

### Whom do I call if I suspect there is an abandoned oil or gas well on my property?

The Manager of the Orphaned and Abandoned Well Program Indiana is Mary Estrada. Call her or any of the other persons at the Division of Oil and Gas listed on the last page of this brochure.

### What is the Orphaned and Abandoned Well Program?

This is a program administered by the Division of Oil and Gas to plug improperly abandoned oil and gas wells. The program is funded by Annual Well Fees paid by active oil and gas operators in Indiana, and from civil penalties collected from violations of the Oil and Gas Act. As wells are prioritized and identified for plugging, the Division contracts with qualified well plugging contractors to perform the plugging operations.

### How many orphaned or abandoned wells are there in Indiana?

The number of inventoried orphaned or abandoned wells as of January, 2018, was 975. This list is continually updated as new wells are added and as wells are either plugged or returned to production by other operators.

### How do you determine which wells should be plugged and when they should be plugged?

Each potential well is investigated to verify that it is an abandoned oil or gas well and to confirm there is no viable owner or operator who is responsible for plugging the well. The well is ranked according to the relative risks it poses to public health or safety or to the environment taking into account factors such as: whether the well is currently (or suspected to be) leaking oil, salt water, or natural gas into the environment; its proximity to residential or commercial buildings or water supply wells; any immediate threats the well poses to the health or safety of the public, or to that of wildlife or livestock; the fluid levels in the well; whether the well is in an area subject to frequent flooding or close to streams or other environmentally sensitive areas; or whether the well currently



Orphaned Gas Well in Marion County

poses a significant impediment to existing or proposed commercial or residential development, or to mineral extraction, agricultural, or industrial operations.

As funds are available, plugging projects are prepared each year to plug those wells ranking highest based upon the assessment of well's risk to public health or safety or to the environment.

Funds may also be available on a cost-share basis to landowners or developers for use in plugging qualified lower priority wells.

For more information about oil and gas in Indiana, the Division of Oil and Gas, or to search the PDMS database, visit our website at:

<http://www.in.gov/dnr/dnroil>



Orphaned Well in Warrick County

## INDIANA DEPARTMENT OF NATURAL RESOURCES

### Division of Oil and Gas

#### Indianapolis Office

402 W. Washington St., W293

Indianapolis, IN 46204

Rusty Retherford, Director, [rretherford@dnr.in.gov](mailto:rretherford@dnr.in.gov)

Jim AmRhein, Asst. Director, Permitting &

Compliance, [jamrhein@dnr.in.gov](mailto:jamrhein@dnr.in.gov)

Mary Estrada, Manager, Orphan/Abandoned Sites,

[mestrada@dnr.in.gov](mailto:mestrada@dnr.in.gov)

Phone: 317-232-4055

#### Evansville Office

8215 Pollack Ave.

Evansville, IN 47715

Kevin York, Field Inspection Manager, [kyork@dnr.in.gov](mailto:kyork@dnr.in.gov)

Phone: 812-853-8640

Fax: 812-853-8648

INDIANA DEPARTMENT OF  
NATURAL RESOURCES

## ORPHANED & ABANDONED WELL PROGRAM



**Our Mission: Encouraging the Responsible Development of Indiana's Oil and Gas in a Manner that is Protective of Public Health and Safety, and the Environment**



Orphaned Oil Well in Pike County

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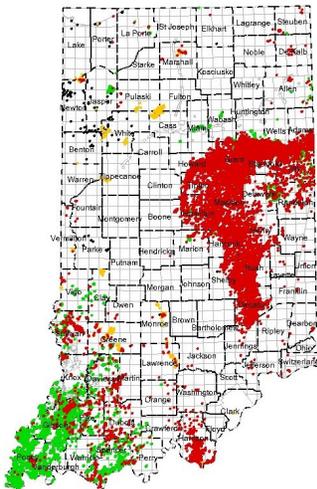
<http://www.in.gov/dnr/dnroil>

# ORPHANED AND ABANDONED WELLS IN INDIANA - FAQ'S

## How many oil and gas wells are there in Indiana?

There have been more than 70,000 oil and gas wells drilled in Indiana. Many were drilled during the original "gas boom" in east central Indiana that began in the 1890's. About 5,000 wells are in use today. While Indiana had well plugging standards as early as 1893, many methods used to abandon wells prior to 1947 do not meet modern standards.

The location of oil and gas producing areas in Indiana are depicted on the map below. Locations of gas wells are represented in red, oil wells in green, and gas storage wells in yellow. (Map Source: Indiana Geological Survey)



## Why does a well need to be plugged?

When no longer used for production of oil or gas, a well is required to be plugged to ensure that:

- it does not cause or contribute to the contamination of ground or surface water;
- it does not allow oil, gas, or water to discharge onto the ground or into the air;
- all oil, gas, and water are confined in their original formations; and
- the well does not pose a hazard to public health or safety or interfere with agricultural or other uses of the land after the well is no longer in active use.

## Who is responsible for plugging the well?

Indiana law requires a well to be plugged by the owner or operator whenever it is no longer used for oil or gas production. In addition to plugging it, the operator is required to remove all equipment used in the production of the well and restore the site to a suitable condition.

## What is an orphaned well?

An orphaned well is an oil and gas well that has been abandoned by its operator without properly plugging the well and the operator or owner of the well is unknown.

## How is a well plugged?



Pumping cement into a well

After all of the tubing and other equipment in the well is removed, the well is plugged with Portland Cement. The cement plug is placed in the well across all zones that had produced oil or gas and also from below the base of the deepest fresh groundwater zone to the top of the well to ensure that all fresh groundwater zones are protected with a solid column of cement.

## How will I know if I have an abandoned well on my property?

Unless the well casing, wellhead, or surface production equipment is still present, it can be difficult to determine whether an abandoned oil or gas well is on your property. Many of these wells have been found buried under buildings, driveways, as well as streets and highways. Some signs that may indicate an abandoned well are:

- areas of distressed vegetation;
- areas where the ground has settled or caved in from a collapsed wellbore;
- oily or salty water seeps;
- the odor of natural gas or crude oil; or

- a water well contaminated with saltwater, crude oil, or natural gas.

Crude oil may appear either as a thick layer or a thin "rainbow" sheen on the surface of water. Natural gas in a water well may be signaled by pressure surges, a natural gas odor at the tap, or bubbling in the water.

You may also want to search the Petroleum Database Management System (PDMS) developed by the Indiana Geological Survey. PDMS is a searchable, interactive program available online and can be used to identify well locations in Indiana. It can be accessed from the Division of Oil and Gas website by selecting the "Well Data Online" option.

## If an abandoned well is on my property, why shouldn't I just remove the equipment, cut the well off, and just fill it in myself?

Work performed on an abandoned oil or gas well should only be performed by a qualified well plugging contractor. Removing equipment from a well can pose serious safety hazards. Some wells may also have residual pressure inside them that could pose a serious hazard resulting from a sudden discharge of natural gas or crude oil from the well. Experienced well plugging contractors have the appropriate equipment and knowledge to properly abandon a well.



Well plugging contractor at work in Knox County

By law a representative from the Division of Oil and Gas must witness oil or gas well plugging operations. In addition to safety and environmental concerns previously mentioned, cutting the casing off from an abandoned well and covering it with soil or other material is an unacceptable method of plugging which can create substantial risks to public health or safety and result in the contamination of groundwater.

Never attempt to remove abandoned equipment or abandon a well without first notifying the Division of Oil and Gas and seeing that the work is performed by an experienced well plugging contractor.