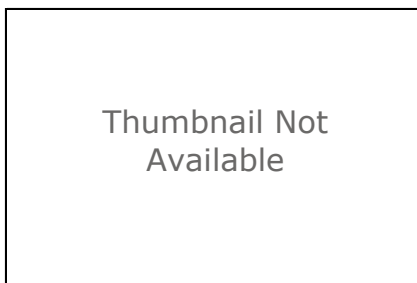


DDP_Halite



Tags

salt deposits, geoscientificInformation

Summary

DDP_Halite -- A spatial database of salt occurrences that do not appear to correspond to known diapirs of Devonian age (DDP_Diapirs) in the Dnieper-Donets Basin, Ukraine.

Description

An assessment of potash resources in the Pripyat and Dnieper-Donets Basins, Belarus and Ukraine, was undertaken as part of a global mineral resource assessment. Areas which are defined by geological criteria as permitting specific types of deposits are referred to as permissive tracts. Four permissive tracts with the potential for undiscovered potash deposits are delineated. These include permissive tracts for stratabound potash-bearing deposits in Famennian age (Upper Devonian) salt in the Pripyat Basin and in Famennian and Cisuralian age (lower Permian) salt in the Dnieper-Donets Basin. The geology of each of these permissive tracts is described. A qualitative assessment of each of these permissive tracts is attempted but varies with the amount and quality of available subsurface information. In addition, a tract is delineated for halokinetic potash-bearing salt in the Famennian of the Dnieper-Donets Basin, and a quantitative estimate of undiscovered resources is made for this tract. These evaporite basins formed within the Pripyat-Donbass Rift, an Upper Devonian continental rift structure, and their geology and potash potential are dependent on the evolution of the rift and potash-bearing salt deposition within the rift.

Credits

Mark D. Cocker and Greta J. Orris compiled the raw data into a spreadsheet format; Greta J. Orris designed the data model, standardized the data content, and proofed location information; Pamela Dunlap converted the data from a spreadsheet format to a spatial database (Esri File Geodatabase feature class of points), further standardized the data, wrote metadata, and prepared the digital data for publication.

Use limitations

None. The U.S. Geological Survey (USGS) provides these geographic data "as is." The USGS makes no guarantee or warranty concerning the accuracy of information contained in the geographic data. The USGS further makes no warranties, either expressed or implied as to any other matter whatsoever, including, without limitation, the condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user. Although these data have been processed successfully on computers of the USGS, no warranty, expressed or implied, is made by the USGS regarding the use of these data on any other system, nor does the fact of distribution constitute or imply such warranty. Locations for deposits and occurrences were derived from a variety of source maps, the smallest scale of which was about 1:1,000,000; thus, these data should not be used or portrayed at scales larger than 1:1,000,000 (for example, 1:500,000).

Extent

There is no extent for this item.

Scale Range

There is no scale range for this item.

ArcGIS Metadata ▼**FGDC Metadata (read-only) ►****Identification ►**

CITATION

CITATION INFORMATION

ORIGINATOR USGS

PUBLICATION DATE 2017

TITLE

DDP_Halite

GEOSPATIAL DATA PRESENTATION FORM map

SERIES INFORMATION

SERIES NAME Scientific Investigations Report

ISSUE IDENTIFICATION 2010-5090-BB

OTHER CITATION DETAILS

Cocker, M.D., Orris, G.J., and Dunlap, Pamela, with contributions from Lipin, B.R., Ludington, Steve, Ryan, R.J., Słowakiewicz, Mirosław, Spanski, G.T., Wynn, Jeff, and Yang, Chao, 2017, Geology and undiscovered resource assessment of the potash-bearing Pripyat and Dnieper-Donets Basins, Belarus and Ukraine: U.S. Geological Survey Scientific Investigations Report 2010 -5090 -BB, 116 p., and spatial data, <https://doi.org/10.3133/sir20105090BB>.

ONLINE LINKAGE <https://doi.org/10.3133/sir20105090BB>

DESCRIPTION

ABSTRACT

An assessment of potash resources in the Pripyat and Dnieper-Donets Basins, Belarus and Ukraine, was undertaken as part of a global mineral resource assessment. Areas which are defined by geological criteria as permitting specific types of deposits are referred to as permissive tracts. Four permissive tracts with the potential for undiscovered potash deposits are delineated. These include permissive tracts for stratabound potash-bearing deposits in Famennian age (Upper Devonian) salt in the Pripyat Basin and in Famennian and Cisuralian age (lower Permian) salt in the Dnieper-Donets Basin. The geology of each of these permissive tracts is described. A qualitative assessment of each of these permissive tracts is attempted but varies with the amount and quality of available subsurface information. In addition, a tract is delineated for halokinetic potash-bearing salt in the Famennian of the Dnieper-Donets Basin, and a quantitative estimate of undiscovered resources is made for this tract. These evaporite basins formed within the Pripyat-Donbass Rift, an Upper Devonian continental rift structure, and their geology and potash potential are dependent on the evolution of the rift and potash-bearing salt deposition within the rift.

PURPOSE

DDP_Halite -- A spatial database of salt occurrences that do not appear to correspond to known diapirs of Devonian age (DDP_Diapirs) in the Dnieper-Donets Basin, Ukraine.

TIME PERIOD OF CONTENT

TIME PERIOD INFORMATION

SINGLE DATE/TIME

CALENDAR DATE 2016

CURRENTNESS REFERENCE

2016

STATUS

PROGRESS Complete

MAINTENANCE AND UPDATE FREQUENCY None planned

SPATIAL DOMAIN

BOUNDING COORDINATES

WEST BOUNDING COORDINATE 23.904600

EAST BOUNDING COORDINATE 38.097400

NORTH BOUNDING COORDINATE 52.441700

SOUTH BOUNDING COORDINATE 45.178200

KEYWORDS

THEME

THEME KEYWORD THESAURUS None

THEME KEYWORD salt deposits

THEME

THEME KEYWORD THESAURUS ISO 19115 Topic Categories

THEME KEYWORD geoscientificInformation

PLACE

PLACE KEYWORD THESAURUS United Nations geographic regions and countries

PLACE KEYWORD Eastern Europe, Ukraine

ACCESS CONSTRAINTS

None

USE CONSTRAINTS

None. The U.S. Geological Survey (USGS) provides these geographic data "as is." The USGS makes no guarantee or warranty concerning the accuracy of information contained in the geographic data. The USGS further makes no warranties, either expressed or implied as to any other matter whatsoever, including, without limitation, the condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user. Although these data have been processed successfully on computers of the USGS, no warranty, expressed or implied, is made by the USGS regarding the use of these data on any other system, nor does the fact of distribution constitute or imply such warranty. Locations for deposits and occurrences were derived from a variety of source maps, the smallest scale of which was about 1:1,000,000; thus, these data should not be used or portrayed at scales larger than 1:1,000,000 (for example, 1:500,000).

POINT OF CONTACT

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

CONTACT ORGANIZATION U.S. Geological Survey

CONTACT PERSON Greta J. Orris

CONTACT POSITION Research Geologist

CONTACT ADDRESS

ADDRESS TYPE Mailing and physical

ADDRESS 520 North Park Avenue

CITY Tucson

STATE OR PROVINCE AZ

POSTAL CODE 85719

COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 520-670-5583

CONTACT FACSIMILE TELEPHONE 520-670-5113

CONTACT ELECTRONIC MAIL ADDRESS greta@usgs.gov

DATA SET CREDIT

Mark D. Cocker and Greta J. Orris compiled the raw data into a spreadsheet format; Greta J. Orris designed the data model, standardized the data content, and proofed location information; Pamela Dunlap converted the data from a spreadsheet format to a spatial database (Esri File Geodatabase feature class of points), further standardized the data, wrote metadata, and prepared the digital data for publication.

NATIVE DATA SET ENVIRONMENT

Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.1.1.3143

Hide Identification ▲

Data Quality ►**LOGICAL CONSISTENCY REPORT**

No checks for consistency were performed.

COMPLETENESS REPORT

Complete, no updates planned.

LINEAGE**PROCESS STEP****PROCESS DESCRIPTION**

Tabular data were exported from a Microsoft Excel spreadsheet format to an Esri File Geodatabase feature class of points (vector GIS). Attributes were further standardized and corrected in the attribute table.

PROCESS DATE 2012-02-16

Hide Data Quality ▲

Spatial Data Organization ►

DIRECT SPATIAL REFERENCE METHOD Vector

POINT AND VECTOR OBJECT INFORMATION**SDTS TERMS DESCRIPTION**

SDTS POINT AND VECTOR OBJECT TYPE Entity point

POINT AND VECTOR OBJECT COUNT 41

Hide Spatial Data Organization ▲

Spatial Reference ►**HORIZONTAL COORDINATE SYSTEM DEFINITION****GEOGRAPHIC**

LATITUDE RESOLUTION 8.9831528411952133e-009

LONGITUDE RESOLUTION 8.9831528411952133e-009

GEOGRAPHIC COORDINATE UNITS Decimal Degrees

GEODETTIC 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 ▲

Entities and Attributes ►

DETAILED DESCRIPTION

ENTITY TYPE

ENTITY TYPE LABEL DDP_Halite

ENTITY TYPE DEFINITION

FGDB Feature Class -- a collection of features with the same geometry type, the same attributes, and the same spatial reference.

ENTITY TYPE DEFINITION SOURCE Esri, accessed October 21, 2011 at

<http://support.esri.com/en/knowledgebase/GISDictionary/term/feature%20class>

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 Hal_Dep_ID

ATTRIBUTE DEFINITION

HALITE DEPOSIT IDENTIFIER -- Unique numeric identifier for halite deposit.

ATTRIBUTE

ATTRIBUTE LABEL Hal_Name

ATTRIBUTE DEFINITION

Halite deposit name.

ATTRIBUTE

ATTRIBUTE LABEL Shape

ATTRIBUTE DEFINITION

Feature geometry.

ATTRIBUTE DEFINITION SOURCE ESRI

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Coordinates defining the features.

ATTRIBUTE

ATTRIBUTE LABEL LATITUDE

ATTRIBUTE DEFINITION

LATITUDE -- Positive number represents latitude north of the equator.

ATTRIBUTE DOMAIN VALUES

RANGE DOMAIN

ATTRIBUTE UNITS OF MEASURE decimal degrees

ATTRIBUTE

ATTRIBUTE LABEL Age

ATTRIBUTE DEFINITION

Geologic age of host rock unit and halite mineralization.

ATTRIBUTE DEFINITION SOURCE International Commission on Stratigraphy, 2010, International stratigraphic chart: accessed March 20, 2014, at

<http://www.stratigraphy.org/ICSchart/StratChart2010.pdf>.

ATTRIBUTE

ATTRIBUTE LABEL Comments

ATTRIBUTE DEFINITION

Grade and tonnage data, if known.

ATTRIBUTE

ATTRIBUTE LABEL LONGITUDE

ATTRIBUTE DEFINITION

LONGITUDE -- Positive number represents longitude east of the Greenwich meridian.

ATTRIBUTE DOMAIN VALUES

RANGE DOMAIN

ATTRIBUTE UNITS OF MEASURE decimal degrees

ATTRIBUTE

ATTRIBUTE LABEL SHORT_REFS

ATTRIBUTE DEFINITION

SHORT REFERENCES -- Abbreviated citation(s) for source reference(s) used in compiling the data; multiple citations are delimited by commas. Full references are listed in the Lineage section of the metadata.

*Hide Entities and Attributes ▲***Distribution Information ►**

DISTRIBUTOR

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

CONTACT ORGANIZATION U.S. Geological Survey

CONTACT ADDRESS

ADDRESS TYPE mailing

ADDRESS Denver Federal Center, P.O. Box 25286

CITY Denver

STATE OR PROVINCE Colorado

POSTAL CODE 80225

COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 888-275-8747

CONTACT VOICE TELEPHONE 888-ASK-USGS

CONTACT ELECTRONIC MAIL ADDRESS infoservices@usgs.gov

DISTRIBUTION LIABILITY

See access and use constraints information.

STANDARD ORDER PROCESS

DIGITAL FORM

DIGITAL TRANSFER INFORMATION

FORMAT NAME Geodatabase

DIGITAL TRANSFER OPTION

ONLINE OPTION

ACCESS INSTRUCTIONS

<https://doi.org/10.3133/sir20105090BB>

FEES none

*Hide Distribution Information ▲***Metadata Reference ►**

METADATA DATE 2017-07-25

METADATA CONTACT

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

CONTACT ORGANIZATION U.S. Geological Survey

CONTACT PERSON Pamela Dunlap
CONTACT POSITION Geologist
CONTACT ADDRESS
ADDRESS TYPE mailing
ADDRESS 520 N. Park Ave., Ste. 355
CITY Tucson
STATE OR PROVINCE Arizona
POSTAL CODE 85719
COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 520-670-5573
CONTACT ELECTRONIC MAIL ADDRESS pdunlap@usgs.gov

METADATA STANDARD NAME FGDC Content Standard for Digital Geospatial Metadata
METADATA STANDARD VERSION FGDC-STD-001-1998
METADATA TIME CONVENTION local time

METADATA USE CONSTRAINTS
None.

Hide Metadata Reference ▲