

Mineral Industry Surveys

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SULFUR IN AUGUST 2013

During August 2013, production of recovered elemental sulfur was 747,000 metric tons (t), which was slightly lower than that of July 2013 and slightly higher than that of August 2012. Shipments were 759,000 t, which was slightly higher than those of July 2013. Producers' ending stocks for August 2013 were 136,000 t.

Imports of recovered sulfur for August 2013 were estimated to be 279,000 t; exports were 257,000 t. Imports of sulfuric acid for August 2013 were 254,000 t; exports were 14,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 781,000 t in August 2013. This was about 15% lower than that of July 2013 and 6% less than that of August 2012.

Significant adjustments have been made to the sulfur import data. The U.S. Census Bureau appears to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information and other published data.

TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period ³
	Petroleum ²	Natural gas	Total		
2012:					
January–December	7,360	1,040	8,400	8,440	130
January–August	4,880 ^r	744	5,620 ^r	5,650 ^r	153 ^r
August	637	98	735	732	153
September	607	82	689	695	141
October	612	76	688	698	127
November	622	61	683	679	132
December	642	76	718	720	130
2013:					
January	615	85	700	703	127
February	527	89 ^r	617 ^r	621 ^r	122 ^r
March	593	92 ^r	685 ^r	677 ^r	134
April	595	91 ^r	686 ^r	696 ^r	124 ^r
May	629	85 ^r	714 ^r	706 ^r	130 ^r
June	603	73 ^r	676 ^r	667 ^r	137
July	673	85 ^r	758 ^r	751	148 ^r
August ^p	668	80	747	759	136
January–August	4,900	680	5,580	5,580	136

^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.

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
2012:								
January–December	2,440	163,000	366	56,000	115	14,200	2,930	238,000
January–August	1,660 ^r	110,000	259 ^r	41,700	87 ^r	10,700	2,010 ^r	165,000
August	190	13,800	30	4,590	20	3,310	241	22,100
September	190	12,100	30	3,920	12	1,620	233	17,800
October	200	13,600	30	3,870	--	--	231	18,100
November	190	14,000	30	3,630	--	--	220	18,000
December	200	13,500	16	2,840	15	1,840	233	18,900
2013:								
January	190	15,300	2	122	--	--	193	16,000
February	170	11,800	63	8,040	20	2,580	254	22,700
March	190	14,100	30	3,730	--	--	222	18,500
April	210	15,300	31	3,660	30	2,520	271	21,800
May	220	10,600	51	6,530	--	--	271	17,800
June	210	13,800	51	6,530	14	1,600	275	22,200
July	220	15,400	50	5,420	8	967	280	22,400
August	220	12,600	44	4,040	14	1,550	279	18,900
January–August	1,630	109,000	322	38,100	86	9,210	2,050	160,000

^eEstimated. ^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 ICIS 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
2012:									
January–December	1,980	646	155,000	471	154	33,700	2,850	933	239,000
January–August	1,340	437	105,000	308	101	22,200	1,900	622	160,000
August	166	54	12,500	34	11	2,350	228	75	17,900
September	151	49	12,000	31	10	2,130	232	76	19,000
October	169	55	13,200	49	16	3,400	279	91	23,200
November	166	54	12,900	43	14	3,060	211	69	17,100
December	153	50	11,900	40	13	2,840	230	75	19,600
2013:									
January	170	56	13,500	38	12	2,500	236	77	18,000
February	162	53	13,000	39	13	2,460	201	66	15,500
March	186	61	14,700	45	15	2,930	269	88	19,500
April	179	59	12,100	51	17	3,170	280	92	17,600
May	173	57	10,900	47	15	2,870	286	93	16,700
June	149	49	9,380	62	20	3,950	232	76	16,100
July	178	58	12,600	60	20	3,810	265	87	20,100
August	187	61	12,900	55	18	3,500	254	83	19,500
January–August	1,380	454	99,100	397	130	25,200	2,020	662	143,000

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
2012:					
January–December	1,850	366,000	161	53	33,000
January–August	1,150	236,000	107	35	21,800
August	141	26,000	11	4	2,480
September	192	38,600	17	6	2,830
October	232	41,100	15	5	3,060
November	104	18,800	10	3	1,810
December	174	31,300	12	4	3,530
2013:					
January	77	15,900	15	5	2,900
February	130	22,600	8	3	1,820
March	155	30,000	20	7	3,090
April	227	35,200	11	4	2,290
May	64	14,400	17	6	3,100
June	116	19,500	12	4	2,430
July	111	18,600	15	5	3,360
August	257	18,100	14	5	2,830
January–August	1,140	174,000	112	39	21,800

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
2012:			
January–December	6,590	2,930	9,510
January–August ^f	4,500	2,010	6,510
August	591	241	832
September	503	233	736
October	466	231	697
November	575	220	795
December	546	233	779
2013:			
January	626	193	819
February	491 ^r	254	745 ^r
March	522 ^r	222	744 ^r
April	469 ^r	271	740 ^r
May	642 ^r	271	913 ^r
June	551 ^r	275	826 ^r
July	640	280	920
August ^p	502	279	781
January–August	4,440	2,050	6,490

^eEstimated. ^pPreliminary. ^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–August 2012 ²		July 2013		August 2013 ^p		January–August 2013 ^{p, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	73	76	14	14	16	16	117	118
Natural gas	9	9	1	1	1	1	9	9
Total	82	85	15	16	18	17	126	126
PAD 2:								
Petroleum and coke	736	736	90	89	98	96	698	695
Natural gas	12	12	1	1	1	1	10	10
Total	748	748	91	90	99	97	708	705
PAD 3: ³								
Petroleum and coke	3,190	3,220	458	448	436	442	3,240	3,230
Natural gas	305	296	37	38	37	37	291	292
Total	3,500	3,510	495	485	473	479	3,530	3,520
PAD 4 and 5								
Petroleum and coke	876	882	112	115	117	117	850	853
Natural gas	418	419	46 ^r	45 ^r	41	49	370	373
Total	1,300	1,300	158 ^r	160 ^r	158	166	1,220	1,230
Grand total	5,620	5,650	758 ^r	751	747	759	5,580	5,580

^pPreliminary. ^rRevised.

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

²May include revisions to previously published data.

³Includes the U.S. Virgin Islands.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

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

	2012	2013		
		July	August	January– August
Production	8.40	8.92 ^r	8.80 ^p	8.39
Shipments	8.43	8.84	8.94 ^p	8.38
Exports of sulfur	1.85	1.31	3.03	1.71
Imports of sulfur:				
Canada ^c	2.44	2.59	2.59	2.45
Mexico	0.37	0.59	0.52	0.48
Venezuela ^c	0.12	0.09	0.16	0.13
Total ^{e, 2}	2.93	3.30	3.29	3.07
Exports of H ₂ SO ₄	0.16	0.18	0.16	0.17
Imports of H ₂ SO ₄ :				
Canada	1.98	2.10	2.20	2.08
Mexico	0.47	0.71	0.65	0.60
Total ²	2.85	3.12	2.99	3.04
Consumption:				
Domestic sources	6.58	7.54	5.91	6.67
Imports ^c	2.93	3.30	3.29	3.07
Total	9.51	10.80	9.20	9.75
Sulfur export values ³	198	168	70	153
Sulfur import values: ³				
Canada	67	70	57	67
Mexico	153	108	92	118
Venezuela	123	121	111	107
Average ²	81	80	68	78
H ₂ SO ₄ export values ³	205	224	202	195
H ₂ SO ₄ import values: ³				
Canada	79	71	69	72
Mexico	71	64	64	63
Average ²	84	76	78	71

^cEstimated. ^pPreliminary. ^rRevised.

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.