

EXPLANATION

INDIANA GEOLOGICAL SURVEY
PETROLEUM WELL SYMBOLS

The following symbols include all of the primary petroleum well symbols used by the Indiana Geological Survey. These symbols may be modified using the three modifiers listed below to provide additional information about the status or source data for a particular well. This list may include symbols not shown on this particular map.

- permitted location
- ◇ dry hole
- oil
- ✱ gas
- ✱ oil and gas
- ✱ shut-in gas
- gas storage
- gas storage formerly oil
- ✱ gas storage formerly gas
- ✱ water injection
- ✱ water injection and/or formerly oil
- ✱ water injection and/or formerly gas
- ✱ water injection and/or formerly oil and gas
- observation
- ✱ observation and/or formerly gas
- ✱ observation and/or formerly gas storage
- ◇ Trenton well, possibly productive; only available information is an uncertain location
- salt water disposal
- salt water disposal and/or formerly oil
- salt water disposal and/or formerly gas
- salt water disposal and/or formerly gas storage
- potable water supply
- nonpotable water supply
- nonpotable water supply formerly oil
- waste disposal
- temporarily abandoned
- confidential well
- confidential workover
- confidential boring
- boring
- stratigraphic test
- surface location of deviated hole
- path of deviated hole

SYMBOL MODIFIERS

Modifiers may be added to any standard IGS well symbol to denote the following three criteria:

- abandoned
- completion type uncertain
- location uncertain

COMPLETION FORMATIONS

- Unknown
 - Tar Springs
 - Hardinsburg
 - Big Clifty (Jackson)
 - Cypress
 - Sample (Paint Creek)
 - Bethel
 - Paoli
 - Ste. Genevieve
 - Salem
 - Harrodsburg
 - Muldraugh
 - Borden (Carper)
 - New Albany
- The horizons or stratigraphic units (completion formations) from which individual wells produce oil or gas are denoted by color-coded circles. The same color code is used throughout the state. Because some wells produce from multiple horizons, the colored circles are systematically offset around each well symbol so that multiple colors can be associated with an individual well.
- The completion formation symbol pattern is modified to distinguish between oil and gas, gas storage, and water injection wells. The color of the symbol denotes the completion formation while the pattern of the symbol denotes the type of well.
- oil and gas
 - gas storage
 - water injection

State Property

- Petroleum field boundary; encloses wells classified in a single field, but is not intended to indicate the extent of producing reservoirs.
- Gas storage project boundary; encloses wells classified in a single gas storage project, but is not intended to indicate the extent of the gas storage reservoir.

ACCURACY OF WELL LOCATIONS

Local coordinates of wells contained within the Indiana Geological Survey's Petroleum Database Management System (PDMS) and their corresponding locations as shown on maps are believed to be reasonably accurate when portrayed on a scale of 1 inch to 1 mile. Although the coordinates for a great many locations in the database have been very accurately determined, past practices and inherent limitations on the accuracy with which a well was spotted on a 1:24,000-scale USGS topographic map have resulted in well coordinates that locate wells a small distance from their actual locations. Depending on circumstances, this distance could be as great as 100 feet, or rarely, somewhat more. In general, such locations are sufficiently accurate for most petroleum exploration and field mapping purposes. Additionally, it is important to note that new and revised data continually are being entered into the PDMS and, despite the use of careful procedures and proofing of the entered data, human error always remains a possibility. Every effort is made to correct errors and discrepancies whenever they are identified, but it is the responsibility of the user to verify any information to the extent it is deemed important.

GENERAL DISCLAIMER

This map was compiled by the Indiana Geological Survey, Indiana University, using data believed to be accurate; however, a margin of error is inherent in all maps. This map is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability of a particular purpose or use. There is no attempt in either the design or production of this map to define the jurisdiction of any federal, state, or local government. This map is intended for use only at the scale of 1:63,360 or smaller.

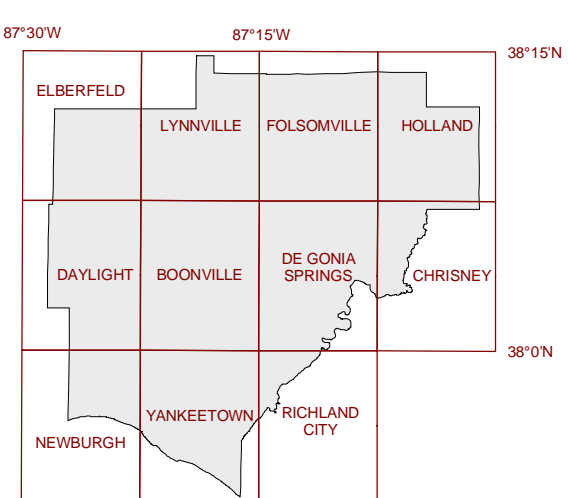
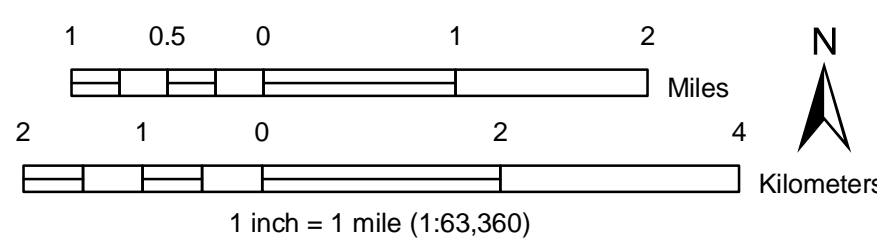
COPYRIGHT 2010 INDIANA UNIVERSITY, INDIANA GEOLOGICAL SURVEY, ALL RIGHTS RESERVED

The information on this media is proprietary to Indiana University, Indiana Geological Survey, and any copying, adaptation, distribution, public performance, or public display without the express written consent of Indiana University, Indiana Geological Survey is prohibited.

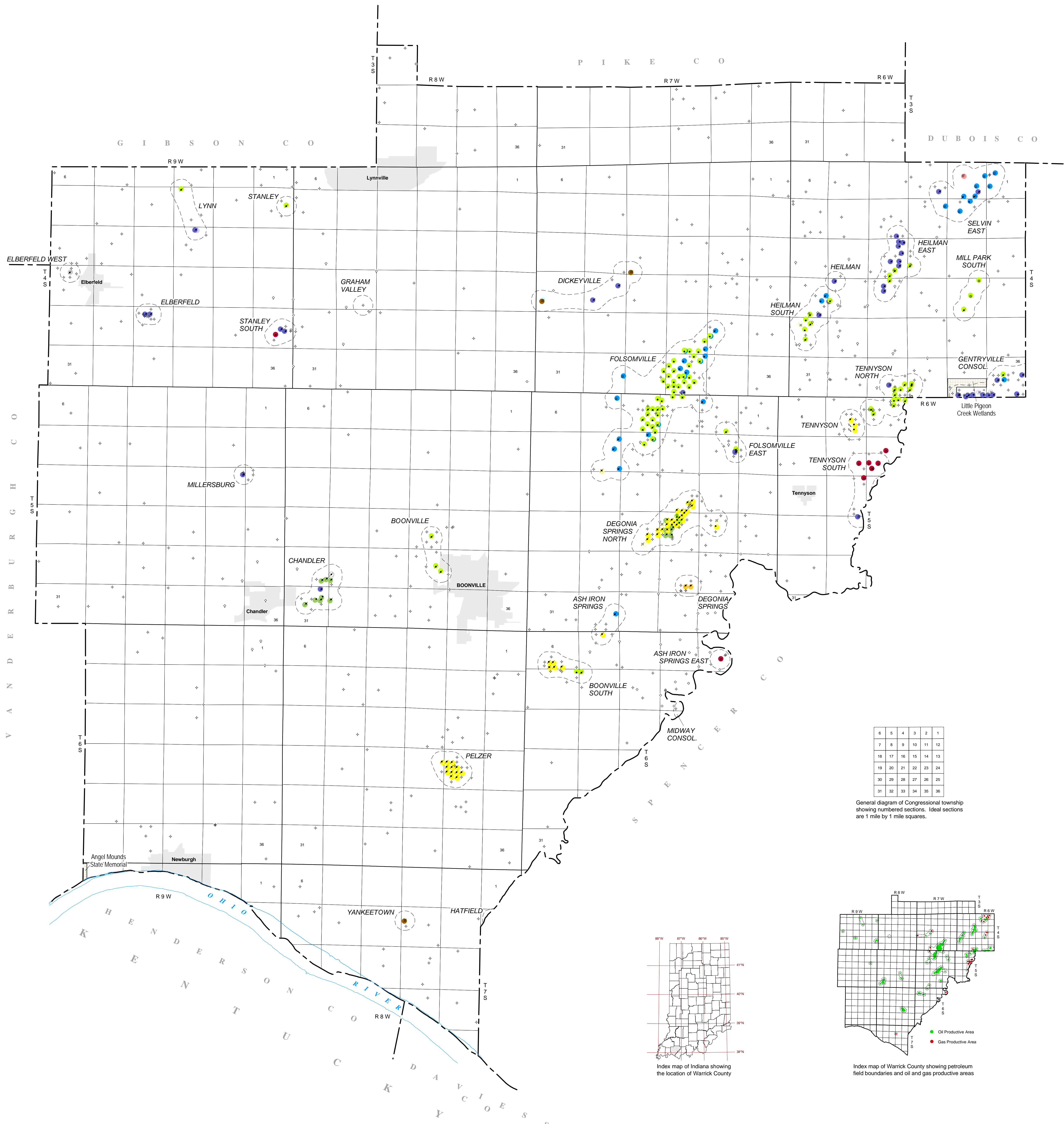
DATA AVAILABILITY

Paper copies, as well as digital Adobe Acrobat formats, are available for purchase through the Publications Sales Office of the Indiana Geological Survey, Indiana University. Larger-scale maps, optionally showing additional well information may also be obtained from the IGS. Availability may depend on the current status of information contained in the IGS's Petroleum Database Management System. Prices for larger-scale maps vary depending on the amount of custom preparation needed to produce the map. Requests for specific well information should be directed to the Subsurface Geology Section, Indiana Geological Survey.

611 North Walnut Grove Ave.
Bloomington, IN 47405-2208
Phone (812) 855-7636
Fax (812) 855-2862
E-mail: IGSR@indiana.edu
URL: http://igs.indiana.edu/

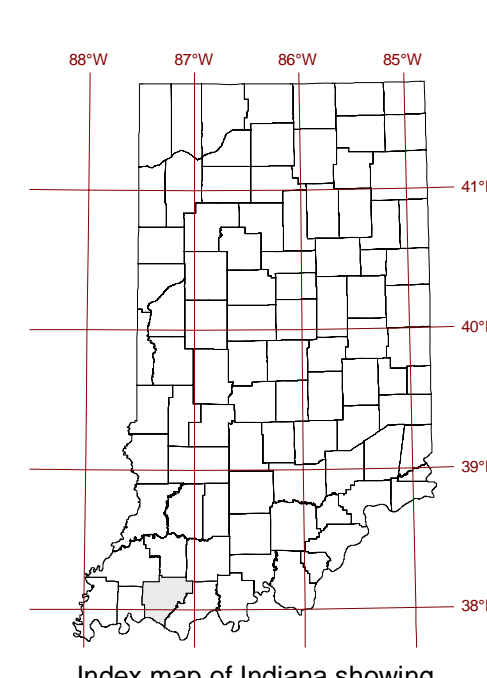


Index map of Warrick County showing U.S. Geological Survey 7 1/2-minute topographic quadrangle map names

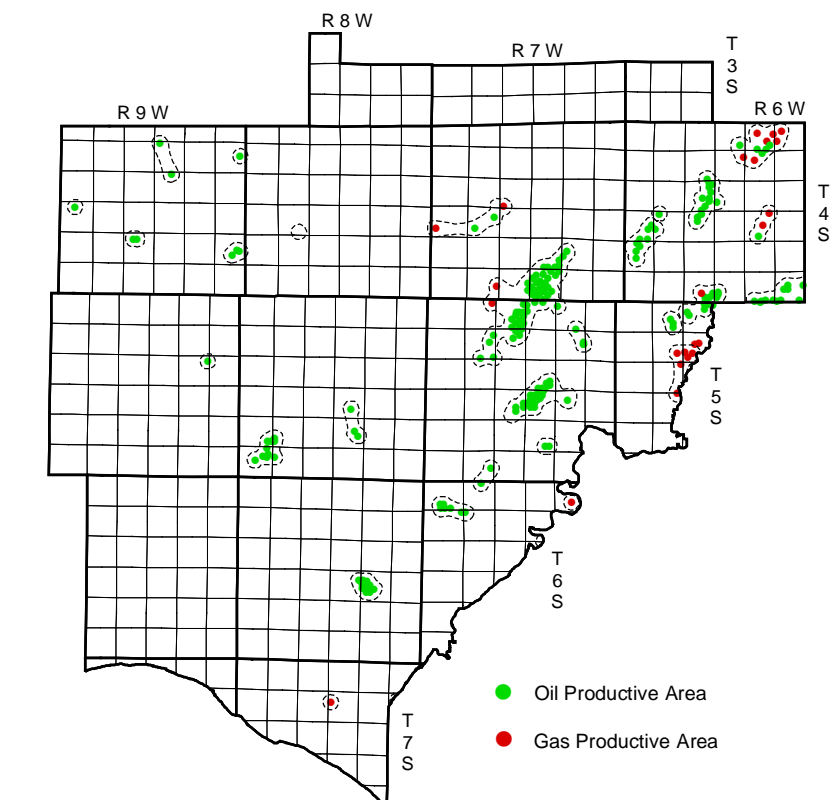


6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

General diagram of Congressional township showing numbered sections. Ideal sections are 1 mile by 1 mile squares.



Index map of Indiana showing the location of Warrick County



Index map of Warrick County showing petroleum field boundaries and oil and gas productive areas