



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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Tuesday, April 21, 2020
WELL WORK PLUGGING PERMIT
Vertical Plugging

LEATHERWOOD, LLC
1000 CONSOL ENERGY DRIVE

CANONSBURG, PA 15317

Re: Permit approval for 1
47-049-00682-00-00

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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: 1
Farm Name: GLOVER, REBECCA
U.S. WELL NUMBER: 47-049-00682-00-00
Vertical Plugging
Date Issued: 4/21/2020

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. 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.

WW-4B
Rev. 2/01

- 1) Date Jan. 24, 2020
- 2) Operator's
Well No. #1 _____
- 3) API Well No. 47-049 - 00682

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
- 5) Location: Elevation 1425' Watershed Buffalo Creek
District Mannington County Marion Quadrangle Glover Gap
- 6) Well Operator Leatherwood, LLC 7) Designated Agent Sandra Halstead
Address 1000 Consol Energy Drive Address 1627 Quarrier Street
Canonsburg, PA 15317 Charleston WV, 25311-2124
- 8) Oil and Gas Inspector to be notified Name Sam Ward
Address PO Box 2327
Buckhannon, WV 26201
- 9) Plugging Contractor Name Coastal Drilling East Road
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 plugging and abandonment procedure

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

Work order approved by inspector *S. D. Ward* Date 2/26/20 RECEIVED
Office of Oil and Gas

MAR 09 2020
WV Department of
Environmental Protection

R Glover #1

Mannington District

Location: Glover Gap

API 37-049-00682 P

Marion County

Proposed Plug & Abandonment Procedure:

The work order for the manner of plugging this well is as follows:

We will rig up on site and any tubing, cable or rods present will be removed from the well. We will run in the hole to determine the total depth of the well. Next, we will run wire line in hole and run a caliper/bond log. After the log, we will run work string to the attainable bottom. A bottom cement plug will be set from the attainable to a minimum of 100'. After 8 hours WOC, we will run in hole and tag to confirm plug is set and top if necessary. We will attempt to pull any remaining pipe. If unable to pull, the pipe will be perforated and cemented to surface. No gel spacers will be used. Once complete, a monument with API number will be set on the well bore at the surface. All plugging shall comply with WV code Chapter 22 article 6.

The disturbed area shall be graded, seeded and mulched as required. The site will then be reclaimed as soon as possible.

Notify the inspector if unable to remove pipe prior to perforating and cementing.

SOW
2/17/2020

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cc: PA DEP – Oil and Gas Division



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. MAR-6 Oil or Gas Well GAS

Company Carnegie Natural Gas Co.
 Address Pittsburgh, Pa.
 Farm Wells & Glover Acres 40
 Location (waters) _____
 Well No. 1453 Elev. 1285
 District Mannington County Marion
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by _____
 Address _____
 Drilling commenced _____
 Drilling completed _____
 Date Shot _____ From _____ To _____
 With _____
 Open Flow /10ths Water in _____ Inch
 /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock Pressure _____ lba. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

Casing and Tubing Used in Drilling Left in Well Packers

Size	Used in Drilling	Left in Well	Packers
16			Kind of Packer _____
18 Wood Cond.	16'		
10	260'		Size of _____
8 1/4	1640'		
6 3/4	2365'		Depth set _____
5 8/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

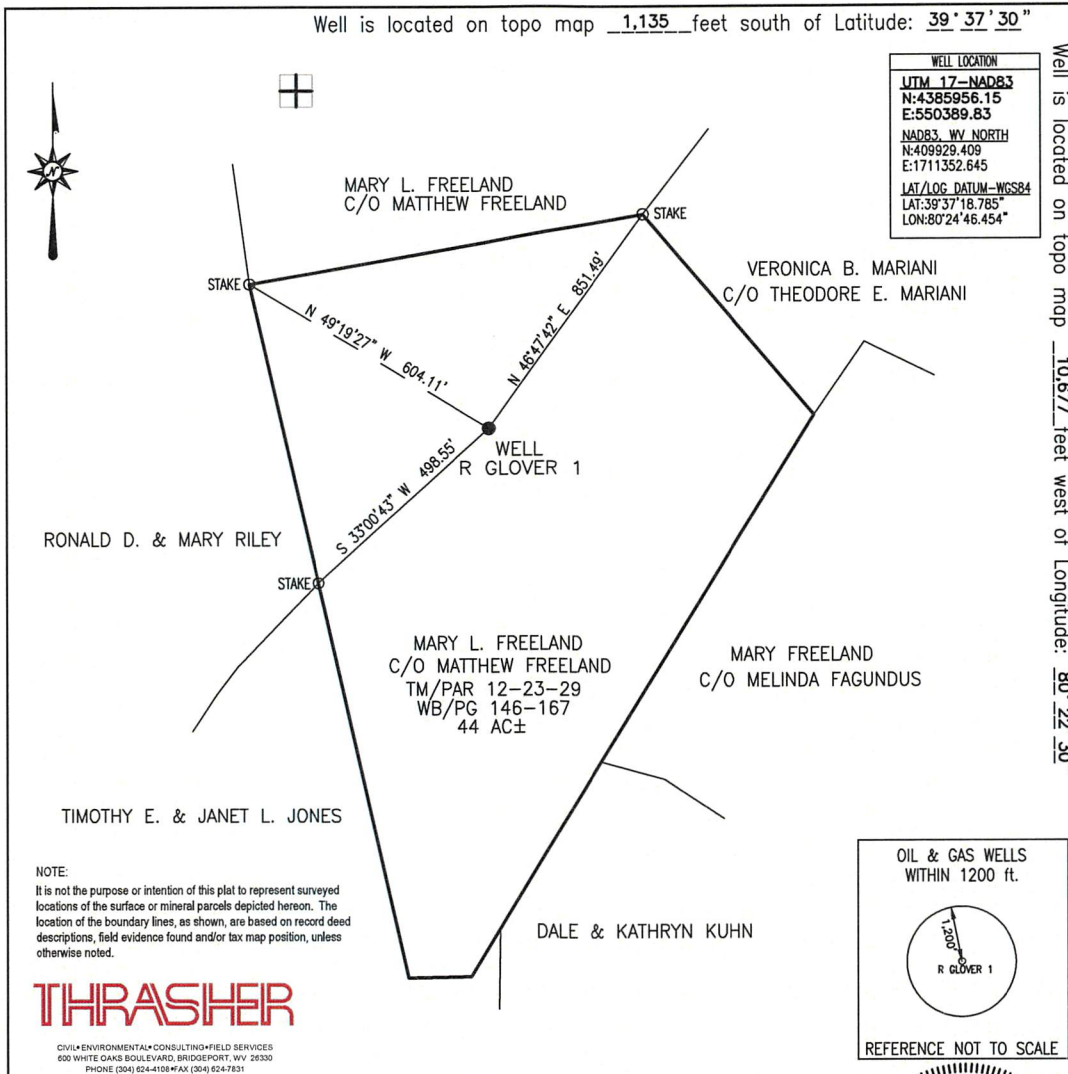
CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT 1055 FEET _____ INCHES
1058 FEET 36 INCHES 1155 FEET _____ INCHES
1165 FEET 120 INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth Found	Remarks
Conductor				16			
Mapleton Coal			1055	1058			
Pittsburgh coal			1155	1165			
Little Dunkard			1545	1575			
Big Dunkard			1630	1680			
Gas sand		Shells					
1st salt sand		"					
2d salt sand		"					
Maxton sand		"					
Little lime			2335	2345			
Pencil Cave		Shells					
Big lime			2350	2419			
Big Injun			2419	2625			
Gantz sand		Shells					
50' sand			3111	3140			
30' sand			3168	3188			
Gordon Stray			3210	3240			
Gordon sand			3343	3370			
4th sand			3343	3370			
5th sand			3389	3410			
Bayard sand			3530	3535			
			Total Depth	3544			

Show of gas 2490' and 2-6 bailers water every 2 1/2 hrs.
 Hole reduced at 3132'
 Gas at 3126-3127' 2/10 W in 2"
 Oil at 3182'
 Gas at 3299'
 Gas at 3299'
 Gas at 3360' - 3362' All test 8/10 W.
 Gas at 3392' in 2"
 Gas at 3531' - 3532' in 2"
 Blew down to 23/10 W.

SDW
 2/27/2020
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 Environmental Protection



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CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (204) 624-4108 • FAX (204) 624-7831

FILE #: R GLOVER 1
DRAWING #: R GLOVER 1
SCALE: 1" = 400'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: **PRELIMINARY**
R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D. SIX
LICENSED
No. 2000
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: AUGUST 22, 2019
OPERATOR'S WELL #: R GLOVER 1
API WELL #: 47 49 00682
STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: BUFFALO CREEK ELEVATION: 1425'
COUNTY/DISTRICT: MARION/MANNINGTON QUADRANGLE: GLOVER GAP, WV 7.5'
SURFACE OWNER: MARY L. FREELAND C/O MATTHEW FREELAND ACREAGE: 44
OIL & GAS ROYALTY OWNER: UNKNOWN ACREAGE: _____

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: GREENLAND GAP FORMATION ESTIMATED DEPTH: 3544'

WELL OPERATOR LEATHERWOOD DESIGNATED AGENT JOHN C. BAKER JR.
Address 1000 CONSOL ENERGY DRIVE Address 74 CLEARVIEW AVE
City CANONSBURG State PA Zip Code 15317 City WHEELING State WV Zip Code 26003

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Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: 3/13/2020
2) Operator's Well Number #1 _____
3) API Well No.: 47 - 049 - 00682

**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	Mary L Freeland c/o Matthew Freeland	Name	N/A
Address	12808 Whispering Pine Lane Marion, IL 62959	Address	_____
(b) Name	_____	(b) Coal Owner(s) with Declaration	
Address	_____	Name	Consol Mining Company LLC/ Reserve Coal Properties Company
(c) Name	_____	Address	1000 Consol Energy Drive Canonsburg, PA 15317
Address	_____	Name	_____
	_____	Address	_____
6) Inspector	Sam Ward	(c) Coal Lessee with Declaration	
Address	PO Box 2327 Buckhannon, WV 26201	Name	N/A
Telephone	304 389-7583	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.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Chad M. Roberts, Notary Public
North Strabane Twp., Washington County
My Commission Expires Dec. 6, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Well Operator Leatherwood, LLC
By: Danny Caldwell *Danny Caldwell*
Its: Maintenance Coordinator
Address 1000 Consol Energy Drive
 Canonsburg, PA 15317
Telephone (724) 416-8283

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Office of Oil and Gas

MAR 13 2020

Subscribed and sworn before me this 13th day of March 2020
Chad M. Roberts Notary Public
My Commission Expires 12-6-2020

WV Department of
Environmental Protection

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.

API No. 47-049-00682 P
Farm Name _____
Well No. R Glover #1

**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 than 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.

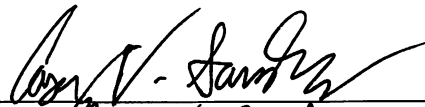
This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, 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 X / 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: 01/23/2020


By: Casey V. Saunders
Its Manager Coal/Gas Coordination

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Environmental Protection

47-049-00682 P

WW-9
(5/16)

API Number 47 - 049 - 00682
Operator's Well No. ~~7~~ /

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

Operator Name Leatherwood LLC OP Code 494476721

Watershed (HUC 10) Buffalo Creek Quadrangle Glover Gap, WV 7.5'

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. N/A

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

Additives to be used in drilling medium? N/A

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

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

-Landfill or offsite name/permit number? _____

SDW
2/7/2020

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.

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Office of Oil and Gas

Company Official Signature Danny Caldwell

Company Official (Typed Name) Danny Caldwell

Company Official Title Maintenance Coordinator

MAR 09 2020

WV Department of
Environmental Protection

Subscribed and sworn before me this 24 day of January, 20 20

Christopher A. Rabbit Notary Public

My commission expires 1/18/2024

Commonwealth of Pennsylvania - Notary Seal
Christopher A. Rabbit, Notary Public
Washington County
My commission expires January 18, 2024
Commission number 1266666
Member, Pennsylvania Association of Notaries

Form WW-9

Operator's Well No. #1

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: Sed Wanda

Comments: _____

Title: OOG Inspector

Date: 2/7/2020

Field Reviewed? () Yes (X) No

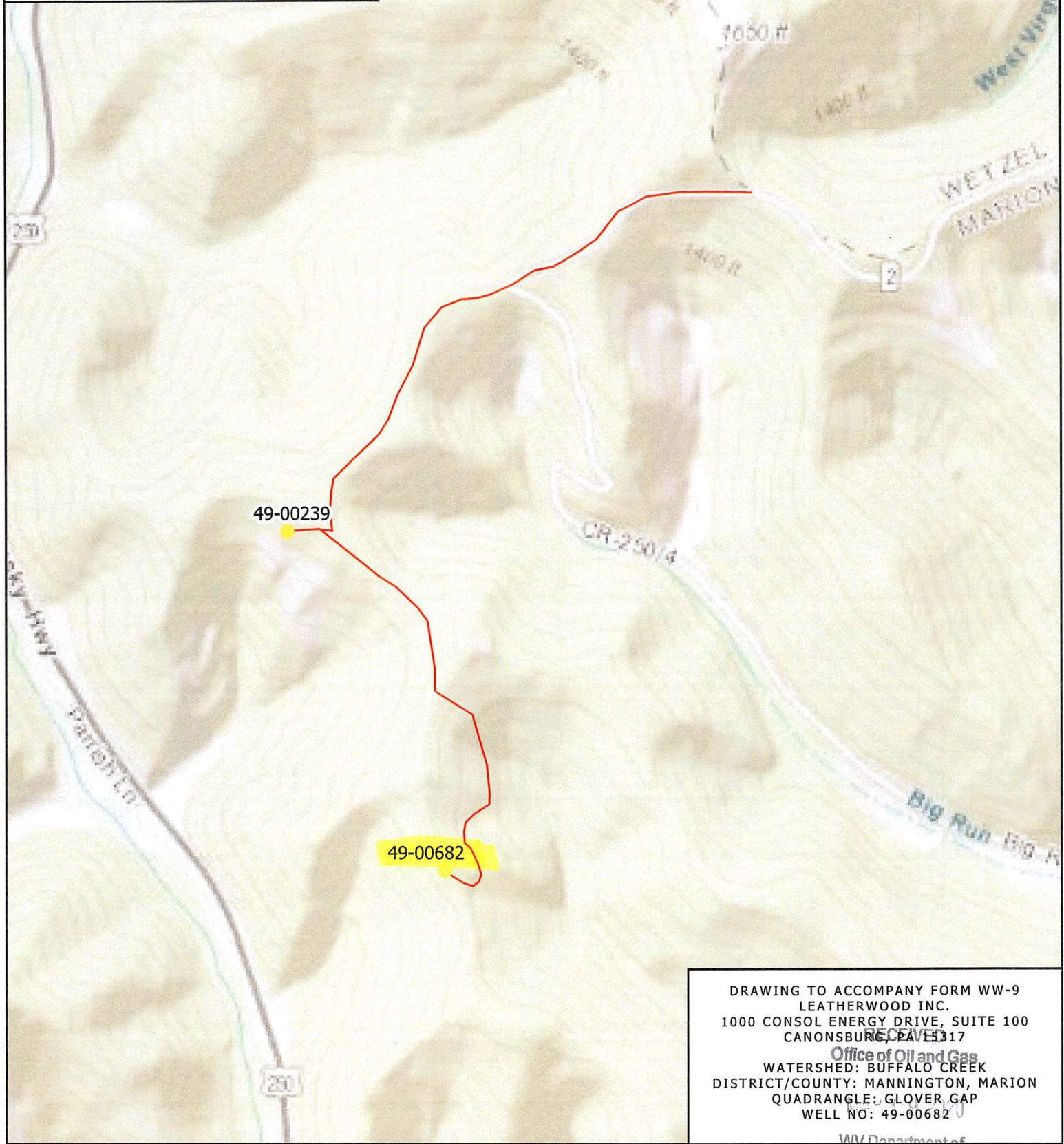
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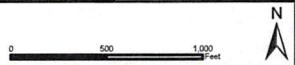
49-049-00682P

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



DRAWING TO ACCOMPANY FORM WW-9
 LEATHERWOOD INC.
 1000 CONSOL ENERGY DRIVE, SUITE 100
 CANONSBURG, PA 15317
 Office of Oil and Gas
 WATERSHED: BUFFALO CREEK
 DISTRICT/COUNTY: MANNINGTON, MARION
 QUADRANGLE: GLOVER GAP
 WELL NO: 49-00682

- Wells To Plug
- Proposed Access Road

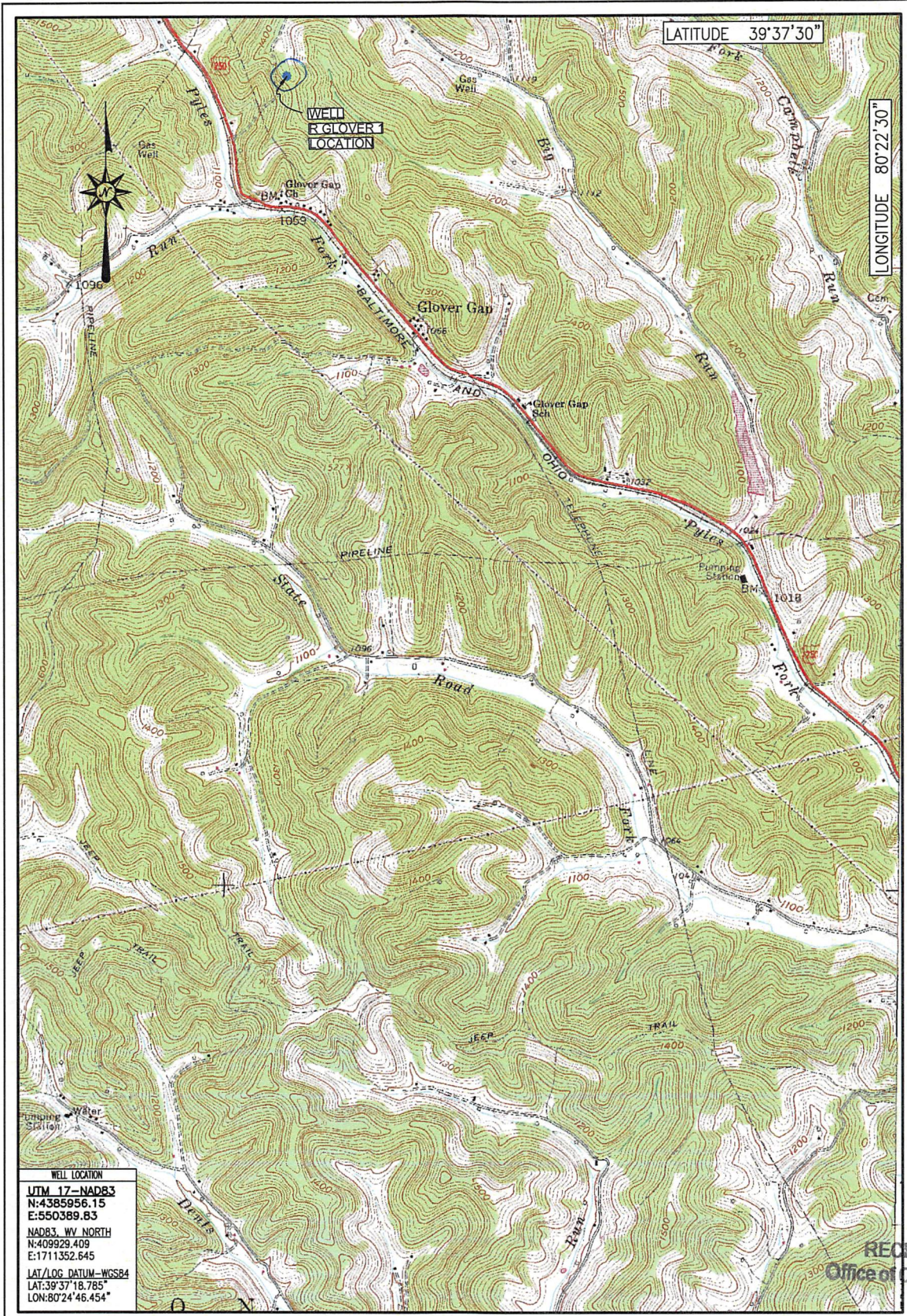


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WV Department of
 Energy **CONSOL ENERGY**

This map is property of CONSOL Energy, Inc. and CONSOL Coal Resources LP and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.

Date: 2/25/2020	Prepared By: GIS
Revisions: 0	Approved By:



WELL LOCATION
 UTM 17-NAD83
 N:4385956.15
 E:550389.83
 NAD83, WV NORTH
 N:409929.409
 E:1711352.645
 LAT/LONG DATUM-WGS84
 LAT:39°37'18.785"
 LON:80°24'46.454"

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 Office of Oil and Gas

PRELIMINARY LOCATION MAP
 AUGUST 22, 2019

MAR 09 2020

WV Department of
 Environmental Protection

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R GLOVER 1
 GLOVER GAP QUADRANGLE
 WEST VIRGINIA

SCALE 1" = 2000'

0' 2000' 4000' 6000'



CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-1108 • FAX (304) 624-7831

BLUE MOUNTAIN ENGINEERING

WW-7
8-30-06



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

API: 47-049-00682 WELL NO.: 1

FARM NAME: R. Glover

RESPONSIBLE PARTY NAME: Danny Caldwell

COUNTY: Marion DISTRICT: Mannington

QUADRANGLE: Glover Gap

SURFACE OWNER: James R Glover

ROYALTY OWNER: _____

UTM GPS NORTHING: 4385956.15

UTM GPS EASTING: 550389.83 GPS ELEVATION: 1425'

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.

Danny R. Caldwell
Signature

Maintenance Coordinator
Title

11/24/08
Date
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Office of Oil and Gas
MAY 15 2008
WV Department of
Environmental Protection