

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

API 47 - 041 - 05696H County Lewis District Freemans Creek
Quad Vadis 7.5' Pad Name Ramsburg #1H 2045 Field/Pool Name _____
Farm name Wilson, Brad, ET AL Well Number Ramsburg #1H 2045
Operator (as registered with the OOG) WACO OIL & GAS Co. INC.
Address P.O.Box 397 City Glenville State WV Zip 26351

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) 1073' 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)

Date permit issued 10/20/2014 Date drilling commenced 12/01/2014 Date drilling ceased 12/18/2014
Date completion activities began 1/12/2015 Date completion activities ceased 1/12/2015
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug **NOV 16 2015**

Freshwater depth(s) ft 35' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft none Void(s) encountered (Y/N) depths _____
Coal depth(s) ft none Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) no

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Reviewed by: _____
RBDMS/AN 01/27/2017
01/25/17

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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							
Coal							
Intermediate 1	12.250	9 5/8	420	new	26		Yes
Intermediate 2	8 3/4	7.00	2025	new	17		Yes
Intermediate 3							
Production	6.25	4 1/2	3653	new	11.6		no
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							
Surface							
Coal							
Intermediate 1	Type 1	150					8 hrs.
Intermediate 2	Type 1	300					8 hrs.
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 3653 Loggers TD (ft) 2088
 Deepest formation penetrated Big Injun Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 882

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 _____

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)

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)

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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Injun	2030	TVD	2045 MD
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 50 psi Bottom Hole _____ psi DURATION OF TEST 48 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 Show mcfpd Trace 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)
Clay	0	10	0		
Sd/Sh	10	900			
Sand	900	950			
Sd/Sh	950	1450			
Sand	1450	1600			
Sd/Sh	1600	1844			
Little Lime	1844	1854			
Sd/Sh	1854	1892			
Big Lime	1892	2016			
Injun	2016	2040			
T.D.	3653				

Please insert additional pages as applicable.

Drilling Contractor Waco Oil & Gas
 Address 1595 U.S. 33 City Glenville State WV Zip 26351

Logging Company Weatherford Wireline Services
 Address 7777 North River Avenue City Weston State wv Zip 26452

Cementing Company Universal Well Service
 Address 14 Sewer Plant Road City Buckhannon State WV Zip 26201

Stimulating Company Universal Well Service
 Address 14 Sewer Plant Road City Buckhannon State WV Zip 26201

Please insert additional pages as applicable.

Completed by _____ Telephone _____
 Signature _____ Title _____ Date _____

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

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