

Mineral Potential Evaluation Section (MPES) Report 380: Aggregate Resource Potential in Parts of Northern St. Louis and Lake Counties, MN

- MN/DOT Quality Database - report380_dotquality

This page last updated: 2011

Metadata created using [Minnesota Geographic Metadata Guidelines](#)

Metadata Summary

| | |
|------------------------------------|--|
| Originator | Minnesota Department of Natural Resources, Division of Lands and Minerals, Mineral Potential Evaluation Section |
| Abstract | This dataset consists of information about the quality of Minnesota Department of Transportation's evaluated gravel pits and other aggregate sources in the project area for MPES Report 380. In this report there were 9 pit sheets that had quality information that could be summarized. Quality information includes soundness, durability, and mineral content. This table contains the averages and ranges of values for the different quality tests and was summarized by the MN DNR from the MN/DOT pit sheets. |
| Browse Graphic | none available |
| Time Period of Content Date | 2010 |
| Currentness Reference | The pit sheets are from 1936-1996, with these values compiled in 2010. |
| Access Constraints | |
| Use Constraints | Acknowledgement of the Minnesota Department of Transportation and the Minnesota Department of Natural Resources is appreciated for products derived from these data. |
| Distributor Organization | Minnesota Department of Natural Resources, Division of Lands and Minerals |
| Ordering Instructions | <p>The MPES Report 380's spatial datasets (shapefiles & file geodatabase) are included in the file report380data.zip, accessible from the MN DNR Aggregate Mapping web page: http://www.dnr.state.mn.us/lands_minerals/aggregate_maps/completed/index.html</p> <p>The spatial datasets include: sand and gravel resource potential, clay and silt resource potential, field observations, aggregate pits, Minnesota Geological Survey (MGS) County Well Index (CWI) data points, MGS CWI stratigraphy table, sieve analysis database, Mn/DOT Aggregate Source Information System (ASIS) points, and Mn/DOT ASIS pit quality table.</p> |
| Online Linkage | Click here to download data. (See Ordering Instructions above for details.) By clicking here, you agree to the notice in "Distribution Liability" in Section 6 of this metadata. |

Full Metadata

Mineral Potential Evaluation Section (MPES) Report 380: Aggregate Resource Potential in Parts of Northern St. Louis and Lake Counties, MN

- MN/DOT Quality Database - report380_dotquality

Go to Section:

- [1. Identification Information](#)
- [2. Data Quality Information](#)
- [3. Spatial Data Organization Information](#)
- [4. Spatial Reference Information](#)
- [5. Entity and Attribute Information](#)
- [6. Distribution Information](#)
- [7. Metadata Reference Information](#)

| Section 1 | Identification Information | Top of page |
|--|---|-----------------------------|
| <i>Originator</i> | Minnesota Department of Natural Resources, Division of Lands and Minerals, Mineral Potential Evaluation Section | |
| <i>Title</i> | Mineral Potential Evaluation Section (MPES) Report 380: Aggregate Resource Potential in Parts of Northern St. Louis and Lake Counties, MN - MN/DOT Quality Database - report380_dotquality | |
| <i>Abstract</i> | This dataset consists of information about the quality of Minnesota Department of Transportation's evaluated gravel pits and other aggregate sources in the project area for MPES Report 380. In this report there were 9 pit sheets that had quality information that could be summarized. Quality information includes soundness, durability, and mineral content. This table contains the averages and ranges of values for the different quality tests and was summarized by the MN DNR from the MN/DOT pit sheets. | |
| <i>Purpose</i> | This table summarizes the quality data that is presented on the MN/DOT pit sheets. MN/DOT has specifications that the aggregate must meet to be used for specific jobs. This table summarizes the quality data by averaging the values of the pit and giving the range of values. The data can be joined to the file titled, report380_pits.shp, using the 'ASIS_NUMBR' field. | |
| <i>Time Period of Content Date</i> | 2010 | |
| <i>Currentness Reference</i> | The pit sheets are from 1936-1996, with these values compiled in 2010. | |
| <i>Progress</i> | Complete | |
| <i>Maintenance and Update Frequency</i> | None planned | |
| <i>Spatial Extent of Data</i> | Northern St. Louis County and Lake County, Minnesota | |
| <i>Bounding Coordinates</i> | -92.30 -91.65 47.45 47.92 | |
| <i>Place Keywords</i> | St. Louis County, Lake County, Minnesota | |
| <i>Theme Keywords</i> | Mn/DOT, ASIS, Aggregate, Gravel Pits, Quality, Soundness, Durability | |
| <i>Theme Keyword Thesaurus</i> | | |
| <i>Access Constraints</i> | | |
| <i>Use Constraints</i> | Acknowledgement of the Minnesota Department of Transportation and the Minnesota Department of Natural | |

Resources is appreciated for products derived from these data.

**Contact Person
Information**

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Browse Graphic

none available

**Browse Graphic File
Description**

Associated Data Sets

The report380_pits shapefile and the report380_asis1208 shapefile can be joined to this table using the 'Asis_numbr' field as the primary key.

The MPES Report 380's spatial datasets (shapefiles & file geodatabase) are included in the file report380data.zip, accessible from the MN DNR Aggregate Mapping web page:
http://www.dnr.state.mn.us/lands_minerals/aggregate_maps/completed/index.html
The spatial datasets include: sand and gravel resource potential, clay and silt resource potential, field observations, aggregate pits, Minnesota Geological Survey (MGS) County Well Index (CWI) data points, MGS CWI stratigraphy table, sieve analysis database, Mn/DOT Aggregate Source Information System (ASIS) points, and Mn/DOT ASIS pit quality table. CWI stratigraphy table, and Mn/DOT ASIS pit quality table.

Section 2

Data Quality Information

[Top of full metadata](#)

[Top of page](#)

Attribute Accuracy

The ranges of values were taken directly from the MN/DOT pit sheets. These numbers were also averaged to represent the entire pit. However, a pit may meet specifications on one end and not the other, or the top 10 feet may meet specifications and the bottom layers do not. Thus, care must be taken when interpreting this information. For further detail, refer to the pit sheets from MN/DOT.

Logical Consistency

Completeness

All available data were summarized and are incorporated within this table.

**Horizontal Positional
Accuracy**

Not applicable.

**Vertical Positional
Accuracy**

Not applicable.

Lineage

The ranges of values were taken directly from the MN/DOT pit sheets. These numbers were also averaged to represent the entire pit. However, a pit may meet specifications on one end and not the other, or the top 10 feet may meet specifications and the bottom layers do not. Thus, care must be taken when interpreting this information. For further detail, refer to the pit sheets from MN/DOT.

**Source Scale
Denominator**

Section 3

**Spatial Data Organization
Information**

[Top of full metadata](#)

[Top of page](#)

**Native Data Set
Environment**

***Geographic
Reference for
Tabular Data***

Spatial Object Type Point

***Vendor Specific
Object Types***

Tiling Scheme MPES Report 380 Project Boundary

Section 4

Spatial Reference Information

[Top of full metadata](#)

[Top of page](#)

***Horizontal
Coordinate Scheme***

Ellipsoid Not applicable

Horizontal Datum

Horizontal Units

Distance Resolution

Altitude Datum Not applicable

Depth Datum Not applicable

Section 5

Entity and Attribute Information

[Top of full metadata](#)

[Top of page](#)

***Entity and Attribute
Overview***

The ranges of values were taken directly from the Mn/DOT pit sheets. These numbers were also averaged to represent the entire pit. However, a pit may meet specifications on one end and not the other, or the top 10 feet may meet specifications and the bottom layers do not. Thus, care must be taken when interpreting this information. For further detail, refer to the pit sheets from Mn/DOT. These data can be related to their locations by using either the report380_pits shapefile or report380_asis1208 shapefile. The primary key in report380_dotquality is the 'ASIS_NUMBR' field which can be related to the corresponding 'Asis_numbr' field in report380_pits shapefile or to the 'sourcenum' field in report380_asis1208 shapefile.

***Entity and Attribute
Detailed Citation***

Attribute vales can be found in a table at the bottom of this document (report380_dotquality.pdf). If you are viewing this metadata in ArcCatalog, from the .xml file, the attribute table is not displayed. Please refer to the report380_dotquality.pdf document included in the project zip file report380data.zip, which can be found at the following directory: report380data\resource\shapefiles\mndnr\metadata

Section 6

Distribution Information

[Top of full metadata](#)

[Top of page](#)

Publisher Minnesota Department of Natural Resources, Division of Lands and Minerals, Mineral Potential Evaluation Section

Publication Date 2011

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Information*** Aggregate Resource Mapping Program
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Distributor's Data Set Identifier

MPES Report 380: Aggregate Resource Potential in Parts of Northern St. Louis and Lake Counties, MN

Distribution Liability

The Minnesota Department of Natural Resources makes no representation or warranties, express or implied, with respect to the reuse of data provided herewith, regardless of its format or the means of its transmission. There is no guarantee or representation to the user as to the accuracy, currency, suitability, or reliability of this data for any purpose. The user accepts the data 'as is', and assumes all risks associated with its use. By accepting this data, the user agrees not to transmit this data or provide access to it or any part of it to another party unless the user shall include with the data a copy of this disclaimer. The Minnesota Department of Natural Resources assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data.

Transfer Format Name

Transfer Format Version Number

Transfer Size

mb for data, mb for associated maps

Ordering Instructions

The MPES Report 380's spatial datasets (shapefiles & file geodatabase) are included in the file report380data.zip, accessible from the MN DNR Aggregate Mapping web page:

http://www.dnr.state.mn.us/lands_minerals/aggregate_maps/completed/index.html

The spatial datasets include: sand and gravel resource potential, clay and silt resource potential, field observations, aggregate pits, Minnesota Geological Survey (MGS) County Well Index (CWI) data points, MGS CWI stratigraphy table, sieve analysis database, Mn/DOT Aggregate Source Information System (ASIS) points, and Mn/DOT ASIS pit quality table.

Online Linkage

[Click here](#) to download data. (See Ordering Instructions above for details.) By clicking here, you agree to the notice in "Distribution Liability" above.

Section 7

Metadata Reference Information

[Top of full metadata](#)

[Top of page](#)

Metadata Date

2011

Contact Person Information

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Metadata Standard Name

Minnesota Geographic Metadata Guidelines

Metadata Standard Version

2.1

Metadata Standard Online Linkage

<http://www.lmic.state.mn.us/gc/stds/metadata.htm>

This page last updated: 2011

| Table Name | Field Name | Begin | Definition | Valid | Descriptions |
|------------|------------|-------|------------|-------|--------------|
|------------|------------|-------|------------|-------|--------------|

| | | Column | | Values | |
|--------------------------|------------|--------|-------------|------------------------------|---|
| report380_dotquality.dbf | ASIS_NUMBR | | Text, 10, 0 | E.g., 09014 | Unique identifier used by MN/DOT to identify a pit - new numbering scheme. This is the primary key used to join this data to report380_pits.shp or report380_asis1208.shp |
| | SOURCEXX | | Text, 10, 0 | E.g., 09014 | Unique identifier used by MN/DOT to identify a pit - new numbering scheme. |
| | PITNO | | Text, 10,0 | E.g., 587 | Unique identifier used by MN/DOT to identify a pit - without letter (A or B). |
| | PITNOLTR | | Text, 3 | E.g., A, B, NA (none listed) | Unique identifier used by MN/DOT to identify a pit - if more than one pit (A, B, or C). |
| | SHALE_SAND | | Number,19,1 | E.g., 0.9, 3.6 | Average amount of shale found in the sand fraction (percent). Null values are displayed as -999 |
| | SHALE_GRLV | | Number,19,1 | E.g., 1.4, 3.9 | Average amount of shale found in the gravel fraction (percent). Null values are displayed as -999 |
| | FEOXIDEPCT | | Number,19,1 | e.g., 1.4, 2.3 | Average amount of iron oxide found in sample (percent). |
| | UNCHERTPCT | | Number,19,1 | e.g., 0.2, 0.6 | Average amount of unsound chert found in sample (percent). Null values are displayed as -999 |
| | LAR_A | | Number,19,1 | e.g., 7.7, 28.5 | Average amount of material lost in the Los Angeles Rattler test (percent). Null values are displayed as -999 |
| | LAR_B | | Number,19,1 | e.g., 24.2, 28.3 | Average amount of material lost in the Los Angeles Rattler test (percent). Null values are displayed as -999 |
| | LAR_C | | Number,19,1 | e.g., 23.5, 26.0 | Average amount of material lost in the Los Angeles Rattler test (percent). Null values |

| | | | | | |
|--|------------|--|-------------|--------------------------------------|--|
| | | | | | are displayed as -999 |
| | HIGHSHSAND | | Number,19,1 | e.g., 3.3, 8.6 | Highest amount of shale found in the sand fraction (percent). Null values are displayed as -999 |
| | LOWSHSAND | | Number,19,1 | e.g., 1.1, 4.4 | Lowest amount of shale found in the sand fraction (percent). Null values are displayed as -999 |
| | RANGESHSND | | Text, 10 | e.g., 1.1-3.3, 2.7-8.8, No Range, NA | Range of shale found in the sand fraction (percent). 'No Range' indicates that the high and low values were the same. NA indicates there were null values in the high and low. |
| | HIGH_SHGVL | | Number,19,1 | e.g., 2.4, 6.8 | Highest amount of shale found in the gravel fraction (percent). Null values are displayed as -999 |
| | LOW_SH_GVL | | Number,19,1 | e.g., 1.3, 6.3 | Lowest amount of shale found in the gravel fraction (percent). |
| | RANGESHGVL | | Text, 10 | e.g., 1.0-2.6, 2.8-6.3, No Range, NA | Range of shale found in the gravel fraction (percent). 'No Range' indicates that the high and low values were the same. NA indicates there were null values in the high and low. |
| | HIGHFEOXID | | Number,19,1 | e.g., 1.1-3.2 | Highest amount of iron oxide found in sample (percent). Null values are displayed as -999 |
| | LOWFEOXIDE | | Number,19,1 | e.g., 0.2, 1.4 | Lowest amount of iron oxide found in sample (percent). Null values are displayed as -999 |
| | RANGE_FEOX | | Text, 10 | e.g., 0.5-1.1, 1.3-2.3, No Range, NA | Range of iron oxide found in sample (percent). 'No Range' indicates that the high and low values were the same. NA indicates there were null values in the high and low. |
| | HIGHUNCHRT | | Number,19,1 | e.g., 0.0, 0.4 | Highest amount of unsound chert found in |

| | | | | | |
|--|------------|--|-------------|---|---|
| | | | | | sample (percent). Null values are displayed as -999 |
| | LOWUNCHERT | | Number,19,1 | e.g., 0.0, 0.6 | Lowest amount of unsound chert found in sample (percent). Null values are displayed as -999 |
| | RANGE_UNCH | | Text, 10 | e.g., 0.1-0.2, 0.4-0.4, No Range, NA | Range of unsound chert found in sample (percent). 'No Range' indicates that the high and low values were the same. NA indicates there were null values in the high and low. |
| | HIGH_LAR | | Number,19,1 | e.g., 25.3, 30.6 | Highest amount of material lost in the Los Angeles Rattler test (percent). Null values are displayed as -999 |
| | LOW_LAR | | Number,19,1 | e.g., 7.0, 26.6 | Lowest amount of material lost in the Los Angeles Rattler test (percent). Null values are displayed as -999 |
| | RANGE_LAR | | Text,12 | e.g., 19.9-25.3, 7.7-26.0, No Range, NA | Range of material lost in the Los Angeles Rattler test (percent). 'No Range' indicates that the high and low values were the same. NA indicates there were null values in the high and low. |