

# Mineral Industry Surveys

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## LEAD IN MAY 2010

Domestic mine production (recoverable) of lead in May was estimated to be 33,000 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in May was 1,070 t, slightly higher than that in April 2010. Secondary refinery production of lead in May increased by 4% from that of the previous month. Secondary refined lead production for the year to date through May 2010 was 3% lower than that in the corresponding period of 2009.

Total imports of lead for consumption for the year to date through April 2010 were 15% greater than those in the same period in the previous year. Canada (86%) and Mexico (11%) were the principal sources of imported refined lead for the first 4 months of 2010. Total exports of lead, exclusive of scrap, in April 2010 were 13% lower than those in the previous month. Total exports of lead, exclusive of scrap for the year to date through April 2010 were 33% lower than those in the same period of the previous year. The overall decline in exports through April 2010 was partially owing to a 47% decline in exports of lead ore and concentrates to China compared with those through April 2009. China and Canada were the leading destinations for ore and concentrate exports through April 2010. Exports of lead scrap in April 2010 decreased by 40% from those in the previous month. Canada and the Republic of Korea were leading destinations for lead scrap exports through April 2010.

The average Platts Metals Week North American producer price for lead in May 2010 was \$1.09 per pound, down slightly from that of the previous month and 53% higher than that in May 2009. The London Metal Exchange (LME) cash price of

lead in May 2010 averaged \$1,182 per metric ton, down 17% from that of the previous month and 31% higher than that in May 2009. The sharp decline in the LME cash price in May was partially attributed to commodity investors liquidating their positions. Global LME lead stocks at the end of May 2010 were 192,675 t, 6% higher than those at the end of April 2010 and 144% greater than those at month-end May 2009.

In late May, Teck Resources Ltd. (Vancouver, British Columbia, Canada) announced that it was proceeding with development of the Aqqaluk deposit at its Red Dog zinc-lead mine in northwest Alaska. (See Lead in February 2010.) Teck's decision followed discussions with the U.S. Environmental Protection Agency (EPA) concerning the status of the renewal of Red Dog's main water discharge permit and an internal review of operating plans for the deposit. Teck had acquired the necessary permits and authorizations to develop Aqqaluk, and a supplemental environmental impact statement conducted by the EPA determined that a new water discharge permit issued for Red Dog in 2010 protected the environment. An outstanding administrative appeal of certain conditions of the water discharge permit was not expected to affect the Aqqaluk development (Teck Resources Ltd., 2010).

### Reference Cited

Teck Resources Ltd., 2010, Teck Resources announces Aqqaluk to proceed: Vancouver, British Columbia, Canada, Teck Resources Ltd. news release, May 20, 2 p.

TABLE 1  
SALIENT LEAD STATISTICS IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content, unless otherwise specified)

	2009		2010		
	Year	January- May	April	May	January- May
<b>Production:</b>					
Mine (recoverable)	395,000	166,000	31,500 <sup>r</sup>	33,000 <sup>e</sup>	158,000
<b>Secondary refinery:</b>					
Reported by smelters/refineries	1,120,000	468,000	84,200 <sup>r</sup>	87,700	453,000
Estimated	11,200	4,680	842 <sup>r</sup>	877	5,390
Recovered from copper-base scrap <sup>e</sup>	15,000	6,250	1,250	1,250	6,250
Total secondary	1,150,000	479,000	86,300 <sup>r</sup>	89,800	464,000
<b>Consumption:</b>					
Reported	1,380,000	586,000	112,000 <sup>r</sup>	112,000	564,000
Undistributed <sup>e</sup>	41,500	17,600	3,360 <sup>r</sup>	3,350	16,900
Total	1,430,000	604,000	115,000 <sup>r</sup>	115,000	581,000
Stocks, end of period, consumers and secondary smelters	61,700	66,400	50,700 <sup>r</sup>	53,100	53,100
<b>Imports for consumption:</b>					
Base bullion	844	384	20	NA	146 <sup>2</sup>
Refined metal	251,000	104,000	24,100	NA	92,400 <sup>2</sup>
<b>Exports:</b>					
Ore and concentrate	287,000	106,000	21,000	NA	55,000 <sup>2</sup>
Bullion	34	25	--	NA	-- <sup>2</sup>
Wrought and unwrought lead	82,000	40,600	4,080	NA	25,100 <sup>2</sup>
TEL/TML preparations, based on lead compounds	2,070	1,610	124	NA	329 <sup>2</sup>
Scrap (gross weight)	140,000	59,700	3,710	NA	22,800 <sup>2</sup>
<b>Platts Metals Week North American producer price (cents per pound)</b>					
	86.87	67.67	110.88	109.46	110.49

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. -- Zero.

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

<sup>2</sup>Includes data for April only; May 2010 data were not available at time of publication.

TABLE 2  
MONTHLY AVERAGE LEAD PRICES

	North American producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate \$/£
		\$/metric ton	£/metric ton	
<b>2009:</b>				
May	71.79	1,439.58	934.07	1.541189
June	81.92	1,673.65	1,012.14	1.635659
July	86.91	1,678.05	1,024.84	1.637377
August	94.50	1,899.26	1,147.34	1.655350
September	107.80	2,203.82	1,348.43	1.634360
October	110.79	2,240.00	1,389.69	1.611869
November	111.03	2,308.19	1,390.84	1.659562
December	111.11	2,327.76	1,431.91	1.625638
January-December	86.87	1,718.49	1,086.44	1.564528
<b>2010:</b>				
January	111.24	2,367.70	1,464.68	1.616535
February	110.35	2,122.45	1,358.72	1.562100
March	110.53	2,171.66	1,443.00	1.504961
April	110.88	2,264.48	1,526.82	1.483130
May	109.46	1,882.18	1,285.55	1.464105
January-May	110.49	2,161.69	1,415.75	1.526166

Source: Platts Metals Week.

TABLE 3  
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	April 30, 2010			May 31, 2010
Battery-lead	26,200 <sup>r</sup>	86,300	85,800	26,700
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other <sup>2</sup>	739 <sup>r</sup>	6,340	6,230	847
Total	27,000 <sup>r</sup>	92,700	92,100	27,600
Percent change from preceding month <sup>3</sup>	XX	-7.9	-3.7	+2.1

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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

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

<sup>3</sup>Based on unrounded data; preceding monthly may have been revised.

TABLE 4  
LEAD, TIN, AND ANTIMONY RECOVERED FROM  
LEAD-BASE SCRAP IN MAY<sup>1</sup>

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	52,700	--	--
Remelt lead	W	--	--
Antimonial lead	9,790	(2)	(2)
Other <sup>3</sup>	25,200	(2)	(2)
Total lead-base	87,700	130	254

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

-- Zero.

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

<sup>2</sup>Withheld to avoid disclosing company proprietary data; included in "Total."

<sup>3</sup>Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5  
CONSUMPTION OF LEAD IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content)

Use	2009		2010		
	January-December	January-May	April	May	January-May
<b>Metal products:</b>					
Ammunition, shot and bullets	70,500	29,100	6,310	6,430	30,500
Brass and bronze, billet and ingots	3,920	1,680	233	233	1,210
Cable covering, power and communication and caulking lead, building construction	5,830	3,740	654 <sup>r</sup>	626	2,900
Casting metals	20,100	8,380	1,340 <sup>r</sup>	1,350	5,520
Sheet lead, pipes, traps and other extruded products	27,100	11,400	2,290	2,310	14,700
Solder	7,270	2,980	896 <sup>r</sup>	687	3,740
Storage batteries, including oxides	1,210,000	512,000	97,000 <sup>r</sup>	96,800	489,000
Terne metal, type metal, and other metal products <sup>2</sup>	16,700	6,950	1,220	1,220	6,270
Total metal products	1,360,000	576,000	110,000 <sup>r</sup>	110,000	554,000
Other oxides and miscellaneous	21,300	9,850	2,020	1,980	9,770
Total reported	1,380,000	586,000	112,000 <sup>r</sup>	112,000	564,000
Undistributed <sup>e</sup>	41,500	17,600	3,360 <sup>r</sup>	3,350	16,900
Grand total	1,430,000	604,000	115,000 <sup>r</sup>	115,000	581,000

<sup>e</sup>Estimated. <sup>r</sup>Revised.

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

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

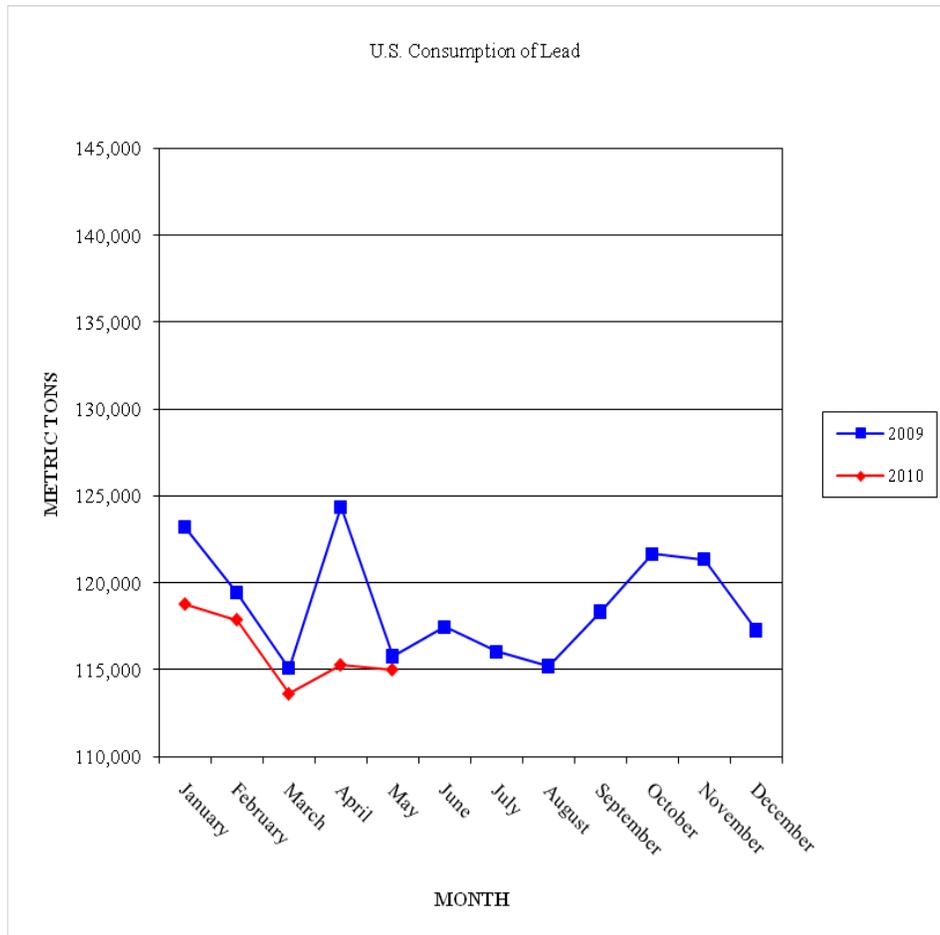


TABLE 6  
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD<sup>1</sup>

(Metric tons, lead content)

Type of material	Stocks	Net	Consumption	Stocks
	April 30, 2010	receipts		May 31, 2010
Soft lead	27,800 <sup>r</sup>	80,700	77,500	31,000
Antimonial lead	17,100 <sup>r</sup>	21,600	22,300	16,300
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	50,700 <sup>r</sup>	119,000	116,000	53,100

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

<sup>1</sup>Data are rounded to no more than three significant digits.

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

(Metric tons)

	2009		2010		
	Year	January- April	March	April	January- April
Lead content:					
Ore and concentrates	287,000	85,300	19,100	21,000	55,000
Bullion	34	25	--	--	--
Materials excluding scrap	82,000	32,500	9,780	4,080	25,100
TEL/TML preparations, based on lead compounds	2,070	1,420	63	124	329
Total	371,000	119,000	29,000	25,200	80,400
Gross weight, scrap	140,000	45,600	6,220	3,710	22,800

-- Zero.

<sup>1</sup>Data are rounded to more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY  
COUNTRY OF ORIGIN<sup>1</sup>

(Metric tons, lead content)

Country of origin	2009		2010		
	Year	January- April	March	April	January- April
Ore, matte, etc., Canada	1,490	609	--	--	--
Base bullion:					
Mexico	810	344	19	20	108
Other	34	--	--	--	38
Total	844	344	19	20	146
Pigs and bars:					
Canada	205,000	63,000	23,000	19,900	79,400
Mexico	41,100	12,800	2,280	2,190	9,780
Peru	991	991	--	--	--
Other	4,020	2,530	1,120 <sup>r</sup>	2,090	3,270
Total	251,000	79,300	26,400	24,100	92,400
Grand total	253,000	80,200	26,400	24,200	92,600

<sup>r</sup>Revised. -- Zero.

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

Source: U.S. Census Bureau.