

Mineral Industry Surveys

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LEAD IN JULY 2018*

Domestic secondary refined lead production in July was 97,000 t, 5% more than that in the previous month and slightly more than that in July 2017 (tables 1, 2).

The United States is a significant exporter of lead concentrates. In July 2018, U.S. exports of ores and concentrates were 128,000 t year-to-date, 13% less than that for the same period in 2017. Leading destinations for the exports of lead ores and concentrates were China (36%), Canada (16%), and Mexico (14%).

Prices and Stocks

The Platts Metals Week average North American Market price for lead in July 2018 was \$1.09 per pound, 9% less than that in the previous month, and slightly less than that in July 2017. The London Metal Exchange, Ltd. (LME) cash price was \$1.00 per pound, 9% less than that in the previous month, and slightly less than that in July 2017 (table 3). The Platts average U.S. used lead-acid batteries (Midwest) price in July 2018 was \$0.42 per pound, 4% less than that in June and slightly less than that in July 2017 (table 3). Most of the secondary lead is recovered from used lead-acid batteries.

Global LME lead stocks in July 2018 were 127,025 t, which were 4% less than those at the end of June 2018 and 17% less than those at the end of July 2017 (table 11).

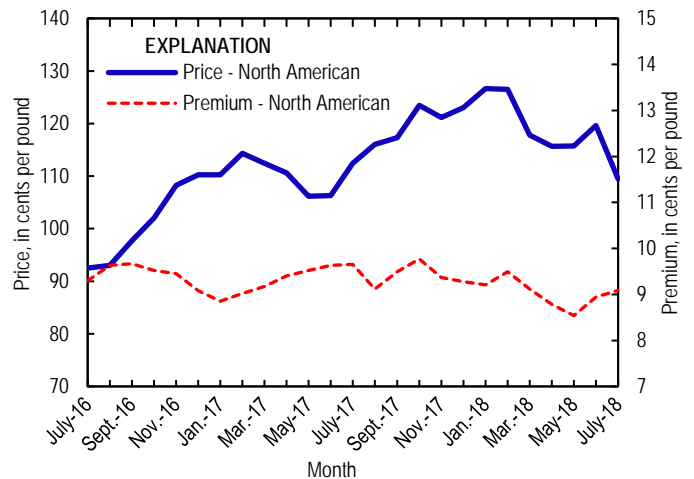


Figure 1. Average monthly North American price and premium for refined lead metal from July 2016 through July 2018. Source: Platts Metals Week.

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*Corrections posted on March 22, 2019.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2017		2018		
	January– December ²	January– July	June	July	January– July ²
Production:					
Mine (recoverable)	302,000	181,000 ^r	23,400	W *	W *
Secondary refinery, reported by smelters/refineries	1,130,000	658,000 ^r	92,400	97,000	662,000
Consumption of refined lead, apparent ^{e, 3}	1,760,000	1,060,000 ^r	144,000	127,000	988,000
Imports for consumption:					
Ore and concentrate	--	--	--	--	--
Bullion	--	--	--	165	223
Unwrought	658,000	414,000 ^r	55,400	33,600	343,000
Exports:					
Ore and concentrate	269,000	147,000	17,300	47,200	128,000
Bullion (gross weight)	1,550	1,150	23	420	1,300
Unwrought (gross weight)	23,900	16,200	4,200	3,460	17,200
Platts Metals Week North American Market					
price (cents per pound)	114.45	110.36	119.63	109.44	118.79

^eEstimated. ^rRevised. W Withheld to avoid disclosing company proprietary data. -- Zero.

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

²May include revisions to previously published data.

³Smelter production plus imports for consumption minus domestic exports.

*Corrections posted on March 22, 2019.

TABLE 2
MINE AND SECONDARY REFINERY PRODUCTION OF LEAD
IN THE UNITED STATES¹

(Metric tons)

Period	Mine		Secondary refinery ^c
	Lead in concentrate	Recoverable	
2017:			
July	24,100	23,400	95,000
August	26,500	25,700	95,300
September	21,600	21,000	93,300
October	25,300	24,600	94,600
November	28,100	27,300	91,400
December	22,600	21,900	94,300
January–December	310,000	302,000	1,130,000
2018:			
January	22,800 ^r	22,100	95,100
February	18,400 ^r	17,900	91,500
March	21,200	20,700	97,500
April	22,800 ^r	22,200	97,300
May	23,600 ^r	23,000	91,400
June	24,000	23,400	92,400
July	W *	W *	97,000
January–July	W *	W *	662,000

^cEstimated. ^rRevised. W Withheld to avoid disclosing company proprietary data.

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

*Corrections posted on March 22, 2019.

TABLE 3
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market ¹	cash		batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2017:				
July	112.43	102.78	2,265.85	42.44
August	116.02	106.90	2,356.76	43.13
September	117.30	107.81	2,376.81	43.31
October	123.43	113.66	2,505.76	43.08
November	121.13	111.76	2,463.80	43.28
December	123.05	113.77	2,508.20	43.00
January–December	114.45	105.10	2,317.00	40.92
2018:				
January	126.65	117.44	2,589.08	43.23
February	126.53	117.04	2,580.29	43.88
March	117.82	108.70	2,396.45	43.50
April	115.69	106.91	2,356.95	43.25
May	115.75	107.20	2,363.44	44.25
June	119.63	110.68	2,440.14	43.19
July	109.44	100.35	2,212.39	41.60
January–July	118.79	109.76	2,419.82	43.27

¹Platts Metals Week North American Market price. Reflects the LME lead cash price plus the Platts premium for 99.97% lead.

²Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 4
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JULY 2018¹

(Metric tons, gross weight)

Item	Stocks June 30, 2018	Net receipts	Consumption	Stocks July 31, 2018
Battery-lead	31,000	72,800	75,300	28,400
Other ²	14,100	15,500	15,300	14,200
Total	45,100	88,200	90,700	42,600
Percent change from preceding month ³	XX	0.9	7.7	-5.5

XX Not applicable.

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

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

³Based on unrounded data; preceding monthly data may have been revised.

TABLE 5
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JULY 2018¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	84,100	--	--
Remelt lead	W	--	W
Antimonial lead	12,400	W	W
Other ²	W	W	--
Total lead-base	97,000	181	285

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

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

²Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 6
U.S. APPARENT CONSUMPTION OF LEAD¹

(Metric tons)

Period	Production	Imports ^{2,3}	Exports ^{2,3}	Apparent consumption ⁴
2017: ^P				
July	95,000	64,000	1,950	157,000
August	95,300	45,900	2,890	138,000
September	93,300	65,200	959	157,000
October	94,600	46,600	834	140,000
November	91,400	48,600	1,350	139,000
December	94,300	37,700	1,700	130,000
January–December	1,130,000	658,000	23,900	1,760,000
2018:				
January	95,100	36,200	758	131,000
February	91,500	65,000	1,510	155,000
March	97,500	66,900	1,740	163,000
April	97,300	44,900	2,790	139,000
May	91,400	40,500	2,780	129,000
June	92,400	55,400	4,200	144,000
July	97,000	33,600	3,460	127,000
January–July	662,000	343,000	17,200	988,000

^PPreliminary.

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

²Import and export data are for Harmonized Tariff Schedule of the United States (HTS) codes 7801.10.0000, 7801.91.0000, 7801.99.9030, 7801.99.9050.

³Source: U.S. Census Bureau.

⁴Smelter production plus imports for consumption minus domestic exports.

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

(Metric tons, gross weight, unless otherwise specified)

	2017		2018		
	January– December ²	January– July	June	July	January– July
Ores and concentrate (lead content):	269,000	147,000	17,300	47,200	128,000
Bullion	1,550	1,150	23	420	1,300
Unwrought:					
Refined lead	2,020	830	2,490	1,560	6,420
Refined lead containing antimony as the principal alloying element	2,330	2,150	216	--	529
Lead alloys	19,300	13,000	1,280	1,640	8,850
Other	283	223	217	270	1,440
Total	23,900	16,200	4,200	3,460	17,200
Wrought:					
Bars, rods, profiles, and wire	1,040	670	52	104	566
Pipes and tubes, including fittings	251	166	12	1	55
Plates, sheets, strip, foil	4,700	1,740	162	207	2,090
Other	1,560	938 ^r	138	108	1,050
Total	7,550	3,510 ^r	364	420	3,760
Powders and flakes	186	126	16	47	188
Tetraethyl lead and tetramethyl lead	260	96	45	56	277
Waste and scrap:					
Spent lead-acid storage batteries for starting engines	19,700	11,400	2,590	2,190	16,800
Lead waste and scrap obtained from lead-acid storage batteries	20,000	10,400	1,010	1,390	7,800
Other lead waste and scrap	37,600	19,900	3,530	3,620	23,400

^rRevised.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 8
U.S. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY¹

(Metric tons, lead content)

	2017		2018		
	January– December ²	January– July	June	July	January– July
Australia	7,370	86	--	--	--
Canada	36,600	20,000	720	5,800	20,100
China	134,000	69,500	3,550	25,600	46,100
Germany	14,800	7,470	7,200	--	7,200
Italy	7,470	7,470	--	--	7,170
Japan	24,400	13,200	36	5,090	5,160
Korea, Republic of	43,300	28,500	4,760	5,460	14,100
Mexico	868	548	74	3,710	18,400
Netherlands	--	--	--	--	7,100
Peru	29	--	--	--	--
Saudi Arabia	15	15	--	--	27
Thailand	--	--	961	1,560	2,520
Total	269,000	147,000	17,300	47,200	128,000

-- Zero.

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

²May include revisions to previously published data.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF LEAD, BY CLASS¹

(Metric tons, gross weight, unless otherwise specified)

	2017		2018		
	January– December ²	January– July	June	July	January– July
Ores and concentrate (lead content):	--	--	--	--	--
Bullion (lead content)	--	--	--	165	223
Unwrought:					
Refined lead	538,000	344,000 ^r	47,200	27,500	278,000
Refined lead containing antimony as the principal alloying element (lead content)	40,800	24,300	3,440	3,500	27,000
Lead alloys (lead content)	22,300	12,700	1,880	747	9,890
Other (lead content)	56,300	33,200 ^r	2,890	1,890	27,400
Total	658,000	414,000 ^r	55,400	33,600	343,000
Wrought:					
Bars, rods, profiles, and wire	2,020	1,550	60	53	547
Pipes and tubes, including fittings	37	27	3	(3)	4
Plates, sheets, strip, foil	1,590	1,100	214	104	928
Other	3,840	2,080	323	127	2,150
Total	7,480	4,750 ^r	600	283	3,630
Powders and flakes	343	222	(3)	19	131
Tetraethyl lead and tetramethyl lead	972	436	24	48	557
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	1,460	714 ^r	59	52	377
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	4,180	3,500	161	69	945
Other lead waste and scrap (lead content)	2,430	1,520	256	182	1,470

^rRevised. -- Zero.

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

²May include revisions to previously published data.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD BY
COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Material and country or locality of origin	2017		2018		
	January– December ²	January– July	June	July	January– July
Refined lead:					
Argentina	2,880	993	--	1,200	3,540
Australia	7,570	5,240	--	--	--
Azerbaijan	955	526	--	--	--
Bolivia	889	725	--	--	--
Brazil	20,800	12,400	--	100	9,010
Burma	1,150	800	50	--	100
Canada	160,000	98,500 ^r	13,600	12,800	84,800
Chile	--	--	--	100	100
China	12	3	--	--	--
Colombia	1,500	500	--	--	491
Dominican Republic	693	595	25	50	200
Ecuador	14,400	8,730	525	300	6,510
Ghana	97	--	--	--	--
Honduras	--	--	--	--	199
India	55,400	38,100	338	556	20,800
Israel	1,990	1,310	199	--	1,510
Kazakhstan	5,550	4,250	591	591	2,860
Korea, Republic of	127,000	92,300	19,900	--	64,000
Mexico	103,000	58,800	11,000	11,000	67,500
Nigeria	1,480	1,460	--	--	--
Panama	--	--	--	--	125
Peru	3,900	1,700	300	--	1,950
Poland	165	165 ^r	--	--	--
Russia	14,700	6,110	--	--	6,460
Saudi Arabia	999	999 ^r	--	--	--
Serbia	2,020	1,770	--	--	--
South Africa	654	654	--	--	174
Sri Lanka	2,500	1,250	--	--	625
Thailand	3,590	2,570 ^r	668	717	5,640
United Arab Emirates	148	49	--	--	--
United Kingdom	532	322	95	--	191
Venezuela	3,030	2,590	25	25	1,520
Total	538,000	344,000^r	47,200	27,500	278,000
Other unwrought lead:³					
Argentina	882	806	352	--	1,920
Bolivia	456	232	--	--	--
Brazil	1,550	1,520	--	--	--
Canada	91,200	49,800 ^r	6,100	4,140	51,300
Chile	2,220	1,190	--	238	1,780
Columbia	--	--	--	132	431
Costa Rica	171	171	388	214	2,110
Ecuador	2,310	1,790	--	--	--
Egypt	402	402	--	--	--
Ghana	98	98	--	--	--
Guatemala	96	--	--	--	--
Honduras	3,840	1,070	--	--	2,490
India	1,590	1,590 ^r	--	--	--

See footnotes at end of table.

TABLE 10—Continued
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD BY
COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Material and country or locality of origin	2017		2018		
	January– December ²	January– July	June	July	January– July
Mexico	6,430	4,710	1,130	1,330	3,150
Panama	997	502	--	--	199
Paraguay	411	358	--	--	--
Peru	223	191	--	--	50
Russia	2,960	2,960	96	--	153
Senegal	1,470	1,270	--	--	--
South Africa	--	--	--	61	95
Turkey	1	1	--	--	--
United Kingdom	794	436	--	--	--
Venezuela	626	450	134	26	643
Vietnam	683	683	--	--	--
Total	119,000	70,200 ^r	8,200	6,140	64,300
Grand total	658,000	414,000 ^r	55,400	33,600	343,000

^rRevised. -- Zero.

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

²May include revisions to previously published data.

³Includes the lead content (Quantity 2) of Harmonized Tariff Schedule of the United States (HTS) codes 7801.91.0000, 7801.99.9030, 7801.99.9050. Excludes bullion.

Source: U.S. Census Bureau.

TABLE 11
LONDON METAL EXCHANGE (LME) STOCKS OF LEAD, END OF PERIOD

(Metric tons)

Period	United States	Asia	Europe	Total
2017:				
July	--	65,425	87,375	152,800
August	--	62,475	85,950	148,425
September	--	54,525	102,950	157,475
October	--	49,175	100,525	149,250
November	--	48,425	96,575	145,000
December	--	49,575	92,650	142,225
2018:				
January	--	47,300	85,950	133,250
February	--	44,350	80,875	125,225
March	--	42,475	86,625	129,100
April	--	42,075	88,700	130,775
May	--	41,475	92,000	133,475
June	--	40,125	91,525	131,775
July	--	35,000	92,025	127,025
-- Zero.				

Source: London Metal Exchange, Ltd.