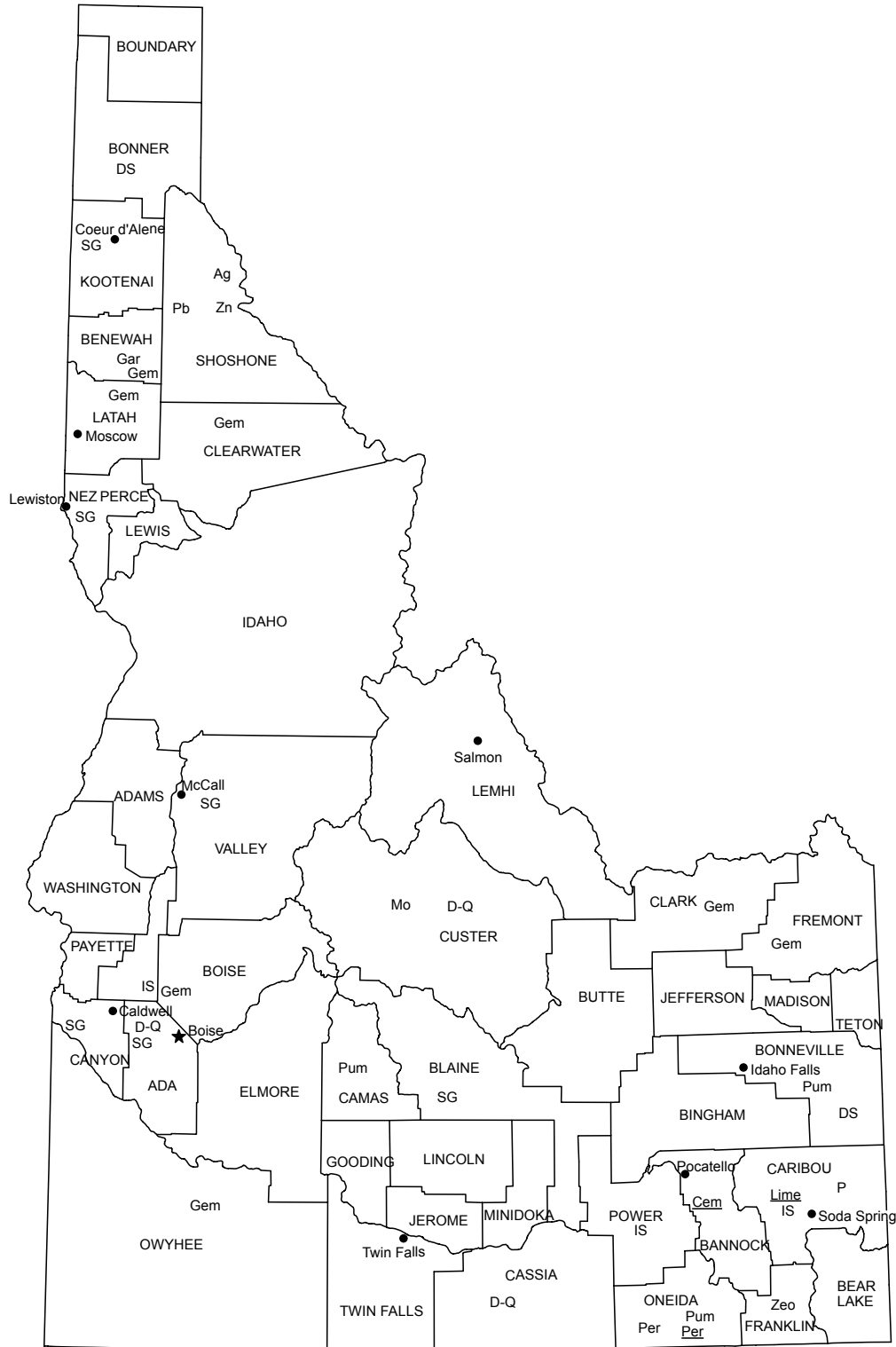


IDAHO



LEGEND

- County boundary
- ★ Capital
- City

MINERAL SYMBOLS (Major producing areas)

- Ag Silver
- Cem Cement plant
- D-Q Dimension quartzite
- DS Dimension stone
- Gar Garnet
- Gem Gemstones
- IS Industrial sand
- Lime Lime plant
- Mo Molybdenum
- P Phosphate rock
- Pb Lead
- Per Perlite
- Per Perlite plant
- Pum Pumice and pumicite
- SG Construction sand and gravel
- Zn Zinc
- Zeo Zeolites



THE MINERAL INDUSTRY OF IDAHO

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Idaho Geological Survey for collecting information on all nonfuel minerals.

In 2004, Idaho's nonfuel mineral production was valued¹ at \$446 million based upon preliminary U.S. Geological Survey (USGS) data. This was a nearly 66% increase from the State's total nonfuel mineral value for 2003,² which was down less than 1% from 2002. The State rose to 34th from 37th in rank among the 50 States in total nonfuel mineral production value, of which Idaho accounted for 1% of the U.S. total value.

Molybdenum concentrates, phosphate rock, construction sand and gravel, silver, and portland cement, in descending order of value, were Idaho's leading nonfuel minerals and accounted for about 88%³ of the State's total nonfuel mineral production value in 2004. Industrial minerals accounted for about 51% of the State's total nonfuel mineral value; molybdenum concentrates, silver, lead, copper, and zinc (descending order of value) accounted for the remainder. In 2004, the largest increases in value were for molybdenum concentrates, which were up more than \$110 million; phosphate rock, up about \$20 million; construction sand and gravel, up \$15 million³; and silver, up about \$10 million. Except for a relatively large decrease that occurred in the value of portland cement (production up slightly), the several other commodity value decreases that took place were for less than one million dollars.

In 2003, the largest increases in value were those of molybdenum concentrates, which were up by about \$11 million; lime, up by about \$3 million; and lead and construction sand and gravel, up by about \$2 million each. These increases were slightly offset by decreases in silver, which was down by more than \$5 million; phosphate rock and copper, down by about \$4 million each; portland cement, down by about \$3 million; zinc, down by about \$2 million; and gold and industrial garnet, down by about \$1 million each, resulting overall in the State's small net decrease for the year (table 1).

During the past 6 years, the value of metals and industrial minerals as a percentage of the State's total nonfuel mineral value has fluctuated significantly. The overall value of metals production rose sharply from 30% in 2003 to more than 48% in 2004 mostly owing to a substantial increase in the average price of molybdenum concentrates mined from Thompson Creek Mining Co.'s large open pit molybdenum mine in Custer County. The values of the State's other mined metals also rose in 2004, especially that of silver, which was up by more than 20% in spite of a slight decrease in silver production. The value of metals production had decreased to 28% in 2001 and 29% in 2002 from 45% and 43% in 1999 and 2000, respectively. The State's decrease to the lower values of 2001-02 resulted mainly from a substantial decrease in gold production in 2001 from that of 2000, which continued to decrease significantly in 2002 mostly as a result of the closing down of operations at the Beartrack Mine in Lemhi County; gold production ceased in the State during 2003.

In 2004, Idaho continued to rank second in the quantity of phosphate rock produced, second of the two industrial-garnet-producing States, third in silver and lead (descending order of value), and fourth in molybdenum concentrates. While the State rose to second from fourth in the production of zeolites, to third from fifth in pumice and pumicite, and to fifth from seventh in gemstones (gemstones based upon value), it continued to be a significant producer of construction sand and gravel and industrial sand and gravel.

The Idaho Geological Survey⁴ (IGS) provided the narrative information that follows.

Higher commodity prices from increasing demand helped fuel an increase in exploration activity and an increase in the value of Idaho's nonfuel mineral production to \$446 million (table 1). This was a sizable jump from the 2003 final data value of only \$269 million. Higher silver, molybdenum, and base-metal prices were accompanied by an increased demand for aggregate and phosphate rock. In 2004, employment at the State's metal and nonmetal mines increased about 10% to 1,960 compared with 1,769 in 2003. These numbers do not include the approximately 1,000 workers at three large phosphate-processing chemical plants in southeastern Idaho.

Exploration and Development Activities

The higher silver prices, which stayed in the \$6- to \$7-per-troy-ounce range for 2004, helped to pay for new development costs at the two deep underground mines in the Coeur d'Alene District in Shoshone County. Since 1884, the District production has totaled more than 36,800 metric tons (t) (1.180 billion troy ounces) of silver from the rich quartz-siderite-sulfide veins. Hecla Mining Co. added 50 employees at the Lucky Friday Mine in Mullan to assist with the new \$8.5 million production drift on the 1,800-meter (m) level to connect the Silver Shaft with the Gold Hunter deposit. About 1,220 m of the 1,460-m-long drift was completed during the year, and another eight core holes were drilled to test ore grades and extensions of the system. The company also experimented with new ways to use slusher stopes on some of the narrower veins. Coeur d'Alene Mines Corp. produced nearly 109 t (3.5 million troy

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2004 USGS mineral production data published in this chapter are those available as of December 2005.³ All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—also can be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

²Values, percentage calculations, and rankings for 2003 may differ from the Minerals Yearbook, Area Reports: Domestic 2003, Volume II, owing to the revision of preliminary 2003 to final 2003 data. Data and rankings for 2004 are considered to be final and are not likely to change significantly.³

³Correction posted August 7, 2006.

⁴Virginia S. Gillerman, Associate Research Geologist/Economic Geologist, authored the text of the State mineral industry information provided by the Idaho Geological Survey.

ounces) of silver from their Galena Mine, mostly by mechanized cut and fill. The extensive development work included a horizontal passage west on the 1,000-m level, deep exploration along the Polaris Fault and the 72 vein, and 12,000 m of diamond drilling.

Sterling Mining Co. worked to restore the Jewell Shaft and hoist system at the Sunshine Mine, which it had acquired in 2001. Sterling also awarded a contract to Atlas Faucett to restore the Silver Summit Tunnel, which can serve as escapeway for the Sunshine Mine. Sterling targeted an induced polarization/resistivity anomaly by drilling four core holes from the surface and discovered several veins, at least one of which was mineralized. It also acquired property from Merger Mines Inc. and Metropolitan Mines Corp.

New Jersey Mining Co. had a portfolio of six exploration properties in the Coeur d'Alene District and nearby region and a mill at Kellogg. The company drilled its New Jersey Mine and two other properties, staked a new discovery (named the Silver Button), continued U.S. Forest Service permitting for the Silver Strand silver-gold underground mine, and developed the Golden Chest Mine near Murray, Shoshone County. In the 1980s, Newmont Mining Corp. had drilled out a small open pit gold resource at the Golden Chest, which was the largest lode mine in the district. New Jersey Mining, which acquired the property in 2003, constructed a ramp from the surface down to intersect with the high-grade Katie Dora vein. The company mined a bulk sample for test milling and drilled four surface exploration holes, which hit ore-grade rock below the historic workings. In December, New Jersey Mining announced its decision to proceed with mining the Katie Dora vein (New Jersey Mining Co., 2004⁵).

Elsewhere in northern Idaho, Valencia Ventures Inc. optioned the Idaho Gold Project from Beartooth Platinum Corp. The project included the previously permitted Buffalo Gulch resource, which was estimated to contain 4.5 million metric tons (Mt) of ore at 0.79 gram per metric ton (g/t) gold, and the Friday-Petsite properties near Elk City. Beartooth had drilled both locales in early summer to confirm grades that had been determined in previous work.

In the Warren District in central Idaho, Kimberly Gold Mines, Inc. purchased the Rescue Mine and mill. Kimberly replaced the collapsed roof on the mill and finished an extensive site cleanup at the small high-grade underground gold mine. Unity Gold-Silver Mines and Sidney Resources Corp. also worked their lode properties in the Warren District. Elsewhere in central Idaho, Vista Gold Corp. held the 62-t gold sulfide resource at Stibnite, and American Independence Mining continued legal negotiations and geochemical work at the Golden Hand Mine near Big Creek.

In Lemhi County, Nevada Contact drilled seven holes at Iron Creek and returned the property to its owner. Wave Exploration Corp. worked on the Musgrove Creek gold property, which hosts a 9-t gold resource based on prior drilling by discoverer Atlas Precious Metals Inc. and Newmont. Wave conducted surface geochemical sampling and drilled four reverse circulation holes.

In the Blackbird Mining District, high cobalt and copper prices enabled Formation Capital Corp. to resume exploration and permitting activities for its proposed underground cobalt-copper-gold mine. Formation drilled 7,580 m of core in 28 holes and did extensive geologic work. The total resource for the Idaho Cobalt Project, including the Ram and the Sunshine with the 0.2% cutoff contains a combined measured and indicated mineral resource of 1,979,000 t grading 0.60 % cobalt, 0.56% copper, and 0.48 grams per metric ton (g/t) gold. The inferred mineral resource at the 0.2% cutoff stands at 1,366,000 t grading 0.58 % cobalt, 0.87% copper, and 0.55 g/t gold (Formation Capital Corp., 2005, p. 2).

In eastern Idaho, Trio Gold Corp. agreed with Sultana Resources LLC to explore the Empire Mine property near Mackay in Custer County (Trio Gold Corp., 2004⁵). The polymetallic skarn was drilled by Cambior Exploration USA, Inc. in the mid-1990s. Trio was reportedly interested in the open pit copper potential of the historic district. Kilgore Gold Co. explored the epithermal gold-silver property in Clark County where previous drilling delineated a resource of about 15 t of gold. Kilgore drilled six holes and, in spite of numerous drilling problems, encountered low-grade mineralization under a new geochemical anomaly named Dog Bone Ridge.

In southwestern Idaho, Nevada Contact held the Blacksheep epithermal prospect and Milestone Fault zone north of the DeLamar Mine in Owyhee County. Desert Mineral Mining LLC proposed a controversial but very small gold operation in the Neal District east of Boise. Mosquito Consolidated Gold Mines Ltd. acquired an option on the large Cumo property northwest of Idaho City in Boise County. Cumo, which was discovered by Amax Exploration Inc. in the 1970s, is a 403-Mt low-grade (0.135% molybdenum) system at a significant depth.

In the Atlanta Mining District of Elmore County, Atlanta Gold Corp. forged ahead with permitting work on an open pit heap-leach gold-silver mine on historic Atlanta Hill just west of the Sawtooth Mountains. More than 61,000 m of past drilling was used by a consultant to calculate a minable reserve of 12.4 Mt of gold-silver ore at a grade of 2 g/t gold in two pits.

Exploration for industrial minerals was limited to phosphate, feldspar-clay, and decorative rock.

Commodity Review

Industrial Minerals

Agrium Inc., J.R. Simplot Company, and Monsanto Co. mined and processed phosphate rock from southeastern Idaho's Phosphoria Formation. Phosphate rock production continued to be the State's largest mineral industry. Simplot produced at full capacity at its Smoky Canyon Mine and initiated a controversial environmental impact statement to expand southward to the Deer Creek and Manning areas, which are partly located in a roadless area. Simplot had a large drilling program at the Dairy Syncline property. Monsanto completed mining the Enoch Valley Mine and started construction on a high-tech waste dump to encapsulate selenium-bearing waste shale. Monsanto's production has shifted to the South Rasmussen Ridge Mine, and the company explored the Blackfoot River Bridge project.

⁵References that include a section mark (§) are found in the Internet References Cited section.

Agrium announced that it would take over the Dry Valley phosphate mine, which had been developed by Astaris Production LLC, which left the business in 2003 (Agrium Inc., 2004§). Phosphate fertilizer demand increased owing in part to 2004 hurricane-related shutdowns of the Florida operations. Agrium shipped nearly 1.8 Mt of ore from the Rasmussen Ridge Mine before announcing that it had taken over the phosphate leases from Astaris. The company planned to mothball the Rasmussen Ridge Mine and to shift production over to the former Astaris Dry Valley Mine.

Prices for decorative stone continued to be strong, which was a favorable situation for the four major Oakley stone producers on Middle Mountain in south-central Idaho. L&W Stone Corp. extracted some 31,000 t of prized Three Rivers stone from the quarry near Clayton and received approval from the U.S. Bureau of Land Management for a new plan of operations. The small Ramshorn quarry at Bayhorse applied to expand from private to Federal land. Aggregate production, cement (produced primarily by Ash Grove Cement Co. in Inkom), industrial garnet, and zeolites were in high demand.

Idaho Minerals LLC resumed active perlite mining after it secured a major contract with a Canadian supplier of horticultural products. In addition, Hess Pumice Products, Inc. reported a market demand shift to more low-unit-value, higher tonnage amounts of pumice used for construction products from high-unit-value ultrafine, and ultrapure grade pumice used in polishing television screens. This was owing to the entry of cheaper Chinese pumice into the television screen markets of the Pacific Rim.

Cement and construction sand and gravel production increased approximately 10% from the level of 2003. This was in line with Idaho's visibly booming construction industry in the Boise-Nampa, Coeur d'Alene, and Idaho Falls population centers. Continued growth in 2005 could result in local shortages and price increases.

Metals

Higher average prices enabled the silver mines and the giant Thompson Creek molybdenum mine in Custer County to make money. Molybdenum prices averaged about \$30 per kilogram in 2004, which was nearly triple those of 2003 (Magyar, 2005). Thompson Creek's workforce increased to 160, and with the 2003 stripping done, most of 2004 was spent mining phase 5 ore. Approximately 6,800 t of concentrate were produced from the large open pit.

Environmental Issues and Mine Reclamation

The Idaho Department of Lands, in conjunction with other State and Federal agencies, honored the phosphate industry with most of its 2004 Reclamation Awards. Winners included Agrium (operations at Rasmussen Ridge), Astaris (special project to relocate and restore Upper Dry Valley Creek), Monsanto (special project of vegetative management at South Rasmussen), and Simplot (exploration reclamation at the Deer Creek, the Manning Creek, and the Wells Canyon leases). Much of the reclamation work centered on ways to minimize and prevent selenium release into surface and ground waters. The middle waste shales of the Phosphoria Formation are naturally enriched in selenium. Efforts by a joint industry-agency working group to address the selenium problem were being driven by requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

Government Programs

Geologic mapping continued with Federal matching funding from the STATEMAP program, a component of the USGS National Cooperative Geologic Mapping Program (NCGMP). The NCGMP distributes funding through STATEMAP for participating State geological surveys.

The IGS made available more than 60 new digital geologic maps; many were available on the IGS Web site at URL www.idahogeology.org. Mapping was conducted near the Lewiston, the Moscow, the Orofino, the Sandpoint, and the Twin Falls regions. The IGS Mines and Prospects database, which includes data for more than 8,000 historic mines in the State, was made available on the IGS Web site and as a CD-ROM. The IGS, in cooperation with the Federal land-management agencies, continued its field surveys of inactive mines sites. These were examined for physical safety and environmental hazards.

References Cited

Formation Capital Corp., 2005, Annual report fiscal 2005: Vancouver, British Columbia, Canada, Formation Capital Corp., 44 p.
Magyar, M.J., 2005, Molybdenum: U.S. Geological Survey Mineral Commodity Summaries 2005, p. 112-113.

Internet References Cited

Agrium Inc., 2004 (March 8), Agrium finalizes agreement to acquire Astaris assets at Conda, Idaho, News Release, accessed October 3, 2005, at URL http://www.agrium.com/investor_information/news/5784_5860.jsp.

New Jersey Mining Co., 2004 (December 17), New Jersey Mining Company to proceed with mining operation at Golden Chest Mine, Press Release, accessed September 29, 2005, at URL http://www.newjerseymining.com/press_releases/2004/12_17_2004_press.htm.

Trio Gold Corp., 2004 (March 26), Trio Gold announces acquisition of Empire Mine property, Press Release, accessed October 3, 2005, at URL <http://www.triogold.com/PRMar2604.php>.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN IDAHO^{1,2}

(Thousand metric tons and thousand dollars)

Mineral	2002		2003		2004	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	460	NA	477	NA	836 ³
Sand and gravel, construction	15,700	57,700	16,500	59,300	19,600 ³	74,300 ³
Stone, crushed	3,420	15,800	3,160	15,700	3,320 ³	17,400 ³
Combined values of cement (portland), copper, feldspar, garnet (industrial), gold (2002-03), lead, lime, molybdenum concentrates, perlite (crude), phosphate rock, pumice and pumicite, sand and gravel (industrial), silver, stone [dimension granite, quartz, sandstone (2002), dimension quartzite and sandstone (2003-04)], zeolites (2004), zinc	XX	197,000	XX	193,000	XX	354,000 ³
Total	XX	271,000	XX	269,000	XX	446,000

NA Not available. XX Not applicable.

¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

²Data are rounded to three significant digits; may not add to totals shown.

³Corrections posted August 7, 2006.

TABLE 2
IDAHO: CRUSHED STONE SOLD OR USED, BY KIND¹

Kind	2002				2003				2004			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	3	460	\$2,890	\$6.29	6	550	\$3,970	\$7.23	8	404	\$2,680	\$6.63
Shell	1	W	W	7.08 ^r	1	W	W	7.02	1	W	W	7.67
Granite	8	160	793	4.96	8	362	1,350	3.72	10	452	2,600	5.75
Traprock	36	2,140	9,140	4.27	23	1,690	7,710	4.57	22	1,880	9,130	4.86
Quartzite	2	W	W	4.28	2	W	W	4.72	2	W	W	4.89
Miscellaneous stone	5	279	1,280	4.60	4	172	715	4.16	4	148	800	5.40
Total or average	XX	3,420	15,800	4.62	XX	3,160	15,700	4.95	XX	3,320	17,400	5.25

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total or average." XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3a
IDAHO: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2003, BY USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1½ inch):			
Riprap and jetty stone	39	\$275	\$7.14
Filter stone	29	177	6.14
Other coarse aggregates	150	268	1.79
Total or average	218	938	4.30
Coarse aggregate, graded:			
Concrete aggregate, coarse	13	123	9.83
Bituminous aggregate, coarse	W	W	5.91
Bituminous surface-treatment aggregate	50	385	7.72
Railroad ballast	W	W	10.28
Total or average	172	1,190	6.92
Fine aggregate (-¾ inch):			
Stone sand, concrete	W	W	11.02
Stone sand, bituminous mix or seal	W	W	5.14
Screening, undesignated	W	W	4.31
Total or average	74	593	8.01
Coarse and fine aggregates:			
Graded road base or subbase	978	4,110	4.20
Unpaved road surfacing	87	272	3.13
Crusher run or fill or waste	57	168	2.96
Other coarse and fine aggregates	63	574	9.15
Total or average	1,190	5,120	4.32
Agricultural:			
Agricultural limestone	W	W	4.41
Poultry grit and mineral food	W	W	25.35
Total or average	33	592	17.94
Chemical and metallurgical:			
Cement manufacture	W	W	4.41
Flux stone	W	W	4.41
Total or average	628	2,770	4.41
Special:			
Mine dusting or acid water treatment	W	W	25.35
Asphalt fillers or extenders	W	W	4.41
Total or average	2	46	23.00
Other miscellaneous uses and specified uses not listed	28	912	31.69
Unspecified:²			
Reported	576	2,570	4.46
Estimated	247	1,150	4.65
Total or average	823	3,710	4.51
Grand total or average	3,160	15,700	4.95

W Withheld to avoid disclosing company proprietary data; included in "Total or average."

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Reported and estimated production without a breakdown by end use.

TABLE 3b
IDAHO: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2004, BY USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1½ inch):			
Riprap and jetty stone	20	\$124	\$6.20
Filter stone	W	W	6.20
Other coarse aggregates	8	48	6.00
Total or average	28	172	6.14
Coarse aggregate, graded:			
Bituminous aggregate, coarse	321	2,460	7.66
Bituminous surface-treatment aggregate	21	149	7.16
Total or average	342	2,610	7.62
Fine aggregate (-¾ inch):			
Stone sand, bituminous mix or seal	34	182	5.35
Other fine aggregate	2	19	9.50
Total or average	36	201	5.58
Coarse and fine aggregates:			
Graded road base or subbase	1,100	4,810	4.37
Unpaved road surfacing	47	155	3.28
Other coarse and fine aggregates	71	358	5.04
Total or average	1,220	5,320	4.37
Agricultural:			
Poultry grit and mineral food	(2)	(2)	25.35
Other agricultural uses	(2)	(2)	4.41
Total or average	31	601	19.39
Chemical and metallurgical, cement manufacture	(3)	(3)	2.76
Special:			
Mine dusting or acid water treatment	(2)	(2)	25.36
Asphalt fillers or extenders	(2)	(2)	3.27
Total or average	2	42	21.00
Other miscellaneous uses:			
Chemicals	(2)	(2)	30.87
Other specified uses not listed	(2)	(2)	4.41
Total or average	283	2,140	7.57
Unspecified:⁴			
Reported	941	3,700	3.93
Estimated	440	2,600	5.95
Total or average	1,380	6,330	4.58
Grand total or average	3,320	17,400	5.25

W Withheld to avoid disclosing company proprietary data; included with "Other coarse aggregates."

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Withheld to avoid disclosing company proprietary data; included in "Total or average."

³Withheld to avoid disclosing company proprietary data; included in "Unspecified: Reported."

⁴Reported and estimated production without a breakdown by end use.

TABLE 4a
IDAHO: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2003,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	1,950	\$9,540	\$4.88
Plaster and gunitite sands	18	83	4.60
Concrete products (blocks, bricks, pipe, decorative, etc.)	20	158	7.82
Asphaltic concrete aggregates and other bituminous mixtures	910	3,870	4.26
Road base and coverings ²	4,860	15,100	2.82
Fill	599	1,850	3.09
Snow and ice control	82	502	6.14
Other miscellaneous uses	5	25	4.51
Unspecified: ³			
Reported	2,090	7,090	3.39
Estimated	5,900	21,000	3.56
Total or average	16,500	59,300	3.60

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes road and other stabilization (cement and lime).

³Reported and estimated production without a breakdown by end use.

TABLE 4b
IDAHO: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2004,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	1,510	\$8,860	\$5.85
Plaster and gunitite sands	63	335	5.34
Concrete products (blocks, bricks, pipe, decorative, etc.)	22	172	7.69
Asphaltic concrete aggregates and other bituminous mixtures	940	5,080	5.40
Road base and coverings ²	5,530	19,200	3.47
Fill	916	2,650	2.89
Snow and ice control	108	651	6.05
Railroad ballast	32	289	9.08
Other miscellaneous uses	31	154	4.90
Unspecified: ³			
Reported	3,330	11,200	3.36
Estimated	7,100	26,000	3.61
Total or average	19,600	74,300	3.79

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes road and other stabilization (cement).

³Reported and estimated production without a breakdown by end use.