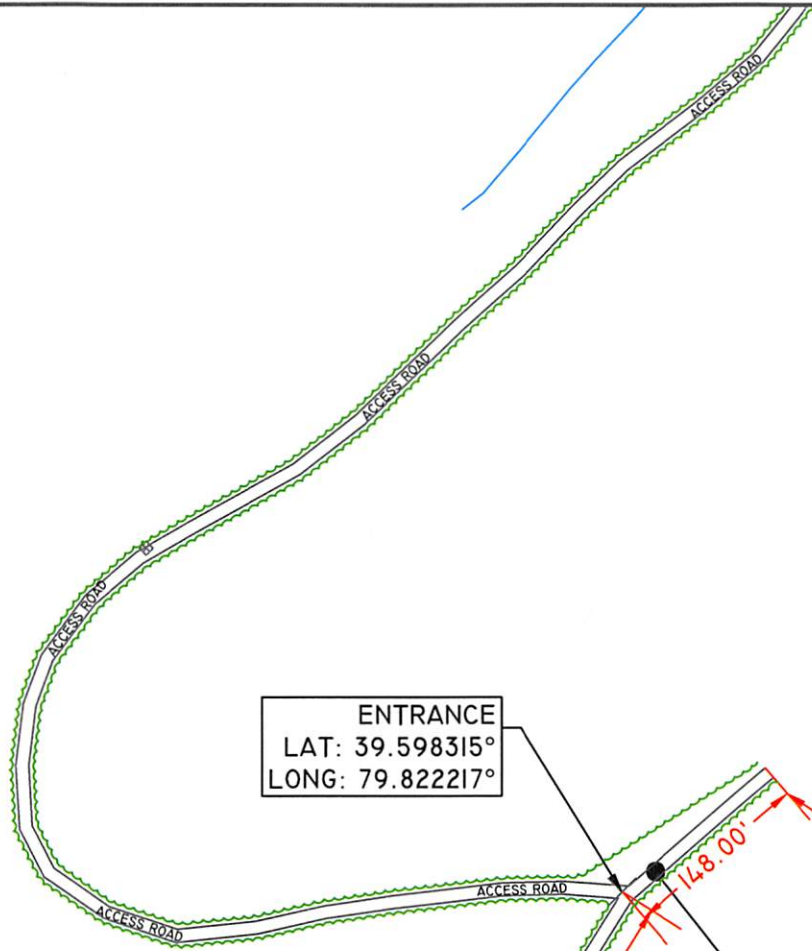
08/18/2017



THIS PLAN IS FOR THE PLUGGING OF AN EXISTING WELL. ENTIRE LENGTH OF ACCESS IS EXISTING WELL ROAD. ROCK WILL BE USED WHERE NECESSARY.

LEGEND

- — — — — - EXISTING ROAD
- ~~~~~ - EXISTING TREE LINE



ENTRANCE
LAT: 39.598315°
LONG: 79.822217°

SIGHT DISTANCE LIMIT
SPEED LIMIT: 25 MPH
REQUIRED DISTANCE - 173.0'
MEASURE DISTANCE - 148.0'

WOLFE ROAD
SPEED LIMIT 25
(CR 84/3)

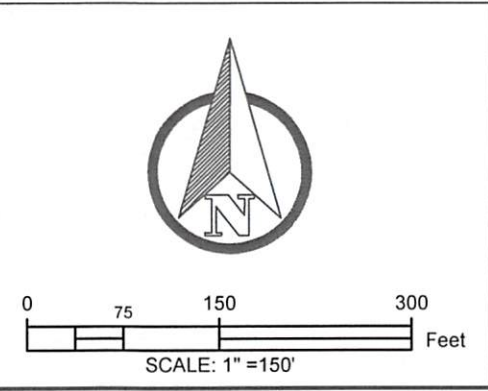
SIGHT DISTANCE LIMIT
SPEED LIMIT: 25 MPH
REQUIRED DISTANCE - 173.0'
MEASURE DISTANCE - 105.0'

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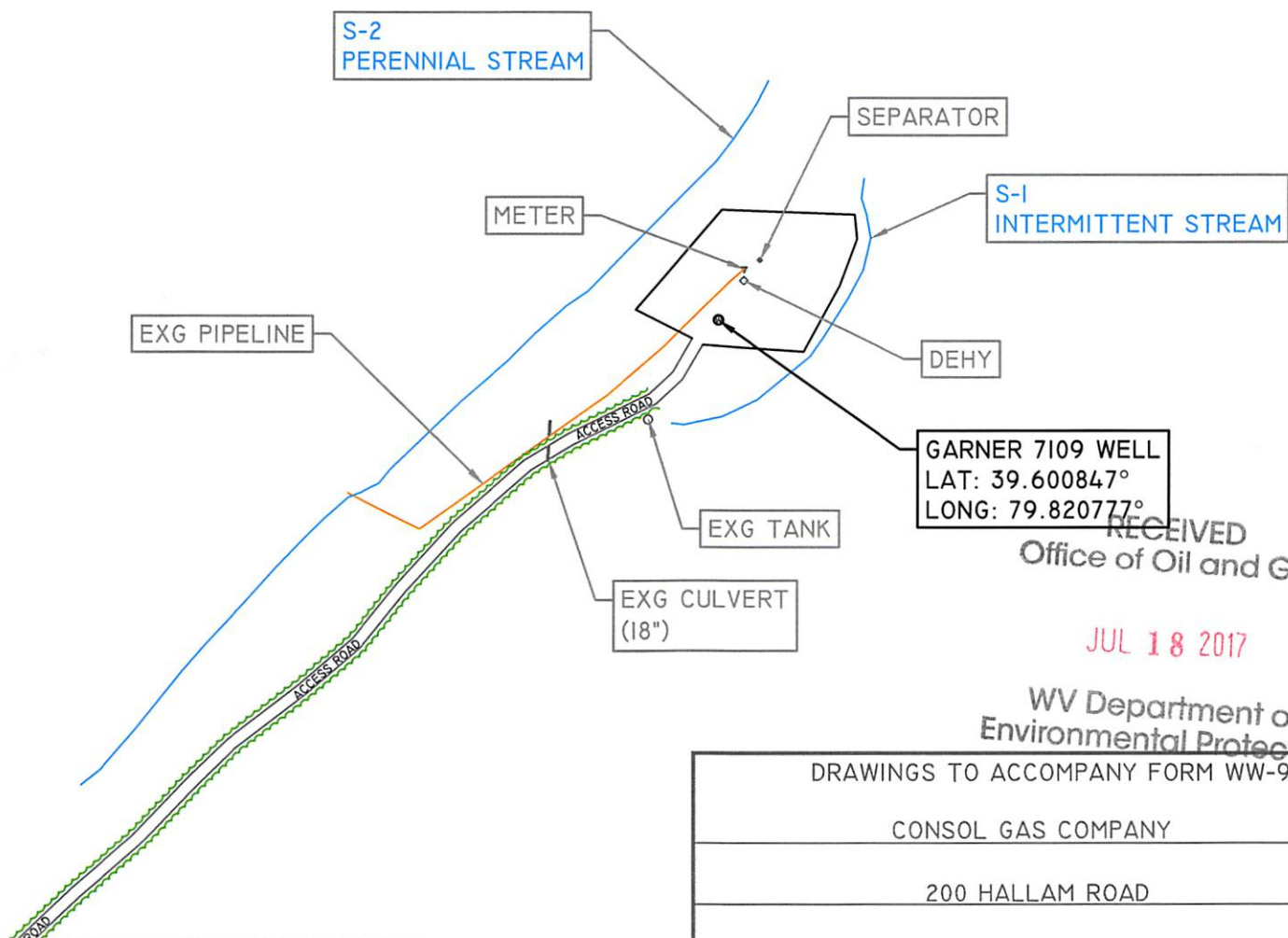
DRAWINGS TO ACCOMPANY FORM WW-9	
CONSOL GAS COMPANY	
200 HALLAM ROAD	
WASHINGTON, PA 15301	
WATERSHED: <u>BULL RUN-CHEAT RIVER</u>	
DISTRICT: <u>MORGAN</u>	COUNTY: <u>MONONGALIA</u>
QUADRANGLE: <u>MASONTOWN</u> WELL NO: <u>GARNER 7109</u>	
DATE: <u>06/10/2017</u>	PAGE <u>2</u> OF <u>4</u>
08/18/2017	



THIS PLAN IS FOR THE PLUGGING OF AN EXISTING WELL. ENTIRE LENGTH OF ACCESS IS EXISTING WELL ROAD. ROCK WILL BE USED WHERE NECESSARY.

LEGEND

- — — — — - EXISTING ROAD
- ~~~~~ - EXISTING TREE LINE

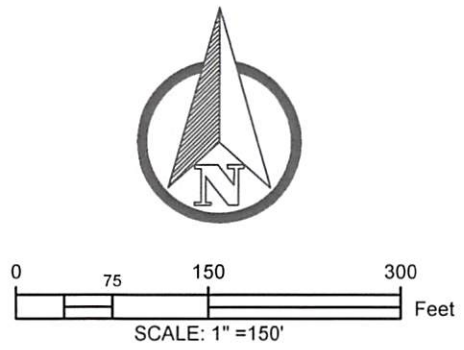


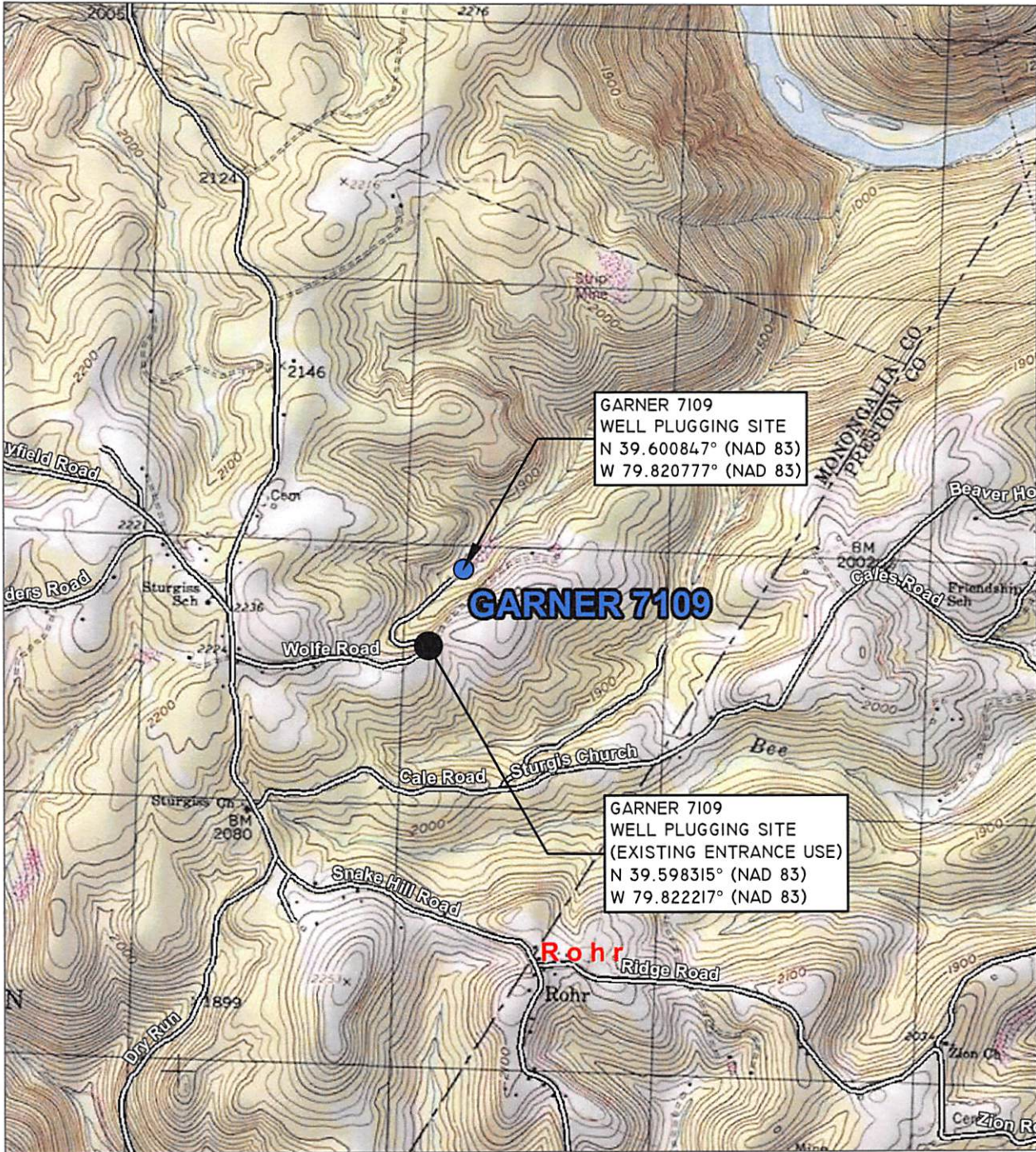
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DRAWINGS TO ACCOMPANY FORM WW-9	
CONSOL GAS COMPANY	
200 HALLAM ROAD	
WASHINGTON, PA 15301	
WATERSHED: <u>BULL RUN-CHEAT RIVER</u>	
DISTRICT: <u>MORGAN</u>	COUNTY: <u>MONONGALIA</u>
QUADRANGLE: <u>MASONTOWN</u> WELL NO: <u>GARNER 7109</u>	
DATE: <u>06/10/2017</u>	PAGE <u>3</u> OF <u>4</u>
08/18/2017	





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LOCATION MAP
MASONTOWN, WV 7.5M USGS QUADRANGLE
SCALE: 1"=2000'



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WV Department of Environmental Protection
Blue Mountain Inc.
 Engineers and Land Surveyors
 Woman Owned Small Business
 11023 Mason Dixon Hwy.
 Burton, WV 26562-9656
 (304) 662-6486

LOCATION MAP
GAS WELL PLUGGING
GARNER 7109 GAS WELL
 MORGAN DISTRICT
 MONONGALIA COUNTY, WV
 CONSOL GAS COMPANY
 200 HALLAM ROAD
 WASHINGTON, PA 15301

DRAWN BY: LLF
CHECKED BY: WPF
DATE: 06/10/2017
SCALE: 1"=2000'
WATERSHED: BULL RUN-CHEAT RIVER
PAGE <u>4</u> OF <u>4</u>

WW-7
8-30-06



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

API: 47-061-00324 WELL NO.: 7109

FARM NAME: Garner

RESPONSIBLE PARTY NAME: Erika Whetstone

COUNTY: Monongalia DISTRICT: Morgan

QUADRANGLE: Masontown

SURFACE OWNER: WILLIAM A JR, MELANIE E & DOW S DELORENZO

ROYALTY OWNER: _____

UTM GPS NORTHING: 4,384,120.838

UTM GPS EASTING: 601,243.110 GPS ELEVATION: 593.531

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:
Survey grade GPS : Post Processed Differential
Real-Time Differential _____
Mapping Grade GPS _____ : Post Processed Differential _____
Real-Time Differential _____

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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.

Erika Whetstone
Signature

Permitting Supervisor
Title

7/6/17
Date