

Mineral Industry Surveys

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SULFUR IN DECEMBER 2007

During the month, production of recovered elemental sulfur was 732,000 metric tons (t), according to the U.S. Geological Survey. December 2007 production was 3.5% higher than that of November 2007 and 2.7% lower than that of December 2006. Sulfur production for 2007 was slightly lower than that of 2006. Shipments were slightly higher than those of November 2007. Producers' ending stocks for December 2007 were 187,000 t.

Import and export data for December 2007 were not available at the time of publication and will be published in the Sulfur in January 2008, Mineral Industry Surveys along with apparent

consumption. Imports of recovered sulfur for November 2007 were estimated to be 253,000 t; exports were 95,000 t. Imports of sulfuric acid for November 2007 were 208,000 t; exports were 16,000 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 STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks ³
	Petroleum ²	Natural gas	Total		
2006:					
January-December	6,950	1,430	8,370 ^r	8,280	XX
December	630	122	752	728	221
2007:					
January	603	119	721	749	185
February	501	110	612	582	211
March	591	97	688	705	207
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 ^r	105 ^r	707 ^r	723 ^r	167 ^r
November	602 ^r	105 ^r	707 ^r	710 ^r	168
December ^p	619	113	732	716	187
Total	6,990	1,280	8,270	8,310	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 ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³	Quantity ^e	Value ³
2006:								
January-December	2,100	33,100	476	20,100	359	15,100	2,950	70,400
January-November	1,930	32,000	434	18,800	324	13,900	2,700	66,000
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	60 ^r	1,320	266 ^r	4,630
May	170 ^r	2,170	58	1,460	50 ^r	1,360	277 ^r	5,030
June	165	1,740	43	1,390	22	714	246	5,420
July	190	1,900 ^r	29	1,030	37 ^r	1,300 ^r	257 ^r	4,300 ^r
August	190	4,480	29	1,000	32 ^r	1,420 ^r	252 ^r	7,020 ^r
September	185 ^r	4,940	29	1,520	33 ^r	1,730	247 ^r	8,390 ^r
October	180 ^r	6,850 ^r	33	2,040	25 ^r	1,560	238 ^r	10,600
November	175	5,110	44	2,550	34	2,250	253	10,200
Total	1,910	35,600	409	14,900	353	13,200	2,680	66,600

^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 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
2006:									
January-December	1,980	647	79,200	200	64	5,100	2,430	795	91,100
January-November	1,910	626	75,500	182 ^r	58	4,390	2,320	759	85,500
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
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 ^r	8,300	11	4	295	201	66	8,710
November	183	60	7,810	12	4	318	208	68	9,380
Total	2,120	626	92,200	228	75	6,270	2,400	767	102,000

^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.

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
2006:					
January-December	635	43,800	249	80	21,800
January-November	550	39,500	216	70	18,600
November	48	2,980	9	3	1,040
December	85	4,250	32	10	3,270
2007:					
January	52 ^r	5,510	42	5	2,960
February	37	3,420	17	4 ^r	1,610
March	80	4,750	28	3 ^r	2,980
April	77 ^r	4,570	33	8	3,290
May	29 ^r	5,730	26	8	3,340
June	13	1,720	21	7	2,610
July	62 ^r	7,440	34	11	3,660
August	59 ^r	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
Total	683	74,200	320	83	31,900

^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
2006:			
January-December	7,660	2,950	10,600
January-November	7,020	2,700	9,720
November	642	198	840
December	638	250	888
2007:			
January	697 ^r	236	933 ^r
February	545	195	740
March	625	216	841
April	597 ^r	266 ^r	863 ^r
May	638 ^r	277 ^r	915 ^r
June	659 ^r	246	905 ^r
July ^f	619	257	876
August ^f	685	252	937
September ^f	620	247	866
October ^f	605	238	843
November	615	253	868
Total	6,910	2,690	9,590

^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	December 2007 ^p		November 2007		January-December 2007 ²		January-December 2006 ²	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	23	23	22	23	269	272	229	227
Natural gas	1	1	1	1	14	13	42	42
Total	24	24	24	24	283	285	271	268
PAD 2:								
Petroleum and coke	80	80	73	73	935	940	1,010 ^r	1,010 ^r
Natural gas	3	3	--	--	35	34	40	40
Total	83	83	73	73	969	974	1,050 ^r	1,050 ^r
PAD 3:³								
Petroleum and coke	419	403	414 ^r	414 ^r	4,620	4,660	4,340 ^r	4,300 ^r
Natural gas	46	47	36 ^r	37 ^r	468	473	483	484
Total	464	450	450 ^r	451 ^r	5,090	5,130	4,820	4,790 ^r
PAD 4 and 5:⁴								
Petroleum and coke	97	92	93	91	1,170	1,150	1,370 ^r	1,310
Natural gas	64	67	68	71	764	774	861	859
California	81	75	75	72	937	902	1,140 ^r	1,090
Total	161	159	161	162	1,930	1,920	2,230	2,170
Grand total	732	716	707 ^r	710 ^r	8,270	8,310	8,370 ^r	8,280 ^r

^pPreliminary. ^rRevised. -- Zero.

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 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)

	2007			2006
	December	November	Total	Total
Production	8.62 ^P	8.60 ^r	8.27 ^r	8.38
Shipments	8.43 ^P	8.64 ^r	8.30	8.29
Exports of sulfur	NA	1.16	0.75	0.63
Imports of sulfur:				
Canada ^e	NA	2.13	2.08	2.09
Mexico	NA	0.54	0.45	0.47
Venezuela ^c	NA	0.41	0.39	0.36
Total ^{2,e}	NA	3.08	2.93	2.95
Exports of H ₂ SO ₄	NA	0.19	0.35	0.25
Imports of H ₂ SO ₄ :				
Canada	NA	2.23	2.32	1.98
Mexico	NA	0.14	0.25	0.20
Total ²	NA	2.53	2.62	2.43
Consumption: ³				
Domestic sources	NA	7.48	7.55	7.66
Imports ^e	NA	3.08	2.93	2.95 ^e
Total	NA	10.56	10.48	10.10
Sulfur export values ⁴	NA	115	109	69
Sulfur import values: ⁴				
Canada	NA	29	18	16
Mexico	NA	58	37	42
Venezuela	NA	66	37	42
Average ²	NA	40	25	24
H ₂ SO ₄ export values ⁴	NA	99	100	88
H ₂ SO ₄ import values: ⁴				
Canada	NA	43	43	40
Mexico	NA	27	27	26
Average ²	NA	45	42	37

^eEstimated. ^PPreliminary. ^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 December trade data were not available, December consumption was not determined.

⁴Average value per ton for most recent data available.