MS Oil and Gas Wells 2016

Shapefile



Tags

Well, homeland security, homeland defense, emergency response, Oil Well, Natural Gas Well, Storage Well, name, type, status, facility characteristics

Summary

This feature class/shapefile contains Oil and Natural Gas Wells for the Homeland Infrastructure Foundation-Level (HIFLD) Database (https://gii.dhs.gov/HIFLD) as well as the Energy modeling and simulation community.

Description

This feature class/shapefile represents Oil and Natural Gas Wells. An Oil and Natural Gas Well is a hole drilled in the earth for the purpose of finding or producing crude oil or natural gas; or producing services related to the production of crude or natural gas. Geographic coverage includes. According to the Energy Information Administration (EIA) the following states do not have active/producing Oil or Natural Gas Wells: Some states do have wells for underground Natural Gas storage facilities where these have been identified they were included. This layer is derived from well data from individual states and provinces and United States Agencies. This layer is complete for the United States but further development of data missing from two Canadian provinces and Mexico is in process. *** MARIS extracted the MIssissippi portion July 2023

Credits

Oak Ridge National Laboratory (ORNL), Argonne National Laboratory (ANL), Decision and Infrastructure Sciences Division, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team, MARIS

Use limitations

None (Public Use). Users are advised to read the data set's metadata thoroughly to understand appropriate uses and data limitations.

Extent

 West
 -91.679745
 East
 -88.229136

 North
 34.487966
 South
 30.226947

Scale Range

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

ArcGIS Metadata 🕨

Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE utilitiesCommunication

* CONTENT TYPE Downloadable Data EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION NO

Hide Topics and Keywords

Citation **>**

TITLE MS Oil and Gas Wells 2016 PUBLICATION DATE 2023-07-26 00:00:00

PRESENTATION FORMATS * digital map

Hide Citation

Resource Details ►

DATASET LANGUAGES * English (UNITED STATES) SPATIAL REPRESENTATION TYPE * vector * PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.9.1.28388

CREDITS

Oak Ridge National Laboratory (ORNL), Argonne National Laboratory (ANL), Decision and Infrastructure Sciences Division, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team, MARIS

ARCGIS ITEM PROPERTIES

- * NAME MS_OilnGaswells_2016
- * SIZE 0.148
- * LOCATION file://\\DESKTOP-
- TP9LNVL\F\$\DATA\00_UTILITYCOMM\Oil&Gas\MS_OilnGaswells_2016.shp
- * ACCESS PROTOCOL Local Area Network

Hide Resource Details

Extents 🕨

EXTENT

GEOGRAPHIC EXTENT BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

- * WEST LONGITUDE -91.679745
- * EAST LONGITUDE -88.229136
- * NORTH LATITUDE 34.487966
- * SOUTH LATITUDE 30.226947
- * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- * WEST LONGITUDE 322731.900395
- * EAST LONGITUDE 639694.646598
- * SOUTH LATITUDE 1049449.856741
- * NORTH LATITUDE 1520455.223436

* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents

Resource Constraints ►

CONSTRAINTS LIMITATIONS OF USE

None (Public Use). Users are advised to read the data set's metadata thoroughly to understand appropriate uses and data limitations.

Hide Resource Constraints

Spatial Reference

ARCGIS COORDINATE SYSTEM

* TYPE Projected

- * GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
- * PROJECTION NAD_1983_Mississippi_TM
- * COORDINATE REFERENCE DETAILS **PROJECTED COORDINATE SYSTEM** Well-known identifier 102609 X ORIGIN -5122200 Y ORIGIN -12297100 XY SCALE 450339697.45066422 Z ORIGIN -100000 Z SCALE 10000 M ORIGIN -100000 M SCALE 10000 XY TOLERANCE 0.001 Z TOLERANCE 0.001 M TOLERANCE 0.001 HIGH PRECISION true LATEST WELL-KNOWN IDENTIFIER 3814 WELL-KNOWN TEXT PROJCS["NAD 1983 Mississippi TM", GEOGCS["GCS North American 1983", DATUM["D _North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich", 0.0], UNIT["Degree", 0.0174532925199433]], PROJECTION["Transverse_Mer cator"],PARAMETER["False_Easting",500000.0],PARAMETER["False_Northing",1300000. 0],PARAMETER["Central_Meridian",-

89.75],PARAMETER["Scale_Factor",0.9998335],PARAMETER["Latitude_Of_Origin",32.5], UNIT["Meter",1.0],AUTHORITY["EPSG",3814]]

REFERENCE SYSTEM IDENTIFIER

* VALUE 3814

- * CODESPACE EPSG
- * VERSION 6.17.1(10.0.0)

Hide Spatial Reference **A**

Spatial Data Properties

```
VECTOR ►

* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME MS_OilnGaswells_2016

* OBJECT COUNT 5530

Hide Vector ▲

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME MS_OilnGaswells_2016

* FEATURE TYPE Simple

* GEOMETRY TYPE Point

* HAS TOPOLOGY FALSE

* FEATURE COUNT 5530

* SPATIAL INDEX TRUE

* LINEAR REFERENCING FALSE
```

Hide ArcGIS Feature Class Properties

Hide Spatial Data Properties

Distribution >

DISTRIBUTION FORMAT * NAME Shapefile VERSION 10.8.1

TRANSFER OPTIONS * TRANSFER SIZE 0.148

Hide Distribution

Fields **>**

DETAILS FOR OBJECT MS_OIInGaswells_2016 ►
* TYPE Feature Class
* Row COUNT 5530
DEFINITION
Attribute fields were populated using sources identified in the SOURCE field for the period covered in this Time Period metadata and other open source data. For string and date data types, NOT AVAILABLE values denote missing data that was not present in the source data while NOT APPLICABLE values denote that the field does not apply for the specific case. For numeric data types, -999 denotes missing data that was not present in the source data. However, the missing data may be present in other sources not yet discovered and used in the creation and/or maintenance of this dataset. These records may be populated with valid information in future update cycles.

DEFINITION SOURCE

Argonne National Laboratory

FIELD FID ►

- * ALIAS FID
- * DATA TYPE OID
- * WIDTH 4
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION Internal feature number.
- * DESCRIPTION SOURCE Esri
- * DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field FID 🔺

FIELD OBJECTID ►

- * ALIAS OBJECTID
- * DATA TYPE Integer
- * WIDTH 10
- * PRECISION 10
- * SCALE 0
- FIELD DESCRIPTION

Internal feature number.

DESCRIPTION SOURCE

Esri

DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field OBJECTID ▲

FIELD SHAPE ► * ALIAS Shape * DATA TYPE Geometry * WIDTH 0 * PRECISION 0 * SCALE 0 FIELD DESCRIPTION Feature geometry. DESCRIPTION SOURCE

Esri

DESCRIPTION OF VALUES Coordinates defining the features.

Hide Field SHAPE ▲

FIELD ID 🕨

- * ALIAS ID
- * DATA TYPE String
- * WIDTH 20
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Unique identifier for each feature. ID values are unique to this dataset ONLY and may have changed from the previous versions of the dataset, and/or change in a future version of the dataset.

DESCRIPTION SOURCE

Argonne National Laboratory

DESCRIPTION OF VALUES

id

Hide Field ID ▲

FIELD NAME

- * ALIAS NAME
- * DATA TYPE String
- * WIDTH 150
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Feature name.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

name

Hide Field NAME ▲

FIELD TYPE ►

- * ALIAS TYPE
- * DATA TYPE String
- * WIDTH 85
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Specific categorical breakdown of the feature.

DESCRIPTION SOURCE

Originator defined

DESCRIPTION OF VALUES

type

Hide Field TYPE ▲

FIELD STATUS ►

- * ALIAS STATUS
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Operational status of the feature.

DESCRIPTION SOURCE Argonne National Laboratory

LIST OF VALUES

VALUE ACTIVE WELL DESCRIPTION Feature is an active well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE NON-ACTIVE WELL DESCRIPTION Feature is a non-active well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE PRODUCING, NON-ACTIVE WELL DESCRIPTION Feature is a producing, non-active well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE UNKNOWN WELL DESCRIPTION Status of the feature is unknown. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE WELL DEVELOPMENT DESCRIPTION Feature is for well development. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory VALUE STORAGE WELL/MAINTENTANCE WELL/OBSERVATION WELL DESCRIPTION Feature is a storage well, maintenance well, or observation well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE PRODUCING WELL DESCRIPTION Feature is a producing well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

Hide Field STATUS ▲

FIELD COUNTY

- * ALIAS COUNTY
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

United States and its Territories county name and legal/statistical area description (county, borough, parish, municipality, census area), Canada (province, territory), and Mexico (municipality).

DESCRIPTION SOURCE

Argonne National Laboratory

CODED VALUES

NAME OF CODELIST United States County, Canadian Province, Mexican Municipality SOURCE When the county name is available from a specific source, the contents are replicated from the SOURCE. Otherwise, ANL assigns the value based on open source searches.

Hide Field COUNTY ▲

FIELD COUNTYFIPS ►

- * ALIAS COUNTYFIPS
- * DATA TYPE String
- * WIDTH 20
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

US County Federal Information Processing Standards (FIPS) Code (5 digit), Canada Standard Geographical Classification (SGC) Code (7 digit), and Mexico National Institute of Statistics and Geography (INEGI) Code (5 digit).

DESCRIPTION SOURCE

Argonne National Laboratory

CODED VALUES

NAME OF CODELIST 2010 FIPS Codes for Counties and County Equivalent Entities, Standard Geographical Classification 2011, and INEGI National Geostatistical Framework SOURCE FIPS/Census (http://www.census.gov/geo/reference/codes/cou.html), Statistics Canada (http://www.statcan.gc.ca/pub/92-195-x/2011001/other-autre/sgc-cgt/sgc-cgteng.htm), and Marco Geoestadistico Nacional (http://www.inegi.org.mx/geo/contenidoes/geoestadistica/default.aspx).

Hide Field COUNTYFIPS ▲

FIELD LATITUDE

- * ALIAS LATITUDE
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

The angular distance north or south from the equator on the earth's surface.

DESCRIPTION SOURCE

Argonne National Laboratory

RANGE OF VALUES

MINIMUM VALUE 25.880895 MAXIMUM VALUE 71.069597 UNITS OF MEASURE Decimal Degrees

Hide Field LATITUDE

FIELD LONGITUDE

- * ALIAS LONGITUDE
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

The angular distance east or west from the prime meridian on the earth's surface.

DESCRIPTION SOURCE

Argonne National Laboratory

RANGE OF VALUES

MINIMUM VALUE -74.457660 MAXIMUM VALUE -160.023750 UNITS OF MEASURE Decimal Degrees

Hide Field LONGITUDE ▲

FIELD NAICS_CODE

* ALIAS NAICS_CODE * DATA TYPE String * WIDTH 50 * PRECISION 0 * SCALE 0

FIELD DESCRIPTION

The North American Industry Classification System (NAICS) code is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

DESCRIPTION SOURCE

Argonne National Laboratory

CODED VALUES

NAME OF CODELIST North American Industry Classification System, 2017 SOURCE US Census (http://www.census.gov/eos/www/naics/)

Hide Field NAICS_CODE ▲

FIELD NAICS_DESC ►

* ALIAS NAICS_DESC

- * DATA TYPE String
- * WIDTH 100
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

North American Industry Classification System (NAICS) definition is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

DESCRIPTION SOURCE

Argonne National Laboratory

CODED VALUES

NAME OF CODELIST North American Industry Classification System SOURCE Office of Management and Budget (http://www.census.gov/eos/www/naics/)

Hide Field NAICS_DESC ▲

FIELD SOURCE ►

- * ALIAS SOURCE
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Original source used to identify geospatial location and/or attribution for the feature.

DESCRIPTION SOURCE

Argonne National Laboratory

DESCRIPTION OF VALUES SOURCE Hide Field SOURCE ▲

FIELD SOURCEDATE

- * ALIAS SOURCEDATE
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Date of source, or, if not available, the date ANL accessed the source.

DESCRIPTION SOURCE

Argonne National Laboratory

RANGE OF VALUES

MINIMUM VALUE 08/30/1999 MAXIMUM VALUE 01/08/2019 UNITS OF MEASURE Date

Hide Field SOURCEDATE

FIELD VAL_METHOD ►

- * ALIAS VAL_METHOD
- * DATA TYPE String
- * WIDTH 85
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Methodology used to validate geospatial location and/or attribution for the feature.

DESCRIPTION SOURCE

Argonne National Laboratory

LIST OF VALUES

VALUE GEOCODE

DESCRIPTION Street address geocoding used to determine the location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE IMAGERY

DESCRIPTION The best available imagery used to determine the location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE IMAGERY/OTHER

DESCRIPTION Imagery and supplemental open source information used to determine the location.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE OTHER

DESCRIPTION Aggregated open source information used to determine/verify attribution and locational information for the feature. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE UNVERIFIED

DESCRIPTION Feature could not be located or the feature has not yet been validated. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

Hide Field VAL_METHOD ▲

FIELD VAL_DATE

- * ALIAS VAL DATE
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Date when geospatial location and/or attribution were last validated for the feature.

DESCRIPTION SOURCE

Argonne National Laboratory

RANGE OF VALUES MINIMUM VALUE 11/12/2014

MAXIMUM VALUE 06/17/2019 UNITS OF MEASURE Date

Hide Field VAL_DATE ▲

FIELD WEBSITE

* ALIAS WEBSITE

- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION The feature specific website.

DESCRIPTION SOURCE Argonne National Laboratory

DESCRIPTION OF VALUES URL

Hide Field WEBSITE

FIELD WELLIDNO

- * ALIAS WELLIDNO
- * DATA TYPE String
- * WIDTH 20
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Well ID number assigned to the feature by the appropriate State or Province agency.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

ID number

Hide Field WELLIDNO

FIELD API

- * ALIAS API
- * DATA TYPE String
- * WIDTH 20
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

American Petroleum Institute (API) well number which is a "unique, permanent, numeric identifier" assigned to each feature drilled for oil and gas in the United States.

DESCRIPTION SOURCE

American Petroleum Institute

DESCRIPTION OF VALUES well number

Hide Field API

FIELD PERMITNO ►

- * ALIAS PERMITNO
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

The feature's permit number, if different from well ID number.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

permit number

Hide Field PERMITNO ▲

FIELD OPERATOR ►

- * ALIAS OPERATOR
- * DATA TYPE String
- * WIDTH 75
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Feature operator name.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

name

Hide Field OPERATOR

FIELD OPERATORID ►

- * ALIAS OPERATORID
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Operator ID number for the feature, if available from the appropriate State agency.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

operator id

Hide Field OPERATORID

FIELD PRODTYPE ►

- * ALIAS PRODTYPE
- * DATA TYPE String
- * WIDTH 25
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Indicates the primary commodity of the feature. For example whether a feature is "DRY GAS" or "OIL" or "GAS-OIL", etc.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

LIST OF VALUES

VALUE GAS AND OIL

DESCRIPTION The feature is a gas and oil well.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE OIL INJECTION

DESCRIPTION The feature is an oil injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE OIL

DESCRIPTION The feature is an oil well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS CONDENSATE DESCRIPTION The feature is a gas condensate well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE COAL BED METHANE GAS DESCRIPTION The feature is a coal bed methane gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identifed in the SOURCE field.

VALUE GAS INJECTION DESCRIPTION The feature is a gas injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE UNKNOWN WELL DESCRIPTION The primary commodity of the feature is unknown. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS OR OIL DESCRIPTION The feature is a gas or oil well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE NATURAL GAS LIQUIDS DESCRIPTION The feature is a natural gas liquids well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE SALT WATER INJECTION DESCRIPTION The feature is a salt injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS DESCRIPTION The feature is a gas well.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS STORAGE PRODUCING

DESCRIPTION The feature is a gas storage producing well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS STORAGE

DESCRIPTION The feature is a gas storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE INJECTION GAS OR OIL Gas DESCRIPTION The feature is a gas or oil injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE SHALE GAS

DESCRIPTION The feature is shale gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE DRY GAS

DESCRIPTION The feature is a dry gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE LIQUEFIED PETROLEUM GAS

DESCRIPTION The feature is a liquid petroleum gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS AND OIL STORAGE

DESCRIPTION The feature is a gas and oil storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS AND OIL STORAGE DESCRIPTION The feature is a gas and oil storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS STORAGE (CAVERN) DESCRIPTION The feature is a gas storage cavern well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS STORAGE (RESERVOIR) DESCRIPTION The feature is a gas storage reservoir well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE OIL STORAGE DESCRIPTION The feature is an oil storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE DRY GAS DESCRIPTION The feature is a dry gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

VALUE GAS STORAGE PRODUCING

DESCRIPTION The feature is a gas storage producing well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

Hide Field PRODTYPE ▲

FIELD SURF_LAT ►

- * ALIAS SURF_LAT
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Surface Well hole latitude coordinate of the feature (decimal degrees).

DESCRIPTION SOURCE

Argonne National Laboratory

DESCRIPTION OF VALUES latitude

Hide Field SURF_LAT ▲

FIELD SURF_LONG ►

- * ALIAS SURF_LONG
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Surface Well hole longitude coordinate of the feature (decimal degrees).

DESCRIPTION SOURCE Argonne National Laboratory

DESCRIPTION OF VALUES longitude

Hide Field SURF_LONG ▲

FIELD BOT_LAT ►

- * ALIAS BOT_LAT
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Bottom Well hole (extraction point) latitude coordinate of the feature (decimal degrees).

DESCRIPTION SOURCE

Argonne National Laboratory

DESCRIPTION OF VALUES latitude

Hide Field BOT_LAT ▲

FIELD BOT_LONG ►

- * ALIAS BOT_LONG
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Bottom Well hole (extraction point) longitude coordinate of the feature (decimal degrees).

DESCRIPTION SOURCE Argonne National Laboratory

DESCRIPTION OF VALUES longitude

Hide Field BOT_LONG ▲

FIELD POSREL ►

- * ALIAS POSREL
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

The level of accuracy and confidence in the feature location.

DESCRIPTION SOURCE

Argonne National Laboratory

LIST OF VALUES

VALUE WITHIN 40 FEET DESCRIPTION Coordinates are within 40 feet of the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE WITHIN 1 MILE

DESCRIPTION Coordinates are within 1 mile of the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE EXCEEDS 1 MILE

DESCRIPTION Coordinates are farther than 1 mile from the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE WITHIN 166 FEET

DESCRIPTION Coordinates are within 166 feet of the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE NOTIONAL

DESCRIPTION The exact position is either unknown or determination is cost prohibitive. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

VALUE THIRD PARTY

DESCRIPTION Geospatial coordinates provided by a third party source. Revalidating the provided geolocations would not be cost effective. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

Hide Field POSREL 🔺

FIELD FIELD ►

- * ALIAS FIELD
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Name of Oil-Gas Field in which the feature is located.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES field name

Hide Field FIELD ▲

FIELD COMPDATE * ALIAS COMPDATE * DATA TYPE Date

- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Completion date of the feature. If a COMPDATE was not provided in the original source data then the COMPDATE value will be shown as NULL.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

DESCRIPTION OF VALUES

date

Hide Field COMPDATE

FIELD TOTDEPTH

- * ALIAS TOTDEPTH
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Total depth (in feet) of the feature.

DESCRIPTION SOURCE

The responsible organization as identified in the SOURCE field.

RANGE OF VALUES MINIMUM VALUE 0 MAXIMUM VALUE 10000

Hide Field TOTDEPTH ▲

Hide Details for object MS_OilnGaswells_2016 ▲

OVERVIEW DESCRIPTION

ENTITY AND ATTRIBUTE OVERVIEW

The entity and attribute information provided here describes the tabular data associated with the data set. Please review the detailed descriptions that are provided (the individual attribute descriptions) for information on the values that appear as fields/table entries of the data set. Please see the "Processing Steps" section for further methodology. For string and date data types, NOT AVAILABLE values denote missing data that was not present in the source data while NOT APPLICABLE values denote that the field does not apply for the specific case. For numeric data types, -999 denotes missing data that was not present in the source data. However, the missing data may be present in other sources not yet discovered and used in the creation and/or maintenance of this dataset. These records may be populated with valid information in future update cycles.

ENTITY AND ATTRIBUTE DETAIL CITATION Argonne National Laboratory

Hide Overview Description

Hide Fields 🔺

Metadata Details 🕨

* METADATA LANGUAGE English (UNITED STATES)
* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format
SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset
SCOPE NAME * dataset
* LAST UPDATE 2023-07-27
ARCGIS METADATA PROPERTIES METADATA FORMAT ArcGIS 1.0

METADATA STYLE ISO 19139 Metadata Implementation Specification STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

CREATED IN ARCGIS FOR THE ITEM 2023-07-26 10:07:38 LAST MODIFIED IN ARCGIS FOR THE ITEM 2023-07-27 90:05:50

AUTOMATIC UPDATES HAVE BEEN PERFORMED Yes LAST UPDATE 2023-07-27 09:00:37

Hide Metadata Details 🔺

Metadata Contacts **>**

METADATA CONTACT INDIVIDUAL'S NAME Steve Walker ORGANIZATION'S NAME MARIS CONTACT'S POSITION GIS Operations Manager CONTACT'S ROLE distributor

Hide Metadata Contacts 🔺

Thumbnail and Enclosures

THUMBNAIL THUMBNAIL TYPE JPG

Hide Thumbnail and Enclosures

FGDC Metadata (read-only) ▼

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CITATION
 CITATION INFORMATION
 ORIGINATOR Oak Ridge National Laboratory
 ORIGINATOR Argonne National Laboratory
 PUBLICATION DATE 2019-06-21
 TITLE
MS Oil and Gas Wells 2016
  GEOSPATIAL DATA PRESENTATION FORM Vector Digital Data Set (Point)
  ONLINE LINKAGE https://hifld-geoplatform.opendata.arcgis.com
  LARGER WORK CITATION
 CITATION INFORMATION
 ORIGINATOR Homeland Infrastructure Foundation-Level (HIFLD) Subcommittee
 PUBLICATION DATE 2019-07-09
 TITLE
HIFLD Open and HIFLD Secure
  GEOSPATIAL DATA PRESENTATION FORM GIS Data Project/Collection
```

DESCRIPTION

ABSTRACT

This feature class/shapefile represents Oil and Natural Gas Wells. An Oil and Natural Gas Well is a hole drilled in the earth for the purpose of finding or producing crude oil or natural gas; or producing services related to the production of crude or natural gas. Geographic coverage includes. According to the Energy Information Administration (EIA) the following states do not have active/producing Oil or Natural Gas Wells: Some states do have wells for underground Natural Gas storage facilities where these have been identified they were included. This layer is derived from well data from individual states and provinces and United States Agencies. This layer is complete for the United States but further development of data missing from two Canadian provinces and Mexico is in process. MARIS extracted the MIssissippi portion July 2023 PURPOSE

This feature class/shapefile contains Oil and Natural Gas Wells for the Homeland Infrastructure Foundation-Level (HIFLD) Database (https://gii.dhs.gov/HIFLD) as well as the Energy modeling and simulation community.

SUPPLEMENTAL INFORMATION

None

TIME PERIOD OF CONTENT TIME PERIOD INFORMATION RANGE OF DATES/TIMES BEGINNING DATE 1999-08-30 ENDING DATE 2019-01-08 STATUS PROGRESS Complete MAINTENANCE AND UPDATE FREQUENCY Continually

KEYWORDS

IHEME	
THEME KEYWORD	Well
THEME KEYWORD	homeland security
THEME KEYWORD	homeland defense
THEME KEYWORD	emergency response
THEME KEYWORD	Oil Well
THEME KEYWORD	Natural Gas Well
THEME KEYWORD	Storage Well
THEME KEYWORD	name

THEME KEYWORD type THEME KEYWORD status THEME KEYWORD facility characteristics PLACE PLACE KEYWORD THESAURUS None

PLACE KEYWORD Continental United States PLACE KEYWORD USA PLACE KEYWORD Canada PLACE KEYWORD Alabama PLACE KEYWORD Alaska PLACE KEYWORD Arizona PLACE KEYWORD Arkansas PLACE KEYWORD California PLACE KEYWORD Colorado PLACE KEYWORD Florida PLACE KEYWORD Illinois PLACE KEYWORD Indiana PLACE KEYWORD Kansas PLACE KEYWORD Kentucky PLACE KEYWORD Louisiana PLACE KEYWORD Maryland PLACE KEYWORD Michigan PLACE KEYWORD Mississippi PLACE KEYWORD Missouri PLACE KEYWORD Montana PLACE KEYWORD Nebraska PLACE KEYWORD Nevada PLACE KEYWORD New Mexico PLACE KEYWORD New York PLACE KEYWORD North Dakota PLACE KEYWORD Ohio PLACE KEYWORD Oklahoma PLACE KEYWORD Oregon PLACE KEYWORD Pennsylvania PLACE KEYWORD South Dakota PLACE KEYWORD Tennessee PLACE KEYWORD Texas PLACE KEYWORD Virginia PLACE KEYWORD Utah PLACE KEYWORD Washington PLACE KEYWORD West Virginia PLACE KEYWORD Wyoming PLACE KEYWORD British Columbia PLACE KEYWORD Manitoba

USE CONSTRAINTS

None (Public Use). Users are advised to read the data set's metadata thoroughly to understand appropriate uses and data limitations.

POINT OF CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Oak Ridge National Laboratory CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS One Bethel Valley Rd, MS-6017 CITY Oak Ridge STATE OR PROVINCE TN POSTAL CODE 37831

> CONTACT VOICE TELEPHONE 865-241-3976 CONTACT FACSIMILE TELEPHONE 865-241-6261

DATA SET CREDIT

Oak Ridge National Laboratory (ORNL), Argonne National Laboratory (ANL), Decision and Infrastructure Sciences Division, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team, MARIS

Hide Identification

ATTRIBUTE ACCURACY

ATTRIBUTE ACCURACY REPORT

No formal attribute accuracy test was conducted. Data from the authoritative sources (as identified in other sections of this metadata) is assumed to be correct and accurate. See also "Overview Description" in the "Entities and Attributes" metadata section.

LOGICAL CONSISTENCY REPORT

Data were extracted from sources (identified in the SOURCE field) and other open source websites to populate the attribute fields. For string and data types, NOT AVAILABLE values denote missing data that was not present in the source data while NOT APPLICABLE values denote that the field does not apply for the specific case. For numeric data types, -999 denotes missing data that was within the expected ranges or had expected/valid values. Text attribute values were checked for spelling and usage consistency. No topology tests were conducted. All records were verified to occur within the spatial domain of the feature class/shapefile.

COMPLETENESS REPORT

Data is complete as of the most recent date indicated in the Time Period section. All efforts were taken to identify Oil and Natural Gas Wells through open sources. Additional facilities may exist. Primary source is derived from well data from individual states and provinces and United States Agencies. This layer is complete for the United States but further development of data missing for two Canadian provinces and Mexico is in process.

POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY REPORT

None; all efforts were made to place the geographic representation of the facility onentity using the best available imagery from a wide variety of sources. Users should read and understand the VAL_METHOD metadata as well as the Processing Steps.

QUANTITATIVE HORIZONTAL POSITIONAL ACCURACY ASSESSMENT

HORIZONTAL POSITIONAL ACCURACY VALUE horizontal

HORIZONTAL POSITIONAL ACCURACY EXPLANATION

The physical accuracy of each feature is qualified in the POSREL (Positional Reliability) Field. All features were given one of six values: WITHIN 40 FEET, WITHIN 166 FEET, WITHIN 1 MILE, EXCEEDS 1 MILE, NOTIONAL, or THIRD PARTY. Definitions for Positional Reliability field values can be found in the POSREL attribute information.

VERTICAL POSITIONAL ACCURACY

VERTICAL POSITIONAL ACCURACY REPORT

None; dataset contains no vertical data.

LINEAGE SOURCE INFORMATION

SOURCE CITATION

CITATION INFORMATION

ORIGINATOR SEE SOURCE field

PUBLICATION DATE See SOURCEDATE field.

TITLE

see SOURCE field

GEOSPATIAL DATA PRESENTATION FORM Other PUBLICATION INFORMATION PUBLICATION PLACE SEE SOURCE field PUBLISHER SEE SOURCE field

TYPE OF SOURCE MEDIA Digital Resources SOURCE TIME PERIOD OF CONTENT TIME PERIOD INFORMATION RANGE OF DATES/TIMES BEGINNING DATE 08/30/1999 ENDING DATE 01/08/2019 SOURCE CURRENTNESS REFERENCE Observed PROCESS STEP

PROCESS DESCRIPTION

Reviews of public sources were performed to identify states that potentially contained active Oil and Natural Gas Wells. These sources included but were not limited to various state or province agencies, the United States Geological Survey, and the Energy Information Administration (EIA). The websites of the identified states were reviewed and data about each facility was identified and populated into the attributes table. The website used to derive the facility information for each company is identified in the attributes of the data layer. Where available both the Surface (Wellhead) coordinates and the bottom hole coordinates were provided. The display coordinates are used when Surface coordinates were not available. The COORDTYPE field indicates when the display coordinates are Surface or Bottom Hole.

Hide Data Quality 🔺

HORIZONTAL COORDINATE SYSTEM DEFINITION GEODETIC MODEL HORIZONTAL DATUM NAME D WGS 1984 ELLIPSOID NAME WGS 1984 SEMI-MAJOR AXIS 6378137.0 DENOMINATOR OF FLATTENING RATIO 298.257223563

Hide Spatial Reference

DETAILED DESCRIPTION ENTITY TYPE ENTITY TYPE LABEL MS Oil and Natural Gas Wells 2016 ENTITY TYPE DEFINITION

Attribute fields were populated using sources identified in the SOURCE field for the period covered in this Time Period metadata and other open source data. For string and date data types, NOT AVAILABLE values denote missing data that was not present in the source data while NOT APPLICABLE values denote that the field does not apply for the specific case. For numeric data types, -999 denotes missing data that was not present in the source data. However, the missing data may be present in other sources not yet discovered and used in the creation and/or maintenance of this dataset. These records may be populated with valid information in future update cycles.

ENTITY TYPE DEFINITION SOURCE Argonne National Laboratory

ATTRIBUTE ATTRIBUTE LABEL FID ATTRIBUTE DEFINITION Internal feature number. ATTRIBUTE DEFINITION SOURCE Esri

ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

ATTRIBUTE ATTRIBUTE LABEL OBJECTID ATTRIBUTE DEFINITION Internal feature number. ATTRIBUTE DEFINITION SOURCE Esri ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

ATTRIBUTE ATTRIBUTE LABEL SHAPE ATTRIBUTE DEFINITION Feature geometry. ATTRIBUTE DEFINITION SOURCE Esri ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Coordinates defining the features.

ATTRIBUTE ATTRIBUTE LABEL ID ATTRIBUTE DEFINITION Unique identifier for each feature. ID values are unique to this dataset ONLY and may have changed from the previous versions of the dataset, and/or change in a future version of the dataset. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

id

ATTRIBUTE ATTRIBUTE LABEL NAME ATTRIBUTE DEFINITION Feature name. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN name

ATTRIBUTE ATTRIBUTE LABEL TYPE ATTRIBUTE DEFINITION Specific categorical breakdown of the feature. ATTRIBUTE DEFINITION SOURCE Originator defined ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN type

ATTRIBUTE ATTRIBUTE LABEL STATUS ATTRIBUTE DEFINITION Operational status of the feature. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE ACTIVE WELL ENUMERATED DOMAIN VALUE DEFINITION Feature is an active well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE NON-ACTIVE WELL **ENUMERATED DOMAIN VALUE DEFINITION** Feature is a non-active well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE PRODUCING, NON-ACTIVE WELL ENUMERATED DOMAIN VALUE DEFINITION Feature is a producing, non-active well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE UNKNOWN WELL ENUMERATED DOMAIN VALUE DEFINITION Status of the feature is unknown. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE WELL DEVELOPMENT **ENUMERATED DOMAIN VALUE DEFINITION** Feature is for well development. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE STORAGE WELL/MAINTENTANCE WELL/OBSERVATION WELL **ENUMERATED DOMAIN VALUE DEFINITION** Feature is a storage well, maintenance well, or observation well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE PRODUCING WELL ENUMERATED DOMAIN VALUE DEFINITION Feature is a producing well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory

ATTRIBUTE

ATTRIBUTE LABEL COUNTY ATTRIBUTE DEFINITION

United States and its Territories county name and legal/statistical area description (county, borough, parish, municipality, census area), Canada (province, territory), and Mexico (municipality).

ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES

CODESET DOMAIN

CODESET NAME United States County, Canadian Province, Mexican Municipality CODESET SOURCE When the county name is available from a specific source, the contents are replicated from the SOURCE. Otherwise, ANL assigns the value based on open source searches.

ATTRIBUTE

ATTRIBUTE LABEL COUNTYFIPS

ATTRIBUTE DEFINITION

US County Federal Information Processing Standards (FIPS) Code (5 digit), Canada Standard Geographical Classification (SGC) Code (7 digit), and Mexico National Institute of Statistics and Geography (INEGI) Code (5 digit).

ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory

ATTRIBUTE DOMAIN VALUES

CODESET DOMAIN

CODESET NAME 2010 FIPS Codes for Counties and County Equivalent Entities, Standard Geographical Classification 2011, and INEGI National Geostatistical Framework CODESET SOURCE FIPS/Census

(http://www.census.gov/geo/reference/codes/cou.html), Statistics Canada (http://www.statcan.gc.ca/pub/92-195-x/2011001/other-autre/sgc-cgt/sgc-cgt-

eng.htm), and Marco Geoestadistico Nacional

(http://www.inegi.org.mx/geo/contenidoes/geoestadistica/default.aspx).

ATTRIBUTE

ATTRIBUTE LABEL LATITUDE

ATTRIBUTE DEFINITION

The angular distance north or south from the equator on the earth's surface. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES

RANGE DOMAIN

RANGE DOMAIN MINIMUM 25.880895

RANGE DOMAIN MAXIMUM 71.069597

ATTRIBUTE UNITS OF MEASURE Decimal Degrees

ATTRIBUTE

ATTRIBUTE LABEL LONGITUDE

ATTRIBUTE DEFINITION

The angular distance east or west from the prime meridian on the earth's surface.

ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory

ATTRIBUTE DOMAIN VALUES RANGE DOMAIN RANGE DOMAIN MINIMUM -74.457660

RANGE DOMAIN MAXIMUM -160.023750

ATTRIBUTE UNITS OF MEASURE Decimal Degrees

ATTRIBUTE

ATTRIBUTE LABEL NAICS_CODE ATTRIBUTE DEFINITION

The North American Industry Classification System (NAICS) code is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES CODESET DOMAIN CODESET NAME North American Industry Classification System, 2017 CODESET SOURCE US Census (http://www.census.gov/eos/www/naics/)

ATTRIBUTE

ATTRIBUTE LABEL NAICS_DESC ATTRIBUTE DEFINITION

North American Industry Classification System (NAICS) definition is the standard used by Federal statistical agencies in classifying business establishments for the purpose of

collecting, analyzing, and publishing statistical data related to the US business economy.

ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES CODESET DOMAIN CODESET NAME North American Industry Classification System CODESET SOURCE Office of Management and Budget (http://www.census.gov/eos/www/naics/)

ATTRIBUTE

ATTRIBUTE LABEL SOURCE ATTRIBUTE DEFINITION Original source used to identify geospatial location and/or attribution for the feature. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

source

ATTRIBUTE

ATTRIBUTE LABEL SOURCEDATE ATTRIBUTE DEFINITION Date of source, or, if not available, the date ANL accessed the source. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES RANGE DOMAIN RANGE DOMAIN MINIMUM 08/30/1999 RANGE DOMAIN MAXIMUM 01/08/2019 ATTRIBUTE UNITS OF MEASURE Date

ATTRIBUTE

ATTRIBUTE LABEL VAL METHOD ATTRIBUTE DEFINITION Methodology used to validate geospatial location and/or attribution for the feature. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GEOCODE **ENUMERATED DOMAIN VALUE DEFINITION** Street address geocoding used to determine the location. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE IMAGERY ENUMERATED DOMAIN VALUE DEFINITION The best available imagery used to determine the location. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE IMAGERY/OTHER ENUMERATED DOMAIN VALUE DEFINITION Imagery and supplemental open source information used to determine the location. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE OTHER **ENUMERATED DOMAIN VALUE DEFINITION** Aggregated open source information used to determine/verify attribution and locational information for the feature.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE UNVERIFIED ENUMERATED DOMAIN VALUE DEFINITION Feature could not be located or the feature has not yet been validated. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

ATTRIBUTE

ATTRIBUTE LABEL VAL_DATE ATTRIBUTE DEFINITION Date when geospatial location and/or attribution were last validated for the feature. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES RANGE DOMAIN RANGE DOMAIN MINIMUM 11/12/2014 RANGE DOMAIN MAXIMUM 06/17/2019 ATTRIBUTE UNITS OF MEASURE Date

ATTRIBUTE

ATTRIBUTE LABEL WEBSITE ATTRIBUTE DEFINITION The feature specific website. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN

URL

Attribute

ATTRIBUTE LABEL WELLIDNO

ATTRIBUTE DEFINITION

Well ID number assigned to the feature by the appropriate State or Province agency. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN

ID number

ATTRIBUTE

ATTRIBUTE LABEL API ATTRIBUTE DEFINITION American Petroleum Institute (API) well number which is a "unique, permanent, numeric identifier" assigned to each feature drilled for oil and gas in the United States. ATTRIBUTE DEFINITION SOURCE American Petroleum Institute ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN well number

ATTRIBUTE

ATTRIBUTE LABEL PERMITNO ATTRIBUTE DEFINITION The feature's permit number, if different from well ID number. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN permit number

ATTRIBUTE

ATTRIBUTE LABEL OPERATOR ATTRIBUTE DEFINITION Feature operator name. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN name

ATTRIBUTE

ATTRIBUTE LABEL OPERATORID ATTRIBUTE DEFINITION Operator ID number for the feature, if available from the appropriate State agency. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE

field. Attribute Domain Values Unrepresentable Domain operator id

Attribute

ATTRIBUTE LABEL PRODTYPE ATTRIBUTE DEFINITION Indicates the primary commodity of the feature. For example whether a feature is "DRY GAS" or "OIL" or "GAS-OIL", etc. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS AND OIL **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas and oil well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE OIL INJECTION ENUMERATED DOMAIN VALUE DEFINITION The feature is an oil injection well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE OIL ENUMERATED DOMAIN VALUE DEFINITION The feature is an oil well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS CONDENSATE ENUMERATED DOMAIN VALUE DEFINITION The feature is a gas condensate well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE COAL BED METHANE GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a coal bed methane gas well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE**

The responsible organization as identifed in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS INJECTION ENUMERATED DOMAIN VALUE DEFINITION The feature is a gas injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE UNKNOWN WELL **ENUMERATED DOMAIN VALUE DEFINITION** The primary commodity of the feature is unknown. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS OR OIL **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas or oil well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE NATURAL GAS LIQUIDS ENUMERATED DOMAIN VALUE DEFINITION The feature is a natural gas liquids well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE SALT WATER INJECTION ENUMERATED DOMAIN VALUE DEFINITION The feature is a salt injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE GAS STORAGE PRODUCING **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas storage producing well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE GAS STORAGE **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE INJECTION GAS OR OIL Gas ENUMERATED DOMAIN VALUE DEFINITION The feature is a gas or oil injection well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE SHALE GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is shale gas well.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE DRY GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a dry gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE LIQUEFIED PETROLEUM GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a liquid petroleum gas well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS AND OIL STORAGE ENUMERATED DOMAIN VALUE DEFINITION The feature is a gas and oil storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS AND OIL STORAGE **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas and oil storage well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS STORAGE (CAVERN) **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas storage cavern well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS STORAGE (RESERVOIR) **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a gas storage reservoir well. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE OIL STORAGE **ENUMERATED DOMAIN VALUE DEFINITION** The feature is an oil storage well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE DRY GAS **ENUMERATED DOMAIN VALUE DEFINITION** The feature is a dry gas well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE GAS STORAGE PRODUCING ENUMERATED DOMAIN VALUE DEFINITION The feature is a gas storage producing well. ENUMERATED DOMAIN VALUE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

ATTRIBUTE

ATTRIBUTE LABEL SURF_LAT

ATTRIBUTE DEFINITION Surface Well hole latitude coordinate of the feature (decimal degrees). ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN latitude

ATTRIBUTE

ATTRIBUTE LABEL SURF_LONG ATTRIBUTE DEFINITION Surface Well hole longitude coordinate of the feature (decimal degrees). ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN longitude

ATTRIBUTE

ATTRIBUTE LABEL BOT_LAT ATTRIBUTE DEFINITION Bottom Well hole (extraction point) latitude coordinate of the feature (decimal degrees). ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN latitude

ATTRIBUTE

ATTRIBUTE LABEL BOT_LONG ATTRIBUTE DEFINITION Bottom Well hole (extraction point) longitude coordinate of the feature (decimal degrees). ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN longitude

ATTRIBUTE

ATTRIBUTE LABEL POSREL ATTRIBUTE DEFINITION The level of accuracy and confidence in the feature location. ATTRIBUTE DEFINITION SOURCE Argonne National Laboratory ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE WITHIN 40 FEET **ENUMERATED DOMAIN VALUE DEFINITION** Coordinates are within 40 feet of the site's actual location. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE WITHIN 1 MILE ENUMERATED DOMAIN VALUE DEFINITION Coordinates are within 1 mile of the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE EXCEEDS 1 MILE **ENUMERATED DOMAIN VALUE DEFINITION** Coordinates are farther than 1 mile from the site's actual location.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE WITHIN 166 FEET **ENUMERATED DOMAIN VALUE DEFINITION** Coordinates are within 166 feet of the site's actual location. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE NOTIONAL ENUMERATED DOMAIN VALUE DEFINITION The exact position is either unknown or determination is cost prohibitive. **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Argonne National Laboratory ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE THIRD PARTY ENUMERATED DOMAIN VALUE DEFINITION Geospatial coordinates provided by a third party source. Revalidating the provided geolocations would not be cost effective. ENUMERATED DOMAIN VALUE DEFINITION SOURCE Argonne National Laboratory

ATTRIBUTE

ATTRIBUTE LABEL FIELD ATTRIBUTE DEFINITION Name of Oil-Gas Field in which the feature is located. ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN field name

ATTRIBUTE

ATTRIBUTE LABEL COMPDATE ATTRIBUTE DEFINITION

Completion date of the feature. If a COMPDATE was not provided in the original source data then the COMPDATE value will be shown as NULL.

ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field.

ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN date

ATTRIBUTE

ATTRIBUTE LABEL TOTDEPTH ATTRIBUTE DEFINITION Total depth (in feet) of the feature. ATTRIBUTE DEFINITION SOURCE The r

ATTRIBUTE DEFINITION SOURCE The responsible organization as identified in the SOURCE field. ATTRIBUTE DOMAIN VALUES

RANGE DOMAIN

RANGE DOMAIN MINIMUM 0

RANGE DOMAIN MAXIMUM 10000

OVERVIEW DESCRIPTION

ENTITY AND ATTRIBUTE OVERVIEW

The entity and attribute information provided here describes the tabular data associated with the data set. Please review the detailed descriptions that are provided

(the individual attribute descriptions) for information on the values that appear as fields/table entries of the data set. Please see the "Processing Steps" section for further methodology. For string and date data types, NOT AVAILABLE values denote missing data that was not present in the source data while NOT APPLICABLE values denote that the field does not apply for the specific case. For numeric data types, -999 denotes missing data that was not present in the source data. However, the missing data may be present in other sources not yet discovered and used in the creation and/or maintenance of this dataset. These records may be populated with valid information in future update cycles.

ENTITY AND ATTRIBUTE DETAIL CITATION

Argonne National Laboratory

Hide Entities and Attributes \blacktriangle

DISTRIBUTOR CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION HIFLD Subcommittee CONTACT ELECTRONIC MAIL ADDRESS hifld@hq.dhs.gov

DISTRIBUTION LIABILITY Distributor assumes no liability for misuse of the data. STANDARD ORDER PROCESS DIGITAL FORM DIGITAL TRANSFER INFORMATION FORMAT NAME Vector Digital Data Set (Point)

FEES None. No fees are applicable for obtaining the data set.

Hide Distribution Information

METADATA DATE 2019-06-21 METADATA CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Oak Ridge National Laboratory CONTACT ADDRESS ADDRESS TYPE Mailing and Physical address ADDRESS One Bethel Valley Rd, MS-6017 CITY Oak Ridge STATE OR PROVINCE TN POSTAL CODE 37831

CONTACT VOICE TELEPHONE 865-241-3976 CONTACT FACSIMILE TELEPHONE 865-241-6261

METADATA STANDARD NAME FGDC Content Standards for Digital Geospatial Metadata METADATA STANDARD VERSION Vector Digital Data Set (Point) METADATA TIME CONVENTION local time

Hide Metadata Reference