



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, June 14, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

EASTERN GAS TRANSMISSION AND STORAGE, INC
925 WHITE OAKS BOULEVARD
BRIDGEPORT, WV 26330

Re: Permit approval for 6603
47-041-02296-00-00

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: 6603
Farm Name: HOWELL, F.
U.S. WELL NUMBER: 47-041-02296-00-00
Vertical Plugging
Date Issued: 6/14/2021

1) Date 8-20, 2020
 2) Operator's
 Well No. 6603
 3) API Well No. 47-041 - 02296

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 ___ / Shallow X
- 5) Location: Elevation 1,063' Watershed Jesse Run
 District Hackers Creek County Lewis Quadrangle Berlin 7.5'
- 6) Well Operator: Eastern Gas Transmission & Storage Inc. 7) Designated Agent John M. Love
 Address 925 White Oaks Blvd. Address 925 White Oaks Blvd.
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
 Name Barry Stollings Name Stalnaker Energy
 Address 28 Conifer Dr. Address 220 W. Main St.
Bridgeport, WV 26330 Glennville, WV 26351

- 10) Work Order: The work order for the manner of plugging this well is as follows:
 Please see attached sheet for plugging procedure.

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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

Barry Stollings

Date

12-16-20

06/18/2021

2020 Work Plan

6603

Lost Creek Production – Straddle Lease (Outside Storage)

47-041-02296

Scope of Work: Plug to Abandon

Emergency ContactsOperations (Supervisor)

Keith Swisher

(M): 304.918.8370

(O): 304.269.6946

Environmental (ECC Supervisor)

Traci Ricottilli

(M): 304.703.9027

(O): 304.269.6948

Operations (Manager)

Dave Gum

(M): 304.669.5760

(O): 304.269.6935

Well DataWell Configuration (Based on historic records)

(Assume MD = TVD & all measurements from GL, unless otherwise noted)

- 10-3/4" casing seat @ 271' (pulled – c. 1925)
- 8-5/8" casing @ 725' (set on shoe – c. 1925)
- 7" casing @ 1302' (set on shoe – c. 1925)
- 5-1/2" casing seat @ 2337' (pulled – c. 1925)
- 3-1/2" tubing @ 2200' (c. 1934)
 - Packer @ 1985'

JASON BACH
 O 681-843-3329
 C 304-669-4850

Zones of Interest

- Native coal: 178' – 180'
- Water
 - Brine - 725', 900'
- Gas shows
 - Injun – 1285', 1309', 1360'
 - Gantz – 1603'
 - 5th Sand – 2113'
 - Benson – 4077'
 - Shot - 4074' – 4084'
- Original TD @ 4302' (c. 1925)

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Potential Well Conditions

- Current shut in well surface pressure – 52 psi (24 hour)
- Potential fluids: Brine

Site Specific Conditions

Multiple strings of casing exist within the well, but no cement information is present. The potential exists for circulation or flow to be present at surface, from any of the casing annuli. Measures should be taken at surface to encapsulate or intercept any flow from these annuli. This may include, but is not limited to, the installation of wellhead equipment/plating, sealed cellar around well, and appropriate tanks & pumps to handle any encountered fluids.

Well Work

- File for and receive all necessary regulatory agency authorizations (§22-6-23; §35-4-13(1)(a)).
- Upgrade well site. Install well cellar and site containment in manner which protects the environment and any identified site-specific areas of concern.
- Move in service rig and ancillary equipment.
- Well conditions present may include salt / brine, paraffin / oil, and solids, and natural gas.
- Appropriate well control/diversion equipment needs utilized to divert flow and returns from well. Well control equipment should have a pressure rating higher than any pressure anticipated to be encountered during workover and plugging operations, be of dimensional proportions to allow passage of all anticipated tools and casing strings, and be able to isolate the wellbore at any time, as necessary. Well control equipment should be hydro pressure tested to a pressure in excess of the maximum pressure anticipated to be encountered during well work operations. Pressure tests should be recorded. All equipment should be assessed for soundness and all personnel required to operate well control equipment should demonstrate competency. Depending on the phase of operations, well control equipment may need to be changed or replaced. If so, the new equipment must meet all the aforementioned performance and testing requirements. **Prior to manipulating the 3-1/2" production casing, blowout prevention and pressure control equipment must be attached to the 7" casing. This will serve as the control devices and strings to be employed during storage horizon well work activities. This equipment must be tested to a pressure which exceeds the storage reservoir pressure. The recommended minimum size and pressure rating of a BOP attached to the 7" casing is 7-1/16", 3M. A full opening safety valve should be on the rig floor, in the open position with wrench present, with subs to adapt to all work string sections.**
- Based on maximum anticipated pressures and formation properties, build workover fluid system.
 - To enhance compatibility with plugging operations, the workover fluid may be freshwater based 6% bentonite gel. If bentonite gel cannot be used as the workover fluid, 6% bentonite gel spacers may be required during plugging, to separate cement plugs.
- Depending on well flow and pressures, well may: 1) require to be killed or, 2) may be blown down and loaded with fluid. If well must be killed from surface, kill will be done before further downhole work proceeds. If well can be blown down, further work may proceed before loading the well is necessary.
- Locate the packer with wireline tools and perforate the 3-1/2" tubing immediately above the packer. Circulate fluid through the perforations until the tubing annulus is dead and clean. Unseat the packer and pull the tubing string (maximum pull weight required, based on anticipated length of free tubulars = 37,000#) (§35-4-13.6).
- A caliper log is recommended to verify wellbore capacities and the depth of the 7" casing seat.

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- TIH w/ plugging string to as near current TD as possible ($\pm 2205'$).
- Circulate well (at least 1 surface to surface volume). Shut down and confirm well is static. If so, proceed with plugging. If not, perform corrective actions necessary to achieve static conditions, prior to proceeding with plugging activities.
- Spot balanced Class A cement plug f/ as near TD as possible ($\pm 2205'$) – t/ $\pm 50'$ below the 7" casing seat (this covers the Gantz and lower Injun intervals) (§22-6-24 (a) (1)); 35-4-13.5 & 14.1).
2205' To 1250' gum
- TOH.
- TIH w/ plugging string and tag top of last cement plug set, to verify depth. The top of this bottom plug will serve as the platform for further plugging work. The bottom plug must be allowed to set and gain compressive strength, then be tagged to verify top of plug. If the plug is not found to be installed as designed, further cementing and verification activities may be required prior to proceeding.
- Pull free point on 7" casing and determine length of free tubulars (maximum pull required, based on total recorded length of tubulars = 39,000#) (§35-4-13.6).
- Sever 7" casing at free point (mechanical or wireline cut).
- Pull free 7" casing. (Multiple pulls and/or pull attempts may be necessary) (§35-4-13.6).
- If 7" casing cannot be pulled below 1285', zones of concern which may require perforation are: 7" casing separation @ depth'; Injun @ 1285'; brine @ 900'; brine @ 725' 8-5/8" casing seat @ 725'.7"
 - The Injun interval is of concern, due to being a recorded gas show.
 - If casing has been removed, a caliper log is recommended to confirm the volumes of cement required for proper isolation.
- TIH.
- With work string setting immediately above the top of the lowest cement plug, circulate well (at least 1 surface to surface volume). Shut down and confirm well is static. If so, proceed with plugging. If not, perform corrective actions necessary to achieve static conditions, prior to proceeding with plugging activities.
- Spot Class A cement plugs (100' minimum length/plug) across any perforated zones of concern, open hole zones of concern, and the 7" casing top (50' above and 50' below the casing top) (this may cover some or all of the aforementioned zones of concern). The final Class A cement plug top should be set $\pm 50'$ below the 8-5/8" casing seat. (§22-6-24 (a) & (a) (1)); 35-4-13.5 & 14.1).
≈ 775' gum
- TOH.
- Pull free point on 8-5/8" casing and determine length of free tubulars (maximum pull weight required, based on total recorded length of tubulars = 23,000 lbs.)

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- Sever 8-5/8" casing at free point (mechanical or wireline cut).
- Pull free 8-5/8" casing (§35-4-13.6).
- If 8-5/8" casing cannot be pulled below 230', zones of concern which may require perforation are: 8-5/8" casing seat @ 725'; native coal@ 178' - 180'.
- Prior to setting cement plugs, a caliper log may be run to verify wellbore capacities across open hole plug intervals.
- TIH w/ plugging string and tag top of last cement plug set, to verify depth.
- Circulate well (at least 1 surface to surface volume). Shut down and confirm well is static. If so, proceed with plugging. If not, perform corrective actions necessary to achieve static conditions, prior to proceeding with plugging activities.
- Spot Class A cement plugs (100' minimum length/plug) across any perforated zones of concern, open hole zones of concern, and the 8-5/8" casing top (50' above and 50' below the casing top) (this may cover some or all of the aforementioned zones of concern). The final Class A cement plug should be set to surface (§22-6-24 (a) & (a) (1)); 35-4-13.5 & 14.1).
- TOH.
- Rig down and move out service rig and equipment.
- Remove site containment and well cellar.
- Reclaim well site (§35-4-16).
- Top well off with cement, as necessary.
- Install well monument (§22-6-24(c)).
- File any necessary forms with regulatory agencies, including WV DEP forms WR-34 and WR-38 (§22-6-23).

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Mechanical Properties (@ 100% condition, per API Technical Report 5C3)

****Limited data is available for casing and tubing strings, outside of OD. The following are assumptions, based on lowest weights & grades.

- 8-5/8", 24#, J-55 (STC)
 - ID = 8.097"
 - Drift = 7.972"
 - Coupling OD = 9.625"
 - Capacity = 0.0637 bbl/ft
 - Burst = 2950 psi
 - Collapse = 1370 psi
 - Tensile Yield (Body) = 381,000#
 - Tensile Yield (Joint) = 244,000#
 - Torque = 2440 ft-lbs
 -
- 7", 20#, H-40 (STC)
 - ID = 6.456"
 - Drift = 6.331"
 - Coupling OD = 7.656"
 - Capacity = 0.0405 bbl/ft
 - Burst = 2720 psi
 - Collapse = 1970 psi
 - Tensile Yield (Body) = 230,000#
 - Tensile Yield (Joint) = 176,000#
 - Torque = 1760 ft-lbs
- 3-1/2", 9.2#, J-55 (NU)
 - ID = 2.992"
 - Drift = 2.867"
 - Coupling OD = 4.250"
 - Capacity = 0.0087 bbl/ft
 - Burst = 7950 psi
 - Collapse = 8330 collapse
 - Tensile Yield (Body) = 127,300#
 - Tensile Yield (Joint) = 127,300#
 - Torque = 1480 ft-lbs

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Wellhead Program

- The use of braden style heads or API flanged wellhead equipment may be used
- Steel plate for covering external casing annuli should be ½" A-36 Grade plating
- Flex-o-lets should be Grade SA105

Well History Synopsis

1925: Well drilled. 10-3/4" casing pulled during drilling operations. Benson interval shot. Lower portion of well plugged, including the Benson interval. 5-1/2" casing pulled.

Plugging Data

Wood @ 2205'
Rock @ 2210' – 2238'
Cement (3 sx) @ 2318'
Wood @ 2318'
Clay @ 3400' – 3840'
Lead @ 3840' – 3845'
Wood @ 3845'
Rock @ 3845' – 3900'
Clay @ 3900' – 4117'
Wood @ 4117'
Bridging material @ 4121' – 4127'

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1934: 3-1/2" tubing and packer ran and set.

Administrative Disclaimers & Additional Criteria

- Additional supplements to this work plan may be developed and utilized, depending on actual or anticipated job specific requirements.
- Although detailed in a sequential manner, some portions of the work plan may be performed concurrently.
- During well work activities, unanticipated, non-emergency deviations from the work plan may be required. In the event of these deviations, the required actions will be reviewed by BHE Production representative and the Well Site Manager. The actions related to these deviations will be documented in the daily reports.
- The well will be secured at the completion of each day's activities. Well pressures and flow potentials will be verified, prior to recommencing daily well work activities.
- Multiple repetitions of the same activity, in excess of what is indicated in the work plan, may occur. Such actions include, but are not limited to, installation of a night cap assembly.
- All contractors performing work activities for DETI must have completed DETI Contractor Safety and Environmental training, prior to commencing work. This training should be completed prior to arriving at the well site, but may also be provided by a qualified trainer at the well site, as necessary.
- Prior to commencing daily well work activities, a site safety and environmental briefing must be held. Record of this meeting may be contained on a BHE Job Safety Brief. Copies of daily safety and environmental briefings are to be submitted to BHE Production Operations upon completion of well work activities.
- Permits are not required for any of the hot work functions (e.g. torch cutting and welding activities). However, the work area must be monitored for flammable gases/vapors using portable or fixed CGIs.
- Some work, such as welding, welding inspection, and pipe coating are tasks which BHE may require OQ individuals to perform. Prior to these work activities commencing, individuals performing this work will be verified to have active qualifications.
- Contractors shall be actively compliant with the requirements of a D&A monitoring program meeting BHE criterion.
- Mechanical parameters of tubulars, connections, and associated wellhead equipment should be obtained from industry technical manuals or from manufacturer/supplier data.

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Low- 2296

4704102296P

FORM 11-10-1918

Hope Natural Gas Company

Well No. 60320 Hope Farm March-28 1925

District Illinois Commenced 3-12-25

N S 24 E 13 W REPAIRS Completed 3-26-25

CASING AND TUBING RECORD

Size	Before Repairs	Pulled	Put in Well	After Repairs	Disposition of Amount Pulled
10	271	271	None	None	
8	2337	2337	None	None	
7	None	None	2329	2329	
2 1/2	None	"	7	7	

SHOOTING RECORD

Date	Quartz	Top of Shell	Bottom of Shell	Diameter	Sand	TEST BEFORE SHOT			TEST AFTER SHOT			Test Taken After Shot No. Hours	By Whose Shot
						Reading	Liquid	Opening	Reading	Liquid	Opening		
3-5	20	474	4084	3 1/2	None	810	W	1/2	168	81400		711 & Co.	

RECORD OF ANY DEEPER DRILLING

Formation	Top	Bottom	Name of Driller	Time (Days)
			<u>M.A. Diller</u>	<u>12</u>
Commenced drilling at depth of			Name of Tool Drusser	Time (Days)
<u>1300</u>			<u>M.A. Diller</u>	<u>12</u>

PACKER RECORD (ALSO NOTE BELOW IF ANY PACKERS ARE PULLED)			
Size	Kind	Anchor	Amount Above Anchor
<u>2 1/2</u>	<u>Anchor</u>	<u>348</u>	<u>1970</u>

OIL AND GAS DISCOVERIES IN DEEPER DRILLING			
Oil at	Ft. in	Sand	Gas at
			<u>No Acc.</u>

VOLUME AND PRESSURE REPORT

BEFORE REPAIRS				
Reading	Liquid	Opening	Rock or Surface Pressure	Side Gas From

AFTER REPAIRS

VOLUME TEST						
Date of Test	Opening	PILOT TUBE		OPEN FLOW	Side Gas From	
		Reading	Liquid Used	Lbs.		
<u>3/26-25</u>	<u>Casing</u>					
<u>Time Blows</u>	<u>2 - Tubing</u>	<u>810</u>	<u>Water</u>	<u>134.470</u>	<u>5 1/2 x 5 1/2</u>	

PRESSURE TEST

Date of Test	Opening	1 Min.	2 Min.	3 Min.	4 Min.	5 Min.	6 Min.	7 Min.	8 Min.	9 Min.	10 Min.	30 Min.	60 Min.	Hrs.	P.
<u>3/26-25</u>	<u>Casing</u>														
<u>Time Blows</u>	<u>2 Tubing</u>	<u>4</u>	<u>8</u>	<u>12</u>	<u>20</u>	<u>24</u>	<u>26</u>	<u>28</u>	<u>30</u>	<u>33</u>	<u>36</u>	<u>95</u>	<u>172</u>	<u>12</u>	<u>2</u>

OIL: From Sand

Estimated Production Bbl per Day

Remarks: Tested 5 1/2 x 3 sec. - 342 lbs. - heavy and set tubing on shoulder

[Signature]
FOREMAN

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HOPE NATURAL GAS COMPANY

LOCATION FOR WELL No. 6603

c 4 H
Instructions N

Kanawha DISTRICT

On *Flaming Howell* Farm, on waters of *Gene Neigher Run*
Nackin's Run District *Sevier* County, West Virginia

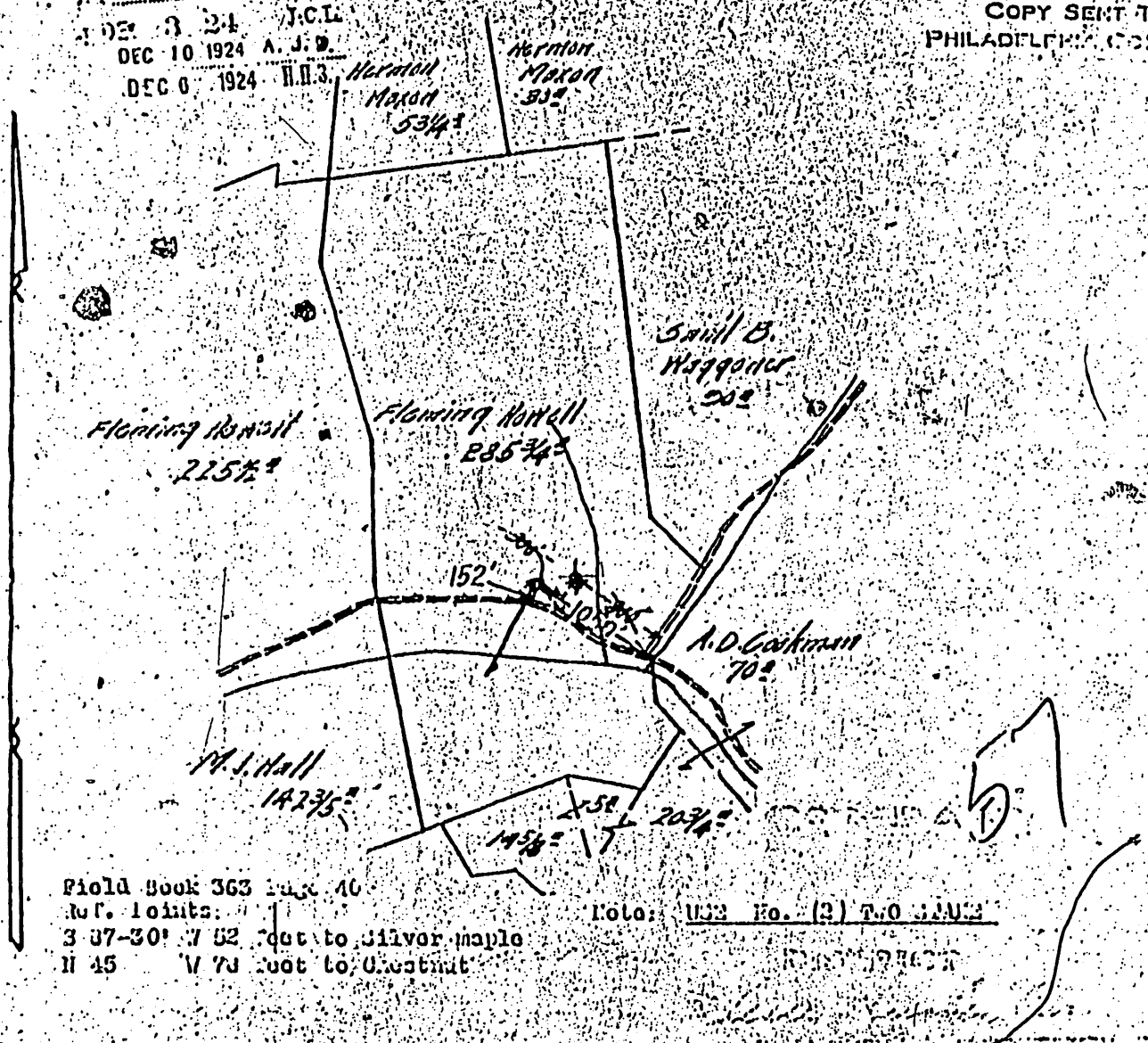
Lease No. *33155* Acres *788* N. S. 74 E. 13 W.

Scale one inch equals *80 feet* Location made in Pittsburgh *9-10-24* Sent to Clarksburg *9-11-24*

Location to be *300 feet and 300 feet from county roads as per plat.*

DEC 3 24 J.C.L.
DEC 10 1924 A.J.D.
DEC 0 1924 H.H.S.

COPY SENT TO
PHILADELPHIA



TITLE RESERVE *300 feet around the dwelling buildings - To be drilled through Reserve said*
SPECIAL INSTRUCTIONS COMPLETE WELL ON OR BEFORE *06/18/2021*

Same Lease on which Located Well No. _____
Location made *Sept. 26, 1924* by *H. D. Linger* As per plat, except as noted. On field map
Sept. 30, 1924 Returned to Pittsburgh *Sept. 30, 1924*
Location changed on account of *Original location same on reserve*
Authorized by *Gerrit A. Linger* Date *Sept. 29, 1924* Signed *S. H. Bradley*
by *Talley*

HOPE NATURAL GAS CO

LOCATION FOR WELL No. *14* *11*

Kanawha DISTRICT

On *Flaming Howell* Farm, on waters of *Gene Hughes Run*
Marshall District *Sevier* County, West Virginia

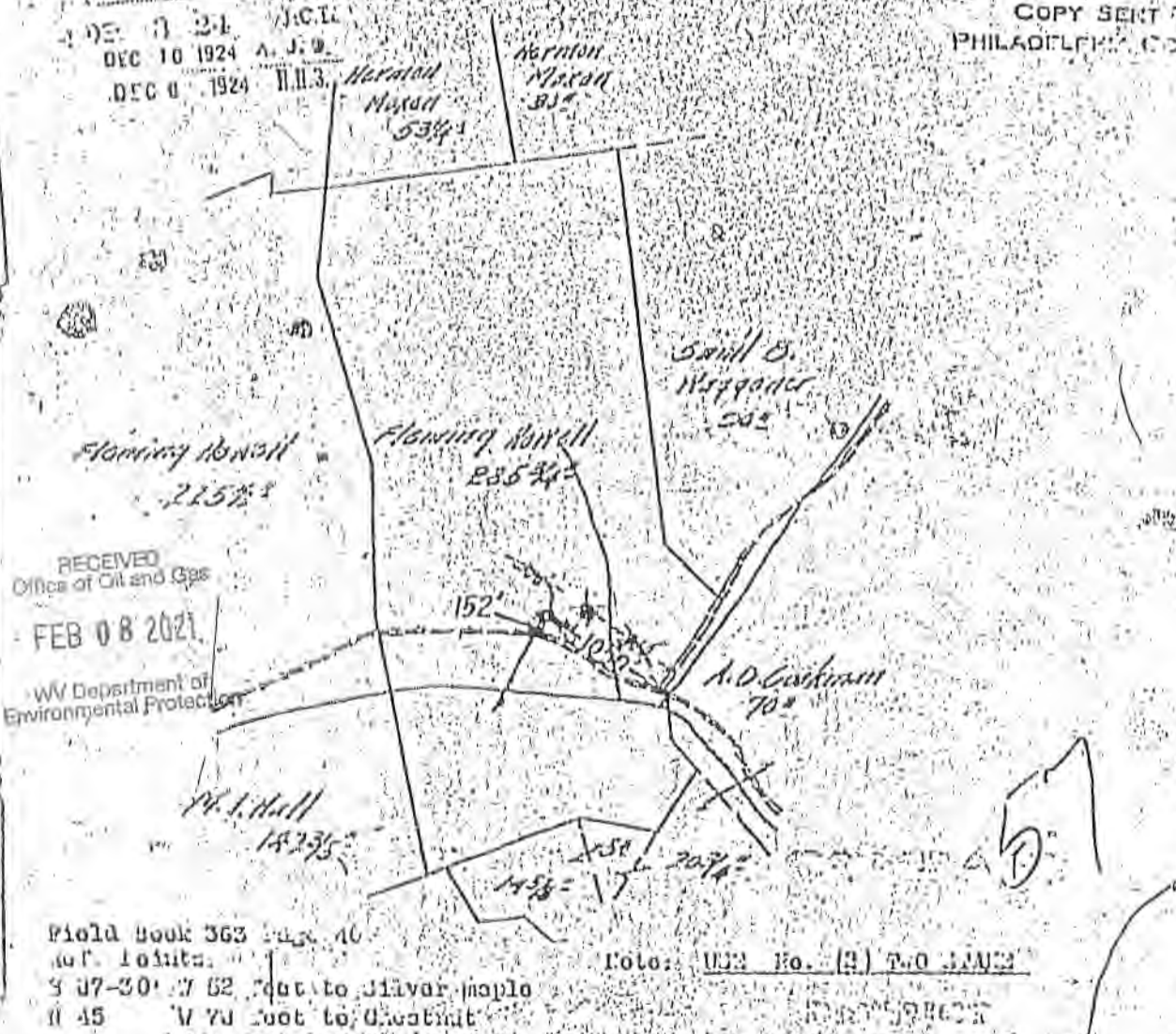
Lease No. *1155* Acres *788* N. S. *74* E. *13* W.

Scale one inch equals *80 feet* Location made in Pittsburgh *9-10-24* Sent to Clarkburg *9-11-24*

Location to be *300 feet* and *300 feet* from county roads as per plat.

DEC 7 24 A.C.L.
 DEC 10 1924 A. J. D.
 DEC 11 1924 H.H.S.

COPY SENT TO PHILADELPHIA COMMISSION



TITLE RESERVE *300 feet* around the dwelling buildings. To be drilled through *Beason* sand. SPECIAL INSTRUCTIONS COMPLETE WELL ON OR BEFORE *roads* 06/18/2021

Location made *Sept. 25, 1924* by *H. D. Linger* As per plat, except as noted. On field map
Sept. 30, 1924 Returned to Pittsburgh *Sept. 30, 1924*
 Location changed on account of *Original location same on reserve*
 Authorized by *U.S. Dept. of Interior* Date *Sept. 29, 1924* Signed *G. H. Bradley*
 By *Talley*

WW-4A
Revised 6-07

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1) Date: 8/20/20
2) Operator's Well Number
6603

3) API Well No.: 47 - 041 - 02296

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>Thomas & Esther Bond</u>	Name <u>N/A</u>
Address <u>1779 Jesse Run Rd.</u>	Address _____
<u>Jane Lew, WV 26378</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>None with declaration</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Barry Stollings</u>	(c) Coal Lessee with Declaration
Address <u>28 Conifer Dr.</u>	Name <u>N/A</u>
<u>Bridgeport, WV 26330</u>	Address _____
Telephone <u>304-552-4194</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.



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Melissa D. Mars
925 White Oaks Blvd.
Bridgeport, WV 26330
My Commission Expires July 5, 2025

Well Operator	<u>EASTERN GAS TRANSMISSION & STORAGE, INC.</u>
By:	<u>John M. Love</u>
Its:	<u>Designated Agent</u>
Address	<u>925 White Oaks Blvd.</u>
	<u>Bridgeport, WV 26330</u>
Telephone	<u>304-688-4673</u>

Subscribed and sworn before me this 3rd day of February, 2021
Melissa D. Mars Notary Public
My Commission Expires July 5, 2025

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.

47-041-02296P



7018 2290 0000 1197 7660

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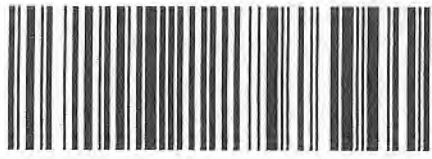
WV Department of
Environmental Protection

SMITH LAND SURVEYING, INC.

12 Vanhorn Drive
PO Box 150
Glenville, WV 26351

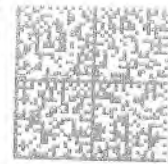
TO: THOMAS & ESTHER BOND
1779 JESSE RUN RD.
JANE LEW, WV 26378

4704102296P



7018 2290 0000 1197 7660

FIRST-CLASS



US POSTAGE

02 7H
0001267858

\$ 008.20⁰

NOV 23 2020
MAILED FROM ZIP CODE 26351

SMITH LAND SURVEYING, INC.

12 Vanhorn Drive
PO Box 150
Glennville, WV 26351

TO: THOMAS & ESTHER BOND
1779 JESSE RUN RD.
JANE LEW, WV 26378

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SURFACE OWNER WAIVER

Operator's Well
Number

6603

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

_____	Date _____	Name _____
Signature		By _____
		Its _____
		Date _____

Signature

06/18/2021

4704102296P

Office of Oil and Gas

FEB 08 2021

WW-9 (5/16)

WV Department of Environmental Protection

API Number 47 - 041 - 02296
Operator's Well No. 6603

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

Operator Name Dominion Energy Transmission Inc. OP Code 307048

Watershed (HUC 10) Jesse Run Quadrangle Berlin 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: N/A

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) MUST DISPOSE OFF-SITE
- Other (Explain AST will be put on site and removed following plugging)

*9/11/21
2/19/2021*

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. None

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

Additives to be used in drilling medium? No Drilling, P&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) _____

-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 _____

Company Official (Typed Name) John M. Love

Company Official Title Designated Agent

Subscribed and sworn before me this 3rd day of February, 2021

Melissa D. Mars

My commission expires July 5, 2021

Notary

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Melissa D. Mars
925 White Oaks Blvd
Bridgeport, WV 26309
My Commission Expires July 5, 2025

Operator's Well No. _____

Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 1/3 Ton lbs/acre

Mulch Hay Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

KY-31 40

Orchard Grass 15

Alsike Clover 5

Alsike Clover 5

Annual Rye 15

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: Barry Stiles

Comments: _____

RECEIVED
Office of Oil and Gas

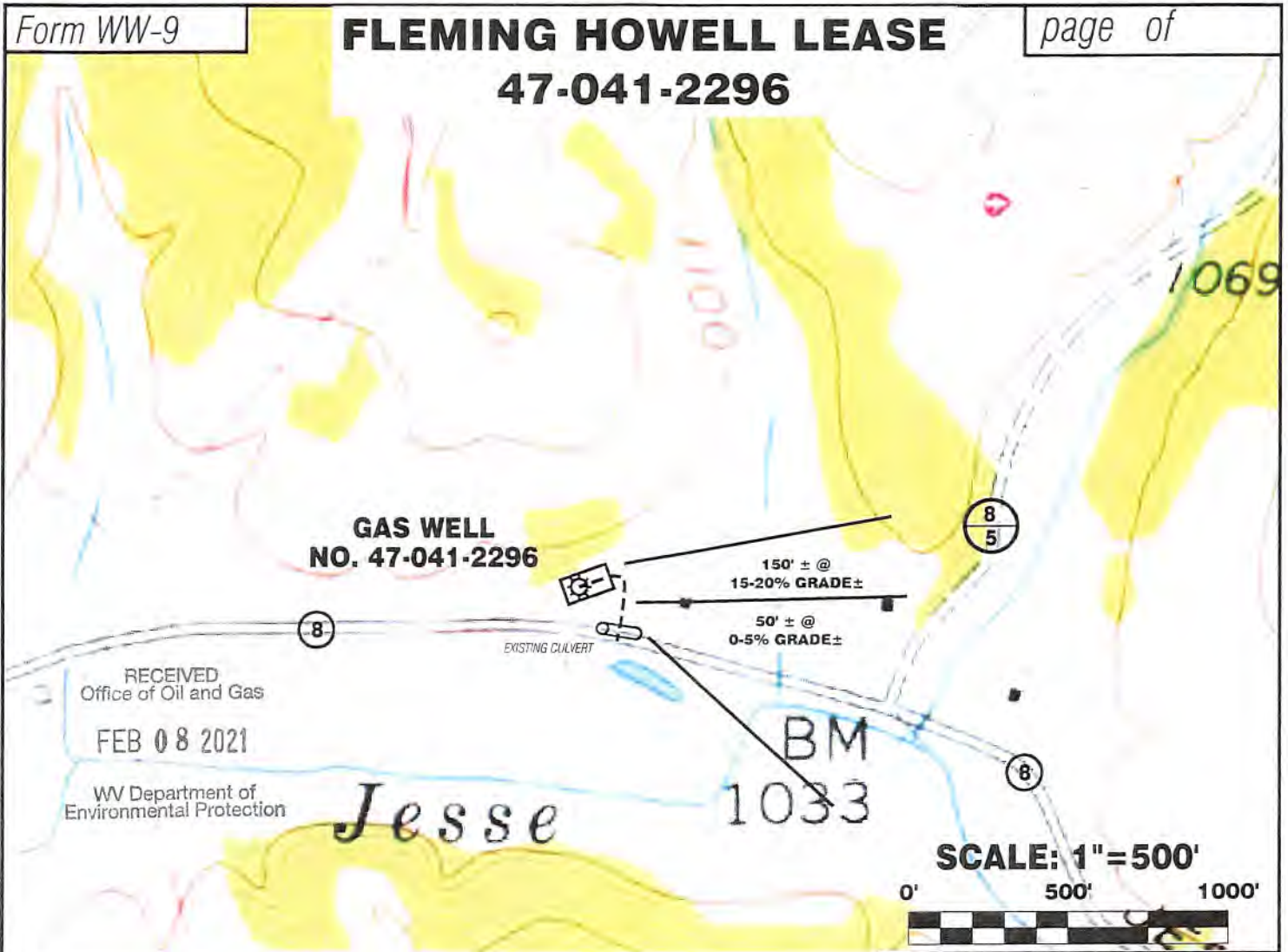
FEB 08 2021

WV Department of
Environmental Protection

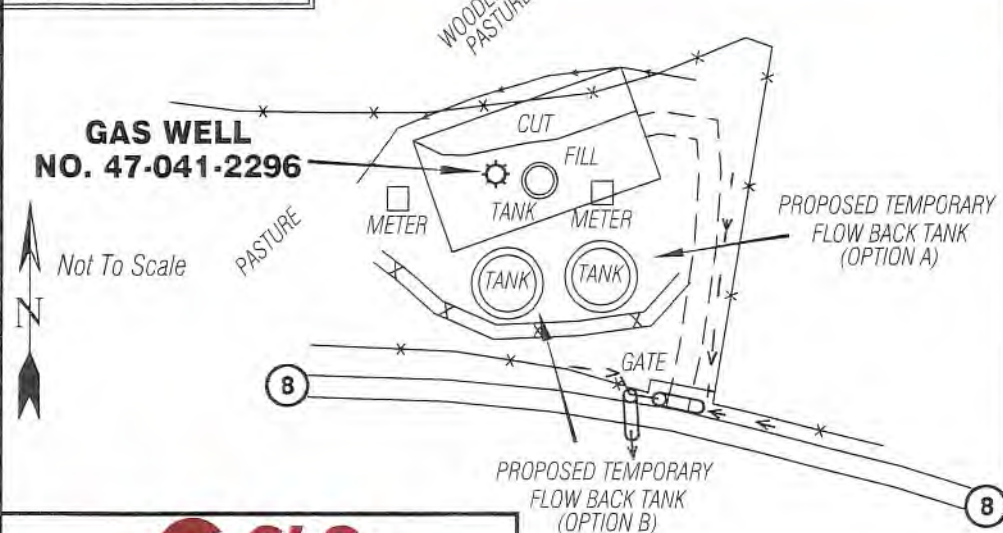
Title: inspector Date: 12-16-20

Field Reviewed? () Yes () No

FLEMING HOWELL LEASE 47-041-2296



Detail Sketch for 47-041-2296



ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATION. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT & STACK ALL MARKETABLE TIMBER.

STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES).

- = EXISTING CULVERT
- = PROPOSED CULVERT 15' MIN. UNLESS OTHERWISE NOTED
- = PROPOSED STREAM CROSSING
- = APPROXIMATE LIMITS OF DISTURBANCE

12 Vannoren Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5624
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.249.5952
 354 East Boctley Bypass | Boctley, WV 25801 | 304.252.3296
 slsenv.com

DRAWN BY CPM	FILE NO. 9025	DATE 08-19-20	CADD FILE: 9025REC.dwg
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TOPO SECTION OF BERLIN
7.5' TOPO QUADRANGLE

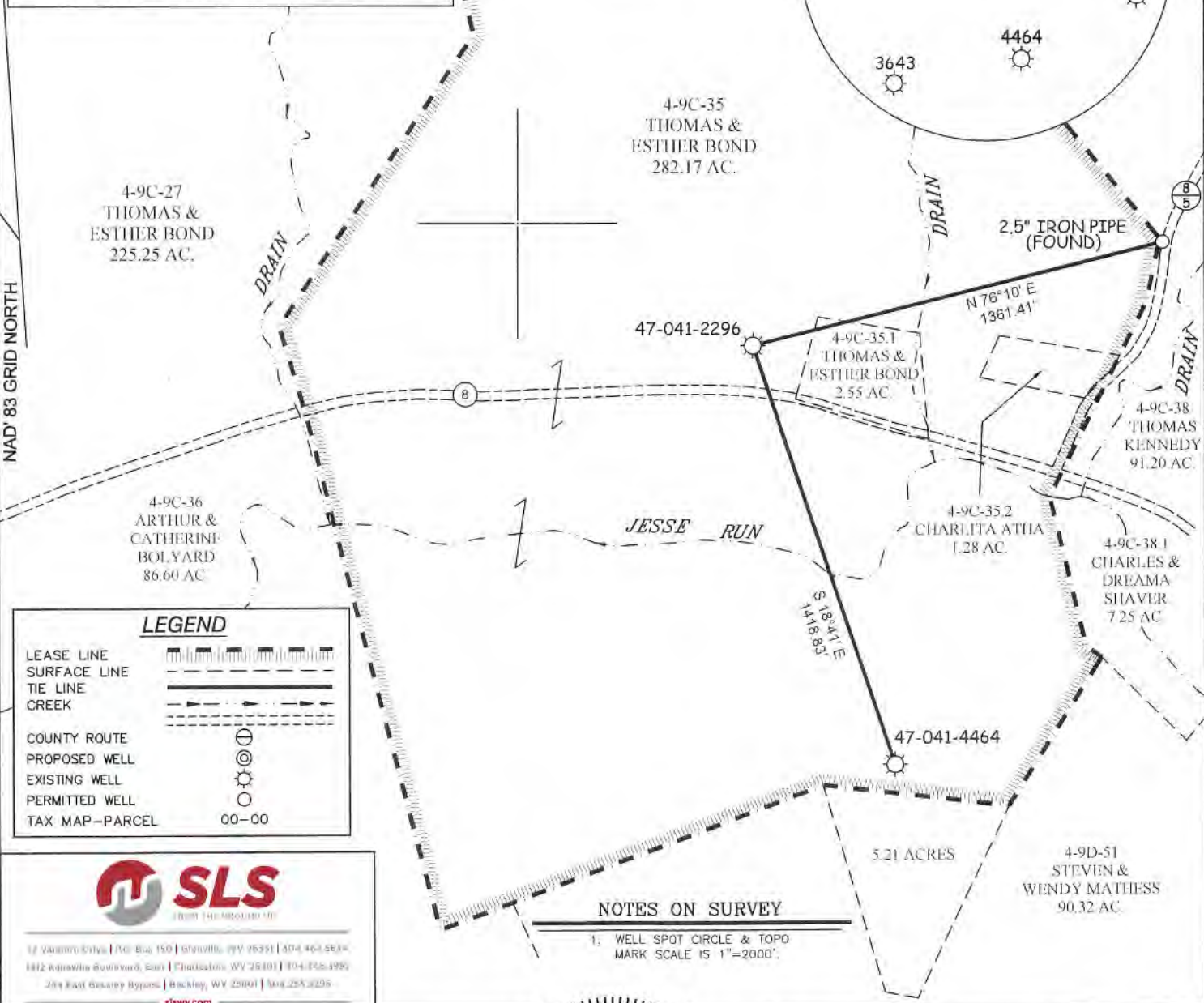
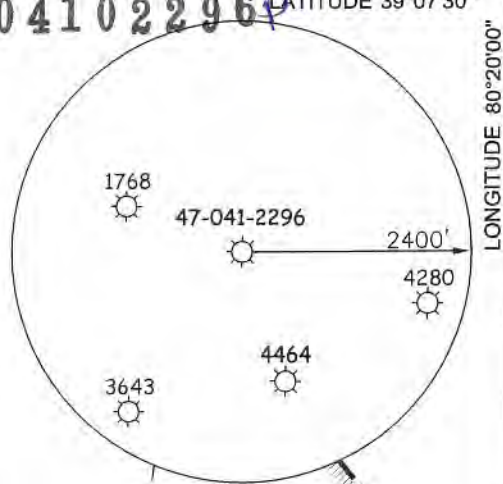
06/18/2021

FLEMING HOWELL LEASE
288 ACRES
WELL 6603
47-041-2296

RECEIVED
Office of Oil and Gas
FEB 08 2021

WV Department of
Environmental Protection

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
NAD'83 S.P.C.(FT) N. 222,575 E. 1,723,177
NAD'83 GEO. LAT-(N) 39.107846 LONG-(W) 80.364529
NAD'83 UTM (M) N. 4,328,936.7 E. 554,943.1



NAD'83 GRID NORTH

LONGITUDE 80°20'00"

6,248'

LEGEND

- LEASE LINE [Symbol]
- SURFACE LINE [Symbol]
- TIE LINE [Symbol]
- CREEK [Symbol]
- COUNTY ROUTE [Symbol]
- PROPOSED WELL [Symbol]
- EXISTING WELL [Symbol]
- PERMITTED WELL [Symbol]
- TAX MAP-PARCEL 00-00 [Symbol]

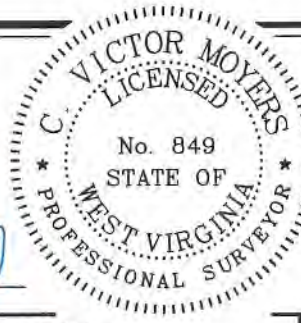
SLS
SLOTTED LOGGING SERVICES, INC.
17 Vauxhall Drive | P.O. Box 150 | Glenwood, WV 26031 | 304-464-5644
1812 Republic Boulevard, East Charleston, WV 25301 | 304-426-1995
284 East Berkeley Bypass | Beckley, WV 25801 | 304-254-2296
sllwv.com

NOTES ON SURVEY

1. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

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. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE AUGUST 19, 20 20
 REVISED, 20
 OPERATORS WELL NO. 6603
 API WELL NO. 47 - 041 - 2296P
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 9025P2296.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SUBMETER MAPPING GRADE TIE TO CORS NETWORK) SCALE 1" = 500'

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

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

LOCATION:
 ELEVATION 1,063' WATERSHED JESSE RUN
 DISTRICT HACKERS CREEK COUNTY LEWIS QUADRANGLE BERLIN 7.5'

SURFACE OWNER THOMAS & ESTHER BOND ACREAGE 282.17±
 ROYALTY OWNER FLEMING HOWELL HEIRS OR ASSIGNS ACREAGE 288±

PROPOSED WORK:
 DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON CLEAN OUT AND REPLUG ___ OTHER ___
 PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION BENSON ESTIMATED DEPTH 4,302'

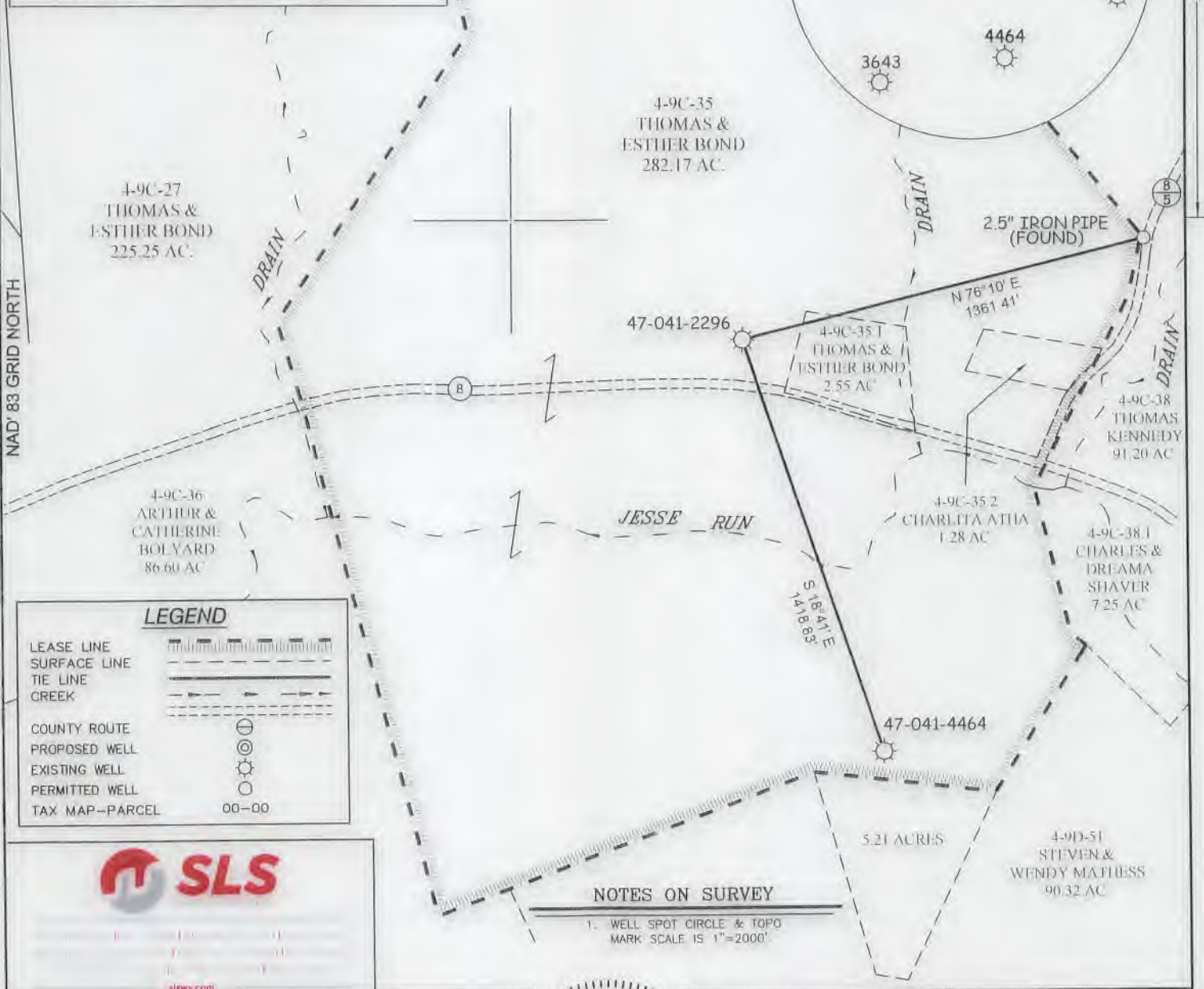
WELL OPERATOR EASTMAN GAS TRANSMISSION AND STORAGE, LLC DESIGNATED AGENT JOHN M. LOVE
 ADDRESS 925 WHITE OAKS BOULEVARD BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

06/18/2021

FLEMING HOWELL LEASE 288 ACRES WELL 6603 47-041-2296

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
NAD'83 S.P.C.(FT) N. 222,575 E. 1,723,177
NAD'83 GEO. LAT.(N) 39.107846 LONG.(W) 80.364529
NAD'83 UTM (M) N. 4,328,936.7 E. 554,943.1



LEGEND

- LEASE LINE
- SURFACE LINE
- TIE LINE
- CREEK
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL 00-00



slewx.com

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PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON CLEAN OUT AND REPLUG ___ OTHER ___ PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON ESTIMATED DEPTH 4,302'

WELL OPERATOR Eastern Gas TRANSMISSION AND STORAGE, INC. DESIGNATED AGENT JOHN M. LOVE
 ADDRESS 925 WHITE OAKS BOULEVARD BRIDGEPORT, WV 26330 ADDRESS 925 WHITE OAKS BOULEVARD BRIDGEPORT, WV 26330

06/18/2021

COUNTY NAME PERMIT