

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

API 47 - 590 - 2246 County MINGO District MAGNOLIA
Quad MAJESTIC Pad Name _____ Field/Pool Name _____
Farm name LOGAN COAL AND TIMBER CORPORATION Well Number 2353
Operator (as registered with the OOG) QUALITY NATURAL GAS, LLC
Address P.O. BOX 480 City ALLEN State KY Zip 41601

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

Elevation (ft) 740.8 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)
N/A

Date permit issued 9/23/2014 Date drilling commenced 10/28/2014 Date drilling ceased 11/03/2014
Date completion activities began 11/25/2014 Date completion activities ceased 12/15/2014
Verbal plugging (Y/N) N/A Date permission granted _____ Granted by _____

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

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

JAN 22 2015

Reviewed by:

02/06/2015

Received
Office of Oil & Gas

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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	17 1/2"	13 3/8"	42'	New	LS		
Surface	12 1/4"	9 5/8"	309'	New	LS	44', 265'	YES
Coal							
Intermediate 1	8 7/8"	7"	2035'	New	LS		YES
Intermediate 2							
Intermediate 3							
Production	6 3/8"	4 1/2"	4217'	New	L-65		500' up in 7"
Tubing							
Packer type and depth set							

Comment Details _____

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	Class A						
Surface	Class A	110	15.5	1.18	129.8	Surface	8
Coal							
Intermediate 1	Class A	100, 160	15.6, 12.3	1.18, 1.84	118, 294.4	Surface	8
Intermediate 2							
Intermediate 3							
Production	Class A	180	13.6	1.90	342	500' up in 7"	8
Tubing							

Drillers TD (ft) 4,230' Loggers TD (ft) 4,255'
 Deepest formation penetrated HARRELL SHALE Plug back to (ft) N/A
 Plug back procedure N/A

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
For drilling purposes only.

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING 4 1/2" CASING - 4317', 4040.2', 3863.4', 3686.6'
3509.8', 3333', 3156.2', 2979.4', 2802.6' and 2625.80'

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 _____

