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: 47-4102755, issued to DOMINION TRANSMISSION INC, 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: AW230
Farm Name: STARCHER, U. E.
API Well Number: 47-4102755
Permit Type: Re-Work
Date Issued: 06/02/2015

Promoting a healthy environment.

4102755W

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.

4102755W

WW-2A
(Rev. 6-07)

RECEIVED
Office of Oil and Gas
FEB 25 2015
WV Department of
Environmental Protection

1). Date: July 24, 2013
2.) Operator's Well Number AW-230
3.) API Well No.: State 47- County 041 - Permit

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: Judith A. Rioch
Address: 15115 Wollett Road
Nelsonville, OH 45764-9676
(b) Name
Address
(c) Name
Address

6) Inspector: Mr. Barry Stollings
Address: P.O. Box 1228
Chapmanville, WV 25508
Telephone: 304-552-4194

5) (a) Coal Operator
Name: Dominion Transmission, Inc.
Address: PO Box 27026
Richmond, VA 23261-7026
(b) Coal Owner(s) with Declaration
Name
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.

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
BEVERLY D. LOWE
Dominion Transmission Inc.
445 West Main Street
Clarksburg, WV 26301
My Commission Expires December 17, 2020

Well Operator: Dominion Transmission, Inc.
By: James D. Blasingame
Its: Director of Storage
Address: 445 West Main Street
Clarksburg, WV 26301
Telephone: 304-669-5007

Subscribed and sworn before me this 20th day of February, 2015

Beverly D. Lowe
Notary Public

My Commission Expires December 17, 2020

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

4102755W

Dominion Transmission AW-230 Permit

Article Number

7160 3901 9846 3216 5041

Service Type CERTIFIED MAIL

Restricted Delivery? (Extra Fee) ☐ Yes

Article Addressed to:

Judith Riach
15115 Wollet Rd.
Nelsonville, OH 45764

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery 4/18/15

C. Signature

X Judith Rieca ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

'S Form 3811, January 2005 Domestic Return Receipt

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address and ZIP+4 below •

DOMINION TRANSMISSION INC
PO BOX 2450
CLARKSBURG WV 26302-2450
Attn: Jason Harshbarger

402755W

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Lewis
Operator Dominion Transmission, Inc. Operator's Well Number AW-230

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

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

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

RECEIVED
Office of Oil and Gas
FEB 25 2015
WV Department of
Environmental Protection

WAIVER

The undersigned coal operator _____/ owner _____/ lessee _____/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

FOR EXECUTION BY A NATURAL PERSON

_____ Date _____
Signature

FOR EXECUTION BY A CORPORATION, ETC.

Company Name Dominion Transmission Inc.
By James D. Blasingame
Its Designated Agent Date
James D Blasingame 2/20/15
Signature Date

Subscribed and sworn before me
this 20th day of February, 2015.
Beverly D. Lowe - Notary Public
My Comission expires December 17 2020

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
BEVERLY D. LOWE
Dominion Transmission Inc.
445 West Main Street
Clarksburg, WV 26301
My Commission Expires December 17, 2020

4102755W

WW-2A1
(Rev. 1/11)

Operator's Well Number AW-230

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
SEE ATTACHED SHEET			

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

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

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

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

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

Well Operator: Dominion Transmission, Inc.
By: James D. Blasingame
Its: Director of Storage

4102755W

Dominion Transmission's Lease Lineage for Well AW-230 (API# 47-041-02755)

AW-230 (LEASE FK000783 – CONSOLIDATED GAS SUPPLY ACQUIRED 100% INTEREST IN OIL AND GAS OF THIS LEASE, SO WE NOW CARRY THIS ACREAGE UNDER FEE LEASE FK079442):
ORIGINAL GRANTORS: L. H. STARCHER AND ERNESTINE STARCHER, HIS WIFE; LUCY W. WISEMAN AND SANFORD F. WISEMAN, HER HUSBAND. 384/512 INTEREST IN FEE IN 100 ACRES.
ORIGINAL GRANTOR: CONSOLIDATED GAS SUPPLY CORPORATION.
CONSOLIDATED GAS SUPPLY CORPORATION TO: CONSOLIDATED GAS TRANSMISSION CORPORATION BY ASSIGNMENT DTD 3-1-84 EFFECTIVE 1-1-84. REC. B. 427 P. 538. MISC 6296
BY CORPORATE NAME CHANGE EFFECTIVE 1-1-88, CONSOLIDATED GAS TRANSMISSION CORPORATION IS NOW CNG TRANSMISSION CORPORATION.
ABSTRACT - BRING-DOWN REQUESTED 2-87.A RESULT OF A MERGER, CNG TRANSMISSION CORPORATION CHANGED ITS NAME TO DOMINION TRANSMISSION, INC., EFFECTIVE APRIL 11, 2000.

Royalty Information:

Dominion Transmission owns this lease, therefore has 12.5% Royalty Interest and 87.5% Working Interest.

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

4102755SW

WW-2B1
(5-12)

Well No. AW-230

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

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

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

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

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

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

Certified Laboratory Name REIC
Sampling Contractor MSES Consultants, Inc.

Well Operator Dominion Transmission, Inc.
Address 445 West Main Street
Clarksburg, WV 26301
Telephone 304-669-5007

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

SEE ATTACHMENT.

RECEIVED
Office of Oil and Gas
FEB 25 2015
WV Department of
Environmental Protection

4(0 27559W

ATTACHMENT

Dominion Transmission, Inc
Existing Well AW-230
Freemans Creek District, Lewis County, WV

July 24, 2013

RECEIVED
Office of Oil and Gas

FEB 25 2015

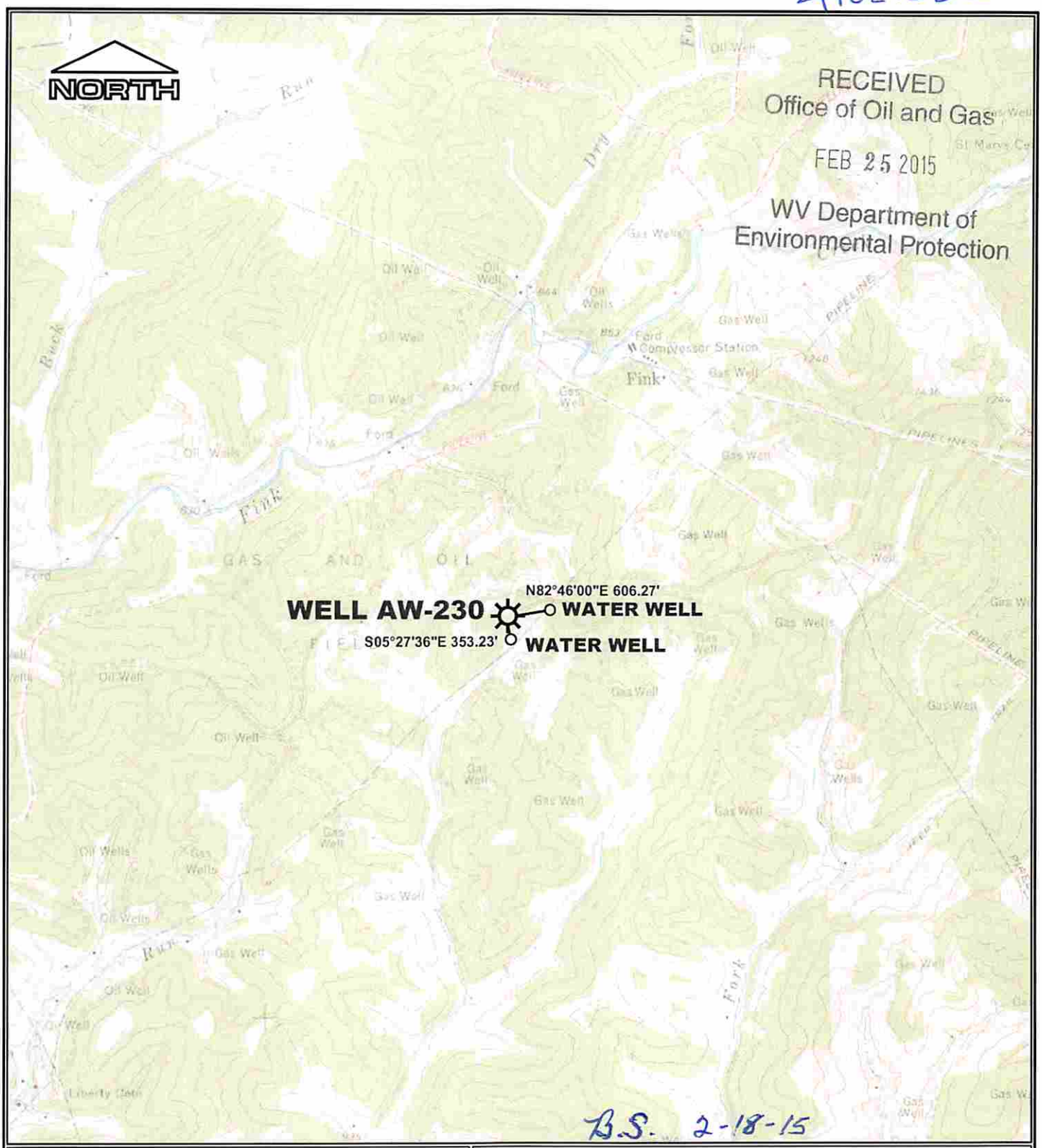
WV Department of
Environmental Protection

Water Well Locations

Matthew D. & Linda S. Richards
4481 Issacs Fork Road
Camden, WV 26338

Judith A. Rioch
15115 Wollett Road
Nelsonville, OH 45764

4102755W



B.S. 2-18-15

2000' 1000' 0 2000'

SCALE : 1" = 2000'

REFERENCE

U.S.G.S TOPOGRAPHIC MAP 7.5'
VADIS, W.V. 1964 PHOTOREVISED 1976

12-502-WellAW230-WaterWellExhibit

DOMINION TRANSMISSION, INC.

WELL AW-230
SURROUNDING WATER WELLS

Drawn by	KLA	7/13	Scale: AS SHOWN
Engineer	HDW	7/13	
Checked by	RVS	7/13	
		Date	1 of 1

Prepared by MSES consultants, inc.

4102755W

WW - 2B
(Rev. 8/10)

RECEIVED
Office of Oil and Gas

FEB 25 2015
WV Department of
Environmental Protection

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

1) Well Operator: Dominion Transmission, Inc.

307048	Lewis	Freemans Creek	Vadis 7.5'
Operator ID	County	District	Quadrangle

2) Operator's Well Number: AW-230 3) Elevation: 1198.20'

4) Well Type: (a) Oil____ or Gas X

(b) If Gas: Production ____ / Underground Storage X

Deep ____ / Shallow X

5) Proposed Target Formation(s): Gantz Proposed Target Depth: 2488'-2516'
6) Proposed Total Depth: 2536' Feet Formation at Proposed Total Depth: Gantz "A" Sand
7) Approximate fresh water strata depths: 250'
8) Approximate salt water depths: 1532'

9) Approximate coal seam depths: 648'-653'

10) Approximate void depths,(coal, Karst, other): N/A

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)
(SEE ATTACHED SHEET)

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	10 3/4"	N/A	N/A	148	0	
Fresh Water	8 5/8"	N/A	N/A	1140	0	
Coal						
Intermediate	7"	K-55	20#	2194	2194	Existing
Production	5 1/2"	K-55	17#	2289	2289	Existing
Tubing	3 1/2"	J-55	9.2#	2274	2274	152 cu. ft (5% excess)
Liners						

Packers: Kind: Formation packer set inside of 5.5" casing and cement to surface
Sizes: 5.5" Packer set with pump out cement sleeve on top
Depths Set 2274'

4102755W

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

Well AW230 (REC)
API# 47-041-02755, U. F. Starcher
FKLC Storage, Lewis County, WV
2015 Rework Procedure

Purpose:

The reason for this rework is to evaluate the annular gas buildup behind the casing patches in the 5-1/2" casing by sealing off the storage interval and perforating all of casing patches to allow flow testing and pressure analysis. This information will be used to determine if the well will be reworked or plugged and abandoned in 2012. ?

Well Information:

7" 20# casing set at 2194' in 1901 (no cement recorded)
5-1/2" 17# K55 casing set at 2289' in 1943 (cement squeezed to surface from 1365')
Casing patches on 5-1/2" casing at **2029-2049', 1935-1955', 1815-1835', 1602-1622', 1354'-1374', 840-870', 655-675', 485-505', 208-228' (installed 1996)**
Gantz OH completion 2488' to 2516' (shot w/ 30qts)
Original TD 2840' plugged back from 2677' to 2536' with cement

Procedure:

1. Complete One Call and Pipeline Crossing Notification Process.
2. Remove existing lead line, install tapped blind flange over pipeline (Southern area support).
3. Prepare roads and location as needed to allow for service rig to access location per E&S Plan. Install all required E&S controls. Stockpile topsoil and seed and mulch pile. Excavate around well and install well cellar around wellhead and line with plastic or seal off bottom with cement.
4. Move in flow back tank and rig up flow iron to well. Record well test of Gantz (stabilized choke flow)
5. MIRU logging truck pull CCL/GR log. Determine best location and set mechanical bridge plug in 5-1/2" casing below bottom patch and blow well down to tank. Record initial well pressure prior to blowing down well.
6. Perforate each patch and record well pressures and flow after between perforating intervals.
7. Run production logs on the well to determine flow from each zone.
8. Load well with fluid treated with biocide and corrosion inhibitor and run bond log on 5-1/2 casing.
9. Notify State Oil and Gas Inspector of rig move. MIRU service rig, mud tank, and auxiliary equipment. Install 7-1/16" 2M+ BOP with and test to 2000psi.
10. Build mud system to desired weight based on field pressure.
11. Based on Bond Log results and any possible annular gas seen at surface during top joint change out prepare to cut window in 5-1/2" and 7" casing.
12. Clean out well to TD to 2,536'
13. Clean and inspect threads on 3-1/2" 10RD 9.2# J/K-55 tubing.
14. Pick up 5-1/2" packer and 3-1/2" pump out cement sleeve and 3-1/2" tubing and set at 2,274'
15. MIRU cementing unit. RU on 3-1/2" tubing. Circulate wellbore for 1 hour with mud taking returns through 2" outlets in casing head. Cement well to surface as follows: 10bbls of mud flush, Cement –

Class A 15.4 ppg. 10% excess inside casing if window is cut pump 15% extra. Displace with fresh water. Cement weight should be based on maximum differential pressure of packer. Secure well. WOC a minimum of 12 hrs.

16. Install 7-1/16" 2M x 3-1/8" 2M DSA ,3-1/8" 2M Master Gate Valve, 3-1/8" 2M x 3-1/8" 2M Studded Tee, and 3-1/8" 2M Blind Flange tapped 3-1/2" 8RD, 3-1/8" Side Gate Valve and 4-1/16" x 3-1/8" SSA
17. Bond Log 3-1/2".
18. Rig up 4-1/16" with 1502 integral flange and pressure up to pump out disc in cementing sleeve.
19. Rig up and swab well down until it kicks off, flow well until it cleans up.
20. RDMO service rig and haul fluid to disposal
21. MIRU logging truck and run casing inspection suite.
22. Reclaim site.

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

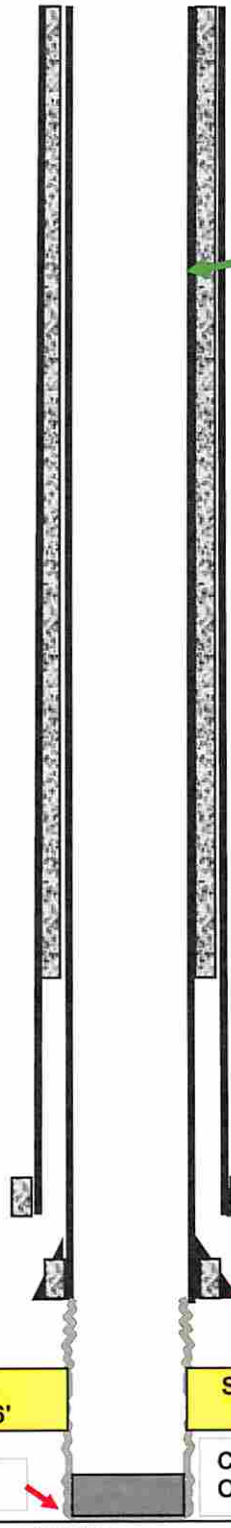
4102755W

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

Fink Storage
AW-230 [REC]
Permit #47-041-02755
Elev = 1186'[GL]



Casing patches on the 5 1/2" casing @ 2029-2049', 1935-1955', 1815-1835', 1602-1622', 1354'-1374', 840-870', 655-675', 485-505', 208-228' - 1996

7" Csg @ 2194' [1901] No Cement Record.

5 1/2" 17# K55 Csg @ 2289' [1943] CTS from 1365'

Gantz 2488'- 2516'

Shot with 30 qts

Current TD: 2536'
Original TD: 2840'

Cement plug from 2677-2536'

Well Name & Number:		AW-230			Lease	U. F. Starcher			
County or Parish:		Lewis		State/Prov.	WV		Country:	USA	
Perforations: (MD)					(TVD)	2536'			
Angle/Perfs		Angle @KOP and Depth					KOP TVD		
BHP:		BHT:		Completion Fluid:					
FWHP:		FBHP:		FWHT:		FBHT:		Other:	
Date Completed:		11/29/01						RKB:	
Prepared By:		Jeff Renner			Last Revision Date:		08/20/13		

4102755W

WW-9
Rev. 5/10

Page _____ of _____
API Number 47 - 041 - _____
Operator's Well No. AW-230

RECEIVED
Office of Oil and Gas

FEB 25 2015

WV Department of
Environmental Protection

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 Dominion Transmission, Inc. OP Code 307048

Watershed Walnut Fork of Fink Creek Quadrangle Vadis, WV 7.5'

Elevation 1198.20' County Lewis District Freemans Creek

Description of anticipated Pit Waste: None - Tanks to be used in place of pit

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.? N/A

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

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application
_____ Underground Injection (UIC Permit Number _____)
_____ Reuse (at API Number _____)
X Off Site Disposal (Supply form WW-9 for disposal location)
_____ Other (Explain Meadowfill Landfill, Bridgeport, WV

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. N/A
-If oil based, what type? Synthetic, petroleum, etc. N/A
Additives to be used? Potassium Chloride and Gel
Will closed loop system be used ? N/A
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A
-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust N/A
-Landfill or offsite name/permit number? N/A

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 D. Blasingame

Company Official (Typed Name) James D. Blasingame

Company Official Title Director of Storage

Subscribed and sworn before me this 20th day of February, 2015

Beverly D. Lowe Notary Public

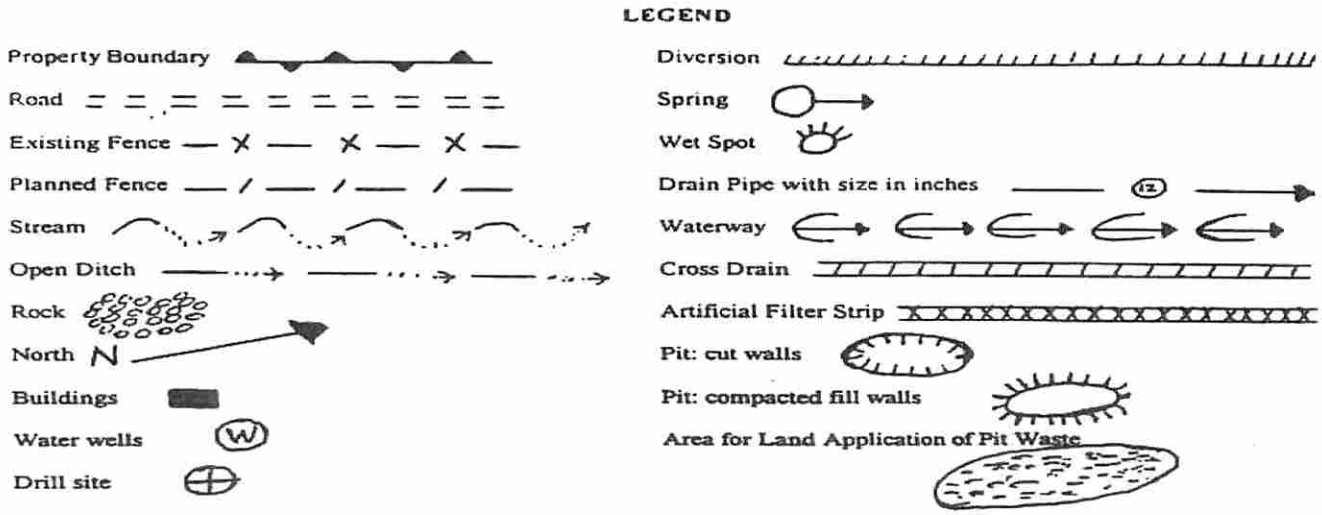
My commission expires December 17, 2020

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
BEVERLY D. LOWE
Dominion Transmission Inc.
445 West Main Street
Clarksburg, WV 26301
My Commission Expires December 17, 2020

4102755W

Form WW-9

Operator's Well No. AW-230



Proposed Revegetation Treatment: Acres Disturbed 1.00 +- Prevegetation pH _____

Lime 3.0 Tons/acre or to correct to pH 6.5

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

Mulch Hay or Straw Tons/acre

RECEIVED
Office of Oil and Gas
FEB 25 2015
WV Department of
Environmental Protection

Seed Mixtures

Area I Seed Type	lbs/acre	Area II Seed Type	lbs/acre
Timothy	3	Timothy	3
Orchard Grass	12	Orchard Grass	12
White Clover	4	White Clover	4

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

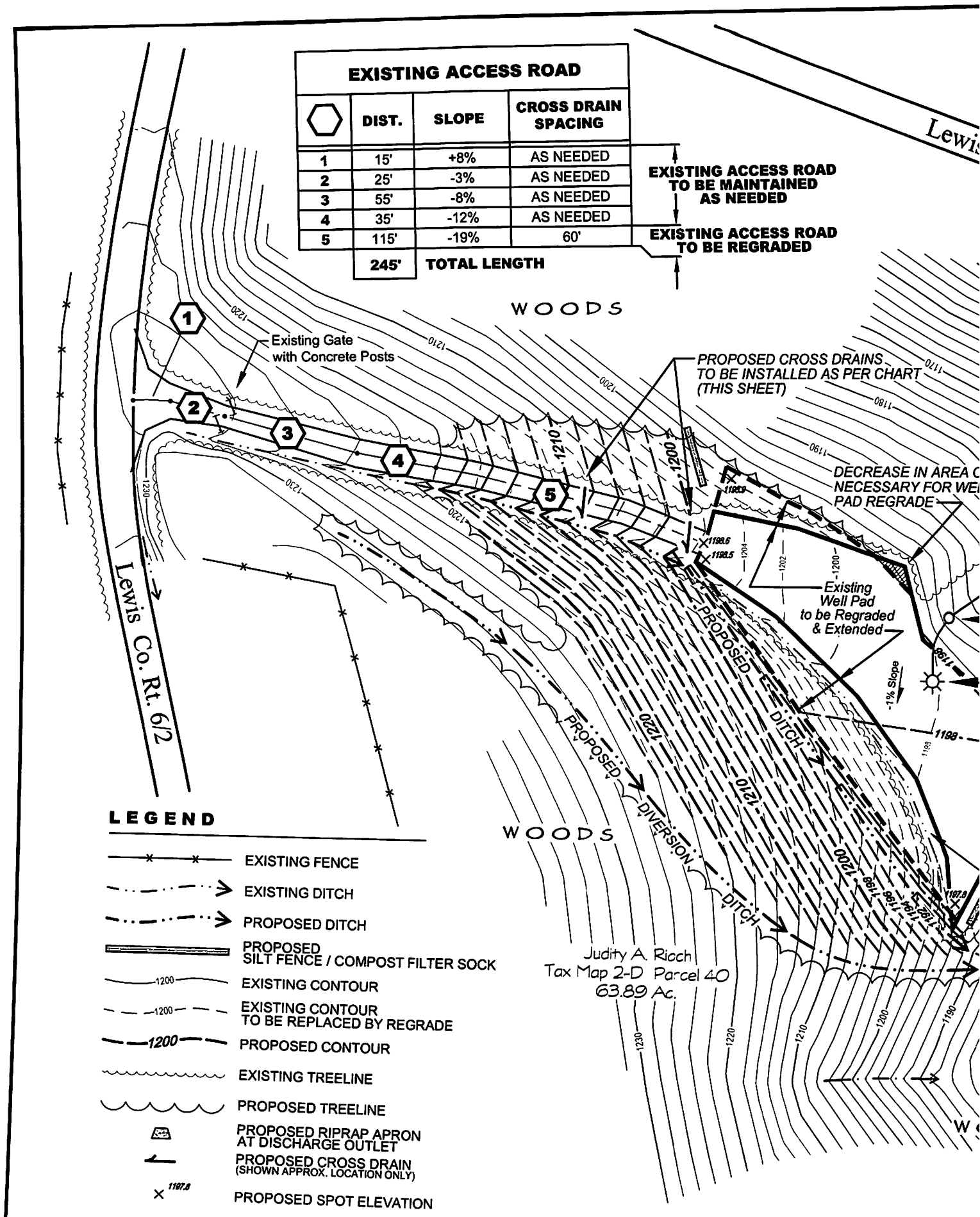
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Barry Stillings

Comments: _____

Title: inspector Date: 2-18-15

Field Reviewed? (_____) Yes (X) No

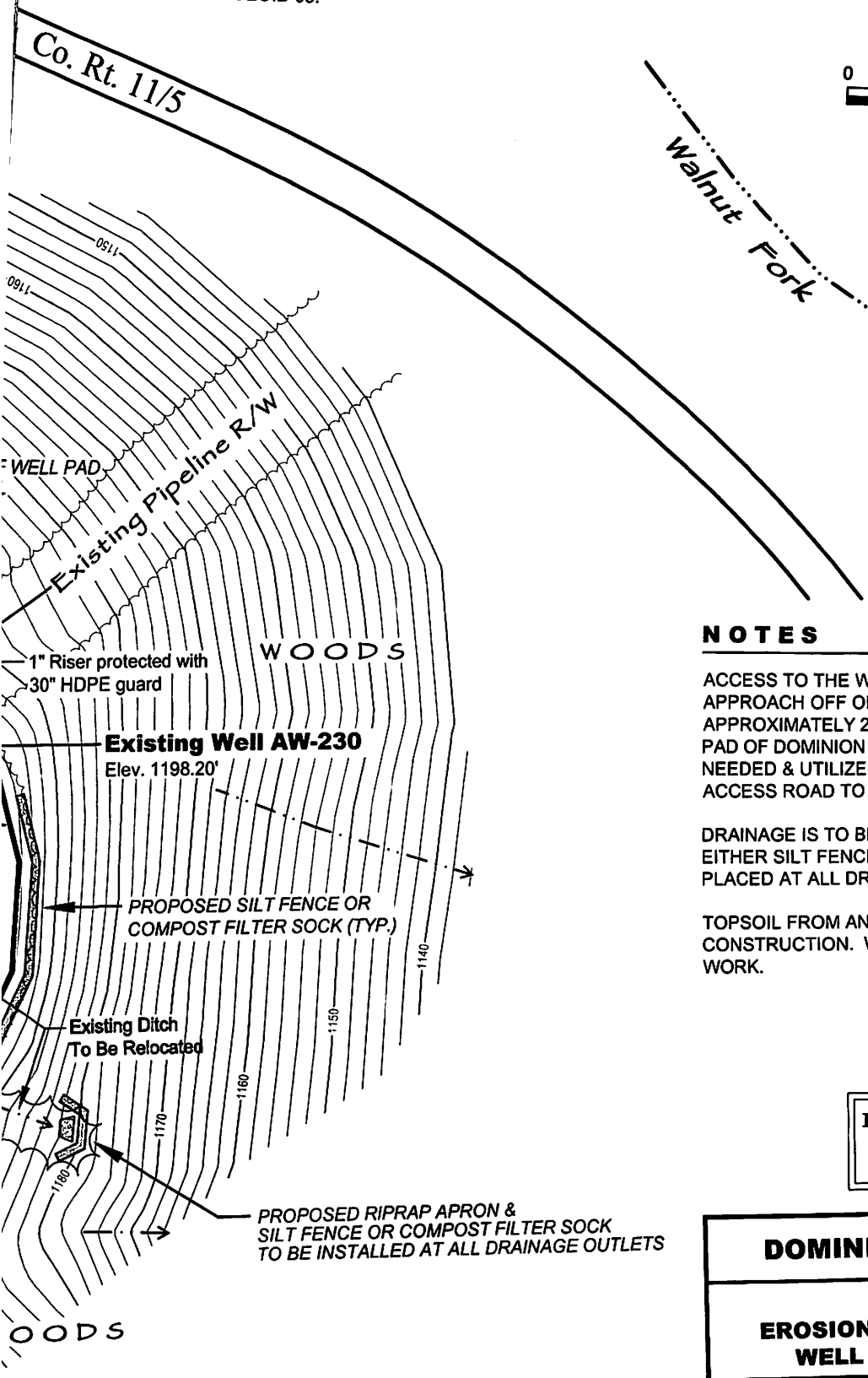


CAD FILE NO. 12-502-WellAW230-E&S

4102755W

REFERENCE

SURVEY HORIZONTAL DATUM WEST VIRGINIA STATE PLANE COORDINATES NAD 83 SOUTH ZONE. SURVEY VERTICAL DATUM NAVD 88 GEOID 03.



NORTH

0 50' 100'

SCALE : 1" = 50'
CONTOUR INTERVAL : 2 FEET

RECEIVED
Office of Oil and Gas
FEB 25 2015
WV Department of Environmental Protection

NOTES

ACCESS TO THE WELL SITE IS TO BE GAINED USING AN EXISTING APPROACH OFF OF LEWIS CO. RT. 6/2. FROM THAT POINT, APPROXIMATELY 245' OF EXISTING ACCESS ROAD TO THE WELL PAD OF DOMINION WELL AW-230 IS TO BE UPGRADED AS NEEDED & UTILIZED, WITH THE LAST 115' OF THAT EXISTING ACCESS ROAD TO REGRADED AS SHOWN & NOTED.

DRAINAGE IS TO BE MAINTAINED. ROCK RIP-RAP APRON AND EITHER SILT FENCE OR COMPOST FILTER SOCK ARE TO BE PLACED AT ALL DRAINAGE OUTLETS.

TOPSOIL FROM ANY EXCAVATION IS TO BE STOCKPILED DURING CONSTRUCTION. WELL SITE IS TO BE RECLAIMED AFTER WELL WORK.

Freemans Creek District
Lewis County
West Virginia

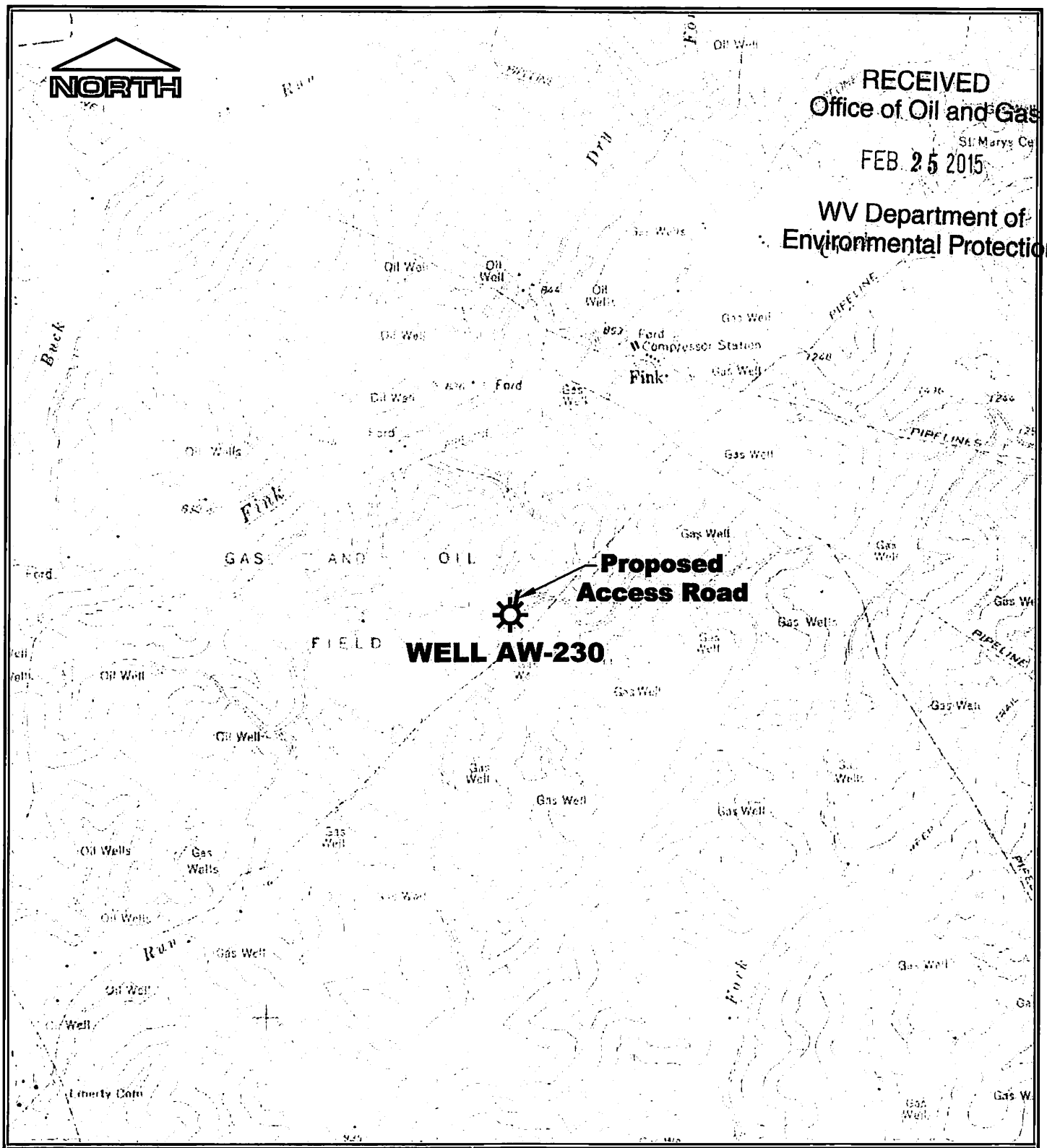
DOMINION TRANSMISSION, INC.

WELL #AW-230
EROSION & SEDIMENTATION CONTROL
WELL LOCATION & ACCESS ROAD

Drawn by	SARC	4/13	Scale AS SHOWN
Engineer	JRH	4/13	
Checked by	RVS	4/13	Sheet 1 of 1
		Date	

Prepared by MSES consultants, inc.

4102755 W



RECEIVED
Office of Oil and Gas
St. Marys Ce
FEB 25 2015
WV Department of
Environmental Protection

2000' 1000' 0 2000'

SCALE : 1" = 2000'

REFERENCE

U.S.G.S TOPOGRAPHIC MAP 7.5'
VADIS, W.V. 1964 PHOTOREVISED 1976

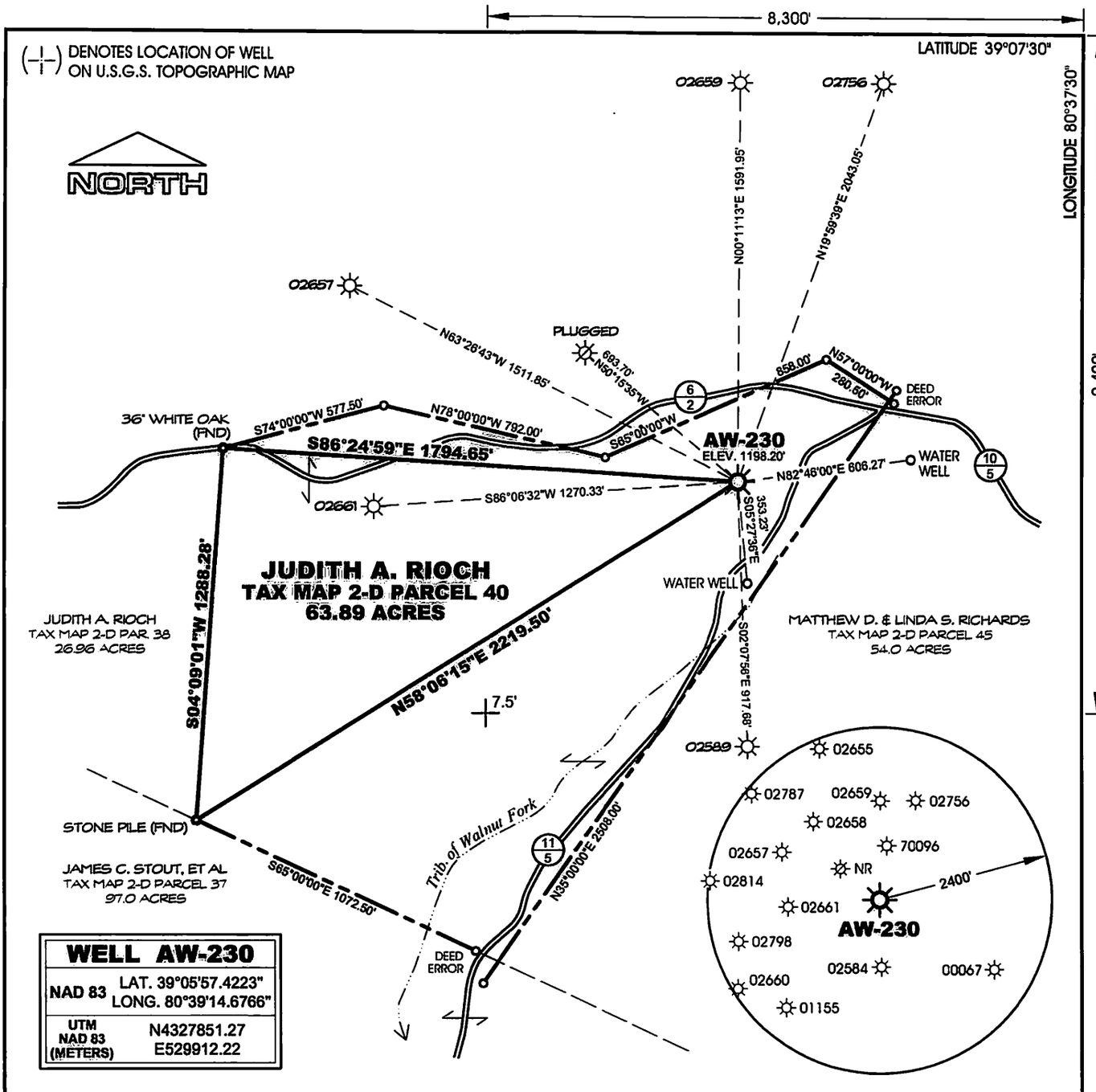
12-502-WellAW230-WellExhibit

DOMINION TRANSMISSION, INC.

WELL AW-230
LOCATION MAP

Drawn by	KLA	7/13	Scale: AS SHOWN
Engineer	HDW	7/13	
Checked by	RVS	7/13	
		Date	1 of 1

Prepared by MSES consultants, inc.



WELL AW-230	
NAD 83	LAT. 39°05'57.4223" LONG. 80°39'14.6766"
UTM NAD 83 (METERS)	N4327851.27 E529912.22

MSES consultants, inc.

FILE NO. 12-502-WellAW230-WellPlat
DRAWN BY HDW / MVS
SCALE 1" = 500'
MIN. DEGREE OF ACCURACY 1 IN 2500
PROVEN SOURCE OF ELEVATION:
DGPS (SUBMETER MAPPING GRADE)

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT IT SHOWS ALL INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) Hershel Dale Ward
R.P.E. _____ P.S. 995

HERSHEL D. WARD LICENSED No. 995 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE JULY 24 20 13
OPERATOR'S WELL NO. AW-230
API WELL NO.
47 041 02755 W
STATE COUNTY PERMIT NO.

WELL TYPE: OIL ☐ GAS ☒ LIQUID INJECTION ☐ WASTE DISPOSAL ☐
IF "GAS", PRODUCTION ☐ STORAGE ☒ DEEP ☐ SHALLOW ☐

LOCATION: ELEVATION 1198.20' WATERSHED WALNUT FORK OF FINK CREEK
DISTRICT FREEMANS CREEK COUNTY LEWIS
QUADRANGLE VADIS, WV 7.5' NEAREST TOWN FINK
SURFACE OWNER JUDITH A. RIOCH ACREAGE 63.89
OIL & GAS ROYALTY OWNER U. E. STARCHER, ET AL LEASE ACREAGE 100.00
LEASE NO. FK079442

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

TARGET FORMATION GANTZ ESTIMATED DEPTH 2516'
WELL OPERATOR DOMINION TRANSMISSION, INC. DESIGNATED AGENT MR. JAMES D. BLASINGAME
ADDRESS 445 WEST MAIN STREET ADDRESS 445 WEST MAIN STREET
CLARKSBURG, WV 26301 CLARKSBURG, WV 26301

COUNTY 041
PERMIT NO. 02755

FORM IV-6