

Mineral Industry Surveys

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SULFUR IN AUGUST 2019

During August 2019, production of recovered elemental sulfur was 701,000 metric tons (t), which was slightly lower than that of July 2019 and 13% lower than that of August 2018. Shipments were 696,000 t, which was 4% lower than those of July 2019. Producers' ending stocks for August 2019 were 111,000 t (table 1).

Imports of recovered sulfur for August 2019 were estimated to be 163,000 t; exports were 296,000 t. Imports of sulfuric acid for August 2019 were 262,000 t; exports were 17,000 t (tables 2-4).

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 563,000 t in August 2019. This was

23% lower than that of July 2019 and 34% lower than that of August 2018 (table 5).

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TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period ³
	Petroleum ²	Natural gas	Total		
2018:					
January–December	8,380	626	9,010	9,020	122
January–August	5,560	427	5,990	6,020	107
August	751	54	805	809	107
September	690	38	728	722	113
October	663	53	717	713	117
November	696	54	750	762	105
December	766	54	820	803	122
2019:					
January	699	47	746	767	101
February	592	26	618	613	109
March	650	28	678	664	120
April	625	28	652	666	108
May	621	25	647	646	107
June	623	22	645 ^r	639	112 ^r
July	689 ^r	28	717 ^r	723 ^r	106 ^r
August ^p	673	27	701	696	111
January–August	5,170	231	5,400	5,410	111

^pPreliminary. ^rRevised.

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

²Includes a small quantity from coking operations.

³Subject to inventory adjustments.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

Period	Canada		Total, all countries ²	
	Quantity	Value ³	Quantity	Value ³
2018:				
January–December	1,510	90,600	2,230	205,000
January–August	990 ^r	54,400 ^r	1,530 ^r	137,000
August	151	9,040	214	18,800
September	120	8,200	155	13,700
October	139	9,310	190	17,700
November	135	9,250	185	26,600
December	125	9,390	173	10,500
2019:				
January	131	10,100	180	19,800
February	107	6,400	157	16,000
March	146	8,240	193	15,400
April	138	7,370	183	14,200
May	118	6,180	119	7,060
June	109	4,980	209	16,200
July	120 ^e	6,730	127 ^e	13,000
August	120 ^e	4,000	163 ^e	9,380
January–August	990	54,000	1,330	111,000

^eEstimated. ^rRevised.

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

²May include other countries not listed.

³Declared customs valuation.

Sources: U.S. Census Bureau as adjusted by U.S. Geological Survey and Acuity Commodities.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries ²		
	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³
2018:									
January–December	1,900	622	88,100	470	154	18,400	3,050	997	170,000
January–August	1,260	413	57,400	312	102 ^r	12,200	2,040	667	112,000
August	149	49	6,720	39	13	1,420	236	77	14,200
September	153	50	6,420	33	11	1,260	252	82	13,300
October	164	53	7,990	21	7	780	266	87	16,300
November	136	45	6,810	46	15	1,870	220	72	14,000
December	187	61	9,480	57	19	2,200	272	89	15,000
2019:									
January	139	46	7,280	36	12	1,470	237	77	14,200
February	118	39	6,380	43	14	1,890	185	61	12,000
March	183	60	9,220	63	21	4,490	350	114	24,200
April	157	51	16,300	65	21	4,320	250	82	24,700
May	175	57	19,100	23	8	2,310	233	76	25,700
June	151	49	15,600	24	8	1,810	237	78	23,300
July	178	58	14,200	34	11	2,140	251	82	21,700
August	190	62	13,300	29	10	1,800	262	86	20,500
January–August	1,290	422	101,000	317	104	20,200	2,010	656	166,000

^rRevised.

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

²May include other countries not listed.

³Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value ²	Quantity	Sulfur content	Value ²
2018:					
January–December	2,390	299,000	342	112	40,400
January–August	1,490	190,000 ^r	253 ^r	83 ^r	27,300 ^r
August	173	23,100	25	8	3,820
September	217	31,100	32	10	4,110
October	172	24,300	15	5	2,210
November	193	27,100	16	5	2,680
December	318	26,400	28	9	4,050
2019:					
January	349	29,800	16	5	2,980
February	119	15,800	18	6	2,990
March	144	14,700	13	4	2,610
April	116	14,000	21	7	4,240
May	210	21,900	21	7	2,910
June	150	13,600	18	6	1,920
July	120	12,400	15	5	2,890
August	296	13,100	17	5	2,630
January–August	1,510	135,000	139	45	23,200

^rRevised.

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

²Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR¹

(Thousand metric tons)

Period	Domestic sources ²	Imports	Consumption
2018:			
January–December	6,620	2,230	8,850
January–August	4,520	1,530 ^r	6,050 ^r
August	636	214	850
September	505	155	660
October	541	190	731
November	569	185	754
December	485	173	658
2019:			
January	418	180	598
February	494	157	651
March	520	193	713
April	550	183	733
May	436	119	555
June	489	209	698
July	603 ^r	127 ^e	730 ^r
August ^p	400	163 ^e	563
January–August	3,910	1,330	5,240

^eEstimated. ^pPreliminary. ^rRevised.

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

²Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT¹

(Thousand metric tons)

District and source	January–August 2018 ²		July 2019		August 2019 ^p		January–August 2019 ^{p, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	161	161	18	20	16	16	113	114
Natural gas	9	9	1	1	1	1	9	9
Total	170	170	20	21	17	17	122	123
PAD 2:								
Petroleum and coke	923	933	122	125	124	121	875	873
Natural gas	5	5	--	--	--	--	2	2
Total	927	938	122	125	124	121	877	875
PAD 3:								
Petroleum and coke	3,480	3,480	421 ^r	423 ^r	404	404	3,200	3,200
Natural gas	85	86	10	10	9	9	79	78
Total	3,560	3,560	431 ^r	433 ^r	413	413	3,280	3,280
PAD 4 and 5:								
Petroleum and coke	1,000	1,020	128	128	129	128	981	988
Natural gas	329	329	17	17	17	16	142	146
Total	1,330	1,350	144 ^r	144	146	144	1,120	1,130
Grand total	5,990	6,020	717 ^r	723 ^r	701	696	5,400	5,410

^pPreliminary. ^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.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	2019			
	2018	July	August	January– August
Production	9.01	8.44 ^r	8.25 ^p	8.12 ^p
Shipments	9.02	8.51 ^r	8.19 ^p	8.13 ^p
Exports of sulfur	2.39	1.42	3.49	2.26
Imports of sulfur:				
Canada	1.51	1.41	1.41	1.49
Total ²	2.23	1.50 ^r	1.92	2.00
Exports of H ₂ SO ₄	0.34	0.17	0.20	0.21
Imports of H ₂ SO ₄ :				
Canada	1.90	2.10	2.24	1.94
Mexico	0.47	0.40	0.35	0.48
Total ²	3.05	2.95	3.09	3.01
Consumption:				
Domestic sources	6.62	7.10 ^r	4.71	5.87
Imports	2.23	1.50 ^r	1.92	2.00
Total	8.85	8.59 ^r	6.63	7.87
Sulfur export values ³	125	103	44	90
Sulfur import values: ³				
Canada	60	56	33	55
Average ²	92	102 ^r	58	83
H ₂ SO ₄ export values ³	118	199	155	167
H ₂ SO ₄ import values: ³				
Canada	46	80	70	79
Mexico	39	63	62	64
Average ²	56	87	78	83

^pPreliminary. ^rRevised.

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

²Includes other countries not listed.

³Average value per ton.