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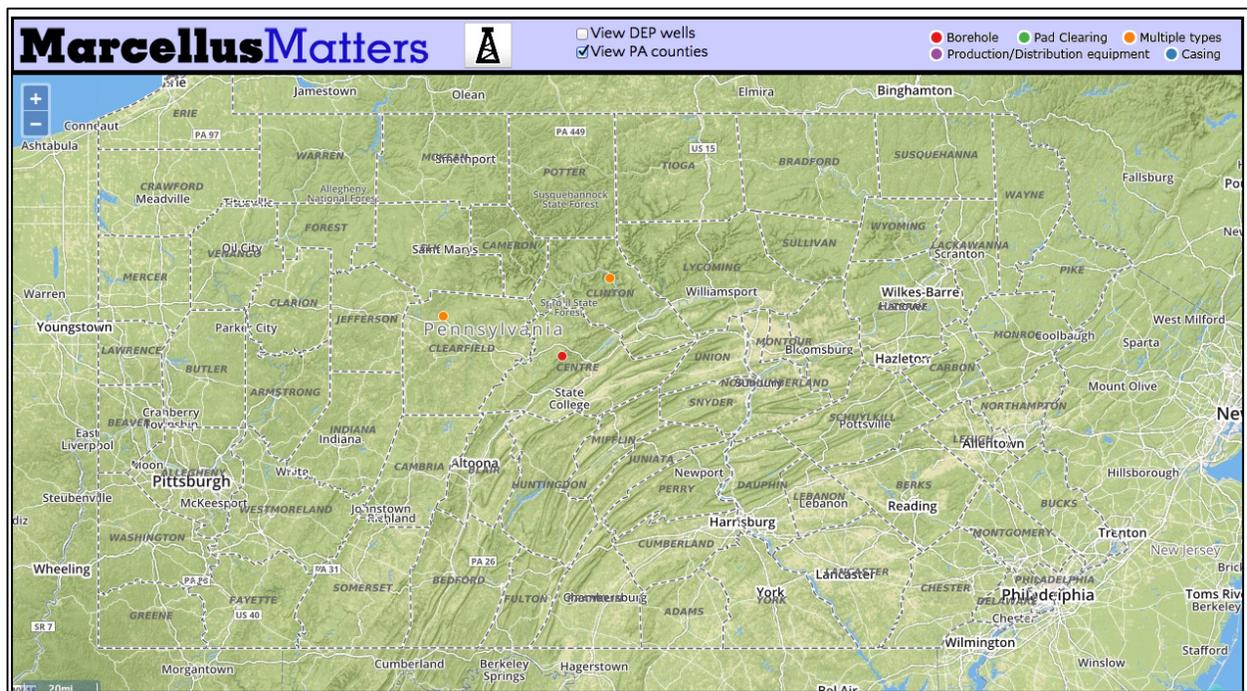**MARCELLUS CENTER**
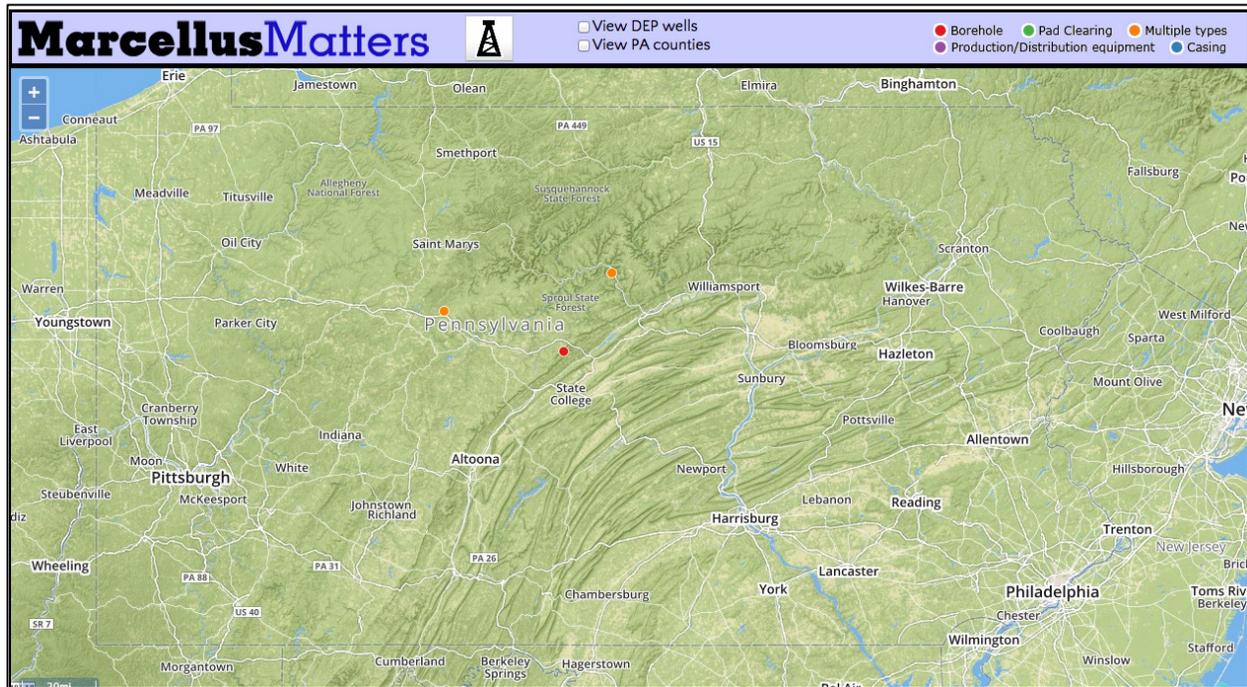**MCOR**
FOR OUTREACH AND RESEARCH

Orphan Well Scout: Quick Start Guide

Summary

The Orphan Well Scout is a map-based web application available on the Marcellus Matters website (http://www.marcellusmatters.psu.edu) designed to document the discovery of orphan and abandoned oil and gas wells. This particular application enables Community Science Volunteers to record the location of a suspected orphan well on a map and to specify descriptive information about the field site. The simple design of the application is intended to accommodate a variety of users.
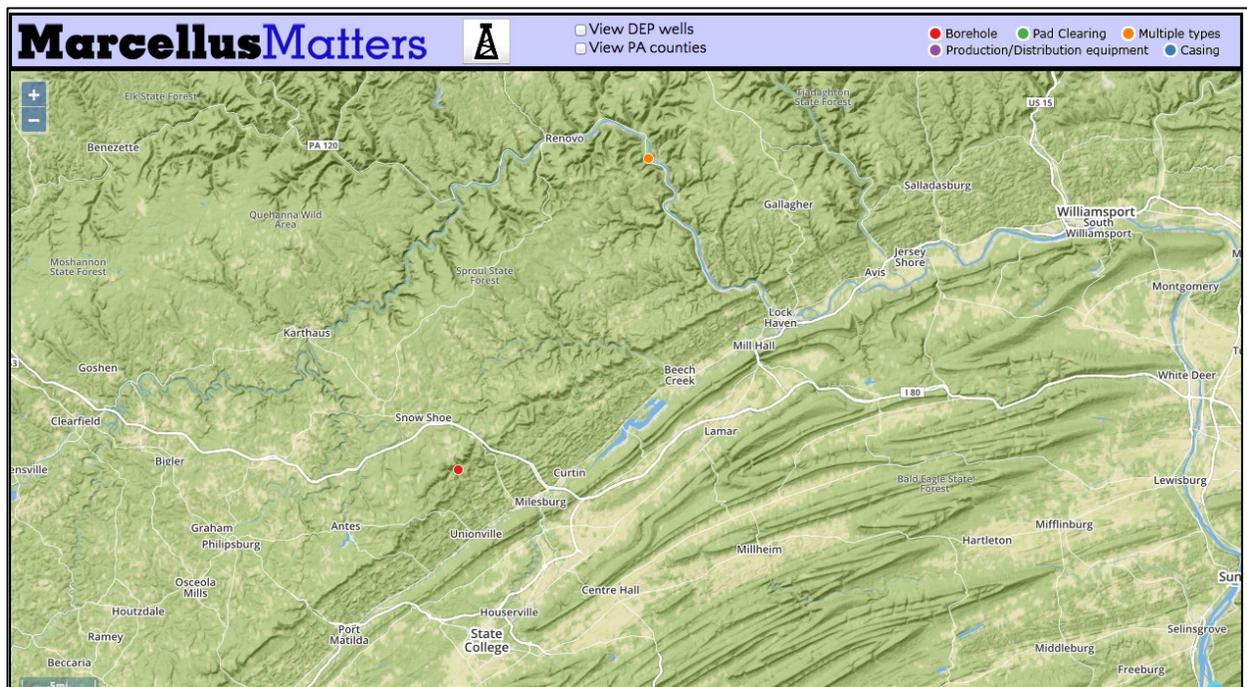
Basic Use

1. The Orphan Well Scout appears as a topographic map of Pennsylvania, with options to view layers of the county boundaries and the active, inactive, and abandoned oil and gas wells designated by the Pennsylvania Department of Environmental Protection.
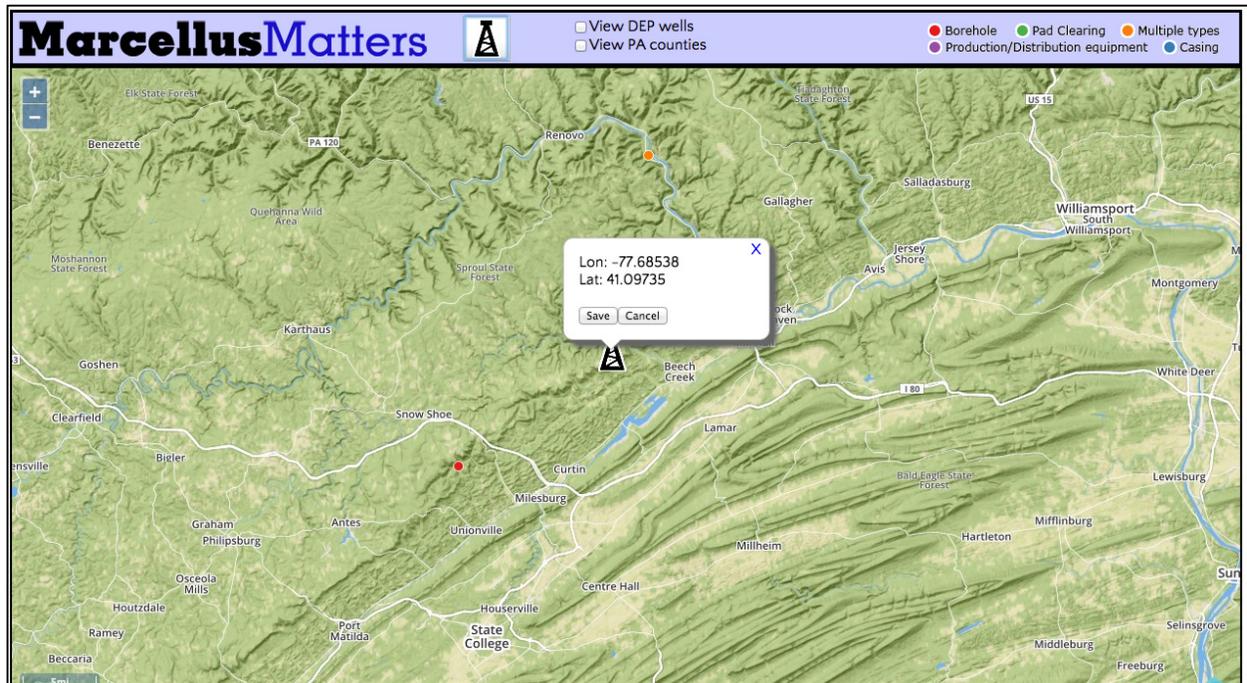

2. The locations of historic oil and gas development contributed by users are shown as points of varying colors. Borehole locations are designated as red points, pad clearing locations are designated as green points, production and distribution equipment locations are designated as purple points, casing locations are designated as blue points, and multiple types locations are designated as orange points.

3. To change the resolution of the map uese the zoom in and zoom out buttons in the upper left corner of the screen.

4. To contribute the location of an orphan or abandoned oil and gas well, select the Oil Derrick button at the top of the screen. An Oil Derrick icon will then appear at the center of the screen, which can be dragged to the site location. The application is designed to allow users to designate the site location by either placing the point at an approximate location using the map or by specifying the specific geographic coordinates of the point. Once the icon is positioned in the correct location, click either the save button to record the site or the cancel button to remove the icon.

5. If you select the save button, a box will appear which allows descriptive information about the site to be specified. This data includes the type of site (borehole, casing, pad clearing, production and distribution equipment), the casing status (none, steel, wood, not visible, other), the approximate pipe diameter, the plugging status of the site, the condition of the site (pipe or equipment damaged, outgassing or bubbling, pipe or equipment corroded, outgassing sulfur or other odor), the site vegetation (bare ground, grasses, shrubs, young forest, mature forest), and the distance of the well to water (less than 1 meter, 1 to 10 meters, 11 to 100 meters, greater than 100 meters).

In the interest of data quality, the Orphan Well Scout has been designated as private. In the interest of data quality, the orphan well scout has been designated as private. Data can only be contributed by participants who have attended either the Community Science Volunteer educational workshops or the Marcellus Citizen Science Network informational sessions and field trips.

Create your Marcellus Matters Web Account

1. Go to http://www.marcellusmatters.psu.edu/mm_memberships/register
2. Enter registration code: shale2015-A