

# Mineral Industry Surveys

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## SULFUR IN JUNE 2008

During the month, production of recovered elemental sulfur was 693,000 metric tons (t), according to the U.S. Geological Survey. June 2008 production was about 5% lower than that of May 2008 and 4% higher than that of June 2007. Shipments were 678,000 t, 8% lower than those of May 2008. Producers' ending stocks for June 2008 were 176,000 t.

Imports of recovered sulfur for June 2008 were estimated to be 247,000 t; exports were 74,000 t. Imports of sulfuric acid for June 2008 were 357,000 t; exports were 18,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 851,000 t in June 2008. This was 12%

lower than that of May 2008 and 6% lower than that of June 2007.

Significant adjustments have been made to the sulfur import data. Reports from the U.S. Census Bureau appear to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information and data from personal communications with industry experts.

Reported prices continued to increase through June as supplies remained tight globally. The average customs value of elemental sulfur imported into the United States in June 2008 was \$252 per ton. This was 4% higher than that of May 2008 and nearly 12 times what it was in June 2007.

TABLE 1  
SALIENT SULFUR STATISTICS<sup>1</sup>

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks <sup>3</sup>
	Petroleum <sup>2</sup>	Natural gas	Total		
2007:					
January-December	7,000	1,280	8,280	8,320	XX
January-June	3,380	640 <sup>r</sup>	4,020 <sup>r</sup>	4,050	XX
June	554	115	668	672	160
July	597	106	703	681	183
August	612	107	719	744	171
September	581	104	685	681	190
October	602	106	708	719	167
November	602	105	707	710	168
December	629	114	744	727	187
2008:					
January	610	86	694	694	190
February	526	93	620	624	180
March	612 <sup>r</sup>	89	701 <sup>r</sup>	711	174 <sup>r</sup>
April	605 <sup>r</sup>	94	700 <sup>r</sup>	691 <sup>r</sup>	179 <sup>r</sup>
May	636 <sup>r</sup>	95	732 <sup>r</sup>	737 <sup>r</sup>	173 <sup>r</sup>
June <sup>p</sup>	596	98	693	678	176
Total	3,590	555	4,140	4,140	XX

<sup>p</sup>Preliminary. <sup>r</sup>Revised. 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 a small quantity from coking operations.

<sup>3</sup>Subject to inventory adjustments.

TABLE 2  
U.S. IMPORTS OF SULFUR<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Venezuela		Total, all countries <sup>2</sup>	
	Quantity <sup>e</sup>	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	Quantity <sup>e</sup>	Value <sup>3</sup>	Quantity <sup>e</sup>	Value <sup>3</sup>
2007:								
January-December	2,090	43,200	424	16,100	406	17,200	2,930	79,400
January-June	985 <sup>r</sup>	12,300	245	6,780 <sup>r</sup>	192 <sup>r</sup>	4,970	1,440 <sup>r</sup>	26,100
June	165	1,740	43	1,390	22	714	245 <sup>r</sup>	5,420
July	190	1,900	29	1,030	37	1,300	257	4,300
August	190	4,480	29	1,000	32	1,420	251	7,020
September	185	4,940	29	1,520	33	1,730	247	8,390
October	180	6,850	33	2,040	25	1,560	238	10,600
November	175	5,110	44	2,550	34	2,250	253	10,200
December	180	7,610	15	1,140	53	3,930	248	12,800
2008:								
January	205	11,600	43	3,070	63	4,480	311	19,300
February	190	16,100	29	6,820	35	8,260	254	31,400
March	205	36,000	22	8,000	19	4,110	273	60,300
April	195	25,200	21	12,900	11	6,720	228	45,000
May	205	40,800	43	16,800	16	6,330	264	64,200
June	195	36,800	29	9,840	23	8,230	257	64,700
Total	1,200	167,000	187	57,400	167	38,100	1,590	285,000

<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>May include other countries not listed.

<sup>3</sup>Declared customs valuation.

Sources: U.S. Census Bureau data as adjusted by U.S. Geological Survey and PentaSul North America Sulphur Service.

TABLE 3  
U.S. IMPORTS OF SULFURIC ACID<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries <sup>2</sup>		
	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>
2007:									
January-December	2,310	688	101,000	239	79	6,760	2,600	833	112,000
January-June	1,190	370	50,200	140	46	3,900	1,330	417	54,500 <sup>r</sup>
June	208	68	9,050	7	2	204	216	71	9,360
July	190	62	9,260	33	11	879	240	78	11,500
August	194	14	8,350	22	7	581	237	77	9,360
September	176	58	8,310	10	3	293	187	61	8,630
October	190	62	8,300	11	4	295	201	66	8,710
November	183	60	7,810	12	4	318	208	68	9,380
December	192	62	9,060	11	4	493	202	66	9,610
2008:									
January	193	63	11,500	12	4	711	205	67	12,300
February	198	65	13,400	16	5	1,330	242	79	17,300
March	239	74	17,700	45	15	6,380	326	107	30,300
April	213	70	19,000	18	6	2,050	323	106	36,400
May	237	77	23,800	15	5	1,530	305	100	36,700
June	192	63	18,100	12	4	1,370	357	117	33,300
Total	1,270	412	104,000	118	39	13,400	1,760	576	166,000

<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>May include other countries not listed.

<sup>3</sup>Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF SULFUR AND SULFURIC ACID<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value <sup>2</sup>	Quantity	Sulfur content	Value <sup>2</sup>
2007:					
January-December	922	84,800	334	106 <sup>r</sup>	34,300
January-June	366	25,700	167 <sup>r</sup>	53 <sup>r</sup>	16,800
June	13	1,720	21	7	2,610
July	116	7,440	34	11	3,660
August	83	8,190	50	16	4,660
September	61	7,890	27	8	2,700
October	118	14,100	26	8	2,510
November	95	10,900	16	5	1,590
December	84	10,600	14	5	2,370
2008:					
January	31	4,910	22	7	3,230
February	92	32,900	18	6	1,780
March	53	17,000	33	11	5,410
April	56	21,200	15	5	2,590
May	39	9,210	23	8	5,450
June	74	24,800	18	6	2,130
Total	345	110,000	129	43	20,600

<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>Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5  
U.S. CONSUMPTION OF SULFUR<sup>1</sup>

(Thousand metric tons)

Period	Domestic sources <sup>2</sup>	Imports <sup>e</sup>	Consumption
2007:			
January-December	7,390	2,930	10,300
January-June <sup>f</sup>	3,680	1,440	5,120
June <sup>f</sup>	659	245	904
July	565	257	822
August	661	251	912
September	620	247	867
October	605	238	843
November	615	253	868
December	643	248	858
2008:			
January	663	311	974
February	532	254	786
March	658	273	931
April	635 <sup>r</sup>	228	863 <sup>r</sup>
May	698 <sup>r</sup>	264	962 <sup>r</sup>
June	604	257	861
Total	3,790	1,590	5,380

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

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

<sup>2</sup>Calculated as shipments minus exports.

TABLE 6  
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,  
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT<sup>1</sup>

(Thousand metric tons)

District and source	January-June 2007 <sup>2</sup>		May 2008 <sup>2</sup>		June 2008 <sup>p</sup>		January-June 2008 <sup>2</sup>	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	136	137	23	24	23	23	153	149
Natural gas	6	6	1	1	1	1	7	7
Total	142	143	24	25	24	24	159	155
PAD 2:								
Petroleum and coke	467	468	87	87	87	87	499	501
Natural gas	21	20	3	3	3	3	15	15
Total	488	489	90	90	90	90	514	515
PAD 3: <sup>3</sup>								
Petroleum and coke	2,180	2,210	405	414	367	359	2,260	2,280
Natural gas	247	247	46	45	47	48	262	265
Total	2,420	2,450	451	459	415	407	2,520	2,540
PAD 4 and 5: <sup>4</sup>								
Petroleum and coke	586	576	121	118	118	113	670	653
Natural gas	377	390	45	45	46	45	271	273
California	460	445	96	94	94	88	546	523
Total	963	966	166	162	165	158	941	926
Grand total	4,020	4,050	732	737	693	678	4,140	4,140

<sup>p</sup>Preliminary.

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

<sup>2</sup>May include revisions.

<sup>3</sup>Includes the U.S. Virgin Islands.

<sup>4</sup>Quantities produced and shipped in California included in petroleum and coke California total shown for information purpose only.

TABLE 7  
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS<sup>1</sup>

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

	2007	2008		
	total	May	June	Total
Production	8.28	8.62 <sup>r</sup>	8.45 <sup>p</sup>	8.32
Shipments	8.31	8.70 <sup>r</sup>	8.27 <sup>p</sup>	8.32
Exports of sulfur	0.92	0.46	0.90	0.69
Imports of sulfur:				
Canada <sup>e</sup>	2.08	2.42	2.38	2.40
Mexico	0.42	0.51	0.35	0.38
Venezuela <sup>e</sup>	0.37	0.19	0.28	0.34
Total <sup>e, 2</sup>	2.93	3.12	3.14	3.20
Exports of H <sub>2</sub> SO <sub>4</sub>	0.33	0.27	0.22	0.26
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	2.31	2.80	2.34	2.56
Mexico	0.24	0.18	0.15	0.24
Total <sup>2</sup>	2.60	3.60	4.35	3.54
Consumption:				
Domestic sources	7.39	8.24 <sup>r</sup>	7.37	7.62
Imports <sup>e</sup>	2.90	3.12	3.14	3.19
Total	10.30	11.36 <sup>r</sup>	10.50	10.81
Sulfur export values <sup>3</sup>	92	236	335	320
Sulfur import values: <sup>3</sup>				
Canada	21	200	189	139
Mexico	38	390	340	307
Venezuela	42	396	358	228
Average <sup>2</sup>	27	243	252	179
H <sub>2</sub> SO <sub>4</sub> export values <sup>3</sup>	103	237	118	160
H <sub>2</sub> SO <sub>4</sub> import values: <sup>3</sup>				
Canada	44	101	94	81
Mexico	28	102	114	113
Average <sup>2</sup>	43	120	93	95

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <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 other countries not listed.

<sup>3</sup>Average value per ton.