

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

API 47 - 59 - 02245 County MINGO District HARVEY
Quad WILSONDALE Pad Name _____ Field/Pool Name _____
Farm name HUNTINGTON REALTY CORP Well Number HRC 3
Operator (as registered with the OOG) TUG FORK DEVELOPMENT
Address 3930 BRANDYWINE DR City CATLETTSBURG State KY Zip 41129

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,195,082.250 Easting 389,280.612
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1153 ^(357.223') 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 DRY HOLE

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)

Date permit issued 7/29/14 Date drilling commenced 9/15/14 Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased _____
Verbal plugging (Y/N) Y Date permission granted 5/13/15 Granted by Jeremy James
Received Office of Oil & Gas JUL 21 2015
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft NO SHOWS Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1420 Void(s) encountered (Y/N) depths N
Coal depth(s) ft none Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

JK 9/10/15
Reviewed by:
~~_____~~
~~_____~~
10/23/2015
~~RECEIVED~~

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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	15"	13 3/8	17'	NEW	N 36#		DRIVE PIPE
Surface							
Coal	12 1/4"	9 5/8	320	NEW	N 26#	290	YES
Intermediate 1	8 3/4	7"	1634	NEW	N 19#	350,100	YES
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details 9 5/8" CASING 5 BBLs CEMENT TO SURFACE, 7" 8 BBLs TO SURFACE

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							
Coal	A	110	15.6	1.2	132	SURFACE	48 HRS
Intermediate 1	LITE CEMENT/A	120/75	12.7/15.6	1.84/1.2	310	SURFACE	13 HRS
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 2801 Loggers TD (ft) N/A
 Deepest formation penetrated BEREA Plug back to (ft) SURFACE
 Plug back procedure SEE PLUGGING AFFIDAVIT

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Kick off depth (ft) _____

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 _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>N/A</u>	<u>TVD</u>	<u>MD</u>

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY 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)
SAND AND SHALE	0		0	998	
SALT SAND			998	1187	
SAND AND SHALE			1187	1351	
SALT SAND			1351	1463	BRINE 1420
MAXON			1463	1523	
SAND AND SHALE			1523	1600	RED SHALE
LITTLE LIME			1600	1630	
BIG LIME			1630	1673	
INJUN SAND			1673	1803	
SAND AND SHALE			1803	2432	
COFFEE SHALE			2432	2455	
BEREA			2455	2545	DAMP HOLE (OIL)
WHITE SLATE			2545	2801	

Please insert additional pages as applicable.

Drilling Contractor MID AMERICAN DRILLING
Address PO BOX 327 City WILLIAMSBURG State KY 40769 Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company NABORS
Address PO BOX 975682 City DALLAS State TX Zip 75397

Stimulating Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by W. D. CUBBEDGE Telephone 6069225087
Signature *W.D. Cubbedge* Title OWNER Date 5/8/15

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

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