

# Mineral Industry Surveys

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## SULFUR IN JUNE 2004

During the month, production of recovered elemental sulfur was 777,000 metric tons, according to the U.S. Geological Survey. June production was about the same as May 2004 and 13% higher than that of June 2003. Shipments were virtually the same as those of May 2004. Producers' ending stocks for June 2004 were 188,000 tons.

Import and export data for June 2004 were not available at the time of publication and will be published in the Sulfur in July 2004 Mineral Industry Surveys along with apparent consumption. Imports of recovered sulfur for May 2004 were

estimated to be 235,000 tons; exports were 81,000 tons. Imports of sulfuric acid for May 2004 were 222,000 tons; exports were 10,000 tons.

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. Better strategies for estimating import data from Canada are being explored.

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

(Thousand metric tons)

Period	Production			Shipments, all sources
	Petroleum <sup>2</sup>	Natural gas	Total	
2003:				
January-December	6,970	1,950	8,920	8,910
January-June	3,480	978	4,460	4,420
June	543	145	688	680
July	601	154	755	760
August	553	169	722	723
September	544	154	698	708
October	548	166	714	715
November	615	160	775	783
December	630	168	798	804
2004:				
January	577	165	742	762
February	525	155	679 <sup>r</sup>	690 <sup>r</sup>
March	597	176	773	782
April	609	161	771	770
May	602 <sup>r</sup>	177 <sup>r</sup>	779 <sup>r</sup>	774
June <sup>p</sup>	612	165	777	777
Total	3,520	999	4,520	4,560

<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 a small quantity from coking operations.

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

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		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>
2003:						
January-December	2,080	32,000	535	26,500	2,810	69,100
January-May	940	13,600	223	11,400	1,160	26,600
May	200	4,160	45	2,530	266	7,760
June	180	2,940	44	2,410	241	6,270
July	160	2,440	45	2,180	241	6,390
August	160	2,040	45	1,940	267	4,820
September	160	2,910	44	2,070	213	6,160
October	160	2,460	49	2,470	229	5,760
November	160	2,850	45	2,170	205	6,860
December	160	2,770	40	1,960	230	6,180
2004:						
January	160	1,720	50	2,400	247	5,850
February	160	3,130	35	3,050	225	7,930
March	170	3,660	25	2,570	215	7,210
April	140	3,060	54	2,550	239	8,040
May <sup>e</sup>	150	2,830	57	2,680	235	6,880
Total	780	14,400	221	13,300	1,160	35,900

<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			Europe			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>
2003:									
January-December	387	126	16,200	266	86	5,870	905	298	28,800
January-May	188	62	7,140	102	33	2,260	316	105	11,600
May	34	11	1,320	29	10	638	75	25	2,710
June	26	8	963	40	13	1,350	84	27	2,770
July	23	8	1,020	19	6	318	82	27	1,950
August	19	6	980	74	24	751	103	34	2,410
September	22	7	1,150	9	3	382	70	23	2,230
October	35	11	1,520	1	<sup>(4)</sup>	36	104	34	1,550
November	33	11	1,590	1	<sup>(4)</sup>	36 <sup>e</sup>	71	23	3,350
December	41	13	1,880	20	7	734	75	25	2,900
2004:									
January	97	32	3,930	--	--	--	114	37	4,610
February	179	58	7,480	21	7	488	204	69	8,450
March	167	54	6,760	6	2	163	176	58	7,280
April	203	66	7,710	14	5	344	221	72	8,410
May	190	62	7,230	22	7	555	222	72	8,120
Total	836	272	33,100	63	21	1,550	937	308	36,900

<sup>e</sup>Estimated. -- Zero.

<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.

<sup>4</sup>Less than 1/2 unit.

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>
2003:					
January-December	742	46,100	207	68	18,800
January-May	343	17,300	73	23	6,930
May	41	2,430	22	7	1,610
June	70	6,650	21	7	1,790
July	55	4,700	28	10	2,430
August	57	2,190	27	9	2,060
September	50	2,090	23	7	1,910
October	72	4,360	12	4	1,200
November	27	4,880	12	4	1,170
December	67	3,920	12	4	1,360
2004:					
January	18	1,740	10	3	1,120
February	6	1,530	13	4	1,520
March	84	5,930	14	5	3,190
April	107	6,550	11	4	1,380
May	81	4,040	10	3	2,370
Total	296	19,800	58	19	9,580

<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>c</sup>	Consumption
2003:			
January-December	8,170	2,810	11,000
January-May	4,210	1,150	5,360
May	728	266	994
June	610	241	851
July	705	241	946
August	666	267	933
September	658	213	871
October	643	229	872
November	756	205	961
December	731	230	961
2004:			
January	744	247	991
February	684 <sup>r</sup>	225	909 <sup>r</sup>
March	698	215	913 <sup>r</sup>
April	663	239	902
May	693	235	928
Total	3,480	1,160	4,640

<sup>c</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>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	June 2004 <sup>p</sup>		May 2004		Year to date 2004 <sup>2</sup>		Year to date 2003 <sup>r,2</sup>	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	18	19	19	19	116	118	107	106
Natural gas	2	2	2	2	11	11	13	13
Total	20	21	21	21	127	129	120	119
PAD 2:								
Petroleum and coke	74	75	65 <sup>r</sup>	64 <sup>r</sup>	421	431	463	456
Natural gas	3	3	9	9	27	28	21	21
Total	77	78	75 <sup>r</sup>	75 <sup>r</sup>	448	458	484	478
PAD 3: <sup>3</sup>								
Petroleum and coke	397	397	411 <sup>r</sup>	410 <sup>r</sup>	2,340	2,350	2,200	2,210
Natural gas	41	42	44	43	264	266	276	273
Total	438	439	455 <sup>r</sup>	453 <sup>r</sup>	2,600	2,620	2,470	2,480
PAD 4 and 5: <sup>4</sup>								
Petroleum and coke	123	120	107 <sup>r</sup>	104 <sup>r</sup>	649	655	710	684
Natural gas	119	119	122 <sup>r</sup>	123 <sup>r</sup>	697	694	668	657
California	97	94	83	79	488	487	560	540
Total	242	239	230 <sup>r</sup>	227	1,350	1,350	1,380	1,340
Grand total	777	777	777 <sup>r</sup>	774	4,520	4,560	4,460	4,420

<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>May include revisions to prior months.

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

<sup>4</sup>Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes 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)

	2004			2003
	June	May	Year to date	
Production	9.48	9.20 <sup>r</sup>	9.09	8.92
Shipments	9.48	9.14 <sup>r</sup>	9.16	8.91
Exports of sulfur	NA	0.96	0.71	0.74
Imports of sulfur:				
Canada	NA	1.77 <sup>e</sup>	1.88 <sup>e</sup>	2.08
Mexico	NA	0.67	0.53	0.54
Total <sup>2</sup>	NA	2.77 <sup>e</sup>	2.80 <sup>e</sup>	2.81
Export of H <sub>2</sub> SO <sub>4</sub>	NA	0.12	0.14	0.21
Import of H <sub>2</sub> SO <sub>4</sub> :				
Canada	NA	2.24	2.01	0.39
Europe	NA	0.26	0.15	0.27
Total <sup>2</sup>	NA	2.62	2.26	0.91
Consumption: <sup>3</sup>				
Domestic sources	NA	8.18	8.38	8.18
Imports	NA	2.77 <sup>e</sup>	2.80 <sup>e</sup>	2.81
Total	NA	10.96	11.18	11.00
Sulfur export values <sup>4</sup>	NA	\$50	\$67	\$62
Sulfur import values: <sup>4</sup>				
Canada	NA	\$19	\$18	\$15
Mexico	NA	\$47	\$60	\$50
Average	NA	\$29	\$31	\$25
H <sub>2</sub> SO <sub>4</sub> export values <sup>4</sup>	NA	\$237	\$165	\$91
H <sub>2</sub> SO <sub>4</sub> import values: <sup>4</sup>				
Canada	NA	\$38	\$40	\$42
Europe	NA	\$25	\$25	\$22
Average	NA	\$37	\$39	\$32

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available.

<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>Because June trade data were not available, June consumption was not determined.

<sup>4</sup>Average value per ton for most recent data available.