

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 033 - 03068 County Harrison District Union
Quad West Milford Pad Name BW-5217 Field/Pool Name Kennedy
Farm name McDonald, R.C. Well Number BW-5217
Operator (as registered with the OOG) EASTERN GAS TRANSMISSION AND STORAGE, INC. (FORMERLY DOMINION ENERGY TRANSMISSION, INC.)
Address 925 White Oaks Blvd. City Bridgeport State WV Zip 26330

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4335209 Easting 545269
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1138' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
GEL WATER, BENTONITE GEL, BRINE, FRESHWATER

Date permit issued 7/29/2019 Date drilling commenced N/A Date drilling ceased N/A
Date completion activities began 9/11/2019 Date completion activities ceased 12/20/2019
Verbal plugging (Y/N) N/A Date permission granted 7/29/2019 Granted by JAMES A. MARTIN

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft N/A Open mine(s) (Y/N) depths N
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N
Coal depth(s) ft 30'-33' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
09/24/2021

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CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface		13-3/8"	290'		K-55 48#/FT		Y
Coal							
Intermediate 1		8-5/8"	2101'		K-55 24#/FT		Y
Intermediate 2							
Intermediate 3							
Production		4-1/2"	1943'		J-55 10.5#/FT		Y
Tubing							
Packer type and depth set							

Comment Details BASED ON HISTORICAL WELL RECORDS. UPDATED 4-1/2" PRODUCTION TO PLUG BACK DEPTH.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	N/A	300				SURFACE	
Coal							
Intermediate 1	N/A	1000				SURFACE	
Intermediate 2							
Intermediate 3							
Production	CLASS A	533	15.2	1.28	682	SURFACE	24
Tubing							

Drillers TD (ft) 4606' Loggers TD (ft) 4604'
 Deepest formation penetrated BENSON Plug back to (ft) 1943'
 Plug back procedure REFER TO ATTACHED PLUG BACK DESCRIPTION SHEET.

Kick off depth (ft) N/A

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING N/A

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	12/20/2019	1863'	1875'	48	GANTZ

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
GANTZ	1860'-1874'	TVD _____ MD _____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 400 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
0 mcfpd _____ bpd _____ bpd _____ bpd Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		
PITTSBURGH COAL	30'	33'			
DUNKARD	416'	595'			
FIRST SALT	790'	1140'			
INJUN	1569'	1681'			
GANTZ	1860'	1874'			GAS

Please insert additional pages as applicable.

Drilling Contractor KEY ENERGY SERVICES
 Address 138 SEWER PLANT ROAD City BUCKHANNON State WV Zip 26201

Logging Company BAKER HUGHES
 Address 180 CHILDERS RUN ROAD City BUCKHANNON State WV Zip 26201

Cementing Company BOSS SERVICES
 Address 4300 BERLIN ROAD City WESTON State WV Zip 26452

Stimulating Company NINE ENERGY
 Address 2163 STATE ROUTE 821 City WHIPPLE State OH Zip 45788

Please insert additional pages as applicable.

Completed by JOHN LOVE Telephone 681-842-3311
 Signature  Title DIRECTOR OF STORAGE Date 09/02/2021

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

09/24/2021

Well 47-033-03068 plugged back with the following materials, over the following intervals:

<u>Material or Zone of Interest</u>	<u>Bottom</u>	<u>Top</u>
Tagged TD inside 4-1/2" casing		4407'
Class A cement (76 sx)	4407'	3407'
6% bentonite gel	3407'	3401'
Class A cement (62 sx)	3401'	2600'
6% bentonite gel	2600'	2531'
Class A cement (43 sx)	2531'	2040'
Cement Retainer		1950'
TD inside 4-1/2" casing after plug back		1943'
****4-1/2" squeeze perforations:	2039' – 2035' (4 spf)	