

Mineral Industry Surveys

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SULFUR IN JULY 2004

During the month, production of recovered elemental sulfur was 814,000 metric tons, according to the U.S. Geological Survey. July production was 5% higher than that of June 2004 and 8% higher than that of July 2003. Shipments were 3% higher than those of June 2004. Producers' ending stocks for June 2004 were 203,000 tons.

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

estimated to be 227,000 tons; exports were 36,000 tons. Imports of sulfuric acid for June 2004 were 192,000 tons; exports were 26,000 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 STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources
	Petroleum ²	Natural gas	Total	
2003:				
January-December	6,970	1,950	8,920	8,910
January-July	4,080	1,130	5,210	5,180
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	690
March	598 ^r	176	774 ^r	783 ^r
April	610 ^r	161	772 ^r	771 ^r
May	603 ^r	177	780 ^r	775 ^r
June ^r	615	163	778	778
July ^p	646	168	814	800
Total	4,170	1,170	5,340	5,360

^pPreliminary. ^rRevised.

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

²Includes a small quantity from coking operations.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries ²	
	Quantity ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³
2003:						
January-December	2,080	32,000	535	26,500	2,810	69,100
January-June	1,120	16,500	267	13,800	1,400	32,900
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	170 ^r	1,720	50	2,400	257 ^r	5,850
February	170 ^r	3,130	35	3,050	235 ^r	7,930
March	170	3,660	25	2,570	215	7,210
April	160 ^r	3,060	54	2,550	259 ^r	8,040
May	160 ^r	2,830	57	2,680	245 ^r	6,880
June ^e	160	2,560	49	2,440	227	5,980
Total	990	17,000	270	15,700	1,440	41,900

^eEstimated. ^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.

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

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total, all countries ²		
	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³
2003:									
January-December	387	126	16,200	266	86	5,870	905	298	28,800
January-July	214	70	8,100	142	46	3,620	400	132	14,400
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	(4)	36	104	34	1,550
November	33	11	1,590	1	(4)	36 ^e	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
June	166	54	6,350	11	3	247	192	63	7,860
Total	1,000	326	39,500	74	24	1,800	1,130	371	44,700

^eEstimated. -- Zero.

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.

⁴Less than 1/2 unit.

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
2003:					
January-December	742	46,100	207	68	18,800
January-July	413	23,900	94	30	8,710
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
June	36	1,980	26	8	1,610
Total	332	21,800	84	27	11,200

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 ^c	Consumption
2003:			
January-December	8,170	2,810	11,000
January-June	4,820	1,400	6,210
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	257 ^r	1,000
February	684	235 ^r	919 ^r
March	699 ^r	215	914 ^r
April ^f	664	259	923
May ^f	694	245	939
June	742	227	969
Total	4,230	1,440	5,670

^cEstimated. ^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	July 2004 ^p		June 2004		Total 2004 ²		Year to date 2003 ^{r,2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	20	21	21 ^r	21 ^r	139	141	127	128
Natural gas	2	2	2	2	13	13	15	15
Total	22	23	22 ^r	23 ^r	152	154	142	143
PAD 2:								
Petroleum and coke	76	77	74	75	497	508	542	533
Natural gas	3	3	3	3	30	31	25	25
Total	79	80	77	78	527	539	567	559
PAD 3: ³								
Petroleum and coke	425	416	397	397	2,760	2,770	2,580	2,600
Natural gas	40	40	41	42	305	306	326	323
Total	465	457	439 ^r	440 ^r	3,070	3,080	2,910	2,920
PAD 4 and 5: ⁴								
Petroleum and coke	125	126	123	121 ^r	774	782	829	808
Natural gas	122	114	117 ^r	116 ^r	817	806	766	753
California	97	97	97	94	584	585	647	632
Total	247	240	239 ^r	237 ^r	1,590	1,590	1,600	1,560
Grand total	814	800	778 ^r	778 ^r	5,340	5,360	5,210	5,180

^pPreliminary. ^rRevised.

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

²May include revisions to prior months.

³Includes the U.S. Virgin Islands.

⁴Quantities 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 STATISTICS¹

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

	2004			2003
	July	June	Year to date	total
Production	9.61	9.49 ^r	9.17	8.92
Shipments	9.45	9.49 ^r	9.21	8.91
Exports of sulfur	NA	0.44	0.67	0.74
Imports of sulfur:				
Canada	NA	1.95 ^e	1.99 ^e	2.08
Mexico	NA	0.60	0.54	0.54
Total ²	NA	2.77 ^e	2.89 ^e	2.81
Export of H ₂ SO ₄	NA	0.32	0.17	0.21
Import of H ₂ SO ₄ :				
Canada	NA	2.03	2.02	0.39
Europe	NA	0.13	0.15	0.27
Total ²	NA	2.34	2.27	0.91
Consumption: ³				
Domestic sources	NA	9.05	8.50	8.18
Imports	NA	2.77 ^e	2.89 ^e	2.81
Total	NA	11.82	11.39	11.00
Sulfur export values ⁴	NA	\$55	\$66	\$62
Sulfur import values: ⁴				
Canada	NA	\$16	\$17	\$15
Mexico	NA	\$50	\$58	\$50
Average	NA	\$26	\$29	\$25
H ₂ SO ₄ export values ⁴	NA	\$62	\$133	\$91
H ₂ SO ₄ import values: ⁴				
Canada	NA	\$38	\$39	\$42
Europe	NA	\$22	\$24	\$22
Average	NA	\$41	\$40	\$32

^eEstimated. ^rRevised. NA Not available.

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

²Includes other countries not listed.

³Because July trade data were not available, July consumption was not determined.

⁴Average value per ton for most recent data available.