

TABLE V-4.—VALID SAMPLES, BY OCCUPATION AND MINE CATEGORY—Continued

Occupation	Metal	Stone	Trona	Other N/M	Total
Drill Operator, Jumbo Perc.	4	9	0	8	21
Mucking Mach. Operator	15	0	0	3	18
Utility Man	5	3	8	2	18
Scaling (hand)	3	12	0	2	17
Complete Load-Haul-Dump	1	0	0	16	17
Roof Bolter, Rock	3	6	0	5	14
Drill Operator, Rotary Air	1	12	0	1	14
Crusher Oper/Worker	0	12	0	2	14
All Others Combined	63	41	3	49	156
Totals	189	519	15	151	874

TC levels calculated by $EC \times 1.3$ were lower than TC levels calculated by $OC + EC$ in 663 (76%) of the 874 baseline samples. Of the 211 samples where $TC = OC + EC$ was the lower value, 64% of the $TC = EC \times 1.3$ values were within 12% of the $TC = OC + EC$ value. Table V-5 summarizes the results of the

baseline samples when determining the TC level using either $EC \times 1.3$ or $OC + EC$. Approximately 6.3% of results did not concur when measuring TC by the two calculations. Approximately 15.7% of the samples were above the 400_{TC} $\mu g/m^3$ interim concentration limit when using $TC = EC \times 1.3$ and approximately

19.5% were above the concentration limit when using $TC = OC + EC$. There is 93.7% concurrence between the two methods of calculating TC and comparing the calculations to the 400_{TC} $\mu g/m^3$ interim concentration limit.

TABLE V-5.—COMPARISON OF RESULTS WITH 400_{TC} $\mu g/m^3$ CALCULATING TC BY $OC + EC$ OR $EC \times 1.3$

All Valid Samples— $OC + EC > 400 \mu g/m^3$	$EC \times 1.3 > 400 \mu g/m^3$		Total
	No	Yes	
No	693 (79.3%)	11 (1.3%)	704 (80.5%)
Yes	44 (5.0%)	126 (14.4%)	170 (19.5%)
Total	737 (84.3%)	137 (15.7%)	874 (100.0%)

Table V-6 lists the 19 occupations found to have at least one sample in which the level of TC was over the interim 400_{TC} $\mu g/m^3$ concentration limit

($TC = EC \times 1.3$). Table V-6 is sorted by the median TC result. The table also lists the minimum value, median value, and the total number of valid samples

for these occupations. TC values varied widely among all miners' occupations.

TABLE V-6.—OCCUPATIONS WITH AT LEAST ONE SAMPLE GREATER THAN OR EQUAL TO 400_{TC} $\mu g/m^3$

Occupation	Total samples	Minimum	Median	Maximum
Engineer	1	438	438	438
Roof Bolter, Mounted	8	98	335	588
Miner, Stope	11	165	330	622
Clean Up Man	2	66	283	499
Mucking Machine Operator	18	15	278	872
Shuttle Car, Diesel	2	95	257	419
Drill Operator, Rotary Air	14	56	231	1145
Belt Crew	8	26	225	502
Blaster, Powder Gang	101	6	216	960
Drill Operator, Jumbo	21	41	194	708
Complete Load-Haul-Dump	17	42	188	824
Miner, Drift	14	16	185	1459
Scaling (Hand)	17	18	166	2014
Roof Bolter, Rock	14	63	157	829
Truck Driver	184	0	155	1074
Front End Loader	155	0	136	1743
Drill Operator, Rotary	58	3	133	1109
Scaling (Mechanical)	63	0	131	750
Utility Man	18	29	93	638
Supervisor	10	1	87	856
Crusher Operator	14	1	47	427

Table V-7 and Chart V-1 provide the frequencies and percent of

overexposures among the four commodities. Chart V-2 provides the

frequency of overexposures among the commodities. The metal mines have the