THE MINERAL INDUSTRY OF UTAH

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Utah Geological Survey for collecting information on all nonfuel minerals.

In 1994, for the third year in a row, Utah ranked seventh nationally in total nonfuel mineral value,[1] according to the U.S. Bureau of Mines. The estimated value for 1994 exceeded $1.4 billion, an increase of about 9% compared with that of 1993. This followed a more than 2% decrease in 1993 from that of 1992. The State accounted for more than 4% of the U.S. total. Metals accounted for almost four-fifths of Utah's nonfuel mineral value, copper representing more than 60% of the total value of metals. The largest cause for the increase in mineral value in Utah in 1994 was higher prices and increased production and sales of copper. In estimated mineral production for 1994, Utah rose from fourth to second in potash, while the State remained second in copper; third in gold, molybdenum, and iron ore; fourth in magnesium compounds and phosphate rock; and sixth in salt. Utah ranked third among the three major magnesium metal producing States, was one of the top seven silver producing States, and was the only State to produce beryllium. Grade A helium was added to Utah's production in 1994. Compared with 1993, the value of copper, gold, magnesium metal, construction sand and gravel, molybdenum, crushed stone, lime, phosphate rock, magnesium compounds, iron ore, common clays, grade A helium, gemstones, gypsum, masonry cement, and beryllium increased. The value of portland cement, potash, salt, and silver decreased.

Mineral exploration in the State slowed significantly in 1994, according to the Utah Geological Survey. Only 33 notices of intent to explore had been filed by mid-November, compared with 54 for all of 1993. Exploration was predominantly for precious metals, although interest in porphyry- and skarn-type copper deposits increased. Chief Consolidated Mining Co. entered into a joint-venture agreement with Akiko Gold Resources Ltd. to explore Chief's properties in the Tintic mining district. Underground drilling and drifting (small-diameter tunneling) was scheduled for the Burgin lead-zinc-silver mine to confirm existing reserves of about 935,000 metric tons, according to the company, and to explore for additional reserves. Summo Minerals Corp. was evaluating its Lisbon Valley copper property in San Juan County. The company obtained permits for 120 drill holes and was expected to complete a feasibility study in 1995

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN UTAH[1]

Mineral		1992		1993		1994[p]	
		Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Beryllium concentrates	metric tons	4,826	$5	4,939	$5	5,000	$6
Clays[2]	thousand metric tons	243	2,714	216	3,129	300	3,270
Gemstones		NA	634	NA	1,156	NA	1,920
Potash	thousand metric tons	W	W	210	49,690	W	W
Salt	do.	1,367	44,498	2,251	46,759	2,630	35,000
Sand and gravel (construction)	do.	16,037	54,819	[e]16,000	[e]56,000	18,000	65,700
Silver[3]	metric tons	W	W	135	18,703	W	W
Stone (crushed)	thousand metric tons	[e]4,808	[e]22,400	4,555	29,400	[e]5,400	[e]36,200
Combined value of cement, clays [bentonite, fuller's earth (1992-93)], copper, gold,[4] gypsum (crude), helium [Grade-A, (1994)], iron ore (usable), lime, magnesium compounds, magnesium metal, mercury, molybdenum, phosphate rock, sodium sulfate [natural (1992-93)], stone [dimension (1993-94)], and values indicated by symbol W		XX	[r]1,221,160	XX	1,108,695	XX	1,290,000
Total		XX	[r]1,346,230	XX	1,313,537	XX	[4]1,430,000

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data. XX Not applicable.

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

[2]Excludes certain clays; kind and value included with "Combined value" data.

[3]Recoverable content of ores, etc.

[4]Data do not add to total shown because of independent rounding.

for an open-pit, heap-leach operation. Kennecott Utah Copper Corp. awarded a contract to Morrison Knudsen Corp. for engineering and management services for a tailings-impoundment project. Tailings storage will be increased by nearly 70% when the $500 million project is completed in 1998. Energy Fuels Nuclear Inc. (EFN) acquired the uranium-vanadium mining and milling properties of Umetco Minerals Corp. in southwestern Colorado and in southeastern Utah, including the White Mesa mill near Blanding. EFN also announced plans to reactivate the White Mesa mill in 1995. USMX Inc., citing both environmental and financial considerations as reasons, announced the closure of its Goldstrike gold mine in Washington County. Mining ceased in 1994, although leaching of the dumps was expected to continue into 1995.

[1]The term value means the total monetary value as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual mineral commodities.

TABLE 2

UTAH: CRUSHED STONE[1] SOLD OR USED BY PRODUCERS IN 1993, BY USE

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Riprap and jetty stone	21	$175	$8.33
Fine aggregate (-3/8 inch):			
Coarse and fine aggregates:			
Graded road base or subbase	223	689	3.09
Unpaved road surfacing	W	W	4.61
Crusher run or fill or waste	W	W	1.65
Other construction materials[2]	1,018	3,252	3.19
Agricultural:			
Agricultural limestone	([3])	([3])	22.04
Poultry grit and mineral food	3	78	26.00
Chemical and metallurgical:			
Cement manufacture	([3])	([3])	4.95
Lime manufacture	([3])	([3])	14.81
Flux stone	133	739	5.56
Special:			
Mine dusting or acid water treatment	([3])	([3])	4.31
Other specified uses not listed	2,959	23,400	7.91
Unspecified:[4]			
Actual	198	1,066	5.38
Total[5]	4,555	29,400	6.45
Total[6 7]	5,021	29,400	5.86

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."
[1]Includes dolomite, limestone, sandstone, and volcanic cinder and scoria.
[2]Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, stone sand (bituminous mix or seal), and screening (undesignated).
[3]Withheld to avoid disclosing company proprietary data; included with "Other specified uses not listed."
[4]Includes production reported without a breakdown by use and estimates for nonrespondents.
[5]Data may not add to totals shown because of independent rounding.
[6]One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.
[7]Total shown in thousand short tons and thousand dollars.

TABLE 3

UTAH: CRUSHED STONE SOLD OR USED, BY KIND

Kind	1991				1993			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	28	r2,712	$12,590	$4.64	17	3,187	24,103	7.56
Dolomite	2	W	W	3.88	2	W	W	3.65
Sandstone	4	W	W	4.65	4	W	W	5.15
Volcanic cinder and scoria	6	r29	385	13.27	4	13	105	8.07
Total[1]	XX	4,037	18,259	4.52	XX	4,555	29,400	6.45
Total[2 3]	XX	4,450	18,259	4.10	XX	5,021	29,400	5.86

rRevised. W Withheld to avoid disclosing company proprietary data; included with "Total." XX Not applicable.
[1]Data may not add to totals shown because of independent rounding.
[2]One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.
[3]Total shown in thousand short tons and thousand dollars.

TABLE 4

UTAH: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1993, BY USE AND DISTRICT

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction aggregates:						
Coarse aggregate (+1 1/2 inch)[1]	—	—	W	W	(2)	(2)
Coarse aggregate, graded[3]	—	—	W	W	—	—
Fine aggregate (-3/8 inch)[4]	—	—	W	W	—	—
Coarse and fine aggregate[5]	(2)	(2)	W	W	—	
Other construction materials	—	—	1,242	3,998	—	—
Agricultural[6]	—	—	(2)	(2)	—	—
Chemical and metallurgical[7]	1,721	(2)	632	(2)	—	—
Special[8]	(2)	(2)	(2)	(2)	—	—
Unspecified:[9]						
Actual	180	972	(2)	(2)	(2)	(2)
Estimated	—	—	—	—	—	—
Total[10]	2,622	22,067	1,915	7,215	18	118
Total[11 12]	2,890	22,067	2,111	7,215	20	118

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."
[1]Includes riprap and jetty stone.
[2]Withheld to avoid disclosing company proprietary data; included with "Total."
[3]Includes concrete aggregate (coarse), bituminous aggregate (coarse), and bituminous surface-treatment aggregate.
[4]Includes stone sand (bituminous mix or seal) and screening (undesignated).
[5]Includes graded road base or subbase, unpaved road surfacing, and crusher run (select material or fill).
[6]Includes agricultural limestone and poultry grit and mineral food.
[7]Includes cement manufacture, flux stone, and lime manufacture.
[8]Includes mine dusting or acid water treatment.
[9]Includes production reported without a breakdown by use and estimates for nonrespondents.
[10]Data may not add to totals shown because of independent rounding.
[11]One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.
[12]Total shown in thousand short tons and thousand dollars.