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**west virginia** department of environmental protection

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

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

March 08, 2016

**WELL WORK PERMIT**

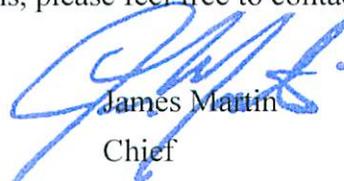
**Re-Work**

This permit, API Well Number: 47-3901610, issued to COLUMBIA GAS TRANSMISSION, LLC, 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 1-800-642-3074 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 7219  
Farm Name: BROWN, JAMES E. III  
**API Well Number: 47-3901610**  
**Permit Type: Re-Work**  
Date Issued: 03/08/2016

**Promoting a healthy environment.**

## PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

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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, drilling ceased, completion of any other permitted well work and completion of the well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov) within 30 days of commencement of drilling.

WW - 2B  
(Rev. 8/10)

**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
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Operator ID County District Quadrangle

2) Operator's Well Number: Coco A 7219 3) Elevation: 1032 ft

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: 5350

6) Proposed Total Depth: 5398 (existing) Feet Formation at Proposed Total Depth: Helderberg

7) Approximate fresh water strata depths: 155' (as reported by driller in 1953)

8) Approximate salt water depths: 1040' (as reported by driller in 1953)

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)

Kill well. Pull coiled tubing. Obtain pipe inspection logs. Replace wellhead. Perform acid treatment.  
*Angela Miller*  
2-4-16

13) **CASING AND TUBING PROGRAM** \* existing tubulars

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13.375		48	7	7	none
Fresh Water	10.75		40.5	1750	0	none
Coal						
Intermediate	8.625		32	2029	2029	cmt top @ 160'
Production	5.5		15.5	5287	5287	cmt'd to/near surface
Tubing	2.375		coil tubing		5250	
Liners						

Received

Packers: Kind: \_\_\_\_\_  
Sizes: \_\_\_\_\_  
Depths Set \_\_\_\_\_

FEB 10 2016

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: BROWN, JAMES E. III Operator Well No.: 7219

LOCATION: Elevation: 1,035.68 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA  
Latitude: 2700 Feet South of 38 Deg. 25Min. Sec.  
Longitude 8600 Feet West of 81 Deg. 22 Min. 30 Sec.

Company: COLUMBIA GAS TRANSMISSION  
P.O. BOX 1273  
CHARLESTON, WV 25325-1273

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY  
Permit Issued: 07/19/95  
Well work Commenced: 9-20-95  
Well work Completed: 2-2-96  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary \_\_\_\_\_ Cable \_\_\_\_\_ Rig WORKOVER  
Total Depth (feet) 5398'  
Fresh water depths (ft) 155'  
Salt water depths (ft) 1040'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 7/8"	7'	7'	
8 5/8"	2029'	2029'	
5 1/2"	5249'	5249'	T.O.C. FROM 2BL 15 AT 1360' SPUT AT 140' Cemented

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 200'-204'

OPEN FLOW DATA

Producing formation ORISKANY SANDSTONE Pay zone depth (ft) 5323-5350  
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 650 psig (surface pressure) after 24 Hours

\* STORAGE WELL - NO OPEN FLOW AVAILABLE

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.

Approved

For: COLUMBIA GAS TRANSMISSION CORP. FEB 10 2016

By: [Signature]  
Date: 2-26-96

## PHYSICAL CHANGE:

NO CASING PULLED DUE TO 5 1/2" CASING  
BEING CEMENTED AT 160'

INSTALLED NEW WELLHEAD.

DRILLED NEW 4 3/4" HOLE FROM 5350' TO 5398' (ALL LIME)

2-2-96

FRACTURED ORISKANY SANDSTONE w/

25,600 # 20/40 SAND

475 bbls BORAGEL FRAC FLUID

BREAKDOWN PRESSURE 1480 PSIG

AVG PRESSURE 1750 PSIG

ISIP 3119 PSIG

5 MIN SIP 1922 PSIG

10 MIN SIP 1640 PSIG

15 MIN SIP 1403 PSIG

Received

FEB 10 2016

**United Fuel Gas Company**  
COMPANY

SERIAL WELL NO. 7219

LEASE NO. PL 48180 and 48341

MAP SQUARE 7463

RECORD OF WELL NO. <u>7219</u> on the	CASING AND TUBING				TEST BEFORE SHOT
	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	
<u>Osborn Hairs</u> farm of <u>837</u> Acres					<u>20</u> /10 of Water in <u>7</u> inch
in <u>Elk</u> District	<u>13</u>	<u>40#</u>	<u>20'</u>	<u>7'</u>	/10 of Merc. in _____ inch
<u>Kanawha</u> County	<u>10</u>	<u>40.5#</u>	<u>1750'</u>	<u>0-</u>	Volume <u>1,929,000</u> Cu. ft.
State of: <u>West Virginia</u>	<u>8q</u>	<u>32#</u>	<u>2357'</u>	<u>2029'</u>	TEST AFTER SHOT
Field: <u>Clendenin</u>	<u>5</u>	<u>25.5#</u>	<u>5323'</u>	<u>5287'</u>	<u>80</u> /10 of Water in <u>7</u> inch
Rig Commenced <u>19</u>	<u>2-3/8</u>	<u>4.6#</u>	<u>5177'</u>	<u>5385'</u>	/10 of Merc. in _____ inch
Rig Completed <u>19</u>					Volume <u>3,858,000</u> Cu. ft.
Drilling Commenced <u>8/27</u> <u>1953</u>					Hours After Shot _____
Drilling Completed <u>3/18</u> <u>1954</u>					Rock Pressure <u>800#</u>
Drilling to cost _____ per foot					Date Shot <u>3/22/54</u>
Contractor is: <u>Olan E. Jones</u>					Size of Torpedos <u>10 Cts. 61#</u>
Address: _____	SHUT IN				Oil Flowed _____ bbls. 1st 24 hrs.
	Date <u>3/22/54</u>				Oil Pumped _____ bbls. 1st 24 hrs.
Driller's Name <u>D. E. Jones</u>	Tubing or _____ in. _____				
<u>O. E. Jones</u>	Size of Packer <u>None</u>				Well abandoned and
	Kind of Packer _____				Plugged _____ 19 _____
	1st. Perf. Set _____ from _____				
Elevation: _____	2nd Perf. Set _____ from _____				

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Ssile	0	5		
Clay	5	15		
Sand	15	95		
Slate	95	120		
Sand	120	160		Water at 155 ft.
Slate	160	200		
Cal	200	204		
Sand	204	258		
Slate	258	289		
Lime	289	313		
Slate	313	340		
Coal	340	346		
Sand	346	405		
Slate and Shell	405	670		
Sand	670	780		
Slate	780	815		
Salt Sand	815	1140		

Received

FEB 10 2016

Office of Oil and Gas  
WV Dept. of Environmental Protection



WW-2A  
(Rev. 6-14)

1.) Date: 1/29/2016  
2.) Operator's Well Number Coco A 7219  
State County Permit  
3.) API Well No.: 47- 039 - 01610

**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 James F. Brown III  
Address PO Box 1793  
Charleston, WV 25326  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
5) (a) Coal Operator  
Name not operated  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address Received  
Name \_\_\_\_\_  
Address FEB 10 2016  
6) Inspector Terry Urban  
Address PO Box 1207  
Clendenin, WV 25045  
Telephone 304-389-7583  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_ Office of Oil and Gas  
Address \_\_\_\_\_ WV Dept. of Environmental Protection

**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)
- 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.

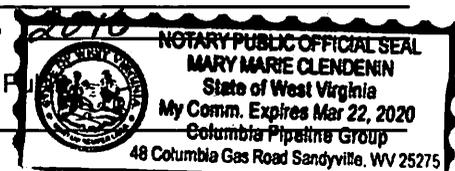
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: Columbia Gas Transmission, LLC  
By: James E. Amos  
Its: Senior Well Services Engineer  
Address: 1700 MacCorkle Ave. SE  
Charleston, WV 25325-1273  
Telephone: 304-483-0073  
Email: jamos@cpq.com

Subscribed and sworn before me this 8th day of February, 2016

Mary Marie Clendenin  
My Commission Expires 3/22/20

Notary Public



Oil and Gas Privacy Notice

FT 79

NOTARY PUBLIC OFFICIAL  
MARY MARIE CI ENDRIN  
State of West Virginia  
My Comm Expires Mar 20, 2020  
Columbus, West Virginia



WW-2A1  
(Rev. 1/11)

Operator's Well Number Coco A 7219

**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
Hester N. Brown	Columbia Gas Transmission, LLC	Storage lease 1048180-000	123 / 401

**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:

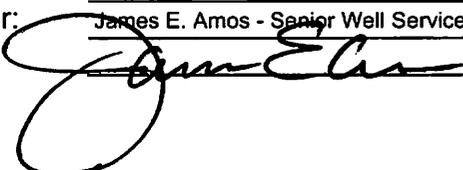
- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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FEB 10 2016

Office of Oil and Gas  
WV Dept. of Environmental Protection

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: Columbia Gas Transmission, LLC  
 By: Its: James E. Amos - Senior Well Service Engineer  


3901610W

WW-9  
(2/15)

API Number 47 - 039 - 01610

Operator's Well No. Coco A 7219

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) Blue 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: slu

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 34-105-23619, 34-121-22459, 34-059-20965 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Rumpke Beech Hollow Landfill, Wellston, OH)

Will closed loop system be used? If so, describe: yes - steel lines to steel portable tank

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. kill fluid: freshwater based

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

Additives to be used in drilling medium? kill fluid: biocide, starch, polymer

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

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

-Landfill or offsite name/permit number? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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

FEB 10 2016

Company Official (Typed Name) James E. Amos

Company Official Title Senior Well Services Engineer

Office of Oil and Gas  
WV Dept. of Environmental Protection

Subscribed and sworn before me this 8th day of February, 2020

Mary Marie Clendenin



My commission expires 3/22/20



**Columbia Gas Transmission, LLC**

Proposed Revegetation Treatment: Acres Disturbed 0.5 Prevegetation pH 6

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
Orchard Grass and/or Tall Fescue	29
Birdsfoot Trefoil (Empire)	9
Annual Rye	12

Seed Type	lbs/acre
(if Tall Fescue is used, plant endophyte-free certified seed)	
(legumes to be inoculated by manufacturer's recommendation)	

\* seed rate must be doubled for broadcast seeding

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: Top Hill End of Blue Creek

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FEB 10 2016

Title: Truss Sub E Gas

Date: 2-4-14

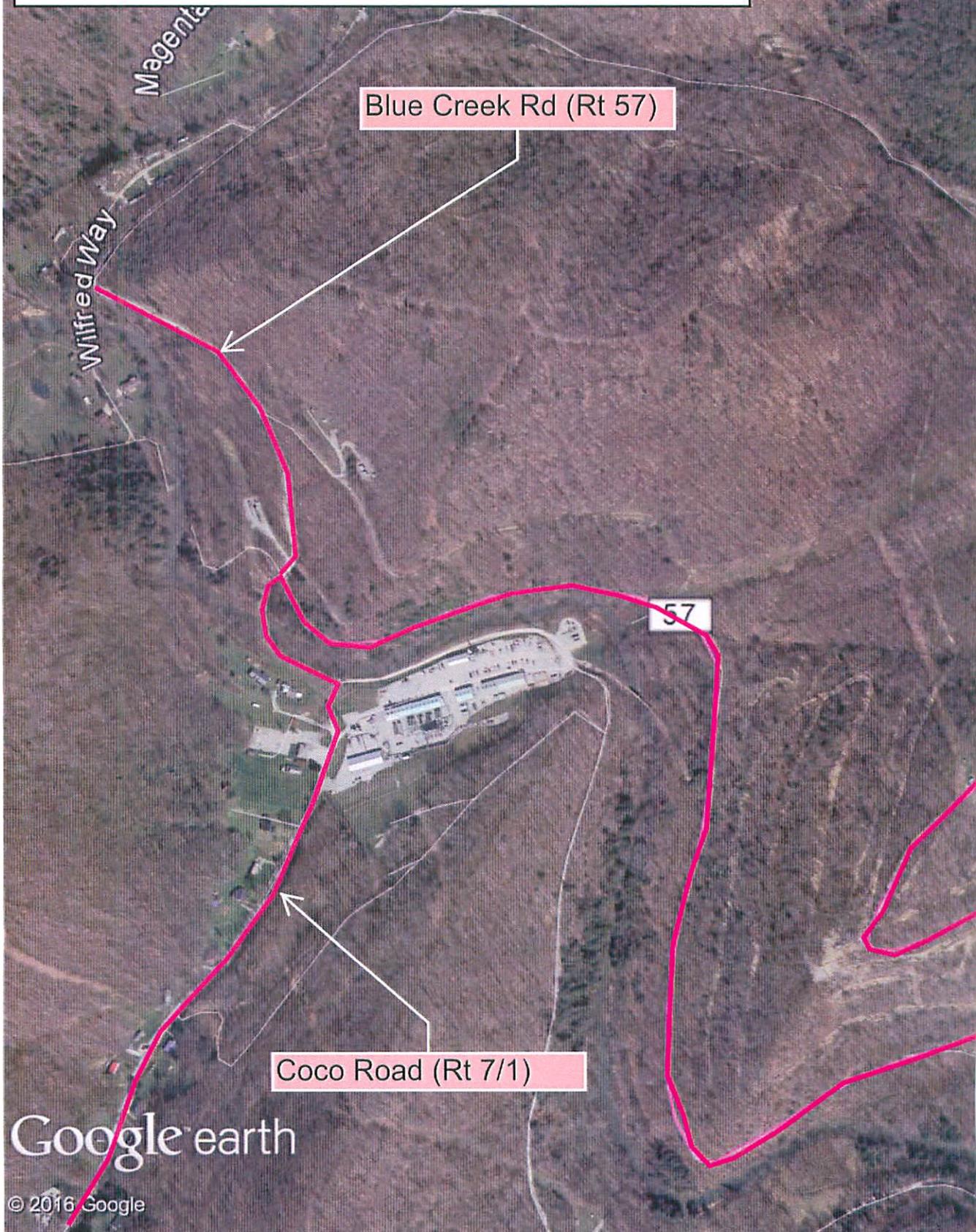
Office of Oil and Gas  
WT Dept. of Environmental Protection

Field Reviewed?  Yes  No

# Coco A well 7219

WV DEP Reclamation Plan 1 of 2 - Access Road Detail

- BMPs to be utilized per WV DEP guidelines
- Existing drainage, culverts, and road ditches to be maintained
- Minor grading and road surfacing material to be applied as needed



Google earth

© 2016 Google

well site

Coco A - 07219

existing access road

Blue Creek Rd (Rt 57)

**Legend**

- ⊙ Coco A - 07219
- ▭ Coco A 7219 LOD
- ⋯ Coco A 7219 road

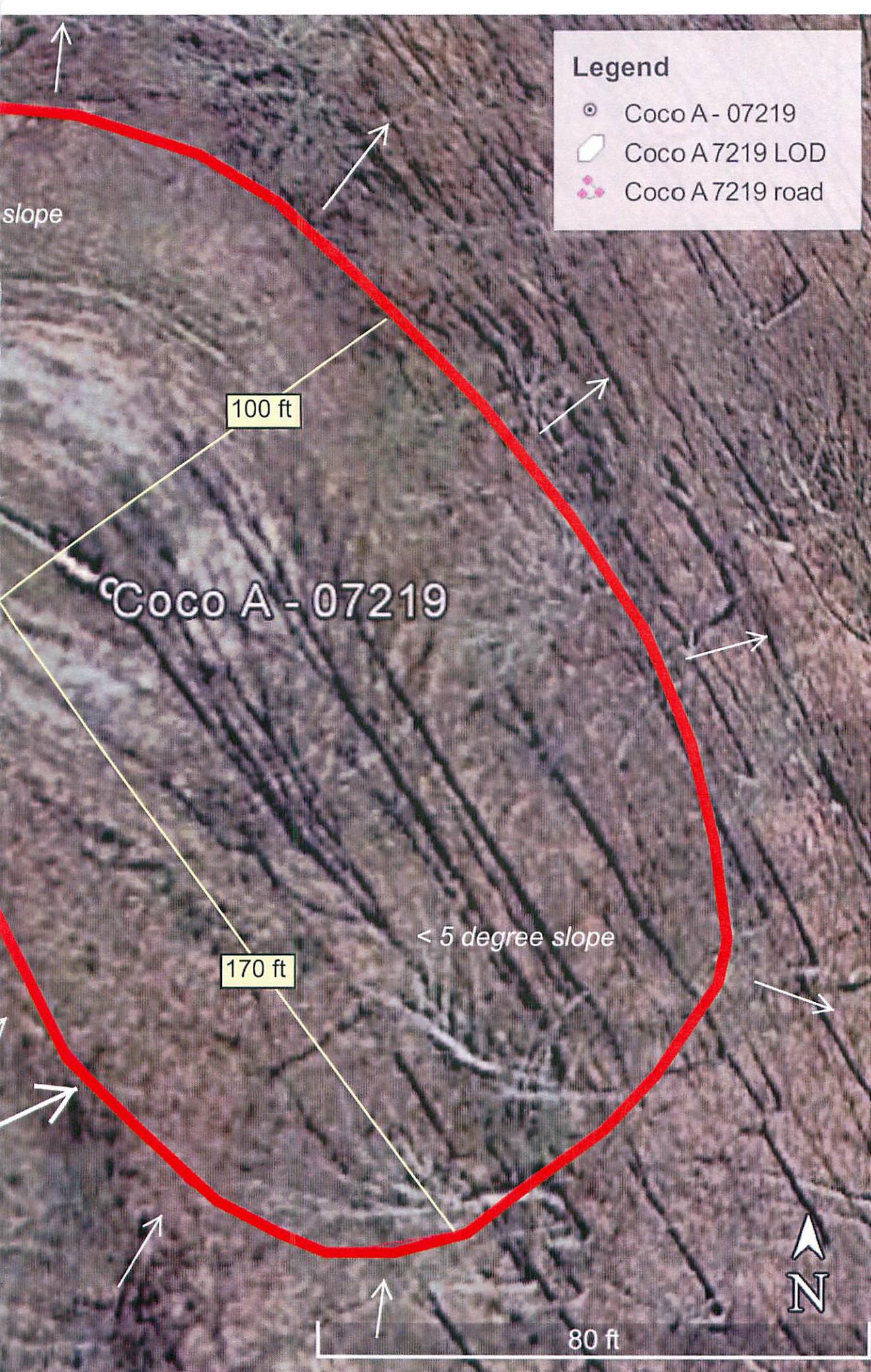


2000 ft

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FEB 10 2016

3901610W



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FEB 10 2016

Office of Oil and Gas  
Dept. of Environmental Protection



< 5 degree

*existing access road*

## Coco A well 7219

WV DEP Reclamation Plan 2 of 2 - Site Detail

- 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 surfacing material to be applied as needed

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

3901610W

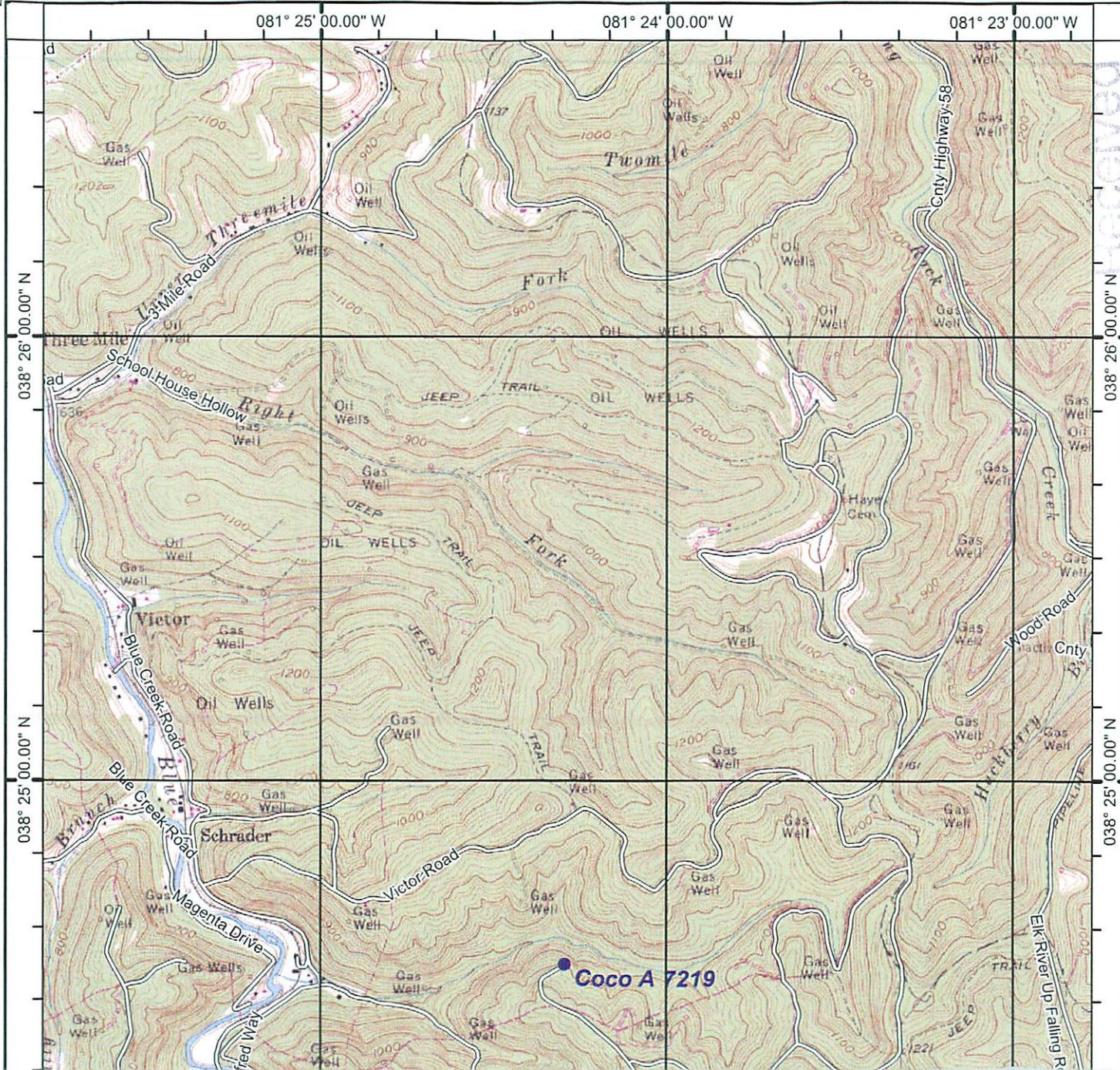
(ROMANCE)



BLUE CREEK QUADRANGLE  
WEST VIRGINIA  
TOPOGRAPHIC SERIES

(CLIO)

081° 25' 48.46" W (KETTLE) 081° 22' 45.80" W  
038° 26' 40.11" N 038° 26' 00.00" N 038° 25' 00.00" N



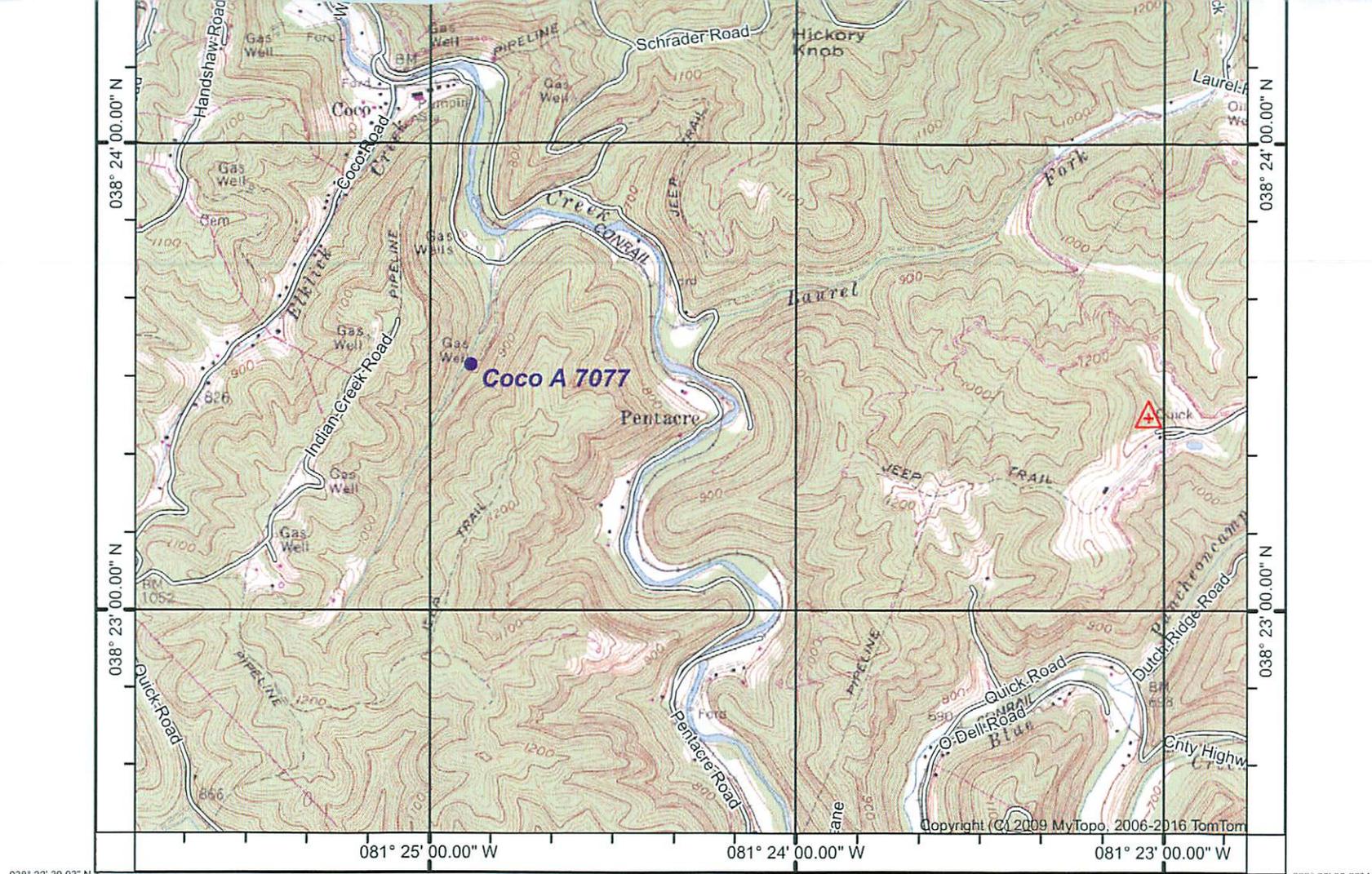
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Office of Oil and Gas  
WV Dept. of Environmental Protection

(BIG CHIMNEY)

(CLEDENIN)



038° 22' 30.93" N  
 081° 25' 48.46" W  
 038° 24' 00.00" N  
 081° 25' 00.00" W  
 081° 24' 00.00" W  
 081° 23' 00.00" W  
 038° 23' 00.00" N  
 038° 22' 30.93" N  
 081° 22' 45.60" W

(CHARLESTON EAST)

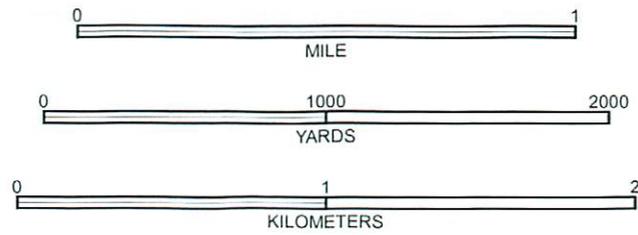
(MAMMOTH)

Produced by MyTopo Terrain Navigator  
 Topography based on USGS 1:24,000 Maps  
 North American 1983 Datum (NAD83)  
 Polyconic Projection

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



(QUICK)  
 SCALE 1:24000



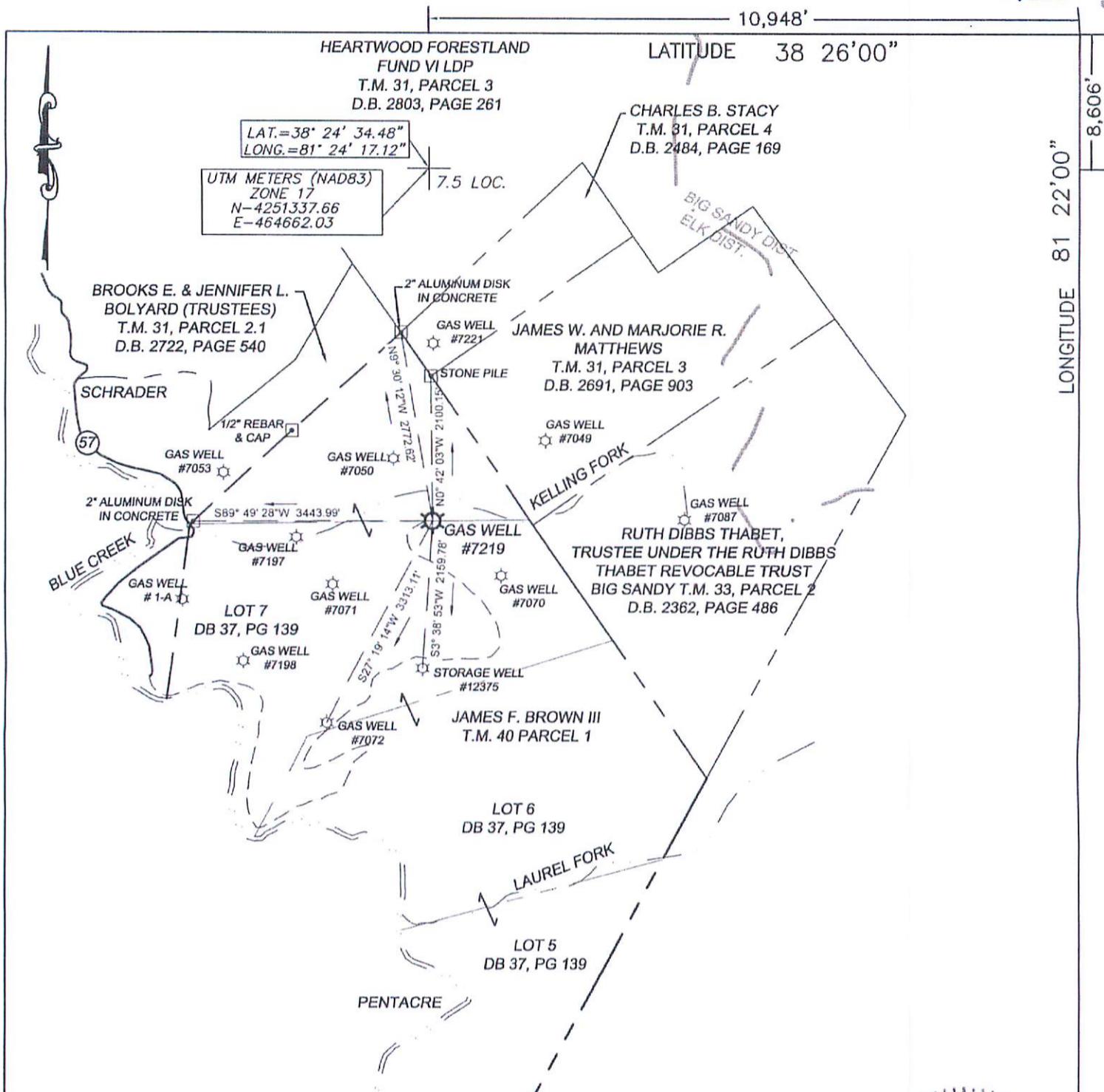
CONTOUR INTERVAL 20 FEET  
 NATIONAL GEODETIC VERTICAL DATUM 1929

BLUE CREEK, WV  
 1957

Printed: Fri Jun 08, 2016

Copyright (C) 2009 MyTopo, 2006-2016 TomTom

3901610 W

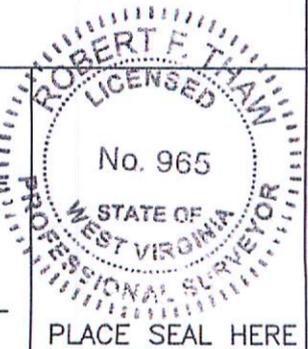


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 1601-2345-001-001  
 DRAWING No. 1601-2345-001  
 SCALE 1"=2000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION TRIMBLE R8-3  
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 JANUARY 25 20 16  
 OPERATOR'S WELL No. 7219  
 API WELL No. 47 039 -01610 W

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1032 WATER SHED BLUE CREEK  
 DISTRICT ELK COUNTY KANAWHA  
 QUADRANGLE BLUE CREEK, WV

SURFACE OWNER JAMES F. BROWN III ACREAGE 1,661  
 OIL & GAS ROYALTY OWNER HESTER N. BROWN LEASE ACREAGE 787  
 LEASE No. 1048180-000

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 5398  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT PAUL AMICK  
 ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON W.V.  
25325-1273 25325-1273

FORM IV-6 (8-78)

10,948'

LATITUDE 38 26'00"

HEARTWOOD FORESTLAND  
FUND VI LDP  
T.M. 31, PARCEL 3  
D.B. 2803, PAGE 261

CHARLES B. STACY  
T.M. 31, PARCEL 4  
D.B. 2484, PAGE 169

LAT.=38° 24' 34.48"  
LONG.=81° 24' 17.12"

UTM METERS (NAD83)  
ZONE 17  
N-4251337.66  
E-464662.03

7.5 LOC.

BROOKS E. & JENNIFER L.  
BOLYARD (TRUSTEES)  
T.M. 31, PARCEL 2.1  
D.B. 2722, PAGE 540

JAMES W. AND MARJORIE R.  
MATTHEWS  
T.M. 31, PARCEL 3  
D.B. 2691, PAGE 903

RUTH DIBBS THABET,  
TRUSTEE UNDER THE RUTH DIBBS  
THABET REVOCABLE TRUST  
BIG SANDY T.M. 33, PARCEL 2  
D.B. 2362, PAGE 486

JAMES F. BROWN III  
T.M. 40 PARCEL 1

LOT 6  
DB 37, PG 139

LOT 5  
DB 37, PG 139

PENTACRE

SCHRADER

BIG SANDY DIST  
ELK DIST.

KELLING FORK

LAUREL FORK

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

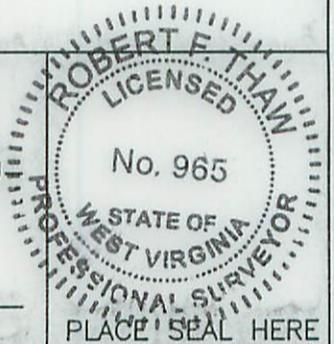
FILE No 1601-2345-001-001  
DRAWING No. 1601-2345-001  
SCALE 1"=2000'  
MINIMUM DEGREE OF  
ACCURACY 1:200  
PROVEN SOURCE OF  
ELEVATION TRIMBLE R8-3  
GPS UNIT

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 REGU  
LATIONS 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



DATE JANUARY 25 20 16  
OPERATOR'S WELL No. 7219  
API WELL No.

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  STATE 47 COUNTY 039 PERMIT 01610W  
'IF "GAS"') PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1032 WATER SHED BLUE CREEK  
DISTRICT ELK COUNTY KANAWHA  
QUADRANGLE BLUE CREEK, WV

SURFACE OWNER JAMES F. BROWN III ACREAGE 1,661  
OIL & GAS ROYALTY OWNER HESTER N. BROWN LEASE ACREAGE 787  
LEASE No. .048180-000

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

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
TARGET FORMATION ORISKANY ESTIMATED DEPTH 5398  
WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT PAUL AMICK  
ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON W.V.  
25325-1273 25325-1273

LONGITUDE 81 22'00"

8,606'

FORM IV-6 (8-78)