

Mineral Industry Surveys

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LEAD IN SEPTEMBER 2008

Domestic mine production (recoverable) of lead in September was estimated to be 34,200 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in September was 1,140 t, essentially unchanged from that in August. Year-to-date mine production through September 2008 was about 3% lower than that of the same period of 2007. Secondary refinery production of lead decreased about 10% compared with that of the previous month.

According to Platts Metals Week, the average North American producer price for lead in September was \$1.09 per pound, essentially unchanged from that of the previous month. The producer price has declined about 28% since September 2007. The London Metal Exchange (LME) cash price in September averaged \$1,868 per metric ton, down about 3% from that of the previous month. During September 2008, global LME lead stocks declined by 16,475 t to 64,100 t.

In Anchorage, AK, Teck Cominco Alaska Inc. (a wholly owned subsidiary of Teck Cominco Ltd.) and plaintiffs from the village of Kivalina, in Northwest Alaska, reached a settlement agreement resolving litigation under the Clean Water Act that was before the U.S. District Court for Alaska. Under the terms of the agreement, Teck committed to design and construct an 84-kilometer-long water discharge pipeline from its Red Dog Mine in Northwest Alaska to a port on the Chukchi Sea. Once constructed, the pipeline would transport treated wastewater directly from the mine to the ocean for discharge, alleviating concerns of the villagers related to existing discharge practices. Currently, the mine discharges treated wastewater into Red Dog Creek, which feeds directly into a river that serves as Kivalina's primary source of drinking water. Construction of the pipeline would be contingent upon Teck receiving regulatory approval to mine its undeveloped Aqqaluk property at the Red Dog site. Under the terms of the agreement, if the company decides not to build the pipeline, it would be subject to a civil penalty of up to \$20 million. Teck also agreed to purchase, install, and maintain drinking water purification units for each business, public building, and residence in Kivalina until the pipeline is operational (Metal Bulletin, 2008a; Teck Cominco Ltd., 2008).

In early September, Intec Ltd. (Sydney, New South Wales, Australia) announced that it had suspended operations at the

Hellyer Zinc Concentrate Project in Tasmania. Adverse economic conditions, notably recent declines in the price of zinc coupled with increased production costs led to the decision to place the facility on care-and-maintenance status. The project had been a 50-50 joint venture between Intec and Polymetals Mining Services Pty Ltd. until Intec assumed full ownership of the operation this past August. The milling facility, which extracted lead, silver, and zinc from the Hellyer tailings dam, produced 52,600 t of bulk zinc-lead concentrate in fiscal year 2008 (Intec Ltd., 2008a, p.1, 6; b).

East Penn Manufacturing Co., Inc. (Lyon Station, PA) entered into an exclusive agreement with Japanese battery manufacturer Furukawa Battery, Co., Ltd. (Yokohama City, Kanagawa, Japan), to manufacture and distribute the UltraBattery throughout North America. (See Lead in January 2008.) East Penn will produce the batteries at its manufacturing facility in Pennsylvania. The UltraBattery is based on a new technology that integrates a supercapacitor with a lead-acid battery and has the ability to provide and absorb charge rapidly during vehicle acceleration and braking, making it suitable for use in hybrid electric vehicles. UltraBattery technology also has the potential to store energy generated by renewable resources such as solar or wind power (East Penn Manufacturing Co., Inc., 2008).

RSR Corp. (Dallas, TX) had been working towards bringing its Los Angeles-based lead smelter back online after a fire in early July forced the company to completely shut down operations at the plant. The fire had started in part of a pollution-control device at the facility. RSR did not release an estimated restart date for the smelter because of the complex nature of the ongoing repair work. The recycling facility had an estimated production capacity of 120,000 metric tons per year of refined lead when operating under normal conditions (Platts Metals Week, 2008).

One of the leading producers of refined lead in China, Yuguang Gold and Lead Co., Ltd. (Henan Province), announced that it expected to reduce refined lead production in October by about 10,000 t owing to a partial maintenance shutdown. Yuguang produced 25,000 t of refined lead per month at its three refineries in Henan. Extensive maintenance work at all

Henan refineries was expected to commence on October 6 and last 35 to 45 days (Metal Bulletin, 2008b).

References Cited

East Penn Manufacturing Co., Inc., 2008, East Penn brings UltraBattery technology to North America: Lyon Station, PA, East Penn Manufacturing Co., Inc. news release, September 22, 1 p.
Intec Ltd., 2008a, Annual report 2008: Sydney, New South Wales, Australia, Intec Ltd., September 30, 80 p.
Intec Ltd., 2008b, Suspension of operations at Hellyer: Sydney, New South Wales, Australia, Intec Ltd. news release, September 8, 2 p.

Metal Bulletin, 2008a, Teck says Red Dog output secure after deal with Inuit villagers: Metal Bulletin, no. 9064, September 15, p. 14.
Metal Bulletin, 2008b, Yuguang Gold & Lead to lose at least 10,000 tonnes of output: Metal Bulletin, no. 9066, September 29, p. 8.
Platts Metals Week, 2008, Timing unclear for RSR smelter restart: Platts Metals Week, v. 79, no. 36, September 8, p. 10.
Teck Cominco Ltd., 2008, Parties to Red Dog clean water act litigation reach settlement—Teck Cominco Alaska announces settlement of the Kivalina litigation at Red Dog: Vancouver, British Columbia, Canada, Teck Cominco Ltd. news release, September 4, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2007		2008		
	Year	January-September	August	September	January-September
Production:					
Mine (recoverable)	434,000	326,000	34,200	34,200 ^e	316,000 ^e
Secondary refinery:					
Reported by smelters/refineries	1,170,000	875,000	97,400	89,600	876,000
Estimated	11,700	8,750	2,920	896	10,700
Recovered from copper-base scrap ^c	15,000	11,300	1,250	1,250	11,300
Total secondary	1,200,000	895,000	102,000	91,700	898,000
Stocks, end of period, consumers and secondary smelters	63,100	58,700	52,500 ^r	52,300	52,300
Imports for consumption:					
Base bullion	1,990	1,260	60	NA	1,980 ²
Refined metal	264,000	190,000	22,900	NA	210,000 ²
Consumption:					
Reported	1,500,000	1,150,000	128,000	129,000	1,180,000
Undistributed ^c	45,100	34,500	1,280 ^r	1,290	30,100
Total	1,550,000	1,180,000	129,000 ^r	130,000	1,210,000
Exports:					
Ore and concentrate	300,000	217,000	31,600	NA	142,000 ²
Bullion	170	132	49	NA	554 ²
Wrought and unwrought lead	56,400	38,300	6,760	NA	46,000 ²
TEL/TML preparations, based on lead compounds	2,740	2,590	154	NA	1,670 ²
Exports (gross weight), scrap	129,000	81,800	13,300	NA	121,000 ²
Platts Metals Week North American producer price (cents per pound)	123.84	110.98	108.84	108.66	130.54

^eEstimated. ^rRevised. NA Not available.

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

²Includes data for January-August only; September data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2007:				
September	150.65	3,224.98	1,597.73	2.018479
December	160.63	2,595.28	1,287.31	2.016050
Year	123.84	2,579.02	1,288.41	2.001715
2008:				
January	150.03	2,606.85	1,323.11	1.970238
February	146.88	3,078.82	1,567.15	1.964600
March	146.60	3,007.29	1,502.54	2.001467
April	145.91	2,821.68	1,423.96	1.981568
May	143.74	2,234.06	1,136.94	1.964976
June	115.21	1,862.33	947.05	1.966448
July	109.02	1,944.16	977.54	1.988827
August	108.84	1,922.60	1,019.13	1.886514
September	108.66	1,867.68	1,039.16	1.797305

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	August 31, 2008	receipts		September 30, 2008
Battery-lead	21,900	102,000	98,300	26,100
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	1,920	8,430	7,820	2,530
Total	23,800	111,000	106,000	28,600
Percent change from preceding month	XX	+5.7	+4.7	+20.1

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN SEPTEMBER 2008¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	48,200	--	--
Remelt lead	W	--	--
Antimonial lead	9,160	(2)	(2)
Other ³	32,200	(2)	(2)
Total lead-base	89,600	134	241

W Withheld to avoid disclosing company proprietary data; included in "Other."
-- Zero.

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

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

³Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES¹

(Metric tons, lead content)

Use	2007		2008		
	Year	January-September	August	September	January-September
Metal products:					
Ammunition, shot and bullets	75,400	58,800	6,570	6,860	58,100
Brass and bronze, billet and ingots	3,190	3,110	323	323	2,940
Cable covering, power and communication and calking lead, building construction	8,020	5,310	670	466	6,080
Casting metals	29,900	22,400	2,640	2,640	23,800
Sheet lead, pipes, traps and other extruded products	29,700	7,160	2,350	2,480	21,200
Solder	7,000	5,120	587	588	5,280
Storage batteries, including oxides	1,300,000	1,010,000	112,000	112,000	1,030,000
Terne metal, type metal, and other metal products ²	16,700	12,500	1,440 ^r	1,400	13,200
Total metal products	1,470,000	1,130,000	126,000	127,000	1,160,000
Other oxides and miscellaneous	28,000	21,000	1,850 ^r	1,960	16,900
Total reported	1,500,000	1,150,000	128,000	129,000	1,180,000
Undistributed ^e	45,100	34,500	1,280 ^r	1,290	30,100
Grand total	1,550,000	1,180,000	129,000^r	130,000	1,210,000

^eEstimated. ^rRevised.

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

²Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

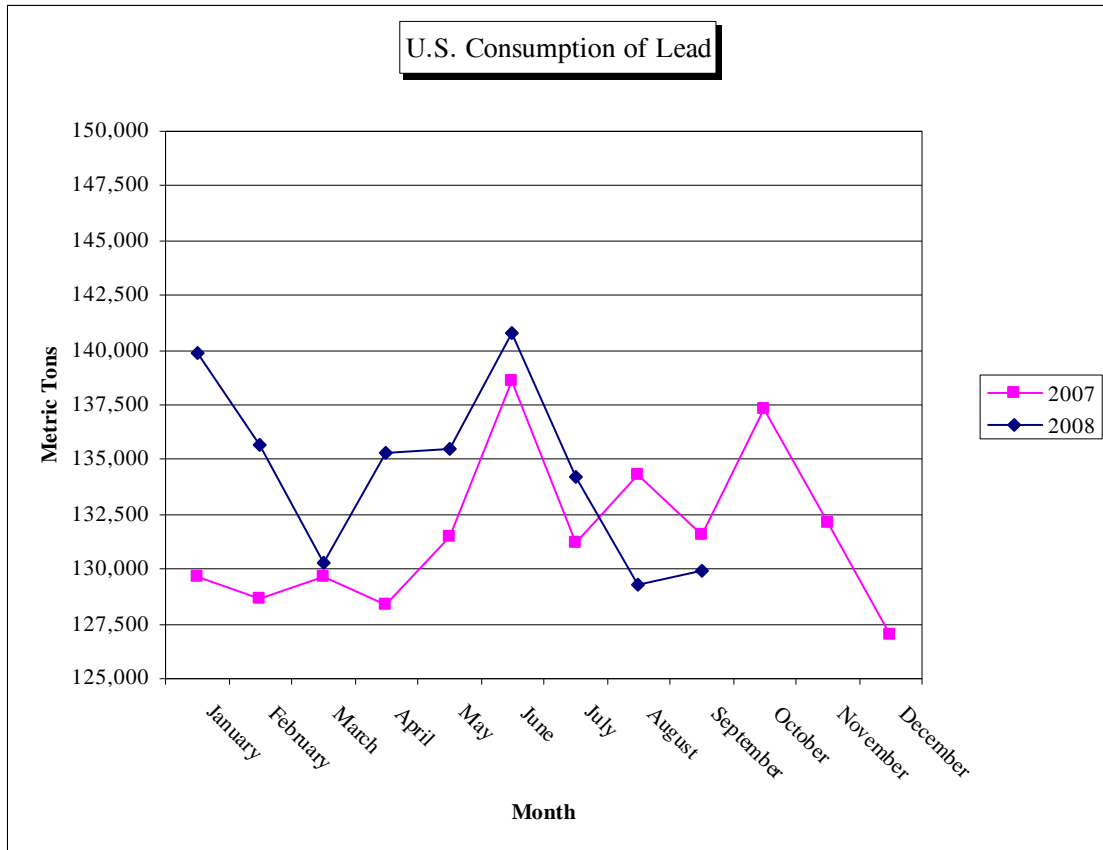


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	August 31, 2008	Net receipts		September 30, 2008
Soft lead	27,400 ^r	71,900	69,800	29,500
Antimonial lead	15,200	23,900	25,300	13,800
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	52,500 ^r	128,000	129,000	52,300

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

¹Data are rounded to no more than three significant digits.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons)

	2007		2008		
	August	Year	July	August	January- August
	Lead content:				
Ore and concentrates	41,500	300,000	56,700	31,600	142,000
Bullion	17	170	79	49	554
Materials excluding scrap	4,520	56,400	7,020	6,760	46,000
TEL/TML preparations, based on lead compounds	32	2,740	184	154	1,670
Total	46,100	359,000	64,000	38,500	191,000
Gross weight: Scrap	11,300	129,000	13,500	13,300	121,000

¹Data are rounded to 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 ORIGIN¹

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	2007		2008			2007		2008		
	Year	January- August	July	August	January- August	Year	January- August	July	August	January- August
Ore, matte, etc.:										
Canada	--	--	--	--	41	--	--	--	--	41
Mexico	--	--	138	--	353	--	--	138	--	353
Total	--	--	138	--	394	--	--	138	--	394
Base bullion:										
Colombia	1,860	--	19	--	483	1,860	--	19	--	483
Mexico	--	--	40	60	1,350	--	--	40	60	1,350
Other	127	1,080	92	--	152	127	1,080	92	--	152
Total	1,990	1,080	152	60	1,980	1,990	1,080	152	60	1,980
Pigs and bars:										
Canada	208,000	136,000	16,100	15,600	149,000	208,000	136,000	16,100	15,600	149,000
Mexico	35,600	19,300	5,850	3,840	39,000	35,600	19,300	5,850	3,840	39,000
Peru	16,500	11,600	467	1,020	7,100	16,500	11,600	467	1,020	7,100
Other	3,860	500	4,120	2,430	14,900	3,860	500	4,120	2,430	14,900
Total	264,000	167,000	26,600	22,900	210,000	264,000	167,000	26,600	22,900	210,000
Grand total	266,000	168,000	26,800	23,000	212,000	266,000	168,000	26,800	23,000	212,000

-- Zero.

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

Source: U.S. Census Bureau.