



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

Tuesday, September 26, 2023
WELL WORK PERMIT
Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for 7227
47-039-01622-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

A blue ink signature of James A. Martin, written in a cursive style.

Operator's Well Number: 7227
Farm Name: HARDWAY, NELSON
U.S. WELL NUMBER: 47-039-01622-00-00
Vertical Re-Work
Date Issued: 9/26/2023

Promoting a healthy environment.

09/29/2023

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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

09/29/2023

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Columbia Gas Transmission, LLC 307032 Kanawha Elk Blue Creek, WV
Operator ID County District Quadrangle

2) Operator's Well Number: Coco B 7227 3) Elevation: 848

4) Well Type: (a) Oil _____ or Gas X
 (b) If Gas: Production _____ / Underground Storage X
 Deep X _____ / Shallow _____

5) Proposed Target Formation(s): Oriskany Proposed Target Depth: 5197

6) Proposed Total Depth: 5197 Feet Formation at Proposed Total Depth: Oriskany

7) Approximate fresh water strata depths: driller reported hole full of water at 315', 950' and 972 to 995'

8) Approximate salt water depths: Salt Sand reported from 885 - 1410' by driller. Water at 940'

9) Approximate coal seam depths: None reported by driller

10) Approximate void depths,(coal, Karst, other): None reported by driller

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Snub tubing out of the well, obtain HRVRT log, perform wellhead change, perform coil tubing cleanout and 2000 gal 15% acid stimulation.

13) **CASING AND TUBING PROGRAM** * existing 8-16-23

TYPE	SPECIFICATIONS			FOOTAGE		INTERVALS	CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)	
Conductor							
Fresh Water	13 *		48	418	418		
Coal	10 *	H-40	40	1626	1626	gelled w/ 18 sx	
Production	5.5 *	J-55	15.5	5174	5174	1250 sx	
Production							
Tubing	2-3/8	J-55	4.6	5078	5078		
Liners							

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

Packers: Kind: _____
 Sizes: _____
 Depths Set _____

09/29/2023

API 5K wellhead, 5-1/2" FS x 10" support

5-1/2" 15.5# J-55 8rd NUE csg set at 5174'

Burst: 4810 psig new (3848 psig assuming 80% safety factor)

Capacity: [5174 ft x 0.9997 gal/ft] = 5173 gals; x 0.0238 bbl/ft = 123.2 bbls

Openhole

Capacity 7-7/8" hole: 23 ft x 0.06024 bbl/ft = 1.4 bbls

Total Capacity: 125 bbls

Oriskany: 5185 - 5197

TD: 5197

Fluids Needed

2000 gals 15% HCl acid** treated with corrosion inhibitor, iron control/sequestering agent, and surfactant. Biocide, clay stabilizer, and surfactant to treat +/- 400 bbls fresh water. Liquid caustic on location in case need to neutralize flowback fluids.

* Prior to acid treatment verify that the 5-1/2" x 10" annulus is full, top off with fresh water treated with biocide, corrosion inhibitor, and clay stabilizer as needed.

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

CTCO Procedure

1. MIRU 1.75" CTU.
2. Load CT with treated fresh water (TFW) and pressure test CT and BOPs to 2500 psig.
* maximum pressure on wellhead components 4500 psig
3. Open well and RIH under static conditions.
4. At 4900' begin jetting with foamed TFW. Jet to TD and cycle up and down across interval 5160' – TD.
5. Begin 15% HCl acid foamed to 50Q and cycle up and down across interval 5160' – TD until 1000 gals acid gone.
6. Chase acid with 40 bbls TFW foamed to 50Q to neutralize wellbore / flowback fluids.
7. Flow well while POOH to 4900'. Flow until returns are relatively dry.
8. CTU on stand-by until after acid treatment to unload wellbore if needed.

Acid Treatment

1. RU to perform acid treatment down casing as follows. Pump at highest rate possible while staying below maximum treating pressure.

▪ 1000 gals 15% HCl acid	4-5 BPM	Max Treating Press = 2500 psig
▪ 25 bbls bbls TFW	3-4 BPM	Max Treating Press = 2000 psig
▪ 25 bbls bbls TFW	3-4 BPM	Max Treating Press = 1500 psig
▪ 25 bbls bbls TFW	2-4 BPM	Max Treating Press = 1000 psig
▪ 20 bbls TFW	2-4 BPM	Max Treating Press = 1000 psig
		▪ SHUT DOWN FOR 30 minutes TO ALLOW ACID TO SOAK
▪ 15 bbls TFW	1-3 BPM	Max Treating Press = 1000 psig
		▪ SHUT DOWN FOR 30 minutes TO ALLOW ACID TO SOAK
▪ 15 bbls TFW	1-3 BPM	Max Treating Press = 1000 psig

09/29/2023

4703901622W

2. Flow well. If well quits flowing, RBIH with CT unloading fluid with N2.
3. RDMO and release CTU / acid equipment.

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

09/29/2023

WELL JOB PLAN		STS Well Engineering & Technology		PAGE 1	DATE JOB PREPARED: 4/19/2023	
Objective: Baseline Integrity Project						
TITLE: Snub tubing, log, WHX, CTCO						
FIELD: Coco B		WELL ID: 7227			WORK TYPE: Well Integrity	
STATE: WV		SHL (Lat/ Long) 38.41934		-81.41833		LEASE #: 881
DIST/TWP: Elk		BHL (Lat/Long) 38.41934		-81.41833		API: 47-039-05327-0000
EXISTING TUBULAR CONFIGURATION		OD (inches)	WEIGHT (PPF)	GRADE	THREAD	DEPTH KB (ft)
						TOP
						BOTTOM
Conductor						
Surface		13	48.0		8rd NUE	0 418
Intermediate		10	40.0	H-40	8rd NUE	0 1626
Production		5 1/2	15.5	J-55	8rd NUE	0 5174 *
Production		*conflicting record on csg shoe - well record 5174, 2000 permit 5086, GRN log 5075 and SBT log bitm logged cmt/csg 5125'				
Tubing		2 3/8	4.6	J-55	10rd NUE	0 5078 **
Perforations		Open Hole ** 1.87" profile nipple and wireline re-entry guide				
Wellhead		API 5K wellhead, 5-1/2" x 10" support, 2-3/8" 10rd wellhead connection				
D.H. EQUIPMENT		TYPE			DEPTH (ft)	
PACKER INFO:		Upper				
		Lower				
NIPPLE PROFILE INFO:		Upper				
		Lower				
SSSV INFO:						
CEMENT INFO						TOC (ft)
13	No records					-
10	Gelled with 18 sx 6% gel					1586
5 1/2	1250 sx class A to surface. CBL TOC -->					4224
MISC INFORMATION						
REFER TO WELL SUMMARY RPT, WELLBORE DIAGRAM, ELOG, ETC. (see spreadsheet tabs below)						
Kill Fluid Calculation * Note that kill fluid calculation tabs are hidden						
Maximum calculated bottom-hole pressure (for reference only):		2074	psig	* input		
* Maximum storage field surface pressure (MAOP):		1800	psig	* input		
Well TD:		5197	ft TVD	* input		
Top of storage zone (Oriskany):		5185	ft TVD	* input		
Calculated maximum BH pressure at top of zone:		2059	psig	* output Kill Fluid (TOZ)		
Kill fluid density at top of zone @:		200	psi OB	8.38	ppg	* output Kill Fluid (TOZ)
Proposed depth of BP:		5000	ft TVD	* input		
Calculated maximum BH pressure at depth of BP:		2050	psig	* output Kill Fluid (BP)		
Kill fluid density at depth of BP @:		200	psi OB	8.65	ppg	* output Kill Fluid (BP)
Required minimum kill fluid density:		8.7	ppg	* greater of the two		
Current AOF:		30,243 MCF/D				
Top historical AOF:		48,475 MCF/D				
Last MVRT:		Baker HRVRT ran 11.06.2000 showed one 29% internal isolated defect in 5.5" csg.				
SBT:		Baker bond log ran 11.06.2000 showed good quality bond 5142 - 4740, partial bond 4740 - 4619, better than partial bond 4619 - 4536, partial bond 4536 - 4224 and likely free pipe above. Log ran to 4100'.				
PROPOSED YEAR:	2024	ERCB PERMIT REQD:	YES	NO	(Internal) PDS Required: YES NO	
PREPARED BY:	Maria Medvedeva	DT. APPLIED:	ISSUED:	APPROVED: Recoverable Signature		
PREP DATE:	4/19/2023	REVIEWED BY:	James Amos			

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

WELL JOB PLAN		STS Well Engineering & Technology		PAGE 2	DATE JOB PREPARED: 4/19/2023
Objective: Baseline Integrity Project					
TITLE: Snub tubing, log, WHX, CTCO			LAST PROFILE UPDATE:		
FIELD: Coco B	WELL: 7227		WORK TYPE: Well Integrity		
STAT: WV	SHL (Lat/Long): 38.41934	-81.41833	API: 47-039-05327-0000		
TWP: Elk	BHL (Lat/Long): 38.41934	-81.41833	CNTY: Kanawaha		

PROCEDURE

NOTE: No history of annulus pressure issues. Well has a history of degrading and needing workovers to restore deliverability. Good results from historic FWW. During 2022 gyro survey tagged up hard at 3320'. Attempted to resolve bridge with pumping 10 gal methanol and 15 bbls FW overnight. RIH 1.75" guage ring successfully, unsuccessful with gyro tools.

- 1 Obtain 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 Reservoir Engineering & Geosciences (REG) of intent to take well out of service.
- 5 Notify environmental inspector prior to beginning work. If required, notify State/Federal regulatory agencies prior to beginning work.
- 6 Disconnect well line.
- 7 Prepare access road and well site. Install ECD's per EM&CP.
- 8 Service all wellhead valves.
- 9 Document and report to WE&T the initial casing and annular pressures.
- 10 Pump 20 gals methanol and 20 bbls fresh water down tubing to verify it's open. Let set overnight.
- 11 Flow well up casing to verify no bridges and dry wellbore.
- 12 MIRU TTS slickline unit. RIH to find bottom of tubing. Install TTS packoff plug #1 in bottom joint of tubing. Perform negative pressure test in stages to 0 psig. Install TTS packoff plug #2. Perform negative pressure test in stages to 0 psig.
- 13 Remove tbg valve and bonnet. Spray / pour lubricant around top of tubing mandrel and around lock-down pins. Clean mandrel lift threads and verify thread profile. NU 7-1/16" 3M gate valve, Cameron double BOP (blind-shear in bottom / 2-3/8" pipes in top), and annular.
- 14 MIRU stand-alone snubbing stack. Perform low (250 psig) and high (2300 psig) pressure test on each BOP component, including FOSV (2), choke line, blow-off line, and equalization line.
- 15 PU pulling joint, screw into tubing hanger, grab bite on tubing with snubbing slips, equalize pressure across hanger, back out mandrel hold-down pins, and unseat hanger.
- 16 Strip / snub tubing out of hole. On last 3 joints RIH 60 ft every joint with weight on masonry twine to verify depth of upper RBP. Last joint, stop connection just below annular, close gate valve and lower snubbing pipe rams, and bleed pressure to verify last joint. Note that there will likely be pressure inside tubing between the two RBPs.
Note: Tubing will not be rerun.
- 17 MIRU Baker Atlas Logging. Run guage ring, HRVRT casing inspection log. Install RBP1 at 5000' correlated to Baker SBT-GR log dated 11.06.2000. Perform negative pressure test down to 0 psi in increments. Load wellbore with 8.7 ppg NaCl fluid and perform a positive pressure test to 500 psig. Install RBP2 300ft above RBP1.
Request 1-day turnaround on HRVRT analysis. Condition of 5-1/2" casing will determine next steps. Consult with WE&T engineer before proceeding.
- 18 RDMO Loggers.
- 19 Blow down 5-1/2" x 10" annulus, remove BOPs, gate valve, and tubing spool.
- 20 Install new API 5M wellhead - reuse existing casing head. Pressure test wellhead seals to 2200 psi.
- 21 MIRU 1.75" CTU.
- 22 RIH and retrieve RBPs.
- 23 Flow well. If well won't flow unload with nitrogen.
- 24 Perform CTCO and 2000 gals 15% HCL acid matrix treatment.
- 25 RDMO CTU.
- 26 Flow well to recover treatment fluids.
- 27 Perform final 45-min flowback test thru 3/4" choke.
- 28 Notify WET Project Support that well is back in-service.
- 29 Reclaim R&L.
- 30 Reconnect well line.
- 31 Paint wellhead and well line.
- 32 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form.
- 33 Notify REG that well is ready for storage service.

Note: DO NOT FRACTURE STIMULATE WELL; LOW-GRADE LIGHT WEIGHT 5-1/2" 15.5# J-55 CASING.

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

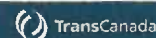
James Amos
8-16-23

a Medvedeva	REVIEWED BY:	<i>James Amos</i>	APPROVED:	<i>Brent Criser</i>
1/19/2023				

09/29/2023

4703901622W

Last Updated: 4/13/2023 12:08 PM

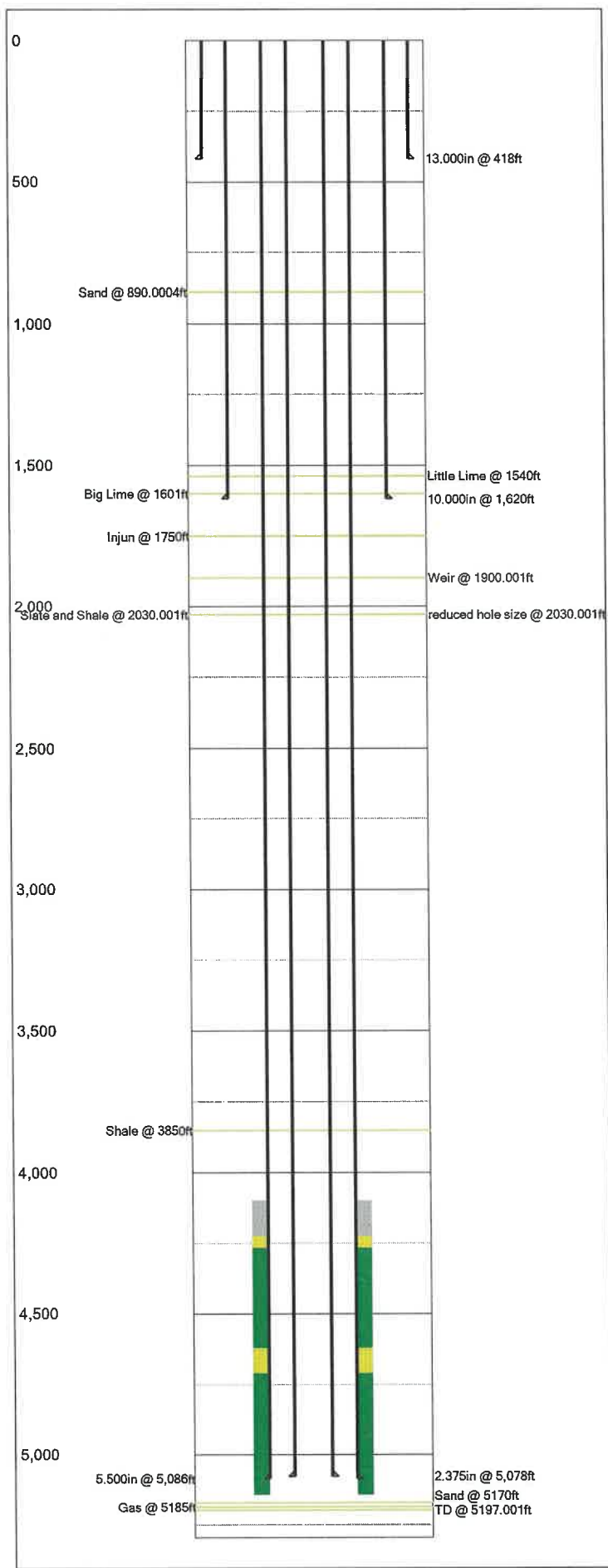


Field Name		Lease Name		Well No.
Coco B		Coco B - 07227		07227
County		State		API No.
Kanawha		WV		47039016220000
Version	Version Tag			
0	Current Completion			
G.L. (ft)	K.B. (ft)	Sec.	Township/Block	Range/Survey
5,197.0		70-63	Elk	030307227
Operator		Well Status	Latitude	Longitude
TransCanada		ACTIVE	38.414	-81.4659
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
PropNum		Spud Date	Comp. Date	
L. H. Gillespie, Et Al		3/1/1954		
Additional Information				
Other1	Other2	Other3	Other4	
Coco B	0303	030307227		
Prepared By		Updated By	Last Updated	
			4/13/2023 12:08 PM	

Tubular Summary						
Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
3/1/1954	Casing	13.000	48.00		0	418
3/2/1954	Casing	10.000	40.00	H-40	0	1,620
3/3/1954	Casing	5.500	15.50	J-55	0	5,086
11/8/2000	Tubing	2.375	4.60	J-55	0	5,078

Casing Cement Summary						
C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	11/6/2000	0	5.500	4,100	4,224	Free Pipe
	11/6/2000	0	5.500	4,224	4,265	Partial Quality
	11/6/2000	0	5.500	4,265	4,619	Good Quality
	11/6/2000	0	5.500	4,619	4,710	Partial Quality
	11/6/2000	0	5.500	4,710	5,142	Good Quality

Formation Tops Summary		
Formation	Top (TVD ft)	Comments
Sand	890	Comments: Water-Y HFW @315' Comments: Gas-Y Water-Y Show of oil @895'. HFW @972'-995' - 2 13" bailers of H2O per hour @950'
Little Lime	1,540	
Big Lime	1,601	Comments: Gas-Y Show gas 1632 and 1745'
Injun	1,750	Comments: Gas-Y Show oil 1772'
Weir	1,900	Comments: Gas-Y Show gas & oil 1912 & 1960' and 1990'
Slate and Shale	2,030	Comments: @2030' - reduce hole from 10" to 8"
reduced hole size	2,030	
Shale	3,850	
Sand	5,170	Comments: Gas-Y Show gas 5185'
Gas	5,185	Comments: Gas-Y Show gas 5195' - open flow 3,901 MCF - not shot
TD	5,197	



www.WellShadow.com

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

09/29/2023

United Fuel Company
CORPORATION

SERIAL WELL NO. 7227

LEASE NO. _____

MAP SQUARE _____

RECORD OF WELL NO. <u>7227</u> on the farm of Acres	CASING AND TUBING				TEST BEFORE SHOT
	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	/10 of Water in _____ inch
in <u>Slk</u> District	<u>2 1/2</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>4</u> /10 of Merc. in <u>7</u> inch
<u>Kanawha</u> County	<u>2 1/2</u>	<u>100</u>	<u>100</u>	<u>100</u>	Volume <u>2,000,000</u> Cu. ft.
State of: <u>West Virginia</u>	<u>5</u>	<u>15.50</u>	<u>5010</u>	<u>5010</u>	TEST AFTER SHOT
Field:	<u>2-3/4</u>	<u>1.50</u>	<u>5017</u>	<u>5010</u>	/10 of Water in _____ inch
Rig Commenced _____ 19 _____					/10 of Merc. in _____ inch
Rig Completed _____ 19 _____					Volume _____ Cu. ft.
Drilling Commenced <u>Sept. 7</u> 19 <u>53</u>					Hours After Shot _____
Drilling Completed <u>March 10</u> 19 <u>54</u>					Rock Pressure <u>26.50</u> <u>7000</u>
Drilling to cost _____ per foot					Date Shot <u>Not Shot</u>
Contractor is: <u>Claude Drake</u>					Size of Torpedo _____
Address:	SHUT IN				Oil Flowed _____ bbls. 1st 24 hrs.
	Date <u>3/10/54</u>				Oil Pumped _____ bbls. 1st 24 hrs.
Driller's Name <u>Bob Pauley</u>	Tubing or Casing <u>2 in.</u>				
<u>Bob Pauley</u>	Size of Packer <u>None</u>				Well abandoned and
	Kind of Packer _____				Plugged _____ 19 _____
	1st Perf. Set _____ from _____				
	2nd Perf. Set _____ from _____				
Elevation: <u>855.02 ft.</u>					

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand and Gravel	0	20		
Slate	20	30		
Sand	30	45		
Slate	45	70		
Sand	70	125		
Slate	125	184		
Sand	184	245		
Sandy Lime	245	260		
Slate	260	310		
Sand	310	370		Hole full of water at 315 ft.
Slate	370	400		
Sand	400	420		
Slate	420	425		
Sand	425	485		
Slate	485	515		
Sand	515	530		
Slate	530	600		

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

09/29/2023

SERIAL WELL NO. 7227

LEASE NO. _____

MAP SQUARE _____

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand	600	640		
Slate	640	720		
Sand	720	770		
Slate	770	790		
Sand	790	820		
Slate	820	890		
Sand	890	1397		Show of oil at 895 ft. Hole full of
Red Line	1397	1410		water 972 ft. to 995 ft. 2 13" bailers
Line	1410	1900		of water per hour, 990 ft.
Sand	1500	1540		
Little Line	1540	1591		
Slate	1591	1592		
Line	1592	1600		
Slate	1600	1601		
Big Line	1601	1750		Show of Gas at 1632 ft. and 1745 ft.
Infin Sand	1750	1772		Show of oil at 1772 ft.
Slate	1772	1780		
Line Shells	1780	1900		
Wier Sand	1900	2025		Show of gas and oil at 1912 ft., 1960 ft.
Line Shells	2025	2030		and 1990 ft.
Slate and Shells	2030	3650		Reduced from 10" hole to 8" hole at 2030.
Shale	3650	4025		
White Slate	4025	4250		
Slate and Shells	4250	4625		
White Slate	4625	4670		
Shale	4670	4790		
Brown Shale	4790	4970		
White Slate	4970	5015		
Brown Shale	5015	5051		
Line	5051	5086		Steel line at 5086 ft.
Sand	5170	5185		Show of gas at 5185 ft.
Gas	5185	5195		Show of gas at 5195 ft.
Total Depth	5195	5197		Steel line depth 5197 ft. Open flow
				6/10 average 7" O. S.

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

09/29/2023

WW-2A
(Rev. 6-14)

1). Date: 08.03.2023
2.) Operator's Well Number Coco B 7227
State County Permit
3.) API Well No.: 47- 039 - 01622

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

4) Surface Owner(s) to be served:
(a) Name Norman II & Donna Hardway
Address 80 Upper Pinch Rd.
Elkview, WV 25071
(b) Name _____
Address _____
(c) Name _____
Address _____
5) (a) Coal Operator
Name Not operated
Address _____
(b) Coal Owner(s) with Declaration **RECEIVED**
Name Not operated **Office of Oil and Gas**
Address _____ **AUG 25 2023**
Name _____
Address _____ **WV Department of**
Environmental Protection
6) Inspector Terry Urban
Address PO Box 1207
Clendenin, WV 25045
Telephone 304-549-5915
(c) Coal Lessee with Declaration
Name Not operated
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

X Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

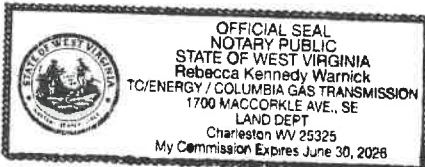
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:

- _____ Personal Service (Affidavit attached)
- X _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.



Well Operator: Columbia Gas Transmission, LLC
By: Maria Medvedeva
Its: Senior Wells Engineer Storage Technical Services
Address: 1700 MacCorkle Ave SE
Charleston WV 25314-1273
Telephone: 304-410-4313
Email: maria_medvedeva@tcenergy.com

Subscribed and sworn before me this 3 day of August, 2023

My Commission Expires 6/30/26
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

09/29/2023

4703901622W

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



August 3, 2023

Norman Hardway II and Donna Steward Hardway
80 Upper Pinch Rd
Elkview, WV 25071

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to work on an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Coco B 7227 (API 47-039-01622).

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,

Maria Medvedeva
Senior Wells Engineer
Well Engineering & Technology
Columbia Gas Transmission, LLC

7022 2410 0002 6396 3010

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
Elkview, WV 25071 OFFICIAL USE	
Certified Mail Fee	\$4.35
Extra Services & Fees (check box, add fee as appropriate)	\$7.55
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$9.65
Total Postage and Fees	\$17.55
Sent To Norman II & Donna Hardway	
Street and Apt. No., or PO Box No.	
City, State, ZIP+4®	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

0726 04
Postmark Here
AUG 14 2023
08/14/2023
CB 7227

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

www.tcenergy.com

09/29/2023

Maria Medvedeva

To: Mike Donnally (Contractor)
Cc: Gregory Larch
Subject: RE: Coco B 7227 surface owner need

From: Mike Donnally (Contractor) <michael_donnally@tcenergy.com>
Sent: Thursday, August 24, 2023 1:50 PM
To: Maria Medvedeva <maria_medvedeva@tcenergy.com>
Cc: Gregory Larch <scott_larch@tcenergy.com>
Subject: RE: Coco B 7227 surface owner need

Maria,

I cannot find another address; please provide the scope of work and I will contact the landowner. Thanks!!

Michael T. Donnally
Right-of-Way Manager
Contract Land Staff, LLC
In Service to TC Energy/Columbia Gas Transmission
3940 Green Valley Rd.
Huntington, WV 25701
Phone: 304-638-3804
Michael_donnally@tcenergy.com

From: Maria Medvedeva <maria_medvedeva@tcenergy.com>
Sent: Thursday, August 24, 2023 8:25 AM
To: Mike Donnally (Contractor) <michael_donnally@tcenergy.com>
Cc: Gregory Larch <scott_larch@tcenergy.com>
Subject: RE: Coco B 7227 surface owner need

Hi Mike, good morning,
Could you please check on the LO address again? My permit packet was initially delivered but refused / returned back to sender.

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

4703901622W

Tracking Number:

70222410000263963010

Copy Add to Informed Delivery

Latest Update

Your item was returned to the sender on August 23, 2023 at 3:56 pm in ELKVIEW, WV 25071 because the addressee was not known at the delivery address noted on the package.

Get More Out of USPS Tracking:

USPS Tracking Plus[®]

Alert

Addressee Unknown

ELKVIEW, WV 25071
August 23, 2023, 3:56 pm

Available for Pickup

ELKVIEW, WV 25071
August 21, 2023, 11:23 am

[See All Tracking History](#)

Maria (Masha) Medvedeva

Senior Wells Engineer – Well Engineering & Technology

Storage Technical Services

maria_medvedeva@tcenergy.com

M: +1-304-410-4313



1700 MacCorkle Ave SE
Charleston, WV 25314

TCEnergy.com

From: Mike Donnally (Contractor) <michael_donnally@tcenergy.com>
Sent: Monday, July 31, 2023 6:07 PM
To: Maria Medvedeva <maria_medvedeva@tcenergy.com>
Cc: Gregory Larch <scott_larch@tcenergy.com>
Subject: RE: Coco B 7227 surface owner need

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

Maria,

According to GeoFind & the Kanawha County Sheriff's Tax Office, the surface owner of Well 7227 is NORMAN N. HARDWAY II AND DONNA STEWART HARDWAY of 80 Upper Pinch Rd. Elkview, WV 25071 . Please see attached.

Scott,

Please let me know if you would like for me to work on this project. Thanks y'all.

Mike Donnally – Lead Land Agent
Contract Land Staff, In service to
TC Energy, Columbia Gas Transmission, LLC
485 Industrial Road
St. Albans, WV 25177
304-638-3804

09/29/2023

4708901622W

WW-2A Surface Waiver
(4/16)

SURFACE OWNER WAIVER

County Kanawha

Operator
Operator well number

Columbia Gas Transmission LLC
Coco B 7227

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (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:

RECEIVED
Office of Oil and Gas

AUG 25 2023

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

WV Department of
Environmental Protection

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 **FIFTEEN (15) 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.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

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 Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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

FOR EXECUTION BY A CORPORATION, ETC.

Signature

Date

Company Name
By _____
Its _____
Date

Print Name

Signature

Date

09/29/2023

COAL OPERATOR, OWNER, OR LESSEE WAIVER

* coal not operated

County Kanawha

Operator Columbia Gas Transmission LLC

Operator's Well Number Coco B 7227

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 extension 1654

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. 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.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature

Date

Company Name
By
Its

Date

Signature

Date

09/29/2023

WW-2B1
(5-12)

N/A

Well No. Coco B 7227

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name _____
Sampling Contractor _____

Well Operator Not applicable - existing underground natural gas storage well
Address _____

Telephone _____

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

09/29/2023

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
John Burdette et ux	United Fuel Gas Company	Storage Lease - 1000924000	127 / 103

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:
By: Its:

Columbia Gas Transmission, LLC

 Maria Medvedeva

 Senior Wells Engineer Storage Technical Services



09/29/2023

WW-9
(5/16)

API Number 47 - 039 - 01622
Operator's Well No. Coco B 7227

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

Operator Name Columbia Gas Transmission, LLC OP Code 307032

Watershed (HUC 10) Pinch Creek Quadrangle Blue Creek, WV

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 14

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number 34-167-23862)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Mud Master 64054; Reserve Environmental Services (WMGR 123SW008)
Appalachian Water Services (WMGR 123SW001))

Will closed loop system be used? If so, describe: yes - steel flow line to tanks

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Fresh water

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

Additives to be used in drilling medium? NaCl, biocide, soda ash, polymer, starch, CaCO3, KCl, HCl

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? To be managed by Waste Management and US Ecology for disposal at permitted landfill

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) Maria Medvedeva

Company Official Title Senior Wells Engineer Storage Technical Services

Subscribed and sworn before me this 3rd day of August 2023

[Signature] Notary

My commission expires 6/30/26



09/29/2023

Proposed Revegetation Treatment: Acres Disturbed < 1.0 Prevegetation pH 6-7

Lime 2 Tons/acre or to correct to pH 7-8

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch hay or straw @ 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

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: [Signature]

Comments: _____

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

Title: Inspect Oil & Gas Date: 8-16-23

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): Pinch Creek Quad: Blue Creek, WV
Farm Name: L. H. Gillespie, Et Al

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

No fluids planned to be discharged. No fertilizer will be stored on site. Fuel, oil, and lubricants will be stored on site, but located within secondary containment. Accidental spills from construction equipment, well treatment fluids, and produced well fluids are the only possible source of contamination to groundwater. Drilling and flowback fluids to be stored in tanks. 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 and well servicing equipment will be monitored and inspected daily for leaks. Tanks to be monitored 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.

Pinch Creek is at a distance of 0.1 miles N.
The Trail Kitchen WV9908037 is the closest Well Head Protection Area at a distance of 11.1 miles E from discharge area.

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

N/A

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

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

09/29/2023

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 and JSA meetings groundwater protection will be a topic of discussion.

RECEIVED
Office of Oil and Gas
AUG 25 2023
WV Department of
Environmental Protection

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

No fertilizer will be stored on site. Fuel, oil, and lubricants will be stored on site, but located within secondary containment. Spills from construction equipment, well treatment fluids, and produced well fluids are the only possible source of contamination to groundwater.

All construction and well servicing equipment will be monitored and inspected daily for leaks or spills.

Signature: 

Date: 08.03.2023

09/29/2023

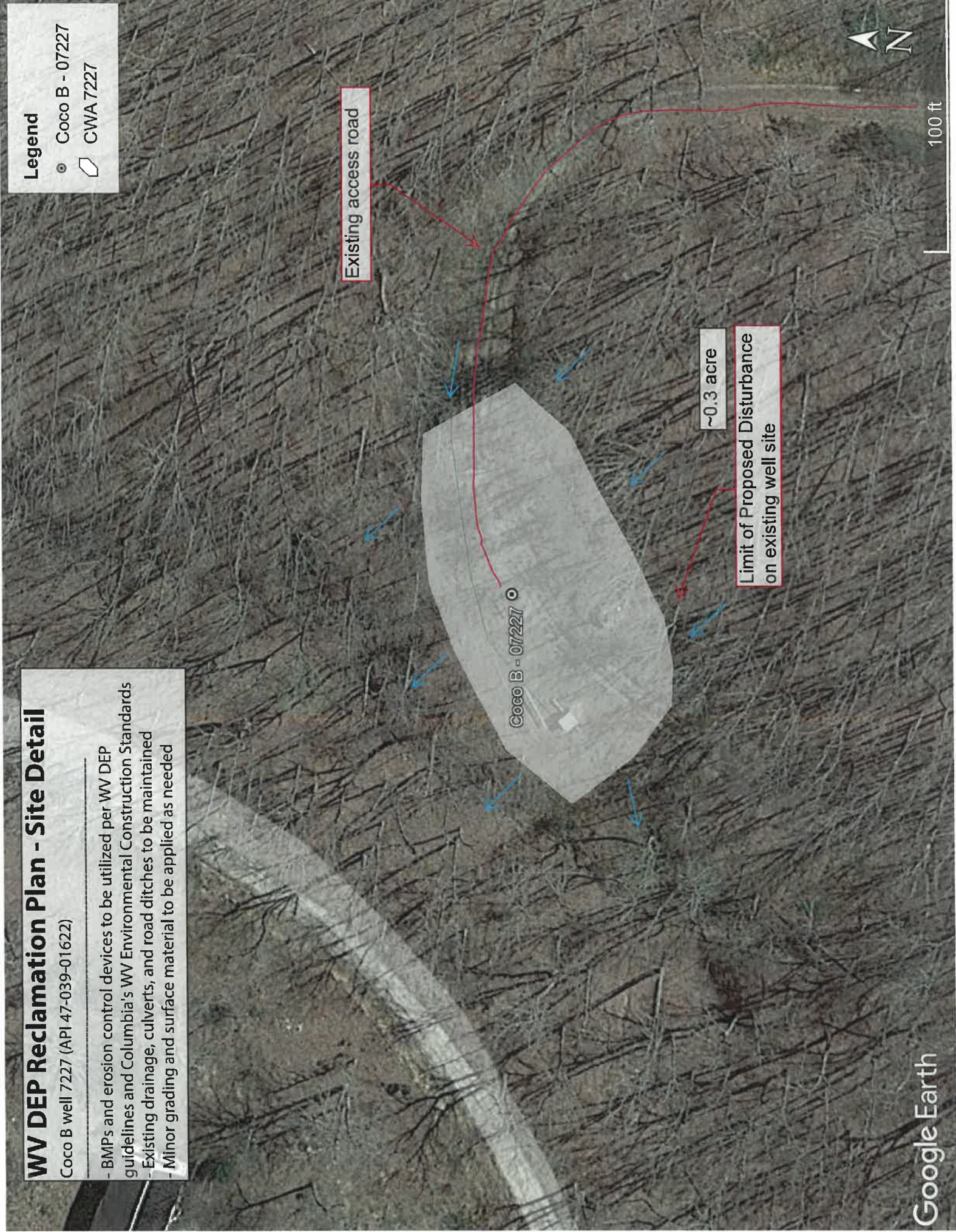
WV DEP Reclamation Plan - Site Detail

Coco B well 7227 (API 47-039-01622)

- 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

Legend

- Coco B - 07227
- CWA 7227



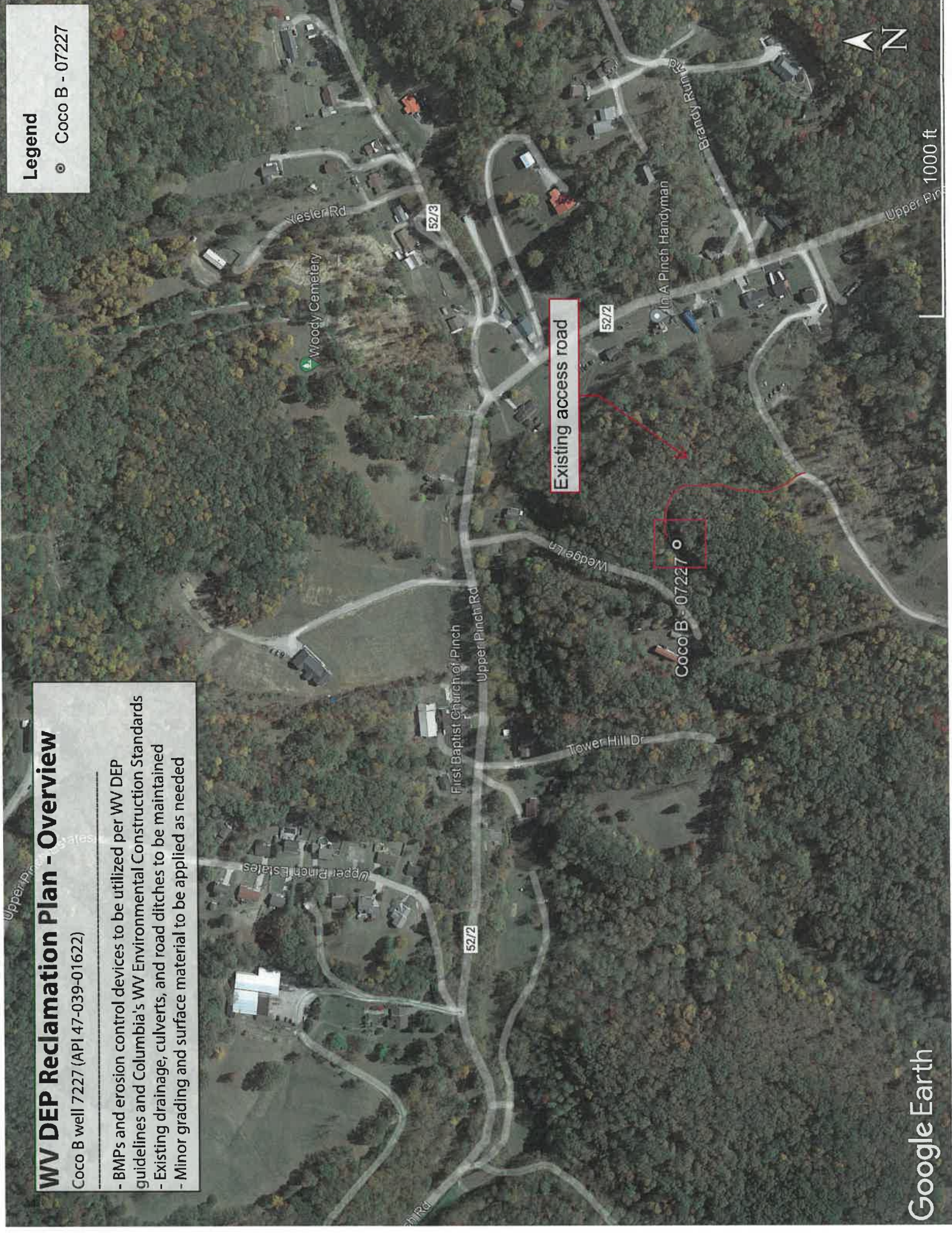
WV DEP Reclamation Plan - Overview

Coco B well 7227 (API 47-039-01622)

- 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

Legend

- Coco B - 07227



Google Earth

09/29/2023

4703901622

BLUE CREEK QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

(CLIO)

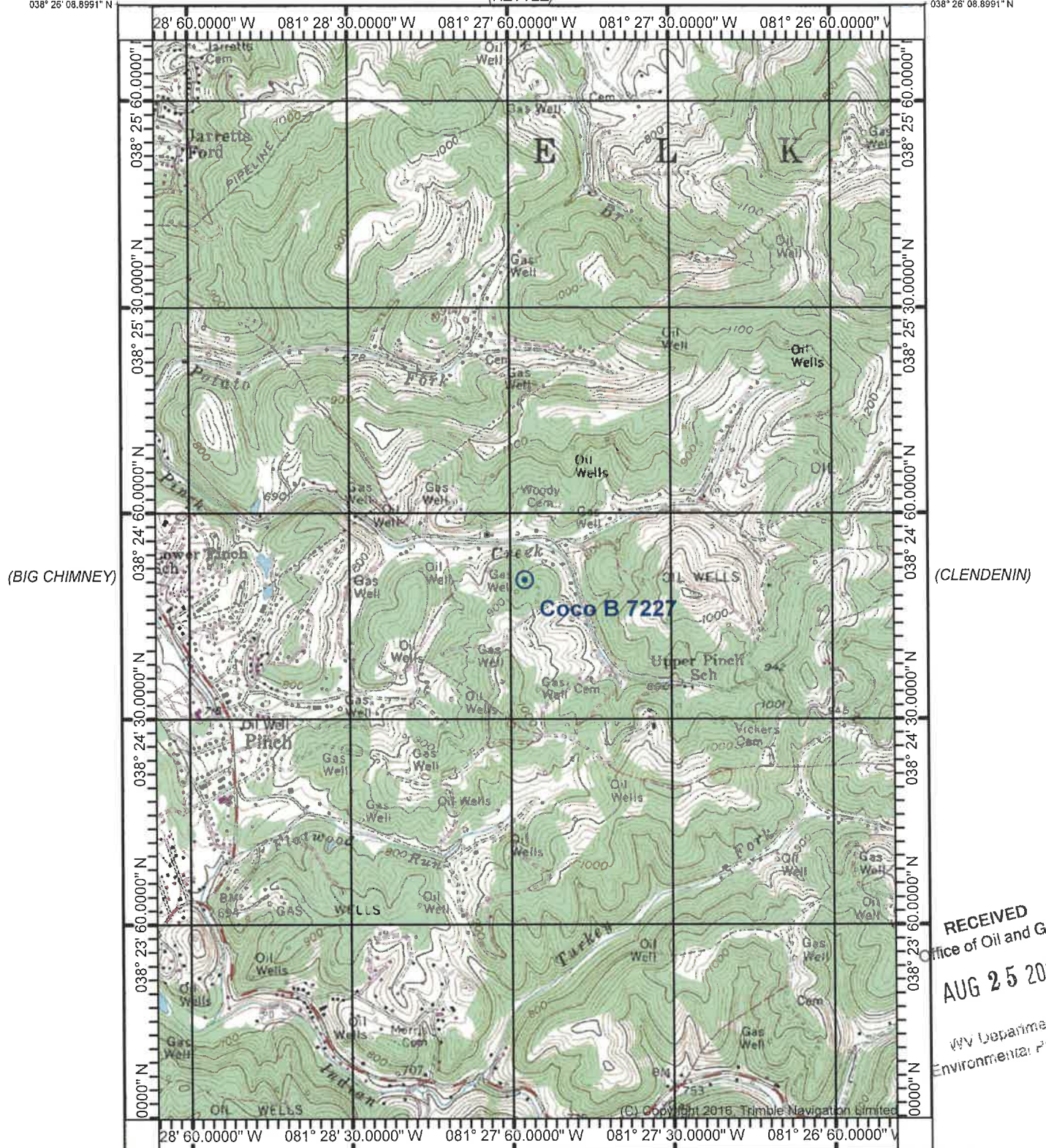
(ROMANCE)



081° 29' 06.2908" W
038° 26' 08.8991" N

(KETTLE)

081° 26' 47.8888" W
038° 26' 08.8991" N



(BIG CHIMNEY)

(CLENDENIN)

RECEIVED
Office of Oil and Gas
AUG 25 2023

WV Department of
Environmental Protection

(CHARLESTON
EAST)

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

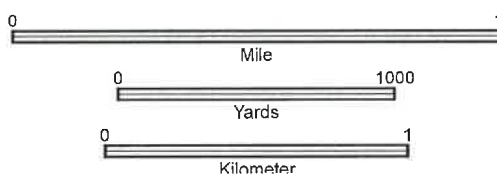
North American 1983 Datum (NAD83)

To place on the predicted North American
1927 move the projection lines 11M N and
14M E

Declination



(QUICK)
SCALE 1:24000

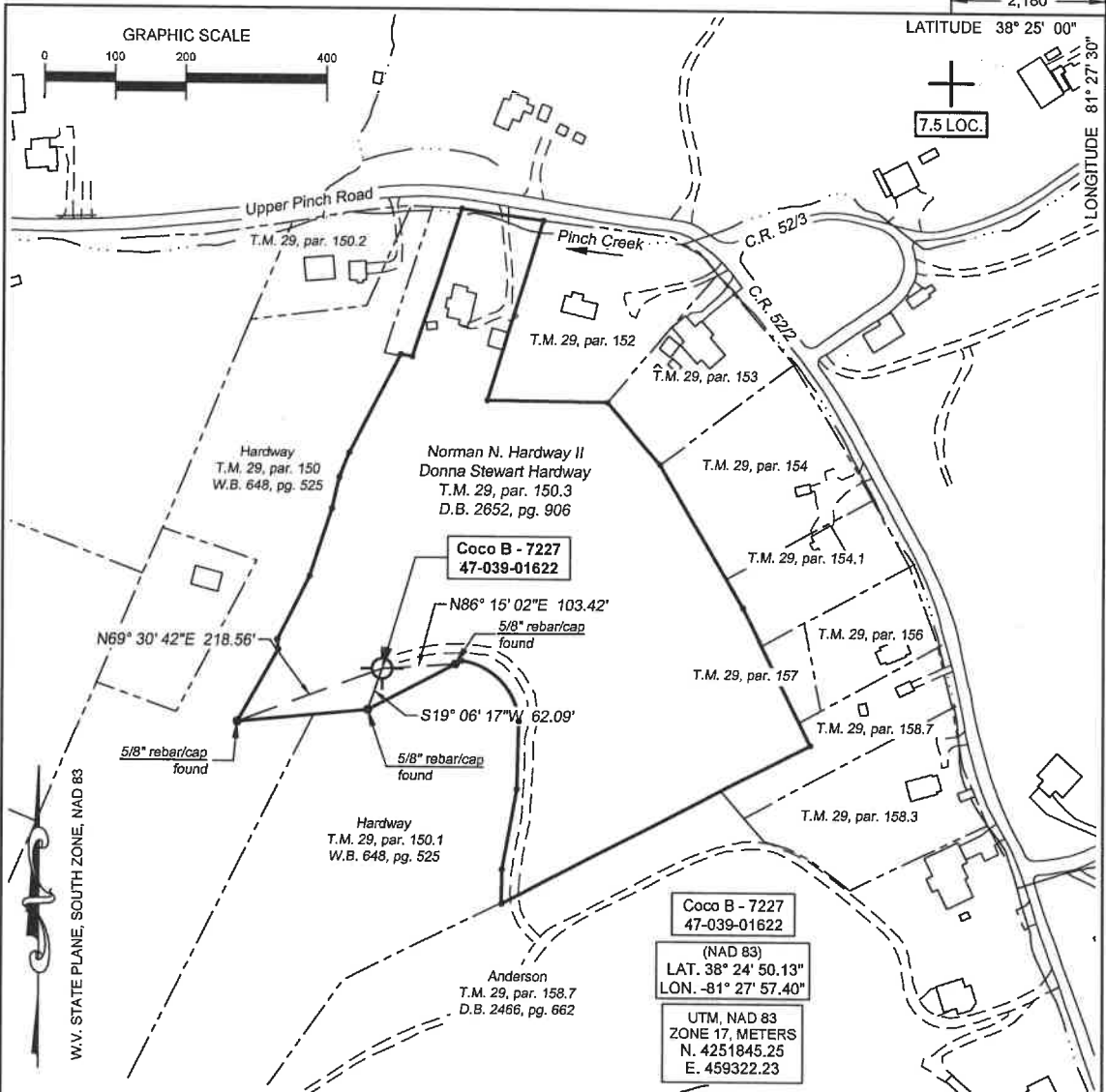


CONTOUR INTERVAL 20 FT

(MAMMOTH)

38081-D3-TM-024
BLUE CREEK, WV
JAN 1, 1977

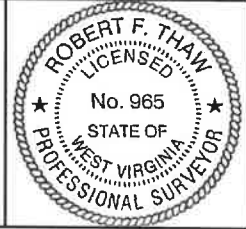
09/29/2023



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

FILE No. **2301-2345-001-019**
 DRAWING No. **COCO-B-7227**
 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) _____
ROBERT F. THAW PS #965



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

DATE **JULY 18** 20**23**
 OPERATOR'S WELL No. **7227**
 API WELL No. _____

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___ **47** **039** - **01622**
 (IF "GAS") PRODUCTION ___ STORAGE DEEP SHALLOW ___ STATE COUNTY PERMIT

LOCATION: ELEVATION **848.0'** WATER SHED **PINCH CREEK**
 DISTRICT **FLK** COUNTY **KANAWHA**

QUADRANGLE **BLUE CREEK, WV**

SURFACE OWNER **NORMAN N. HARDWAY II AND DONNA STEWART HARDWAY** ACREAGE **7.58**
 OIL & GAS ROYALTY OWNER **UNITED FUEL GAS COMPANY**

LEASE ACREAGE **109 ACRES** LEASE NO. **1000924-000**

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

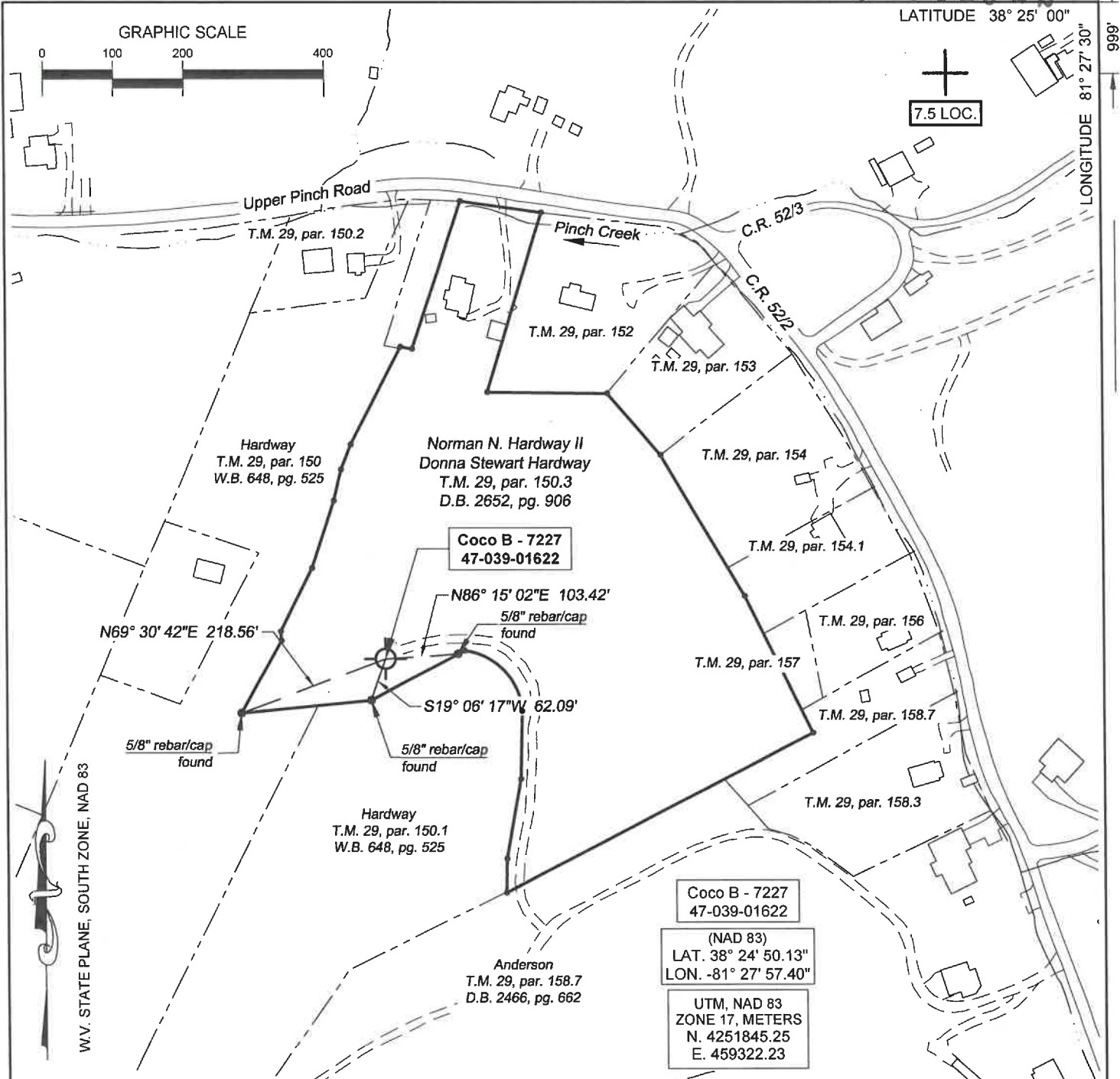
TARGET FORMATION **ORISKANY** ESTIMATED DEPTH **5179**

WELL OPERATOR **COLUMBIA GAS TRANSMISSION, LLC** DESIGNATED AGENT **MARIA MEDVEDEVA**
 ADDRESS **PO BOX 1273, CHARLESTON, WV 25325-1273** ADDRESS **1700 MACCORKLE AVE., S.E. CHARLESTON, WV 25314**

FORM IV-6 (8-78)

RECEIVED
 Office of Oil and Gas
AUG 25 2023
 WV Department of Environmental Protection

P:\2023\2201-2345-001-019 - TC ENERGY - COCO-B-7227\50-SURVEY\DWG\COCO-B-7227-1WELL-PLAT.DWG



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

FILE No. 2301-2345-001-019
DRAWING No. COCO-B-7227
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. Thaw
ROBERT F. THAW PS #965



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

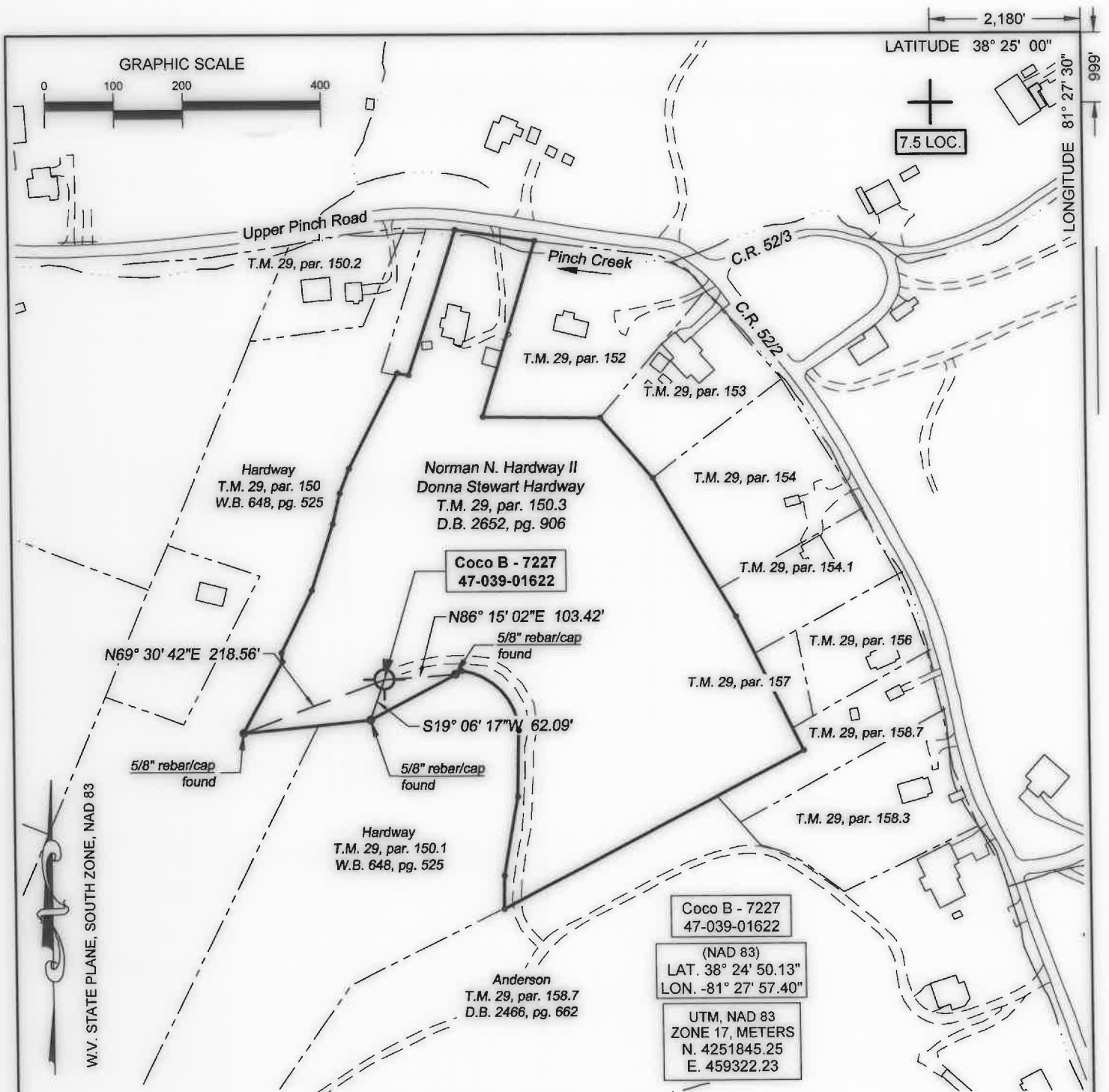


DATE JULY 18 2023
OPERATOR'S WELL No. 7227
API WELL No.

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 039 PERMIT 01622
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 848.0' WATER SHED PINCH CREEK
DISTRICT ELK COUNTY KANAWHA
QUADRANGLE BLUE CREEK, WV
SURFACE OWNER NORMAN N. HARDWAY II AND DONNA STEWART HARDWAY ACREAGE 7.58
OIL & GAS ROYALTY OWNER UNITED FUEL GAS COMPANY
LEASE ACREAGE 109 ACRES LEASE NO. 1000924-000

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE
STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 08/29/2023
PLUG AND ABANDON CLEAN OUT AND REPLUG
TARGET FORMATION ORISKANY ESTIMATED DEPTH 5179
WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT MARIA MEDVEDEVA
ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 1700 MACCORKLE AVE., S.E. CHARLESTON, WV 25314

FORM IV-6 (8-78)

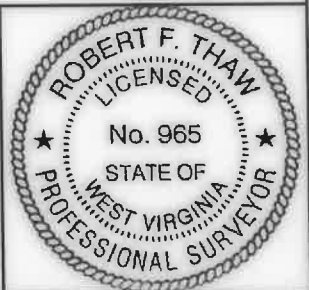


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2301-2345-001-019
 DRAWING No. COCO-B-7227
 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. Thaw*
ROBERT F. THAW PS #965



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



DATE JULY 18 2023
 OPERATOR'S WELL No. 7227
 API WELL No.

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

LOCATION: ELEVATION 848.0' WATER SHED PINCH CREEK
 DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK, WV

SURFACE OWNER NORMAN N. HARDWAY II AND DONNA STEWART HARDWAY ACREAGE 7.58
 OIL & GAS ROYALTY OWNER UNITED FUEL GAS COMPANY
 LEASE ACREAGE 109 ACRES LEASE NO. 1000924-000

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE 09/29/2023
 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 5179
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT MARIA MEDVEDEVA
 ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 1700 MACCORKLE AVE., S.E. CHARLESTON, WV 25314

FORM IV-6 (8-78)

4703901622W

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



CK No 34699 \$900.00

August 24th, 2023

WV DEP – Office of Oil & Gas
601 57th Street, SE
Charleston, WV 25304-2345

Enclosed is a well work permit application for the following Columbia Gas Transmission existing storage well:

Coco B 7227 (API 47-039-01622)

Please email to address below, and return hardcopies of permits to:

Columbia Gas Transmission
1700 MacCorkle Ave SE
Charleston, WV 25314
Attn: Maria Medvedeva

If you have questions, feel free to call.

Regards,

Maria Medvedeva
Senior Wells Engineer
Well Engineering & Technology
Columbia Gas Transmission, LLC
Mob: 304-410-4313
maria_medvedeva@tcenergy.com

RECEIVED
Office of Oil and Gas

AUG 25 2023

WV Department of
Environmental Protection

www.tcenergy.com

09/29/2023