COMPARISON OF 1970 AND 1973 ORE TONNAGE AND GRADE ESTIMATES (zone I)

Below is a table comparing (by bench) the 1970 and 1973 reserve tonnage and grade estimates. Note that the 1970 estimate did not break the grade down into Pb and Zn. The comparison has thus been made on the same terms.

TABLE 1: Comparing 1970 & 1973 Ore Tonnage and Grade Estimates

	1970 Estimate		1973 Estimate	
Bench	Tonnage	Grade	Tonnage	Grade
3910	3,139,012	11.65	3,243,831	11.6
3870	3,473,477	11.20	3,640,275	10.3
3830	4,122,308	10.30	3,511,661	10.0
3790	3,575,901	7.81	3,188,473	9.8
3750	3,265,451	9.27	3,057,035	9.3
3710	3,854,840	9.47	3,442,167	9.8
3670	3,129,411	10.82	2,888,849	9.3
3630	2,426,080	9.28	2,647,171	8.8
3590	1,555,955	7.67	2,130,362	8.6
Total	28,542,435	9.46	27,749,824	9.8

Benches 3830-3670 inclusive have been reduced in tonnage in the new estimate, the remaining three have been increased. The grade has remained essentially unchanged for benches 3910 and 3750. The remaining benches have been changed in varying ways. Overall, the total tonnage has been reduced by 769,055 tons, while the 1970 estimate originally contained 871,902 tons averaging 4.01% Pb + Zn. The original aim of this reappraisal was both to ensure an objective approach and attempt to eliminate this < 5% material.

These tonnage and grade changes can be attributed to the following causes:

Tonnage Changes:

(1) New data acquired through 1972 drilling

(2) Editing cross-sections with respect to 5' intersections < 5% which were incorporated into the 1970 sections without any apparent systematic approach.

(3) Reinterpretation of cross-sections based on (1) and (2)

Grade Changes:

(1) New data acquired through 1972 drilling.

(2) Adoption of 40' averages rather than the optimistic approach of averaging only the ore interval intersected within any bench interval. In only one case was it considered necessary to do this in the present estimate. The 1970 estimate frequently employed 10' to 35' values somewhat arbitrarily.

(3) Reweighting of areas of influence using holes surrounding the ore as well as those within. The 1970 estimate employed only those within, frequently resulting in projection of grade to areas very remote from the source of the data yet quite close or almost adjacent to holes intersecting ore in the next bench which were used to project the ½ bench line.

(4) Discarding ore which was projected as being < 5% for a 40' intersection in the 1970 estimate and is still < 5% by the new estimate. This occurred in only a few cases.

The table below categorizes these tonnage and grade changes per bench. It must be understood, however, that only cases where the category has made a significant change are shown. All categories apply in many cases, but the table only outlines the highlights. Also in the table is a comparison of the number of areas of influence employed for the two estimates. This attempts to demonstrate the amount of significant data added to the earlier approach. The number of 1972 holes (new data) used is shown also.

TABLE 2: Showing Sources of Change in Estimates Keyed to Seven Causes Listed Above

Bench	Areas of Influence 1970	Areas of Influence 1973	1972 DDH's Used	Cause of Change: Tonnage (1)	(2)	(3)	Grade (1)	(2)	(3)	(4)
3910	27	39	4	x		x				
3870	26	35	4	x		x	x		x	
3830	28	36	4	x	x	x			x	
3790	22	35	5	x	x	x	x		x	x
3750	14	29	5		x	x				
3710	12	28	4	x	x	x				x
3670	10	17	3	x	x	x		x		
3630	6	15	1	x	x	x			x	
3590	4	16	2		x	x			x	