

# Mineral Industry Surveys

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## SULFUR IN MAY 2008

During the month, production of recovered elemental sulfur was 714,000 metric tons (t), according to the U.S. Geological Survey. May 2008 production was about 3% higher than that of April 2008 and 6% higher than that of May 2007. Shipments were 720,000 t, 5% higher than those of April 2008. Producers' ending stocks for May 2008 were 167,000 t.

Imports of recovered sulfur for May 2008 were estimated to be 264,000 t; exports were 39,000 t. Imports of sulfuric acid for May 2008 were 305,000 t; exports were 23,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 945,000 t in May 2008. This was 10%

more than that of April 2008 and 8% higher than that of May 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 May as supplies remained tight globally. The average customs value of elemental sulfur imported into the United States in May 2008 was \$243 per ton. This was 23% higher than that of April 2008, nearly 14 times what it was in May 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-May	2,820	525	3,350	3,380	XX
May	570	101	671	667	163
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	608	89	697	711	165
April	600	94	694	685	183
May <sup>p</sup>	619	95	714	720	167
Total	2,960	457	3,420	3,430	XX

<sup>p</sup>Preliminary. 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-May	820	10,600	202	5,400	170	4,250	1,190	20,700
May	170	2,170	58	1,460	50	1,360	278	5,030
June	165	1,740	43	1,390	22	714	245	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
Total	1,000	130,000	158	47,600	144	29,900	1,330	220,000

<sup>e</sup>Estimated.

<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-May	980	302	41,200	133	44	3,700	1,110	346	45,200 <sup>r</sup>
May	193	45	8,740	30	10	1,090	223	55	9,950
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
Total	1,080	349	85,400	106	35	12,000	1,400	459	133,000

<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	88	34,300
January-May	353	24,000	146	28	14,200
May	71	5,730	26	8	3,340
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
Total	271	85,300	111	37	18,500

<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-May	3,020	1,190	4,220
May	596	278	874
June	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	629	228	857
May	681	264	945
Total	3,160	1,330	4,490

<sup>e</sup>Estimated.

<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-May 2007 <sup>2</sup>		April 2008 <sup>2</sup>		May 2008 <sup>p</sup>		January-May 2008 <sup>2</sup>	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	112	113	23	23	23	24	130	126
Natural gas	5	5	1	1	1	1	5	5
Total	117	118	24	24	24	25	136	131
PAD 2:								
Petroleum and coke	388	389	77	77	76	77	393	395
Natural gas	17	17	3	3	3	3	12	12
Total	406	406	80	79	79	80	405	407
PAD 3: <sup>3</sup>								
Petroleum and coke	1,830	1,860	383	374	405	414	1,900	1,920
Natural gas	189	193	32	33	46	45	214	217
Total	2,020	2,050	415	407	451	459	2,110	2,130
PAD 4 and 5: <sup>4</sup>								
Petroleum and coke	490	479	117	114	115	112	546	534
Natural gas	313	323	59	60	45	45	224	228
California	385	369	95	92	90	88	446	429
Total	803	802	176	174	160	156	770	762
Grand total	3,350	3,380	694	685	714	720	3,420	3,430

<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	April	May	Total
Production	8.28	8.47	8.43 <sup>P</sup>	8.23
Shipments	8.31	8.36	8.50 <sup>P</sup>	8.27
Exports of sulfur	0.92	0.68	0.46	0.65
Imports of sulfur:				
Canada <sup>e</sup>	2.08	2.38	2.42	2.41
Mexico	0.42	0.26	0.51	0.38
Venezuela <sup>e</sup>	0.37	0.13	0.19	0.35
Total <sup>e, 2</sup>	2.93	2.78	3.12	3.20
Exports of H <sub>2</sub> SO <sub>4</sub>	0.33	0.18	0.27	0.27
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	2.31	2.60	2.80	2.60
Mexico	0.24	0.22	0.18	0.26
Total <sup>2</sup>	2.60	3.94	3.60	3.37
Consumption:				
Domestic sources	7.39	7.67	8.04	7.62
Imports <sup>e</sup>	2.90	2.78	3.12	3.20
Total	10.30	10.50	11.20	10.80
Sulfur export values <sup>3</sup>	92	379	236	315
Sulfur import values: <sup>3</sup>				
Canada	21	129	200	130
Mexico	38	616	390	301
Venezuela	42	611	396	208
Average <sup>2</sup>	27	198	243	166
H <sub>2</sub> SO <sub>4</sub> export values <sup>3</sup>	103	173	237	166
H <sub>2</sub> SO <sub>4</sub> import values: <sup>3</sup>				
Canada	44	89	101	79
Mexico	28	114	102	113
Average <sup>2</sup>	43	113	120	95

<sup>e</sup>Estimated. <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>Includes other countries not listed.

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