



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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, July 29, 2019
WELL WORK PERMIT
Vertical / Re-Work

DOMINION ENERGY TRANSMISSION, INC.
925 WHITE OAKS BOULEVARD
BRIDGEPORT, WV 26330

Re: Permit approval for BW-8109
47-033-03089-00-00

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

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

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

James A. Martin
Chief

Operator's Well Number: BW-8109
Farm Name: BRADLEY S. & TERRI L. STUBBS
U.S. WELL NUMBER: 47-033-03089-00-00
Vertical Re-Work
Date Issued: 7/29/2019

H

47-033-03089W

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.

June, 18th 2019

By U.S Mail, Certified Delivery

7018 0680 0000 8051 9087

WV DEP
Office of Oil and Gas
601 57th Street
Charleston, WV 25304
Art: Jeff McLaughlin OOG

RE: Permit BW-8109 (47-033-03089) Rework Application

To the Office of Oil and Gas,

Dominion Energy Transmission, Inc. is submitting the permit application packet for reworking BW-8109 (47-033-03089)

The following documents are enclosed:

- Check for rework application (EF0000113488)
- Permit application packet
- Coal database review
- Mylar
- Copies of certified mail receipts from landowners
- Topographic map section

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Office of Oil and Gas
JUN 21 2019
WV Department of
Environmental Protection

The documents enclosed are for your records and review. If you should have any questions or comments related to the rework operations, please contact me by the means of the information listed below.

Sincerely,



J. Daniel Frost

(C): 681-622-1948

(E): john.d.frost@dominionenergy.com

Check # 314016
Amt \$650
Date 6/15/19

47-033-03089 W

CK# 314049
\$650⁰⁰

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: Dominion Energy Transmission, Inc. 307048 Harrison Union West Milford
Operator ID County District Quadrangle

2) Operator's Well Number: BW-8109 3) Elevation: 1264' 1265'

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

5) Proposed Target Formation(s): Gantz Proposed Target Depth: 1855'
6) Proposed Total Depth: 1870' Feet Formation at Proposed Total Depth: Gantz
7) Approximate fresh water strata depths: n/a
8) Approximate salt water depths: n/a

9) Approximate coal seam depths: n/a SPW
10) Approximate void depths, (coal, Karst, other): N/A 5/6/2019

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)
Please see attached work plan. CONVERT TO OBSERVATION WELL

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor						
Fresh Water	13-3/8"	K-55	48#/FT	N/A	241'	CTS
Coal	8-5/8"	K-55	24#/FT	N/A	2152'	700 sks
Intermediate						
Production	4-1/2"	J-55	10.5#/FT	N/A	4847'	606 sks
Tubing	2-3/8"	J-55	4.6#/FT	N/A	4701	N/A
Liners						

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Packers: Kind: _____
Sizes: _____
Depths Set _____

WV Department of Environmental Protection

1. Phase 1- Preliminary activities

1. File for and receive necessary regulatory permits
2. Upgrade site and access road; disconnect and remove any unnecessary production equipment
3. Install any remaining necessary well site containment

2. Phase 2- Well work activities

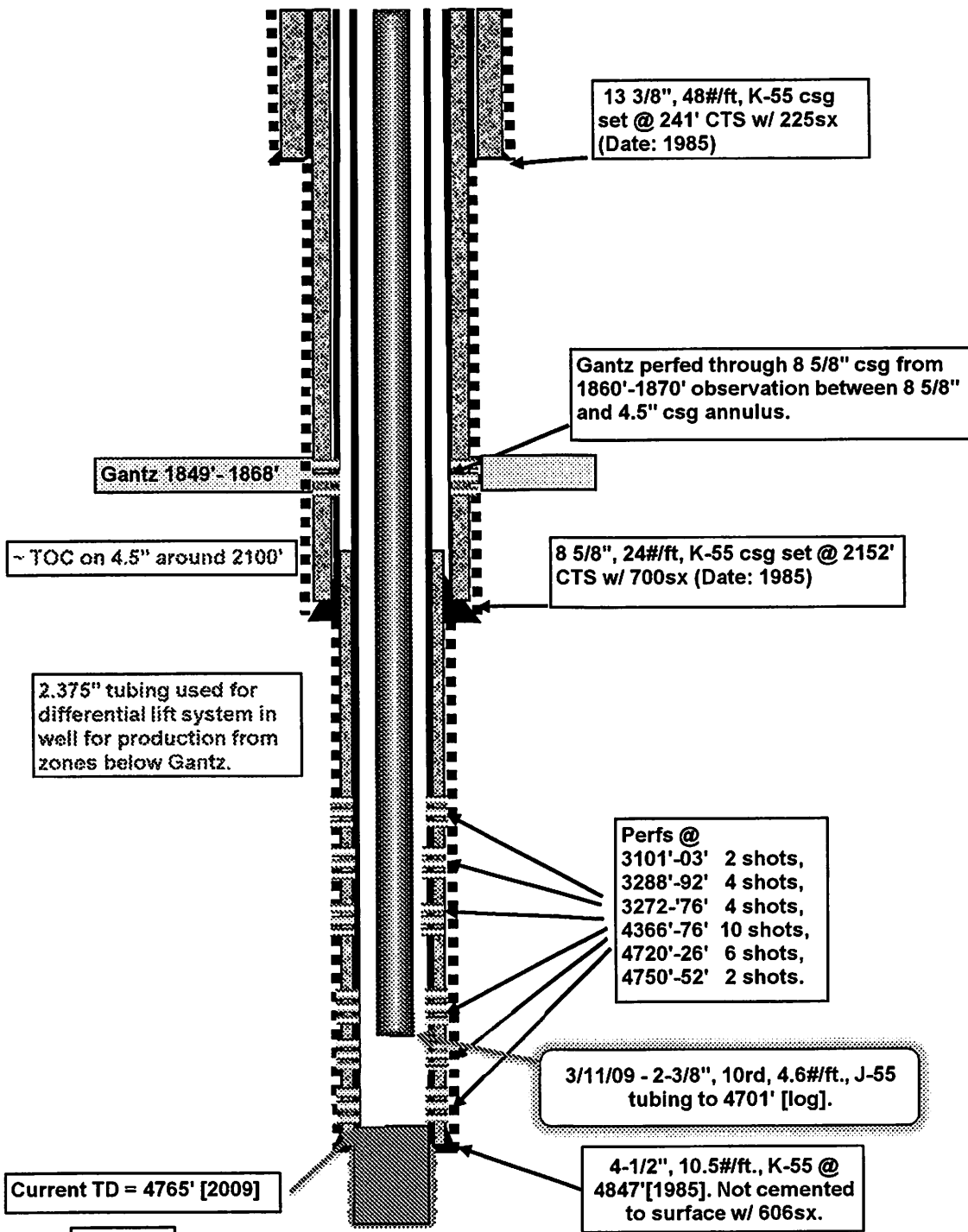
1. MIRU rig and any other ancillary equipment
2. Pull 2-3/8" tubing
3. Log 4-1/2" casing
4. Install all BOPE equipment
5. TIH with work string to above td
6. Spot cement balance plug from bottom of well to immediately below Gantz, satisfying the requirements of §22-6-24 (a) 13.4.a.1-5
7. TOOH with work string
8. WOC
9. Tag and verify the cement plug top
10. Perforate 4-1/2" casing immediately below Gantz
11. Set cement retainer immediately above 4-1/2" squeeze perforations
12. Squeeze cement into 4-1/2"x7" annulus. Designed to be to surface.
13. WOC
14. TOOH and move out rig
15. RDMO service rig and ancillary equipment
16. Perform top joint and well head change out activities
17. Bond log 4-1/2" casing
18. Perforate 4-1/2" casing across Gantz formation
19. Swab 4-1/2" casing
20. Remove all environmental controls and assure 70% growth of vegetation

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Environmental Protection

**Kennedy Storage
BW-8109[OBS]
Permit #47-033-03089
Elev = 1264'[GL]**



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JUN 21 2019

WV Department of
Environmental Protection

Well Name & Number:		BW-8109		Lease	Guinn Minter		
County or Parish:		Harrison	State/Prov.	WV	Country:	USA	
Perforations: (MD)		(TVD)			4903'		
Angle/Perfs	Angle @KOP and Depth					KOP TVD	
BHP:	BHT:	Completion Fluid:					
FWHP:	FBHP:	FWHT:	FBHT:	Other:			
Date Completed:	09/23/16					RKB:	
Prepared By:	Matthew Goralczyk/Dick Cross			Last Revision Date:	08/09/09		

RECEIVED
SEP 6 1985



IV-35
(Rev 8-81) DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date August 21, 1985
Operator's
Well No. 8109
Farm Guinn Minter
API No. 47 - 033 - 3089-Frac.

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal /
(If "Gas," Production X / Underground Storage / Deep / Shallow /)
LOCATION: Elevation: 1264' Watershed Kincheloe Creek
District: Union County Harrison Quadrangle West Milford

COMPANY Consolidated Gas Transmission Corp.
ADDRESS 445 W. Main St., Clarksburg, WV
DESIGNATED AGENT W. A. Fox
ADDRESS 445 W. Main St., Clarksburg, WV
SURFACE OWNER David Allman
ADDRESS Rt. 1, Box 185, Jane Lew, WV 26378
MINERAL RIGHTS OWNER Lucy M. Stewart
ADDRESS Rt. 4, Box 636, Clarksburg, WV 26301
OIL AND GAS INSPECTOR FOR THIS WORK Stephen
Casey Rt. 2, Box 232-D
ADDRESS Jane Lew, WV 26378
PERMIT ISSUED July 3, 1985
DRILLING COMMENCED July 11, 1985
DRILLING COMPLETED July 16, 1985
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing Tubing	Used in Drilling	Left in Well	Cement Fill up Cu. ft.
Size 20-16 Cond.			
13 3/8 13-10"	241	241	225 SKS. To surface
9 5/8			
8 5/8	2152	2152	700 Skav
7			
5 1/2			
4 1/2	4847	4847	606 SKS.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 4698-4753 feet
Depth of completed well 4869 feet Rotary X / Cable Tools
Water strata depth: Fresh None feet; Salt feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Alexander, Benson & Balltown Pay zone depth see perf. feet
Gas: Initial open flow 267 Mcf/d Oil: Initial open flow Bbl/d
Final open flow 1750 Mcf/d Final open flow Bbl/d

HARR 3089-F

RAC

Time of open flow between initial and final tests 2 hours
 Static rock pressure 1200 psig (surface measurement) after 14 ^{days} ~~hours~~ shut in
 (If applicable due to multiple completion--)
 Second producing formation _____ Pay zone depth _____ feet
 Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ hours
 Static rock pressure _____ psig (surface measurement) after _____ hours shut in

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DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Alexander fractured with 75,000# sand, 700 bbls. of water & 500 gal. 15% HCL acid.
Perforated 4720-4726 with 6 holes, 4750-4752 with 2 holes & 4783-4785 with 2 holes.

Benson fractured with 75,000# sand, 700 bbls. of water & 750 gal. 15% HCL acid.
Perforated 4366-4376 with 10 holes.

Balltown fractured with 75,000# sand, 700 bbls of water & 750 gal. 15% HCL acid.
Perforated 3272-3276 with 4 holes, 3288-3292 with 4 holes & 3301-3303 with 2 holes.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Salt Sand			790	970	
Injun			1521	1675	
Fifty Foot			1950	1975	
Thirty Foot			2083	2090	
Stray			2135	2142	
Gordon			2151	2182	
Fourth			2192	2215	
Fifth			2342	2352	
Total depth of old hole				2400	
New hole					
Shale		Grey	2400	3278	
Balltown		Brown	3278	3305	
Sand & Shale		Grey	3305	4375	
Sand		Grey	4375	4430	
Sand & Shale		Grey	4430	4903	TD
Gamma Ray Tops					
Little Lips			1446	1469	
Big Lime			1487	- -	
Big Injun			- -	1667	
Gantz			1849	1869	
Gantz A			1884	1902	
Fifty Foot			1956	1981	
Thirty Foot			2084	2096	
Upper Speechley			2930	2965	
Speechley			3046	3062	
Balltown			3141	3323	
Benson			4364	4380	
Alexander			4698	4753	
Drillers T.D.				4903	
Logging T.D.				4869	

(Attach separate sheets as necessary)

WELL No. BW-8109 NAME: **Minter/Guinn** LEASE No. **52896** ACRES: **362** MAP No.

District:		Formation		Top	Bottom	Gas	Oil	Water	Casing Record							Pulled			
Township:	Union	Native Coal							Date	Size	Wt.	Grade	Amount	Set At	Cem Result	Cem Sacks	Date	Amt	
County:	Harrison	Pittsburgh Coal							1985	13.375	48	K-55	243	240.6	CTS	225			
State:	WV	Little Dunkard							1985	8.625	24	K-55	2165.45	2152.2	CTS	700			
Located:		Big Dunkard							1985	4.5	10.5	K-55	4882	4857	NTS	606			
Elevation:	1264	G.L.	K.B.	Gas Sand					3/11/09	2.375	4.6	J-55	4701*						
W.H. Latitude:	39.15445	D.F.		First Salt Sand	790	970	[Salt Sd]		1916	10 3/4			250					42	
W.H. Longitude:	-80.46278			Second Salt Sand					1916	8 5/8			987					987	
API No.	47-033-03089			Third Salt Sand					1916	7			1537					1537	
Well Type:	OBS			Maxon					1916	5 1/2			2152					2069	
Storage Horizon:	Gantz			Little Lime	1446	1469			Shoe and Packer Data							Perforating Data			
Contractor:	Frank W. Porter			Big Lime	1487	?			Date	Size	Type	Set	Pulled	Top	Bottom	Holes	Size		
Coal Owners:				Big Injun Sand	1521	1667			1916	8x6	Bottom Hole	1525	?	1860	1870	1			
Agreement Dated:				Squaw Sand					1916	6x5	Bottom Hole	2137	?	4783	4785	2			
Area Purchased:				Gantz Sand	1849	1869			?	2x5	Anchor	2155	Yes	4750	4752	2			
Drilling Commenced:	7/17/1916[Redrill-5/9/85]			Gantz "A" Sand	1884	1902			5/16/85	13 3/8	Guide Shoe	241	No	4720	4726	6			
Drilling Completed:	9/23/1916[Redrill-7/29/85]			Fifty Foot Sand	1956	1981			6/25/85	8 5/8	Float Shoe	2152	No	4366	4376	10			
Well Completed:	9/23/1916			Thirty Foot Sand	2084	2096			7/15/85	4 1/2	Float Shoe	4851	No	3272	3276	4			
Turned In Line:				Gordon Stray Sand	2135	2142			1985	4 1/2	Latchdown plug	4835	No	3288	3292	4			
Line Number:				Gordon Sand	2151	2182	2169							3301	3303	2			
Purchased From:				Fourth Sand	2192	2215			Logging Data							Wellhead Data			
Date:				Fifth Sand	2342	2352	2344		Date	Types	Interval	Comments	Wellhead Date	3/11/2009					
Sold To:				Upper Speechley	2930	2965			12-Mar-85	Caliper	0-240	Allegheny	Gate Type						
Date:				Speechley Sand	3046	3062			30-May-85	GR/Dens/Ind	100-2160	Schlumberger	Gate Rating	2M					
Disconnected:	5/24/1948			Balltown Sand	3141	3323			28-Jun-85	GR/CBL/VDL	0-2141	Schlumberger	Gate Size						
Date Plugged:	6/25/1948			Riley Sand					15-Jul-85	GRN/Dens/Ind	1600-4867	Schlumberger	Head Type						
Classified:				Benson Sand	4364	4380			15-Jul-85	Temperature	1600-4765	Schlumberger	Head Rating						
				Alexander	4698	4753			15-Jul-85	Cyberlook	2300-4800	Schlumberger	Top Joint Date						
				Helderberg Lime					15-Jul-85	Caliper	1600-4855	Schlumberger							
				Newberg					4-Mar-08	GR/CCL Photon	2000-4710	Baker Atlas	FERC Data						
				Above from GR log.					6-Mar-09	GRNT	0-4763.5	Baker Atlas	FERC Authorized						
				Total Depth Driller:					6-Mar-09	Magnelog	0-4710	Baker Atlas	FERC Cite(s)						
				Total Depth Logger:					6-Mar-09	MVRT	0-1878	Baker Atlas	Docket No.						
				Plugged Back To:					9-Mar-09	MVRT	0-4810	Baker Atlas	Proof/Notes						
				Rework Date:	7/29/85				11-Mar-09	GR/Correlation	4300-4761.5	Baker Atlas							
				Current TD	4903														
				Deepest TD	4903														
				Original TD	2353														

VOLUME and PRESSURE

Date	Reading	Liquid	Opening	Minute Rise					Hours	Rock	Volume	Sand
				1	5	10	30	60				
20-Sep-16	64/10	Water	2"							380,000	Gordon	
25-Sep-16	8/10	Mercury	5"	100	240	280	285	295	305	3,108,000	Gordon & Fifth	
21-Jul-17	30/10	Water	2"	5	20	45	120	225	380	260,640	Gordon & Fifth	
21-Oct-18	70/10	Water	2"							413,740	Fifth	
4-Nov-18	20/10	Mercury	2"	75	120	145	160	170	200	786,720	Fifth	
3-Feb-23	16/10	Water	2"	25	56	66	73	73		190,080	Fifth	
23-Mar-25	6/10	Water	2"	15	33	40	45	46		115,968	Fifth	
1-Dec-25	3/10	Water	2"	10	31	40	50	50	50	83,040	Fifth	
11-Oct-27	46/10	Water	1"	8	26	36	49	44		80,472	Fifth	
20-Aug-29	30/10	Water	1"	5	16	23	30	30		65,160	Fifth	
30-Oct-29	18/10	Water	1"	7	21	26	32	34		50,400	Fifth	
26-Mar-30	18/10	Water	1"							50,400	Fifth	
5-Sep-30	NT			0	0	0	5	8	62		Upper Sands	
5-Sep-30	50/10	Water	1"	2	6	12	22	27	38	83,680	Gordon & Fifth	
4-Dec-30	50/10	Water	1"	2	8	13	22	26		82,680	Gordon & Fifth	
3-Apr-31	66/10	Water	1"	2	10	13	23	28		61,199	Gordon & Fifth	
28-Jun-32	30/10	Water	1 1/4"	5	11	16	23	26		64,410	Gordon & Fifth	
2-Apr-43	18/10	Water	1"	0	4	7	16	23		31,950	Gordon & Fifth	

Shooting Record

Date	Qts	Sand	Vol. Before	Vol. After
10/12/1918	30	Fifth	413,740	786,720

REMARKS

Redrilled & Recompleted 07/29/1985 as Dual OBS - Prod. Perfed from 3301'-03' (BT), 3288'-92' (BT), 3272'-76' (BT), 4366'-76' (BN), 4720'-26' (AX), 4750'-52' (AX) and 4783'-4785' (AX). Grv monitored thru 4.5"/8.625" annulus. Prod up thru 4.5" & tubing.

Also, ran - and later pulled - 2400' of 2 3/8" tubing during the prod. period and a 14' section of perforated 2 3/8".

TREATMENT DATA (SHOT, FRACTURE, ACIDIZE, ETC.)

Date	Type	BD Pressure	Sand	O.F. Before (MM)	O.F. After (MM)	R.P. Before	R.P. After
7/23/1985	Frac	1800	Alexander				
		3400	Benson		2,613,000		1200-14da
		1500	Balltown				

see GED 11/10/16
REC'D 6/10/19
6/10/19
Environ
Department of

47-033-03089W

WW-2A
(Rev. 6-14)

1.) Date: 5/2/2019
2.) Operator's Well Number BW-8109
State 47- County Harrison Permit 03089
3.) API Well No.:

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 Bradley and Terri Stuller Address 725 Two-Lick Road Jane Lew, WV 26378
(b) Name _____ Address _____
(c) Name _____ Address _____
6) Inspector Address _____ Telephone _____
5) (a) Coal Operator Name _____ Address _____
(b) Coal Owner(s) with Declaration 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 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)

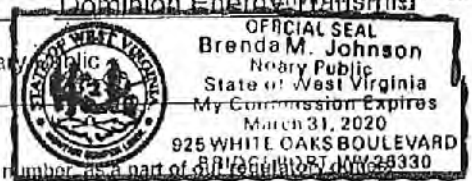
I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that 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 Dominion Energy Transmission, Inc
By: John M. Love
Its: Designated Agent
Address: 925 White Oaks Blvd Bridgeport, WV 26330
Telephone: 681-622-1948
Email: john.d.frost@dominionenergy.com

RECEIVED
Office of Oil and Gas
JUN 21 2019

Subscribed and sworn before me this 13th day of May, 2019

Brenda M. Johnson
My Commission Expires March 31, 2020
Oil and Gas Privacy Notice



47-033-03089W

U.S. Postal Service
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

7017 0190 0000 9775 7130

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

OFFICIAL USE

Certified Mail Fee

\$ 3.50

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ 2.80

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage

\$ 95

Total Postage and Fees

\$ 7.25

Sent To

Brad & Terri Stubler
Street and Apt. No., or PO Box No. 725 Two Lick Road
City, State, ZIP+4® Jane Lew, WV 26378

PS Form 3811, April 2015 PSN 7530-02-000-9053 See Reverse for Instructions



SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Brad & Terri Stubler
725 Two Lick Road
Jane Lew, WV 26378



9590 9402 3273 7196 7482 21

2. Article Number (Transfer from service label)

7017 0190 0000 9775 7130

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent Addressee
Terri Stubler

B. Received by (Printed Name) C. Date of Delivery

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

3. Service Type
- Adult Signature
 - Adult Signature Restricted Delivery
 - Certified Mail®
 - Certified Mail Restricted Delivery
 - Collect on Delivery
 - Collect on Delivery Restricted Delivery
 - Insured Mail
 - Insured Mail Restricted Delivery (over \$500)
 - Priority Mail Express®
 - Registered Mail™
 - Registered Mail Restricted Delivery
 - Return Receipt for Merchandise
 - Signature Confirmation®
 - Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

RECEIVED
Office of Oil and Gas

JUN 21 2019

WV Department of
Environmental Protection

WW-2A Surface Waiver
(4/16)

SURFACE OWNER WAIVER

County Harrison Operator Dominion Energy Transmission
Operator well number BW-8109

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

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 **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

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

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature

Date _____

Company Name _____
By _____
Its _____

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Office of Oil and Gas

JUN 21 2019
Date

03089

Print Name

Signature

Signature

Date

WV Department of Environmental Protection

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Harrison
Operator Dominion Energy Transmission, Inc

Operator's Well Number BW-8109

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

WAIVER

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

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature Date _____

Company Name _____
By _____
Its _____ Date _____

Signature Date _____

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Office of Oil and Gas

JUN 21 2019

WV Department of
Environmental Protection

WW-2B1
(5-12)

Well No. BW-8109

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 Reliance laboratories inc. Bridgeport, WV
Sampling Contractor Polestar engineering, surveying, and environmental

Well Operator Dominion Energy Transmission, Inc
Address 925 White Oaks Blvd
Bridgeport, WV 26330
Telephone 681-622-1948

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Office of Oil and Gas

JUN 21 2019

WV Department of
Environmental Protection

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

Water test contacts

STUTLER, BRADLEY S & TERRIL

725 TWO LICK RD

Jane Lew, WV 26378

Neely, Jennifer K

375 Neely Hollow Rd.

Jane Lew, WV 26378

McDonald, Sharon

104 E Main St.

Lost Creek, WV 26385

Stickel, Danny Lee and Alicia

1404 Kincheloe Rd

Jane Lew, WV 26378

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Environmental Protection

WW-2A1
(Rev. 1/11)

Operator's Well Number BW-8109

**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
Please see attached document			

**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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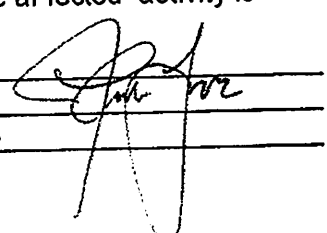
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WV Department of
Environmental Protection

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:
By: Its:

Dominion energy transmission
John Love
Director of storage and land services



Grantor/Lessor	Grantee/Lessee	Royalty	Book page
Guinn and Jane Minter	Hope Natural Gas	Storage	174/203

Hope Natural Gas Company changed its name to Consolidated Gas Supply Corporation. On January 1, 1984 Consolidated Gas Supply Corporation assigned its leasehold interest to Consolidated Gas Transmission Corporation. On January 1, 1998 Consolidated Gas Transmission Corporation became CNG Transmission Corporation. As a result of a merger with Dominion Resources Inc. CNG Transmission Corporation changed its name to Dominion Transmission Inc. on May 2000. Dominion Transmission Inc. changed its name to Dominion Energy Transmission Inc. on May 12, 2017.

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West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

DOMINION ENERGY TRANSMISSION, INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	1/17/1984		1/17/1984	Foreign	Profit			

Organization Information			
Business Purpose	2212 - Utilities - Utilities - Natural Gas Distribution		Capital Stock 0.0000
Charter County			Control Number 0
Charter State	DE	Excess Acres 0	
At Will Term	Member Managed		
At Will Term Years			Par Value 0.000000
Authorized Shares	0	Young Entrepreneur	Not Specified

Addresses	
Type	Address
Local Office Address	5400 D BIG TYLER ROAD CHARLESTON, WV, 25313
Mailing Address	925 WHITE OAKS BOULEVARD BRIDGEPORT, WV, 26330
Notice of Process Address	CT CORPORATION SYSTEM 1627 QUARRIER STREET CHARLESTON, WV, 253112124
Principal Office Address	925 WHITE OAKS BOULEVARD BRIDGEPORT, WV, 26330 USA
Type	Address

Officers	
Type	Name/Address
Director	DIANE LEOPLD 120 TREDEGAR STREET RICHMOND, VA, 23219
President	DIANE LEOPOLD 120 TREDEGAR STREET RICHMOND, VA, 23219
Secretary	CARTER M REID 100 TREDEGAR STREET 2ND FL. RICHMOND, VA, 23219
Treasurer	JAMES R. CHAPMAN 120 TREDEGAR ST RICHMOND, VA, 23219
Type	Name/Address

Name Changes	
Date	Old Name
7/19/2017	DOMINION TRANSMISSION, INC.
5/10/2000	CNG TRANSMISSION CORPORATION

47-033-03089W

Date	Old Name
------	----------

Mergers				
Merger Date	Merged	Merged State	Survived	Survived State
1/16/2002	CNG POWER COMPANY	DE	DOMINION TRANSMISSION, INC.	DE
Merger Date	Merged	Merged State	Survived	Survived State

Date	Amendment
7/19/2017	NAME CHANGE: FROM DOMINION TRANSMISSION, INC.
1/16/2002	MERGER: MERGING CNG POWER COMPANY, A QUALIFIED DE CORPORATION WITH AND INTO DOMINION TRANSMISSION, INC., A QUALIFIED DE CORPORATION, THE SURVIVOR
5/10/2000	NAME CHANGE: FROM CNG TRANSMISSION CORPORATION
12/2/1994	CHANGE TO AMEND STOCK IN ARTICLES OF CERTIFICATE OF AUTHORITY.
3/22/1993	CHANGE TO AMEND STOCK DESIGNATION IN ARTICLES OF CERTIFICATE OF AUTHORITY.
8/27/1991	AMENDMENT TO CERTIFICATE OF AUTHORITY.
12/19/1990	AMENDMENT TO CERTIFICATE OF AUTHORITY.
1/13/1988	CHANGE OF NAME FROM: CONSOLIDATED GAS TRANSMISSION CORPORATION.
Date	Amendment

Annual Reports
Filed For
2019
2018
2017x
2017
2016

47-033-03089W

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Date filed

For more information, please contact the Secretary of State's Office at 304-558-8000.

Friday, July 19, 2019 — 2:10 PM

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47-033-03089 W

WW-9
(5/16)

API Number 47 - 033 - 03089 W
Operator's Well No. bw-8109

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

Operator Name Dominion Energy Transmission, Inc OP Code 307048

Watershed (HUC 10) Middle West Fork River Quadrangle West Millford

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: N/A

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

NO LAND APPLICATION SDW 5/6/2019

Will closed loop system be used? If so, describe: Yes, above ground steel pits and dumpster receptacles.

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

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

Additives to be used in drilling medium? Sodium/Potassium Chloride, Xanthan gum, Sodium Bicarbonate, Caustic Soda, Biocide

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? Waste Management, Clarksburg, WV

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 _____

Company Official (Typed Name) John M. Love

Company Official Title Director, Storage and Land Services

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JUN 21 2019

Subscribed and sworn before me this 13th day of May, 2019

Brenda M. Johnson

My commission expires March 31, 2020

WV Department of Environmental Protection



Form WW-9

Operator's Well No. bw-8109

Proposed Revegetation Treatment: Acres Disturbed 0.70 acres Prevegetation pH _____

Lime 3.0 Tons/acre or to correct to pH 6.5

Fertilizer type 10/10/20

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw @ 2.5 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre
Meadow Mix @ 40lbs/acre

Seed Type lbs/acre
Meadow Mix @ 50lbs/acre

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

Title: OOG Inspector

Date: 5/16/2019

Field Reviewed? () Yes (X) No

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WV Department of
Environmental Protection

May 28, 2019

Coal Database Review

A search was performed for data related to the presence of coal beds and coal mining operations, within the vicinity of well 47-033-03089. This data was gathered from the West Virginia Geologic & Economic Survey and the West Virginia Office of Miner’s Health, Safety, and Training. Surface mining had been performed in the immediate vicinity of the well, but was no longer actively occurring.

The following information was gathered, related to the aforementioned surface mining activities:

Seam: Redstone	Seam: Pittsburgh
Mine Name: Null	Mine Name: Null
Mine ID: Null	Mine ID: Null
Company Name: Null	Company Name: Null
Map Year: Null	Map Year: Null

Further review indicated 6 economic coal beds are present in north central West Virginia. They are listed below, as well as their presence or lack thereof, in relation to the well location.

Washington Coal: Not present in the area of the well. Nearest listed occurrence is to the west of the area, in Doddridge County.

Waynesburg A Coal: Not present in the area of the well. Nearest listed occurrence is to the west of the area, in Doddridge County.

Waynesburg Coal: Not present in the area of the well. This coal is present, sporadically, in western Harrison County. Given the provided elevation of this coal, it was either not deposited in the vicinity of the well location or was eroded out of existence.

Sewickley Coal: Not present in the area of the well. This coal is present, sporadically, in western Harrison County. Given the provided elevation of this coal, it was either not deposited in the vicinity of the well location or was eroded out of existence.

Redstone Coal: This coal is present in the area of the proposed well location. The coal structure is mapped to be ±1295’ ASL, with the existing well location setting at ±1265’ ASL. Maps indicate surface mining of the coal at the proposed well site, which is confirmed by the well physically setting on a strip bench. Given the elevation of the coal seam and well location, the strip bench is believed to be

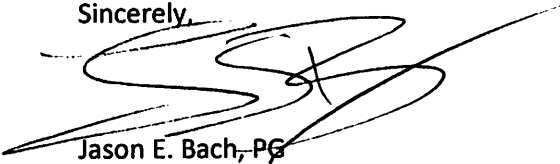
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 Office of Oil and Gas
 JUN 21 2019
 WV Department of Environmental Protection

due to the Redstone Coal being removed. The nearest deep mine operation for this coal seam is ± 4.3 miles from the well location.

Pittsburgh Coal: This coal is present in the area of the proposed well location. The coal structure is mapped to be $\pm 1250'$ ASL, with the existing well location setting at $\pm 1265'$ ASL. This would place the coal seam approximately 15' below the surface of the well location. Historical well records do not denote this coal seam at the time the well was drilled, indicating the coal seam is either not present, was surface mined in conjunction with the Redstone seam, or is of inconsequential thickness. The nearest deep mine operation listed for this coal seam is ± 3.9 from the well location.

Based on the data available and the results of field reviews, no coal related activities are currently being undertaken in the immediate vicinity of the well location and no coal related issues are anticipated to occur during the planned well work. If there are any further questions or concerns related to this coal data evaluation, please do not hesitate to contact me.

Sincerely,



Jason E. Bach, PG

304.669.4850

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Environmental Protection

47-033-03089W

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Office of Oil and Gas
JUN 21 2019
WV Department of
Environmental Protection

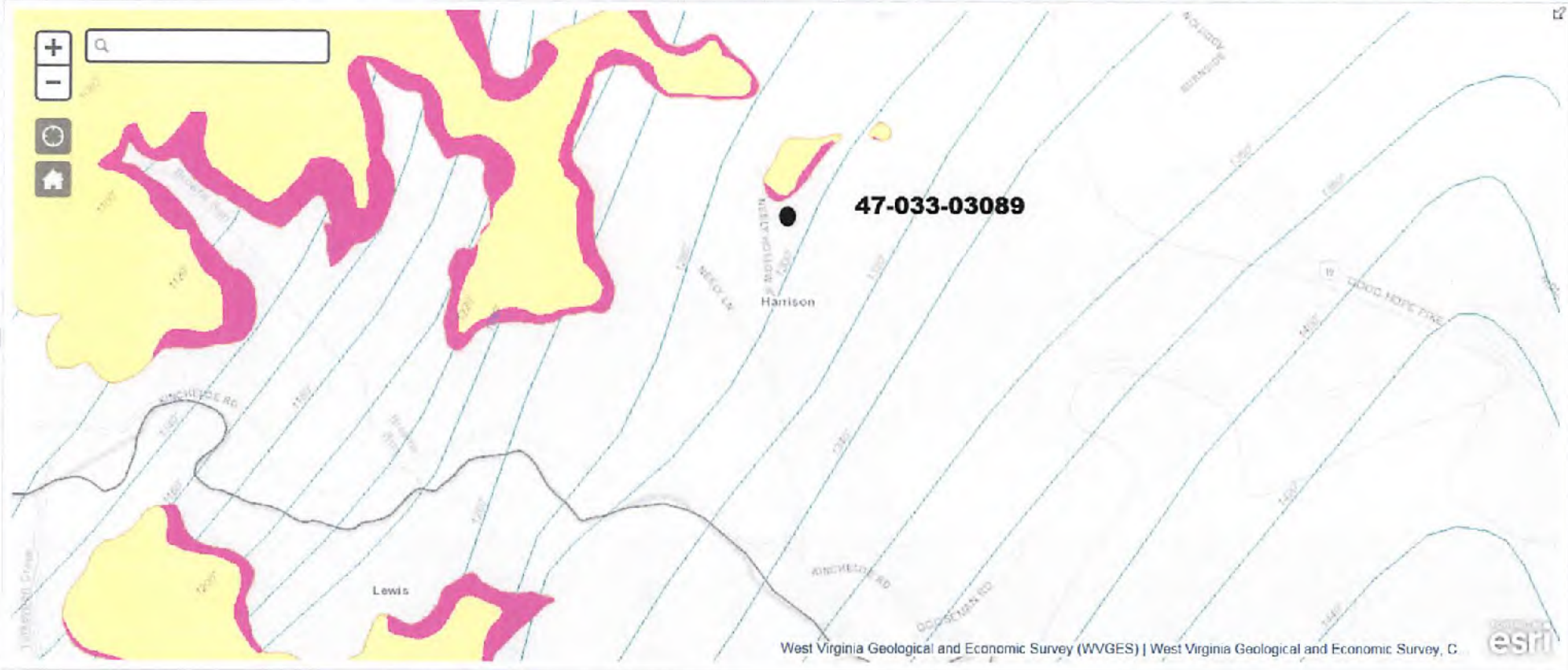


Redstone Coal

Monongahela Group

Coal Bed Mapping Project
Coverage Explanations
Map Help & Tips

Zoom in and click on coal mining, boundaries, structural contours to get further information.



47-033-03089W

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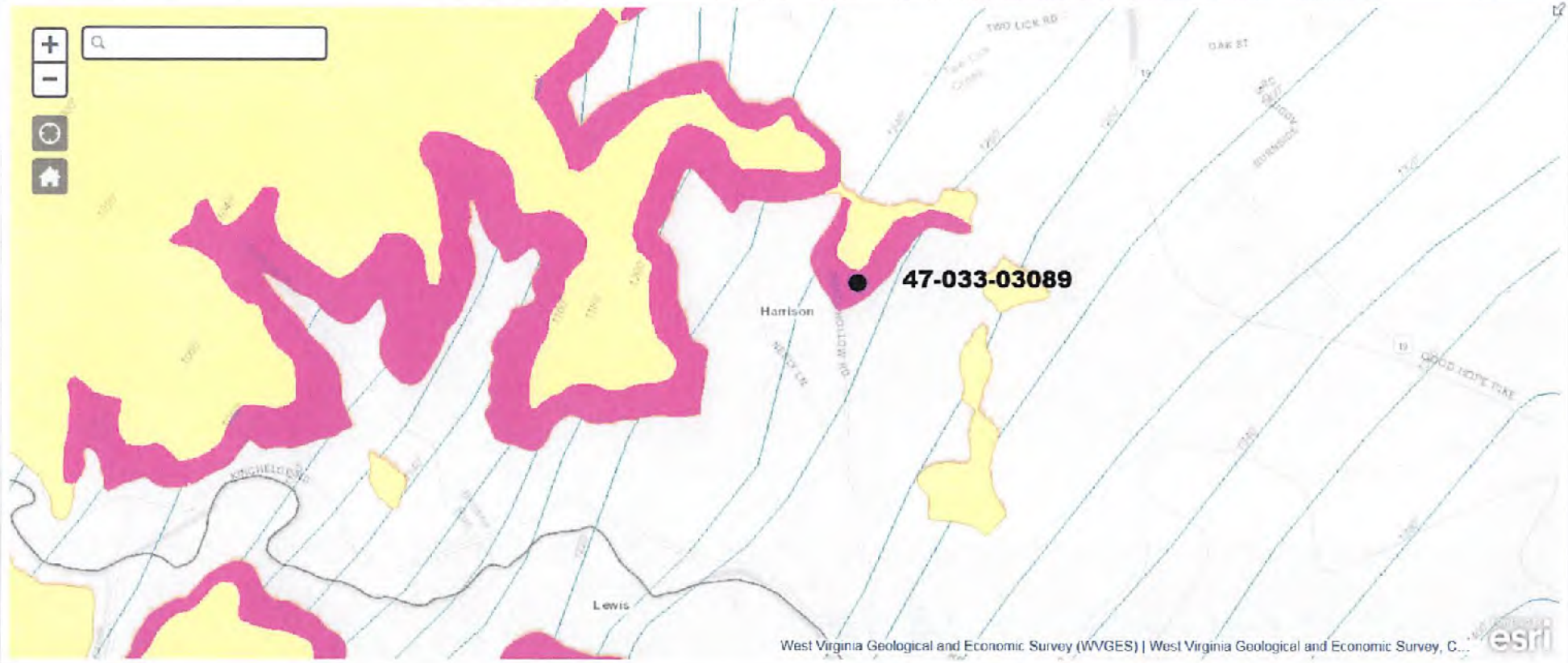


Pittsburgh Coal

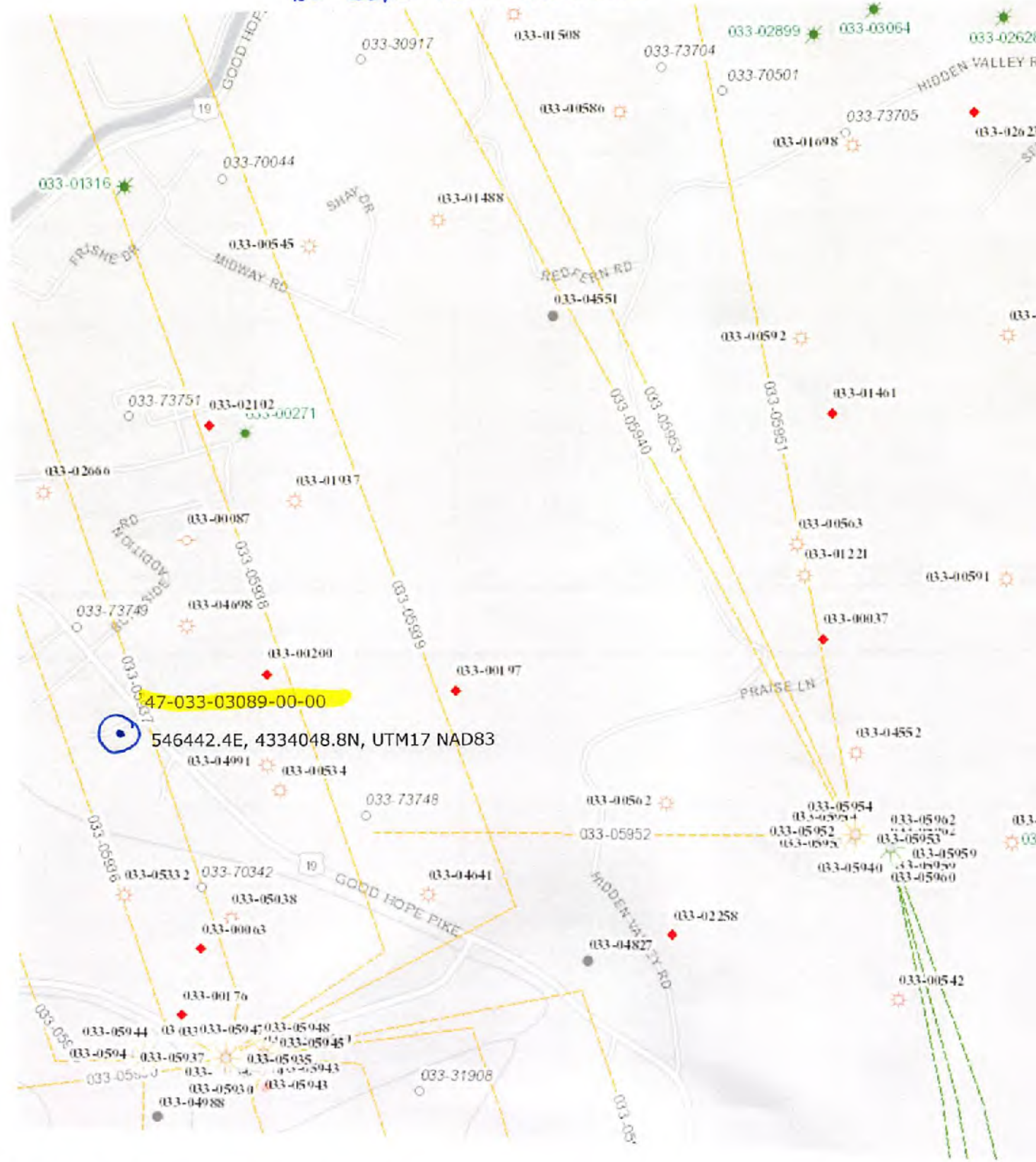
Monongahela Group

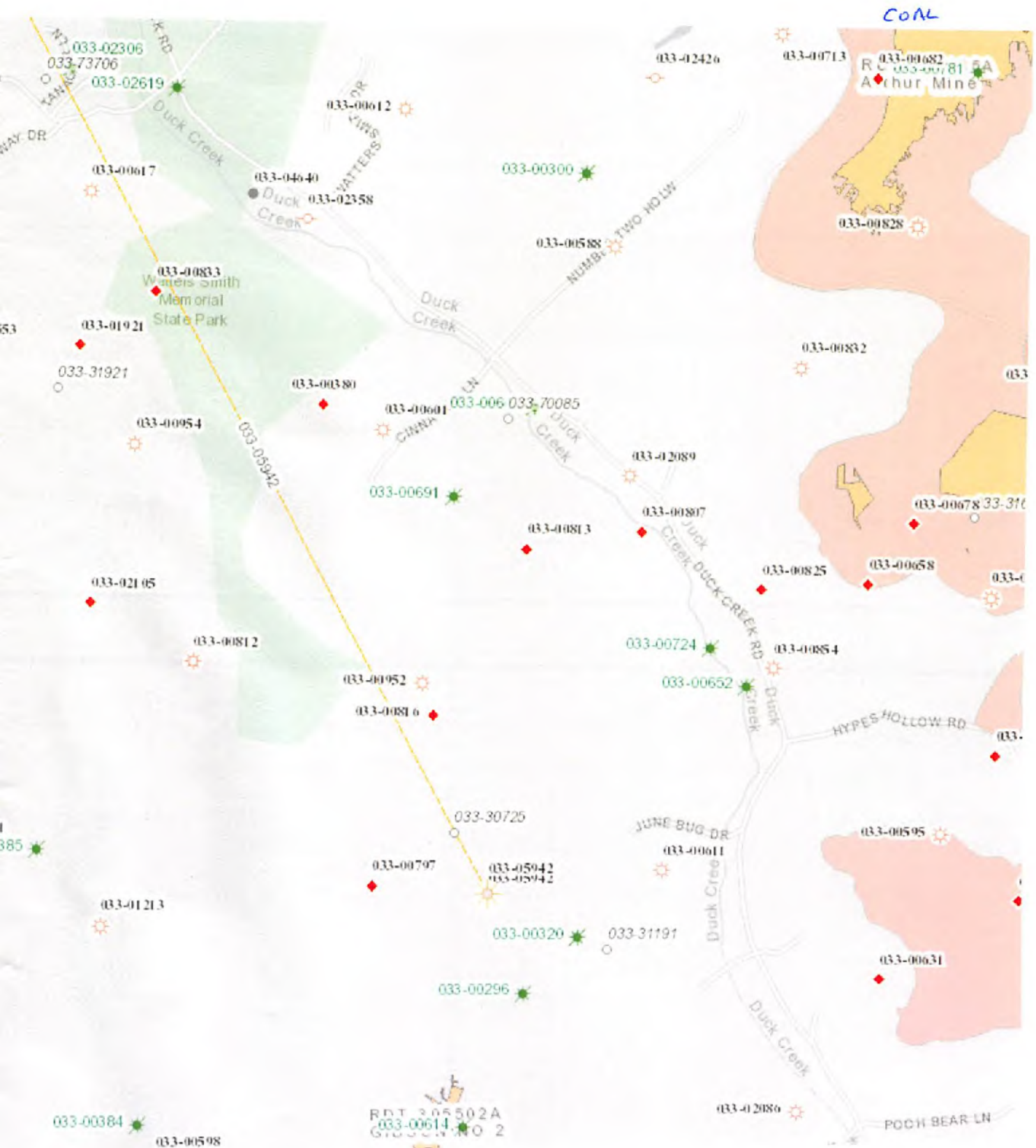
Coal Bed Mapping Project
Coverage Explanations
Map Help & Tips

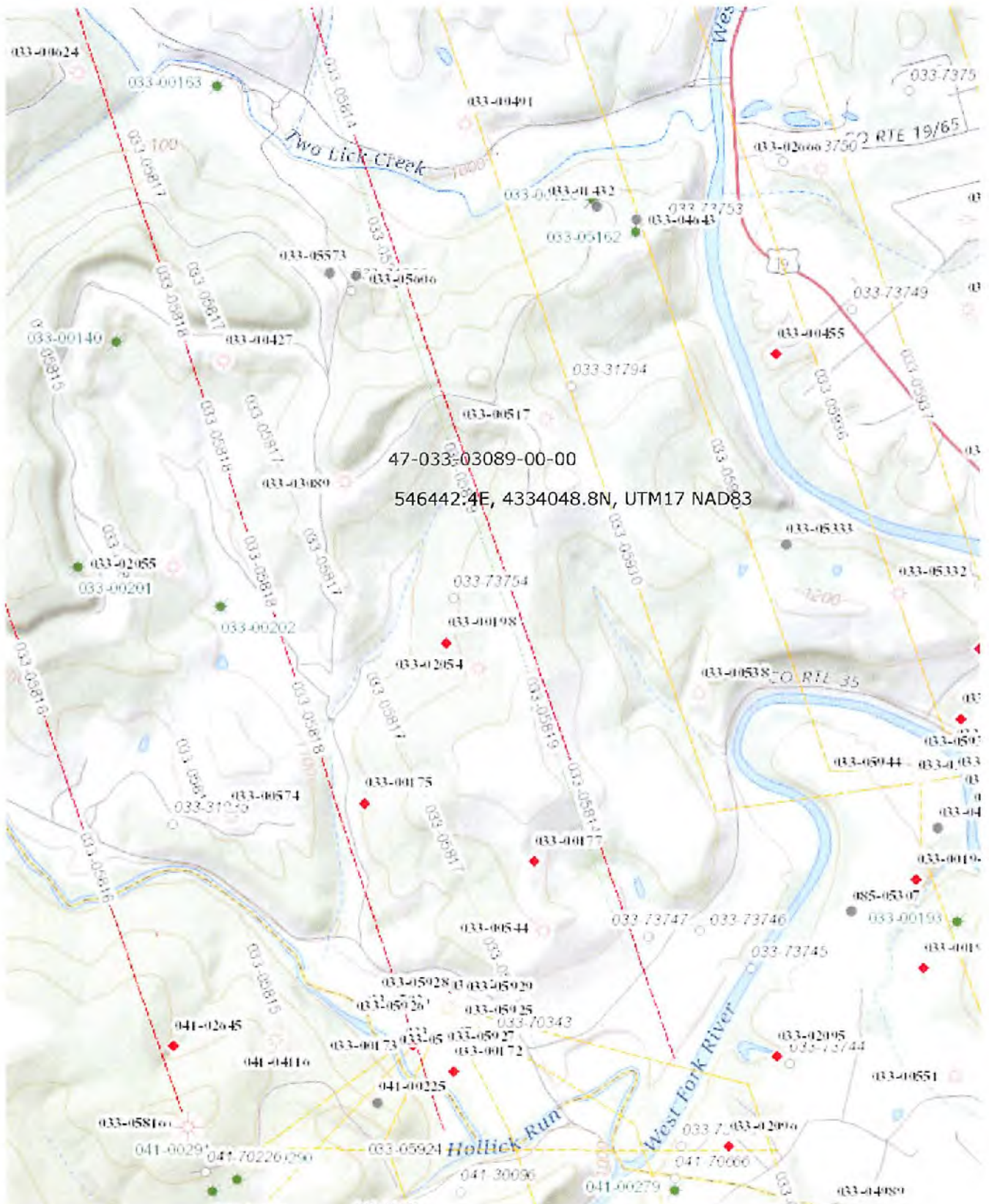
Zoom in and click on coal mining, boundaries, structural contours to get further information.



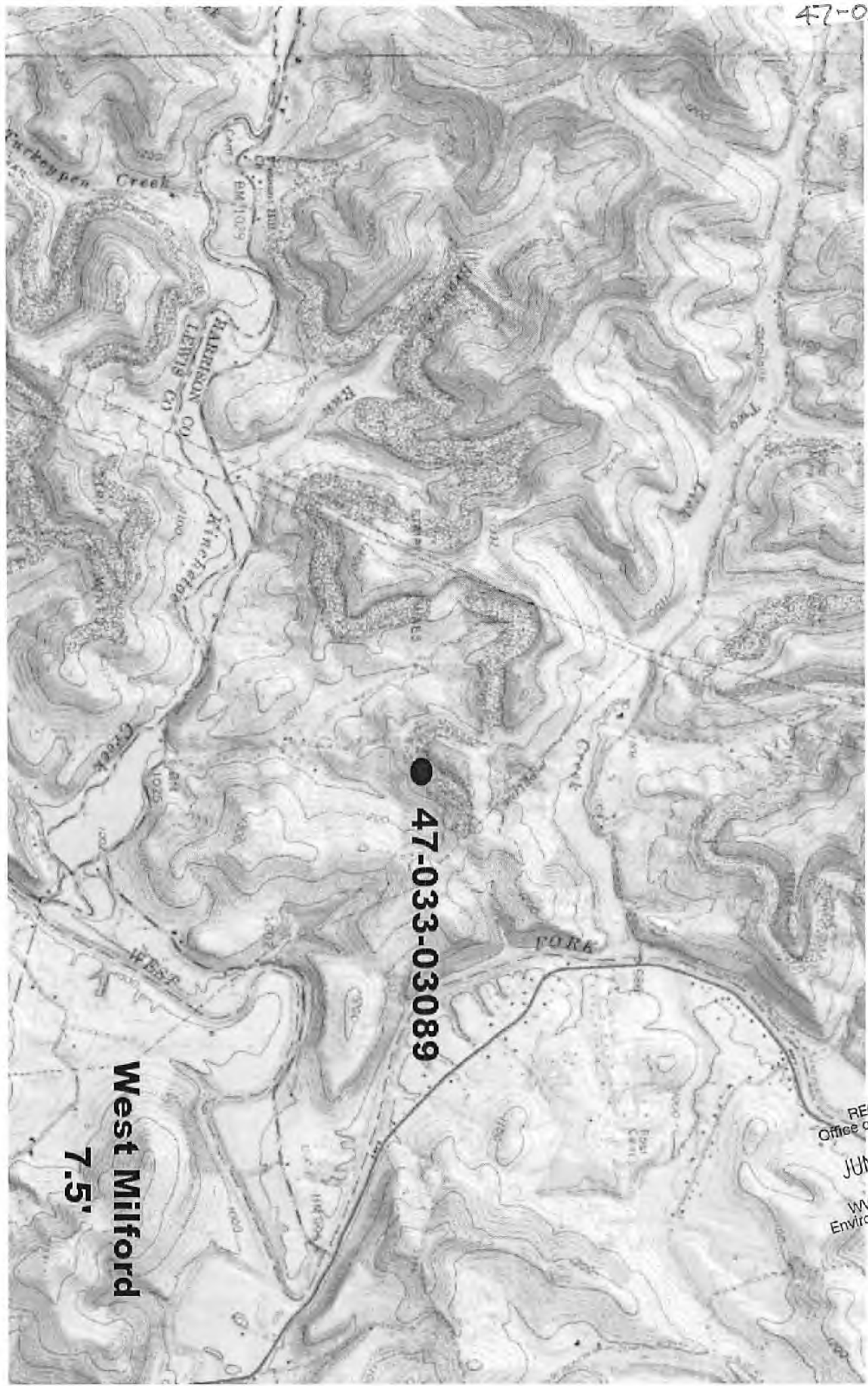
NO COAL IN THIS AREA







47-033-03089W



● 47-033-03089

West Milford
7.5'

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JUN 21 2019

WV Department of
Environmental Protection

47-033-00427 ☀

WEST VIRGINIA COORDINATE SYSTEM NORTH ZONE		
NAD 27	NAD 83	UTM ZONE 17 NORTH (NAD 83)
N: 239777.13 E: 1727000.43	N: 239814.64 E: 1695560.41	FEET N: 14219291.86 E: 1792786.44
LAT: 39°09'15.53" LON: 80°27'45.65"	LAT: 39°09'15.86" LON: 80°27'44.98"	METERS N: 4334048.83 E: 546442.40

NORTH

Marjorie Neely
17-20-444-1

N 20°29'48" W
247.50'
N 39°14'48" W
146.50'

Cistern

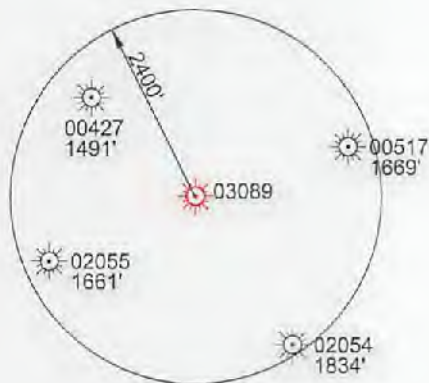
Sharon McDonald
17-20-424-47

Bradley & Terri Stutler
TM 17-20-444-02
48.79 Acres

EXISTING WELL
NO. BW-8109
47-033-03089

TOP HOLE
7.5' SPOT

47-33-02055 ☀



STATES TOPOGRAPHIC MAPS

Jennifer Neely
17-20-444-18

Bradley & Terri Stutler
17-20-444-03

47-33-02054 ☀

Water Well + DENOTES LOCATION OF WELL ON UNITED

FILE NUMBER: WV-
DRAWING NUMBER: BW-8109 PLAT DWG
SCALE: 1"=400'
MINIMUM DEGREE OF ACCURACY: SUBMETER
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 SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

Jeffrey N. Waggett

JEFFREY N. WAGGETT, WV P.E. #22316
POLESTAR ENGINEERING
400 DIXON BLVD., UNIONTOWN, PA 15401
PHONE: 724-550-4190



DATE: JULY 15, 2019
OPERATORS WELL NO.: BW-8109
API WELL NO.: 47 033 03089
STATE COUNTY PERMIT

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



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

LOCATION: ELEVATION: 1265 FT. WATERSHED: MIDDLE WEST FORK RIVER DISTRICT: UNION COUNTY: HARRISON QUADRANGLE: WEST MILFORD

SURFACE OWNER: BRADLEY S. & TERRI L. STUTLER ACREAGE: 48.79

OIL AND GAS ROYALTY OWNER: 0 LEASE ACREAGE: 0

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) CONVERT STORAGE/PRODUCTION WELL TO STORAGE/OBSERVATION WELL

TARGET FORMATION: GANTZ ESTIMATED DEPTH: 1849-1868 FT.

WELL OPERATOR: DOMINION ENERGY TRANSMISSION INC. DESIGNATED AGENT: JOHN LOVE
ADDRESS: 925 WHITE OAKS BLVD. ADDRESS: 925 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

HARRISON COUNTY PERMIT 03089

FORM NOT NECESSARY

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 033 - ~~Domination Energy~~ 03089
Operator's Well No. ~~BW-5247~~ BW-8109

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

Operator Name: Domination Energy Transmission
Watershed (HUC 10): Middle West Fork River Quad: West Milford
Farm Name: Minter, Guinn

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

Well workover fluids generated in relation to downhole well work will be contained in above ground tanks and will be hauled offsite for disposal at a DEP approved facility.
Surface water will be handled, as follows:
Surface water not entering the site containment will be diverted to E&S controls, to minimize sedimentation.
Surface water entering the site containment will be evaluated for contamination. If contamination is present, the water will be collected and hauled offsite for disposal at a DEP approved facility. If no contamination has occurred, the water will be discharged from the site and will be diverted to E&S controls, to minimize sedimentation.

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

A temporary cellar will be installed around the well. The cellar will be of metal construction. The floor will be sealed with an impermeable barrier (e.g. synthetic liner, cement, etc.). Full site containment will be employed. The site containment will consist of an impermeable synthetic liner, overlain with matting materials. The sides of the containment will be bermed.

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

Closest water body: Unnamed tributary of Kincheloe Creek
Distance to closest water body (from wellhead): 996' to unnamed tributary
No Well Head Protection Area within 2000' of the discharge area

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

Existing gas storage/production well. Well is operated in accordance with any regulations required, pertaining to groundwater protection.

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

WV Department of
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Form

WW-9- GPP
Rev. 5/16

Page 2 of 2
API Number 47 - 033 - 03089
Operator's Well No. ~~BW-5217~~ BW-8109

No groundwater quality data available.

No sources of water utilized for human consumption, livestock consumption, or other potable use were identified during surveying activities, within 2000'.

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. Fill material utilized will either be existing soil and rock at the site or construction grade aggregate and materials. No deicing is planned for this site. In the event deicing is required, no waste products will be used for this purpose.

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.

Employees will be instructed to identify fluids present in the site containment area. If the fluids have not been contaminated with workover fluid and do not have an oil sheen present, the fluid may be discharged and diverted to E&S controls to minimize sedimentation.

If the fluids present in the site containment area have been contaminated with workover fluid or have an oil sheen present, they will be gather and hauled to offsite disposal at a DETI approved facility.

E&S controls are to be monitored and maintained.

State regulations require a copy of the permit associate with this GPP to be on site for the duration of the planned well work. This Groundwater Protection Plan will be included in that permit package and may be used as guidance for preventing groundwater contamination.

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

E&S controls will be inspected on a weekly basis, at a minimum.

Site containment will be monitored as part of the daily well work activities. Site containment will be removed and hauled offsite to an approved DETI facility, at the completion of the project

Signature: [Handwritten Signature]

Date: 5/6/2019

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