DATE: December 2, 2013 API#: 47-10501367

## State of West Virginia Department of Environmental Protection Office of Oil and Gas

## Well Operator's Report of Well Work

Farm name: Heartwood Forestland

Operator Well No.: CAD 11

LOCATION: Elevation: 909'

Quadrangle: Burning Springs 7.5

District: Spring Creek

County: Wirt

Latitude: 6650 Feet South of 38 Deg. 56 Min. 24.3 Sec. Longitude 7790 Feet West of 81 Deg. 16 Min. 38.3 Sec.

Company: CAD Energy Corp.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 10318 Little Kanawha Pkwy.				
Creston, WV 26141				
Agent: Russell Hupp				
Inspector: Joe Taylor				
Date Permit Issued: 7/16/13				
Date Well Work Commenced: 8/26/13				
Date Well Work Completed: 11/11/13	9-5/8"	323'	323'	To surface
Verbal Plugging: N/A				
Date Permission granted on:N/A	7"	1732'	1732'	To surface
Rotary X Cable Rig				
Total Depth (feet): 5590	4-1/2"	5586'	5586'	140 sks
Fresh Water Depth (ft.): None				
Salt Water Depth (ft.): 1562				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):_N/A				44.1

## **OPEN FLOW DATA**

Producing formation:	Devonian Shale	Pay zone depth (ft):	4194 - 5498

Oil: Initial open flow: Bbl/d Gas: Initial open flow MCF/d

Final open flow: MCF/d Final open flow: Bbl/d Time of open flow between initial and final tests: Hours Static rock Pressure: 900 psig (surface pressure) after 36 Hours

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OCT 1 3 2015

Second producing formation: Pay zone depth (ft): Gas: Initial open flow: MCF/d

Oil: Initial open flow Bbl/d

Final open flow: \_\_\_\_ MCF/d Final open flow

Bbl/d WV Department of **Environmental Protection** 

Time of open flow between initial and final tests: Hours Static rock Pressure: psig (surface pressure) after

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

10/30/2015

Signed:

## Stage 1:

17 holes 5318 - 5498 Perforations:

Treatment: 500 gals. 15% HCL 700,000 scf N2

Stage 2:

Perforations: 18 holes 5156 - 5244 Treatment: 500 gals. 15% HCL 700,000 scf N2

Stage 3:

Perforations:

20 holes 4664-4678

Treatment: 500 gals. 15% HCL 1,100,000 scf N2

Stage 4:

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Perforations:

22 holes 4194 - 4226

Treatment: 500 gals. 15% HCL

1,100,000 scf N2

Well Log:	Sand & Shale	0 - 1821
_	Injun	1822- 1838
	Sand & Shale	1839 - 1840
	Squaw	1841 - 1856
	Sand & Shale	1857 - 2592
٠.	Gordon	2593 - 2600
	Shale	2601 - 4188
	Riley	4189 - 4220
	Shale	4221 - 4430
	Benson	4431 - 4448
	Shale	4449 - 4654
	Alexander	4655 - 4674
	Shale	4675 - 5148
	Rhinestreet	5149 - 5590