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Mineral Availability System/
Minerals Industry Location System CD-ROM
MAS/MILS CD-ROM

DATA DICTIONARY

The information on this CD-ROM was extracted from the Minerals
Availability System/Mineral Industry Location System (MAS/MILS)
database. MAS/MILS was developed to do systematic assessment of
the future supply of strategic and critical minerals and to record
mineral sites identified in mineral land assessment campaigns for
the United States Government. The MAS/MILS database has two basic
components - MAS and MILS.

The MAS part is focused on 34 mineral commodities. It has
extensive data on about 5,000 significant mineral deposits, mining
operations and processing plants worldwide. This detailed
information was developed to classify identified domestic and
foreign mineral resources according to their respective extraction
technologies, economics, and availability. Much of this
information specifies engineering cost elements and estimates the
economic viability of individual mineral operations. These
proprietary fields are not available to the general public.

The MILS part covers more commodities and has records for over
221,000 mineral occurrences, deposits, mines and processing plants.
Ninety percent of these are in the United States. This more
general information is used to support government agencies which
have land-use planning responsibilities. These agencies look to
the Bureau of Mines both for mineral resource assessments and for
help identifying and remediating inactive and abandoned mine
hazards. The mineral industry has obtained this data to assist in
exploration activities.

The information provided on this CD-ROM is targeted at users
interested in a geographically referenced list of mineral sites.
The data fields included enable searches of selected, non-
proprietary information from the MAS/MILS database by such criteria
as political boundary, geographical coordinates, or particular
commodity associated with an occurrence. Data for a total of
221,151 separate locations are contained on this CD-ROM. Five
browse screens - general identification, location, commodity, cross
reference, and land status - display related collections of some
fields. Limitations in the extraction software has restricted the
number of fields that could be handled in an efficient manner. The
78 fields contained on this CD-ROM originated from four ORACLE
Tables in the MAS/MILS database. ORACLE, the host software used
for the MAS/MILS database, defines a Table as a set of information
which is connected to other sets of information in a relational
format.   These Four Tables are the Mineral Industry Location
System (MILS) Table, the Commodity Table, The Alternate Name Table,
and the Bibliography Table.

On the CD-ROM, these fields (except the Bibliography File) were
combined into one data record structure which corresponds to each
entry on the CD-ROM - MAS/MILS database. A short description of
the general structure of the data fields as well as a dictionary of
the valid data options for each field follows. The field
definitions are the same ones relied on by the numerous evaluators
who have developed the MAS/MILS data over the last 19 years.

The information contained in the associated Bibliography has been

extracted into a separate file. Bibliographic information for a particular deposit can be accessed through its corresponding 10-digit sequence number.

GENERAL STRUCTURE

The following is the general structure of the MAS/MILS CD-ROM data base.

Table Field NAME/Item Description	Size	
STAte name (NATION - FMAS users only)	20	char.
COUnty name (PROVINCE - FMAS users only)	20	char.
SEQuence number	10	char.
FOD Foreign Or Domestic	1	char.
NAMe of deposit or operation	35	char.
TYPe of operation	12	char.
CURrent status	21	char.
LATitude (Latitude Degree Decimal Value)	10	digit
CHARLAT (Latitude Character DDMMSS Value)	7	char.
LONgitude (Longitude Degree Decimal Value)	11	digit
CHARLON (Longitude Character DDDMMSS Value)	8	char.
POR Point Of Reference	8	char.
POP Precision Of Point	5	char.
ELEvation (in meters)	6	char.
ELP ELevation Precision	4	char.
DATum of elevation	1	char.
YFC Year Field Checked YYYY (SITE)	4	char.
ZONe	2	char.
HEMisphere	1	char.
NORthing	7	char.
EASting	6	char.
QUA250 QUAdrangle 1:250,000 scale	18	char.
MAP name	17	char.
SCAle	7	char.
FEDLAND FEDeral LAND status	10	char.
FEDSCA FEDeral SCAle	7	char
DOMain	14	char.
RIVer basin name	24	char.
RBC River Basin Code	4	char.
HUC Hydrologic Unit Code	8	char.
HOL1 1st type of mineral holding	13	char.
HOL2 2nd type of mineral holding	13	char.
HOL3 3rd type of mineral holding	13	char.
MID MSHA Identification Number	8	char.
ISMI ISMI Identification Number	7	char.
GSC Geologic Survey Computer system	7	char.
TOE Type Of Evaluation	1	char.
YOI Year Of Initial file entry YYYY	4	char.
PLT PLant Type	6	char.
PID Plant IDentifier	6	char.
MERidian	14	char.
TWN township	5	char.
RNG range	5	char.
SECtion	2	char.
SUBdivision	6	char.
SURvey status	6	char.
YOD Year Of Discovery YYYY	4	char.
YIP Year of Initial Production YYYY	4	char.
YLP Year of Last Production YYYY	4	char.
MDN Mining District Name	15	char.
COMPANY	40	char.
MINEMET Predominant Mining Method	25	char.
MILLMET Predominant Milling Method	12	char.
PMPMET Predominant Post Mill Processing	35	char.

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MLA Mineral Land Assessment study area            1 char.
DLM Date Last Modification                         6 char.
COM1 Commodity #1                                 14 char.
MOC1 Modifier for Commodity #1                    22 char.
MAR1 Marketability  for Commodity #1               1 char.
COM2 Commodity #2                                 14 char.
MOC2 Modifier for Commodity #2                    22 char.
MAR2 Marketability  for Commodity #2               1 char.
COM3 Commodity #3                                 14 char.
MOC3 Modifier for Commodity #3                    22 char.
MAR3 Marketability  for Commodity #3               1 char.
COM4 Commodity #4                                 14 char.
MOC4 Modifier for Commodity #4                    22 char.
MAR4 Marketability  for Commodity #4               1 char.
COM5 Commodity #5                                 14 char.
MOC5 Modifier for Commodity #5                    22 char.
MAR5 Marketability  for Commodity #5               1 char.
SIC Standard Industry Code                         4 char.
NAM1 Alternate Property Name #1                   35 char.
NAM2 Alternate Property Name #2                   35 char.
NAM3 Alternate Property Name #3                   35 char.
NAM4 Alternate Property Name #4                   35 char.
NAM5 Alternate Property Name #5                   35 char.
NAM6 Alternate Property Name #6                   35 char.
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FIELD DEFINITIONS

STAte/nation name (20 characters) corresponds to positions 1-3 of the SEQuence number (see appendix A).

COUnty/province name (20 characters) corresponds to positions 4-6 of the SEQuence number.

SEQuence number is the unique 10-digit number which references records of information pertaining to a mineral property in the following manner:
o   The three-digit State/nation code (or ocean code) from appendix A is assigned to field positions 1-3.
o   The three-digit county/province code is assigned to field positions 4-6. For the United States, this is the county code from the Department of Commerce (see, appendix B). For foreign deposits, this is the province or political subdivision code as defined by the Minerals Availability Field Office. For ocean mining, the code is the marsden square, a unique three digit number from 001 to 999 which represents an area on the earth's surface of 10 degrees latitude by 10 degrees longitude.
o   The four digits in field positions 7-10 designate a deposit reference number assigned by the evaluator to insure uniqueness of each deposit within State and county (or within nation and province).

FOD indicates whether this is a Domestic deposit (a State or territory of the United States) or a Foreign deposit by either a D or F respectively.

NAMe of the deposit or operation (35 characters) is the primary or most common name.

TYPe of operation (12 characters) refers to the existing/proposed/past type of operation at this site from the table below. It identifies the existing operation when CURrent status equals 'PRODUCER, PAST PRODUCER, TEMP SHUTDOWN or DEVEL DEPOSIT'. It identifies the proposed operation when CURrent status equals 'EXP PROSPECT or RAW PROSPECT'. All processing plants will be coded 'PROC PLANT' here and further defined with the PLant Type

(PLT) and Plant IDentifier (PID) fields.

Entry	Description
UNKNOWN	Unknown or undetermined by evaluator
SURFACE	Surface operation
UNDERGROUND	Underground operation
SURF-UNDERG	Surface-underground operation
OFFSHORE	Any lake/ocean mining operation
WELL	Any well operation
PROC PLANT	Processing plant
LEACH	Leach operation
BRINE OP	Brine recovery operation
GEOTHERMAL	Geothermal operation

CURrent status indicates the operating status of the sites at time of last modification. The description of this 21 character field is defined in the following table:

Entry	Description
UNKNOWN	Unknown or undetermined resource.
PRODUCER	Currently operating mineral property.
PAST PRODUCER	Previously operating mineral property, where the equipment or structures have been removed or abandoned.
DEVEL DEPOSIT	Resource defined, development initiated.
EXP PROSPECT	Resource defined by exploration methods.
RAW PROSPECT	Resource not defined by exploration methods.
INTERMITTENT_PRODUCER	Operates only part of the year. Production interrupted due to seasonal, stockpiling, or other physical restrictions on a regular basis.
TEMP SHUTDOWN	Temporary halt in mineral production, where the property is under care and maintenance status or this status is designated by the current owner and/or operator.
RECLAIMED	Location has been reclaimed.
MINERAL LOCATION	Mineral Location
OTHER	Status other than one of the above.

LATitude is a numeric field 10 characters wide specifying the latitude in standard degree decimal format. A negative symbol preceeding the numeric value indicates the property is in the Southern Hemishere.

CHARLAT is a seven-character latitude field consisting of four subfields:
    a.   Direction (either N or S) is entered in field position 1.
    b.   Field positions 2 and 3 are degrees (maximum value is 90).
    c.   Field positions 4 and 5 are minutes (maximum value is 59).
    d.   Field positions 6 and 7 are seconds (maximum value is 59).

LONgitude is a numeric field 11 characters wide specifying the longitude in standard degree decimal format. A negative symbol preceeding the numeric valued indicates the property is in the Western Hemisphere.

CHARLON   is an eight-character longitude field consisting of four subfields:
   a.   Direction (either E or W) is entered in field position 1.
   b.   Field positions 2-4 are degrees (maximum value is 180).
   c.   Field positions 5 and 6 are minutes (maximum value is
        59).
   d.   Field positions 7 and 8 are seconds (maximum value is
        59).

POR (8 characters), Point Of Reference, indicates the physical
determination point for the elevation, latitude and longitude data,
as selected from the table that follows.

Entry	Description
MAIN ENT	Main Entry to Mine (i.e. Shaft)
TRENCH	Exploration Trench
ORE BODY	Definable Ore Body Structure (out-drop)
CLAIM	Claim
PLANT	Location of Processing Plant
TOWN	Nearest Town
PIT	Discovery Pit

POP Precision Of Point (5 characters right-justified) gives the
precision or maximum deviation from exact POR in meters (e.g. 10,
500, 5000). POP is a required if POR is entered. An entry of
99999 indicates that the precision is over 10000 meters.

ELEvation (6 characters including optional sign) of the Point of
Reference (POR) in meters. Locations with an elevation below the
reference datum must have a minus (-) sign immediately preceding
the numeric value (e.g., a location with an elevation 1800 meters
below the datum would be entered as " -1800").

ELP ELevation Precision (4 characters - right-justified) gives the
precision OF the elevation measurement in meters. (e.g. 10, 100,
500). An entry of 9999 indicates that the precision is over 500
meters.

DATum of elevation provides for elevations to be expressed above or
below either sea level or a local datum. The recommended reference
is sea level whenever possible. Input the appropriate letter from
the list below:

Entry	Description
S	Sea level
L	Local datum
D	Depth of water

YFC Year Field Checked is a four-character year of an on-site
evaluation check made by either personnel or contractors of the
Minerals Availability Program.

The following four items (ZON, HEM, NOR, and EAS) contain the
Universal Transverse Mercator (UTM - an international grid
coordinate system) location of this mineral property.

ZONe is a 2-character field for the UTM ZONe number (01 through 60).

HEMisphere is the UTM HEMisphere (either N or S).

NORthing (7 characters) In the Northern Hemisphere, this represents the
distance in meters NORth of the equator; the equator is 0 meters
with numbers increasing northward. In the Southern Hemisphere, it

represents the distance in meters NORth from about 80 degrees south
latitude; the equator is 10 million meters, with numbers decreasing
southward.

EASting (6 characters) represents the distance in meters from a central
meridian in each UTM zone. The central meridian is given an
arbitrary value of 500,000 meters. Measurements increase to the
east and decrease to the west of the central meridian and are
terminated by the respective east and west boundaries of each of
the 60 zones.

QUA250 QUAdrangle is an 18-character data field which, for domestic
deposits, identifies the U.S. Geological Survey 1:250,000 series
map on which the deposit can be located. These codes and their 18-
character entries are shown in appendix B-QUA250. This field is
valid for domestic deposits and is not used in foreign or ocean
deposits.

MAP name (17 characters) of the largest-scale map available for the
area of the deposit. If the name is larger than 17 characters it
has been shortened to a recognizable name.

SCAle (7 characters) indicates the SCAle of the map identified
field above:

Entry	Description
7.5 MIN	7.5 minutes
15 MIN	15 minutes
30 MIN	30 minutes
1:250K	1:250,000
1:500K	1:500,000
1:1 MIL	1:1,000,000

FEDLAND (10 characters) identifies the FEDeral LAND status of this
location. The value for this field was generated utilizing GIS
technology with the LATitude (LAT) and LONgitude (LON) of this
location. Valid entries for this field are:

Entry	Definition
BIA	Indian Reservation lands
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
DOD	Department of Defense lands
FS	Forest Service
FWS	Fish and Wildlife lands
NPS	National Parks lands
TVA	Tennessee Valley Authority

FEDSCA (7 characters) indicates the SCAle of the coverage used to
determine the FEDLAND entry. Valid entries are:

Entry	Description
7.5 MIN	7.5 minutes
15 MIN	15 minutes
30 MIN	30 minutes
1:100K	1:100,000
1:250K	1:250,000
1:500K	1:500,000
1:1 MIL	1:1,000,000
1:2 MIL	1:2,000,000

DOMain (14 characters) describes the type of public or private land

holding of the deposit area:

Code	Entry	Code	Entry	Code	Entry
00	UNKNOWN	33	STATE OFFSHORE	47	INDIAN RES
05	MIXED	40	FEDERAL	48	NAT OFFSHORE
10	PRIVATE	41	NAT FOREST	49	BLM ADMIN
15	MUNICIPALITY	42	NAT RECREATION	50	MILITARY RES
20	COUNTY	43	NAT WILDERNESS	61	FORGN OFFSHORE
30	STATE	44	NAT PRIMITIVE	71	INTERNAT WATER
31	STATE FOREST	45	NAT PARK	72	UN ADMIN
32	STATE PARK	46	NAT MONUMENT		

RBC River Basin Code (4 characters) is defined in the U.S. Geological Survey Office of Water Data Coordination publication, Catalog of Information on Water Data-Maps Showing Location of Water Quality Stations. These maps show major drainage area boundaries coded from 1 through 97; each of these major drainage areas is further subdivided into minor areas which are assigned letter codes (e.g., 1A, 4B, 23C, 26AA, etc.). The data base entry consists of two numeric digits (leading zeros are required) followed by either one or two alphabetic characters (e.g., "01A", "04B", "23C", "26AA", etc.).

RIVer (24 characters) is optional. If left blank it is a computer-generated data field that will contain the name of the RIVer basin indicated by the River Basin Code.

HUC Hydrologic Unit Code is an 8-character replacement for the RBC, currently being used by the Water Resources Division of the U.S. Geological Survey. This code more precisely pinpoints the water drainage area and it is recommended that it be used as an addition to the data provided by the River Basin Code. The code for a particular deposit can be obtained from a Hydrologic Unit Map (1974+ - date varies) for a given State. These maps have been published by the Water Resources Division of the U.S. Geological Survey and are available from the district office responsible for the State(s) concerned.

HOL# designates a 13-character data item for entry of mineral and access rights (holdings) available for the resources contained on this property. HOL1 is the primary type of mineral holding from the table below. HOL2 and HOL3 are the second and third type, respectively, of mineral holding from the table below.

Entry	Entry
UNKNOWN	PRIVATE LEASE
LOCATED CLAIM	FEE OWNERSHIP
PATENTED	MINERALS ONLY
FEDERAL LEASE	OTHER
STATE LEASE	

MID Mine Safety and Health Administration (MSHA) Identification Number which corresponds to this particular property. Most often an operating or temporarily closed facility.

ISMI The International Strategic Minerals Inventory identification number which corresponds to this particular property. Limited to those commodities which were studied by this international cooperation.

GSC Geological Survey's Computerized seven character deposit number for their Mineral Resource Data System (MRDS) data base entry that

relates to this MAS deposit entry.

TOE Type Of Evaluation is a single-character representing the type
of deposit information currently on the data base. Valid entries
are:

Entry	Definition
A	MILS default from ADIT database.
M	Location information resulting from general sources; data may not be confirmed.
L	Location information with validity confirmed through investigation by an evaluator.
R	Resource data present, in addition to MILS information.
C	Complete deposit description, often indicates thorough MAS evaluation.

YOI Year Of Initial data entry contains the four-digit year of
initial entry of this property into the MAS data base. The
contents of this field should not be changed when data is entered
for update purposes. System will default to current year for new
entries.

PLT and PID are available when an evaluator wishes to identify a
processing plant (mill, smelter, refiner, etc.) and show its
location, owners, feed, etc. The mill would be assigned a unique
sequence number and TYPe of operation would be entered as code 06
"PROC PLANT". The following two data fields further identify the
plant.

PLT (6 characters) PLant Type identifies the primary type of
processing plant, from the following table.

Entry	Description
BENEF	beneficiation (mill)
LEACH	leach
AGGLOM	agglomeration
DRI	Direct Reduced Iron plant
PELLET	pellet plant
SINTER	sinter plant
SMELTR	smelter
SYNRTL	synthetic rutile
PIG	pigment plant
METAL	metal plant
REFINR	refiner
SMLREF	smelter/refiner
ACID	acid plant
MANUF	manufacturing plant

PID (6 characters) Plant IDentifier is a more detailed subdivision
of plant type listing the primary processing method used, from the
table on the next page.

Entry	Description
DRY	dry
WASH	wash
CRUSH	crush
GRAV	gravity
FLOAT	flotation
MAG	magnetic
ESTAT	electrostatic
E-M	electrostatic-magnetic

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TI-CL           TIO2 pigment-chloride
TI-S            TIO2 pigment-sulfide
TI              TI metal
PPT             precipitation
SX-EW           solvent extraction-electrowin
IX-EW           ion exchange-electrowin
SINTER          sinter
PELLET          pellet
NODULE          nodule
COMPCT          compact
BRIQUT          briquette
S-PYRO          smelter-pyrometallurgy
REDUCT          reduction
R-PYRO          refiner-pyrometallurgy
HYDRO           hydromet
ELECT           electrowinning
DISTLL          distillation
CRYSTL          crystallization
CAL-DB          calcination/dead burn
BAYER           Bayer
HARRIS          Harris
PARKES          Parkes
FERRO           ferro alloy plant
FIBRE           fibre plant (e.g. asbestos plant)
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MER, TWN, RNG, SEC, SUB and SUR contain the deposit's Public Land
Survey location information.

MERidian (14 characters) contains the name of the Principal
Meridian from the following table:

Code	Entry	Code	Entry	Code	Entry
01	1ST PRINCIPAL	17	INDIAN	33	WILLAMETTE
02	2ND PRINCIPAL	18	LOUISIANA	34	WIND RIVER
03	3RD PRINCIPAL	19	MICHIGAN	35	OHIO
04	4TH PRINCIPAL	20	MONTANA PRINC	36	GT MIAMI RIVER
05	5TH PRINCIPAL	21	MOUNT DIABLO	37	MUSKINGUM RIV
06	6TH PRINCIPAL	22	NAVAJO	38	OHIO RIVER
07	BLACK HILLS	23	NEW MEXICO	39	1ST SCIOTO RIV
08	BOISE	24	ST HELENA	40	2ND SCIOTO RIV
09	CHICKASAW	25	ST STEPHENS	41	3RD SCIOTO RIV
10	CHOCTAW	26	SALT LAKE	42	ELLICOTTS LINE
11	CIMARRON	27	SAN BERNARDINO	43	12 MILE SQUARE
12	COPPER RIVER	28	SEWARD	44	KATEEL RIVER
13	FAIRBANKS	29	TALLAHASSEE	45	UMIAT
14	GILA & SALT R	30	UINTAH SPECIAL	96	UNKNOWN
15	HUMBOLDT	31	UTE	99	VARIOUS
16	HUNTSVILLE	32	WASHINGTON		

TWN ToWNship (5 characters) includes the township number and
direction: the first three characters are the township number with
leading zeros, the fourth character is either blank or contains a
plus sign (+) to indicate a fractional township, and the fifth
character locates the township north (N) or south (S) of the base
line (e.g., T 32 N is entered as "032 N", and T 104-1/2 S is
"104+S").

RNG RaNGe (5 characters) includes the range number and direction,
using the same conventions outlined in TWN. Except that the
directions used for ranges are either east (E) or west (W) of the
base line.

SECtion (2 characters) is the section number, 01 to 36, including the
leading zero.

SUBdivision (6 characters) uses the accepted practice of section subdivision naming (e.g., NWSESW is the northwest quarter of the southeast quarter of the southwest quarter). Numerical codes cannot be used for entry of this left-justified field; the following alphanumeric abbreviations must be used:

Entry	Description	Entry	Description
C	Center	NE	Northeast quarter
N2	North half	NW	Northwest quarter
S2	South half	SE	Southeast quarter
E2	East half	SW	Southwest quarter
W2	West half	(blank)	No section subdivision

SURvey status (6 characters) is to be selected from the following table:

Code	Entry	Description
00	UNK	unknown
01	UNSURV	unsurveyed
02	SURVEY	surveyed
03	GRID	superimposed grid

YOD (4 characters) indicates the Year Of Discovery of the deposit.

YIP (4 characters) records the Year of Initial significant Production from the deposit.

YLP (4 characters) records the Year of Last Production.

MDN (15 characters) contains the Mining District Name, when applicable. The field is free-form, although an effort should be made to geographically standardize entries.

COMPANY (40 characters) contains the principal owner/company name or a summary of the most significant owners identified with the operation. For this file, the first company listed in the Owners Table was sued as the principal owner/company in this field.

MINEMET MINE METhod (25 Characters) identifies the most predominant mining method being used at this site.

Method	Entry
UNDERGROUND	OPEN STOPE
	GOPHERING (COYOTING)
	BREAST STOPING
	ROOM AND PILLAR
	UNDERHAND
	GLORY HOLE
	OVERHAND
	PILLAR AND CHAMBER
	SUBLEVEL
	OTHER OPEN STOPE METHODS
	TIMBERED STOPES
	OVERHAND SQUARE-SET
	UNDERHAND SQUARE-SET
	HORIZONTAL SQUARE-SET
	OTHER TIMBERED STOPES
	FILLED STOPES
	TIMBER WITH SUBSEQUENT FILL
	HORIZ CUT & FILL W/WASTE ROCK

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                        HORIZ CUT & FILL W/TAILINGS
                        RESUING
                        ASCENDING CROSSCUTS
                        DESCENDING CROSSCUTS
                        INCLINED CUT AND FILL
                        OTHER FILLED STOPE METHODS
                    CAVING METHODS
                        TOP SLICING
                        INCLINED TOP SLICING
                  SUBLEVEL CAVING
                        BLOCK CAVING
                        LONGWALL CAVING
                        OTHER CAVING METHODS
                    SHRINKAGE METHODS
                        OVERHAND SHRINKAGE
                        OTHER SHRINKAGE METHODS
                    COMBINED METHODS
                        SHRINKAGE W/CAVING
                        SHRINKAGE W/TIMBERED METHODS
                        SHRINKAGE W/CUT AND FILL
                        TIMBERED STOPES W/CAVING METHODS
                        CAVING METHODS W/TIMBERED METHODS
                        OTHER COMBINED METHODS
                        AUGER MINING
                        SOLUTION MINING
                        LEACHING IN PLACE (IN SITU)
                        FRASCH PROCESS
                        BORE HOLE SUSPENSION MINING
                        BRINE WELL
                    COAL MINING METHODS
                        CONVENTIONAL ROOM & PILLAR
                        CONVENTIONAL W/PILLAR EXTRACTION
                        CONTINUOUS
                        CONTINUOUS W/PILLAR EXTRACTION
                        LONGWALL
                        SHORTWALL
                        HYDRAULIC
                        COMBINED COAL MINING METHODS
        SURFACE         OPEN PIT
                        STRIP-HILLSIDE
                        STRIP-LEVEL
                        BENCH (BERM)
                        QUARRY
                        GLORY HOLE
                        STRIP-MOUNTAINTOP
                        AUGER MINING
                        STRIP-AREA
                        STRIP-AUGER
                        ALLUVIAL MINING
                        HYDRAULICKING
                        DREDGING
                        GROUND SLUICING
                        NONFLOATING PLANT
                        IN SITU LEACH
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MILLMET MILL METhod (12 Characters) identifies the most predominant milling method being used at this site. Select the most appropriate mill method from the following table:

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    Entry               Description

    UNSPECIFIED         unspecified
    HANDSORT            handsort
    SIZING              sizing
    WASHING             washing
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GRAVITY              gravity
JIG                  jig
CLASSIFIER           classifier
HEAVY MEDIA          heavy media
FLOTATION            flotation
HYDROMET             hydrometallurgy unspecified
LEACH-PPT            leach-precipitation
LPF                  leach-precipitation-float
L-SX-PPT             leach-solvent-extract-precipitation
L-IX                 leach-ion exchange
ACIDULATION          acidulation
L-SX-EW              leach-solvent-extract-electrowin
MC                   Merrill-Crowe
CIL-EW               carbon-in-leach-electrowin
CIL-MC               carbon-in-leach-Merrill-Crowe
CIP-EW               carbon-in-pulp-electrowin
CIP-MC               carbon-in-pulp-Merrill-Crowe
AUT-CIL-EW           autoclave-carbon-in-leach-electrowin
AUT-CIL-MC           autoclave-carbon-in-leach-Merrill-Crowe
AUT-CIP-EW           autoclave-carbon-in-pulp-electrowin
AUT-CIP-MC           autoclave-carbon-in-pulp-Merrill-Crowe
HL-EW                heap leach-electrowin
HL-MC                heap leach-Merrill-Crowe
HL-CC-EW             heap leach-carbon column-Merrill-Crowe
HL-AGG-MC            heap leach-agglomerate-Merrill-Crowe
HL-AGG-CC-EW         heap leach-agglomerate-carbon column-
                        electrowin
HL-AGG-CC-MC         heap leach-agglomerate-carbon column-
                        Merrill-Crowe
CRYSTALIZ            crystallization
MAGNETIC             magnetic
ELECTROSTAT          electrostatic
MAG/ELECTRO          magnetic and electrostatic
PYROMET              pyrometallurgy unspecified
DISTILL              distillation
TEMP DECOMP          thermal decomposition
ELECTRO FAC          electrolytic facilities
SINTER PLT           sinter plants
BRIQUETTING          briquetting
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PMPMET Post Mill Processing METhod (35 Characters) identifies the most predominant post mill processing method being used at this site.

Method	Code	Entry
PELLETIZING	210	PELLET - GRATE KILN
	211	PELLET - TRAVELING GRATE
	212	PELLET - SHAFT FURNACE
	213	PELLET - CIRCULAR GRATE
SMELTER	310	REVERBERATORY
	311	REVERB GREEN CHARGE
	312	REVERB CALCINE CHARGE
	313	REVERB OXY-FUEL
	320	ELECTRIC FURNACE
	321	ELECT GREEN CHARGE
	322	ELECT CALCINE CHARGE
	330	FLASH
	331	INCO FLASH
	332	OUTOKUMPU FLASH
	340	CONTINUOUS
	341	MITSUBISHI CONT
	342	NORANDA CONT
	350	BLAST FURNACE
	360	ALUMINOTHERMIC

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                    370        HALL-HEROULT
                    380        IMPERIAL BLAST FURNACE
                    390        IMPERIAL
    REFINERY        410      ELECTROLYTIC
                    420      ELECTROWINNING
                    430      FIRE REFINED
                    431      ELECTROLYTIC/FIRE REF.
                    440      MATTE LEACH-SX-PPT-FIRE REFINE.
                    450      UNSPECIFIED BAYER
                    451        MODIFIED BAYER
                    452        AMERICAN BAYER
                    453        EUROPEAN BAYER
                    454        COMBINATION BAYER
                    460      REFLUXER COLUMNS
    OTHER           510        SYNTHETIC RUTILE
                    520      CHLORIDE PIGMENT PLANT
                    530      SULFIDE PIGMENT PLANT
                    540      KROLL PROCESS (TI METAL)
                    550      ACIDULATION
```

MLA Mineral Land Assessment study area is a 1 character field that
contains a 'Y' if an alternate Name (N) with record number greater
than '49' exists. These (greater than 49) alternate Name (N)
records have been reserved for names used to identify Mineral Land
Assessment study areas.

DLM Date Last Modification (6 characters) contains date of entry or the
last modification made to the MILS table.

The COM#, MOC#, and MAR# fields identify the numerous products that can be
recovered from a mineral deposit. These products, or commodities,
cover a wide spectrum (e.g., pure metals, liquids, gases, mineral
compounds, stone, etc.) For this CD-ROM the
first five commodities (COM#) found at a property are listed with its
commodity modifier (MOD#), and marketability code (MAR#). These commodities
correspond to COM1, MOD1, MAR1; COM2, MOD2, MAR2; etc.

COM# is a Commodity name (14 characters) corresponds to the valid entries
found in Appendix C.

MOC# is a Modifier Of Commodity (22 characters) and an integral part of
the COMmodity. See Appendix C.

MAR# is Marketability; a single-character indicator of this commodity's
market status, using the following abbreviations:

Code	Description	Definition
P	Primary Product	Major product affecting revenue
C	Co-product	A product of equal or near equal value to another product in terms of producing revenue
B	Byproduct	A product that helps the economic viability of a property, but which would not be produced unless other primary products or co-products are being recovered
R	Recoverable	A product that is not identifiable as a primary

product, co-product, or byproduct, but is recoverable or potentially recoverable. The evaluator should identify in the comments if this is a commodity proposed for stockpiling if no market presently exists, or if revenues will exist, but the status (P, C, B) of the commodity is unknown.

A   Affecting   Deleterious products or impurities that affect the marketability of the marketability recovered product(s).

SIC Standard Industrial Classification code, as defined by the Office of Management and Budget, is a four-character optional entry (see Appendix D).

NAM# corresponds to multiple alternate or secondary names associated with this mineral property up to a total of six. The NAM1 through NAM6 fields (each 35 character) correspond to the first six fields found in the MAS data base Alternate Name Table.

APPENDIX A - VALID COUNTRY AND STATE NAMES

CODE	COUNTRY OR STATE	CODE	COUNTRY OR STATE

NORTH AMERICA

UNITED STATES:

CODE	COUNTRY OR STATE	CODE	COUNTRY OR STATE
001	ALABAMA	029	MISSOURI
002	ALASKA	030	MONTANA
004	ARIZONA	031	NEBRASKA
005	ARKANSAS	032	NEVADA
006	CALIFORNIA	033	NEW HAMPSHIRE
008	COLORADO	034	NEW JERSEY
009	CONNECTICUT	035	NEW MEXICO
010	DELAWARE	036	NEW YORK
011	DISTRICT OF COLUMBIA	037	NORTH CAROLINA
012	FLORIDA	038	NORTH DAKOTA
013	GEORGIA	039	OHIO
015	HAWAII	040	OKLAHOMA
016	IDAHO	041	OREGON
017	ILLINOIS	042	PENNSYLVANIA
018	INDIANA	044	RHODE ISLAND
019	IOWA	045	SOUTH CAROLINA
020	KANSAS	046	SOUTH DAKOTA
021	KENTUCKY	047	TENNESSEE
022	LOUISIANA	048	TEXAS
023	MAINE	049	UTAH
024	MARYLAND	050	VERMONT
025	MASSACHUSETTS	051	VIRGINIA
026	MICHIGAN	053	WASHINGTON
027	MINNESOTA	054	WEST VIRGINIA
028	MISSISSIPPI	055	WISCONSIN
		056	WYOMING

OTHER U.S. AREAS:

057	PACIFIC ISLE PS	074	SWAN ISLANDS

```
060    AMERICAN SAMOA          075    TRUST TERRITORIES, P
061    PANAMA CANAL ZONE       076    US MISC CARIBBEAN IS
062    CANTON & ENDERBURY I    077    US MISC PACIFIC IS
066    GUAM                    078    VIRGIN ISLANDS
067    JOHNSTON ATOLL          079    WAKE ISLAND
071    MIDWAY ISLANDS          085    FOREIGN COUNTRY(IES)
072    PUERTO RICO             098    UNKNOWN STATE
073    RYUKYU IS., SOUTH       099    VARIOUS STATES
```

OTHER NORTH AMERICA

```
101    GREENLAND               232    BERMUDA
122    CANADA                  236    BAHAMAS
161    MIQUELON-ST PIERRE I    239    CUBA
201    MEXICO                  242    JAMAICA
205    GUATEMALA               245    HAITI
208    BELIZE                  247    DOMINICAN REPUBLIC
211    EL SALVADOR             248    LEEWARD-WINDWARD IS
215    HONDURAS                272    BARBADOS
219    NICARAGUA               274    TRINIDAD AND TOBAGO
223    COSTA RICA              277    NETH. ANTILLES
225    PANAMA                  283    FR W INDIES
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SOUTH AMERICA

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301    COLOMBIA                335    BOLIVIA
307    VENEZUELA               337    CHILE
312    GUYANA                  351    BRAZIL
315    SURINAM                 353    PARAGUAY
317    FRENCH GUIANA           355    URUGUAY
331    ECUADOR                 357    ARGENTINA
333    PERU                    372    FALKLAND ISLANDS
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EUROPE

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400    ICELAND                 455    POLAND
401    SWEDEN                  456    ARMENIA
403    NORWAY                  457    AZERBAIJAN
405    FINLAND                 458    GEORGIA
409    DENMARK                 459    KAZAKHSTAN
412    UNITED KINGDOM          460    KRYGYZSTAN
419    IRELAND (EIRE)          461    CIS
421    NETHERLANDS             462    MOLDOVA
423    BELGIUM                 463    TAJIKISTAN
425    LUXEMBOURG              464    TURKMENISTAN
427    FRANCE                  465    UZBEKISTAN
428    GERMANY FR              467    AZORES
429    GERMANY DR              469    SPAIN
433    AUSTRIA                 470    ANDORRA
435    CZECH REPUBLIC          471    PORTUGAL
436    SLOVAKIA                472    GIBRALTER
437    HUNGARY                 473    MALTA AND GOZO
441    SWITZERLAND             474    MONACO
443    LIECHTENSTEIN           475    ITALY
447    ESTONIA                 479    YUGOSLAVIA
449    LATVIA                  481    ALBANIA
451    LITHUANIA               484    GREECE
452    RUSSIA                  485    ROMANIA
453    BELARUS                 487    BULGARIA
454    UKRAINE                 489    TURKEY
                               491    CYPRUS
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ASIA

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502    SYRIA                   539    BANGLADESH
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504	LEBANON	542	SRI LANKA
505	IRAQ	546	BURMA
507	IRAN	549	THAILAND
508	ISRAEL	550	VIETNAM
511	JORDAN	553	LAOS
512	GAZA STRIP	555	CAMBODIA
513	KUWAIT	557	MALAYSIA
517	SAUDI ARABIA	559	SINGAPORE
518	QATAR	560	INDONESIA
520	UA EMIRATES	565	PHILIPPINES
521	YEMEN ARAB REP-ADEN	566	MACAU
522	YEMEN PDR(SANA)	567	S.AND S.E.ASIA,NEC.
523	OMAN	570	CHINA PR
525	BAHRAIN	574	MONGOLIA
531	AFGHANISTAN	579	KOREA PDR
533	INDIA	580	KOREA R
535	PAKISTAN	582	HONG KONG
536	NEPAL	583	TAIWAN (ROC)
537	BHUTAN	588	JAPAN
		590	NANSEI ISLANDS NEC

AUSTRALIA & OCEANIA

602	AUSTRALIA	622	BRIT PAC. ISLANDS
604	PAPUA NEW GUINEA	641	FRENCH PACIFIC IS.
614	NEW ZEALAND	684	TR. TERR. PAC. IS.
615	WESTERN SAMOA	686	FIJI
617	NAURU	686	OTHER PAC. IS, NEC.
		699	ANTARCTICA

AFRICA

714	MOROCCO	760	BURKINA FASO
715	WESTERN SAHARA	761	BENIN
721	ALGERIA	762	ANGOLA
723	TUNISIA	763	CONGO REPUBLIC
725	LIBYA	764	GUINEA-BISSAU
729	EGYPT	765	LIBERIA
732	SUDAN	766	ZAIRE
733	CANARY ISLANDS	767	BURUNDI
734	CAPE VERDE ISLANDS	769	RWANDA
736	SPANISH AFRICAN ISL	770	SOMALIA
738	EQ GUINEA	774	ETHIOPIA
739	SAO TOME-PRINCIPE	777	DJIBOUTI
741	MAURITANIA	778	UGANDA
742	CAMEROON	779	KENYA
744	SENEGAL	782	SEYCHELLES
745	MALI	783	TANZANIA
746	GUINEA	784	MAURITIUS
747	SIERRA LEONE	787	MOZAMBIQUE
748	IVORY COAST	788	MADAGASCAR
749	GHANA	789	COMORO ISLANDS
750	GAMBIA	790	FR. IND. OC. AREA
751	NIGER	791	SOUTH AFRICA
752	TOGO	792	NAMIBIA
753	NIGERIA	793	BOTSWANA
754	CENTRAL AFRICAN REP.	794	ZAMBIA
755	GABON	795	SWAZILAND
756	CHAD	796	ZIMBABWE
758	BR W AFRICA	797	MALAWI
759	MADEIRA ISLANDS	799	LESOTHO

OCEANS

900	NORTH PACIFIC	915	SOUTH ATLANTIC

905	SOUTH PACIFIC	920	ARCTIC OCEAN
910	NORTH ATLANTIC	925	ANTARCTIC OCEAN
911	U.S. VIRGIN ISLANDS	930	INDIAN OCEAN
		935	MEDITERRANEAN SEA

APPENDIX B - STATE/COUNTY VALUES

Code County Name   Code County Name   Code County Name

ALABAMA
  State Code: 001

Code	County Name	Code	County Name	Code	County Name
001	Autauga	047	Dallas	091	Marengo
003	Baldwin	049	De Kalb	093	Marion
005	Barbour	051	Elmore	095	Marshall
007	Bibb	053	Escambia	097	Mobile
009	Blount	055	Etowah	099	Monroe
011	Bullock	057	Fayette	101	Montgomery
013	Butler	059	Franklin	103	Morgan
015	Calhoun	061	Geneva	105	Perry
017	Chambers	063	Greene	107	Pickens
019	Cherokee	065	Hale	109	Pike
021	Chilton	067	Henry	111	Randolph
023	Choctaw	069	Houston	113	Russell
025	Clarke	071	Jackson	115	St. Clair
027	Clay	073	Jefferson	117	Shelby
029	Cleburne	075	Lamar	119	Sumter
031	Coffee	077	Lauderdale	121	Talladega
033	Colbert	079	Lawrence	123	Tallapoosa
035	Conecuh	081	Lee	125	Tuscaloosa
037	Coosa	083	Limestone	127	Walker
039	Covington	085	Lowndes	129	Washington
041	Crenshaw	087	Macon	131	Wilcox
043	Cullman	089	Madison	133	Winston
045	Dale				

        ALASKA
     State Code: 002

No county subdivision in Alaska; topographic quadrangle names are
used instead.

Code	County Name	Code	County Name	Code	County Name
149	Adak	067	Healy	017	Point Hope
127	Afognak	072	Holy Cross	009	Point Lay
028	Ambler River	079	Hooper Bay	116	Port Alexander
146	Amukta	020	Howard Pass	138	Port Moller
085	Anchorage	038	Hughes	132	Pribilof Islands
024	Arctic	107	Icy Bay	122	Prince Rupert
148	Atka	073	Iditarod	151	Rat Islands
110	Atlin	012	Ikpikpuk River	056	Ruby
153	Attu	103	Iliamna	081	Russian Mission
090	Baird Inlet	112	Juneau	061	St. Lawrence
027	Baird Mts.	136	Kaguyak	088	St. Matthew
001	Barrow	057	Kantishna River	062	St. Michael
008	Barter Island	130	Karluk	014	Sagavanirktok
040	Beaver	046	Kateel River	145	Samalga Island
006	Beechey Point	094	Kenai	147	Seguam
044	Bendeleben	120	Ketchikan	036	Selawik
097	Bering Glacier	021	Killik River	104	Seldovia
091	Bethel	152	Kiska	095	Seward
039	Bettles	131	Kodiak	034	Shishmaref
059	Big Delta	035	Kotzebue	037	Shungnak
070	Black	100	Kuskokwim Bay	140	Simeonof Island
042	Black River	071	Kwiguk	114	Sitka

105	Blying Sound	093	Lake Clark	109	Skagway
118	Bradfield Canal	083	Lime Hills	082	Sleetmute
128	Bristol Bay	049	Linvengood	053	Solomon
045	Candle	011	Lookout Ridge	137	Stepovak Bay
099	Cape Mendenhall	080	Marshall	115	Sumdum
031	Chandalar	087	McCarthy	029	Survey Pass
022	Chandler Lake	074	McGrath	134	Sutwik Island
051	Charley River	003	Meade River	025	Table Mtn.
133	Chignik	065	Medfra	113	Taku River
032	Christian	047	Melozitna	075	Talkeetna
050	Circle	106	Middleton Island	076	Talkeetna Mtns.
139	Cold Bay	019	Miskeguk Mtn.	069	Tanacross
033	Coleen	111	Mt. Fairweather	048	Tanana
096	Cordova	068	Mt. Hayes	092	Taylor Mtns.
119	Craig	126	Mt. Katmai	043	Teller
018	De Long Mts.	066	Mt. McKinley	004	Teshekpuk
016	Demarcation Point	015	Mt. Michelson	135	Trinity Islands
102	Dillingham	098	Mt. St. Elias	084	Tyonek
121	Dixon Entrance	078	Nabesna	129	Ugashik
060	Eagle	125	Naknek	013	Umiat
058	Fairbanks	026	Noatak	144	Umnak
141	False Pass	052	Nome	063	Unalakleet
007	Flaxman Island	054	Norton Bay	143	Unalaska
041	Fort Yukon	055	Nulato	143	Unimak
150	Gareloi Island	089	Nunivak Island	010	Utukok River
101	Goodnews	124	Nushagak Bay	086	Valdez
077	Gulkana	064	Ophir	002	Wainwright
123	Hagemeister Island	117	Petersburg	030	Wiseman
005	Harrison Bay	023	Philip Smith Mts.	108	Yakutat

ARIZONA
State Code: 004

001	Apache	011	Greenlee	019	Pima
003	Cochise	012	La Paz	021	Pinal
005	Coconino	013	Maricopa	023	Santa Cruz
007	Gila	015	Mohave	025	Yavapai
009	Graham	017	Navajo	027	Yuma

ARKANSAS
State Code: 005

001	Arkansas	051	Garland	101	Newton
003	Ashley	053	Grant	103	Ouachita
005	Baxter	055	Greene	105	Perry
007	Benton	057	Hempstead	107	Phillips
009	Boone	059	Hot Spring	109	Pike
011	Bradley	061	Howard	111	Poinsett
013	Calhoun	063	Independence	113	Polk
015	Carroll	065	Izard	115	Pope
017	Chicot	067	Jackson	117	Prairie
019	Clark	069	Jefferson	119	Pulaski
021	Clay	071	Johnson	121	Randolph
023	Cleburne	073	Lafayette	123	St. Francis
025	Cleveland	075	Lawrence	125	Saline
027	Columbia	077	Lee	127	Scott
029	Conway	079	Lincoln	129	Searcy
031	Craighead	081	Little River	131	Sebastian
033	Crawford	083	Logan	133	Sevier
035	Crittenden	085	Lonoke	135	Sharp
037	Cross	087	Madison	137	Stone
039	Dallas	089	Marion	139	Union
041	Desha	091	Miller	141	Van Buren
043	Drew	093	Mississippi	143	Washington
045	Faulkner	095	Monroe	145	White

| 047 | Franklin | 097 | Montgomery | 147 | Woodruff |
| 049 | Fulton | 099 | Nevada | 149 | Yell |

CALIFORNIA
State Code: 006

001	Alameda	041	Marin	079	San Luis Obispo
003	Alpine	043	Mariposa	081	San Mateo
005	Amador	045	Mendocino	083	Santa Barbara
007	Butte	047	Merced	085	Santa Clara
009	Calaveras	049	Modoc	087	Santa Cruz
011	Colusa	051	Mono	089	Shasta
013	Contra Costa	053	Monterey	091	Sierra
015	Del Norte	055	Napa	093	Siskiyou
017	El Dorado	057	Nevada	095	Solano
019	Fresno	059	Orange	097	Sonoma
021	Glenn	061	Placer	099	Stanislaus
023	Humboldt	063	Plumas	101	Sutter
025	Imperial	065	Riverside	103	Tehama
027	Inyo	067	Sacramento	105	Trinity
029	Kern	069	San Benito	107	Tulare
031	Kings	071	San Bernardino	109	Tuolumne
033	Lake	073	San Diego	111	Ventura
035	Lassen	075	San Francisco	113	Yolo
037	Los Angeles	077	San Joaquin	115	Yuba
039	Madera				

COLORADO
State Code: 008

001	Adams	043	Fremont	085	Montrose
003	Alamosa	045	Garfield	087	Morgan
005	Arapahoe	047	Gilpin	089	Otero
007	Archuleta	049	Grand	091	Ouray
009	Baca	051	Gunnison	093	Park
011	Bent	053	Hinsdale	095	Phillips
013	Boulder	055	Huerfano	097	Pitkin
015	Chaffee	057	Jackson	099	Prowers
017	Cheyenne	059	Jefferson	101	Pueblo
019	Clear Creek	061	Kiowa	103	Rio Blanco
021	Conejos	063	Kit Carson	105	Rio Grande
023	Costilla	065	Lake	107	Routt
025	Crowley	067	La Plata	109	Saguache
027	Custer	069	Larimer	111	San Juan
029	Delta	071	Las Animas	113	San Miguel
031	Denver	073	Lincoln	115	Sedgwick
033	Dolores	075	Logan	117	Summit
035	Douglas	077	Mesa	119	Teller
037	Eagle	079	Mineral	121	Washington
039	Elbert	081	Moffat	123	Weld
041	El Paso	083	Montezuma	125	Yuma

CONNECTICUT
State Code: 009

001	Fairfield	007	Middlesex	013	Tolland
003	Hartford	009	New Haven	015	Windham
005	Litchfield	011	New London		

DELAWARE
State Code: 010

| 001 | Kent | 003 | New Castle | 005 | Sussex |

DISTRICT OF COLUMBIA
State Code: 011

001 District of Columbia

FLORIDA
State Code: 012

001	Alachua	047	Hamilton	091	Okaloosa
003	Baker	049	Hardee	093	Okeechobee
005	Bay	051	Hendry	095	Orange
007	Bradford	053	Hernando	097	Osceola
009	Brevard	055	Highlands	099	Palm Beach
011	Broward	057	Hillsborough	101	Pasco
013	Calhoun	059	Holmes	103	Pinellas
015	Charlotte	061	Indian River	105	Polk
017	Citrus	063	Jackson	107	Putnam
019	Clay	065	Jefferson	109	St. Johns
021	Collier	067	Lafayette	111	St. Lucie
023	Columbia	069	Lake	113	Santa Rosa
025	Dade	071	Lee	115	Sarasota
027	De Soto	073	Leon	117	Seminole
029	Dixie	075	Levy	119	Sumter
031	Duval	077	Liberty	121	Suwannee
033	Escambia	079	Madison	123	Taylor
035	Flagler	081	Manatee	125	Union
037	Franklin	083	Marion	127	Volusia
039	Gadsden	085	Martin	129	Wakulla
041	Gilchrist	087	Monroe	131	Walton
043	Glades	089	Nassau	133	Washington
045	Gulf				

GEORGIA
State Code: 013

001	Appling	109	Evans	217	Newton
003	Atkinson	111	Fannin	219	Oconee
005	Bacon	113	Fayette	221	Oglethorpe
007	Baker	115	Floyd	223	Paulding
009	Baldwin	117	Forsyth	225	Peach
011	Banks	119	Franklin	227	Pickens
013	Barrow	121	Fulton	229	Pierce
015	Bartow	123	Gilmer	231	Pike
017	Ben Hill	125	Glascock	223	Polk
019	Berrien	127	Glynn	235	Pulaski
021	Bibb	129	Gordon	237	Putnam
023	Bleckley	131	Grady	239	Quitman
025	Brantley	133	Greene	241	Rabun
027	Brooks	135	Gwinnett	243	Randolph
029	Bryan	137	Habersham	245	Richmond
031	Bulloch	139	Hall	247	Rockdale
033	Burke	141	Hancock	249	Schley
035	Butts	143	Haralson	251	Screven
037	Calhoun	145	Harris	253	Seminole
039	Camden	147	Hart	255	Spalding
043	Candler	149	Heard	257	Stephens
045	Carroll	151	Henry	259	Stewart
047	Catoosa	153	Houston	261	Sumter
049	Charlton	155	Irwin	263	Talbot
051	Chatham	157	Jackson	265	Taliaferro
053	Chattahoochee	159	Jasper	267	Tattnall
055	Chattooga	161	Jeff Davis	269	Taylor
057	Cherokee	163	Jefferson	271	Telfair
059	Clarke	165	Jenkins	273	Terrell
061	Clay	167	Johnson	275	Thomas

063	Clayton	169	Jones	277	Tift
065	Clinch	171	Lamar	279	Toombs
067	Cobb	173	Lanier	281	Towns
069	Coffee	175	Laurens	283	Treutlen
071	Colquitt	177	Lee	285	Troup
073	Columbia	179	Liberty	287	Turner
075	Cook	181	Lincoln	289	Twiggs
077	Coweta	183	Long	291	Union
079	Crawford	185	Lowndes	293	Upson
081	Crisp	187	Lumpkin	295	Walker
083	Dade	189	McDuffie	297	Walton
085	Dawson	191	McIntosh	299	Ware
087	Decatur	193	Macon	301	Warren
089	De Kalb	195	Madison	303	Washington
091	Dodge	197	Marion	305	Wayne
093	Dooly	199	Meriwether	307	Webster
095	Dougherty	201	Miller	309	Wheeler
097	Douglas	205	Mitchell	311	White
099	Early	207	Monroe	313	Whitfield
101	Echols	209	Montgomery	315	Wilcox
103	Effingham	211	Morgan	317	Wilkes
105	Elbert	213	Murray	319	Wilkinson
107	Emanuel	215	Muscogee	321	Worth

HAWAII
State Code: 015

001	Hawaii	005	Kalawao	009	Maui
003	Honolulu	007	Kauai		

IDAHO
State Code: 016

001	Ada	031	Cassia	061	Lewis
003	Adams	033	Clark	063	Lincoln
005	Bannock	035	Clearwater	065	Madison
007	Bear Lake	037	Custer	067	Minidoka
009	Benewah	039	Elmore	069	Nez Perce
011	Bingham	041	Franklin	071	Oneida
013	Blaine	043	Fremont	073	Owyhee
015	Boise	045	Gem	075	Payette
017	Bonner	047	Gooding	077	Power
019	Bonneville	049	Idaho	079	Shoshone
021	Boundary	051	Jefferson	081	Teton
023	Butte	053	Jerome	083	Twin Falls
025	Camas	055	Kootenai	085	Valley
027	Canyon	057	Latah	087	Washington
029	Caribou	059	Lemhi		

ILLINOIS
State Code: 017

001	Adams	069	Hardin	137	Morgan
003	Alexander	071	Henderson	139	Moultrie
005	Bond	073	Henry	141	Ogle
007	Boone	075	Iroquois	143	Peoria
009	Brown	077	Jackson	145	Perry
011	Bureau	079	Jasper	147	Piatt
013	Calhoun	081	Jefferson	149	Pike
015	Carroll	083	Jersey	151	Pope
017	Cass	085	Jo Daviess	153	Pulaski
019	Champaign	087	Johnson	155	Putnam
021	Christian	089	Kane	157	Randolph
023	Clark	091	Kankakee	159	Richland
025	Clay	093	Kendall	161	Rock Island

027	Clinton	095	Knox	163	St. Clair
029	Coles	097	Lake	165	Saline
031	Cook	099	La Salle	167	Sangamon
033	Crawford	101	Lawrence	169	Schuyler
035	Cumberland	103	Lee	171	Scott
037	De Kalb	105	Livingston	173	Shelby
039	De Witt	107	Logan	175	Stark
041	Douglas	109	McDonough	177	Stephenson
043	Du Page	111	McHenry	179	Tazewell
045	Edgar	113	McLean	181	Union
047	Edwards	115	Macon	183	Vermillion
049	Effingham	117	Macoupin	185	Wabash
051	Fayette	119	Madison	187	Warren
053	Ford	121	Marion	189	Washington
055	Franklin	123	Marshall	191	Wayne
057	Fulton	125	Mason	193	White
059	Gallatin	127	Massac	195	Whiteside
061	Greene	129	Menard	197	Will
063	Grundy	131	Mercer	199	Williamson
065	Hamilton	133	Monroe	201	Winnebago
067	Hancock	135	Montgomery	203	Woodford

INDIANA
State Code: 018

001	Adams	063	Hendricks	125	Pike
003	Allen	065	Henry	127	Porter
005	Bartholomew	067	Howard	129	Posey
007	Benton	069	Huntington	131	Pulaski
009	Blackford	071	Jackson	133	Putnam
011	Boone	073	Jasper	135	Randolph
013	Brown	075	Jay	137	Ripley
015	Carroll	077	Jefferson	139	Rush
017	Cass	079	Jennings	141	St. Joseph
019	Clark	081	Johnson	143	Scott
021	Clay	083	Knox	145	Shelby
023	Clinton	085	Kosciusko	147	Spencer
025	Crawford	087	LaGrange	149	Starke
027	Daviess	089	Lake	151	Steuben
029	Dearborn	091	La Porte	153	Sullivan
031	Decatur	093	Lawrence	155	Switzerland
033	De Kalb	095	Madison	157	Tippecanoe
035	Delaware	097	Marion	159	Tipton
037	Dubois	099	Marshall	161	Union
039	Elkhart	101	Martin	163	Vanderburgh
041	Fayette	103	Miami	165	Vermillion
043	Floyd	105	Monroe	167	Vigo
045	Fountain	107	Montgomery	169	Wabash
047	Franklin	109	Morgan	171	Warren
049	Fulton	111	Newton	173	Warrick
051	Gibson	113	Noble	175	Washington
053	Grant	115	Ohio	177	Wayne
055	Greene	117	Orange	179	Wells
057	Hamilton	119	Owen	181	White
059	Hancock	121	Parke	183	Whitley
061	Harrison	123	Perry		

IOWA
State Code: 019

001	Adair	067	Floyd	133	Monona
003	Adams	069	Franklin	135	Monroe
005	Allamakee	071	Fremont	137	Montgomery
007	Appanoose	073	Greene	139	Muscatine
009	Audubon	075	Grundy	141	O Brien

011	Benton	077	Guthrie	143	Osceola
013	Black Hawk	079	Hamilton	145	Page
015	Boone	081	Hancock	147	Palo Alto
017	Bremer	083	Hardin	149	Plymouth
019	Buchanan	085	Harrison	151	Pocahontas
021	Buena Vista	087	Henry	153	Polk
023	Butler	089	Howard	155	Pottawattamie
025	Calhoun	091	Humboldt	157	Poweshiek
027	Carroll	093	Ida	159	Ringgold
029	Cass	095	Iowa	161	Sac
031	Cedar	097	Jackson	163	Scott
033	Cerro Gordo	099	Jasper	165	Shelby
035	Cherokee	101	Jefferson	167	Sioux
037	Chickasaw	103	Johnson	169	Story
039	Clarke	105	Jones	171	Tama
041	Clay	107	Keokuk	173	Taylor
043	Clayton	109	Kossuth	175	Union
045	Clinton	111	Lee	177	Van Buren
047	Crawford	113	Linn	179	Wapello
049	Dallas	115	Louisa	181	Warren
051	Davis	117	Lucas	183	Washington
053	Decatur	119	Lyon	185	Wayne
055	Delaware	121	Madison	187	Webster
057	Des Moines	123	Mahaska	189	Winnebago
059	Dickinson	125	Marion	191	Winneshiek
061	Dubuque	127	Marshall	193	Woodbury
063	Emmet	129	Mills	195	Worth
065	Fayette	131	Mitchell	197	Wright

KANSAS
State Code: 020

001	Allen	071	Greeley	141	Osborne
003	Anderson	073	Greenwood	143	Ottawa
005	Atchison	075	Hamilton	145	Pawnee
007	Barber	077	Harper	147	Phillips
009	Barton	079	Harvey	149	Pottawatomie
011	Bourbon	081	Haskell	151	Pratt
013	Brown	083	Hodgeman	153	Rawlins
015	Butler	085	Jackson	155	Reno
017	Chase	087	Jefferson	157	Republic
019	Chautauqua	089	Jewell	159	Rice
021	Cherokee	091	Johnson	161	Riley
023	Cheyenne	093	Kearny	163	Rooks
025	Clark	095	Kingman	165	Rush
027	Clay	097	Kiowa	167	Russell
029	Cloud	099	Labette	169	Saline
031	Coffey	101	Lane	171	Scott
033	Comanchee	103	Leavenworth	173	Sedgwick
035	Cowley	105	Lincoln	175	Seward
037	Crawford	107	Linn	177	Shawnee
039	Decatur	109	Logan	179	Sheridan
041	Dickinson	111	Lyon	181	Sherman
043	Doniphan	113	McPherson	183	Smith
045	Douglas	115	Marion	185	Stafford
047	Edwards	117	Marshall	187	Stanton
049	Elk	119	Meade	189	Stevens
051	Ellis	121	Miami	191	Sumner
053	Ellsworth	123	Mitchell	193	Thomas
055	Finney	125	Montgomery	195	Trego
057	Ford	127	Morris	197	Wabaunsee
059	Franklin	129	Morton	199	Wallace
061	Geary	131	Nemaha	201	Washington
063	Gove	133	Neosho	203	Wichita
065	Graham	135	Ness	205	Wilson

| 067 | Grant | 137 | Norton | 207 | Woodson |
| 069 | Gray | 139 | Osage | 209 | Wyandotte |

KENTUCKY
State Code: 021

001	Adair	081	Grant	161	Mason
003	Allen	083	Graves	163	Meade
005	Anderson	085	Grayson	165	Menifee
007	Ballard	087	Green	167	Mercer
009	Barren	089	Greenup	169	Metcalfe
011	Bath	091	Hancock	171	Monroe
013	Bell	093	Hardin	173	Montgomery
015	Boone	095	Harlan	175	Morgan
017	Bourbon	097	Harrison	177	Muhlenberg
019	Boyd	099	Hart	179	Nelson
021	Boyle	101	Henderson	181	Nicholas
023	Bracken	103	Henry	183	Ohio
025	Breathitt	105	Hickman	185	Oldham
027	Breckinridge	107	Hopkins	187	Owen
029	Bullitt	109	Jackson	189	Owsley
031	Butler	111	Jefferson	191	Pendleton
033	Caldwell	113	Jessamine	193	Perry
035	Calloway	115	Johnson	195	Pike
037	Campbell	117	Kenton	197	Powell
039	Carlisle	119	Knott	199	Pulaski
041	Carroll	121	Knox	201	Robertson
043	Carter	123	Larue	203	Rockcastle
045	Casey	125	Laurel	205	Rowan
047	Christian	127	Lawrence	207	Russell
049	Clark	129	Lee	209	Scott
051	Clay	131	Leslie	211	Shelby
053	Clinton	133	Letcher	213	Simpson
055	Crittenden	135	Lewis	215	Spencer
057	Cumberland	137	Lincoln	217	Taylor
059	Daviess	139	Livingston	219	Todd
061	Edmonson	141	Logan	221	Trigg
063	Elliott	143	Lyon	223	Trimble
065	Estill	145	McCracken	225	Union
067	Fayette	147	McCreary	227	Warren
069	Fleming	149	McLean	229	Washington
071	Floyd	151	Madison	231	Wayne
073	Franklin	153	Magoffin	233	Webster
075	Fulton	155	Marion	235	Whitley
077	Gallatin	157	Marshall	237	Wolfe
079	Garrard	159	Martin	239	Woodford

LOUISIANA
State Code: 022

001	Acadia	045	Iberia	087	St. Bernard
003	Allen	047	Iberville	089	St. Charles
005	Ascension	049	Jackson	091	St. Helena
007	Assumption	051	Jefferson	093	St. James
009	Avoyelles	053	Jefferson Davis	095	St. John
011	Beauregard	055	Lafayette		the Baptist
013	Bienville	057	Lafourche	097	St. Landry
015	Bossier	059	La Salle	099	St. Martin
017	Caddo	061	Lincoln	101	St. Mary
019	Calcasieu	063	Livingston	103	St. Tammany
021	Caldwell	065	Madison	105	Tangipahoa
023	Cameron	067	Morehouse	107	Tensas
025	Catahoula	069	Natchitoches	109	Terrebonne
027	Claiborne	071	Orleans	111	Union
029	Concordia	073	Ouachita	113	Vermilion

031 De Soto	075 Plaquemines	115 Vernon
033 East Baton Rouge	077 Pointe Coupee	117 Washington
035 East Carroll	079 Rapides	119 Webster
037 East Feliciana	081 Red River	121 West Baton Rouge
039 Evangeline	083 Richland	123 West Carroll
041 Franklin	085 Sabine	125 West Feliciana
043 Grant		127 Winn

MAINE
State Code: 023

001 Androscoggin	013 Knox	023 Sagadahoc
003 Aroostook	015 Lincoln	025 Somerset
005 Cumberland	017 Oxford	027 Waldo
007 Franklin	019 Penobscot	029 Washington
009 Hancock	021 Piscataquis	031 York
011 Kennebec		

MARYLAND
State Code: 024

001 Allegany	019 Dorchester	035 Queen Anne's
003 Anne Arundel	021 Frederick	037 St. Mary's
005 Baltimore	023 Garrett	039 Somerset
009 Calvert	025 Harford	041 Talbot
011 Caroline	027 Howard	043 Washington
013 Carroll	029 Kent	045 Wicomico
015 Cecil	031 Montgomery	047 Worcester
017 Charles	033 Prince George's	510 Baltimore City

MASSACHUSETTS
State Code: 025

001 Barnstable	011 Franklin	021 Norfolk
003 Berkshire	013 Hampden	023 Plymouth
005 Bristol	015 Hampshire	025 Suffolk
007 Dukes	017 Middlesex	027 Worcester
009 Essex	019 Nantucket	

MICHIGAN
State Code: 026

001 Alcona	057 Gratiot	113 Missaukee
003 Alger	059 Hillsdale	115 Monroe
005 Allegan	061 Houghton	117 Montcalm
007 Alpena	063 Huron	119 Montmorency
009 Antrim	065 Ingham	121 Muskegon
011 Arenac	067 Ionia	123 Newaygo
013 Baraga	069 Iosco	125 Oakland
015 Barry	071 Iron	127 Oceana
017 Bay	073 Isabella	129 Ogemaw
019 Benzie	075 Jackson	131 Ontonagon
021 Berrien	077 Kalamazoo	133 Osceola
023 Branch	079 Kalkaska	135 Oscoda
025 Calhoun	081 Kent	137 Otsego
027 Cass	083 Keweenaw	139 Ottawa
029 Charlevoix	085 Lake	141 Presque Isle
031 Cheboygan	087 Lapeer	143 Roscommon
033 Chippewa	089 Leelanau	145 Saginaw
035 Clare	091 Lenawee	147 St. Clair
037 Clinton	093 Livingston	149 St. Joseph
039 Crawford	095 Luce	151 Sanilac
041 Delta	097 Mackinac	153 Schoolcraft
043 Dickinson	099 Macomb	155 Shiawassee
045 Eaton	101 Manistee	157 Tuscola

047	Emmet	103	Marquette	159	Van Buren
049	Genesee	105	Mason	161	Washtenaw
051	Gladwin	107	Mecosta	163	Wayne
053	Gogebic	109	Menominee	165	Wexford
055	Grand Traverse	111	Midland		

MINNESOTA
State Code: 027

001	Aitkin	059	Isanti	117	Pipestone
003	Anoka	061	Itasca	119	Polk
005	Becker	063	Jackson	121	Pope
007	Beltrami	065	Kanabec	123	Ramsey
009	Benton	067	Kandiyohi	125	Red Lake
011	Big Stone	069	Kittson	127	Redwood
013	Blue Earth	071	Koochiching	129	Renville
015	Brown	073	Lac Qui Parle	131	Rice
017	Carlton	075	Lake	133	Rock
019	Carver	077	Lake of the Woods	135	Roseau
021	Cass	079	Le Sueur	137	St. Louis
023	Chippewa	081	Lincoln	139	Scott
025	Chisago	083	Lyon	141	Sherburne
027	Clay	085	McLeod	143	Sibley
029	Clearwater	087	Mahnomen	145	Stearns
031	Cook	089	Marshall	147	Steele
033	Cottonwood	091	Martin	149	Stevens
035	Crow Wing	093	Meeker	151	Swift
037	Dakota	095	Mille Lacs	153	Todd
039	Dodge	097	Morrison	155	Traverse
041	Douglas	099	Mower	157	Wabasha
043	Faribault	101	Murray	159	Wadena
045	Fillmore	103	Nicollet	161	Waseca
047	Freeborn	105	Nobles	163	Washington
049	Goodhue	107	Norman	165	Watonwan
051	Grant	109	Olmsted	167	Wilkin
053	Hennepin	111	Otter Tail	169	Winona
055	Houston	113	Pennington	171	Wright
057	Hubbard	115	Pine	173	Yellow Medicine

MISSISSIPPI
State Code: 028

001	Adams	057	Itawamba	111	Perry
003	Alcorn	059	Jackson	113	Pike
005	Amite	061	Jasper	115	Pontotoc
007	Attala	063	Jefferson	117	Prentiss
009	Benton	065	Jefferson Davis	119	Quitman
011	Bolivar	067	Jones	121	Rankin
013	Calhoun	069	Kemper	123	Scott
015	Carroll	071	Lafayette	125	Sharkey
017	Chickasaw	073	Lamar	127	Simpson
019	Choctaw	075	Lauderdale	129	Smith
021	Claiborne	077	Lawrence	131	Stone
023	Clarke	079	Leake	133	Sunflower
025	Clay	081	Lee	135	Tallahatchie
027	Coahoma	083	Leflore	137	Tate
029	Copiah	085	Lincoln	139	Tippah
031	Covington	087	Lowndes	141	Tishomingo
033	De Soto	089	Madison	143	Tunica
035	Forrest	091	Marion	145	Union
037	Franklin	093	Marshall	147	Walthall
039	George	095	Monroe	149	Warren
041	Greene	097	Montgomery	151	Washington
043	Grenada	099	Neshoba	153	Wayne
045	Hancock	101	Newton	155	Webster

047	Harrison	103	Noxubee	157	Wilkinson
049	Hinds	105	Oktibbeha	159	Winston
051	Holmes	107	Panola	161	Yalobusha
053	Humphreys	109	Pearl River	163	Yazoo
055	Issaquena				

MISSOURI
State Code: 029

001	Adair	077	Greene	153	Ozark
003	Andrew	079	Grundy	155	Pemiscot
005	Atchison	081	Harrison	157	Perry
007	Audrain	083	Henry	159	Pettis
009	Barry	085	Hickory	161	Phelps
011	Barton	087	Holt	163	Pike
013	Bates	089	Howard	165	Platte
015	Benton	091	Howell	167	Polk
017	Bollinger	093	Iron	169	Pulaski
019	Boone	095	Jackson	171	Putnam
021	Buchanan	097	Jasper	173	Ralls
023	Butler	099	Jefferson	175	Randolph
025	Caldwell	101	Johnson	177	Ray
027	Callaway	103	Knox	179	Reynolds
029	Camden	105	Laclede	181	Ripley
031	Cape Girardeau	107	Lafayette	183	St. Charles
033	Carroll	109	Lawrence	185	St. Clair
035	Carter	111	Lewis	186	Ste. Genevieve
037	Cass	113	Lincoln	187	St. Francois
039	Cedar	115	Linn	189	St. Louis
041	Chariton	117	Livingston	195	Saline
043	Christian	119	McDonald	197	Schuyler
045	Clark	121	Macon	199	Scotland
047	Clay	123	Madison	201	Scott
049	Clinton	125	Maries	203	Shannon
051	Cole	127	Marion	205	Shelby
053	Cooper	129	Mercer	207	Stoddard
055	Crawford	131	Miller	209	Stone
057	Dade	133	Mississippi	211	Sullivan
059	Dallas	135	Moniteau	213	Taney
061	Daviess	137	Monroe	215	Texas
063	De Kalb	139	Montgomery	217	Vernon
065	Dent	141	Morgan	219	Warren
067	Douglas	143	New Madrid	221	Washington
069	Dunklin	145	Newton	223	Wayne
071	Franklin	147	Nodaway	225	Webster
073	Gasconade	149	Oregon	227	Worth
075	Gentry	151	Osage	229	Wright
				510	St. Louis City

MONTANA
State Code: 030

001	Beaverhead	039	Granite	077	Powell
003	Big Horn	041	Hill	079	Prairie
005	Blaine	043	Jefferson	081	Ravalli
007	Broadwater	045	Judith Basin	083	Richland
009	Carbon	047	Lake	085	Roosevelt
011	Carter	049	Lewis and Clark	087	Rosebud
013	Cascade	051	Liberty	089	Sanders
015	Chouteau	053	Lincoln	091	Sheridan
017	Custer	055	McCone	093	Silver Bow
019	Daniels	057	Madison	095	Stillwater
021	Dawson	059	Meagher	097	Sweet Grass
023	Deer Lodge	061	Mineral	099	Teton
025	Fallon	063	Missoula	101	Toole

027	Fergus	065	Musselshell	103	Treasure
029	Flathead	067	Park	105	Valley
031	Gallatin	069	Petroleum	107	Wheatland
033	Garfield	071	Phillips	109	Wibaux
035	Glacier	073	Pondera	111	Yellowstone
037	Golden Valley	075	Powder River	113	Yellowstone National Park

NEBRASKA
State Code: 031

001	Adams	063	Frontier	125	Nance
003	Antelope	065	Furnas	127	Nemaha
005	Arthur	067	Gage	129	Nuckolls
007	Banner	069	Garden	131	Otoe
009	Blaine	071	Garfield	133	Pawnee
011	Boone	073	Gosper	135	Perkins
013	Box Butte	075	Grant	137	Phelps
015	Boyd	077	Greeley	139	Pierce
017	Brown	079	Hall	141	Platte
019	Buffalo	081	Hamilton	143	Polk
021	Burt	083	Harlan	145	Red Willow
023	Butler	085	Hayes	147	Richardson
025	Cass	087	Hitchcock	149	Rock
027	Cedar	089	Holt	151	Saline
029	Chase	091	Hooker	153	Sarpy
031	Cherry	093	Howard	155	Saunders
033	Cheyenne	095	Jefferson	157	Scotts Bluff
035	Clay	097	Johnson	159	Seward
037	Colfax	099	Kearney	161	Sheridan
039	Cuming	101	Keith	163	Sherman
041	Custer	103	Keya Paha	165	Sioux
043	Dakota	105	Kimball	167	Stanton
045	Dawes	107	Knox	169	Thayer
047	Dawson	109	Lancaster	171	Thomas
049	Deuel	111	Lincoln	173	Thurston
051	Dixon	113	Logan	175	Valley
053	Dodge	115	Loup	177	Washington
055	Douglas	117	McPherson	179	Wayne
057	Dundy	119	Madison	181	Webster
059	Fillmore	121	Merrick	183	Wheeler
061	Franklin	123	Morrill	185	York

NEVADA
State code: 032

001	Churchill	013	Humboldt	027	Pershing
003	Clark	015	Lander	029	Story
005	Douglas	017	Lincoln	031	Washoe
007	Elko	019	Lyon	033	White Pine
009	Esmeralda	021	Mineral	510	Carson City
011	Eureka	023	Nye		

NEW HAMPSHIRE
State Code: 033

Code County Name

001	Belknap	009	Grafton	015	Rockingham
003	Carroll	011	Hillsborough	017	Strafford
005	Cheshire	013	Merrimack	019	Sullivan
007	Coos				

NEW JERSEY
State Code: 034

001	Atlantic	015	Gloucester	029	Ocean
003	Bergen	017	Hudson	031	Passaic
005	Burlington	019	Hunterdon	033	Salem
007	Camden	021	Mercer	035	Somerset
009	Cape May	023	Middlesex	037	Sussex
011	Cumberland	025	Monmouth	039	Union
013	Essex	027	Morris	041	Warren

NEW MEXICO
State code: 035

001	Bernalillo	021	Harding	041	Roosevelt
003	Catron	023	Hidalgo	043	Sandoval
005	Chaves	025	Lea	045	San Juan
006	Cibola	027	Lincoln	047	San Miguel
007	Colfax	028	Los Alamos	049	Santa Fe
009	Curry	029	Luna	051	Sierra
011	De Baca	031	McKinley	053	Socorro
013	Dona Ana	033	Mora	055	Taos
015	Eddy	035	Otero	057	Torrance
017	Grant	037	Quay	059	Union
019	Guadalupe	039	Rio Arriba	061	Valencia

NEW YORK
State Code: 036

001	Albany	043	Herkimer	085	Richmond
003	Allegany	045	Jefferson	087	Rockland
005	Bronx	047	Kings	089	St. Lawrence
007	Broome	049	Lewis	091	Saratoga
009	Cattaraugus	051	Livingston	093	Schenectady
011	Cayuga	053	Madison	095	Schoharie
013	Chautauqua	055	Monroe	097	Schuyler
015	Chemung	057	Montgomery	099	Seneca
017	Chenango	059	Nassau	101	Steuben
019	Clinton	061	New York	103	Suffolk
021	Columbia	063	Niagara	105	Sullivan
023	Cortland	065	Oneida	107	Tioga
025	Delaware	067	Onondaga	109	Tompkins
027	Dutchess	069	Ontario	111	Ulster
029	Erie	071	Orange	113	Warren
031	Essex	073	Orleans	115	Washington
033	Franklin	075	Oswego	117	Wayne
035	Fulton	077	Otsego	119	Westchester
037	Genesee	079	Putnam	121	Wyoming
039	Greene	081	Queens	123	Yates
041	Hamilton	083	Rensselaer		

NORTH CAROLINA
State Code: 037

001	Alamance	199	Yancey	133	Onslow
003	Alexander	069	Franklin	135	Orange
005	Alleghany	071	Gaston	137	Pamlico
007	Anson	073	Gates	139	Pasquotank
009	Ashe	075	Graham	141	Pender
011	Avery	077	Granville	143	Perquimans
013	Beaufort	079	Greene	145	Person
015	Bertie	081	Guilford	147	Pitt
017	Bladen	083	Halifax	149	Polk
019	Brunswick	085	Harnett	151	Randolph
021	Buncombe	087	Haywood	153	Richmond
023	Burke	089	Henderson	155	Robeson
025	Cabarrus	091	Hertford	157	Rockingham

027	Caldwell	093	Hoke	159	Rowan
029	Camden	095	Hyde	161	Rutherford
031	Carteret	097	Iredell	163	Sampson
033	Caswell	099	Jackson	165	Scotland
035	Catawba	101	Johnston	167	Stanly
037	Chatham	103	Jones	169	Stokes
039	Cherokee	105	Lee	171	Surry
041	Chowan	107	Lenoir	173	Swain
043	Clay	109	Lincoln	175	Transylvania
045	Cleveland	111	McDowell	177	Tyrrell
047	Columbus	113	Macon	179	Union
049	Craven	115	Madison	181	Vance
051	Cumberland	117	Martin	183	Wake
053	Currituck	119	Mecklenburg	185	Warren
055	Dare	121	Mitchell	187	Washington
057	Davidson	123	Montgomery	189	Watauga
059	Davie	125	Moore	191	Wayne
061	Duplin	127	Nash	193	Wilkes
063	Durham	129	New Hanover	195	Wilson
065	Edgecombe	131	Northampton	197	Yadkin
067	Forsyth				

NORTH DAKOTA
State Code: 038

001	Adams	037	Grant	073	Ransom
003	Barnes	039	Griggs	075	Renville
005	Benson	041	Hettinger	077	Richland
007	Billings	043	Kidder	079	Rolette
009	Bottineau	045	La Moure	081	Sargent
011	Bowman	047	Logan	083	Sheridan
013	Burke	049	McHenry	085	Sioux
015	Burleigh	051	McIntosh	087	Slope
017	Cass	053	McKenzie	089	Stark
019	Cavalier	055	McLean	091	Steele
021	Dickey	057	Mercer	093	Stutsman
023	Divide	059	Morton	095	Towner
025	Dunn	061	Mountrail	097	Traill
027	Eddy	063	Nelson	099	Walsh
029	Emmons	065	Oliver	101	Ward
031	Foster	067	Pembina	103	Wells
033	Golden Valley	069	Pierce	105	Williams
035	Grand Forks	071	Ramsey		

OHIO
State Code: 039

001	Adams	059	Guernsey	117	Morrow
003	Allen	061	Hamilton	119	Muskingum
005	Ashland	063	Hancock	121	Noble
007	Ashtabula	065	Hardin	123	Ottawa
009	Athens	067	Harrison	125	Paulding
011	Auglaize	069	Henry	127	Perry
013	Belmont	071	Highland	129	Pickaway
015	Brown	073	Hocking	131	Pike
017	Butler	075	Holmes	133	Portage
019	Carroll	077	Huron	135	Preble
021	Champaign	079	Jackson	137	Putnam
023	Clark	081	Jefferson	139	Richland
025	Clermont	083	Knox	141	Ross
027	Clinton	085	Lake	143	Sandusky
029	Columbiana	087	Lawrence	145	Scioto
031	Coshocton	089	Licking	147	Seneca
033	Crawford	091	Logan	149	Shelby
035	Cuyahoga	093	Lorain	151	Stark

037	Darke	095	Lucas	153	Summit
039	Defiance	097	Madison	155	Trumbull
041	Delaware	099	Mahoning	157	Tuscarawas
043	Erie	101	Marion	159	Union
045	Fairfield	103	Medina	161	Van Wert
047	Fayette	105	Meigs	163	Vinton
049	Franklin	107	Mercer	165	Warren
051	Fulton	109	Miami	167	Washington
053	Gallia	111	Monroe	169	Wayne
055	Geauga	113	Montgomery	171	Williams
057	Greene	115	Morgan	173	Wood

OKLAHOMA
State Code: 040

001	Adair	053	Grant	105	Nowata
003	Alfalfa	055	Greer	107	Okfuskee
005	Atoka	057	Harmon	109	Oklahoma
007	Beaver	059	Harper	111	Okmulgee
009	Beckham	061	Haskell	113	Osage
011	Blaine	063	Hughes	115	Ottawa
013	Bryan	065	Jackson	117	Pawnee
015	Caddo	067	Jefferson	119	Payne
017	Canadian	069	Johnston	121	Pittsburg
019	Carter	071	Kay	123	Pontotoc
021	Cherokee	073	Kingfisher	125	Pottawatomie
023	Choctaw	075	Kiowa	127	Pushmataha
025	Cimarron	077	Latimer	129	Roger Mills
027	Cleveland	079	Le Flore	131	Rogers
029	Coal	081	Lincoln	133	Seminole
031	Comanche	083	Logan	135	Sequoyah
033	Cotton	085	Love	137	Stephens
035	Craig	087	McClain	139	Texas
037	Creek	089	McCurtain	141	Tillman
039	Custer	091	McIntosh	143	Tulsa
041	Delaware	093	Major	145	Wagoner
043	Dewey	095	Marshall	147	Washington
045	Ellis	097	Mayes	149	Washita
047	Garfield	099	Murray	151	Woods
049	Garvin	101	Muskogee	153	Woodward
051	Grady	103	Noble		

OREGON
State Code: 041

001	Baker	025	Harney	049	Morrow
003	Benton	027	Hood River	051	Multnomah
005	Clackamas	029	Jackson	053	Polk
007	Clatsop	031	Jefferson	055	Sherman
009	Columbia	033	Josephine	057	Tillamook
011	Coos	035	Klamath	059	Umatilla
013	Crook	037	Lake	061	Union
015	Curry	039	Lane	063	Wallowa
017	Deschutes	041	Lincoln	065	Wasco
019	Douglas	043	Linn	067	Washington
021	Gilliam	045	Malheur	069	Wheeler
023	Grant	047	Marion	071	Yamhill

PENNSYLVANIA
State code: 042

001	Adams	047	Elk	093	Montour
003	Allegheny	049	Erie	095	Northampton
005	Armstrong	051	Fayette	097	Northumberland
007	Beaver	053	Forest	099	Perry

009 Bedford	055 Franklin	101 Philadelphia
011 Berks	057 Fulton	103 Pike
013 Blair	059 Greene	105 Potter
015 Bradford	061 Huntingdon	107 Schuylkill
017 Bucks	063 Indiana	109 Snyder
019 Butler	065 Jefferson	111 Somerset
021 Cambria	067 Juniata	113 Sullivan
023 Cameron	069 Lackawanna	115 Susquehanna
025 Carbon	071 Lancaster	117 Tioga
027 Centre	073 Lawrence	119 Union
029 Chester	075 Lebanon	121 Venango
031 Clarion	077 Lehigh	123 Warren
033 Clearfield	079 Luzerne	125 Washington
035 Clinton	081 Lycoming	127 Wayne
037 Columbia	083 McKean	129 Westmoreland
039 Crawford	085 Mercer	131 Wyoming
041 Cumberland	087 Mifflin	133 York
043 Dauphin	089 Monroe	
045 Delaware	091 Montgomery	

RHODE ISLAND
State Code: 044

001 Bristol	005 Newport	009 Washington
003 Kent	007 Providence	

SOUTH CAROLINA
State Code: 045

001 Abbeville	033 Dillon	063 Lexington
003 Aiken	035 Dorchester	065 McCormick
005 Allendale	037 Edgefield	067 Marion
007 Anderson	039 Fairfield	069 Marlboro
009 Bamberg	041 Florence	071 Newberry
011 Barnwell	043 Georgetown	073 Oconee
013 Beaufort	045 Greenville	075 Orangeburg
015 Berkeley	047 Greenwood	077 Pickens
017 Calhoun	049 Hampton	079 Richland
019 Charleston	051 Horry	081 Saluda
021 Cherokee	053 Jasper	083 Spartanburg
023 Chester	055 Kershaw	085 Sumter
025 Chesterfield	057 Lancaster	087 Union
027 Clarendon	059 Laurens	089 Williamsburg
029 Colleton	061 Lee	091 York
031 Darlington		

SOUTH DAKOTA
State Code: 046

003 Aurora	047 Fall River	091 Marshall
005 Beadle	049 Faulk	093 Meade
007 Bennett	051 Grant	095 Mellette
009 Bon Homme	053 Gregory	097 Miner
011 Brookings	055 Haakon	099 Minnehaha
013 Brown	057 Hamlin	101 Moody
015 Brule	059 Hand	103 Pennington
017 Buffalo	061 Hanson	105 Perkins
019 Butte	063 Harding	107 Potter
021 Campbell	065 Hughes	109 Roberts
023 Charles Mix	067 Hutchinson	111 Sanborn
025 Clark	069 Hyde	113 Shannon
027 Clay	071 Jackson	115 Spink
029 Codington	073 Jerauld	117 Stanley
031 Corson	075 Jones	119 Sully
033 Custer	077 Kingsbury	121 Todd

035	Davison	079	Lake	123	Tripp
037	Day	081	Lawrence	125	Turner
039	Deuel	083	Lincoln	127	Union
041	Dewey	085	Lyman	129	Walworth
043	Douglas	087	McCook	135	Yankton
045	Edmunds	089	McPherson	137	Ziebach

TENNESSEE
State Code: 047

001	Anderson	065	Hamilton	129	Morgan
003	Bedford	067	Hancock	131	Obion
005	Benton	069	Hardeman	133	Overton
007	Bledsoe	071	Hardin	135	Perry
009	Blount	073	Hawkins	137	Pickett
011	Bradley	075	Haywood	139	Polk
013	Campbell	077	Henderson	141	Putnam
015	Cannon	079	Henry	143	Rhea
017	Carroll	081	Hickman	145	Roane
019	Carter	083	Houston	147	Robertson
021	Cheatham	085	Humphreys	149	Rutherford
023	Chester	087	Jackson	151	Scott
025	Claiborne	089	Jefferson	153	Sequatchie
027	Clay	091	Johnson	155	Sevier
029	Cocke	093	Knox	157	Shelby
031	Coffee	095	Lake	159	Smith
033	Crockett	097	Lauderdale	161	Stewart
035	Cumberland	099	Lawrence	163	Sullivan
037	Davidson	101	Lewis	165	Sumner
039	Decatur	103	Lincoln	167	Tipton
041	De Kalb	105	Loudon	169	Trousdale
043	Dickson	107	McMinn	171	Unicoi
045	Dyer	109	McNairy	173	Union
047	Fayette	111	Macon	175	Van Buren
049	Fentress	113	Madison	177	Warren
051	Franklin	115	Marion	179	Washington
053	Gibson	117	Marshall	181	Wayne
055	Giles	119	Maury	183	Weakley
057	Grainger	121	Meigs	185	White
059	Greene	123	Monroe	187	Williamson
061	Grundy	125	Montgomery	189	Wilson
063	Hamblen	127	Moore		

TEXAS
State Code: 048

001	Anderson	171	Gillespie	341	Moore
003	Andrews	173	Glasscock	343	Morris
005	Angelina	175	Goliad	345	Motley
007	Aransas	177	Gonzales	347	Nacogdoches
009	Archer	179	Gray	349	Navarro
011	Armstrong	181	Grayson	351	Newton
013	Atascosa	183	Gregg	353	Nolan
015	Austin	185	Grimes	355	Nueces
017	Bailey	187	Guadalupe	357	Ochiltree
019	Bandera	189	Hale	359	Oldham
021	Bastrop	191	Hall	361	Orange
023	Baylor	193	Hamilton	363	Palo Pinto
025	Bee	195	Hansford	365	Panola
027	Bell	197	Hardeman	367	Parker
029	Bexar	199	Hardin	369	Parmer
031	Blanco	201	Harris	371	Pecos
033	Borden	203	Harrison	373	Polk
035	Bosque	205	Hartley	375	Potter
037	Bowie	207	Haskell	377	Presidio

039	Brazoria	209	Hays	379	Rains
041	Brazos	211	Hemphill	381	Randall
043	Brewster	213	Henderson	383	Reagan
045	Briscoe	215	Hidalgo	385	Real
047	Brooks	217	Hill	387	Red River
049	Brown	219	Hockley	389	Reeves
051	Burleson	221	Hood	391	Refugio
053	Burnet	223	Hopkins	393	Roberts
055	Caldwell	225	Houston	395	Robertson
057	Calhoun	227	Howard	397	Rockwall
059	Callahan	229	Hudspeth	399	Runnels
061	Cameron	231	Hunt	401	Rusk
063	Camp	233	Hutchinson	403	Sabine
065	Carson	235	Irion	405	San Augustine
067	Cass	237	Jack	407	San Jacinto
069	Castro	239	Jackson	409	San Patricio
071	Chambers	241	Jasper	411	San Saba
073	Cherokee	243	Jeff Davis	413	Schleicher
075	Childress	245	Jefferson	415	Scurry
077	Clay	247	Jim Hogg	417	Shackelford
079	Cochran	249	Jim Wells	419	Shelby
081	Coke	251	Johnson	421	Sherman
083	Coleman	253	Jones	423	Smith
085	Collin	255	Karnes	425	Somervell
087	Collingsworth	257	Kaufman	427	Starr
089	Colorado	259	Kendall	429	Stephens
091	Comal	261	Kenedy	431	Sterling
093	Comanche	263	Kent	433	Stonewall
095	Concho	265	Kerr	435	Sutton
097	Cooke	267	Kimble	437	Swisher
099	Coryell	269	King	439	Tarrant
101	Cottle	271	Kinney	441	Taylor
103	Crane	273	Kleberg	443	Terrell
105	Crockett	275	Knox	445	Terry
107	Crosby	277	Lamar	447	Throckmorton
109	Culberson	279	Lamb	449	Titus
111	Dallam	281	Lampasas	451	Tom Green
113	Dallas	283	La Salle	453	Travis
115	Dawson	285	Lavaca	455	Trinity
117	Deaf Smith	287	Lee	457	Tyler
119	Delta	289	Leon	459	Upshur
121	Denton	291	Liberty	461	Upton
123	De Witt	293	Limestone	463	Uvalde
125	Dickens	295	Limpscomb	465	Val Verde
127	Dimmit	297	Live Oak	467	Van Zandt
129	Donley	299	Llano	469	Victoria
131	Duval	301	Loving	471	Walker
133	Eastland	303	Lubbock	473	Waller
135	Ector	305	Lynn	475	Ward
137	Edwards	307	McCulloch	477	Washington
139	Ellis	309	McLennan	479	Webb
141	El Paso	311	McMullen	481	Wharton
143	Erath	313	Madison	483	Wheeler
145	Falls	315	Marion	485	Wichita
147	Fannin	317	Martin	487	Wilbarger
149	Fayette	319	Mason	489	Willacy
151	Fisher	321	Matagorda	491	Williamson
153	Floyd	323	Maverick	493	Wilson
155	Foard	325	Medina	495	Winkler
157	Fort Bend	327	Menard	497	Wise
159	Franklin	329	Midland	499	Wood
161	Freestone	331	Milam	501	Yoakum
163	Frio	333	Mills	503	Young
165	Gaines	335	Mitchell	505	Zapata
167	Galveston	337	Montague	507	Zavala

169 Garza   339 Montgomery

UTAH
State Code: 049

001	Beaver	021	Iron	041	Sevier
003	Box Elder	023	Juab	043	Summit
005	Cache	025	Kane	045	Tooele
007	Carbon	027	Millard	047	Uintah
009	Daggett	029	Morgan	049	Utah
011	Davis	031	Piute	051	Wasatch
013	Duchesne	033	Rich	053	Washington
015	Emery	035	Salt Lake	055	Wayne
017	Garfield	037	San Juan	057	Weber
019	Grand	039	Sanpete		

VERMONT
State Code: 050

001	Addison	011	Franklin	021	Rutland
003	Bennington	013	Grand Isle	023	Washington
005	Caledonia	015	LaMoille	025	Windham
007	Chittenden	017	Orange	027	Windsor
009	Essex	019	Orleans		

VIRGINIA
State Code: 051

001	Accomack	067	Franklin	135	Nottoway
003	Albemarle	069	Frederick	137	Orange
005	Alleghany	071	Giles	139	Page
007	Amelia	073	Gloucester	141	Patrick
009	Amherst	075	Goochland	143	Pittsylvania
011	Appomattox	077	Grayson	145	Powhatan
013	Arlington	079	Greene	147	Prince Edward
015	Augusta	081	Greensville	149	Prince George
017	Bath	083	Halifax	153	Prince William
019	Bedford	085	Hanover	155	Pulaski
021	Bland	087	Henrico	157	Rappahannock
023	Botetourt	089	Henry	159	Richmond
025	Brunswick	091	Highland	161	Roanoke
027	Buchanan	093	Isle of Wight	163	Rockbridge
029	Buckingham	095	James City	165	Rockingham
031	Campbell	097	King and Queen	167	Russell
033	Caroline	099	King George	169	Scott
035	Carroll	101	King William	171	Shenandoah
036	Charles City	103	Lancaster	173	Smyth
037	Charlotte	105	Lee	175	Southampton
041	Chesterfield	107	Loudoun	177	Spotsylvania
043	Clarke	109	Louisa	179	Stafford
045	Craig	111	Lunenburg	181	Surry
047	Culpeper	113	Madison	183	Sussex
049	Cumberland	115	Mathews	185	Tazewell
051	Dickenson	117	Mecklenburg	187	Warren
053	Dinwiddie	119	Middlesex	191	Washington
057	Essex	121	Montgomery	193	Westmoreland
059	Fairfax	125	Nelson	195	Wise
061	Fauquier	127	New Kent	197	Wythe
063	Floyd	131	Northampton	199	York
065	Fluvanna	133	Northumberland		

Code Independent Cities in VIRGINIA

510	Alexandria	630	Fredericksburg	735	Poquoson
515	Bedford	640	Galax	740	Portsmouth

520	Bristol	650	Hampton	750	Radford
530	Buena Vista	660	Harrisonburg	760	Richmond
540	Charlottesville	670	Hopewell	770	Roanoke
550	Chesapeake	678	Lexington	775	Salem
560	Clifton Forge	680	Lynchburg	780	South Boston
570	Colonial Heights	683	Manassas	790	Staunton
580	Covington	685	Manassas Park	800	Suffolk
590	Danville	690	Martinsville	810	Virginia Beach
595	Emporia	700	Newport News	820	Waynesboro
600	Fairfax	710	Norfolk	830	Williamsburg
610	Falls Church	720	Norton	840	Winchester
620	Franklin	730	Petersburg		

WASHINGTON
State Code: 053

001	Adams	027	Grays Harbor	053	Pierce
003	Asotin	029	Island	055	San Juan
005	Benton	031	Jefferson	057	Skagit
007	Chelan	033	King	059	Skamania
009	Clallam	035	Kitsap	061	Snohomish
011	Clark	037	Kittitas	063	Spokane
013	Columbia	039	Klickitat	065	Stevens
015	Cowlitz	041	Lewis	067	Thurston
017	Douglas	043	Lincoln	069	Wahkiakum
019	Ferry	045	Mason	071	Walla Walla
021	Franklin	047	Okanogan	073	Whatcom
023	Garfield	049	Pacific	075	Whitman
025	Grant	051	Pend Oreille	077	Yakima

WEST VIRGINIA
State Code: 054

001	Barbour	039	Kanawha	075	Pocahontas
003	Berkeley	041	Lewis	077	Preston
005	Boone	043	Lincoln	079	Putnam
007	Braxton	045	Logan	081	Raleigh
009	Brooke	047	McDowell	083	Randolph
011	Cabell	049	Marion	085	Ritchie
013	Calhoun	051	Marshall	087	Roane
015	Clay	053	Mason	089	Summers
017	Doddridge	055	Mercer	091	Taylor
019	Fayette	057	Mineral	093	Tucker
021	Gilmer	059	Mingo	095	Tyler
023	Grant	061	Monongalia	097	Upshur
025	Greenbrier	063	Monroe	099	Wayne
027	Hampshire	065	Morgan	101	Webster
029	Hancock	067	Nicholas	103	Wetzel
031	Hardy	069	Ohio	105	Wirt
033	Harrison	071	Pendleton	107	Wood
035	Jackson	073	Pleasants	109	Wyoming
037	Jefferson				

WISCONSIN
State Code: 055

001	Adams	049	Iowa	095	Polk
003	Ashland	051	Iron	097	Portage
005	Barron	053	Jackson	099	Price
007	Bayfield	055	Jefferson	101	Racine
009	Brown	057	Juneau	103	Richland
011	Buffalo	059	Kenosha	105	Rock
013	Burnett	061	Kewaunee	107	Rusk
015	Calumet	063	La Crosse	109	St. Croix
017	Chippewa	065	Lafayette	111	Sauk

019	Clark	067	Langlade	113	Sawyer
021	Columbia	069	Lincoln	115	Shawano
023	Crawford	071	Manitowoc	117	Sheboygan
025	Dane	073	Marathon	119	Taylor
027	Dodge	075	Marinette	121	Trempealeau
029	Door	077	Marquette	123	Vernon
031	Douglas	078	Menominee	125	Vilas
033	Dunn	078	Milwaukee	127	Walworth
035	Eau Claire	081	Monroe	129	Washburn
037	Florence	083	Oconto	131	Washington
039	Fond Du Lac	085	Oneida	133	Waukesha
041	Forest	087	Outagamie	135	Waupaca
043	Grant	089	Ozaukee	137	Waushara
045	Green	091	Pepin	139	Winnebago
047	Green Lake	093	Pierce	141	Wood

WYOMING
State Code: 056

001	Albany	017	Hot Springs	033	Sheridan
003	Big Horn	019	Johnson	035	Sublette
005	Campbell	021	Laramie	037	Sweetwater
007	Carbon	023	Lincoln	039	Teton
009	Converse	025	Natrona	041	Uinta
011	Crook	027	Niobrara	043	Washakie
013	Fremont	029	Park	045	Weston
015	Goshen	031	Platte		

Appendix C - Valid Commodity and Commodity Modifier Table

COMCODE	COMMODITY	MODIFIER
0100	ABRASIVE	
0110		BLASTING SAND
0120		CORUNDUM
0130		CRUSHING BORT
0140		DIAMOND
0150		EMERY
0160		GARNET
0170		INDUSTRIAL DIAMOND
0200	ALKALI	
0210		OXIDE
0300	ALUMINUM	
0309		ALUMINA
0318		ALUMINOUS SHALE
0327		ALUNITE
0336		ANORTHOSITE
0345		BAUXITE
0354		CONTAINED OR METAL
0363		DAWSONITE
0372		HI-ALUMINA CLAY
0381		PHOSPHATE ROCK
0390		SAPROLITE
0400	ANTIMONY	
0450		OXIDE
0500	ARSENIC	
0600	ASBESTOS	
0630		LONG FIBER
0660		SHORT FIBER
0700	ASH	
0730		AS RECEIVED
0760		DRY BASIS
0800	BARIUM	
0830		CARBONATE

0860		SULFATE
0900	BERYLLIUM	
1000	BISMUTH	
1100	BORAX	
1200	BORON	
1300	BROMINE	
1330		LAKE & WELL BRINE
1360		OCEAN BRINE
1400	CADMIUM	
1500	CALCIUM	
1510		CALCAREOUS MARL
1520		CALCITE
1530		CALCIUM CHLORIDE BRINE
1540		CHLORIDE BRINE
1550		DOLOMITE
1560		LIMESTONE
1570		OXIDE
1580		SHELL OR OYSTER SHELL
1600	CESIUM	
1700	CHLORINE	
1725		OCEAN BRINE
1740		CHLORIDE-CONTAMINANT
1750		SALINE LAKE
1775		SALT
1800	CHROMIUM	
1850		CHROMITE
1875		FERROCHROME
1900	CLAY	
1909		BALL CLAY
1918		BENTONITE
1927		COMMON CLAY
1936		FIRE CLAY
1945		FULLERS EARTH
1954		HECTORITE
1963		ILLITE
1972		KAOLIN (CHINA CLAY)
1981		MONTMORILLONITE
1990		REFRACTORY
2000	COAL	
2010		ANTHRACITE
2020		BITUMINOUS
2040		LIGNITE
2060		PEAT
2080		SUBBITUMINOUS
2090		SULFUR (REC)
2095		SULFUR (DRY)
2100	COBALT	
2200	COLUMBIUM	
2210		COLUMBITE
2220		PYROCHLORE
2230		COLUMBITE/TANTALITE
2300	COPPER	
2325		NATIVE
2350		OXIDE
2375		SULFIDE
2400	CYANIDE	CONTAMINANT
2500	DIATOMITE	
2600	FELDSPAR	
2700	FIXED CARBON	AS RECEIVED
2750		DRY BASIS
2800	FLUORINE	
2850		FLUORSPAR
2875		HYDROGEN FLUORIDE
2900	GALLIUM	
3000	GEMSTONE	

3010		DIAMOND
3020		EMERALD
3030		NONPRECIOUS
3040		RUBY
3050		SAPPHIRE
3060		SEMIPRECIOUS OTHER
3070		SEMIPRECIOUS SILICATES
3100	GEOTHERMAL	
3200	GERMANIUM	
3250		OXIDE
3300	GOLD	
3330		LODE
3360		PLACER
3390		REFINERY
3400	GRAPHITE	
3430		AMORPHOUS-CRYSTALLINE
3460		FLAKE
3500	GYPSUM	
3525		ANHYDRITE
3550		GYPSITE
3575		ROCK GYPSUM
3600	HAFNIUM	
3700	HEAT VALUE	AS RECEIVED
3750		DRY BASIS
3800	HEAVY METALS	CONTAMINANT
3900	HELIUM	
4000	HYDROXIDE	CONTAMINANT
4100	INDIUM	
4200	IODINE	
4230		BRINES
4260		CALICHE NITRATES
4300	IRON	
4305		FERRIC OXIDE
4310		FERROUS OXIDE
4315		GOETHITE
4320		HEMATITE
4325		HEMATITE-MAGNETITE
4330		MAGNETITE
4335		SULFIDE
4340		TACONITE
4345		TACONITE BOTTOM LEAN
4350		TACONITE LEAN
4355		TACONITE OXIDIZED
4360		TACONITE OXIDIZED LEAN
4365		TACONITE SILICEOUS
4370		TACONITE SILICEOUS LEA
4375		TITANIFEROUS MAGNETITE
4400	KYANITE GROUP	
4500	LEAD	
4525		CARBONATE
4550		OXIDE
4575		SULFIDE
4580		SMELTER
4590		REFINER
4600	LITHIUM	
4630		BRINES
4660		PEGMATITE
4670		CARBONATE
4700	MAGNESIUM	
4710		BRINES
4720		BRUCITE
4730		CONTAINED OR METAL
4740		DOLOMITE
4750		EVAPORITES
4760		MAGNESITE

4770		SEA WATER
4780		OLIVINE-CHRYSOLITE
4790		OXIDE
4800	MANGANESE	
4825		DIOXIDE
4850		NODULES
4875		OXIDE
4880		FERROMANGANESE
4900	MERCURY	
5000	MICA	
5025		BOOK
5050		FLAKE
5075		SERICITE
5100	MOLYBDENUM	
5150		SULFIDE
5200	NATURAL GAS	
5250	NEPHELINE	SYENITE
5300	NICKEL	
5325		OXIDE
5350		SILICATE
5375		SULFIDE
5380		SMELTER
5390		REFINER
5400	NITRATE	CONTAMINANT
5500	NITROGEN	
5600	PERLITE	
5700	PETROLEUM	
5710		CRUDE
5720		GILSONITE
5740		OIL SHALE
5760		ROCK ASPHALT
5780		TAR SANDS
5800	PHOSPHATE	
5825		PHOSPHORUS
5850		PRODUCT
5875		WASTE
5890		ACID
5900	PLATINUM GROUP	
5910		IRIDIUM
5920		OSMIUM
5940		PALLADIUM
5960		PLATINUM
5980		RHODIUM
5990		RUTHENIUM
6000	POTASH	
6025		BEDDED DEPOSITS
6050		BRINES
6075		SULFATE
6100	PUMICE	
6110		PUMICITE
6120		SCORIA
6140		VOLCANIC ASH
6160		VOLCANIC CINDER
6180		VOLCANIC DUST
6200	QUARTZ CRYSTAL	
6230		ELECTRONIC GRADE
6260		OPTICAL GRADE
6300	RADIUM	
6400	RARE EARTH	
6430		CERIUM GROUP
6460		YTTRIUM GROUP
6500	RHENIUM	
6600	RUBIDIUM	
6650	SAND	
6700	SAND & GRAVEL	

6800	SCANDIUM	
6900	SELENIUM	
7000	SILICON	
7010		DIOXIDE
7020		FOUNDRY SAND
7040		GLASS SAND
7060		QUARTZ
7080		QUARTZITE
7090		SANDSTONE
7100	SILVER	
7120		CARBONATE
7140		NATIVE
7160		OXIDE
7180		SULFIDE
7190		REFINERY
7200	SODIUM	
7210		BICARBONATE-NAHCOLITE
7220		BRINE
7240		CARBONATE (TRONA)
7260		OXIDE
7280		SALT
7290		SULFATE
7300	STONE	
7302		AGGREGATE CB
7304		BALLAST CB
7308		BASALT CB
7310		BASALT DM
7312		BASALT DR
7314		CALCAREOUS MARL
7315		DECOMPOSED GRANITE CB
7316		CINDERS DR
7318		DECOMPOSED GRANITE
7320		DIMENSION
7322		FILL CB
7324		GRANITE CB
7326		GRANITE DM
7328		GRANITE DR
7330		GRANITIC DR
7332		LIMESTONE CB
7334		LIMESTONE DM
7336		LIMESTONE DR
7338		MARBLE CB
7340		MARBLE DM
7342		METAMORPHIC DR
7344		MICA SCHIST CB
7346		MICA SCHIST DM
7348		MISCELLANEOUS CB
7350		MISCELLANEOUS DM
7352		MISCELLANEOUS DR
7356		QUARTZITE CB
7358		QUARTZITE DM
7360		RIP RAP
7362		SANDSTONE CB
7364		SANDSTONE DM
7366		SANDSTONE DR
7368		SEDIMENTARY DR
7370		SHALE CB
7372		SHELL CB
7374		SLATE CB
7376		SLATE DM
7378		SLATE DR
7380		SUBBASE CB
7382		TRAVERTINE DM
7384		TRAVERTINE DR
7386		VOLCANIC DR

7400	STRONTIUM	
7500	SULFUR	
7510		NATIVE
7520		PYRITE
7530		PYRITE-CONTAMINANT
7540		SULFURIC ACID
7560		SULFATE-CONTAMINANT
7580		SULFIDE-CONTAMINANT
7600	TALC	
7620		BLOCK STEATITE
7640		GROUP
7660		PYROPHYLLITE
7680		SOAPSTONE
7700	TANTALUM	
7710		TANTALITE
7720		TIN SLAG
7800	TELLURIUM	
7900	THALLIUM	
8000	THORIUM	
8050		OXIDE
8100	TIN	
8125		LODE
8150		PLACER
8170		TAILINGS
8200	TITANIUM	
8220		ILMENITE
8240		LEUCOXENE
8260		RUTILE
8280		TITANIFEROUS MAGNETITE
8285		PIGMENT
8290		METAL
8300	TUNGSTEN	
8310		BRINES
8320		LODE
8340		TAILINGS
8360		PLACER
8380		WO3 CONTENT
8390		REFINERY
8400	URANIUM	
8450		U3O8 CONTENT
8500	VANADIUM	
8525		PHOSPHATIC SHALE
8550		TITANIFEROUS MAGNETITE
8575		V2O5 CONTENT
8600	VERMICULITE	
8700	VOLATILE CONT	
8730		AS RECEIVED
8760		DRY BASIS
8800	WATER CONTENT	
8810		FREE WATER
8830		HYDRATED WATER
8860		TOTAL WATER
8900	WOLLASTONITE	
9000	XANTHATE	CONTAMINANT
9100	ZEOLITES	
9200	ZINC	
9220		CARBONATE
9240		OXIDE
9260		SILICATE
9280		SULFIDE
9285		SMELTER
9290		REFINER
9300	ZIRCONIUM	
9330		BADDELEYITE
9360		ZIRCON

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                      CB = Crushed and Broken STONE
                      DM = Dimension STONE
                      DR = Decorative Rock or decorative stone
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  APPENDIX D - STANDARD INDUSTRIAL CLASSIFICATION (SIC) VALUE

SIC
CODE    Commodity Name

1474    Potash (trona)
2816    Inorganic pigments
2819    Industrial inorganic chemicals, N.E.C.
2851    Paints, varnishes, lacquers, enamels and allied products
2873    Nitrogenous fertilizers
2874    Phosphatic fertilizers
2879    Pesticides & agri. chemicals, N.E.C.
2892    Explosives
2899    Chemicals & chem. preparations, N.E.C.
2911    Petroleum refining
2951    Paving mixtures & blocks
2952    Asphalt felts & coatings
2992    Lubricating oils & greases
2999    Petroleum & coal products
3241    Cement, hydraulic
3251    Brick & structural clay tile
3253    Ceramic wall & floor
3255    Clay refractories
3259    Structural clay products, N.E.C.
3271    Concrete block, brick
3272    Concrete products, N.E.C.
3273    Ready-mixed concrete
3274    Lime
3275    Gypsum products
3281    Cut stone & stone products
3291    Abrasive products
3292    Asbestos products
3295    Minerals & earths ground or otherwise treated
3296    Mineral wool
3297    Nonclay refractories
3299    Nonmetallic mineral products, N.E.C.
3312    Blast furn, coke ovens, steel works, rolling mills
3313    Electrometallurgical products
3315    Steel wire drawing, nails, spikes
3316    Cold rolled steel sheet, strip, bars
3317    Steel pipe & tubes
3321    Gray iron foundries
3322    Malleable iron foundries
3324    Steel investment foundries
3325    Steel foundries, N.E.C.
3331    Primary smelting & refining of copper
3332    Primary smelting & refining of lead
3333    Primary smelting & refining of zinc
3334    Primary production of aluminum
3339    Primary smelting & refining of nonferrous metals, N.E.C.
3341    Secondary smelting & refining of nonferrous metals
3351    Rolling, drawing, and extruding of copper
3353    Aluminum sheet, plate, and foil
3354    Aluminum extruded products
3355    Aluminum rolling & drawing, N.E.C.
3356    Rolling, drawing, extruding of nonferrous metals except Cu & Al
3357    Drawing & insulating of nonferrous wire
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3361    Aluminum foundries (castings)
3362    Cu & Cu base alloy foundries (castings), brass, bronze
3369    Nonferrous foundries
3399    Primary metal products, N.E.C.
4943    Gilsonite
9999    Undetermined
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