

3-31-88

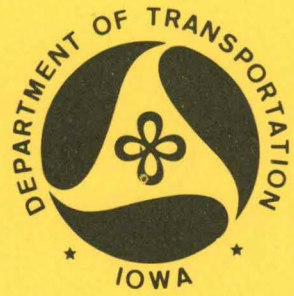
MATLS. I.M. T-203

JANUARY 1978

TE
203
.G46
1978

GENERAL AGGREGATE SOURCE INFORMATION

1978



DIVISION OF HIGHWAYS
OFFICE OF MATERIALS

STATE LIBRARY OF IOWA
Historical Building
IOWA 50319

January 1978
Supersedes T-109 July 1976
and T-203 Jan. 1977



Highway Division

Matls. I.M. T-203
Page 1 of 2

OFFICE OF MATERIALS — INSTRUCTIONAL MEMORANDUM

GENERAL AGGREGATE SOURCE INFORMATION

GENERAL

This revision combines the former I.M. T-203, "Source Information for Aggregate - Portland Cement Concrete" and the booklet "Aggregate Sources" formerly issued by the Geology Section. This revision additionally ranks sources in accordance with a skid resistance classification as defined herein for aggregates used in asphalt construction. One or more skid resistance classification types may be specified on asphalt surface courses.

Only those aggregate sources which have been sampled or tested within the last nine years are listed. Sources not listed will be evaluated upon request. The listing identifies the types of aggregate which can be potentially produced from each source.

PORTLAND CEMENT CONCRETE AGGREGATES

Aggregates shall be produced from sources approved in accordance with the requirements of Materials I.M. Numbers 410, 415, and 417.

All aggregates produced and inspected for intended use in contracts under Iowa Department of Transportation Specifications shall be stored in identifiable stockpiles unless they are being delivered as produced.

The aggregate durability requirements in Article 4115.04 as applied to ledge rock are based in part on the performance in past construction or in concrete freeze and thaw specimens. The durability classifications are based on the complete crushing of approved ledges and removing only the excess fines fraction.

SKID RESISTANCE CLASSIFICATION OF AGGREGATE

When Type I through Type IV skid resistant aggregates are specified for construction, a source approval including bed limitations, is required for each project. Tentative bed limitations are shown in the listing.

Aggregates have been classified into five functional types in accordance with their characteristics as related to skid resistance. One or more of the four higher type skid resistant aggregates may be specified for use in pavement surface courses. If a type is not specified in the contract documents, Type V or better will be acceptable.



The five skid resistant types are listed and defined in order of descending quality as follows.

Type I

Aggregates which are generally a heterogeneous combination of minerals with coarse grained microstructure of very hard particles (Generally a Mohs Hardness range of 7 to 9) bonded together by a slightly softer matrix.

These aggregates are typified by those developed for and used by the grinding-wheel industry such as calcined bauxite (synthetic) and emery (natural). They normally are not available from Iowa sources. Due to the high cost, these aggregates would be specified only for extremely critical situations.

Type II

Natural aggregates in this class are crushed quartzite and granites. The mineral grains in these materials generally have a Mohs hardness range of 5 to 7.

Synthetic aggregates in this class are some aircooled steel furnace slags and others with similar characteristics.

Type III

Natural aggregates in this class are crushed traprocks, crushed gravels or those crushed from dolomitic ledges in which 80 percent or more of the grains have diameters of 120 microns or larger. The mineral grains in the approved dolomitic ledges generally have a Mohs hardness range of 3.5 to 4. The crushed gravels shall not contain more than 30 percent of carbonate stone as defined in the Type V classification.

Synthetic aggregates in this class are the expanded shales with a Los Angeles abrasion loss less than 35 percent.

Type IV

Aggregates crushed from dolomitic or limestone ledges in which 80 percent of the grains are 30 microns or larger. The mineral grains in the approved ledges for this classification generally have a Mohs hardness range of 3 to 4. The gravels shall not contain more than 60 percent of carbonate stone as defined in the Type V classification.

Type V

Aggregates crushed from lithographic and sublithographic limestone ledges and natural gravels containing more than 60 percent lithographic and sublithographic limestone particles. Grain sizes will predominately be below 30 microns for the crushed stone.

LISTING

The following sheet explains the code used in the listing.

The bed numbers shown for concrete aggregate are those on the formal approval letter for the source. The beds shown for asphalt sources are those which have been used or have a potential for use and are of the designated skid resistance type. The beds listed may not include all of those normally worked.

Asphaltic Concrete - Type B

Asphaltic Concrete - Type A

Portland Cement Concrete - Fine Aggregate

Portland Cement Concrete - Coarse Aggregate

Skid resistance classification for asphalt use

Concrete Durability Class

Class 2 sources with a bar over the numeral (2̄) are approved for bridge deck repair aggregate.

A (V) indicates Class 5 aggregate.

Specific Gravity

Denotes that the source has the potential to make the kind of aggregate designated.

LINN COUNTY cont.

Alpha Cr. Stone
B. L. Anderson
Martin Marietta
Martin Marietta
B. L. Anderson
Crawford Stone
B. L. Anderson

CRUSHED STONE

Sweeting
Alice
South Cedar Rapids
South Cedar Rapids
Mitchell/Lisbon
Lee Crawford
Palo

LOCATION

NW 18-85-08
NW 08-85-07
NE 15-82-06
NE 15-82-06
NW 24-82-05
NW 23-83-08
SW 18-84-08

SpGr

2.61
2.71

Alpha Cr. Stone
Alpha Cr. Stone
B. L. Anderson
Alpha Cr. Stone
Milan Freese P
Kings Conc. Co.

SAND & GRAVEL

Sweeting
Park
Spaight
East Marion
Freese
Kings

NE 18-85-08
NE 15-85-06
NE 27-84-08
NE 36-84-06
Cen. 11-83-08
07, 17-83-07

| | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--|--------|--------|--------|--------|------|
| | | | | 5 | |
| | | | | 5 | |
| | 2̄ | | 4 | 4 | 2- 9 |
| | 2̄ | | 4 | 4 | 2-14 |
| | | | | 5 | 1 |
| | | | | X | |
| | X | | 4 | 4 | |
| | | X | 4 | 4 | |
| | | X | 4 | 4 | |
| | | X | 4 | 4 | |
| | | X | 4 | 4 | |
| | | | 4 | 4 | |

**LIST OF AGGREGATE SOURCES
WITH
RECENT ACTIVITY**

ADAIR COUNTY
Schildberg Const.
Schildberg Const.
Schildberg Const.
Schildberg Const.

CRUSHED STONE
Menlo SE 17-77-31 2.65
Menlo SE 17-77-31
Jefferson NW 17-77-31
Howe SW 01-76-31

Schildberg Const.

SAND & GRAVEL
Jefferson NW 17-77-31

ADAMS COUNTY
Schildberg Const.
Schildberg Const.

CRUSHED STONE
Mt. Etna 14, 23-73-34
Corning 03, 10-71-34

Schildberg Const.

SAND & GRAVEL
Mt. Etna NW 23-73-34 2.65

ALLAMAKEE COUNTY

Cooney Const.
Cooney Const.
Bruening Rock Prod.
Cooney Const.
Cooney Const.
Roverud Const.
Cooney Const.
Kraemer & Son
Bruening Rock Prod.
Roverud Const.
Cooney Const.
Pavlovec Rock Co.
Cooney Const.
Bresnahahn Const.
Cooney Const.
Roverud Const.

CRUSHED STONE
Wexford NE 36-98-03 2.70
Wexford NE 36-98-03
Christofferson E½ 17-96-06 2.62
Morken SW 17-100-6
McCabe NE 06-97-05
Siegmiller SE 17-100-6
Quarry SE 03-98-05
Boonies SW 02-99-06
Carlson NW 17-96-05
Swenson SW 17-96-05
Miller NW 17-96-05
Livingood Cen. 07-96-6
Brazel SW 16-97-03
Tierney 25-99-06
Johnson SW 35-99-04
Wild SW 2-99-05

Carlson Matls.
Carlson Matls.
Cooney Const.
Cooney Const.

SAND & GRAVEL
Harpers Ferry NE 13-97-03 2.67
Harpers Ferry NE 13-97-03 2.67
New Albin SE 16-100-4
Boonies SW 02-99-06

APPANOOSE COUNTY

Carter Waters

CRUSHED STONE
Quarry NW 23-69-18
(Light-weight Agg.)

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| 1 | | | | 15 |
| | | 5 | 5 | 15-16 |
| | | | 5 | 20,25 |
| | | | 5 | 25 |
| | | 4 | 4 | |
| | | | | |
| | | | 4 | 11-13 |
| | | | 4 | 3- 5 |
| | X | 4 | 4 | |
| 2 | | | | 1- 6 |
| | | 3 | 3 | 1- 5 |
| 2 | | 5 | 5 | 1- 4 |
| | | | X | |
| | | | X | |
| | | | X | |
| | | | X | |
| | | 3 | 3 | |
| | | | X | |
| | | | X | |
| | | | X | |
| | | | X | |
| | | X | X | |
| | | | X | |
| | | 3 | 3 | |
| | | | X | |
| | 2 | 4 | 4 | |
| | | X | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |
| X | | 3 | 3 | |

APPANOOSE COUNTY cont.

L & W Const. Co.
Mott Quarries, Inc.

Mott Quarries, Inc.
Mott Quarries, Inc.
L & W Const. Co.
Mott Quarries, Inc.
L & W Const. Co.

CRUSHED STONE

Lemley West No. 3
Vanderlinden/
Confidence
Farnsworth
McClury
No. 2 Quarry
Swan
Lemley East

LOCATION

E½ 19-70-19
NW 31-70-19

NW 27-68-18
NW 04-69-19
SW 12-69-18
25-69-19
35-70-19

SpGr

2.69

2.70

2.68

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| 1 | | 5 | 5 | 1- 3 |
| | | 5 | 5 | 1- 3 |
| 1 | | 5 | 5 | 1- 3 |
| | | | 5 | |
| | | | 5 | |
| 1 | | 5 | 5 | 1- 3 |
| | | | X | |
| | X | 4 | 4 | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| 2 | | 4 | 4 | 23-26 |
| | | 4 | 4 | 6-16 |
| | | 4 | 4 | 6-16 |
| | | | X | |
| | | | X | |
| | | 4 | 4 | 10-12 |
| | | | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| 1 | | | | 20-23 |
| | | 4 | 4 | 18-27 |
| 1 | | | | 18-23 |
| | | 4 | 4 | 12-21 |
| | | | 5 | |
| | | | 5 | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |

SAND & GRAVEL

Sargent Quarries

Cincinnati

NE 13-67-19

2.67

AUDUBON COUNTY

G. A. Finley
G. A. Finley

SAND & GRAVEL

Brayton
Brayton

SW 25-78-36
SW 25-78-36

2.67
2.65

BENTON COUNTY

Martin Marietta
B. L. Anderson
B. L. Anderson
B. L. Anderson
B. L. Anderson
B. L. Anderson
B. L. Anderson

CRUSHED STONE

Smith
Garrison 'A'
Garrison 'B'
Ballheim
Mt. Auburn
Jabens
Milroy/Vinton

NW 19-86-12
SE 28-85-11
NE 33-85-11
NE 17-86-12
NE 33-86-11
SW 07-85-11
S¼ 10-85-10

2.65
2.67
2.67

2.65
2.65

SAND & GRAVEL

B. L. Anderson
Coots S&G

Milroy/Vinton
Mt. Auburn

S¼ 10-85-10
SW 31-86-10

2.65
2.65

BLACK HAWK COUNTY

Welp & McCarten
Welp & McCarten
Martin Marietta
Martin Marretta
Martin Marietta
Martin Marietta
Welp & McCarten

CRUSHED STONE

Pint's
Pint's
Waterloo South
Waterloo South
Yokum
Morgan
Fox

SW 36-89-12
SW 36-89-12
NW 18-87-12
NW 18-87-12
04, 05-90-14
NE 15-89-12
SW 13-88-11

2.69

2.66

2

SAND & GRAVEL

Assink Bros.
Martin Marietta
Martin Marietta
Aspro Inc.
Hawkeye Matls.
Bagenstos & Son
Joe Zien

Assink
Cedar Bend
Cedar Bend
Waterloo
Livingston
Bagenstos
Zien

SE 01-89-14
SW 09-89-13
SW 09-89-13
NW 01-88-13
09, 16-88-12
19-87-11
NW 23-87-12

2.66
2.66
2.66
2.65
2.65
2.65
2.66

BOONE COUNTY
 Hallett Const. Co.
 Hallett Const. Co.
 Hallett Const. Co.
 Hallett Const.

SAND & GRAVEL
 Sturtz
 Sturtz
 Gast
 Ahrens

LOCATION
 SW 36-84-27
 SW 36-84-27
 SW 17-82-26
 SE 12-83-27

SpGr
 2.73
 2.66

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | | 5 | |
| | | 5 | 5 | 5-10 |
| | | | | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | | | | |
| 2 | | | | 1- 6 |
| | | 4 | 4 | 1- 7 |
| 1 | | | | 2- 5 |
| | | 4 | 4 | 1- 7 |
| | | | 5 | |
| | | 4 | 4 | 4- 6 |
| 2.67 | 2 | 4 | 4 | 4 |
| | | | 5 | |
| | | 4 | 4 | 13-16 |
| | | 4 | 4 | 13-16 |
| | | 4 | 4 | 1- 5 |
| | | | 5 | |
| | | | 5 | |
| | | | 5 | |
| | | | 5 | |
| 2.69 | 2 | | 4 | 1- 3 |
| | | | | |
| | | X | 4 | 4 |
| | | X | 4 | 4 |
| | | X | 4 | 4 |
| | | X | 4 | 4 |
| | | | | |
| | | | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |
| | | | 4 | 4 |

BREMER COUNTY
 Martin Marietta
 Niemann Const.

CRUSHED STONE
 Frederika
 Denver

NE 12-93-13
 NE 29-91-13

SAND & GRAVEL
 Tripoli
 Nolte

NE 28-93-12
 SE 31-92-11

2.65

BUCHANAN COUNTY

Niemann Const.
 Niemann Const.
 Niemann Const.
 Niemann Const.
 Niemann Const.
 Wendling Quarries
 Wendling Quarries
 Hewitt Bros.
 Hewitt Bros.
 Hewitt Bros.
 O'Brian
 Niemann Const.
 Niemann Const.
 Niemann Const.
 Niemann Const.
 Niemann Const.

CRUSHED STONE
 Weston/Lamont
 Weston/Lamont
 Bloom/Jesup
 Bloom/Jesup
 Levendusky
 Mishler
 Pattison
 Independance
 Oelwein No. 1
 Oelwein No. 2
 Aurora
 Archie Miller
 Brooks
 Rasmussen No. 2
 Brandon
 Hertzberger
 So. Aurora

NW 14-90-07
 NW 14-90-07
 SE 32-89-10
 SE 28-90-10
 NW 02-90-09
 NW 11-90-09
 NW 14-88-09
 SW 02-90-09
 SE 03-90-09
 NE 17-90-07
 NW 25-88-09
 NW 02-88-09
 SE 21-88-08
 SE 27-87-10
 NE 36-87-10
 NW 19-84-07

2.70
 2.63
 2.67
 2.69

SAND & GRAVEL
 Ward Farm
 Quality R.M.
 Burns
 Huffman

SE 10-90-07
 SE 19-88-09
 NE 32-88-08
 SE 02-89-08

2.65
 2.64
 2.64
 2.65

BUENA VISTA COUNTY

Rohlin Const.
 Maudlin Const.
 Maudlin Const.
 Maudlin Const.
 Maudlin Const.
 Maudlin Const.

SAND & GRAVEL
 Rohlin
 Railroad
 Linn Grove
 Newell
 Sioux Rapids
 Near Marathon

SW 02-93-38
 NE 03-93-37
 NW 25-93-38
 NW 01-90-36
 05-93-36
 SE 19-93-35

CERRO GORDO COUNTY

Welp & McCarten
 Welp & McCarten
 P & M Stone
 P & M Stone
 Weaver Const.
 Weaver Const.
 Martin Marietta
 Martin Marietta
 Greene Ls. Co.
 Greene Ls. Co.
 Weaver Const.
 Welp & McCarten

CRUSHED STONE

Stricker
 Stricker
 Wepking
 Wepking
 Quimby
 Quimby
 Kohler
 Kohler
 McEachran
 McEachran
 Lillybridge
 Swaledale

LOCATION

NW 15-97-21
 NW 15-97-21
 NW 15-97-21
 NW 15-97-21
 NW 27-97-20
 NW 27-97-20
 NE 19-96-19
 NE 19-96-19
 NW 20-96-19
 NW 20-96-19
 SW 26-94-20
 SW 10-94-21

SpGr
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77
 2.77

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------------------------|--------|--------|--------|------|
| 2 | | | | 4- 5 |
| | | 4 | 4 | 3- 5 |
| 2 | | | | 4- 5 |
| | | 4 | 4 | 2- 5 |
| 2 | | 5 | 5 | 4-10 |
| | | 4 | 4 | 8-10 |
| 2 | | 5 | 5 | 1- 8 |
| | | 4 | 4 | 4- 8 |
| 2 | | 5 | 5 | 1- 8 |
| | | 4 | 4 | 4- 8 |
| X | | 5 | 5 | |
| | | | 5 | |
| | | | | |
| SAND & GRAVEL | | | | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | | | |
| CHEROKEE COUNTY | | | | |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| 2 | | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| X | X | 4 | 4 | |
| X | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | | | | |
| CHICKASAW COUNTY | | | | |
| 2 | | 4 | 4 | 9-10 |
| | | | 5 | |
| X | | 4 | 4 | 9-10 |
| | | | 5 | |

CHICKASAW COUNTY

Martin Marietta
 Hewitt Bros.
 Hewitt Bros.
 Martin Marietta

CRUSHED STONE

Nashua
 Mahoney
 Hunt
 Boice

SE 29-94-14
 SE 33-97-14
 NE 29-94-14
 NE 16-95-14

2.59

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|------|
| CRAWFORD COUNTY | SAND & GRAVEL | LOCATION | | | | | | |
| G. A. Finley | Deloit | NE 13-84-39 | 2.65 | | X | 4 | 4 | |
| Clark Const. | Meyer | SE 05-83-38 | 2.65 | | X | 4 | 4 | |
| G. A. Finley | Hanigan | SE 07-83-38 | | | X | 4 | 4 | |
| G. A. Finley | Wescott | 15, 16-83-39 | 2.66 | | X | 4 | 4 | |
| G. A. Finley | Denison | NW 28-83-39 | 2.65 | | X | 4 | 4 | |
| DALLAS COUNTY | CRUSHED STONE | | | | | | | |
| Gendler Stone | Bear Creek | SW 23-78-29 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| G. A. Finley | Messerschmidt | NW 28-79-27 | 2.67 | 2 | | 4 | 4 | |
| G. A. Finley | Messerschmidt | NW 28-79-27 | 2.67 | | X | 4 | 4 | |
| Booneville S&G | Booneville | NW 30-78-26 | 2.68 | 2 | | 4 | 4 | |
| Booneville S&G | Booneville | NW 30-78-26 | 2.66 | | X | 4 | 4 | |
| Maudlin Const | Croft | NE 16-81-27 | | | | 4 | 4 | |
| P & M Stone | Dudley Prop. | NW 05-78-29 | | | | 4 | 4 | |
| Perry S&G | Perry | NW 01-81-29 | 2.70 | 2 | | 4 | 4 | |
| Perry S&G | Perry | NW 01-81-29 | 2.67 | | X | 4 | 4 | |
| DAVIS COUNTY | CRUSHED STONE | | | | | | | |
| Mott Quarries | Hootman | NE 15-70-12 | | | | | 5 | |
| Douds Stone | Lewis | W½ 02-69-12 | | | | | 5 | |
| DECATUR COUNTY | CRUSHED STONE | | | | | | | |
| Sargent Quarries | Grand River | NW 22-70-27 | | | | | 5 | |
| Sargent Quarries | DeKalb | NW 29-70-26 | | | | | 5 | |
| Sargent Quarries | | SW 21-70-26 | | | | | 5 | |
| Sargent Quarries | Decatur City | SE 32-69-26 | | | | | 5 | |
| Gondringer-Barnett | Elk Chapel | NE 12-68-27 | | | | | 5 | |
| Sargent Quarries | Davis City | NE 04-67-26 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Grand River Quarries | Grand River | SW 15-70-27 | | | | 4 | 4 | |
| Sargent Quarries | Decatur City | SE 32-69-26 | | | | 4 | 4 | |
| Sargent Quarries | Woodward | SW 20-69-26 | | | | 4 | 4 | |
| DELAWARE COUNTY | CRUSHED STONE | | | | | | | |
| Kuhlman Const. | Sedgewick No. 2 | SW 36-90-06 | 2.63 | 2 | | | | 3 |
| Kuhlman Const. | Sedgewick No. 2 | SW 36-90-06 | | | | 4 | 4 | 1- 3 |
| Kuhlman Const. | Sedgewick No. 1 | SW 36-90-06 | | | | 4 | 4 | 1- 3 |
| Wendling Quarries | Edgewood | Cen. 04-90-05 | 2.69 | 2 | | | | 2- 7 |
| Wendling Quarries | Edgewood | Cen. 04-90-05 | | | | 4 | 4 | 1- 7 |
| Kuhlman Const. | Tibbot | SW 23-90-04 | 2.70 | 2 | | | | 1- 5 |
| Kuhlman Const. | Tibbot | SW 23-90-04 | | | | 4 | 4 | 1- 7 |
| Wendling Quarries | Bahl Qr. | SE 22-89-06 | | | | 5 | 5 | |
| Wendling Quarries | Logan | 09, 10-88-05 | | 2 | | | | 3- 8 |

| | | | | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|------------------------------|--------------------------|-----------------|-------------|--------|--------|--------|--------|-------|
| DELAWARE COUNTY cont. | CRUSHED STONE | LOCATION | SpGr | | | | | |
| Wendling Quarries | Logan | 09, 10-88-05 | | | | 4 | 4 | 1- 8 |
| Dyersville S&G | Deutmeyer | SW 13-88-03 | 2.73 | 2 | | 5 | 5 | 2- 6 |
| Wendling Quarries | Forrestville | NW 22-90-06 | | | | | 5 | |
| Wendling Quarries | Wulfekuhle | NW 23-90-04 | | | | | 5 | |
| Wendling Quarries | Schulte Prop. | 16, 21-89-05 | | | | | 5 | |
| Dyersville Rdy Mix | Dyersville | SE 23-89-03 | | | | | 5 | |
| Wendling Quarries | Grief | NE 18-87-03 | | | | | 5 | |
| Wendling Quarries | Truman House | NE 35-88-04 | | | | | 5 | |
| Wendling Quarries | Goedkin | NW 22-89-03 | | | | | 5 | |
| Wendling Quarries | Lanning | NE 19-87-04 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Kuhlman Const. | Sedgewick | SW 36-90-06 | 2.65 | | X | 4 | 4 | |
| Wendling Quarries | Tegler | NE 36-89-03 | 2.65 | | X | 4 | 4 | |
| Dyersville Rdy Mix | Dyersville | NW 26-89-03 | 2.66 | | X | 4 | 4 | |
| Wendling Quarries | Arnold | NE 07-88-05 | | | X | 4 | 4 | |
| Wendling Quarries | Logan | SW 10-88-05 | 2.64 | | X | 4 | 4 | |
| Wendling Quarries | Hoth | NW 22-90-06 | | | | 4 | 4 | |
| Martin Marietta | Ferguson | NE 32-89-06 | | | | 4 | 4 | |
| Wendling Quarries | Hard Scrabble | NE 25-87-04 | | | | 4 | 4 | |
| DES MOINES COUNTY | CRUSHED STONE | | | | | | | |
| Kaser Const. | Leonhard | SE 01-71-04 | 2.64 | 2 | | | | 15 |
| Kaser Const. | Leonhard | SE 01-71-04 | 2.66 | 1 | | 5 | 5 | 20 |
| Kaser Const. | Leonhard | SE 01-71-04 | | | | 5 | 5 | 15-18 |
| Raid Quarries | Heinold | SW 10-79-04 | 2.65 | 1 | | | | 13-15 |
| Raid Quarries | Heinold | SW 10-69-04 | | | | 5 | 5 | 13-16 |
| Raid Quarries | Sullivan Slough | SE 30-69-02 | 2.64 | 1 | | 5 | 5 | 6 |
| Raid Quarries | Sullivan Slough | SE 30-69-02 | 2.62 | 2 | | | | 1B |
| Raid Quarries | Nelson | NE 26-72-02 | 2.64 | 2 | | | | 21-24 |
| Raid Quarries | Nelson | NE 26-72-02 | | | | | 4 | 15-24 |
| Raid Quarries | McLaughlin | NE 12-71-04 | | | | | 5 | |
| Raid Quarries | Sullivan Slough | SE 30-69-02 | | | | 4 | 4 | 2- 3 |
| | SAND & GRAVEL | | | | | | | |
| Raid Quarries | Spring Pit | SW 36-69-03 | 2.66 | | X | 4 | 4 | |
| DICKINSON COUNTY | SAND & GRAVEL | | | | | | | |
| Conc. Sand & Matls. | Milford | 11, 12-98-37 | 2.71 | 2 | | 4 | 4 | |
| Conc. Sand & Matls. | Milford | 11, 12-98-37 | 2.66 | | X | 4 | 4 | |
| Rohlin Const. | Rohlin | NE 06-98-36 | | | | 4 | 4 | |
| Hummel S&G | Fostoria | NE 26-98-37 | | X | X | 4 | 4 | |
| DUBUQUE COUNTY | CRUSHED STONE | | | | | | | |
| Dubuque Stone Prod. | Dubuque Stone | 26, 27-90-2E | 2.70 | 2 | | | | 2- 8 |
| Dubuque Stone Prod. | Dubuque Stone | 26, 27-90-2E | | | | 4 | 4 | 1-15 |

GREENE COUNTY

Ferguson & Diehl
 Ferguson & Diehl
 Ferguson & Diehl
 Ferguson & Diehl
 Ferguson & Diehl
 Maudlin Const.
 Maudlin Const.

SAND & GRAVEL

Beazor
 Beazor
 Farm
 Finch
 Armstrong
 Pound

LOCATION
 SW 2-83-31
 SW 2-83-31
 SW 04-83-31
 NW 20-83-30
 SE 26-83-30
 NW 20-84-29
 NW 05-84-29

SpGr
 2.70
 2.68
 2.65

GRUNDY COUNTY

Greene Ls.

CRUSHED STONE

Reiken

NE 15-89-18

Maudlin Const.

SAND & GRAVEL

Holland

SE 28-88-17

GUTHRIE COUNTY

Maudlin Const.
 Schildberg Const.
 Buttler Const.

SAND & GRAVEL

Monteith
 Smith
 Bayard

SW 29-79-30
 NW 34-79-30
 NE 22-81-32

HAMILTON COUNTY

Weaver Const.
 Weaver Const.

CRUSHED STONE

Moberly Mine
 County Line

SW 18-89-25
 SE 34-86-23

2.62

Maudlin Const.
 Maudlin Const.
 Maudlin Const.

SAND & GRAVEL

Luppes
 Ahart
 Forrester

NW 15-88-24
 SW 19-89-25
 NW 32-89-25

HANCOCK COUNTY

Martin Marietta
 Martin Marietta
 Martin Marietta
 Weaver Const.
 Weaver Const.
 Ft. Dodge Ls.
 Ft. Dodge Ls.

CRUSHED STONE

Garner
 Garner
 Garner
 Garner
 Garner
 Garner
 Garner

SE 11-95-24
 SE 11-95-24
 SE 11-95-24
 NW 13-95-24
 NW 13-95-24
 NE 14-95-24
 NE 14-95-24

2.77

Welp & McCarten
 Herman Bunns
 Welp & McCarten
 Maudlin Const.
 Sankey S&G
 LaHarve Const.

SAND & GRAVEL

Mezvinski
 Hutchins
 Klemme
 Kirshbaum
 Sankey
 Crystal Lake

SW 07-97-24
 NE 27-96-26
 25, 26-95-24
 SW 18-97-24
 N½ 34-96-26
 NE 01-97-25

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | | 4 | |
| | | 4 | 4 | 2- 5 |
| | | | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| 2 | | 4 | 4 | 11-13 |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | 1- 4 |
| | | 4 | 4 | 1- 4 |
| | | 4 | 4 | 6- 7 |
| | | 4 | 4 | 1- 4 |
| | | 4 | 4 | 6- 7 |
| | | 4 | 4 | 1- 4 |
| | | 4 | 4 | 6- 7 |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |

HARDIN COUNTY

Weaver Const.
Weaver Const.
Martin Marietta

CRUSHED STONE

Alden
Alden
Gifford

LOCATION
SW 17-89-21
NW 20-89-21
NW 04-86-19

SpGr
2.58
2.58

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|------|
| 2 | | 4 | 4 | 1- 3 |
| 2 | | 4 | 4 | 1- 3 |
| | | | 5 | |

SAND & GRAVEL

Welden Bros.
Welden Bros.
Open
Maudlin Const.
Maudlin Const.
Weaver
Hardin Aggregates
Maudlin Const.
Maudlin Const.
Maudlin Const.
Maudlin Const.

Iowa Falls
Iowa Falls
Lyman
Seivert Prop.
McCormick
Janssen
Gifford
Nerhing
Iowa Falls
Klein

NW 20-89-20
NW 20-89-20
NE 28-89-20
SW 23-87-21
27-87-20
SE 34-89-20
SW 31-87-19
NW 28-87-20
NW 17-89-20
SW 35-89-20
NW 32-88-22

2.64
2.66

2.67
2.65

| | | | | |
|---|---|---|---|--|
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |

HARRISON COUNTY

Clark Ls. Co.
Schemmer Ls.

CRUSHED STONE

Logan
Logan

17, 19-79-42
17, 19-79-42

2.65
2.64

| | | | | |
|---|--|---|---|----|
| 1 | | 5 | 5 | 25 |
| 1 | | 5 | 5 | 25 |

SAND & GRAVEL

Clark Ls. Co.
Clark Ls. Co.
Clark Ls. Co.
Schemmer Ls.

Woodbine
Woodbine
Pisgah
Logan

NW 23-80-42
NW 23-80-42
NW 23-81-44
SE 08-79-42

2.69
2.66
2.66
2.65

| | | | | |
|---|---|---|---|--|
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |

HENRY COUNTY

Henry County

CRUSHED STONE

County

NE 18-71-06

| | | | | |
|--|--|---|---|------|
| | | 4 | 4 | 8-13 |
|--|--|---|---|------|

SAND & GRAVEL**HOWARD COUNTY**

Pavlovec Rock Co.
Pavlovec Rock Co.
Pavlovec Rock Co.
Bruening Rock Prod.
Bruening Rock Prod.
Bruening Rock Prod.
Welp & McCarten
Welp & McCarten
Welp & McCarten
Welp & McCarten
Welp & McCarten
Welp & McCarten

CRUSHED STONE

Eckerman
Eckerman
Stinger
Nelson
Nelson
Nelson
Dotzler
Daley
Souhrada
Souhrada
Souhrada
Elma

NW 33-100-1
NW 33-100-11
SE 28-99-11
NE 33-99-13
NE 33-99-13
NE 33-99-13
NE 23-99-12
NE 11-98-11
NW 34-99-13
NW 34-99-13
NW 34-99-13
SE 08-97-14

2.61

2.54
2.61

| | | | | |
|---|--|---|---|-------|
| 2 | | | | 8- 9 |
| | | 4 | 4 | 8-10 |
| | | | 5 | |
| 2 | | | | 1- 3 |
| | | 4 | 4 | 1- 4 |
| | | 4 | 4 | 8- 9 |
| 2 | | 4 | 4 | 7-10 |
| 2 | | 4 | 4 | 9-10 |
| | | 4 | 4 | 1- 6 |
| | | 4 | 4 | 10-12 |
| 2 | | 4 | 4 | 5- 6 |

| BED2 | VC (B) | VC (V) | ACC (A) | ACC (C) |
|------------------------|--------|--------|---------|---------|
| HOWARD COUNTY | | | | |
| Pavlovec Rock Co. | | | | |
| Carlson Matls. Co. | | | | |
| Carlson Matls Co. | | | | |
| Ft. Dodge Ls. | | | | |
| Welp & McCarten | | | | |
| HUMBOLDT COUNTY | | | | |
| P & M Stone Co. | | | | |
| P & M Stone Co. | | | | |
| P & M Stone Co. | | | | |
| P & M Stone Co. | | | | |
| Welp & McCarten | | | | |
| P & M Stone Co. | | | | |
| P & M Stone Co. | | | | |
| P & M Stone | | | | |
| Midwest Ls. | | | | |
| Midwest Ls. | | | | |
| P & M Stone | | | | |
| Humboldt Conc. Prod. | | | | |
| P & M Stone | | | | |
| IOWA COUNTY | | | | |
| Marengo Rdy Mix | | | | |
| JACKSON COUNTY | | | | |
| Bellevue S&G | | | | |
| B. L. Anderson | | | | |
| Martin Marietta | | | | |
| Martin Marietta | | | | |
| B. L. Anderson | | | | |
| B. L. Anderson | | | | |
| B. L. Anderson | | | | |
| B. L. Anderson | | | | |
| Martin Marietta | | | | |
| Martin Marietta | | | | |
| B. L. Anderson | | | | |
| B. L. Anderson | | | | |
| B. L. Anderson | | | | |
| Martin Marietta | | | | |
| Trenkamp Quarries | | | | |
| Bellevue S&G | | | | |

SAND & GRAVEL

| LOCATION | SpGr |
|-----------------------|------|
| Eckerman NW 33-100-11 | 2.65 |
| Chester NE 09-100-13 | 2.65 |
| Sovereign SW 01-98-12 | 2.65 |
| Lourdes NW 31-98-12 | |
| NW 06-97-12 | |

CRUSHED STONE

| LOCATION | SpGr |
|-----------------------------|------|
| Bradgate 15, 16-92-30 | 2.67 |
| Bradgate 15, 16-92-30 | 2.67 |
| Bradgate 15, 16-92-30 | |
| Kampen NW 19-92-29 | |
| Griffith/Old SW 24-91-30 | |
| Seavers | |
| Hodges East NE 32-92-28 | 2.63 |
| Hodges West NW 32-92-28 | 2.63 |
| Hodges East & West 32-92-28 | 2.58 |

SAND & GRAVEL

| LOCATION | SpGr |
|----------------------|------|
| Bradgate NE 15-92-30 | 2.68 |
| Bradgate NE 15-92-30 | 2.65 |
| Daggy SW 27-92-29 | |
| Zeidler NW 19-91-28 | 2.67 |
| Hodges NE 32-92-28 | |

SAND & GRAVEL

| LOCATION | SpGr |
|---------------------|------|
| Kimmich SE 24-81-11 | 2.66 |

CRUSHED STONE

| LOCATION | SpGr |
|--------------------------|------|
| Bellevue S&G SW 25-87-4E | |
| LaMotte NW 02-86-3E | |
| Beckley NW 02-86-3E | |
| Beckley NW 02-86-3E | |
| Schwenker SW 16-85-2E | |
| Schwenker SW 16-85-2E | |
| Andrew NW 21-85-3E | 2.72 |
| Andrew NW 21-85-3E | |
| Frost SE 16-84-3E | 2.72 |
| Frost SE 16-84-3E | |
| Maquoketa NW 18-84-3E | |
| Maquoketa NW 18-84-3E | |
| Weis NE 22-85-4E | |
| Pataska NW 23-85-5E | |
| Preston SW 26-84-5E | |

SAND & GRAVEL

| LOCATION | SpGr |
|--------------------|------|
| Kueter SE 36-87-4E | |

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| 2 | | | | 8-11 |
| 2 | | | | 14-22 |
| | | 5 | 5 | 14-24 |
| | | 5 | 5 | 3-14 |
| | | 5 | 5 | |
| 1 | | | | 4-18 |
| 2 | | | | 4- 8 |
| 1 | | | | 2- 5 |
| | | 5 | 5 | 5-24 |
| 2 | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | | 5 | 5 | |
| | | 5 | 5 | |
| 2 | | 4 | 4 | 1 |
| | | 4 | 4 | 1- 2 |
| 2 | | | | 3- 6 |
| | | 4 | 4 | 1- 6 |
| 2 | | | | 2- 4 |
| | | 4 | 4 | 1- 7 |
| 2 | | | | 1 |
| | | 4 | 4 | 1- 2 |
| | | 4 | 4 | 7- 8 |
| | | 4 | 4 | 1- 5 |
| | | 5 | 5 | |
| | | 5 | 5 | |
| | | 4 | 4 | 1-10 |
| | | 4 | 4 | |
| | | 4 | 4 | |

| | | | | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|-----------------------------|--------------------------|--------------------|-------------|--------|--------|--------|--------|-------|
| JACKSON COUNTY cont. | | | | | | | | |
| | SAND & GRAVEL | LOCATION | SpGr | | | | | |
| Bellevue S&G | Bellevue | E½ 01-86-4E | 2.64 | 2 | | 4 | 4 | |
| Bellevue S&G | Bellevue | E½ 02-86-4E | 2.68 | | X | 4 | 4 | |
| Trenkamp Quarries | Trenkamp | SW 06-84-7E | 2.64 | 2 | | 4 | 4 | |
| Trenkamp Quarries | Trenkamp | SW 06-84-7E | 2.67 | | X | 4 | 4 | |
| B. L. Anderson | Maquoketa | NW 18-84-3E | 2.65 | | X | 4 | 4 | |
| Eno S&G | Rockdale | SE 13-84-2E | | | X | 4 | 4 | |
| W. G. Block Co. | Lubben Sand | NW 12-84-1E | 2.65 | | X | 4 | 4 | |
| Alpha Cr. Stone | Turner | NE 07-84-7E | 2.63 | 2 | | 4 | 4 | |
| Alpha Cr. Stone | Turner | NE 07-84-7E | 2.65 | | X | 4 | 4 | |
| JASPER COUNTY | | | | | | | | |
| Kaser Const. | CRUSHED STONE | Sully | | | | | 5 | |
| SAND & GRAVEL | | | | | | | | |
| Van Dusseldorp S&G | Colfax | NE 01-79-21 | 2.69 | 2 | | 4 | 4 | |
| Van Dusseldorp S&G | Colfax | NE 01-79-21 | 2.68 | | X | 4 | 4 | |
| Van Dusseldorp S&G | Reasnor | 03, 10-78-19 | 2.68 | | X | 4 | 4 | |
| JEFFERSON COUNTY | | | | | | | | |
| Martin Marietta | CRUSHED STONE | Anderson | | | | | 5 | |
| Raid Quarries | | Cedar Creek | | | | 4 | 4 | 7 |
| JOHNSON COUNTY | | | | | | | | |
| Martin Marietta | CRUSHED STONE | Crozier | | | | | X | |
| River Products | Conklin | NW 33-80-06 | 2.66 | 2 | | 5 | 5 | 3- 9 |
| River Products | Conklin | NW 33-80-06 | | 2 | | 5 | 5 | 23-24 |
| Martin Marietta | Klein | NE 02-79-07 | 2.69 | 2 | | 5 | 5 | 2-17 |
| Martin Marietta | Klein | NE 02-79-07 | | | | 4 | 4 | 7-17 |
| River Products | Conklin | NW 33-80-06 | | | | 4 | 4 | 6-10 |
| River Products | Conklin | NW 33-80-06 | | | | 4 | 4 | 18-21 |
| SAND & GRAVEL | | | | | | | | |
| Stevens S&G | Stevens | NE 27, 28-79-06 | 2.66 | | X | 4 | 4 | |
| JONES COUNTY | | | | | | | | |
| Alpha Cr. Stone | CRUSHED STONE | Farmers | 2.68 | 2 | | 4 | 4 | 1- 5 |
| B. L. Anderson | Monti/Matternach | NE 24-86-04 | 2.69 | 2 | | 4 | 4 | 1 |
| B. L. Anderson | Vernon/Anamosa | SE 13-84-04 | 2.66 | 2 | | | | 1- 5 |
| B. L. Anderson | Vernon | SE 13-84-04 | | | | 4 | 4 | 1- 6 |
| B. L. Anderson | Kula | SW 21-84-04 | 2.67 | 2 | | | | 4- 5 |
| B. L. Anderson | Kula | SW 21-84-04 | | | | 4 | 4 | 1- 6 |
| Alpha Cr. Stone | Ballou | NE 24-83-03 | 2.57 | 2 | | | | 3 |
| Alpha Cr. Stone | Ballou | NE 24-83-03 | | | | 4 | 4 | 1- 3 |
| B. L. Anderson | Bagus | NW 33-84-01 | 2.72 | 2 | | 4 | 4 | 1- 2 |
| Alpha Cr. Stone | Jacobs | SW 07-85-02 | | | | | 5 | |
| Weber Stone | Stone City | E 6-84-04 | | 2 | | 4 | 4 | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|---------------------------|--------------------|--------------------------|------|--------|--------|--------|--------|-------|
| LINN COUNTY cont. | | CRUSHED STONE | | | | | | |
| Alpha Cr. Stone | Sweeting | NW 18-85-08 | | | | | 5 | |
| B. L. Anderson | Alice | NW 08-85-07 | | | | | 5 | |
| Martin Marietta | South Cedar Rapids | NE 15-82-06 | 2.61 | 2 | | | | 2- 9 |
| Martin Marietta | South Cedar Rapids | NE 15-82-06 | | | | 4 | 4 | 2-14 |
| B. L. Anderson | Mitchell/Lisbon | NW 24-82-05 | 2.71 | 2 | | 4 | 4 | 1 |
| Crawford Stone | Lee Crawford | NW 23-83-08 | | | | | 5 | |
| B. L. Anderson | Palo | SW 18-84-08 | | | | | X | |
| | | SAND & GRAVEL | | | | | | |
| Alpha Cr. Stone | Sweeting | NE 18-85-08 | 2.64 | | X | 4 | 4 | |
| Alpha Cr. Stone | Park | NE 15-85-06 | 2.66 | | X | 4 | 4 | |
| B. L. Anderson | Spaight | NE 27-84-08 | 2.65 | | X | 4 | 4 | |
| Alpha Cr. Stone | East Marion | NE 36-84-06 | 2.65 | | X | 4 | 4 | |
| Milan Freese | Freese | Cen. 11-83-08 | 2.65 | | X | 4 | 4 | |
| Kings Conc. Co. | Kings | 07, 17-83-07 | | | | 4 | 4 | |
| Martin Marietta | Baird | NW 02-82-07 | 2.64 | 2 | | 4 | 4 | |
| | | SW 35-83-07 | 2.65 | | X | 4 | 4 | |
| Martin Marietta | Schultz | SW 29-82-06 | | | | 4 | 4 | |
| B. L. Anderson | Ivanhoe | NW 29-82-05 | 2.66 | | X | 4 | 4 | |
| B. L. Anderson | Central City | NE 10-85-06 | | | X | 4 | 4 | |
| B. L. Anderson | Coggon | NW 11-86-06 | 2.65 | | X | 4 | 4 | |
| LOUISA COUNTY | | CRUSHED STONE | | | | | | |
| River Products | Columbus Jct. | NW 03-74-05 | 2.56 | 2 | | | | 16-19 |
| River Products | Columbus Jct. | NW 03-74-05 | | | | 4 | 4 | 16-21 |
| | | SAND & GRAVEL | | | | | | |
| River Products | McKean | 17-75-04 | | | | 4 | 4 | |
| LYON COUNTY | | SAND & GRAVEL | | | | | | |
| Pettengill Conc. & Gravel | Rock Rapids | NW 33-100-45 | 2.69 | 2 | | 4 | 4 | |
| Pettingill Conc. & Gravel | Rock River | NE 09-99-45 | 2.67 | | X | 4 | 4 | |
| Hogan | | SW 10-99-45 | | | | 4 | 4 | |
| Maudlin Const. | | 17-100-45 | | | | 4 | 4 | |
| Maudlin Const. | | SE 24-100-49 | | | | 4 | 4 | |
| Maudlin Const. | Klondike | NW 21-99-48 | | | | 4 | 4 | |
| Maudlin Const. | Little Rock | NW 03-99-43 | | | | 4 | 4 | |
| Maudlin Const. | Doon | 21-98-45 | | | | 4 | 4 | |
| Maudlin Const. | | SW 24-98-46 | | | | 4 | 4 | |
| Rock Valley S&G | | NW 17-99-48 | | | | 4 | 4 | |
| MADISON COUNTY | | CRUSHED STONE | | | | | | |
| Gendler Stone | Early Chapel | NW 10-76-29 | 2.61 | 1 | | 5 | 5 | 15 |
| Gendler Stone | North River | NW 11-76-29 | 2.64 | 1 | | 5 | 5 | 15 |
| Schildberg Const. | Stanzel | SW 05-75-29 | | | | 5 | 5 | 15 |

| | | | | | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|-----------------------------|--------------------------|-----------------|-------------|---|--------|--------|--------|--------|-------|
| MADISON COUNTY cont. | CRUSHED STONE | LOCATION | SpGr | | | | | | |
| Martin Marietta | Earlham | SW 04-77-28 | | | | | | 5 | 25 |
| Sargent Quarries | Winterset | SE 27-76-27 | | | | | | 5 | 25 |
| Gendler Stone | Winterset | SE 27-76-27 | | | | | | 5 | 25 |
| Gendler Stone | '92' Quarry | NW 34-76-27 | | | | | | 5 | 25 |
| Sargent Quarries | Jones Creek | NE 27-75-27 | | | | | | 5 | 25 |
| Sargent Quarries | Pammel | 08-75-28 | | | | 5 | | 5 | 15 |
| Sargent Quarries | Peru | NW 10-74-27 | | | | | | 5 | 25 |
| | SAND & GRAVEL | | | | | | | | |
| | Stanzel Center | 06-75-29 | | | | | 4 | 4 | |
| MAHASKA COUNTY | CRUSHED STONE | | | | | | | | |
| Kaser Const. | Langstraat | SW 29-76-15 | 2.61 | 2 | | | 5 | 5 | 16 |
| | SAND & GRAVEL | | | | | | | | |
| MARION COUNTY | CRUSHED STONE | | | | | | | | |
| Kaser Const. | Durham Mine | NE 08-75-18 | 2.59 | 2 | | | 4 | 4 | 88-95 |
| Hess & Sons | Melcher Field | SW 21-74-21 | | | | | | | |
| | SAND & GRAVEL | | | | | | | | |
| Pella Const. | Dingman | NW 33-76-18 | 2.66 | | X | | 4 | 4 | |
| Pella Const. | Grootveld | NW 28-76-18 | 2.66 | | X | | 4 | 4 | |
| Van Dusseldorp S&G | Pella Field | SE 34-76-18 | 2.66 | | X | | 4 | 4 | |
| Kaser Const. | Harvey Field | SE 33-76-18 | 2.67 | 2 | | | 4 | 4 | |
| Kaser Const. | Harvey Field | SE 33-76-18 | 2.66 | | X | | 4 | 4 | |
| Kaser Const. | New Harvey | NW 12-75-18 | | 2 | | | 4 | 4 | |
| Kaser Const. | New Harvey | NW 12-75-18 | 2.67 | | X | | 4 | 4 | |
| MARSHALL COUNTY | CRUSHED STONE | | | | | | | | |
| Martin Marietta | Ferguson | SW 05-82-17 | 2.69 | 2 | | | 4 | 4 | 8-17 |
| Martin Marietta | Ferguson | SW 05-82-17 | | | | | 4 | 4 | 1-18 |
| Kenyon | LeGrand | NW 01-83-17 | | | | | | | 1-7 |
| Kenyon | LeGrand | SW 36-84-17 | | | | | 4 | 4 | 8-27 |
| | SAND & GRAVEL | | | | | | | | |
| Martin Marietta | Marshalltown | SW 29-84-17 | 2.66 | 2 | | | 4 | 4 | |
| Martin Marietta | Marshalltown | SW 29-84-17 | 2.66 | | X | | 4 | 4 | |
| Hallett Const. | Bromley | NE 02-84-20 | | | X | | 4 | 4 | |
| MILLS COUNTY | CRUSHED STONE | | | | | | | | |
| Kaser Corp. | Folsom | NW 29-73-43 | | | | | | 5 | |
| Kaser Corp. | Malvern | NW 05-71-41 | | | | | | 5 | |
| Kaser Corp. | Stenett | 17-73-38 | | | | | | 5 | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|-------|
| MILLS COUNTY | SAND & GRAVEL | LOCATION | | | | | | |
| Jack Stanley | Pacific Jct. | NW 30-72-43 | 2.64 | 2 | | 4 | 4 | |
| Jack Stanley | Pacific Jct. | NW 30-72-43 | 2.64 | | X | 4 | 4 | |
| MITCHELL COUNTY | CRUSHED STONE | | | | | | | |
| Falk Const. | Duenow | SE 08-99-17 | 2.78 | 2 | | 4 | 4 | 4- 5 |
| Welp & McCarten | Brownsville | SE 30-99-15 | | | | 4 | 4 | 1- 5 |
| Falk Const. | Wilde | NE 07-98-18 | | | | | 5 | |
| Falk Const. | Osage/Cedar | SW 35-98-17 | | | | 4 | 4 | 11 |
| Falk Const. | Dixon | NE 05-97-15 | | | | | 5 | |
| Greene Ls. Co. | Wrage | SE 17-97-17 | | | | 4 | 4 | 6-11 |
| Falk Const. | Staff | NW 17-97-17 | | | | 4 | 4 | 6-11 |
| | SAND & GRAVEL | | | | | | | |
| Falk Const. | Osage | NW 01-97-17 | 2.64 | | X | 4 | 4 | |
| Falk Const. | St. Ansgar | SW 36-99-18 | | | | 4 | 4 | |
| MONONA COUNTY | SAND & GRAVEL | | | | | | | |
| Peters Const. | Rodney | 02, 11-85-44 | 2.69 | 2 | | 4 | 4 | |
| Peters Const. | Rodney | 92, 22-85-44 | 2.64 | | X | 4 | 4 | |
| Peters Const. | Castana | 04, 05-84-43 | 2.69 | 2 | | 4 | 4 | |
| Peters Const. | Castana | 04, 05-84-43 | 2.64 | | X | 4 | 4 | |
| Hargrave Const. | Hargrave | NE 31-85-46 | | | | 4 | 4 | |
| Midwest Paving | Onawa | SW 09-82-45 | | | | 4 | 4 | |
| MONROE COUNTY | CRUSHED STONE | | | | | | | |
| Kaser Const. | Eddyville | NE 02-73-16 | | | | | 5 | |
| MONTGOMERY COUNTY | CRUSHED STONE | | | | | | | |
| Kaser Const. | Stennett | NE 27-73-38 | | | | | 5 | |
| Kaser Const. | New Grant | NE 05-73-36 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Hallett Const. | Red Oak | NE 07-71-38 | 2.64 | | X | 4 | 4 | |
| G. A. Finley | Elliott | 13-73-38 | | | | 4 | 4 | |
| Hallett Const. | Villisca | SE 33-71-36 | | | | 4 | 4 | |
| MUSCATINE COUNTY | CRUSHED STONE | | | | | | | |
| Wendling Quarries | Moscow | NW 08-78-02 | 2.68 | 2 | | 5 | 5 | 11-15 |
| Wendling Quarries | Moscow | NW 08-78-02 | 2.69 | 2 | | 4 | 4 | 21-24 |
| | SAND & GRAVEL | | | | | | | |
| Wendling Quarries | Atalissa | NW 36-78-03 | | | X | 4 | 4 | |
| Wendling Quarries | Moscow | NW 20-78-02 | | | X | 4 | 4 | |
| Acme Fuel & Matls. | Acme | W½ 22-76-02 | 2.64 | 2 | | 4 | 4 | |
| Acme Fuel & Matls. | Acme | W½ 22-76-02 | 2.67 | | X | 4 | 4 | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|-------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|------|
| O'BRIEN COUNTY | | | | | | | | |
| | SAND & GRAVEL | LOCATION | | | | | | |
| Faber Const. | Faber | SW 19-97-42 | 2.67 | | X | 4 | 4 | |
| Rabe S&G | Rabe | SW 15-94-41 | 2.65 | | X | 4 | 4 | |
| Maudlin Const. | | SE 20-97-42 | | | | 4 | 4 | |
| Maudlin Const. | Sheldon | SW 16-97-42 | | | | 4 | 4 | |
| Maudlin Const. | | SE 29-97-42 | | | | 4 | 4 | |
| Maudlin Const. | Sanborn | SW 04-96-41 | | | | 4 | 4 | |
| Maudlin Const. | Paullina | SE 23-95-41 | | | | 4 | 4 | |
| Maudlin Const. | | SE 01-94-41 | | | | 4 | 4 | |
| Maudlin Const. | | 17-95-3 | | | | 4 | 4 | |
| Maudlin Const. | Primghar | NW 04-95-39 | | | | 4 | 4 | |
| Faber & Son | Sheldon | SE 19-97-42 | | | | 4 | 4 | |
| Floyd River S&G | | NW 11-97-42 | 2.70 | 2 | | 4 | 4 | |
| Floyd River S&G | | NW 11-97-42 | 2.67 | | X | 4 | 4 | |
| OSCEOLA COUNTY | | | | | | | | |
| | SAND & GRAVEL | | | | | | | |
| Rehms & Stewart | Ocheyedan | NE 23-99-40 | 2.64 | | X | 4 | 4 | |
| Hallett Const. | Ashton | NE 28-98-42 | 2.69 | 2 | | 4 | 4 | |
| Hallett Const. | Ashton | NE 28-98-42 | 2.67 | | X | 4 | 4 | |
| Maudlin Const. | Thomas | NW 36-99-40 | | | | 4 | 4 | |
| Maudlin Const. | | SE 15-99-40 | | | | 4 | 4 | |
| Hogan Const. | | NE 12-98-42 | | | | 4 | 4 | |
| Maudlin Const. | | NW 31-100-40 | | | | 4 | 4 | |
| PAGE COUNTY | | | | | | | | |
| | CRUSHED STONE | | | | | | | |
| Gendler Stone | Braddyville Qr. | 15, 22-67-36 | | | | | 5 | |
| PAGE COUNTY | | | | | | | | |
| | SAND & GRAVEL | | | | | | | |
| Hallett Const. | Essex | SW 13-70-39 | | | | 4 | 4 | |
| G. A. Finley | Shenandoah | NW 17-69-39 | 2.64 | 2 | | 4 | 4 | |
| G. A. Finley | Shenandoah | NW 17-69-39 | 2.64 | | X | 4 | 4 | |
| Jack Stanley | Shenandoah | SW 08-69-30 | 2.64 | 2 | | 4 | 4 | |
| Jack Stanley | Shenandoah | SW 08-69-30 | 2.64 | | X | 4 | 4 | |
| PALO ALTO COUNTY | | | | | | | | |
| | SAND & GRAVEL | | | | | | | |
| Bogges Matls. | Bogges | 35, 36-96-33 | 2.70 | 2 | | 4 | 4 | |
| Bogges Matls. | Bogges | 35, 36-96-33 | 2.66 | | X | 4 | 4 | |
| Bogges Matls. | Dorweiller | SW 05-94-31 | 2.66 | | X | 4 | 4 | |
| P & M Stone | West Bend | NW 08-94-31 | | | | 4 | 4 | |
| PLYMOUTH COUNTY | | | | | | | | |
| | SAND & GRAVEL | | | | | | | |
| Higman S&G | Higman Akron | NW 01-92-49 | 2.68 | 2 | | 4 | 4 | |
| Higman S&G | Higman Akron | NW 01-92-49 | 2.67 | | X | 4 | 4 | |
| L. G. Everist | Everist Akron | NE 01-92-49 | 2.68 | 2 | | 4 | 4 | |
| L. G. Everist | Everist Akron | NE 01-92-49 | 2.67 | | X | 4 | 4 | |
| Peters Const. | Corwin | S½ 31-90-46 | 2.69 | 2 | | 4 | 4 | |
| Peters Const. | Corwin | S½ 31-90-46 | 2.67 | | X | 4 | 4 | |

PLYMOUTH COUNTY cont.

Maudlin Const.
Maudlin Const.
Maudlin Const.
Hyman & Sons

SAND & GRAVEL

Remsen
Aspen
Kingsley
Kingsley

LOCATION

SE 03-92-44
NE 11-92-49
NE 35-90-44
NE 13-90-44

SpGr

POCAHONTAS COUNTY

Hallett Const.
Midwest Ls.

CRUSHED STONE

Gilmore City Qr.
Gilmore City Qr.

NE 36-92-31
SW 25-92-31

2.64

SAND & GRAVEL

Maudlin Const.
Maudlin Const.
P & M Stone
Maudlin Const.
P & M Stone

Palmer
Havelock
Egle
Zeaman

N½ 13-90-31
NE 35-93-33
NE 02-90-31
NE 07-91-33
SE 13-92-31

POLK COUNTY

Martin Marietta
Martin Marietta
Hallett Const.
Hallett Const.
Kenyon Const.
Hallett Const.
Hallett Const.
Martin Marietta
Martin Marietta
Hallett Const.
West Des Moines
Sand Co.
Peters Const.
Peters Const.

SAND & GRAVEL

Johnston
Johnston
Denny/Johnston
Denny/Johnston
SE 22nd
East Des Moines
East Des Moines
West Des Moines
West Des Moines
Schroeder
Flint
Gooch/Avon
New W.D.M.

NW 17-79-24
NW 17-79-24
07, 08-79-24
07, 08-79-24
SW 12-78-24
SE 18-78-23
SE 18-78-23
15, 22-78-25
15, 22-78-25
SW 29-81-25
SE 29-78-25
27-78-23
SW 30-78-25

2.72
2.68
2.72
2.67
2.68
2.67
2.69
2.67
2.67
2.67

POTTAWATTAMIE COUNTY

Schildberg Const.
Schildberg Const.
Schildberg Const.
Schildberg Const.
Schildberg Const.
Schildberg Const.
Schildberg Const.

CRUSHED STONE

Crescent
Crescent
Crescent
Silver City
South Macedonia
K & S
North Macedonia Qr.

34, 35-76-44
34, 35-76-44
34, 35-76-44
SE 31-74-41
NE 28-74-40
NW 28-74-40
SW 22-74-40

2.65

G. A. Finley
G. A. Finley
Schildberg Const.
Schildberg Const.

SAND & GRAVEL

Avoca
Oakland
Crescent
Hively

29-77-39
SW 23-75-40
NE 34-76-44
11-75-44

2.65

| | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--|--------|--------|--------|--------|-------|
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | 2 | | 5 | 5 | 1- 3 |
| | 2 | | 5 | 5 | 1- 5 |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | X | 4 | 4 | |
| | 2 | | 4 | 4 | |
| | | X | 4 | 4 | |
| | 2 | | 4 | 4 | |
| | | X | 4 | 4 | |
| | 2 | | 4 | 4 | |
| | | X | 4 | 4 | |
| | 2 | | 4 | 4 | |
| | | X | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | 1 | | | | 25 |
| | | | 5 | 5 | 20,25 |
| | | | 5 | 5 | 26 |
| | | | | | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |
| | | X | 4 | 4 | |
| | | | 4 | 4 | |
| | | | 4 | 4 | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|-------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|-------|
| POWESHIEK COUNTY | CRUSHED STONE | LOCATION | | | | | | |
| Malcom Stone | Malcom Mine | SE 04-80-15 | 2.61 | 2 | | 4 | 4 | 10-13 |
| Kaser Const. | New Sharon | NE 35-78-16 | | 1 | | 5 | 5 | 24 |
| | SAND & GRAVEL | | | | | | | |
| County Pit | Gilbraeth Pit | NW 18-78-15 | | | | 4 | 4 | |
| RINGGOLD COUNTY | CRUSHED STONE | | | | | | | |
| Martin Marietta | Adams/Watterson | SE 19-67-29 | | | | | 5 | |
| SAC COUNTY | SAND & GRAVEL | | | | | | | |
| Hallett Const. | Sacton | S½ 08-86-36 | 2.70 | 2 | | 4 | 4 | |
| Hallett Const. | Sacton | S½ 08-86-36 | 2.68 | | X | 4 | 4 | |
| Hosteng S&G | Auburn | NW 02-86-35 | 2.70 | 2 | | 4 | 4 | |
| Hosteng S&G | Auburn | NW 02-86-35 | 2.66 | | X | 4 | 4 | |
| Mauer Const. | Sac City | NW 36-88-36 | | | | 4 | 4 | |
| Maudlin Const. | Lake View | SE 05-86-36 | | | | 4 | 4 | |
| Mauer Const. | | NW 12-87-36 | | | | 4 | 4 | |
| Mauer Const. | Wilson | NW 29-87-36 | | | | 4 | 4 | |
| SCOTT COUNTY | CRUSHED STONE | | | | | | | |
| LeClaire Quarries | Princeton | NW 02-79-5E | | 2 | | | | 1-14 |
| LeClaire Quarries | Dannatt/McCausland | W½ 17-80-4E | | 2 | | 4 | 4 | 1-19 |
| LeClaire Quarries | Liberty | NE 33-80-1E | 2.70 | 2 | | 4 | 4 | 1-10 |
| LeClaire Quarries | LeClaire | NW 35-79-5E | | 2 | | | | 2- 9 |
| LeClaire Quarries | LeClaire | NW 35-79-5E | | | | 4 | 4 | 1-22 |
| Linwood Stone Co. | Linwood Mine | SW 13-77-2E | 2.67 | 2 | | 5 | 5 | 12-24 |
| | SAND & GRAVEL | | | | | | | |
| LeClaire Quarries | Schlofeldt | SW 17-80-5E | 2.66 | | X | 4 | 4 | |
| LeClaire Quarries | Koester | NW 17-80-2E | | | | 4 | 4 | |
| SHELBY COUNTY | SAND & GRAVEL | | | | | | | |
| G. A. Finley | Harlan | NE 36-79-39 | 2.67 | 2 | | 4 | 4 | |
| G. A. Finley | Harlan | NE 36-79-39 | 2.65 | | X | 4 | 4 | |
| SIOUX COUNTY | SAND & GRAVEL | | | | | | | |
| Rock Valley Gr. Co. | Van Zee | NW 20-97-46 | 2.68 | 2 | | 4 | 4 | |
| Rock Valley Gr. Co. | Van Zee | NW 20-97-46 | 2.68 | | X | 4 | 4 | |
| Hyman Const. | Vanderesch/Hudson | SW 20-96-47 | 2.69 | 2 | | 4 | 4 | |
| Hyman Const. | Hudson/Ostevcamp | SE 07-96-47 | | X | X | 4 | 4 | |
| Hyman Const. | Sioux Center | NW 33-95-45 | 2.68 | 2 | | 4 | 4 | |
| Hyman Const. | Sioux Center | NW 33-95-45 | 2.68 | | X | 4 | 4 | |
| L. G. Everist | Hawarden | 22, 27-95-48 | 2.70 | 2 | | 4 | 4 | |
| L. G. Everist | Hawarden | 22, 27-95-48 | 2.67 | | X | 4 | 4 | |
| Hyman Const. | Sioux Center | NE 01-95-48 | 2.69 | 2 | | 4 | 4 | |
| Maudlin Const. | Sheldon | NW 34-97-43 | | | | 4 | 4 | |
| Sioux Co. | County | 34-97-44 | | | | 4 | 4 | |

| | | | | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|-------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|-------|
| STORY COUNTY | CRUSHED STONE | LOCATION | SpGr | | | | | |
| Sargent Quarries | Cooks | NW 24-84-24 | | | | 4 | 4 | 1- 8 |
| Martin Marietta | Roberson | Cen. 24-84-24 | | | | 4 | 4 | 1-11 |
| | SAND & GRAVEL | | | | | | | |
| Hallett Const. | Christensen | SE 22-84-24 | 2.69 | 1.7 | | 4 | 4 | |
| Hallett Const. | Christensen | SE 22-84-24 | 2.68 | | X | 4 | 4 | |
| Peters Const. | Boyd | NE 21-82-22 | | | | 4 | 4 | |
| TAMA COUNTY | CRUSHED STONE | | | | | | | |
| B. L. Anderson | Montour | NW 09-83-16 | 2.63 | 2 | | | | 1- 7 |
| B. L. Anderson | Montour | NW 09-83-16 | 2.63 | 2 | | | | 13-18 |
| B. L. Anderson | Montour | NW 09-83-16 | | | | 4 | 4 | 4- 7 |
| | SAND & GRAVEL | | | | | | | |
| Manatts, Inc. | Flint | NW 03-82-15 | 2.65 | | X | 4 | 4 | |
| Maudlin Const. | LeGrand | NE 16-83-16 | | | | 4 | 4 | |
| Maudlin Const. | Clutier | SE 11-84-14 | | | | 4 | 4 | |
| McCoy | | 15-83-16 | | | | 4 | 4 | |
| TAYLOR COUNTY | CRUSHED STONE | | | | | | | |
| Gendler Stone | Bedford | SW 25-68-34 | | | | | 4 | |
| Gendler Stone | 102 | NE 32-68-34 | | | | | 5 | |
| UNION COUNTY | CRUSHED STONE | | | | | | | |
| Schildberg Const. | Thayer | NE 35-72-28 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Peters Const. | Afton/Lacena | NE 16-72-29 | | | | 4 | 4 | |
| Peters Const. | Thayer | NE 22-72-28 | 2.69 | 2 | | 4 | 4 | |
| Peters Const. | Thayer | NE 22-72-28 | 2.68 | | X | 4 | 4 | |
| VAN BUREN COUNTY | CRUSHED STONE | | | | | | | |
| Douds Stone | Douds Mine | SE 25-70-11 | 2.50 | 2 | | | | 10-15 |
| Douds Stone | Douds Mine | SE 25-70-11 | | | | 4 | 4 | 14- 7 |
| Douds Stone | Douds Mine | SE 25-70-11 | | | | 5 | 5 | 15- 4 |
| Douds Stone | Selma/Nedrow | NE 19-70-11 | | | | 4 | 4 | 23-27 |
| Raid Quarries | Farmington | NE 05-67-08 | 2.69 | 2 | | 5 | 5 | 3 |
| Raid Quarries | Farmington | NE 05-67-08 | 2.47 | 2 | | 4 | 4 | 16-17 |
| Douds Stone | Gardner | NW 16-70-11 | | | | 4 | 4 | 22-24 |
| Douds Stone | Winsell | SE 22-69-11 | | | | 4 | | 3- 4 |
| | SAND & GRAVEL | | | | | | | |
| Ideal Sand Co. | Farmington | NW 12-67-08 | 2.64 | 2 | | 4 | 4 | |
| Ideal Sand Co. | Farmington | NW 12-67-08 | 2.66 | | X | 4 | 4 | |
| WAPELLO COUNTY | CRUSHED STONE | | | | | | | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|-------|
| WAPELLO COUNTY | SAND & GRAVEL | LOCATION | | | | | | |
| Martin Marietta | Harding | SE 32-71-12 | | | | 4 | 4 | |
| Martin Marietta | Hoffman | 10, 9-72-14 | 2.67 | | X | 4 | 4 | |
| WARREN COUNTY | SAND & GRAVEL | | | | | | | |
| Carlisle S&G | Carlisle | N½ 06-77-22 | | | | 4 | 4 | |
| WASHINGTON COUNTY | CRUSHED STONE | | | | | | | |
| Kaser Corp. | West Chester | NE 19-76-08 | 2.65 | 2 | | 4 | 4 | 5- 7 |
| Kaser Corp. | West Chester | NE 19-76-08 | | | | 4 | 4 | 13-14 |
| River Products | Grace Hill | SW 31-75-08 | | | | 5 | 5 | |
| Kaser Const. | Coppock | NE 30-74-07 | 2.47 | 2 | | 4 | 4 | 8-13 |
| | | | 2.67 | 1 | | 5 | 5 | 3- 4 |
| River Products | Pepper/Keota Field | SW 31-76-09 | | | | | 4 | 12-37 |
| River Products | Young America | SW 02-75-08 | | | | 4 | 4 | 12-17 |
| WAYNE COUNTY | CRUSHED STONE | | | | | | | |
| L & W Const. | Promise City | SW 01-69-20 | | | | | 5 | |
| WEBSTER COUNTY | CRUSHED STONE | | | | | | | |
| Ft. Dodge Ls. | Ft. Dodge Mine | NW 24-89-29 | 2.67 | 2 | | 4 | 4 | |
| Welp & McCarten | Mitchell | NE 25-90-29 | | | | 5 | 5 | |
| Northwest Ls. | Yates | SW 01-89-29 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Northwest Ls. Co. | Yates | W½ 01-89-29 | 2.66 | | X | 4 | 4 | |
| Noel Westrum | Iles | SE 03-86-27 | | | | 4 | 4 | |
| Maudlin Const. | Gilpin | NW 02-89-30 | | | | 4 | 4 | |
| Automated Asph. | Automated Asph. | NW 26-89-29 | | | | 4 | 4 | |
| Welp & McCarten | Sand | SW 23-89-29 | | | | 4 | 4 | |
| Maudlin Const. | Tobin | SW 06-89-28 | | | | 4 | 4 | |
| Maudlin Const. | Hudson/Otho | SW 14-88-28 | | | | 4 | 4 | |
| Welp & McCarten | Condon | SW 03-89-30 | | | | 4 | 4 | |
| Ft. Dodge Ls. | Spilka | NW 26-89-29 | | | | 4 | 4 | |
| WINNEBAGO COUNTY | SAND & GRAVEL | | | | | | | |
| LaHarve Const. | Otis | NE 29-98-24 | | | | 4 | 4 | |
| LaHarve Const. | Leland | SE 11-98-24 | | | | 4 | 4 | |
| LaHarve Const. | Forest City | SE 25-98-23 | | | | 4 | 4 | |
| Welp & McCarten | | SE 23-98-23 | | | | 4 | 4 | |
| WINNESHIEK COUNTY | CRUSHED STONE | | | | | | | |
| J. F. Pavlovec | Kendallville | NE 33-100-10 | 2.68 | 2 | | | | 3- 7 |
| J. F. Pavlovec | Kendallville | NE 33-100-10 | | | | 5 | 5 | 1- 9 |
| Roverud Const. | Hovey | SW 28-98-08 | | 2 | | | | 1- 4 |
| Roverud Const. | Hovey | SW 28-98-08 | | | | 5 | 5 | 1- 6 |
| Roverud Const. | Bolson | SW 09-98-07 | 2.74 | 2 | | 4 | 4 | 2- 4 |

WINNESHIEK COUNTY cont.

CRUSHED STONE

| | | LOCATION | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|---------------------|-------------------|---------------|------|--------|--------|--------|--------|------|
| Roverud Const. | Welken | SW 04-98-07 | 2.71 | 2 | | 4 | 4 | 4- 7 |
| Roverud Const. | Anderson | SW 22-100-10 | 2.65 | 2 | | | | 1- 4 |
| Bruening Rock Prod. | Steinlage | NE 35-96-09 | | 2 | | | | 1- 5 |
| Bruening Rock Prod. | Steinlage | NE 35-96-09 | | | | 5 | 5 | 1- 6 |
| J. F. Pavlovec | Festina | SW 26-96-09 | | | | 5 | 5 | |
| Bruening Rock Prod. | Skyline | SE 10-98-08 | 2.67 | 2 | | | | 1- 3 |
| Bruening Rock Prod. | Skyline | SE 10-98-08 | | | | 5 | 5 | 1- 8 |
| Bruening Rock Prod. | Sexton | SE 14-100-09 | | | | | 5 | |
| Bruening Rock Prod. | Bentley | SE 22-100-08 | | | | | 5 | |
| J. F. Pavlovec | Madison | Cen. 18-98-08 | | | | | 5 | |
| J. F. Pavlovec | Shop | SW 17-98-08 | | | | | 5 | |
| J. F. Pavlovec | Huey | SE 17-98-10 | | | | | 5 | |
| Bruening Rock Prod. | Wepler | NE 05-98-08 | | | | | 5 | |
| Roverud Const. | Ask | NE 27-98-07 | | | | | 5 | |
| Roverud Const. | Bruevold | NW 20-98-07 | | | | | 5 | |
| Bruening Rock Prod. | Thompson | Cen. 29-98-09 | | | | | 5 | |
| Roverud Const. | Pilgrim | NE 14-98-09 | | | | | 5 | |
| Roverud Const. | Rovang | SE 09-97-08 | | | | 5 | 5 | |
| Roverud Const. | Locust | 01-98-08 | | | | | 5 | |
| Roverud Const. | Young | SW 32-99-07 | | | | | 5 | |
| Bruening Rock Prod. | County | NE 05-97-08 | | | | | 5 | |
| Bruening Rock Prod. | Sersland/Smorstad | SE 09-97-07 | | | | | 5 | |
| J. F. Pavlovec | Love | NW 30-96-10 | | | | | 5 | |
| Bruening Rock Prod. | Bullerman | SE 14-96-09 | | | | | 5 | |
| Roverud | Estrem | SW 04-97-7 | 2.64 | 2 | | 5 | 5 | |
| J. F. Pavlovec | Horseshoe Bend | 21-97-9 | | | | | 5 | |

SAND & GRAVEL

| | | | | | | | | |
|----------------|------------|---------------|------|--|---|---|---|--|
| Carlson Matls. | Decorah | NE 22-98-08 | 2.66 | | X | 5 | 5 | |
| Carlson Matls. | Norske Run | SW 07-98-08 | 2.66 | | X | 5 | 5 | |
| Roverud Const. | Freeport | 07-98-07 | 2.65 | | X | 5 | 5 | |
| J. F. Pavlovec | Protivin | NE 18-97-10 | | | | 4 | 4 | |
| Roverud Const. | Anderson | NE 11-97-10 | 2.65 | | X | 4 | 4 | |
| Peters Const. | Vobr Prop. | Cen. 02-97-10 | | | | 4 | 4 | |
| Roverud Const. | Elsburnd | NW 16-96-09 | 2.66 | | X | 4 | 4 | |

WOODBURY COUNTY

SAND & GRAVEL

| | | | | | | | | |
|----------------|-----------------|-------------|------|---|---|---|---|--|
| Peters Const. | Correctionville | NW 13-89-42 | 2.72 | 2 | | 4 | 4 | |
| Peters Const. | Correctionville | NW 13-89-42 | 2.68 | | X | 4 | 4 | |
| Maudlin Const. | Moville | SE 09-89-44 | | | | 4 | 4 | |
| Maudlin Const. | Correctionville | NW 35-89-42 | | | | 4 | 4 | |
| Maudlin Const. | Anthon | SE 11-88-43 | | | | 4 | 4 | |
| Maudlin Const. | | NE 14-88-43 | | | | 4 | 4 | |
| Persinger S&G | Smithland | NW 25-86-44 | | | | 4 | 4 | |

WORTH COUNTY

CRUSHED STONE

| | | | | | | | | |
|-----------------|------------------|--------------|------|---|--|--|--|------|
| Welp & McCarten | Northwood/Harris | SW 29-100-20 | 2.62 | 2 | | | | 6- 7 |
|-----------------|------------------|--------------|------|---|--|--|--|------|

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|---------------------------|--------------------------|-----------------|------|--------|--------|--------|--------|-------|
| WORTH COUNTY cont. | CRUSHED STONE | LOCATION | | | | | | |
| Welp & McCarten | Northwood | SW 29-100-20 | | | | 4 | 4 | 2-10 |
| Martin Marietta | Randall | SE 23-99-20 | 2.76 | 2 | | 4 | 4 | 2- 3 |
| Martin Marietta | Fertile | SW 36-98-22 | 2.73 | 2 | | 4 | 4 | 15-20 |
| Martin Marietta | Fertile | SW 36-98-22 | | | | 4 | 4 | 5- 7 |
| Greene Ls. | Hanson | NW 14-99-20 | | | | 4 | 4 | 3- 7 |
| Falk Const. | Shields | NW 01-98-20 | | | | 5 | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Martin Marietta | Randall R.M. | NW 31-100-20 | 2.66 | | X | 4 | 4 | |
| Martin Marietta | Fertile | NW 36-98-22 | 2.65 | | X | 4 | 4 | |
| Weaver Const. | Kensett | NE 29-99-20 | 2.65 | | X | 4 | 4 | |
| Maudlin Const. | | SW 30-100-20 | | | | 4 | 4 | |
| Falk Const. | Hanlontown | SE 30-98-21 | | | | 4 | 4 | |
| Falk Const. | Moretz | SE 24-99-21 | | | | 4 | 4 | |
| WRIGHT COUNTY | SAND & GRAVEL | | | | | | | |
| Nelson S&G | Nelson | NW 12-93-24 | 2.68 | | X | 4 | 4 | |
| Geo. Eckhoff | Eckhoff | SW 12-93-24 | | | | 4 | 4 | |
| P & M Stone | Bjorson/Amosson | N½ 18-92-26 | | | | 4 | 4 | |
| Maudlin Const. | McCullough/Lesher | NW 26-90-26 | | | | 4 | 4 | |
| Maudlin Const. | Denger | 15-90-23 | | | | 4 | 4 | |
| Maudlin Const. | Meineke | NE 14-90-23 | | | | 4 | 4 | |
| ILLINOIS | CRUSHED STONE | | | | | | | |
| Raid Quarries | Biggsville | 17-10-4W | | | | | 4 | |
| Dubuque S&G | Henderson County | | | | | | | |
| Midway Stone Co. | McCarthy | NW 34-29-2W | 2.68 | 2 | | 4 | 4 | 1- 5 |
| Moline Consumers | Jo Daviess County | | | | | | | |
| Allied Stone Prod. | Midway | SW 16-18-2E | | | | 4 | 4 | |
| Material Services | Rock Island County | | | | | | | |
| Raid Quarries | McMahn | NE 11-20-2E | | | | | | |
| Moline Consumers | Whiteside County | | | | | | | |
| | Van Druff Is./ | 14-17-2W | 2.69 | 2 | | 5 | 5 | 7-13 |
| | Milan | | | | | | | |
| | Lightweight Agg. | SE of Ottawa | | | | 4 | 4 | |
| | Dallas City | | 2.66 | 2 | | 4 | 4 | 5- 6 |
| | Henderson Co. | | | | | | | |
| | Cleveland | SW 31-17-2E | | | | 4 | 4 | |
| | Henry County | | | | | | | |
| | SAND & GRAVEL | | | | | | | |
| Moline Consumers | Cordova | SW 34-21-2E | 2.65 | 2 | | 4 | 4 | |
| General S&G | (Albanin Plant) | | 2.67 | | X | 4 | 4 | |
| Illinois S&G | Milan | 16-17-2W | 2.67 | 2 | | 4 | 4 | |
| | Rock Island County | | 2.67 | | X | 4 | 4 | |
| | South Beloit | | | | | 4 | 4 | |

ILLINOIS cont.
Moline Consumers

Nelson S&G

Dubuque S&G

SAND & GRAVEL
Barstow
Rock Island County
Sand
Whiteside County
Coyle
Jo Daviess County

LOCATION
NE 34-18-1E
SW 29-21-7E
S½ 34-29-2W

SpGr

2.66

MINNESOTA

Roverud Const.

Roverud Const.

Roverud Const.

New Ulm Quartzite
J. L. Shiely

CRUSHED STONE
New Albin Qr.
Houston County
Pool Hill Qr.
Houston County
Otterness Qr.
Fillmore County
Quartzite
St. Cloud

NW 09-101-04
SW 33-101-04
E½ 11-101-08
SW 35-110-31W

2.75

SAND & GRAVEL

Hallett Const.

Cooney Const.

Hector Const.

Hodgman & Sons

Willett S&G

Maudlin Const.

Hallett's
NE of Luverne
New Albin
Houston County
New Albin
Houston County
Hodgman
Jackson County
Willet
Jackson County
Maudlin
Nobles County

SE 36-103-45
09-101-04
NW 23-101-04
NE 34-101-34
SW 25-102-35
SE 26-101-42

2.70
2.69

MISSOURI

Kaser Const.

Sargent Quarries

Gendler Stone

Sargent Quarries

Sargent Quarries

Sargent Quarries

Carter-Waters
Raid Quarries

CRUSHED STONE
Kohoka
Clark County
Mercer
Mercer County
Turner Prop./
Hopkins
Allendale/Lamb
Worth County
Allendale/King
Worth County
Dr. Jeffereis
Harrison County
Expanded Shale
Bethany

NE 17-65-07
NW 22-66-23
SW 31-67-34
Nodaway Co.
NW 03-66-30
SE 34-66-30
NW 03-66-26
New Market, Mo.
Harrison

| PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--------|--------|--------|--------|-------|
| | | 4 | 4 | |
| | | 4 | 4 | |
| | X | 4 | 4 | |
| | | | 5 | |
| | | | 5 | |
| | 2 | 3 | 3 | 1- 2 |
| | | 2 | 2 | |
| | | 2 | 2 | |
| | 2 | 4 | 4 | |
| | X | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | |
| | | 4 | 4 | 14-16 |
| | | | 5 | |
| | | | 5 | |
| | | | 5 | |
| | | 5 | 5 | |
| | | 3 | 3 | |
| | | 5 | 5 | |

| | | | | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|----------------------------------|-----------------------------------|--------------------------------|--------------|--------|--------|--------|--------|------|
| MISSOURI cont. | CRUSHED STONE | LOCATION | SpGr | | | | | |
| Raid Quarries | Route 'C' | Daviess Co. | | | | 5 | 5 | |
| Raid Quarries | Ridgeway | Harrison Co. | | | | 5 | 5 | |
| Trap Rock Matls. & Engr. Company | Traprock | St. Francis County | | | | 3 | 3 | |
| | SAND & GRAVEL | | | | | | | |
| Kaser Const. | Wayland, Mo. | SW 21-65-06 Clark Co. | 2.66 | | X | 4 | 4 | |
| Raid Quarries | Albany | Gentry Co. Sec. 27-63-31 | 2.67 | 2 | | 4 | 4 | |
| Raid Quarries | Gallitin | Cen. 16-59-27 Daviess Co. | | | | 4 | 4 | |
| Hallett Const. | Livesay | SE 36-65-26 Harrison Co. | 2.66 2.64 | 2 | | 4 | 4 | |
| Turner Quarries | Clearmont | SW 34-66-37 Mo. River | | | X | 4 | 4 | |
| Raid Quarries | Quinn | Howard Co. | | | X | 4 | 4 | |
| NEBRASKA | CRUSHED STONE | | | | | | | |
| Hopper Bros. | Weeping Water Cass County | 92, 03-10-11E | 2.69 | 2 | | 5 | 5 | 10 |
| Kerford Ls. Co. | Weeping Water Mine Cass County | S½ 34-11-11E | 2.69 | 2 | | 5 | 5 | 10 |
| Hopper Bros. | Nehawka Cass County | SE 20-10-13E | | | | | 5 | |
| Hopper Bros. | Waldo Cass County | SE 16-10-12E | | | | | 5 | |
| Ft. Calhoun Stone | Quarry Ft. Calhoun | SE 01-17-12E Washington Co. | | | | 5 | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Lyman-Richey S&G | Cullom No. 5 | SW 26-13-12E Cass County | 2.62 | V | X | 4 | 4 | |
| Lyman-Richey S&G | Waterloo No. 10 | SE 17-15-10E Douglas Co. | 2.62 | V | X | 4 | 4 | |
| Hartford S&G | Valley | NW 18-15-10E Douglas Co. | 2.62 | V | X | 4 | 4 | |
| Lyman-Richey S&G | Valley No. 11 | SE 35-16-09E Douglas Co. | 2.62 | V | X | 4 | 4 | |
| Hartford S&G | Valley | SW 22-16-09E Douglas Co. | 2.62 | V | X | 4 | 4 | |
| Lyman-Richey S&G | Waterloo No. 14 | NE 20-15-20E Douglas Co. | 2.62 | | X | 4 | 4 | |
| Lyman-Richey S&G | Oreapolis No. 8 | SE 34-13-13E Cass County | 2.62 | V | X | 4 | 4 | |
| Lyman-Richey S&G | Elliott | SW 36-13-13E Cass County | | X | X | 4 | 4 | |

| | | | SpGr | PCC CA | PCC FA | AC 'A' | AC 'B' | BEDS |
|--|--------------------------|-------------------------------|------|--------|--------|--------|--------|------|
| NEBRASKA cont. | SAND & GRAVEL | LOCATION | | | | | | |
| Lyman-Richey S&G | Richfield | SE 26-13-12E Sarpy County | | X | X | 4 | 4 | |
| Western S&G | Ashland | NW 24-13-09-E Saunders Co. | | X | X | 4 | 4 | |
| Hartford S&G | LaPlatte | SW 27-13-13E Sarpy Co. | 2.62 | V | X | 4 | 4 | |
| Hobbs S&G | Cedar Creek | 32-13-12E Cass County | | X | | | | |
| SOUTH DAKOTA | CRUSHED STONE | | | | | | | |
| L. G. Everist | Quartzite | SW 10-104-49 Minnehaha Co. | 2.64 | 2 | | 2 | 2 | |
| Concrete Matls. | Quartzite | 18-101-50 Minnehaha Co. | | | | 2 | 2 | |
| | SAND & GRAVEL | | | | | | | |
| Boyer Materials | Boyer/Hawarden | 10-95-48 Union County | | 2 | | 4 | 4 | |
| Midwest Paving | Hawarden | SW 15-95-48 Union County | | | | 4 | 4 | |
| Midwest Paving | Richland | SW 20-92-49 Union County | | | | 4 | 4 | |
| Concrete Matls. | Canton | 17-89-48 Lincoln County | 2.68 | | X | 4 | 4 | |
| WISCONSIN | CRUSHED STONE | | | | | | | |
| Bryan Dresser Co. | Traprock | Dresser, Wisc. | | | | 3 | 3 | |
| Chicago-Northwestern Trans. Company | Quartzite | Rock Springs, Wisc. | | | | 2 | 2 | |
| E. Kramer | Shockley Hill | 21-08-03 | | | | | 5 | |
| E. Kramer | Oswald | NW 05-07-05 | | | | | 5 | |
| | SAND & GRAVEL | | | | | | | |
| Prairie S&G | Prairie du Chien | 24-74-07 Crawford Co. | 2.67 | 2 | | 4 | 4 | |
| Dubuque S&G | Vogt Farm | 17-90-3E Grant Co. | 2.67 | 2 | X | 4 | 4 | |
| | | | 2.67 | | | 4 | 4 | |
| | | | 2.67 | | X | 4 | 4 | |

