

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

API 47-033-05298 County Harrison District Sardis  
Quad Folsom 7.5' Pad Name Radtka Field/Pool Name \_\_\_\_\_  
Farm name Franklin Whay, Jr. etal Well Number 1997  
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 327368 Easting 1707332  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1144' 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 08/05/2009 Date drilling commenced 12/22/2009 Date drilling ceased 01/21/2010  
Date completion activities began 05/06/2010 Date completion activities ceased 05/06/2010  
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

Freshwater depth(s) ft 91' Open mine(s) (Y/N) depths None  
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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**APPROVED**  
NAME: Jequelin Thornton  
DATE: 5/12/16

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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		11 3/4	423	N	36		
Coal							
Intermediate 1		8 5/8	2393	N	28		
Intermediate 2							
Intermediate 3							
Production		5 1/2	7527	N			
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	A	205	15.6	1.18		Surface	8
Coal							
Intermediate 1	A	435	15.6	1.18		Surface	8
Intermediate 2							
Intermediate 3							
Production	A	600	15.6			4802	
Tubing							

Drillers TD (ft) 7528

Loggers TD (ft) 7530

Deepest formation penetrated Marcellus

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

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>		
Marcellus	7420 - 7515	TVD	MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 622 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 4 hrs

OPEN FLOW Gas 2,000 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 <sub>2</sub> S, ETC)
	0	240	0		Grey, soft
Red Rock	240	260			Red, soft
Sd & Shale	260	457			Grey, med
Sd & Shale	457	700			Grey, med
Sand	700	780			White, hard
Sd & Shale	780	1652			Grey, med
Shale	1652	2210			Grey mix, hard
Injun	2210	2298			hard
Squaw	2298	2367			Grey, med
Shale	2367	2780			Mix, soft
50 foot	2780	2802			Grey, soft
Shale	2802	2870			Grey, soft
30 foot	2870	2900			Grey, soft
Shale	2900	2920			Grey, med

Please insert additional pages as applicable.

Drilling Contractor Waco Oil & Gas Co., Inc.  
Address P.O. Box 397 City Glenville State WV Zip 26351

Logging Company Schlumberger  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company Superior  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Stimulating Company Halliburton  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by Stephen E. Holloway Telephone 304-462-5347  
Signature  Title Land Manager Date 02/22/2016

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FARM NAME

Franklin Whay, Jr. etal

WELL NUMBER

1997

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 QUANTITIES AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC.)
	0		0		
Gordon Stray	2920	2960			Mlx, med
Sd & Shale	2960	2989			Grey, med
Gordon	2989	3027			Grey, med
Shale	3027	3585			Grey, soft
Speechly	3585	3645			Grey, soft
Shale	3645	4125			Grey, soft
Balltown	4125	4181			Grey, med
Shale	4181	4555			Grey, soft
Riley	4555	4970			Grey, med
Shale	4970	5210			Grey, soft
Benson	5210	5220			Grey, med
Shale	5220	5480			Grey, soft
Alexander	5480	5535			Grey, med
Shale	5535	6142			Grey, soft
Sycamore Grit	6142	6172			Grey, med
Shale	6172	7150			Grey, soft
Gennessee	7150	7318			Dark, soft
Sd & Shale	7318	7340			Grey, med
Tully Lime	7340	7398			Grey, hard
Marcellus	7418	7526			TD

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