

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

API 47 - 039 - 01546 County Kanawha District Elk
Quad Blue Creek, WV Pad Name _____ Field/Pool Name Coco A Storage
Farm name Kanawha Crude Oil Co Well Number 7106
Operator (as registered with the OOG) Columbia Gas Transmission, LLC
Address PO Box 1273 City Charleston State WV Zip 25314

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4251988.6 m Easting 463502.3 m
Landing Point of Curve Northing N/A Easting N/A
Bottom Hole Northing not measured (vertical wellbore) Easting not measured (vertical wellbore)

Elevation (ft) 842 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 - no drilling performed

Date permit issued 4/21/17 Date drilling commenced N/A Date drilling ceased N/A
Date rework activities began 10/31/17 Date rework activities ceased 11/3/17 RECEIVED
Office of Oil and Gas
Verbal plugging (Y/N) N/A Date permission granted _____ Granted by _____ **NOV 20 2017**

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

Freshwater depth(s) ft none observed during rework Open mine(s) (Y/N) depths none observed during rework
Salt water depth(s) ft none observed during rework Void(s) encountered (Y/N) depths none observed during rework
Coal depth(s) ft none observed during rework Cavern(s) encountered (Y/N) depths none observed during rework
Is coal being mined in area (Y/N) N

Reviewed by: _____
 **Reviewed** 01/05/2018

API 47- 039 - 01546 Farm name Kanawha Crude Oil Co Well number 7106

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details No casing or tubing pulled or ran during rework. No casing or tubing cemented during rework.

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							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 5200 Loggers TD (ft) _____

Deepest formation penetrated Oriskany Plug back to (ft) N/A

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

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

N/A RECEIVED Office of Oil and Gas NOV 20 2017

WV Department of Environmental Protection

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 _____

Angela Miller 12-14-17

Reviewed 01/05/2018

