
Tags   oil, gas, petroleum, petrogeology, economic geology, well, exploration, permit, log, LAS, drill, history, abandoned, analysis, chemistry, chemical, education, public data, web map service

Summary
This feature class provides the locations and attributes for 214 oil and gas wells in Idaho.

Description
This is a component of the Idaho Geological Survey publication, Digital Database 3: Database of oil and gas data of Idaho. This dataset represents information on current and historical oil and gas exploration wells in Idaho provided by companies to the Oil and Gas Commission from 1903-2022. This data was transferred to the Idaho Geological Survey in 2009 from the Idaho Department of Lands, who regulates and maintains data for recent/current oil and gas exploration in Idaho. These data were derived mostly from historical well paper logs and reports. This database also includes newly drilled and producing wells. Information for active wells is from journal articles, well permits from Idaho Department of Lands, and electric logs.

Credits
New well data came from Idaho Department of Lands, electric logs, Rigzone.com, Oil and Gas Journal. Historic well data came from the Idaho Geological Survey publication DD-3 (2013), Historical Oil and Gas data for Idaho: 1903-1988. Data source for this 2023 release is Idaho Department of Lands and brings data current to 2022.

Use limitations
Provided as-is for research purposes. Locations and attributes of wells are compiled from the assortment of source documents available at the time of publication. Revisions of this database will be issued as new information is added. Wells that were drilled from 2007 to present day have had their locations verified using the best available imagery. If a well was permitted but not drilled, the coordinates from the permit are provided.

Extent
West  -117.023782   East  -111.070051
North  47.813927   South  42.005267

Scale Range
Maximum (zoomed in)  1:5,000
Minimum (zoomed out)  1:150,000,000

Topics and Keywords   ►
Themes or categories of the resource   Economy

Content type   Downloadable Data
Export to FGDC CSDGM XML format as Resource Description   No
Citation

Title Oil and gas wells of Idaho: 1903-2022, Idaho Geological Survey Digital Database 3, Version 1.2023
Publication date 2023-05-25 00:00:00
Presentation formats digital map

Citation Contacts

Responsible party - originator
Individual's name Mark Barton

Responsible party - originator
Individual's name Reed Lewis

Responsible party - originator
Individual's name Christopher Tate

Responsible party - originator
Individual's name Jacob Eldredge

Responsible party - publisher
Organization's name Idaho Geological Survey

Contact information

Phone
Voice 208-885-7991

Address
Type physical
Delivery point 875 Perimeter Dr.
City Moscow
Administrative area ID
Postal code 83844-3014
Country US
Delivery point Morrill Hall, 3rd Floor

Resource Details

Dataset character set utf8 - 8 bit UCS Transfer Format

Status on-going

Credits
New well data came from Idaho Department of Lands, electric logs, Rigzone.com, Oil and Gas Journal. Historic well data came from the Idaho Geological Survey publication DD-3 (2013), Historical Oil and Gas data for Idaho: 1903-1988. Data source for this 2023 release is Idaho Department of Lands and brings data current to 2022.

ArcGIS item properties

Extents

Extent
Description
Intermittent permitting and drilling of oil and gas wells.

Geographic extent
Bounding rectangle
Extent type
Extent used for searching
   West longitude  -117.023782
   East longitude  -111.070051
   North latitude  47.813927
   South latitude  42.005267

Temporal extent
   Beginning date  1903-01-01  00:00:00
   Ending date    2022-02-28  00:00:00

Resource Points of Contact

Point of contact - publisher
   Organization's name  Idaho Geological Survey

Contact information
   Phone
      Voice  208-885-7991

Address
   Type  physical
   Delivery point  875 Perimeter Dr.
   City  Moscow
   Administrative area  ID
   Postal code  83844-3014
   Country  US
   Delivery point  Morrill Hall, 3rd Floor

Resource Maintenance

Resource maintenance
   Update frequency  as needed

Resource Constraints

Constraints
   Limitations of use
   Provided as-is for research purposes. Locations and attributes of wells are compiled from the assortment of source
documents available at the time of publication. Revisions of this database will be issued as new information is added.
Wells that were drilled from 2007 to present day have had their locations verified using the best available imagery. If
a well was permitted but not drilled, the coordinates from the permit are provided.

Legal constraints
   Limitations of use
   The Idaho Geological Survey does not assume liability; no warranty expressed or implied is made by the Agency
regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty.

Data Quality

Scope of quality information
   Resource level  dataset

Data quality report - Conceptual consistency
   Data quality measure reference
Measure description
Wells and their attributes are assigned by IGS Staff. Data presented here represent the best known information for these wells.

Data quality report - Completeness omission
Data quality measure reference
Measure description
All well locations were visually checked against original maps, imagery, and other location data for completeness.

Data quality report - Quantitative attribute accuracy
Data quality measure reference
Measure description
Attributes in this dataset were derived by IGS staff from files acquired from the Idaho Department of Lands in 2009. Additional data was added from IGS files associated with oil and gas.

Quality evaluation procedure
Evaluation type direct internal

Data quality report - Absolute external positional accuracy
dimension horizontal
Data quality measure reference
Measure description
Wells were plotted on a 1:24,000 base using measurements provided in sundry reports and applications. Locations are approximate if permitted but not drilled.

Lineage
Process step
When the process occurred 2009-08-01 00:00:00
Description
Acquired paper files from Idaho Department of Lands.

Process step
When the process occurred 2010-08-01 00:00:00
Description
Scanned letter sized documentation.

Process step
When the process occurred 2010-09-01 00:00:00
Description
Added attributes for wells from scanned data.

Process step
When the process occurred 2010-10-01 00:00:00
Description
Created Lat/Lon locations in decimal degrees from plotting locations or measured from topo map.
Process step ►
  When the process occurred 2010-11-01 00:00:00
  Description
  Scanned geophysical logs (scanned at LogDigi).

Process step ►
  When the process occurred 2011-03-01 00:00:00
  Description
  Added attributes for log information from scanned data.

Process step ►
  When the process occurred 2011-04-01 00:00:00
  Description
  Created point shapefile from Lat/Lon locations in decimal degrees from table (excel file).

Process step ►
  When the process occurred 2013-04-23 00:00:00
  Description
  Published DD-3

Process step ►
  When the process occurred 2020-11-09 00:00:00
  Description
  Update DD-3 records and fields. Add recent oil and gas wells.

Process step ►
  When the process occurred 2023-02-22 00:00:00
  Description
  Update DD-3 records and fields. Add recent oil and gas wells. Add new log type, logs, documents, and LAS files for recently permitted wells.

Process step ►
  When the process occurred 2023-05-15 00:00:00
  Description
  Update DD-3 records and field names. Remove redundant fields. Add recent oil and gas wells. Verify and correct accuracy of well coordinates in WGS84 and NAD27.

Process step ►
  When the process occurred 2023-05-25 00:00:00
  Description
  Publish new DD-3.

Source data ►
  Description
These records include information on past oil and gas exploration wells in Idaho from 1903 to 1988 provided by companies to the Oil and Gas Conservation Commission. These data were derived mostly from historical well paper logs and reports. This data was transferred to the Idaho Geological Survey in 2009 from the Idaho Department of Lands. Data from wells that were permitted from 2007 to the present comes from Idaho Department of Lands and the Oil and Gas Conservation Commission.

Distribution

Distributor

Contact information - publisher

Organization’s name  Idaho Geological Survey

Contact information

Phone

Voice  208-885-7991

Address

Type  physical

Delivery point  875 Perimeter Dr.

City  Moscow

Administrative area  ID

Postal code  83844-3014

Country  US

Delivery point  Morrill Hall, 3rd Floor

Fields

Details for object Details for OilGasWells

Type  Feature Class

Definition

Oil and gas well point data

Definition source

Idaho Geological Survey

Field ID

Data type  OID

Width  4

Field description

Internal feature number.

Description source

ESRI

Field API

Data type  Text

Width  255

Field description

The American Petroleum Institute number is a unique number used nationally to track and identify every permitted oil and gas well. First two digits are state, next 3 digits are county, last five digits are permit serial number.

Description source

IGS
Field IGS_num ►
  Data type  Text
  Width  255

Field description
Idaho Geological Survey well identification number. IGS number has the following format (xxxx-xx): First four digits are the year in which the well was permitted, last two digits correspond to the order in which the permits were issued.

Description source
IGS

Field Operator ►
  Data type  Text
  Width  255

Field description
Company listed on the well permit.

Description source
IGS

Field WellName ►
  Data type  Text
  Width  255

Field description
Name of well listed on permit.

Description source
IGS

Field WellStatus ►
  Data type  Text
  Width  255

Field description
Oil and Gas producing well, Shut-in, Abandoned (plugged status unknown), Plugged and Abandoned, currently used as an artesian well, currently used as a geothermal well.

Description source
IGS

Field WellType ►
  Data type  Text
  Width  255

Field description
Oil and Gas well, Geothermal well, Water Well, Stratigraphic test well.
Field Latitude NAD27
- Data type: Double
- Width: 8

Field description:
Latitude of well location based on NAD27 datum.

Description source
IGS

Field Longitude NAD27
- Data type: Double
- Width: 8

Field description:
Longitude of well location based on NAD27 datum.

Description source
IGS

Field Latitude WGS84
- Data type: Double
- Width: 8

Field description:
Latitude of well location based on WGS84 datum.

Description source
IGS

Field Longitude WGS84
- Data type: Double
- Width: 8

Field description:
Longitude of well location based on WGS84 datum.

Description source
IGS

Field Completion Status
- Data type: Text
- Width: 255

Field description:
Y = subsurface zone completed, N = well not completed or status unknown.

Description source
IGS
Field Drilled

- **Data type**: Text
- **Width**: 255

Field description
Y = well was drilled, N = well was permitted but not drilled.

Description source
IGS

Field DrillingFluid

- **Data type**: Text
- **Width**: 255

Field description
O indicates an oil based drilling fluid used, W indicates a water based drilling fluid was used, U indicates drilling fluid type is unknown.

Description source
IGS

Field EndDrillDate

- **Data type**: Text
- **Width**: 255

Field description
Date in which the drilling of the well was completed.

Description source
IGS

Field SpudDate

- **Data type**: Text
- **Width**: 255

Field description
Estimated date well was spudded.

Description source
IGS

Field HydrocarbonType

- **Data type**: Text
- **Width**: 255

Field description
Oil show reported, Gas show reported, Cuttings Fluorescence reported, No show reported.

Description source
Field GeophysicalLogs ➤
Data type  Text
Width  255

Field description
Y geophysical wireline logs for the well exist. N indicates the existence of logs are not known.

Description source
IGS

Field LASFiles ➤
Data type  Text
Width  255

Field description
Y indicates digital LAS Files of logs are available from the IGS website, N means LAS files are not available from the IGS website, C indicates public distribution of LAS files are restricted for a year after the well has been drilled.

Description source
IGS

Field PaperLogs ➤
Data type  Text
Width  255

Field description
Y indicates copies of the wireline logs are available from the IGS website.

Description source
IGS

Field DirSurvey ➤
Data type  Text
Width  255

Field description
Y indicates Directional Survey is available from the IGS website.

Description source
IGS

Field MudLog ➤
Data type  Text
Width  255

Field description
Y indicates Mud Log is available from the IGS website.

Description source
IGS
Field DipLog ►
  Data type  Text
  Width   255

Field description
Y indicates Dip Log is available from the IGS website, N indicates Dip does not exists or copy is not available from IGS.

Description source
IGS

Field TempLog ►
  Data type  Text
  Width   255

Field description
Y indicates a Temperature Log available from IGS website.

Description source
IGS

Field LithLogType ►
  Data type  Text
  Width   255

Field description
Indicates the types of Lithologic Logs available from the IGS website.

Description source
IGS

Field DST ►
  Data type  Text
  Width   255

Field description
Y indicates a Drill Stem Report (DST) available from IGS website.

Description source
IGS

Field HCA ►
  Data type  Text
  Width   255

Field description
Y indicates a Hydrocarbon Analysis (HCA) is available from the IGS website.

Description source
Field BHP ►
Data type: Text
Width: 255

Field description
Y indicates a Bottom Hole Pressure (BHP) Log is available from the IGS website.

Description source
IGS

Field Cuttings ►
Data type: Text
Width: 255

Field description
Agency where cuttings reside. N indicates unknown existence of any cuttings.

Description source
IGS

Field Core ►
Data type: Text
Width: 255

Field description
Indicates drill cores were taken, how many, and at what intervals. Core logs are available from the IGS website.

Description source
IGS

Field CountyAPI ►
Data type: Long
Width: 4

Field description
County code portion of the API number.

Description source
IGS

Field County ►
Data type: Text
Width: 255

Field description
County name.

Description source
IGS
Field plssTownship ►
  Data type  Text
  Width  255

Field description
PLSS Township code.

Description source
IGS

Field plssRange ►
  Data type  Text
  Width  255

Field description
PLSS Range code.

Description source
IGS

Field plssSection ►
  Data type  Long
  Width  4

Field description
PLSS Section Number.

Description source
IGS

Field plssQQSection ►
  Data type  Text
  Width  255

Field description
PLSS (quarter) quarter section code. For example, NW SE would be read as: the northwest quarter of the southeast quarter of the section.

Description source
IGS

Field FNL ►
  Data type  Double
  Width  8

Field description
Distance north of section boundary to well location in feet according to permit.

Description source
IGS
Field FEL ►
  Data type  Double
  Width     8

Field description
Distance east of section boundary to well location in feet according to permit.

Description source
IGS

Field FSL ►
  Data type  Double
  Width     8

Field description
Distance south of section boundary to well location in feet according to permit.

Description source
IGS

Field FWL ►
  Data type  Double
  Width     8

Field description
Distance west of section boundary to well location in feet according to permit.

Description source
IGS

Field GroundElevation ►
  Data type  Double
  Width     8

Field description
Ground elevation above sea level in feet.

Description source
IGS

Field KellyBushing ►
  Data type  Double
  Width     8

Field description
Kelly bushing elevation above sea level in feet.

Description source
IGS
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<tr>
<th>Field</th>
<th>Data type</th>
<th>Width</th>
<th>Field description</th>
<th>Description source</th>
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<tr>
<td>TotalDepth</td>
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<td>8</td>
<td>Measured depth of well below ground elevation.</td>
<td>IGS</td>
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<td>FieldName</td>
<td>Text</td>
<td>255</td>
<td>Name of oil/gas field name as designated by the Idaho Department of Lands. Wildcat refers to wells drilled outside of a known oil/gas field.</td>
<td>IGS</td>
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<tr>
<td>IBMG_num</td>
<td>Text</td>
<td>255</td>
<td>Retired identification code used by Idaho Bureau of Mines and Geology (now Idaho Geological Survey).</td>
<td>IGS</td>
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**Metadata Details**

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<thead>
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<td>dataset</td>
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<td>Last update</td>
<td>2023-05-25</td>
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**ArcGIS metadata properties**

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Created in ArcGIS for the item 2023-05-24 12:14:39

Automatic updates

Have been performed No

**Metadata Contacts**

Metadata contact - publisher

Organization's name | Idaho Geological Survey
Phone
  Voice  208-885-7991

Address
  Type  physical
  Delivery point  875 Perimeter Dr.
  City  Moscow
  Administrative area ID
  Postal code  83844-3014
  Country  US
  Delivery point  Morrill Hall, 3rd Floor

Metadata Maintenance ➤
  Maintenance
    Update frequency  as needed

Thumbnail and Enclosures ➤
  Thumbnail
    Thumbnail type
      Image file