Figure 3
Arsenic Air Sample Results
NIOSH REL 2.0 Micrograms/Cubic Meter Ceiling Limit
OSHA PEL 10.0 Micrograms/Cubic Meter

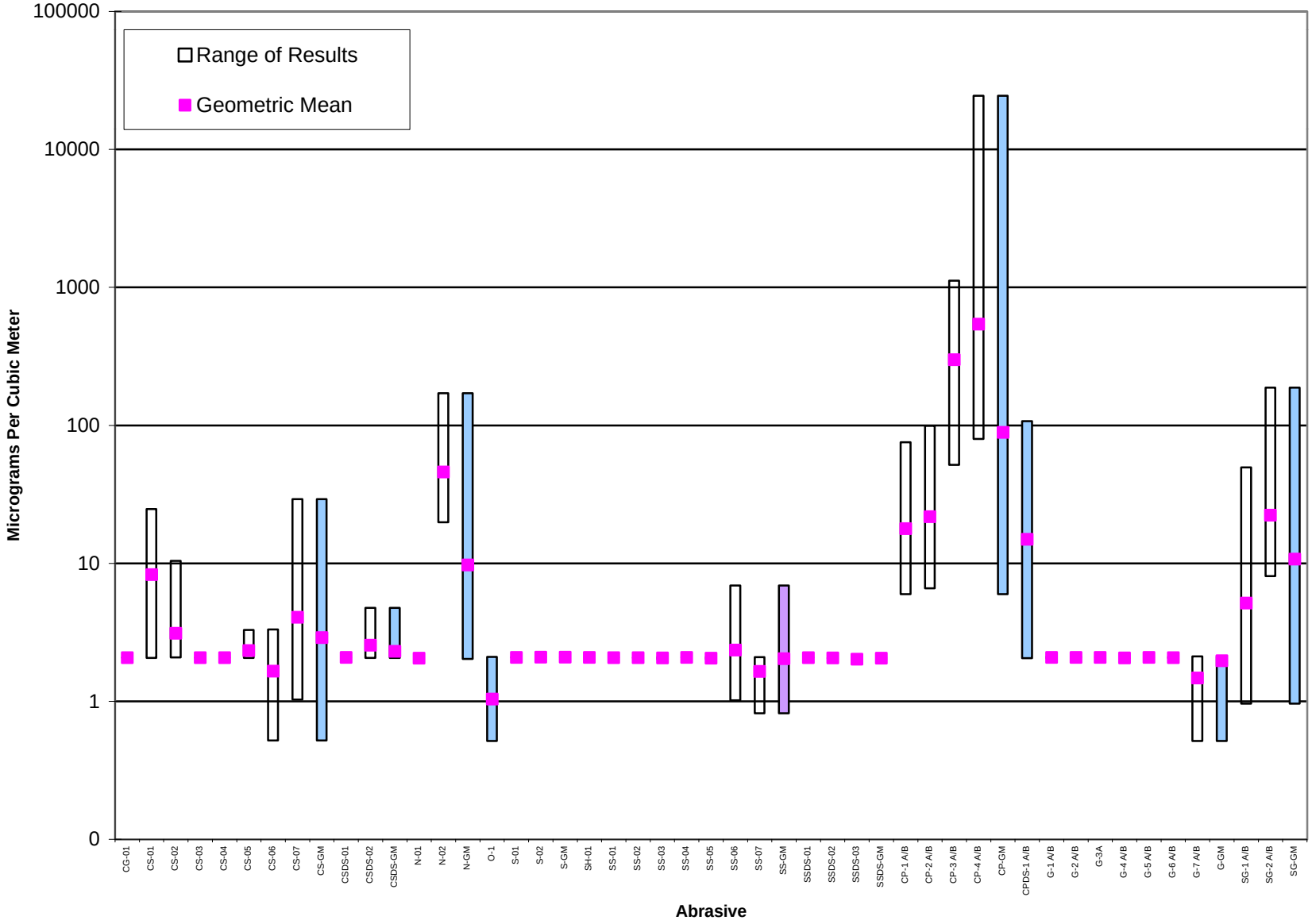

Figure 4

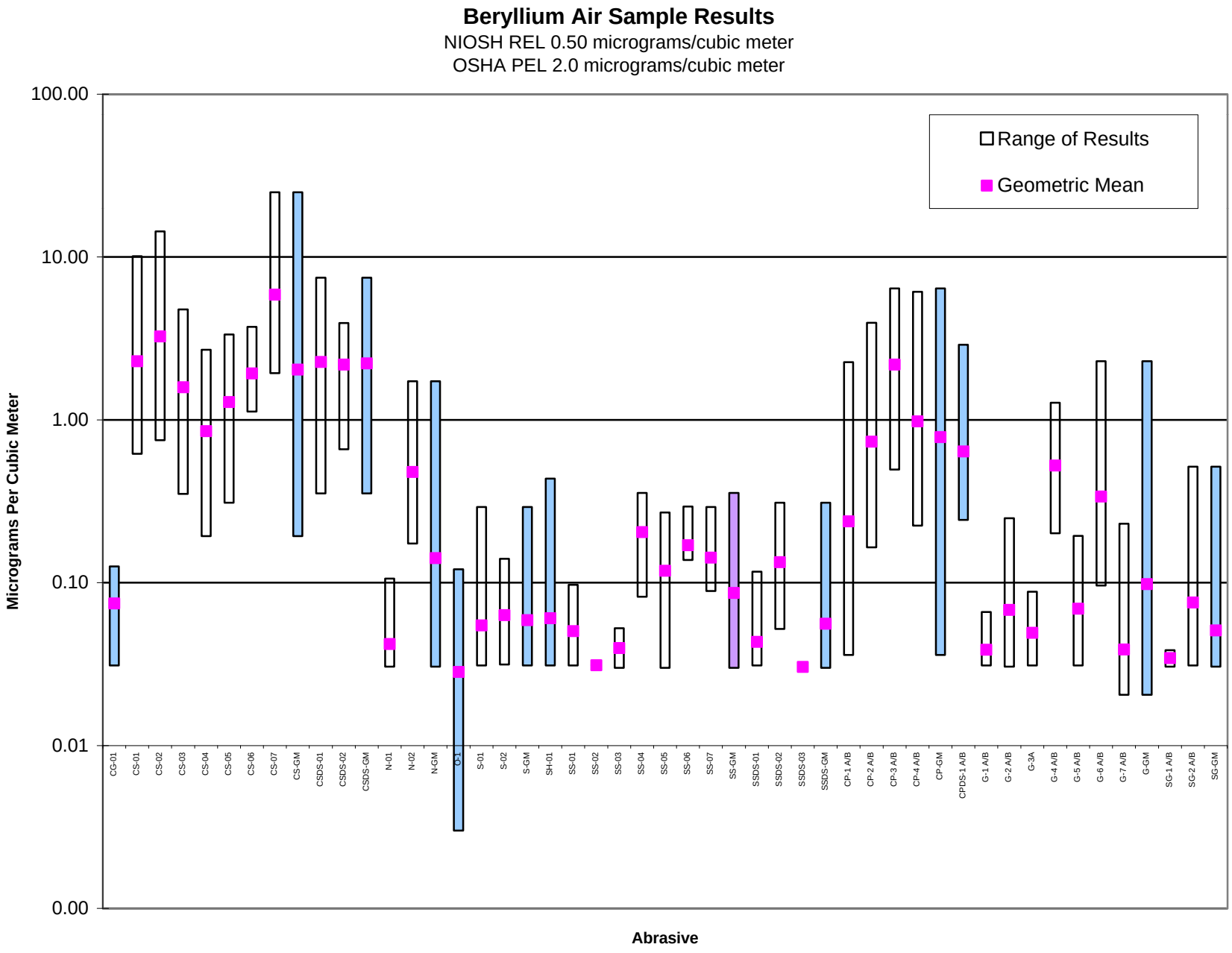
Beryllium Air Sample Results
NIOSH REL 0.50 micrograms/cubic meter
OSHA PEL 2.0 micrograms/cubic meter
Range of Results
Geometric Mean
Micrograms Per Cubic Meter
100.00
10.00
1.00
0.10
0.01
0.00
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 5

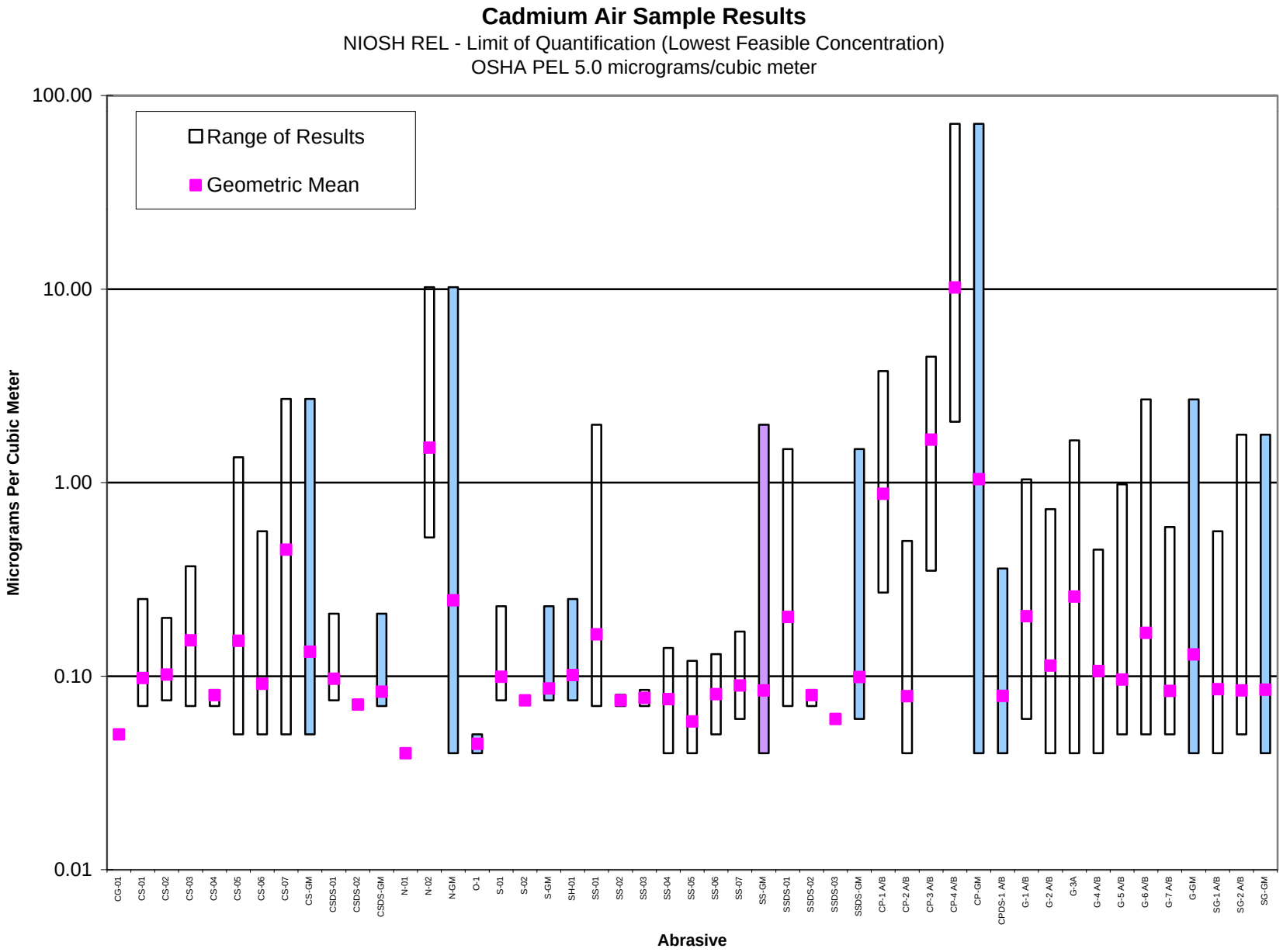
Cadmium Air Sample Results
NIOSH REL - Limit of Quantification (Lowest Feasible Concentration)
OSHA PEL 5.0 micrograms/cubic meter
Range of Results
Geometric Mean
100.00
10.00
1.00
0.10
0.01
Micrograms Per Cubic Meter
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 6

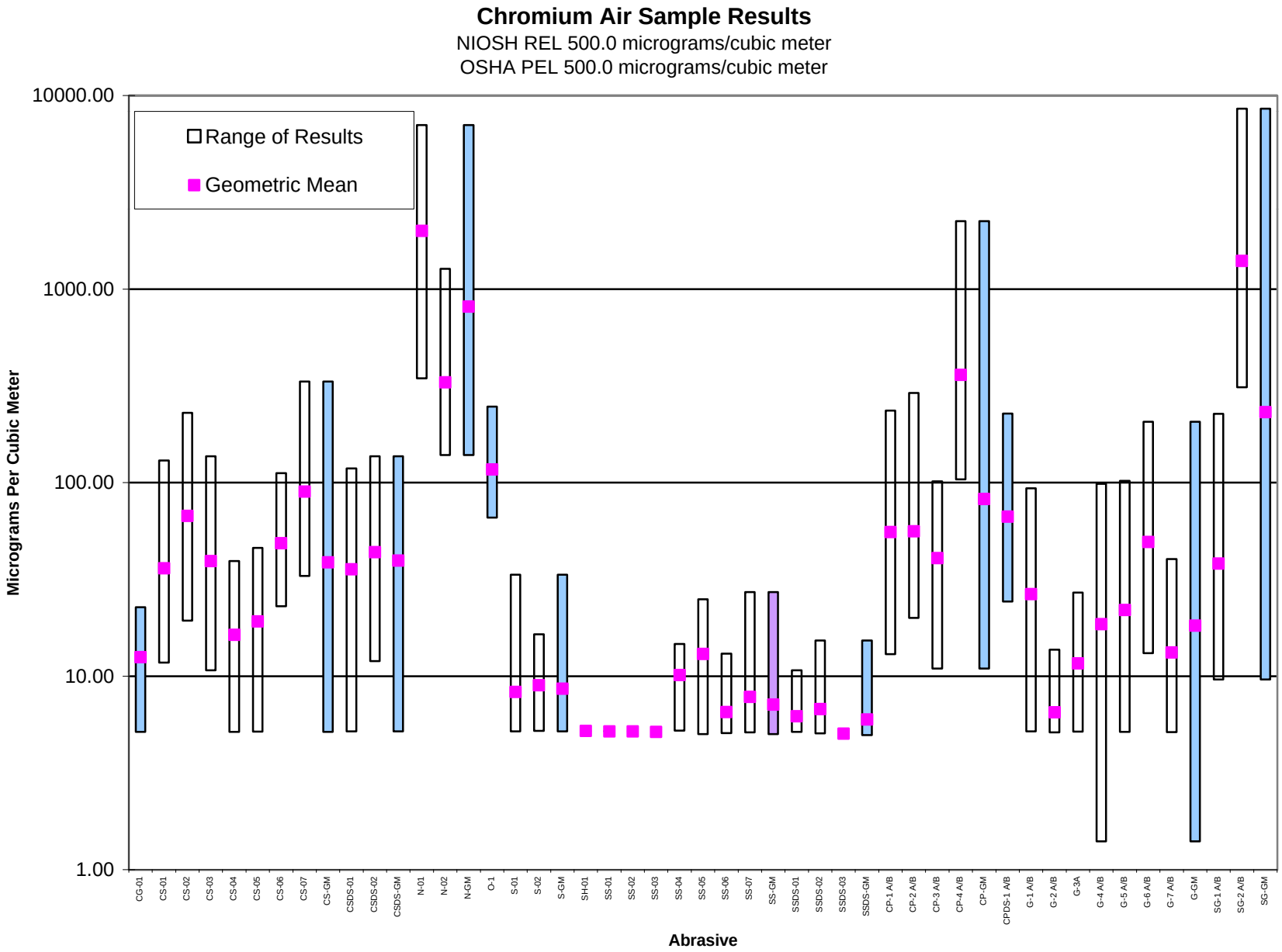
Chromium Air Sample Results
NIOSH REL 500.0 micrograms/cubic meter
OSHA PEL 500.0 micrograms/cubic meter
Range of Results
Geometric Mean
10000.00
1000.00
100.00
10.00
1.00
Micrograms Per Cubic Meter
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 7

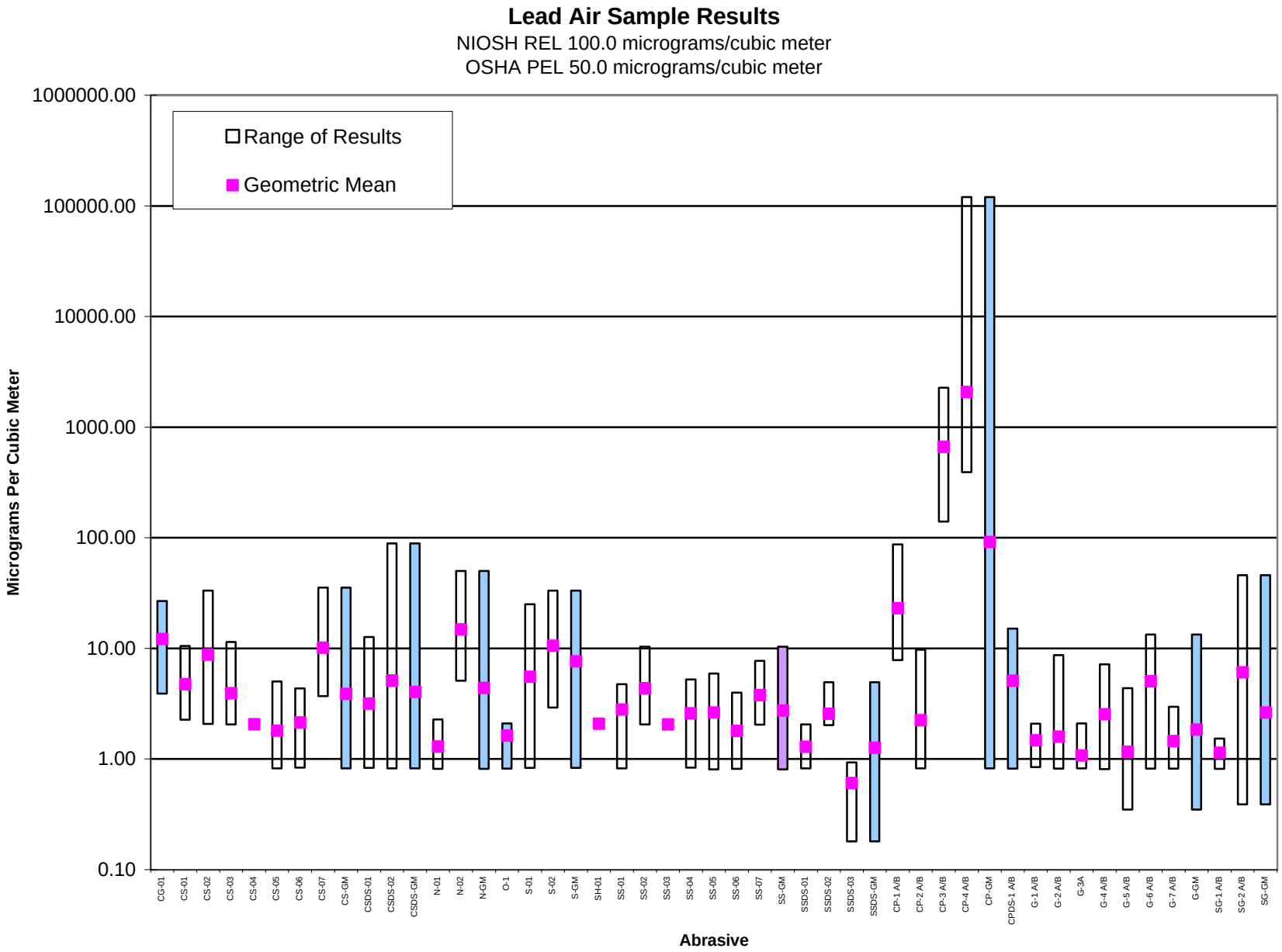
Lead Air Sample Results
NIOSH REL 100.0 micrograms/cubic meter
OSHA PEL 50.0 micrograms/cubic meter
Range of Results
Geometric Mean
Micrograms Per Cubic Meter
1000000.00
100000.00
10000.00
1000.00
100.00
10.00
1.00
0.10
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 8

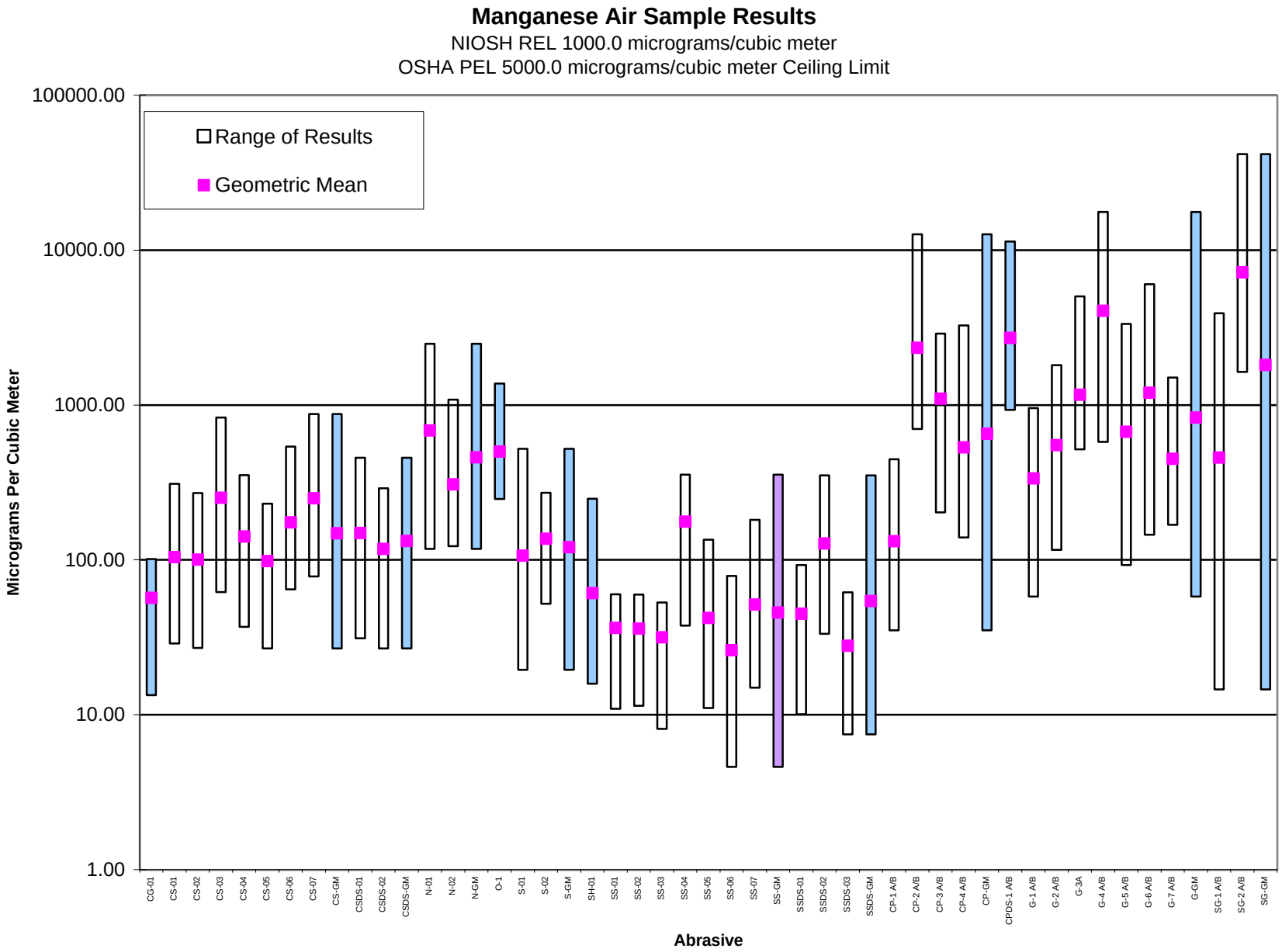
Manganese Air Sample Results
NIOSH REL 1000.0 micrograms/cubic meter
OSHA PEL 5000.0 micrograms/cubic meter Ceiling Limit
Range of Results
Geometric Mean
Micrograms Per Cubic Meter
100000.00
10000.00
1000.00
100.00
10.00
1.00
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 9

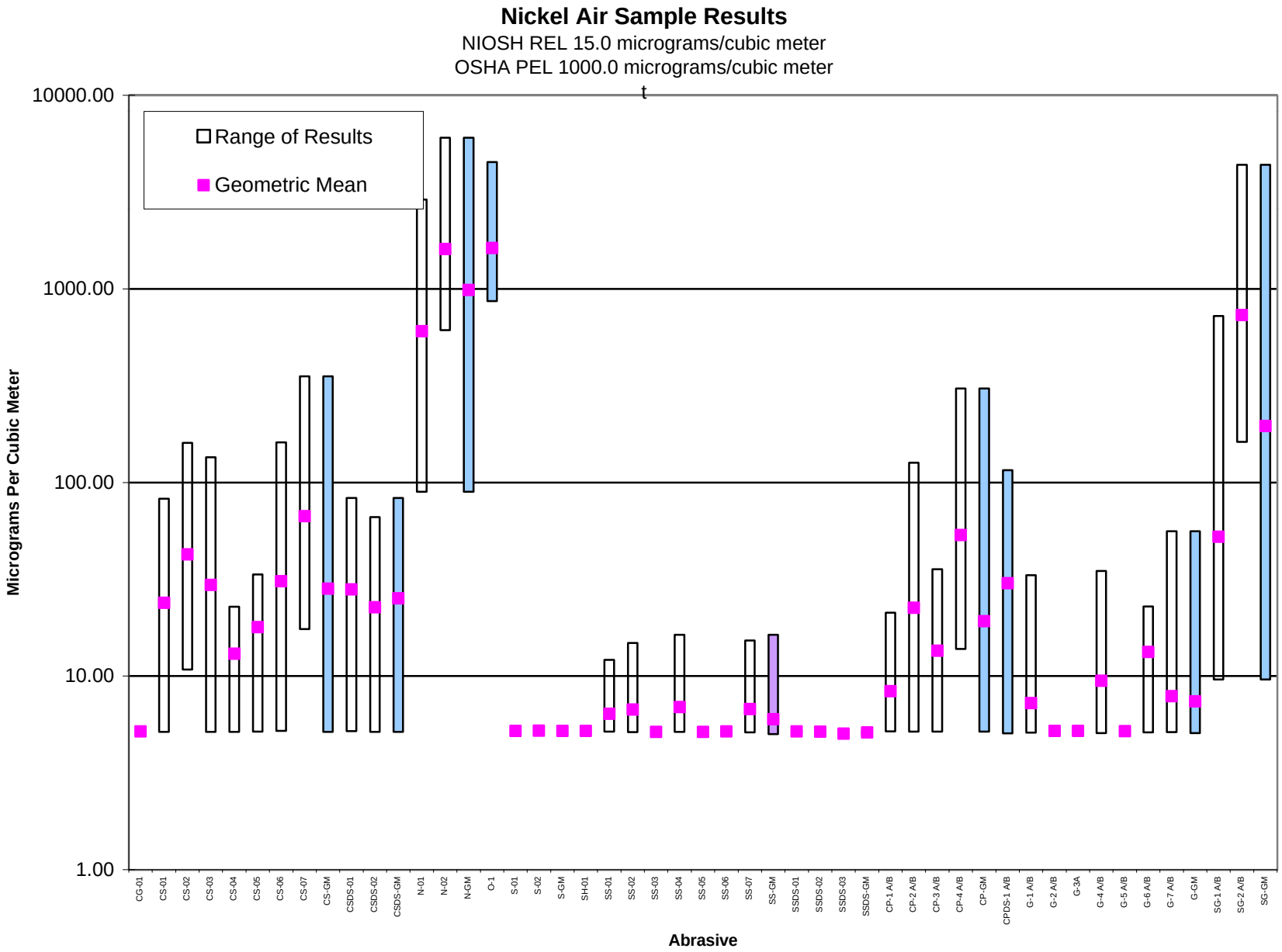
Nickel Air Sample Results
NIOSH REL 15.0 micrograms/cubic meter
OSHA PEL 1000.0 micrograms/cubic meter
t
Range of Results
Geometric Mean
10000.00
1000.00
100.00
10.00
1.00
Micrograms Per Cubic Meter
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 10

Respirable Quartz Air Sample Results
NIOSH REL 0.05 milligrams/cubic meter
OSHA PEL As Calculated

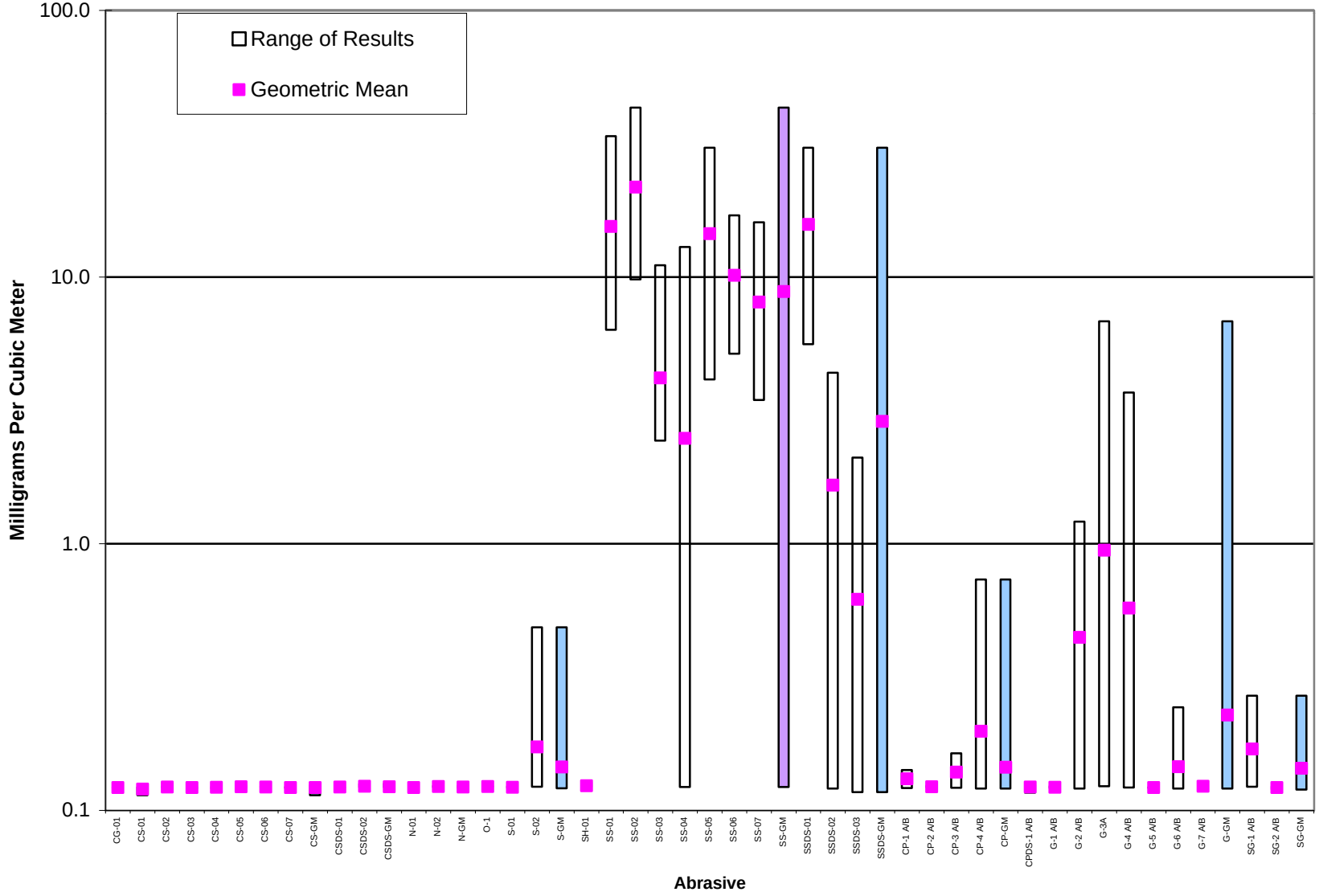

Figure 11

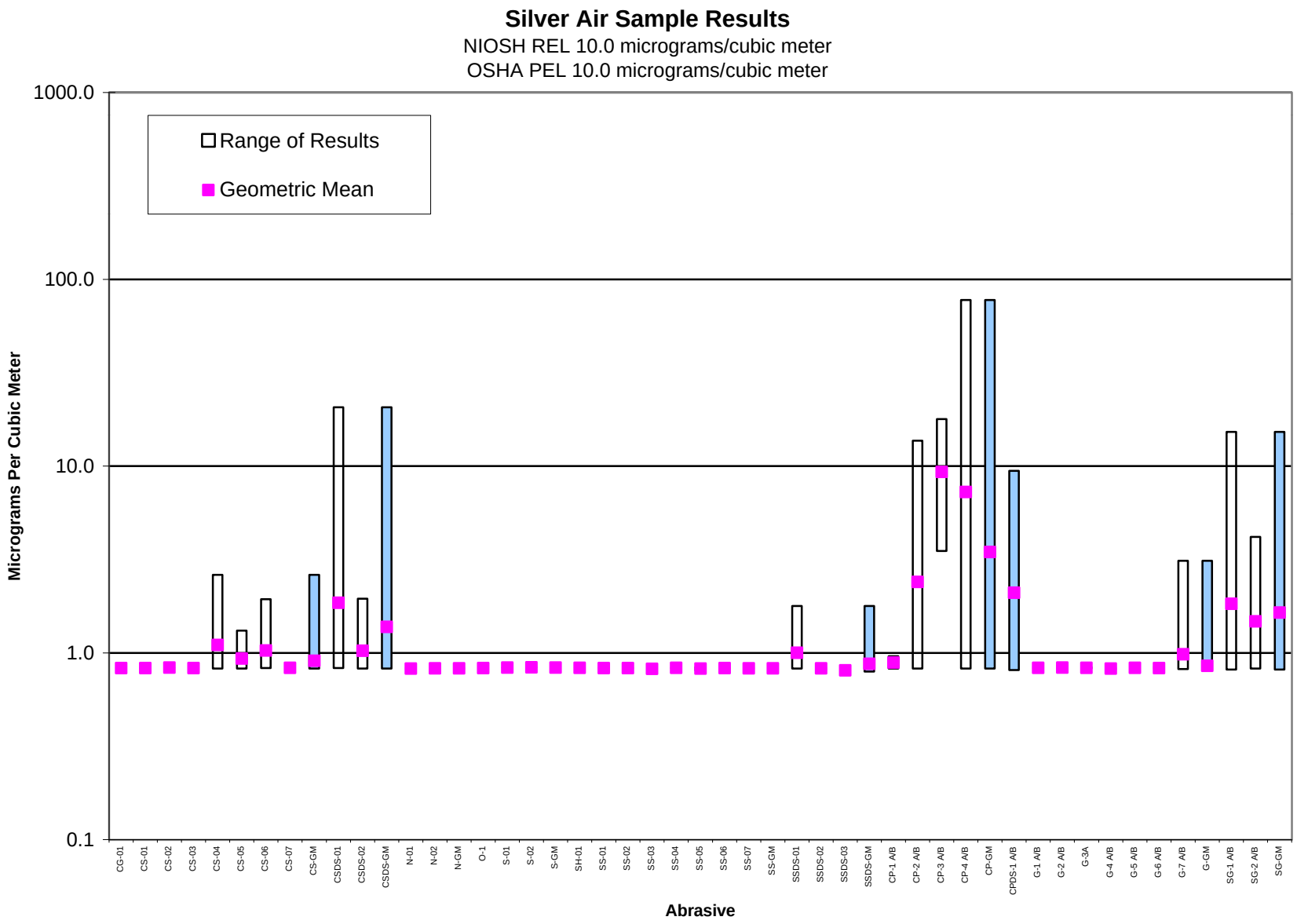
Silver Air Sample Results
NIOSH REL 10.0 micrograms/cubic meter
OSHA PEL 10.0 micrograms/cubic meter
Range of Results
Geometric Mean
1000.0
100.0
10.0
1.0
0.1
Micrograms Per Cubic Meter
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM
Abrasive

Figure 12

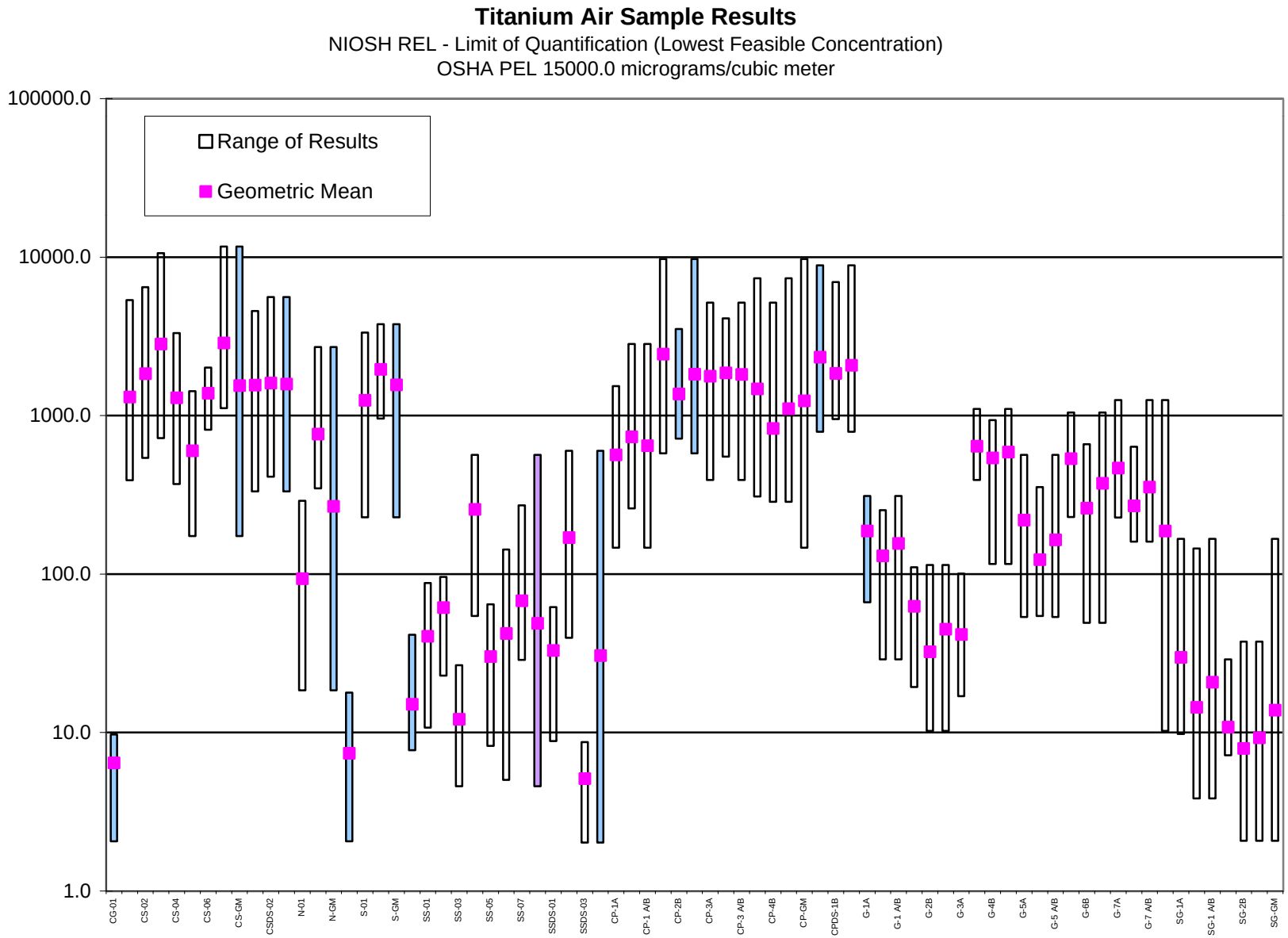
Titanium Air Sample Results
NIOSH REL - Limit of Quantification (Lowest Feasible Concentration)
OSHA PEL 15000.0 micrograms/cubic meter
Range of Results
Geometric Mean
100000.0
10000.0
1000.0
100.0
10.0
1.0
CG-01
CS-02
CS-04
CS-06
CS-GM
CSDS-02
N-01
N-GM
S-01
S-GM
SS-01
SS-03
SS-05
SS-07
SSDS-01
SSDS-03
CP-1A
CP-1 A/B
CP-2B
CP-3A
CP-3 A/B
CP-4B
CP-GM
CPDS-1B
G-1A
G-1 A/B
G-2B
G-3A
G-4B
G-5A
G-5 A/B
G-6B
G-7A
G-7 A/B
SG-1A
SG-1 A/B
SG-2B
SG-GM

Figure 13

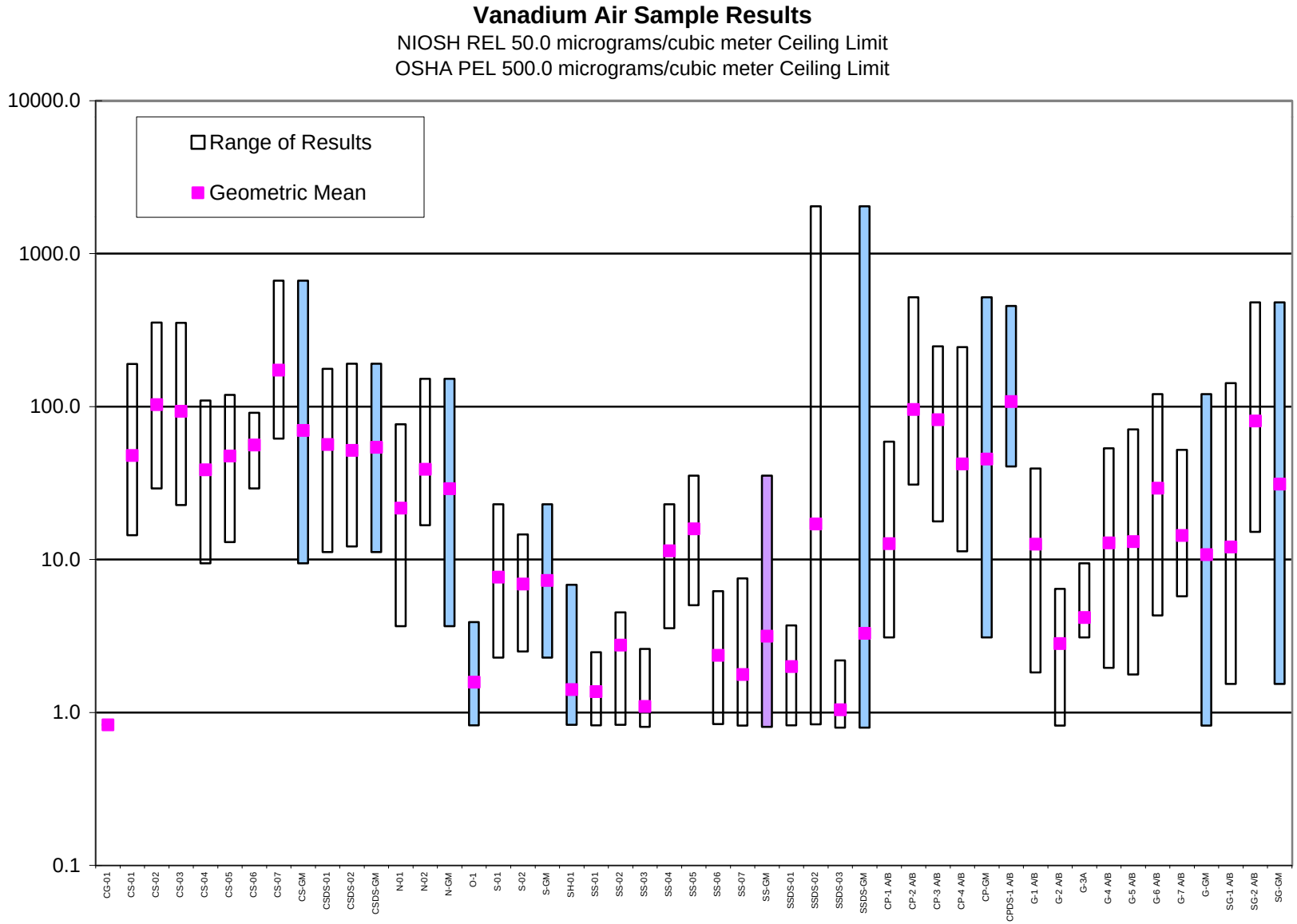
Vanadium Air Sample Results
NIOSH REL 50.0 micrograms/cubic meter Ceiling Limit
OSHA PEL 500.0 micrograms/cubic meter Ceiling Limit
Range of Results
Geometric Mean
10000.0
1000.0
100.0
10.0
1.0
0.1
CG-01
CS-01
CS-02
CS-03
CS-04
CS-05
CS-06
CS-07
CS-GM
CSDS-01
CSDS-02
CSDS-GM
N-01
N-02
N-GM
O-1
S-01
S-02
S-GM
SH-01
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-GM
SSDS-01
SSDS-02
SSDS-03
SSDS-GM
CP-1 A/B
CP-2 A/B
CP-3 A/B
CP-4 A/B
CP-GM
CPDS-1 A/B
G-1 A/B
G-2 A/B
G-3A
G-4 A/B
G-5 A/B
G-6 A/B
G-7 A/B
G-GM
SG-1 A/B
SG-2 A/B
SG-GM

Figure 14
Paired Abrasives - Effect of Treating Abrasives With Dust Suppressants Charts
Note: All units in µg/m^3, except respirable quartz which is in mg/m^3

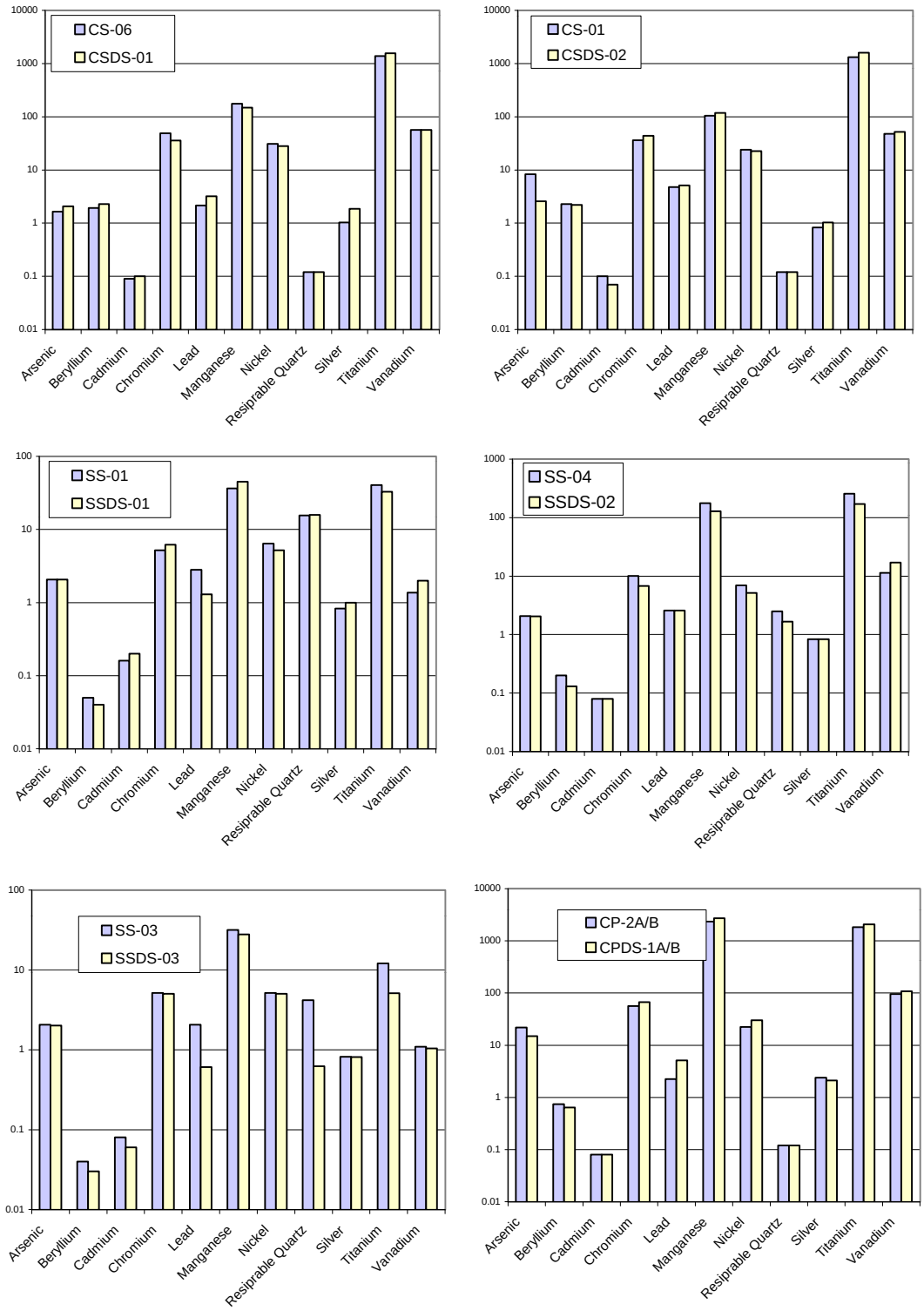

Figure 15
Arsenic Bulk Sample Results

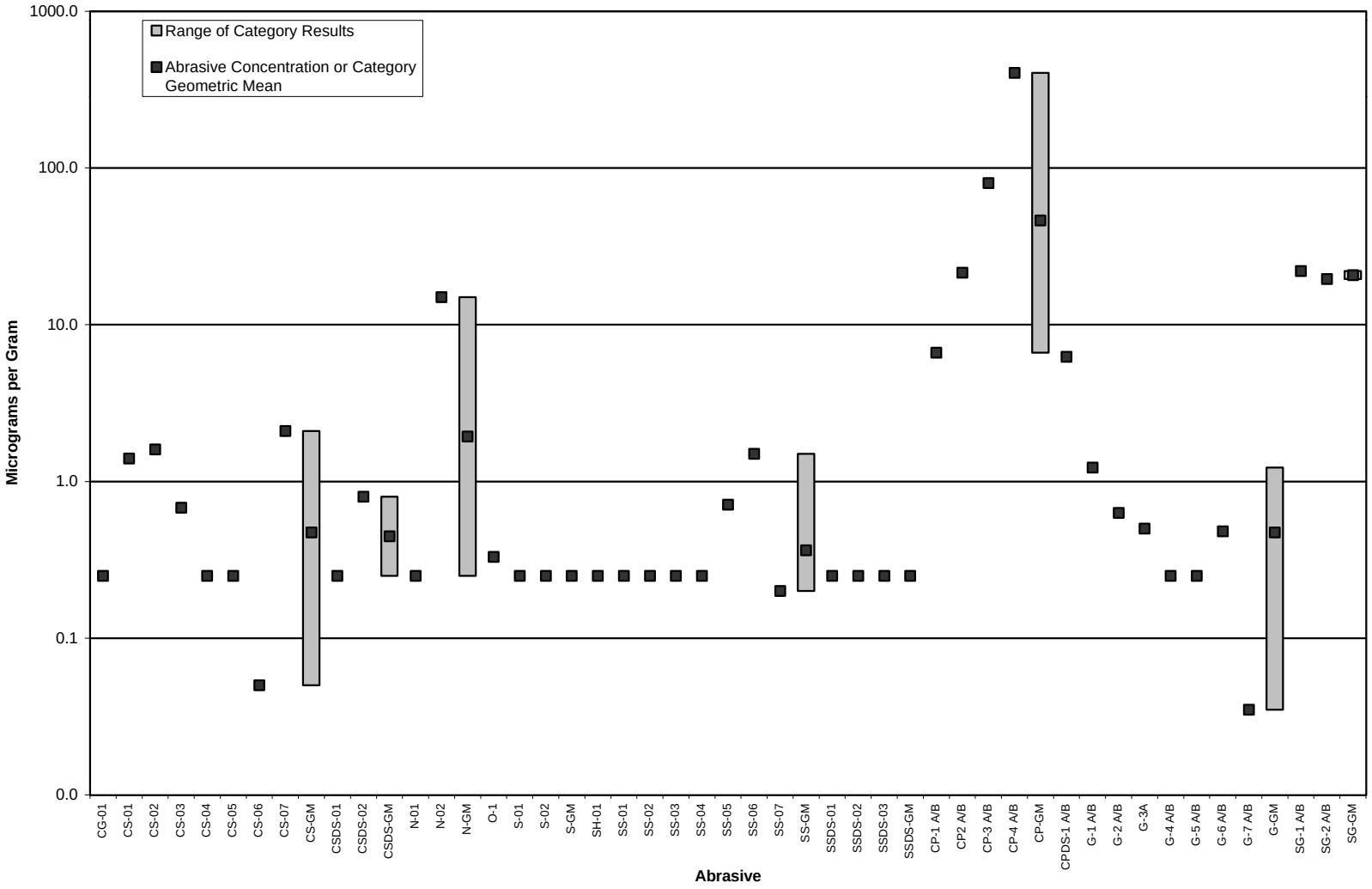

Figure 16
Beryllium Bulk Sample Results

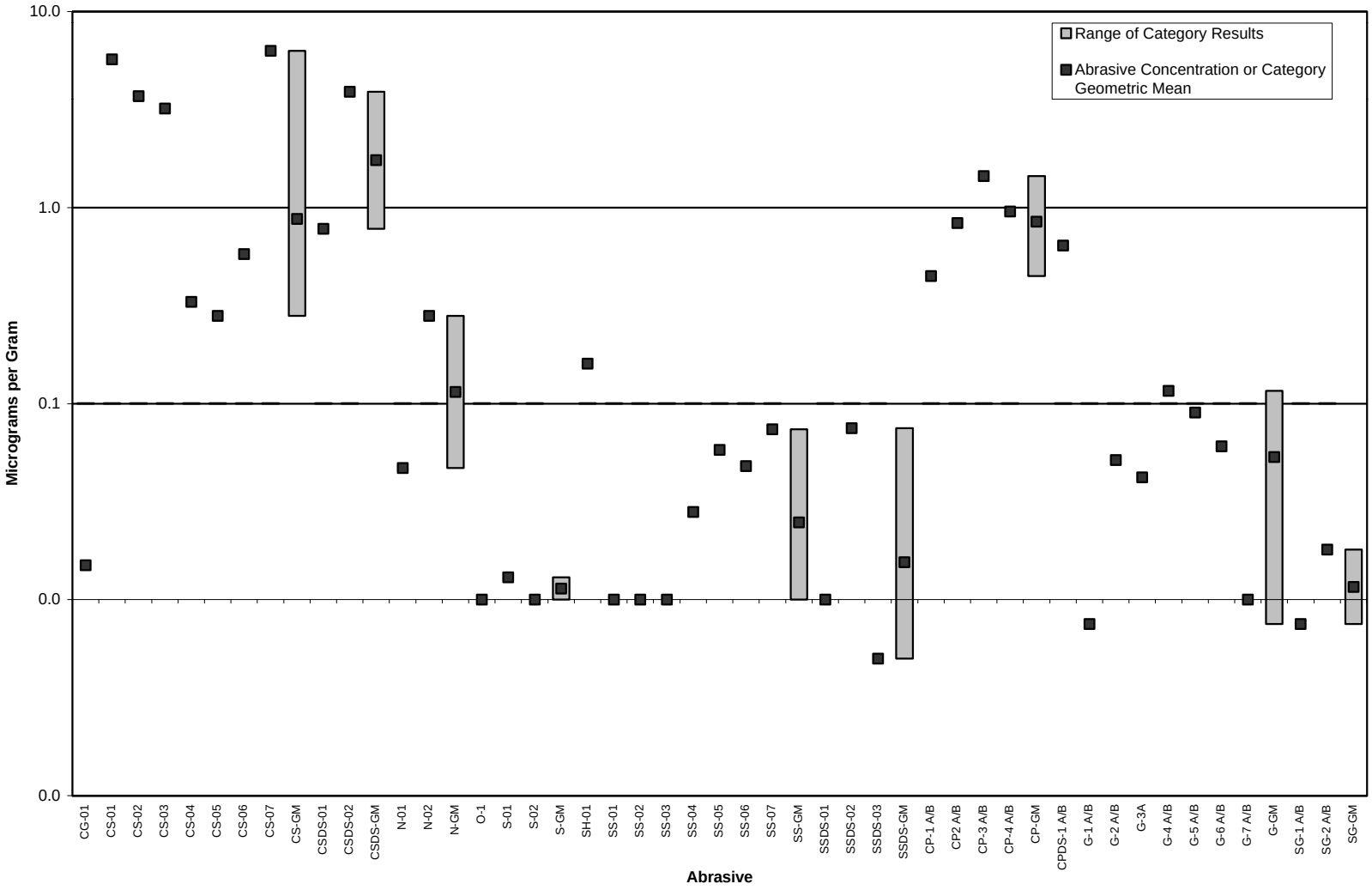

Figure 17
Cadmium Bulk Sample Results

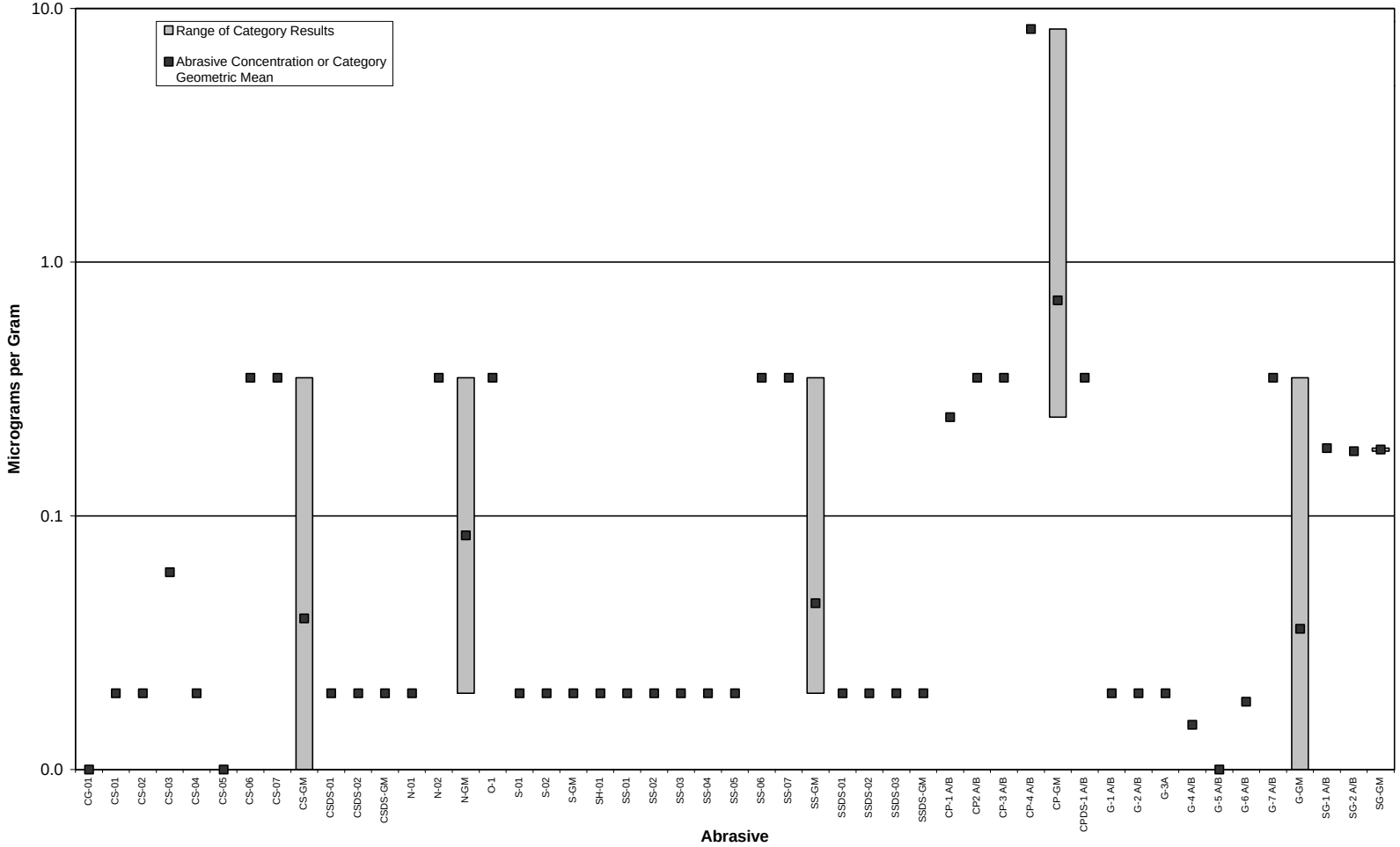

Figure 18
Chromium Bulk Sample Results

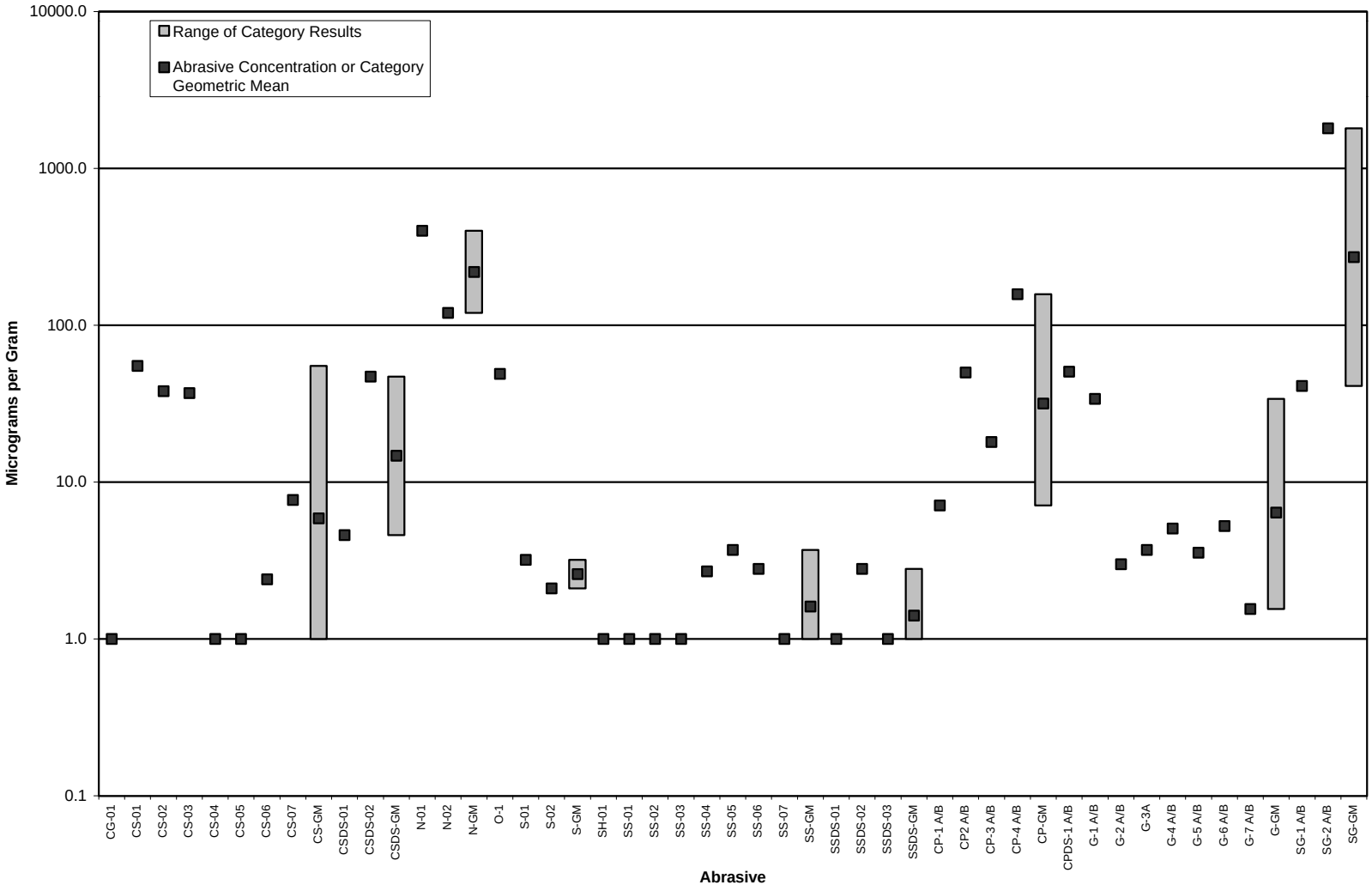

Figure 19
Lead Bulk Sample Results

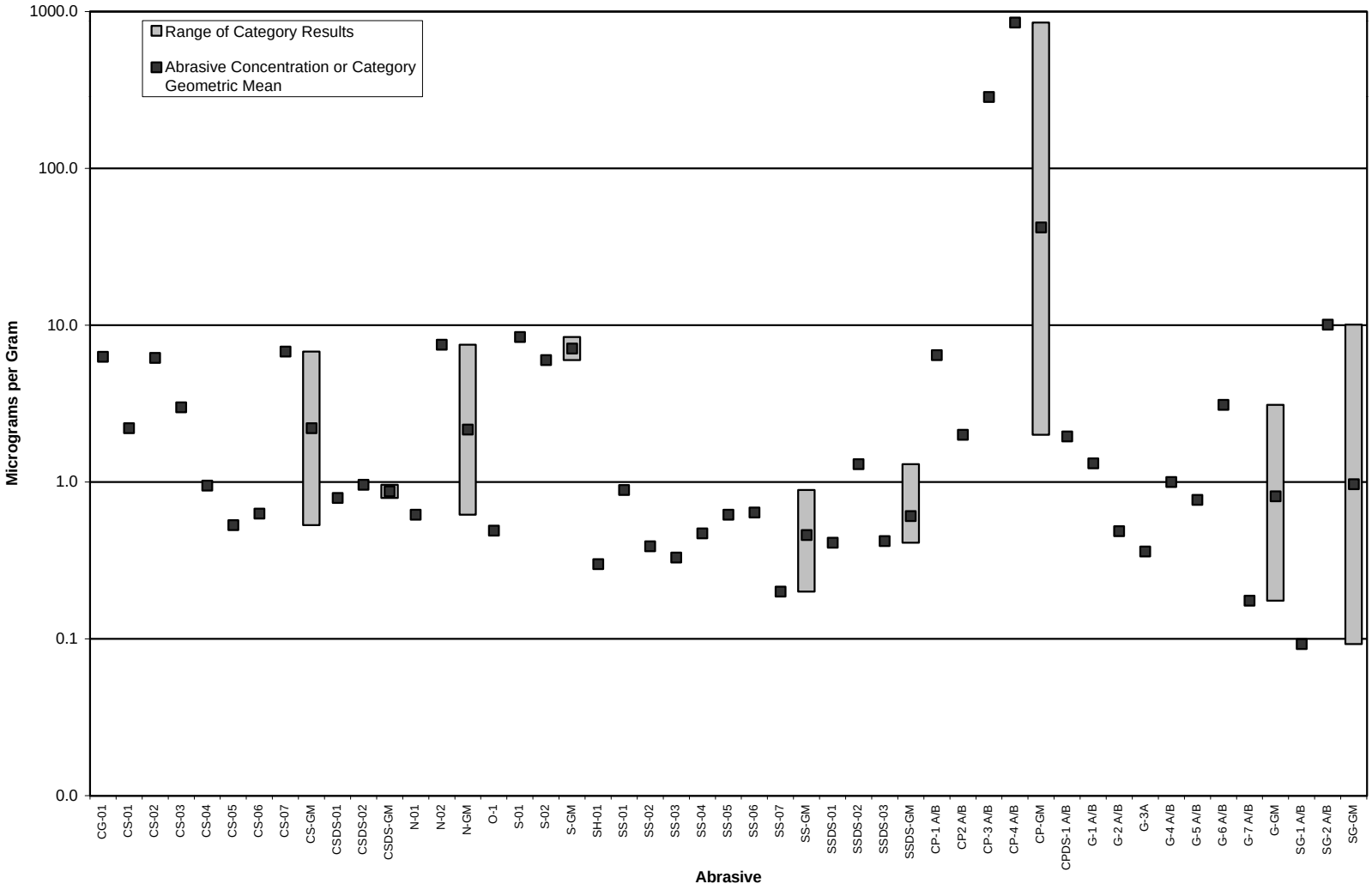

Figure 20
Manganese Bulk Sample Results

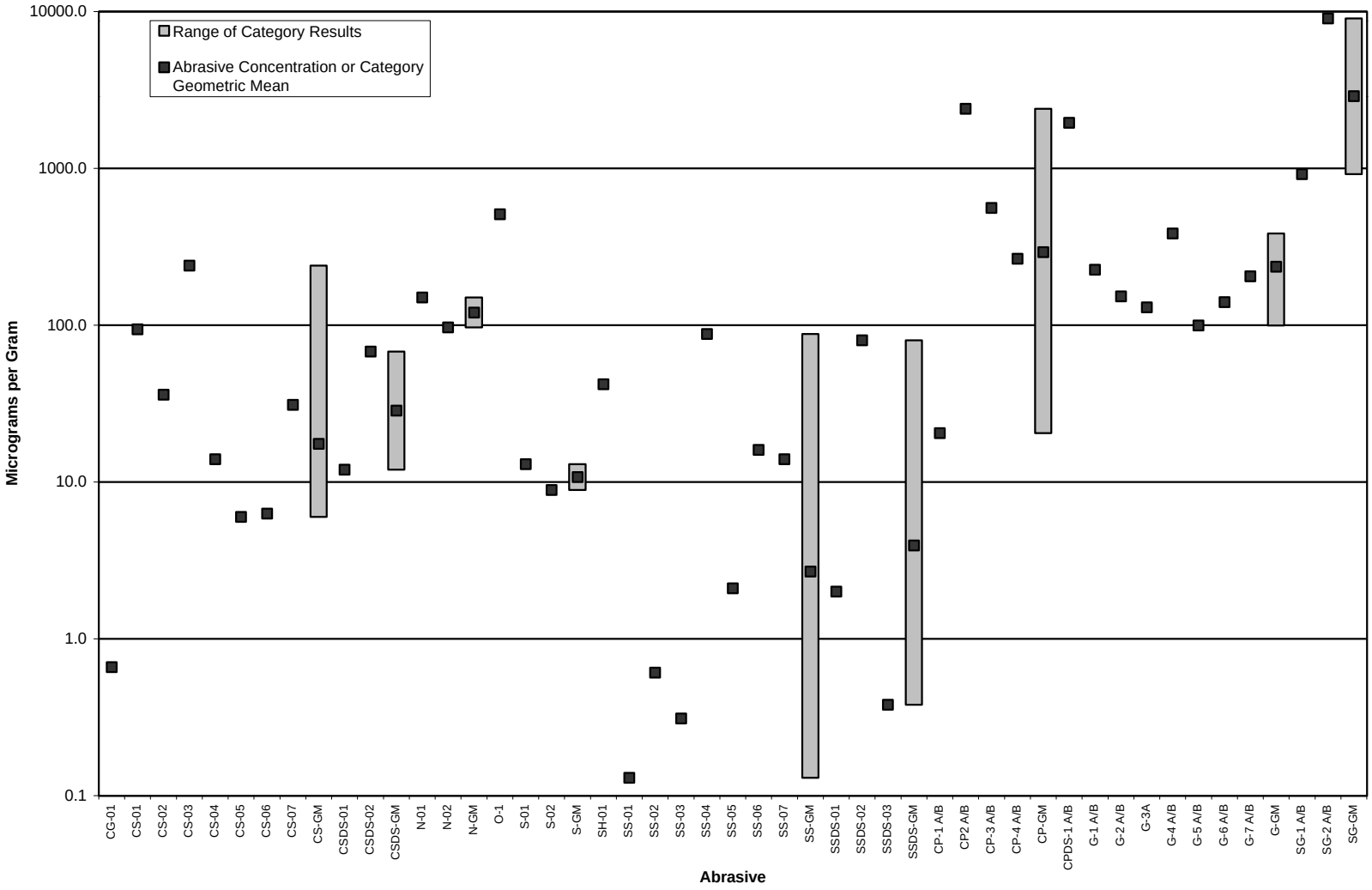

Figure 21
Nickel Bulk Sample Results

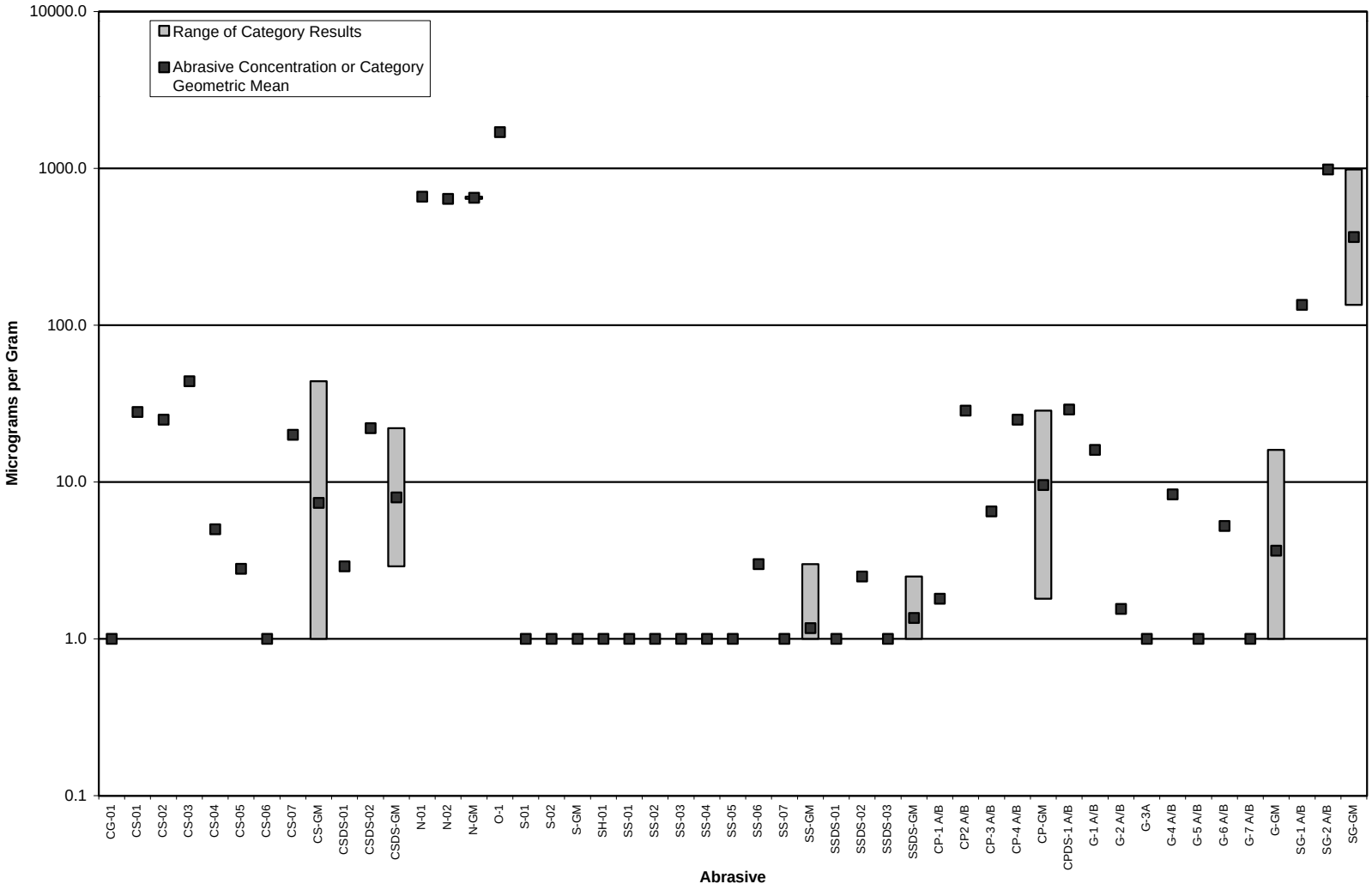

Figure 22
Quartz Bulk Sample Results

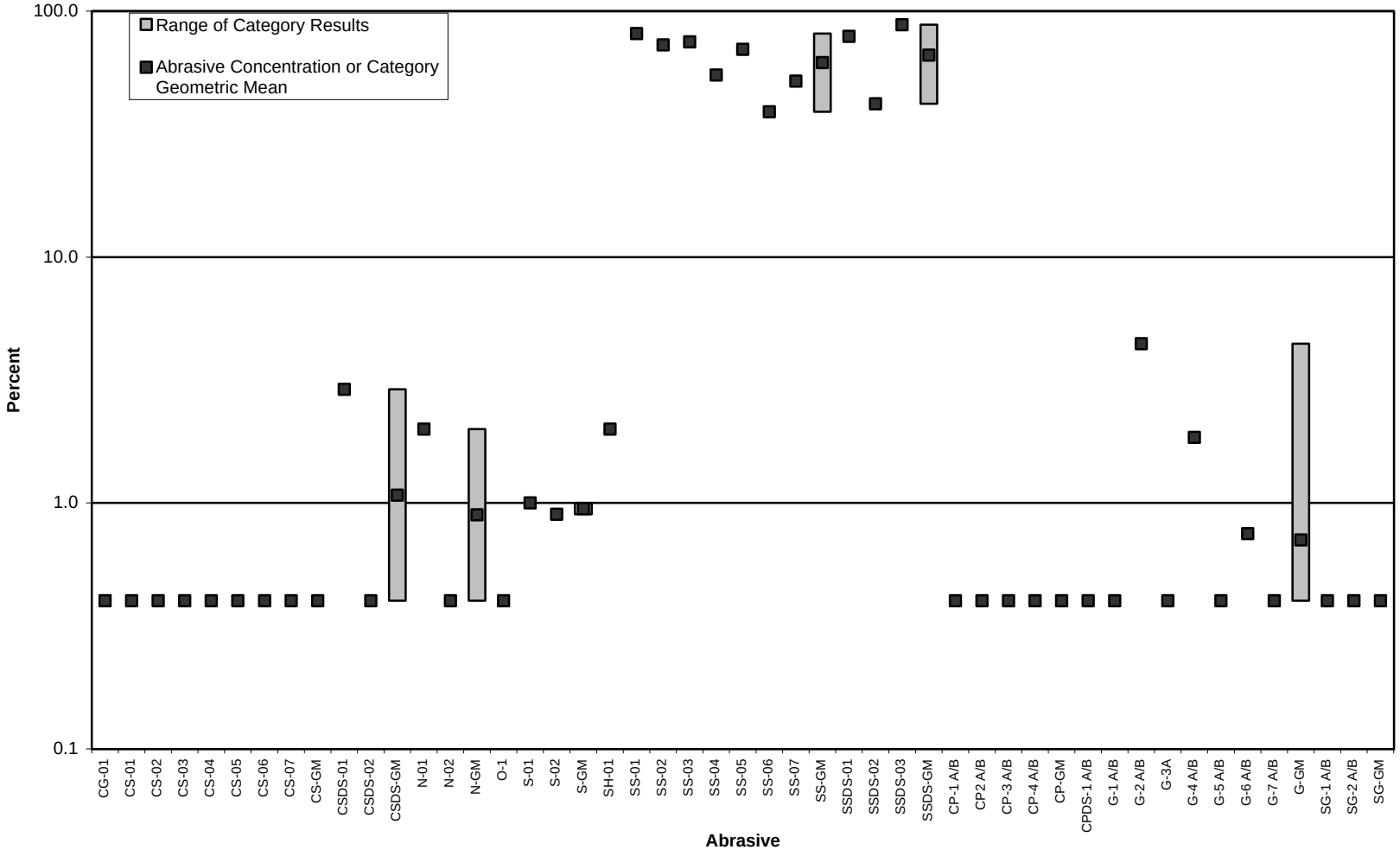

Figure 23
Silver Bulk Sample Results

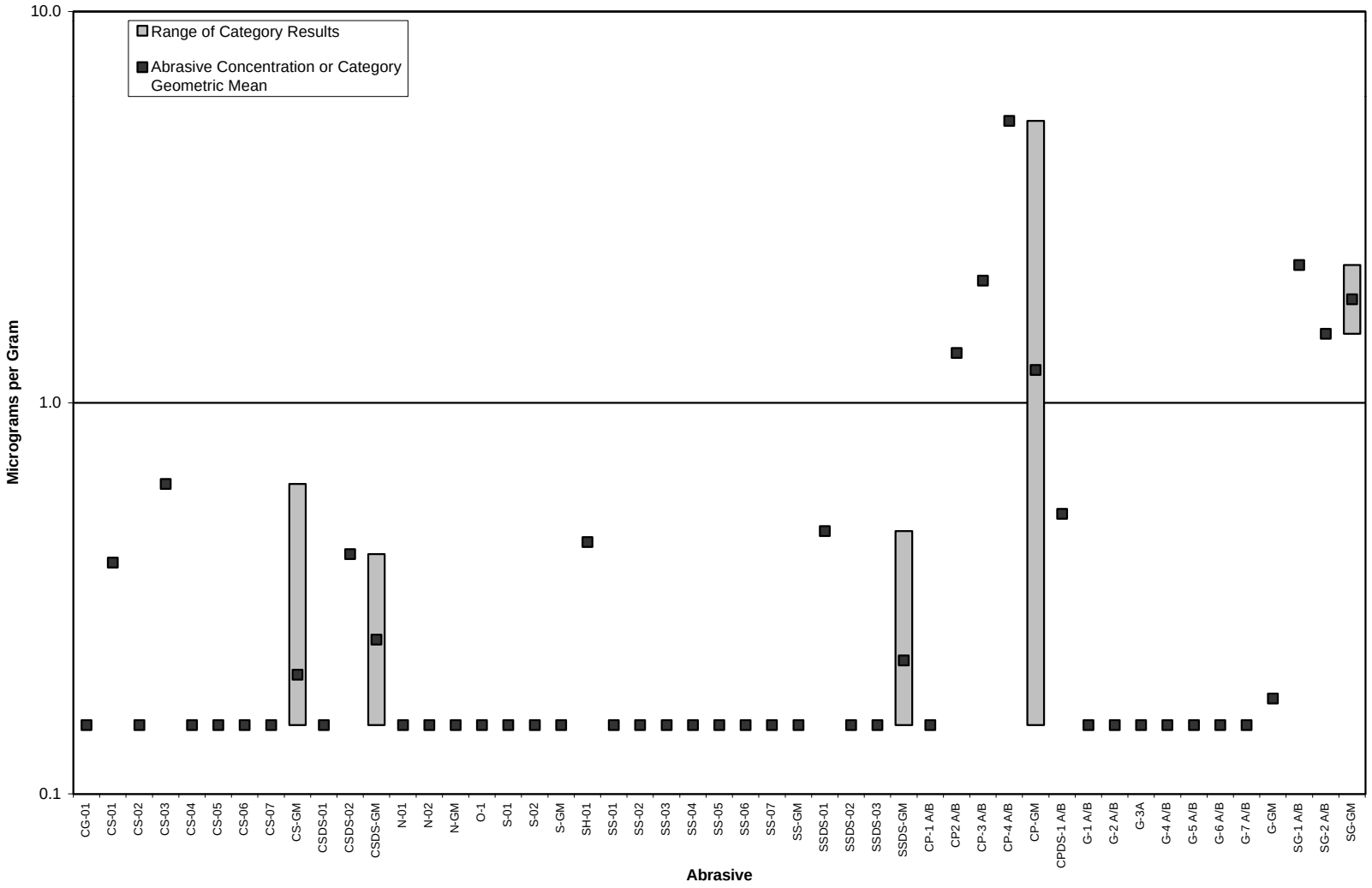

Figure 24
Titanium Bulk Sample Results

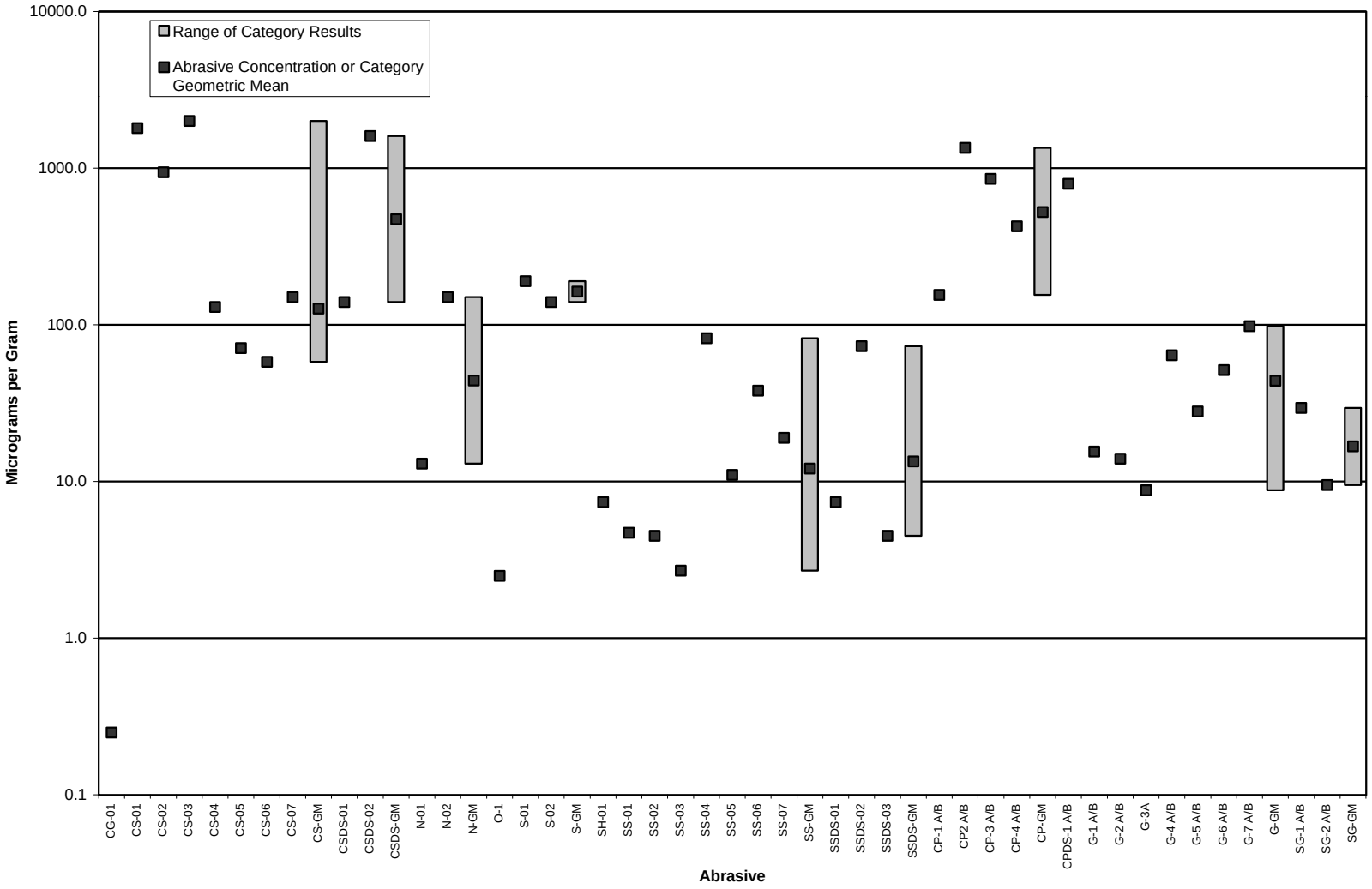
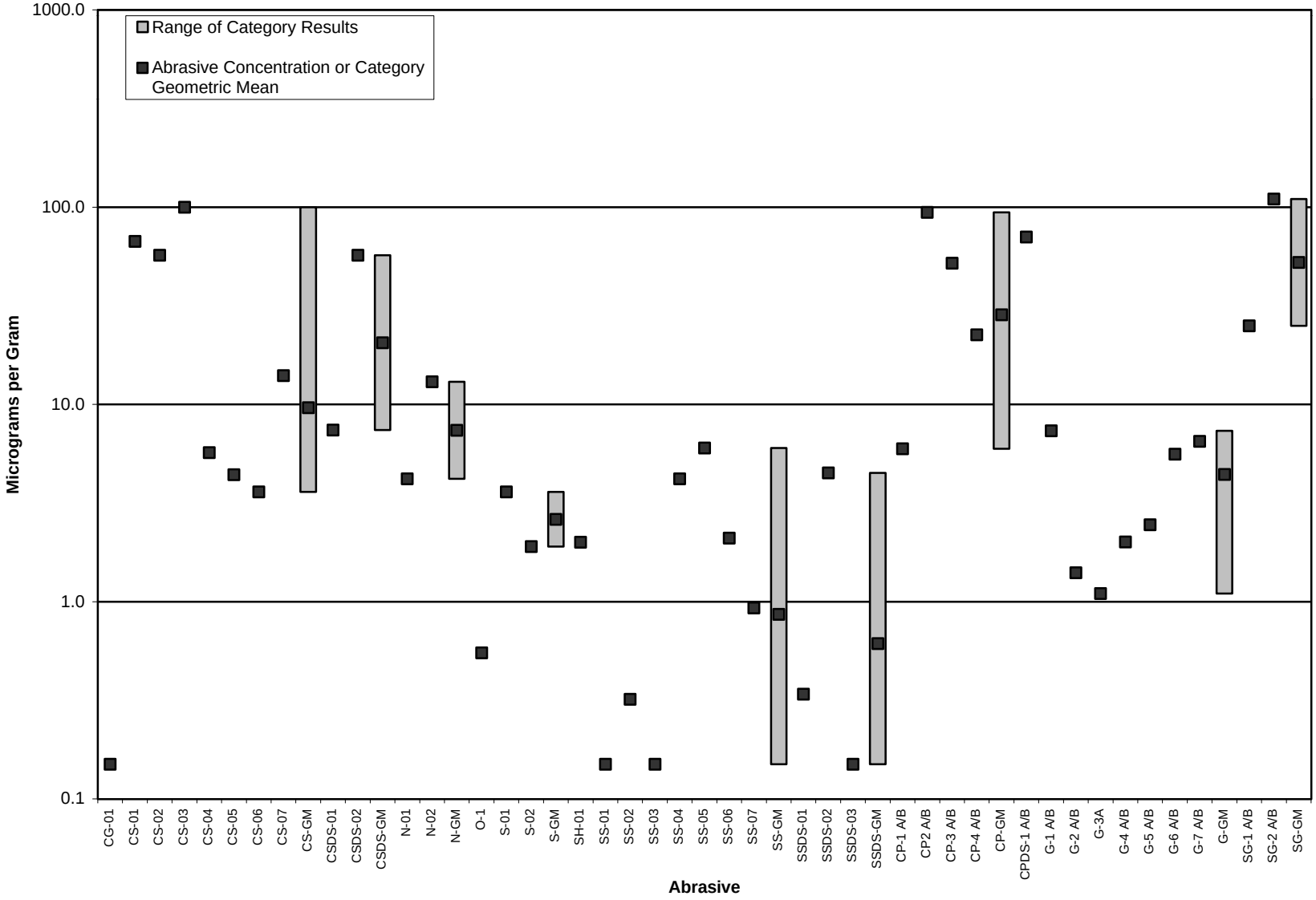
Figure 25
Vanadium Bulk Sample Results