

Mineral Industry Surveys

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SULFUR IN APRIL 2008

During the month, production of recovered elemental sulfur was 694,000 metric tons (t), according to the U.S. Geological Survey. April 2008 production was about the same as that of March 2008 and 6% higher than that of April 2007. Shipments were 685,000 t, 4% lower than those of March 2008. Producers' ending stocks for April 2008 were 183,000 t.

Imports of recovered sulfur for April 2008 were estimated to be 228,000 t; exports were 56,000 t. Imports of sulfuric acid for April 2008 were 323,000 t; exports were 15,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 857,000 t in April 2008. This was 9% less than that of March 2008 and the same as that of April 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 April as supplies remained tight globally. The average customs value, however, of elemental sulfur imported into the United States in April 2008 decreased to \$198 per ton. This was 10% lower than that of March 2008, but 10 times what it was in April 2007.

TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks ³
	Petroleum ²	Natural gas	Total		
2007:					
January-December	7,000	1,280	8,280	8,320	XX
January-April	2,250	424	2,680	2,710	XX
April	558	98	656	674	164
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 ^r	89 ^r	697 ^r	711 ^r	165
April ^p	600	94	694	685	183
Total	2,340	360	2,700	2,720	XX

^pPreliminary. ^rRevised. XX Not applicable.

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		Mexico		Venezuela		Total, all countries ²	
	Quantity ^c	Value ³	Quantity	Value ³	Quantity ^c	Value ³	Quantity ^c	Value ³
2007:								
January-December	2,090	43,200	424	16,100	406	17,200	2,930	79,400
January-April	650	8,420	144	3,940	120	2,890	913	15,600
April	165	2,260	41	891	60	1,320	266	4,630
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
Total	795	89,000	115	30,800	128	23,600	1,070	156,000

^cEstimated.

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 data as adjusted by U.S. Geological Survey and PentaSul North America Sulphur Service.

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
2007:									
January-December	2,310	688	101,000	239	79	6,760	2,600	833	112,000
January-April	787	257	32,400	103	33	2,610	889	291	35,200
April	203	66	8,580	25	8	678	228	74	9,310
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 ^r	45	15	6,380	326	107	30,300
April	213	70	19,000	18	6	2,050	323	106	36,400
Total	843	272	61,600	91	30	10,500	1,100	359	96,300

^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
2007:					
January-December	922	84,800	334	88	34,300
January-April	282	18,300	120	20	10,800
April	83	4,570	33	8	3,290
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 ^r
February	92	32,900	18 ^r	6	1,780
March	53	17,000	33	11	5,410
April	56	21,200	15	5	2,590
Total	232	76,100	88	29	13,000

^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 ^e	Consumption
2007:			
January-December	7,390	2,930	10,300
January-April	2,430	913	3,340
April	591	266	857
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 ^r	273	931 ^r
April	629	228	857
Total	2,480	1,070	3,550

^eEstimated. ^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-April 2007 ²		March 2008 ²		April 2008 ^p		January-April 2008 ²	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	90	90	23	23	23	23	107	102
Natural gas	4	4	1	1	1	1	4	4
Total	94	94	24	24	24	24	111	107
PAD 2:								
Petroleum and coke	323	324	74	74	77	77	317	318
Natural gas	14	14	3	3	3	3	9	9
Total	337	337	77	77	80	79	326	327
PAD 3: ³								
Petroleum and coke	1,470	1,500	403	419	383	374	1,490	1,500
Natural gas	149	153	43	42	29	31	165	170
Total	1,620	1,650	446	461	413	405	1,660	1,670
PAD 4 and 5: ⁴								
Petroleum and coke	373	365	109	106	117	113	430	421
Natural gas	256	264	42	43	61	64	182	188
California	299	287	92	87	95	91	356	340
Total	629	629	151	149	178	177	611	610
Grand total	2,680	2,710	697	711	694	685	2,700	2,720

^pPreliminary.

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

²May include revisions.

³Includes the U.S. Virgin Islands.

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

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTIC¹

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

	2007	2008		
	total	March	April	Total
Production	8.28	8.23	8.47 ^P	8.18
Shipments	8.31	8.39	8.36 ^P	8.21
Exports of sulfur	0.92	0.63	0.68	0.70
Imports of sulfur:				
Canada ^e	2.08	2.42	2.38	2.39
Mexico	0.42	0.26	0.26	0.35
Venezuela ^e	0.37	0.22	0.13	0.39
Total ^{2,e}	2.93	3.22	2.78	3.22
Exports of H ₂ SO ₄	0.33	0.39	0.18	0.26
Imports of H ₂ SO ₄ :				
Canada	2.31	2.82	2.60	2.55
Mexico	0.24	0.53	0.22	0.28
Total ²	2.60	3.85	3.94	3.32
Consumption: ³				
Domestic sources	7.39	7.77 ^r	7.67	7.51
Imports ^e	2.90	3.22	2.78	3.22
Total	10.30	11.00 ^r	10.50	10.70
Sulfur export values ³	92	321	379	328
Sulfur import values: ³				
Canada	21	176	129	113
Mexico	38	363	616	268
Venezuela	42	216	611	184
Average ²	27	221	198	146
H ₂ SO ₄ export values ³	103	164	173	151
H ₂ SO ₄ import values: ³				
Canada	44	74 ^r	89	73
Mexico	28	142	114	115
Average ²	43	93	113	88

^eEstimated. ^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 for most recent data available.