

Cyprus Anvil Mining Corporation

From: **J. Glenn Simpson** Date

To *Lucy*

*File
Shannon Co*

Garrett

f_i	$f_i m_i$	M_i	$(m_i - \mu)^2$	$f_i (m_i - \mu)^2$	$\Sigma f_i =$
157	171.915	1.095	4.22	663.02	
0	0	1.305	—	0	
0	0	1.555	—	0	
624	1154.4	1.85	1.69	1054.56	
0	0	2.205	—	0	
0	0	2.625	—	0	
538	1681.25	3.125	0.0006	0.34	
215	800.875	3.725	0.33	71.08	
0	0	4.435	—	0	
105	554.4	5.28	4.54	476.38	
56	352.24	6.29	9.86	552.14	
53	397.235	7.495	18.90	1000.59	
3	26.79	8.93	33.41	100.23	
11	116.985	10.635	56.03	616.28	
8	106.32	12.665	90.54	724.28	
3	45.255	15.085	142.44	427.33	
7	125.755	17.965	219.48	1536.40	
2	42.79	21.395	332.88	665.76	
1	25.485	25.485	498.85	498.85	
1	30.355	30.355	740.11	740.11	
1784	5627.05			9127.35	

$$\text{Mean} = \frac{5627.05}{1784}$$

$$= \boxed{3.15}$$

$$S = \sqrt{\frac{9127.35}{1784}}$$

$$= \boxed{2.26}$$

Silver

f_i	$f_i m_i$	M_i	$(M_i - \mu)^2$	$f_i (M_i - \mu)^2$	$\Sigma f_i = 1786$
41	13.325	0.325	.80	32.84	
33	12.705	0.385	.70	23.01	
0	0	.46	.58	0	
59	32.155	.545	.46	26.88	
96	61.44	.64	.34	32.79	
293	221.215	.755	.22	63.35	
171	153.045	.895	.11	18.06	
354	373.47	1.055	.03	9.64	
254	316.23	1.245	0.0006	0.16	
151	222.725	1.475	.07	9.82	
141	246.045	1.745	.28	38.86	
92	189.52	2.06	.71	64.92	
32	77.92	2.435	1.48	47.24	
25	72	2.88	2.76	68.84	
15	51	3.40	4.75	71.25	
14	56.21	4.015	7.81	109.34	
9	42.75	4.75	12.46	112.15	
3	16.845	5.615	19.32	57.95	
1	6.275	6.275	25.55	25.55	
2	15.69	7.845	43.89	87.78	
1786	2180.565			900.02	

$$\text{Mean} = \frac{2180.565}{1786}$$

$$= \boxed{1.22}$$

$$S = \sqrt{\frac{900.02}{1786}}$$

$$= \boxed{0.71}$$

ZINC

f_i	$f_i m_i$	M_i	$(M_i - \mu)^2$	$f_i (M_i - \mu)^2$	$\Sigma f_i = 1786$
1	9.22	9.22	82128.10	82128.10	
6	72.06	12.01	80538.76	483220.56	
8	125.2	15.65 12.01	78484.02	627872.16	
9	183.6	20.4 15.65	75845.16	682606.44	
8	212.72	26.59 20.4	72474.02	579792.16	
17	589.22	34.66 26.59	68194.10	1159299.7	
45	2032.65	45.17 34.66	62815.40	2826693	
78	4591.86	58.87 45.17	56135.83	4378594.7	
185	4195.05	76.73 58.87	47991.67	8878459	
382	38200	105 76.73	38337.64	14644978	
444	57870.96	130.34 105	27377.01	12155392	
312	53002.58	169.88 130.34	75855.85	4947025.2	
172	38082.52	221.41	5533.87	951825.64	
59	17026.22	289.58	51.98	3066.82	
31	11660.03	376.13	6452.91	266040.21	
16	8876.64	554.79	67075.82	1073213.1	
4	2555.8	638.95	11751.92	471007.68	
6	4996.68	832.78	288347.52	1730085.1	
1	1085.41	1085.41	623483.95	623483.95	
2	282936	1414.68	1251892.45	2503785	
$\Sigma = 1786$	$\Sigma = 528304.4$			59245569	

$$\text{Mean} = \frac{528304.4}{1786}$$

$$= \boxed{295.80}$$

$$S = \sqrt{\frac{59245569}{1786}}$$

$$= \boxed{182.13}$$

LEAD

f_i	$f_i M_i$	M_i	$(M_i - \mu)^2$	$f_i (M_i - \mu)^2$	$\sum f_i = 1836$
1	2.29	2.29	365.57	365.57	
0	0	2.96	340.40	0	
1	3.83	3.83	458.39	458.39	
0	0	4.94	271.26	0	
5	31.9	6.38	225.90	1129.5	
7	57.68	8.24	173.45	1214.15	
53	563.92	10.64	116.0	6148	
320	4396.8	13.74	58.83	18925.6	
676	11979	17.75	13.40	9058.4	
370	8484.1	22.93	2.31	854.7	
222	6575.64	29.62	67.40	14962.8	
70	2677.5	38.25	283.59	19851.3	
25	1235.25	49.41	78.4	19600	
17	1086.13 1767.89	63.89	1804.55	30677.35	
9	738.18	82.02	3673.57	33062.13	
4	425.84	106.46	7233.50	28934	
4	550.04	137.51	13479.21	53916.84	
1	177.6	177.6	24395.30	24395.30	
0	0	229.40	43259.84	0	
1	296.10	296.30	75564.51	75564.51	
$\sum f_i = 1836$	$\sum f_i M_i = 39302$			$\sum f_i (M_i - \mu)^2 = 215872.78$	

$$\text{Mean} = \frac{39302}{1836}$$

$$= \boxed{21.41}$$

$$S = \sqrt{\frac{215872.78}{1836}}$$

$$= \boxed{10.84}$$

COPPER

f_i	$f_i \cdot m_i$	m_i	$(m_i - \mu)^2$	$f_i (m_i - \mu)^2$	$\sum f_i = 1786$
2	230	1.15	513.5	1027	
0	0	1.50	497.7	0	
3	500 1539	1.95	477.9	1433.7	
0	0	2.53	452.8	0	
12	312	3.28	421.5	5058	
26	104	4.00	392.4	10202.4	
87	487	5.54	332.0	28889	
126	907.2	7.20	275.9	34763.4	
140	1310.4	9.36	208.8	29232	
209	2543.53	12.17	135.5	28319.5	
273	4316.13	15.81	64	17472	
257	5281.35	20.55	10.6	2724.2	
215	5740.5	26.70	8.4	1806	
178	6176.6	39.70	118.6	21110.8	
117	5276.7	45.10	453.3	53036.1	
73	4278.53	58.61	1211.0	88403	
41	3234.4	76.18	2742.6	112446.6	
21	2079	99.00	5653.5	118723.5	
4	514.64	128.66	10993.5	43974	
2	334.42	167.21	20563.6	41127.2	
$\sum = 1786$	42516.41			639743.4	

$$\text{Mean} = \frac{42516.41}{1786}$$

$$= 23.81$$

$$S = \sqrt{\frac{639743.4}{1786}}$$

$$= 18.93$$