

Mineral Industry Surveys

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SULFUR IN JULY 2009

During the month, production of recovered elemental sulfur was 754,000 metric tons (t), according to the U.S. Geological Survey. Production was about the same as that of June 2009 and that of July 2008. Shipments were 716,000 t, 3% lower than those of June 2009. Producers' ending stocks for July 2009 were 307,000 t.

Imports of recovered sulfur for July 2009 were estimated to be 182,000 t; exports were 123,000 t. Imports of sulfuric acid for July 2009 were 46,000 t; exports were 27,000 t.

U.S. sulfur consumption, calculated as shipments minus

exports plus imports, was 775,000 t in July 2009. This was 16% higher than that of June 2009 and 20% lower than that of July 2008. Monthly sulfur consumption in 2009 has averaged about 20% lower than that of 2008, mostly as a result of declining demand from the phosphate fertilizer industry.

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 STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks ³
	Petroleum ²	Natural gas	Total		
2008:					
January-December	7,370	1,170	8,540	8,510	XX
January-July ^f	4,230	650	4,890	4,900	XX
July	652	101	753	771	174
August	634	105	739	724	182
September	500	94	594 ^r	574	209
October	656	106	762 ^r	767	198
November	636	100	736	720	209
December	713	110	823	828	205
2009:					
January	687	89	776	776	205
February	583	92	675	671	215
March	678	112	790	767	252
April	697	93	790	810	239
May	651	96	747	703	289
June	654	95	749	740	285
July ^p	653	101	754	716	307
Total	4,610	677	5,280	5,180	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
2008:								
January-December	2,180	415,000	365	140,000	360	134,000	3,000	753,000
January-July	1,400	230,000	203	63,300	187	46,400	1,850 ^r	387,000 ^r
July	200	62,900	14	5,940	20	8,230	261	102,000
August	200	55,900	29	11,600	60	39,100	309	119,000
September	195	52,000	29	13,800	49	22,800	273	88,700
October	130	55,200	49	25,400	40	15,100	232	99,500
November	125	17,600	29	16,300	9	5,250	164	39,500
December	130	4,900	27	9,210	15	5,260	172	19,500
2009:								
January	65	3,360	--	--	10	200	75	3,900
February	59	1,650	14	805	--	--	73	2,750
March	65	2,020	7 ^r	157	10	164	82 ^r	2,670
April	120	3,260	--	--	8	142	128	3,690
May	125	3,810	20	98	14	294	161	4,400
June	120	5,080	--	--	5	100	125	5,490
July	125	4,400	36	194	20	412	182	5,290
Total	679	23,600	77	1,250	67	1,310	827	28,200

^cEstimated. ^rRevised. -- 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.

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
2008:									
January-December	2,350	765	233,000	296	97	55,700	3,440	1,130	459,000
January-July	1,470	476	125,000	139	46	16,300	2,000	655	195,000
July	196	64	21,000	21	7	2,970	241	79	29,000
August	237	77	28,400	41	13	13,500	324	106	57,100
September	186	61	21,400	24	8	5,360	319	104	61,600
October	164	54	21,900	34	11	7,480	278	91	55,200
November	151	49	18,600	25	8	5,320	257	84	45,200
December	146	48	18,000	33	11	7,690	265	87	44,400
2009:									
January	142	46	24,500	23	8	3,590	196	64	35,800
February	172	56	31,700	14	5	458	206	67	32,600
March	192	63	34,700	18	6	334	281	92	40,700 ^r
April	70	23	9,290	2	1	97	106 ^r	34	10,400 ^r
May	32	10	3,440	1	(⁴)	12	44 ^r	14	3,830 ^r
June	18	6	1,860	8	3	41	64	21	3,780
July	34	11	2,770	10	3	49	46	15	3,050
Total	660	215	108,000	76	26	4,580	943	307	130,000

^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.

⁴Less than ½ 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		
	Quantit	Value ²	Quantity	Sulfur content	Value ²
2008:					
January-December	954	272,000	261	85	42,700
January-July	414	127,000	144	48	22,500
July	69	16,700	15	5	1,900
August	104	53,900	20	7	2,670
September	37	18,700	24	8	3,430
October	125	36,800	37	10	8,490
November	101	14,800	14	5	1,350
December	173	20,400	22	7	4,240
2009:					
January	116	10,500	16	5	1,550
February	114	4,790	17	6	1,720
March	247	9,960	11	4	1,500
April	119	5,820	17	6	1,740
May	99	5,490	19	6	1,980
June	199	10,400	25	8	2,420
July	123	8,170	27	9	2,720
Total	1,020	55,200	132	44	13,600

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
2008:			
January-December	7,560	3,000	10,600
January-July ^f	4,490	1,850	6,330
July	702	261	963
August	620	309	929
September	537	273	810
October	642	232	874
November	619	164	783
December	655	172	827
2009:			
January	660	75	735
February	557	73	630
March	520	82 ^r	602 ^r
April	691	128	819
May	604	161	765
June	541	125	666
July	593	182	775
Total	4,170	827	4,990

^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	January-July 2008 ²		June 2009		July 2009 ^p		January-July 2009 ^{p, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	147	142	16	15	15	11	110	103
Natural gas	8	8	1	1	1	1	7	7
Total	154	150	17	16	16	12	117	110
PAD 2:								
Petroleum and coke	580	585	70	72	71	70	501	489
Natural gas	20	20	2	3	2	2	18	18
Total	599	605	72	75	73	73	518	508
PAD 3: ³								
Petroleum and coke	2,710	2,730	478	470	486	444	3,320	3,260
Natural gas	309	311	38	39	38	36	284	256
Total	3,020	3,040	515	509	524	480	3,600	3,510
PAD 4 and 5: ⁴								
Petroleum and coke	794	775	90	89	81	90	677	675
Natural gas	326	329	54	52	59	61	369	379
California	648	623	73	73	68	73	556	554
Total	1,120	1,100	144	140	140	151	1,050	1,050
Grand total	4,890	4,900	749	740	754	716	5,280	5,180

^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 STATISTICS¹

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

	2008	2009		
	total	June	July	Total
Production	8.54	9.11	8.88 ^P	9.09
Shipments	8.51	9.00	8.43 ^P	8.92
Exports of sulfur	0.95	2.42	1.45	1.75
Imports of sulfur:				
Canada ^c	2.18	1.46	1.47	1.17
Mexico	0.37	--	0.42	0.13
Venezuela ^c	0.36	0.06	0.24	0.12
Total ^{c,2}	3.00	1.52	2.14	1.42
Exports of H ₂ SO ₄	0.26	0.30	0.32	0.23
Imports of H ₂ SO ₄ :				
Canada	2.35	0.22	0.40	1.14
Mexico	0.30	0.10	0.12	0.13
Total ²	3.44	0.78	0.54	1.62
Consumption:				
Domestic sources	7.56	6.58	6.98	7.17
Imports ^c	3.00	1.52	2.14	1.42
Total	10.60	8.10	9.13	8.59
Sulfur export values ³	285	52	66	54
Sulfur import values: ³				
Canada	191	42	35	35
Mexico	383	XX	5	16
Venezuela	372	20	21	20
Average ²	251	44	29	34
H ₂ SO ₄ export values ³	164	97	101	103
H ₂ SO ₄ import values: ³				
Canada	99	103	82	164
Mexico	188	5	5	60
Average ²	133	59	66	138

^cEstimated. ^PPreliminary. XX Not applicable. -- Zero.

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.