



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

Thursday, May 13, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

COLUMBIA GAS TRANSMISSION, LLC
STORAGE TECHNICAL SERVICES - 6TH FLOOR
1700 MACCORKLE AVE. SE.
CHARLESTON, WV 25314

Re: Permit approval for 7415
47-077-00106-00-00

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: 7415
Farm Name: LEWIS, R. L.
U.S. WELL NUMBER: 47-077-00106-00-00
Vertical Plugging
Date Issued: 5/13/2021

I

4707700106P

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.

4707700106A

WW-4B
Rev. 2/01

1) Date 12/24, 2020
2) Operator's
Well No. Terra Alta 7415
3) API Well No. 47-077 - 00108

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 1984 feet Watershed Saltlick Creek
District Portland County Preston Quadrangle Terra Alta

6) Well Operator Columbia Gas Transmission LLC 7) Designated Agent James Amos
Address 1700 MacCorkle SE Address 48 Columbia Gas Road
Charleston, WV 25325 Sandyville, WV 25275

8) Oil and Gas Inspector to be notified Name Gayne Knitowski
Address PO Box 108
Gorman, WV 26720
9) Plugging Contractor Name Contractor Services Inc.
Address 929 Charleston Road
Spencer, WV 25276

10) Work Order: The work order for the manner of plugging this well is as follows:

Refer to enclosed:

- 1) Well job plan.
- 2) Prior to P&A wellbore schematic.
- 3) Proposed P&A wellbore schematic.

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

Work order approved by inspector Gayne Knitowski Date 1/21/21

05/14/2021

Objective: Plug and Abandon LAST PROFILE UPDATE:

TITLE: Plug and Abandon WORK TYPE: WR

FIELD: Terra Alta WELL: 7415

STATE: WV SHL (Lat/ Long) API:

DIST: BHL (Lat/Long) CNTY:

EXISTING TUBULAR CONFIGURATION	OD (inches)	WEIGHT (PPF)	GRADE	THREAD	DEPTH (ft)		FORMATION: DEPTH:
					TOP	BOTTOM	

Conductor							Oriskany See below.
Surface							
Intermediate1							ELEVATIONS TMG: KB-RF: GL:
Intermediate2							
Production							WELLBORE SCHEMATIC
Tubing							

Perforations							4707700106f
Perforations							
Perforations							
Wellhead							

D.H. EQUIPMENT	TYPE	DEPTH (ft)
PACKER INFO: Upper		
	Lower	
NIPPLE PROFILE INFO: Upper		
	Lower	
SSSV INFO:		

CEMENT INFO	TOC (ft)

MISC INFORMATION

REFER TO WELL SUMMARY REPORT and WELLBORE DIAGRAM

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PROPOSED YEAR: 2020 ERCB PERMIT REQD: YES ___ NO ___X___ (Internal) PDS Required: YES ___ NO ___

PREPARED BY: Jim Amos DT. APPLIED: ISSUED: APPROVED: 

PREP DATE: 12/21/2020 REVIEWED BY:
James Amos
Principal Engineer
Signed by: 83aa62d7-b683-404d-8328-f042f2e33502

WELL JOB PLAN		Well Engineering & Technology		PAGE 3	DATE JOB PREPARED: 12/21/2020
Objective: Plug and Abandon			LAST PROFILE UPDATE:		
TITLE: Plug and Abandon	WELL: 7415		WORK TYPE: WR		
FIELD: Terra Alta	SHL (Lat/Long): 0 0	API: 0			
STAT: WV	BHL (Lat/Long): 0 0	CNTY: 0			
TWP: 0					

PROCEDURE

****Note: All cement used will be Class A, slurry weight 15.6ppg, slurry yield 1.18 cuft/sk. All spacers will be 6% Bentonite gel****

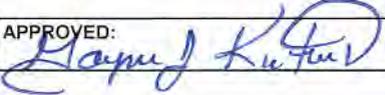
4707700106P

- 1 Obtain State plugging permit, FERC authorization, EM&CP, pipeline crossing evaluation, call before you dig, etc. Prepare site specific SPCC.
- 2 Notify landowner.
- 3 Obtain General Work Permit and Wellsite Review & Turnover Form from Operations.
- 4 Notify environmental inspector prior to beginning work.
- 5 Notify State O&G inspector prior to beginning work.
- 6 Disconnect well line.
- 7 Install ECD's per EM&CP.
- 8 Prepare access road and well site.
- 9 Document and report to WET engineer the casing and annular pressures.
- 10 Blow down all annuli and replace fittings as necessary. Leave annuli open to atmosphere for monitoring.
- 11 Load/top 7x13 annuli with FW. Document volumes.
- 12 Kill well with viscosified fluid. After well is dead spot 10 bbl LCM pill on bottom.
- 13 Dig around base of wellhead to uncover casing tops and remove cement if present.
- 14 MIRU service rig.
- 15 Remove wellhead equipment down to top of tubing spool.
- 16 Screw in 2-3/8" nipple with full port valve into top of hanger.
- 17 Strip over and NU 7-1/16" Cameron 5K BOPE (blind/shear + pipe + annular). Need kill and choke outlets below blind/shear.
- 18 Function and pressure test BOPE to low (250 psig) and high (3000 psig).
- 19 Unseat hanger, PU and remove hanger, and pull tubing, wash to TD.
- 20 Obtain CBL inside 4-1/2" liner from TD to top of liner at 5392'. Send digital copy of CBL to WET engineer.
- 21 Obtain CBL inside 7" casing from top of liner to surface - keep hole full. Send digital copy of CBL to WET engineer and consult on next Steps.
 * Note (there is a 1" x 18" long bailer that was lost in well)
- 22 RIH with 2-3/8" work string w/ cut-lip shoe, wash to TD, and install balanced cement plug from TD to 5000'.
- 23 PU above cement top, reverse circulate to clean tubulars, pull 10 joints, close pipe rams, and WOC.
- 24 WOC minimum 8 hours. RIH and tag cement. If cement top is deeper than 4290' then spot a second balanced cmt plug.
- 25 Install 7" CIDBP above cement plug.
- 26 Top off 7" with kill fluid and perform 500 psig pressure test to verify integrity of BP.
 * The following Steps assume adequate sealing cement behind the 7" csg between 1500 and 5400' If not then will need to sqz cmt.
- 27 RIH with 2-3/8" work string and install balanced cement plug from BP to 4000' and 6% gel from 4000 - 2100'.
- 28 TOOH.
- 29 Release all annular pressure and top off.
- 30 ND BOPE and tubing spool.
- 31 Weld pulling nipple on 7" csg and pull seals and slips.
- 32 NU 11" spool (with kill/choke outlets) and 11" annular BOP.
- 33 Function and attempt to pressure test BOPE to low (250 psig) and high (1500 psig). Report results to WET engineer.
- 34 Wireline freepoint and cut/pull all 7" casing that is free.
- 35 TIH with work string and install balanced cement plugs from 2100' to 100' above top of 7" csg stub.
- 36 POOH to above cement, reverse circulate to clean tubulars, and WOC.
- 37 WOC minimum 4 hours. RIH and tag cement. If cement top is below 7" csg stub then install second cement plug.
- 38 TOOH and ND BOPE and remainder of wellhead.
- 39 Freepoint and cut/pull all 13-3/8" casing that is free.
- 40 TIH with work string and install balanced cement plug from top of last cement plug to surface.
- 41 Grout all annuli as deep as possible.
- 42 RDMO service rig.
- 43 Erect monument per state regulations. Reclaim location and lease road.
- 44 P&A complete.

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WAM Department of
Energy

PREPARED BY: Jim Amos	REVIEWED BY:	APPROVED:  1/21/21
PREP DATE: 12/21/2020		

05/14/2021

WELL JOB PLAN

Well Engineering & Technology

PAGE 4

DATE JOB PREPARED: 12/21/2020

Objective: Plug and Abandon

LAST PROFILE UPDATE:

TITLE: Plug and Abandon		WORK TYPE: WR	
FIELD: Terra Alta	WELL: 7415		
STAT: WV	SHL (Lat/Long): 0 0	API: 0	
TWP: 0	BHL (Lat/Long): 0 0	CNTY: 0	

PROCEDURE CONTINUED

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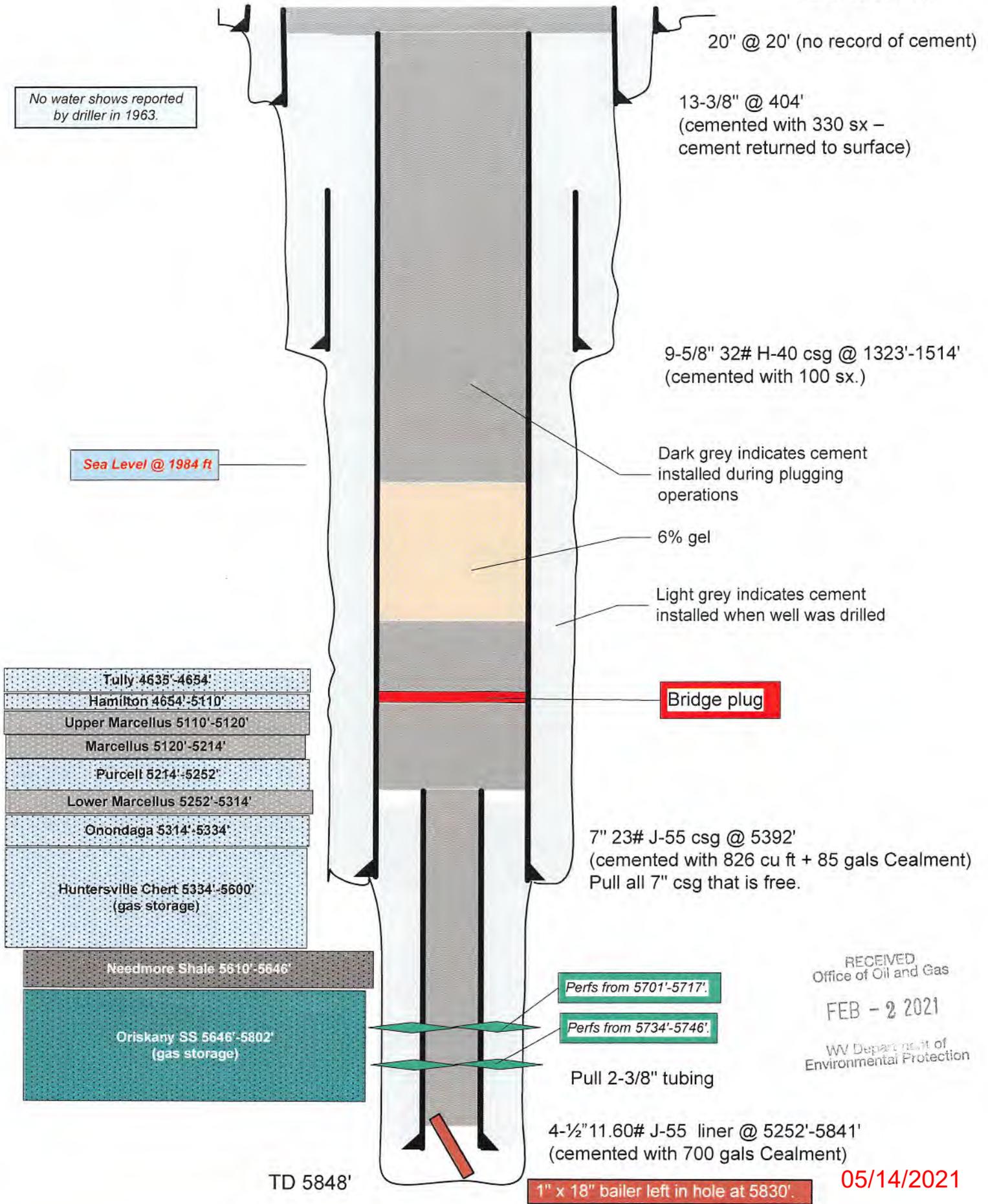
PREPARED BY: Jim Amos	REVIEWED BY:	APPROVED:  1/21/21
PREP DATE: 12/21/2020		

05/14/2021

~ not to scale ~

4707700106P Terra Alta 7415

Proposed P&A
(as of 12/9/2020)



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~ not to scale ~

4707700106

Terra Alta 7415

Prior to P&A

(as of 11/2/2020)

No water shows reported by driller in 1963.

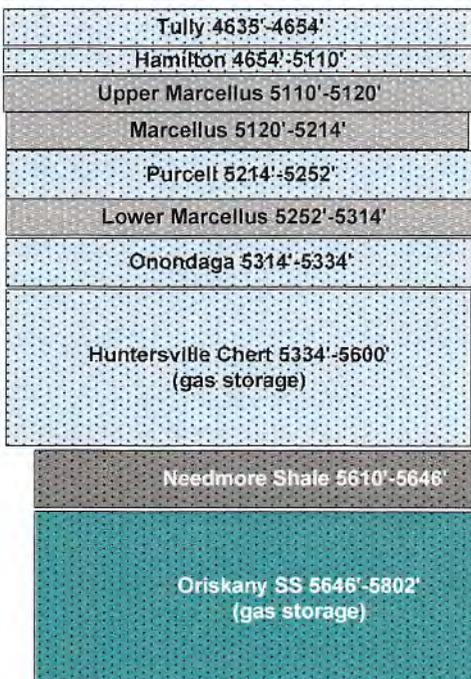
20" @ 20' (no record of cement)

13-3/8" @ 404'
(cemented with 330 sx – cement returned to surface)

No CBL ran to-date, but TOC could be near surface based on volumetric calculations.

9-5/8" 32# H-40 csg @ 1323'-1514'
(cemented with 100 sx.)

Sea Level @ 1984 ft



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7" 23# J-55 csg @ 5392'
(cemented with 826 cu ft + 85 gals Cealment)

Perfs from 5701'-5717'

Perfs from 5734'-5746'

2-3/8" 4.6# J-55 tbg @ 5739' (no packer)

4-1/2" 11.60# J-55 liner @ 5252'-5841'
(cemented with 700 gals Cealment)

LATEX

TD 5848'

1" x 18" bailer left in hole at 5830'

05/14/2021



47077001060

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Kingwood
Permit No. Pres. 106

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Atlantic Seaboard Corporation
Address Elkins, West Virginia
Farm Roy L. Lewis Et Ux Acres 5
Location (waters) Salt Lick Creek
Well No. 7415 Elev. 1902.35
District Portland County Preston
The surface of tract is owned in fee by Roy L. Lewis Et Ux
Address Terra Alta, W. Va.
Mineral rights are owned by Roy L. Lewis, Et Ux
Address Terra Alta, W. Va.
Drilling commenced April 7, 1963
Drilling completed _____
Date Shot _____ From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED SEE REVERSE
WELL FRACTURED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
18 20"	20'	20'	
13 - 3/8 H-40	404'	404'	
12 9-5/8	1514' 0"	225	Size of
8 7"	5389'	5389'	
8 4 1/2	589'	589'	Depth set
8 2-3/8	5208'	5208'	
2 1 1/2"	608	608'	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date

SEE REVERSE

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

RESULT AFTER TREATMENT SEE REVERSE

ROCK PRESSURE AFTER TREATMENT SEE REVERSE

Fresh Water _____ Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Siltstone & Shale			0	4634			
Fully Lime			4634	4655			
Siltstone & Shale			4655	5314			
Onondaga Lime			5314	5334			
Chert			5334	5398			
Siltstone & Shale			5398	5454			
Onondaga Lime			5454	5470			
Chert			5470	5604			
Shale			5604	5643			
Driskany			5643	5802			
Halderberg Lime			5802				
Total Depth				5841			

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WV Dept. of Environmental Protection

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Logging:							
Gamma Ray:		5832'	to surface	5-9-63	Schlumberger		
Temperature:		5841'	to 2000'	5-9-63	"		
Formation Density:		5840'	to 5358'	5-9-63	"		
Induction:		5837'	to 5357'	5-9-63	"		
Gamma Ray-Correlation:		5838'	to 5200'	5-10-63	McCullough		
Casing & Cement:							
20" road casing (conductor) - 20' Driven into 17 1/2" drilled hole - 4-7-63 - Not cemented.							
13-3/8", 4.8#/ft., H-40 casing - 404' set at 410' (KB). Cemented to surface with 330 sacks neat cement, 3 sacks Ca Cl - 4-9-63 - Dowell							
9-5/8", 3.2#/ft., H-40 casing - 1514'6" set at 1512' (KB). Cemented 100' with 40 sacks Class A Neat cement with 2% Ca Cl - 4-15-63 - Dowell. Backed off 9-5/8" Left and Right Collar and pulled 1323', 3.2#/ft., H-40 casing. Left 225' 9-5/8" casing in well - 4-28-63. Top left and right nipple left in well rolled out (Plated) 5-2-63							
7", 2.3#/ft., J-55 casing - 5289' set at 5358' (KB). Cemented to surface with 826 cu. ft. "Litepoz", 826 sacks Class A cement & 85 gal. "Cealment" (Latex Cement) - 5-4-63 - Dowell							
4 1/2" 11.6 #/ft., J-55 casing liner - 589' set from 5848' to 5250' (KB) Cemented with 700 gal. "Cealment" (Latex Cement) - 5-10-63 - Dowell							
2-3/8", 4.6#/ft., J-55 Tubing 5208', and 1 1/2" 2.75#/ft., J-55 Tubing, 608' Suspended from National H-1 tubing hanger. 5-11-63							
Perforations:							
Oriskany: 4 Holes/ft., 5,701'-5,717', 5,734'-5,746' - 5-9-63 - McCullough							
Stimulation:							
Oriskany: 1,000 gal 15% Super Mud Acid - 5-10-63 - Dowell							
Oriskany: 5,000 gal 15% Retarded Hcl; 5,000 gal 15% Regular Hcl - 7-11-63 - Dowell							
Production:							
Before running & cementing Liner - 49/10 W-2" =295 mcf							
After Perforating - Not tested							
After Acid treatment							
Final rock pressure							
Final Shut in Date:							

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WV Department of
Environmental Protection
05/14/2021

Date Oct 3, 1963
APPROVED Atlantic Seaboard Corp., Owner
By H. Mcufford Supt.
(Title)

Form OG-2

*Bud Gole
WV 12-1-11
Well 7415*

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL DRILLING PERMIT

Permit No. PRES-106

APRIL 5, 19 63

TO ATLANTIC SEABOARD CORPORATION
Well Operator

LOCATION OF WELL:

P. O. BOX 1273
Street

PORTLAND DISTRICT

CHARLESTON 25, WEST VIRGINIA
City

PRESTON COUNTY

WELL No. X-76-7415 ELEVATION 1902.35'

ROY L. LEWIS FARM

ACRES 5

The Department of Mines received your Notice and Plat of the Well described above on the 26th day of

MARCH, 19 63, showing proposed location for drilling an oil or gas well.

Ten days having expired since the receipt of Notice and Plat and no objections having been made by the coal owners, coal operators, or the Department of Mines, the location is approved and permission is granted you to drill strictly in accordance with the several provisions of Chapter 22, Code of 1931, the Well to be numbered and located as above shown and more particularly as indicated on the Plat on file with this Department.

This Permit is assignable either by separate instrument, or incident to the transfer of title to the oil and gas, or of the right to drill therefore at said location, but no such assignment shall entitle the assignee to drill thereat until he shall have filed with the Department of Mines a certified, or sworn copy of the instrument assigning same, or as an incident to which such assignment was made.

In case the well is not commenced within four months from the above date, this Permit shall expire and be of no further force or effect.

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Office of Oil and Gas

LEONARD J. TIMMS
DIRECTOR

FEB - 2 2021
Department of Mines
WV Department of
Environmental Protection

BY *James Wauchope*
EXECUTIVE SECRETARY-OIL AND GAS DIVISION

05/14/2021

WW-4A
Revised 6-07

1) Date: 12/24/2020
2) Operator's Well Number
Terra Alta 7415

3) API Well No.: 47 - 077 - 00106

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

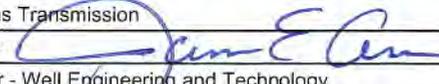
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Kelly Marjorie Ann Grimm</u>	Name <u>Not operated.</u>
Address <u>182 Lewis Lane</u>	Address _____
<u>Terra Alta, WV 26764</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Gayne Knitowski</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 108</u>	Name _____
<u>Gormanian, WV 26720</u>	Address _____
Telephone <u>304.546.8171</u>	_____

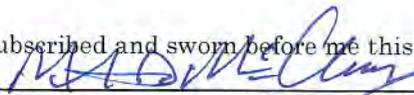
TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (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.

Well Operator	<u>Columbia Gas Transmission</u>	RECEIVED
By:	<u>James Amos</u> 	Office of Oil and Gas
Its:	<u>Team Leader - Well Engineering and Technology</u>	
Address	<u>48 Columbia Gas Road</u>	FEB - 2 2021
	<u>Sandyville, WV 25275</u>	
Telephone	<u>304.373.2412</u>	WV Department of Environmental Protection

Subscribed and sworn before me this 1st day of February 2021

My Commission Expires 6/19/22



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.

4707700106 P

Columbia Gas Transmission, LLC

1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



December 24, 2020

Kelly Marjorie Ann Grimm
182 Lewis Lane
Terra Alta, WV 26764

4707700106

4707700106

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to plug and abandon an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Terra Alta 7415 (API 47-077-00106).

As part of the well permitting process, Columbia, the well operator, is required to provide a copy of all applicable permit application forms for your review and record retention.

Regards,

Jim Amos
Team Leader
Well Engineering & Technology
Columbia Gas Transmission, LLC

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Office of Oil and Gas

FEB - 2 2021

WV Department of
Environmental Protection

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY														
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> <i>Kelly Marjorie Ann Grimm</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____ C. Date of Delivery <i>Feb 2-21</i></p>														
<p>1. Article Addressed to:</p> <p>KELLY MARJORIE ANN GRIMM 182 LEWIS LN TERRA ALTA, WV 26764</p>  <p>9590 9402 3688 7335 3537 34</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p> <p>4707700106</p>														
<p>2. Article Number (Transfer from service label)</p> <p>7017 0660 0001 0359 5705</p>	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Restricted Delivery (over \$500)	
<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®														
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™														
<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery														
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise														
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™														
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery														
<input type="checkbox"/> Restricted Delivery (over \$500)															

05/14/2021

SURFACE OWNER WAIVER

Operator's Well
Number

Terra Alta 7415

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

Date
05/14/2021

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Environmental Protection

4707700106f

WW-4B

COAL NOT OPERATED

API No. 47-077-00106
Farm Name _____
Well No. Terra Alta 7415

**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 ____/ owner ____/ 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: _____

By: _____

Its _____

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WV Department of
Environmental Protection

05/14/2021

WW-9
(5/16)

API Number 47 - 077 -00106
Operator's Well No. _____

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

Operator Name Columbia Gas Transmission OP Code 307032

Watershed (HUC 10) Saltlick Creek Quadrangle Terra Alta

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: fresh water, brine, cement returns, bentonite gel

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Undergound Injection (UIC Permit Number 34-119-28776-, 34-167-23862)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Appalachian Water Services, Station W1 Ronco WTP, Masontown, PA - Permit 2608201)

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?

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) subsoils

-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 [Signature]
Company Official (Typed Name) James E. Amos
Company Official Title Team Leader, Well Engineering & Technology

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WV Department of Environmental Protection

Subscribed and sworn before me this 6th day of February, 2021
[Signature]
My commission expires 6/19/22



05/14/2021

Proposed Revegetation Treatment: Acres Disturbed <1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Rye	40	Orchard Grass and/or Tall Fescue	29
		Birdsfoot trefoil (empire)	9
		Annual Rye	12

For wetland areas: Annual Rye (40 lbs/acre) until indigenous plants re-establish cover.

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: Gayne J. Kuitert

Comments: _____

Reclaim SITE ASAP

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WV Department of
Environmental Protection

Title: Inspector

Date: 1/21/21

Field Reviewed? () Yes () No

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

Operator Name: Columbia Gas Transmission LLC

Watershed (HUC 10): Saltlick Creek Quad: Terra Alta

Farm Name: _____

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications will be stored on site, but located within secondary containment.
Accidental release from well fluids and spills from construction equipment are the only sources of contaminate to groundwater.

All accumulated fluids to be hauled off site to UIC disposal facility.

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

All construction equipment will be inspected daily for leaks. Spill kits will be on site.

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

Saltlick Creek - 0.02 miles. Terra Alta Water Works (WV3303917) - 1.72 miles.

4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

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WV Department of
Environmental Protection

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

During routine tailgate meetings, groundwater protection will be a topic of discussion.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubricants will be stored on site, but located within secondary containment. Construction equipment will be inspected daily for leaks or spills.

Signature: *Jim E. [unclear]*

Date: 1/29/21

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05/14/2021

4707700106P

WV DEP Reclamation Plan - Site Detail

Terra Alta well 7415 (API 077-00106)

- BMPs and erosion control devices to be utilized per WV DEP guidelines and Columbia's WV Environmental Construction Standards
- Existing drainage, culverts, and road ditches to be maintained
- Minor grading and surface material to be applied as needed



1.0 acres

PIT B
50' x 10' x 4' deep

PIT A
50' x 10' x 4' deep

Terra Alta - 07415

Saltlick Rd

Limit of Proposed Disturbance
on existing well site

Google Earth

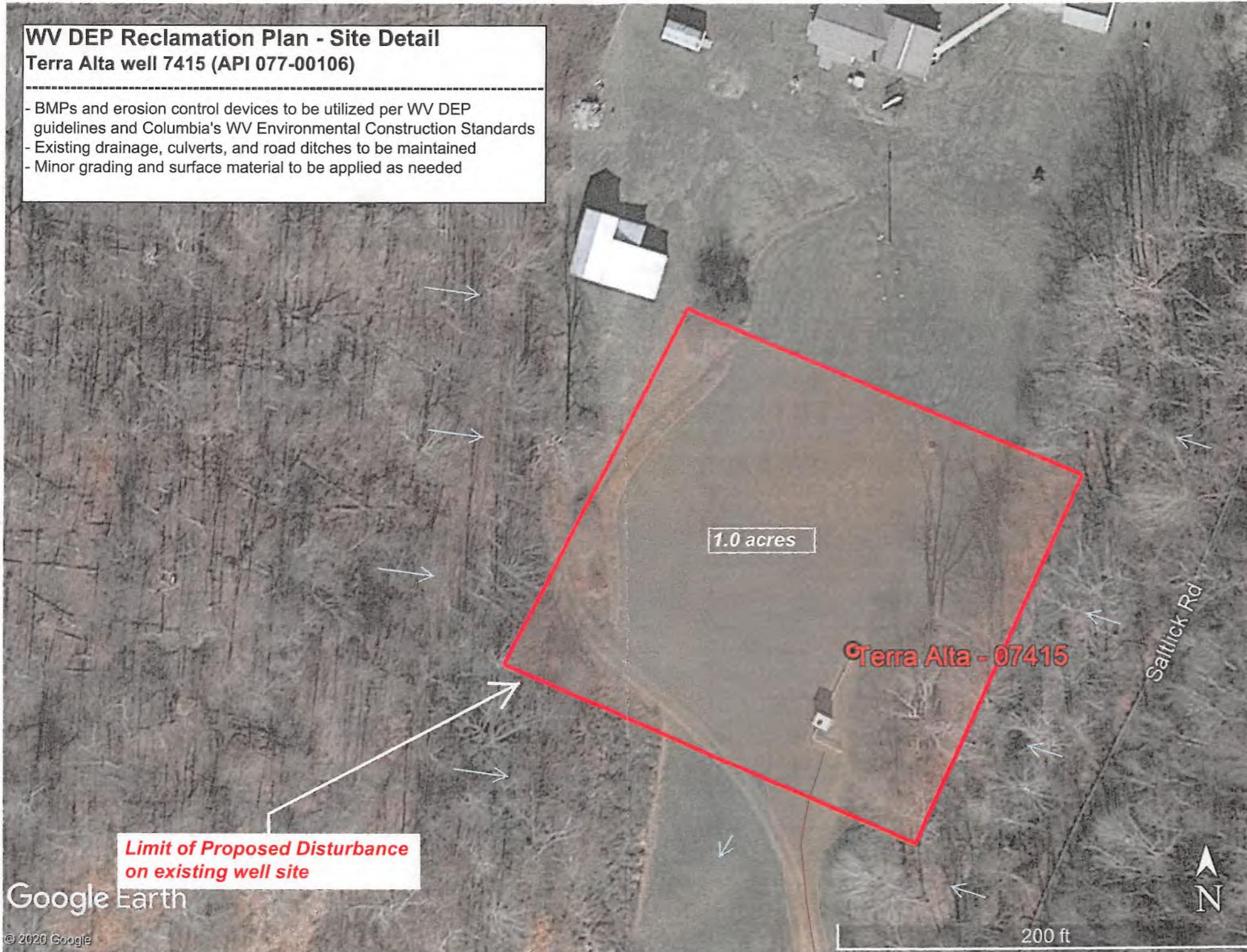
© 2020 Google

200 ft

WV DEP Reclamation Plan - Site Detail

Terra Alta well 7415 (API 077-00106)

- BMPs and erosion control devices to be utilized per WV DEP guidelines and Columbia's WV Environmental Construction Standards
- Existing drainage, culverts, and road ditches to be maintained
- Minor grading and surface material to be applied as needed



1.0 acres

Terra Alta - 07415

Saltlick Rd

Limit of Proposed Disturbance on existing well site

Google Earth

© 2020 Google

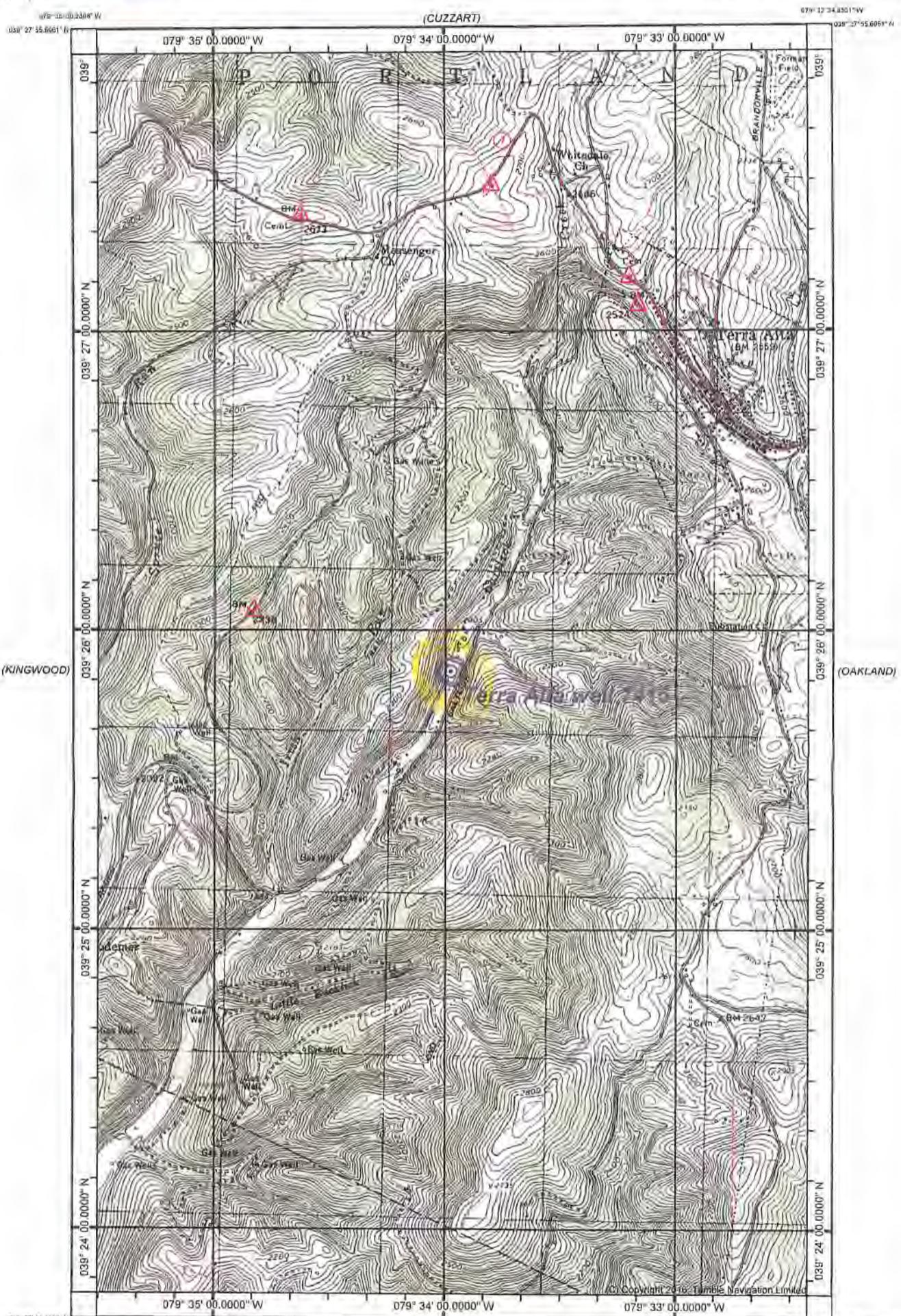
200 ft

4707700106P



TERRA ALTA QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

(SANG RUN)



05/14/2021
(TABLE ROCK)

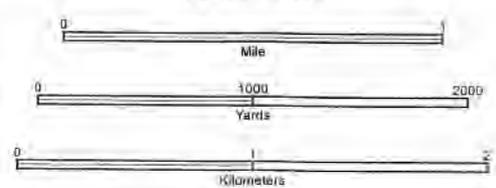
Produced by Trimble TerraNav Navigator Pro
Topography based on USGS 1:24,000 Maps

North American 1983 Datum (NAD83)

To align on the predicted North American 1977 move (IP)

projection lines 10M N and 19M

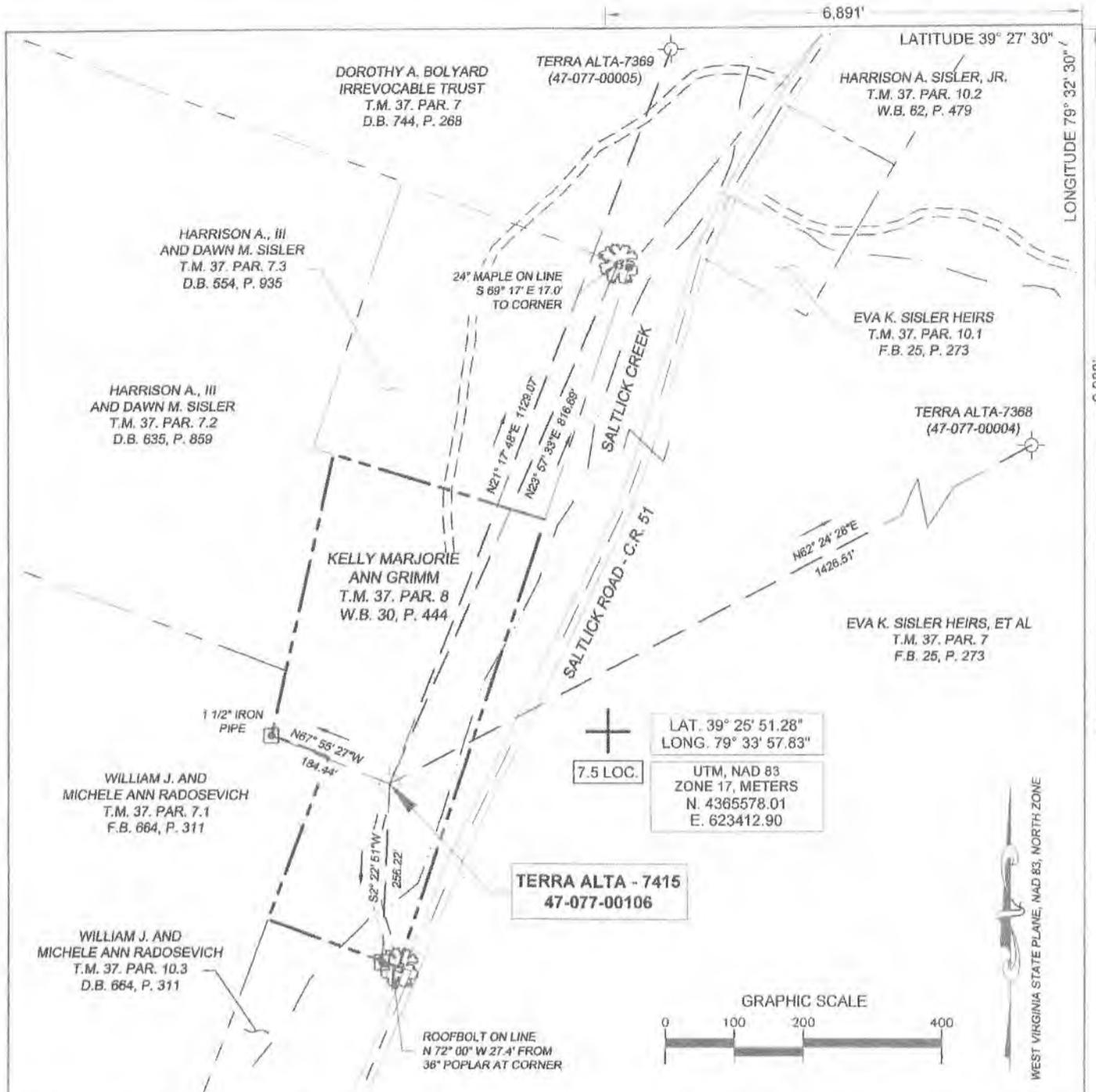
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CONTOUR INTERVAL 20 FT

39079-D4-TM-024
TERRA ALTA, WV
JAN 1, 2000

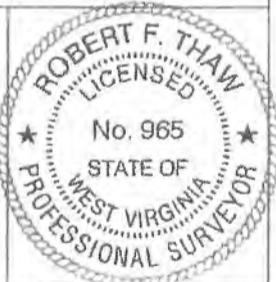
4707700106



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2001-3079-001-017
 DWG No. TERRA ALTA-7415
 SCALE 1"=200'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TRIMBLE R10 GPS UNIT

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.
 (SIGNED) *R. F. Thaw*
 ROBERT F. THAW PS #965



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE NOVEMBER 25 2020
 OPERATOR'S WELL No. 7415
 API WELL No. 47 077 - 00106P

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

LOCATION: ELEVATION 1984.4' WATER SHED SALTICK CREEK
 DISTRICT PORTLAND COUNTY PRESTON
 QUADRANGLE TERRA ALTA, WV

SURFACE OWNER KELLY MARJORIE ANN GRIMM ACREAGE 4
 OIL & GAS ROYALTY OWNER ROY L. LEWIS, ET UX
 LEASE No. 1090359-000 LEASE ACREAGE 5

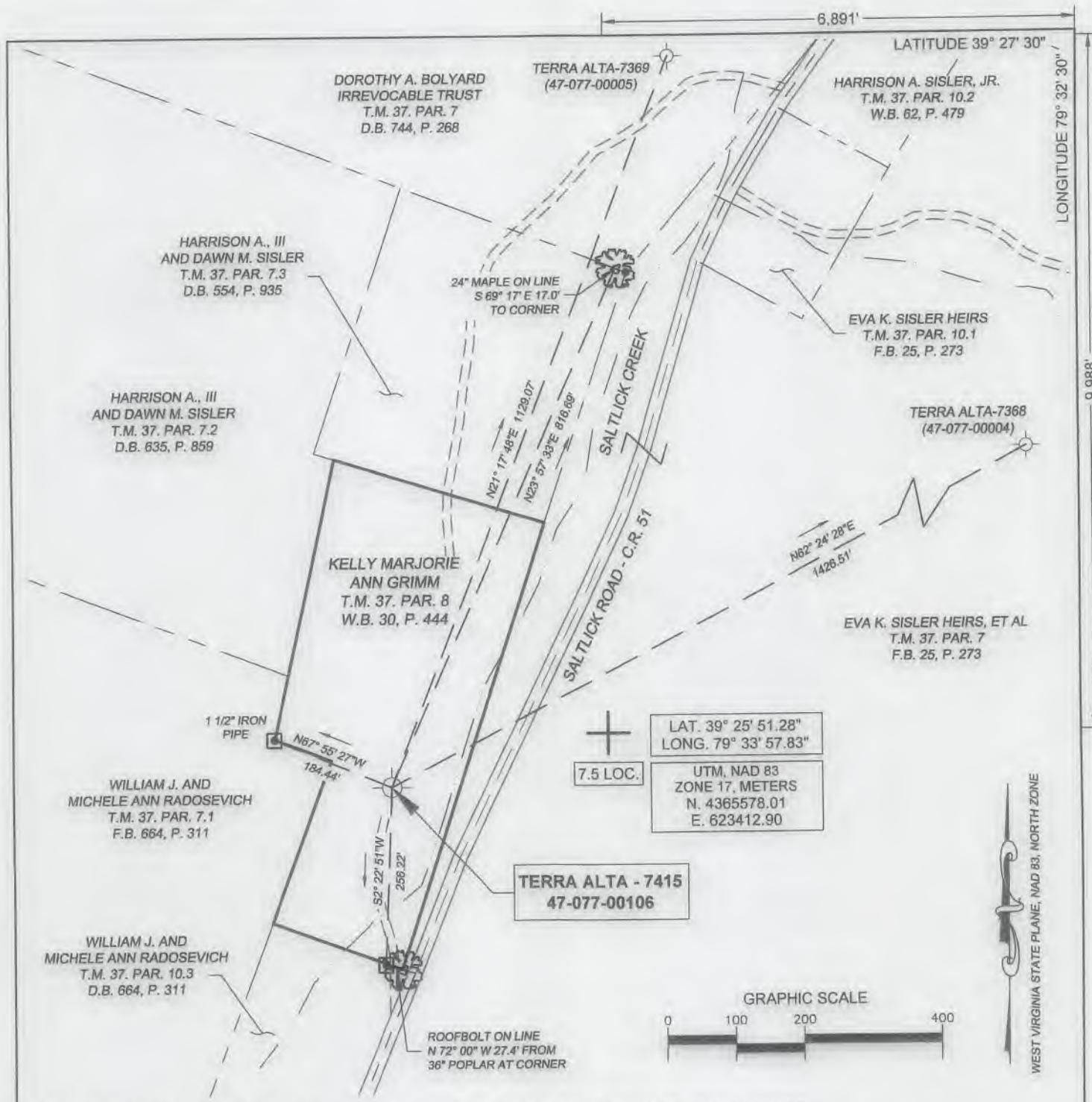
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION ORISKANY ESTIMATED DEPTH 5841

WELL OPERATOR COLUMBIA GAS TRANSMISSION LLC DESIGNATED AGENT JAMES AMOS
 ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 48 COLUMBIA GAS ROAD SANDYVILLE, WV 25275

05/14/2021

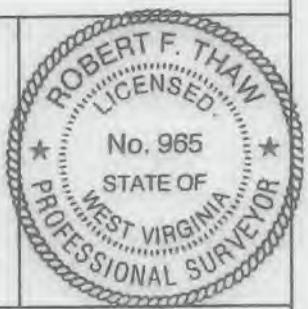
FORM IV-6 (8-78)



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2001-3079-001-017
 DWG No. TERRA ALTA-7415
 SCALE 1"=200'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TRIMBLE R10 GPS UNIT

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 (SIGNED) R. Thaw
 ROBERT F. THAW PS #965



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE NOVEMBER 25 2020
 OPERATOR'S WELL No. 7415
 API WELL No. 47 077 - 00106P

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

LOCATION: ELEVATION 1984.4' WATER SHED SALTICK CREEK
 DISTRICT PORTLAND COUNTY PRESTON
 QUADRANGLE TERRA ALTA, WV

SURFACE OWNER KELLY MARJORIE ANN GRIMM ACREAGE 4
 OIL & GAS ROYALTY OWNER ROY L. LEWIS, ET UX
 LEASE No. 1090359-000 LEASE ACREAGE 5

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION ORISKANY ESTIMATED DEPTH 5841

WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT JAMES AMOS
 ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 48 COLUMBIA GAS ROAD SANDYVILLE, WV 25275

FORM IV-6 (8-78)

05/14/2021