

Mineral Industry Surveys

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LEAD IN JUNE 2019

Domestic mine production (recoverable) of lead in June was 23,900 metric tons (t). Average daily mine production in June was 796 t, 8% less than that in the previous month and slightly more than that in June 2018. Total secondary refined lead production in June was 93,800 t, 4% more than that in the previous month and slightly more than that in June 2018 (fig. 1; tables 1, 2).

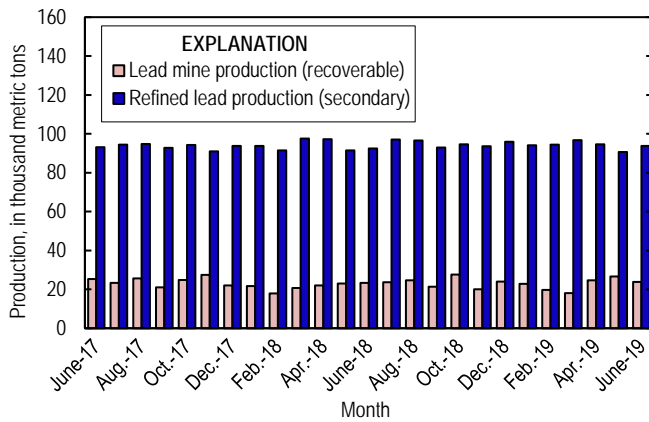


Figure 1. U.S. production of lead from June 2017 through June 2019. Source: U.S. Geological Survey.

The United States is a significant exporter of lead concentrates. U.S. exports of lead in ores and concentrates for the year through June were 81,100 t, 5% less than that for the same period in 2018. Leading destinations were Canada (35%), the Republic of Korea (23%), Mexico (10%), China (9%), and Italy (9%) (table 8).

Prices and Stocks

The average London Metal Exchange, Ltd. (LME) cash price for lead in June was 85.8 cents per pound, 4% more than that in the previous month and 22% less than that in June 2018 (table 3). The Platts Metals Week average North American Market price for lead in June 2019 was 95.0 cents per pound, 3% more

than that in the previous month and 21% less than that in June 2018. The North American premium to the LME cash price in June 2019 averaged about 9.18 cents per pound, 4% less than that in May 2019 and slightly more than that in June 2018 (fig. 2, table 3).

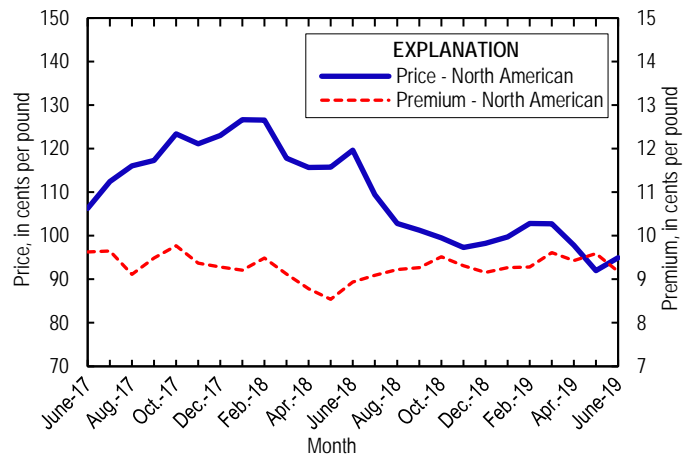


Figure 2. Average monthly North American price and premium for refined lead metal from June 2017 through June 2019. Source: Platts Metals Week.

The Platts average U.S. used lead-acid batteries (Midwest) price in June 2019 was 31.4 cents per pound, slightly less than that in May and 27% less than that in June 2018 (table 3). Most secondary lead is recovered from used lead-acid batteries.

Global LME lead stocks at the end of June 2019 were 65,750 t, 5% less than those at the end of May 2019 and 50% less than those at the end of June 2018 (table 11).

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TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2018 ²		2019		
	January– December	January– June	May	June	January– June
Production:					
Mine (recoverable)	271,000	129,000	26,700	23,900	136,000
Secondary refinery, reported by smelters/refineries	1,140,000	565,000	90,600	93,800	564,000
Consumption of refined lead, apparent ³	1,630,000	860,000	124,000	133,000	808,000
Imports for consumption:					
Ore and concentrate	--	--	8	--	8
Bullion	789	58	--	--	75
Unwrought	563,000	309,000	34,900	41,400	261,000
Exports:					
Ore and concentrate	251,000	85,400	26,100	11,800	81,100
Bullion (gross weight)	2,060	876	51	158	243
Unwrought (gross weight)	67,200	13,800	1,320	1,860	16,800
Platts Metals Week North American Market					
price (cents per pound)	110.89	120.34	91.99	94.96	98.34

⁶Estimated. -- 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.

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

(Metric tons)

Period	Mine		Secondary refinery ^c
	Lead in concentrate	Recoverable	
2018:			
June	24,000	23,400	92,400
July	24,300	23,700	97,000
August	25,300	24,600	96,600
September	23,300	21,300	92,900
October	28,500	27,700	94,600
November	20,600	20,100	93,600
December	24,700	24,000	96,000
January–December	280,000	271,000	1,140,000
2019:			
January	23,500	22,800	94,100
February	20,300	19,800	94,500
March	18,600	18,100	96,700
April	25,300	24,600	94,600
May	27,500	26,700	90,600
June	24,400	23,900	93,800
January–June	140,000	136,000	564,000

^cEstimated.

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

TABLE 3
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market ¹	cash		batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2018:				
June	119.63	110.68	2,440.14	43.19
July	109.44	100.35	2,212.39	41.60
August	102.85	93.64	2,064.34	37.03
September	101.25	91.98	2,027.78	34.38
October	99.53	90.02	1,984.58	33.00
November	97.29	87.98	1,939.65	31.25
December	98.29	89.13	1,965.07	30.63
January–December	110.89	101.76	2,243.35	39.10
2019:				
January	99.70	90.43	1,993.73	30.95
February	102.78	93.51	2,061.45	29.94
March	102.78	93.17	2,054.14	31.34
April	97.80	88.37	1,948.26	33.65
May	91.99	82.40	1,816.64	32.25
June	94.96	85.78	1,891.04	31.38
January–June	98.34	88.94	1,960.88	31.58

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 JUNE 2019¹

(Metric tons, gross weight)

Item	Stocks May 31, 2019	Net receipts	Consumption	Stocks June 30, 2019
Battery-lead	W	61,500	71,300	W
Other ²	W	15,100	15,200	W
Total	43,100	76,600	86,500	33,200
Percent change from preceding month ³	XX	-11.2	3.2	-22.9

W Withheld to avoid disclosing company proprietary data; included in "Total." 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 JUNE 2019¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	80,200	--	--
Remelt lead	W	--	--
Antimonial lead	13,000	W	W
Other ²	W	W	--
Total lead-base	93,800	185	W

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
2018: ^P				
June	92,400	55,200	4,200	143,000
July	97,000	33,600	3,460	127,000
August	96,600	39,300	4,640	131,000
September	92,900	58,700	12,600	139,000
October	94,600	38,500	12,300	121,000
November	93,600	46,100	14,000	126,000
December	96,000	38,000	6,360	128,000
January–December	1,140,000	563,000	67,200	1,630,000
2019:				
January	94,100	54,000	9,490	139,000
February	94,500	37,200	1,380	130,000
March	96,700	38,100	1,820	133,000
April	94,600	55,100	918	149,000
May	90,600	34,900	1,320	124,000
June	93,800	41,400	1,860	133,000
January–June	564,000	261,000	16,800	808,000

^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)

	2018 ²		2019		
	January– December	January– June	May	June	January– June
Ores and concentrate (lead content):	251,000	85,400	26,100	11,800	81,100
Bullion	2,060	876	51	158	243
Unwrought:					
Refined lead	49,300	4,860	197	134	8,870
Refined lead containing antimony as the principal alloying element	654	529	--	73	334
Lead alloys	14,400	7,210	1,100	1,570	6,430
Other	2,850	1,170	20	79	1,150
Total	67,200	13,800	1,320	1,860	16,800
Wrought:					
Bars, rods, profiles, and wire	886	462	34	68	343
Pipes and tubes, including fittings	116	54	25	1	38
Plates, sheets, strip, foil	3,180	1,880	211	336	2,020
Other	1,770	944	113	100	713
Total	5,960	3,340	383	505	3,120
Powders and flakes	372	141	(³)	27	174
Tetraethyl lead and tetramethyl lead	502	221	21	32	379
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	26,800,000	14,600,000	2,190,000	2,250,000	13,100,000
Lead waste and scrap obtained from lead-acid storage batteries	9,200	6,410	--	--	--
Other lead waste and scrap	40,300	20,100	3,550	3,040	20,900

-- 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 8
U.S. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY OR LOCALITY¹

(Metric tons, lead content)

	2018 ²		2019		
	January– December	January– June	May	June	January– June
Australia	7,310	--	--	--	--
Canada	51,200	19,000	14,000	1,020	28,300
China	73,600	20,500	3,540	--	7,300
Dominican Republic	--	--	--	--	29
Germany	15,100	7,200	--	--	--
Italy	7,170	7,170	--	--	7,360
Japan	19,100	71	--	5,420	5,590
Korea, Republic of	48,700	8,640	8,290	3,840	18,700
Laos	--	--	--	--	11
Mexico	19,100	14,700	284	37	8,430
Netherlands	7,100	7,100	--	1,430	5,340
Saudi Arabia	27	27	--	--	--
Thailand	2,520	961	--	--	--
Vietnam	--	--	5	4	18
Total	251,000	85,400	26,100	11,800	81,100

-- Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

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

(Metric tons, gross weight, unless otherwise specified)

	2018 ²		2019		
	January– December	January– June	May	June	January– June
Ores and concentrate (lead content):	--	--	8	--	8
Bullion (lead content)	789	58	--	--	75
Unwrought:					
Refined lead	448,000	251,000	28,500	33,900	213,000
Refined lead containing antimony as the principal alloying element (lead content)	45,200	23,300	2,750	1,930	13,900
Lead alloys (lead content)	18,600	9,220	1,140	2,630	9,660
Other (lead content)	50,800	25,600	2,510	2,900	24,400
Total	563,000	309,000	34,900	41,400	261,000
Wrought:					
Bars, rods, profiles, and wire	1,020	495	261	389	1,190
Pipes and tubes, including fittings	29	4	21	(3)	70
Plates, sheets, strip, foil	1,740	827	258	131	911
Other	4,090	2,010	154	142	1,660
Total	6,890	3,340	694	662	3,840
Powders and flakes	203	112	20	23	173
Tetraethyl lead and tetramethyl lead	716	467	12	14	61
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	1,050,000	324,000	119,000	28,600	270,000
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	1,660	875	162	208	959
Other lead waste and scrap (lead content)	2,450	1,280	176	104	852

-- 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	2018 ²		2019		
	January– December	January– June	May	June	January– June
Refined lead:					
Argentina	6,050	2,340	729	301	2,420
Australia	2,780	--	--	--	--
Brazil	15,500	8,910	1,200	503	3,510
Burma	100	100	400	--	400
Canada	148,000	71,900	12,200	12,400	81,400
Chile	100	--	1	--	--
China	--	--	--	--	1
Colombia	491	491	--	--	801
Dominican Republic	250	150	--	--	50
Ecuador	10,900	6,210	2,100	1,500	10,800
Germany	--	--	--	--	50
Honduras	199	199	--	--	--
India	23,200	20,200	1,500	177	3,320
Israel	1,820	1,510	601	200	1,360
Kazakhstan	5,130	2,270	967	8,500	10,400
Korea, Republic of	106,000	64,000	--	1,000	40,800
Mexico	107,000	56,200	8,690	8,350	53,000
Nigeria	47	--	--	149	149
Panama	125	125	--	--	1,350
Peru	3,350	1,950	--	--	779
Russia	6,460	6,460	--	779	20
South Africa	174	174	--	--	--
Sri Lanka	625	625	--	--	--
Thailand	7,500	4,920	149	--	1,160
United Kingdom	485	191	--	--	196
Venezuela	2,460	1,500	--	25	554
Total	448,000	251,000	28,500	33,900	213,000
Other unwrought lead: ³					
Argentina	1,920	1,920	245	198	1,260
Canada	93,100	47,200	5,820	6,530	43,700
Chile	1,780	1,540	--	--	--
Colombia	1,040	299	--	--	--
Costa Rica	4,470	1,680	--	--	19
Ecuador	125	--	44	67	245
Honduras	2,490	2,490	--	--	--
India	93	--	38	--	111
Korea, Republic of	--	--	4	2	5
Mexico	8,150	1,920	250	122	1,950
Panama	199	199	--	--	--
Peru	50	50	--	--	--
Russia	209	153	--	--	(4)
South Africa	95	35	--	--	--
Taiwan	--	--	--	(4)	(4)
United Kingdom	--	--	--	540	603
Venezuela	885	696	--	--	54
Total	115,000	58,200	6,400	7,460	48,000
Grand total	563,000	309,000	34,900	41,400	261,000

-- Zero.

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

²May include revisions to previously published data.

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.

⁴Less than ½ unit.

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
2018:				
June	--	40,100	91,500	132,000
July	--	35,000	92,000	127,000
August	--	33,600	89,300	123,000
September	--	27,200	88,500	116,000
October	--	23,600	90,000	114,000
November	--	21,100	84,100	105,000
December	--	20,700	86,700	107,000
2019:				
January	--	19,300	53,200	72,500
February	--	22,600	54,300	76,900
March	--	22,200	56,500	78,800
April	--	22,100	52,400	74,400
May	--	20,600	48,800	69,400
June	--	19,100	46,700	65,800

-- Zero.

Source: London Metal Exchange, Ltd.