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Mineral Industry Surveys

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LEAD IN APRIL 2002

Domestic mine production, based on the net quantity of lead recovered from concentrate, decreased by 12% in April compared with revised production data for March. Secondary refinery production increased by 5% in April, and reported consumption was up by about 7% in April compared with corresponding data for the previous month.

According to Platts Metals Week published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) decreased by 0.05% and 1.62%, respectively, in April.

Worldwide, lead supply remained in surplus during April. LME stocks grew by an additional 35,000 metric tons (t), reaching 170,000 t by the end of the month. An abundant supply of lead was being offered in Asia, Europe, and North America. Exports of refined lead from Australia and China to Europe and the United States increased during the month, underscoring a persistent lower demand for lead in the Asian market (CRU International Ltd., 2002).

Speculation regarding the supply of lead concentrates continued to dominate the world lead market. As a result of the closure of several mines recently, the supply of concentrate feed to primary smelters has become increasingly tighter, thus raising the possibility of a significant decrease in production of primary refined lead during the remainder of 2002 (Metal Bulletin, 2002a).

The National Defense Stockpile monthly cash disposal (sale) of lead in April was 2,980 t (3,285 short tons). Sale of lead through the first 7 months of fiscal year 2002 (October 2001 through April 2002) was 9,211 t (10,154 short tons).

The Consumer Product Safety Commission (CPSC), under the authority of the Federal Hazardous Substances Act, recently issued a proposed rule that would ban certain lead-containing, metal-cored candle wicks and candles with such wicks. Under the CPSC proposal, metal-cored candle wicks containing more than 0.06% lead by weight would be declared hazardous substances, and thus would be prohibited from use. The CPSC concluded that lead emissions during candle burning could expose children to indoor air lead concentrations that would result in elevated blood lead levels (U.S. Consumer Product Safety Commission, 2002).

The Lead Industries Association, Inc. (LIA), Sparta, NJ, closed down at the beginning of April, and filed for Chapter 7 bankruptcy liquidation in New Jersey. According to the LIA's executive director, the LIA closed because of "a lack of insurance to cover litigation." He further added that the LIA, founded in 1928, had been a defendant in litigation starting 14 years ago and that additional litigation had accumulated since then. Most of the suits were related to lead in paint in which the LIA was named as one of many defendants (Platts Metals Week, 2002a; Battery Man, 2002).

Japan's Mitsubishi Materials Corp. recently announced its withdrawal from the primary refined lead business, citing a decline in domestic demand and lower profits from its operation. During fiscal year 2001, Mitsubishi produced 37,000 t of refined lead, of which, 12,000 t was primary lead produced on its behalf by Toho Zinc Co., Ltd. In the future, Mitsubishi will focus only on the production of secondary lead. This lead will be derived principally from the recycling of spent lead acid batteries by its 80%-owned subsidiary, Hosokura Smelting & Refining Co., Ltd. in Miyagi Prefecture (Metal Bulletin, 2002b).

Canadian Zinc Ltd. has received additional permits for exploration and development at its wholly owned Prairie Creek Mine and mill in the Northwest Territories. Under one of the permits, the company will conduct a drilling program designed to further define and extend the existing zinc-lead-silver deposit. The current resource estimate is 11.8 million metric tons (Mt), grading 12.5% zinc, 10.1% lead, and 161 grams per ton silver. In addition to the drilling program, Canadian Zinc has applied for permits to operate a pilot plant and to drive a second decline into the deposit. Prairie Creek consists of a fully operational mine and mill infrastructure that was built in the 1980s by a previous owner. Although the facility was financed to within a few months of startup, its operation was aborted as a result of final funding difficulties and depressed metal prices. Under Canadian Zinc's present development plans, the company hopes to progress to a full bankable feasibility study at Prairie Creek over the next 12 months (Northern Miner, 2002).

The United Nations Mission in Kosovo (UNMIK) is seeking potential investors and lenders for the Trepca lead-zinc-silver mines complex. Trepca is currently under administration by UNMIK following the conflict in Kosovo in 1999. Potential interested parties will be able to visit the assets and conduct due diligence investigations until July. UNMIK plans to evaluate offers in August and September, and to award contracts during the period from September to December 2002. The Trepca complex comprises three clusters of mines and associated milling, smelting and refining operations. UNMIK has outlined plans for possible restart of all of these facilities. Total lead resource at Trepca's northern cluster is estimated at 3.4 Mt, grading 8.2% to 11.7% lead. The resource at the southern cluster is estimated at 3.5 Mt, grading 4.9 to 9.6% lead (Mining Journal, 2002).

China's Yuguang Gold and Lead Group produced 27,000 t of refined lead in the first quarter of 2002, up 28.6% compared with the first quarter of 2001. The production increase resulted from the completion of an expansion project in late 2001 that boosted capacity to 110,000 metric tons per year (t/yr) from the previous 80,000 t/yr. A further expansion, expected to be completed in May, will increase Yuguang's capacity to 140,000 t/yr. The company plans to produce 130,000 t of refined lead in 2002, up from 112,000 t in 2001 (Platts Metals Week, 2002b).

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Metal Bulletin, 2002a, Cutbacks dominate lead and zinc concentrate markets: Metal Bulletin, v. 8664, April 11, p. 5.

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Platts Metals Week, 2002b, Yuguang lead output surges: Platts Metals Week, v. 73. no. 14, April 8, p. 13.

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TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, lead content, unless otherwise specified)

	2001		2002		
	January - December	January - April	March	April	January - April
Production:					
Mine (recoverable)	450,000	153,000	41,200 r/	36,100	152,000
Primary refinery	290,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,090,000	351,000	86,100	90,900	338,000
Estimated	11,000	3,540	869	918	3,410
Recovered from copper-base scrap e/	15,000	5,000	1,250	1,250	5,000
Total secondary	1,110,000	360,000	88,200	93,100	347,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	86,100	64,200	85,600	82,700	82,700
Imports for consumption:					
Ore and concentrates (lead content)	2,240	2,240	--	NA	-- 2/
Refined metal	271,000	105,000	24,300	NA	57,000 2/
Consumption:					
Reported	1,540,000 r/	485,000 r/	121,000	129,000	489,000
Undistributed e/	153,000	47,900 r/	11,900	12,800	48,400
Total	1,700,000	533,000	133,000	142,000	538,000
Exports (lead content):					
Ore and concentrates	181,000	9,490	7,280	NA	18,700 2/
Bullion	3,470	2,980	--	NA	82 2/
Wrought and unwrought lead	34,700	14,200	2,330	NA	7,100 2/
Ash and residues	14,200	239	--	NA	-- 2/
TEL/TML preparations, based on lead compounds	3,470	3,200	19	NA	89 2/
Exports (gross weight): Scrap	108,000	31,800	9,150	NA	23,400 2/
Platts Metals Week average North American producer price (cents per pound)	43.64	43.68	43.65	43.63	43.67

e/ Estimated. r/ Revised. NA Not available. -- Zero.
1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.
2/ Includes data for January - March only; April data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	LME		Sterling exchange rate
	cents/lb	$/metric ton	£/metric ton	dollars/£
2001:				
April	43.64	477.61	323.26	1.477495
December	43.66	482.84	335.01	1.441265
Year	43.64	453.58	300.08	1.515869
2002:				
February	43.65	479.63	337.15	1.422568
March	43.65	479.76	337.16	1.422925
April	43.63	471.99	327.11	1.442909

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

Item	Stocks March 31, 2002	Net receipts	Consumption	Stocks April 30, 2002
Battery-lead	10,500	82,800	82,600	10,800
Soft lead	W	W	W	W
Drosses and residues	2,570	3,920	3,910	2,580
Other 2/	1,600	3,350	3,410	1,550
Total	14,700	90,100	89,900	14,900
Percent change from preceding month	XX	+7.4	+5.5	+1.5

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN APRIL 2002 1/

(Metric tons)

Product recovered	Secondary metal content: Lead	Tin	Antimony
Soft and calcium lead	47,600	--	--
Remelt lead	W	W	W
Antimonial lead	18,100	W	W
Other 2/	W	W	--
Total lead-base	90,900	43	425

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.
1/ Data are rounded to no more than three significant digits.
2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

	2001		2002		
Uses	January - December	January - April	March	April	January - April
Metal products:					
Ammunition, shot and bullets	38,500	12,900 r/	3,430	3,720	14,800
Brass and bronze, billet and ingots	3,490	1,130 r/	300 r/	303	1,170
Cable covering, power and communication and calking lead, building construction	3,770	1,210 r/	292	368	1,260
Casting metals	7,410	1,690 r/	652	653	2,610
Sheet lead, pipes, traps and other extruded products	21,800	4,870 r/	1,330 r/	1,590	5,980
Solder	1,560	679 r/	135 r/	167	574
Storage batteries, including oxides	1,400,000	443,000 r/	110,000 r/	114,000	435,000
Terne metal, type metal, and other metal products 2/	6,250	477 r/	250	191	778
Total metal products	1,480,000	466,000 r/	116,000	121,000	462,000
Other oxides and miscellaneous uses	59,000	19,100 r/	4,930	8,310	27,000
Total reported	1,540,000	485,000 r/	121,000	129,000	489,000
Undistributed consumption e/	153,000	47,900 r/	11,900	12,800	48,400
Grand total	1,700,000	533,000	133,000	142,000	538,000

e/ Estimated. r/ Revised.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

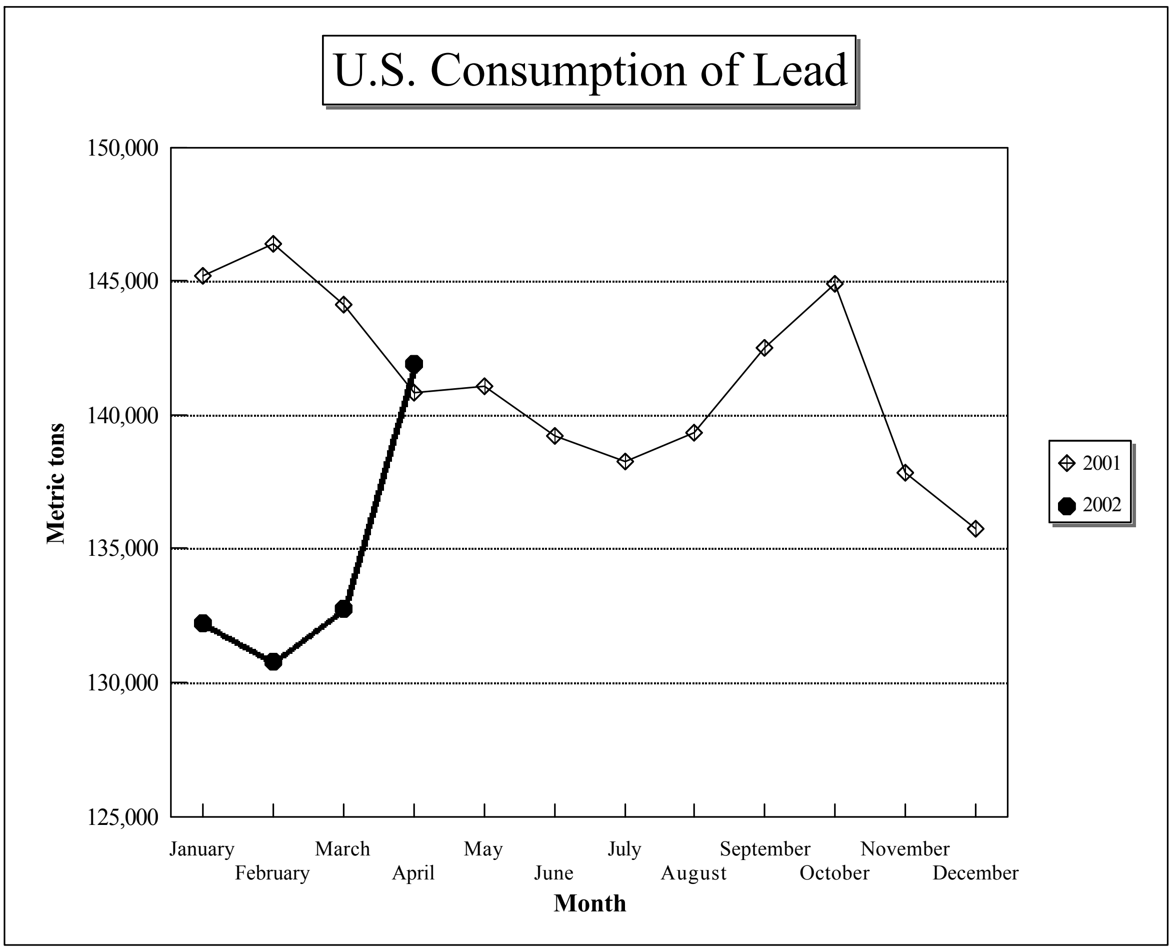

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN APRIL 2002 1/

(Metric tons, lead content)

Type of material	Stocks March 31, 2002	Net receipts	Consumption	Stocks April 30, 2002
Soft lead	44,700	71,500	73,100	43,100
Antimonial lead	31,100	27,100	29,100	29,200
Lead alloys	W	27,400	26,600	W
Copper-base scrap	W	213	212	W
Total	85,600	126,000	129,000	82,700

W Withheld to avoid disclosing company proprietary data; included in "Total."
1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	2001		2002		
	Year	March	February	March	January - March
Lead content:					
Ore and concentrates	181,000	2,430	3,640	7,280	18,700
Bullion	3,470	1,000	--	--	82
Materials excluding scrap	34,700	3,890	3,080	2,330	7,100
Ash and residues	14,200	58	--	--	--
TEL/TML preparations, based on lead compounds	3,470	449	66	19	89
Total	237,000	7,830	6,790	9,630	25,900
Gross weight: Scrap	108,000	8,990	6,930	9,150	23,400

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

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

	General imports					Imports for consumption				
	2001		2002			2001		2002		
Country of origin	Year	January - March	February	March	January - March	Year	January - March	February	March	January - March
Ore, matte, etc.:										
Other	11,200	5,590	--	--	--	2,240	2,240	--	--	--
Total	11,200	5,590	--	--	--	2,240	2,240	--	--	--
Pigs and bars:										
Australia	18,300	709	7,720	--	7,720	18,600	2,430	1,100	--	1,100
Canada	167,000	52,200	9,440	14,300	35,800	167,000	52,200	9,440	14,300	35,800
China	53,100	12,300	--	9,540	19,400	56,300	14,300	--	9,540	19,400
Germany	120	81	24	25	49	120	81	24	25	49
Mexico	12,400	5,710	264	421	723	12,400	5,710	264	421	723
Peru	2,330	233	--	--	--	2,330	233	--	--	--
Other	3,260	159	3	--	3	14,500	2,460	3	--	3
Total	256,000	71,300	17,400	24,300	63,600	271,000	77,300	10,800	24,300	57,000
Reclaimed scrap, including ash and residues	203	203	--	--	--	203	203	--	--	--
Grand total	268,000	77,100	17,400	24,300	63,600	274,000	79,800	10,800	24,300	57,000

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

Source: U.S. Census Bureau.