

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, December 06, 2017 WELL WORK PERMIT Vertical / Plugging

CONSOL GAS COMPANY 1000 CONSOL ENERGY DRIVE

CANNONSBURG, PA 163176506

Re:

Permit approval for WV 7096

47-061-00323-00-00

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: WV 7096

Farm Name: HART, LOIS

U.S. WELL NUMBER: 47-061-00323-00-00

Vertical / Plugging

Date Issued: 12/6/2017

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.

1)Date	470	6 1	02013	2	3 1
2)Operat	cor's				
Well 1	No. 7096				
3) API We	all No.	47-061	- 00323		

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

	MIT TO PLUG AND ABANDON
Well Type: Oil/ Gas X/ Liquid	d injection / Waste disposal /
	derground storage) Deep / Shallowx
· · · · · · · · · · · · · · · · · · ·	
Location: Elevation 638.154 METERS	Watershed HEADWATERS DECKERS CREEK
District MORGAN	County Monongalia Quadrangle MASONTOWN
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
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 122017 WV Department of Environmental Protection
	(If "Gas, Production x or Und Location: Elevation 638.154 METERS District MORGAN Well Operator Consol Gas Company Address 1000 Consol Energy Drive Canonsburg, PA 15317 Oil and Gas Inspector to be notified Name Gayne J Knitowski Address P.O. Box 108

Hart, Lois #7096

Morgan, Monongalia County WV Original Completion: 10/19/1970 API# 47-061-00323 Elevation = 2098'

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 @ 8313')
- 3. TIH with 2 3/8" Workstring and load the well with 6% Gel
- 4. Pump an 800' Class A Cement Plug from TD to 7500', POOH (3700') to a depth of 3800' and pump a 1500' Class A Cement plug from 3800' to 4 ½" TOC found from Bond log
- 5. Verify TOC
- 6. RIH Jet Cut/Collar Bust 4 1/2" Casing above Bottom Hole Plug
- 7. Attempt to pull 4 1/2" Casing at a min. of 1/2 x string weight
 - a. If unable to pull run bond long/free point and cut where free
- 8. TIH with 2 3/8" Workstring to TOC and set Class A Cement Plug from TOC to surface
 - a. This plug will cover Elevation @ 2098'
- 9. Install monument with Well Name, API#, & Company Name. Monument must extend 30" min. above ground level and be 6" in diameter.

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

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

OCT 1 2 2017

WV Department of Environmental Protecti

Work Order approved by Inspector:

will be set to cover all cut points.

WR-35 Rev (5-01) DATE: 11/12/2003 API#: 47 06#03239F

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

pr 13

Well Operato	r's Report of W	ell Work			
Farm name: Hart, Lois_	Oper	ator Well No.:_	7096		
LOCATION: Elevation: 2098	<u>O</u> u	adrangle:	Masontow	m	** *****
District: Morgan	Cor	unty: Mo	noneahelia		
Latitude: 10,100 Feet South of 39 Deg	. 35 Min.	00 Sec.			
Longitude 5,565 Feet West of 79 Deg. 50	0 Min. 00 S	ec.			
Company: Dominion Exploration & Production. In	c				
	Casing &	Used in	Left in well	Cement fill	• *
	Tubing	drilling		up Cu. Ft.	_
Address: POBox 1248					
Jane Lew, WV 26378	ļ			ļ	-
Agent: Rodney J. Biggs					_
Inspector: Terry Urban Date Permit Issued: 08/18/2033					• • • • •
Date Well Work Commenced:			 		-
Date Well Work Completed: 10/27/2003		 		 	•
Verbal Plugging: N/A	 	See	Previous	WR-35 for	-
Date Permission granted on: N/A	 	existing	Casing prog	171033 101	•
Rotary X Cable Rig	 	- VALUE -	Garage prog	 	•
Total Depth (feet):		<u> </u>		<u> </u>	•
Fresh Water Depth (ft.): N/A	 	1			• •
				f	•
Salt Water Depth (ft.): N/A					CENTED
					RECEIVED Office of Oil and Gas
Is coal being mined in area (N/Y)? N					Ource or a
Coal Depths ft.):N/A	ļ	1	ł		OCT 1 2 2017
OPEN FLOW DATA					UCI 12 200
Riley			3640-3662	,	mant of
Producing formation Balltown	P	ay zone depth			. WV Department of Environmental Protection
Gas: Initial open flowOdorMCF/c					Environmenta
Final open flow 94 MCF/d			Bbl/d		• • •
Time of open flow between initial and	final tests		_	•	
Static rock Pressure 600 psig (su	rface pressur	e) after 12	Hours		•
	•				
Second producing formation Speechley	·	Pay zone dep	th (ft) 2508-25	18'	and the second second
Gas: Initial open flow * MCF/d Oi	l: Initial open	flow*		1	,
Final open flow * MCF/d	Final open flo	w*	_B91/g	المانسين تا	de a de
Time of open flow between initial and	final tests	*Hot		1 18	5.70
Static rock Pressure * psig (surfa	ice pressure) :	after*F	Iours	I KON LO	i.
*Commingled	OT FOURTS	1) DETAILS	75 DEDECT 1 00	ED AN DESPE	Arrest Stand
NOTE: ON BACK OF THIS FORM PUT THE I INTERVALS, FRACTURING OR STIMULATIN LOG WHICH IS A SYSTEMATIC DETAILED	IG PHYSICA	I). DETAILS	JF FERFURA I	BIT I Smitchman	المستحددة المستحددة
LOG WHICH IS A SYSTEMATIC DETAILED	GEOLOGICA	L RECORD OF	ALL FORMAT	TIONS	3
INCLUDING COAL ENCOUNTERED BY THE		1		,	o o
	low				Mono
Signed:	1013	De			a
By: Rodney J. Biggs	- 11/1-2	1000	.0.		Ë
Date:			· Nr		$\mathcal{E}_{\mathcal{G}}$
	•		•		77

Page 2

WELL 7096

10/27/2003 PERFED AND FRACED AS FOLLOWS:

RILEY, 3840 - 3882', 20 HOLES, BD 2050', AVG RATE 20 BPM, AVG PRESS 2286#, 420 BBLS, TOT SAND 30,000#,

TOT SAND 30,000#, ISIP 1770#
BALLTOWN, 2770 - 2776', 20 HOLES, BD 4100#, AVG RATE 11 BPM, AVG PRESS 2284#, 324
BBLS, TOT SAND
20,500#, ISIP 1550#
SPEECHLEY, 2508 - 2518', 20 HOLES, BD 1895#, AVG RATE 17 BPM, AVG PRESS 2236#, 370
BBLS, TOT SAND
25,500#, ISIP 1510#

RECEIVED Office of Oil and Gas

OCT 12 2017

V V Department of Environmental Protection

Form: WW - 2B

STATE OF WEST VIRGINIA

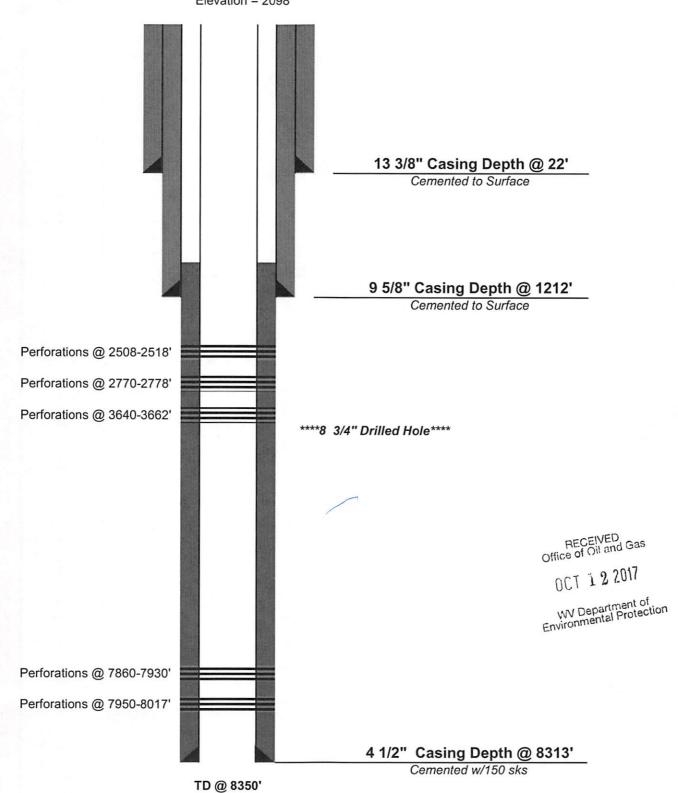
61.00323F

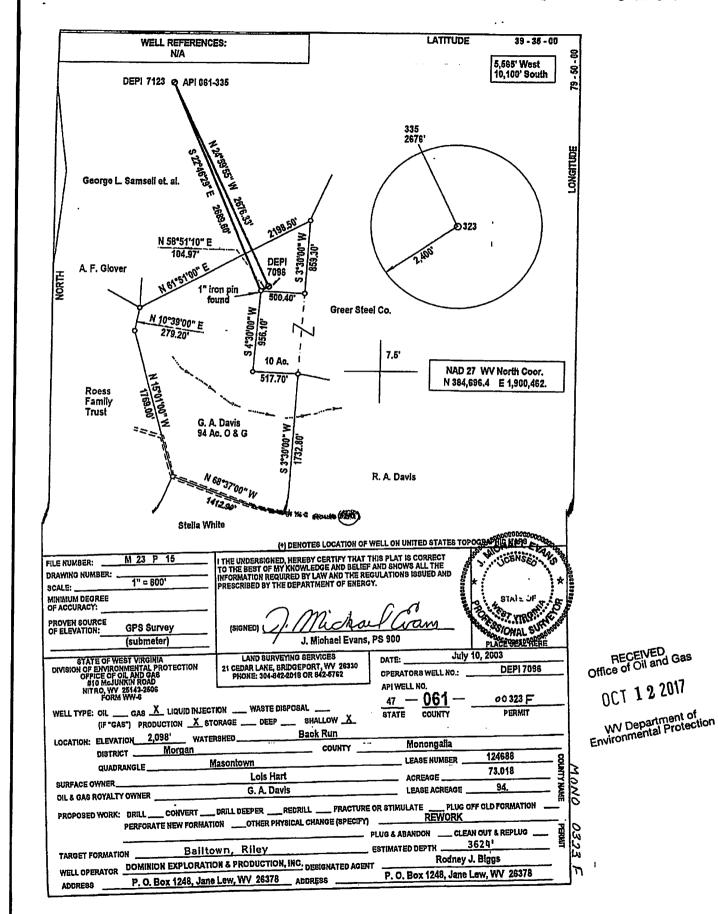
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

		V	VELL WORK PE	RMIT API	PLICATIO	V		
4) Wall Oncord	a Domin					Monongalia	(A)	461
1) Well Operat	tor Domin	ion Explora	ation & Production,		Operator ID		Morgan District	Masontown Quadrangle
4) Well Type:		or Ga	ction_X/ U		3) E	levation:	Office — JUL	8' Gas Permitting 3 1 2003
5) Proposed T	arget Forr	mation(s)	:Speechley	, Balltown	, Riley		Environm	epartment of lental Protection
6) Proposed T 7) Approximate 8) Approximate	e fresh wa	ter strata		N/	Α			
9) Approximate	e coal sea	m depth:	s:	N/	Ά			
10) Does land	contain co	oal seam	s tributary to ac	tive mine?	N	0		
11) Describe p	proposed v	well work	Squeeze ce					
			production.	7				
12) TYPE	SPECIFIC		ASING AND TUE	BING PRO		RVALS	CEME	ENT
	Size	<u>Grade</u>	Weight per ft	For Drilli	ng Left in	Well F	ill -up (Cu	. Ft.)
Conductor	13.375			22	22		CTS	
Fresh Water	9.625		4	1212	121	2	CTS	
Coal								
Intermediate								18
Production	4.50		11.6	8313	831	3	150 sks	
Tubing								
Liners								6
5	Kind Bizes Depths Se	t	9	٠				
350								

Hart, Lois #7096

Morgan, Monongalia County WV Original Completion: 10/19/1970 API # 47-061-00323 Elevation = 2098'





Form OG-10





DEPARTMENT OF MINES

Rotary	500000X
Spudder	
Cable Tools	
Cable Tools	

Quadrangle MORO	antown		OIL AND GAS	WELLS DIVISE	ОИ	Storage	
Permit No. MON-	323		WELL	RECORD		Oll or Ga	— C. NOLL
company			corporation	Cooling and Tubling	Used in Defilling	Left in Well	Packers
			Acres 94	Size			
Location (waters) .				16			Kind of Packer
Well No. 1096				13	55	22	
District More	gan	County Mono	ngalia	## 9 5/8"	1212	1212	Size of
The surface of trac	t is owned in f	ee by		81/4			
		\ddress		656	ļ		Depth set
Mineral rights are	owned by			5 3/16			
	A	ddress		415	8313	8313	
Drilling commence	d 10-05-	70		3	ļļ.		Perf. top 7860
Drilling completed	10-19-	70		2			Perf. bottom 7930
			ro07		ļ <u>.</u>		Perf. top. \$956
With							Perf. bottom 8017
OIL NODE WELL ACIDIZED WELL FRACTUR RESULT AFTER TROCK PRESSURE	2050 (DETAILS) ED (DETAILS) FREATMENT APTER TRE	No No 10-24-70 1000# wal: (Initial open Flow	nut hulls and or bbls 1 3,160	Name of Servic COAL WAS E FEE FEE Water, 10 4000 hhp.	e Co. He INCOUNTERED ST. INCE	Alliburton AT None HBS BBS acid, 30,0	FEBT INCHES
Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
This	Record	de from Gem	na Ray Log		Water	11.5	
Little Lime Big Lime Weir 50' Sand			517 570 882	533 786 1008			

Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
Thi	Record w	de from Gem	na Ray Log		Water	115	
Little Lime Big Lime Weir 50' Sand 4th Sand 5th Sand Bayard Speechley Balltown Riley Benson Tully Onondaga Chert Oriskany Helderberg Total Depth			517 570 882 1147 1704 1760 1845 2499 2714 3619 3824 7270 7837 7855 8088 8156	533 786 1008 1255 1732 1795 1881 2519 2778 3672 7309 7855 8088 8156	Gas Gas Gas	FEB 16	RECEIVED Office of Oil and Gas OCT 1 2 2017 WV Department of Environmental Protection 381 M

(over)

	Annual of the contract of the	·
J. LAUGHLIN E. G. DOWLEY POWLEY AN S. WIN	S GEPT W 10971 HART B-I S GEPT W 10971 .	
DRILL DEEPER	STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION CHARLESTON WELL LOCATION MAP FILL TO MON 309 TRANSFORCE TO - MON 308 + DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE I TO 62,500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN	RECEIVED Diffice of Oil and Gas OCT 12 2017 WV Department of avironmental Protection
FILE NO BRANING NO DATE SCALE	— DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING,	

WW-4A Revised 6-07

1) 1	Date:	
2) (Operator's Well Number	
7096		

STATE OF WEST VIRGINIA

3) API Well No.: 47 -

061 - 00323

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

		5) (a) Coal Operator		
(a) Name	TIMOTHY LEE & LUCINDA K HART	Name	N/A	
Address	149 MCKINNEY CAVE RD	Address		
	MORGANTOWN WV 26508			
(b) Name	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(b) Coal Owr	ner(s) with Declaration	
Address		Name	Unknown	
		Address		
	7 - 7			Office of Oil and Gas
(c) Name		Name		Office of Oil arm
Address		Address		OCT 122011
6) Inspector	Gayne J Knitowski	(c) Coal Less	ee with Declaration	WV Department of Environmental Protect
Address	P.O. Box 108	Name	N/A	Environmental
	Gormania WV 26720	Address		
Telephone	304-546-8171			4
TO THE PE	RSONS NAMED ABOVE:	You should have receive	ved this Form and the followi	ng documents:
	application to Plug and Abandon a Well its and the plugging work order; and	on Form WW-4B, which s	ets out the parties involved in th	ne work and describes the
(2) The	plat (surveyor's map) showing the well lo	cation on Form WW-6.		
	you received these documents is that you havou are not required to take any action at all.	e rights regarding the applicat	ion which are summarized in the inst	ructions on the reverses side.
accompany	e that under Chapter 22-6 of the West Virginia ing documents for a permit to plug and abando with respect to the well at the location describ	n a well with the Chief of the	Office of Oil and Gas, West Virginia	Department of Environmental

Well Operator	Consol Gas Company
COMMONWEALTH OF PENNSYLVANIES:	Sarah Weigand // Wach Weigrand
NOTARIAL SEAL Its:	Permitting Manager
Lori L. Walker, Notary Public Address	1000 Consol Energy Drive
Richhill Twp., Greene County My Commission Expires Feb. 23, 2019	Canonsburg, PA 15370
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES elephone	724-485-3244
Commonwealth of Pennsylva	unia County of Greene
Subscribed and sworn before me this da	ny of Public Notary Public
My Commission Expires - Crucou 23, 20	019

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.

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.

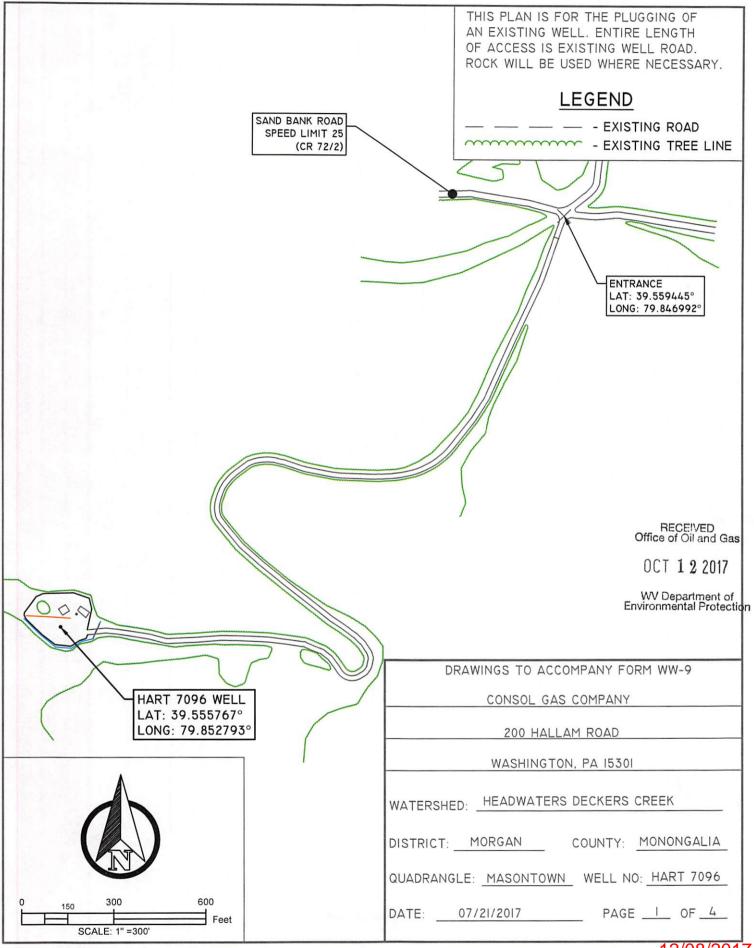
WW-9 (5/16)

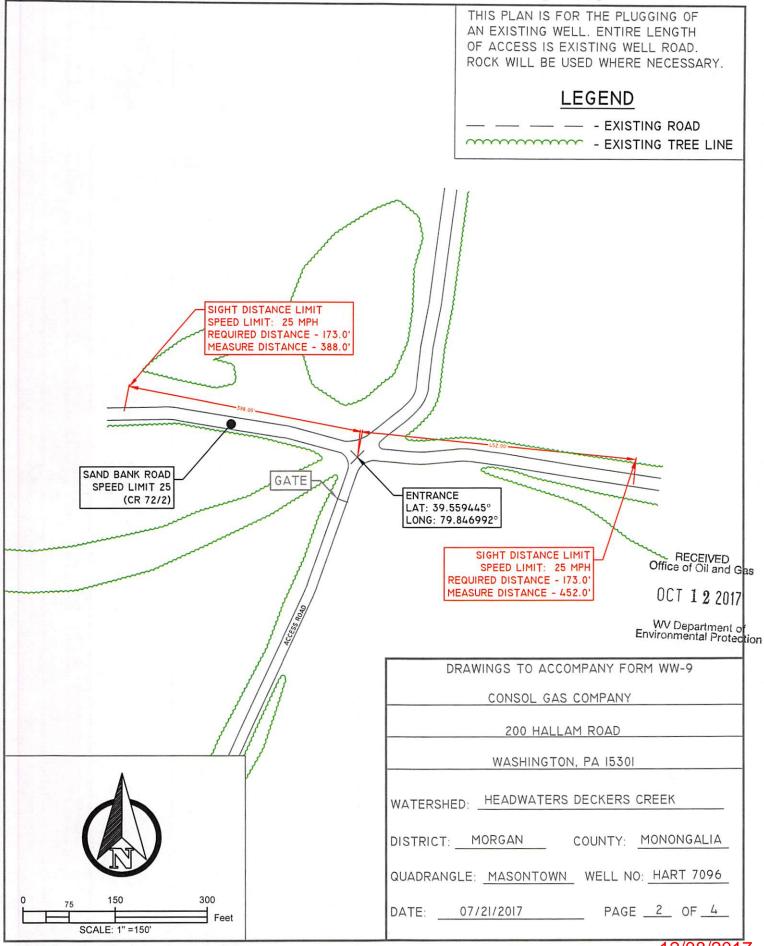
API Number 47	_ 061	_ 00323	
Operator's Well N	Vo.		

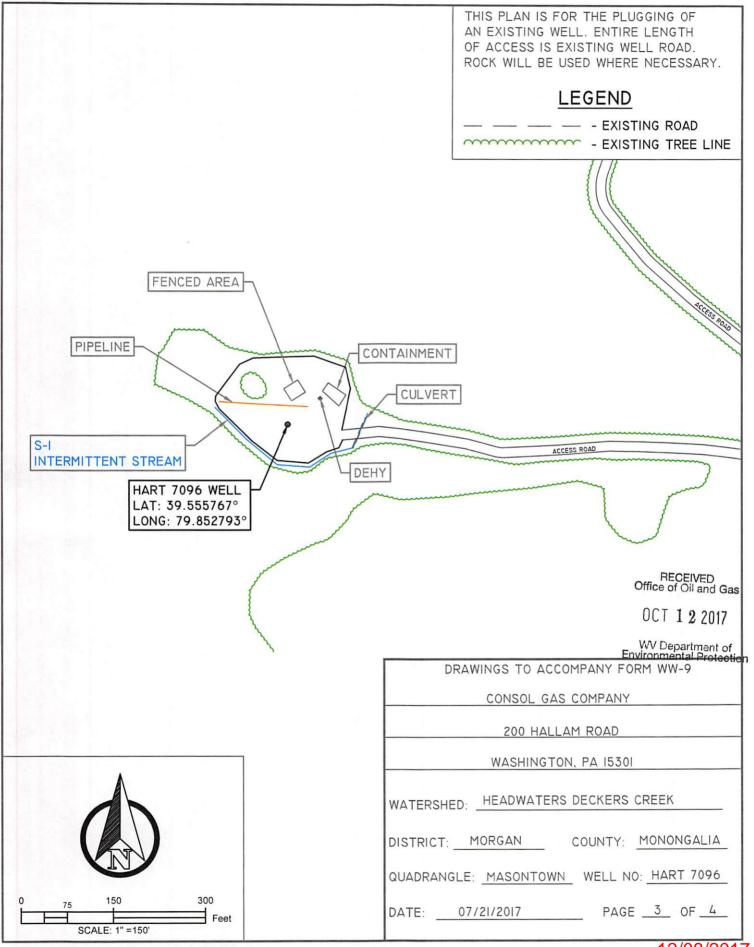
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS FILLIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

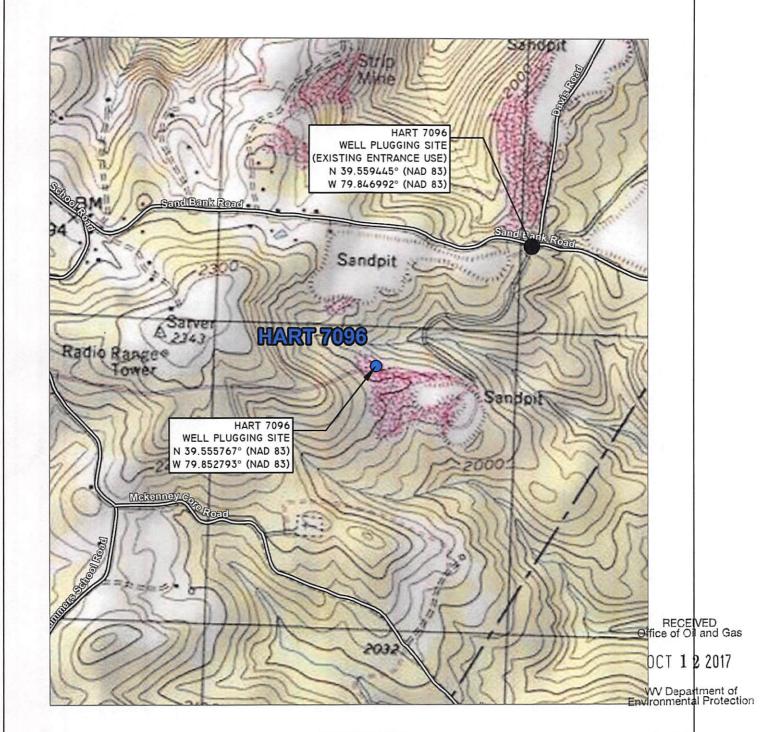
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN
Operator Name Consol Gas Company OP Code 494495754
Watershed (HUC 10) HEADWATERS DECKERS CREEK Quadrangle Masontown
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No
Will a pit be used? Yes No
If so, please describe 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, etcOffice of Oil and Gas
Additives to be used in drilling medium? na OCI 1 2 2017
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) -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)Environmental Protection
-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. Company Official Signature Company Official Title Permitting Manager Company Official Title Permitting Manager
Notary Public NOTARIAL SEAL
My commission expires FOURIDAY 23 2019 Lori L. Walker, Notary Public Richhill Twp., Greene County My Commission Expires 5eb-23, 2019 MEMBER, PENNSYLVANIA-ASSOCIATION OF NOTARIES

	Operator's W	'ell No
Proposed Revegetation Treatment: Acres Disturbed	less than 1 acre Prevegetation p	Н
Lime 2-3 Tons/acre or to co	prrect to pH	
Fertilizer type 10-20-20 or equivalent		
Fertilizer amount 500	lbs/acre	
Mulch_ hay or straw 2	Tons/acre	
	Seed Mixtures	
Temporary	Perma	nent
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 provided). If water from the pit will be land applied, (L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic she	provide water volume, include dimensions (L, a.	W, D) of the pit, and dimensions RECEIVED Office of Oil and Gas
Plan Approved by: Lam D Km	tu	OCT 1 2 2017
Comments:		WV Department of Environmental Protection
Redain site ASAP		
Install Soil crosion me	auni along acress room	d and well
Site As resided		
Title:		









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 HART 7096 GAS WELL MORGAN DISTRICT MONONGALIA COUNTY, WV

> CONSOL GAS COMPANY 200 HALLAM ROAD WASHINGTON, PA 15301

DRAWN BY	: LLF		
CHECKED E	BY: WPF		
DATE: 07/	21/2017		
SCALE: I	"=1000'		
WATERSH	IED:		
HEADWATER	RS DECKERS	CREEK	
PAGE _4	_ OF _4		



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATIO	IN FORM: GPS	
_{API:} 47-061-00323	_{WELL NO.:} 7096	
FARM NAME. Hart		
RESPONSIBLE PARTY NAME: Sarah	Weigand / Consor Cas	Company
COUNTY: Monongalia	_{DISTRICT:} Morgan	
QUADRANGLE: Masontown		_
SURFACE OWNER: TIMOTHY LE	E & LUCINDA K HART	
ROYALTY OWNER: G. A. DAVIS		
UTM GPS NORTHING: 4,379,081.995		13')
UTM GPS EASTING: 598,558.116 METE	GPS ELEVATION: 638.154 METE	:RS
The Responsible Party named above has chose preparing a new well location plat for a pluggin above well. The Office of Oil and Gas will not the following requirements: 1. Datum: NAD 1983, Zone: 17 North height above mean sea level (MSL) 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS ×: Post Processed D	ng permit or assigned API number on the accept GPS coordinates that do not me a, Coordinate Units: meters, Altitude: — meters.	
Real-Time Differ		
Mapping Grade GPS: Post Processed		
Real-Time Dit	fferential	
4. Letter size copy of the topography I the undersigned, hereby certify this data is cobelief and shows all the information required by prescribed by the Office of Oil and Gas.	prrect to the best of my knowledge and	
Mardelle gane Permi	itting Manager Title 9/28 Date	<u>//</u> 7