							2222
All Mine Safety and Health Number of Mines	2016 13,267						2022 12,647
Number of Miners*	327,257	322,321			305,976		312,362
Fatalities*	24			34	23		32
Fatal Injury Rate ^{1*}	.0089	.0097	.0078	.0119	.0090	.0152	.0120
All Injury Rate ^{1*}	2.17	2.19	2.08	2.06	1.90	1.90	1.86
Total Mining Area Inspection Hours/Mine ²	52	53	50	48	42	39	40
Citations and Orders Issued ^{3, 4}	96,528	103,425	99,597	99,542	82,783	77,014	85,965
S&S Citations and Orders (%)	22%			20%	18%	19%	20%
Dollar Amount Assessed (Millions) ⁴	53.7		55.6		42.2	41.0	53.3
All Mine Safety and Health Number of Mines	2009 14,832			2012 14,273	2013 14,006		2015 13,510
Number of Miners*	371,658			393,966			359,565
Fatalities*	43	•			34	48	38
Fatal Injury Rate ^{1*}	.0140	.0219	.0112	.0133	.0106	.0154	.0126
All Injury Rate ^{1*}	3.06	2.86	2.77	2.65	2.48	2.46	2.39
Total Mining Area Inspection Hours/Mine ²	55	59	59	59	56	56	54
Citations and Orders Issued ^{3, 4}	173,725			144,934	121,979		112,342
S&S Citations and Orders (%)	28%			27%	25%	25%	24%
Dollar Amount Assessed (Millions) ⁴	136.9		149.6	143.6	96.0	99.0	71.6
All Mine Safety and Health	2002						2008
Number of Mines Number of Miners*	14,690 338,791				,	•	15,057 393,649
Fatalities*	72				363,930 74		393,649 52
Fatal Injury Rate ^{1*}	.0242					1	.0152
All Injury Rate ^{1*}	4.63	4.17	3.98	3.93		3.50	3.27
Total Mining Area Inspection Hours/Mine ²	4.03	47	49	45		40	5.27
Citations and Orders Issued ^{3, 4}	113,285						171,842
S&S Citations and Orders (%)	32%			32%	32%	· ·	27%
Dollar Amount Assessed (Millions) ⁴	22.7						154.3
Deliai / lifearit / ledeceda (iviiiilerie)							
All Mine Safety and Health	1995			1998	1999		2001
Number of Mines	14,059	-					14,685
Number of Miners*	365,375						350,575
Fatalities*	.0262	.0289	.0302	.0244	.0255	.0279	.0229
Fatal Injury Rate ^{1*}							
All Injury Rate ^{1*}	6.46		5.57	5.57	5.17	5.07	4.86
Total Mining Area Inspection Hours/Mine ²	54			48			49
Citations and Orders Issued ^{3, 4}	127,637	108,489	113,883	119,006	113,611	118,966	124,250
	/110/	270/	260/	270/	260/	260/	
S&S Citations and Orders (%)	41%			37% 25.7	36% 26.6	36%	34%
	41% 22.9		36% 19.3	37% 25.7	36% 26.6	1	
S&S Citations and Orders (%)		17.8	19.3	25.7		25.5	22.5
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines	22.9 1988 16,699	17.8 1989 16,348	19.3 1990 16,258	25.7 1991 15,891	26.6 1992 15,181	25.5 1993 14,797	22.5 1994 14,442
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners*	22.9 1988 16,699 395,436	17.8 1989 16,348 400,537	19.3 1990 16,258 406,198	25.7 1991 15,891 395,900	26.6 1992 15,181 383,617	25.5 1993 14,797 368,323	22.5 1994 14,442 369,736
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities*	22.9 1988 16,699 395,436 104	17.8 1989 16,348 400,537 119	19.3 1990 16,258 406,198 120	25.7 1991 15,891 395,900 104	26.6 1992 15,181 383,617 101	25.5 1993 14,797 368,323 98	22.5 1994 14,442 369,736 98
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*}	22.9 1988 16,699 395,436 104 .0288	17.8 1989 16,348 400,537 119 .0326	19.3 1990 16,258 406,198 120 .0323	25.7 1991 15,891 395,900 104 .0292	26.6 1992 15,181 383,617 101 .0295	25.5 1993 14,797 368,323 98 .0301	22.5 1994 14,442 369,736 98 .0296
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*}	22.9 1988 16,699 395,436 104 .0288 8.93	17.8 1989 16,348 400,537 119 .0326 9.11	19.3 1990 16,258 406,198 120 .0323 8.52	25.7 1991 15,891 395,900 104 .0292 8.20	26.6 1992 15,181 383,617 101 .0295 7.66	25.5 1993 14,797 368,323 98 .0301 7.17	22.5 1994 14,442 369,736 98 .0296 6.97
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ²	22.9 1988 16,699 395,436 104 .0288 8.93 55	17.8 1989 16,348 400,537 119 .0326 9.11 53	19.3 1990 16,258 406,198 120 .0323 8.52 53	25.7 1991 15,891 395,900 104 .0292 8.20 52	26.6 1992 15,181 383,617 101 .0295 7.66 55	25.5 1993 14,797 368,323 98 .0301 7.17 54	22.5 1994 14,442 369,736 98 .0296 6.97 55
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4}	22.9 1988 16,699 395,436 104 .0288 8.93 55 162,293	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	22.9 1988 16,699 395,436 104 .0288 8.93 55 162,293 59%	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58%	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57%	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54%	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50%	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47%	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841 45%
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4}	22.9 1988 16,699 395,436 104 .0288 8.93 55 162,293	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57%	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	22.9 1988 16,699 395,436 104 .0288 8.93 55 162,293 59%	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841 45%
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines	22.9 1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners*	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 17,187 432,928	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities*	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A N/A N/A N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*}	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A N/A N/A N/A N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A N/A N/A N/A N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386	22.5 1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} All Injury Rate ^{1*}	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A N/A N/A N/A N/A N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A N/A N/A N/A N/A N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 17,187 432,928 164 .0422 5.72	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ²	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A N/A N/A N/A N/A N/A N/A N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A N/A N/A N/A N/A N/A N/A N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} Citations and Orders Issued ^{3, 4}	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43%	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55%	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60%	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58%
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} Citations and Orders Issued ^{3, 4}	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43%	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55%	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58%
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A	26.6 1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A	25.5 1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A 1982 N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5586 55 133,701 60% N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatalities*	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*}	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines* Fatalities*	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ²	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5586 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Nu	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} All Injury Rate ^{1*} Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Mines* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A 1981 N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	25.7 1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5586 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Injury Rate ^{1*} Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Fatal Injury Rate ^{1*} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Injury Rate ^{1*} Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ Note:	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} All Injury Rate ^{1*} Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Mines* Fatal Injury Rate ^{1*} Fatal Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A
S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number of Mines Number of Miners* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} Total Mining Area Inspection Hours/Mine ² Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ All Mine Safety and Health Number of Mines Number	1988 16,699 395,436 104 .0288 8.93 55 162,293 59% N/A	17.8 1989 16,348 400,537 119 .0326 9.11 53 158,543 58% N/A N/A N/A N/A N/A N/A N/A N/A	19.3 1990 16,258 406,198 120 .0323 8.52 53 159,222 57% N/A 1983 N/A	1991 15,891 395,900 104 .0292 8.20 52 157,882 54% N/A 1984 17,187 432,928 164 .0422 5.72 56 129,539 43% N/A N/A N/A N/A N/A N/A N/A N/A	1992 15,181 383,617 101 .0295 7.66 55 148,385 50% N/A 1985 17,277 422,542 173 .0462 5.47 56 132,908 55% N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	1993 14,797 368,323 98 .0301 7.17 54 138,127 47% N/A 1986 16,889 403,445 140 .0386 5.86 55 133,701 60% N/A N/A N/A N/A N/A N/A N/A N/A	1994 14,442 369,736 98 .0296 6.97 55 136,841 45% N/A 1987 16,675 390,708 126 .0358 7.56 55 146,622 58% N/A N/A N/A N/A N/A N/A N/A N/A

1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes: On-site Inspection Time (M/NM), MMU Pit Time (Coal), Outby Area Time (Coal), Surface Area Time (Coal), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

3-Citations and orders are those not vacated.

4-Citations and Orders issued, and Dollar Amount Assessed, are based on issue date. Therefore, citation counts and dollars assessed can fluctuate, upwards or downwards, depending on the date information was pulled. For example, numbers tend to fluctuate downwards when an issued citation is either conferenced or contested and is subsequently vacated. Dollars assessed can fluctuate upwards when there is a lag time between the issuance date and the assessed date.

COAL Only (At A Glance Data FY 1978-2022)							
Coal Mine Safety and Health	2016	2017	2018	2019	2020	2021	2022
Number of Coal Mines Number of Miners*	1,328						
Fatalities*	85,656 8	83,478 14					
Fatal Injury Rate ^{1*}	.0110				.0051	.0207	.0202
All Injury Rate ^{1*}	2.80		2.96				
States with Coal Mining	N/A 736	N/A 780	N/A 757	N/A 734	N/A 567	N/A 565	N/A 596
Coal Production (Millions of Tons) Total Mining Area Inspection Hours/Mine ²	244					1	1
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4}	40,259	· ·					· ·
S&S Citations and Orders (%)	21%	21%					1
Dollar Amount Assessed (Millions) ⁴	27	27.3	30.3	29.8	18.7	16.4	23.9
Coal Mine Safety and Health	2009	2010	2011	2012	2013	2014	2015
Number of Coal Mines	2,103			,			
Number of Miners* Fatalities*	138,664 20				126,388 18		
Fatal Injury Rate ^{1*}	.0159						
All Injury Rate ^{1*}	3.75	3.49	3.46	3.29	3.11	3.12	3.05
States with Coal Mining	26						
Coal Production (Millions of Tons) Total Mining Area Inspection Hours/Mine ²	1,114 236		1,089 258		994 249	†	
FY Inspection Completion Rate (%)	100						
Citations and Orders Issued ^{3, 4}	105,439	97,573	93,033	83,680	65,388	62,225	53,280
S&S Citations and Orders (%)	30%						
Dollar Amount Assessed (Millions) ⁴	99.6	107.3	108.4	107.5	67.4	64.3	43.5
	•						1
Coal Mine Safety and Health Number of Coal Mines	2002 2,105						
Number of Coal Mines Number of Miners*	2,105 114,745		108,057	·	122,906		
Fatalities*	33	32	24	23	45	35	30
Fatal Injury Rate ^{1*}	.0321	.0332					
All Injury Rate ^{1*} States with Coal Mining	6.00				4.55 26		
Coal Production (Millions of Tons)	1,104			1,132			
Total Mining Area Inspection Hours/Mine ²	175	170	172	163	162	154	219
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	61,706 38%	55,277 38%		67,633 39%	76,984 39%		
Dollar Amount Assessed (Millions) ⁴	14.0				26.7		
Denail 7 arroam 7 to cooos a (minions)	1		10.0				12010
Coal Mine Safety and Health Number of Coal Mines	1995						
Number of Miners*	3,051 135,751						
Fatalities*	43						
Fatal Injury Rate ^{1*}	.0356			.0250			
All Injury Rate ^{1*}	8.33 26					-	
States with Coal Mining Coal Production (Millions of Tons)	1,029						
Total Mining Area Inspection Hours/Mine ²	151	155					
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	84,821 49%	72,980 42%			· ·		
Dollar Amount Assessed (Millions) ⁴	17	12.6					
		!	!		!		
Coal Mine Safety and Health Number of Coal Mines	1988 4,808						
Number of Miners*	169,130	,			156,314		
Fatalities*	55		1		+	+	52
Fatal Injury Rate ^{1*}	.0358				.0373		
All Injury Rate ^{1*} States with Coal Mining	11.05 26			10.14 29			
Coal Production (Millions of Tons)	936						
Total Mining Area Inspection Hours/Mine ²	129						
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	116,646 69%			•		,	•
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		!	!				
Coal Mine Safety and Health Number of Coal Mines	1981 N/A	1982 N/A	1983 N/A	1984 5,612			
Number of Miners*	N/A	N/A	N/A	210,856	· · · · · · · · · · · · · · · · · · ·		
Fatalities*	N/A	N/A	N/A	90	+	+	61
Fatal Injury Rate ^{1*}	N/A N/A	N/A N/A	N/A N/A	.0472 6.89	.0577 6.58		1
All Injury Rate ^{1*} States with Coal Mining	N/A N/A	N/A	N/A	6.89			
Coal Production (Millions of Tons)	N/A	N/A	N/A	876			
Total Mining Area Inspection Hours/Mine ²	N/A	N/A	N/A	114			
FY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	N/A N/A	N/A N/A	N/A N/A	N/A 109,664	N/A		N/A
S&S Citations and Orders (%)	N/A	N/A	N/A	46%		<u> </u>	
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NI/A	NI/A	NI/A	NI/A	1077	1050	1000
Coal Mine Safety and Health Number of Coal Mines	N/A N/A	N/A N/A	N/A N/A	N/A N/A	1978 N/A	1979 N/A	1980 N/A
Number of Miners*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fatalities*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fatal Injury Rate ^{1*} All Injury Rate ^{1*}	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
States with Coal Mining	N/A N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	N/A
Coal Production (Millions of Tons)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Mining Area Inspection Hours/Mine ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
S&S Citations and Orders (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NOTE: Data for Fiscal Years 1978-1983 data not available in MSIS							
Assessment Data for Fiscal Years 1978-1994 not available in							
*Values are all inclusive of operator and contractor employee	s.						

*Values are all inclusive of operator and contractor employees. 1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes:MMU Pit Time (Coal), Outby Area Time (Coal), Surface Area Time (Coal), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

3-Citations and orders are those not vacated.

4-Citations and Orders issued, and Dollar Amount Assessed, are based on issue date. Therefore, citation counts and dollars assessed can fluctuate, upwards or downwards, depending on the date information was pulled. For example, numbers tend to fluctuate downwards when an issued citation is either conferenced or contested and is subsequently vacated. Dollars assessed can fluctuate upwards when there is a lag time between the issuance date and the assessed date.

METAL/NONMETAL Only (At A Glance Data FY	1978-2022)						
Metal and Nonmetal Mine Safety and Health	2016		2018				2022
Number of Metal/Nonmetal Mines Number of Miners*	11,939 241,601	· ·		· ·			
Fatalities*	16	· ·	13			237,928 27	240,772
Fatal Injury Rate ^{1*}	.0082		.0063		.0102	.0138	
All Injury Rate ^{1*}	1.94	1.83	1.75	1.74	1.63	1.65	1.60
States with M/NM Mining	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Mining Area Inspection Hours/Mine ²	21		22	22	21	20	20
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	56,269 23%		53,427 21%	-		47,973 19%	51,309 19%
Dollar Amount Assessed (Millions) ⁴	26.7	27.5	25.4	25.2	23.4	24.6	29.4
Donal Attribute Assessed (Williams)	20.1	21.0	20.4	20.2	20.4	24.0	20.4
Metal and Nonmetal Mine Safety and Health	2009						
Number of Metal/Nonmetal Mines Number of Miners*	12,729 232,994						11,995 250,886
Fatalities*	232,994	· ·		250,320	· ·		230,000
Fatal Injury Rate ^{1*}	.0127	.0085	.0106				.0113
All Injury Rate ^{1*}	2.58						2.07
States with M/NM Mining	50		50			50	50
Total Mining Area Inspection Hours/Mine ²	21	22	21	22	21	22	22
FY Inspection Completion Rate (%)	100	100	100			100	100
Citations and Orders Issued ^{3, 4}	68,286			-		57,614	
S&S Citations and Orders (%)	26%		27%			24%	24%
Dollar Amount Assessed (Millions) ⁴	37.3	52.4	41.2	36.1	28.6	34.7	28.1
Metal and Nonmetal Mine Safety and Health	2002						2008
Number of Metal/Nonmetal Mines	12,585			,	,		12,957
Number of Miners*	224,046						
Fatal Injury Rate ^{1*}	0201		0133		0137	0146	0100
Fatal Injury Rate ^{1*} All Injury Rate ^{1*}	.0201	.0176 3.54	.0133 3.47	.0167 3.55	.0137 3.26	.0146 3.07	.0100 2.89
States with M/NM Mining	3.91		3.47 50			50	
Total Mining Area Inspection Hours/Mine ²	21		25		18		20
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4}	51,579	49,345	57,156	57,123	62,774	58,535	67,708
S&S Citations and Orders (%)	25%	24%	24%	23%	23%	22%	21%
Dollar Amount Assessed (Millions) ⁴	8.7	8.1	9.4	10.4	12.4	25.6	33.7
Metal and Nonmetal Mine Safety and Health	1995	1996	1997	1998	1999	2000	2001
Number of Metal/Nonmetal Mines	11,008						12,537
Number of Miners*	229,624		236,040			· ·	
Fatalities*	44	56	62	52	45	54	30
Fatal Injury Rate ^{1*}	.0208		.0286			.0248	.0144
All Injury Rate ^{1*} States with M/NM Mining	5.39 50		4.79 50			4.38 50	4.23 50
Total Mining Area Inspection Hours/Mine ²	23						23
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4}	42,816						
S&S Citations and Orders (%)	27%		31%			30%	27%
Dollar Amount Assessed (Millions) ⁴	5.9	5.2	8.0	12.8	12.5	14.0	10.0
Madel and Newscotch Micro Octobs and Health	4000	4000	4000	4004	4000	4000	4004
Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines	1988 11,891						
Number of Miners*	226,306						
Fatalities*	49	50	52	48	49	48	46
Fatal Injury Rate ^{1*}	.0237	.0233	.0241	.0230	.0242	.0241	.0225
All Injury Rate ^{1*}	7.36		7.23			5.93	5.78
States with M/NM Mining	50		50			50	
Total Mining Area Inspection Hours/Mine ² EV Inspection Completion Rate (%)	N/A	22 N/A	23 N/A	23 N/A	24 N/A	23 N/A	23 N/A
FY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	N/A 45,647		49,349				
S&S Citations and Orders (%)	35%	,	49,349 33%			30%	27%
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
`							
Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines	N/A	1982 N/A	1983 N/A	1984 11,575			1987 11,682
Number of Miners*	N/A	N/A	N/A	222,072		,	
Fatalities*	N/A	N/A	N/A	74	70	51	65
Fatal Injury Rate ^{1*}	N/A	N/A	N/A	.0374	.0357	.0266	.0336
All Injury Rate ^{1*}	N/A	N/A	N/A	4.59			
States with M/NM Mining	N/A	N/A	N/A	50		50	50
Total Mining Area Inspection Hours/Mine ²	N/A	N/A	N/A	19			21
FY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	N/A N/A	N/A N/A	N/A N/A	N/A 10.875	N/A 24.035	N/A 20 150	N/A 36.402
S&S Citations and Orders Issued (%)	N/A N/A	N/A	N/A	19,875 26%		· · · · · · · · · · · · · · · · · · ·	36,402 35%
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		I	l				
Metal and Nonmetal Mine Safety and Health	N/A	N/A	N/A	N/A	1978		
Number of Metal/Nonmetal Mines Number of Miners*	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Fatalities*	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A N/A
Fatal Injury Rate ^{1*}	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Injury Rate ^{1*}	N/A	N/A	N/A	N/A	N/A	N/A	N/A
States with M/NM Mining	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Mining Area Inspection Hours/Mine ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY Inspection Completion Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4}	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&S Citations and Orders (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NOTE: Data for Fiscal Years 1978-1983 data not available in MSIS							
Assessment Data for Fiscal Years 1978-1994 not available in	MSIS						

*Values are all inclusive of operator and contractor employees.

1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes: On-site Inspection Time (M/NM), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

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CONTRACTORS (At A Glance Data FY 1978-2022)

Mine Contractors	2016	2017	2018	2019	2020	2021	2022
Coal Fatalities ²	0	1	0	3	0	2	3
MNM Fatalities ²	5	2	0	7	4	5	4
Total Fatalities ²	5	3	0	10	4	7	7
Coal Fatal Injury Rate ¹	.0000	.0070	.0000	.0194	.0000	.0200	.0274
MNM Fatal Injury Rate ¹	.0145	.0060	.0000	.0186	.0120	.0144	.0101
Total Fatal Injury Rate ¹	.0103	.0063	.0000	.0188	.0090	.0156	.0139

Mine Contractors	2009	2010	2011	2012	2013	2014	2015
Coal Fatalities ²	8	6	5	4	2	2	3
MNM Fatalities ²	7	6	6	4	2	6	9
Total Fatalities ²	15	12	11	8	4	8	12
Coal Fatal Injury Rate ¹	.0315	.0249	.0182	.0148	.0086	.0094	.0152
MNM Fatal Injury Rate ¹	.0227	.0204	.0168	.0096	.0046	.0145	.0232
Total Fatal Injury Rate ¹	.0267	.0224	.0174	.0117	.0060	.0127	.0205

Mine Contractors	2002	2003	2004	2005	2006	2007	2008
Coal Fatalities ²	7	8	5	5	7	5	10
MNM Fatalities ²	9	5	5	5	6	10	8
Total Fatalities ²	16	13	10	10	13	15	18
Coal Fatal Injury Rate ¹	.0364	.0458	.0266	.0238	.0304	.0219	.0394
MNM Fatal Injury Rate ¹	.0443	.0253	.0219	.0192	.0197	.0274	.0195
Total Fatal Injury Rate ¹	.0404	.0349	.0241	.0212	.0243	.0253	.0271

Mine Contractors	1995	1996	1997	1998	1999	2000	2001
Coal Fatalities ²	9	4	6	5	4	10	7
MNM Fatalities ²	12	11	24	15	17	13	9
Total Fatalities ²	21	15	30	20	21	23	16
Coal Fatal Injury Rate ¹	.0579	.0251	.0345	.0272	.0224	.0558	.0361
MNM Fatal Injury Rate ¹	.0616	.0546	.1130	.0704	.0744	.0475	.0352
Total Fatal Injury Rate ¹	.0600	.0416	.0777	.0504	.0516	.0508	.0356

Mine Contractors	1988	1989	1990	1991	1992	1993	1994
Coal Fatalities ²	8	5	9	4	12	13	9
MNM Fatalities ²	15	12	10	10	15	10	10
Total Fatalities ²	23	17	19	14	27	23	19
Coal Fatal Injury Rate ¹	.0993	.0493	.0798	.0325	.0852	.0857	.0553
MNM Fatal Injury Rate ¹	.1198	.0770	.0703	.0630	.1001	.0723	.0599
Total Fatal Injury Rate ¹	.1118	.0661	.0745	.0497	.0929	.0793	.0577

Mine Contractors	1981	1982	1983	1984	1985	1986	1987
Coal Fatalities ²	N/A	N/A	N/A	6	6	3	5
MNM Fatalities ²	N/A	N/A	N/A	12	9	7	11
Total Fatalities ²	N/A	N/A	N/A	18	15	10	16
Coal Fatal Injury Rate ¹	N/A	N/A	N/A	.0861	.0780	.0397	.0685
MNM Fatal Injury Rate ¹	N/A	N/A	N/A	.1754	.1120	.0815	.1138
Total Fatal Injury Rate ¹	N/A	N/A	N/A	.1304	.0954	.0619	.0943

Mine Contractors	N/A	N/A	N/A	N/A	1978	1979	1980
Coal Fatalities ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MNM Fatalities ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Fatalities ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coal Fatal Injury Rate ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MNM Fatal Injury Rate ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Fatal Injury Rate ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NOTE: Fiscal Year 1978-1983 data not available in MSIS	-	-	-	•	-	_	-

¹⁻Reported injuries per 200,000 hours worked.

²⁻Contractor fatalities are not exclusive to those reported in the All Mine Safety and Health; Coal Mine Safety and Health; and, Metal and Nonmetal Mine Safety and Health sections of this report.