

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

API 47-059-02243 County MINGO District HARDEE
Quad NAUGATUCK Pad Name _____ Field/Pool Name _____
Farm name MARYNARD, RAYMOND Well Number 2365
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) 851.1 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 4/24/2014 Date drilling commenced 5/13/2014 Date drilling ceased 5/19/2014
Date completion activities began 9/16/2015 Date completion activities ceased 9/16/2015
Verbal plugging (Y/N) N 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 Encountered Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Encountered Void(s) encountered (Y/N) depths N
Coal depth(s) ft 83-87' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:

APPROVED

NAME: [Signature]
DATE: 5-31-2016

07/22/2016
AX 07/21/16

API 47-059 - 02243 Farm name MARYNARD, RAYMOND Well number 2365

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	None	
Surface	12 1/4"	9 5/8"	441'	New	LS	397', 44'	Yes - 4bbls
Coal							
Intermediate 1	8 7/8"	7"	1752'	New	LS	None	Yes - 6bbls
Intermediate 2							
Intermediate 3							
Production	6 3/8"	4 1/2"	3654'	New	L-65	None	No - 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	150	15.5	1.18	177	Surface	8
Coal							
Intermediate 1	Class A	100, 125	15.6, 12.3	1.18, 1.84	118, 230	Surface	8
Intermediate 2							
Intermediate 3							
Production	Class A	145	13.6	145	275.5	500' up in 7"	8
Tubing							

Drillers TD (ft) 3654' Loggers TD (ft) 3660'
 Deepest formation penetrated HARRELL SHALE Plug back to (ft) _____
 Plug back procedure _____

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
For drilling purposes only.

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING 3609.50, 3430.90, 3252.50,
3074.30, 2896.10, 2717.90, 2539.60, 2361.20, 2183, 2009, 1831.50, 1653.10

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 _____

WELL #2365

API#47-5902243

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, H2S, ETC)
TOP SOIL	0	15			
SAND	15	55			
SAND/SLATE	55	83			
COAL	83	87			
SLATE	87	125			
SAND	125	190			
SLATE	190	260			
SAND	260	295			
SAND/SLATE	295	540			
SLATE	540	590			
SAND	590	665			
SLATE	665	685			
SAND/SLATE	685	814			
SAND	814	855			
SAND/SLATE	855	880			
SAND	880	935			
SLATE	935	1005			
SAND	1005	1067			
SALT SAND	1067	1128			
SAND/SLATE	1128	1168			
SAND	1168	1214			
SALT SAND	1214	1296			
SAND/RED ROCK	1296	1262			
RED ROCK/SLATE	1262	1355			
SAND	1355	1710			
LITTLE LIME	1710	1760			
BIG LIME	1760	1958			
INJUN	1958	2010			
WEIR	2010	2512			
COFFEE SHALE	2512	2539			
BEREA	2539	2609			
BROWN SHALE	2609	3540			
HARRELL SHALE	3540	3660			

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