

Michigan Mineral Producers 1973



**ANNUAL DIRECTORY 7
1974**

Geological Survey Division, Department of Natural Resources

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. . . the State Geological Survey shall make an annual report to the Governor, setting forth in detail the mineral statistics for the year; with the progress and development . . . mining and smelting industries.
--Compiled Laws Mich. 1948 s.319.202

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MICHIGAN MINERAL PRODUCERS

1973

GEOLOGICAL SURVEY DIVISION

ANNUAL DIRECTORY 7



By

R. Thomas Segall

C O N T E N T S

PREFACE

Michigan Mineral Producers is a record of names and addresses of all mineral producers in Michigan including the locations of their mineral operations during 1973 and is based on United States Bureau of Mines final tabulation for 1972. It is prepared as a directory supplement to "Mineral Industry of Michigan", published annually with the cooperation of the U. S. Bureau of Mines.

This directory is intended primarily as a general reference to be used by the mineral industry, students, teachers, state and county officials, and other interested persons. The directory lists producers alphabetically by mineral, with a producer location map for some sections. Mineral producers are also listed alphabetically by county including location by section, township, and range.

The compiler is indebted to the Michigan mineral industry for their excellent cooperation. The U. S. Bureau of Mines has been indispensable in providing up-to-date producer lists based on yearly canvasses.

Special appreciation is given to Miss Esther Middlewood of the U. S. Bureau of Mines Lansing Liaison Office, and Mrs. Lynda Craft of the Michigan Geological Survey Division for updating listings and manuscript preparation.

Corrections, additions, or suggestions for improving this directory are welcome, and actively solicited in order to make it as effective in accomplishing its purpose as possible.

Lansing,
January, 1974

R. Thomas Segall
Geologist
Mining Economics Section

	Page
<u>Metallic Mining Operations</u>	
Iron mines and open pits.	1
Copper mines.	1
<u>Industrial Mineral Operations</u>	
Cement.	3
Clay and shale.	5
Gypsum.	7
Lime.	8
Marl.	8
Natural Salines.	11
Peat.	11
Salt.	13
Stone.	14
Limestone and Dolomite.	14
Sandstone.	16
Miscellaneous.	18
Sand and Gravel.	18
Industrial Sand.	18
Construction Sand and Gravel.	20
Sulfur.	28
<u>Mineral Producers Listed by County.</u>	30
<u>Selected Minerals and Geology.</u>	54

- - FIGURES AND TABLES - -

Michigan Mineral Commodities and Producing Counties. . .iv
Did you know?. v
Active Mines in Michigan's Iron and Copper Districts. . .2
Cement Shipments from Michigan 1960-1972.4
Locations of Clay and Shale--Cement Operations.6
Locations of Gypsum and Lime Operations.9
Locations of Chemical and Salt Plants.10
Locations of Limestone, Dolomite, Sandstone & Miscellaneous Stone Operations. 17
Number and Production of Sand and Gravel Producers per County. 19

MICHIGAN MINERAL COMMODITIES AND PRODUCING COUNTIES
1972

Mineral Product	# of Producing Counties	Top 3 Counties in Order of Rank	Other Counties
Bromine	3	Midland, Gratiot, Manistee	
Calcium-Magnesium Chlorides	4	Mason, Midland, Gratiot	Lapeer
Cement	7	Alpena, Wayne, Monroe	Bay, Charlevoix, Emmet, St. Clair
Clay & Shale	12	Monroe, Alpena, Wayne	Antrim, Clinton, Eaton, Emmet, Lenawee, Ottawa, Saginaw, St. Clair, Shiawassee
Copper	1	Ontonagon	
Gypsum	2	Iosco, Kent	
Iodine	1	Midland	
Iron Ore	3	Marquette, Dickinson, Iron	
Lime	8	Wayne, Mason, Saginaw	Bay, Huron, Menominee, Sanilac, Tuscola
Magnesium Compounds	4	Mason, Manistee, Midland	Gratiot
Marl	9	Kalamazoo, Calhoun, Cass	Allegan, Barry, Berrien, Branch, Hillsdale, St. Joseph
Natural Gas	23	St. Clair, Hillsdale, Calhoun	Allegan, Clare, Crawford, Grand Traverse, Gratiot, Ingham, Jackson, Kalkaska, Kent, Lapeer, Lenawee, Macomb, Mecosta, Missaukee, Newaygo, Ogemaw, Osceola, Otsego, Ottawa, Roscommon
Natural Gas Liquids	9	Hillsdale, St. Clair, Osceola	Clare, Crawford, Ingham, Kalkaska, Otsego, Washtenaw
Peat	11	Confidential	Allegan, Eaton, Ingham, Kent, Lapeer, Mecosta, Monroe, Oakland, St. Joseph, Sanilac, Shiawassee
Petroleum	48	Hillsdale, Otsego, Calhoun	Allegan, Antrim, Arenac, Barry, Bay, Calhoun, Clare, Crawford, Eaton, Genesee, Gladwin, Grand Traverse, Gratiot, Hillsdale, Huron, Ingham, Isabella, Jackson, Kalkaska, Kent, Lake, Lapeer, Macomb, Mason, Mecosta, Midland, Missaukee, Monroe, Montcalm, Muskegon, Newaygo, Oakland, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon, Saginaw, Shiawassee, St. Clair, Tuscola, Van Buren, Washtenaw, Wayne, Wexford

MICHIGAN MINERAL COMMODITIES AND PRODUCING COUNTIES(CONTINUED)
1972

Mineral Product	# of Producing Counties	Top 3 Counties in Order of Rank	Other Counties
Salt	6	St. Clair, Wayne, Manistee	Gratiot, Midland, Muskegon
Sand & Gravel	81	Oakland, Wayne, Kent	All others except Gladwin and Monroe.
Silver	1	Ontonagon	
Stone	19	Presque Isle, Mackinac, Monroe	Alpena, Arenac, Charlevoix, Cheboygan, Chippewa, Delta, Dickinson, Eaton, Emmet, Houghton, Huron, Jackson, Marquette, Ontonagon, Schoolcraft, Wayne
Sulfur	2	Wayne, Gratiot	

- DID YOU KNOW -

Did you know that Michigan is the number one producer in the nation (in value) of:

Natural Salines	-	\$104,627,000
Crude Gypsum	-	\$7,267,000
Peat	-	\$2,190,000

Did you know that Michigan is the number two producer in the nation (in value) of:

Iron Ore	-	\$165,370,000
Sand and Gravel	-	\$65,445,000
Salt	-	\$50,761,000

Did you know that Michigan has the 13th highest mineral value in the nation but when subtracting value for fossil fuels, (Coal, Petroleum, Natural Gas, Natural Gas Liquids) from other state's value, Michigan has the fourth largest value in Industrial and Metallic minerals production.

	Total Value	Minus	Value of Fossil Fuels	Equals	Value of Non-Metals & Metals
Texas	\$6,807,955,000	-	\$5,691,632,000	=	\$1,116,323,000
Louisiana	\$5,553,009,000	-	\$5,015,334,000	=	\$537,675,000
California	\$1,920,648,000	-	\$1,175,923,000	=	\$744,725,000
W. Virginia	\$1,273,960,000	-	\$1,201,298,000	=	\$72,662,000
Oklahoma	\$1,189,516,000	-	\$1,018,003,000	=	\$171,513,000
Pennsylvania	\$1,149,107,000	-	\$763,387,000	=	\$385,720,000
New York	\$1,046,284,000	-	\$578,328,000	=	\$467,956,000
Arizona	\$981,020,000	-	\$10,947,000	=	\$971,073,000
Kentucky	\$925,885,000	-	\$829,045,000	=	\$96,840,000
Wyoming	\$717,937,000	-	\$545,714,000	=	\$172,223,000
Illinois	\$700,819,000	-	\$454,607,000	=	\$246,812,000
Ohio	\$652,151,000	-	\$326,306,000	=	\$325,845,000
Michigan	\$640,636,000	-	\$45,649,000	=	\$594,987,000

MICHIGAN'S IRON AND COPPER DISTRICTS

Metallic Mining Operations

Iron Mines and Pits

Range-Dist. & Map Symbol	Mine	Company	Mine Location
--------------------------	------	---------	---------------

MARQUETTE

- | | | | |
|-----|------------------------------------|--|--|
| (a) | Empire
(open pit-pellets) | Cleveland-Cliffs Iron Co.
(Operator for Empire Mining Company)
1460 Union Commerce Bldg.
Cleveland, Ohio 44114 | 1 Mi. NW of Palmer, in
Secs. 19, 20, 25, 30,
T47N, R26W
<u>MARQUETTE COUNTY</u> |
| (b) | Mather | Cleveland-Cliffs Iron Co.
(Operator for the Negaunee Mine Company)
1460 Union Commerce Bldg.
Cleveland, Ohio 44114 | Ishpeming-Negaunee
in Secs. 1 & 2,
T47N, R27W
<u>MARQUETTE COUNTY</u> |
| (c) | Republic
(open pit-pellets) | Cleveland-Cliffs Iron Co.
(Operator for the Marquette Mining Company)
1460 Union Commerce Bldg.
Cleveland, Ohio 44114 | 1 Mi. S of Republic
in Secs. 7 & 18,
T46N, R29W
<u>MARQUETTE COUNTY</u> |
| (d) | Tilden
(open pit siliceous ore) | Cleveland-Cliffs Iron Co.
(Operator for Tilden Mining Company)
1460 Union Commerce Bldg.
Cleveland, Ohio 44114 | 3 Mi. S of Ishpeming in
Sec. 26, T47N, R27W
<u>MARQUETTE COUNTY</u> |

IRON RIVER-CRYSTAL FALLS

- | | | | |
|-----|----------|---|---|
| (e) | Sherwood | Inland Steel Co.
30 W. Monroe St.
Chicago, Illinois 60603 | ½ Mi. N of Iron River in
Secs. 23 & 24, T43N, R35W
<u>IRON COUNTY</u> |
|-----|----------|---|---|

FELCH

- | | | | |
|-----|---------------------------------|---|---|
| (f) | Groveland
(open pit-pellets) | The Hanna Mining Co.
100 Erieview Plaza
Cleveland, Ohio 44114 | 3 Mi. E of Randville in
Sec. 31, T42N, R29W
<u>DICKINSON COUNTY</u> |
|-----|---------------------------------|---|---|

AMASA-OVAL, EAST MENOMINEE, GOGEBIC, GWINN - (Not Active)

Copper Mines

COPPER SULFIDE ORE

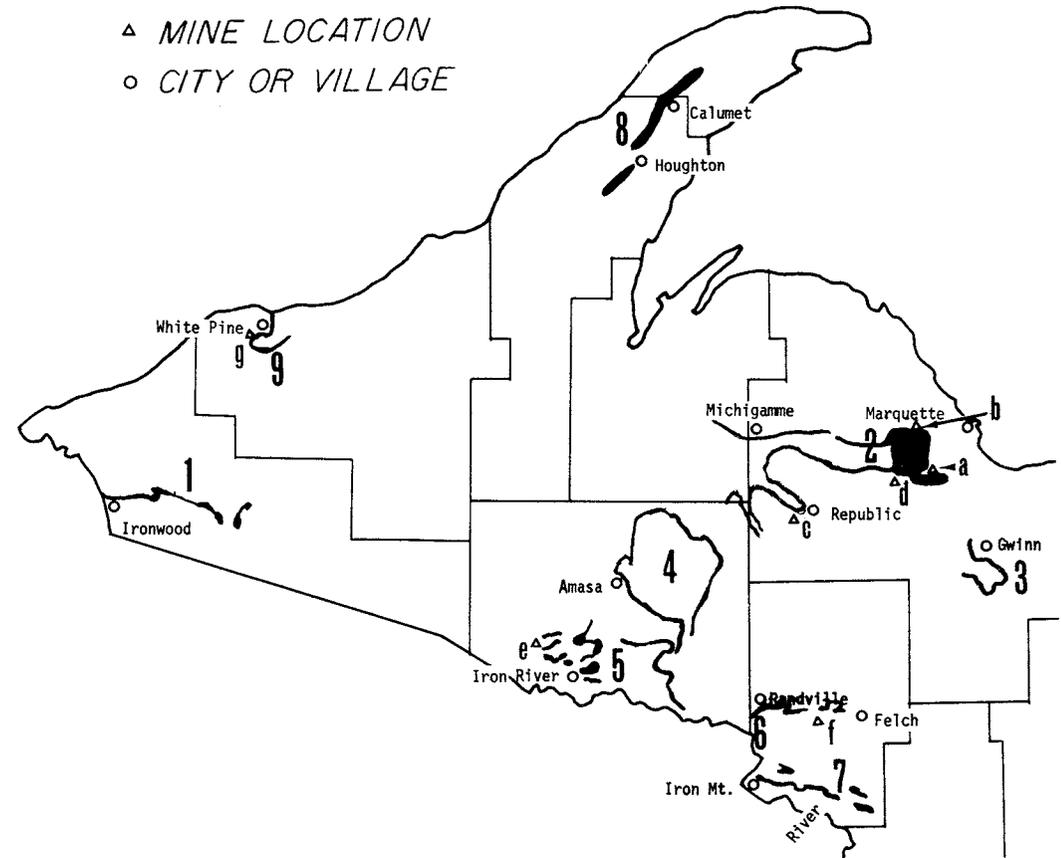
- | | | | |
|-----|------------|--|---|
| (g) | White Pine | White Pine Copper Co.
P. O. Box 427
White Pine, Michigan 49971 | White Pine Mich. in Sec.
4, 5, 9, T50N, R42W.
<u>ONTONAGON COUNTY</u> |
|-----|------------|--|---|

NATIVE COPPER ORE (Not Active)

IRON AND COPPER OUTCROPS

▲ MINE LOCATION

○ CITY OR VILLAGE



IRON MINES

- GOGEBIC RANGE (not active)
- MARQUETTE RANGE
 - Empire open pit
 - Mather Mine
 - Republic open pit
 - Tilden open pit

- GWINN DISTRICT (not active)

- AMASA-OVAL DISTRICT (not active)

- IRON RIVER-CRYSTAL FALLS DISTRICT
 - Sherwood Mine

- FELCH DISTRICT
 - Groveland open pit

- IRON MOUNTAIN RANGE (not active)

COPPER MINES AND RECLAMATIONS

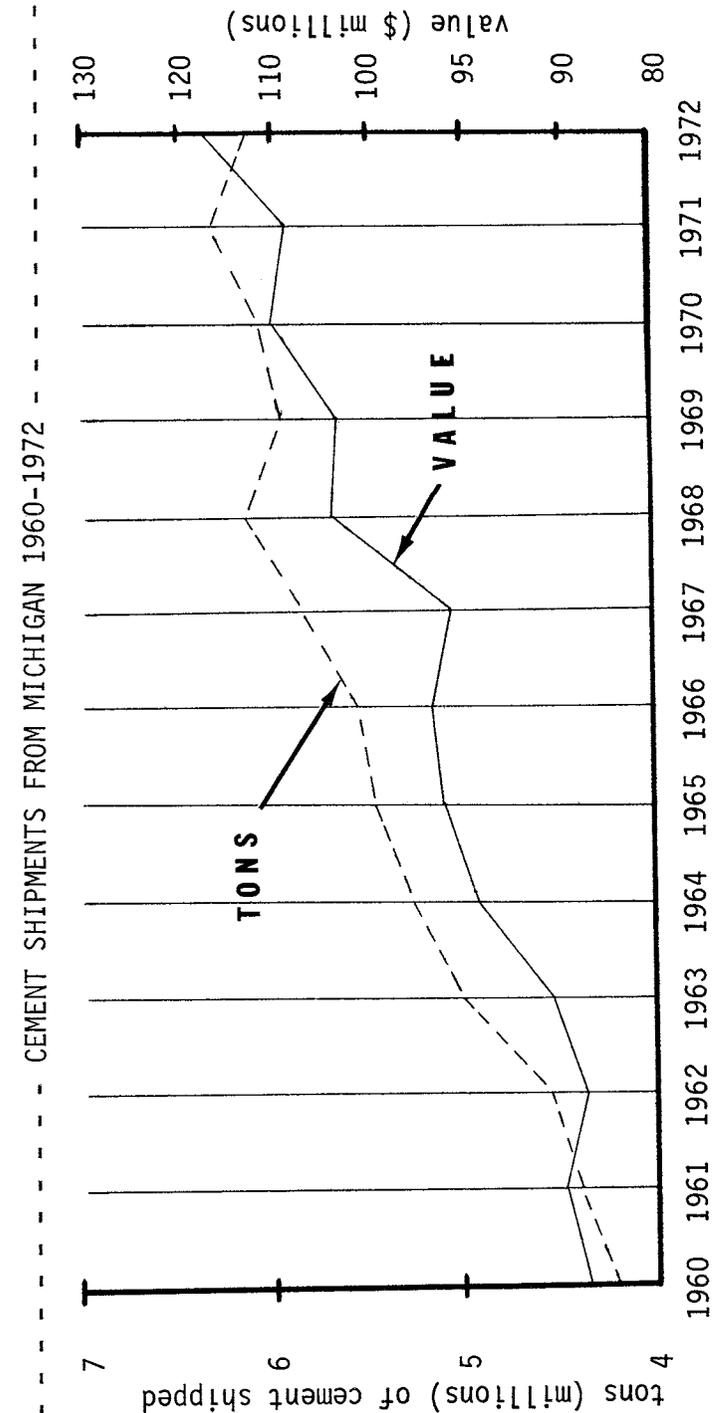
- NATIVE COPPER ORE (not active)

- COPPER SULFIDE ORE
 - White Pine Mine

Industrial Mineral Operations

Cement

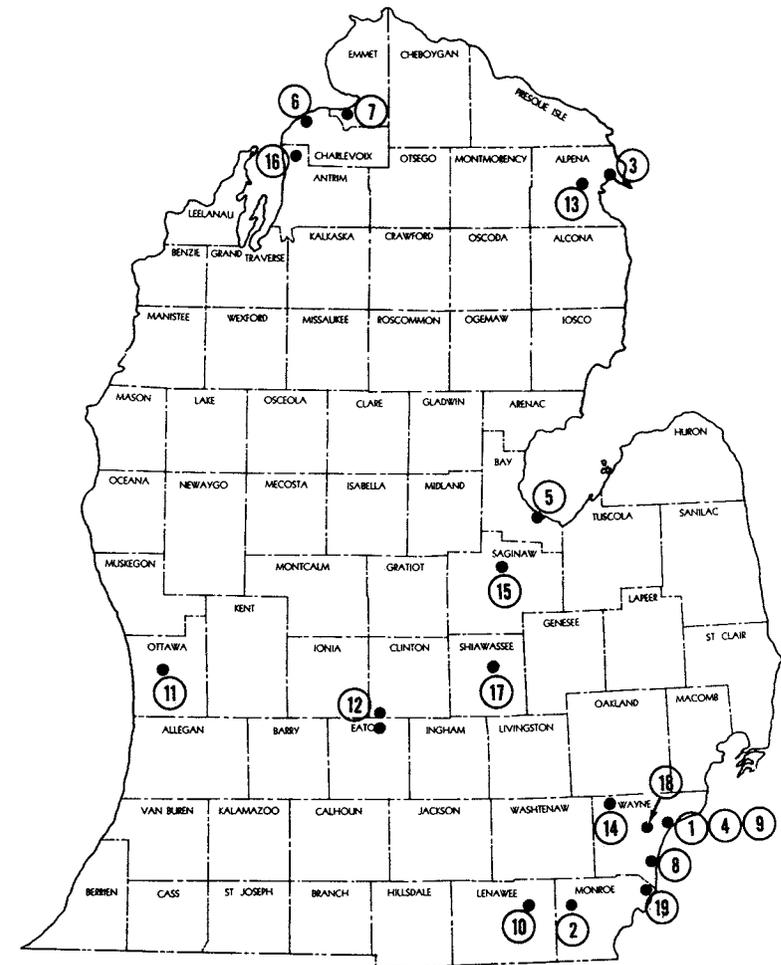
Name of Operation	Map No. (page)	Plant Location
Amcord Cement Div. of American Cement Corp. 900 Detroit Trade Center Detroit, Michigan 48226	(1)	Forman Avenue Plant-Ext. Sec. 28, T2S, R11E; raw materials obtained from Ford Motor Co. clay pit and Rogers City area. <u>WAYNE COUNTY</u>
Dundee Cement Co. P. O. Box 317 Dundee, Michigan 48131	(2)	2 Mi. N of Dundee, Sec. 6, T6S, R7E, plant and quarry. <u>MONROE COUNTY</u>
Huron Cement Div. Div. Nat'l. Gypsum Corp. Plant address: Alpena, Michigan 49707 Office address: 17515 W. Nine Mile Rd. Honeywell Center-12th Fl. Southfield, Michigan 48075	(3)	1.5 Mi. NE of Alpena, in Sec. 13, T31N, R9E, plant and quarry. <u>ALPENA COUNTY</u>
Jefferson Marine Terminal Div. of Edward C. Levy Co. 8800 Dix Avenue Detroit, Michigan 48640	(4)	Jefferson Avenue at Detroit; Process purchased clinker, <u>WAYNE COUNTY</u>
Martin-Marietta Cement Co. Great Lakes Division P. O. Box No. 8 Bay City, Michigan 48076	(5)	3 Mi. NE of Bay City at Essexville, NE½ Sec. 14, T14N, R5E; raw material obtained from Rogers City area. <u>BAY COUNTY</u>
Medusa Cement Div. of Medusa Corp. Plant address: Charlevoix, Michigan 49720 Office address: Box 5668 Cleveland, Ohio 44101	(6)	2 Mi. W of Charlevoix, C of Sec. 28, T34N, R8W <u>CHARLEVOIX COUNTY</u>
Penn-Dixie Cement Corp. Plant #10 Plant address: Petoskey, Michigan 49770 Office address: P. O. Box 152 Nazareth, PA. 18064	(7)	3.5 Mi. W of Petoskey, (plant and quarry) in Sec. 3, T34N, R6W. <u>EMMET COUNTY</u>
Wyandotte Cement Inc. 3505 Biddle Avenue Wyandotte, Michigan 48192	(8)	Wyandotte, Mich. Process purchased clinker, <u>WAYNE COUNTY</u>



Clay and Shale

LOCATIONS OF CLAY AND SHALE--CEMENT OPERATIONS

Name of Operation	Map No. (page)	Product	Location
Clippert Brick Co. Wyoming & Southern Streets Dearborn, Michigan 48127	(9)	Brick	Clay pit, near SE corner Wyoming and Michigan Ave. (U.S.-112) Dearborn <u>WAYNE COUNTY</u>
Comfort Brick & Tile Co. 6393 Rogers Hwy. Tecumseh, Michigan 49286	(10)	Drain tile	Clay pit, 1 Mi. SE of Tecumseh; SE $\frac{1}{4}$ Sec. 2, T6S, R4E <u>LENAWEE COUNTY</u>
Construction Aggregates Corp. 120 S. LaSalle St. Chicago, Illinois 60603	(11)	Light-weight aggregate	Clay pit, 4 Mi. W of Eastmanville, in Sec. 7, T7N, R14W <u>OTTAWA COUNTY</u>
Dundee Cement Co. P. O. Box 317 Dundee, Michigan 48131	(2)	Cement	Sec. 6, T6S, R7E, (clay overburden over limestone) <u>MONROE COUNTY</u>
Grand Ledge Clay Products Co. R. R. 1, P. O. Box 66 Grand Ledge, Michigan 48837	(12)	Drain tile, vitrified sewer pipe, flux lining	Shale pits at SE $\frac{1}{4}$ Sec. 3, T4N, R4W, <u>EATON COUNTY</u> and NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 34, T5N, R4W <u>CLINTON COUNTY</u>
Huron Cement Div. Div. of National Gypsum Co. 17515 W. Nine Mile Rd. Honeywell Center-12th Floor Southfield, Michigan 48075	(13)	Cement	Paxton Shale Quarry, 8 Mi. W of Alpena, NE $\frac{1}{4}$ Sec. 30, T31N, R7E <u>ALPENA COUNTY</u>
Lightweight Aggregate Corp. 27611 Schoolcraft Rd. Livonia, Michigan 48150	(14)	Light-weight aggregate	Clay pit, 1 Mi. S of Livonia Sec. 27, T1S, R9E <u>WAYNE COUNTY</u>
Martin-Marietta Cement Co. Great Lakes Div. P. O. Box 8 Bay City, Michigan 48706	(15)	Cement	Clay pit, NW $\frac{1}{4}$ Sec. 1, T11N, R3E <u>SAGINAW COUNTY</u>
Medusa Cement Div. Medusa Corp. Box 5668 Cleveland, Ohio 44101	(16)	Cement	Shale pit, SW $\frac{1}{4}$, Sec. 24, T32N, R8W <u>ANTRIM COUNTY</u>
Michigan Vitrified Tile Co. P. O. Box 450 Findlay, Ohio 45840	(17)	Brick	Shale pit, $\frac{1}{2}$ Mi. E of Corunna, Sec. 22, T7N, R3E <u>SHIAWASSEE COUNTY</u>
Amcord Co. Div. of American Cement Corp. 900 Detroit Trade Center Detroit, Michigan 48226	(18)	Cement	Ford Motor Co. Clay Pit NW $\frac{1}{4}$ Ext. Sec. 36, T2S, R10E <u>WAYNE COUNTY</u>
Penn-Dixie Cement Corp. P. O. Box 152 Nazareth, PA. 18064	(7)	Cement	Shale pit, Sec. 8, T34N, R6W <u>EMMET COUNTY</u>
F. W. Ritter & Sons Co., Inc. 12670 N. Dixie Hwy. S. Rockwood, Michigan 48179	(19)	Flower pots	Clay pit, 1 Mi. S of South Rockwood, NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 16, T5S, R10E <u>MONROE COUNTY</u>



CEMENT

1. Amcord Cement
2. Dundee Cement Co.
3. Huron Cement Co.
4. Jefferson Marine Terminal
5. Martin-Marietta Cement
6. Medusa Cement
7. Penn-Dixie Cement Corp.
8. BASF Wyandotte Corp.

CLAY AND SHALE

9. Clippert Brick & Tile
10. Comfort Brick & Tile
11. Construction Aggregates Corp.
2. Dundee Cement Co.
12. Grand Ledge Clay Prod.
13. Huron Cement Co.
14. Lightweight Aggregates Corp.
15. Martin-Marietta Cement
16. Medusa Cement
17. Michigan Vitrified Tile
18. Amcord Co.
7. Penn-Dixie Cement Corp.
19. F. W. Ritter & Sons

Gypsum

Name of Operation	Map No. (page)	Mine or Quarry Location	Mill Location
Georgia-Pacific Corp. 900 S. W. Fifth Ave. Portland, Oregon 97204	(1)	SE Grand Rapids in NW¼ Sec. 24, T6N, R11W <u>KENT COUNTY</u>	SW Grand Rapids 2228 Butterworth Rd. SW Grand Rapids, Mich. 49501
Grand Rapids Gypsum Co. 201 Monroe Avenue Grand Rapids, Michigan 49501	(2)	SW side Grand Rapids in Sec. 34, T6N, R12W, Mine & Mill <u>KENT COUNTY</u>	At Mine
Michigan Gypsum Co. 2840 Bay Road Saginaw, Michigan 48601	(3)	4 Mi. SW of National City in Sec. 25, T21N, R5E, open pit and plant. <u>IOSCO COUNTY</u>	E of Pit, in SW¼ Sec. 30, T21N, R6E <u>IOSCO COUNTY</u>
National Gypsum Co. 325 Delaware Avenue Buffalo, New York 14202	(4)	8 Mi. W of Tawas City Sec. 26 & 35, T22N, R6E, open pit. <u>IOSCO COUNTY</u>	2 Mi. S of Nat'l. City Sec. 16, T21N, R6E, <u>IOSCO COUNTY</u>
United States Gypsum Co. 101 S. Wacker Drive Chicago, Illinois 60606	(5)	W of Alabaster, Sec. 22 & 27, T21N, R7E, open pit. <u>IOSCO COUNTY</u>	Detroit, Michigan <u>WAYNE COUNTY</u>

GYPSUM-HISTORY CAPSULE

Gypsum was used by the earliest civilizations for artistic and ornamental purposes both as carvings of alabaster and as plaster casts. It was utilized as mortar by the Egyptians in construction of the pyramids about 3000 B.C. and later by the Romans, who also consumed small quantities for plaster.

Benjamin Franklin, during his trip to Europe in 1776, observed the practice of using gypsum for soil conditioning and subsequently promoted its use for that purpose in the United States. Domestic production resulted from discoveries of gypsum in central New York (1792), Virginia (1835), Michigan (1841), Ohio (1850), Iowa (1872), Colorado (1875), California (1875), and many other states at later dates.

Gypsum was discovered in Michigan along Plaster Creek in Kent County in 1827, but was not mined until 1841. The early production was limited to localized use as fertilizer. In the middle 1880's a commercial method to retard setting of gypsum plaster was developed and marked the practical use of plaster in the construction industry. The growth of the cement industry which required crude gypsum to control the "set" of the cement, the increased need for plaster, and later, gypsum wallboard, caused an ever-increasing demand for gypsum.

To date, a total of 5 gypsum mines are operating in Michigan - 3 open-pit mines and 2 underground mines (see above). As of January 1, 1972, a reported total of 65,573,884 tons of gypsum has been mined in Michigan. Michigan's record year for tonnage mined of crude gypsum was in 1955 when 1,762,105 tons were produced at a value of \$5,660,587 while the highest value mark was set in 1972 when 1,649,632 tons production was valued at \$7,266,992. Michigan, the number one producer of crude gypsum, along with California, Iowa, and Texas, produce over fifty percent of the gypsum mined in the United States.

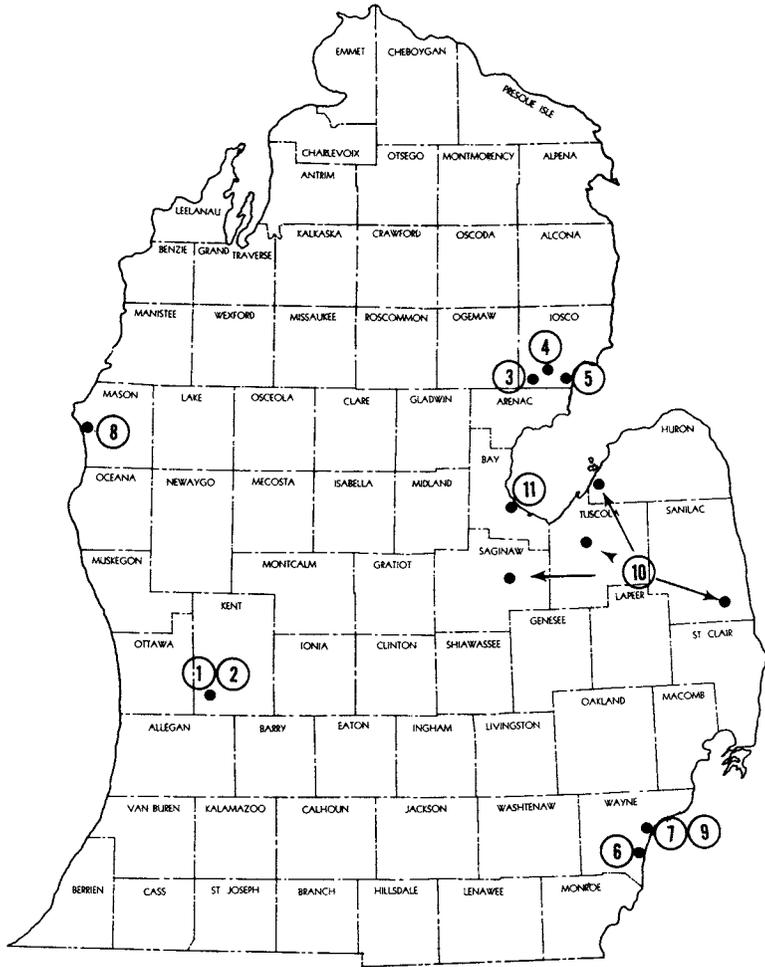
Lime

Name of Operation	Map No. (page)	Plant Location
BASF Wyandotte Corp. 1609 Biddle Ave. Wyandotte, Michigan 48192	(6)	Wyandotte, Limekiln only <u>WAYNE COUNTY</u>
Detroit Lime Co. (subsidiary, Ed. C. Levy Co.) 8800 Dix Avenue Detroit, Michigan 48209	(7)	River Rouge, Limekiln only <u>WAYNE COUNTY</u>
The Dow Chemical Co. Ludington Division 2020 Dow Center Midland, Michigan 48640	(8)	Ludington, Limekiln only <u>MASON COUNTY</u>
Marblehead Lime Co. (General Dynamics Corp.) 25 Marion St. Detroit, Michigan 48233	(9)	River Rouge, Limekiln only <u>WAYNE COUNTY</u>
Michigan Sugar Co. 999 2nd National Bank Bldg. Saginaw, Michigan 48601	(10)	4 plants: (Limekilns only) Sebewaing, <u>HURON COUNTY</u> Carrollton, <u>SAGINAW COUNTY</u> Croswell, <u>SANILAC COUNTY</u> Caro, <u>TUSCOLA COUNTY</u>
Monitor Sugar Division Robert Gage Coal Co. 2600 S. Euclid Avenue Bay City, Michigan 48706	(11)	Bay City, Limekiln only <u>BAY COUNTY</u>

Marl

Name and Address of Producer	Pit and County
Agricultural Marl Supply, RR#1, Allen 49227	Marshall pit, <u>HILLSDALE CO.</u>
Gerald Arnsman, R#1, Hopkins 49328	Belden & Hervig Pits, <u>ALLEGAN CO.</u>
Barnes Bros., Horton 49246	John Punk & Steve Demack pits, <u>JACKSON CO.</u>
Case Bros., R#2, Box 136, Union City 49094	Sec. 28, T4S, R7W, <u>CALHOUN CO.</u>
Crosby Marl Co., B. W. Crosby, Three Oaks 49128	Sec. 14, T8S, R20W, <u>BERRIEN CO.</u>
William Currier, R#1, Middleville 49333	Duncan L., Sec. 6, T4N, R10W, <u>BARRY CO.</u>
Darrell L. Hamilton, R#3, Nashville 49073	Sec. 25, T2N, R7W, <u>BARRY CO.</u>
Hayward Dry Marl, R#2, Vicksburg 49097	Sec. 8, T4S, R10W, <u>KALAMAZOO CO.</u>
John Hess, R#1, Hanover 49241	Sec. 14, T5S, R3W, <u>HILLSDALE CO.</u>
Kerr Bros. Marl, RR#1, Three Rivers 49093	Kerr pit, T6S, R12W, <u>ST. JOSEPH CO.</u>
Emil Pavlak, R#2, Hopkins 49328	Sec. 12, T2N, R12W, <u>ALLEGAN CO.</u>
Poehlman & Son, R#2, Cassopolis 49031	Sec. 12 & 13, T7S, R16W, <u>CASS CO.</u>
Elmo Taylor & Son, Orland, Indiana 46776	Sec. 4, T8S, R6W; Sec. 16, T8S, R5W, <u>BRANCH CO.</u>

LOCATIONS OF GYPSUM AND LIME OPERATIONS



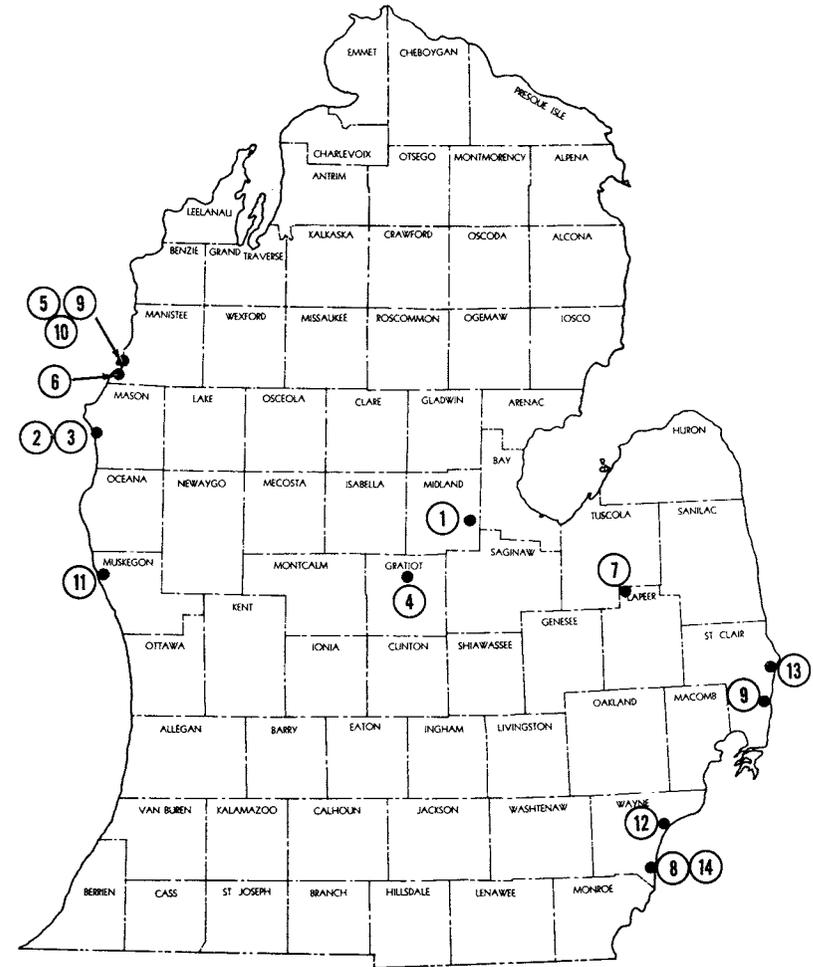
GYPSUM

1. Georgia Pacific Corp.
2. Grand Rapids Gypsum Co.
3. Michigan Gypsum Co.
4. National Gypsum Co.
5. U. S. Gypsum Co.

LIME

6. BASF Wyandotte Corp.
7. Detroit Lime Co.
8. Dow Chemical-Ludington
9. Marblehead Lime Co.
10. Michigan Sugar Co.
11. Monitor Sugar Div.

LOCATIONS OF CHEMICAL AND SALT PLANTS



Natural Salines

1. Dow Chemical-Midland
2. Dow Chemical-Ludington
3. Harbison-Walker Refractories
4. Mich. Chemical Corp.
5. Morton Chemical Co.-Manistee
6. Martin Marietta Chemical-Refrac. Div.
7. Wilkinson Chemical Co.

Salt

8. BASF Wyandotte Corp.
9. Diamond Crystal Salt Co.
1. Dow Chemical-Midland
10. Hardy Salt Co.
11. Hooker Chemical Corp.
12. International Salt Co.
4. Michigan Chemical Corp.
5. Morton Salt Co.-Manistee
13. Morton Salt Co.-Marysville
14. Pennwalt Corp.

Natural Salines

PEAT (CONT'D.)

Name of Operation	Map No. (page)	Products	Plant Location
The Dow Chemical Co. 2020 Dow Center Midland, Michigan 48640	(1)	Bromine, bromine compounds, magnesium compounds, calcium chloride, iodine	South side of Midland T14N, R2E, <u>MIDLAND COUNTY</u>
The Dow Chemical Co. 2020 Dow Center Midland, Michigan 48640	(2)	Bromine, magnesium compounds, calcium chloride	1 Mi. SE of Ludington SW $\frac{1}{4}$, Sec. 23, T18N, R18W <u>MASON COUNTY</u>
Harbison-Walker Refrac. Co. 2 Gateway Center Pittsburgh, PA. 15222	(3)	Magnesium compounds	1.5 Mi. SE of Ludington NE $\frac{1}{4}$, SE $\frac{1}{2}$ Sec. 23, T18N, R18W <u>MASON COUNTY</u>
Michigan Chemical Corp. Div. of Martin Marietta 351 E. Ohio Street Chicago, Illinois 60606	(4)	Bromine, magnesium compounds, calcium magnesium chloride	W side of St. Louis in Sec. 24, T12N, R3W <u>GRATIOT COUNTY</u>
Morton Chemical Co. Div. of Morton Norwich Prod. Inc. 110 N. Wacker Dr. Chicago, Illinois 60606	(5)	Bromine, magnesium compounds, calcium chloride	At Manistee Sec. 12, T21N, R17W <u>MANISTEE COUNTY</u>
Martin Marietta Chemicals Refractories Div. Executive Plaza II Hunt Valley, Maryland 21030	(6)	Magnesium compounds	1 Mi. NW of Stronach SE $\frac{1}{4}$ Sec. 18, T21N, R16W <u>MANISTEE COUNTY</u>
Wilkinson Chemical Co. 8290 Lapeer Rd. Mayville, Michigan 48744	(7)	Calcium-magnesium chloride	S of Mayville Sec. 21, T10N, R10E <u>LAPEER COUNTY</u>

Peat

Name & Address of Producer	Kind of Peat	Nearest Town	Location
Al-Par Peat 9551 Krouse Ovid, Michigan 48866	reed-sedge bulk & packaged	Ovid	Sec. 18, T9N, R2E <u>SHIAWASSEE COUNTY</u>
Anderson Peat Co. 332 Graham Rd. Imlay City, Michigan 48444	reed-sedge bulk & packaged	Imlay City	Sec. 23, T7N, R12E <u>LAPEER COUNTY</u>
Appleman Farms 717 Pickard Rd. Temperence, Michigan 48182	reed-sedge bulk	Ida	Sec. 2, T8S, R6E <u>MONROE COUNTY</u>
Chet's Trucking RFD #2 Marcellus, Michigan 49067	reed-sedge	Marcellus	<u>CASS COUNTY</u>
Dan's Peat Farm 40500 12 Mile Rd. Novi, Michigan 48050	moss, bulk	Novi	SE SW Sec. 12, T1N R8E <u>OAKLAND COUNTY</u>

Name & Address of Producer	Kind of Peat	Nearest Town	Location
Charles E. Douglas Wayland, Michigan 49438	reed-sedge bulk	Wayland	Sec. 26; T4N, R11W <u>ALLEGAN COUNTY</u>
Fletcher and Richard 54001 Grand River Rd. New Hudson, Michigan 48165	humus, bulk	New Hudson	Sec. 23, T1N, R7E <u>OAKLAND COUNTY</u>
Gummer's Peat Co. R#2 Lakeview, Michigan 48850	moss, reed-sedge bulk & packaged	Lakeview	Sec. 28, T13N, R8W <u>MECOSTA COUNTY</u>
Hilu Peat Company 3040 Clinton Trail, R#3 Charlotte, Michigan 48813	humus, bulk	Charlotte	Sec. 21, T2N, R4E <u>EATON COUNTY</u>
J. M. Huber Corp. P. O. Box 312 Sandusky, Michigan 48471	moss, reed-sedge bulk & packaged	Sandusky	Sec. 11, T11N, R14E <u>SANILAC COUNTY</u>
Kas Peat 3843 Michigan Rd., NE Grand Rapids, Michigan 49506	humus, bulk	Grand Rapids	<u>KENT COUNTY</u>
Kerr's Peat Moss R#1, Box 72 Three Rivers, Michigan	reed-sedge, bulk	Three Rivers	Sec. 13, T6S, R12W <u>ST. JOSEPH COUNTY</u>
Norman E. Link R#1, Petersburg, Michigan 49270	humus- bulk	Petersburg	<u>MONROE COUNTY</u>
Michigan Peat, Inc. 8 Executive Mall Valley Forge, PA. 19481	reed-sedge packaged	Minden City & Sandusky	<u>SANILAC COUNTY</u>
Quality Peat R#2 Three Rivers, Michigan 49093	moss, bulk & packaged	Three Rivers	Sec. 24, T5S, R12W <u>ST. JOSEPH COUNTY</u>
Scenic Lakes, Inc. P. O. Box 926 East Lansing, Michigan 48823	reed-sedge, packaged	Laingsburg	Sec. 4, 10, 16, T5N, R1E <u>SHIAWASSEE COUNTY</u>
Souilliere Peat & Sod Co. 23650 23 Mile Rd. Mt. Clemens, Michigan 48043	reed-sedge, bulk & packaged	Imlay City	Sec. 25, T7N, R12E <u>LAPEER COUNTY</u>
Twin Lakes Nursery 3680 Michigan Road, NE Grand Rapids, Michigan 49506	moss, reed-sedge, bulk & packaged	Grand Rapids	Sec. 26, T7N, R11W <u>KENT COUNTY</u>
Wicker's Inc. 6498 Bishop Road Lansing, Michigan 48910	moss, bulk	Lansing	T3N, R2W <u>INGHAM COUNTY</u>

Salt

Stone

Company and Address	Map No. (page)	Product	Location
BASF Wyandotte Corp. 1609 Biddle Ave. Wyandotte, Michigan 48192	(8)	Salt brine (chlorine, soda ash)	At Wyandotte <u>WAYNE COUNTY</u>
Diamond Crystal Salt Co. 916 S. Riverside St. Clair, Michigan 48079	(9)	Evaporated salt	At St. Clair, Sec. 31, T5N, R17E <u>ST. CLAIR COUNTY</u>
The Dow Chemical Co. 2020 Dow Center Midland, Michigan 48640	(1)	Salt brine (chlorine, natural salines)	At Midland <u>MIDLAND COUNTY</u>
Hardy Salt Co. P. O. Drawer 449 St. Louis, MO. 63166	(10)	Evaporated salt	At Manistee <u>MANISTEE COUNTY</u>
Hooker Chemical Corp. P. O. Box 295 Montague, Michigan 49437	(11)	Salt brine (chlorine, caustic soda, hydrogen)	At Montague NE 1/4 Sec. 31, T12N, R17W <u>MUSKEGON COUNTY</u>
International Salt Co., Inc. Clarks Summit, PA. 18411 Detroit Mine: 12841 Saunders St. Detroit, Mich. 48217	(12)	Rock salt	At Detroit SE 1/4, Sec. 32, T2S, R11E <u>WAYNE COUNTY</u>
Michigan Chemical Corp. Div. of Martin Marietta 351 E. Ohio Street Chicago, ILL. 60611	(4)	Evaporated salt	At St. Louis <u>GRATIOT COUNTY</u>
Morton Salt Co. Div. Morton-Norwich Products, Inc. 110 N. Wacker Drive Chicago, ILL. 60606	(5)	Evaporated salt	At Manistee E 1/2 Sec. 12, T21N, R17W <u>MANISTEE COUNTY</u>
Morton Salt Co. Div. Morton-Norwich Products, Inc. 110 N. Wacker Drive Chicago, ILL. 60606	(13)	Evaporated salt	Marysville, Mich. SE 1/4, Sec. 29, T6N, R17E <u>ST. CLAIR COUNTY</u>
Pennwalt Corp. 4655 Biddle Wyandotte, Michigan 48192	(14)	Salt brine (chlorine, caustic soda, hydrogen)	At Wyandotte <u>WAYNE COUNTY</u>

LIMESTONE AND DOLOMITE

Name of Operation	Map No. (page)	Type of Stone	Quarry Location
Atton Stone Inc. Afton, Michigan 49705	(1)	Limestone, crushed	1 Mi. N of Afton, Sec. 25, T35N, R2W <u>CHEBOYGAN COUNTY</u>
Anderson, York, Quarry Manistique, Mich. 49854	(2)	Dolomite, crushed and broken	6 Mi. E of Manistique SE Sec. 36, T42N, R15W <u>SCHOOLCRAFT COUNTY</u>
A-0 Company Sand Products, Inc. 2489 First Nat'l. Bank Bldg. Detroit, Mich. 48226	(3)	Dolomite, broken	7 1/2 Mi. N of Epoufette SW Sec. 34, T44N, R7W <u>MACKINAC COUNTY</u>
Arenac Co. Rd. Comm. 116 Bridge Street Omer, Mich. 48749	(4)	Limestone, crushed	3 Mi. NE of Au Gres Sec. 5, T19N, R7E <u>ARENAC COUNTY</u>
Bay Co. Rd. Comm. 812 N. Jefferson St. Bay City, Mich. 48706	(5)	Limestone, crushed	3 Mi. N of Omer Sec. 34, T20N, R5E <u>ARENAC COUNTY</u>
Bethlehem Mines Corp. 701 East Third St. Bethlehem, PA. 18016	(6)	Dolomite, crushed	W end Drummond Island, Secs. 3 & 10, T41N, R5E <u>CHIPPEWA COUNTY</u>
Bichler Gravel & Concrete Co. Box 263 Escanaba, Mich. 49829	(7)	Dolomite, crushed	1 1/2 Mi. N of Wells Sec. 1, T39N, R23W <u>DELTA COUNTY</u>
C & D Stone Co. Au Gres, Michigan	(8)	Limestone, crushed	3 Mi. NE of Au Gres Sec. 5, T19N, R7E <u>ARENAC COUNTY</u>
Caspian Construction Co. Caspian, Mich. 49115	(9)	Limestone, crushed	8 1/2 Mi. SE of Rapid River Sec. 6, T40N, R20W <u>DELTA COUNTY</u>
Cheney Limestone Co. P. O. Box 6 Bellevue, Mich. 49021	(10)	Limestone, crushed and dimensional	W of Bellevue Sec. 29, T1N, R6W <u>EATON COUNTY</u>
Delta Co. Rd. Comm. P. O. Box 298 Escanaba, Mich. 49829	(11)	Dolomite, crushed	8 1/2 Mi. S of Ensign Sec. 11, T39N, R21W <u>DELTA COUNTY</u>
Dundee Cement Co. P. O. Box 317 Dundee, Mich. 48131	(12)	Limestone, crushed	2 Mi. N of Dundee Sec. 6, T6S, R7E <u>MONROE COUNTY</u>
France Stone Co. P. O. Box 1928 Toledo, Ohio 43603	(13)	Dolomite, crushed	At Grape Sec. 13, T6S, R7E <u>MONROE COUNTY</u>
France Stone Co. P. O. Box 1928 Toledo, Ohio 43603	(14)	Dolomite, crushed	At Monroe Sec. 7, T7S, R9E <u>MONROE COUNTY</u>
Glancy, R. E. 1055 S. Bay Drive Tawas City, Mich. 48763	(15)	Limestone, crushed	5 Mi. S of Alabaster Secs. 13 & 14, T20N, R7E <u>ARENAC COUNTY</u>

Salt is produced in Michigan from artificial and natural brines and from rock salt. The only rock salt mine in Michigan is the International Salt Co. underground mine at Detroit, and the only salt produced from natural brines is at the Michigan Chemical Co. at St. Louis, Mich. All other companies produce salt by the evaporation of artificial brines.

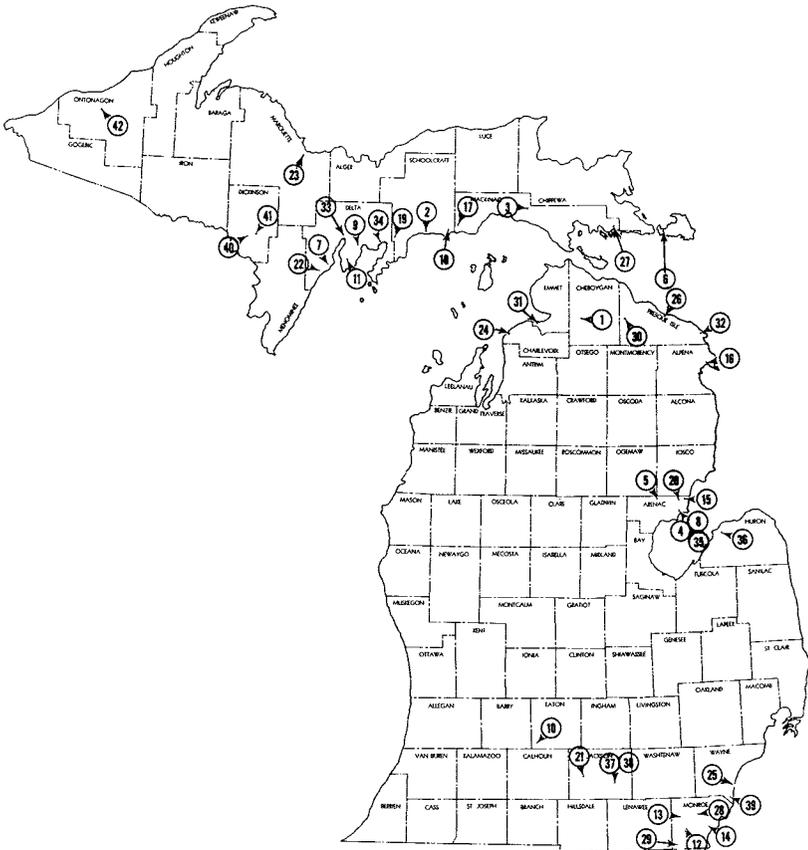
Michigan had been ranked as the leading salt-producing state for many years. From 1905 through 1958, Michigan salt production had only been in second rank four times. Increased salt production in Louisiana, Texas, Ohio, and New York, together with a general decrease in Michigan's annual production, has declined Michigan to the fifth largest salt-producing state in the country. Michigan's record production year for salt was in 1956 with a total of 5,548,178 tons, and since then, the Michigan salt industry has produced an average of 4,385,000 tons per year.

Name of Operation	Map No. (page)	Type of Stone	Quarry Location	Name of Operation	Map No. (page)	Type of Stone	Quarry Location
Huron Cement Co. Div. Nat'l. Gypsum Co. 17515 W. Nine Mile Rd. Honeywell Center - 12th Flr. Southfield, Mich. 48075	(16)	Limestone, crushed	At Alpena Sec. 13, T31N, R9E <u>ALPENA COUNTY</u>	Onaway Stone Co. c/o Cherryland Cut Stone Co. Route 4, Box 529 Traverse City, Mich. 49684	(30)	Limestone, dimensional	1 Mi. N of Onaway Sec. 5, T34N, R2E <u>PRESQUE ISLE COUNTY</u>
Inland Lime and Stone Co. Div. of Inland Steel Co. Gulliver, Mich. 49840	(17)	Limestone, crushed	N of Port Inland Sec. 6, T42N, R12W <u>MACKINAC COUNTY</u>	Penn-Dixie Cement Corp. P. O. Box 152 Nazareth, Penn. 18064	(31)	Limestone, crushed	3.5 Mi. W of Petoskey Sec. 3, T34N, R6W <u>EMMET COUNTY</u>
Inland Lime and Stone Co. Div. of Inland Steel Co. Gulliver, Mich. 49840	(18)	Dolomite, crushed	W of Port Inland Sec. 2, T41N, R13W <u>SCHOOLCRAFT COUNTY</u>	Presque Isle Corp. P. O. Box 426 Alpena, Mich. 49704	(32)	Limestone, crushed	7 Mi. N of Lakeport Sec. 2, T33N, R8E <u>PRESQUE ISLE COUNTY</u>
Inwood Stone Products Co. P. O. Box 24 Cooks, Mich. 49817	(19)	Dolomite, dimensional	3 Mi. NE of Cooks Sec. 8, T41N, R17W <u>SCHOOLCRAFT COUNTY</u>	Schoolcraft Co. Rd. Comm. P. O. Box 153 Manistique, Mich. 49854	(33)	Dolomite, crushed	4½ Mi. N of Manistique Sec. 14, T42N, R16W <u>SCHOOLCRAFT COUNTY</u>
Iosco Co. Rd. Comm. P. O. Box 31 East Tawas, Mich. 48730	(20)	Limestone, crushed	7 Mi. NE of Au Gres Sec. 24, T20N, R7E <u>ARENAC COUNTY</u>	Thornton Construction Co. 1028 Ethel Avenue Hancock, Mich. 49930	(34)	Dolomite, crushed	½ Mi. W of Isabella Sec. 2, T40N, R19W <u>DELTA COUNTY</u>
Jeffrey Limestone Co. Box 126 Parma, Mich. 49269	(21)	Limestone, crushed	1 Mi. NE of Parma Sec. 30, T2S, R2W <u>JACKSON COUNTY</u>	Van Deusen Stone Co. Route #1 Au Gres, Mich. 48703	(35)	Limestone, crushed	3 Mi. NE of Au Gres Sec. 5, T19N, R7E <u>ARENAC COUNTY</u>
Krygoski Construction Co. P. O. Box 116 Menominee, Mich. 49858	(22)	Dolomite, crushed	4 Mi. W of Escanaba Sec. 33, T39N, R23W <u>DELTA COUNTY</u>	Wallace Stone Co. Div. J. P. Burroughs & Son, Inc., P. O. Box 1468 Saginaw, Mich. 48605	(36)	Limestone, crushed and dimensional	3 Mi. W of Pigeon Secs. 5 & 6, T16N, R10E <u>HURON COUNTY</u>
Limestone Products Co. Box 84 Vanderbilt, Mich. 49795	(1)	Limestone, crushed	1 Mi. N of Afton Sec. 25, T35N, R2W <u>CHEBOYGAN COUNTY</u>	----- SANDSTONE -----			
Lindberg and Sons Box 308 Ishpeming, Mich. 49849	(23)	Dolomite, crushed	8 Mi. E of Negaunee Sec. 8, T47N, R25W <u>MARQUETTE COUNTY</u>	Jude Sandstone Co. P. O. Box 335 Napoleon, Mich. 49261	(37)	Sandstone, crushed and dimensional	½ Mi. E of Napoleon Sec. 6, T4S, R2E and Sec. 31, T3S, R2E <u>JACKSON COUNTY</u>
Medusa Corp. Box 5668 Cleveland, Ohio 44101	(24)	Limestone, crushed	2 Mi. W of Charlevoix Sec. 28, T34N, R8W <u>CHARLEVOIX COUNTY</u>	Napoleon Stone Quarry P. O. Box 119 Napoleon, Mich. 49261	(38)	Sandstone, dimensional	½ Mi. E of Napoleon Sec. 6, T4S, R2E <u>JACKSON COUNTY</u>
Mich. Foundation Quarry Co. 110 W. Jefferson Ave. Trenton, Mich. 48183	(25)	Limestone, crushed	At Trenton Sec. 7, T4S, R11E <u>WAYNE COUNTY</u>	Ottawa Silica Co. 33620 Streicher Rd. Rockwood, Mich. 48173	(39)	Sandstone, crushed (silica sand)	At Rockwood Sec. 15, T5S, R10E <u>WAYNE COUNTY</u>
Mich. Limestone Operations U. S. Steel Corp. Rogers City, Mich. 49779	(26)	Limestone, crushed	At Rogers City Sec. 23, T35N, R5E <u>PRESQUE ISLE COUNTY</u>				
Mich. Limestone Operations U. S. Steel Corp. Rogers City, Mich. 49779	(27)	Dolomite, crushed	4 Mi. E of Cedarville Sec. 10, T42N, R1E <u>MACKINAC COUNTY</u>				
Michigan Stone Co. Ottawa Lake, Mich. 49267	(28)	Dolomite, crushed	½ Mi. N of Maybee Sec. 29, T5S, R8E <u>MONROE COUNTY</u>				
Michigan Stone Co. Ottawa Lake, Mich. 49267	(29)	Dolomite, crushed	E of Ottawa Lake Sec. 25, T8S, R6E <u>MONROE COUNTY</u>				

LOCATIONS OF LIMESTONE, DOLOMITE, SANDSTONE, AND MISCELLANEOUS STONE OPERATIONS

----- MISCELLANEOUS STONE -----

Name of Operation	Map No. (page)	Type of Stone	Quarry Location
Aggregate Specialties Inc. Randville, Mich. 49881	(40)	Feldspar, amphibolite, crushed	Near Randville Sec. 26, T42N, R30W; Sec. 30, T42N, R29W <u>DICKINSON COUNTY</u>
Aggregate Specialties Inc. Randville, Mich. 49881	(41)	Marble, crushed	2½ Mi. E of Felch Sec. 26, T42N, R28W <u>DICKINSON COUNTY</u>
Hocking Construction Co. Box 488 South Range, Mich. 49963	(42)	Rhyolite, crushed	7 Mi. SE of White Pine Sec. 21, T50N, R41W <u>ONTONAGON COUNTY</u>



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SAND AND GRAVEL
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Industrial Sand
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| <ol style="list-style-type: none"> 1. Afton Stone Inc. 2. Anderson Quarry 3. A-O Company 4. Arenac Co. Rd. Comm. 5. Bay Co. Rd. Comm. 6. Bethlehem Mines Corp. 7. Bichler Gravel & Concrete Co. 8. C & D Stone Co. 9. Caspian Construction Co. 10. Cheney Limestone Co. 11. Delta Co. Rd. Comm. 12. Dundee Cement Co. 13. France Stone Co.-Grape 14. France Stone Co.-Monroe 15. Glancy Quarry 16. Huron Cement Co. 17. Inland Lime & Stone Co. 18. Inland Lime & Stone Co. 19. Inwood Stone Products Co. 20. Iosco Co. Rd. Comm. 21. Jeffrey Limestone Co. 22. Krygoski Construction Co. | <ol style="list-style-type: none"> 1. Limestone Products Co. 23. Lindberg and Sons 24. Medusa Corp. 25. Mich. Foundation Quarry Co. 26. Mich. Limestone Operations 27. Mich. Limestone Operations 28. Michigan Stone Co.-Maybee 29. Michigan Stone Co.-Ottawa Lake 30. Onaway Stone Co. 31. Penn-Dixie Cement Corp. 32. Presque Isle Corp. 33. Schoolcraft Co. Rd. Comm. 34. Thornton Constr. Co. 35. Van Deusen Stone Co. 36. Wallace Stone Co. 37. Jude Sandstone Co. 38. Napoleon Stone Quarry 39. Ottawa Silica Co. 40. Aggregate Specialties Inc. 41. Aggregate Specialties Inc. 42. Hocking Construction Co. |
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Company	Type Plant & Use	County
Arrowhead Silica Corp. (Manley Bros. Div.) P. O. Box 67 Chesterton, Indiana 46304	Plant: Stationary Uses: Molding, Blast, Engine	SW¼ Sec. 5, & NW¼ Sec. 8, T6S, R19W <u>BERRIEN COUNTY</u>
Construction Agg. Corp. P. O. Box 6830 Ferrysburg, Mich. 49409	Plant: Stationary Uses: Molding	SE¼ NE¼ Sec. 17, T8N, R16W <u>OTTAWA COUNTY</u>
Great Lakes Foundry Sand Co. 1217 Francis Palms Bldg. Detroit, Mich. 48201	Plant: Dredge, Stationary Uses: Molding	SW¼ SW¼ Sec. 27, T12N, R8E <u>TUSCOLA COUNTY</u>
Industrial Sand Div. Martin Marietta Agg. 110 E. Main Street Rockton, Illinois 61072	Plant: Stationary Uses: Glass, Molding Engine, & others	Sec. 18, T6S, R19W <u>BERRIEN COUNTY</u>
McCormick Sand Corp. P. O. Box 506 Muskegon, Mich. 49440	Plant: Portable Uses: Molding, Foundry, Glass, Blast, Engine	SE¼ Sec. 16, T11N, R16W <u>MUSKEGON COUNTY</u>
Nugent Sand Co., Inc. P. O. Box 506 Muskegon, Michigan 49440	Plant: Dredge, Stationary Uses: Molding, Engine, Glass, Abrasive, Blast	NE¼ Sec. 3, T9N, R17W <u>MUSKEGON COUNTY</u>
Ottawa Silica Company 33620 Streicher Rd. Rockwood, Michigan 48173	Plant: Stationary Uses: Glass, Molding, Blast, Engine, Abrasive, Enamel, Pottery	SW¼ NE¼ Sec. 15, T5S, R10E <u>WAYNE COUNTY</u>
Sand Products Corp. 2489 First Nat'l. Bldg. Detroit, Michigan 48226	Plant: Dredge, Portable Uses: Foundry	N¼ Sec. 11, T21N, R17W <u>MANISTEE COUNTY</u>

Company	Type Plant & Use	County
Sargent Sand Co. 2840 Bay Road Saginaw, Michigan 48604	Plant: Stationary Uses: Molding, Grinding, Polishing	BAY COUNTY MASON COUNTY SAGINAW COUNTY TUSCOLA COUNTY
Standard Sand Co. P. O. Box 290 Grand Haven, Michigan 49417	Plant: Stationary Uses: Molding, Engine, Blast, Abrasive	E½ SW¼ Sec. 2, T6N, R13W OTTAWA COUNTY

NUMBER AND PRODUCTION OF SAND AND GRAVEL PRODUCERS PER COUNTY

Counties Producing 0-250,000 Tons
(4,256,000 Tons or 7% of State Total)

Alcona	2	Gogebic	2	Midland	1
Alger	1	Grand Traverse	4	Monroe	0
Antrim	2	Gratiot	3	Montmorency	1
Arenac	2	Houghton	3	Newaygo	4
Baraga	2	Iron	2	Ontonagon	1
Benzie	1	Kalkaska	1	Oscoda	1
Branch	3	Keweenaw	1	Otsego	3
Calhoun	4	Lake	2	Roscommon	4
Charlevoix	4	Leelanau	1	St. Clair	2
Cheboygan	4	Luce	1	St. Joseph	3
Clare	2	Mackinac	5	Schoolcraft	1
Crawford	1	Mecosta	2	Van Buren	4
Gladwin	0	Menominee	5	Wexford	2

Counties Producing 250,000-500,000
(8,101,000 Tons or 14% of State Total)

Barry	5	Emmet	3	Montcalm	4
Bay	1	Hillsdale	5	Oceana	4
Cass	5	Huron	5	Ogemaw	3
Chippewa	3	Ionia	3	Osceola	1
Clinton	7	Isabella	3	Presque Isle	2
Delta	4	Jackson	4	Saginaw	3
Dickinson	3	Manistee	4	Sanilac	4
Eaton	4	Missaukee	2		

Counties Producing 500,000+ Tons
(47,110,000 Tons or 79% of State Total)

Allegan	5	Lapeer	5	Ottawa	12
Alpena	4	Lenawee	6	Shiawassee	7
Berrien	9	Livingston	6	Tuscola	9
Genesee	6	Macomb	11	Washtenaw	8
Ingham	6	Marquette	7	Wayne	8
Iosco	1	Mason	2		
Kalamazoo	6	Muskegon	5		
Kent	13	Oakland	22		

Numbers appearing after county name are the number of operators producing sand and gravel within the county.

Construction Sand and Gravel

Name and Address (Michigan)	County
A Adrian Sand & Gravel Co., 7831 Sylvania Ave., Sylvania, Ohio 43560 [S]	LENAWEE
Advance Bldg., Materials Co., 4500 31 Mile Rd., Romeo 48065 [S]	MACOMB
Aggregate Processors, Inc., Box 566, White Pigeon 49099 [D]	ST. JOSEPH
Ajax Materials, 4875 Baldmountain, Pontiac 48057	OAKLAND
Albert Sand & Gravel, Inc., 4621 Wilcox Rd., Holt 48841 [D, S]	LIVINGSTON
Albrecht, William Jr., Sandusky 48471 [P]	SANILAC
Alcona County Road Commission, Lincoln 48742 [P]	ALCONA
Alger County Road Commission, Drawer 359, Munising 49862 [P]	ALGER
Allegan County Road Commission, R#1, Box 2, Allegan 49010 [P]	ALLEGAN
Alpena County Road Commission, Route 6, Alpena 49707 [P]	ALPENA
American Aggregates Corp., Drawer 160, Greenville, Ohio 45331 [S-4]	KALAMAZOO, LIVINGSTON (HMS), MACOMB (HMS), OAKLAND (HMS)
Andersen Sand & Gravel Co., 1705 Boxwood St., Saginaw 48601	TUSCOLA
Anderson Gravel Excavating Co., 233 Thupman, Belding 48809 [S]	MONTCALM
Antrim County Road Commission, Mancelona 49659 [P]	ANTRIM
Arenac County Road Commission, Omer 48749 [BR]	ARENAC
B B-K, Rt#1, Wallace 49893 [S]	MENOMINEE
Balkema, Henry, 7758 Kilowatt, Kalamazoo 49001	KALAMAZOO
Baraga County Road Commission, P. O. Box 227, L'Anse 49946 [P]	BARAGA
Barr Sand and Gravel, Inc., 990 Barnes Rd., Mason 48854 [P]	INGHAM
Barry County Road Commission, P. O. Box 158, Hastings 49058 [BR]	BARRY
Bartlett, Norman, R#3, East Jordan 49727 [BR]	CHARLEVOIX
Beagle, Richard, Sand & Gravel, 1855 Hollingsworth, Walled Lake 48088 [P]	OAKLAND
Beckman Bros. Inc., 210 Michigan Ave., Shelby 49455 [P, S]	OCEANA
Beeman Trucking & Bulldozing Co., R#1, Grawn 49637	GRAND TRAVERSE
Bennett Excavating & Gravel Co. Inc., 10835 Hamburg Rd., Hamburg 48139	LIVINGSTON, WASHTENAW
Bentley Sand and Gravel, 9220 Bennet Lake Rd., Fenton 48430	LIVINGSTON
Benzie County Road Commission, Honor 49640 [P]	BENZIE
Bernthal Sand & Gravel Co. Inc., 9523 Saginaw Rd., R#2, Reese 48757 [P]	TUSCOLA
Bichler Gravel and Concrete Co., Box 263, Escanaba 49829	DELTA
Boichot Concrete Corp., P. O. Box 5247, Lansing 48905 [S]	CLINTON (HMS)

Name and Address (Michigan)	County
Brade Ready Mix Co., 4900 Van Dyke, Kinde 48455 [S]	HURON
Brady Sand & Gravel, 2980 Russell Rd., Tecumseh 49286 [P]	LENAAWEE
Branch Co. Rd. Commission, 23 E. Garfield, Coldwater 49036	BRANCH
Brewers City Coal Dock, 24 Pine Ave., Holland 49423 [P]	OTTAWA
Briggs Ready-Mix & Gravel, 311 State St., Charlotte 48813 [D, S]	EATON (HMS)
Brink, William, 1535 Willis Rd., Saline 48176	WASHTENAW
Brow, Gene Construction Co., Box 5, Seney 49883 [P]	LUCE
Brown, Gil, Constructors, Inc., R#2, Alpena 49707 [P]	OGEMAW
Budzen Cement Products, John, Route 1, Paw Paw 49079 [S]	VAN BUREN
Bunting Sand and Gravel Products, Inc., 3247 Cook Rd., West Branch 48661	OGEMAW
Burkett, J. V. Construction Co. Inc., 3860 U. S. 31, St. Joseph 49085 [P]	LENAAWEE, OTTAWA, VAN BUREN
C Calhoun County Road Commission, County Bldg., Marshall 49068	CALHOUN
Capitol Excavating & Paving Co. Inc., 2325 Kipp Rd., Mason 48854	INGHAM
Carter, George S. Co. Inc., 5800 Van Dyke Rd., Almont 48003	MACOMB
Caspian Constr. Co., 100 W. Caspian, Caspian 49115 [P]	DICKINSON, IRON
Cass County Road Commission, R#1, Box 175, Cassopolis 49031 [P]	CASS
Central Michigan Sand & Gravel, 416 E. Huron St., Ann Arbor 48108 [S]	CLINTON
Central Paving Co., 116 S. 3rd St. West Branch 48661	OGEMAW
Champion, Inc., 105 E. "A" St., Iron Mountain 49801 [S]	DICKINSON, MARQUETTE
Clare County Road Commission, Harrison 48625 [P]	CLARE
Cliff's Gravel Co., 6-6411 W. Carpenter Rd., Flushing 48433 [DL]	GENESEEE
Clinton County Road Commission, 709 W. State Rd., St. Johns 48879 [P]	CLINTON
Coit Ave. Gravel Co., Inc., 4772 Coit Ave. NE, Grand Rapids 49505 [D, S]	KENT
Cole Brothers Contractors Inc., 4742 Crandell Rd., Battle Creek 49017 [P]	BARRY, CALHOUN, HILLSDALE, IONIA, KALAMAZOO, ST. JOSEPH
	BARRY
	CALHOUN
	OAKLAND, MACOMB
	GRAND TRAVERSE
Cole Gravel Co., R#1, Patterson Rd., Wayland 49348 [S]	OTTAWA
Combs, Emil, Gravel & Ready-Mix, R#1, Tekonsha 49092 [S]	OTTAWA
Compton Sand and Gravel, 4300-31 Mile Road, Romeo 48065	KALAMAZOO
Concrete Service Corp., W. Front St., Traverse City 48964	KENT
Construction Aggregates Corp., P. O. Box 6830 Ferrysburg 49409	SANILAC
Consumers Sand & Gravel Co., P. O. Box 231, Kalamazoo 49005 [D, P, S]	ALPENA
Contractors Gravel Co., Box 83, Sparta 49345 [D, S]	LAPEER
Cook Block Co., 138 E. Harrington Rd., Crosswell 48422 [BR]	ISABELLA, MASON, MECOSTA
Copping, C. J. Trucking Co., Box 8925 Rt#4, Alpena 49707	EATON
Corey & Hartwig, Inc., 4353 Pratt Rd., Hadley, Michigan 48440 [P, S]	CRAWFORD
Cousineau Gravel, Inc., P. O. Box 222, Big Rapids 49307 [P]	
Crandell Trucking Co., 504 E. Lovett, Charlotte 48813	
	3 Pits [P]
Crawford County Road Commission, 320 State Rd., Grayling 49738 [P, S]	

Name and Address (Michigan)	County
D D. & J. Gravel Co. Inc., R#2, 4950 Mason Rd., Howell 48843 [P, S]	LIVINGSTON
Dean, Henry & Son, P. O. Box 184, Onaway 49765 [P]	CHEBOYGAN
DeBoer Materials, R#1, Box 81, Three Rivers 49093	ST. JOSEPH
Delta County Road Commission, P. O. Box 298, Escanaba 49829 [P]	DELTA
DeVries, E. & Sons, 959 Bristol Ave., NW, Grand Rapids 49504 [S]	KENT
DeWent Gravel Co., 5725 Marlin Ave., Hudsonville 49426 [S]	OTTAWA
Dickinson County Road Commission, P. O. Box 509, Iron Mountain 49801 [P]	DICKINSON
Dowling, Bernard Trucking, Rt. 4, 1564 Long Rapid Road, Alpena 49707	ALPENA
Drenth Bros., Inc., Ellsworth 49729 [P]	ANTRIM
Dubey, Earl and Sons, Inc., R#3, Alpena 49707 [P]	ALPENA
Dunbar, Leo, P. O. Box 246, Cadillac 49601 [S]	WEXFORD
Dyer Company, Box 98 McBride 48852 [P]	MONTCALM
E Eastman Gravel Pit, R#1, 422 Stover Rd., Standish 48658 [S]	ARENAC
Eichenberg, Howard, Contractors, R#1, White Cloud 49349 [P]	NEWAYGO
Emmet County Road Commission, Box 0, Petoskey 49770 [P]	EMMET
F Faulkender Sand & Gravel, Inc., Box 68, 1601 E. Hamlin Road Rochester 48063 [S]	MACOMB
Fayas & Sons, Inc., P. O. Box 2187, Kingsford 49801	DICKINSON
Fedewa, Leo, Route 4, St. Johns 48879	CLINTON
Fenton Gravel Co., Inc., 11301 Fenton Hill Rd., Fenton 48430 [S]	LIVINGSTON
Ferguson Excavating Co., 5360 N. State Rd., Davison 48423 [P]	GENESEEE
Fisher Supply Co., 1617 E. Jolly Rd., Lansing 48910 [D]	INGHAM
Fisher Sand & Gravel Co., 921 S. Jefferson Ave., Midland 48640 [P]	CLARE, ISABELLA
Fitzgerald, Fred M., Gravel Co., 3990 E. Six Mile Creek, Owosso 48867 [D]	SHIAWASSEE
Fitzgerald & Powell, Inc., P. O. Box 160, Rose City 48654	OGEMAW
Fleming Gravel Co., Inc., Box 232, R#3, Allegan 49010	ALLEGAN, KALAMAZOO, KENT
Foster, Don, Inc., 67550 Pashalk Road, Richmond 48062	MACOMB
Fox Valley Construction Co., Box 645, 103 W. College Ave., Appleton, Wisconsin 54911 [P]	GOGEBIC
Fuoss Gravel Co., R#1, Durand 48429 [BR]	SHIAWASSEE
G George, Jerry, Sand & Gravel, Inc., Harrisville 48740 [P]	ALCONA
Gillisse Construction Co., 2500 28th Street SW, Box 278, Grandville 49418	KENT
Glancy, R. E., Inc., 1055 S. Bay Dr., Tawas City 48763 [P]	IOSCO, MONTMORENCY
Globe Industries Inc., Mill St., Ironwood 49938 [P]	GOGEBIC
Gogebic County Road Commission, Courthouse, Bessemer 49911 [P]	GOGEBIC
Grand Rapids Gravel Co., 2700 28th Street SW, Grand Rapids 49509 [S]	KENT
Grand River Gravel Co., Box 494, Owosso 48867 [S]	SHIAWASSEE
Grand Valley Gravel Co., 10450 Linden Dr., R#5, Grand Rapids 49540 [S]	OTTAWA
Gratiot County Road Commission, Ithaca 48847 [P]	GRATIOT
Great Lakes Gravel Co., 490 Spaulding SE, Grand Rapids 49506 [D, S]	MACOMB, OAKLAND
Great Lakes Gravel Co., Inc., 2900 Auburn Rd., Utica 48087	MACOMB, OAKLAND
Greenthumb Greenhouse, R#2, Box 44C, Ironwood 49938	GOGEBIC
Gronlund Gravel Co., Box 28, R#2, Bear Lake 49614 [P]	MANISTEE

Name and Address (Michigan)	County	Name and Address (Michigan)	County
H Halliday Sand & Gravel, Inc., R#79, Box 230, Houghton Lake 48629 [P]	ROSCOMMON ALLEGAN	K K-V Gravel Co., 403 Cherokee Dr., Fremont 49412 [S] Kaatz, Fred, 33555 - 31 Mile Rd., Richmond 48062 Kalkaska County Road Commission, Box 2127, Kalkaska 49646 [P]	NEWAYGO MACOMB KALKASKA CLINTON
Hamilton Block & Redi-Mix, R#3, Hamilton 49419	CLINTON MENOMINEE	Karber Gravel Co., 917 Church St., St. Johns 48879 Kent County Road Commission, 1500 Scribner NW, Grand Rapids 49504	KENT KEWEENAW BERRIEN
Harmon Sand & Gravel Co., 3365 Harmon Rd., St. Johns 48879 [S]	WAYNE BARAGA	Keweenaw County Road Commission, Mohawk 49950 [P] Kiell Excavating Co., 2046 M-140, Niles 49120 [P] Klett Construction Co., (Gravel Hill), R#2, Hartford 49057	VAN BUREN JACKSON, LENAWEE EMMET
Havelka Construction Co., R#1, Wallace 49893 [P]	OSCEOLA (HMS) ALCONA	Klumpp Bros. Gravel Co., 3342 Page Ave., Jackson 49203 [P, S] Koboski Coal Co., Inc., 114 Washington St., Petoskey 49770 Koenig Fuel & Supply Co., 1955 Lakeville Rd., Oxford 48051 [S]	OAKLAND (HMS) WASHTENAW GENESEEE
Hayes Washed Sand & Gravel Co., Inc., 15205 Middlebelt Rd., Livonia 48154	HILLSDALE	Kruse Gravel Pit, 1090 W. Clark Rd., Ypsilanti 48197 [S] Kurtz Gravel Co., G-5300 N. Dort Hwy., Flint 48505	
Herman, Al Sand & Gravel Co., L'Anse Michigan 49946	HOUGHTON, ONTONAGON MARQUETTE		
Hersey Sand & Gravel, J. P. Burroughs & Son, Aggregate Div., P. O. Box 1468, Saginaw 48605	CALHOUN		
Hilderbrand H., Sand & Gravel, 4264 River Rd., Oscoda 48750	GENESEEE, OAKLAND, OTSEGO	L Lake City Redi-Mix, Route 1, Falmouth 49632 Lake County Road Commission, Baldwin 49304 [P] Lamar Gravel Co., Inc., R#1, Grawn 49637 [P] Lapeer County Road Commission, 820 Davis Lake Road, Lapeer 48446 [P]	MISSAUKEE LAKE GRAND TRAVERSE LAPEER LEELANAU SHIawassee WASHTENAW CHARLEVOIX MARQUETTE
Hillsdale County Road Commission, Courthouse, Hillsdale 49242 [BR] [S]		Leelanau County Road Commission, Suttons Bay 49682 [P] Lennon Sand & Gravel Inc., 114 Duane St., Vernon 48476 Liberty Sand Company, Box 1046, Ann Arbor 48105 [S] Lilak & Moore, East Jordan 49727 [P, S] Lindberg A. & Sons, Inc., Box 308, Ishpeming 49849 [P, S] Livingston County Road Commission, 918 North St., Howell 48843	LIVINGSTON
Hocking, George, Construction Co., Box 488, South Range 49963 [P]		Long Lake Gravel Service, 736 Lakewood Rd., Traverse City 49684	GRAND TRAVERSE
Hodgins, Ken & Sons, P. O. Box 631, Marquette 49855 [P]		Luce County Road Commission, P. O. Box 401, Newberry 49868 [P]	LUCE
Hoffman Bros. Excavating, 1355 Dickman Rd., Battle Creek [S] (Sand only)		Lyon Sand & Gravel Co., (Div. E. C. Levy Co.) 9300 Dix, Dearborn 48120 [S]	OAKLAND (HMS)
Holloway Sand & Gravel Co., Inc., (Holloway Construction Co.) 10930 6 Mile Rd., Northville			
Holly Sand & Gravel Plant, J. P. Burroughs & Son, Inc., Aggregate Div., P. O. Box 1468, Saginaw 48605 [S]	HOUGHTON CLARE, GRATIOT, ISABELLA OTTAWA		
Holmberg, Gunnar F., R#1, Mounted Rd., Gladstone 49837 [S]	HURON SAGINAW		
Hoogerhyde Sand & Gravel Co., R#1, Box 92, Gaylord 49735			
Hoover Brothers, 1139 Tripp Rd., Waldron 49288 [P]			
Houghton County Road Commission, Royce Rd., Hancock 49930 [P]			
Hubscher & Son, Inc., P. O. Box 411, Mt. Pleasant 48858 [D]			
Huizenga Gravel Co., 10015 Gordon, Zeeland 49464 [P, S]			
Huron County Road Commission, P. O. Box 270, Bad Axe 48413 [P]			
Hutfilz, Walter, 2850 Bay Rd., Saginaw 48601			
I Indiana Hwys. Materials, Inc., 2116 W. Wilden Ave., Goshen Indiana 46526	CASS INGHAM IONIA	M Mabry & Melton Sand & Gravel Co., 2600 Forrester St., Pontiac 48057 [P]	OAKLAND
Ingham County Road Commission, 301 Bush St., Mason 48854 [P]		Mackinac County Road Commission, Box 486, St. Ignace 49781 [P]	MACKINAC MACOMB MACKINAC
Ionia County Road Commission, P. O. Box 76, Ionia 48846 [P]		Macomb Sand & Gravel Co., 3295 Auburn Rd., Utica 48087 [D] Mangene, Mike, Inc., Cedarville 49719 Manistee County Road Commission, 425 Parkdale Ave., Manistee 49660 [BR]	MANISTEE MARQUETTE MARQUETTE DELTA ST. CLAIR
Iosco County Road Commission, 810 W. Westover, East Tawas 48730 [P]	IOSCO IRON GOGEBIC GOGEBIC	Marquette, City of, Marquette 49855 [S] Marquette County Road Commission, Box 10, Ishpeming 49849 [P] Marvic, Steve Sand & Gravel, 1514 N. 16th, Escanaba 49829 [P] Marysville, City of, Marysville 48040 [S] Mason County Road Commission, P. O. Box 247, Scottville 49454 [P]	MASON OTSEGO
Iron County Road Commission, Crystal Falls 49920 [DL, P, S]	ISABELLA ISABELLA MARQUETTE	Mason Excavating Inc., R#4, Box 289, Gaylord 49735 Matthews, H. C., Gravel Co., 8082 N. Gaelle Rd., Otisville 48063	GENESEEE ISABELLA
Ironwood, City of, Ironwood 49938		McGuirk Jim & Sons, 616 S. Adams St., Mt. Pleasant 48858 Mecosta County Road Commission, 120 N. DeKraft Ave., Big Rapids 49307 [P]	MECOSTA
Ironwood Concrete Products, Ironwood 49938		Menominee County Road Commission, 3222 10th St., Menominee 49858 [P]	MENOMINEE
Isabella County Road Commission, R#7, Mt. Pleasant 48858 [D, P, S]		Michigan Aggregates Corp., 213 E. St. Joseph, Lansing 48933	INGHAM
Isabella Sand & Gravel Co., E. Wing Rd., Mt. Pleasant 48858			
Ishpeming, City of, Ishpeming 49849 [BR]			
J Jackson Sand & Gravel, R#2, Reading 49274	HILLSDALE MONTMORENCY		
James, Jr., Chester, P. O. Box 45, Hillman 49746	LAPEER MENOMINEE		
John R. Sand & Gravel Co., 1717 East Dryden Rd., Metamore 48455			
Johnson, Norman Co., R#1, Box 111, Daggett 49821			

Name and Address (Michigan)	County
Michigan, State of, Dept. Natural Resources, Lansing 48926	ALCONA, ALGER, ALPENA, CHEBOYGAN, CHIPPEWA, CRAWFORD, GOGEBIC, IOSCO, KALKASKA, MARQUETTE, MECOSTA, MENOMINEE, MONTMORENCY, ONTONAGON, OSCODA, ROSCOMMON, SCHOOLCRAFT, WEXFORD OAKLAND (HMS) MIDLAND
Mickelson Corp., 435 Granger Rd., Oxford 48051 [D, P, S] Midland County Road Commission, Midland 48640 [P]	MIDLAND
Mid-Michigan Materials, Inc., 406 Park Ave., Yale 49097 [S] Miller, George & Sons, 3300 Hollywood Rd., St. Joseph 49085 [P] Miller, Paul C. Co., 10300 Sparta Ave., Sparta 49345 [P]	SANILAC BERRIEN KENT, MUSKEGON, NEWAYGO, OCEANA, OTTAWA
Miller Prod. & Supply Co., P. O. Box 548, North U.S.-2, Iron Mountain 49801 [P] Miller Sand & Gravel, R#2, 1466-120 Ave. West, Hopkins 49328 [P] Millikin, Jack, Inc., 398 Millikin Rd., Box 12A, Grayling 49738 [P] Millington Gravel Co., Box 1, Millington 48746 Missaukee County Road Commission, P. O. Box A, Lake City 49651 [P] Molesworth Contracting Co., 321 Park Ave., P. O. Box 117, Yale 48097 [P]	DICKINSON ALLEGAN CRAWFORD TUSCOLA MISSAUKEE LAPEER, MACOMB, OAKLAND, SANILAC, ST. CLAIR
Montero Excavation Inc., I-75 Business Supr., Sault Ste. Marie 49783 Montcalm County Road Commission, Stanton 48888 Montmorency County Road Commission, Atlanta 49709 Morgan Sand & Gravel Co., 46218 Custer Road, Utica 48087 [D, S] Morgan, Al, Sand Co., 26291 Pennsylvania Rd., Romulus 48174 Muskegon Gravel & Redi-Mix, Inc., R. R. #1, Box 183, Ravenna 49451 [S]	CHIPPEWA MONTCALM MONTMORENCY LIVINGSTON, MACOMB MONROE OTTAWA
N Nashville Gravel Co., R#3, Box 117B, Nashville 49073 [S] Natural Aggregates Corp., 65545 Mound Rd., Romeo 48065 [D, S] Negaunee, City of, Negaunee 49866 [S] Neuman Sand & Gravel, G-5281 Deland, Flushing 48433 [S] Newaygo County Road Commission, White Cloud 49349 [P] New Hudson Sand & Gravel, Inc., (Div. of Texas Industries) 4200 S. Milford Rd., New Hudson 48165 [P, S] Nieb Concrete Prod. Co., (Niles Sand & Gravel Div.), 2779 Hoyt Drive, Niles 49120 [S] Northeast Gravel Co., 4300 Cannonsburg Rd., Belmont 49306 [S] Northern Concrete Prod. Co., P. O. Box 525, Petoskey 49770 [S]	BARRY (HMS) LIVINGSTON, MACOMB MARQUETTE GENESEEE NEWAYGO OAKLAND CASS KENT EMMET
O Oceana County Road Commission, P. O. Box 112, Hart 49420 [P] Ogemaw County Road Commission, 223 Thomas St., West Branch 48661 [P] Ontonagon County Road Commission, 415 Spar St., Ontonagon 49953 [P] Osceola County Road Commission, Reed City 49677 [P]	OCEANA OGEMAW ONTONAGON OSCEOLA

Name and Address (Michigan)	County
Oscoda County Road Commission, Mio 48647 [P] Otisville Stone Co., 300 Center St., Otisville 48463 [S] Otsego County Road Commission, 720 S. Otsego Ave., Gaylord 49735 [BR]	OSCODA GENESEEE OTSEGO OTTAWA OAKLAND
Ottawa County Road Commission, Grand Haven 49417 Oxford Mining Co., 9820 Andersonville Rd., Davisburg 48019 [S]	OAKLAND
P P. & B. Gravel Co., R#3, Ithaca 48847 [S, D] Palmer Sand & Gravel, 2531 E. South St., Jackson 49201 [S] Paquin & Sons, Inc., R#1, Gladstone 49837 Paris Gravel Co., R#1, Big Rapids 49307 [S, P] Peninsula Asphalt Corp., Box 726, Traverse City 49684 [S] Penn-Dixie Cement Corp., Box 152, Nazareth, Pa. 18064 Peterhans, H. O., Sand & Gravel, 530 Pearl St., Caro 48723 Peters Construction Co., 3325 E. Kilgore Rd., Kalamazoo 49001 [P] Petersen Gravel & Excav., 350 Norwood, Rockford 49341 [S] Pickitt & Schreur, Inc., Box 257, Allegan 49010 [P]	GRATIOT JACKSON DELTA MECOSTA LEELANAU EMMET TUSCOLA KALAMAZOO KENT ALLEGAN (HMS), BARRY CASS, IONIA, KALAMAZOO, KENT SHIAWASSEE OAKLAND TUSCOLA PRESQUE ISLE CLINTON, EATON ST. CLAIR
Polhamus Sand & Gravel, Ovid 48866 Portable Aggregate Producers, Inc., 1401 Souter Blvd., Troy 48084 [P] Powell Sand & Gravel, 2284 Main St., Fairgrove 48733 [BR] Presque Isle County Road Commission, Rogers City 49779 Pryor Bros., R#2, P. O. Box 89, Grand Ledge 48837 [P] Port Huron, City of, Port Huron 48060 [BR]	 HILLSDALE
Q Quality Aggregate Co., Inc., 646 Beecher Rd., Osses 49266 [S]	HILLSDALE
R Richardson Asphalt Corp., 801 Lewis St., P. O. Box 1134 Jackson 49201 Rieth-Riley Const. Co., Inc., P. O. Box 566, Sturgis 49091 [P] Riverside Sand & Gravel Co., 1050 Maynard Ave., SW, Grand Rapids 49504 [S] Riverview Gravel Co., 805 Taylor St., Jenison 49428 [P, S] Rock Creek Prod., 6991 Chelsea Manchester Rd., Manchester 48158 Rocks, Redi-Mix Concrete Co., 2401 Chicago Dr., Grand Rapids 49509 [S] Roscommon County Road Commission, P. O. Box 117, Roscommon 48653 Roslund Gravel Co., 6902 Jerome Rd., Alma 48801 [D, S] Ryno Sand & Gravel, Box 115, Watervliet 49098	JACKSON VARIOUS KENT OTTAWA WASHTENAW KENT ROSCOMMON GRATIOT BERRIEN
S St. Clair County Road Commission, 3415 28th St., Port Huron 48060 [S] St. Joseph County Road Commission, Rt#1, Centerville 49032 [P] Saginaw Aggregates Inc., 2324 Willard St., Saginaw 48602	LAPEER, ST. CLAIR ST. JOSEPH TUSCOLA

Name and Address (Michigan)	County
Saginaw County Road Commission, 3020 Sheridan, Saginaw 48601 [BR]	SAGINAW
Salem Sand & Gravel (J. P. Burroughs & Son, Aggregates Div.), P. O. Box 1468, Saginaw 48605	OAKLAND
Sanderson, C. G. Equipment Co., 3024 Lakeshore Dr., Sault Ste. Marie 49783 [P]	CHIPPEWA
Sanilac County Road Commission, Sandusky 48471	SANILAC
Scarlett Gravel Co., Box 218, Holt 48842	INGHAM
Schligal, Carl, Inc., 16527 Wood, Lansing 48906	CLINTON, INGHAM
Schley, Bill, 210 Mary St., Union City 49094	BRANCH
Schoolcraft County Road Commission, Box 152, Manistique 49854 [P]	SCHOOLCRAFT
Schworm Inc., Box 162, Traverse City 49684 [P]	GRAND TRAVERSE, LEELANAU
Shiawassee County Road Commission, Corunna 48817 [D, P, S]	SHIAWASSEE
Sievert Bros. Contr., 200 E. River St., Manistee 49660 [P]	MANISTEE
Smith, Bill, Sand & Gravel, P. O. Box 23, Otsego 49078	ALLEGAN
Smith, D. L., Sand & Gravel, Rte. #3, Box 280, East Jordan 49727	CHARLEVOIX
Snellenberger, J., Gravel, 1545 W. Fry Road, Burt 48417 [P]	GENESEE
Spartan Aggregates, Inc., P. O. Box 25, Holt 48842 [P]	CLINTON, EATON, INGHAM, LIVINGSTON, OAKLAND
Stamm Bros. Gravel Co., R#1, Adrian 49221 [P]	LENAWEE
Standard Gravel Co., (Whittaker Gooding) 5800 Cherry Hill Rd. Ypsilanti 48197 [P]	LENAWEE
Standard Ready-Mix, Inc., 1384 Lake Lansing Rd., Lansing 48912 [D]	CLINTON, INGHAM
Stanley Gravel Co., Box 786, Houghton Lake 48629 [P]	CRAWFORD, ROSCOMMON
Steel Brothers Excavating, 458 W. Sunset Dr., Roscommon 48653 [P]	ROSCOMMON
Stevick Gravel Co., 1100 S. Jackson Rd., Cement City 49233 [P]	JACKSON
Stidham Gravel Co., 227 S. Michigan Ave., Hastings 49058 [S]	BARRY
Stony Lake Sand & Gravel, R#1, Augusta 49012 [S]	KALAMAZOO
Straits Aggregate & Equip. Corp., 120 Oak St., Tawas 48763 [S]	PRESQUE ISLE
Superior Sand & Gravel, Inc., 1028 Ethel Ave., Hancock 49930 [P]	HOUGHTON
Sutherland, Warran, Box 253, Delton 49046	BARRY
Tantoni Redi-Mix, 4519 Mills Rd., Deckerville 48427	HURON
Tecumseh Gravel Co., P. O. Box 247, Tecumseh 49286 [S]	LENAWEE
Tharp & Kosiba, 445 Brown Rd., Pontiac 48053 [P]	OAKLAND
Thompson Construction Co., 234 W. Garfield, Coldwater 49036	BRANCH
Thompson-McCully Co., 5905 Belleville Rd., Belleville 48111 [P]	OAKLAND, WASHTENAW
Thomson Sand & Gravel Inc., 48399 W. 7 Mile Rd., Northville 48167 [P, S]	WAYNE
Three S Gravel Co., 2252 White St., Niles 49120	CASS
Tod Gravel Co., 6498 W. M-21, Rt. #1, Ovid 48866	SHIAWASSEE
Towns Sand & Gravel, P. O. Box 608, Ludington 49431	MASON, OCEANA
Trautman Sand & Gravel, 800 W. Fourth St., Buchanan 49107	BERRIEN
Traverse City Sand & Gravel Co., Box 421, Traverse City 49684 [P]	LEELANAU
Tri-City Aggregates Inc., 14300 Shields Road, Holly 48442	OAKLAND
Tri-County Sand & Stone, 3664 Calhoun Rd., P. O. Box 328, Beaverton 48612	CLARE
Tuckey Block Co., 6038 E. Cass City Rd., Cass City 48726 [D, S]	TUSCOLA
Tuscola County Road Commission, 120 Millwood St., Caro 48723	TUSCOLA

Name and Address (Michigan)	County
Underwood Sand & Gravel Co., 2255 Hamlin Rd., Utica 48087 [S]	OAKLAND
Van Buren County Road Commission, Box 156, Lawrence 49064 [S, P]	VAN BUREN
Van Every, Charles, 42100 W. Eleven Mile Rd., Novi 48050 [P]	OAKLAND
Velting Contractors, Inc., 2020 Newark Ave., SE, Grand Rapids 49507 [P]	KENT
Vermontville Gravel Co., R#1, Vermontville 49096	EATON
Vollmer Redi-Mix, 196 S. Caseville Rd., Pigeon 48755 [D, S]	HURON
Wanders & Son, RFD 5, Box 30, Allegan 49010	ALLEGAN
Wagner Ready-Mix, 8260 Sand Beach Rd., Harbor Beach 48441 [S]	HURON
Washtenaw County Road Commission, 555 N. Zeeb Rd., Ann Arbor 48103 [BR]	WASHTENAW
Washtenaw Sand & Gravel, Inc., 4984 Earhardt, Ann Arbor 48103 [S]	WASHTENAW
Waterbury, K., Contractor, R#6, Box 19, U. S. 27 North Coldwater 49036 [D, S, P]	BRANCH (HMS)
Wayne Sand & Gravel, Inc., P. O. Box 267, Wayne 48184 [S]	WAYNE
Weaver, Ronald, Gravel Co., Box 116, Dansville 48819 [P]	INGHAM, SHIAWASSEE
Weber's Sand & Gravel, 350 W. Silverbell Rd., Pontiac 48055 [P, S]	OAKLAND
Weldon's Transit Mix, 1184 N. County Farm Rd., Harrison 48625	CLARE
West Branch Concr. Prod., Inc., 3350 Rau, West Branch 48661 [S]	OGEMAW
West Shore Constr. Co., Inc., 188 Jefferson, P. O. Box 77, Zeeland 49464 [P]	OTTAWA
Wexford County Road Commission, P. O. Box 88, Cadillac 49601 [P]	WEXFORD
Wexford Gravel Co., P. O. Box 578, Cadillac 49604 [P]	WEXFORD
Wheeler Transit Mix Concrete Co., Rt. #1, Box 741, Greenville 48838 [S]	MONTCALM
Whit Pond Gravel Co., (Div. of Kuert Concrete Inc.) 3113 Lincoln Way West, South Bend, Ind. 46628	CASS
White, Alden & Sons, Rt. #3, Box 343, Watervliet 49098 [P]	BERRIEN
Whitehall Gravel Co., 3278 Colby Rd., Whitehall 49461 [S]	MUSKEGON
Whitehead, I. L., Co., 1107 W. Easterday Ave., Sault Ste. Marie 49783 [P]	CHEBOYGAN, CHIPPEWA, MACKINAC
Whites Washed Sand & Stone, Box 283, Houghton Lake 48629 [S]	ROSCOMMON
Whittaker & Gooding Co., 5800 Cherry Hill Rd., Ypsilanti 48197 [S]	WASHTENAW
Whittum's Gravel Co., R#4, Eaton Rapids 48827 [S]	EATON
Wiggins, Max & Sons, Merritt 49667 [P]	MISSAUKEE
Williams Bros. Asphalt Paving Co., Box 54, Saranac 48881 [P, S]	IONIA
Willson Bros., Inc., 3788 Rives & Eaton Rd., Rives Junction 49277 [D, S]	JACKSON
Worden, James, P. O. Box 13, Whittemore 48770	OGEMAW
Wurth Concrete & Aggregates, Inc., 3734 10th St., Menominee 49858 [S]	MENOMINEE

Mineral Producers Listed By Counties

Name and Address (Michigan)	County
Y Yerington Construction Co., R#2, Box 34, Benton Harbor 49022 [P]	ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, HILLSDALE, IONIA, LENAWEE, MUSKEGON, NEWAYGO, VAN BUREN
Z Zellar's Custom Crushing, 1406 S. Linden Rd., Flint 48504	MACOMB

(HMS) = Heavy media separation equipment

[D] = Dredge; [P] = Portable; [S] - Stationary; [BR] = Bank Run; [DL] = Dragline

Sulfur

Name & Address of Producer	Nearest Town	County
Total-Leonard Refineries, Inc. Alma, Michigan 48801	Alma	GRATIOT COUNTY
Marathon Oil Company 1300 S. Fort Street Detroit, Michigan 48217	Detroit	WAYNE COUNTY

1973

Mineral producers are listed below by county. Location of the operation, when known, is given by section, township, and range, or nearest city to operation.

The line appearing in italics below each county name gives: (1) the county standing (rank) in total value of minerals produced by the county in 1972, (2) the total dollar value, and (3) minerals produced in the county in order of value. Values withheld in order to avoid disclosing individual company confidential data are indicated with a (W). Figures in parentheses following a mineral resource show the rank of the county in production. 1972 production and value figures are given because 1973 statistics were not available at time of printing.

A brief narrative report on 1971 mineral production county by county is given in "Mineral Industry of Michigan, 1971", distributed with this Directory or available on request. Annual publications entitled: "Statistics Covering Costs and Production of Michigan Iron Mines", and "Michigan Oil and Gas Fields" are also available by writing the Publications Room, Department of Natural Resources, Lansing, Michigan 48933.

ALCONA

79th - \$49,000: Sand and gravel

Alcona Co. Road Comm.	NW NW 14 28N 8E SW SW 12 26N 9E SW NE 4 28N 5E	NW SE 23 27N 8E NE SW 1 26N 9E SE NE 7 26N 6E NW NW 12 25N 6E SW SE 3 25N 9E	Sand and gravel " " " " " " " " " " " " " " "
Jerry George Sand & Gravel State of Michigan	W½ SW 32 25N 9E NE NW 34 27N 7E	NE NE 12 25N 6E SW SW 32 27N 5E	" " " " " "

ALGER

76th - \$52,000: Sand and gravel

Alger Co. Road Comm.	NE SW 7 49N 13W SE SE 11 47N 17W SE NE 15 46N 19W SE NE 32 46N 21W NE 4 45N 21W SW NE 10 45N 20W SW 33 45N 22W	SE SE 10 49N 14W SE NE 8 46N 17W SW NW 6 46N 20W SE NE 34 46N 21W NE 9 45N 21W SE NE 28 45N 21W NE NE 34 45N 21W NE 7 44N 21W NE NE 11 45N 21W	Sand and gravel " " " " " "
State of Michigan	SW NW 25 44N 21W NE SE 15 47N 17W		" " " " " "

ALLEGAN

47th - \$995,000 (-8.8%): Sand and gravel, Petroleum, Natural Gas, Peat, Marl

Allegan Co. Rd. Comm. Gerald Arnsman Charles E. Douglas	(contractor) Hervig and Belden, Pits 26 4N 11W	Sand and gravel Marl Peat (reed-sedge)
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ALLEGAN (con't.)

Flemming Gravel Company	SE NE 1 3N 3W	11&14	2N 12W	Sand and gravel
Miller Sand & Gravel Co.		NE SW 12	2N 12W	" " "
Emil Pavlak		NW SE 18	4N 13W	Marl
Pickett & Schreur	W 1/2 SE 24 1N 1W	SW NE 34	3N 13W	Sand and gravel
Harold O. Voss	Fennville			" " "

ALPENA

5th - \$49,297,000: Cement (1st), Stone for cement mfg., Shale for cement mfg., Sand and gravel

Alpena Co. Road Comm.	NW SW 13 30N 7E	Sand and gravel
	SW 35 31N 6E	" " "
	E 1/2 NW 24 32N 8E	" " "
	13 32N 7E	" " "
	35 32N 7E	" " "
Bernard Dowling Trucking	NE SE 23 32N 8E	" " "
Earl Dubey and Sons, Inc.	SE 32 32N 8E	" " "
Huron-Cement Division	NE 30 31N 7E	Shale
(National Gypsum Corp.)	24 31N 8E	Cement
	13 31N 8E	Limestone, crushed
State of Michigan	NE SW 12 31N 6E	Sand and gravel

ANTRIM

63rd - (W): Sand and gravel, Shale for cement mfg.

Antrim Co. Rd. Comm.	NW NE 23 29N 8W	Sand and gravel
	NE NE 2 29N 6W	" " "
	SE SE 14 29N 7W	" " "
	NE SW 14 30N 8W	" " "
	NW SE 14 32N 8W	" " "
Drenth Bros. Inc.	NW 7 29N 8W	" " "
Lilak and Moore	NW SW 24 32N 8W	Shale
Medusa Cement		Sand and gravel
Mich. State Hwy. Dept.	(contractor)	

ARENAC

46th - (W): Petroleum, Stone, Sand and gravel

Arenac Co. Road Comm.	NE NW 5 19N 7E	Limestone, crushed
	NW SE 20 10N 3E	Sand and gravel
	SE SE 34 20N 5E	Limestone, crushed
Bay Co. Road Comm.	NW 5 19N 7E	Limestone, crushed
C & D Stone Co.	SW NW 36 19N 5E	Sand and gravel
Eastman Gravel pit		Limestone, crushed
R. E. Glancey Inc.	13&14 20N 7E	Limestone, crushed
Iosco Co. Road Comm.	SW 24 20N 7E	Limestone, crushed
Van Deusen Stone Co.	NW 5 19N 7E	Limestone, crushed

BARAGA

81st - (W): Sand and gravel

Baraga Co. Road Comm.	7 49N 33W	Sand and gravel
	15 48N 33W	" " "
	NW 23 51N 31W	" " "
Fox Construction Co.	(Unknown)	" " "

BARAGA (con't.)

State of Michigan	SW SE 8 47N 34W	SW NE 12 48N 32W	Sand and gravel
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BARRY

58th - (W): Sand and gravel, Petroleum, Marl

Barry Co. Road Comm.	Various	Sand and gravel	
Cole Gravel Co.	NE NW 7 3N 10W	" " "	
Cole Brothers Const. Co.	(for county)	" " "	
William Currier	NW SE 6 4N 10W	Marl	
Fleming Brothers	SW NW 25 2N 10W	Sand and gravel	
D. L. Hamilton	25 2N 7W	Marl	
Nashville Gravel Co.	NE NW 10 1N 7W	Sand and gravel	
	(HMS)		
Pickett & Schreur Inc.	N 1/2 SW 3 1N 7W	SE SW 35 3N 8W	" " "
Stidham Gravel Co.		SW NW 12 3N 9W	" " "
Wayne Sutherland		Sutherland pit	" " "
Yerington Construction		30 4N 10W	" " "

BAY

15th - \$11,795: Cement, Sand, Petroleum, Lime

Martin-Marietta Cement Co. Great Lakes Div.	NE 14 14N 5E	Cement
Monitor Sugar Div.	Bay City	Lime
Sargent Sand Co.	Gravel Flats	Industrial Sand

BENZIE

74th - (W): Sand and gravel

Benzie Co. Road Comm.	Various	Sand and gravel	
Ivan Schworm & Son	SE SE 33 25N 13W	SW NW 25N 16W	" " "
	SW SW 28 26N 14W	NE NE 11 26N 15W	" " "
	NE NE 14 26N 15W	SE NE 7 27N 14W	" " "

BERRIEN

31st - \$3,088: Sand and gravel, Industrial Sand, Marl

Arrowhead Silica Corp.	SW5 NW 8 6S 19W	Industrial Sand	
Crosby Marl Co.	14 8S 20W	Marl	
Industrial Sand Div. Martin-Marietta	18 6S 19W	Industrial Sand	
Kiell Excavating	SE 15 7S 17W	Sand and gravel	
George Miller & Sons, Inc.	St. Joseph	" " "	
Ryno Gravel Co.	NE 27 3S 17W	" " "	
Trautman Sand & Gravel	27 7S 18W	" " "	
Alden White & Sons Contractor	27 3S 17W	" " "	
Yerington Construction	NE SW 6 6S 17W	27 7S 18W	" " "
		35 6S 18W	" " "

BRANCH

67th - (W): Sand and gravel, Marl

Branch Co. Road Comm.		Various	Sand and gravel
Taylor & Son	NW NW 16 8S 5W	SW SW 4 8S 6W	Marl
Thompson Constr. Co.		SE 20 6S 6W	Sand and gravel
Wallace Waterbury Gravel Co.		SW SE 4 6S 6W	" " "
Yerington Construction		SW SW 12 6S 6W	" " "

CALHOUN

21st - \$5,794: Petroleum, Natural Gas, Sand and Gravel, Marl

David Atoow		NE 21 4S 7W	Marl
Calhoun Co. Road Comm.	5 4S 7W	SW 9 3S 7W	Sand and gravel
	24 & 25 4S 7W	5 2S 4W	" " "
	34 3S 6W	32 & 33 2S 5W	" " "
	14 2S 5W	SW 12 1S 6W	" " "
	27 2S 6W	NE 13 4S 6W	" " "
Case Brothers		28 4S 7W	Marl
Cole Brothers Const. Co.	S ₂ 4 2S 8W	SW NW 25 4S 6W	Sand and gravel
	NE NE 34 3S 6W	NE 17 3S 4W	" " "
Emil Combs Grav. & Ready-Mix		SW SE 18 3S 4W	" " "
Hoffman Brothers Excavating		11 2S 8W	" " "
Michigan Aggregate Corp.		SE SW 12 1S 6W	" " "
George Miller	NE SE 5 4S 7W	SE SW 5 2S 4W	" " "
Pickett & Schreur		2 1S 7W	" " "
Yerington Construction		SE SE 32 2S 5W	" " "
		NW NW 35 3S 6W	" " "

CASS

66th - (W): Sand and gravel, Marl

Cass Co. Road Comm.	NE SE 16 6S 15W	SW NW 24 6S 15W	Sand and gravel
		NW SE 19 6S 16W	" " "
Indiana Hwys. Materials, Inc.		NW SW 1 8S 16W	" " "
Nieb Concrete Prod.		NW NW 15 7S 16W	" " "
Pickett & Schreur		NW SE 10 5S 16W	" " "
Poehlman & Sons		12 & 13 7S 16W	Marl
Whit Pond Gravel Co.		NW NW 23 6S 15W	Sand and gravel
Yerington Construction		NW SE 10 5S 16W	" " "

CHARLEVOIX

18th - (W): Cement, Stone for cement mfg., Sand and gravel

Norman Bartlett		NE SW 30 32N 6W	Sand and gravel
Lilak & Moore		SW NW 4 33N 8W	" " "
Medusa Cement		SW 28 34N 8W	Cement, sand and gravel
(Division of Medusa Corp.)			Sand and gravel
State of Michigan	NW NW 6 33N 4W	NW NW 31 33N 4W	" " "
	SW SW 36 33N 4W	NW SE 31 34N 8W	" " "
	SW SW 11 37N 10W	SE SE 13 37N 11W	" " "
	SW SW 21 38N 10W	NW NW 27 38N 10W	" " "
	SE NE 35 38N 10W		" " "

CHARLEVOIX (con't.)

D. L. Smith Sand & Gravel NE NW 28 32N 7W Sand and gravel

CHEBOYGAN

72nd - (W): Stone, Sand and gravel

Afton Stone Inc.	N ₂ SE 25 35N 2W	Limestone, crushed
Henry Dean & Sons	SW 19 34N 2W	Sand and gravel
Limestone Products Co.	SE 25 35N 2W	Limestone, crushed
State of Michigan	NE NW 10 35N 1E	Sand and gravel
Onaway Stone Co.	NW NW 6 34N 1E	Dimensional Limestone
I. L. Whitehead	NW SE 25 38N 1W	Sand and gravel

CHIPPEWA

29th - (W): Stone, Sand and gravel

Bethlehem Mines Corp.		3 & 10 41N 5E	Dolomite, crushed
State of Michigan	SE SW 3 41N 6E	NW SW 20 42N 6E	Sand and gravel
Anthony J. Montero Excavation Inc.		NW NW 24 47N 1W	" " "
C. G. Sanderson		NW NW 24 47N 1W	" " "
I. L. Whitehead Co.	NW NW 25 47N 1W	Lutz Pit	" " "
	SE SW 35 48N 7W	23 45N 2W	" " "
		NE NE 23 47N 1W	" " "

CLARE

39th - \$1,436,000: Petroleum, Sand and gravel, Natural Gas, Natural Gas Liquids

Clare Co. Road Comm.	Various	Sand and gravel
Fisher Sand and Gravel	(Unknown)	" " "
Hubscher & Son, Inc.	4 16N 3W	" " "

CLINTON

55th - \$618,000: Sand and gravel, Shale (for clay products)

Boichot Concrete Prod. Corp.	NW NW 27 5N 2W	Sand and gravel
	(HMS)	" " "
	NE SW 3 5N 2W	" " "
	11 7N 1W	" " "
Central Mich. S & G Co.		" " "
Clinton Co. Road Comm.	Various	" " "
Leo M. Fedewa	St. Johns	" " "
Grand Ledge Clay Prod. Co.	NE SW 34 5N 4W	Shale (for tile mfg.)
Harman Sand & Gravel	NE NW 33 5N 4W	Sand and gravel
Karber Block Co.	SE NW 34 8N 2W	" " "
Pryor Bros. Gravel Co.	NE NW 33 5N 4W	" " "
	SE SE 29 5N 4W	" " "
	NW SW 17 5N 3W	" " "
Schlegal, Carl Inc.	Drumheller	" " "
Spartan Aggregates	(Unknown)	" " "
Standard Redi-Mix, Inc.	NE NW 36 8N 2W	" " "

CRAWFORD

37th - (W): Petroleum, Natural Gas, Sand and gravel, Natural Gas Liquids

Crawford County Road Comm.		Various	Sand and gravel
Jack Millikin	NE NE 16 25N 3W	5 27N 3W	" " "
State of Michigan	SW NW 27 25N 2W	NE NE 16 25N 3W	" " "
	NE SE 20 22N 11W	SW NE 15 28N 4W	" " "
Jess Stanley Gravel		(Unknown)	" " "

DELTA

69th - (W): Sand and gravel, Stone

Bichler Gravel Co.	E½ NE 14 40N 23W	NE 1 39N 23W	Sand and gravel
		SW 1 39N 23W	Dolomite, crushed
Caspian Constr. Co.		SW 6 40N 20W	" " "
Delta Co. Road Comm.		SE SW 11 39N 21W	" " "
	NE NE 5 38N 24W	SW NE 12 29N 23W	Sand and gravel
	NW NW 30 38N 19W	NW SE 17 40N 21W	" " "
	SW SW 19 38N 24W	NE NE 14 40N 23W	" " "
		NE NW 8 40N 23W	" " "
		15 40N 22W	" " "
Gunnar F. Holmberg		NE NE 33 39N 23W	Dolomite, crushed
Krygoski Constr. Co.		27 39N 24W	Sand and gravel
Marvic & Sons		NE NW 2 40N 19W	Dolomite, crushed
Thornton Constr. Co.			

DICKINSON

8th - \$30,085,000: Iron Ore, Sand and gravel, Stone

Aggregate Specialties, Inc.		NW NW 26 42N 30W	Feldspar
		SE SW & SW SE 30 42N 29W	Amphibolite
		SE SW 26 42N 28W	Marble, crushed
Caspian Const. Co.	SW SW 25 41N 28W	NE SW 12 39N 30W	Sand and gravel
		NE NE 19 40N 30W	" " "
Champion, Inc.		NE NE 19 40N 30W	" " "
Dickinson Co. Road Comm.		Various	" " "
Fayas & Sons, Inc.			" " "
Groveland Mine (M.A. Hanna Co.)		Open pit 31 42N 29W	Iron Ore
Lindberg & Sons		SW SW 5 40N 30W	Sand and gravel
State of Michigan	SE SE 35 40N 28W	SW SW 30 41N 29W	" " "
Miller Products & Supply Co.		NW SW 7 40N 30W	Fill Sand

EATON

51st - \$736,000: Stone, Sand and gravel, Petroleum, Shale, Peat

Briggs Ready Mix and Gravel		SE 13 2N 5W	Sand and gravel
		(HMS)	
Cheney Limestone Co.		NE 29 1N 6W	Limestone, crushed
Crandell Trucking Co. 3 Pits		NW 9 2N 4W	Sand and gravel
Grand Ledge Clay Products		SE 3 4N 6W	Shale (for tile mfg.)
Hilu Peat Co.	21 2N 4E		Peat (humus)
Pickett & Schreur		SE SW 3 1N 4W	Sand and gravel
Pryor Brothers		NE NE 1 4N 5W	" " "
		E½ SW 9 3N 3W	" " "

EATON (con't.)

Spartan Aggregates, Inc.	SE SE 15 3N 4W	NW NW 3 2N 4W	Sand and gravel
Vermontville Gravel Co.		NE NE 29 1N 6W	" " "
Whittum's Gravel Co.		SE NE 5 1N 3W	" " "

EMMET

14th - \$12,299,000: Cement, Stone, Sand and gravel, Shale

Emmet Co. Road Comm.	SW NW 20 36N 4W	NW NW 27 38N 4W	Sand and gravel
	NW SE 7 35N 4W	SE SW 34 38N 4W	" " "
	NW NE 25 35N 5W	NE NW 17 27N 5W	" " "
	SE NW 14 28N 5W	SE 34 35N 4W	" " "
Northern Concrete Products Co.		2 34N 6W	" " "
Penn-Dixie Cement Corp.		2 34N 6W	Cement
		3 34N 6W	Limestone, sand and gravel and Shale (for cement)
Pickett & Schreur Inc.		Various	Sand and gravel

GENESEE

52nd - \$700,000: Sand and gravel, Petroleum

Cliffs Gravel Co.		SW SW 19 8N 6E	Sand and gravel
Ferguson Excavating Co.		N½ 18 & S½ 7 8N 8E	" " "
Holloway Sand & Gravel Co., Inc.		NW SW 10 6N 5E	" " "
Kurtz Gravel Co.		12 8N 7E	" " "
H. C. Mathews Gravel		S½ 7 8N 8E	" " "
Neuman Sand & Gravel		W½ 23 8N 5E	" " "
Otisville Stone Co.		N½ 15 9N 8E	" " "
Snellenberger Gravel Co.		SE 16 9N 5E	" " "

GLADWIN

48th - \$876,000: Petroleum, Sand and gravel

State of Michigan	SW SE 10 20N 2W		Sand and gravel
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GOGEBIC

80th - \$26,000: Sand and gravel

Caspian Constr. Co.	NE SW 4 46N 42W	SW NE 34 45N 39W	Sand and gravel
Globe Ready-Mix		NW NE 10 47N 47W	" " "
Gogebic Co. Road Comm.		Various	" " "
City of Ironwood		NE NE 3 46N 47W	" " "
Ironwood Concrete Products		(2 pits)	" " "

GRAND TRAVERSE

53rd - (W): Sand and gravel, Natural Gas, Petroleum

Concrete Service Corp.	SE SW 5 27N 11W	Sand and gravel
Lamar Gravel Co.	27 26N 11W	" " "
I. W. Schworm & Son, Inc.	Traverse City	" " "

GRATIOT

12th - (W): Bromine, Magnesium Compounds, Salt, Ca-Mg Chloride, Sand and gravel, Sulfur, Petroleum, Natural Gas

Gratiot Co. Road Comm.	NE NE 3 12N 4W	NE SW 29 12N 3W	Sand and gravel
	SE NW 17 11N 1W	NW SE 10 11N 1W	" " "
	NE SW 33 11N 4W	SW NW 22 12N 4W	" " "
	NE NW 10 11N 4W	SE SE 13 12N 3W	" " "
	NW NW 29 12N 3W	SE NW 24 12N 2W	" " "
	SE SW 23 12N 2W	SE NE 23 12N 2W	" " "
	NE NW 21 12N 1W	NW SE 31 12N 1W	" " "
	NE SE 31 12N 1W	SW SE 2 9N 1W	" " "
	NE SE 34 11N 4W	3 10N 4W	" " "
Hubscher & Son		Alma	Sulfur
Total-Leonard Refineries		24 12N 3W	Bromine, Calcium-
Michigan Chemical Corp.			Magnesium Chloride,
(Div. of Martin-Marietta)			Magnesium Compounds,
			Salt
P. & B. Gravel	NW SE 9 10N 1W		Sand and gravel
Roslund Gravel Co.	NW NE 36 12N 3W		" " "

HILLSDALE

16th - \$10,463,000: Petroleum, Natural Gas Liquids, Natural Gas, Sand and gravel, Marl

Cole Brothers	35 7S 3W	Sand and gravel
John Hess	14 5S 3W	Marl
Hoover Brothers	NE SE 23 8S 2W	Sand and gravel
Jackson Sand & Gravel	Reading	" " "
Michigan Aggregates	NE 7 & NW 8 5S 1W	" " "
	(HMS)	" " "
Northwest Materials, Inc.	Thompson Pit	" " "
Quality Aggregate Co.	SE 3 7S 2W	" " "

HOUGHTON

64th - \$272,000: Sand and gravel, Stone

George Hocking Constr. Co.	NW 21 54N 34W	NW 21 54N 34W	Crushed Basalt
Houghton Co. Road Comm.		NW 21 54N 34W	" " "
	C SE 10 54N 34W	NW SE 29 52N 36W	" " "
Superior Sand and Gravel		NE SW 27 55N 34W	Sand and gravel

HURON

45th - \$1,202,000: Stone, Sand and gravel, Lime, Petroleum

Brade Ready-Mix	Amos, Dunlap, Wood & Wahl Pits	Sand and gravel
Huron Co. Road Comm.	SE SE 17 16N 13E	" " "
Michigan Sugar Co.	SEbewaing	Lime (for sugar mfg.)
Vollmer Sand & Gravel	NE SE 20 16N 11E	Sand and gravel
Wagner Ready-Mix	SE 29 16N 13E	" " "
	SW SW 22 16N 15E	" " "
	E $\frac{1}{2}$ E $\frac{1}{2}$ SW 27 16N 13E	" " "
Wallace Stone Co.	5 & 6 16N 10E	Limestone, crushed and dimensional

INGHAM

20th - \$5,912,000: Petroleum, Natural Gas, Sand and gravel, Natural Gas Liquids, Peat

Anderson Sand and Gravel	SW 14 2N 1E	Sand and gravel
Barr Sand & Gravel, Inc.		SE SW 25 2N 1W
Fiser Supply Co.		SW SE 34 4N 2W
Ingham Co. Road Comm.		Various
Scarlett Gravel Co.		NE NW 25 3N 2W
Schlegel, Carl Inc.	SE SW 3 4N 2W	" " "
Spartan Aggregates		NE NE 15 3N 1E
Standard Ready-Mix		St. Johns
Ronald Weaver Gravel Co.	NE SE 24 2N 2W	SE SW 24 2N 2W
	NE NE 34 3N 1E	SE NW 23 2N 1E
	NE SE 10 3N 1E	" " "
Wicker's, Inc.		(?) 3N 2W Peat (moss)

IONIA

62nd - (W): Sand and gravel

Cole Bros.		SW NW 19 8N 5W	Sand and gravel
Ionia Co. Road Comm.	NW NE 33 7N 7W	SE SE 8 6N 5W	" " "
	SE NE 24 5N 7W	SE SW 18 5N 5W	" " "
	NE SW 15 7N 5W	NW SW 27 6N 5W	" " "
Pickett & Schreur, Inc.		25 7N 6W	" " "
Williams Bros.		N $\frac{1}{2}$ SE 32 7N 7W	" " "

IOSCO

19th - \$6,775,000: Gypsum, Sand and gravel

R. E. Glancy, Inc.	SE SW 10 24N 5E	Sand and gravel
Iosco Co. Rd. Comm.	Various	" " "
Michigan Gypsum Co.	25 21N 5E	Gypsum
National Gypsum Co.	26 & 35 22N 6E	"
U. S. Gypsum Co.	22 & 27 21N 7E	"

IRON

25th - \$4,233,000: Iron Ore, Sand and gravel

Caspian Constr. Co.	NW NE 31 43N 35W	S½ SW 22 43N 35W	Sand and gravel
Inland Steel Co.:			
Sherwood Mine		23 43N 35W	Iron Ore
Iron Co. Road Comm.	NE NE 18 43N 32W	22 43N 34W	Sand and gravel
	NE NW 14 42N 35W	SE SW 25 44N 34W	" " "

ISABELLA

54th - \$649,000 (-): Petroleum, Sand and gravel, Natural Gas

Cousineau Gravel, Inc.		2 pits	Sand and gravel
Fisher Sand & Gravel Co.		NW 12 14N 3W	" " "
Hubscher & Son	SW SW 4 16N 3W	E½ SW 20 14N 5W	" " "
Isabella Co. Road Comm.	SW NW 25 14N 6W	SE NE 19 16N 6W	" " "
	SW SW 27 14N 6W	SW SE 6 16N 3W	" " "
	SE SW 14 14N 5W	NE SE 27 15N 6W	" " "
	NE NE 25 14N 5W	NW SE 19 15N 5W	" " "
	SE SE 21 13N 6W	SW NE 5 15N 3W	" " "
	SE NE 26 13N 6W	SW NE 14 14N 6W	" " "
		NE SW 8 13N 3W	" " "

JACKSON

28th - \$3,369,000 (-19.0%): Petroleum, Natural Gas, Sand and gravel, Stone, Marl

Barnes Brothers	Horton (DeMack pit)	Concord (John Pung pit)	Marl
Jeffrey Limestone Co.		SE 30 2S 2W	Sand and gravel
Jude Sandstone Qy.		NW NE 6 4S 2E	Sandstone
		SW SE 31 3S 2E	"
Klumpp Bros. Gravel Co.		SE SE 1 2S 2E	Sand and gravel
Napoleon Sandstone Qy.		NW NE 6 3S 2E	Sandstone
Palmer Sand & Gravel		SW NW 8 3S 1E	Sand and gravel
Pickett & Schreur, Inc.		34 3S 3W	" " "
		24 3S 3W	" " "
Stevick Gravel Co.	Cement City		" " "
Willson Bros., Inc.	Rives Junction		" " "

KALAMAZOO

44th - \$1,244,000* (* does not include marl): Sand and gravel, Marl

American Aggregates Corp.	SW NW 15 1S 11W	Sand and gravel
Balkema Sand & Gravel	SE SE 17 2S 10W	" " "
Cole Bros. Const. Co.	NW NE 7 2S 9W	" " "
Consumers Sand and Gravel	SE NE 13 2S 11W	" " "
Hayward Dry Marl	8 4S 10W	Marl
Kalamazoo Co. Road Comm.	NE NW 22 1S 11W	Sand and gravel
Peter Constr. Co.	SW NE 7 2S 11W	" " "
	NW SE 5 4S 12W	" " "
Pickett & Schreur Inc.	Welling, Byrnes pits	" " "
	SW NW 27 1S 11W	" " "
Stony Lake Sand & Gravel	NE NE 22 1S 9W	" " "

KALKASKA

26th - \$3,782,000: Petroleum, Natural Gas, Sand and gravel, Natural Gas Liquids

Kalkaska Co. Road Comm.	SW NE 33 28N 8W	SE SE 26 25N 8W	Sand and gravel
	NE SE 10 28N 7W	SE NE 14 27N 8W	" " "
State of Michigan	NE NW 31 27N 5W		" " "

KENT

22nd - \$5,497,000 (+14.5%): Sand and gravel, Gypsum, Petroleum, Peat, Natural Gas

Coit Ave. Gravel Co.		NE SE 29 8N 11W	Sand and gravel
Contractor's Gravel Co.		Sparta	" " "
Ed DeVries & Sons		NE 22 7N 12W	" " "
Flemming Gravel Co.		NW 8 6N 10W	" " "
Georgia-Pacific Corp.		NW 24 6N 11W	Gypsum
Gillespie Construction Co.		(Grandville)	Sand and gravel
Great Lakes Gravel Co.		NW NE 31 7N 10W	" " "
Grand Rapids Gypsum Co.		34 6N 12W	Gypsum
Grand Rapids Gravel Co.	E½ NW & SW	NE 16 6N 12W	Sand and gravel
		26 8N 11W	" " "
		5 6N 12W	" " "
Kas Peat		Grand Rapids	Peat (humus)
Kent Co. Road Comm.	SW SE 36 5N 9W	NW SE 32 5N 11W	Sand and gravel
	NE SE 20 6N 9W	NE NE 17 6N 9W	" " "
	SW NE 5 6N 12W	NE NE 32 7N 11W	" " "
	NW SW 26 7N 11W	NW 8 7N 12W	" " "
	NE NW 13 8N 11W	SW NE 23 10N 11W	" " "
	NE SE 13 10N 12W	SE SW 11 10N 12W	" " "
		NW 15 10N 12W	" " "
		NE SW 19 8N 11W	" " "
Paul C. Miller		NE SW 24 8N 11W	" " "
Northeast Gravel & Excavating		SW SW 12 8N 11W	" " "
Petersen Gravel & Excavating		SW SE 23 8N 11W	" " "
Pickett & Schreur Inc.	NE NE 25 9N 11W	W½ NE 32 8N 11W	" " "
	SE NE 35 9N 11W	NE NE 10 6N 9W	" " "
	19 7N 9W	NE NW 6N 9W	" " "
	7 6N 10W	NE NW 6N 9W	" " "
	SW NW 1 8N 9W	28th Street	" " "
	N½ NW 24 10N 11W	Bliss	" " "
	NE 20 7N 10W	Cannonsburg	" " "
	Finkler	Cascade	" " "
Riverside Sand and Gravel		SE SE 33 7N 12W	" " "
Rocks, Sand & Gravel Co.		4 & 9 1N 12W	" " "
Twin Lakes Nursery		NE NW 26 7N 11W	Peat (reed-sedge) & moss
Velting Contractors, Inc.		Grand Rapids	Sand and gravel

KEWEENAW

83rd - \$2,000: Sand and gravel

Keweenaw Co. Road Comm.	SE SE 7 57N 32W	NW NW 8 58N 30W	Sand and gravel
	SE SE 5 57N 32W	SW SW 8 57N 32W	" " "

LAKE

59th - \$483,000: Petroleum, Sand and gravel

Lake Co. Road Comm.	SE NE 23 18N 13W	NE SW 21 19N 14W	Sand and gravel
	SE NE 29 17N 12W	SE NW 12 19N 12W	" " "

LAPEER

38th - \$1,181,000: Peat, Sand and gravel, Petroleum, Ca-Mg Chloride, Natural Gas

Anderson Peat Co.		NE SE 23 7N 12E	Peat
Attica Aggregate Corp.		17 7N 11E	Sand and gravel
Corey & Hartwig		SW 20 7N 10E	" " "
Lapeer Co. Road Comm.	NW SW 21 7N 11E	SE NE 18 9N 11E	" " "
		NW 27 9N 12E	" " "
		NE NE 1 9N 10E	Ca-Mg Chloride
Molesworth Contr. Co.		SE SE 21 7N 11E	Sand and gravel
St. Clair Co. Road Comm.	SE SE 27 9N 12E	NW NW 5 6N 11E	" " "
Solliere Peat & Sod Co.		SW SW 25 7N 12E	Peat (reed-sedge)
Wilkinson Chemical Co.		21 10N 10E	Ca-Mg Chloride

LEELANAU

73rd - (W): Sand and gravel

Leelanau Co. Road Comm.	SW SW 22 28N 13W	Sand and gravel
Peninsula Asphalt & Constr. Co.	NE NW 16 28N 13W	" " "
Schworm & Son	SE NE 28 30N 12W	" " "
Traverse City Sand & Gravel	(Unknown)	" " "

LENAWEE

40th - \$1,335,000: Sand and gravel, Clay, Natural Gas

Adrian Sand and Gravel	NE SE 4 6S 4E	SE 16 7S 3E	Sand and gravel
Brady Sand and Gravel		SE 32 5S 4E	" " "
J. V. Burkett Constr.		SE SE 4 6S 4E	" " "
Comfort Brick & Tile Co.		SE 2 6S 4E	Clay (for clay products)
O. E. Gooding		SE NW 19 5S 4E	Sand and gravel
Holloway		NW 19 5S 1E	" " "
Klumpp Bros.		SE NW 8 5S 1E	" " "
Stamm Bros. Gravel Co.		SW NE 19 7S 3E	" " "
Standard Gravel Co.		NW 5 5S 4E	" " "
Tecumseh Gravel Co.		SW NE 4 6S 4E	" " "
Yerlington Construction		30 7S 3E	" " "

LIVINGSTON

30th - (W): Sand and gravel

Albert Gravel Co.		SW NE 6 3N 3E	Sand and gravel
American Aggregates Corp.	NE 24 2N 6E	NE NE 11 1N 6E	" " "
	(HMS)	(HMS)	" " "
Bennett Excavating & Gravel Co.		33 & 34 1N 5E	" " "

LIVINGSTON (con't.)

Bentley Sand and gravel		SE NW 5 4N 6E	Sand and gravel
D. & J. Gravel Co.		SW SW 32 3N 4E	" " "
Fenton Gravel Co.	NE SE 2 4N 6E	SW NE 2 1N 3E	" " "
Livingston Co. Road Comm.	SW NE 30 1N 6E	SW NE 31 4N 6E	" " "
	NW NW 26 2N 4E		" " "
	SW SW 11 4N 5E	NW SW 14 4N 6E	" " "
	NW NW 36 4N 5E	SE SW 13 3N 4E	" " "
	NE SW 33 3N 5E	NE SW 24 3N 6E	" " "
	SW SE 23 2N 5E	NW SE 32 2N 5E	" " "
	SE NE 21 2N 4E	NW NW 5 2N 3E	" " "
	NW SW 19 2N 3E	NE NE 20 1N 3E	" " "
	SW SW 14 1N 4E	SE NE 12 1N 4E	" " "
		10 2N 6E	" " "
Morgan Sand & Gravel		NE 24 2N 6E	" " "
Natural Aggregates Corp.		7 3N 3E	" " "
Spartan Aggregates, Inc.			" " "

LUCE

78th - (W): Sand and gravel

Gene Brow Constr.		Newberry	Sand and gravel
Luce Co. Road Comm.		SE NE 14 45N 10W	" " "
State of Michigan	NE SW 20 48N 8W	NW NW 17 48N 8W	" " "
	SE NE 3 49N 11W		" " "

MACKINAC

17th - (W): Stone, Sand and gravel

A. O. Company	SW 34 44N 7W		Dolomite
Inland Lime & Stone Co.		6 42N 12W	Limestone, crushed
Mackinac Co. Road Comm.		SW SE 5 42N 1W	Sand and gravel
		NW NW 17 44N 12W	" " "
		SE NE 25 42N 5W	" " "
		SE NW 13 40N 4W	" " "
		C 16 43N 10W	" " "
		NW NW 18 43N 11W	" " "
State of Michigan	SW SE 5 42N 1E	SE NE 30 42N 12W	" " "
	NW NE 32 43N 11W	SE SE 19 43N 12W	" " "
Mike Mangene, Inc.		SW SE 5 42N 1W	" " "
Mich. Limestone Operation,			
U. S. Steel, Cedarville Quarry		10 42N 1E	Limestone, crushed
I. L. Whitehead Co.		SE SW 19 42N 1E	Sand and gravel
		5 42N 1W	" " "
		SW NW 13 40N 4W	" " "

MACOMB

27th - \$3,537,000: Sand and gravel, Natural Gas, Petroleum

Advance Bldg. Materials Co.		SE NW 18 4N 12E	Sand and gravel
American Aggregates Corp.		SW NW 4 4N 12E	" " "
		(HMS)	" " "

MACOMB (con't.)

George S. Carter Co., Inc.	Romeo		Sand and gravel
Compton Sand and Gravel	SE 5 4N 12E	" " "	" " "
Don Foster Inc.	SW 3 4N 14E	" " "	" " "
Great Lakes Gravel Co.	SW SW 31 3N 12E	" " "	" " "
Fred Katz	SW 16 4N 14E	" " "	" " "
Macomb Sand & Gravel	SW SW 30 3N 12E	" " "	" " "
Molesworth Contracting Co.	Carter Pit	" " "	" " "
Morgan Sand & Gravel	30 3N 12E	" " "	" " "
Natural Aggregates Corp.	NW NE 8 4N 12E	" " "	" " "
Peake Asphalt Paving Co., Inc.	Utica	" " "	" " "
Whitehall Farms	NE NW 21 4N 14E	" " "	" " "

MANISTEE

7th - \$31,028,000: Mg-Compounds, Salt, Bromine, Sand and gravel

Gronlund Gravel Co.	NE SE 7 23N 14W	Sand and gravel
	NE 14 21N 13W	" " "
	SE 6 23N 14W	" " "
Manistee Co. Road Comm.	Various	Salt, evaporated
Hardy Salt Co.	Manistee	
Martin-Marietta Chemical Co.	SE 18 21N 16W	Magnesium compounds
Refractories Div.	12 21N 17W	Bromine, Magnesium
Morton Chemical Co.		Compounds, Calcium
		Chloride
Morton Salt Co.	Manistee	Salt
Sand Products Corp.	N $\frac{1}{2}$ 11 21N 17W	Industrial Sand
Sievert Bros. Contractors	31 21N 16W	Sand and gravel

MARQUETTE

1st - \$132,805,000: Iron Ore, Sand and gravel, Stone, Iron oxide pigments

Caspian Constr. Co.	SW SW 5 47N 26W	NW NE 28 45N 25W	Sand and gravel
		NE SW 29 45N 25W	" " "
		NW NE 26 48N 30W	" " "
Champion, Inc.			
Cleveland-Cliffs Iron Co.:		19 47N 26W	Iron Ore
Empire Open Pit Mine		1 47N 27W	" " "
Mather Mine		7 46N 29W	" " "
Republic Open Pit Mine		26 47N 27W	" " "
Tilden Open Pit Mine		SE NE 16 47N 26W	Sand and gravel
R. J. Fox Constr. Co.		Marquette	" " "
Ken Hodgins & Son		Ishpeming	" " "
City of Ishpeming		(Unknown)	" " "
Lake Superior & Ishpeming R. R.		NW NE 17 47N 25W	" " "
A. Lindberg & Sons, Inc.		SE SE 8 47N 25W	Dolomite, crushed
		NE SW 10 48N 25W	Sand and gravel
City of Marquette	NE SW 9 48N 25W	NE NW 3 47N 28W	" " "
Marquette Co. Road Comm.			" " "
City of Negaunee			" " "

MASON

6th - \$32,600,000: Magnesium Compounds, Ca-Mg Chloride, Lime, Sand and gravel, Petroleum

Cousineau Gravel, Inc.	Bass Lake & Ruby Creek pits		Sand and gravel
The Dow Chemical Co.	NW SW 23 18N 18W		Calcium Chloride,
			Magnesium Compounds,
			Lime
Harbison-Walker Refractories	NE SE 23 18N 18W		Magnesium compounds
Mason Co. Road Comm.	NW NW 27 20N 17W	SE SE 18 19N 15W	Sand and gravel
	NE NW 10 18N 17W	SW SW 11 18N 15W	" " "
	SW NW 24 17N 18W	SE SW 34 17N 15W	" " "
Mich. State Hwy. Dept.	(Contractor)		" " "
Sargent Sand Co.	SW 33 19N 18W		Industrial Sand

MECOSTA

60th - \$308,000: Sand and gravel, Petroleum, Natural Gas, Peat

Cousineau Gravel, Inc.	NW NE 27 16N 10W	NW NE 35 15N 8W	Sand and gravel
	SW SW 24 15N 10W	NW NE 28 14N 10W	" " "
Gummer's Peat Co.		N $\frac{1}{2}$ SE 28 13N 8W	Peat
Mecosta Co. Road Comm.	NE SW 7 15N 7W	NE NE 32 15N 9W	Sand and gravel
	NW NE 35 15N 8W	SW SW 24 15N 10W	" " "
	SE NW 25 15N 9W	W $\frac{1}{2}$ SW 4 15N 9W	" " "
State of Michigan		SW SE 12 15N 8W	" " "
Paris Gravel Co.		NW SE 27 16N 10W	" " "

MENOMINEE

68th - (W): Sand and gravel

B. & K. Sand and gravel		26 34N 27W	Sand and gravel
Havelka, Gerald	19 33N 27W		" " "
Menominee Co. Road Comm.		SE NE 33 35N 26W	" " "
	NE NE 9 39N 25W	SE SE 4 39N 25W	" " "
State of Michigan	N $\frac{1}{2}$ NE 36 36N 25W	SE NE 15 38N 26W	" " "
Wurth Concrete & Aggregates		Menominee	" " "

MIDLAND

4th - \$50,062,000: Bromine, Ca-Mg Chloride, Mg Compounds, Salt, Iodine, Petroleum, Sand and gravel

The Dow Chemical Co.	Midland	Bromine, Magnesium
		Compounds, Calcium
		Chloride, Salt,
		Iodine
Midland Co. Road Comm.	(Various)	Sand and gravel

MISSAUKEE

36th - (W): Petroleum, Natural Gas, Sand and gravel

Lake City Redi-Mix		N $\frac{1}{2}$ 35 23N 7W	Sand and gravel
State of Michigan	SW NE 1 21N 5W	NE SW 13 23N 8W	" " "
Missaukee Co. Road Comm.		(Contractor)	" " "
Pickett & Schreur, Inc.		SE NE 5 21N 5W	" " "
Max Wiggins & Sons		5 22N 5W	" " "

MONROE

10th - \$24,319,000: Cement, Stone, Clay, Petroleum, Peat

Appleman Farms	2 8S 6E		Peat (humus, reed-sedge)
Dundee Cement Co.	NW 6 6S 7E		Cement, Limestone, Clay
France Stone Co.		7 7S 9E	Dolomite, crushed
Monroe Quarry		13 6S 7E	" "
Grape Quarry			Peat (humus)
Norman E. Link		Petersburg	
Michigan Stone Co.		29 5S 8E	Dolomite, crushed
Maybee Quarry		SW 25 8S 6E	" "
Ottawa Lake Quarry		NE SW 16 5S 10E	Clay, Flower pots
F. W. Ritter & Sons, Co.			

MONTCALM

56th - \$568,000: Petroleum, Sand and gravel

Anderson Gravel Co.		Unknown	Sand and gravel
Dyer Co.	NE NW 35 9N 8W	SW SW 9 12N 5W	" " "
	SW NE 7 11N 5W	NW 1 10N 6W	" " "
Montcalm Co. Road Comm.	NE 36 10N 6W	NW 26 9N 5W	" " "
Wheeler Transit-Mix Concrete Co.		E $\frac{1}{2}$ 34 9N 8W	" " "

MONTMORENCY

79th - \$27,000: Sand and gravel

R. E. Glancy, Inc.		NE NE 4 29N 1E	Sand and gravel
Chester, James Jr.		(Unknown)	" " "
State of Michigan	SE SE 23 29N 3E	NW NW 14 31N 2E	" " "
Montmorency Co. Road Comm.	NW NE 34 32N 2E	Various	" " "

MUSKEGON

32nd - \$2,645,000: Salt, Sand and gravel, Petroleum

Hooker Chemical Co.		NE 31 12N 17W	Salt-Brine for chemical manufacturing
Paul C. Miller		SE SE 32 10N 13W	Sand and gravel
McCormick Sand Corp.		SW 16 11N 16W	Industrial Sand
Nugent Sand Co.		NE 3 9N 17W	" " "
Whitehall Gravel Co.		W $\frac{1}{2}$ NE 27 12N 17W	Sand and gravel
Yerington Construction		31 & 32 10N 13W	" " "

NEWAYGO

71st - \$132,000: Sand and gravel, Petroleum

J. V. Burkett		NE 4 13N 12W	Sand and gravel
Cousineau Gravel, Inc.	NW SW 16 11N 11W	SE 4 13N 12W	" " "
		(2 pits)	" " "
Howard Eichenberg Contr.		NW 16 16N 12W	" " "
K. V. Gravel Co.		26 14N 15W	" " "
Paul C. Miller		NE NW 21 12N 12W	" " "
Newaygo Co. Road Comm.		S $\frac{1}{2}$ NE 34 12N 13W	" " "
Yerington Construction	SW NE 34 12N 13W	NE NW 26 15N 11W	" " "

OAKLAND

13th - \$14,199,000* (*Value does not include Peat): Sand and gravel, Peat, Petroleum

Ajax Paving		SW SW 36 4N 16E	Sand and gravel
American Aggregates Corp.		NE NW 22 5N 10E	" " " (HMS)
Richard Beagle Sand & Gravel		NW SE 5 3N 11E	" " "
Dan's Peat Farm		SE SW 12 1N 8E	Peat (moss)
Faulkender Sand & Gravel, Inc.		24 3N 11E	Sand and gravel
Fletcher & Richard		23 1N 7E	Peat (humus)
Great Lakes Gravel Co., Inc.		36 5N 11E	Sand and gravel
Holloway Sand & Gravel Co., Inc.		Hass & Warren pits	" " "
Holly Sand & Gravel		NE SE 32 5N 8E	" " "
		(HMS)	" " "
Jennings, Inc.		NW SW 19 5N 8E	" " "
John R. Sand and Gravel Co.		SE 4 4N 10E	" " "
Koenig Coal & Supply Co.	SW SE 24 5N 10E	NW 1 3N 8E	" " "
		(HMS)	" " "
Lyon Sand & Gravel Div.		NW NE 13 1N 7E	" " "
		(HMS)	" " "
Marby & Melton		SE SW 30 3N 11E	" " "
Mickelson Corp.		NE SE 20 5N 10E	" " "
		(HMS)	" " "
New Hudson Sand & Gravel		NW NE 33 2N 7E	" " "
Oxford Mining Co.		E $\frac{1}{2}$ NW 26 4N 8E	" " "
Portable Aggregate Producers, Inc.		Troy	" " "
Salem Gravel & Contr. Co.		E $\frac{1}{2}$ NE 2 4N 9E	" " "
Spartan Aggregates, Inc.		Kurtz pit	" " "
Telischak Sand & Gravel, Inc.		27 4N 9E	" " "
Thompson McCully Sand and Gravel		Clarkston-Manchester	" " "
		Pontiac	" " "
Thorp & Kosiba Sand & Gravel		SW 19 5N 8E	" " "
Tri-City Aggregates, Inc.		NW 2 3N 10E	" " "
Underwood Sand & Gravel		SE 11 3N 8E	" " "

OAKLAND (con't.)

Charles Van Every
Weber's Sand & Gravel

Novi
W $\frac{1}{2}$ 26 & E $\frac{1}{2}$ 27 4N 10E

Sand and gravel
" " "

OCEANA

61st - \$385,000: Petroleum, Sand and gravel

Beckman Brothers
Paul C. Miller
Oceana Co. Road Comm.

NE NE 32 15N 18W
SW NW 4 13N 15W

NE SW 24 14N 17W
SW 3 13N 15W
NE SW 26 14N 15W
SE SE 8 13N 18W
SW NE 15N 16W

Sand and gravel
" " "
" " "
" " "
" " "

OGEMAW

35th - (W): Petroleum, Sand and gravel, Natural Gas

Gil Brown Constructors, Inc.
Bunting Sand & Gravel Prod., Inc.
Holloway Sand & Gravel Co., Inc.
State of Michigan
Ogemaw Co. Road Comm.
George Peters Sand & Gravel
West Branch Concrete Products

SW SW 14 24N 4E
SW 5 22N 2E

NE SE 6 22N 2E
NE NE 6 21N 2E
NW NE 12 21N 1E
NW NW 2 23N 2E
SW SW 26 24N 3E
NE SE 6 21N 2E

Sand and gravel
" " "
" " "
" " "
" " "
" " "
" " "

ONTONAGON

2nd - \$68,231,000* (*Value does not include sand & gravel): Copper, Silver, Sand and gravel

Caspian Constr. Co.
Geo. Hocking Constr. Co.
Ontonagon Co. Road Comm.
White Pine Copper Co.:
White Pine Mine

SW 21 50N 41W

Various
SE 7 49N 42W
4, 5, 9 50N 42W

Sand and gravel
Rhyolite, crushed
Sand and gravel
Copper & Silver

OSCEOLA

33rd - \$2,224,000* (*Value doesn't include sand and gravel): Petroleum, Natural Gas Liquids, Sand and gravel, Natural Gas

Cousineau Gravel, Inc.
Hersey Sand and Gravel
Osceola County Road Comm.

NW NW 11 17N 9W

Osceola Pit, Evert
Post Pit
NW SW 20 17N 9W
(HMS)
Various

Sand and gravel
" " "
" " "
" " "

OSCODA

82nd - \$10,000: Sand and gravel, Petroleum

State of Michigan
Oscoda Co. Road Comm.

SW NW 32 25N 1E

SE SW 7 27N 4E
NW NW 36 25N 4E
SE SW 15 27N 1E

Sand and gravel
" " "
" " "

OTSEGO

23rd - \$5,250,000: Petroleum, Natural Gas, Natural Gas Liquids, Sand and gravel

Holloway Sand & Gravel Co., Inc.
Otsego Co. Road Comm.
State of Michigan

NW NW 3 31N 3W
15 29N 4W
NE NW 19 29N 4W
NE SE 25 32N 1W

SE 15 29N 4W
NW NE 29 31N 3W
17 29N 3W
NE SE 31 30N 1W

Sand and gravel
" " "
" " "
" " "

OTTAWA

24th - \$4,119,000* (*Value does not include clay): Sand and gravel, Clay, Petroleum, Natural Gas

Brewers City Coal Dock
J. V. Burkett Constr.
Compton Sand and Gravel
Construction Aggregates Corp.
DeWent Gravel Co.
Grand Valley Gravel Co.
Huizenga Gravel
Paul C. Miller Co.
Muskegon Gravel & Ready-Mix
Ottawa Co. Road Comm.
Pickett & Schreur, Inc.
Riverview Gravel Co.
Standard Sand Co.
West Shore Constr. Co.

NW SE 7 7N 14W
SE SE 29 7N 13W
NW NE 16 7N 14W
NE NE 32 7N 13W
SW NE 15 5N 13W
SW SW 2 6N 13W

Holland
NE NW 15 5N 13W
SE SW 16 8N 16W
(Unknown)
SE SW 16 8N 15W
SW NE 17 8N 16W
(HMS)
SW SW 23 6N 13W
NE NE 32 7N 13W
W $\frac{1}{2}$ NE 3 6N 13W
NW NW 4 9N 13W
NW NE 5 9N 13W
SW SE 7 7N 14W
NW SW 2 6N 13W
NE NW 29 5N 14W
5 5N 13W
E $\frac{1}{2}$ 2 6N 13W
E $\frac{1}{2}$ SW 2 6N 13W
E $\frac{1}{2}$ SW 2 6N 13W

Sand and gravel
" " "
" " "
Clay
Sand and gravel
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
Industrial Sand
Sand and gravel

PRESQUE ISLE

9th - \$21,529,000: Stone, Sand and gravel, Petroleum

State of Michigan

NE SW 29 36N 2E
S $\frac{1}{2}$ SW 13 34N 7E

NW NE 28 36N 3E
NW NE 22 34N 7E

Sand and gravel
" " "

PRESQUE ISLE (con't.)

Michigan Limestone Operation, U. S. Steel	SE NE 23 35N 5E	Limestone, crushed
Onaway Stone Co.	NW NW 5 34N 2E	Limestone, dimensional
Presque Isle Co. Rd. Comm.	NE NE 19 33N 5E SW SE 18 35N 2E	Sand and gravel
Presque Isle Corp.	NW 2 33N 8E	Limestone, crushed
Straits Aggregate & Equip. Corp.	NE NW 19 34N 4E	Sand and gravel

ROSCOMMON

43rd - \$742,000* (*Value does not include sand & gravel): Petroleum, Sand and gravel, Natural Gas

Halliday Sand & Gravel, Inc.	SE SE 30 24N 3W NW SW 3 23N 3W	Sand and gravel
State of Michigan	NE SE 22 23N 2W NW NW 32 23N 4W	" " "
Roscommon Co. Road Comm.	NW NE 25 24N 4W NE NW 32 23N 4W	" " "
Jess Stanley Gravel Co.	SW NW 4 22N 4W NW NW 14 22N 4W	" " "
Steel Brothers	W $\frac{1}{2}$ NE 24 22N 4W & Michelson pit 3 34N 3W	" " "
Whites Sand & Gravel	(Unknown)	" " "

SAGINAW

49th - \$766,000: Sand and gravel, Lime, Clay (for cement mfg.), Petroleum

Walter Hutfilz	(Unknown)	Sand and gravel
Martin-Marietta	NW 1 11N 3E	Clay (for cement mfg.)
Michigan Sugar Co.	Carrollton	Lime (for sugar mfg.)
Saginaw Co. Road Comm.	Various	Sand and gravel
Sargent Sand Co.	17 10N 2E	Industrial Sand

ST. CLAIR

9th - \$27,282,000: Salt, Natural Gas, Cement, Natural Gas Liquids, Petroleum, Clay, Sand and gravel

Diamond Crystal Salt Co.	31 5N 17E	Salt, evaporated
Marysville, City of	(Unknown)	Sand and gravel
Molesworth Contracting	4 8N 14E NE SE 8 7N 15E	" " "
Morton Salt Co.	Dryden & Valdesuso Pits	" " "
Peerless Cement Co.	SE 29 6N 17E	Salt, evaporated
Port Huron, City of	Port Huron	Portland cement mfg.
St. Clair Co. Road Comm.	32 6N 16E	Clay (for cement mfg.)
	(Unknown)	Sand and gravel
	8 8N 14E	" " "
	8 7N 15E 29 8N 16E	" " "

ST. JOSEPH

65th - \$199,660 (-23.7%): Sand and gravel, Peat

Aggregate Processors, Inc.	NE 7 8S 11W	Sand and gravel
Coie Brothers	SE NE 16 5S 9W NW NE 12 5S 9W	" " "
	SE 24 5S 11W NE NW 26 6S 11W	" " "
	SW SW 20 7S 10W SW NW 27 7S 10W	" " "
	NW NW 16 7S 9W SW NW 27 7S 9W	" " "
	SE 6 8S 9W	" " "
Kerr Brothers Marl	13 6S 12W	Marl
Kerr's Peat Moss	13 6S 12W	Peat (moss)
Quality Peat	24 5S 12W	" " "
St. Joseph County Road Comm.	Various	Sand and gravel

SANILAC

57th - \$1,934,876 (+449%): Peat, Lime, Sand and gravel

William Albrecht, Jr.	SW SE 31 12N 13E	Sand and gravel
Cook Block Co.	NE NE 28 10N 15E	" " "
J. M. Huber Corp.	NW 11 11N 14E	Peat (moss & reed-sedge)
Michigan Peat, Inc.	Minden & Sandusky	Peat (reed-sedge)
Michigan Sugar Co.	Croswell	Lime (for sugar mfg.)
Mid-Michigan Materials, Inc.	SW SW 32 9N 16E	Sand and gravel
Molesworth Contracting	SW SW 32 9N 16E	" " "
Sanilac Co. Road Comm.	SW SW 31 12N 13E	" " "
	NE SE 18 13N 13E NW NE 17 14N 12E	" " "
	NW NW 34 12N 12E NW NE 18 14N 16E	" " "
	NW NE 1 12N 13E SW SE 5 13N 14E	" " "
	SE SW 31 12N 13E NE SE 24 13N 13E	" " "
	NW SE 28 11N 12E SW SW 21 11N 14E	" " "
	SE SW 21 11N 14E NE NE 3 10N 14E	" " "

SCHOOLCRAFT

41st - (W): Stone, Sand and gravel

York Anderson	SE 36 42N 15W	Limestone, crushed
Caspian Construction Co.	(Unknown)	Sand and gravel
Inland Lime & Stone Co.	2 41N 13W	Dolomite, crushed
Inwood Stone Products Co.	8 41N 17W	Dolomite, dimensional
State of Michigan	SE NW 15 41N 17W	Sand and gravel
Schoolcraft Co. Road Comm.	SE SW 7 41N 17W	" " "
	SE SW 14 42N 16W	Dolomite, crushed

SHIAWASSEE

50th - \$764,000: Sand and gravel, Peat, Shale, Petroleum

Al-Par Peat Co.	18 9N 2E	Peat (reed-sedge)
Central Michigan Sand & Gravel Co.	SW NW 23 7N 1E	Sand and gravel
Fred Fitzgerald Gravel Co.	4 & 14 8N 3E NE SW 22 8N 2E	" " "
Fuoss Gravel Co.	SE SW 4 6N 3E SE SE 17 5N 4E	" " "
	SE NW 9 6N 3E	" " "

SHIAWASSEE (con't.)

Gillette Sand & Gravel		NW NE 26 5N 1E	Sand and gravel
Grand River Gravel Co.	NW SE 22 6N 2E	NW 25 6N 2E	" " "
Lennon Sand & Gravel		NE 27 7N 4E	" " "
Mich. Vitrified Tile Co.		SE 22 7N 3E	Shale (for tile mfg.)
Polhamus Gravel Co.		SW SE 16 7N 1E	Sand and gravel
Scenic Lakes, Inc.	4, 10 & 16	5N 1E	Peat (reed-sedge)
Shiawassee Co. Road Comm.		SE SE 20 7N 2E	Sand and gravel
Ronald Weaver Gravel Co.		NE SW 16 5N 2E	" " "

TUSCOLA

42nd - (W): Sand and gravel, Petroleum, Lime

Andersen Sand & Gravel	NW SW 19 11N 9E	NE NE 20 11N 9E	Sand and gravel
Bernthal Sand & Gravel	SW SE 6 11N 9E	SW SE 31 12N 9E	" " "
Great Lakes Foundry Sand Co.		SW SW 27 12N 8E	Industrial Sand
Michigan Sugar Co.		Caro	Lime (for sugar mfg.)
H. D. Peterhans S. & G.		13 12N 8E	Sand and gravel
Powell Sand & Gravel		23 13N 7E	" " "
Sargent Sand Co.	5 10N 9E	SE 13 11N 8E	Industrial Sand
		NW 1 11N 8E	" " "
Tuckey Block Co.		W $\frac{1}{2}$ NW 33 14N 11E	Sand and gravel
Tuscola Co. Road Comm.	NW NW 28	SW NE 33 10N 9E	" " "
	NW SE 22 11N 7E	SW SW 19	" " "
	NE NW 29	NE NE 2 11N 9E	" " "
	E $\frac{1}{2}$ SW 5 11N 10E	SW NE 3	" " "
	SE SE 34	SW NW 13 12N 8E	" " "
	NE NW 7 12N 10E	N $\frac{1}{2}$ SW 18 12N 10E	" " "
	SE SE 10 13N 9E	NW NW 16 13N 10E	" " "
	SE SW 4 13N 11E	33 14N 10E	" " "
	NE NW 24 14N 11E	SE SW 27 10N 8E	" " "

VAN BUREN

70th - \$158,000: Sand and gravel, Petroleum

John Budzen Cement Products		13 3S 14E	Sand and gravel
J. V. Burkett Constr.		SE NE 24 3S 15W	" " "
Klett Constr. Co.		SE NW 24 3S 14W	" " "
Van Buren Co. Road Comm.		Various	" " "
Yerington Construction		NE SE 24 3S 1W	" " "

WASHTENAW

34th - \$2,377,000: Natural Gas Liquids, Petroleum, Sand and gravel

Bennet Excavating and Gravel Co.		(Hamburg)	Sand and gravel
William Brink		8 4S 6E	" " "
O. E. Gooding & Co.	SW NW 10 2S 5E	SW 3 2S 5E	" " "
	(HMS)		
	SE SE 9 2S 7E	SW NE 19 2S 7E	" " "
	19 3S 6E	14 3S 6E	" " "
	12 3S 3E	27 1S 3E	" " "
Killins Gravel Co.		25 2S 5E	" " "
Kruse Gravel Co.		32 2S 7E	" " "

WASHTENAW (con't.)

Liberty Sand Co.		36 2S 6E	Sand and gravel
Mich. State Hwy. Dept.		(Contractor)	" " "
Short Hills Gravel Co.		12 3S 3E	" " "
Rock Products		12 3S 3E	" " "
Thompson-McCully Sand & Gravel		NE SE 26 3S 7E	" " "
Washtenaw Co. Road Comm.	SE NE 21 2S 5E	NW SW 3 2S 5E	" " "
	SW NE 14 1S 7E	NE SE 2 4S 3E	" " "
	NW 23 3S 4E	SE NW 22 1S 3E	" " "
		12 2S 7E	" " "
Washtenaw Sand & Gravel		1 2S 6E	" " "
Whitaker and Gooding		E $\frac{1}{2}$ SW 3 2S 5E	" " "

WAYNE

3rd - \$61,416,000: Cement, Lime, Salt, Sand and gravel, Stone, Clay, Sulfur, Petroleum

BASF Wyandotte	Wyandotte	Salt, lime
Clippert Brick & Tile Co.	NW 21 2S 11E	Clay, brick
Detroit Lime Co.	River Rouge	Lime, (limekiln only)
Hayes Washed Sand & Gravel Co., Inc.	SE NE 8 1S 8E	Sand and gravel
International Salt Co., Inc.	(Ext.) SW 32 2S 11E	Rock Salt (Halite)
Lightweight Aggregate Corp.	NE 27 1S 9E	Clay, light weight aggregate
Marathon Oil Co.	Detroit	Sulfur
Marblehead Lime Co.	River Rouge	Lime (limekiln only)
Mich. Foundation Quarry Co.	NE NW 7 4S 11E	Limestone, crushed
Moore Bros. Sand & Gravel	E $\frac{1}{2}$ SE 9 3S 9E	Sand and gravel
Al Morgan Sand Co.	Romulus	Sand
Ottawa Silica Co.	SW NE 15 5S 10E	Sandstone (silica sand)
Peerless Cement Co.	Ext. Sec. 28 2S 11E	Cement
Peerless Cement Co.	NW Ext. Sec. 36 2S 10E	Clay
Pennwalt Corp.	Wyandotte	Salt (brine for chlorine mfg.)
Thomson Sand & Gravel	NW NE 8 1S 8E	Sand and gravel
Wayne Sand & Gravel Co.	NW SE 12 3S 8E	" " "
Wyandotte Cement Inc.	Wyandotte	Cement

WEXFORD

75th - (W): Sand and gravel

Leo Dunbar		SW NE 15 21N 9W	Sand and gravel
State of Michigan	NW SE 20 22N 11W		" " "
Wexford Co. Road Comm.		(contractor)	" " "
Wexford Gravel Co.		NW NE 10 21N 9W	" " "

UNDISTRIBUTED

\$8,954,000: Sand and gravel

Rieth Riley Construction Co.
U. S. Department of Agriculture

Various Counties Sand and gravel
Various Counties " " "

SELECTED MINERALS AND GEOLOGY

GEOLOGIC UNIT MINED:

NAMES OF OPERATIONS:

Iron

Middle Huronian:
Negaunee Iron Formation.....Empire, Mather, Republic, &
Tilden mines
Vulcan Formation.....Groveland Mine

Copper & Silver

Upper Keweenaw:
Nonesuch Shale.....White Pine Mine

Gypsum

Upper Mississippian:
Michigan Formation.....Georgia-Pacific Corp., Grand
Rapids Gypsum Co., National
Gypsum Co., Michigan
Gypsum Co., United States
Gypsum Co.

Natural Salines

Middle Devonian:
Dundee Limestone.....Michigan Chemical Co., @
St. Louis
Detroit River.....Dow Chemical Co. @ Midland &
Ludington, Michigan Chemical
@ Manistee & St. Louis, &
Wilkinson Chemical Co.

Salt

Middle Devonian:
Detroit River.....Dow Chemical Co. @ Midland
Late Silurian:
Salina
F-Salt.....International Salt Co.
B-Salt.....Pennwalt Chemical Corp.;
BASF Wyandotte Corp.
A & B-Salts.....Diamond Crystal Salt Co., Hooker
Chemical Corp., Hardy Salt
Co., Morton Salt Co.

Limestone

Late Mississippian:
Bayport Limestone.....Arenac Co. Road Comm., Bay
Co. Road Comm., C & D Stone,
Cheney Lms. Co., Iosco Co.
Road Comm., Jeffrey Lms. Co.,
& Wallace Stone Co., Van Deusen
Stone Co.

SELECTED MINERALS AND GEOLOGY (cont'd.)

GEOLOGIC UNIT MINED:

NAMES OF OPERATIONS:

U. S. GEOLOGICAL SURVEY TOPOGRAPHIC MAPS*
Published July 1, 1972 - June 30, 1973

Limestone (cont'd.)

Middle Devonian:
 Traverse.....Afton Stone Inc., Huron
 Portland Cement Co. (Alpena
 Lms.), Penn-Dixie Cement Co.
 (Gravel Point), Medusa
 Portland Cement Co. (Gravel
 Point), Limestone Products Co.,
 Onaway Stone Co.
 Dundee Limestone.....Dundee Cement Co., Michigan
 Limestone Operation @
 Calcite, & Presque Isle
 Corp. (Rogers City Lms.)
 Middle Silurian:
 Hendricks Dol. (Fiborn Lms.).....Inland Lime & Stone Co.

Dolostone

Middle Devonian:
 Detroit River.....Michigan Foundation Quarry
 Co., Inc., Michigan Stone
 Co., France Stone Co. @
 Maybee
 Late Silurian:
 Bass Islands.....France Stone Co., Michigan
 Stone Co.
 Middle Silurian:
 Engadine.....A-O Co., Bethlehem Mines Corp.,
 Michigan Limestone Operation
 @ Cedarville, and Inland Lime
 & Stone Co.
 Cordell Dol.....York Anderson Qy.
 Hendricks Dol.....Inwood Stone Products Co.
 Middle Ordovician:
 Trenton-Black River.....Bichler Gravel Co., Krygoski
 Constr. Co.

Sandstone

Early Mississippian:
 Marshall Sandstone.....Napoleon Stone Co., Quarry
 & Jude Sandstone Co.
 Middle Devonian:
 Sylvania Sandstone.....Ottawa Silica Co.

Shale

Early Pennsylvanian:
 Saginaw Fm.....Grand Ledge Clay Products &
 Michigan Vitriified Tile Co.
 Late Devonian:
 Elsworth Shale.....Medusa Cement
 Antrim Shale.....Huron Cement Div.
 Middle Devonian:
 Gravel Point Fm.....Penn-Dixie Cement Corp.

Allendale
 Assumption
 Bad Axe East
 Bad Axe West
 Bad Axe SE
 Baroda
 Bayport East
 Bayport West
 Benton Harbor
 Benton Heights
 Bridgeman
 Caledonia
 Caseville
 Cedar Springs
 Cedar Springs SW
 Cement City
 Columa
 Cutlerville
 Dansville
 Fayette
 Gilletts Lake
 Grand Rapids East
 Grand Rapids West
 Grandville
 Huron City
 Jackson North
 Jackson South
 Kinde East
 Kinde West
 Leslie
 Long Lake NE
 Lyons
 Michigan Center
 Morenci
 New Buffalo East
 New Buffalo West
 Pleasant Lake
 Port Austin East
 Port Austin West
 Port Hope
 Rockford
 Sodus
 Somerset Center
 Sparta
 Three Oaks
 Tipler
 Williamston

* All are 7½ minute series

Topographic maps are available through Department of Natural Resources,
 Geological Survey Division, 4th Floor - Mason Bldg., Lansing, Michigan
 48926 -- cost \$1.00 each.

