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Mineral Industry Surveys

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LEAD IN NOVEMBER 2002

Domestic mine production, based on the net quantity of lead recovered from concentrate, decreased by 2% in November compared with production in October. Secondary refinery production decreased by about 3% in November compared with the previous month, and reported consumption was down by 2% compared with consumption in October.

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) increased by 0.16% and 5.76%, respectively, in November.

Demand for lead in North America remained moderate in November, showing no signs of a significant upturn in preparation for the approaching winter replacement-battery season. A slight increase in the demand for industrial batteries in the telecommunications sector was evident, but was considered more likely to be a result of inventory restocking rather than a sign of improving business conditions. Sales of new U.S. vehicles declined by 3% in the first 11 months of 2002, and were down by 13% in November 2002 compared with November 2001, thus continuing the softer demand for original equipment automotive batteries. LME stocks of refined lead held in U.S. warehouses have increased by 83,000 metric tons (t) since January 2002 to a level of 106,000 t. Market analysts thought that some of this lead may be heading for the European market where concerns over the shortage in lead supply continued to grow (CRU International Ltd., 2002).

The National Defense Stockpile aggregated cash disposal (sale) of lead in the first 2 months of fiscal year 2003 (October 2002 through November 2002) under the Basic Ordering Agreement, DLA-Lead-005 totaled 1,220 t (1,107 short tons). In addition, 7,370 t (8,124 short tons) were sold under a Long-Term Solicitation of Offers issued by the Defense National Stockpile Center on November 6, 2002 (U.S. Defense National Stockpile Center, 2002).

East Penn Manufacturing Co., Inc., Lyon Station, PA, reportedly plans to significantly increase its secondary lead production capacity. The permitting process for the construction of two reverbatory furnaces as well as a blast furnace has begun. The additional units would effectively increase East Penn's secondary lead production capacity to about 145,000 metric tons per year (t/yr) from the current level of about 82,000 t/yr. According to an East Penn spokesperson, the units were not likely to be operational until 2005. The expansion is expected to significantly reduce the company's current reliance on other North American secondary producers to process a portion of the battery scrap received through its battery manufacturing and battery return program (Ryan's Notes, 2002).

Australia's Pasminco Ltd. has completed an exclusive agreement with Consolidated Broken Hill Ltd. (CBH) that allows CBH to negotiate the purchase of Pasminco's Elura zinc-lead mine at Cobar in New South Wales. According to a CBH spokesperson, any sales agreement would include arrangements for the distribution of concentrate produced at Elura. Pasminco currently uses Elura as a source of concentrate for its Cockle Creek smelter, which has a production capacity of 90,000 t/yr of zinc and 35,000 t/yr of lead bullion. Elura currently produces about 73,000 t/yr of zinc and 42,000 t/yr of lead in concentrate. The exclusive period for due diligence, negotiation, and completion of documentation for any sale of Elura runs until January 28, 2003. In a separate arrangement, CBH and Clough Engineering Ltd. have agreed to conduct due diligence jointly and would operate the mine in a 50:50 partnership. Reserves at Elura, as of March 2002, totaled 4.6 million metric tons, grading 8.8% zinc and 5.0% lead. The Elura Mine was made available for purchase as part of Pasminco's plans to emerge from its 14-month-long period of administration (Platts Metals Week, 2002a).

China's West Mining Co. lead refining operations remained closed in November, after having been closed since May, when, according to a company official, losses were incurred as a result of weak lead prices. West Mining had planned to produce 60,000 t of refined lead in 2002, but final output will be well below this level. Although refining operations were shut down, mining operations continued throughout the period. A firm schedule has not been set for resuming the lead refining operations (Platts Metals Week, 2002b).

United Kingdom-based MinMet plc recently reported results of a completed core drilling program at its 70%-owned El Aguila polymetallic property in central Peru. The mineralization levels determined from the drilling ranged from 6.5% to 11% lead and 2.3% to 12.3% zinc. El Aguila is located about 14 kilometers from the Cerro de Pasco lead-silver deposit. MinMet acquired its interest in El Aguila from Denver-based Apex Silver Mines Ltd. in March 2002 (Mining Journal, 2002).

References Cited

CRU International Ltd., 2002, Market commentary: CRU Monitor—Lead, December, p. 2.

Mining Journal, 2002, MinMet encouraged at Aguila: Mining Journal, v. 339, no. 8710, November 8, p. 325.

Platts Metals Week, 2002a, Australia's Pasminco to negotiate Elura sale with CBH: Platts Metals Week, v. 73, no. 46, November 18, p. 1.

Platts Metals Week, 2002b, West Mining keeps lead shut: Platts Metals Week, v. 73, no. 47, November 25, p. 7.

Ryan's Notes, 2002, East Penn looking to boost Pb capacity: Ryan's Notes, v. 8, no. 47, November 25, p. 3.

U.S. Defense National Stockpile Center, 2002, Stockpile long-term lead offering: Fort Belvoir, VA, U.S. Defense National Stockpile Center news release, November 6, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, lead content, unless otherwise specified)

	2001		2002		
	Year	January - November	October	November	January - November
Production:					
Mine (recoverable)	454,000	415,000	34,800 r/	34,100	402,000
Primary refinery	290,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,090,000	994,000	95,300	92,800	995,000
Estimated	11,000	10,000	962	937	10,000
Recovered from copper-base scrap e/	15,000	13,800	1,250	1,250	13,800
Total secondary	1,110,000	1,020,000	97,500	95,000	1,020,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	86,100	83,200	81,000 r/	85,200	85,200
Imports for consumption:					
Ore and concentrates (lead content)	2,240	2,240	3	NA	6 2/
Refined metal	271,000	253,000	20,500	NA	179,000 2/
Consumption:					
Reported	1,590,000	1,420,000	132,000 r/	129,000	1,400,000
Undistributed e/	--	140,000	13,100 r/	12,800	138,000
Total	1,590,000	1,560,000	145,000 r/	142,000	1,540,000
Exports (lead content):					
Ore and concentrates	181,000	164,000	19,200	NA	228,000 2/
Bullion	3,470	3,470	--	NA	95 2/
Wrought and unwrought lead	34,700	32,900	4,980	NA	29,100 2/
Ash and residues	14,200	12,000	--	NA	-- 2/
TEL/TML preparations, based on lead compounds	3,470	3,460	49	NA	375 2/
Exports (gross weight): Scrap	108,000	99,800	9,270	NA	87,600 2/
Platts Metals Week average North American producer price (cents per pound)	43.64	43.64	43.46	43.53	ERR

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 - October only; November 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:				
November	43.67	486.09	338.60	1.435610
December	43.66	482.84	335.01	1.441265
Year	43.64	475.76	330.05	1.441488
2002:				
September	43.47	420.92	270.50	1.556330
October	43.46	417.75	268.30	1.557459
November	43.53	441.83	281.22	1.571116

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

Item	Stocks October 31, 2002		Net receipts	Consumption	Stocks November 30, 2002
Battery-lead	26,600	r/	87,000	76,600	37,100
Soft lead	W		W	W	W
Drosses and residues	2,620	r/	4,080	4,070	2,640
Other 2/	1,820	r/	3,220	3,230	1,810
Total	31,100	r/	94,300	83,900	41,500
Percent change from preceding month	XX		-14.7	-21.3	+33.6

r/ Revised. 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 NOVEMBER 2002 1/

(Metric tons)

Product recovered	Secondary metal content: Lead	Tin	Antimony
Soft and calcium lead	67,700	--	--
Remelt lead	W	--	--
Antimonial lead	24,300	W	W
Other 2/	W	W	W
Total lead-base	92,800	43	364

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)

Uses	2001 Year	2001 January - November	2002 October		2002 November	2002 January - November
Metal products:						
Ammunition, shot and bullets	53,600	36,200	3,010		2,180	38,000
Brass and bronze, billet and ingots	2,590	3,260	282		246	1,400
Cable covering, power and communication and calking lead, building construction	3,900	3,440	167		200	2,740
Casting metals	24,100	6,880	512		512	6,750
Sheet lead, pipes, traps and other extruded products	24,800	20,800	1,880		1,780	18,100
Solder	6,120	1,500	148		202	1,700
Storage batteries, including oxides	1,390,000	1,290,000	119,000		114,000	1,250,000
Terne metal, type metal, and other metal products 2/	17,900	5,960	12		14	1,030
Total metal products	1,530,000	1,370,000	125,000	r/	119,000	1,320,000
Other oxides and miscellaneous uses	55,900	54,100	6,600		9,950	76,900
Total reported	1,590,000	1,420,000	132,000	r/	129,000	1,400,000
Undistributed consumption e/	--	140,000	13,100	r/	12,800	138,000
Grand total	1,590,000	1,560,000	145,000	r/	142,000	1,540,000

e/ Estimated. r/ Revised. -- Zero.
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.

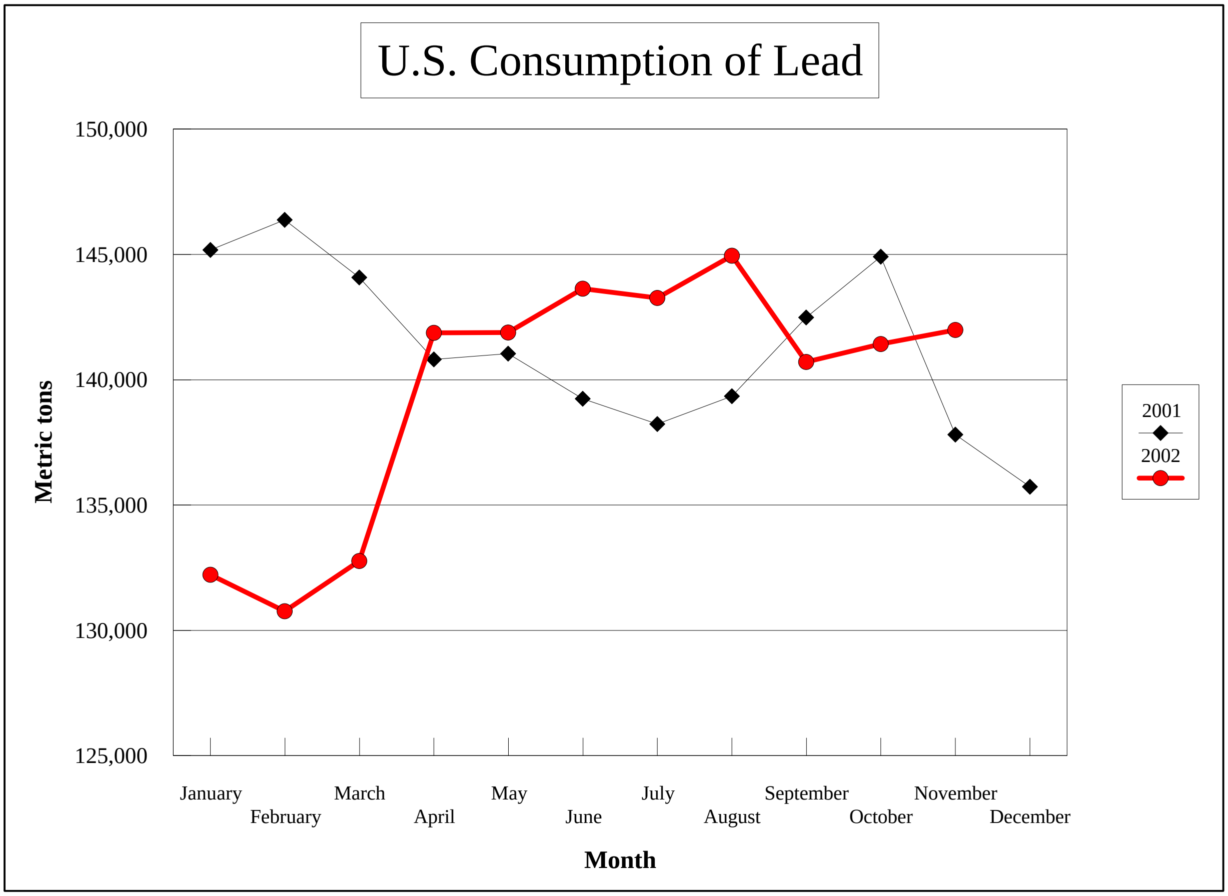

TABLE 6

CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD IN NOVEMBER 2002 1/

(Metric tons, lead content)

Type of material	Stocks October 31, 2002		Net receipts	Consumption	Stocks November 30, 2002
Soft lead	41,000	r/	72,900	72,000	41,900
Antimonial lead	29,300	r/	27,500	27,000	29,700
Lead alloys	W		33,200	30,400	W
Copper-base scrap	W		58	60	W
Total	81,000	r/	134,000	130,000	85,200

r/ Revised. 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	October	September	October	January - October
Lead content:					
Ore and concentrates	181,000	5,530	59,000	19,200	228,000
Bullion	3,470	102	--	--	95
Materials excluding scrap	34,700	2,020	3,820	4,980	29,100
Ash and residues	14,200	1,730	--	--	--
TEL/TML preparations, based on lead compounds	3,470	64	18	49	375
Total	237,000	9,450	62,900	24,300	257,000
Gross weight: Scrap	108,000	8,900	7,380	9,270	87,600

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 - October	September	October	January - October	Year	January - October	September	October	January - October
Ore, matte, etc.:										
Australia	5,600	--	--	--	--	--	--	--	--	--
Other	5,590	11,200	--	3	6	2,240	2,240	--	3	6
Total	11,200	11,200	--	3	6	2,240	2,240	--	3	6
Pigs and bars:										
Australia	18,300	12,300	--	10,200	32,600	18,600	18,600	--	--	2,630
Canada	167,000	146,000	7,600	20,000	142,000	167,000	146,000	7,600	20,000	142,000
China	53,100	45,400	--	--	28,200	56,300	48,600	--	--	28,200
Germany	120	120	25	--	185	120	120	25	--	185
Mexico	12,400	11,600	582	580	5,920	12,400	11,600	582	580	5,920
Peru	2,330	2,330	--	--	--	2,330	2,330	--	--	--
Other	3,260	3,260	--	--	245	14,500	14,500	--	--	93
Total	256,000	221,000	8,210	30,700	209,000	271,000	241,000	8,210	20,500	179,000
Reclaimed scrap, including ash and residues	203	203	--	--	--	203	203	--	--	--
Grand total	268,000	232,000	8,210	30,700	209,000	274,000	244,000	8,210	20,500	179,000

-- Zero.

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

Source: U.S. Census Bureau.