

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

API 47 - 039 - 06352 County Kanawha District Union  
Quad Big Chimney Pad Name n/a Field/Pool Name n/a  
Farm name D. Haynes ET AL Well Number D. Haynes #1  
Operator (as registered with the OOG) Reserve Oil and Gas, Inc.  
Address 929 Charleston Road City Spencer State WV Zip 25276

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing (4251341) 38.4007250 Easting (0446818) - 81.6091350  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1023 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 3/20/2013 Date drilling commenced 6/7/2013 Date drilling ceased 6/24/2013  
Date completion activities began 7/17/2013 Date completion activities ceased 7/17/2013  
Verbal plugging (Y/N) n/a Date permission granted n/a Granted by n/a

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

Freshwater depth(s) ft 70 Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft 1260, 1360 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

RECEIVED  
Office of Oil and Gas  
NO  
OCT 15 2013  
Reviewed by:  
WV Department of Environmental Protection  
12/06/2013

API 47-039 - 06352

Farm name D. Haynes ET AL

Well number D. Haynes #1

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	18.00	New	48.0	none	No, cement by hand to surface
Surface	12 1/4	9 5/8	335.00	New	26.0	1 at 84'	Yes, 7 bbls to pit
Coal							
Intermediate 1	8 7/8	7	2071.45	New	17.0	1 at 295'	Yes, 5 bbl to pit
Intermediate 2							
Intermediate 3							
Production	6 1/2	4 1/2	4652.30	New	11.6	5 at joints: 10,20,30,40,50	
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	Portland	7				GL	8
Surface	Type 1	105	14.8	1.40	147	GL	16
Coal							
Intermediate 1	Unifillight/Type 1	140/150	12.7/14.8	1.84/1.40	257.6/210	GL	16
Intermediate 2							
Intermediate 3							
Production	Stronglite 250	175	12.3	2.34	409.5	4642	17
Tubing							

Drillers TD (ft) 4672      Loggers TD (ft) 4682

Deepest formation penetrated Devonian 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

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

13 3/8": no centralizers used

9 5/8": no centralizers used

7": 3 centralizers used at joints: 10, 20, 30

4 1/2": 6 centralizers used at joints 10, 20, 30, 40, 50, 60

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 \_\_\_\_\_

API 47- 039 - 06352 Farm name D. Haynes ET AL Well number D. Haynes #1

**PERFORATION RECORD**

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	7/17/2013	3669	4554	40	Devonian Shale
2	7/17/2013	2864	3598	40	Huron, Devonian Shale

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 (bbbls)	Amount of Nitrogen/other (units)
1	7/17/2013		2078	2342	1930	none	11	1,000,897 scf
2	7/17/2013		2129	1601	1535	none	11	1,002,300 scf

RECEIVED  
Office of Oil and Gas  
NOV 25 2013  
WV Department of  
Environmental Protection

RECEIVED  
Office of Oil and Gas

Please insert additional pages as applicable.

OCT 15 2013 12/06/2013  
WV Department of  
Environmental Protection



