west virginia department of environmental protection

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

June 02, 2015

WELL WORK PERMIT

Re-Work

This permit, API Well Number: 47-3500487, 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: 7295
Farm Name: AYLERS, ARTHUR
API Well Number: 47-3500487
Permit Type: Re-Work
Date Issued: 06/02/2015

Promoting a healthy environment.

3500487W

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.

3500487W

WW-2A
(Rev. 6-07)

1). Date: 2/5/15

2.) Operator's Well Number Ripley 7295

3.) API Well No.: State 47- County 035 - Permit 00487

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: Arthur & Barbara Ayres
Address: PO Box 245
Sandyville, WV 25275

(b) Name
Address

(c) Name
Address

6) Inspector: Jamie Stevens
Address: 105 Kentuck Rd
Kenna, WV 25248
Telephone: 304-206-7775

5) (a) Coal Operator
Name: not operated
Address

(b) Coal Owner(s) with Declaration
Name: not operated
Address

Name
Address

(c) Coal Lessee with Declaration
Name
Address

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

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

OR

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: James E. Amos
Its: Senior Well Services Engineer
Address: 1700 MacCorkle Ave. SE
Charleston, WV 25325-1273
Telephone: 304-483-0073

Subscribed and sworn before me this 10th day of February, 2015

Mary Marie Clendenin
Notary Public

My Commission Expires 3/22/2015

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
MARY MARIE CLENDENIN
COLUMBIA GAS TRANSMISSION CORPORATION
RR 2 BOX 138
SANDYVILLE, WV 25275
My Commission Expires March 22, 2015

Received
MAR 3 0 2015

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

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For delivery information visit our website at www.usps.com®

OFFICIAL USE

SANDYVILLE, WV 25275

Postage	$ $1.61
Certified Fee	$3.30
Return Receipt Fee (Endorsement Required)	$2.70
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $7.61

RIPLEY WV
MAR 26 2015
USPS 25275

0271
06
Postmark Here

03/26/2015

Sent To: Arthur and Barbara Ayers

Street, Apt. No.; or PO Box No.: P. O. Box 245

City, State, ZIP+4: Sandyville WV 25275

PS Form 3800, August 2006 — See Reverse for Instructions

47-035-00487-7
3500487W

WW-2A1
(Rev. 1/11)

Operator's Well Number Ripley 7295

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
W. E. Hupp, et al	Columbia Gas Transmission, LLC	Storage Lease 52783	84 / 519

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:

Received
Office of Oil & Gas
MAR 30 2015

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

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Office of Oil & Gas
MAR 30 2015

3500487 W

WW - 2B
(Rev. 8/10)

API - 47-035-00487

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 (Operator ID) | Jackson (County) | Ravenswood (District) | Sandyville (Quadrangle)

2) Operator's Well Number: Ripley 7295 (existing well) 3) Elevation: 669

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: 4854

6) Proposed Total Depth: 4871 (existing) Feet Formation at Proposed Total Depth: Oriskany

7) Approximate fresh water strata depths: 290' (as reported by driller in 1945)

8) Approximate salt water depths: 1265' (as reported by driller in 1945)

9) Approximate coal seam depths: none reported by driller in 1945

10) Approximate void depths,(coal, Karst, other): none reported by driller in 1945

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)

Clean wellbore using coil tubing and fracture stimulate.

* Casing and tubing listed below are existing.

Existing from well records Jamie Stevens 3/25/2015

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS Size	Grade	Weight per ft	FOOTAGE INTERVALS For Drilling	Left in Well	CEMENT Fill -up (Cu. Ft.)
Conductor	16			16	16	no record of cement
Fresh Water	13.375		48	590	590	cmt'd but no record of amount
Coal	10.75			1139	0	N/A
Intermediate	8.625		24	2004	2004	cmt'd but no record of amount
Production	4.5	J-55	12.6	4871	4871	cmt'd but no record of amount
Tubing						
Intermediate #2	7		22	4757	4757	cmt'd but no record of amount

Packers: Kind: _____
Sizes: _____
Depths Set _____

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Office of Oil & Gas
MAR 30 2015
OK

3500487W

7295

F-19835

API 47-035-00487

7295

Permit - JAC - 487
Company - United Carbon Company
Farm - W. E. Hupp et al Well No. 1-1293
Location - Ravenswood District, Jackson County
Commenced - May 26, 1945
Completed - August 11, 1945
Elevation - 675.3'

Columbia Gas Transmission
Free. Existing Well

Casing Record:

16"	16'	
13 3/8"	48#	590'
10 3/4"	32.75#	1138'9" Pulled
8 5/8"	24#	2004'
7" OD	22#	4757'
2 3/8"		4851'

Formation		
Red Rock	0	60
Shell	60	70
Red Rock	70	110
Slate, Blue	110	130
Shell	130	150
Red Rock	150	200
Slate, Blue	200	230
Sand	230	290
Slate, Blue	290	300
Red Rock	300	315
Shell	315	340
Red Rock	340	350
Sand Shell	350	375
Red Rock	375	400
Slate	400	420
Red Rock	420	475
Sand	475	545
Slate, Black	545	550
Lime, Sandy	550	590
Slate	590	615
Sand	615	700
Slate, Blue	700	710
Red Rock	710	725
Sand	725	740
Red Rock	740	800
Slate Shells	800	975
Slate, Black	975	990
Slate Shell	990	1075
Lime Shell	1075	1090
Slate Shell	1090	1240
Slate, Black	1240	1252
Lime	1252	1262
Sand	1262	1325
Slate & Shells	1325	1360
Sand	1360	1405
Slate	1405	1450
Sand	1450	1485
Slate	1485	1570
Salt Sand	1570	1700
Big Lime	1700	1855
Slate, White	1855	1878
Injun Sand	1878	1994
Slate Shell	1994	2330
Shale, Brown	2330	2340
Berea Shell	2340	2350
Slate & Shells	2350	3600
Shale, Brown	3600	3650
Slate & Shells	3650	3860
Shale, Brown	3860	4080
Slate, White	4080	4520
Shale, Brown	4520	4745
Corniferous Lime	4745	4854
Oriskany Sand	4854	4871
TOTAL DEPTH		4871'

Water at 290'
" 1265' Hole full

Gas 4854' 6/10 W 2" 103M
" 4856' 12/10 W 2" 146M

Final open flow 17,437,000 Cu. Ft. Natural

24 hour rock pressure 1740#.

Jamie Stevens
3/25/2015

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Office of Oil & Gas
MAR 30 2015

7295

United Carbon
F-19835

3500487W

WW-9
Rev. 5/10

Page ____ of ____
API Number 47 - 035 - 00487 7.
Operator's Well No. Ripley 7295

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Columbia Gas Transmission, LLC OP Code 307032

Watershed Mud Run of Sandy Creek Quadrangle Sandyville

Elevation 669 County Jackson District Ravenswood

Description of anticipated Pit Waste: no earthen pit to be utilized

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ____ No X

Will a synthetic liner be used in the pit? N/A . If so, what mil.? ____

ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS & DISPOSED OF PROPERLY. JMM

Proposed Disposal Method For Treated Pit Wastes:

- ____ Land Application
- X Underground Injection (UIC Permit Number 34-105-2-3619, 34-009-03761, 34-121-2459)
- ____ Reuse (at API Number ____)
- ____ Off Site Disposal (Supply form WW-9 for disposal location)
- X Other (Explain Pinegrove Landfill - Amanda, OH

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. freshwater

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

Additives to be used? biocide, surfactant

Will closed loop system be used ? yes

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. not anticipated

-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust ____

-Landfill or offsite name/permit number? IF NEEDED: Pinegrove Landfill - Amanda, OH

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

Received
Office of Oil & Gas
MAR 30 2015

Company Official (Typed Name) James E. Amos

Company Official Title Senior Well Services Engineer

3/25/2015

Subscribed and sworn before me this 10th day of February, 20 15

Mary Marie Clendenin Notary Public

My commission expires 3/22/2015

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
MARY MARIE CLENDENIN
COLUMBIA GAS TRANSMISSION CORPORATION
RR 2 BOX 138
SANDYVILLE, WV 25275
My commission expires March 22, 2015

3500487W

Form WW-9

Operator's Well No. Ripley 7295

LEGEND

Property Boundary
Road
Existing Fence
Planned Fence
Stream
Open Ditch
Rock
North N
Buildings
Water wells W
Drill site

Diversion
Spring
Wet Spot
Drain Pipe with size in inches 12
Waterway
Cross Drain
Artificial Filter Strip
Pit: cut walls
Pit: compacted fill walls
Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed < 0.5 Prevegetation pH 6

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre

Seed Mixtures

Area I Seed Type	lbs/acre	Area II Seed Type	lbs/acre
Orchard Grass	20	Orchard Grass	20
Ledino Clover	10	Ledino Clover	10
Annual Rye	20	Annual Rye	20

Attach:
Drawing(s) of road, location,pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: James S. Stevens Jr.

Comments: Existing well location built. been there before.

Title: County Inspector Date: 3/25/2015

Field Reviewed? ( ) Yes (X) No

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JSS
3/25/2015

Google earth

feet 800
meters 200

3500487W

Jamie Stevens
3/25/2015

Received
Office of Oil & Gas
MAR 30 2015

Google earth

feet 100
meters 50

3500487W

3500487 W

mytopo

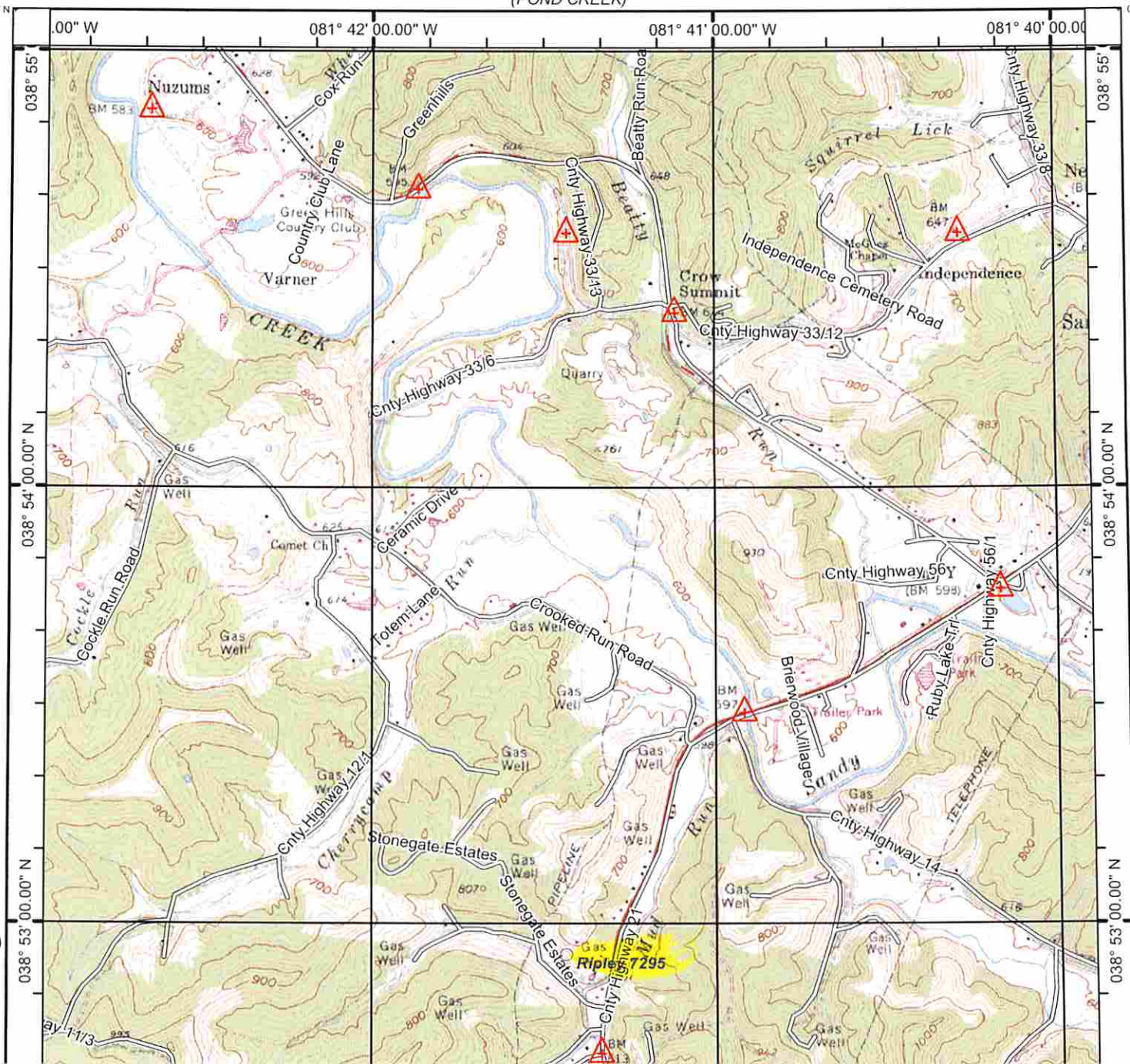
SANDYVILLE QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

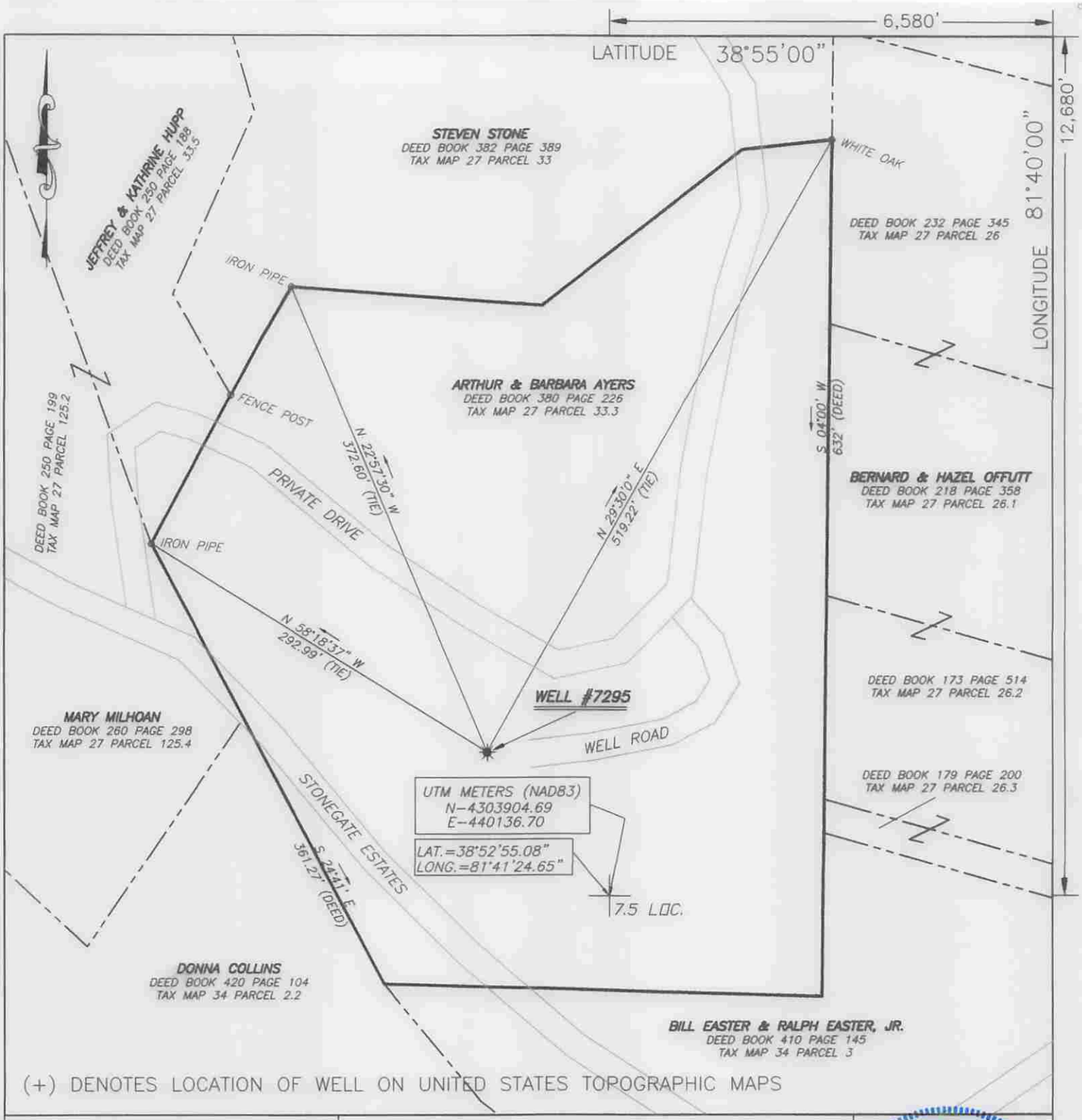
(PORTLAND) (ROCKPORT)

081° 42' 57.54" W 038° 55' 00.79" N

(POND CREEK)

081° 39' 53.55" W 038° 55' 00.79" N





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

FILE No 14-100-032
DRAWING No. 14-100-032
SCALE 1"=100'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION TRIMBLE PRO XH 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) _____
RICHARD J. PRINE PS #851

RICHARD J. PRINE LICENSED No. 851 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

PLACE SEAL HERE

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

DATE JANUARY 21 20 15
OPERATOR'S WELL No. 7295
API WELL No.
47 — 03[redacted]5 — 00487 W
STATE — COUNTY — PERMIT

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

LOCATION: ELEVATION 669 WATER SHED MUD RUN OF SANDY CREEK
DISTRICT RAVENSWOOD COUNTY JACKSON
QUADRANGLE SANDYVILLE

SURFACE OWNER ARTHUR & BARBARA AYRES ACREAGE 5.37
OIL & GAS ROYALTY OWNER W.E. HUPP, ET AL LEASE ACREAGE 50
LEASE No. 52783

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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 4871
WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT PAUL AMICK
ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS P.O. BOX 1273, CHARLESTON W.V. 25325-1273

FORM IV-6 (8-78)