

# Mineral Industry Surveys

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### **SULFUR IN JULY 2007**

During the month, production of recovered elemental sulfur was 705,000 metric tons (t), according to the U.S. Geological Survey. July 2007 production was 4% higher than that of June 2007 and 2% lower than that of July 2006. Sulfur production from January through July 2007 was slightly lower than that in the same period of 2006. Shipments were the same as those of June 2007. Producers' ending stocks for July 2007 were 183,000 t.

Import and export data for July 2007 were not available at the time of publication and will be published in the Sulfur in August

2007 Mineral Industry Surveys along with apparent consumption. Imports of recovered sulfur for June 2007 were estimated to be 230,000 t; exports were 13,000 t. Imports of sulfuric acid for June 2007 were 216,000 t; exports were 21,000 t.

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.

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

		Production						
Period	Petroleum <sup>2</sup>	Natural gas	Total	all sources	stocks <sup>3</sup>			
2006:								
January-December	6,960	1,430	8,390	8,290	XX			
January-July <sup>r</sup>	3,950	820	4,770	4,740	XX			
July	600	119	719	695	172			
August	618	122	740	726	184			
September	597	112	710	726	168			
October	594	127	720	692	196			
November	573	124	698	690	203			
December	624	122	746	723	221			
2007:								
January	603	119	721	749	185			
February	501	110	612	582	211			
March	591	97	688	705	207			
April	557	98	655	673	162			
May	565	100	665	661	161			
June	567	114 <sup>r</sup>	680 <sup>r</sup>	683 <sup>r</sup>	161			
July <sup>p</sup>	600	106	705	683	183			
Total	3,980	743	4,730	4,740	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 2U.S. IMPORTS OF SULFUR1

(Thousand metric tons	and thousand dollars)
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	Cana	ada	Mexi	со	Venezu	ela	Total, all co	untries <sup>2</sup>
Period	Quantity	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>
2006:								
January-December	2,100	33,100	476	20,100	359	15,100	2,950	70,400
January-June	1,100	22,200	247	11,100	189	8,510	1,540	42,800
June	205	2,550	44	1,970	29	1,270	281	6,120
July	165	2,370	43	1,900	33	1,370	241	5,730
August	165	2,330	43	1,770	20	824	229	4,940
September	160	1,970	43	1,730	31	1,240	245	4,970
October	170	1,960	43	1,710	32	1,270	246	4,990
November	165	1,210	14	577	18	725	198	2,620
December	170	1,020	43	1,350	36	1,140	250	4,410
2007:								
January	170	2,480	44	1,300	23	695	236	4,600
February	145	1,670	30	1,090	20	503	195	3,290
March	170	2,010	29	661	17	376	216	3,120
April	165	2,260	41	891	22	1,320	230	4,630
May	165	2,170	58	1,460	20	1,360	243	5,030
June	165	1,740	43	1,390	22	714	230	5,420
Total	980	12,300	245	6,790	124	4,970	1,350	26,100

<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)

		Canada			Mexico		Tota	al, all countries	$s^2$
		Sulfur			Sulfur			Sulfur	
Period	Quantity	content	Value <sup>3</sup>	Quantity	content	Value <sup>3</sup>	Quantity	content	Value <sup>3</sup>
2006:									
January-December	1,980	647	79,200	200	64	5,100	2,430	795	91,100
January-June	1,160	378	44,900	89	29	2,070 r	1,370	448	51,000
June	189	62	7,030	2	1	56	208	68	7,860
July	181	59	6,290	7	2	157	228	74	6,900
August	212	69	7,330	22	7	624	245	80	8,070
September	178	58	6,850	23	8	557	201	66	7,490
October	93	30	4,650	19	6	464	122	40	5,320
November	93	31	5,440	21	7	512	154	50	6,740
December	65	21	3,710	18	6	713	109	36	5,530
2007:									
January	216	71	8,930	22	7	510	238	78	9,440
February	160	52	6,600	23	8	548	182	60	7,150
March	208	68	8,320	33	11	874	240	79	9,200
April	203	66	8,580	25	8	678	228	74	9,260
May	193	45	8,740	30	10	1,090	223	55	9,820
June	208	68	9,050	7	2	204	216	71	9,360
Total	1,190	370	50,200	140	46	3,900	1,330	417	54,200

<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 $^{\rm 1}$

#### (Thousand metric tons and thousand dollars)

			S	Sulfuric acid	
	Su	lfur			
Period	Quantity	Value <sup>2</sup>	Quantity	content	Value <sup>2</sup>
2006:					
January-December	635	43,800	249	80	21,800
January-June	309 <sup>r</sup>	23,200	121	40	10,200
June	141	8,790	11	4	1,370
July	79	4,540	18	6	2,030
August	15	2,380	37	12	2,280
September	15	1,540	11	4	1,320
October	84	4,910	20	6	1,730
November	48	2,980	9	3	1,040
December	85	4,250	32	10	3,270
2007:					
January	82	5,510	15	5	2,960
February	37	3,420	17	6	1,610
March	80	4,750	20	7	2,980
April	83	4,570	24	8	3,290
May	71	5,730	26	8	3,340
June	13	1,720	21	7	2,610
Total	366	25,700	123	41	16,800

<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 5U.S. CONSUMPTION OF SULFUR1

#### (Thousand metric tons)

	Domestic		
Period	sources <sup>2</sup>	Imports <sup>e</sup>	Consumption
2006:			
January-December	7,660	2,950	10,600
January-June	3,730 <sup>r</sup>	1,540	5,270 <sup>r</sup>
June	556	281	837
July	616	241	857
August	711	229	940
September	711	245	956
October	608	246	854
November	642	198	840
December	638	250	888
2007:			
January	667	236	903
February	545	195	740
March	625	216	841
April	590	230	818
May	605	243	828
June	670	230	900
Total	3,700	1,350	5,030

<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>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)

	July	2007 <sup>p</sup>	June 2007		January-	July 2007 <sup>2</sup>	January-July 2006 <sup>2</sup>	
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	22	22	24	24	158	160	139	139
Natural gas	- 1	1	1	1	7	7	10	10
Total	23	23	25	25	165	166	149	149
PAD 2:								
Petroleum and coke	91	92	84	84	566	566	591	594
Natural gas	- 1	4	4	3	25	24	22	22
Total	92	95	88	87	591	590	613	616
PAD 3: <sup>3</sup>	_							
Petroleum and coke	- 386	368	353	356	2,570	2,590	2,450	2,430
Natural gas		37	45 <sup>r</sup>	41 <sup>r</sup>	269	270	284 <sup>r</sup>	287 <sup>r</sup>
Total	422	405	398 <sup>r</sup>	398 <sup>r</sup>	2,840	2,860	2,730 <sup>r</sup>	2,720 <sup>r</sup>
PAD 4 and 5: <sup>4</sup>	_							
Petroleum and coke	101	97	105	105	686	672	777 <sup>r</sup>	748 <sup>r</sup>
Natural gas	65	63	64 <sup>r</sup>	67 <sup>r</sup>	442	453	503	504
California	- 81	77	84	84	540	521	642	616
Total	166	160	170 <sup>r</sup>	172 <sup>r</sup>	1,130	1,130	1,280 <sup>r</sup>	1,250 <sup>r</sup>
Grand total	705	683	680 <sup>r</sup>	683 <sup>r</sup>	4,730	4,740	4,770 <sup>r</sup>	4,740 <sup>r</sup>

<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.

<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 $^{\rm 1}$

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

		2007		2006
	July	June	Total	total
Production	8.30 <sup>p</sup>	8.27 <sup>r</sup>	8.14 <sup>r</sup>	8.38
Shipments	8.04 <sup>p</sup>	8.31 <sup>r</sup>	8.15 <sup>r</sup>	8.29
Exports of sulfur	NA	0.16	0.74	0.63
Imports of sulfur:				
Canada	NA	2.01 <sup>e</sup>	1.98 <sup>e</sup>	2.09 <sup>e</sup>
Mexico	NA	0.52	0.49	0.47
Venezuela	NA	0.27 <sup>e</sup>	0.25 <sup>e</sup>	0.36 <sup>e</sup>
Total <sup>2</sup>	NA	2.80 e	2.72 <sup>e</sup>	2.95 <sup>e</sup>
Exports of H <sub>2</sub> SO <sub>4</sub>	NA	0.26	0.25	0.25
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	NA	2.53	2.40	1.98
Mexico	NA	0.85	0.28	0.20
Total <sup>2</sup>	NA	2.63	2.68	2.43
Consumption: <sup>3</sup>				
Domestic sources	NA	8.15	7.50	7.66
Imports	NA	2.80 e	2.72 <sup>e</sup>	2.95 <sup>e</sup>
Total	NA	10.95	10.14	10.61
Sulfur export values <sup>4</sup>	NA	13	70	69
Sulfur import values:4				
Canada	NA	11	13	16
Mexico	NA	32	28	42
Venezuela	NA	32	40	42
Average <sup>2</sup>	NA	24	19	24
$H_2SO_4$ export values <sup>4</sup>	NA	12	14	88
H <sub>2</sub> SO <sub>4</sub> import values: <sup>4</sup>				
Canada	NA	44	42	40
Mexico	NA	29	28	26
Average <sup>2</sup>	NA	43	41	37

<sup>e</sup>Estimated. <sup>P</sup>Preliminary. <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 July trade data were not available, July consumption was not determined.

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