1997 NAICS

Sector 21--Mining

The Sector as a Whole

The Mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

The Mining sector distinguishes two basic activities: mine operation and mining support activities. Mine operation includes establishments operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis. Mining support activities include establishments that perform exploration (except geophysical surveying) and/or other mining services on a contract or fee basis.

Establishments in the Mining sector are grouped and classified according to the natural resource mined or to be mined. Industries include establishments that develop the mine site, extract the natural resources, and/or those that beneficiate (i.e., prepare) the mineral mined. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. In contrast, manufacturing operations primarily use chemical and electrochemical processes, such as electrolysis and distillation. However some treatments, such as heat treatments, take place in both the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals into more finished manufactured products are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more finished manufactured product will be classified in Sector 31-33, Manufacturing.

211 Oil and Gas Extraction
Industries in the Oil and Gas Extraction subsector operate and/or develop oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operating separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This subsector includes the production of crude petroleum, the mining and extraction of oil from oil shale and oil sands, and the production of natural gas and recovery of hydrocarbon liquids.

Establishments in this subsector include those that operate oil and gas wells on their own account or for others on a contract or fee basis. Establishments primarily engaged in providing support services, on a fee or contract basis, required for the drilling or operation of oil and gas wells (except geophysical surveying and mapping) are classified in Subsector 213, Support Activities for Mining.

2111 Oil and Gas Extraction

21111 Oil and Gas Extraction

This industry comprises establishments primarily engaged in operating and/or developing oil and gas field properties and establishments primarily engaged in recovering liquid hydrocarbons from oil and gas field gases. Such activities may include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This industry includes the production of crude petroleum, the mining and extraction of oil from oil shale and oil sands, the production of natural gas and the recovery of hydrocarbon liquids from oil and gas field gases. Establishments in this industry operate oil and gas wells on their own account or for others on a contract or fee basis.

Cross-References. Establishments primarily engaged in--

- Performing oil field services for operators on a contract or fee basis--are classified in Industry 21311, Support Activities for Mining;
- Manufacturing acyclic and cyclic aromatic hydrocarbons from refined petroleum or liquid hydrocarbons--are classified in Industry 32511, Petrochemical Manufacturing;
- Refining crude petroleum into refined petroleum and liquid hydrocarbons--are classified in Industry 32411, Petroleum Refineries; and
- Recovering helium from natural gas--are classified in Industry 32512, Industrial Gas Manufacturing.

211111 Crude Petroleum and Natural Gas Extraction

US
This U.S. industry comprises establishments primarily engaged in (1) the exploration, development and/or the production of petroleum or natural gas from wells in which the hydrocarbons will initially flow or can be produced using normal pumping techniques, or (2) the production of crude petroleum from surface shales or tar sands or from reservoirs in which the hydrocarbons are semisolids. Establishments in this industry operate oil and gas wells on their own account or for others on a contract or fee basis.

Cross-References. Establishments primarily engaged in--

- Performing oil field services for operators on a contract or fee basis--are classified in Industry 21311, Support Activities for Mining;
- Refining crude petroleum into refined petroleum and liquid hydrocarbons--are classified in Industry 324110, Petroleum Refineries; and
- Recovering helium from natural gas--are classified in Industry 325120, Industrial Gas Manufacturing.

211112 Natural Gas Liquid Extraction^US

This U.S. industry comprises establishments primarily engaged in the recovery of liquid hydrocarbons from oil and gas field gases. Establishments primarily engaged in sulfur recovery from natural gas are included in this industry.

Cross-References. Establishments primarily engaged in--

- Manufacturing acyclic and cyclic aromatic hydrocarbons from refined petroleum or converting refined petroleum into liquid hydrocarbons (petrochemicals) and/or recovering liquid hydrocarbons--are classified in Industry 325110, Petrochemical Manufacturing;
- Refining crude petroleum into refined petroleum and liquid hydrocarbons--are classified in Industry 324110, Petroleum Refineries; and
- Recovering helium from natural gas--are classified in Industry 325120, Industrial Gas Manufacturing.

212 Mining (except Oil and Gas)

Industries in the Mining (except Oil and Gas) subsector primarily engage in mining, mine site development, and beneficiating (i.e., preparing) metallic minerals and nonmetallic minerals, including coal. The term "mining" is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g., crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site.

Beneficiation is the process whereby the extracted material is reduced to particles which can be separated into mineral and waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, centrifugal separation, and so on. In contrast, manufacturing operations primarily use chemical and
electrochemical processes, such as electrolysis, distillation, and so on. However some treatments, such as heat treatments, take place in both stages: the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

Establishments in the Mining (except Oil and Gas) subsector include those that have complete responsibility for operating mines and quarries (except oil and gas wells) and those that operate mines and quarries (except oil and gas wells) for others on a contract or fee basis. Establishments primarily engaged in providing support services, on a contract or fee basis, required for the mining and quarrying of minerals are classified in Subsector 213, Support Activities for Mining.

2121 Coal Mining

2121 Coal Mining

This industry comprises establishments primarily engaged in one or more of the following: (1) mining bituminous coal, anthracite, and lignite by underground mining, auger mining, strip mining, culm bank mining, and other surface mining; (2) developing coal mine sites; and (3) beneficiating (i.e., preparing) coal (e.g., cleaning, washing, screening, and sizing coal).

Cross-References. Establishments primarily engaged in--

- Manufacturing code oven products in coke oven establishments--are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing; and
- Manufacturing coal products in steel mills--are classified in Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

21211 Bituminous Coal and Lignite Surface Mining

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) surface mining or development of bituminous coal and lignite; (2) developing bituminous coal and lignite surface mine sites; and (3) beneficiating bituminous coal (e.g., cleaning, washing, screening, and sizing coal) whether mined on surface or underground.

Cross-References. Establishments primarily engaged in--

- Manufacturing coke oven products in coke oven establishments--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing;
- Underground mining of bituminous coal--are classified in U.S. Industry 212112, Bituminous Coal Underground Mining; and
- Mining and/or beneficiating anthracite coal--are classified in U.S. Industry 212113, Anthracite Mining.

212112 Bituminous Coal Underground MiningUS

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) the underground mining of bituminous coal; (2) developing bituminous coal underground mine sites; and (3) the underground mining and beneficiating bituminous coal (e.g., cleaning, washing, screening, and sizing coal).

Cross-References. Establishments primarily engaged in--

- Manufacturing coke oven products in coke oven establishments--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing;
- Surface mining and/or beneficiating of bituminous coal or lignite--are classified in U.S. Industry 212111, Bituminous Coal and Lignite Surface Mining; and
- Mining and/or beneficiating anthracite coal--are classified in U.S. Industry 212113, Anthracite Mining.

212113 Anthracite MiningUS

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) mining anthracite coal; (2) developing anthracite coal mining sites; and (3) beneficiating anthracite coal (e.g., cleaning, washing, screening, and sizing coal).

Cross-References. Establishments primarily engaged in--

- Manufacturing coke oven products in coke oven establishments--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing;
- Surface mining and/or beneficiating bituminous coal or lignite--are classified in U.S. Industry 212111, Bituminous Coal and Lignite Surface Mining; and
- Underground mining of bituminous coal--are classified in U.S. Industry 212112, Bituminous Coal Underground Mining.

2122 Metal Ore Mining

This industry group comprises establishments primarily engaged in developing mine sites or mining metallic minerals, and establishments primarily engaged in ore dressing and beneficiating (i.e., preparing) operations, such as crushing, grinding, washing, drying, sintering, concentrating, calcining, and leaching. Beneficiating may be performed at mills operated in conjunction with the mines served or at mills, such as
custom mills, operated separately.

21221 Iron Ore Mining

See industry description for 212210 below.

212210 Iron Ore Mining

This industry comprises establishments primarily engaged in (1) developing mine sites, mining, and/or beneficiating (i.e., preparing) iron ores and manganiferous ores valued chiefly for their iron content and/or (2) producing sinter iron ore (except iron ore produced in iron and steel mills) and other iron ore agglomerates.

Cross-References.

Establishments primarily engaged in manufacturing pig iron ore are classified in U.S. Industry 331111, Iron and Steel Mills.

21222 Gold Ore and Silver Ore Mining

This industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their gold and or silver content. Establishments primarily engaged in the transformation of the gold and silver into bullion or dore bar in combination with mining activities are included in this industry.

Cross-References.

Establishments primarily engaged in manufacturing gold or silver bullion or dore bar without mining are classified in Industry 33141, Nonferrous Metal (except Aluminum) Smelting and Refining.

212221 Gold Ore Mining US

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their gold content. Establishments primarily engaged in transformation of the gold into bullion or dore bar in combination with mining activities are included in this industry.

Cross-References.

Establishments primarily engaged in manufacturing gold bullion or dore bar without mining are classified in U.S. Industry 331419, Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum).
21222 Silver Ore Mining

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their silver content. Establishments primarily engaged in transformation of the silver into bullion or dore bar in combination with mining activities are included in this industry.

Cross-References.

Establishments primarily engaged in manufacturing silver bullion or dore bar without mining are classified in U.S. Industry 331419, Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum).

21223 Copper, Nickel, Lead, and Zinc Mining

This industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their copper, nickel, lead, or zinc content. Beneficiating includes the transformation of ores into concentrates.

Cross-References. Establishments primarily engaged in--

- Refining copper concentrates--are classified in Industry 33141, Nonferrous Metal (except Aluminum) Smelting and Refining; and
- Developing the mine site, mining, and/or beneficiating iron and manganiferous ores valued for their iron content--are classified in Industry 21221, Iron Ore Mining.

212231 Lead Ore and Zinc Ore Mining

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) lead ores, zinc ores, or lead-zinc ores.

212234 Copper Ore and Nickel Ore Mining

This U.S. industry comprises establishments primarily engaged in (1) developing the mine site, mining, and/or beneficiating (i.e., preparing) copper and/or nickel ores, and (2) recovering copper concentrates by the precipitation, leaching, or electrowinning of copper ore.

Cross-References.

Establishments primarily engaged in refining copper concentrates are classified in U.S.
Industry 331411, Primary Smelting and Refining of Copper.

21229 Other Metal Ore Mining

This industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) metal ores (except iron and manganiferous ores valued for their iron content, gold ore, silver ore, copper, nickel, lead, and zinc ore).

Illustrative Examples:

Antimony ores mining and/or beneficiating
Columbite ores mining and/or beneficiating
Ilmenite ores mining and/or beneficiating
Molybdenum ores mining and/or beneficiating
Tantalum ores mining and/or beneficiating
Tungsten ores mining and/or beneficiating
Uranium-radium-vanadium ores mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Developing the mine site, mining, and/or beneficiating iron and manganiferous ores valued chiefly for their iron content--are classified in Industry 21221, Iron Ore Mining;
- Developing the mine site, mining, and/or beneficiating ores valued chiefly for their gold or silver content--are classified in Industry 21222, Gold Ore and Silver Ore Mining;
- Developing the mine site, mining, and/or beneficiating ores valued chiefly for their copper, nickel, lead, or zinc content--are classified in Industry 21223, Copper, Nickel, Lead, and Zinc Mining; and
- Enriching uranium--are classified in Industry 32518, Other Basic Inorganic Chemical Manufacturing.

212291 Uranium-Radium-Vanadium Ore Mining

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) uranium-radium-vanadium ores.

Cross-References.

Establishments primarily engaged in enriching uranium are classified in U.S. Industry 325188, All Other Basic Inorganic Chemical Manufacturing.

212299 All Other Metal Ore Mining
This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) metal ores (except iron and manganiferous ores valued for their iron content, gold ore, silver ore, copper, nickel, lead, zinc, and uranium-radium-vanadium ore).

_Illustrative Examples:_

Antimony ores mining and/or beneficiating  
Columbite ores mining and/or beneficiating  
Ilmenite ores mining and/or beneficiating  
Molybdenum ores mining and/or beneficiating  
Rare-earth metal ores mining and/or beneficiating  
Tantalum ores mining and/or beneficiating  
Tungsten ores mining and/or beneficiating

_Cross-References._ Establishments primarily engaged in--

- Developing the mine site, mining, and/or beneficiating iron and manganiferous ores valued for their iron content--are classified in Industry 212210, Iron Ore Mining;  
- Developing the mine site, mining, and/or beneficiating ores valued chiefly for their gold or silver content--are classified in Industry 21222, Gold Ore and Silver Ore Mining;  
- Developing the mine site, mining, and/or beneficiating ores valued chiefly for their copper, nickel, lead, or zinc content--are classified in Industry 21223, Copper, Nickel, Lead, and Zinc Mining; and  
- Developing the mine site, mining, and/or beneficiating uranium-radium-vanadium ores--are classified in U.S. Industry 212291, Uranium-Radium-Vanadium Ore Mining.

**2123 Nonmetallic Mineral Mining and Quarrying**

This industry group comprises establishments primarily engaged in developing mine sites, or in mining or quarrying nonmetallic minerals (except fuels). Also included are certain well and brine operations, and preparation plants primarily engaged in beneficiating (e.g., crushing, grinding, washing, and concentrating) nonmetallic minerals.

Beneficiation is the process whereby the extracted material is reduced to particles which can be separated into mineral and waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. In contrast, manufacturing operations primarily use chemical and electrochemical processes, such as electrolysis and distillation. However some treatments, such as heat treatments, take place in both the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies...
by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

21231 Stone Mining and Quarrying

This industry comprises (1) establishments primarily engaged in developing the mine site, mining or quarrying dimension stone (i.e., rough blocks and/or slabs of stone), or mining and quarrying crushed and broken stone and/or (2) preparation plants primarily engaged in beneficiating stone (e.g., crushing, grinding, washing, screening, pulverizing, and sizing).

Cross-References. Establishments primarily engaged in--

- Producing lime--are classified in Industry 32741, Lime Manufacturing; and
- Quarrying and dressing dimension stone--are classified Industry 32799, All Other Nonmetallic Mineral Product Manufacturing.

212311 Dimension Stone Mining and Quarrying US

This U.S. industry comprises establishments primarily engaged in developing the mine site and/or mining or quarrying dimension stone (i.e., rough blocks and/or slabs of stone).

Cross-References.

Establishments primarily engaged in dressing dimension stone and manufacturing stone products are classified in U.S. Industry 327991, Cut Stone and Stone Product Manufacturing.

212312 Crushed and Broken Limestone Mining and Quarrying US

This U.S. industry comprises (1) establishments primarily engaged in developing the mine site, mining or quarrying crushed and broken limestone (including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa), and (2) preparation plants primarily engaged in beneficiating limestone (e.g., grinding or pulverizing).

Cross-References. Establishments primarily engaged in--

- Producing lime--are classified in Industry 327410, Lime Manufacturing; and
- Mining or quarrying bituminous limestone--are classified U.S. Industry 212319, Other Crushed and Broken Stone Mining and Quarrying.
212313 Crushed and Broken Granite Mining and Quarrying

This U.S. industry comprises (1) establishments primarily engaged in developing the mine site, and/or mining or quarrying crushed and broken granite (including related rocks, such as gneiss, syenite, and diorite) and (2) preparation plants primarily engaged in beneficiating granite (e.g., grinding or pulverizing).

212319 Other Crushed and Broken Stone Mining and Quarrying

This U.S. industry comprises (1) establishments primarily engaged in developing the mine site and/or mining or quarrying crushed and broken stone (except limestone and granite), (2) preparation plants primarily engaged in beneficiating (e.g., grinding and pulverizing) stone (except limestone and granite), and (3) establishments primarily engaged in mining or quarrying bituminous limestone and bituminous sandstone.

Illustrative Examples:

Bituminous limestone mining and/or beneficiating
Bituminous sandstone mining and/or beneficiating
Marble crushed and broken stone mining and/or beneficiating
Sandstone crushed and broken stone mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Mining or quarrying crushed and broken limestone--are classified in U.S. Industry 212312, Crushed and Broken Limestone Mining and Quarrying; and
- Mining or quarrying crushed and broken granite--are classified in U.S. Industry 212313, Crushed and Broken Granite Mining and Quarrying.

21232 Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying

This industry comprises (1) establishments primarily engaged in developing the mine site and/or mining, quarrying, dredging for sand and gravel, or mining clay, (e.g., china clay, paper clay and slip clay) and (2) preparation plants primarily engaged in beneficiating (e.g., washing, screening, and grinding) sand and gravel, clay, and ceramic and refractory minerals.

Cross-References. Establishments primarily engaged in--

- Calcining, dead burning, or otherwise processing (i.e., beyond basic preparation) clay or refractory minerals--are classified in Industry 32799, All Other Nonmetallic Mineral Product Manufacturing;
- Shaping, molding, baking, burning, or hardening nonclay ceramics, clay and nonclay refractories, and structural clay products--are classified in Industry
32712, Clay Building Material and Refactories Manufacturing; and
- Shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures-
- are classified in Industry 32711, Pottery, Ceramics and Plumbing Fixture
- Manufacturing.

212321 Construction Sand and Gravel MiningUS

This U.S. industry comprises establishments primarily engaged in one or more of the
following: (1) operating commercial grade (i.e., construction) sand and gravel pits; (2)
dredging for commercial grade sand and gravel; and (3) washing, screening, or
otherwise preparing commercial grade sand and gravel.

Cross-References.

Establishments primarily engaged in mining industrial grade sand are classified in U.S.
Industry 212322, Industrial Sand Mining.

212322 Industrial Sand MiningUS

This U.S. industry comprises establishments primarily engaged in one or more of the
following: (1) operating industrial grade sand pits; (2) dredging for industrial grade
sand; and (3) washing, screening, or otherwise preparing industrial grade sand.

Cross-References.

Establishments primarily engaged in mining commercial (i.e., construction) grade
gravel are classified in U.S. Industry 212321, Construction Sand and Gravel Mining.

212324 Kaolin and Ball Clay MiningUS

This U.S. industry comprises (1) establishments primarily engaged in developing the
mine site and/or mining kaolin or ball clay (e.g., china clay, paper clay, and slip clay)
and (2) establishments primarily engaged in beneficiating (i.e., preparing) kaolin or
ball clay.

Cross-References.

Establishments primarily engaged in calcining, dead burning, or otherwise processing
(i.e., beyond basic preparation) kaolin and ball clay are classified in U.S. Industry
327992, Ground or Treated Mineral and Earth Manufacturing.

212325 Clay and Ceramic and Refractory Minerals MiningUS

This U.S. industry comprises establishments primarily engaged in one or more of the
following: (1) mining clay (except kaolin and ball), ceramic, or refractory minerals; (2)
developing the mine site for clay, ceramic, or refractory minerals; and (3) beneficiating (i.e., preparing) clay (except kaolin and ball), ceramic, or refractory minerals.

Illustrative Examples:

- Bentonite mining and/or beneficiating
- Common clay mining and/or beneficiating
- Feldspar mining and/or beneficiating
- Fire clay mining and/or beneficiating
- Fuller's earth mining and/or beneficiating
- Magnesite mining and/or beneficiating
- Nepheline syenite mining and/or beneficiating
- Shale (except oil shale) mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Shaping, molding, baking, burning, or hardening clay and nonclay refractories, and structural clay products--are classified in Industry 32712, Clay Building Material and Refractories Manufacturing;
- Developing the mine site, mining, and/or beneficiating kaolin or ball clay--are classified in U.S. Industry 212324, Kaolin and Ball Clay Mining; and
- Shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures--are classified in Industry 32711, Pottery, Ceramics and Plumbing Fixture Manufacturing.

21239 Other Nonmetallic Mineral Mining and Quarrying

This industry comprises establishments primarily engaged in developing the mine site, mining, and/or milling or otherwise beneficiating (i.e., preparing) nonmetallic minerals (except coal, stone, sand, gravel, clay, ceramic, and refractory minerals).

Illustrative Examples:

- Barite mining and/or beneficiating
- Borate, natural, mining and/or beneficiating
- Peat mining and/or beneficiating
- Phosphate rock mining and/or beneficiating
- Potash mining and/or beneficiating
- Rock salt mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Mining or quarrying dimension stone--are classified in Industry 21231, Stone Mining and Quarrying;
- Mining or quarrying sand, gravel, clay and ceramic and refractory minerals--are classified in Industry 21232, Sand, Gravel, Clay, and Ceramic and Refractory
Minerals Mining and Quarrying;

- Calcining, dead burning, or otherwise processing (i.e., beyond basic preparation) minerals, such as talc, mica, feldspar, barite, and soapstone,—are classified in Industry 32799, All Other Nonmetallic Mineral Product Manufacturing;
- Manufacturing boron compounds and potassium salts—are classified in Industry 32518, Other Basic Inorganic Chemical Manufacturing;
- Manufacturing table salt—are classified in Industry 31194, Seasoning and Dressing Manufacturing;
- Manufacturing salt (except table salt)—are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing; and
- Manufacturing phosphoric acid, superphosphates, or other phosphatic fertilizer materials—are classified in Industry 32531, Fertilizer Manufacturing.

212391 Potash, Soda, and Borate Mineral Mining<sup>US</sup>

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining and/or milling, or otherwise beneficiating (i.e., preparing) natural potassium, sodium, or boron compounds. Drylake brine operations are included in this industry, as well as establishments engaged in producing the specified minerals from underground and open pit mines.

Cross-References. Establishments primarily engaged in--

- Manufacturing boron compounds and potassium salts—are classified in U.S. Industry 325188, All Other Basic Inorganic Chemical Manufacturing;
- Manufacturing sodium carbonate—are classified in U.S. Industry 325181, Alkalies and Chlorine Manufacturing; and
- Manufacturing table salt—are classified in U.S. Industry 311942, Spice and Extract Manufacturing.

212392 Phosphate Rock Mining<sup>US</sup>

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, milling, and/or drying or otherwise beneficiating (i.e., preparing) phosphate rock.

Cross-References.

Establishments primarily engaged in manufacturing phosphoric acid, superphosphates, or other phosphatic fertilizer materials are classified in U.S. Industry 325312, Phosphatic Fertilizer Manufacturing.

212393 Other Chemical and Fertilizer Mineral Mining<sup>US</sup>
This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, milling, and/or drying or otherwise beneficiating (i.e., preparing) chemical or fertilizer mineral raw materials (except potash, soda, boron, and phosphate rock).

Illustrative Examples:

Barite mining and/or beneficiating
Celestite mining and/or beneficiating
Fluorspar mining and/or beneficiating
Rock salt mining and/or beneficiating
Sulfur mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Mining and/or milling or otherwise beneficiating natural potassium, sodium, or boron compounds--are classified in U.S. Industry 212391, Potash, Soda, and Borate Mineral Mining;
- Manufacturing industrial salt--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Mining, milling, drying, and/or sintering or otherwise beneficiating phosphate rock--are classified in U.S. Industry 212392, Phosphate Rock Mining; and
- Manufacturing table salt--are classified in U.S. Industry 311942, Spice and Extract Manufacturing.

212399 All Other Nonmetallic Mineral Mining

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining and/or milling or otherwise beneficiating (i.e., preparing) nonmetallic minerals (except stone, sand, gravel, clay, ceramic, refractory minerals, chemical and fertilizer minerals).

Illustrative Examples:

Gypsum mining and/or beneficiating
Mica mining and/or beneficiating
Pyrophyllite mining and/or beneficiating
Soapstone mining and/or beneficiating
Talc mining and/or beneficiating

Cross-References. Establishments primarily engaged in--

- Mining or quarrying dimension stone--are classified in Industry 21231, Stone Mining and Quarrying;
- Mining, quarrying, or beneficiating sand, gravel, clay, and ceramic and refractory minerals--are classified in Industry 21232, Sand, Gravel, Clay, and
Ceramic and Refractory Minerals Mining and Quarrying;

- Mining, quarrying or beneficiating natural potash, soda, and borate--are classified in U.S. Industry 212391, Potash, Soda, and Borate Mineral Mining; and
- Mining and/or milling or otherwise beneficiating phosphate rock--are classified in U.S. Industry 212392, Phosphate Rock Mining.

213 Support Activities for Mining

Industries in the Support Activities for Mining subsector group establishments primarily providing support services, on a fee or contract basis, required for the mining and quarrying of minerals and for the extraction of oil and gas. Establishments performing exploration (except geophysical surveying and mapping) for minerals, on a contract or fee basis, are included in this subsector. Exploration includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

The activities performed on a fee or contract basis by establishments in the Support Activities for Mining subsector are also often performed in-house by mining operators. These activities include: taking core samples, making geological observations at prospective sites, and such oil and gas operations as spudding in, drilling in, redrilling, directional drilling, excavating slush pits and cellars; grading and building foundations at well locations; well surveying; running, cutting, and pulling casings, tubes and rods; cementing wells; shooting wells; perforating well casings; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

2131 Support Activities for Mining

21311 Support Activities for Mining

This industry comprises establishments primarily engaged in providing support services, on a fee or contract basis, required for the mining and quarrying of minerals and for the extraction of oil and gas. Drilling, taking core samples, and making geological observations at prospective sites (except geophysical surveying and mapping) for minerals, on a fee or contract basis, is included in this industry.

Cross-References. Establishments primarily engaged in--

- Performing geophysical surveying services for minerals (i.e., coal, metal ores, oil and gas, and nonmetallic minerals) on a contract or fee basis--are classified in Industry 54136, Geophysical Surveying and Mapping Services;
- Mining, quarrying, and/or beneficiating on a contract or fee basis--are classified in Subsector 212, Mining (except Oil and Gas) based on the mineral mined; and
- Operating oil and gas field properties on a contract or fee basis--are classified
in Subsector 211, Oil and Gas Extraction based on the activity.

213111 Drilling Oil and Gas Wells\textsuperscript{CAN}

This U.S. industry comprises establishments primarily engaged in drilling oil and gas wells for others on a contract or fee basis. This industry includes contractors that specialize in spudding in, drilling in, redrilling, and directional drilling.

Cross-References. Establishments primarily engaged in--

- Performing exploration (except geophysical surveying and mapping) services for oil and gas on a contract or fee basis--are classified in U.S. Industry 213112, Support Activities for Oil and Gas Operations; and
- Performing geophysical surveying and mapping services for oil and gas on a contract or fee basis--are classified in Industry 541360, Geophysical Surveying and Mapping Services.

213112 Support Activities for Oil and Gas Operations\textsuperscript{US}

This U.S. industry comprises establishments primarily engaged in performing oil and gas field services (except contract drilling) for others, on a contract or fee basis. Services included are exploration (except geophysical surveying and mapping); excavating slush pits and cellars; grading and building foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casings; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

Cross-References. Establishments primarily engaged in--

- Contract drilling for oil and gas--are classified in U.S. Industry 213111, Drilling Oil and Gas Wells;
- Operating oil and gas field properties on a contract or fee basis--are classified in Subsector 211, Oil and Gas Extraction, based on the activity; and
- Performing geophysical surveying and mapping services for oil and gas on a contract or fee basis--are classified in Industry 541360, Geophysical Surveying and Mapping Services.

213113 Support Activities for Coal Mining\textsuperscript{US}

This U.S. industry comprises establishments primarily engaged in providing support services, on a fee or contract basis, required for coal mining. Exploration for coal is included in this industry. Exploration includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.
Cross-References. Establishments primarily engaged in--

- Performing geophysical surveying services for coal on a contract or fee basis--are classified in Industry 541360, Geophysical Surveying and Mapping Services; and
- Operating coal mines or quarries on a contract or fee basis--are classified in Industry Group 2121, Coal Mining, based on the type of coal mined.

213114 Support Activities for Metal Mining\textsuperscript{US}

This U.S. industry comprises establishments primarily engaged in providing support services, on a fee or contract basis, required for the mining and quarrying of metallic minerals and for the extraction of metal ores. Exploration for minerals is included in this industry. Exploration (except geophysical surveying and mapping services) includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

Cross-References. Establishments primarily engaged in--

- Performing geophysical surveying services for metallic minerals on a contract or fee basis--are classified in Industry 541360, Geophysical Surveying and Mapping Services; and
- Operating metallic mineral mines or quarries on a contract or fee basis--are classified in Industry Group 2122, Metal Ore Mining, based on the type of ore mined.

213115 Support Activities for Nonmetallic Minerals (except Fuels)\textsuperscript{US}

This U.S. industry comprises establishments primarily engaged in providing support services, on a fee or contract basis, required for the mining and quarrying of nonmetallic minerals and for the extraction of nonmetallic minerals. Exploration for minerals is included in this industry. Exploration (except geophysical surveying and mapping services) includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

Cross-References. Establishments primarily engaged in--

- Performing geophysical surveying services for nonmetallic minerals on a contract or fee basis--are classified in Industry 541360, Geophysical Surveying and Mapping Services; and
- Operating nonmetallic mineral mines or quarries on a contract or fee basis--are classified in Industry Group 2123, Nonmetallic Mineral Mining and Quarrying, based on the type of mineral mined or quarried.
US—United States industry only. CAN—United States and Canadian industries are comparable. When neither US nor CAN appears, Canadian, Mexican, and United States industries are comparable.