



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

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

Monday, March 29, 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 7078
47-039-01306-00-00

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: 7078
Farm Name: TURLEY, RICHARD
U.S. WELL NUMBER: 47-039-01306-00-00
Vertical Plugging
Date Issued: 3/29/2021

Promoting a healthy environment.

04/02/2021

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4703901306P

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.

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WW-4B
Rev. 2/01

- 1) Date 12/24, 2020
- 2) Operator's
Well No. Coco B 7078
- 3) API Well No. 47-039 - 01306

**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 753 feet Watershed Flatwood Run of Indian Creek
District Elk County Kanawha Quadrangle Blue Creek

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 Terry Urban
Address PO Box 1207
Clendenin, WV 25045

9) Plugging Contractor Name Contractor Services Inc.
Address 929 Charleston Road
Spencer, WV 25276

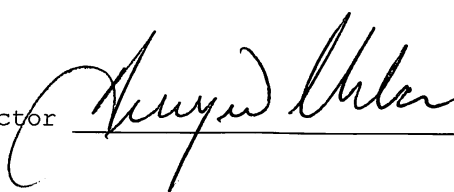
10) Work Order: The work order for the manner of plugging this well is as follows:

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  Date 12-29-30

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4703901306P

Objective: Plug and Abandon LAST PROFILE UPDATE:

TITLE: Plug and Abandon WORK TYPE: WR

FIELD: Coco B WELL: 7078

STATE: WV SHL (Lat/ Long) API:

DIST: BHL (Lat/Long) CNTY:

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

DEPTH: See below. ELEVATIONS

Conductor PAY: TMG:

Surface TD: KB-RF:

Intermediate1 PBDT: GL:

Intermediate2 KB-GL: CSG DEPTH WELLBORE SCHEMATIC

Production

Tubing

Perforations

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: Recoverable Signature

PREP DATE: 12/21/2020 REVIEWED BY: APPROVED: X *Jim Amos*

James Amos
Principal Engineer
Signed by: 83aa62d7-b683-404d-8328-f042f2e33502

04/02/2021

Objective: Plug and Abandon		LAST PROFILE UPDATE:	
TITLE: Plug and Abandon	WELL: 7078		WORK TYPE: WR
FIELD: Coco B	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****

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- 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 casing and annular pressures.
- 10 Blow down all annuli, replace fittings as needed, and leave annuli open to atmosphere for monitoring.
- 11 Kill well with viscosified fluid. Spearhead 10 bbl LCM pill ahead.
- 12 Load 3x5 and 5x10 annuli with kill fluid, Fill all remaining annuli with FW. Document volumes.
- 13 Dig around base of wellhead to uncover casing tops and remove cement if present.
- 14 MIRU service rig.
- 15 Stack a second 3-1/8" 5K gate valve on top of the flow cross and NU 3-1/8" manual BOPE (pipe + pipe).
- 16 Function and pressure test BOPE to low (250 psig) and high (2500 psig).
- 17 TIH w/ 1-3/4" workstring with cut-lip shoe and wash to TD.
- 18 Pump balanced cement plug from TD to 3300 ft.
- 19 POOH to above cement, reverse circulate to clean tubulars, pull 10 joints, close pipe rams, and WOC.
- 20 WOC minimum 8 hours. RIH and tag cement. If cement top is deeper than 4500' then spot a second balanced cmt plug.
- 21 Install 3-1/2" CIDBP above cement plug.
- 22 Top off 3-1/2" with kill fluid and perform 500 psig pressure test to verify integrity of BP.
- 23 Release all annular pressure.
- 24 ND BOPE and wellhead components down to A-section. Weld pulling nipple on 3-1/2" tbg stub.
- 25 Pull seals and slips.
- 26 Strip 7-1/16" Cameron BOPE (blind/shears + 3-1/2" pipe rams + annular) over stub and NU on top of A-section. Will need kill/choke outlets below blind/shear rams.
- 27 Function test and pressure test pipe rams low (250 psig) and high (2500 psig).
- 28 Wireline freepoint and cut/pull all free 3-1/2" tubing.
- 29 Obtain CBL inside 5-1/2" casing. Consult with WET engineer on next step - this may change plans forward.
- 30 Change pipe rams to 1-3/4" and function test.
- 31 TIH with work string and install balanced cement plug from CIBP to 300' above top of 3-1/2" tbg stub.
- 32 POOH to above cement, reverse circulate to clean tubulars, pull 5 joints, close pipe rams, and WOC.
- 33 WOC minimum 4 hours. RIH and tag cement. If cement top is less than 100' from top of 3-1/2" tbg stub then install second cement plug.
- 34 Install 5-1/2" CIDBP above cement plug.
- 35 Top off 5-1/2" with kill fluid and perform 500 psig pressure test to verify integrity of BP.

*** If top of 3-1/2" stub is shallower than 2250', or if cement top behind 5-1/2" csg is deeper than 1950', then consult with WET engineer to determine next steps, which may result in altering next steps to pull 5-1/2" csg.**

- 36 Perforate thru both the 5-1/2" and 7" csg (consult with perforating company) above BP.
- 37 Perform injection test.
- 38 Change pipe rams back to 2-3/8" and function test.
- 39A If injection established: Install cement retainer above perms and squeeze cement. Consult with WET engineer for procedure.
- 39B If injection not established: Cover perms with 600' balanced cement plug, pick up above cement, clean tubulars, close pipe rams, apply 500 psig, and WOC.
- 40 WOC minimum 4 hours. RIH and tag cement. If cement top is less than 100' above perms then install second cement plug.
- 41 ND BOPE and remove A-section.
- 42 Weld pulling nipple on 5-1/2" casing and dress top of 10-3/4" to accommodate BOPE.
- 43 Strip 11" spool (w/ kill + choke outlets) and annular over stub and NU to 10-3/4" csg.
- 44 Function test and attempt to pressure test low (200 psig) and high (500 psig).
- 45 Wireline freepoint and cut/pull all 5-1/2" casing that is free.

Jim Amos
12-29-20

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

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04/02/2021

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		WELL: 7078		WORK TYPE: WR	
FIELD: Coco B	SHL (Lat/Long): 0 0		API: 0		
STAT: WV	BHL (Lat/Long): 0 0		CNTY: 0		
TWP: 0					

PROCEDURE CONTINUED

- 46 TIH with work string and install balanced cement plug from top of last cement plug to 300' above top of 5-1/2" csg stub.
- 47 POOH to above cement, reverse circulate to clean tubulars, pull 5 joints, close pipe rams, and WOC.
- 48 WOC minimum 8 hours. RIH to tag cement.

* Decide whether there's an opportunity to perf and squeeze cement behind the 10-3/4" csg - consult with WET engineer.

- 49A If decision is to perf/squeeze: consult with WET engineer for procedure.
- 49B If decision is not to perf/squeeze: proceed with next steps in job plan.
- 50 ND BOPE.
- 51 Install pulling nipple on top of 10-3/4" and 13-3/8" csgs.
- 52 Drive 10' to 20' of 16" casing around 13-3/8" casing.
- 53 Wireline freepoint and cut/pull all 10-3/4" csg that is free.
- 54 Attempt to pull all 13-3/8" csg. If can't pull then wireline freepoint and cut/pull all that is free.
- 55 Grout cement all annuli as deep as possible (using a small diameter grout string).
- 56 Top off all annuli with cement.
- 57 RDMO service rig.
- 58 Erect monument per state regulations. Reclaim location and lease road.
- 59 P&A complete.

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Jim Amos
12/29/20

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

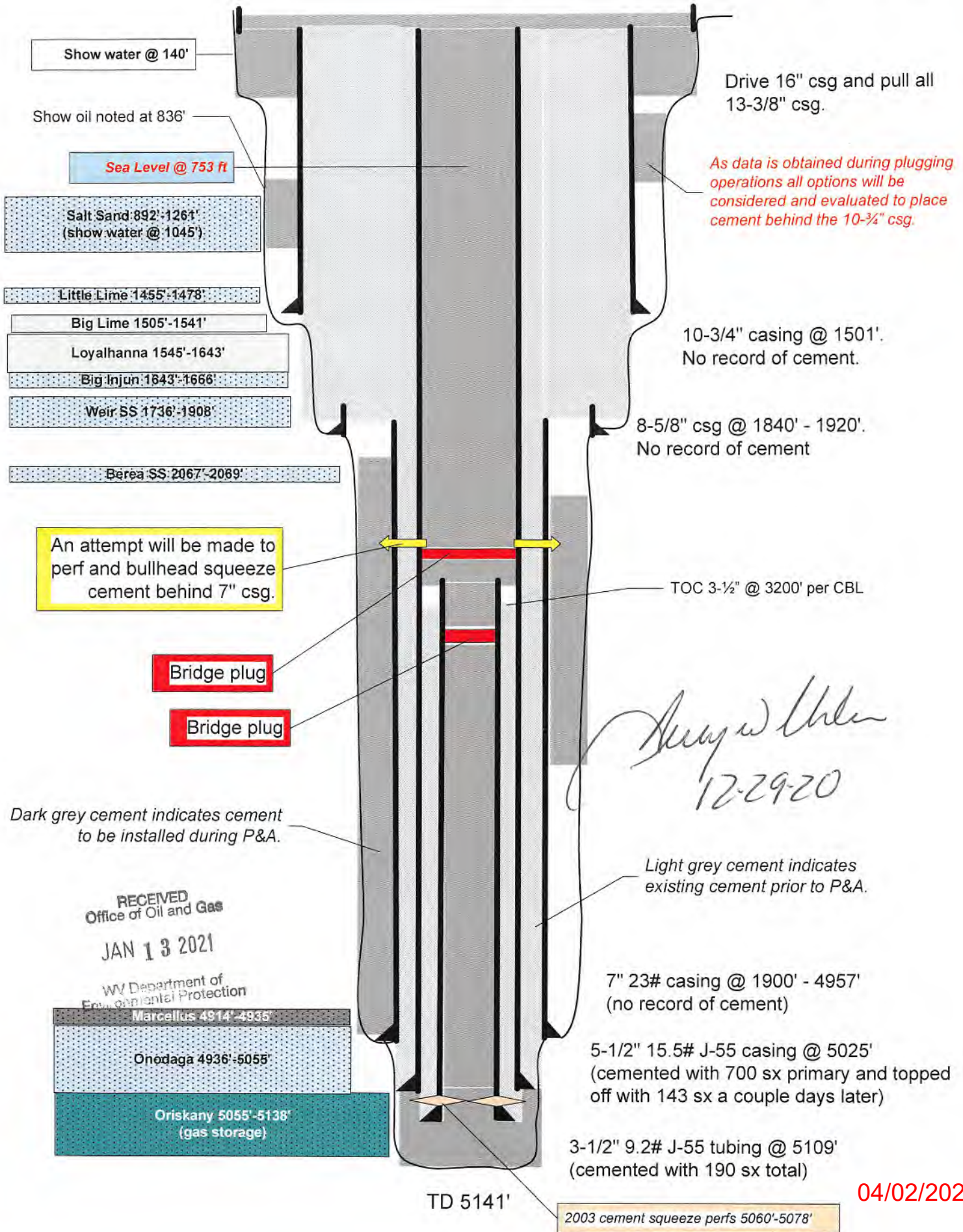
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COCO B 7078

Proposed P&A

(as of 12/9/2020)



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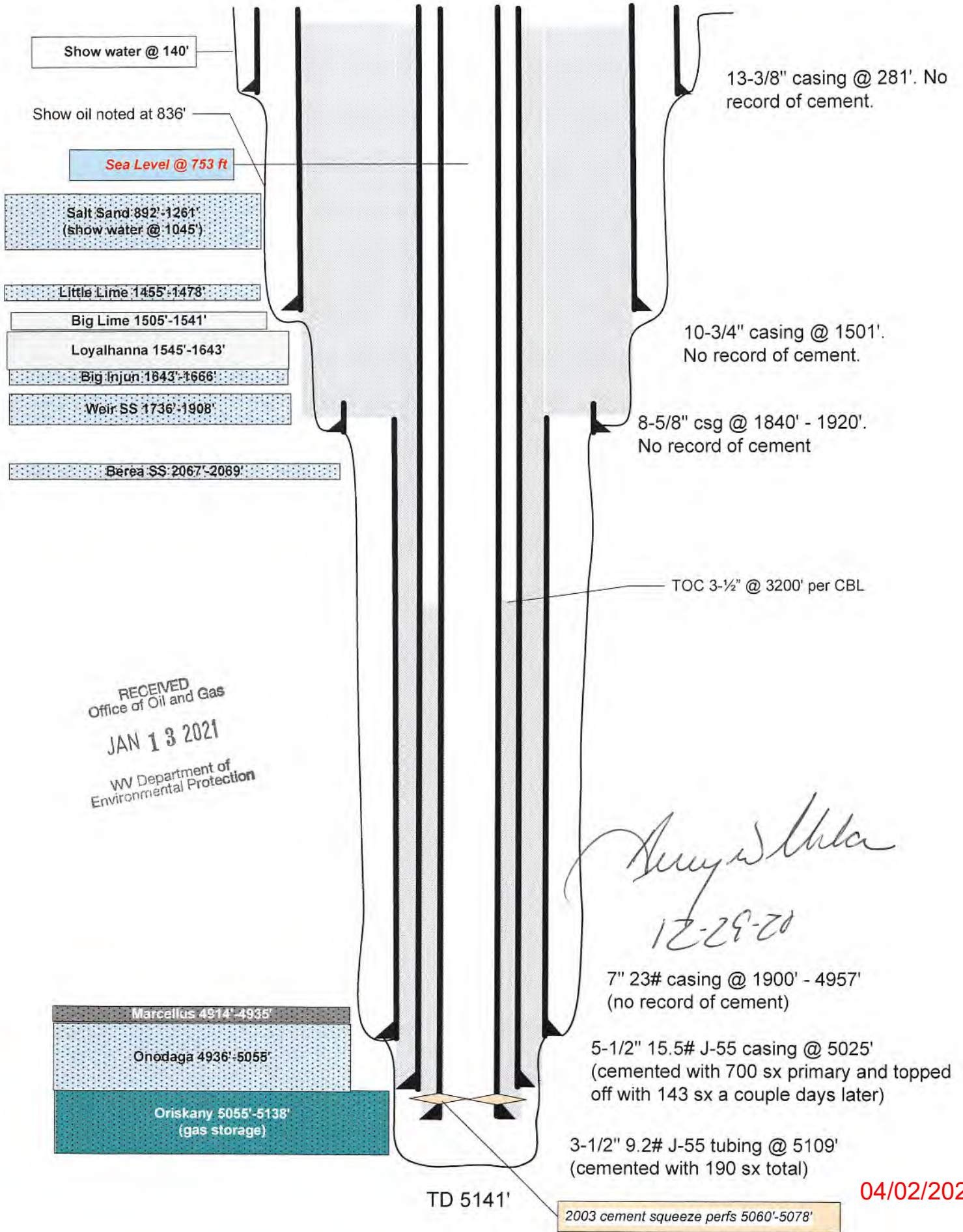
Marcellus 4914'-4935'

Onodaga 4936'-5055'

Oriskany 5055'-5138'
(gas storage)

04/02/2021

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Amy White
 12-29-20

04/02/2021

WR-35
Rev (5-01)

DATE: 3/10/04
API #: 47-039-01306

MB

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

Well Operator's Report of Well Work

Farm name: Richard Turley

Operator Well No.: Coco B #7078

LOCATION: Elevation: 752'

Quadrangle: Blue Creek, WV

District: Elk County: Kanawha
Latitude: _____ Feet South of 38 Deg. 24 Min. 09 Sec.
Longitude _____ Feet West of 81 Deg. 28 Min. 49 Sec.

Company: Columbia Gas Transmission

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: RR 2 Box 138				
Sandyville, WV 25275				
Agent: Paul Amick				
Inspector: Carlos Hively				
Date Permit Issued: 6/23/03	3-1/2"	5119'	5119'	190 sx
Date Well Work Commenced: 7/18/03				
Date Well Work Completed: 11/6/03				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Depth (feet): 5140				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				

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OPEN FLOW DATA

Producing formation **Oriskany Sandstone** Pay zone depth (ft) **5060' to 5078'**
Gas: Initial open flow **N/A Gas Storage** MCF/d Oil: Initial open flow **N/A Gas Storage** Bbl/d
Final open flow **N/A Gas Storage** MCF/d Final open flow **N/A Gas Storage** Bbl/d
Time of open flow between initial and final tests **N/A Gas Storage** Hours
Static rock Pressure **N/A Gas Storage** psig (surface pressure) after **N/A Gas Storage** Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: *John V. McCallister*
By: John V. McCallister
Date: 3/10/04

DATE STARTED/LOCATION: [] API #: 039-1306-0 WELL NO. # 7078
 DRILLING COMMENCED: 8-18-03 OPERATOR: Columbia Gas Trans.
 TD DATE: [] DEPTH: [] FARM: Turley, Richard
 WATER DEPTHS [] COAL DEPTHS []

QUESTIONS FOR THIS REPORT ARE IN ACCORDANCE OF WV CODE 22-6-30 AND REGULATIONS 35CSR 4-12.1 AND 35CSR 4-16 AND THE GENERAL WATER POLLUTION CONTROL PERMIT

POINTS ARE TO BE GIVEN UP TO MAXIMUM AS SHOWN BASED ON PERFORMANCE.

- 1. DID OPERATOR GIVE PROPER NOTICE TO INSPECTOR BEFORE THE FOLLOWING:
 - A. CONSTRUCTION YES [] NO [] (2_PTS) B. DRILLING YES [] NO [] (2_PTS) (4 PTS) _____
- 2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE DIRT WORK STARTED? YES [] NO [] (4_PTS) (4 PTS) _____
- 3. ARE ALL LOCATION AND/OR ROAD BANKS BEING SLOPED? YES [] NO [] (4_PTS) (4 PTS) _____
- 4. CONSTRUCTION: WERE THE FOLLOWING SEDIMENT CONTROL STRUCTURES PROPERLY INSTALLED/MAINTAINED?
 - A. ROAD DITCHES (1)_ (2)_ (3)_ (4)_ (PTS) B. CROSS DRAINS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS)
 - C. CULVERTS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS) D. CREEK CROSSINGS (1)_ (2)_ (3)_ (PTS)
 - E. DIVERSION DITCHES (1)_ (2)_ (3)_ (PTS) F. BARRIERS (1)_ (2)_ (3)_ (PTS)
 - G. TEMPORARY SEEDING YES [] NO [] (5_PTS) POINTS AVAILABLE FOR QUESTION 4: (28 PTS) _____
- 5. HAS TOP SOIL (IF ANY) BEEN STOCKED PILED? YES [] NO [] (2_PTS) (2 PTS) _____
- 6. IS THE PIT PROPERLY INSTALLED AND MAINTAINED? YES [] NO [] (6_PTS) (6 PTS) _____
- 7. RECLAMATION:
 - A. ROADWAY (1)_ (2)_ (3)_ (PTS) B. LOCATION (1)_ (2)_ (3)_ (PTS)
 - C. PITS (1)_ (2)_ (3)_ (PTS) D. PIPELINES (1)_ (2)_ (3)_ (PTS)
 - E. TANK DIKES (1)_ (2)_ (3)_ (PTS) F. GATES & FENCES (1)_ (2)_ (3)_ (PTS)
 - G. API INSTALLED YES OR NO 3_ (PTS) H. ADEQUATE SEEDING MATERIALS (1)_ (2)_ (3)_ (PTS)
 - I. WAS SEED BED ADEQUATE (1)_ (2)_ (3)_ (PTS) POINTS AVAILABLE FOR QUESTION 7: (27 PTS) _____
- 8. WAS RECLAMATION COMPLETED WITHIN: POINTS AVAILABLE FOR QUESTION 8: (24 PTS) _____
 - 6 MTHS OF TD 11_PTS; 4 MTHS OF TD 6_PTS; 2 MTHS OF TD 7_PTS.

TOTAL MAXIMUM POSSIBLE SCORE OF 99.

TOTAL RECLAMATION SCORE: _____

INSPECTIONS :

8-19-03	Running drill bit in well to drill deeper.
8-25-03	Check drilling and fill well at 514b'.
8-29-03	Running 3 1/2" casing in well to cement.
9-19-03	Cleaning up well and c.
11-14-03	Location reclaimed and seeded.
12-7-04	checked location and O.K. for release.

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 EEO 14 2004
 WV Department of
 Environmental Protection

12-7-04
DATE RELEASED

Charles W. Husley
INSPECTOR

04/02/2021

Form: WW - 2B

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

1) Well Operator Columbia Gas Transmission 10450 Kanawha Elk Blue Creek
Operator ID County District Quadrangle

2) Operator's Well Number: Coco B #7078 3) Elevation: 752'

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

5) Proposed Target Formation(s): Oriskany Sandstone

6) Proposed Total Depth: 5201 Feet

7) Approximate fresh water strata depths: NR

8) Approximate salt water depths: NR

9) Approximate coal seam depths: None

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

11) Describe proposed well work Kill well. Drill new hole from 5141' to 5201' Run new 3-1/2" tbg to 5200' and cement to 4200'. Install new API 5M wellhead.
Stimulate Oriskany Sandstone by hydraulically fracturing.
Clean up and return to service.

12) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS		Weight	FOOTAGE INTERVALS		CEMENT
	Size	Grade		Drilling	Left in well	Fill up
<u>Conductor</u>						
<u>Surface</u>	<u>13-3/8"</u>			<u>281'</u>	<u>281'</u>	
<u>Intermed.</u>	<u>10-3/4"</u>			<u>1501'</u>	<u>1501'</u>	
<u>Intermed.</u>	<u>8-5/8"</u>			<u>1920'</u>	<u>80'</u>	
<u>Intermed.</u>	<u>7"</u>		<u>23#/ft</u>	<u>4957'</u>	<u>3057'</u>	
<u>Production</u>	<u>5-1/2"</u>		<u>15.5#/ft</u>	<u>5025'</u>	<u>5025'</u>	
<u>Tubing</u>	<u>2-7/8"</u>	<u>J-55</u>	<u>6.5#/ft</u>	<u>90'</u>	<u>90'</u>	<u>Cmtd</u> <u>w/843sx</u>

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 Permitting
JUN 05 2003
 WV Department of
 Environmental Protection

Packers: Camco SSSV at 90'

C.H. 5-19-03

0036

4703901306P



Office of Oil and Gas
1356 Hansford Street
Charleston, WV 25301
Phone: (304) 558-6075
Fax: (304) 558-6047

West Virginia Department of Environmental Protection

Bob Wise,
Governor

Stephanie R. Timmermeyer,
Cabinet Secretary

June 23, 2003

**WELL WORK PERMIT
Drilling Deeper**

This permit, API Well Number: 47-3901306, issued to COLUMBIA GAS TRANSMISSION CORP, 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 all 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 1-800-654-3312 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 drilling, 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.

This permit will expire in two (2) years from the issue date.

If there are any questions, please feel free to contact me or Mr. Al Blankenship at 304-558-6342.

JAMES MARTIN
Chief,
Office of Oil and Gas

Operator's Well No: 7078
Farm Name: TURLEY, RICHARD
API Well Number: 47-3901306
Permit Type: Drilling Deeper
Date Issued: 06/23/2003



4703901306P

- 8/23/03 - Reamed 4-3/4" hole from 5118' to 5140'
- 8/30/03 - Set 3-1/2" 9.2 ppf J-55 tubing at 5119' KB
Cemented 3-1/2" with 90 sx Class A cement
- 9/5/03 - Installed new API 5M wellhead
- 9/10/03 - Re-cemented 3-1/2" with 100 sx Class A cement
- 9/18/03 - Perforated Oriskany Sandstone from 5060' to 5078' with 72 shots.
- 10/3/03 - Hydrofractured Oriskany Sandstone using;
1000 gal 28% Hcl
352 bbls H2O
24,900# 20/40 sand
86,000 scf N2
ATP 4500 psig
ATR 14 bpm

No earthen pit constructed.

All fluids hauled to L.A.D. in Wheeling, WV

04/02/2021

4703901806P

WORK ORDER

REQUEST NO. 3658 4-5135-53 BUDGET NO. 25 WORK ORDER NO. 1643
 DATE June 13, 19 52 DATE ISSUED 6-25 19 52

COMPANY United Fuel Gas Company DEPT. Production DISTRICT Glendenin
 PROPOSED WORK Install 4975' of 5" Casing, and Miscellaneous Material.

KNOWN AS Well X-52-7078 - Additions NO. _____ ORIGINAL INSTALLATION DATE _____
 PURPOSE AND NECESSITY To install 5" Casing in order to shut off leak in 7" Casing which could not be shut off by other methods.

LOCATION: Well X-52-7078
 IN: Elk Rural Kanawha West Virginia
DISTRIBUTION PLANT MAGISTERIAL DISTRICT TAXING DISTRICT COUNTY STATE

RELATED PROJECT WORK ORDER NO. 1644 FOR Well X-52-7078-Part Removal
 APPROVED BY John C. Martin APPROVED BY Ira Good

DETAIL OF EXPENDITURES							
MATERIAL TO BE INSTALLED	UNIT PRICE	SIZE	ESTIMATE		ACTUAL		VARIATION
			QUANTITY	AMOUNT	QUANTITY	AMOUNT	
15.5# Steel Casing	1.05	5"	4975'	5,224.00	5025'	8,136.29	2,912.29
Baker Cement Shoe		5"	1	61.00	1	61.71	.71
Swedge Nipple		7"x5"	-	-	1	24.48	24.48
TOTAL MATERIAL				5,285.00		8,222.48	2,937.48
INSTALLATION REQUIREMENT COST							
Direct Labor				3,000.00		3,501.39	501.39
Use of Auto and Hauling				800.00		1,517.49	717.49
Tools, Supplies and Miscellaneous Expense				3,000.00		720.48	(2,279.52)
Cement & Services				1,500.00		1,671.85	171.85
Interest				95.00		119.59	24.59
Schlumberger Services				-		1,033.31	1,033.31
Rental of Tools				-		194.63	194.63
Stores Expense & Freight				470.00		709.14	239.14
Labor Benefits Overheads				540.00		628.82	88.82
Administrative Overheads				66.00		84.18	18.18
TOTAL INSTALLATION REQUIREMENT COST See below				9,471.00		10,630.88	1,159.88
TOTAL ESTIMATE				14,756.00		18,853.36	4,097.36

INDICATE NORTH SKETCH (CORRECT TO ACTUAL) INVENTORY MAP NO. F-119
Map Square 70-63

Note: Move in Bucyrus Erie Spudder, and String of Cleaning Out Tools, Pull 2" Tubing, Cut and Pull 1900' of 7" Casing and 1840' of 8" Casing, Run a String of 5" Casing on Cement Float Shoe, Cement between 5" and 7" 8" and 10" Casing to Top of Well, Clean Out Cement, Re-Run a String of 2" Tubing Shut in Well and report results.

Included above:
 Kill Well with Water - Well Service Inc. - 300.00 300.00
 Pressure Test 7" Casing-Well Service Inc. - 150.00 150.00

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 JAN 13 2021
 WV Department of Environment and Natural Resources

04/02/2021

WORK ORDER

9-5189 1951

BUDGET NO. 595

4703901806A
WORK ORDER NO. 8396

DATE ISSUED 7-19-19 51

REQUEST NO. 3252
DATE April 9, 19 51

Production
DEPT. (For Storage) DIVISION Clendenin
DISTRICT

COMPANY United Fuel Gas Company
PROPOSED WORK Recondition Well X-52B-7078 (6633) and Install Miscellaneous Material.

KNOWN AS Well X-52B-7078 (6633) - Additions. NO. ORIGINAL INSTALLATION DATE
PURPOSE AND NECESSITY To clean out well, and install heavier equipment, due to well being converted into a Storage Well in Pool X-52B.

LOCATION: Well X-52B-7078 (6633) N. W. Cavender Farm.
IN Elk Rural Kanawha West Virginia
DISTRIBUTION PLANT MAGISTERIAL DISTRICT TAXING DISTRICT COUNTY STATE

RELATED PROJECT WORK ORDER NO. 7867 FOR Well #6633 - Part Removal
APPROVED BY John C. Martin APPROVED BY Ira Good

DETAIL OF EXPENDITURES

MATERIAL TO BE INSTALLED- RECESS PRICE	SIZE	ESTIMATE		ACTUAL		VARIATION
		QUANTITY	AMOUNT	QUANTITY	AMOUNT	
Nord. #2349 Plug Valve, Comp.	4"	1	376.00	1	413.18	37.18
Orbit Screw Gate Valve	2"	1	107.00	1	107.80	.80
Type "Q" Tubing Head (Type O.C.T.T-26)	7"x2"	1	360.00	1	360.00	-
Turnbuckles 11.88	1 1/2"x18"	2	24.00	2	25.34	1.34
Anchor Clamps	2"	1	22.00	1	22.00	0
Fittings			30.00		30.68	.68
TOTAL MATERIAL			919.00		959.00	40.00
USE OF AUTO AND HAULING COST						
Reconditioning						
Direct Labor			1,200.00		618.79	* (581.21)
Use of Auto and Hauling			100.00		448.83	* 348.83
Tools, Supplies and Miscellaneous Expense			50.00		11.24	(38.76)
Hauling Erecting & Dismantling Spudder			400.00		-	* (400.00)
Fuel			25.00		24.00	(1.00)
Stores Expense and Freight			74.00		78.14	4.14
Labor Benefits Overheads			230.00		117.44	(112.56)
Administrative Overheads			16.00		12.09	(3.91)
TOTAL USE OF AUTO AND HAULING COST			2,095.00		1,310.53	(784.47)
TOTAL ESTIMATE / Reconditioning			3,014.00		2,269.53	(744.47)

INDICATE NORTH

SKETCH
(CORRECT TO ACTUAL)

INVENTORY MAP NO. F-119
Map Square 70-63

* Hauling, Erecting & Dismantling Spudder Charges included in Direct Labor and Use of Auto and Hauling.

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Environmental Protection

04/02/2021

2-595-8356

COMPLETION REPORT

MAKE NECESSARY REVISIONS ON SKETCH TO SHOW WORK ACTUALLY PERFORMED. INDICATING LOCATION AND DIMENSIONS OF SPECIAL CONSTRUCTION.

FOR LINE WORK ON ESTABLISHED STREET OR HIGHWAY. INDICATE ON SKETCH THE DISTANCE OF LINE FROM ADJOINING PROPERTY. ALSO PORTION UNDER PAVING.

WHEN LINE EXTENDS INTO TWO OR MORE TAX DISTRICTS. LIST BELOW PORTION INSTALLED OR RETIRED. IN EACH

Table with 6 columns: FT. OF, SIZE, KIND, TOWN TWP, DIST, COUNTY. Multiple rows for recording line work details.

MATERIAL INSTALLED OR RETIRED

MATERIAL INSTALLED OR RETIRED

Main table with 6 columns: QUANTITY, SIZE, DESCRIPTION, QUANTITY, SIZE, DESCRIPTION. Lists various materials like tubing, valves, bolts, and oil.

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WV Department of Environmental Protection

MATERIAL TRANSFER NUMBERS: April, 1951, # 157-218-May 23-29-1951

PIPE COATING

ORIGINAL INSTALLATION DATES OF PROPERTY RETIRED

Table with 6 columns: QUANTITY, KIND, FT. OF PIPE, QUANTITY, KIND, DATE. For recording pipe coating and retirement dates.

TYPE OF JOINTS _____
EXCAVATION: BY HAND _____ FT. MACHINE _____ FT.
WIDTH OF TRENCH _____ FT. AVG. DEPTH _____ FT.
TYPE OF PAVING: _____
PAVING CUT: WIDTH _____ FT. LENGTH _____ FT.
DESCRIBE NATURE OF SOIL: _____
REPORT UNUSUAL CONDITIONS ENCOUNTERED IN CONSTRUCTION: _____

INFORMATION TO BE FURNISHED FOR SMALL STRUCTURES:
OUTSIDE DIM. LENGTH _____ WIDTH _____
HEIGHT TO EAVES _____ HEIGHT TO RIDGE _____
FOUNDATION: KIND _____
THICKNESS _____ HEIGHT ABOVE GROUND _____ DEPTH BELOW GROUND _____
FLOOR: KIND _____ THICKNESS _____
WALL: KIND _____ THICKNESS _____
ROOF: TYPE _____ KIND _____
DOORS: NO. _____ SIZE _____ KIND _____
WINDOWS: NO. _____ SIZE _____ KIND _____
PAINTING _____
MISCELLANEOUS _____

04/02/2021

REASON FOR OVERRUN - UNDERRUN: Labor underrun due to less cleaning out than was anticipated. As this was a purchased well we did not know just what was in the hole to be cleaned out.

DATE WORK STARTED 4-9-19 51 DATE WORK COMPLETED 4-20-19 51
COMPILED BY Donald B. H. DATE 4-21-19 51 APPROVED BY John G. Martin DATE 4-21-19 51

4703901306P

WW-4A
Revised 6-07

1) Date: 12/24/2020
2) Operator's Well Number
Coco B 7078
3) API Well No.: 47 - 039 - 01306

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WV Department of Environmental Protection
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>Richard L. Turley</u>	Name <u>Not operated</u>
Address <u>1018 McNabb Drive</u>	Address _____
<u>Elkview, WV 25071</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 1207</u>	Name _____
<u>Clendenin, WV 25045</u>	Address _____
Telephone <u>304.549.5915</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 Columbia Gas Transmission
 By: James Amos 12/29/20
 Its: Team Leader - Well Engineering and Technology
 Address 48 Columbia Gas Road
Sandyville, WV 25275
 Telephone 304.373.2412

Subscribed and sworn before me this 29th day of December
Michael D McClung Notary Public
 My Commission Expires June 19, 2022

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.

04/02/2021

4703901306P

Columbia Gas Transmission, LLC

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



December 24, 2020

Richard Turley
1018 McNabb Drive
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 plug and abandon an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Coco B 7078 (API 47-039-01306).

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,

A handwritten signature in black ink, appearing to read "Jim Amos".

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

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WV Department of
Environmental Protection


4703901306P

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Office of Oil and Gas

JAN 13 REC'D

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>Deborah Turley</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p>												
<p>1. Article Addressed to:</p> <p>RICHARD TURLEY 1018 McNABB DRIVE ELKVIEW, WV 25071</p>  <p>9590 9402 3688 7335 3538 33</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>												
<p>2. Article Number (Transfer from service label)</p> <p>7017 0660 0001 0359 5606</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> </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"/> 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												
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt</p>													

04/02/2021

SURFACE OWNER WAIVER

47039013060

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Office of Oil and Gas
JAN 13 2021

Operator's Well
Number

Coco B 7078

WV Department of
Environmental Protection

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,

Signature

Date

Name
By
Its

Date

Signature

Date
04/02/2021

WW-4B

API No. 47-039-01306 P
Farm Name _____
Well No. Coco B 7078

**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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04/02/2021

WW-9
(5/16)

4703901306P

API Number 47 - 039 - 01306
Operator's Well No. _____

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JAN 13 2021
WV Department of
Environmental Protection

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) Flatwood Run of Indian Creek Quadrangle Blue Creek

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)
- Underground 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 James E. Amos 12/29/20
Company Official (Typed Name) James E. Amos
Company Official Title Team Leader, Well Engineering & Technology

Subscribed and sworn before me this 29th day of December, 2020

Michael D. McClung Notary Public

My commission expires June 19, 2022



04/02/2021

Operator's Well No. _____

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

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WV Department of
Environmental Protection

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: _____

Comments: _____

Title: _____

Inspector O&EGAS

Date: _____

12-29-20

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): Flatwood Run of Indian Creek Quad: Blue Creek
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.

Flatwood Run - 0.03 miles. Rippling Waters Camground (WV9918017) - 13.5 miles.

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Environmental Protection

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

N/A

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.

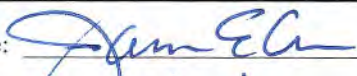
7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

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

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Environmental Protection

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: 
Date: 01/29/20

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

4703901306P
 TC Energy

January 12, 2021

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

Enclosed are well plugging permit applications for the following Columbia Gas Transmission existing storage wells:

Coco B 7075 (039-01258)
Coco B 7078 (039-01306)
Coco B 7101 (039-01341)
Coco B 7228 (039-01623)
Coco B 7230 (039-01585)
Coco C 7326 (039-01603)

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

Columbia Gas Transmission
48 Columbia Gas Rd
Sandyville, WV 25275
Attn: Jim Amos

If you have questions, feel free to call.

Regards,



Jim Amos
Team Leader
Well Engineering & Technology
Columbia Gas Transmission, LLC
Off: 304-373-2412
Mob: 304-483-0073
james_amos@tcenergy.com

www.tcenergy.com

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Environmental Protection

04/02/2021

4703901306P

WV DEP Reclamation Plan
Coco B well 7078 (API 039-01306)

- 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



PIT
 50' x 10' x 4' deep

Coco B - 07078

0.3 acres

**Limit of Proposed Disturbance
 on existing well site**

200 ft



4703901306P



WV DEP Reclamation Plan
Coco B well 7078 (API 039-01306)

- 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

0.3 acres

Coco B - 07078

Limit of Proposed Disturbance
on existing well site

200 ft

Google Earth

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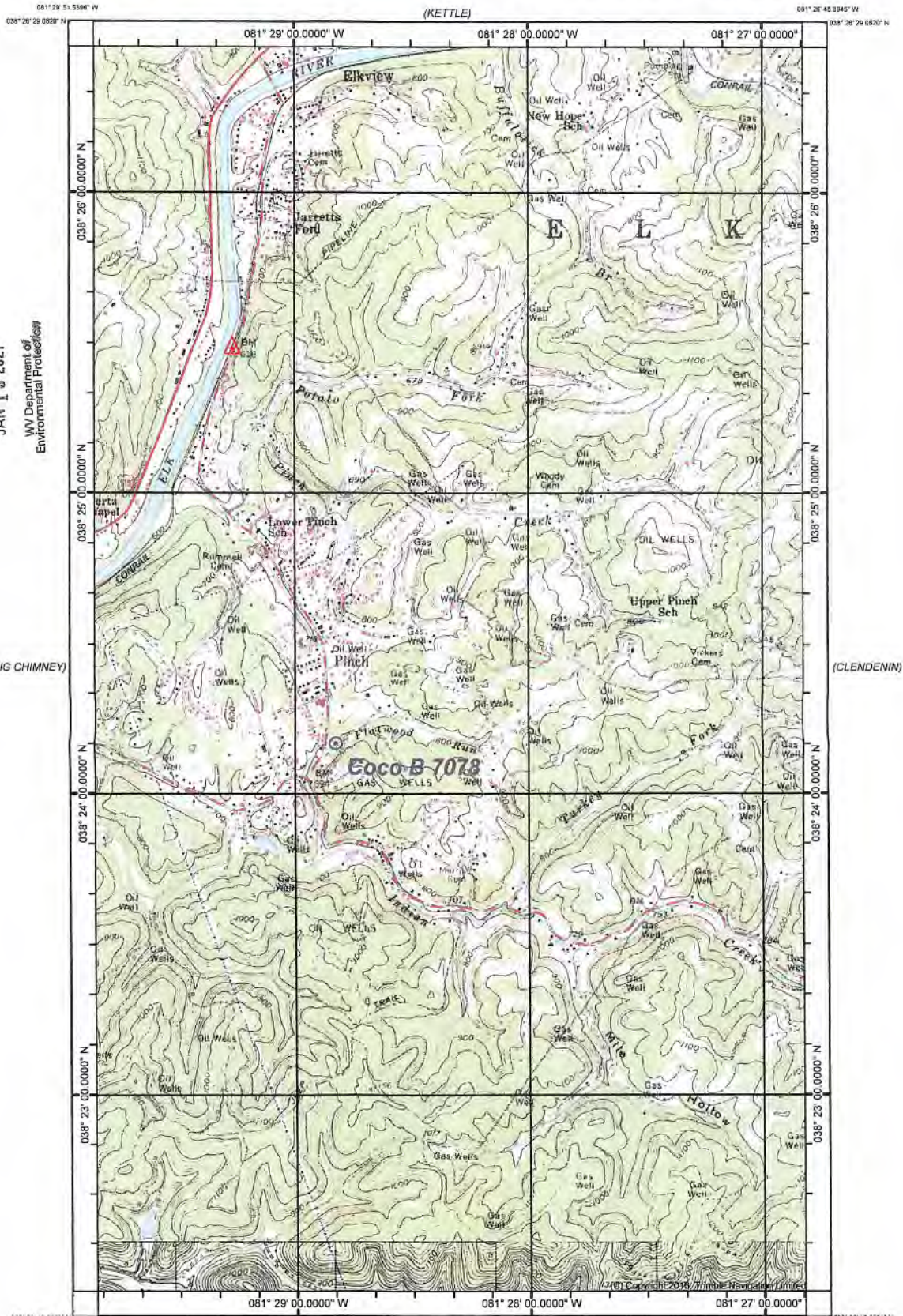
4703901306 P

(ROMANCE)



4703901200
BLUE CREEK QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

(CLIO)



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JAN 13 2021
WV Department of
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(BIG CHIMNEY)

(CLENDENIN)

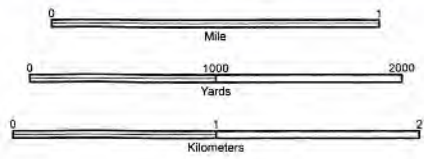
(CHARLESTON EAST)

(MAMMOTH)

Declination



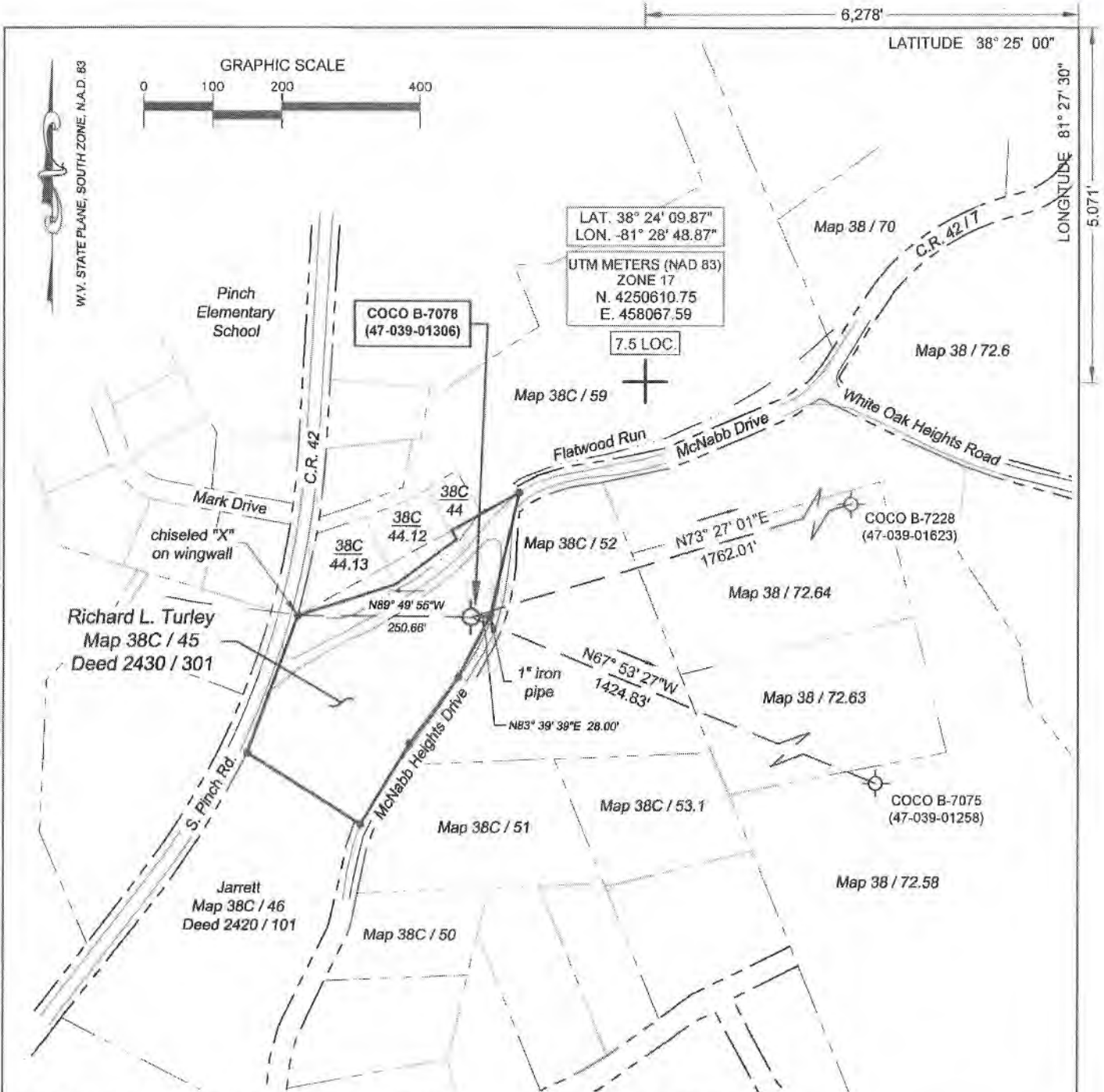
(QUICK)
SCALE 1:24000



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

CONTOUR INTERVAL 20 FT

38081-D3-TM-024
BLUE CREEK, WV
JAN 1, 1977
04/02/2021



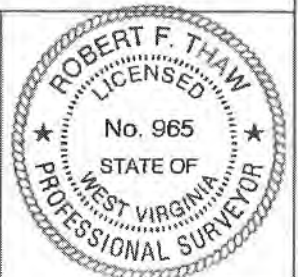
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2001-3079-001-008
 DRAWING No. 2001-3079-001-008
 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 OCTOBER 30 2020
 OPERATOR'S WELL No. 7078
 API WELL No.

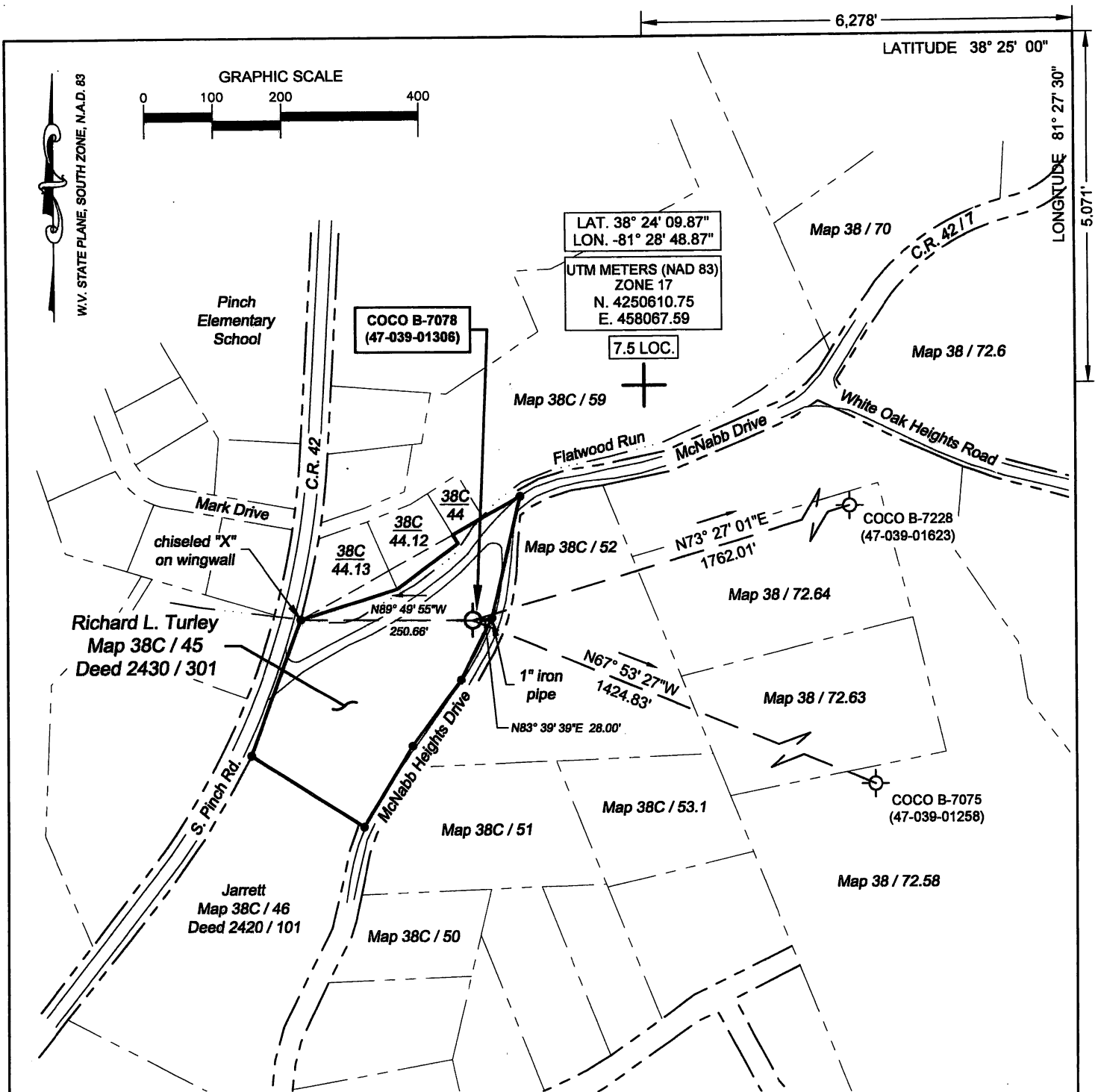
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 752.9' WATER SHED FLATWOOD RUN OF INDIAN CREEK
 DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK, WV

SURFACE OWNER RICHARD L. TURLEY ACREAGE 2.00
 OIL & GAS ROYALTY OWNER 1) MATT AMOS, ET AL, 2) URSULA C. MUDD, ET AL
 LEASE ACREAGE 1) 937 ACRES, 2) 60 ACRES LEASE NO. 1) 104098-000, 2) 1048322-002

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 04/02/2021
 PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION ORISKANY ESTIMATED DEPTH 5141
 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)

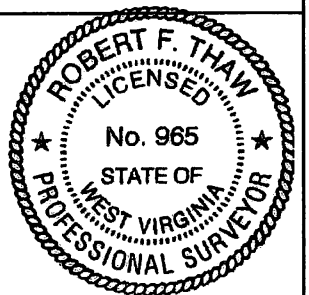


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2001-3079-001-008
 DRAWING No. 2001-3079-001-008
 SCALE 1"=200'
 MINIMUM DEGREE OF ACCURACY 1:200
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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 OCTOBER 30 2020
 OPERATOR'S WELL No. 7078
 API WELL No. 47 039 - 01306P

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 039 PERMIT 01306P
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 752.9' WATER SHED FLATWOOD RUN OF INDIAN CREEK
 DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK, WV

SURFACE OWNER RICHARD L. TURLEY ACREAGE 2.00
 OIL & GAS ROYALTY OWNER 1) MATT AMOS, ET AL, 2) URSULA C. MUDD, ET AL
 LEASE ACREAGE 1) 937 ACRES, 2) 60 ACRES LEASE NO. 1) 104098-000, 2) 1048322-002

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE 04/02/2021
 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 5141
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT JAMES AMOS
 ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS 48 COLUMBIA GAS ROAD SANDYVILLE, WV 25275

FORM IV-6 (8-78)