

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

Monday, December 18, 2017 WELL WORK PERMIT Vertical / Plugging

CONSOL GAS COMPANY 1000 CONSOL ENERGY DRIVE

CANNONSBURG, PA 163176506

Re:

Permit approval for 12239 47-077-00184-00-00

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: 12239 Farm Name: BORN, C. M.

U.S. WELL NUMBER: 47-077-00184-00-00

Vertical / Plugging

Date Issued: 12/18/2017

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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.

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or	's										

1) Date_______, 2017 2) Operator's Well No. 7137 3) API Well No. 47-077 - 00184

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

	APPLICATION FOR A PER	MIT TO PLUG AND ABANDON
4)	Well Type: Oil / Gas X / Liqui	d injection / Waste disposal/
		derground storage) Deep/ Shallow_X
5)	Location: Elevation 564.602 METERS	Watershed HEADWATERS DECKERS CREEK
	District VALLEY	County PRESTON 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	9)Plugging Contractor
	Name Gayne J Knitowski	Name Coastal Drilling East LLC
	Address P.O. Box 108	Address 70 Gums Springs Road
	Gormania WV 26720	Morgantown, WV 26508
		RECEIVED Office of Oil and Gas
		OCT 1 2 2017
		WV Department of Environmental Protection
	fication must be given to the district of can commence.	il and gas inspector 24 hours before permitted
Work	order approved by inspector Hayne	1 km h Date 10/10/2017

K.H. Born #7137

Laurel Run, Preston County, WV
Original Completion: 02/26/1977
API# 47-077-00184
Elevation = 1855'

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 @ 7953')
- 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. @ 7050')
- 5. Verify TOC
- 6. RIH Jet Cut/Collar Bust 4 ½" Casing above Bottom Hole Plug
- 7. Attempt to pull 4 1/2" Casing at MIN. 1/2 times string weight
 - 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
- 9. Install monument with Well Name, API#, & Company Name. Monument must extend 30" min. above ground level and be 6" in diameter.

16. Redain 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:

RECEIVED Office of Oil and Gas

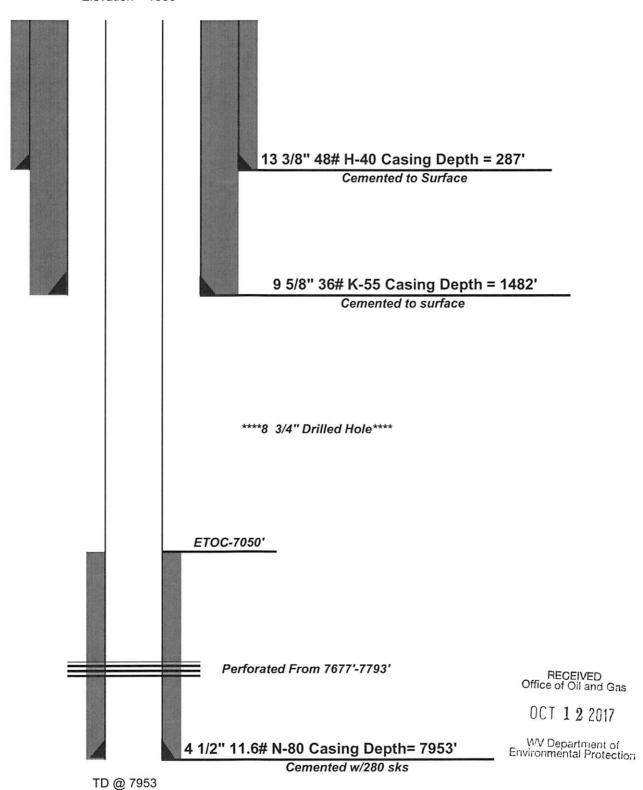
OCT 1 2 2017

WV Department of Environmental Protection

K.H. Born # 7137--Well#12239 Laurel Run, WV--Preston County

Original Completion : 02/26/1977

API # 47-077-00184 Elevation = 1855'





47077001848

NOV 2 6 1977

STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division DESTE OF WILLIES

WELL RECORD

Quadrangle_	MASONTOW
Permit No	PRES-184

Producing Sand

Company Consolidated Gas Supply Corporation

Chert

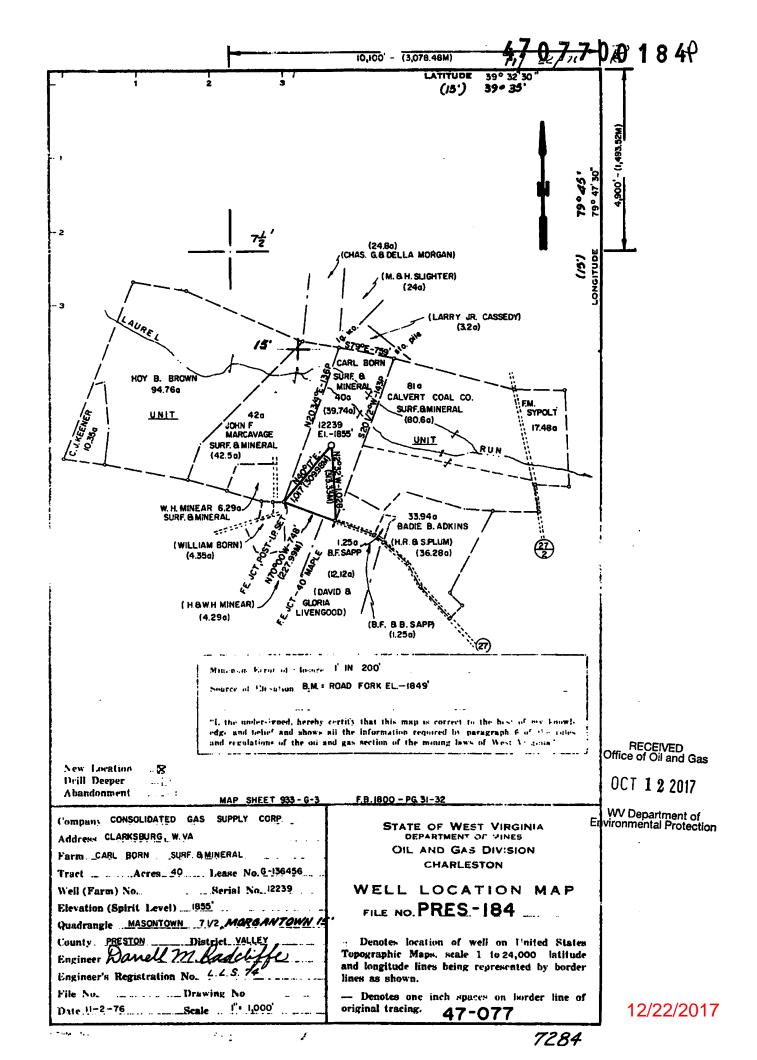
Rotary_XX_	Oil
Cable	Gas xx
Recycling	Comb.
Vater Flood	Storage
Disposal	
	(Kind)

Address Clarksburg, W. Va.	Casing and	Used in	Left	Cement fill up
Farm Carl M. Born Acres 40	Tubing	Drilling	in Well	Cu. ft. (Sks.)
Location (waters) Laurel Run	C		 	ł
Well No. 12239 Elev 1855	Size 20-16	l	1	
District Valley County Preston	Cond.	1	1	
The surface of tract is owned in fee by Carl M. Born	13-50cx	2871	2871	To surface
	9 5/8	11,821	11,821	To surface
Address Kingwood, W. Va.	8 5/8			10 2011208
Mineral rights are owned by Frank M. Sypolt	7			
Address Rt #1. Box 263, Reedsville	5 1/2			
Drilling Commenced 2-5-77	4 1/2	79531	79531	C50 1 -
Drilling Completed 2-26-77	3	1713	1733	280 bags
Initial open flow Show cu. ft bbls.	2		 	
Pinal production libble M cu. ft. per day hhle	Liners Used			
Well open li hrs. before test 3300# RP.				
Well treatment details:	Attach copy of c			
Chert treated with 56,000# sand, 1000 bt	l Water and l	O-200 cel	M. 2014/27	1. <i>Ed</i> 1
Perforations: 7793-7677' with 45 hole		.0,700 gar	acid()1.	(177)
1022 Total Walter By 11020	<u></u> _			
	· · · · · · · · · · · · · · · · · · ·			
Coal was encountered at None Feet				
Fresh water 352! Feet	Salt W			

Permation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water • Remarks	•
Sand & Shale Open Mine Sand Sand & Shale Big Lime Big Injun Sand & Shale Tully Limestone Marcellus Shale ONONDAGA CHERT ORISKANY HELDERBERG Total Depth	0 56 60 315 771 996 1104 7370 7651 7665 7841 7914	56 60 315 771 996 1104 7244 7370 7651 7665 7841 7914 7953	Gas Chert See Perfs	Office of Oil and Gas OCT 1 2 2017 We Department of Environmental Protection
KBM 15' above G.L.	(ove		Consolidated Gas Supply Corporat di5 West Main Street Harksburg, W. Va.	loņ

(over)

^{*} Indicates Electric Log tops in the remarks section.



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1) Date:		-	• .	•	
2) Operator's Well Numb	oer				
3) API Well No.: 47 -	077	_	00184		

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

Surface Own	er(s) to be served:	5) (a) Coal Operator	
(a) Name	ALAN D & DORIS M BORN	Name	N/A
Address	5397 KINGWOOD PIKE	Address	
	REEDSVILLE WV 26547		
(b) Name		(b) Coal Ow	ner(s) with Declaration
Address		Name	Patriot Mining Company c/o Ark Land Company
		Address	One City Place Drive Suite 300
			St. Louis, MO 63141
(c) Name		Name	ALAN D & DORIS M BORN
Address		Address	5397 KINGWOOD PIKE
			REEDSVILLE WV 26547
Inspector	Gayne J Knitowski	(c) Coal Less	see with Declaration
Address	P.O. Box 108	Name	N/A
	Gormania WV 26720	Address	
Telephone	304-546-8171		
	(a) Name Address(b) Name Address(c) Name	(a) Name Address Address S397 KINGWOOD PIKE REEDSVILLE WV 26547 (b) Name Address (c) Name Address Inspector Address Gayne J Knitowski P.O. Box 108 Gormania WV 26720	(a) Name ALAN D & DORIS M BORN Name Address 5397 KINGWOOD PIKE Address (b) Name (b) Coal Ow Address Name Address Name Address Address Inspector Gayne J Knitowski (c) Coal Less Address Name Address 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
- 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	. 1
COMMONWEALTH OF PENNSYLVANIA	By:	Sarah Weigand	ganel
NOTARIAL SEAL	Its:	Permitting Manager	
Lori L. Walker, Notary Public	Address	1000 Consol Energy Drive	
Richhill Twp., Greene County		Canonsburg, PA 15370	
My Commission Expires Feb. 23, 2019 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIE	Telephone	724-485-3244	
Commonwealth of Penn	sylvania	County of Guerre	
Subscribed and sworn before me this		y of Notary Public	RECEIVED Office of Oil and Ga
My Commission Expires	MM 13 1	019	007.4
	1.00		UCT 1 2 2017
Oil and Gas Privacy Notice			U1775

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

API Number 47 -	4.7	0	7 018 7	0	0	1	8	4	P	
Operator's Well N	0.									

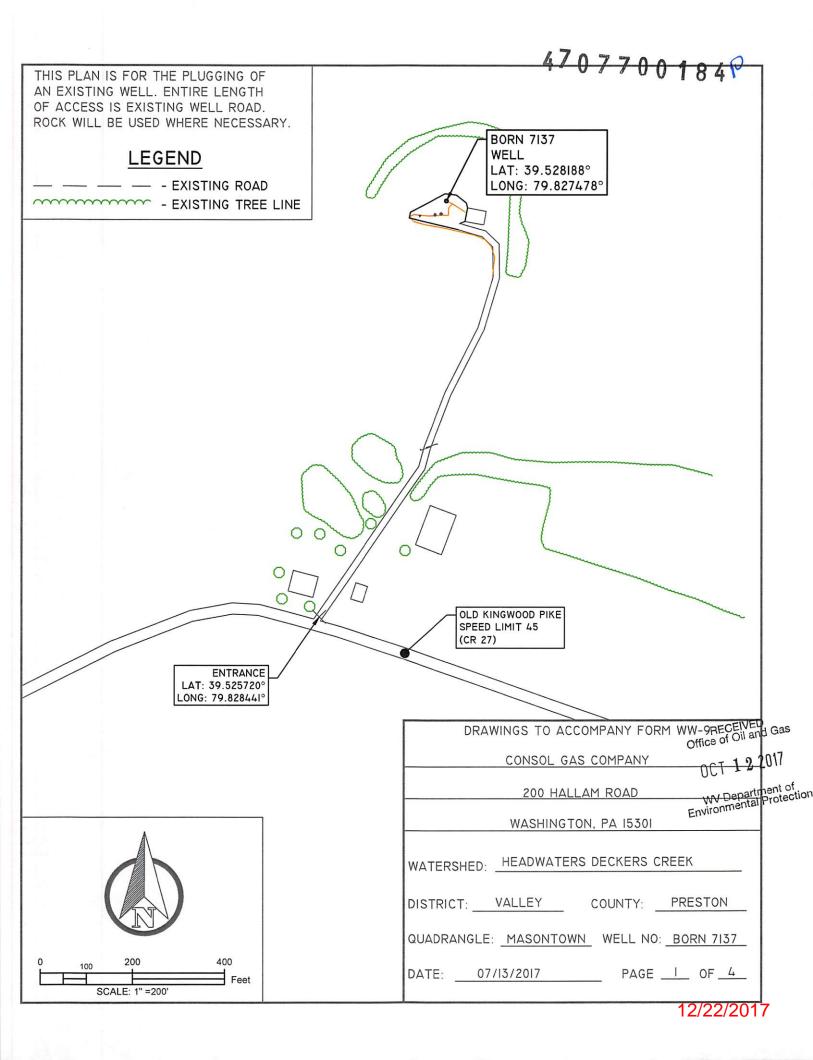
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

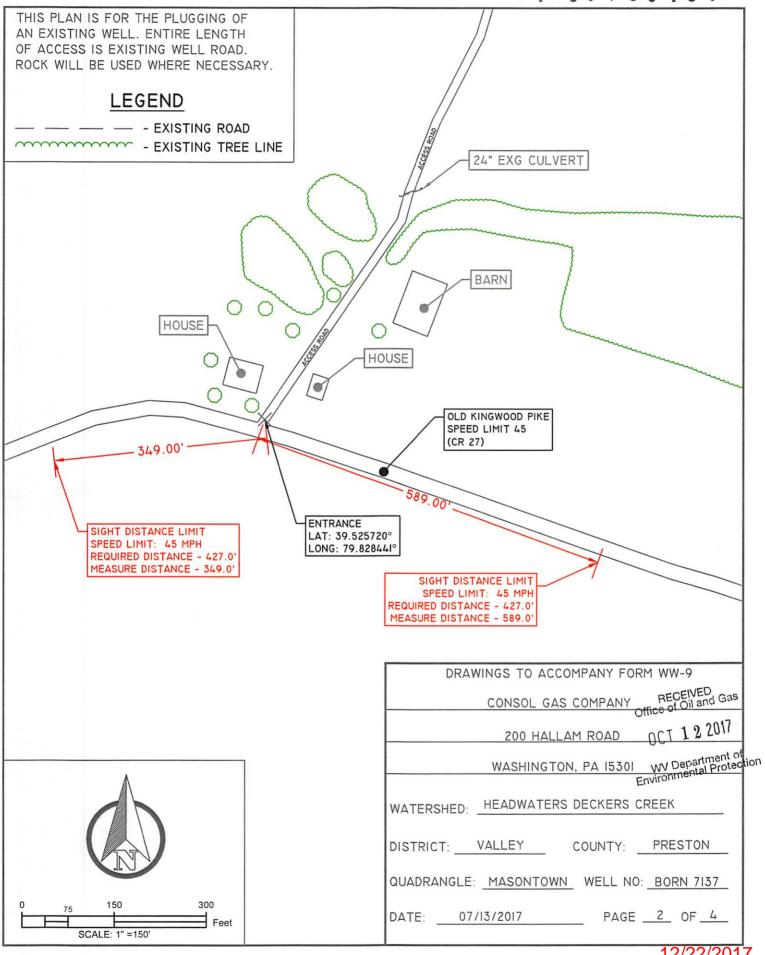
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Consol Gas Company OP Code 494495754
Watershed (HUC 10) HEADWATERS DECKERS CREEK 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 systembe 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 Cas 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 Cas 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 o btaining 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 and Gas
Company Official Signature Out the School
Company Official (Typed Name) Sarah Weigand 0CT 1 2 2017
Company Official Title Permitting Manager WV Department of Environmental Protection
Subscribed and swom before me this A&M day of September , 20 COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Lori L. Walker, Notary Public Richhill Twp., Greene County My Commission expires Feb. 23, 2019 Member, Pennsylvania 1999 Notaries

Operator's Well No._____

Proposed Revegetation Treatment: Acres D	turbed less than 1 acre Prevegetation pH	
2.2	or to correct to pH	
Fertilizer type 10-20-20 or equiv	lent	
Fertilizer amount 500	lbs/acre	
Mulch_ hay or straw 2	Tons/acre	
	Seed Mixtures	
Temporary	Permanen	t
Seed Type lbs/acre	Seed Type	lbs/acre
Tall Fescue 40	Tall Fescue	40
Landino Clover 5	Landino Clover	5
Maps(s) of road, location, pit and proposed provided). If water from the pit will be land	rea for land application (unless engineered plans including oplied, provide water volume, include dimensions (L, W,	
	oplied, provide water volume, include dimensions (L, W, on area.	D) of the pit, and dimensions
Maps(s) of road, location, pit and proposed provided). If water from the pit will be land (L, W), and area in acres, of the land applica Photocopied section of involved 7.5' topographical Plan Approved by:	oplied, provide water volume, include dimensions (L, W, on area.	D) of the pit, and dimensions
Maps(s) of road, location, pit and proposed provided). If water from the pit will be land (L, W), and area in acres, of the land applica Photocopied section of involved 7.5' topographical Plan Approved by: Comments: Levan Site ASAP	oplied, provide water volume, include dimensions (L, W, on area.	D) of the pit, and dimensions
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Maps(s) of road, location, pit and proposed provided). If water from the pit will be land (L, W), and area in acres, of the land applica Photocopied section of involved 7.5' topogra Plan Approved by: Comments: Lectara Site ASAP Tustal Sair crossion	oplied, provide water volume, include dimensions (L, W, on area.	D) of the pit, and dimensions
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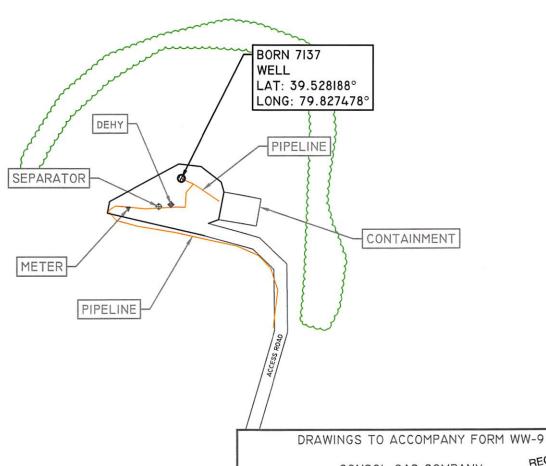


THIS PLAN IS FOR THE PLUGGING OF AN EXISTING WELL. ENTIRE LENGTH OF ACCESS IS EXISTING WELL ROAD. ROCK WILL BE USED WHERE NECESSARY.

LEGEND

– EXISTING ROAD

- EXISTING TREE LINE



0 50 100 200 SCALE: 1" =100' CONSOL GAS COMPANY

RECEIVED
Office of Oil and Gas

200 HALLAM ROAD

OCT 12 2017

WASHINGTON, PA 15301

WASHINGTON, PA 15301

WASHINGTON, PA 15301

Environmental Protection
Environmental Protection

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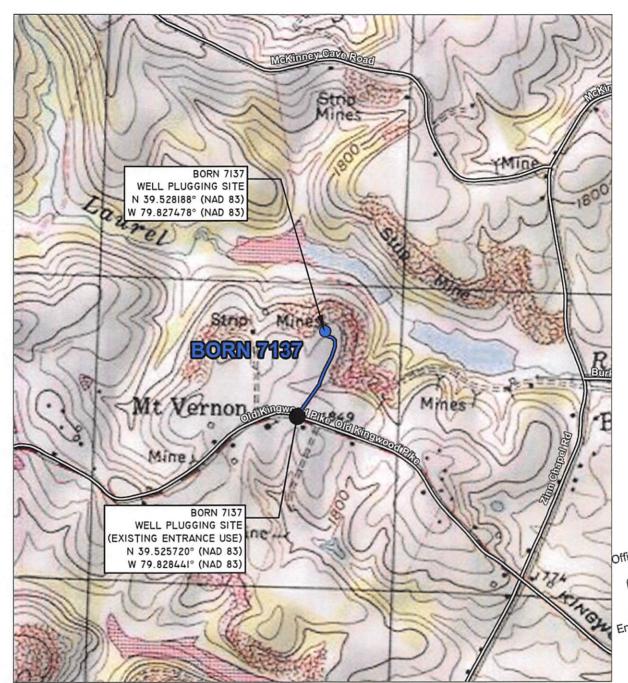
WATERSHED: HEADWATERS DECKERS CREEK

DISTRICT: VALLEY

COUNTY: PRESTON

QUADRANGLE: MASONTOWN WELL NO: BORN 7137

DATE: 07/13/2017 PAGE 3 OF 4



Office of Dil and Gas

WV Department of Environmental Protection

LOCATION MAP
MASONTOWN, WV 7.5M USGS QUADRANGLE
SCALE: I"=1000'





Engineers and Land Surveyors Woman Owned Small Business

> 11023 Mason Dixon Hwy. Burton, WV 26562-9656 (304) 662-6486

LOCATION MAP

GAS WELL PLUGGING BORN 7137 GAS WELL

VALLEY DISTRICT PRESTON COUNTY, WV

CONSOL GAS COMPANY 200 HALLAM ROAD WASHINGTON, PA 15301

DRAWN E	BY:	LLF	
CHECKED	BY	: WPF	

DATE: 07/13/2017 SCALE: I"=1000'

WATERSHED: HEADWATERS DECKERS CREEK

PAGE __4 OF _4

WW-7 8-30-06

Signature



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS	
API: 47-077-00184 WELL NO.: 173	7
Porn	
RESPONSIBLE PARTY NAME: Sarah Weigand / Con	SOL GAS COMPANY
COUNTY: Preston DISTRICT: Valley QUADRANGLE: MASONTOWN	<u>/</u>
QUADRANGLE: MASONTOWN	
QUADRANGLE: MASON TOWN SURFACE OWNER: ALAN D & DORIS M BORN	*
ROYALTY OWNER:	
UTM GPS NORTHING: 4,376,049.157 METERS UTM GPS EASTING: 600,772.903 METERS GPS ELEVATION	(1852')
UTM GPS EASTING: 600,772.903 METERS GPS ELEVATION	564.602 METERS :
The Responsible Party named above has chosen to submit GPS coordinate preparing a new well location plat for a plugging permit or assigned API above well. The Office of Oil and Gas will not accept GPS coordinates the following requirements: 1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters height above mean sea level (MSL) – meters. 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS × : Post Processed Differential X	number on the at do not meet
Real-Time Differential	DECEIVED
Mapping Grade GPS: Post Processed Differential Real-Time Differential	Office of Oil and Gas
4. Letter size copy of the topography map showing the well loo I the undersigned, hereby certify this data is correct to the best of my know belief and shows all the information required by law and the regulations is prescribed by the Office of Oil and Gas. Permitting Manager	wledge and WV Department of
(//and W/ Con Di cilling Wallage)	12011

Title

Date