

FINAL REPORT  
TURNER ALBRIGHT PROJECT (0214)

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## EXECUTIVE SUMMARY

The Turner Albright program objective was to complete 80% of the Ore Definition phase of Exploration Evaluation I by July 31, 1982 at a cost of \$500,000. This objective was expanded and 100% of the Ore Definition phase (3 E-I) was completed by the end of August at a cost of approximately \$667,000. This expenditure resulted in the outlining of the dimensions, geometry, grade, and tonnage of the Turner Albright deposit. Noranda Exploration, Inc.'s preliminary economic evaluation (3 E-I, 9/30/82) indicate that the deposit has a marginal rate of return. The revised objective based on the 3 E-I report was to gain a joint-venture partner in order to meet a \$1,250,000 payment due on or before December 31, 1982. This objective was unsuccessful and the option was terminated on December 28, 1982. Expenses through December 31, 1982, including the front end payment and related precontract expenses totalled approximately \$1,017,000.

The Turner Albright massive sulfide deposit occurs within the lower basaltic pillow lavas of the late Jurassic Josephine Ophiolite complex. The sulfides represent an ophiolite Cyprus-like occurrence in the Klamath Mountain province of southwestern Oregon.

The deposit consists of two principal exhalative horizons: the upper horizon, hosting the upper high-grade pods (UHP) and the main upper zone (MUZ), and the lower horizon, hosting the main lower zone (MLZ). The sulfide zones generally consist of massive sulfides (50-100%) at the top of the pods underlain by semi-massive sulfides (20-50%) and non-massive sulfides (5-20%). Sulfide minerals include pyrite, marcasite, chalcopyrite, and sphalerite. Microscopic native gold occurs in the pyrite, chalcopyrite, and sphalerite.



The massive sulfides occur as thick (10 to 40+ m), round to elongate pods. The upper surface of the massive sulfides is usually somewhat flat, while the lower contact between massive and semi-massive sulfides is typically concave downward. The massive sulfide pods vary in length from 100 to 150 meters and in width from 50 to 100 meters. The upper and lower exhalative horizons are separated by 20 to 50 meters of basalt and gabbro flows.

Geologic reserves based on Noranda Explorations's current understanding of the deposit are considered conservative. The UHP and MUZ (pittable) contain 1,607,000 tons of .132 opt Au, .301 opt Ag, 1.270 % Cu, 2.382 % Zn, and .061% Co; the MLZ (underground) contains 1,710,000 tons of .098 opt Au, .576 opt Ag, 1.643% Cu, 4.233% Zn, and .035% Co. The total tonnage and average undiluted grade for all three zones are 3,317,000 tons of .114 opt Au, .443 opt Ag, 1.462% Cu, 3.325% Zn, and .055% Co.

The exploration potential in the immediate area of the Turner Albright deposit for additional reserves is good. The UHP have not been adequately tested downdip or updip toward the gossan. In the area of the UHP there are sections that have not been drilled which could contain new high-grade pods. The MUZ and MLZ remain open to the southwest, and portions of the updip and downdip extensions of these two zones remain open.

Based on geological, geochemical, and geophysical data, it is recommended that Noranda continue work at Turner Albright. The principal elements of a continued program should include:

- 1) Continued exploratory drilling, with emphasis on the (pittable) main upper zone and upper high-grade pods. One or two holes should be drilled within the main area of

mineralization to obtain representative metallurgical samples.

- 2) Complete delineation of ore (metallurgical) types via polished section studies and identification of geochemical signatures.
- 3) Extensive and thorough metallurgical testing. This work will be strongly enhanced by the completion of the second recommendation.

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## ACKNOWLEDGEMENTS

A great deal of time and energy was spent on the Turner Albright program by the employees of Noranda Exploration, Inc. and Ruen Core Drilling, Inc. in order to accurately evaluate the property. Hart Baitis provided the cornerstone in acquiring the property, initiating the project, and pursuing a joint-venture partnership. Geoff Snow's continued efforts and enthusiasm were both needed and appreciated. The Denver staff, including John Coyne and Pete Young in charge of geophysics and geochemistry, and Roger Baer and Bill Cobb with the economic evaluations, did a fine job providing useful and needed information and assistance as well as dialoging with the project geologist. Noranda Mining, Inc. (Gary Simmons) and Noranda Mines, Ltd. (Dave Carson) provided valuable metallurgical and mineralogic data. I would especially like to thank Jan Haney and Mike Strickler for their good geologic work, and Steve (Wiz) Krisa, Jim Divelbiss, Tom Alford and Sharon Anson for their technical and field assistance. Byron and Arlan Ruen operated the drills as capable and conscientious foreman. I would also like to thank John Alston and Lloyd Frizzell for their cooperation.

## INTRODUCTION

### Program Objective

The Turner Albright program objective was to complete 80% of the Ore Definition phase of Exploration Evaluation I by July 31, 1982 at a cost of \$500,000. This objective was expanded and 100% of the Ore Definition phase (3 E-I) was completed by the end of August at a cost of approximately \$667,000. This expenditure resulted in the outlining of the dimensions, geometry, grade, and tonnage of the Turner Albright deposit. These data, in conjunction with engineering and economic constraints, aided in formulation of a preliminary economic evaluation of the deposit (see Baitis, et al, 1982).

The preliminary economic evaluation indicated that, if mined, the Turner Albright deposit would produce a marginal ROR. The post 3 E-I objective through December 31, 1982, based on the 3 E-I report was to gain a joint-venture partner to share the risk on any future operations at the property. Approximately 20 companies were contacted during this unsuccessful effort. Noranda's option on the property was terminated on December 28, 1982.

### Location and Land Status

The Turner Albright deposit is located approximately 40 miles southwest of Grants Pass, Oregon (Figure 1). Present access to the property is via approximately eight miles of good gravel road from paved Highway 199. Sixty acres (3 claims) of patented ground, 265 acres of fee land, and 315 unpatented claims encompassing 6,300 acres are included in the land package (Figure 2). An additional 24 claims were added to the Turbo block to cover several small gossan shows and six old adits which were located during the 1982 reconnaissance

program (see Moore, 1982).

### Terms

Noranda Exploration, Inc. signed an agreement with American Chromium Limited (Alberta Stock Exchange) for the Turner Albright property during January, 1982. Pertinent highlights of the terms of the agreement are as follows:

- 1) Noranda would pay \$250,000 upon execution of the agreement.
- 2) Noranda agrees to at least a \$500,000 work commitment on the property during 1982.
- 3) On or before December 31, 1982, Noranda has the option to pay American Chromium \$1,250,000 and receive a suitable deed assigning a 100% undivided interest in and to the claims.
- 4) American Chromium will reserve a 10% net profits interest in the property.
- 5) American Chromium may participate in the development agreement to a maximum of 40% undivided interest.
- 6) Noranda is obligated to meet option payments to Rough and Ready Timber Company that are scheduled as follows:
  - a) \$ 50,000 on or before 7/2/82
  - b) \$ 75,000 on or before 7/2/83
  - c) \$100,000 on or before 7/2/84
  - d) \$200,000 on or before 7/2/85

Following the initial \$250,000 payment, Noranda Exploration, Inc. began drilling on the property during February, 1982, and by July 31 had completed 8,407.5 feet in 19 holes. A concurrent program of reevaluation of prior data, additional mapping, and geochemical and metallurgical studies was carried out during this period. During 1982 the required work commitment was met, and the 7/2/82 payment to Rough and Ready was made.



## Methodology

Examination of the Turner Albright property primarily involved an extensive core-drilling program. All drilling and hole surveying of Noranda holes was done by Ruen Core Drilling, Inc. (Clark Fork, ID). Preexisting unsurveyed holes drilled by Baretta were cleaned and surveyed by Heli-Core Diamond Drilling (Cave Junction, OR). All Noranda core was logged in detail and the Baretta sulfide intercepts and other important lithologies were reexamined and summarized. Detailed surface geologic mapping was done on a local (1" = 100') and regional (1" = 500') scale in order to delineate lithologies, structures, and to facilitate mine planning. Mapping within the adits on the property was also done. A quarter corner (el. 2879 feet) along the west side of the Governor claim marks the 20,000 N, 20,000 E survey point for the grid system used on the property.

Geochemical studies included validation and confirmation of Baretta assay data, soil and gossan geochemistry (Young, 1982), and assaying of the core. Standard samples were included with core samples as a means of checking the accuracy of the fire assaying. Noranda's Lakeshore laboratory in Casa Grande, AZ, was used for all assay work. Geophysical Mise-a-la-masse and down-hole EM surveys were employed in an attempt to locate ore extensions (Coyne, 1982). Literature review and interpretive work on the data were ongoing aspects of the project.

The project required 32 man months of geology (Roger Kuhns, Jan Haney and Mike Strickler), 20 man months of technician and field assistance (Steve Krisa, Jim Divelbiss, Tom Alford), and 4 months secretarial work (Sharon Anson). Eight drillers were employed by Ruen



Core Drilling to maintain double shifts on both drill rigs.

### History

The Turner Albright property was discovered around 1900 by Mr. Turner and Mr. Albright. The initial partnership, which had led to the discovery, soon dissolved and the two men fell into an unresolvable argument. Apparently Mr. Turner worked on one side of the hill while Mr. Albright labored on the other. The two men seldom, if ever spoke to one another during their life long dispute. No sign of their work is evident on the property today. Beginning in 1937 a small mining outfit from Redding, California, worked the gossans on the north end of the property (known as the gold pits) and drove a number of adits. No records were kept of these operations which persisted until 1940. In 1940 or 1941 the operation was closed by government legislation #208. L 208 required all gold mines shut down and the equipment confiscated for the war effort. The property was not explored again until after WW II.

Granby examined the property during 1957 and 1958. During this time one surface churn hole and several underground holes from one of the adits were drilled. Most of Granby's efforts were concentrated on opening an old 1939 adit on the north end of the property. Samples taken from the dump in front of the adit ran as high as 2% copper. Attempts to open the adit proved unsuccessful and funds were soon depleted. Granby dropped the Turner Albright at the end of 1958.

Lloyd Frizzell acquired a lease of the property in 1959, and examined it two more times over the next two decades. Frizzell's limited and sporadic drilling program (6 churn holes totalling 650+ feet) managed to intercept gossan and some shallow sulfide

# DRILL HOLES PRIOR TO BARETTA

<u>Hole</u>	<u>Bearing</u>	<u>Dip</u>	<u>N</u>	<u>E</u>	<u>Elev.</u>	<u>T.D.</u>
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## Granby

GDH 1	S25W	-50°	19,376.7	19,906.0	3012.5	300
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\*\*\*\*\*

## Frizzell

Churn 1	Vert	---	19,545.7	19,722.6	2995.4	unknown
Churn 2	Vert	---	19,538.0	19,855.3	2996.0	unknown
Churn 3	Vert	---	19,235.0	20,098.0	3022.8	45
Churn 4	Vert	---	unknown	unknown	unknown	50
FDH 1	S65W	-45°	19,305.8	20,208.5	2932.5	330.0
FDH 2	N80W	-45°	18,845.0	20,235.0	2948.0	200.0

\*\*\*\*\*

## American Selco

TA74 1	South	-45°	19,078.0	20,016.0	3067.1	289
TA74 2	S40W	-45°	18,965.0	20,259.0	2946.2	256
TA74 3	unknown	-68°	18,970.0	20,260.0	2946.2	243
TA74 4	S45W	-45°	18,822.8	20,580.0	2756.0	212.3
TA75 1	S45W	-45°	Extended TA74 4 to:			390.1
TA75 2	S30W	-70°	18,822.8	20,580.0	2756.0	464.0
TA75 3	S30W	-55°	19,690.0	19,925.0	2977.0	228.6
TA75 4	S20W	-55°	19,535.2	20,288.6	2925.8	636.6
TA75 5	S30W	-80°	19,492.8	19,963.0	3009.0	277.8

\*\*\*\*\*

mineralization. Limited geophysical surveys were run over the property which suggested that there might be significant mineralization at depth. Frizzell was never able to gain enough financial backing to adequately test the property.

In 1974 the property was purchased by the Rough and Ready Timber Company (Cave Junction, OR), and an exploration lease was granted to American Selco that same year. American Selco drilled nine short core holes totalling 3,000 feet. The Selco program did not produce any significant (economic) sulfide intercepts due to shallow drilling and a lack of understanding of the geology. The property was dropped by Selco at the end of 1975. Lloyd Frizzell encouraged American Chromium, Ltd., to acquire the property in 1976. Extensive drilling was done by Baretta Mining, Inc., (partially owned by Am. Chromium within the Savanna Group; John M. Alston, President) during 1980 and 1981 (30 holes, 35,500 feet). This program resulted in discovery of the main upper and lower massive sulfide zones. Very little interpretive work was done during this time, which resulted in a limited understanding of the geology. By fall of 1981 Baretta came into financial difficulties and sought a joint-venture partner. During this time approximately 35 companies examined the property. Noranda Exploration, Inc. signed an option agreement for the property during January, 1982.

#### Expenditures

The final approved budget for the Turner Albright project was \$720,000. Estimated 1982 expenditures accountable to this project totalled \$742,000, indicating an approximate 3 percent overrun. Total

expenditures for the program, including the front end payment and related precontract expenses are approximately \$1,017,000. The 1982 expenses are as follows:

Geology (support and wages)	\$182,450 (est)
Geochemistry and sample prep.	\$ 53,975
Geophysics	\$ 27,002
Drilling	\$355,874
Land and property costs	\$ 55,122
Administration	\$ 31,280
Data processing	\$ 6,766
SEI, environmental and P.R.	\$ 20,529
Surface and road work	\$ 9,002
<hr/>	
subtotal	\$742,000
<hr/>	
Front end payment	\$250,000
Precontract expenses	\$ 25,000
<hr/>	
Grand total	\$1,017,000 (est)



## REGIONAL GEOLGY

The west coast of northern California, Oregon, and Washington are the products of accretionary tectonics (sedimentation, orogeny, and continental accretion) along the western continental margin. Brooks (1979) and Drake (1982) note that much of Oregon has been created by a series of island arcs and continental accretions since the Triassic (Figure 3). This growth has produced the Klamath Mountain province (Irwin, 1966; Harper, 1980, 1983) which is defined by a series of four northerly trending, arcuate litho-tectonic belts varying from Ordovician to Jurassic in age (Figure 4). These belts occur as east-dipping regional imbricate under-thrust sheets with the youngest being the most westward and stratigraphically lowest. These belts, beginning from the east, are the Eastern Klamath Belt (Ordovician-Jurassic), the Central Metamorphic Belt (Devonian age metamorphism), the Western Paleozoic Belt, the Triassic Belt, and finally the Western Jurassic Belt. The lithologies within these belts include slaty shale, siltstone, sandstone, limestone, epiclastic and volcanic units, intermediate to felsic intrusive rocks, and ophiolite sequences. It has been hypothesized that imbricate under thrusting was produced when the Farallon plate was rotated eastward and forced into the North American plate (Figure 5) (Drake, 1982).

In Oregon the Western Jurassic Belt is a sequence of northeast-trending, southeast-dipping sedimentary and ultramafic rocks. This sequence is in thrust fault contact with the Jurassic Dothan Formation to the west and the Applegate group (Triassic Belt) to the east (Figure 6). Sedimentary rocks within the Western Jurassic Belt represent an island arc environment and



include the Rogue and Galice Formations. The Rogue Formation is comprised of flows, breccias, pyroclastics, epiclastics (graywackes, conglomerates and lahars), gneisses and intermediate to ultramafic intrusive rocks (Garcia, 1979). The Galice Formation is comprised of thinly layered mudstones, coarse-grained epiclastics, and mafic to intermediate lavas and dikes (Baitis and Young, 1979). The Rogue and Galice Formations are time equivalents to and/or overlie the Josephine Ophiolite complex.

The Josephine Ophiolite represents a complete ophiolite suite within the Western Jurassic Belt, and has been dated at 157 m.y. (Harper and Saleeby, 1980). The ophiolite contains, in ascending order, peridotite (mantle sequence), gabbro (cumulate sequence), sheeted basalt dikes, and pillow lavas overlain by a thick flysch sequence (Galice Formation) (Figure 7). Massive sulfides, including the Turner Albright, occur within the lower pillow lava sequence. Sulfide occurrences found in the ophiolite, other than the Turner Albright, are reported by Moore (1982).

The ophiolite sequence has undergone at least two main stages of deformation in addition to thrusting (D1 = flattening; D2 = folding) (Harper, 1980). The rocks have been subjected to prehnite - pumpellyite to lower greenschist grade metamorphism related to the Nevadan orogeny (150 m.y.). Post Nevadan deformation was associated with thrusting of the Josephine Ophiolite over the Franciscan complex with the main folding episodes probably occurring during early Cretaceous times. Some serpentinization of the ultramafics and spilitic alteration of the mafic flows occurred within the rifting environment.

## Generalized Ophiolite Section

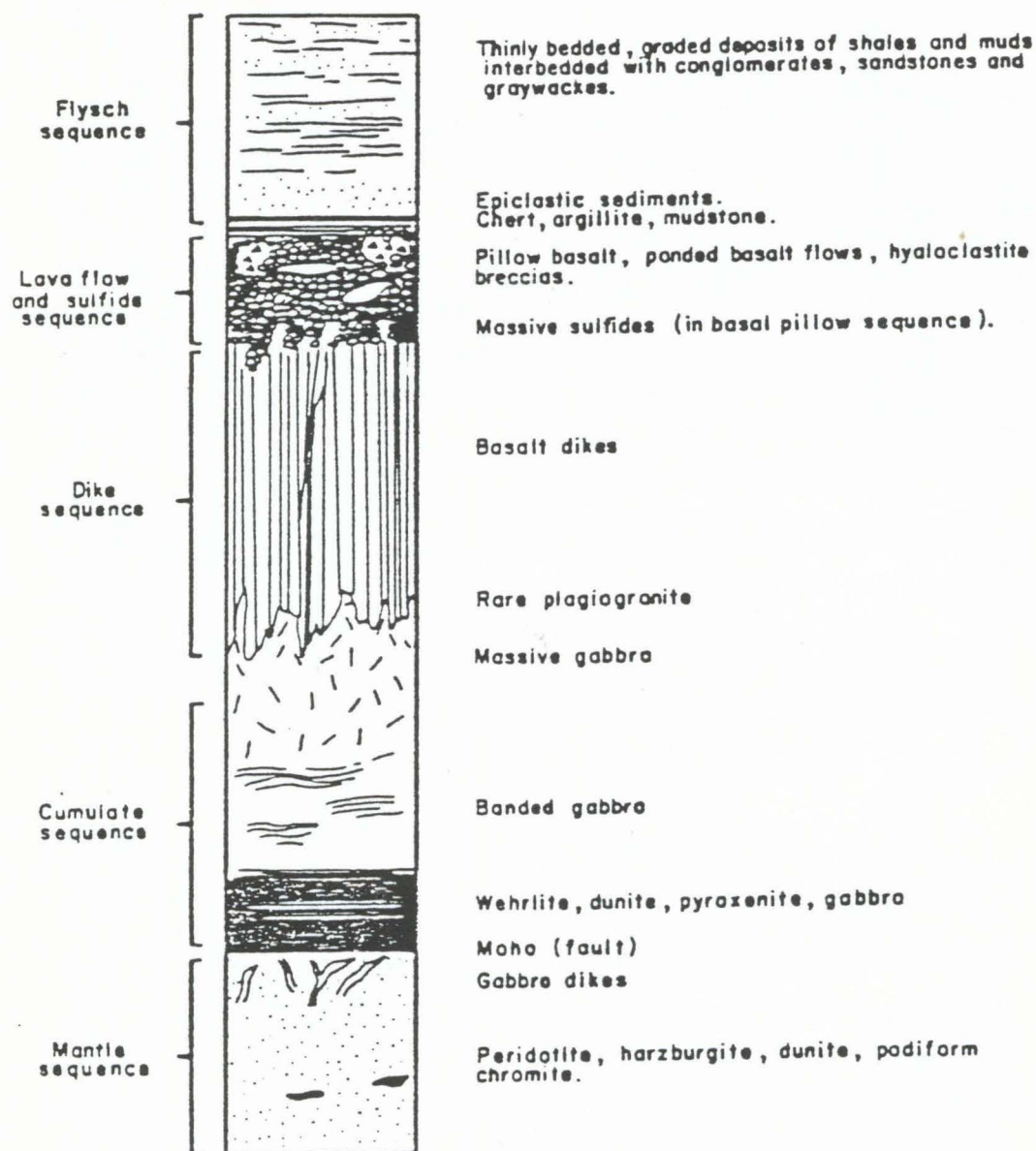


Figure 7. Generalized section of the Josephine Ophiolite complex in southern Oregon and northern California (Harper, 1980). The Turner Albright deposit is located within the pillow basalt sequence.

## LOCAL GEOLOGY

The Turner Albright deposit is comprised of several massive sulfide pods which occur along two major exhalative horizons (Plates 2 through 13). The horizons are situated within the lower pillow lava sequence of the Josephine Ophiolite complex. The deposit is located about 750 to 900 meters stratigraphically below the conformable Galice (flysch) sediments and 120 to 240 meters above the serpentine and sheeted dikes (locally closer) (Plates 1 and 2). The serpentine represents altered peridotite which has been faulted into place against the sheeted dikes and pillow lavas. Rodingite (altered gabbro) dikes occur in the serpentine near the fault. Portions of the sheeted basalt dikes have been located in drill holes below the sulfide pods and pillow lavas (TAB-9, 24 etc.). Sheeted dikes have also been identified on the west side of the property in fault contact with the serpentine. The contact between the dikes and pillow lavas is difficult to locate because of a gradual decrease in dikes and an increase in pillow "screens" up section. This transition zone may be up to 100 meters wide or more.

The sulfide zones occur principally in two time-stratigraphic horizons. The upper horizon hosts several small sulfide pods called the upper high-grade pods (UHP), and a large continuous pod called the main upper zone (MUZ). The second horizon occurs below the UHP-MUZ horizon and is referred to as the main lower zone (MLZ). Massive sulfides typically occur near the top of the zones or pods and decrease in percentage with depth. Epiclastics and sulfide-chert breccias are developed below, and mudstones above the sulfides. Portions of the zones and pods are underlain by stringer (vein)



sulfides within the basalt flows (Figures 8 and 9) (core log summaries are in Appendix 1).

The mineralization associated with the UHP (e.g. TAB-33 and TAB-35 centers) seems to overlap or interdigitate with that of the MUZ. Portions of these overlapping and interdigitating areas seem to represent distal facies of the exhalative events (lower gold and copper values, and locally less than 50% sulfides). Two of the larger UHP trend N 22°E, 52°SE, based on massive sulfide correlations between holes TAB-9, 22, 33 and 48, and N 15°E, 53°SE, based on correlations between holes TAB-8, 35, 41, 42 and Churn-4. The second UHP (TAB-35) may be an updip continuation of the MUZ. The margins of these pods bifurcate and coalesce with one another around basalt flows. The pods seem to directly overlap with the MUZ in the area of drill holes TAB-10, 23 and 24. The UHP occur in an area about 150 meters long, 50 to 80 meters wide, and vary from 1 to 20 meters thick. The western margins of the pods are exposed at the surface as gossans. The massive sulfides (e.g. TAB-33) may have as much as 35 meters or more of stringer (vein) sulfides developed below them. Epiclastic and sulfide breccia development is not as extensive below the UHP as it is below the MUZ and MLZ.

The MUZ upper surface trends N 53°E, 56°SE, based on correlations between massive sulfides in TAB-10, 13, 18, 23, 24, 26, 30 and 43. This zone is roughly 100+ meters long, 60 to 80 meters wide, and 10 to 40 meters thick. The top of the MUZ occurs at a depth of 60 to 120 meters, and may be exposed as gossan on its northwestern margin if correlations with the TAB-35 UHP is valid.

The MLZ is larger than the MUZ but has an irregular surface which yields variable strike and dip orientations (N 69°E to N 86°W)

based on correlations between upper sulfide contacts in TAB-10, 13, 18, 27, 30 and 43. The MLZ is roughly 125+ meters long (and open to the southwest), 90 to 100+ meters wide, and 15 to 20 meters thick. The top of the MLZ mineralization occurs at a depth of 210 to 240 meters. The MLZ is separated from the MUZ by 20 to 50 meters of basalt and gabbro flows. Weak to moderate sulfide mineralization occurs below the MLZ (at 270 to 300 meters depth or more), but has not been well defined by drilling.

In general, the two main exhalative horizons are staggered with respect to one another along the north-northeast to south-southwest trend. The UHP and MUZ extend furthest to the north, while the MLZ seems to extend south, though the southwestern extensions have not been adequately tested (see Geometry of Exhalative Horizons, p. 53).



## LITHOLOGIES

The lithologies associated with the Turner Albright deposit can be put into five main categories. These include: 1) serpentine, 2) sheeted dikes, 3) mafic flow rocks, 4) clastic rocks, and 5) exhalative rocks. The cumulate and massive mafic and ultramafic plutonic rocks within the Josephine Ophiolite have not yet been located in the Turner Albright area.

### Serpentine

Serpentine occurs as a compact or fibrous, green, yellow-green, brownish-green, to black (antigorite and chrysotile) alteration product after mafic and ultramafic rocks, in particular peridotite. Shearing and slickensides are typical throughout the serpentine, which occurs stratigraphically below the other rock types and has been faulted into place. The serpentine may contain accessory magnetite and chromite. Rodingite dikes occur in the serpentine near the contact with the mafic flow rocks.

### Sheeted Dikes

A portion of the sheeted dike complex of the ophiolite is preserved with probable stratigraphic continuity below the pillow lavas and sulfides (to the east) and above, though in fault contact with, the serpentine (to the west). Poor exposures of the dike complex can be seen on the west side of the property. On the surface the dikes appear deeply weathered (argillized), epidotized, and are medium to light green. Dike contacts and sheeting are rarely observable due to the high degree of weathering.

The dike complex has been intercepted in the lower parts of a

number of drill holes (TAB-8, 9, 10, 12, 15, 16, 21 (?), 22, and 24) and seems to be at least 180 meters thick. The dikes are dark to light green, diabasic to aphanitic in texture, and typically epidotized. The dikes are composed of clinopyroxene, olivine (+/-), plagioclase, and accessory chrome spinel (Harper, 1980). Well defined chilled margins can be seen in holes TAB-8 and 24. The margins are subparallel to the holes and dip 40 to 50 degrees west. The dikes seem to intrude at high angles to the pillow lava sequence (80 to 90 degrees), and have been emplaced within 100 meters of the lowest sulfide occurrences.

#### Mafic Flow Rocks

Mafic flow rocks include gabbro and basalt occurring as thin (3 m) to thick (4-90+ m) massive, ponded, pillowed, or brecciated (hyaloclastite) flows. In general the gabbro and basalt are of similar composition and contain plagioclase (55-70%), clinopyroxene (30-40%), and accessory pyrite and magnetite (trace-1%). Major, transition, and trace element abundances for a few samples of basalt and gabbro are listed in Tables 1 and 2. The gabbro is typically medium- to fine-grained, hypidiomorphic granular, and rarely porphyritic. The basalt is typically fine-grained to aphanitic and may contain plagioclase microlites or devitrification structures. The basalt is commonly amygdaloidal (1-3 mm diameter) and variolitic. Pillows are common in the basalt and vary from 0.1 to 1.2 meters in diameter. The gabbroic flows texturally grade into basalt flows or pillows.

	Basalts					Gabbros		Avg. Spilite	Avg. Ocean Tholeiite	
	<u>TA-142</u>	<u>TA-243</u>	<u>TAC-15</u>	<u>TAB-33</u>		<u>TAB-48</u>	<u>TA-89</u>	<u>TAC-16</u>		
Sample No.				392	394	442				
Footage				116.5	123	100				
SiO <sub>2</sub>	53.51	50.58	55.84	54.00	52.00	51.00	51.31	50.86	49.0	49.34
TiO <sub>2</sub>	1.2	0.81	1.24	1.05	1.10	1.30	1.5	1.3	1.5	1.49
Al <sub>2</sub> O <sub>3</sub>	15.1	16.8	18.2	14.40	14.40	14.20	15.3	16.1	15.4	17.04
FeO (total Fe)	4.83	3.84	3.95	11.20	13.20	11.70	5.40	4.78	7.95	9.84
MnO	0.18	0.12	0.35	0.18	0.21	0.26	0.18	0.15	0.18	0.17
MgO	6.96	5.05	6.23	5.10	5.50	4.80	4.95	5.71	5.3	7.19
CaO	6.5	9.9	---	6.50	5.80	8.80	6.9	8.1	7.6	11.72
Na <sub>2</sub> O	4.76	5.14	4.97	5.30	5.20	4.70	5.27	4.91	4.1	2.73
K <sub>2</sub> O	0.07	0.10	0.30	<0.10	<0.10	<0.10	0.67	0.18	1.1	0.16
H <sub>2</sub> O (total)	2.67	1.51	3.47	ND	ND	ND	0.92	1.40	3.2	1.27
P <sub>2</sub> O <sub>5</sub>	ND	ND	ND	0.19	0.15	0.18	ND	ND	ND	ND
S	ND	ND	ND	0.64	0.30	0.49	ND	ND	ND	ND
Total	95.78	93.85	94.55	98.56	97.86	97.43	92.40	93.49	95.33	100.95

Table 1. Major element abundances in some Turner Albright basalts and gabbros compared to average spilite and ocean tholeiite. Samples TA-142, 243, 89, TAC-15 and 16 are from Cunningham (1979), The spilite sample is from Vallance (1969), and the ocean tholeiite is from Engel, Engel, and Havens (1965).

	Basalts						Gabbros	
	TA-142	TA-243	TAC-15	TAB-33		TAB-48	TA-89	TAC-16
Sample No.				392	394	442		
Footage				116.5	123	100		
Sc (ppm)	39	32	32	ND	ND	ND	37	42
Ti (%)	.72	.49	.74	ND	ND	ND	.90	.77
V (ppm)	284	271	256	ND	ND	ND	155	274
Cr (ppm)	150.8	67.8	140.2	10	10	10	12.9	43.8
Co (ppm)	39	29	28	44	40	52	36	33
Ni (ppm)	23	20	20	44	52	50	14	19
Cu (ppm)	89	60	64	64	70	84	12	22
Zn (ppm)	69	58	471	78	74	86	67	55
Pb (ppm)	ND	ND	ND	2	2	2	ND	ND
Cd (ppm)	ND	ND	ND	6.7	0.2	<0.2	ND	ND
Hg (ppb)	ND	ND	ND	560	320	160	ND	ND
La (ppm)	3.70	3.72	3.70	ND	ND	ND	5.45	3.44
Ce (ppm)	9.78	8.03	9.97	ND	ND	ND	14.8	7.94
SM (ppm)	2.99	2.1	2.6	ND	ND	ND	3.69	2.6
Eu (ppm)	1.03	0.773	0.971	ND	ND	ND	1.17	0.983
Tb (ppm)	0.58	0.37	0.50	ND	ND	ND	0.67	0.46
Dy (ppm)	4.45	3.06	3.83	ND	ND	ND	5.35	4.75
Yb (ppm)	2.46	1.76	2.25	ND	ND	ND	2.97	2.30
Lu (ppm)	0.40	0.27	0.31	ND	ND	ND	0.45	0.27

Table 2. Transition and rare earth element abundances in some Turner Albright basalts and gabbros. Samples TA-142, 243, 89, TAC-15 and 16 are from Cunningham (1979).



### Clastic Rocks

Clastic rocks include epiclastics and mudstones. The epiclastics cover a wide variety of rocks which include fine-grained monolithic epiclastics, fine- to coarse-grained, multilithic epiclastic conglomerates and breccias (talus, debris flow, and slump deposits). These units vary from 0.5 to 10 meters thick and may occur as local phenomena or as laterally extensive units (150 m or more). Generally, they are found below or laterally away from the massive sulfides. The textures and compositions of the epiclastics are diverse, but generally contain subrounded to angular fragments of basalt and hyaloclastite (1-40%), red or white to gray chert (1-20%), sulfides (1-10%), and fine-grained, gray, dark-green to black (basaltic) matrix (50-80%). The sulfides may also replace basalt fragments or occur as matrix material, and are locally greater than 10 percent. Rare fragments of laminated massive sulfides sometimes occur in the epiclastic units (TAB-26, 626 feet). Lithic fragments vary in size from 0.1 to 20 centimeters.

The mudstones are typically very fine grained, laminated, and vary in color from gray to black, green, red, and reddish brown. Red and reddish-brown muds may or may not be laminated. Radiolarian have been identified in a few of the mudstones, but are very rare (TAB-33, 120.3 feet). The muds vary in thickness from 10 centimeters to 4 meters. They nearly always occur above the massive sulfide horizons and are rarely associated with the epiclastics. The gray to black muds often occur directly above the sulfides, while the green muds may be stratigraphically higher and bounded by pillow basalts. The muds do not seem to be very extensive. Major, transitional, and rare earth elemental abundances for some mudstone samples are listed in Tables 3

and 4. A possible exhalative, rather than pelagic, origin for the muds is discussed in the interpretive section (p. 46).

### Exhalative Rocks

Massive (50-100%), semi-massive (20-50%), and non-massive (5-20%) sulfides represent the main exhalative units in the Turner Albright deposit. The sulfides exhibit a wide variety of textures and compositions (mainly pyrite, marcasite, chalcopyrite and sphalerite) and are discussed in detail in the mineralization section (p. 37). Partial elemental abundances for some massive sulfide samples are listed in Table 5. Most of the non-massive sulfides occur within flows, breccias, or epiclastic units and may represent true sea floor exhalations which formed contemporaneously with those lithologies. The remainder of the non-massive sulfides occur as veins (stringers and stockwork) below the massive and semi-massive sulfides and were not exhalative, but probably acted as conduits for the exhalative fluids.

Chert probably represents an exhalative component and occurs mainly as subrounded to angular fragments (1-3 cm) in the semi- and non-massive sulfide horizons and epiclastic units. A large percentage of silicified basalt fragments are commonly mixed with the chert in the semi- and non-massive sulfides. The chert varies in color from white to gray, green, red (jasperoidal), and reddish brown. Chert does not occur as bedded or laminated horizons. Some of the muds may also represent exhalative material and are discussed in the interpretive section (p. 46).

Sample No.	TAB-33			TAB-48			
	393	395	396	441	443	444	445
	119' MGB	127' MGB	134' MGB	65' MGN	125' MGN	130' MGB	135.5' MGB
SiO <sub>2</sub>	64.00	74.50	73.00	72.50	72.00	70.00	71.00
TiO <sub>2</sub>	0.55	0.30	0.35	0.45	0.45	0.50	0.45
Al <sub>2</sub> O <sub>3</sub>	11.90	8.60	8.60	9.90	10.40	10.70	10.10
FeO (total)	10.70	8.40	8.60	7.10	9.30	9.30	9.00
MnO	0.10	0.06	0.10	1.10	0.08	0.08	0.08
MgO	3.10	1.95	1.20	1.95	2.10	1.80	1.10
CaO	2.05	0.60	0.60	1.90	1.05	0.90	0.35
Na <sub>2</sub> O	1.30	1.10	0.70	1.10	1.40	1.40	0.40
K <sub>2</sub> O	2.40	1.90	1.60	2.30	2.30	2.10	1.70
P <sub>2</sub> O <sub>5</sub>	0.23	0.11	0.12	0.14	0.16	0.17	0.15
S	0.14	0.19	0.20	0.07	0.42	0.05	0.50
Total	96.47	97.71	95.07	97.51	99.66	97.00	94.83

Table 3. Major element abundances in some Turner Albright mudstones.  
MGB = gray to black mudstone, MGN = green mudstone.

	TAB-33			TAB-48				TA-161
Sample No.	393	395	396	441	443	444	445	
Footage	119	127	134	65	125	130	135.5	
	MGB	MGB	MGB	MGN	MGN	MGB	MGB	
Cu	120	160	290	140	120	110	170	---
Zn	140	370	950	110	110	160	950	---
Pb	12	32	54	12	10	6	14	---
Mn	600	360	620	550	460	440	470	---
Fe%	6.1	4.6	5.3	4.0	3.7	5.3	5.3	---
Ni	90	60	58	64	68	70	62	---
Co	30	30	34	32	38	36	40	---
Cr	40	60	50	30	30	40	40	---
Sb (ppm)	1	1	1	1	1	8	8	---
Hg (ppb)	960	1280	4000	640	720	1100	1800	---
Cd (ppm)	<.2	<.2	<.2	2.7	<.2	<.2	1.3	---
La	---	---	---	---	---	---	---	17.8
Ce	---	---	---	---	---	---	---	28.4
Sm	---	---	---	---	---	---	---	5.54
Eu	---	---	---	---	---	---	---	1.19
Tb	---	---	---	---	---	---	---	0.77
Dy	---	---	---	---	---	---	---	5.2
Yb	---	---	---	---	---	---	---	2.88
Lu	---	---	---	---	---	---	---	0.40

Table 4. Transition and rare earth element abundances in some Turner Albright mudstones. MGB = gray to black mudstone, MGN = green mudstone. Sample TA-161 is from Cunningham (1979).



	TAB-33				TAB-48		
Sample No.	001 397	003 398	006 399	008 400	374 446	376 447	378 448
Footage	137.5	147.5	162.5	172.5	138	148	158
% Sulfides	99	99	97	90	99	99	99
Au (opt)	.1	1.4	.49	.15	.03	.126	.31
Cu	800	70,000	150,000	9,000	140	50,000	25,000
Zn (ppm)	1,200	940	850	52,000	450	650	1,400
Pb	400	300	240	18	520	300	120
Ag (ppm)	58	27	190	50	21	31	68
As	340	2,000	600	210	290	760	12,000
Mn (ppm)	40	50	150	40	20	50	110
Fe%	>20	>20	>20	>20	>20	>20	>20
Ni (ppm)	96	92	88	78	100	100	130
Co	610	290	260	330	620	870	310
Cr (ppm)	120	100	40	120	110	110	100
Cd	1.6	2.3	4.0	84	2.1	1.9	2.4
Sb (ppm)	176	288	156	308	124	184	148
Hg (ppb)	25,000	16,000	>40,000	>40,000	30,000	23,000	24,000

Table 5. Elemental compositions of some massive sulfides at Turner Albright. Semi- and non-massive sulfide samples are excluded due to impurities added from basalt and chert fragments.

## ALTERATION

The rocks of the Turner Albright deposit have been subjected to prehnite - pumpellyite to lower greenschist grade metamorphism which has weakly over-printed earlier seawater metasomatism. The metamorphism has generated weak to moderate (1-10%) pervasive chloritic alteration. Prehnite and pumpellyite have tentatively been identified in fractures in only a few areas and occur as green to gray-green fracture fillings and alteration rinds (TAB-38, 361 feet). Seawater metasomatism is identified as weak spilitic alteration (albite + chlorite + calcite + epidote). Spilitization is patchy and usually difficult to identify; its distribution is poorly understood.

Early stages of exhalative activity were accompanied by moderate to strong silicification and pyritization of basalt fragments. Exhalative (?) chert fragments are commonly found with the silicified basalt. The silicification is most common within and below the semi-massive sulfide horizons which lie below the massive sulfides. Chlorite and talc occasionally are found as vein selvages in weakly spilitized basalts.

Epidotization is common within the sheeted dike complex below the pillow lavas. The alteration varies from pervasive to vein controlled epidotization (+/- calcite). Minor pyritization, and local argillization and silicification also occur within the dike complex. Epidote is not common in the basalt flows.

Serpentinization of the peridotite, and less commonly the pillow basalt and sheeted dikes, occurs to the west and below the sulfide mineralization. Though some serpentinization occurs deep within the rifting environment, most of it is attributed to tectonism and

obduction of the ophiolite at the Turner Albright.

Supergene oxidation of the sulfides has produced well developed gossans. The gossans are typically massive, but may also exhibit very fine cellular boxwork composed of limonitic jasper, quartz, and various forms of limonites and hematites. The oxidation extends to depths of at least 5 to 15 meters. Gossan geochemistry is reported by Young (1982a).

## STRUCTURES

Most of the known sulfides in the Turner Albright deposit are bounded on the south by a fault with possible major displacement, and interrupted to the north by several faults representing moderate displacements. The entire basalt and dike complex stratigraphy is in fault contact with serpentine on the north and west sides of the property (Plates 1 and 2). The possible displacements along these faults are discussed in the section on structural interpretation (p. 58).

The southern fault (F1) trends N 50°W, 77°NE and is 10 to 13 meters thick based on drill-hole data listed in Table 6. This structure is also documented within adit #6 (Plate 12, Appendix 2) along the hanging wall of a small massive sulfide pod represented by the southern-most gossan (cord 18,820 N, 20,200 E, Plate 2). This small sulfide pod and associated gossan, massive and semi-massive sulfides in the lower parts of TAB-37, and non-massive sulfides within hyaloclastite breccias and basalt in TAB-10, 13, 17, 18, 23, and 27 represent all known mineralization south of F1 (the footwall). The fault is probably traceable southeast across Blue Creek (cord 18,350 N, 20,800 E) and up a small drainage. Its northwestern trace is probably represented by a small gossan pit (cord 19,940 N, 19980 E) and iron-stained and sheared basalt before it contacts the serpentine.

The remaining four known structures can be divided into two central faults (F2 and F3), a northern fault (F4) within the basalt stratigraphy, and a massive fault and shear zone between the basalt and dike complex and the serpentine.



Hole	F1 ft. (top)	F2 ft. (top)	F3 ft. (top)	F4 ft. (top)
75-4	---	237	---	---
TAB- 1	1158	60	630	---
3	---	---	479	115
4	1117	---	---	---
6	960	259	---	---
8	831	---	---	---
9	---	---	530	206
10	886	---	---	---
11	726	---	---	---
13	1112	---	---	---
14	---	169	---	---
15	974	---	---	---
16	982	---	---	---
17	1172	---	---	---
18	1050	---	---	---
19	970	---	---	---
20	---	170	810(?)	---
21	---	197	618	---
22	---	---	565	210
23	1176	---	---	---
24	878	---	---	---
25	---	---	700(?)	---
26	932	---	---	---
27	885	---	---	---
30	835	---	---	---
33	---	---	---	193
36	695	---	---	---
37	834	---	---	---
43	979	---	---	---
45	---	---	---	84
46	807	---	---	---
47	---	---	---	145
48	---	---	---	160
Average Trend	N50°W-77°NE	N70°W-67°NE	N78°W-81°NE	N33°E-44°SE
Average True Width	30-38 ft.	3-7 ft.	1-6 ft.	1-5+ ft.

Table 6. Fault zones intercepted in Turner Albright drill core and their correlations with specific faults. F1 represents the southern fault (N50°W, 77°NE), F2 and F3 represent the central faults (N70°W, 67°NE and N78°W, 81°NE respectively), and F4 represents the northern fault (N33°E, 44°SE).

The two central faults trend N 70°W, 67°NE (F2) and N 78°W, 81°NE (F3) and vary in width from 0.3 to 2 meters based on drill-hole data listed in Table 6. Both faults seem to follow an east- to southeast-trending drainage on the east side of the property near drill holes TAB-1, FDH-1, TAB-23, 15, 16, and 19. The abrupt slope on the north end of the property (cord 19,400 N) is probably the surface trace of F2 and F3 cutting across the ridge. The west-northwest extension of these faults is difficult to trace due to lack of drill-hole data and poor outcrop. The faults are lost downdip in the serpentine. F2 and F3 separate the northern UHP (TAB-33, 48) from the MUZ and other UHP (TAB-35).

The northern fault (F4) is a complicated structure trending N 33°E, 44°SE and varies from 0.3 to 2 meters thick based on drill-hole data listed in Table 6. This fault cuts below the massive sulfide zone in TAB-33 and 48 and interrupts the stratigraphy in a number of other holes (TAB-1, 3, 9, 22, 45, and 47). F4 is projected to the surface near the iron-stained, non-massive gossan by adit # 9 (cord 19,830 N, 20,320 E), at the west end of the gold pits (cord 19,730 N, 20,030 E), and above the non-massive gossan of the west side (cord 19,560 N, 19,820 E). Its trace is lost in the serpentine to the northeast, and seems to be cut off by F2 to the southwest. F4 may occur above the northern gossans in the fault block between F2 and F3, but verification of this has not yet been achieved.

The massive fault and shear zone to the north and west of the deposit has brought serpentized peridotite in contact with the basalt and dike complex. The fault zone forms an irregular surface which trends in a northeast direction and bends around the Turner Albright deposit to the west. The dip of the fault varies from 35° to

40°E around adit # 12 (Plate 1), 20° to 60°S to SE on the north end of the property, and steepens to near vertical on the west side. The fault has removed the entire cumulate and massive gabbro sequence and part of the dike complex from the ophiolite in the Turner Albright area. An estimated 1 to 1.5 kms of section are missing. The fault does not come into contact with the massive sulfides, but does contact a small percentage of the non-massive sulfides on the very northern end of the property.

Minor to moderately sheared rock occurs along the margins of many of the sulfide pods. Most of this shearing seems to be minor and simply represents a weak plane between two different rock types with very little, if any displacement.

Rock Quality Designation measurements for core samples longer than four inches (RQD-4) were collected and are listed in Table 7. RQD-4 was measured for each three-meter interval of core.

AVERAGE RQD VALUES

<u>Rock Type</u>	<u>Baretta Core</u>		<u>Noranda Core</u>		<u>Total</u>	
	<u># Samples</u>	<u>RQD-4</u>	<u># Samples</u>	<u>RQD-4</u>	<u># Samples</u>	<u>RQD-4</u>
Basalt	1172	49	454	65	1626	54
Gabbro	304	47	156	76	460	57
Hyaloclastite	173	44	95	56	268	48
Serpentine	243	8	12	74	255	11
Epiclastics	1	12	7	71	8	64
Mudstones	2	27	30	51	50	41
Chert	---	--	1	63	1	63
Sulfides	---	--	102	60	102	60
Debris Flows	---	--	21	54	21	54
Gossan	---	--	9	30	9	30
Faults and broken ground*	793	9	105	9	898	9

Table 7. Rock Quality Designations (RQD-4) for Turner Albright core samples. Note: Baretta core RQD's are consistently lower due to small core diameter (AX and NX as opposed to NC for Noranda core) and from being handled and transported for more than a year before RQD's were collected.

\*Faults and broken ground represent areas with RQD-4 numbers less than 20.



## MINERALIZATION

The Turner Albright deposit contains massive (50-100%), semi-massive (20-50%), and non-massive (5-20%) sulfides. The mineralogy consists of, in order of abundance, fine-grained (.001-.2 mm) pyrite, marcasite, sphalerite, chalcopryite, and accessory sulfides (Table 8). Native gold occurs as small (0.5-27 microns) grains within the sulfides in the following abundance: pyrite (20%), chalcopryite in pyrite (16.4%), chalcopryite (38.9%), sphalerite (14.1%), and in the gangue (10.2%) (Carson, 1982). Silver occurs in native gold, tetrahedrite, and possibly in the sphalerite and chalcopryite. Cobalt occurs in the outer rims of pyrite, and probably within marcasite.

Colloform banding and fragmental to conglomeratic textures are predominant in the sulfides. Colloform bands vary from .001 to 5 millimeters thick, and are typically composed of alternating pyrite and marcasite or pyrite and sphalerite layers. Chalcopryite is commonly not included in the colloform bands. Fragmental to conglomeratic textures consist of angular to subrounded sulfide fragments in a sulfide (usually pyrite) matrix. Very few structureless (massive) or laminated (bedded) textures are seen. Below the massive sulfide horizons, stringer (vein) or disseminated sulfides predominate, sometimes occurring as matrix material for basalt and chert fragments.

The sulfide mineralogy can be separated into four main types based on composition, textures, and occurrence. These four types are:

- 1) massive sulfides with high pyrite and marcasite contents (with sphalerite and chalcopryite),
- 2) massive sulfides with high pyrite (with sphalerite

# GENERAL MINERALOGY OF THE TURNER ALBRIGHT

Mineral	Percentage for M.S. & S.M.S.	Ave. %	Size	Occurrence
Pyrite (PY) FeS <sub>2</sub>	20-100%	90	.001 -.2 mm	PY, MR/PY as fragmental and colloform (cobalt occurs in the outer rims of PY)
Marcasite (MR) FeS <sub>2</sub>	Tr-40%	5	.001 -.05 mm	MR, MR/PY as colloform bands
Sphalerite (SP) ZnS	Tr-57%	2.6	.001 -.01 mm	SP, SP/PY as colloform and fragmental
Chalcopyrite (CP) CuFeS <sub>2</sub>	Tr-48%	3	.001 -.1 mm	CP, CP/PY, CP/SP as fragmental
Native Gold (Au) Au	Tr to .005 (1.4 opt)	.1 opt	.0005-.027 mm	Au/PY, Au/CP, Au/SP Au/CP/PY, Au/GN (gangue)
Tetrahedrite (TT) (Cu,Fe,Ag) <sub>12</sub> SB <sub>4</sub> S <sub>13</sub>	Tr-.1%	Tr	.005 mm	TT/PY
Galena (GA) Pbs	Tr-.1%	Tr	.001 -.01 mm	GA/PY
Arsenopyrite (AR)(?) FeAsS	Tr	Tr	.001 -.01 mm	AS/PY
Pyrrhotite Fe <sub>1-x</sub> S	Tr	Tr	.001 mm	rare inclusion in PY

Table 8. Minerals found in Turner Albright massive (MS, 50-100%) and semi-massive (SMS, 20-50%) sulfides. Note that MR/PY means marcasite growths within pyrite. Percentages are very rough averages for mineralized areas, not necessarily ore grade portions of the deposit.

and chalcopyrite) and low marcasite contents,

- 3) siliceous (cherty) massive to semi-massive sulfides (with pyrite, sphalerite, chalcopyrite, and no marcasite), and
- 4) semi-massive to non-massive stringer sulfides (mainly pyrite).

Details of these four sulfide types are listed in Tabel 9.

The mineral zonation within the sulfide zones is complex, but some broad generalizations can be made. Chalcopyrite often occurs stratigraphically above or at the same level as high concentrations of sphalerite (e.g. TAB-10 (MUZ, MLZ), 16 (MUZ), AND 33 (UHP)). High gold values are consistently associated with chalcopyrite, while silver generally occurs with sphalerite. The tops of the massive sulfide pods are usually pyritic and become richer in chalcopyrite and sphalerite with depth. Chalcopyrite is usually concentrated in the higher grade gold centers of the sulfide pods (TAB-30 (MUZ, MLZ) and 33 (UHP); near the source vents), while sphalerite is often concentrated laterally out from the higher grade gold centers (TAB-43; MUZ, MLZ). Cobalt is typically distributed rather uniformly throughout much of the massive sulfides. The highest concentrations of cobalt occur in the northern portions of the upper exhalative horizon (MUZ and UHP).

# GENERAL SULFIDE TYPES

Sulfide Types	Basic Mineralogy				Principal Textures	Occurrence	Extent
	PY	MR	CP	SP			
MS with high PY and MR content	high	high	high to mod.	high to mod.	Porous to non-porous colloform banding, minor fragmental textures. Usually very fine-grained (.001-.1 mm).	Mainly in UHP and MUZ. Typically above the siliceous and stringer sulfides.	MS may be 20 to 30 meters thick (up to 90 m) and extend laterally for 200 meters or more.
MS with high PY and low MR content	high	low	high to mod.	high to mod.	Massive, fragmental, to conglomeratic textures. Very minor colloform banding. Usually very fine-grained (.001-.1 mm).	Mainly in MLZ and parts of MUZ. Typically above the siliceous and stringer sulfides.	MS may be 20 to 30 meters thick and extend laterally for 200 meters or more.
Siliceous (Cherty) MS to SMS	high to mod.	none	mod. to low	mod. to low	Sulfides occur as matrix material, disseminated in rock fragments, or as veins. Usually fine-grained (.01-.2 mm).	Mainly in MUZ and MLZ below or peripheral to MS; occurs to a lesser extent in the UHP.	Typically 2 to 20 meters thick or more, it may extend laterally for several hundred meters.
Stringer SMS to NMS	mod. to low	none	low	low	Sulfides occur as veins and disseminations. Usually fine- to medium-grained (.01-1 mm).	Nearly always occurs below MS, and below or in siliceous sulfides.	Stringers may extend for tens (hundreds?) of meters below MS and SMS, but seems to be more confined laterally.

Table 9. General sulfide types based on mineralogy, textures and occurrence. Abbreviations are as follow:  
 MS = massive sulfides (50-100%), SMS = semi-massive sulfides (20-50%), NMS = non-massive sulfides (5-20%),  
 PY = pyrite, MR = marcasite, CP = chalcopyrite, SP = sphalerite, UHP = upper high-grade pods, MUZ = main upper zone, MLZ = main lower zone.



## RESERVES

Geologic reserves have been calculated for the upper high-grade pods (UHP), main upper zone (MUZ) and main lower zone (MLZ) of the Turner Albright deposit (Table 10). The final reserve numbers are considered conservative due to the potential of expanding the UHP, MUZ, and MLZ (see Exploration Potential). The geologic reserves are accurate within 35 percent, based on Noranda Exploration's current understanding of the deposit. Baretta assays have been confirmed and were used in the calculation (Young, 1982b).

The geologic reserves for the MLZ and MUZ were calculated using the section block method based on a 0.10 gold equivalent cutoff. The gold equivalent was calculated using \$500.00/ounce gold, \$12.00/ounce silver, \$1.08/pound copper, and \$0.48/pound zinc. A factor of 9 cubic feet per ton was used for the massive sulfides. The section blocks were built around assay intervals falling within the gold equivalent cutoff. Only one hole was used per section block. The blocks, which were drawn on the east-west geologic sections (i.e. Plates 3 through 12), were extended half the distance to the adjacent sections to generate a length and half the distance to the nearest drill hole (updip and downdip) to generate a width. The thicknesses (height) of the blocks were based on the assay interval used and corrected to true thickness. The blocks were then totalled using weighted averages.

Final geologic reserves for the UHP were calculated using five-foot horizontal sections based on a 0.10 gold equivalent cutoff. This method was employed because of the uncertain geologic correlations between drill holes in the UHP. It was concluded that the section block method would render inaccurate tonnages for the

Stage	NEI Acquisition Evaluation of TAB (Proven Mineable Reserves) 1/23/81				NEI Geologic Reserves 9/10/82					
Column	A	B	C	D	E	F	G	H	I	J
Zone	MUZ	MLZ	<u>Total</u> MUZ + MLZ	<u>Total</u> MUZ + MLZ with 10% dilution	UHP	MUZ	MLZ	UHP + MUZ	<u>Total</u> UHP + MUZ + MLZ	<u>Total</u> UHP + MUZ + MLZ + 10% dilution
Tons	680,044	1,001,960	1,682,004	1,870,000 (rounded up)	325,000	1,282,000	1,710,000	1,607,000	3,317,000	3,800,000 (rounded up)
Cutoff (Au eq.)	.09	.09	.09	.09	.1	.1	.1	.1	.1	.1
Au eq. opt	---	---	---	---	.269	.227	.260	.236	.248	.223
Au opt	.106	.134	.113	.103	.135	.131	.098	.132	.114	.105
Ag opt	---	---	---	---	.816	.170	.576	.301	.443	.44
Cu %	1.86	1.60	1.69	1.54	1.154	1.299	1.643	1.270	1.462	1.33
Zn %	3.36	2.44	2.88	2.62	3.322	2.114	4.233	2.382	3.325	3.0
Co %	---	---	---	---	.059	.062	.035	.061	.055	.050

Table 10. Reserves for the upper high-grade pods (UHP), main upper zone (MUZ), and main lower zone (MLZ) of the Turner Albright deposit. Columns A through D represent geologic reserves calculated for the NEI acquisition evaluation (11/23/81). Columns E through J represent geologic reserves calculated at the end of the 3 E-1 Phase of the program.

UHP (probably very high) based on the current understanding of the geology. The horizontal section method identifies ore grade intervals within a drill hole the same way the section block method does. The difference is in the area of influence around the hole. Due to the lack of geologic certainty in the UHP only a 25-foot radius around isolated holes was used. Contours were drawn from hole to hole where assays and geology indicated valid correlations existed. Where geology permitted, contours were drawn only a third the distance to an adjacent barren hole, rather than half, as in the section block method. The contours were then planimetered and the area calculated using a five-foot thickness (based on assay sampling intervals). Using weighted averaging, the horizontal blocks were then totalled.

## EXPLORATION POTENTIAL

Geologic understanding of the Turner Albright deposit has increased significantly during Noranda Exploration's joint venture with American Chromium, Ltd. Noranda Exploration drilled an additional 19 holes and began to define the upper high-grade pods (UHP) and southern extensions of the main upper zone (MUZ) and main lower zone (MLZ). A fairly good understanding of the geometry of the exhalative horizons and faults currently exists (see Interpretive Geology).

The exploration potential in the Turner Albright deposit for additional tons of ore is good. The geologic model is permissive in the extension of the massive sulfide pods in a number of directions.

The downdip (northeast and east), and updip and gossan extensions (west) of the UHP have not been adequately tested and remain open (Plates 3, 4, 5, 6, 7, and 8). The continuity between the UHP and MUZ, such as the relationships between TAB-1, 8, and 35 intercepts and TAB-9, 22, 23, and 33 intercepts is probably interrupted by the central faults (F2 and F3), but may represent a single exhalative horizon. A more thorough understanding of the geology in this area could enhance the tonnage, and possibly the grade. Portions of the updip and downdip extensions of the MUZ, as well as its southwestern limits remain open (Plates 9, 10, and 11).

Several old adits have exposed portions of a small- to moderate-sized massive pod which may be part of the MUZ, or a faulted (upthrown along F1) extension of part of the lower exhalative horizon (MLZ) (Plates 11 and 12; Appendix 2). This pod has not been drilled by Noranda and remains essentially untested. It was not included in the reserve calculations.



The MLZ has not been adequately tested along its strike length to the southwest. The updip and downdip potential of the MLZ to the north (Plate 9) also remains open. Mineralization below the MLZ is poorly understood and may extend to the southwest, or downdip to the east (Plates 7, 8, 9, and 10).

## INTERPRETIVE GEOLOGY

Genetic Model

An ophiolite association, Cyprus (Hutchinson and Searle, 1971; Constantinou and Govett, 1972) or Tumut (Ashley, 1974) massive sulfide model is applicable to the Turner Albright deposit. Some of the ophiolite-related massive sulfide deposits in the Newfoundland area are also similar to the Turner Albright occurrence (e.g. Betts Cove; Upadhyay and Strong, 1973). General discussion of massive sulfides in relation to the ophiolite model and various plate tectonic settings can be readily found in the literature (Mitchell and Bell, 1973; Sillitoe, 1972; Sawkins, 1972, 1976).

The character and composition of the Josephine Ophiolite and related flysch (Galice) sediments, as well as the regional setting support a late Jurassic marginal (inter-arc or back-arc) basin origin (Dick, 1977; Harper, 1980; Snook, 1977; Vail, 1977; Vail and Dasch, 1977). Detrital constituents of the Galice suggest the source terrains consisted of sedimentary-metamorphic-ophiolite suite rocks (older Klamath Mountains terrain) and volcanic rocks. An island arc is implied as the volcanic source based on the predominance of intermediate-type volcanics, porphyritic textures, and the detrital modes of the volcanic-rich sandstones from the lower parts of the Galice (Harper, 1980) (Figure 10).

Harper (1980) suggests that the inter-arc basin was probably narrow (less than 200 to 300 km), and may have been one of several basins along the Oregon-California continental margin. The life of the inter-arc basin could have been on the order of 20 to 30 million years if a one centimeter per year spreading rate is assumed. Water depth in the vicinity of the rift may be predicted based on the

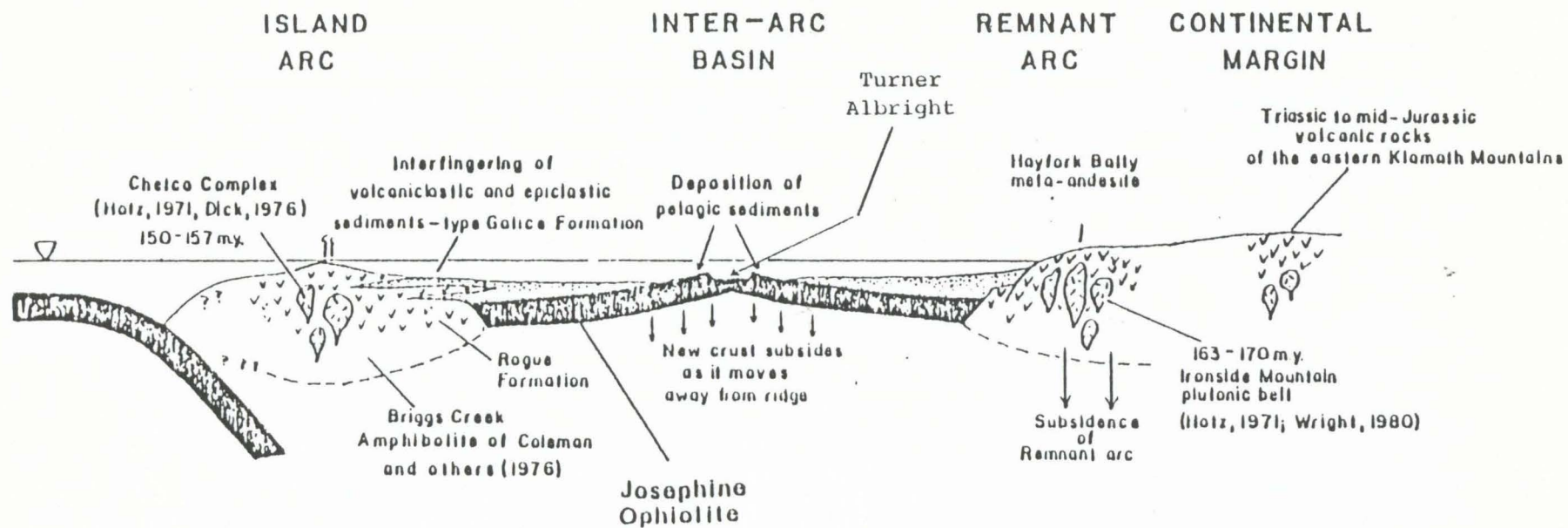


Figure 10. Island arc - inter-arc model for the Josephine Ophiolite (after Harper, 1980). The Turner Albright deposit was formed at the rift within later-arc basin during late Jurassic times, and subsequently obducted onto the continent.

vesicularity of the basalts. Vesicles within the Turner Albright basalts average one to two millimeters in diameter (locally 5 mm), which is a function of the volatile content of the magma and water depth, and suggest depths of probably less than 1000 meters.

The Nevadan Orogeny marks the end of the inter-arc basin. At this time the rocks of the island arc, inter-arc basin, remnant arc, and possibly sections of the continental margin were deformed, metamorphosed, and obducted onto the continent as a series of east-dipping under-thrust sheets (Figure 5). The result of these events presently characterize the structure of the Klamath Mountains (Davis, et al, 1980; Harper, 1980; Irwin, 1966).

During late Jurassic times seawater circulated through the mafic volcanic pile at the rift via thermal convection cells. The heat required to drive the convection cells was generated by ascending mantle material which, in the process, differentiated and erupted along the rift as basalt flows. Metals (Fe, Cu, Zn, Au, Ag, Co, etc.) were leached from the basalts and underlying sheeted dike complex by the seawater, and/or were added to the system directly from magmatic sources. The hot, metal-laden fluids (brines) then ascended through the volcanic pile via fractures and lithologic boundaries. These conduits are recognized as the stringer (or vein) non-massive sulfide zones in the Turner Albright. The ascending fluids eventually vented at or near the spreading axis on the back arc rift (Figure 11).

The vents (seen today as "black smokers" on the East Pacific Rise; Francheteau, et al, 1979) rapidly deposited pyrite, chalcopryrite, and sphalerite in the immediate area. There were probably a large number of vents associated with the Turner Albright, but a



few "centers" exist near TAB-33, 35, 30 and 10 for the upper exhalative horizon, and near TAB-27 for the lower exhalative horizon. Some sulfides may have been deposited on slopes which eventually became unstable (via earthquakes), causing the sulfides to slump or flow into more stable areas (Figure 12). Sulfide-rich brines may have ascended along graben faults and percolated through and mineralized talus debris that developed along associated fault scarps. The abundant fragmental textures of the sulfides at Turner Albright may also be indicative of seafloor (or subsurface) explosion breccias.

The colloform banding that is common in much of the deposit probably represents a diagenetic growth of the sulfides in an attempt to reach equilibrium after deposition (TAB-23, 43). Some of the bands may have developed after fine primary sedimentary lamina. Primary laminations at Turner Albright have not been positively identified, so it appears that the colloform growths have obliterated any such textures if they did indeed exist. Colloform growths also have developed around sulfide and silicified basalt fragments (TAB-35). These are more common where fragmental textures predominate. Some veining within the massive sulfides also exhibit colloform layers (TAB-43). These veins may represent diagenetic remobilization in response to soft sediment deformation, or later stage conduits for mineralizing fluids that cut consolidated sulfide sediments.

Some of the fragmental textures in the cherts may have been caused by the loading of dense sulfides on to considerably less dense siliceous horizons. The cherts are always brecciated and always below the massive sulfides. Some of the fragments were probably created during episodes of explosion brecciation.

Sulfide deposition was periodically interrupted by periods

of volcanism. These episodes resulted in the accumulation of thin to thick pillow basalts or ponded gabbro flows which sometimes interdigitate with the exhalative deposits. The number of overlapping sulfide pods and extensive exhalative horizons in the Turner Albright deposit suggest that a well developed exhalative system persisted in one area for a long time (hundreds to thousands of years?). The total size of the sulfide system is approximately 15 million tons, of which up to one third may hold economic potential. The system was probably shut down as the rifting transported the sulfide center away from the spreading axis.

There appears to have been a period of quiescence following major sulfide exhalations and subsequent basalt eruptions. This period is usually marked by the presence of thin mudstones. The muds are typically very siliceous (Table 3) and may actually represent metal-deficient exhalative deposits (white smokers). They are closely associated with the massive sulfides at Turner Albright and, unlike the sedimentary mudstones at the top of the ophiolite sequence, rarely contain radiolarian fossils. Sedimentation rates for pelagic muds may vary from 0.3 to 3 centimeters per 1000 years (Berger, 1974). Assuming a rough average of 1 centimeter per 1000 years, and if some of the Turner Albright muds are sedimentary, the period of quiescence could be up to 40,000 years or more. The life of a white smoker to generate these sediments would probably be much shorter. The muds probably represent a mix of hydrothermal precipitate from a vent source, and chemical and detrital sedimentary material.

### Geometry of Exhalative Horizons

The geometry of the two main exhalative horizons can best be presented in terms of isopach and upper contact contour maps. The upper exhalative horizon consists primarily of the main upper zone (MUZ) and upper high-grade pods (UHP). An isopach map of this horizon shows a thick concentration of massive (50%) sulfides centering around TAB-10 and 30 for the MUZ and TAB-35 and 33 for the two main UHP (Figure 13). The current understanding of the sulfides in the upper horizon indicate that they are circular to oval, bowl-shaped pods which vary from 12 to greater than 24 meters thick at their centers. The upper contact between the exhalative horizon and overlying mudstones and basalts is a somewhat uniform, though slightly undulating surface (Figure 14). The upper exhalative horizon is interrupted by the central faults (F2 and F3) which are discussed in greater detail below. Extension of the horizon south of F1 is contingent upon a detailed structural interpretation of that fault. The area to the south of F1 is poorly understood.

The lower exhalative horizon consisting of the main lower zone (MLZ) represents an elongate, irregular, trough-shaped pod centering around TAB-27 (Figure 15). The massive sulfides in the MLZ are up to 20 meters thick. The upper contact between the MLZ sulfides and overlying mudstones and basalts appears to be an irregular surface suggesting that the sulfides may have been draped over a ridge and began filling in a shallow valley or low spot (Figure 16). The extension of the lower horizon south of F1 (footwall) is not known (see next section). The surface contour and isopach maps suggest that at least another 30 meters of strike



length south of TAB-43 is possible before intercepting F1.

The isopach and surface contour maps hint at the sea floor paleotopography. Using massive and semi-massive sulfide data in Figure 14 and Appendix 3 a three-dimensional computer-generated view of the sea floor was created. Figure 17 illustrates what the paleotopography may have looked like prior to the deposition of the upper exhalative horizon. The sulfides were deposited in the lows which resulted in noticeably different sea floor topography (Figure 18). One problem in dealing with the paleotopography is that the timing of the basalt flows in relation to the exhalative events is not known.

#### Structural Interpretation

The four main faults (previously described, p. 32) that have a significant impact on the deposit include the large southern fault (F1, N 50°W, 77°NE), the two central faults (F2, N 70°W, 67°NE, and F3, N 78°W, 81°NE), and the northern fault (F4, N 33°E, 44°SE).

Determination of the displacement along F1 is contingent on accurate correlations between the southern gossan (and related sulfides) and massive and semi-massive sulfides in and below the main lower zone (e.g. TAB-30 and 43)). If the southern gossan mineralization is related to the TAB-30 MLZ mineralization, for example, there could be 200 meters or more of normal displacement (south footwall up; Plates 2, 10, 11, and 12). More work is required to test this hypothesis.

The northern gossans located at churn holes 1 and 2 (cord 19,500 N, 19,700 E), which seem to be north of F3 and south of F2



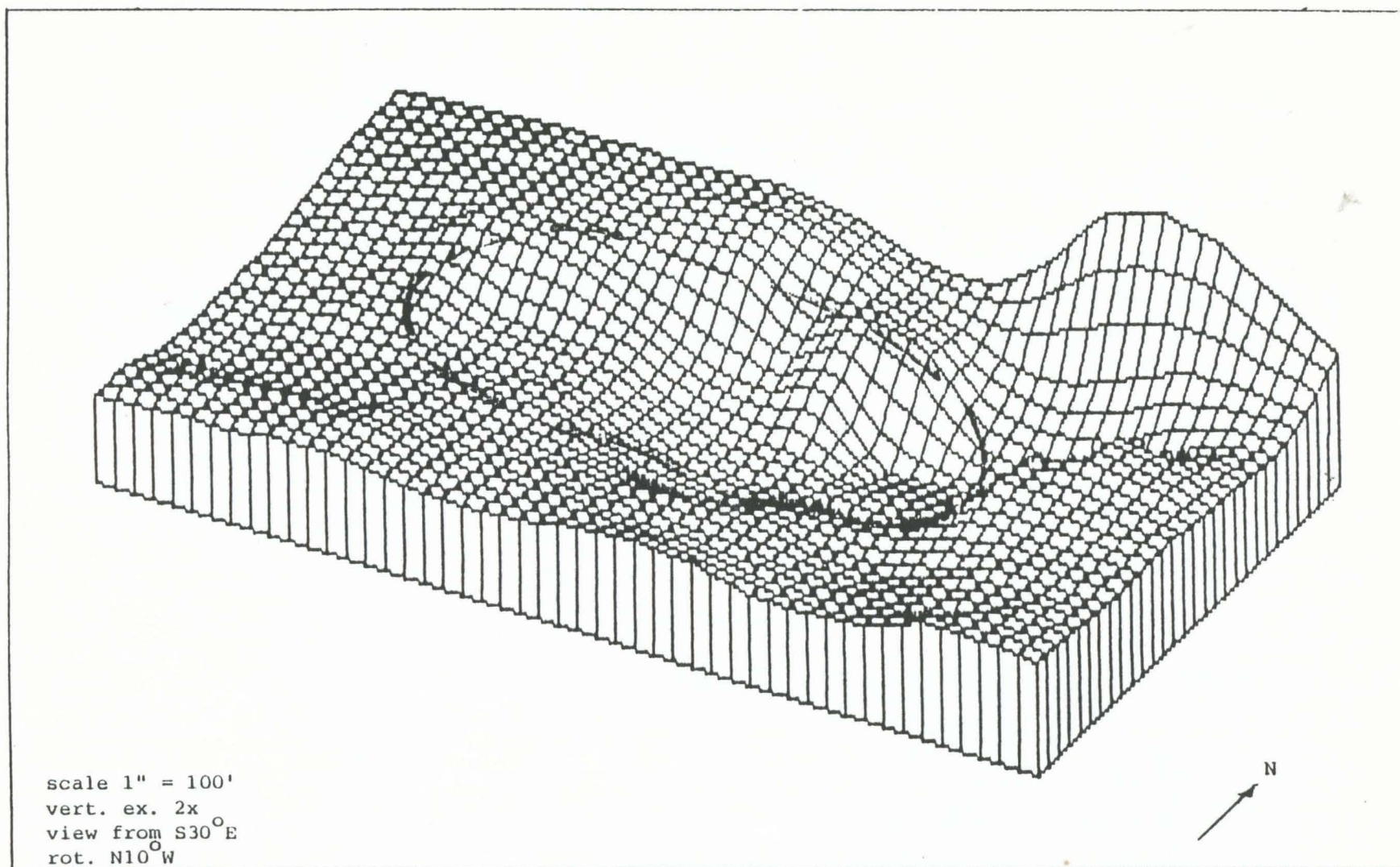


Figure 17. Computer generated paleotopographic map depicting the bottom of the upper exhalative horizon. This map approximates the sea floor topography prior to the accumulation of massive and semi-massive sulfides in the main upper zone and TAB-35 upper high-grade pod. The area outlined in orange indicates the sites where sulfide deposition eventually occurred (see Figure 18). Data are in Appendix 3.

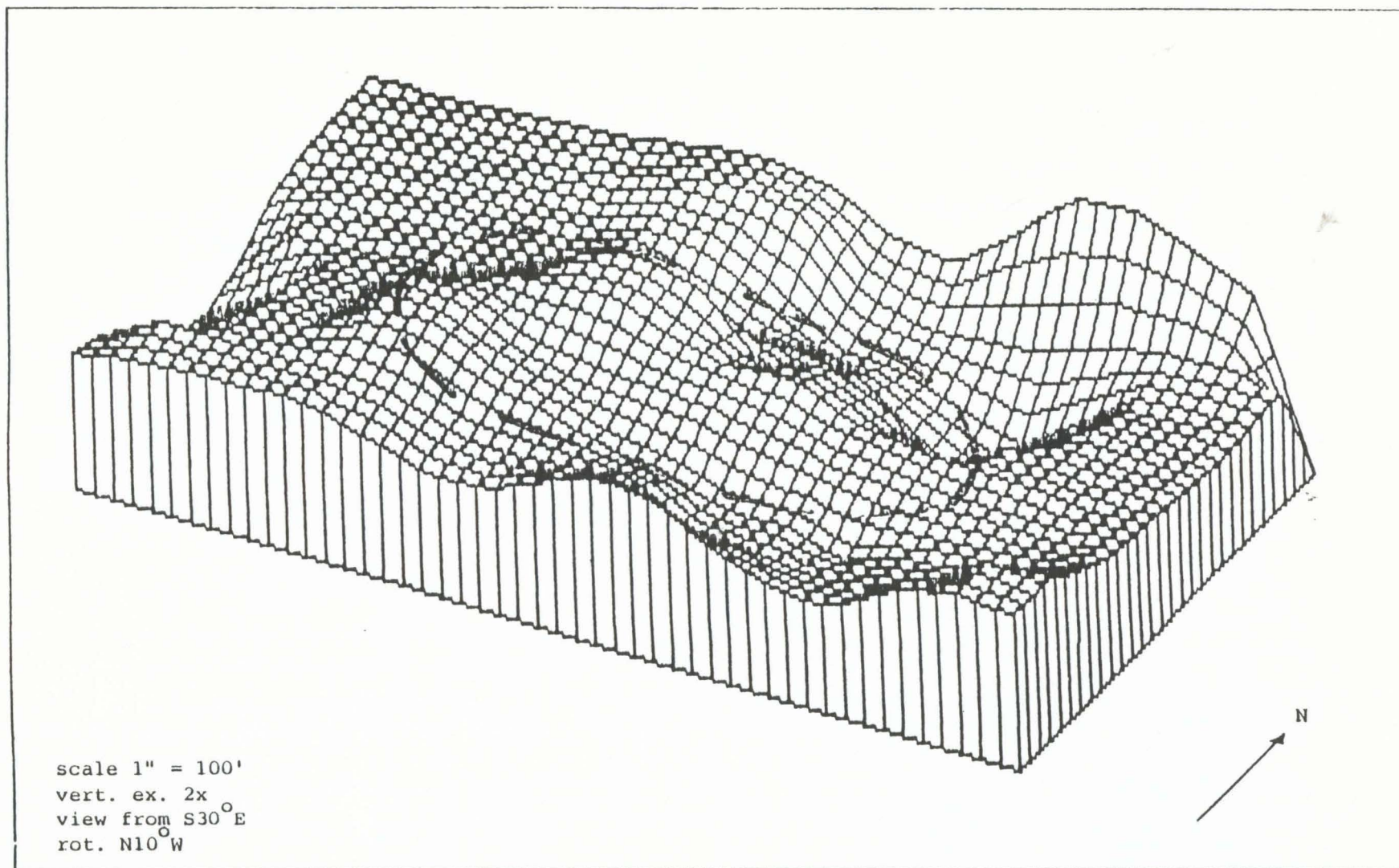


Figure 18. Computer generated paleotopographic map depicting the top of the upper exhalative horizon. This map illustrates the variations in sea floor topography following the deposition of massive and semi-massive sulfides in the main upper zone and TAB-35 upper high-grade pod. The area outlined in orange indicates sites of sulfide deposition. Data are in Appendix 3.



projection may represent displaced portions of the main gossans located south of F3 (cord 19,300 N, 19,890 E; Figure 19). If this correlation is valid, then there may be up to 75 meters of left lateral displacement along F3 (Figure 20). The northern gossan may also be displaced from a non-massive gossan exposure (cord 19,560 N, 19,820 E) which appears to be distally related to the TAB-33 pod. If this correlation is valid, then there may be up to 30 meters of right lateral displacement along F2 (Figure 20). The degree of vertical motion on these faults has not yet been resolved. This scenario would suggest that the north gossans are displaced westward with respect to the rest of the deposit, and explain some of the lack of continuity within the upper exhalative horizon between the upper high-grade pods. The extension of F2 just north of the northern gossans would also explain the abrupt transition from sulfide bearing iron-stained pillow lavas down slope from the gossans and non-sulfide bearing pillow lavas to the north. It is also possible this abrupt transition represents a facies change (exhalative to non-exhalative components).

Estimating the direction and amount of displacement along F4 is difficult due to the variable shape and size of the upper high-grade pods. It seems likely that F4 represents a normal fault with a northeastern rake. This interpretation is based on the the location of the massive sulfides in TAB-48, which have no stringer zone preserved below them, TAB-33 which has both massive sulfides and stringer zones that are separated by F4, and TAB-47 which is missing essentially all of its massive sulfide zone, but has a stringer zone preserved below F4. Such a geometry of sulfide zones between these holes suggests a plane of weakness developed

contemporaneous structures. F1 has the most impact on the property due to its potential large displacement and, providing it is a normal fault, may bring the southern MUZ and MLZ extensions closer to the surface.



## PROPOSED EXPLORATION AND DEVELOPMENT PROGRAM

If Noranda Exploration, Inc. should again become involved with the Turner Albright deposit, a continued program should include several aspects which would significantly advance the property toward the development stage. Major facets of such a program include the following:

1. Extensive metallurgical testing program. This program should focus on bulk sampling (either from drill core or adits) and testing of representative ore types. Testing on gossan samples is also recommended.
2. Rotary or reverse circulation drilling program in the MUZ and UHP massive sulfides for the delineation of proven reserves. Drill holes should be spaced on approximately 50 foot centers.
3. Reverse circulation program in the gossans to determine an accurate tonnage and grade figure. The potential for mining the gossan should be assessed.
4. Continued exploratory drilling south of coordinates 19,050 N and 20,300 to 20,500 E to determine the southern extension of the upper and lower exhalative horizons and the effect of the southern fault on these extensions.
5. Core drilling should also be continued on a limited basis between the UHP (TAB-33 and 35 centers) and the MUZ (e.g. see Figure 13) where only an elementary understanding of the exhalative horizons exists.

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## 4.0 GEOLOGY

### 4.1 Introduction

The task in this feasibility study is that of verification and understanding of the mineralization and geology as it relates to ore reserves and mine design. This included study of the geologic reports and on-site examination of the property and review of diamond drill core.

The following discussion of geology is largely abstracted from reports of others most notably that of Roger J. Kuhn and Hart W. Baitis published in Economic Geology Magazine, Vol. 82, 1987. The time requirements of this study did not allow a complete re-appraisal of the geology. It was possible however, to examine a significant amount of diamond drill core and review many of the drill logs. The development of an ore reserve by R. L. Russell, required the development of reserve cross sections and the consideration of much of the geological data. The structure could not be studied in detail. It is significant to understanding the deposit. Upon review, I have adopted the premise that faulting is significant, most particularly the F-1, F-2 and R-1 faults. I conclude that the suggestion of various geologists that the massive sulfides of the Main Upper and Lower Zones represent a single stratigraphic horizon disrupted by later faulting is correct.

### 4.2 General Geology

The Turner Albright deposit is an important ophiolite-hosted massive sulfide deposit. The ophiolite represents an old (157 million years) accreted terrain which comprises part of the western Jurassic belt of the Klamath Mountain province. The deposit was formed by metal bearing fluids generated by the circulation of seawater through a pillow basalt and sheeted dike complex within a back-arc rifting environment. These fluids vented as sea-floor hot springs, resulting in precipitation of disseminated and massive sulfides. The more disseminated sulfide zones, or stringer zones, are interpreted as conduits for exhalative fluids. Important concentrations of copper, zinc and iron sulfides constitute the bulk of the deposit. The deposit is highly auriferous. Gold is closely associated with both copper and zinc sulfides.

Figure 4.1 provides general geology of the area; Plate 1 shows local geology and follows the interpretation of Strickler.

### 4.3 Lithology

Four main categories of rocks are important.



#### 4.3.1 Serpentinite

Highly serpentinitized peridotite and dunite occur immediately west of the Turner Albright. This is part of the main mass of peridotite extending through the Klamath Mountain region. The rock is commonly faulted and sheared and consists largely of green to black antigorite and chrysotile with accessory magnetite.

#### 4.3.2 Sheeted Dikes And Mafic Flow Rocks

These rocks occur stratigraphically above the serpentinite and below the pillow lavas and sulfides. The dike complex has been intersected in several deep drill holes and is at least 550 feet thick. These dikes are basaltic and are diabasic to aphanitic textured and are typically epidotized. The dikes dip 45 degrees west and appear to intrude the pillow lava sequence, often at high angles. The dikes occur within 100 meters of the lowest sulfide horizon.

Mafic flow rocks are largely tholeiitic basalt occurring as thin to thick (5 - 350 ft. thick) massive flows. These can further be described as massive, ponded lobate, pillowed or brecciated flows. This sequence of extrusive rock has an apparent thickness of 1500 - 2400 ft in the Turner Albright area. Some of this apparent thickness may have been caused by cross faulting. The rock is typically fine grained to aphanitic and it is commonly amygdalioidal. Pillowed and lobate flows are most common. It is noted by Kuhns that gabbroic flows texturally grade into pillowed or massive basalt flows.

#### 4.3.3 Volcaniclastic And Clastic Sedimentary Rocks

Sedimentary rocks (in large part volcaniclastics) and siltstone and sandstone occur both as local and laterally more extensive units below and laterally away from the massive sulfides. This sometimes contains one to ten percent sulfides and rarely fragments of massive sulfide. Grey to black mudstones often occur directly above the sulfides and range from a fraction of an inch to twelve meters in thickness.

#### 4.3.4 Massive And Semi-massive Sulfides

Kuhns has logged core containing sulfides into three major categories as follows:

- Massive - contains 50 - 100 percent sulfides, has fine grained pyrite, marcasite, and chalcopryrite.
- Semi-Massive - contains 25 - 50 percent sulfides.

- Non-Massive - contains 5 - 25 percent sulfides.

The massive and semi-massive sulfides are largely strata formed, usually with fine texture. The non-massive sulfides occur as veins and stockwork, usually occurring below the massive and semi-massive. Non-massive sulfides presumably represent conduits for fluids generating the stratiform sulfides.

#### 4.4 Mineralization

The massive sulfides typically overlie semi-massive sulfides. Both are conformable with stratigraphy. The minerals present in order of abundance are: pyrite, sphalerite, chalcopyrite, marcasite, and accessory sulfides including minor amounts of tetrahedrite, galena, arsenopyrite, and pyrrhotite. The mineralogic study of Carson indicates that gold occurs as small grains within the sulfides in the following proportions: pyrite 20 percent, chalcopyrite 38 percent, sphalerite 14 percent, chalcopyrite-pyrite 16 percent, gangue 10 percent. Cobalt occurs in the outer rims of pyrite. Most of the massive sulfide is anomalous in mercury, arsenic, antimony and cadmium.

The sulfides exhibit colloform banding. The MUZ appears to be somewhat finer grained than the MLZ. The stringer non-massive sulfides occur as matrix material for basalt.

Recent drilling at depth shows that sphalerite is concentrated in some areas of the lower ore zone near the top of the massive horizon. It is also noted that cobalt is concentrated in the northern portion of the main upper zone.

#### 4.5 Orebody, Geometry and Structure

Geologic work to date identifies three ore zones as described below. The following description is summarized from Noranda's Final Report of January 14, 1983, by Kuhns.

##### 4.5.1 Upper Highgrade Pods (UHP)

The mineralization of the UHP as seen in diamond drill holes TAB - 33 and TAB - 35, is closely connected with the Main Upper Zone although UHP may represent a separate exhalative event. Two of the high grade pods appear to strike north 15 degrees east and dip 53 degrees southeast based on correlation of ore intercepts in holes TAB - 8, 35, 41, and 42. The UHP occur in an area 450 ft in strike length and 150 to 250 ft in dip length. The pods vary from 3 ft to 60 ft in thickness. The west margin of the pods are exposed as surface gossans. Hole TAB 33 shows approx. 100 ft of stringer sulfides developed below the massive sulfides.



#### 4.5.2 Main Upper Zone (MUZ)

Kuhns states a strike of north 53 degrees east and a dip of 56 degrees southeast as being representative of the trend of the MUZ. R. L. Russell analysis suggests a more northerly strike about north 15 degrees west.

The MUZ is about 350 ft in strike length. The cross sections developed for ore reserve calculations of this study indicate that the higher grade massive and semi-massive portions extend from approximately elevation 2900 to elevation 2300. Diamond drill holes such as TAB 19, 56, 38, 27, and 17 strongly suggest that the MUZ is faulted off below that elevation. On Sections J, K and L, the dip length is 550 to 600 ft and appears to be relatively uninterrupted by significant faulting. The higher grade portion of the zone is approximately 90 ft in thickness. Sections K, L, and M, indicate that the thickest ore is found at the base, a further indication that the down dip portion has been faulted off. The rake is approximately east.

#### 4.5.3 Main Lower Zone (MLZ)

The plotting of drill hole information for ore reserve calculations by R. L. Russell indicates a strike of north 60 degrees west and a dip of 45 degrees east. All of the data to date suggests that the orebody has a almost due east to slightly south of east rake. This strong rake is a significant feature and is important to mine design.

The MLZ as currently defined by drilling has a strike length of 450 to 500 ft. The upper portion of the orebody (as indicated by diamond drill holes TAB 26, 24, 3, and 16), suggest upward termination near elevation 2200 by a fault. The exposed dip length is a maximum of 400 ft on Sections K - K' and L - L'. There is very little down-dip drilling to determine the down-dip extent of the MLZ. No holes exist north of TAB 17 (TAB 17 is at N19150, Section K - K'). All of the diamond drill holes south of Section K - K' which includes holes TAB 27, 18, and 56 encountered ore grade massive sulfide in excess of 100 feet in true thickness. This suggests that the MLZ continues to further depth. Additionally, hole TAB 37 (at N18750, Section S - S') suggests continuation of down-dip and more southerly continuation of MLZ massive sulfide horizon. Geophysical interpretation of the Pulse EM and Mise Ala Masse Survey also suggest down-dip extension of the MLZ, perhaps with a more southwesterly rake than the drilling completed to date.



#### 4.6 Structure

Appendix B summarizes the structural interpretation of Strickler. Faulting has obviously played an important role in the current geologic picture. Strickler's map as published in the October issue of Oregon Geology seems to reflect the most up-to-date interpretation and provides a somewhat different interpretation of structure from that presented earlier by Noranda. The following comments are made relative to structure.

- The R-1 fault as delineated by Strickler represents the major structure which has offset the MUZ from the MLZ. I also conclude that it is highly probable that the MUZ and the MLZ are the same basic ore zone offset by the relatively flat dipping R-1 fault. The R-1 fault is by far the most important structural feature affecting the ore zone. The R-1 fault appears to offset the F-series faults.
- Previous studies have not included plan views of the mineralized zones. Figure 4.2 indicates at least one east - west to northwest trending fault, probable of the F-Series, with an approximate 55 to 65 degree north dip transversing the MLZ. This shows an approximate 100 ft apparent west displacement of the orebody south of the fault. It is not clear which of the F-Series faults is involved with the MLZ at the 2200 to 2000 horizon. There is no indication that the F-1 fault as mapped by others terminates the ore. Ore could exist south of the F-1.
- As seen in most cross-sections, there remains a strong continuity to ore blocks in the vertical direction. The offsets of faults does not unduly complicate orebody extraction from a locational perspective.
- The review of diamond drill core showed some broken ground immediately beneath the MLZ. While F-series faults could affect the location of development in the footwall of the ore zones, there is no indication that the F-Series faults affect the competency of the ore zone. The high core recovery throughout the MLZ suggests a competent ground. If one assumes the footwall because of faulting will be a problem, development would then be concentrated in the hangingwall of the orebody. Since the orebody is relatively short in strike length, principal development access for entry and ventilation can be accomplished from either end rather than footwall development. The mining methods selected in this study, i.e., cut and fill, are achievable since they eliminate the need to place development in the footwall.

#### 4.7 Comments on Geology

It was not possible within the time frame of this study to check many of the geologic premises of the geologists who have studied the deposit. The following comments are felt to be significant:

- Mineralization - There is no particular controversy concerning the origin of the deposit. The origin in this case is very important to understanding the potential for finding more ore.
- While interpretation of faulting is important, some of the faults have only minor displacement. As in many deposits, the total picture of displacement must await underground development and actual mining. I feel that the basic picture of Strickler is sufficient for planning.

#### 4.8 Geophysics Studies

The Surface pulse EM survey conducted by Crone Geophysics Limited, Mississauga, Ontario, in July and August 1985, appears to be significant. J.D. Crone in a letter ( Oct, 30, 1985) summarizing interpretation concluded that, based on three survey lines ( 66+54s, 8+75s, and 10+75s) the lower sulfide lens (MLZ) would continue at least to section line East 20750.

John Coyne of Noranda who interpreted the Mise ala Masse survey in 1982 concludes that, "The most significant feature of the survey was the large anomaly associated with the lower zone. The lack of subsurface data south of drill hole TAB-28 precludes an accurate determination of the geometry of the causative mass."



## 5.0 ORE RESERVES

### 5.1 General

Ore reserves were previously calculated by both Noranda and Rayrock. Only a narrative summary and summary listing of reserves by Rayrock were available for review for this study. In view of the lack of a data base for verification of reserves, it was necessary to calculate a new reserve. Reserves were calculated for MUZ and MLZ orebodies. The reserve of Rayrock for UHG was accepted in summary since it constitutes a small percentage of the total.

The ore reserves required for this study are those which are deemed minable by the methodology employed in the remainder of this report. The following sub-sections describe the basis, criteria, methodology and results of the reserves calculated for this study. The reserves are classed as "drill indicated" and do not strictly fit SEC criteria.

### 5.2 Drill Base

The method selected for calculation is the cross-section method. The following data basis was employed.

- Cross-sections - Sections E - E' through T - T' located at 50 ft intervals. Sections are N - S. The sections used for determining ore reserves were Sections H - H' Through O - O'. The reserves of MUZ and MLZ begin at Section 19300 N. and continues south to 20000 N.
- Cross-sections used are on a scale of 1 in = 50 ft showing plot of drill holes on all sections as per hole survey. These also showed significant geology. For convenience the sections were reduced to 1 in = 100 ft scale.
- Drill Data Base - All TAB holes from TAB-1 through TAB-59 plus Selco holes TA 75-1 through TA 75-4 were used for geologic interpretation. Plate 2 shows a vertical plan view of all of the drill holes employed. Most holes were surveyed.
- Assays - Assays were assumed to be correct as recorded in the data furnished. The following were used:
  - Significant drill hole intercepts - per Appendix C
  - Computer printout of assay data base for all drill holes through TAB 48.
  - Summary of drill hole co-ordinates and elevations.

The cross-sections, showing the reserve blocks as defined, are reproduced as Plate 6 through Plate 13.

### 5.3 Reserve Methodology

#### 5.3.1 Economics

The net smelter return after concentrate freight was calculated for all significant drill hole intersections. This employed the use of available smelter schedules for copper and zinc. Metal price assumptions and concentrator recovery assumption as per Table 5.1. A criteria that no reserve block would be accepted into reserves unless it contained a NSR value per ton greater than \$20. was used throughout. NSR values for all significant intercept intervals were calculated for this purpose (Appendix C). The reserve blocks were developed on section using this criteria. No value was given for cobalt since it is not deemed economically recoverable from concentrates with conventional metallurgical processes.

#### 5.3.2 Extension

The following extension criteria was followed.

- Reserves were extended 25 ft either side of the section on all sections.
- The area on the cross section to be included within the reserve block was established by:
  - . Bisecting the angle between drill holes;
  - . Extending drill hole influence 50 ft on section beyond the drill hole if not covered up or down-dip by another ore intercept at reasonably projectable distance.
  - . A density of 9.0 cu ft per ton was employed throughout.



Table 5.1 Reserve Economic Basis

## Concentrator:

## Assays, Recoveries and Factors used in Ore Reserve Calculations

	Wt Factor	Assays				Metal Distribution in Products:			
		Cu	Zn	Au	Ag	Cu	Zn	Au	Ag
Feed	1.0000	1.52	3.78	0.11	0.55	100	100	100	100
Cu Conc	0.0572	21.00	5.00	1.22	2.75	179.0%	7.6%	61.2%	29.5%
Zn Conc	0.0465	3.00	51.00	0.25	4.20	9.2%	52.8%	10.5%	25.5%
Tailings	0.8963	0.20	1.25	0.04	0.22	11.8%	29.5%	28.3%	35.9%
Total	1.0000								

## Metal Prices:

Copper	\$ per lb	\$0.90
Zinc	\$ per lb	\$0.50
Gold	\$ per oz	\$400.00
Silver	\$ per oz	\$7.00

Transport to Smelter: \$45.00 per ton

Applied to Both Copper and Zinc Concentrates

Copper Concentrate: NSR per Ton of Concentrate

Copper: Pay for Copper Contained less 1.3% times 97 percent  
Comex price less 6 cents per pound paid for

Gold: Pay for gold at assay less .01 oz/t of contained at London spot  
less \$ 5.00 per ounce paid for

Silver: Pay for silver contained less 3 ounces per ton at 97 percent  
at M&M less \$.20 per ounce

Zinc: No payment for zinc

Smelting charge: \$ 93.00 per ton of concentrates

Zinc Concentrate NSR per Ton of Concentrate

Zinc: Pay for 95 percent of zinc content at US highgrade price, min ded of 1.5 units.

Gold: deduct .03 oz per ton and pay for 90 percent of the remaining gold at  
London quote less \$5.00 per ounce

Silver: Deduct 1.0 oz per ton and pay for 70 percent of the remaining silver at M&M quotation  
less a deduction of \$.29 per ounce.

Copper: No payment

Smelting Charge: \$170.00 per ton of concentrates

## Calculated Unit Values:

Net Smelter Value of one ounce of Gold and Silver

Contained in the ore as mined

Gold: \$215.33 net to the mine per ounce

Silver: \$0.73 net to the mine per ounce

Net Smelter Value of one percent of Copper or Zinc Contained  
in the ore as Mined:

Copper: \$9.99 net to the mine per percent

Zinc: \$2.99 net to the mine per percent

These Values are based upon the smelter schedules and  
metal prices, and head assays indicated above.

The unit value concept does not include mining and concentrating costs or the cost of capital

## 4.4 Results

Table 5.2 and 5.3 provide a summary of reserve by block for MUZ and MLZ respectively. Total undiluted mining reserves are:

	TONS	AVERAGE UNDILUTED GRADE				
		oz Au/t	oz Ag/t	%Cu	%Zn	%Co (1)
UHZ	61,100	.244	1.15	2.72	1.37	0.069
MUZ	931,000	0.127	0.34	1.19	3.45	0.106
MLZ	1,108,500	0.099	0.61	1.55	3.75	0.032
TOTAL	2,100,600	0.115	0.50	1.432	3.55	0.066

Table 5.2 and 5.3 divide the reserves into two groups according to the NSR value of the ore as per the criteria of Table 5.1 and the grade of the block.

The reserves contain:

Gold oz	-	242,000
Silver oz	-	1,058,000
Copper tons	-	29,900
Zinc tons	-	74,500
Cobalt tons	-	1,341

## 4.5 Ore Reserve Analysis

### 5.5.1 Drilling

The MUZ averages approximately 34,000 tons of reserve per drill hole intercept with an average intercept length of 61 ft. The MLZ averages 79,000 tons per drill hole intercept with an average length of 107 ft. There are few obvious areas where fill-in drilling on section is indicated.

### 5.5.2 Core Recovery

Core recovery is almost 100 percent for all TAB diamond drill holes. The lack of significant fracturing or core loss suggests mineralization "healing" perhaps by later mineralization solutions.

### 5.5.3 Core Splitting

Most core was split using a diamond saw. The mineralization is visibly too fine grained and uniform to result in a bias being introduced during the splitting operation.

Table 5.2 Ore Reserves Turner Albright - Main Upper Zone

Undiluted Block Reserves								
			Au	AG	Cu	Zn	Co	
			\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:			215.33	0.73	9.99	2.98	0.00	
Orebody	Sec Block Category		Reserve Tons 000's	Au	AG	Cu	Zn	Co
				oz/t	oz/t	%	%	NSR/t \$/t
MUZ	M	2 MUZ>\$25	41.9	0.276	0.440	4.240	3.870	0.042 113.54
MUZ	L	5 MUZ>\$25	43.1	0.250	0.407	3.950	3.510	0.045 106.50
MUZ	K	5 MUZ>\$25	13.5	0.190	2.925	2.555	5.173	0.041 85.09
MUZ	K	1 MUZ>\$25	46.4	0.115	1.055	1.130	9.390	0.029 55.02
MUZ	J	5 MUZ>\$25	44.4	0.103	1.100	0.980	9.150	0.034 57.09
MUZ	K	3 MUZ>\$25	33.7	0.160	0.284	3.52	1.570	0.059 74.50
MUZ	J	4 MUZ>\$25	26.3	0.185	0.781	1.090	4.759	0.035 55.47
MUZ	J	2 MUZ>\$25	83.3	0.144	0.094	1.040	5.460	0.050 50.72
MUZ	M	3 MUZ>\$25	57.8	0.144	0.233	1.150	3.540	0.082 53.51
MUZ	L	4 MUZ>\$25	55.7	0.144	0.233	1.150	3.540	0.082 53.51
MUZ	K	6 MUZ>\$25	27.1	0.127	0.323	1.044	3.280	0.037 47.79
MUZ	H	1 MUZ>\$25	13.3	0.100	2.071	0.970	1.963	0.070 37.29
MUZ	K	4 MUZ>\$25	43.2	0.127	0.071	1.182	2.588	0.092 46.92
MUZ	I	1 MUZ>\$25	31.0	0.099	0.460	0.592	3.427	0.095 39.55
MUZ	M	1 MUZ>\$25	52.9	0.089	0.107	0.905	2.752	0.024 35.49
MUZ	K	7 MUZ>\$25	27.5	0.134	0.013	0.720	0.410	0.035 37.29
MUZ	K	2 MUZ>\$25	44.0	0.049	0.300	0.529	3.440	0.050 27.21
Sub Total MUZ>\$25			595.0	0.142	0.448	1.527	4.291	0.055 58.92
MUZ	I	4 MUZ<\$25	36.7	0.091	0.010	0.598	0.519	0.055 27.00
MUZ	K	9 MUZ<\$25	9.4	0.090	0.001	0.520	0.140	0.030 25.99
MUZ	I	2 MUZ<\$25	46.4	0.055	0.005	0.131	2.450	0.110 20.49
MUZ	J	3 MUZ<\$25	59.5	0.096	0.012	0.092	1.138	0.780 22.94
MUZ	I	3 MUZ<\$25	33.5	0.090	0.001	0.081	0.335	0.055 21.19
MUZ	H	3 MUZ<\$25	35.0	0.090	0.001	0.081	0.335	0.055 21.19
MUZ	I	5 MUZ<\$25	15.4	0.080	0.001	0.379	0.083	0.074 21.25
Sub Total MUZ<\$25			235.0	0.082	0.005	0.215	0.960	0.254 22.59
MUZ	Total MUZ		931.0	0.127	0.335	1.194	3.445	0.105 49.71



Table 5.3 Ore Reserves Turner Albright - Main Lower Zone

Undiluted Block Reserves				Au	AG	Cu	Zn	Co	
				\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:				215.33	0.73	9.99	2.98	0.00	
Ore-body	Sect	Block Category	Reserve Tons	Au oz/t	AG oz/t	Cu %	Zn %	Co %	NSR/t \$/t
MLZ	M	4 MLZ>\$25	56.5	0.172	1.560	3.410	7.220	0.048	93.93
MLZ	L	1 MLZ>\$25	77.5	0.172	1.560	3.410	7.200	0.048	93.77
MLZ	N	2 MLZ>\$25	47.9	0.071	2.010	0.730	14.560	0.029	67.44
MLZ	N	3 MLZ>\$25	55.1	0.060	1.380	1.120	9.510	0.018	53.45
MLZ	N	4 MLZ>\$25	14.4	0.036	1.550	0.420	9.220	0.005	40.55
MLZ	M	5 MLZ>\$25	59.5	0.088	0.318	1.918	4.900	0.020	52.55
MLZ	K	1 MLZ>\$25	101.9	0.130	0.150	2.040	1.410	0.051	52.59
MLZ	K	4 MLZ>\$25	52.1	0.130	0.150	2.040	1.410	0.051	52.59
MLZ	M	6 MLZ>\$25	50.6	0.079	0.463	1.494	3.988	0.020	44.15
MLZ	L	2 MLZ>\$25	109.4	0.079	0.463	1.490	3.988	0.020	44.12
MLZ	L	3 MLZ>\$25	38.9	0.079	0.463	1.490	3.988	0.020	44.12
MLZ	O	1 MLZ>\$25	20.0	0.084	2.220	0.490	2.930	0.052	33.33
MLZ	J	1 MLZ>\$25	172.0	0.108	0.090	1.381	0.770	0.031	39.41
MLZ	H	1 MLZ>\$25	18.6	0.141	0.001	0.155	0.032	0.031	32.11
MLZ	K	3 MLZ>\$25	37.5	0.060	0.322	0.780	1.400	0.024	25.12
MLZ	K	2 MLZ>\$25	102.3	0.060	0.322	0.780	1.400	0.024	25.12
Sub Total MLZ>\$25			1024.3	0.101	0.551	1.519	4.009	0.033	50.25
MLZ	I	1 MLZ<\$25	37.1	0.071	0.024	0.509	0.153	0.012	20.97
MLZ	H	2 MLZ<\$25	37.1	0.071	0.024	0.509	0.153	0.012	20.97
Sub Total MLZ<\$25			74.2	0.071	0.024	0.509	0.153	0.012	20.97
MLZ	Total MLZ		1108.5	0.099	0.509	1.545	3.752	0.032	48.28
MUZ,MLZ>\$25			1729.3	0.117	0.559	1.592	4.123	0.042	53.73
UHP			51.1	0.244	1.146	2.720	1.370	0.059	94.53
UMZ	Total >\$25		1790.4	0.121	0.599	1.521	4.029	0.043	54.79
Total <\$25			310.2	0.079	0.010	0.295	0.759	0.196	22.17
ALL	Total		2100.6	0.115	0.504	1.423	3.547	0.055	49.97
Contained Metal:									
Gold oz:				242049					
Silver oz:				1058027					
Copper Tons:				29901					
Zinc Tons:				74514					
Cobalt Tons:				1391					



#### 5.5.4 Comparison of Estimates

Table 5.4 provides a comparison of the reserve prepared for this study with that of previous estimates. The criteria used for estimating was somewhat different in each case so that a direct correlation is not possible.

#### 5.6 Resources

Table 5.4 provides a summary of an assessment of the total Turner Albright resource. This was accomplished by Nick Wetzel of USBM. He estimates that the total resource contains 7.8 millions tons of massive, semi-massive and stringer sulfides. The total gold content of this resource he estimates to be 600,000 ounces of gold.

Table 5.5 provides a somewhat more constrained resource assessment accomplished by Rayrock in 1984. This is at a higher cutoff than the USBM assessment.

#### 5.7 Mining Reserve

Table 5.6 provides a mining reserve which is intended for use in mine planning and economic analysis in the remainder of the report. This reserve contemplates cut and fill mining. A factor of 85 percent recovery and 10 percent dilution is applied. The dilution is included at a grade of one third the ore reserve grade since this material would largely come from semi-massive sulfides. Table 5.6 is based upon the block reserves of Tables 5.2 and 5.3.

None of the blocks included in Table 5.6 have an undiluted value of less than \$27 per ton.

It is estimated that 191,500 ounces of gold are recoverable from the mine to the concentrator. A mill head grade of 0.114 oz per ton Au, 0.55 oz per ton Ag, 1.52 percent copper, 3.78 percent zinc and 0.041 cobalt is forecast. The diluted recoverable reserves are 1,674,000 tons.

Table 5.4 Reserve and Resource Evaluation - Comparison of Estimates

Undiluted Block Reserves of Better Grade Reserves

			Au	AG	Cu	Zn	Co	
			\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:			215.33	0.73	9.99	2.98	0.00	
		Reserve						
		Tons	Au	AG	Cu	Zn	Co	MSR/t
		000's	oz/t	oz/t	%	%	%	\$/t
Noranda Mining	UMZ	325	0.135	0.000	1.150	3.32	0.000	50.45
1/22/91 (1)	MUZ	580.0	0.106	0.001	1.950	3.350	0.000	51.42
Mining Reserve	MLZ	1002.0	0.134	0.000	1.600	2.440	0.000	52.11
Total		2007.0	0.125	0.000	1.615	2.994	0.000	51.61
		Contained Gold= 250223 oz						
Stricker High	UMZ	49.9	0.473	2.060	4.530	1.220	0.000	152.25
Grade Reserve	MUZ	313.9	0.217	0.490	2.680	3.720	0.000	84.94
	MLZ	317.1	0.197	0.770	3.210	3.410	0.000	93.06
	MLZZ	255.1	0.052	1.530	0.950	13.570	0.000	51.42
Total		580.8	0.241	1.346	3.384	8.478	0.000	112.00
		Contained Gold= 154235 oz						
Q L Russell	UMZ	51.0	0.244	1.150	2.720	1.270	0.059	94.54
Mining Reserve	MUZ	931.0	0.127	0.340	1.19	3.450	0.106	49.76
	MLZ	1109.0	0.099	0.510	1.550	3.750	0.032	48.42
Total		2101.0	0.116	0.506	1.424	3.543	0.056	50.07
		Contained Gold= 242912 oz						

(1) This reserve was calculated prior to the discovery of high grade zinc in the hangingwall of MLZ

USPM Assessment of Total Resources

			Au	AG	Cu	Zn	Co	
			\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:			215.33	0.73	9.99	2.98	0.00	
		Reserve						
		Tons	Au	AG	Cu	Zn	Co	MSR/t
		000's	oz/t	oz/t	%	%	%	\$/t
USPM Resource	UMZ	119.4	0.274	1.170	2.238	1.575	0.090	95.91
Estimate	MUZ	4142.4	0.096	0.112	0.322	0.970	0.058	34.41
Wetzel, 1997	MLZ	3543.5	0.052	0.357	0.905	2.132	0.029	27.93
Total		7805.3	0.078	0.244	0.571	1.454	0.051	25.95
		Contained Gold= 607242 oz						

Table 5.5 Resource Evaluation - Rayrock 1984

		Au	AG	Cu	Zn	Co	
		\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:		215.33	0.73	9.99	2.98	0.00	
	Reserve						
	Tons	Au	AG	Cu	Zn	Co	NSR/t
	000's	oz/t	oz/t	%	%	%	\$/t
UHP	61.1	0.244	1.146	2.720	1.37	0.069	84.53
MUZ	2409.5	0.077	0.141	0.650	1.430	0.065	27.44
MLZ	770.5	0.088	0.603	1.350	4.360	0.030	45.87
MLZ- Non Massive	259.5	0.051	0.008	0.440	0.190	0.018	19.07
Total	3500.7	0.081	0.250	0.825	1.981	0.054	31.90
Contained Gold=		284080 oz					



Table 5.6 Mining Reserve - Diluted and Mine Recovered

## Undiluted Block Reserves ( Higher Grade Ore)

		Au	AG	Cu	Zn	Co	
		\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:		215.33	0.73	9.99	2.99	0.00	
Reserve							
Tons		Au	AG	Cu	Zn	Co	NSR/t
000's		oz/t	oz/t	%	%	%	\$/t
UHP	61.0	0.244	1.150	2.720	1.370	0.069	84.54
MUZ	595.0	0.142	0.448	1.527	4.291	0.056	59.95
MLZ	1034.3	0.101	0.551	1.519	4.009	0.033	50.34
Total Reserve	1790.3	0.122	0.589	1.521	4.029	0.043	54.95
Contained Gold=		218038 oz					

## Mining Recovered- Diluted Reserve

Waste Dilution:	10.0%	at	33.0%	of Reserve Grade
Mine Recovery of Block Reserve	95.0%	at	Block Grade	

The following Mining Reserves are used for preliminary mine planning:

		Au	AG	Cu	Zn	Co	
		\$/Oz	\$/Oz	\$/%	\$/%	\$/%	
Unit Values:		215.33	0.73	9.99	2.99	0.00	
Reserve							
Tons		Au	AG	Cu	Zn	Co	NSR/t
000's		oz/t	oz/t	%	%	%	\$/t
UHP	57.0	0.229	1.080	2.720	1.370	0.069	81.39
MUZ	549.8	0.133	0.421	1.19	3.450	0.105	51.19
MLZ	957.1	0.095	0.511	1.550	3.750	0.032	47.53
Total to Mill	1573.9	0.114	0.553	1.522	3.793	0.041	51.51
Contained Gold=		191449 oz					

The Mining Reserves are composed of the following:

	Tons	Au	AG	Cu	Zn	Co	NSR/t
Reserve Tons	000's	oz/t	oz/t	%	%	%	\$/t
UHP	51.9	0.244	1.150	2.720	1.370	0.069	84.54
MUZ	590.8	0.142	0.448	1.527	4.291	0.056	59.95
MLZ	979.2	0.101	0.551	1.519	4.009	0.033	50.34
Total	1521.8	0.122	0.589	1.521	4.029	0.043	54.95
Waste Tons	Tons	Au	AG	Cu	Zn	Co	NSR/t
	000's	oz/t	oz/t	%	%	%	\$/t
UHP	5.2	0.031	0.390	2.720	1.370	0.069	48.97
MUZ	59.1	0.047	0.149	0.504	1.415	0.019	19.45
MLZ	97.9	0.033	0.215	0.534	1.323	0.011	15.61
Total	162.2	0.040	0.194	0.535	1.329	0.014	19.10

## 6.0 METALLURGICAL PROCESS DEVELOPMENT AND CONCENTRATE SALES

### 6.1 General

The following subsections provide background for selective flotation process development. The results of metallurgical testing accomplished to date are presented. Section 6.2 is a summary of significant test results accomplished by the limited program completed to date. Section 6.3 provides information relative to the sale of concentrates including potential buyers and factors affecting the purchase of concentrates. The reader is also directed to the excellent mineralogical study by Carlson.

The differential flotation of mixed sulfides particularly copper-zinc and copper-zinc-lead sulfides often presents a challenge. Pyrite is almost always present as the principal gangue mineral in massive sulfide copper-zinc orebodies. Chalcopyrite, sphalerite and pyrite have similar flotation characteristics. In many massive sulfide orebodies of this type, these minerals are relatively fine grained and intergrown, causing difficult separation. Initial testing of Turner Albright ores together with the mineralogical study of Carlson indicated that this problem exists. In at least a dozen cases, the problem of producing copper and zinc concentrates of saleable quality from fine grained ore has been resolved. Usually the copper minerals can be floated at a moderately fine grind (normally about 70 % minus 325 mesh). Following copper separation, the separation of zinc minerals from pyrite and the upgrading of the zinc concentrate to a product with a zinc content of at least 48 percent often requires regrinding to less than 50 micron size to achieve liberation.

For orebodies which exhibit the fine grained intergrowth problem, it is necessary to do a thorough and well structured metallurgical testing program. The major objectives are to understand the liberation problem, followed by process development. In the past decade more than a dozen plants for separation of copper-zinc have been successfully constructed and yielded satisfactory results following the process development stage. The factors which affect liberation and flotation and the process and equipment selected vary from case to case but are well understood.

The amount of metallurgical testing accomplished at Turner Albright to date has been minimal. Dawson Laboratories effectively accomplished 8 flotation tests in 1982. The results show that progressive understanding of liberation characteristics in flotation chemistry yielded encouraging results on both MUZ and MLZ samples. The test program was in its infancy when concluded as a result of relinquishment of the property option by Noranda.



Several lock cycle flotation tests were accomplished by Lakefield Research for Rayrock. Lakefield is a firm well established and highly regarded in process development for copper-zinc massive sulfide ores. Preliminary testing suggests that the problem of differential flotation can be resolved.

The most likely approach is the selective flotation of copper and zinc into saleable products of a grade typically desired at most copper smelters and zinc refineries.

At the start of this study, there was thought to be some merit in considering a bulk copper-zinc concentrate which may be attractive for smelting companies who use flash smelting and autoclaving followed by more conventional recovery of the metals. Dowa, for example, is one of the most likely of two or three metallurgical complexes which could possibly utilize a combined copper-zinc concentrate since they routinely recovers metal from 'dirty' concentrates. That they do so of necessity for the processing of their own ore, rather than routinely, is now probable since they were not interested in TA high grade crude ore from UHP.

## 6.2 Metallurgical Testing to Date

### 6.2.1 Combined MUZ and MUZ Test.

The most comprehensive test of Turner Albright upper orebody metallurgy was Dawson Laboratories' Test No. 13 conducted July 13, 1982. This test was based upon a combination of equal portions of TAB 33 (Upper High-grade Zone) and TAB 35 (Upper part of Main Upper Zone).

The test data and results were as follows:

- Head grade:

Cu	4.33	%
Zn	5.43	%
Au	0.330	oz/ton
Ag	1.60	oz/ton
Fe	37.50	%

- The results were:

No. 3	Cu Cl Conc	% Assay	% Dist
	% Cu	21.57	78.5 %
	% Zn	5.89	16.0 %
	Au oz/ton	0.940	54.2 %
	Ag oz/ton	3.2	38.2 %
	% Fe	32.0	13.1 %

% Wt. in No. 3 Cu Cl Conc. = 15.27 %



No. 3	Zinc Cleaner Conc.	% Assay	%Dist.
	% Cu	4.24 %	9.2 %
	% Zn	45.15 %	73.3 %
	Au oz/ton	0.17oz	5.9 %
	Ag oz/ton	3.8 oz	26.5 %
	% Fe	12.9 %	3.2 %

- The Zinc scavenger tails were as follows:

	% Assay	% Dist.
% Cu	0.68	12.3 %
% Zn	0.80	10.7 %
Au oz/ton	0.14	39.9 %
Ag oz/ton	0.60	35.3 %
Fe	44.60	83.7 %
% Wt. In Zinc Scavenger Tails = 75.57 %		

#### 6.2.2 Lower Ore Zone Test (Noranda)

Test No. 1 through test No. 6 were conducted by Dawson Lab on Lower Ore Zone material. The following are significant:

##### Test No. 3

- The No. 2 Cu Cl Conc contained 24.23 % Cu, 3.25 % Zn and 0.780 oz Au per ton. 72.1 % of the copper and 45% of the gold reported to the copper concentrate.
- The No. 2 Zn Cl Conc assayed only 23.6 % Zn. It contained 0.34 oz Au and 2.4 oz Ag. The zinc concentrate amounted to 67.1 % of the feed weight and assayed 23.4 % iron. Grinding was not sufficient to completely liberate ZNS from the pyrite. The above illustrates that copper liberates at a coarser grind than zinc.

##### Test No. 6

- The No. 2 Zn Cl Conc assayed 46.7 Zn. Zn Ra Tails were 69 % of feed weight. The grind distribution of products gave 60.5 % - 325 mesh.

##### Tests No. 7 and 8

- These tests were cyanide leach of Au and Ag. The results of 48 hours leach at 20 lbs/ton Na CN were:

	% Au in solution	Grind % - 325 mesh
Test 7	47.9 %	58.5 %
Test 8	67.0 %	70.0 %

### 6.2.3 Lakefield Research Testing

Limited flotation testing was conducted by Lakefield Research in 1983 using a composite of equal parts of MLZ and MUZ. Two flotation tests, Test 6 and Test 7 were conducted. These were conducted at 72% and 93% passing minus 400 mesh (Tyler) respectively. The significant results of these tests are:

#### Test 6:

- A Cu Cl Conc assaying 18.0 % Cu, 6.0 % Zn and 0.61 oz Au/ton was achieved. This contained 64 % of the Cu and 14% of the Zn.
- A Zn Cl Conc assay 7.02 % Cu and 35.8 % Zn with .97 oz Au/ton was produced. The reason for the gold reporting to the zinc concentrate is not clear.

### 6.3 Sale of Concentrates

The facilities listed below can be considered for the sale of concentrates. Most plants in the U. S. and Canada have been contacted and have expressed an interest in purchase.

The smelter schedules (payment schedule and list of treatment costs and deductions) are similar in structure. It is not possible to discuss final terms until they have a complete analysis of the concentrates to be shipped.

Copper smelters typically do not pay for zinc. Similarly zinc plants do not pay for copper. At present zinc smelter schedules do not pay for cadmium. It is of importance that the metals report to the appropriate concentrates. Deleterious elements such as arsenic, antimony, mercury, are typically penalized if they exceed specified limits. A base treatment charge per ton of concentrate is charged. Usually rail freight is deducted and paid directly by the metallurgical plant. Charges are sometimes made for environmental costs and electric power. A refining charge may be applied to copper. In the final analysis, the net return for a concentrate may differ only by about ten percent between prospective metallurgical plants. It is important to realize that all base metal contracts are structured in a manner which allows part of the increase or decrease in metal price to be split between the seller and the buyer. This practice dates from the 14th century.

Metallurgical facilities in U. S., Canada, Japan and Europe are candidates for sale of concentrates. Negotiations should begin when metallurgical testing has determined the most probably concentrate grades. At that time a sample of concentrate should be analyzed for approximately thirty



different elements.

The following facilities should be considered for the sale of the Turner Albright concentrates:

### 6.3.1 Japanese Metallurgical Plants

#### DOWA Metallurgical Plants - Japan

- Kowa Seiko Co., Ltd., Tobato Kowa Process Plant  
Pyrite concentrate is the feed assaying 0.4% Cu, 0.3% Pb, 0.40% Zn, 50% PyS, 0.5% BaSO<sub>4</sub>. Roasting in a fluosolid roaster to produce sulfur dioxide for sulfuric acid production leaves Au, Ag, Cu, Zn in the cinder. This is treated by the KOWA (pelletizing and chlorination) process. This recovers the above metals and results in a pellet for steel making.
- DOWA Mining Co., Ltd., Kosaka Flash Copper Smelter (Outokompu type)  
Input feed is copper concentrates from "Black Ore" (Kuroko) of DOWA Mining Company's three concentrators. A typical concentrate would assay 26% Cu, 3.1% Zn, 3.8% Pb with high silver but low gold content. When copper concentrate is combined with zinc plant residue and other products the input feed to Kosaka averages .14 oz/ton Au, 18 oz/ton Ag, 22% Cu, 3.1% Zn, 24% Fe and 27% S. This plant could treat Turner Albright copper concentrate. They may be willing to provide a favorable contract because of the high gold content.
- Akita Zinc Co., Ltd., Iijima Zinc Refinery  
A typical input feed is 1.1% Cu, 2.5% Pb, 55% Zn, 3.7% Pyrite, 1.5% Ba SO<sub>4</sub>. This constitutes about 40% of feed. Other concentrates are bought on a world-wide basis. The process is typical i.e.,
  - . 1st stage purification - precipitation of Cu with zinc dust
  - . 2nd stage purification - precipitation of Ni & Co with zinc dust
  - . 3rd stage cadmium removal - precipitation with Zinc dustZinc residue - Autoclave treatment by inject of SO<sub>2</sub> dissolves 90% of Zn, Fe, Cd, and Cu.



Zinc plant residue treated by Hematite process with precipitation of Cu with elemental S. Copper cake contains most of the precious metals.

#### Overall Recovery of the Metals

- . Overall recovery of metals contained in ore (feed) based upon DOWA integrated operation is:

Cu 90%  
Zn 93%  
Pb 87%  
Au 84%  
Ag 88%

#### Applicability to Turner Albright Concentrates

- . They will be most interested in a clean copper concentrate with high gold.
- . The Akita Iijima Zinc Refinery will require a relatively good Zinc concentrate - 48% or better. Based upon their present feed, they can accommodate moderate levels, say to 7% Cu in the zinc concentrate.
- . Their plants overall do not seem to favor a combined Cu - Zn concentrate.

Most Japanese companies operate through Japanese trading companies. The trading company acts as an intermediary in the establishment of business relations.

#### 6.3.2 North American Metallurgical Plants

The following are likely candidates for sale of copper concentrates in the United States and Canada:

- ASARCO - El Paso, Texas
- ASARCO - Hayden, Arizona
- White Pine Copper Co. - White Pine Michigan
- Hudson Bay Mining and Smelting Co. Ltd. - Flin Flan, Manitoba
- Noranda Mines Ltd. - Gaspe Division - Murdockville, Quebec
- Falconbridge Ltd. - Kidd Creek Division - Timmins, Ontario

The following are likely candidates for sale of zinc concentrates in the United States and Canada:

- National Zinc - Bartlesville, Oklahoma
- COMINCO Ltd. - Trail, British Columbia
- Falconbridge Ltd. - Timmins, Ontario
- Hudson Bay Mining and Smelting Co. Ltd. -  
Flin Flon, Manitoba
- Canadian Electrolytic Zinc Ltd. (Noranda) -  
Valleyfield, Quebec

While pressure leaching plants are now operating at the Trail, Timmins and Flin Flon plants, they are not interested in bulk Cu-Zn concentrates.

All the above specify a concentrates of 50 percent zinc or better. The smelter contracts of all of the above are similar.

B.M.I.-TURNER-ALBRIGHT  
CALCULATION  
OF  
DRILL-INDICATED RESERVES

CONTENTS

1. DETERMINATION OF COMBINED  
METAL VALUES. (CMV)
2. PRODUCE LEVEL PLANS
3. CONTOUR LEVEL PLANS
4. CALCULATE RESERVES BY LEVEL
5. WEIGHTED AVERAGES OF LEVELS



1. DETERMINE COMBINED METAL VALUES FOR ASSAYS  
AT PIERCING POINT FOR EACH HOLE.

A. SET MONETARY VALUE FOR EACH METAL TO PROVIDE  
RATIO FOR COMBINATION AND TO DETERMINE A  
MULTIPLIER. ASSUMING:

COPPER @ 95¢/POUND

GOLD @ \$500.00/OUNCE

SILVER @ \$10.00/OUNCE

ZINC @ 40¢/POUND

COBALT @ \$20.00/POUND

THEREFORE:

$$\text{Cu: Au} = .95 : 500 = 526.32 \div 20 = 26.32$$

$$\text{Cu: Ag} = .95 : 10 = 10.53 \div 20 = .53$$

$$\text{Cu: Cu} = .95 : .95 = 1$$

$$\text{Cu: Zn} = .95 : .40 = .42$$

$$\text{Cu: Co} = .95 : 20 = 21.05$$

SINCE Cu, Zn, AND Co ARE EXPRESSED IN MULTIPLES OF  
20 UNITS (POUNDS) PER TON, WHILE Au AND Ag ARE IN  
SINGLE UNITS PER TON, THE MULTIPLIERS FOR Au AND  
Ag ARE DIVIDED BY 20.

Cu, Zn AND Co COULD HAVE JUST AS EASILY BEEN MULTI-  
PLIED BY 20, WITH THE RESULTING COMBINED METAL VALUE  
BEING THEN EXPRESSED AS POUNDS/TON RATHER THAN AS  
A PERCENTAGE (%).

B. SAMPLE CALCULATIONS:

TAB-23 - SAMPLE # 5225, 315'-320'

<u>ELEMENT</u>	<u>ASSAY</u>	<u>MULTIPLIER</u>	<u>CU EQUIVALENT</u>
Au =	.036 OZ.	X 26.32 =	.95%
Ag =	.18 OZ.	X .53 =	.10%
Cu =	.15%	X 1 =	.15%
Zn =	3.60%	X .42 =	1.51%
Co =	.12 %	X 21.05 =	<u>2.53%</u>
			5.23%

C. FOLLOWING THE SAME PROCEDURE, THE COMBINED METAL VALUES FOR THE DRILL HOLES AT LEVEL 2550' ARE:

TAB - 1 =	1.43%	TAB - 17 =	N/A
TAB - 3 =	.12	TAB - 18 =	5.50%
TAB - 4 =	.16	TAB - 19 =	.07
TAB - 5 =	.08	TAB - 20 =	.17
TAB - 6 =	.37	TAB - 21 =	.25
TAB - 7 =	N/A	TAB - 22 =	N/A
TAB - 8 =	.13	TAB - 23 =	5.23
TAB - 9 =	.10	TAB - 24 =	12.24
TAB - 10 =	.34	TAB - 25 =	N/A
TAB - 11 =	.16	TAB - 26 =	N/A
TAB - 12 =	.07	TAB - 27 =	N/A
TAB - 13 =	.17	TAB - 28 =	N/A
TAB - 14 =	.30	TAB - 29 =	N/A
TAB - 15 =	.18	TAB - 30 =	N/A
TAB - 16 =	4.47	(N/A - NOT ASSAYED)	

2. PRODUCE LEVEL PLANS (SCALE: 1" = 100') AT 25' INTERVALS, RELATIVE TO MEAN SEA LEVEL, PLOTTING THE LOCATION OF EACH HOLE AT THAT ELEVATION.

CODING OF PROJECTED DRILL CO-ORDINATES, BASED UPON THE COMBINED METAL VALUE, IS AS FOLLOWS:

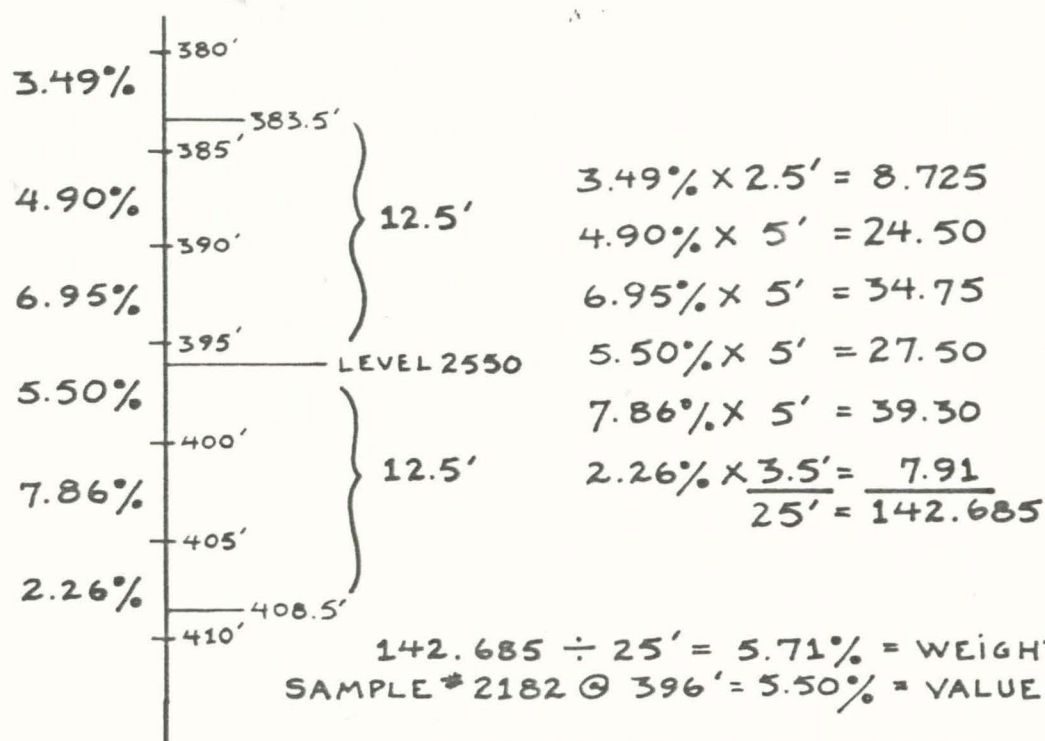
<u>GRADE (% Cu EQUIV.)</u>	<u>SYMBOL</u>	<u>COLOR</u>
<1.0%	⊙	NONE
1.0-2.99%	⊖	BLUE
3.0-4.99%	⊕	PINK
5.0-9.99%	⊗	ORANGE
>10%	⊗	RED

THE COMBINED METAL VALUE FOR THE SAMPLE AT THE POINT OF PIERCING WAS USED IN THE CODING OF EACH LEVEL PLAN. AN ALTERNATE METHOD, BASED UPON A WEIGHTED AVERAGE OF THE 12.5' IMMEDIATELY ABOVE AND BELOW EACH PIERCING POINT WAS CONSIDERED AS A SUPERIOR METHOD BUT REJECTED FOR THE MOMENT DUE TO THE EXTREME AMOUNT OF TIME NEEDED TO CALCULATE THE DATA, ESPECIALLY IN THE CASE OF ANGLE HOLES. (EXAMPLE ON FOLLOWING PAGE)

# EXAMPLE @ 2550' LEVEL

TAB-18 (VERT.)

PIERCING POINT @ 396'



3. CONTOUR LEVEL PLANS USING CODING AS BASIS FOR GROUPING.

4. CALCULATE TONNAGE AND GRADE FOR EACH LEVEL PLAN ( $\pm 12.5'$ ).

A. AVERAGE GRADE WITHIN EACH GROUP IS DETERMINED BY ARITHMETIC AVERAGING OF DRILL HOLES WITHIN THE GROUP.

B. USING CUT-OFF GRADES OF 1.0%, 3.0%, 5.0%, AND 10.0%, THE SURFACE AREA OF EACH GROUP IS CALCULATED, IN SQ. FT., BY THE USE OF A PLANIMETER.

C. ASSUMING A 25' THICK ZONE ( $\pm 12.5'$  FROM THE ELEVATION OF EACH LEVEL PLAN), THE TONNAGE FOR EACH CUT-OFF GRADE IS CALCULATED BY MULTIPLYING THE SURFACE AREA BY 25' TO GIVE THE VOLUME OF THE ZONE IN CUBIC FT., AND THEN DIVIDING BY 10 CUBIC FT. PER TON.

D. AVERAGE GRADE FOR EACH CUT-OFF IS DETERMINED BY WEIGHTING THE PROPORTIONAL SURFACE AREA OF EACH GROUP WITHIN THE CUT-OFF LEVEL BY IT'S AVERAGE ASSAY VALUE. (EXAMPLE ON FOLLOWING PAGE)



EXAMPLE: LEVEL 2550'

> 10.0% (10% CUT-OFF GRADE)

- TAB-24 @ 12.24%
- SURFACE AREA = 2500 FT.<sup>2</sup>
- TONS = 2500 FT.<sup>2</sup> X 25 FT. ÷ 10 FT.<sup>3</sup>/TON  
= 6250 TONS @ 12.24%

5.0-9.99% (5% CUT-OFF GRADE)

- TAB-18 @ 5.50% } 5.37%
- TAB-23 @ 5.23% }
- SURFACE AREA (5% CUT-OFF) = 13,200 FT.<sup>2</sup>
- SURFACE AREA (5-9.99% GROUPING)  
= 13,200 FT.<sup>2</sup> MINUS 2500 FT.<sup>2</sup>
- TONS = 13,200 FT.<sup>2</sup> X 25 FT. ÷ 10 FT.<sup>3</sup>/TON
- GRADE = 2,500 FT.<sup>2</sup> X 12.24% (≥ 10%)  
+ 10,700 FT.<sup>2</sup> X 5.37%  
= 33,000 TONS @ 6.67%

AND AS ABOVE FOR EACH CUT-OFF GRADE AT EACH LEVEL.

5. WEIGHTED AVERAGES (TONS X GRADE) By LEVEL FOR ENTIRE MINERALIZED BODY.

M.D.S.  
S.D.K.  
(wiz)

# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-

LEVEL (A.M.S.L.)	1%		3%		5%		T
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2875	65,500	2.32	12,250	5.78	12,250	5.78	
2850	35,000	9.15	35,000	9.15	35,000	9.15	4
2825	162,000	2.05	8,000	3.37			
2800	12,250	3.17	12,250	3.17			
2775							
2750	161,750	1.79	13,750	3.99			
2725	163,250	2.30	33,500	3.75			
2700	150,750	1.91	38,000	3.85			
2675	110,250	2.02					
2650	135,750	2.71	13,500	4.52			
2625	169,500	2.37	14,000	6.96	14,000	6.96	
2600	76,000	2.36					
2575	81,750	2.90	13,750	4.94			
2550	152,000	3.29	69,250	5.52	33,000	6.67	6
2525	244,000	4.37	228,250	4.47	17,000	7.62	3
2500	402,250	4.27	363,500	4.57	74,500	8.68	15
			441,111	2.00			



# ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - OFF

LEVEL (M.S.L.)	1%		3%		5%		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	295,750	4.72	280,000	4.88	86,750	7.30	11,500
2450	219,250	3.43	90,250	5.48	39,500	7.51	.
2425	146,750	4.05	137,250	4.12	18,500	7.48	
2400	261,250	3.67	90,000	4.89	14,250	8.31	9,000
2375	238,750	2.92	102,750	4.42	8,000	5.88	
2350	153,750	3.17	44,250	5.41	7,750	12.59	7,750
2325	151,000	3.68	69,000	5.55	19,250	8.26	9,250
2300	193,500	3.88	103,000	3.87	9,500	5.55	
2275	129,250	2.78	24,250	3.67			
2250	186,250	2.48	56,000	3.76			
2225	88,000	2.83	17,250	5.39	3,500	12.83	3,500
2000	12,200	1.75	14,250	3.07			
175	47,750	3.62	47,750	3.62			
150	50,750	3.38	6,500	8.11	6,500	8.11	
125	66,250	5.75	66,250	5.75	27,750	8.17	8,250
100	49,500	4.52	49,500	4.52	7,750	6.11	



# ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - O

LEVEL (A.M.S.L.)	1%		3%		5%		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2075	60,500	4.55	60,500	4.55	7,500	6.83	
2050	58,500	5.93	58,500	5.93	30,000	7.93	11,500
2025	144,750	3.51	52,000	5.97	8,750	11.22	8,750
2000	151,750	4.82	114,250	5.86	108,500	5.92	
1975	215,250	2.72	39,000	6.19	28,750	7.01	
1950	189,250	2.80	26,750	4.75	14,750	5.20	
1925	129,250	2.27	27,000	3.95			
1900	106,500	2.71	39,500	4.42	8,500	6.77	
1875	190,250	2.40	59,000	4.41			
1850	132,250	1.96	14,000	5.14	14,000	5.14	
1825	139,000	2.40	50,750	3.51			
1800	48,750	1.55					
1775	12,250	1.46					
1750	15,000	2.82					
1725	86,750	3.15	17,250	9.82	17,250	9.82	
1700	89,000	1.19					

# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT.

LEVEL (A.M.S.L.)	1%		3%		5%		T
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2875	65,500	1.88	12,250	3.46			
2850	35,000	6.43	4,750	29.93	4,750	29.93	* 4,
2825	162,000	1.70	8,000	3.37			
2800	12,250	1.78					
2775							
2750	131,000	1.52					
2725	89,250	1.15					
2700	72,750	1.61					
2675	110,250	1.24					
2650	13,500	2.98					
2625	90,000	2.22	14,000	6.31	14,000	6.31	
2600	76,000	1.44					
2575	68,000	1.56					
2550	152,000	2.93	43,000	5.60	6,250	11.65	6
2525	209,500	2.62	40,000	4.75	3,750	10.58	3
2500	302,750	3.11	69,500	6.65	69,500	6.65	
			W/O	COBALT			



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT

LEVEL (A.M.S.L.)	1%		3%		5%		T
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	246,750	3.97	193,500	4.48	37,250	9.53	
2450	219,250	2.02	23,500	5.81	5,250	9.26	
2425	112,750	2.00	19,250	4.88	6,250	5.55	
2400	104,750	2.05	9,000	8.66	9,000	8.66	
2375	193,250	2.03	24,000	4.13			
2350	89,750	2.79	7,750	11.95	7,750	11.95	
2325	97,500	3.69	48,500	5.27	9,250	11.05	
2300	117,750	2.26	30,750	4.06			
2275	58,750	2.27	9,250	3.53			
2250	128,000	1.74	32,750	3.45			
2225	58,500	2.15	3,500	12.83	3,500	12.83	3
2200							
2175	47,750	1.85	8,500	3.08			
2150	50,750	1.82	6,500	5.37	6,500	5.37	
2125	66,250	4.74	66,250	4.74	8,250	11.67	8
2100	49,500	3.75	49,500	3.75			

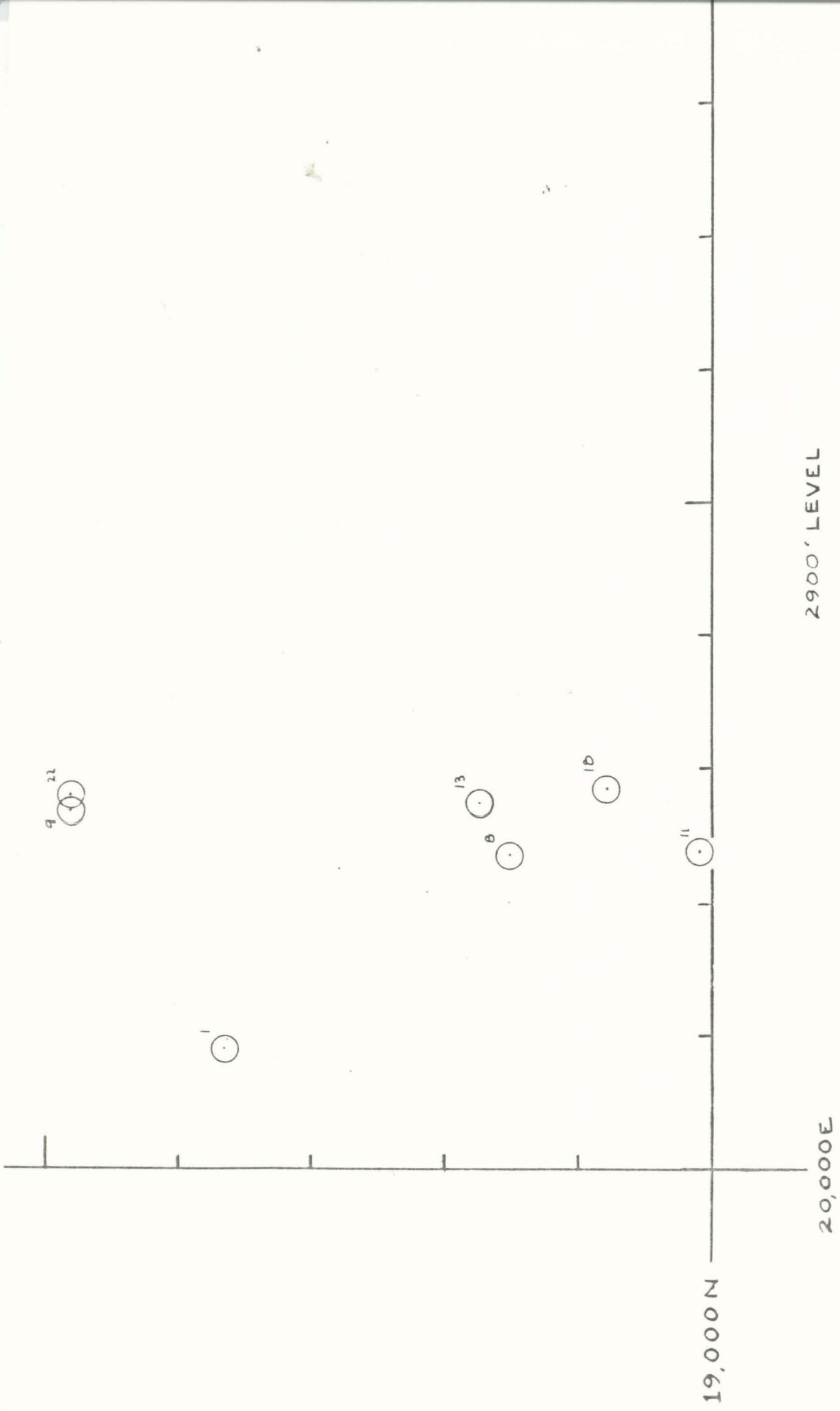


# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-

LEVEL (A.M.S.L.)	1%		3%		5%		TONS
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2075	60,500	4.18	60,500	4.18	7,500	5.12	
2050	58,500	5.10	58,500	5.10	30,000	7.04	
2025	121,000	3.54	52,000	5.27	8,750	10.78	8,
2000	115,000	4.95	100,000	5.44	94,500	5.51	
1975	215,250	2.29	39,000	5.43	28,750	6.03	
1950	189,250	2.47	36,000	4.39			
1925	129,250	2.01	27,000	3.78			
1900	106,500	2.49	39,500	4.33	8,500	6.66	
1875	190,250	1.69	59,000	4.13			
1850	103,750	2.81					
1825	139,000	1.76					
1800	15,800	1.01					
1775							
1750	15,000	2.29					
1725	17,250	9.66	17,250	9.66	17,250	9.66	
1700	89,000	1.05					

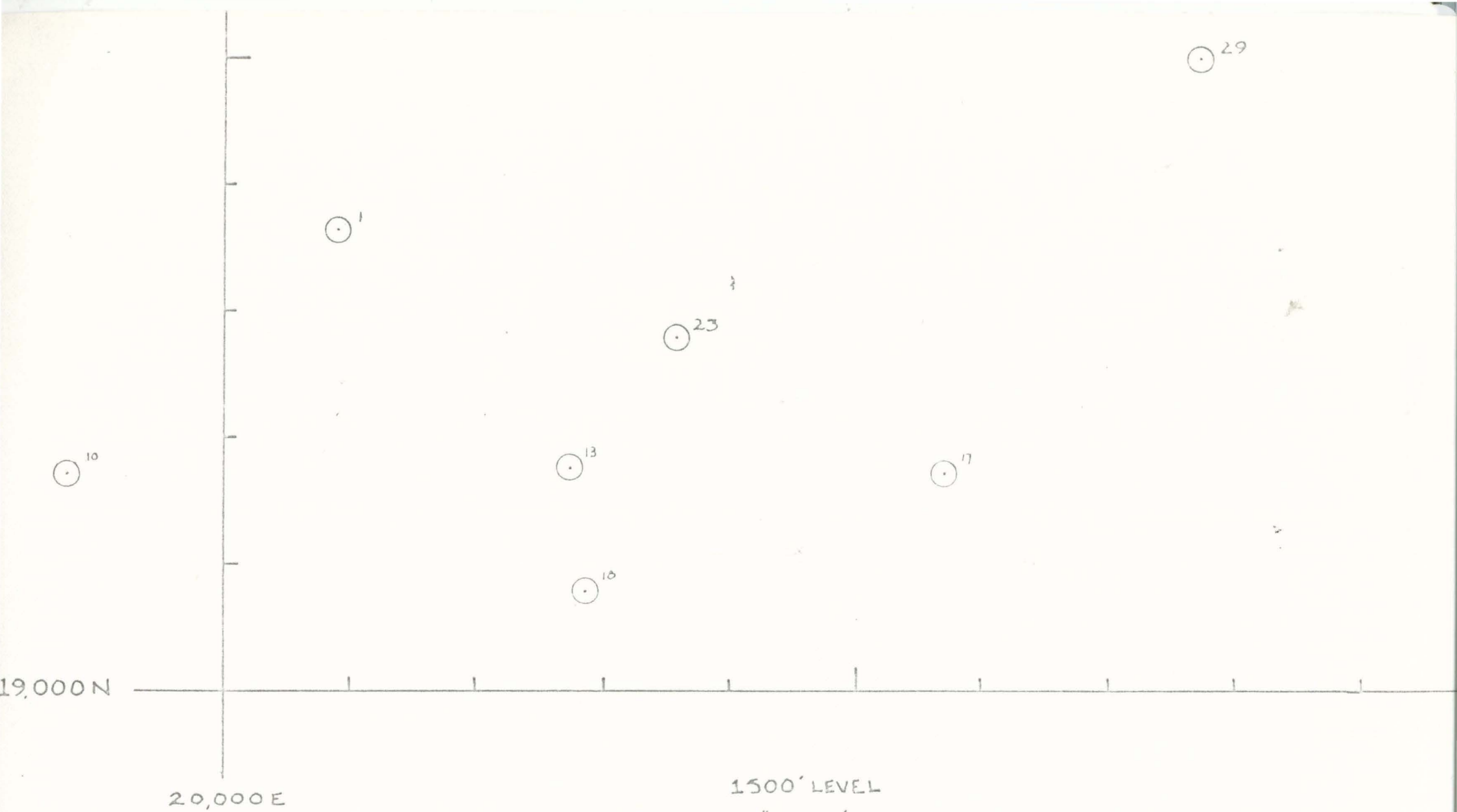
BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-

[illegible]



2900' LEVEL	
1" = 100	
CUT-OFF	GRADE
1%	0
3%	0
5%	0
10%	0





4

CUT-OFF

1%

3%

5%

10%

1500' LEVEL

1" = 100'

TONS

○

○

○

○

GRADE

○

○

○

○

BARETTA MINING, INC.

LEVEL 2875'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.  
VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

LEVEL 2850'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2825'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

AB #	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATES				
		W/Co	WQ/Co	FROM	TO	W/Co	WQ/Co	Au OZ./T.	Au + Cu	NORTH	EAST	ELEV.	BEARING	DIP
1	179'	2.56	1.50	166.5'	191.5'	1.07	.74	.022	.58	19,366	20,090	3004	VERT.	----
3	121'	1.75	1.75	105'	137.5'	9.71	8.91	.258	6.79	19,659	20,193	2918	S 25 W	-50°
4	110'	3.37	3.37	95.5'	124.5'	<2.12>	<1.86>	<.063>	<1.66>	19,694	20,156	2920	SOUTH	-60°
6										19,515	20,526	2830	S 25 W	-55°
8	167'	1.64	1.57	149.5'	184.5'	<1.0	<1.0	<.01	<1.0	19,152	20,281	2943	WEST	-45°
9										19,482	20,297	2931	WEST	-45°
10										19,172	20,570	2748	WEST	-61°
11										19,010	20,265	2946	WEST	-60°
13										19,175	20,274	2941	VERT.	----
15										19,279	20,532	2748	WEST	-60°
16										19,279	20,532	2748	WEST	-45°
18										19,079	20,284	2946	VERT.	----
19										19,257	20,685	2659	WEST	-60°
20										19,372	20,579	2749	WEST	-60°
21										19,372	20,579	2749	WEST	-40°
22										19,482	20,297	2931	WEST	-60°
23										19,280	20,356	2865	VERT.	----
24										19,172	20,570	2748	WEST	-40°
26										19,071	20,742	2662	WEST	-35°
27										19,071	20,742	2662	WEST	-60°
30										19,071	20,742	2662	WEST	-45°



BARETTA MINING, INC.

LEVEL 2800'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2775'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2750'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 2725'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2700'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



## BARETTA MINING, INC.

LEVEL 2675'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

TAB #	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATE			
		W/Co	WO/Co	FROM	TO	W/Co	WO/Co	Au OZ./T.	Au + Cu	NORTH	EAST	ELEV.	BEARING
1	329'	1.98	1.56	316.5'	341.5'	<1.0	<1.0	.02	<1.0	19,366	20,090	3004	VERT
3										19,659	20,193	2918	S 25 V
4	283'	.421	.211	268.5'	297.5'	<1.93>	<1.58>	<.053>	<1.39>	19,694	20,156	2920	SOUT
6										19,515	20,526	2830	S 25 V
8										19,152	20,281	2943	WEST
9	362'	1.19	1.12	344.5'	379.5'	1.96	.68	.008	.21	19,482	20,297	2931	WEST
10										19,172	20,570	2748	WEST
11										19,010	20,265	2946	WEST
13										19,175	20,274	2941	VERT
15										19,279	20,532	2748	WEST
16										19,279	20,532	2748	WEST
18										19,079	20,284	2946	VERT
19										19,257	20,685	2659	WEST
20										19,372	20,579	2749	WEST
21										19,372	20,579	2749	WEST
22										19,482	20,297	2931	WEST
23	190'	2.88	1.04	177.5'	202.5'	3.52	1.86	.028	.74	19,280	20,356	2865	VERT
24										19,172	20,570	2748	WEST
26										19,071	20,742	2662	WEST
27										19,071	20,742	2662	WEST
30										19,071	20,742	2662	WEST



BARETTA MINING, INC.

LEVEL 2650'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

TAB #	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATES				
		W/Co	WO/Co	FROM	TO	W/Co	WO/Co	Au OZ./T.	Au ‡ Cu	NORTH	EAST	ELEV.	BEARING	DI
1										19,366	20,090	3004	VERT.	--
3										19,659	20,193	2918	S 25 W	-5
4	312'	1.20	.99	297.5'	326.5'	<1.51>	<1.30>	<.044>	<1.15>	19,694	20,156	2920	SOUTH	-6
6										19,515	20,526	2830	S 25 W	-5
8										19,152	20,281	2943	WEST	-4
9										19,482	20,297	2931	WEST	-4
10										19,172	20,570	2748	WEST	-6
11										19,010	20,265	2946	WEST	-6
13	291'	4.52	2.98	278.5'	303.5'	3.66	2.49	.03	.80	19,175	20,274	2941	VERT.	--
15										19,279	20,532	2748	WEST	-6
16										19,279	20,532	2748	WEST	-4
18										19,079	20,284	2946	VERT.	---
19										19,257	20,685	2659	WEST	-6
20										19,372	20,579	2749	WEST	-6
21										19,372	20,579	2749	WEST	-4
22										19,482	20,297	2931	WEST	-6
23	215'	2.32	.65	202.5'	227.5'	2.12	.64	.016	.41	19,280	20,356	2865	VERT.	--
24										19,172	20,570	2748	WEST	-4
26										19,071	20,742	2662	WEST	-3
27										19,071	20,742	2662	WEST	-6
30										19,071	20,742	2662	WEST	-4



BARETTA MINING, INC.

LEVEL 2625

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2600'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2575'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2550'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2525'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

TAB#	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATES				
		W/Co	WO/Co	FROM	TO	W/Co	WO/Co	Au OZ./T.	Au + Cu	NORTH	EAST	ELEV.	BEARING	
1	479'	2.89	2.05	466.5'	491.5'	2.69	1.76	.057	1.51	19,366	20,090	3004	VERT.	
3	513'	3.80	1.06	496.5'	529.5'	6.79	4.55	.155	4.08	19,659	20,193	2918	S 25 W	
4										19,694	20,156	2920	SOUTH	
6										19,515	20,526	2830	S 25 W	
8										19,152	20,281	2943	WEST	
9										19,482	20,297	2931	WEST	
10										19,172	20,570	2748	WEST	
11										19,010	20,265	2946	WEST	
13	416'	4.56	3.61	403.5'	428.5'	4.65	3.83	.107	2.82	19,175	20,274	2941	VERT.	
15	257'	10.91	10.58	242.5'	271.5'	3.55	3.24	.064	1.70	19,279	20,532	2748	WEST	
16	315'	4.80	2.70	297'	332.5'	4.56	2.47	.053	1.38	19,279	20,532	2748	WEST	
18	421'	4.40	3.86	408.5'	433.5'	4.38	3.81	.067	1.77	19,079	20,284	2946	VERT.	
19										19,257	20,685	2659	WEST	
20										19,372	20,579	2749	WEST	
21	348'	3.73	.78	328.5'	367.5'	3.02	.77	.021	.56	19,372	20,579	2749	WEST	
22										19,482	20,297	2931	WEST	
23	340'	6.69	4.97	327.5'	352.5'	5.83	3.37	.08	2.10	19,280	20,356	2865	VERT.	
24	346'	4.00	2.61	326.5'	365.5'	3.48	2.29	.031	.82	19,172	20,570	2748	WEST	
26										19,071	20,742	2662	WEST	
27										19,071	20,742	2662	WEST	
30										19,071	20,742	2662	WEST	



LEVEL 2500'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2475'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 2400'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 2375'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2350'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2325'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2300'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2275'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2250'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2225'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

TAB#	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATES				
		W/Co	WQ/Co	FROM	TO	W/Co	WQ/Co	Au OZ./T.	Au # Cu	NORTH	EAST	ELEV.	BEARING	DI
1										19,366	20,090	3004	VERT.	--
3										19,659	20,193	2918	S 25 W	-5
4	803'	2.83	2.01	788.5'	817'	1.96	1.15	.041	1.08	19,694	20,156	2920	SOUTH	-6
6										19,515	20,526	2830	S 25 W	-5
8										19,152	20,281	2943	WEST	-4
9										19,482	20,297	2931	WEST	-4
10										19,172	20,570	2748	WEST	-6
11										19,010	20,265	2946	WEST	-6
13										19,175	20,274	2941	VERT.	--
15	603'	1.85	1.22	588.5'	617.5'	1.29	.76	.025	.65	19,279	20,532	2748	WEST	-6
16										19,279	20,532	2748	WEST	-4
18	721'	12.83	12.33	708.5'	733.5'	(incomplete Assay)				19,079	20,284	2946	VERT.	--
19	501'	3.50	.55	486.5'	515.5'	3.05	.59	.019	.49	19,257	20,685	2659	WEST	-6
20										19,372	20,579	2749	WEST	-6
21										19,372	20,579	2749	WEST	-4
22										19,482	20,297	2931	WEST	-6
23	640'	1.93	1.19	627.5'	652.5'	2.31	1.62	.042	1.09	19,280	20,356	2865	VERT.	--
24										19,172	20,570	2748	WEST	-4
26										19,071	20,742	2662	WEST	-3
27										19,071	20,742	2662	WEST	-6
30										19,071	20,742	2662	WEST	-4



LEVEL 2200'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]







BARETTA MINING, INC.

LEVEL 2150'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2125'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2100'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 2075'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2050'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 2025'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 2000'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1975'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 1950'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1925'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



LEVEL 1900'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1875'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1850'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1825'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

TAB#	PIERCING POINT	ASSAY		AVERAGE		ASSAY				SURFACE COORDINATES				
		W/Co	WQ/Co	FROM	TO	W/Co	WQ/Co	Au OZ./T.	Au # Cu	NORTH	EAST	ELEV.	BEARING	D
1										19,366	20,090	3004	VERT.	-
3										19,659	20,193	2918	S 25 W	-
4	1264'	1.84	1.66	1250'	1278.5'	2.12	1.92	.04	1.05	19,694	20,156	2920	SOUTH	-
6										19,515	20,526	2830	S 25 W	-
8										19,152	20,281	2943	WEST	-
9										19,482	20,297	2931	WEST	-
10	1055'	3.96	1.43	1040.5'	1069'	2.93	1.37	.045	1.19	19,172	20,570	2748	WEST	-
11										19,010	20,265	2946	WEST	-
13	1116'	.34	.32	1103.5'	1128.5'	2.90	2.83	.057	1.49	19,175	20,274	2941	VERT.	-
15										19,279	20,532	2748	WEST	-
16										19,279	20,532	2748	WEST	-
18	1121'	.94	.90	1108.5'	1133.5'	1.16	.63	.018	.47	19,079	20,284	2946	VERT.	-
19	963'	1.67	1.44	948.5'	977.5'	1.39	1.17	.034	.89	19,257	20,685	2659	WEST	-
20										19,372	20,579	2749	WEST	-
21										19,372	20,579	2749	WEST	-
22										19,482	20,297	2931	WEST	-
23										19,280	20,356	2865	VERT.	-
24										19,172	20,570	2748	WEST	-
26										19,071	20,742	2662	WEST	-
27	967'	3.02	2.75	952.5'	981'	1.42	1.21	.027	.71	19,071	20,742	2662	WEST	-
30										19,071	20,742	2662	WEST	-



BARETTA MINING, INC.

LEVEL 1800'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1775'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1750'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1725'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1700'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1675'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1650'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1625'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1600'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1575'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1550'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL 1525'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

• LEVEL 1500'

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



BARETTA MINING, INC.

LEVEL \_\_\_\_\_

VALUES (IN % Cu) USED FOR RESERVE CALCULATIONS

[illegible]



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT -

LEVEL (A.M.S.L.)	1%		2.5%		5%		TO
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2875	25,000	2.31					
2850	61,750	3.04	13,750	6.47	13,750	6.47	
2825	45,000	3.90	13,000	8.91	13,000	8.91	
2800	39,000	1.57					
2775	67,750	1.86	26,250	2.66			
2750	131,000	1.89	33,250	3.10			
2725	25,000	1.78					
2700	122,750	1.47					
2675	70,000	1.72					
2650	83,750	1.40					
2625	33,500	5.01	33,500	5.01	33,500	5.01	
2600	150,000	1.65	7,000	3.29			
2575	113,750	1.41					
2550	64,000	4.50	55,750	4.88	8,750	11.31	
2525	210,000	3.21	137,250	3.76			
2500	255,250	2.93	158,000	3.72	12,250	6.15	



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - O

LEVEL (A.M.S.L.)	1%		2.5%		5%		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	233,750	4.07	109,250	6.51	100,750	6.83	
2450	216,750	2.69	106,750	3.82			
2425	150,500	2.03	26,750	4.93	16,500	5.57	
2400	151,500	3.25	44,000	7.31	21,000	12.22	
2375	155,750	2.34	39,250	3.27			
2350	97,500	3.94	21,250	10.02	21,250	10.02	
2325	106,000	3.81	106,000	3.81	22,000	7.11	
2300	115,500	2.36	62,750	2.93			
2275	65,250	2.18	31,500	2.60			
2250	92,250	1.73	21,250	2.55			
2225	50,000	1.39					
2200	50,000	1.70					
2175	87,500	1.61					
2150	55,000	4.04	14,500	11.09	14,500	11.09	
2125	97,750	4.46	39,500	8.26	39,500	8.26	
2100	68,500	7.98	68,500	7.98	23,500	16.09	

W/D COBALT



# ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - OFF

LEVEL (A.M.S.L.)	1%		2.5%		5%		TONS
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2075	66,250	5.84	66,250	5.84	25,750	7.83	
2050	51,750	4.72	51,750	4.72	10,000	5.15	
2025	120,250	4.07	98,750	4.50	26,750	7.26	
2000	216,250	3.38	100,250	5.46	87,250	5.60	
1975	199,250	2.95	66,750	5.07	46,750	5.95	
1950	201,000	2.63	73,750	4.42	17,000	7.39	
1925	180,250	2.46	75,250	4.04	12,750	6.02	
1900	185,000	2.10	21,750	5.16	21,750	5.16	
1875	99,500	1.79	8750	2.87			
1850	129,000	1.46					
1825	159,500	1.62	22,500	2.83			
1800	25,000	1.03					
1775							
1750	25,000	2.29					
1725	25,000	3.21	25,000	3.21			
1700	25,000	1.31					

ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-OFF

[illegible]

W/D COBALT



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT -

LEVEL (A.M.S.L.)	1%		2.5%		5%		TONS
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2875	53,000	3.67	53,000	3.67			
2850	73,250	4.48	73,250	4.48	12,750	7.06	
2825	102,250	2.63	13,000	9.71	13,000	9.71	
2800	89,750	1.63	12,750	2.98			
2775	67,750	2.13	26,250	2.96			
2750	170,000	2.62	99,500	3.18			
2725	130,000	2.11	40,000	3.74			
2700	135,750	2.25	42,000	3.76			
2675	79,250	2.39	22,250	3.52			
2650	129,750	2.26	31,000	3.66			
2625	60,000	3.91	22,250	6.34	22,250	6.34	
2600	156,500	3.03	121,750	3.61			
2575	136,000	2.57	83,750	3.28			
2550	67,750	7.35	67,750	7.35	63,250	7.58	
2525	261,750	4.00	261,750	4.00	24,750	6.31	
2500	321,000	3.62	265,500	4.01	14,250	6.62	



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-

LEVEL (A.M.S.L.)	1%		2.5%		5%		TO
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	249,250	4.71	237,250	4.83	62,500	7.72	
2450	248,750	3.98	174,000	4.76	32,500	6.29	
2425	195,000	3.52	134,250	4.37	22,250	7.17	
2400	228,750	4.04	149,000	5.36	35,750	9.26	
2375	234,250	3.34	138,750	4.35	12,250	5.38	
2350	208,750	3.82	125,000	5.29	28,500	10.87	
2325	191,500	3.93	165,500	4.37	26,250	7.31	
2300	178,000	3.14	162,250	3.23			
2275	201,750	2.57	105,750	3.08			
2250	168,750	2.54	70,500	3.23			
2225	107,500	2.24	35,000	3.05			
2200	130,750	2.11	26,750	2.86			
2175	87,500	2.88	56,000	3.37			
2150	70,750	5.74	70,750	5.74	17,000	13.56	
2125	104,750	6.45	76,000	8.18	55,000	9.94	
2100	68,500	9.42	68,500	9.42	48,250	11.42	



# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT -

LEVEL (A.M.S.L.)	1%		2.5%		5%		TO
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2075	66,250	6.59	66,250	6.59	66,250	6.59	
2050	51,750	5.82	51,750	5.82	51,750	5.82	
2025	120,250	4.59	120,250	4.59	26,750	7.78	
2000	216,250	3.94	134,750	5.31	87,250	6.07	
1975	199,250	3.55	146,750	4.17	46,750	6.83	
1950	201,000	3.10	108,750	4.09	17,000	7.67	
1925	180,250	2.74	75,250	4.24	12,750	6.25	
1900	185,000	2.29	50,000	3.82	21,750	5.25	
1875	99,500	2.00	8,750	3.02			
1850	129,000	2.27	29,750	3.57			
1825	195,750	2.02	70,250	2.92			
1800	33,750	1.35					
1775							
1750	25,000	2.57	25,000	2.57			
1725	27,000	3.85	27,000	3.85			
1700	27,000	1.56					

BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - OFF

[illegible]



## DISTRIBUTION OF RESERVES

W/O Cobalt  
(Cu, Zn, Au, Ag)

### 1 % Cut-off

2875 - 2575	=	968,250 tons	@	1.96%
2550 - 2300	=	1,756,500 tons	@	3.11%
2275 - 2175	=	345,000 tons	@	1.73%
2150 - 1950	=	1,076,000 tons	@	3.88%
1925 - 1550	=	928,250 tons	@	1.91%
2550 - 1950	=	3,177,500 tons	@	3.22%
2875 - 1550	=	5,074,000 tons	@	2.74%

### 2.5% Cut-off

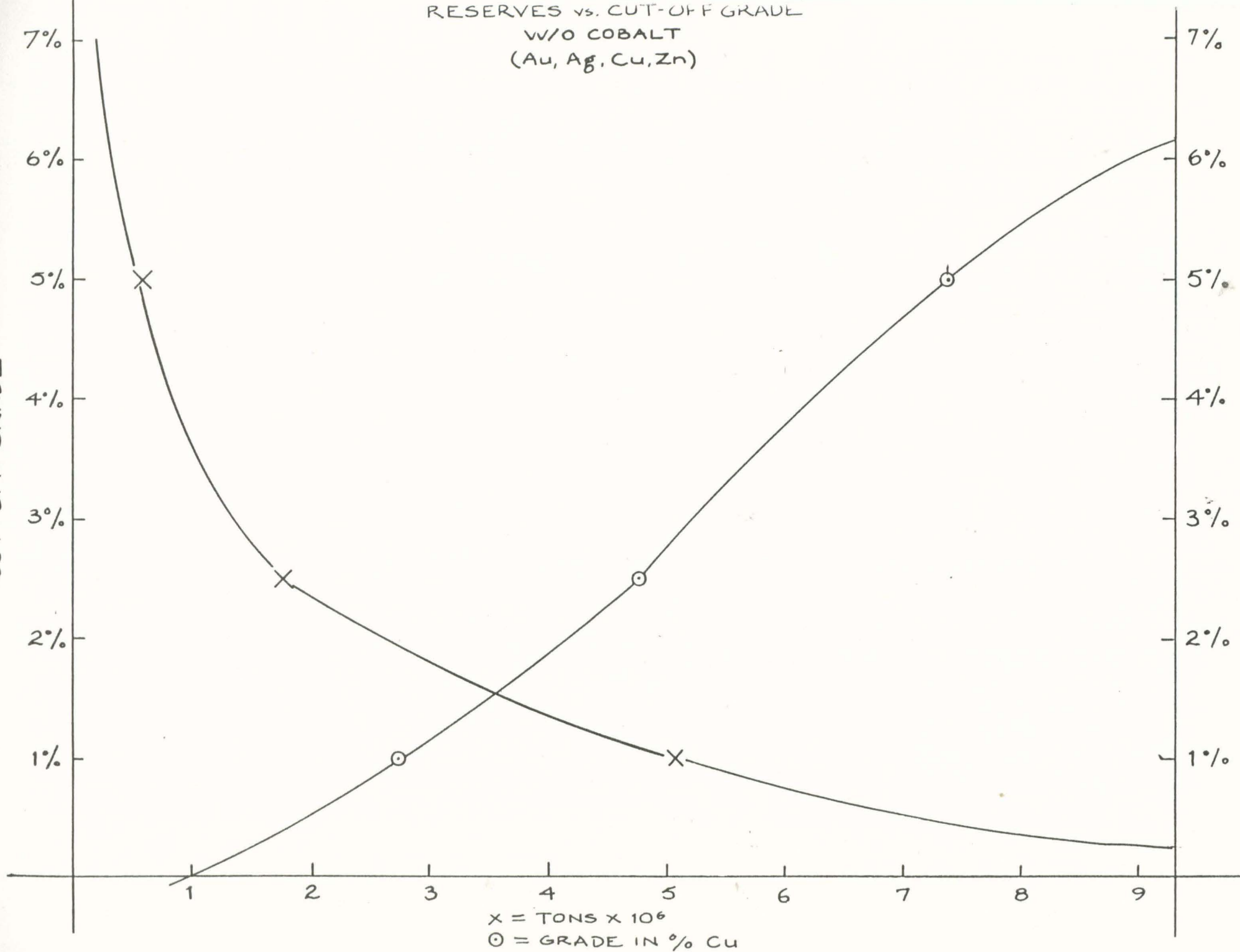
2850 - 2750	=	86,250 tons	@	4.38%
2625 - 2250	=	959,250 tons	@	4.38%
2150 - 1725	=	773,250 tons	@	5.33%
2850 - 1725	=	1,778,750 tons	@	4.77%

### 5% Cut-off

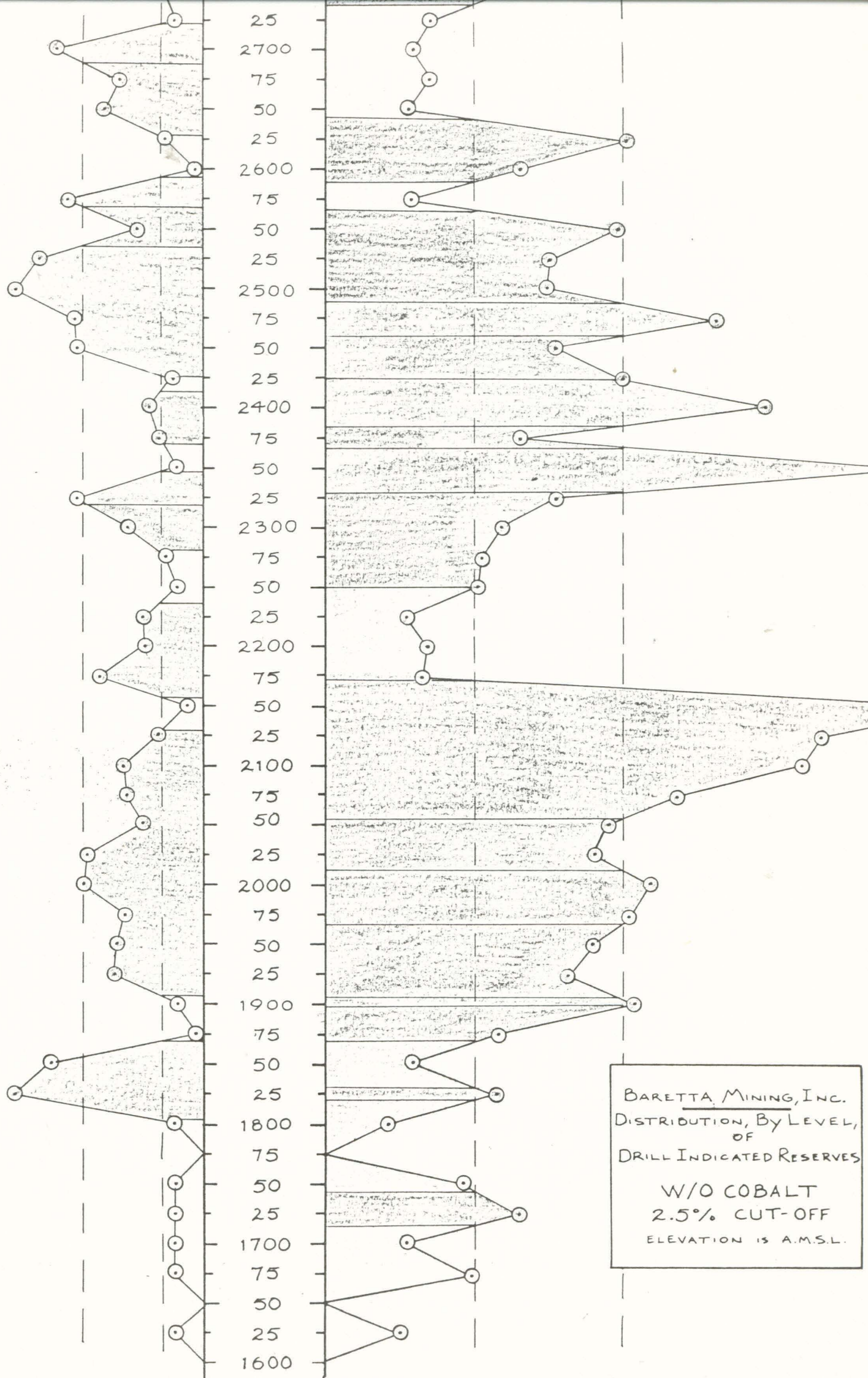
2150 - 1900	=	325,500 tons	@	7.36%
2850 - 1900	=	588,250 tons	@	7.39%

RESERVES vs. CUT-OFF GRADE  
W/O COBALT  
(Au, Ag, Cu, Zn)

CUT-OFF GRADE







# DISTRIBUTION OF RESERVES

With Cobalt  
(Cu, Zn, Co, Au, Ag)

## 1% Cut-off

2150 - 2000	=	698,500 tons	@	5.54%
2625 - 1975	=	4,331,250 tons	@	3.86%
2875 - 1975	=	5,362,000 tons	@	3.60%
2875 - 1550	=	6,682,000 tons	@	3.35%

## 2.5% Cut-off

2150 - 2000	=	588,250 tons	@	6.25%
2875 - 2000	=	3,404,000 tons	@	4.56%
2875 - 1575	=	4,004,750 tons	@	4.43%

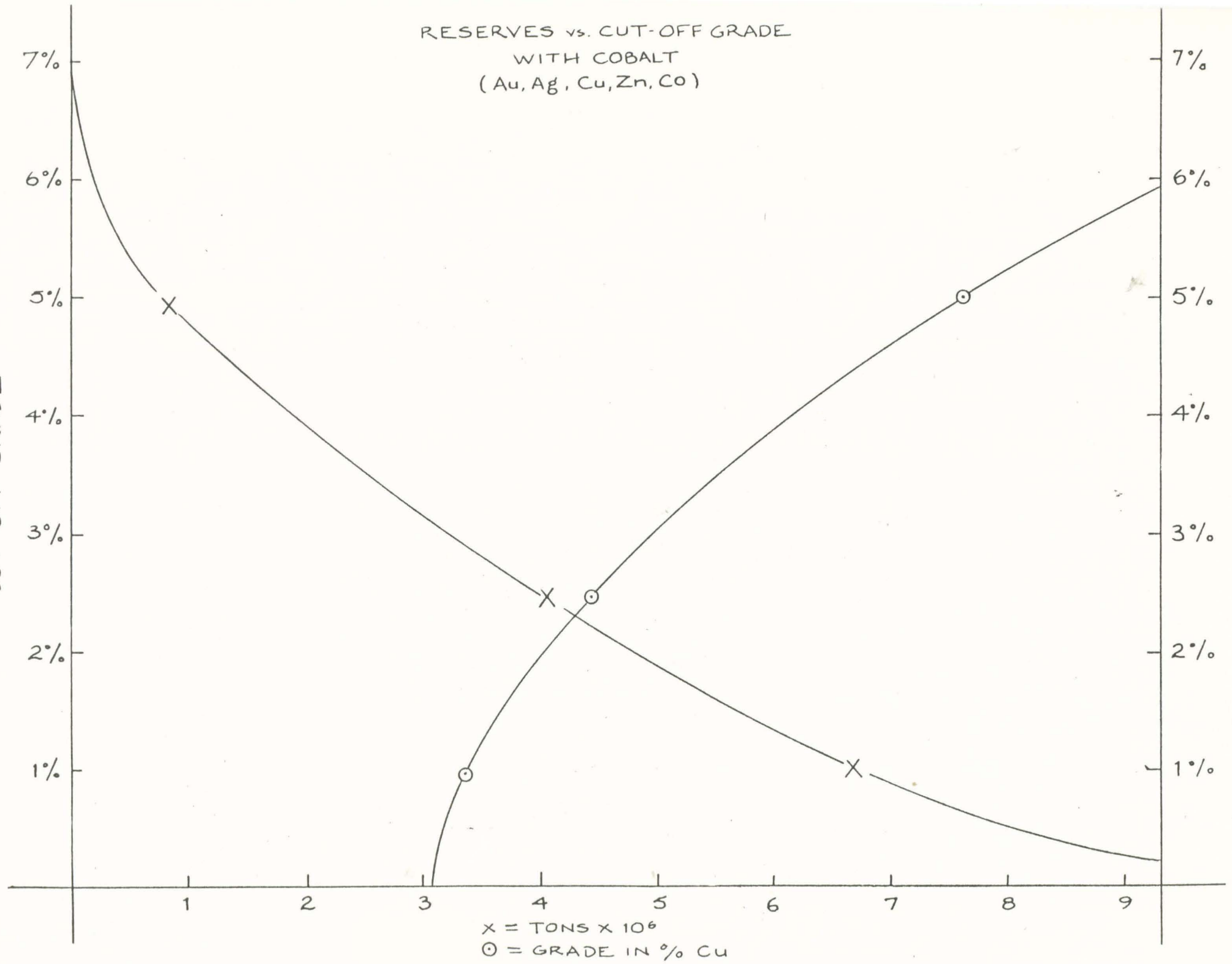
## 5% Cut-off

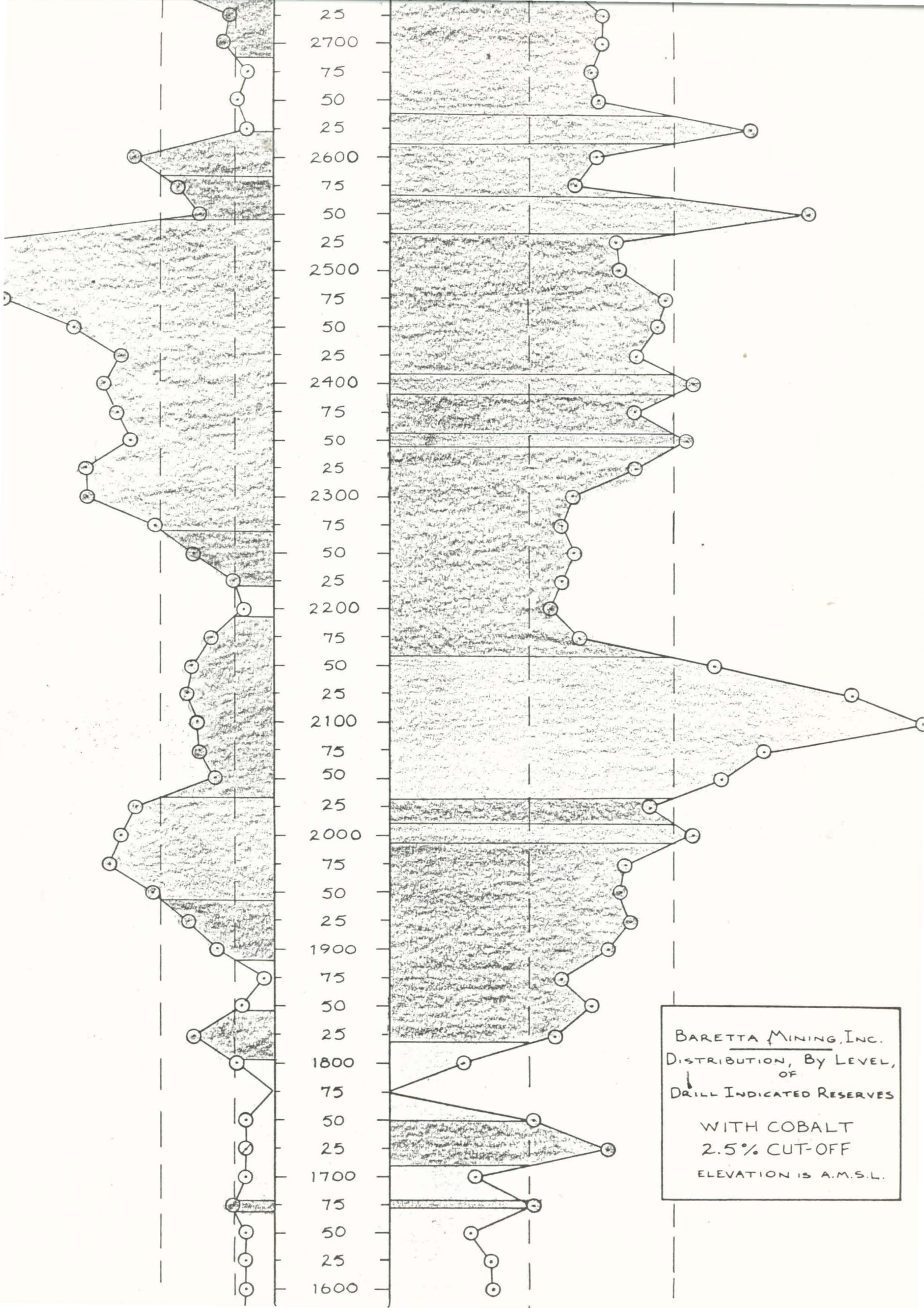
2550 - 1900	=	772,750 tons	@	7.66%
2850 - 1900	=	820,750 tons	@	7.65%



RESERVES vs. CUT-OFF GRADE  
WITH COBALT  
(Au, Ag, Cu, Zn, Co)

CUT-OFF GRADE







# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-

LEVEL A.M.S.L.)	1%		2.5%		5%		TO
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2875	25,000	1.91					
2850	73,250	1.93	12,750	4.79			
2825	51,750	4.06	24,250	6.79	24,250	6.79	
2800	37,250	1.14					
2775	25,000	1.40					
2750	99,500	1.37					
2725							
2700	25,000	1.32					
2675	25,000	1.39					
2650	25,000	1.15					
2625	25,000	2.15					
2600	53,250	1.47					
2575							
2550	50,000	3.02	16,500	5.73	16,500	5.73	
2525	187,000	2.22	56,000	3.45			
2500	191,500	2.11	30,000	3.53			

GOLD & COPPER ONLY

# BARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - O

LEVEL A.M.S.L.)	1%		2.5%		5%		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	218,250	2.55	86,500	4.05			
2450	179,000	2.02	81,250	2.78			
2425	46,250	2.27	21,500	2.85			
2400	141,250	2.51	21,250	6.87	21,250	6.87	
2375	155,750	1.83	15,750	2.86			
2350	97,500	2.77	21,250	5.98	21,250	5.98	
2325	106,000	2.72	42,000	3.46			
2300	115,500	1.65	17,500	2.76			
2275	65,250	1.55					
2250	57,500	1.51					
2225	50,000	1.09					
2200	25,000	1.58					
2175	60,000	1.27					
2150	55,000	1.27	14,500	6.56	14,500	6.56	
2125	62,250	3.59	20,500	7.14	20,500	7.14	
2100	68,500	3.89	46,750	4.68	23,500	6.52	



# ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT - OFF

LEVEL A.M.S.L.)	1%		2.5%		5%		TONS
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2075	66,250	3.24	53,750	3.51			
2050	51,750	2.26	14,000	2.97			
2025	120,250	1.62					
2000	119,750	1.79	12,000	3.17			
1975	147,750	1.89	15,500	3.57			
1950	158,500	1.71	17,750	3.25			
1925	118,000	1.58	13,250	2.84			
1900	76,750	1.83	20,000	2.58			
1875	54,250	1.35					
1850	25,000	1.77					
1825	89,500	1.24					
1800							
1775							
1750	25,000	1.10					
1725	25,000	1.50					
1700							

Au & Cu

ARETTA MINING, INC. / TONNAGE & GRADE (IN % Cu) AT VARIOUS CUT-OFF

[illegible]

And Cu



# DISTRIBUTION OF RESERVES

## Copper & Gold

### 1% Cut-off

2875 - 2600	=	465,000 tons	@	1.81%
2550 - 2325	=	1,372,000 tons	@	2.33%
2300 - 2150	=	428,250 tons	@	1.45%
2125 - 2050	=	248,750 tons	@	3.30%
2025 - 1625	=	1,009,750 tons	@	1.63%
2550 - 2050	=	2,049,000 tons	@	2.26%
2875 - 1625	=	3,523,750 tons	@	2.02%

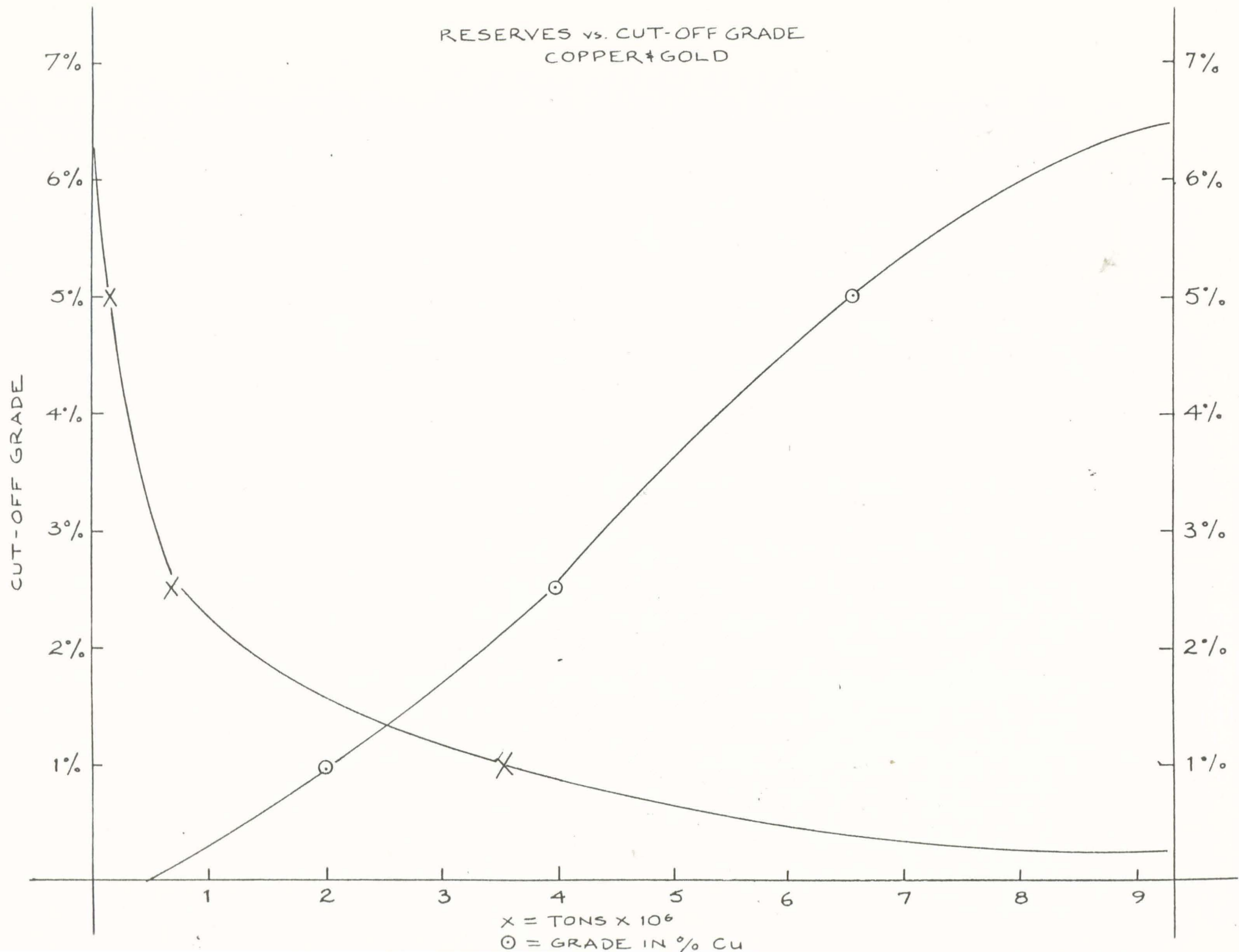
### 2.5% Cut-off

2850 - 2825	=	37,000 tons	@	6.10%
2550 - 2300	=	409,500 tons	@	3.77%
2150 - 1900	=	228,000 tons	@	4.08%
2850 - 1900	=	674,500 tons	@	4.00%

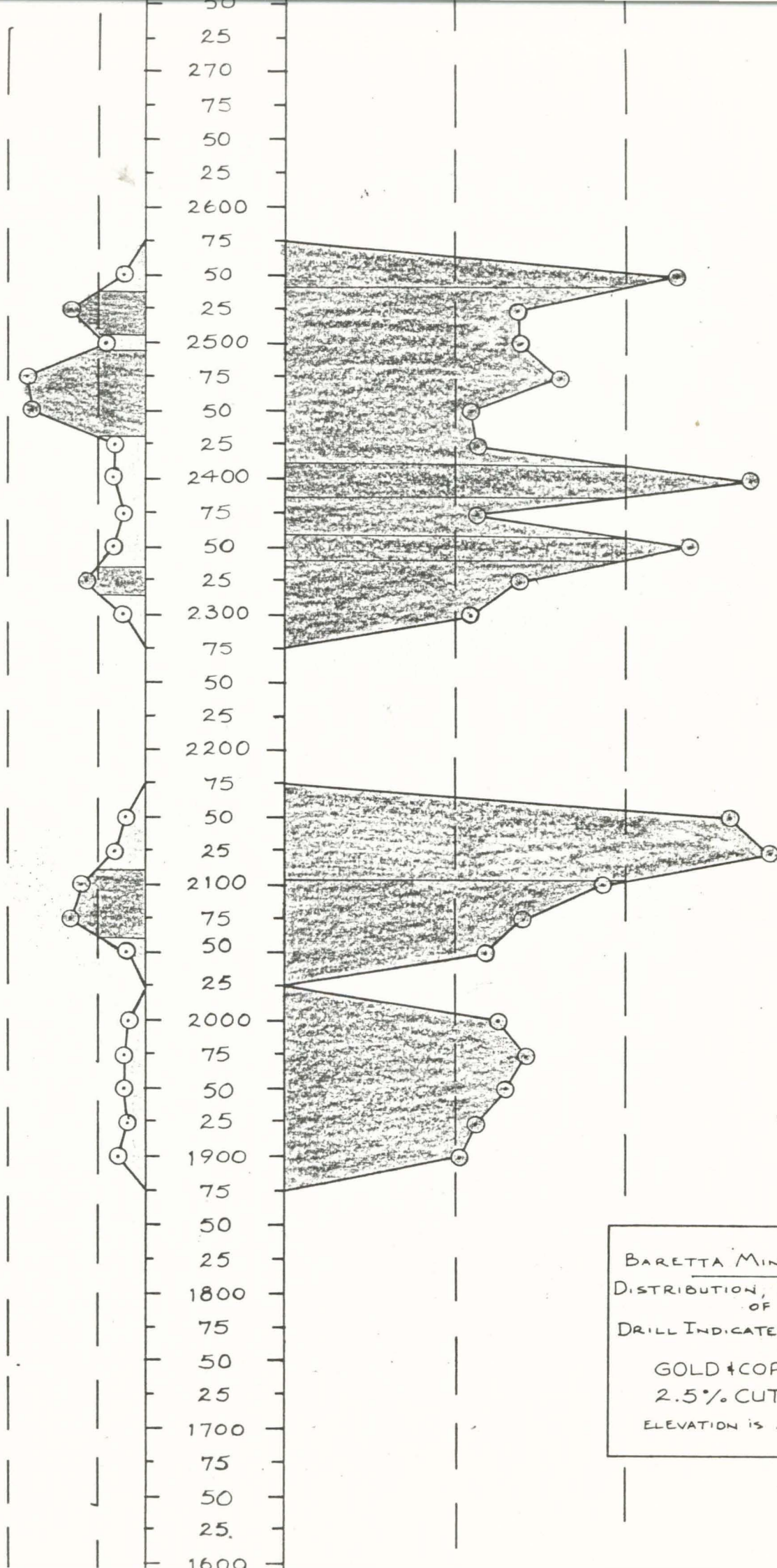
### 5% Cut-off

2150 - 2100	=	58,500 tons	@	6.75%
2825 - 2100	=	141,750 tons	@	6.53%

RESERVES vs. CUT-OFF GRADE  
COPPER & GOLD







BARETTA MINING, INC.  
 DISTRIBUTION, By LEVEL,  
 OF  
 DRILL INDICATED RESERVES  
 GOLD & COPPER  
 2.5% CUT-OFF  
 ELEVATION IS A.M.S.L.

# DISTRIBUTION OF RESERVES

Gold Only  
in oz/ton

## 0.03 oz/ton Cut-off

2875 - 2575	=	589,500 tons	@	.064 oz/ton
2550 - 2325	=	1,620,500 tons	@	.082 oz/ton
2300 - 2175	=	432,500 tons	@	.055 oz/ton
2150 - 1900	=	1,283,750 tons	@	.079 oz/ton
1875 - 1550	=	561,000 tons	@	.042 oz/ton
2550 - 1900	=	3,336,750 tons	@	.077 oz/ton
2875 - 1550	=	4,487,250 tons	@	.071 oz/ton

## 0.05 oz/ton Cut-off

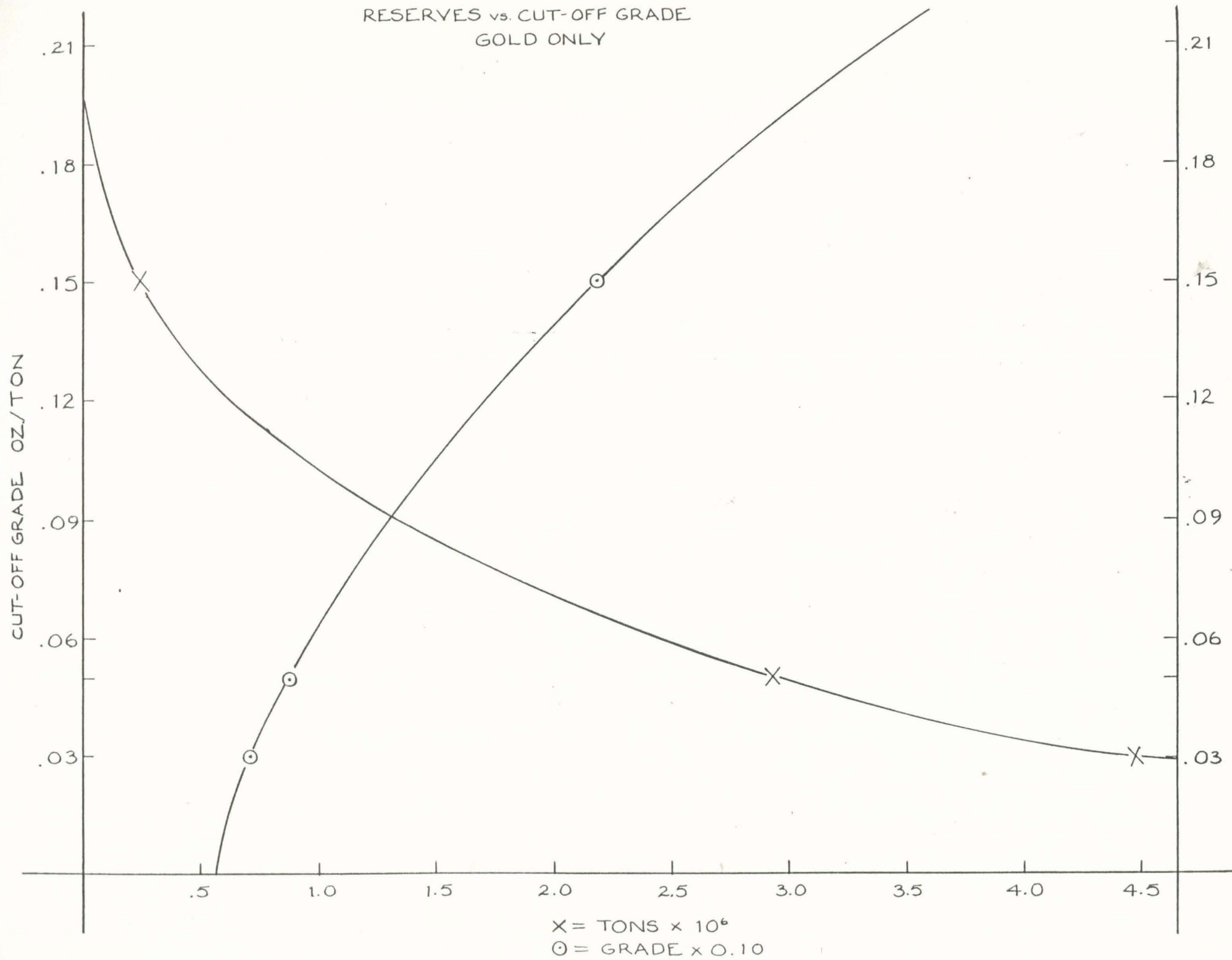
2875 - 2825	=	163,250 tons	@	.104 oz/ton
2775 - 2600	=	180,000 tons	@	.060 oz/ton
2550 - 2325	=	1,261,750 tons	@	.094 oz/ton
2300 - 2175	=	225,500 tons	@	.067 oz/ton
2150 - 2075	=	227,750 tons	@	.137 oz/ton
2050 - 1675	=	874,750 tons	@	.075 oz/ton
2875 - 2075	=	2,058,250 tons	@	.095 oz/ton
2875 - 1675	=	2,933,000 tons	@	.088 oz/ton

## 0.150 oz/ton Cut-off

2850 - 2100	=	241,500 tons	@	.218 oz/ton
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# RESERVES vs. CUT-OFF GRADE GOLD ONLY



BARETTA MINING, INC. / TONNAGE & GRADE GOLD ONLY IN OZ. / TON							
LEVEL A.M.S.L.)	0.03 OZ./TON		0.05 OZ./TON		0.15 OZ./TON		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2900							
2875	30,000	.072	30,000	.072			
2850	73,250	.074	73,250	.074	12,750	.182	
2825	60,000	.157	60,000	.157	29,000	.258	
2800	43,750	.044					
2775	50,000	.053	50,000	.053			
2750	92,500	.051	40,000	.060			
2725	25,000	.035					
2700	25,000	.050	25,000	.050			
2675	25,000	.053	25,000	.053			
2650	76,500	.037					
2625	31,750	.082	31,750	.082			
2600	31,750	.044	8,250	.074			
2575	25,000	.035					
2550	51,000	.108	43,750	.119	10,500	.218	
2525	216,000	.074	201,500	.077	13,250	.155	
2500	240,000	.085	193,500	.096			



# BARETTA MINING, INC. / TONNAGE & GRADE GOLD ONLY IN OZ./TON

LEVEL A.M.S.L.)	0.03 OZ./TON		0.05 OZ./TON		0.15 OZ./TON		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2475	242,250	.090	220,000	.095	47,250	.178	
2450	218,500	.076	180,250	.084			
2425	140,000	.045	20,500	.097			
2400	152,250	.083	63,750	.138	20,250	.261	
2375	155,500	.072	133,500	.076			
2350	104,000	.108	104,000	.108	24,250	.227	
2325	101,000	.107	101,000	.107	24,250	.168	
2300	113,000	.065	80,250	.075			
2275	69,000	.061	57,750	.065			
2250	108,500	.050	48,250	.065			
2225	50,000	.042					
2200	17,000	.060	17,000	.060			
2175	75,000	.049	22,250	.053			
2150	70,750	.097	17,000	.249	17,000	.249	
2125	104,750	.095	76,000	.118	18,000	.271	
2100	68,500	.151	68,500	.151	25,000	.248	
2075	66,250	.115	66,250	.115			

# BARETTA MINING, INC. / TONNAGE & GRADE GOLD ONLY IN OZ./TON

LEVEL A.M.S.L.)	0.03 OZ./TON		0.05 OZ./TON		0.15 OZ./TON		TON
	TONS	GRADE	TONS	GRADE	TONS	GRADE	
2050	51,750	.088	51,750	.088			
2025	120,250	.061	67,750	.071			
2000	165,000	.067	119,250	.077			
1975	199,250	.077	172,500	.083			
1950	201,000	.067	165,500	.072			
1925	135,000	.063	77,250	.080			
1900	101,250	.068	89,500	.072			
1875	83,250	.046	24,000	.060			
1850	129,000	.039	29,000	.067			
1825	140,000	.043	28,250	.057			
1800	33,750	.030					
1775							
1750	25,000	.042					
1725	25,000	.057	25,000	.057			
1700	25,000	.037					
1675	25,000	.061	25,000	.061			
1650							



BARETTA MINING, INC. / TONNAGE & GRADE GOLD ONLY IN OZ./TON

[illegible]



FEETAGE INTERVAL	SAMPLE NUMBER	FT H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	COMBINED METAL VALUES
X 128-134	1001	6	.100	.92	.21	.32	.11	5.78
X 134-144	1002	10	.16	.37	.21	.39	.12	7.31
X 144-151	1003	7	.056	.10	.24	2.3	.13	5.47
X 151-154	1004	3	.064	.17	.36	1.44	.14	5.69
X 154-159	1005	5	.055	.10	.16	1.50	.11	4.61
X 170-175	1006	5	.04	T	.005	.12	.01	1.32
X 183.5-182.5	1007	5	.048	.01	.16	.18	.05	2.56
X 188.5-193.5	1008	5	.032	.01	.45	.36	.01	1.66
X 193.5-198.5	1009	5	.04	.06	.14	.16	.05	2.34
X 198.5-202	1010	3.5	.04	.04	.20	.10	.07	2.79
X 253-258	1011	5	.04	.24	.02	.76	.05	2.57
X 258-263	1012	5	.064	.22	.10	.64	.08	3.85
X 263-268	1013	5	.048	.31	.12	1.34	.07	3.58
X 268-273	1014	5	.024	.32	.11	.68	.08	2.88
X 273-278	1015	5	.032	.93	.20	.86	.10	4.00
X 278-283	1016	5	.032	.17	.20	.58	.08	3.06
X 283-288	1017	5	.03	.31	.12	.83	.11	3.74
X 288-293	1018	5	.064	.24	.11	3.5	.10	5.50
X 293-298	1019	5	.048	.11	.04	.58	.06	2.87
X 298-303	1020	5	.054	.38	.17	1.32	.09	4.24
X 303-308	1021	5	.048	.40	.10	1.30	.08	3.91
X 308-313	1022	5	.064	.50	.12	1.30	.09	4.51
X 313-318	1023	5	.024	.40	.01	.12	.01	1.11
X 318-323	1024	5	.056	.08	.01	.08	.02	1.98
X 324-339	500	5	.03	.11				
X 354-359	501	5	.016	.11				
X 377.6-382.6	502	5	.02	.10				
X 392-397	503	5	.02	.06				
X 405-410	504	5	.02	.16				
X 410-415	1025	5	.072	.22	.01	.50	.03	2.86
X 415-420	1026	5	.048	.13	.01	.76	.03	2.29
X 420-425	1027	5	.056	.32	.01	.73	.03	2.59
X 425-430	1028	5	.04	.10	.01	.50	.04	2.17
X 430-435	1029	5	.04	.06	.01	.54	.04	2.16
X 435-440	1030	5	.04	.04	.01	.23	.02	1.60
X 440-445	1031	5	.04	.02	.01	.18	.02	1.57
X 458-463	1032	5	.04	.06	.01	.30	.01	1.43
X 463-468	1033	5	.048	.05	.01	1.15	.02	2.20
X 468-473	1034	5	.056	.04	.01	.25	.06	2.87
X 473-478	1035	5	.072	.08	.01	.19	.07	3.50
X 478-483	1036	5	.064	.11	.01	.70	.04	2.89
X 483-488	1037	5	.030	.01	.01	.75	.03	1.75
X 488-493	1038	5	.072	.01	.01	.43	.02	2.51
X 493-498	1039	5	.072	.01	.01	.74	.04	3.06
X 498-503	1040	5	.02	.90	.01	1.6	.02	2.11
X 503-508	1041	5	.02	.09	.01	1.15	.02	1.49
X 508-513	1042	5	.032	.01	.01	.61	.02	1.53
X 513-518	1043	5	.030	T	.01	.50	.04	1.59
X 518-523	1044	5	.072	.07	.01	.29	.05	3.12
X 523-528	1045	5	.056	.05	.04	.38	.07	3.17



TAB - #1

(MET. LABS)

CN 5/1  
SA 5/1

FOOTAGE INTERVAL	Sample Number	IN	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	COMBINED METAL VALUES
X 533-538	1047	5	.048	.07	.25	1.3	.10	4.20
X 538-543	1048	5	.056	.04	.01	.37	.05	2.71
X 543-548	1049	5	.048	.01	.13	.24	.04	2.34
X 548-553	1050	5	.04	.02	.02	.10	.05	2.18
X 553-558	1051	5	.048	.05	.09	.30	.04	2.35
X 558-563	1052	5	.072	.07	.15	.26	.05	3.24
X 563-568	1053	5	.04	.02	.20	.17	.04	2.18
X 568-573	1054	5	.024	.01	.06	.19	.03	1.41
X 573-578	1055	5	.024	.02	.13	.21	.04	1.70
X 578-583	1056	5	.048	.02	.10	.03	.04	2.23
X 583-588	1057	5	.032	T	.01	.03	.01	1.08
X 588-593	1058	5	.04	.02	.01	.03	.20	5.30
X 593-598	1059	5	.032	.01	.01	.03	.10	2.98
X 601-606	505	5	.02	.06				.56
X 606-611.6	1063	5.6	.046	1.27				1.88
X 611.6-615	1064	34	.044	.46				1.40
X 615-620	506	5	.020	.12				.59
X 621-626	1065	5	.062	.73				2.02
X 626-631	507	5	.044	.15				1.24
X 632-639	1060	7	.02	T	.01	.01	.04	1.38
X 642-647	508	5	.04	.10				1.11
X 647-652	1066	5						
X 655-660	509	5	.016	.08				.46
X 661-665	1067	4						
X 665-670	1068	5						
X 670-675	510	5	.044	.04				1.18
X 675-679	1069	4						
X 679-684	1070	5						
X 684-688	1071	4						
X 688-693	511	5	.03	.11				.85
X 693-697.6	1072	4.6						
X 697.6-701	1073	34						
X 701-706	1074	5						
X 706-711	512	5						
X 724-729	513	5						
X 737-742	514	5						
X E.O.H.								

CRO 5/  
SIL 5/TAB-#1

(HUNTER LAB)

FOOTAGE Interval	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Value
X 0-80	1	80	N	.14	105 <sup>P</sup>	175 <sup>P</sup>	45 <sup>P</sup>	.19
X 16-32	2	16						
X 48-64	3	16						
X 110-116	4	6	N	N	75 <sup>P</sup>	90 <sup>P</sup>	45 <sup>P</sup>	.11
X 170-175	1006	5	N	N	40 <sup>P</sup>	720 <sup>P</sup>	45 <sup>P</sup>	.13
X 175-176.6	5	1.6	N	N	35 <sup>N</sup>	545 <sup>P</sup>	50 <sup>P</sup>	.13
X 176.6-183.6	6	7	N	.02	60 <sup>P</sup>	575 <sup>P</sup>	50 <sup>P</sup>	.15
X 183.6-188.5	1007	4.9	.010	N	425 <sup>P</sup>	900 <sup>P</sup>	170 <sup>P</sup>	.70
X 202-206	7	4	N	N	45 <sup>P</sup>	900 <sup>P</sup>	40 <sup>P</sup>	.13
X 206-210	8	4	N	N	20 <sup>P</sup>	575 <sup>P</sup>	35 <sup>P</sup>	.10
X 210-212.4	9	2.4	N	N	20 <sup>P</sup>	875 <sup>P</sup>	35 <sup>P</sup>	.11
X 212.4-216	10	3.6	N	N	30 <sup>P</sup>	920 <sup>P</sup>	45 <sup>P</sup>	.14
X 216-220	11	4	N	.02	25 <sup>P</sup>	650 <sup>P</sup>	35 <sup>P</sup>	.11
X 220-224.3	12	4.3	N	N	60 <sup>P</sup>	.16	60 <sup>P</sup>	.26
X 224.3-232.6	13	8.3	N	N	75 <sup>P</sup>	880 <sup>P</sup>	60 <sup>P</sup>	.17
X 232.6-238	14	5.4	N	N	55 <sup>P</sup>	.14	85 <sup>P</sup>	.124
X 238-243	15	5	N	N	55 <sup>P</sup>	735 <sup>P</sup>	50 <sup>P</sup>	.14
X 243-247.3	16	4.3	N	.12	40 <sup>P</sup>	690 <sup>P</sup>	50 <sup>P</sup>	.20
X 247.3-252.9	17	5.6	N	.06	60 <sup>P</sup>	840 <sup>P</sup>	45 <sup>P</sup>	.17
X 321-325	18	4	N	N	40 <sup>P</sup>	.12	90 <sup>P</sup>	.24
X 325-331	19	6	N	N	45 <sup>P</sup>	.12	100 <sup>P</sup>	.27
X 331-334	20	3	N	N	70 <sup>P</sup>	.16	100 <sup>P</sup>	.28
X 341-346	21	5	N	N	60 <sup>P</sup>	795 <sup>P</sup>	50 <sup>P</sup>	.14
X 346-354	22	8	N	N	75 <sup>P</sup>	.15	60 <sup>P</sup>	.20
X 361-365.6	23	4.6	N	N	75 <sup>P</sup>	.52	105 <sup>P</sup>	.45
X 366-372	24	6	N	N	55 <sup>P</sup>	800 <sup>P</sup>	60 <sup>P</sup>	.17
X 373-379	25	6	N	N	30 <sup>P</sup>	575 <sup>P</sup>	65 <sup>P</sup>	.16
X 382.6-392	26	9.4			25 <sup>P</sup>	.11	65 <sup>P</sup>	.19
X 397-405	27	8	N	N	20 <sup>P</sup>	.15	95 <sup>P</sup>	.26
X 409.6-416	28	2			50 <sup>P</sup>	.30	160 <sup>P</sup>	.47
X 445-450	29	5	N	N	140 <sup>P</sup>	1000 <sup>P</sup>	75 <sup>P</sup>	.21
X 450-455	30	5	N	N	15 <sup>P</sup>	1000 <sup>P</sup>	70 <sup>P</sup>	.19
X 455-458	31	3	N	N	50 <sup>P</sup>	.23	160 <sup>P</sup>	.44
X 548-553	1050	5	.024	N				.63
X 558-563	1052	5	.080	.24				2.23
X 598-601	1060	5	T	N				



# TAB-#1

(PULP SAMPLES)

(BONDING-CLC66)

Range Interval	Sample Number	FT	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
x 128-134	1001	6	.018	.16	.22	.33	.12
x 154-159	1005	5	.016	.10	.19	1.26	.11
x 198-202	1010	4	.01	.05	.20	.10	.08
x 273-278	1015	5	.034	.20	.20	.83	.11
x 298-303	1020	5	.017	.16	.17	1.07	.10
x 410-415	1025	5	.003	.03	.01	.53	.04
x 435-440	1030	5	.002	.02	.01	.22	.02
x 473-478	1035	5	.005	.56	.02	.17	.08
x 492-503	1040	5	.003	.28	.02	1.52	.02
x 523-528	1045	5	.006	I.S.	.09	.039	.08
x 548-553	1050	5	.128	.11	.04	.10	.07
x 598-601	1060	3	.002	.02	.01	.01	.05
x 632-639	1060	7	.020	T	.01	.01	.04

E.O.H. = 751'

TAB - #1A  
(TAB 1 EXTENDED)

Footage Interval	Sample Number	ft	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combine METAL VALU
950-955	5829	5	-.002	.06	.010	.008	30 <sup>P</sup>	.11
955-960	5830	5	-.002	.06	.007	.006	25 <sup>P</sup>	.09
960-965	5831	5	-.002	.02	.007	.007	25 <sup>P</sup>	.05
965-970	5832	5	.004	.06	.017	.023	40 <sup>P</sup>	.32
970-975	5833	5	-.002	.30	.050	.023	35 <sup>P</sup>	.26
975-977.6	5834	5	.002	-.02	.078	.030	55 <sup>P</sup>	.26
977.6-980	5835	5	.014	-.02	.15	.044	250 <sup>P</sup>	1.06
980-985	5836	5	.03	-.02	.50	.27	300 <sup>P</sup>	2.03
985-990	5837	5	.014	.14	.077	.087	195 <sup>P</sup>	.95
990-995	5838	5	.030	.02	.21	.10	235 <sup>P</sup>	1.55
995-1000	5839	5	.064	.02	.30	.13	235 <sup>P</sup>	2.54
1000-1005	5840	5	.19	-.02	.64	.21	215 <sup>P</sup>	6.18
1005-1010	5841	5	.072	-.02	.37	.11	205 <sup>P</sup>	2.74
1010-1015	5842	5	.026	-.02	.11	.065	200 <sup>P</sup>	1.26
1015-1020	5843	5	.030	-.02	.048	.11	210 <sup>P</sup>	1.75
1020-1025	5844	5	.026	-.02	.13	.048	230 <sup>P</sup>	1.31
1025-1030	5845	5	.038	-.02	.10	.058	200 <sup>P</sup>	1.86
1030-1035	5846	5	.124	-.02	.12	.033	210 <sup>P</sup>	3.84
1035-1040	5847	5	.030	-.02	.22	.057	185 <sup>P</sup>	1.42
1040-1045	5848	5	.030	-.02	.22	.076	185 <sup>P</sup>	1.43
1045-1050	5849	5	.044	-.02	.21	.079	325 <sup>P</sup>	2.08
1050-1055	5850	5	.128	-.02	.79	.19	265 <sup>P</sup>	4.80
1055-1060	5851	5	.028	-.02	.12	.08	195 <sup>P</sup>	1.30
1060-1065	5852	5	.030	-.02	.11	.083	250 <sup>P</sup>	1.46
1065-1070	5853	5	.040	-.02	.14	.22	265 <sup>P</sup>	1.84
1070-1075	5854	5	.044	-.02	.24	.037	200 <sup>P</sup>	1.83
1075-1080	5855	5	.050	-.02	.11	.021	195 <sup>P</sup>	1.85
1080-1085	5856	5	.022	-.02	.12	.029	195 <sup>P</sup>	1.12
1085-1090	5857	5	.050	.21	.20	.078	325 <sup>P</sup>	2.34
1090-1095	5858	5	.042	-.02	.34	.083	300 <sup>P</sup>	2.11
1095-1100	5859	5	.070	.07	.73	.14	155 <sup>P</sup>	2.99
1100-1105	5860	5	.016	.16	.20	.063	115 <sup>P</sup>	.95
1105-1110	5861	5	.022	-.02	.088	.060	125 <sup>P</sup>	.39
1110-1115	5862	5	.150	.73	.51	.045	145 <sup>P</sup>	5.17
1115-1120	5863	5	.026	.07	.12	.031	130 <sup>P</sup>	1.13
1120-1125	5864	5	.038	-.02	.12	.25	165 <sup>P</sup>	1.57
1125-1130	5865	5	.132	.07	.17	.044	175 <sup>P</sup>	4.06
1130-1135	5866	5	.010	.21	.066	.099	170 <sup>P</sup>	.84
1135-1140	5867	5	.008	.05	.063	.030	105 <sup>P</sup>	.53
1140-1145	5868	5	.012	-.02	.016	.036	100 <sup>P</sup>	.56
1145-1150	5869	5	.016	-.02	.095	.14	100 <sup>P</sup>	.78



TAB-#2

(MET. LABS)

Footage Interval	Sample Number	Feet	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
X 95-106	2001	11	.015	.03	.02	.22	.01
X 106-127	2002	21	.005	.06			
X 127-134	2003	7	.016	T			
X 134-137	2004	3	.016	.05	.01	.14	.01
X 137-193	2005	56	.006	.03	.01	.14	.01
X 193-202	2006	9	.01	.18	.01	.11	.01
X 202-216	2007	14	.01	.04	.01	.14	.01
X 216-226	2008	10	.01	.09	.01	.05	.01
X 226-236	2009	10	.014	.25	.48	.01	.01

TAB-#2

(HOBGLAND)

X 95-106	2001	11	.02	T			
X 106-127	2002	21	T	T			
X 127-134	2003	7	.01	T			
X 134-137	2004	3	.02	T			
X 137-193	2005	56	.01	T			
X 193-202	2006	9	.01	T			
X 202-216	2007	14	T	NIL			
X 216-226	2008	10	T	NIL			
X 226-236	2009	10	T	T			

TAB-#2

(BONDAR-CLEGG)

X 95-106	2001	11	.002	.02	.02	.23	.02
X 106-127	2002	21	.002	.02	.01	.16	.01
X 127-134	2003	7	.002	.02	.01	.12	.01
X 134-137	2004	3	.002	.02	.01	.15	.01
X 137-193	2005	56	.002	.02	.01	.17	.02



FOOTAGE INTERVAL	SAMPLE NUMBER	INT INT	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 36.2-40.2	3001	4	.05	.38				1.52
X 96-100	3000	4	(.94)	(1.02)	(4.59)	(.13)	(.06)	31.19
X 100.8-104.1	1061	4.1	.32	2.0	5.46	.52	.13	17.90
X 104.1-111.5	3002	7.4	.915	2.25	3.53	.28	.03	24.55
X 111.5-115.5	1062	4	.36	5.56	3.19	3.55	.15	20.26
X 115.5-120.8	3003	5.3	.045	.30				1.34
X 120.8-128	3004	7.2	.06	.33				1.75
X 128-139	3005	11	.034	.07				.93
X 139-144	3006	5	.048	.33				1.44
X 144-150	3007	6	.096	.51				2.80
X 150-155	3008	5	.009	.04				.26
X 155-160	3009	5	.045	T				1.18
X 160-165	3010	5	.015	.12				.46
X 165-170	3011	5	.018	.04				.49
X 170-175	3012	5	.016	.04				.44
X 175-179	3013	4	.010	.45				.50
X 179-183	3014	4	.035	.03				.94
X 183-192	3015	9	.009	.19				.34
X 192-196	3016	4	.062	T				1.63
X 219-223	3017	4	.005	.03				.15
X 223-227	3018	4	.005	.03				.15
X 227-232	3019	5	.014	.06				.40
X 232-236	3020	4	.035	.18				1.02
X 236-241	3021	5	.008	T				.21
X 241-246	3022	5	.005	T				.13
X 246-250	3023	4	.045	.28				1.33
X 250-255	3024	5	.015	.19				.50
X 255-260	3025	5	.047	.25				
X 260-265	3026	5	.018	.83	.02	.14	.02	1.41
X 265-271	3027	6	.026	.17	.05	.18	.02	1.32
X 271-276	3028	5	.016	.08	.01	.18	.02	.97
X 276-281	3029	5	.028	.47	.01	.23	.02	1.51
X 281-286	3030	5	.026	.18	.01	.22	.02	1.30
X 286-291	3031	5	.016	.21	.01	.59	.03	1.42
X 291-299	3032	8	.010	.39	.03	.19	.02	1.00
X 299-304	3033	5	.044	.12	.06	.41	.03	2.09
X 304-309	3034	5	.036	.13	.01	.21	.01	1.33
X 309-314	3035	5	.010	.35	.01	.26	.01	.78
X 314-324	3036	10	.004	.09	.05	.50	.02	.83
X 324-329	3037	5	.016	.24	.09	.42	.02	1.24
X 329-334	3038	5	.012	.19	.01	.32	.02	.98
X 334-339	3039	5	.010	1.93	.01	.45	.01	1.70
X 339-347	3040	8	.006	.49	.01	.56	.01	
X 347-356	3041	9	.016	T	.01	.15	.01	
X 356-361	3042	5	.008	T	.03	.10	.05	
X 361-365	3043	4	.010	T	.06	.14	.02	
X 365-370	3044	5	.014	T	.14	.08	.08	
X 370-387	3045	17	.014	T	.12	.08	.03	
X 387-397	3046	10	.004	.02				
X 397-414	3047	17	.010	T				



TIME INTERVAL	Sample Number	ft H	Au oz/TON	Hg oz/TON	Cu %	Zn %	Co %	Combined METAL VALUE
X 414-421	3048	7	.006	T				
X 421-426	3049	5	.006	.01				
X 426-431	3050	5	.008	.01				
X 431-442	3051	11	.008	T				
X 442-455	3052	13	.003	.01				
X 455-461	3053	6	.003	T				
X 461-474	3054	13	.012	.07				
X 474-482	3055	8	.004	.02				
X 482-492	3056	10	.003	.01				
X 492-496	3057	4	.004	T				
X 496-502	3058	6	.028	T	.06	.14	.02	1.28
X 502-507	3059	5	.020	.17	.14	.08	.08	2.47
X 507-512	3060	5	.22	.42	.12	.08	.03	6.80
X 512-516	3061	4	.03	.15	.17	.06	.13	3.80
X 516-521	3062	5	.54	T	.16	.40	.17	18.12
X 521-526	3063	5	.08	.34	.37	1.93	.18	7.26
X 526-531	3064	5	.12	.38	.14	.35	.14	6.59
X 531-536	3065	.	.11	.11	.14	.34	.09	5.13
X 536-541	3066	5	.28	.20	.18	.44	.08	9.52
X 541-546	3067	5	.10	T	.03	.10	.04	3.55
X 546-551	3068	5	.016	.01	.02	.16	T	.51
X 551-553	3069	2	.008	.73	.02	.22	.05	1.76
X 553-553.90	3070	9	.056	.10	4.80	.40	.03	7.13
X 553.1-559	3071	5.9	.020	.01	.05	.03	T	.59
X 559-564	3072	5	.004	.05	.20	.05	T	.35
X 564-569	3073	5	.008	.02	.12	.04	T	.36
X 569-574	3074	5	.020	.01	.19	.12	T	.77
X 574-579	3075	5	.012	.40	.19	.06	.07	
X 579-584	3076	5	.006	T	.01	.01	.01	
X 584-589	3077	5	.008	.02	.02	.01	T	
X 589-593	3078	4	T	T	.01	.02	.01	
X 593-598	3079	5	.01	.41	.02	.01	.01	
X 598-602	3080	4	.025	.07	.02	.01	.01	
X 602-607	3081	5	.016	.04			T	
X 607-612	3082	5	.010	.02			T	
X 612-617	3083	5	.030	T			T	
X 617-621	3084	4	.015	.10			T	
X 621-626	3085	4	T	.03			T	
X 626-631	3086	5	.04	1.01			T	
X 631-636	3087	5	.009	.44			T	
X 636-641	3088	5	.014	.12			T	
X 641-646	3089	5	.01	.34			T	
X 646-651	3090	5	.035	1.12			T	
X 651-656	3091	5	.008	1.52			T	
X 656-661	3092	5	T	.036			T	
X 661-666	3093	5	.004	.43			T	
X 666-669	3094	3	.009	.35			T	
X 669-674	3095	5	T	.71			T	
X 674-679	3096	5	.005	.35			T	
X 679-684	3097	5	.008	.76			T	



Footage Interval	Sample Number	Feet	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
X 684-687	3098	3	T	.68			T
X 687-692	3099	5	T	.20			T
X 692-697	3100	5	T	.55			T
X 702-705	3102	3	.012	.01			T
X 705-714	3103	9	.012	.01			T
X 714-719	3104	5	.032	.02			T
X 719-724	3105	5	.006	.01			T
X 724-728	3106	4	.016	.01			T
X 728-733	3107	5	.006	.01			T
X 733-738	3108	5	.008	.02			T
X 738-743	3109	5	.016	.01			T
X 743-747	3110	4	.002	.01			T
X 747-751	3111	4	.010	.01			T
X 751-755	3112	4	.022	.07			T
Y 755-760	3113	5	.024	.20			T
Y 760-765	3114	5	.006	.01			T
Y 765-769	3115	4	.002	.01			T
X 769-774	3116	5	.008	.01			T
X 774-778	3117	4	.024	.18			T
X 778-783	3118	5	.012	.01			T
X 783-788	3119	5	.024	.26			T
X 788-792	3120	4	.044	.19			T
Y 792-797	3121	5	.020	.03			T
Y 797-801	3122	4	.016	.60			T
Y 801-806	3123	5	.006	.11			T
X 806-810	3124	4	.008	.07			T
X 810-815	3125	5	.006	.20			T
X 815-819	3126	4	.006	.58			T
X 819-824	3127	5	.014	.08			T
X 824-828	3128	4	T	.13			T
X 828-833	3129	5	.006	.15			T
X 833-837	3130	4	.012	.28			T
X 837-842	3131	5	.028	.10			T
X 842-846	3132	4	.006	.05			T
X 846-851	3133	5	.010	.21			T
X 851-855	3134	4	.04	T			T
X 855-860	3135	5	.004	.29			T
X 860-865	3136	5	.008	.34			T
X 865-870	3137	5	.008	.25			T
X 870-874	3138	4	.010	.24			T
X 874-878	3139	4	.016	.29			T
X 878-883	3140	5	.006	.24			T
X 883-887	3141	4	.010	.08			T
X 887-892	3142	5	.024	.01			T
X 892-896	3143	4	.008	T			T
X 896-901	3144	5	.004	.02			T
Y 901-905	3145	4	.004	.01			T
X 905-909	3146	4	.004	T			T
X 909-914	3147	5	.016	T			T
X 914-917	3148	3	T	T			T



# TAB - #3

(MET. LABS)

FOOTAGE INTERVAL	SAMPLE NUMBER	INT	Au OZ/TON	Ag OZ/TON	Cu %	Zn %	Co %
x 917-922	3149	5	.004	T			T
x 922-927	3150	5	.012	T			T
x 927-931	3151	4	.032	.17			T
x 931-936	3152	5	.016	.05			T
x 936-941	3153	5	.008	.04			T
x 941-945	3154	4	.004	.01			T
x 945-950	3155	5	.024	.04			T
x 950-954	3156	4	.006	T			T
x 954-956.9	3157	2.9	.020	.01			T

## TAB 3 (BONDAR - CIEGG)

x 96-100	3000	4	.30	1.56	7.25	.13	.07
x 100. -104.1	1061	4.1	.38	2.07	5.25	.10	.08
x 104.1-111.5	3002	7.4	.72	1.95	4.85	.30	.05
x 111.5-115.5	1062	4	.38	3.54	3.60	11.0	.08

E.O.H. = 956.9

CRO  
LA

# TAB - #4

(MET. LABS)

FOOTAGE INTERVAL	Sample Number	KT H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
X 113-118	4000	5	.12	.40			
X 118-123	4001	5	.006	.13			
X 154-159	4002	5	.008	.07			
X 159-164	4003	5	.008	.03			
X 164-169	4004	5	.012	.07			
X 169-174	4005	5	.006	.21			
X 174-179	4006	5	.008	.09			
X 179-189	4007	10	.020	.13			
X 189-193	4008	4	.010	.05			
X 193-197	4009	4	.010	.40			
X 197-201	4010	4	.004	.01			
X 201-210	4011	9	.004	.01			
X 210-222	4012	12	.002	.01			
X 222-228.7	4013	6.7	.006	.01			
X 228.7-245	4014	16.3	.008	.01			
X 245-250	4015	5	.012	.01			
X 250-255.6	4016	5.6	.006	.01			
X 244-249	4017	5	.016	.01			
X 249-254	4018	5	.004	.01			
X 254-258	4019	4	T	.01			
X 258-261	4020	3	.08	.37			.015
X 261-267	4021	6	.04	.40			.01
X 267-271.6	4022	4.6	.03	.38			.01
X 271.6-276	4023	4.4	.072	.14			.01
X 276-280	4024	4	.041	.21			.05
X 280-285	4025	5	.006	.10			.01
X 285-288.6	4026	3.6	.090	.27			.02
X 288.6-307	4027	18.4	.070	.16			.01
X 307-320	4028	13	.036	.08			.01
X 320-333	4029	13	.020	.06			.01
X 333-338	4030	5	.018	.01			.01
X 338-343	4031	5	.004	.01			.015
X 343-361	4032	18	.02	.05			.015
X 361-368	4033	7	T	.01			.01
X 368-379	4034	11	.008	.35			.01
X 379-393	4035	14	.032	.35			.015
X 393-401.8	4036	8.8	.020	.16			.01
X 401.8-415	4037	13.2	.006	.01			.01
X 415-422	4038	7	.008	.01			.01
X 422-430	4039	8	.006	.01			.01
X 430-431.6	4040	1.6	T	.01			.01



FLYAGE INTERVAL	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 564-574	32	5	N	N	20 <sup>P</sup>	45 <sup>P</sup>	120 <sup>P</sup>	.26
X 574-579	33	5	N	N	125 <sup>P</sup>	35 <sup>P</sup>	45 <sup>P</sup>	.11
X 579-584	34	5	N	N	140 <sup>P</sup>	45 <sup>P</sup>	35 <sup>P</sup>	.09
X 584-588	35	4	N	.12	125 <sup>P</sup>	55 <sup>P</sup>	46 <sup>P</sup>	.18
X 588-592	36	4	N	.18	110 <sup>P</sup>	45 <sup>P</sup>	35 <sup>P</sup>	.18
X 592-594	37	2	N	N	85 <sup>P</sup>	45 <sup>P</sup>	70 <sup>P</sup>	.16
X 594-596	38	4	N	N	240 <sup>P</sup>	40 <sup>P</sup>	65 <sup>P</sup>	.16
X 596-600	39	4	N	N	45 <sup>P</sup>	35 <sup>P</sup>	100 <sup>P</sup>	.22
X 600-604	40	4	N	N	25 <sup>P</sup>	40 <sup>P</sup>	35 <sup>P</sup>	.08
X 604-608	41	4	T	.12	20 <sup>P</sup>	30 <sup>P</sup>	40 <sup>P</sup>	.15
X 608-610.6	42	2.6	N	.08	950 <sup>P</sup>	75 <sup>P</sup>	105 <sup>P</sup>	.36
X 610.6-614	43	3.4	N	.12	245 <sup>P</sup>	45 <sup>P</sup>	130 <sup>P</sup>	.36
X 614-619	44	5	N	N	45 <sup>P</sup>	30 <sup>P</sup>	45 <sup>P</sup>	.10
X 619-624	45	5	N	.10	105 <sup>P</sup>	30 <sup>P</sup>	45 <sup>P</sup>	.16
X 624-629	46	5	N	.22	125 <sup>P</sup>	30 <sup>P</sup>	35 <sup>P</sup>	.20
X 629-634	47	5	N	N	270 <sup>P</sup>	40 <sup>P</sup>	45 <sup>P</sup>	.12
X 634-639	48	5	N	.04	40 <sup>P</sup>	55 <sup>P</sup>	120 <sup>P</sup>	.28
X 639-644	49	5	N	N	90 <sup>P</sup>	40 <sup>P</sup>	55 <sup>P</sup>	.13
X 644-649	50	5	N	N	25 <sup>P</sup>	60 <sup>P</sup>	70 <sup>P</sup>	.15
X 649-655	51	5	N	.14	30 <sup>P</sup>	50 <sup>P</sup>	100 <sup>P</sup>	.29
X 655-660	52	5	N	N	70 <sup>P</sup>	30 <sup>P</sup>	45 <sup>P</sup>	.10
X 660-665	53	5	N	N	30 <sup>P</sup>	40 <sup>P</sup>	25 <sup>P</sup>	.06
X 665-670	54	5	N	N	110 <sup>P</sup>	40 <sup>P</sup>	50 <sup>P</sup>	.12
X 670-676.5	55	6.5	N	N	95 <sup>P</sup>	45 <sup>P</sup>	50 <sup>P</sup>	.12
5-28-80								
X 569-574	32	5	N	.22	15 <sup>P</sup>		110 <sup>P</sup>	.35
X 574-579	33	5	N	.14	35 <sup>P</sup>		45 <sup>P</sup>	.17
X 579-584	34	5	N	N	125 <sup>P</sup>		35 <sup>P</sup>	.09
X 584-588	35	4	N	N	115 <sup>P</sup>		40 <sup>P</sup>	.10
X 588-592.5	36	4.5	N	.04	105 <sup>P</sup>		30 <sup>P</sup>	.09
X 592.5-594.5	37	2	N	.22	70 <sup>P</sup>		60 <sup>P</sup>	.25
X 594.5-596	38	1.5	N	N	235 <sup>P</sup>		60 <sup>P</sup>	.15
X 596-600	39	4	N	N	35 <sup>P</sup>		60 <sup>P</sup>	.13
X 600-604	40	4	N	N	25 <sup>P</sup>		40 <sup>P</sup>	.09
X 604-608	41	4	N	N	15 <sup>P</sup>		40 <sup>P</sup>	.09
X 608-610.6	42	2.6	N	.18	.24		120 <sup>P</sup>	.59
X 610.6-614	43	3.4	N	N	255 <sup>P</sup>		125 <sup>P</sup>	.29
X 614-619	44	5	T	.14	35 <sup>P</sup>		40 <sup>P</sup>	.16
X 619-624	45	5	N	.10	95 <sup>P</sup>		35 <sup>P</sup>	.14
X 624-629	46	5	N	.16	110 <sup>P</sup>		35 <sup>P</sup>	.17
X 629-634	47	5	N	.20	265 <sup>P</sup>		35 <sup>P</sup>	.21
X 634-639	48	5	N	N	20 <sup>P</sup>		110 <sup>P</sup>	.23
X 639-644	49	5	N	.12	25 <sup>P</sup>		80 <sup>P</sup>	.23
X 644-649	50	5	N	.18	25 <sup>P</sup>		60 <sup>P</sup>	.22
X 649-655	51	5	N	.16	20 <sup>P</sup>		95 <sup>P</sup>	.29
X 655-660	52	5	N	.06	65 <sup>P</sup>		35 <sup>P</sup>	.11
X 660-665	53	5	T	N	25 <sup>P</sup>		30 <sup>P</sup>	.07
X 665-670	54	5	N	.02	100 <sup>P</sup>		30 <sup>P</sup>	.08
X 670-677.5	55	7.5	N	N	60 <sup>P</sup>		35 <sup>P</sup>	.08
X 677.5-680	60	2.5	N	N	25 <sup>P</sup>	45 <sup>P</sup>	60 <sup>P</sup>	.13



Feeding INTERVAL	Sample Number	Int.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
x 680-685.5	61	55	N	N	35 <sup>P</sup>	40 <sup>P</sup>	85 <sup>P</sup>	
x 685.5-691.5	62	6	N	N	25 <sup>P</sup>	30 <sup>P</sup>	45 <sup>P</sup>	
x 691.5-696	63	4.5	N	N	10 <sup>P</sup>	25 <sup>P</sup>	50 <sup>P</sup>	
x 696-699	64	4	.011	N	30 <sup>P</sup>	30 <sup>P</sup>	50 <sup>P</sup>	
x 699-704	65	5	.019	N	450 <sup>P</sup>	50 <sup>P</sup>	120 <sup>P</sup>	
x 704-709	66	5	.009	N	35 <sup>P</sup>	70 <sup>P</sup>	60 <sup>P</sup>	
x 709-713	67	4	N	N	245 <sup>P</sup>	140 <sup>P</sup>	60 <sup>P</sup>	
x 713-718	68	5	.019	N	140 <sup>P</sup>	115 <sup>P</sup>	55 <sup>P</sup>	
x 718-723	69	5	.028	N	400 <sup>P</sup>	215 <sup>P</sup>	130 <sup>P</sup>	
x 723-729	70	6	N	N	960 <sup>P</sup>	440 <sup>P</sup>	115 <sup>P</sup>	
x 729-733	71	4	.082	N	.24	300 <sup>P</sup>	140 <sup>P</sup>	
x 733-738	72	4	N	N	970 <sup>P</sup>	315 <sup>P</sup>	115 <sup>P</sup>	
x 738-741	73	3	.026	.052	.14	.13	800 <sup>P</sup>	2.59
x 741-745	74	4	.015	.030	855 <sup>P</sup>	405 <sup>P</sup>	.15	3.67
x 745-750.4	75	5H	.008	.016	500 <sup>P</sup>	.35	.11	2.73
x 750.4-755	76	4.6	.008	N	475 <sup>P</sup>	.40	665 <sup>P</sup>	1.83
x 755-760.5	77	5.5	.020	N	795 <sup>P</sup>	.16	.17	4.25
x 760.5-765	78	4.5	.008	N	200 <sup>P</sup>	440 <sup>P</sup>	605 <sup>P</sup>	1.52
x 765-770	79	5	.021	N	205 <sup>P</sup>	285 <sup>P</sup>	465 <sup>P</sup>	1.56
x 770-776	80	6	.049	N	.14	670 <sup>P</sup>	660 <sup>P</sup>	2.85
x 776-780	81	4	.046	N	635 <sup>P</sup>	.16	445 <sup>P</sup>	2.28
x 780-785	82	5	.028	N	360 <sup>P</sup>	535 <sup>P</sup>	620 <sup>P</sup>	2.10
x 785-790.5	83	5.5	.022	N	515 <sup>P</sup>	275 <sup>P</sup>	570 <sup>P</sup>	1.84
x 790.5-795	84	4.5	.038	N	505 <sup>P</sup>	445 <sup>P</sup>	450 <sup>P</sup>	2.02
x 795-800	85	5	.033	N	330 <sup>P</sup>	175 <sup>P</sup>	390 <sup>P</sup>	1.73
x 800-805	86	5	.023	N	740 <sup>P</sup>	320 <sup>P</sup>	390 <sup>P</sup>	2.83
x 805-810	87	5	.020	N	175 <sup>P</sup>	390 <sup>P</sup>	270 <sup>P</sup>	1.13
x 810-815	88	5	.042	N	880 <sup>P</sup>	240 <sup>P</sup>	320 <sup>P</sup>	1.88
x 815-820	89	5	.060	N	995 <sup>P</sup>	275 <sup>P</sup>	455 <sup>P</sup>	2.65
x 820-825	90	5	.029	N	.13	220 <sup>P</sup>	570 <sup>P</sup>	1.98
x 825-830	91	5	.006	N	705 <sup>P</sup>	670 <sup>P</sup>	220 <sup>P</sup>	
x 830-835	92	5	.024	N	.14	.12	240 <sup>P</sup>	1.33
x 835-840	93	5	.009	N	125 <sup>P</sup>	85 <sup>P</sup>	380 <sup>P</sup>	1.05
x 840-845	94	5	.005	N	355 <sup>P</sup>	345 <sup>P</sup>	160 <sup>P</sup>	
x 845-850	95	5	N	N	235 <sup>P</sup>	225 <sup>P</sup>	45 <sup>P</sup>	
x 850-855	96	5	N	N	165 <sup>P</sup>	180 <sup>P</sup>	50 <sup>P</sup>	
x 855-860	97	5	N	N	85 <sup>P</sup>	225 <sup>P</sup>	50 <sup>P</sup>	
x 860-865	98	5	N	N	125 <sup>P</sup>	215 <sup>P</sup>	45 <sup>P</sup>	
x 865-870	99	5	N	N	345 <sup>P</sup>	415 <sup>P</sup>	40 <sup>P</sup>	
x 870-875	100	5	N	N	645 <sup>P</sup>	225 <sup>P</sup>	45 <sup>P</sup>	
x 875-880	101	5	.011	N	.15	.12	65 <sup>P</sup>	
x 880-885	102	5	.005	N	385 <sup>P</sup>	.20	50 <sup>P</sup>	
x 885-890	103	5	N	N	300 <sup>P</sup>	.23	50 <sup>P</sup>	
x 890-895	104	5	N	N	560 <sup>P</sup>	430 <sup>P</sup>	50 <sup>P</sup>	
x 895-900	105	5	N	N	.14	515 <sup>P</sup>	55 <sup>P</sup>	
x 900-905	106	5	N	N	980 <sup>P</sup>	450 <sup>P</sup>	65 <sup>P</sup>	
x 905-910	107	5	N	N	.13	2.45	85 <sup>P</sup>	
x 910-916	108	6	N	.03	615 <sup>P</sup>	170 <sup>P</sup>	80 <sup>P</sup>	
x 916-920	109	4	T	N	745 <sup>P</sup>	315 <sup>P</sup>	50 <sup>P</sup>	
x 920-923	110	3	.005	N	230 <sup>P</sup>	325 <sup>P</sup>	55 <sup>P</sup>	.27



Footage Interval	Sample Number	INT	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %	Combined METAL VALUE
X 923-930	111	7	.125	N	1.25	.23	465 <sup>P</sup>	5.62
X 930-935	112	5	.037	N	.16	575 <sup>P</sup>	450 <sup>P</sup>	2.11
X 935-940	113	5	.028	N	965 <sup>P</sup>	790 <sup>P</sup>	525 <sup>P</sup>	1.97
X 940-945	114	5	.092	N	.63	.30	675 <sup>P</sup>	4.60
X 945-950	115	5	.080	N	.97	.57	540 <sup>P</sup>	4.45
X 950-955	116	5	.078	N	1.75	.50	620 <sup>P</sup>	5.32
X 955-960	117	5	.147	N	1.90	.63	735 <sup>P</sup>	7.58
X 960-965	118	5	.134	N	1.85	.23	615 <sup>P</sup>	6.77
X 965-970	119	5	.107	N	1.75	.36	495 <sup>P</sup>	5.76
X 970-975	120	5	.218	N	1.70	.58	540 <sup>P</sup>	8.82
X 975-980	121	5	.122	N	1.50	.32	500 <sup>P</sup>	5.90
X 980-985	122	5	.087	N	1.20	.25	465 <sup>P</sup>	4.57
X 985-990	123	5	.051	N	.95	.15	420 <sup>P</sup>	3.24
X 990-995	124	5	.083	N	1.10	.22	425 <sup>P</sup>	4.27
X 995-1000	125	5	.128	N	1.30	.24	410 <sup>P</sup>	5.63
X 1000-1005	126	5	.081	N	.84	.18	365 <sup>P</sup>	3.82
X 1005-1010	127	5	.126	.24	1.30	.25	225 <sup>P</sup>	5.32
X 1010-1015	128	5	.113	.19	2.25	.36	295 <sup>P</sup>	6.10
X 1015-1020	129	5	.151	.02	2.50	.28	310 <sup>P</sup>	7.26
X 1020-1025	130	5	.128	.13	2.25	.95	280 <sup>P</sup>	6.68
X 1025-1030	131	5	.040	.23	1.05	.55	215 <sup>P</sup>	2.91
X 1030-1035	132	5	.042	.30	.66	.65	240 <sup>P</sup>	2.70
X 1035-1040	133	5	.033	.27	.69	.17	165 <sup>P</sup>	2.12
X 1040-1045	134	5	.079	.37	1.25	.81	220 <sup>P</sup>	4.33
X 1045-1050	135	5	.072	N	1.35	1.05	155 <sup>P</sup>	4.01
X 1050-1055	136	5	.116	N	1.55	.75	195 <sup>P</sup>	5.33
X 1055-1060	137	5	.224	.36	1.85	2.25	205 <sup>P</sup>	9.28
X 1060-1065	138	5	.074	.45	1.20	2.10	180 <sup>P</sup>	4.65
X 1065-1070	139	5	.080	N	.84	3.35	210 <sup>P</sup>	4.79
X 1070-1075	140	5	.130	N	1.95	2.40	195 <sup>P</sup>	6.79
X 1075-1080	141	5	.128	N	1.30	.75	185 <sup>P</sup>	5.37
X 1080-1085	142	5	.122	N	.88	.54	95 <sup>P</sup>	4.52
X 1085-1090	143	5	.090	.21	.33	.43	85 <sup>P</sup>	3.17
X 1090-1095	1901	5	.042	.08	1.05	1.00	90 <sup>P</sup>	2.81
X 1095-1100	1902	5	.066	N	555 <sup>P</sup>	.38	80 <sup>P</sup>	2.12
X 1100-1105	1903	5	.044	N	.16	1.27	70 <sup>P</sup>	2.11
X 1105-1110	1904	5	.030	.15	950 <sup>P</sup>	.17	50 <sup>P</sup>	1.14
X 1110-1115	1905	5	.026	.03	475 <sup>P</sup>	.19	50 <sup>P</sup>	.93
X 1115-1120	1906	5	.036	N	710 <sup>P</sup>	.22	50 <sup>P</sup>	1.22
X 1120-1125	1907	5	.068	.17	.28	.54	85 <sup>P</sup>	2.57
X 1125-1130	1908	5	.022	N	555 <sup>P</sup>	.22	60 <sup>P</sup>	.85
X 1130-1134.2	1909	5	.030	.17	.18	.32	60 <sup>P</sup>	1.32
X 1134.2-1139.2	1910	5	.026	.12	.83	.90	100 <sup>P</sup>	2.17
X 1139.2-1144	1911	5	.027	N	.75	.26	65 <sup>P</sup>	1.71
X 1144-1147.1	1912	3.1	.043	.17	.70	.46	60 <sup>P</sup>	2.24
X 1147.1-1153	1913	5.9	.013	N	.24	.21	50 <sup>P</sup>	.78
X 1153-1160.5	1914	7.5	T	N	75 <sup>P</sup>	705 <sup>P</sup>	35 <sup>P</sup>	.11
X 1160.5-1164.8	1915	4.3	.035	N	.12	.15	50 <sup>P</sup>	1.21
X 1164.8-1173	1916	3.2	T	.04	120 <sup>P</sup>	.14	45 <sup>P</sup>	.19
X 1173.7-1177.4	1917	3.7	.031	N	.68	.28	50 <sup>P</sup>	1.72



FOXTAGE INTERVAL	Sample Number	HT H	Au. oz/TON	Ag. oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 1177.4-1181.6	1918	4.2	.091	N	1.10	.46	45 <sup>P</sup>	3.78
X 1181.6-1186.1	1919	4.5	.013	N	.18	.38	40 <sup>P</sup>	.77
X 1186.1-1191	1920	4.9	.005	N	565 <sup>P</sup>	.14	175 <sup>P</sup>	.62
X 1191-1194.8	1921	3.8	.018	N	225 <sup>P</sup>	.11	65 <sup>P</sup>	.68
X 1194.8-1200.5	1922	5.7	.010	N	140 <sup>P</sup>	685 <sup>P</sup>	70 <sup>P</sup>	.46
X 1200.5-1205	1923	4.5	.057	N	.11	.13	105 <sup>P</sup>	1.89
X 1205-1210	1924	5	.043	N	.23	.37	75 <sup>P</sup>	1.68
X 1210-1215	1925	5	.007	N	545 <sup>P</sup>	.22	60 <sup>P</sup>	.46
X 1215-1220	1626	5	.009	N	450 <sup>P</sup>	.28	85 <sup>P</sup>	.58
X 1220-1225.5	1627	5.5	.024	N	.21	.54	75 <sup>P</sup>	1.23
X 1225.5-1230	1628	4.5	.005	N	200 <sup>P</sup>	.22	45 <sup>P</sup>	.34
X 1230-1235	1629	5	.006	.07	.12	.34	65 <sup>P</sup>	.59
X 1235-1239	1630	4	.005	N	390 <sup>P</sup>	.24	40 <sup>P</sup>	.36
X 1239-1245	1631	6	.033	N	.50	.29	170 <sup>P</sup>	1.85
X 1245-1249.1	1632	4.1	.114	.31	2.0	3.55	130 <sup>P</sup>	6.93
X 1249.1-1253.4	1633	4.3	.056	.17	.74	1.20	150 <sup>P</sup>	3.12
X 1253.4-1258	1634	4.6	.074	.10	.95	2.10	135 <sup>P</sup>	4.12
X 1258-1262	1635	4	.075	N	.72	2.00	155 <sup>P</sup>	3.86
X 1262-1268	1636	6	.039	.09	.31	.65	85 <sup>P</sup>	1.84
X 1268-1272	1637	4	.011	.10	.12	.11	50 <sup>P</sup>	.61
X 1272-1279	1638	7	.005	N	290 <sup>P</sup>	.17	40 <sup>P</sup>	.32
X 1279-1285	1639	6	T	.19	65 <sup>P</sup>	.14	40 <sup>P</sup>	.25
X 1285-1290	1640	5	N	N	45 <sup>P</sup>	615 <sup>P</sup>	35 <sup>P</sup>	.70
X 1290-1295	1641	5	.016	.07	.17	770 <sup>P</sup>	60 <sup>P</sup>	.79
X 1295-1300	1642	5	.005	.09	280 <sup>P</sup>	.13	40 <sup>P</sup>	1.35
X 1300-1305	1643	5	T	.03	190 <sup>P</sup>	740 <sup>P</sup>	45 <sup>P</sup>	.16
X 1305-1312	1644	7	.006	.05	365 <sup>P</sup>	575 <sup>P</sup>	55 <sup>P</sup>	.36
X 1312-1316	1645	4	T	.01	55 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>	
X 1316-1321	1301	5	N	N	100 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	
X 1321-1326	1302	5	N	.01	80 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	
X 1326-1330	1303	4	N	N	85 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	
X 1330-1334	1304	4	T	N	155 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	
X 1334-1339	1305	5	N	N	145 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1339-1344	1306	5	N	.01	100 <sup>P</sup>	60 <sup>P</sup>	35 <sup>P</sup>	
X 1344-1349	1307	5	N	N	45 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1349-1353	1308	4	N	N	85 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	
X 1353-1357	1309	4	T	N	55 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	
X 1357-1362.2	1310	5.2	N	N	105 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	
X 1362.2-1367	1311	4.8	N	N	35 <sup>P</sup>	60 <sup>P</sup>	35 <sup>P</sup>	
X 1367-1371	1312	4	N	N	40 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1371-1375	1313	4	N	.05	35 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1375-1379.5	1314	4.5	N	.06	65 <sup>P</sup>	50 <sup>P</sup>	30 <sup>P</sup>	
X 1379.5-1384	1315	4.5	N	N	25 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1384-1388.8	1316	4.8	N	.10	95 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	
X 1388.8-1393	1317	4.2	N	N	70 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1393-1397	1318	4	N	N	60 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1397-1401	1319	4	N	N	45 <sup>P</sup>	55 <sup>P</sup>	30 <sup>P</sup>	
X 1401-1406	1320	5	N	N	55 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	
X 1875-1880	1321	5	.001	.13	70 <sup>P</sup>	50 <sup>P</sup>	20 <sup>P</sup>	
X 1975-1980	1322	5	-.001	.10	90 <sup>P</sup>	65 <sup>P</sup>	20 <sup>P</sup>	



OK 5/1  
SA 5/1

TAB-#4

(HUNTER)

5' INTERVALS  
Every 25'

FOOTAGE INTERVAL	Sample Number	INT	Au oz/ton	Ag oz/ton	Cu %	Zn %	Cc %
2000-2005	1323	5	.001	.07	100 <sup>P</sup>	60 <sup>P</sup>	25 <sup>P</sup>
2025-2030	1324	5	-.001	.01	120 <sup>P</sup>	65 <sup>P</sup>	25 <sup>P</sup>
2050-2055	1325	5	-.001	.09	35 <sup>P</sup>	65 <sup>P</sup>	25 <sup>P</sup>
2075-2080	1326	5	-.001	.15	60 <sup>P</sup>	60 <sup>P</sup>	25 <sup>P</sup>
2100-2105	1327	5	-.001	.02	40 <sup>P</sup>	70 <sup>P</sup>	25 <sup>P</sup>
2125-2130	1328	5	-.001	.06	25 <sup>P</sup>	55 <sup>P</sup>	20 <sup>P</sup>
2150-2155	1329	5	-.001	.11	130 <sup>P</sup>	65 <sup>P</sup>	25 <sup>P</sup>
2175-2180	1330	5	-.001	.10	95 <sup>P</sup>	75 <sup>P</sup>	25 <sup>P</sup>
2195-2200	1331	5	.001	.05	80 <sup>P</sup>	75 <sup>P</sup>	25 <sup>P</sup>
1900-1905	1332	5	-.001	.08	75 <sup>P</sup>	45 <sup>P</sup>	25 <sup>P</sup>
1925-1930	1333	5	.001	.11	50 <sup>P</sup>	35 <sup>P</sup>	20 <sup>P</sup>
1950-1955	1334	5	-.001	.05	90 <sup>P</sup>	50 <sup>P</sup>	20 <sup>P</sup>

E.O.H = 2201'



Footage Interval	Sample Number	ft	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
X 37-42	1401	5	N	.05	85P	70P	35P
X 42-46.8	1402	4.8	N	.02	70P	65P	35P
X 46.8-51	1403	4.2	N	.04	80P	65P	30P
X 51-56	1404	5	T	.05	80P	70P	30P
X 56-61	1405	5	N	.06	75P	65P	30P
X 61-65.10	1406	4.1	N	.06	75P	65P	30P
X 65.1-70.1	1407	5	N	.16	60P	60P	25P
X 70.1-75.8	1408	5.7	T	N	85P	55P	30P
X 75.8-80	1409	4.2	T	.01	85P	70P	30P
X 80-84.8	1410	4.8	N	.05	60P	50P	30P
X 84.8-88.8	1411	4	N	.04	75P	60P	35P
X 88.8-93.1	1412	4.3	N	.02	55P	45P	30P
X 93.1-98.1	1413	5	N	.04	45P	55P	30P
X 98.1-103.6	1414	5.5	N	.01	25P	65P	30P
X 103.6-108	1415	4.4	N	.11	30P	60P	30P
X 108-113	1416	5	N	.08	70P	60P	30P
X 113-117	1417	4	N	.02	80P	60P	30P
X 117-122.3	1418	5.3	N	N	75P	65P	30P
X 122.3-126	1419	3.7	T	.02	80P	65P	25P
X 126-131	1420	5	N	N	75P	65P	30P
X 131-135	1421	4	N	.02	85P	70P	30P
X 135-140.6	1422	5.6	N	.10	80P	70P	35P
X 140.6-145	1423	4.4	N	N	70P	60P	30P
X 145-150.2	1424	5.2	N	.04	75P	65P	35P
X 150.2-155	1425	4.8	N	.06	75P	65P	35P
X 155-160	1426	5	N	.22	65P	60P	35P
X 160-164	1427	4	N	.14	70P	60P	35P
X 164-169	1428	5	N	.28	70P	65P	35P
X 169-174	1429	5	N	N	75P	60P	35P
X 174-178.6	1430	4.6	N	.10	80P	65P	35P
X 178.6-183	1431	4.4	N	N	70P	65P	30P
X 183-187.8	1432	4.8	N	N	70P	55P	35P
X 187.8-192	1433	4.2	N	N	70P	55P	35P
X 192-197.4	1434	5.4	N	N	75P	65P	35P
X 197.4-202	1435	4.6	N	N	70P	65P	35P
X 202-206.8	1436	4.8	N	.04	65P	60P	35P
X 206.8-211	1437	4.2	N	.05	75P	65P	35P
X 211-216	1438	5	N	.06	75P	70P	35P
X 216-221	1439	5	N	.03	95P	65P	35P
X 221-226	1440	5	N	N	90P	75P	35P
X 226-230	1441	4	N	N	75P	85P	30P
X 230-235	1442	5	T	N	75P	65P	35P
X 235-239.5	1443	4.5	N	N	220P	55P	35P
X 239.5-244	1444	4.5	N	N	85P	45P	30P
X 244-249	1445	5	N	.08	85P	70P	30P
X 249-254	1446	5	T	.02	140P	95P	30P
X 254-257	1447	3	N	N	70P	70P	30P
X 257-260.4	1448	3.4	N	N	70P	80P	35P
X 260.4-266	1449	5.6	N	.02	60P	80P	35P
X 266-271	1450	5	N	N	60P	80P	35P



FOOTAGE INTERVAL	Sample Number	Fe %	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
X 271-275	1451	4	N	N	65P	85P	35P
X 275-280.5	1452	5.5	N	N	60P	85P	35P
X 280.5-285	1453	4.5	N	N	80P	85P	35P
X 285-289	1454	4	N	N	65P	85P	35P
X 289-294	1455	5	N	N	60P	70P	30P
X 294-298.5	1456	4.5	N	.06	65P	85P	35P
X 298.5-303	1457	4.5	N	.02	65P	80P	35P
X 303-307.1	1458	4.1	N	N	70P	75P	30P
X 307.1-312	1459	4.9	N	N	70P	75P	35P
X 312-317.4	1460	5.4	N	N	70P	75P	35P
X 317.4-324	1461	6.6	N	.02	65P	70P	35P
X 324-328.5	1462	4.5	N	.02	70P	75P	35P
X 328.5-333	1463	4.5	N	N	75P	75P	35P
X 333-338.8	1464	5.8	N	.02	65P	70P	35P
X 338.8-343	1465	4.2	N	N	70P	75P	35P
X 343-348.6	1466	5.6	N	.04	90P	70P	35P
X 348.6-353	1467	4.4	T	N	75P	75P	35P
X 353-358.2	1468	5.2	N	N	75P	70P	35P
X 358.2-361.5	1469	3.3	N	.06	75P	75P	35P
X 361.5-366.6	1470	5.1	N	N	70P	70P	35P
X 366.6-371	1471	4.4	N	.08	70P	65P	35P
X 371-376.3	1472	5.3	N	.04	80P	75P	35P
X 376.3-381	1473	4.7	N	N	80P	70P	35P
X 381-385.11	1474	4.11	N	N	70P	70P	35P
X 385.11-391	1475	5.89	N	.08	80P	75P	35P
X 391-395.6	1476	4.6	T	.02	75P	75P	40P
X 395.6-400	1477	4.4	N	N	85P	75P	35P
X 400-405.3	1478	5.3	N	.02	85P	90P	35P
X 405.3-410	1479	4.7	N	N	100P	75P	35P
X 410-415.5	1480	5.5	N	.06	50P	55P	30P
X 415.5-420	1481	4.5	N	N	55P	60P	35P
X 420-424.4	1482	4.4	N	N	65P	60P	30P
X 424.4-429.1	1483	4.7	N	.34	75P	65P	35P
X 429.1-433.8	1484	4.7	T	N	75P	80P	40P
X 433.8-438.8	1485	5	N	.04	70P	75P	35P
X 438.8-443.8	1486	5	N	N	65P	70P	35P
X 443.8-448.8	1487	5	N	.02	65P	90P	35P
X 448.8-453	1488	4.2	N	.14	65P	85P	35P
X 453-457.5	1489	8.7	N	.10	65P	80P	30P
X 457.5-462	1490	4.5	N	.40	70P	80P	35P
X 462-467	1491	5	N	N	75P	35P	80P
X 467-471.83	1492	4.83	T	N	65P	30P	75P
X 471.83-475.75	1493	3.92	N	N	70P	30P	85P
X 475.75-480.6	1494	4.85	N	N	75P	35P	90P
X 480.6-485.4	1495	4.8	T	N	80P	35P	90P
X 485.4-490.2	1496	4.8	N	N	75P	30P	80P
X 490.2-494.7	1497	4.5	T	N	70P	30P	85P
X 494.7-499.4	1498	4.7	N	N	75P	35P	85P
X 499.4-500	1499	4.5	T	N	70P	30P	85P

TAB - #5

Footage Interval	Sample Number	4 7	Au oz /TON	Ag oz /TON	Cu %	Zn %	Co %
508.1-513.5	100		.014	.04	80 <sup>P</sup>	90 <sup>P</sup>	35 <sup>P</sup>
513.5-518	101		T	N	80 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>
518-522.6	102		T	N	85 <sup>P</sup>	80 <sup>P</sup>	35 <sup>P</sup>
522.6-527.2	103		N	N	75 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
527.2-531.8	104		N	.04	80 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
531.8-536.4	105		N	N	80 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>
536.4-540.4	106		N	N	80 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>
540.4-545.1	107		T	N	85 <sup>P</sup>	85 <sup>P</sup>	35 <sup>P</sup>
545.1-549.7	108		N	N	85 <sup>P</sup>	80 <sup>P</sup>	35 <sup>P</sup>
549.7-555	109		T	.02	80 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>
595-600	5781						
645-650	5782						
695-700	5783						
745-750	5784						
795-800	5785						



FOOTAGE INTERVAL	Sample Number	IN H	As oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
T 0-24'	1801	24	T	.12	75 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>	.14
T 24-38'	1802	14	N	N	75 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.07
T 38-45	1803	7	T	.02	95 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.09
T 45-53.5	1804	8.5	N	.07	75 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	.11
X 53.5-62	1805	8.5	N	.04	100 <sup>P</sup>	95 <sup>P</sup>	40 <sup>P</sup>	.12
T 62-66.2	1806	4.2	N	N	75 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.07
T 66.2-71	1807	4.8	N	N	75 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.07
X 71-77.5	1808	6.5	N	N	80 <sup>P</sup>	80 <sup>P</sup>	40 <sup>P</sup>	.10
X 77.5-84.5	1809	7	T	.04	75 <sup>P</sup>	65 <sup>P</sup>	35 <sup>P</sup>	.11
T 84.5-91	1810	6.5	N	.09	75 <sup>P</sup>	70 <sup>P</sup>	35 <sup>P</sup>	.13
X 91-96	1811	5	N	.09	80 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.12
T 96-101	1812	5	N	N	75 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	.07
T 101-107	1813	6	N	.04	80 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.10
T 107-112.5	1814	5.5	N	.05	80 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.10
T 112.5-117.5	1815	5	N	.09	85 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.12
T 117.5-121.5	1816	4	N	.10	85 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.13
T 121.5-125.5	1817	4	N	N	80 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>	.07
T 125.5-129.6	1818	4.1	T	.07	80 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	.11
T 129.6-133	1819	3.4	N	.06	80 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.11
T 133-139.5	1820	6.5	N	.07	195 <sup>P</sup>	315 <sup>P</sup>	45 <sup>P</sup>	.16
X 139.5-144	1821	4.5	T	.05	210 <sup>P</sup>	285 <sup>P</sup>	35 <sup>P</sup>	.13
X 144-150	1822	6	N	.03	320 <sup>P</sup>	385 <sup>P</sup>	40 <sup>P</sup>	.15
T 150-164.5	1823	14.5	T	.13	245 <sup>P</sup>	515 <sup>P</sup>	50 <sup>P</sup>	.22
T 164.5-169.5	1824	5	N	.10	255 <sup>P</sup>	210 <sup>P</sup>	30 <sup>P</sup>	.15
X 169.5-173	1825	.5	N	N	215 <sup>P</sup>	330 <sup>P</sup>	35 <sup>P</sup>	.11
X 173-178	1826	5	N	.14	145 <sup>P</sup>	210 <sup>P</sup>	30 <sup>P</sup>	.16
X 178-183	1827	5	N	.11	140 <sup>P</sup>	310 <sup>P</sup>	30 <sup>P</sup>	.15
X 183-187	1828	4	N	.07	45 <sup>P</sup>	115 <sup>P</sup>	25 <sup>P</sup>	.10
X 187-192	1829	5	N	.14	40 <sup>P</sup>	100 <sup>P</sup>	30 <sup>P</sup>	.15
X 192-201	1830	9	N	.01	65 <sup>P</sup>	120 <sup>P</sup>	30 <sup>P</sup>	.08
T 201-206	1831	5	N	N	95 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>	.08
T 206-211	1832	5	N	.13	40 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.14
T 211-217	1833	6	N	.15	30 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	.15
X 217-222	1834	5	N	.08	35 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.11
T 222-227	1835	5	N	.24	50 <sup>P</sup>	85 <sup>P</sup>	30 <sup>P</sup>	.20
T 227-232	1836	5	N	.05	60 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>	.10
T 232-238	1837	6	N	.02	45 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.08
X 238-242	1838	4	N	.14	145 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.15
X 242-247	1839	5	N	.09	140 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>	.14
X 247-252	1840	5	N	.09	95 <sup>P</sup>	70 <sup>P</sup>	35 <sup>P</sup>	.13
X 252-260	1841	8	N	.10	145 <sup>P</sup>	80 <sup>P</sup>	45 <sup>P</sup>	.17
X 260-265	1842	5	N	.12	80 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.14
X 265-269	1843	4	N	.04	70 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.09
X 269-273	1844	4	N	.05	85 <sup>P</sup>	25 <sup>P</sup>	30 <sup>P</sup>	.10
X 273-278	1845	5	N	.08	85 <sup>P</sup>	85 <sup>P</sup>	30 <sup>P</sup>	.12
X 278-283.5	1846	5.5	N	N	70 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>	.07
X 283.5-288	1847	4.5	N	.09	80 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	.12
X 288-292.5	1848	.5	N	.02	80 <sup>P</sup>	65 <sup>P</sup>	30 <sup>P</sup>	.08
X 292.5-296	1849	3.5	N	N	80 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>	.08
X 296-300.5	1850	4.5	N	.06	80 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>	.11



ESTIMATE INTERVAL	Sample No.	TH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUE
X 300.5-305	1851	4.5	N	.08	110 <sup>p</sup>	80 <sup>p</sup>	30 <sup>p</sup>	.12
X 305-310	1852	5	N	N	90 <sup>p</sup>	75 <sup>p</sup>	30 <sup>p</sup>	.08
X 310-315	1853	5	N	N	75 <sup>p</sup>	70 <sup>p</sup>	30 <sup>p</sup>	.07
X 315-320	1854	5	N	.06	80 <sup>p</sup>	65 <sup>p</sup>	30 <sup>p</sup>	.11
X 320-325	1855	5	N	.04	85 <sup>p</sup>	70 <sup>p</sup>	35 <sup>p</sup>	
X 325-330	1856	5	N	.07	150 <sup>p</sup>	105 <sup>p</sup>	30 <sup>p</sup>	
X 330-335	1857	5	T	.15	115 <sup>p</sup>	80 <sup>p</sup>	35 <sup>p</sup>	
X 335-338.5	1858	3.5	N	.09	65 <sup>p</sup>	65 <sup>p</sup>	30 <sup>p</sup>	
X 338.5-342	1859	3.5	N	.17	70 <sup>p</sup>	75 <sup>p</sup>	30 <sup>p</sup>	
X 342-347.5	1860	5.5	.009	.11	65 <sup>p</sup>	65 <sup>p</sup>	30 <sup>p</sup>	
X 347.5-352	1861	4.5	N	N	80 <sup>p</sup>	75 <sup>p</sup>	30 <sup>p</sup>	
X 352-357	1862	5	T	.01	85 <sup>p</sup>	80 <sup>p</sup>	30 <sup>p</sup>	
X 357-361	1863	4	N	.03	75 <sup>p</sup>	65 <sup>p</sup>	30 <sup>p</sup>	
X 361-366	1864	5	N	N	80 <sup>p</sup>	70 <sup>p</sup>	30 <sup>p</sup>	
X 366-370	1865	4	N	N	90 <sup>p</sup>	70 <sup>p</sup>	30 <sup>p</sup>	
X 370-374.5	1866	4.5	T	N	125 <sup>p</sup>	70 <sup>p</sup>	30 <sup>p</sup>	
X 374.5-378	1867	3.5	N	N	85 <sup>p</sup>	65 <sup>p</sup>	30 <sup>p</sup>	
X 378-383	1868	5	N	N	80 <sup>p</sup>	70 <sup>p</sup>	35 <sup>p</sup>	
X 383-388	1869	5	N	N	80 <sup>p</sup>	60 <sup>p</sup>	30 <sup>p</sup>	
X 388-392.8	1870	4.8	N	N	80 <sup>p</sup>	95 <sup>p</sup>	30 <sup>p</sup>	
X 392.8-402	1676	9.2	.132	1.11	100	8.3	.14	11.50
X 402-412	1677	10	.190	1.65	1.3	1.25	.095	9.70
X 412-415	1678	3	.106	.83	.32	2.9	.09	6.66
X 415-420	1679	5	.116	.86	.60	4.1	.15	8.99
X 420-425	1680	5	.010	N	.051	.41	.006	.61
X 425-428.5	1682	3.5	.178	.85	1.65	7.1	1000 <sup>p</sup>	11.87
X 428.5-432.5	1683	4	.019	.39	475 <sup>p</sup>	8.25	275 <sup>p</sup>	4.80
X 432.5-437.5	1684	5	.028	.01	.11	5.55	370 <sup>p</sup>	3.90
X 437.5-442.5	1685	5	.862	.15	4.25	6.15	705 <sup>p</sup>	31.08
X 442.5-447.5	1686	5	.035	N	.24	1.35	550 <sup>p</sup>	2.89
X 447.5-454	1687	6.5	.053	.04	.23	1.75	700 <sup>p</sup>	3.85
X 454-458	1688	4	.040	N	.15	1.80	775 <sup>p</sup>	3.59
X 458-463	1689	5	.044	N	.12	1.55	870 <sup>p</sup>	3.76
X 463-468	1690	5	.025	N	.13	.95	970 <sup>p</sup>	3.23
X 468-473	1691	5	.046	N	.14	.29	.16	4.84
X 473-478	1692	5	.038	N	.23	.27	.16	4.75
X 478-483	1693	5	.056	N	.26	.28	.14	4.80
X 483-488	1694	5	.059	N	.33	.33	.15	5.18
X 488-493	1695	5	.043	.21	.25	.22	.16	4.95
X 493-498	1696	5	.033	N	130 <sup>p</sup>	.24	.12	3.51
X 498-503	1697	5	.030	N	200 <sup>p</sup>	.39	.12	3.50
X 503-508	1698	5	.032	N	155 <sup>p</sup>	.14	.13	3.65
X 508-513	1699	5	.177	N	415 <sup>p</sup>	.21	.11	7.10
X 513-518	1700	5	.082	N	360 <sup>p</sup>	.12	.13	4.98
X 518-523	1776	5	.094	N	410 <sup>p</sup>	.55	875 <sup>p</sup>	4.59
X 523-528	1777	5	.052	N	700 <sup>p</sup>	1.05	.11	4.20
X 528-533	1778	5	.043	N	295 <sup>p</sup>	2.65	.13	5.01
X 533-542.5	1779	9.5	.113	N	925 <sup>p</sup>	.75	.14	6.33
X 542.5-547	1780	4.5	.080	.10	685 <sup>p</sup>	.80	970 <sup>p</sup>	4.60
X 547-552.5	1781	5.5	.039	N	540 <sup>p</sup>	.93	.13	4.2



TAB<sup>#</sup>-6

[illegible]



Footage Interval	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 694-701.5	1559	7.5	.147	N	.57	.35	170 P	4.94
X 701.5-705.5	1560	4	.048	N	.23	.12	125 P	1.81
X 705.5-711	1561	5.5	.110	N	.57	.24	115 P	3.82
X 711-714.5	1562	3.5	.006	.01	.15	.25	45 P	
X 714.5-720.5	1563	6	T	N	.11	.13	35 P	
X 720.5-725	1871	4.5	T	.07	.175	.14	35 P	
X 725-730	1872	5	.018	.02	.20	900 P	40 P	
X 730-735	1873	5	.011	.02	.12	.18	40 P	
X 735-739.5	1874	4.5	T	N	.275	.20	35 P	
X 739.5-744	1875	4.5	.016	.08	.19	925 P	30 P	
X 744-748.5	1876	4.5	T	.03	290 P	315 P	35 P	
X 748.5-753.5	1877	5	T	.09	125 P	215 P	45 P	
X 753.5-758.5	1878	5	T	.06	845 P	.59	50 P	
X 758.5-764	1879	5.5	.005	.01	.12	.40	50 P	
X 764-769	1880	5	.005	.05	700 P	310 P	30 P	
X 769-774	1881	5	N	N	60 P	55 P	25 P	
X 774-779	1882	5	N	N	25 P	55 P	25 P	
X 779-783	1883	5	N	.09	40 P	60 P	25 P	
X 783-788	1884	5	N	.02	85 P	60 P	25 P	
X 788-792	1885	4	N	.02	90 P	65 P	25 P	
X 792-797	1886	5	N	.09	80 P	65 P	30 P	
X 797-801.5	1887	4.5	N	.02	50 P	50 P	25 P	
X 801.5-806.5	1888	5	N	.10	70 P	50 P	30 P	
X 806.5-811	1889	5.5	N	.03	105 P	50 P	25 P	
X 811-816	1890	5	N	.01	95 P	50 P	25 P	
X 816-821	1891	5	N	N	25 P	60 P	25 P	
X 821-826.5	1892	5.5	N	N	25 P	90 P	25 P	
X 826.5-830	1893	3.5	T	.03	45 P	55 P	25 P	
X 830-834	1894	4	N	.02	55 P	55 P	25 P	
X 834-838	1895	4	T	.01	70 P	75 P	30 P	
X 838-843	1896	5	N	N	50 P	55 P	25 P	
X 843-847	1897	4	N	N	95 P	50 P	25 P	
X 847-852.5	1898	5.5	N	N	85 P	50 P	25 P	
X 852.5-856.5	1899	4	N	.01	85 P	55 P	30 P	
X 856.5-861.5	1900	5	N	.03	80 P	60 P	30 P	
X 861.5-865.5	1926	4	T	.11	65 P	50 P	25 P	
X 865.5-870.6	1927	5.1	T	.17	70 P	50 P	25 P	
X 870.6-875.6	1928	5	N	.07	65 P	50 P	25 P	
X 875.6-880.6	1929	5	N	.13	50 P	50 P	30 P	
X 880.6-885	1930	4.4	N	.07	45 P	55 P	30 P	
X 885-890	1931	5	N	.05	20 P	55 P	25 P	
X 890-894.5	1932	4.5	N	.12	70 P	55 P	25 P	
X 894.5-899	1933	4.5	N	.05	110 P	50 P	30 P	
X 899-903.5	1934	3.5	N	.12	80 P	50 P	30 P	
X 903.5-908	1935	4.5	N	N	65 P	50 P	30 P	
X 908-913	1936	5	N	.01	60 P	110 P	30 P	
X 913-917.5	1937	4.5	N	.13	130 P	45 P	30 P	
X 917.5-922	1938	4.5	N	N	95 P	40 P	30 P	
X 922-927	1939	5	N	N	195 P	50 P	35 P	
X 927-931.5	1940	4.5	N	N	155 P	90 P	35 P	



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TAB-6

FOOTAGE INTERVAL	Sample Number	Fe %	Au oz/ton	Ag %	Cu %	Zn %	Co %	Combined METAL VALUES
X 931.5-936	1941	4.5	N	N	125P	75P	30P	.08
X 936-940.5	1942	4.5	T	N	650P	.18	40P	
X 940.5-945.5	1943	5	.005	N	900P	.47	45P	
X 945.5-950	1944	4.5	N	N	155P	.11	30P	
X 950-955	1945	5	N	N	70P	180P	25P	
X 955-959	1151	4	N	N	550P	450P	35P	
X 959-964.5	1152	5.5	N	N	75P	105P	40P	
X 964.5-969	1153	4.5	N	N	130P	.11	85P	
X 969-974	1154	5	N	N	360P	.29	60P	
X 974-980	1155	6	.01	N	.17	.49	85P	
X 980-985	1156	5	.006	N	380P	.13	50P	
X 985-989	1157	4	.005	.08	167	.31	120P	
X 989-994	1158	5	.012	N	610	.19	45P	
X 994-998	1159	4	.009	.09	.18	.20	40P	
X 998-1003.5	1160	5.5	.006	N	.13	.14	55P	
X 1003.5-1009	1161	5.5	.007	N	.12	.22	65P	
X 1009-1015	1162	6	.011	N	505P	.71	35P	
X 1015-1020	1163	5	.008	N	.16	.38	60P	
X 1020-1024.5	1164	4.5	T	N	115P	125P	40P	
X 1024.5-1030	1165	5.5	.013	N	155P	275P	40P	
X 1030-1035	1166	5	.005	N	555P	750P	65P	
X 1035-1039	1167	4	N	N	370P	.19	70P	
X 1039-1043.6	1168	4.6	N	N	.11	.22	60P	
X 1043.6-1047.6	1169	4	T	N	335P	.15	85P	
X 1047.6-1052.8	1170	5.2	T	N	850P	400P	40P	
X 1052.8-1057	1171	4.2	.005	N	80P	130P	30P	
X 1057-1062.4	1172	5.4	N	N	75P	65P	30P	
X 1062.4-1067.4	1173	5	N	N	70P	65P	30P	
X 1067.4-1071.5	1174	4.1	N	N	70P	70P	30P	
X 1071.5-1076	1175	4.5	N	.09	65P	65P	25P	
X 1076-1080.6	1176	4	N	N	70P	70P	35P	
X 1080.6-1085.6	1177	5.6	.006	N	70P	70P	30P	
X 1085.6-1090.2	1178	4.6	N	N	85P	60P	30P	
X 1090.2-1095	1179	4.8	T	N	110P	55P	25P	
X 1095-1100	1180	5	T	.05	110P	65P	30P	
X 1100-1105	1181	5	N	N	105P	85P	30P	
X 1105-1109.5	1182	4.5	N	N	100P	70P	25P	
X 1109.5-1114.5	1183	5	N	N	110P	70P	30P	
X 1114.5-1118.7	1184	4.2	N	N	130P	75P	30P	
X 1118.7-1123.7	1185	5	N	N	135P	70P	30P	
X 1123.7-1128	1186	4.3	N	N	125P	70P	35P	
X 1128-1133	1187	5	N	N	105P	55P	30P	
X 1133-1137.6	1188	4.6	N	N	125P	65P	30P	
X 1137.6-1141.6	1189	4	N	N	110P	65P	30P	



Footage Interval	Sample Number	K 2 H	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %	Combined Metal Values
X 0-5	1201	5	N	N	145 P	35 P	30 P	.08
X 5-11	1202	6	N	N	85 P	50 P	30 P	.07
X 11-15.6	1203	4.6	N	N	100 P	70 P	30 P	.08
X 15.6-20.2	1204	4.6	N	N	130 P	215 P	30 P	.09
X 20.2-24.3	1205	4.1	N	N	85 P	65 P	25 P	.06
X 24.3-28	1206	3.7	N	.06	75 P	65 P	30 P	.07
X 28-32.5	1207	4.5	N	N	75 P	60 P	30 P	.07
X 32.5-37.5	1208	5	N	.03	80 P	75 P	30 P	.09
X 37.5-42.8	1209	5.3	N	N	80 P	95 P	30 P	.08
X 42.8-48.2	1210	5.4	N	N	70 P	60 P	30 P	.07
X 48.2-52.7	1211	4.5	N	N	65 P	55 P	30 P	.07
X 52.7-57.2	1212	4.5	N	N	80 P	60 P	30 P	.07
X 57.2-61.2	1213	4	N	N	85 P	70 P	35 P	.09
X 61.2-65.5	1214	4.3	N	.07	75 P	60 P	30 P	.11
X 65.5-70.2	1215	4.7	N	.01	120 P	85 P	30 P	.08
X 70.2-75	1216	4.8	N	N	75 P	65 P	30 P	.07
X 75-79.6	1217	4.6	N	.06	75 P	60 P	30 P	.10
X 79.6-84.2	1218	4.6	N	N	280 P	65 P	30 P	.09
X 84.2-88.8	1219	4.6	N	N	80 P	65 P	30 P	.07
X 88.8-93.5	1220	4.7	N	N	80 P	60 P	30 P	.07
X 93.5-98	1221	4.5	T	N	85 P	60 P	30 P	.07
X 98-102.5	1222	4.5	T	N	80 P	60 P	30 P	.07
X 102.5-107	1223	4.5	N	N	85 P	65 P	30 P	.07
X 107-111.5	1224	4.5	N	N	80 P	65 P	30 P	.07
X 111.5-116.2	1225	4.7	N	N	80 P	65 P	30 P	.07
X 116.2-121	1226	4.8	N	N	105 P	60 P	30 P	.08
X 121-125.3	1227	4.3	N	N	80 P	60 P	30 P	.07
X 125.3-129.7	1228	4.4	T	N	95 P	75 P	30 P	.08
X 129.7-134.8	1229	5.1	N	.07	80 P	70 P	35 P	.12
X 134.8-140	1230	5.2	N	.10	150 P	95 P	30 P	.14
X 140-144.5	1231	4.5	.007	N	100 P	90 P	25 P	.20
X 144.5-149	1232	4.5	.005	.10	80 P	105 P	35 P	.27
X 149-153	1233	4	.007	.10	70 P	85 P	35 P	.32
X 153-157	1234	4	.022	.12	85 P	85 P	35 P	.73
X 157-161.7	1235	4.7	N	.07	70 P	80 P	35 P	.12
X 161.7-166.5	1236	4.8	.011	N	75 P	120 P	35 P	.38
X 166.5-171.2	1237	4.7	.059	N	80 P	195 P	35 P	1.64
X 171.2-176	1238	4.8	.015	N	75 P	135 P	35 P	.48
X 176-180.1	1239	4.1	.008	N	90 P	85 P	35 P	.30
X 180.1-184.2	1240	4.1	.005	.03	70 P	75 P	35 P	.23
X 184.2-189.1	1241	4.9	.001	.01	80 P	85 P	25 P	.10
X 189.1-194	1242	4.9	.001	.02	75 P	100 P	30 P	.11
X 194-198.7	1243	4.7	.001	.13	115 P	425 P	30 P	.19
X 198.7-203.5	1244	4.8	.001	.10	85 P	105 P	30 P	.16
X 203.5-208.2	1245	4.7	.001	.14	115 P	185 P	30 P	.18
X 208.2-213	1246	4.8	.001	.10	70 P	90 P	30 P	.15
X 213-217.5	1247	4.5	.001	.01	85 P	265 P	30 P	.11
X 217.5-222	1248	4.5	.001	.01	70 P	105 P	30 P	.08
X 222-226.7	1249	4.7	.001	.01	225 P	180 P	30 P	.12
X 226.7-231.50	1250	4.8	.001	.01	80 P	165 P	25 P	.10



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FOOTAGE INTERVAL	SAMPLE NUMBER	FT H	AU OZ/TON	AG OZ/TON	CU %	ZN %	CO %	Combined METAL VALUES
X 231.5-236	1251	4.5	.001	.01	70 P	90	30 P	.11
X 236-242.5	1252	6.5	.003	.20	105 P	.14	30 P	.32
X 242.5-244.5	1253	2	.13	.01	.67	.56	.13	7.07
X 244.5-249	1254	4.5	.144	.01	3.20	1.80	180 P	8.13
X 249-254	1255	5	.104	.01	.62	5.25	180 P	5.95
X 254-259	1256	5	.300	1.22	2.80	7.55	185 P	14.90
X 259-263.5	1257	4.5	.150	1.01	1.15	8.95	220 P	9.86
X 263.5-268	1258	4.5	.024	.06	570 P	.67	65 P	1.14
X 268-273.1	1259	5.1	.003	.01	85 P	.25	25 P	.25
X 273.1-278.3	1260	5.2	.012	.08	280 P	.31	95 P	.72
X 278.3-282.9	1261	4.6	.009	.04	555 P	.36	85 P	.64
X 282.9-287.5	1262	4.6	.005	.01	95 P	.39	85 P	.49
X 287.5-291.8	1263	4.3	.039	.01	.12	.29	155 P	1.60
X 291.8-296.2	1264	4.4	.006	.01	750 P	.30	100 P	.57
X 296.2-300.8	1265	4.6	.003	.22	125 P	.18	40 P	.37
X 300.8-305.5	1266	5.3	.001	.24	70 P	865 P	30 P	.26
X 325-330	1267	5	.001	.03	105 P	95 P	45 P	.15
X 350-355	1268	5	.002	.05	425 P	415 P	225 P	.61
X 375-380	1269	5	-.001	-.01	100 P	65 P	35 P	.09
X 400-405	1270	5	-.001	.16	50 P	60 P	30 P	.16
X 425-430	1271	5	-.001	-.01	60 P	55 P	30 P	.07
X 450-455	1272	5	-.001	-.01	110 P	65 P	35 P	.09
X 475-480	1273	5	-.001	-.01	135 P	60 P	35 P	.09
X 500-505	1274	5	-.001	-.01	180 P	75 P	35 P	.09
X 525-530	1275	5	-.001	-.01	70 P	70 P	35 P	.08
X 550-555	1276	5	-.001	-.01	110 P	65 P	35 P	.13
X 575-580	1277	5	-.001	-.01	90 P	60 P	35 P	.09
X 600-605	1278	5	.001	.05	90 P	60 P	35 P	.14
X 625-630	1279	5	-.001	.12	90 P	140 P	35 P	.15
X 650-655	1280	5	.001	.08	80 P	85 P	35 P	.15
X 675-680	1281	5	-.001	-.01	210 P	420 P	35 P	.11
X 700-705	1282	5	.001	-.01	85 P	295 P	35 P	.12
X 725-730	1283	5	.001	.39	240 P	345 P	30 P	.33
X 750-755	1284	5	-.001	.21	45 P	120 P	40 P	.21
X 755-780	1285	5	-.001	.12	75 P	175 P	30 P	.14
X 800-805	1286	5	-.001	.07	140 P	470 P	35 P	.14
X 825-830	1287	5	.001	.03	190 P	150 P	35 P	.14
X 850-855	1288	5	-.001	.02	85 P	115 P	40 P	.11
X 875-880	1289	5	-.001	.05	20 P	25 P	55 P	.15
X 900-905	1290	5	-.001	.01	20 P	40 P	130 P	.28
X 925-930	1291	5	-.001	-.01	5 P	35 P	145 P	.31
X 950-955	1292	5	-.001	.70	10 P	30 P	125 P	.64
X 975-980	1293	5	.002	.08	100 P	50 P	165 P	.45



Footwall- Interval	Sample Number	Int.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 0-15	2090	15	.001	.11	60P	30P	80P	.24
X 15-20	2091	5	.001	.17	65P	30P	80P	.29
X 20-25	2092	5	.001	.13	60P	30P	25P	.26
X 25-30	2093	5	.001	.07	60P	30P	75P	.23
X 30-35	2094	5	.001	.29	75P	30P	500P	1.24
X 35-40	2095	5	.001	.11	65P	30P	80P	.26
X 40-50	2096	5	.001	.17	65P	30P	125P	.39
X 50-55	2097	5	.001	.16	70P	30P	80P	.29
X 55-60	2098	5	.001	.16	65P	30P	75P	.28
X 60-65	2099	5	.001	.08	65P	30P	50P	.24
X 65-70	2100	5	.001	.13	95P	35P	100P	.32
X 70-75	2126	5	.001	2.24	90P	30P	80P	1.39
X 75-80	2127	5	.001	.11	75P	30P	80P	.26
X 80-85	2128	5	.001	.13	65P	30P	80P	.27
X 85-90	2129	5	.001	.06	70P	30P	80P	.23
X 90-95	2130	5	.001	.12	125P	30P	120P	.36
X 95-100	2131	5	.001	.12	65P	30P	80P	.27
X 100-105	2132	5	.001	.09	75P	30P	75P	.24
X 105-110	2133	5	.001	.11	95P	20P	230P	.58
X 110-115	2134	5	.001	.08	140P	25P	95P	.28
X 115-120	2135	5	.001	.12	155P	35P	75P	.26
X 120-125	2136	5	.001	.14	65P	155P	30P	.18
X 125-130	2137	5	.001	.09	65P	200P	30P	.15
X 130-135	2138	5	.001	.07	85P	275P	30P	.15
X 135-140	2139	5	.001	.11	70P	360P	35P	.18
X 140-145	2140	5	.001	.13	70P	245P	35P	.19
X 145-150	2141	5	.001	.02	70P	80P	30P	.10
X 150-155	2142	5	.001	.01	95P	35P	80P	.18
X 155-160	2143	5	.001	.17	80P	35P	75P	.26
X 160-165	2144	5	.001	.13	80P	35P	75P	.24
X 165-170	2145	5	.001	.17	150P	45P	75P	.26
X 170-174.5	2146	4.5	.001	.11	110P	40P	75P	.23
X 174.5-178.7	2000	4.2	.001	.02	85P	175P	40P	.11
X 178.7-181.8	2001	3.1	.005	.01	470P	.16	55P	.36
X 181.8-192.0	2002	11.2	.034	.93	.22	.42	660P	3.17
X 192.0-196.5	2003	4.5	.054	.01	.23	.13	.11	4.03
X 196.5-201.2	2004	4.5	.078	.12	.53	.17	.13	5.45
X 201-204	2005	3	.357	.01	3.0	.17	590P	13.71
X 204-205.7	2006	1.7	.275	.96	3.65	8.7	400P	15.89
X 205.7-220	2007	4.3	.008	.01	825P	.50	70P	.46
X 220-224.5	2008	4.5	.002	.01	200P	750P	40P	.19
X 224.5-229	2009	4.5	.001	.01	310P	.15	110P	.36
X 229-231.8	2010	2.8	.001	.01	120P	.16	70P	.26
X 231.8-236.8	2011	5	.005	.05	340P	690P	265P	.65
X 236.8-241.8	2012	5	.001	.06	65P	365P	45P	.17
X 241.8-246.8	2013	5	.003	.04	365P	.12	280P	.78
X 246.8-251.8	2014	5	.006	.08	775P	920P	415P	1.19
X 251.8-256.8	2015	5	.004	.01	545P	.25	340P	.99
X 256.8-261.8	2016	5	.016	.01	.18	.58	.11	3.21
X 261.8-267	2017	5.2	.015	.04	.12	.30	520P	1.76



FOOTAGE INTERVAL	SAMPLE NUMBER	INCH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUE
X 267-272	2018	5	.022	.06	.22	.61	.11	3.40
X 272-277	2019	5	.014	.01	.29	.70	.11	3.27
X 277-282	2020	5	.030	.01	.22	.42	.21	5.61
X 282-287	2021	5	.014	.01	.14	.52	.11	3.05
X 287-292	2022	5	.025	.01	.20	.47	.16	4.43
X 292-297	2023	5	.008	.01	.12	.62	.11	2.91
X 297-302	2024	5	.017	.01	.16	.53	810 P	2.54
X 302-307	2025	5	.020	.01	.25	.64	.13	3.79
X 307-312	2026	5	.018	.06	.34	.67	.19	5.13
X 312-317	2027	5	.014	.17	.30	.61	.15	4.17
X 317-322	2028	5	.006	.41	.17	.15	730 P	2.14
X 322-327	2029	5	.016	.01	.26	.35	.14	3.78
X 327-332	2030	5	.014	.21	.28	.25	.11	3.18
X 332-337	2031	5	.028	.45	.44	.74	.21	6.15
X 337-342	2032	5	.018	.20	.27	.34	.12	3.52
X 342-347	2033	5	.022	.30	.30	.29	.12	3.69
X 347-352	2034	5	.020	.32	.35	.33	.15	4.34
X 352-357	2035	5	.016	.26	.32	.71	.17	4.76
X 357-362	2036	5	.064	.01	.13	.19	255 P	.85
X 362-367	2037	5	.002	1.86	595 P	495 P	35 P	1.19
X 367-372	2038	5	.001	.06	755 P	510 P	75 P	.31
X 372-377	2039	5	.001	.11	760 P	520 P	80 P	.35
X 377-382	2040	5	.001	.01	45 P	120 P	50 P	.15
X 382-387	2041	5	.001	.01	115 P	145 P	130 P	.32
X 387-392	2042	5	.001	.01	25 P	45 P	105 P	.26
X 392-397	2043	5	.001	.01	15 P	40 P	65 P	.17
X 397-402	2044	5	.001	.08	25 P	40 P	100 P	.28
X 402-407	2045	5	.001	.09	20 P	60 P	95 P	.28
X 407-412	2046	5	.001	.05	30 P	60 P	110 P	.29
X 412-417	2047	5	.001	.01	10 P	45 P	95 P	.23
X 417-422	2048	5	.001	.05	10 P	40 P	100 P	.24
X 422-427	2049	5	.001	.15	30 P	35 P	150 P	.40
X 427-432	2050	5	.001	.12	105 P	30 P	55 P	.19
X 432-437	2051	5	.001	.14	5 P	40 P	110 P	.31
X 437-442	2052	5	.001	.01	5 P	35 P	105 P	.23
X 442-447	2053	5	.001	.08	5 P	35 P	100 P	.25
X 447-452	2054	5	.001	.19	10 P	35 P	105 P	.32
X 452-457	2055	5	.001	.07	10 P	45 P	95 P	.24
X 457-462	2056	5	.001	.13	20 P	35 P	100 P	.28
X 462-467	2057	5	.001	.01	10 P	40 P	100 P	.22
X 467-472	2058	5	.001	.15	55 P	85 P	55 P	.20
X 472-477	2059	5	.001	.01	60 P	180 P	30 P	.08
X 477-482	2060	5	.001	.07	50 P	215 P	30 P	.11
X 482-487	2061	5	.002	.61	55 P	200 P	35 P	.14
X 487-492	2062	5	.001	.01	105 P	170 P	30 P	.08
X 492-497	2063	5	.001	.01	70 P	210 P	35 P	.09
X 497-502	2064	5	.001	.15	95 P	180 P	35 P	.17
X 502-507	2065	5	.001	.05	15 P	45 P	90 P	.22
X 507-512	2066	5	.001	.05	10 P	40 P	110 P	.26
X 512-517	2067	5	.001	.13	10 P	35 P	100 P	.28



# TAB-9

340 2.1  
da 2.1

Footage Interval	Sample Number	Int.	Hu oz/TON	Hg oz/TON	Cu %	Zn %	Pb %	Combined Metal Values
X 517-522	2068	5	-.001	.21	60P	160P	50P	.23
X 522-527	2069	5	-.001	.13	75P	170P	30P	.15
X 527-532	2070	5	-.001	.08	315P	760P	30P	
X 532-537	2071	5	-.001	.13	315P	.22	30P	.26
X 537-542	2072	5	-.001	.05	180P	170P	25P	.10
X 542-547	2073	5	-.001	-.01	80P	65P	25P	.06
X 547-552	2074	5	-.001	.06	70P	65P	25P	.09
X 552-557	2075	5	-.001	.11	105P	80P	25P	.12
X 557-562	2076	5	-.001	.12	135P	125P	25P	.13
X 562-567	2077	5	-.001	.13	150P	755P	30P	.18
X 567-572	2078	5	-.001	.10	125P	330P	25P	.13
X 572-577	2079	5	-.001	.08	185P	.11	30P	.17
X 577-582	2080	5	.002	.21	255P	445P	20P	.25
X 582-587	2081	5	.001	.17	90P	305P	20P	.18
X 587-592	2082	5	.001	.06	130P	270P	30P	.15
X 592-597	2083	5	.001	-.01	110P	160P	30P	.11
X 597-602	2084	5	.001	-.01	135P	400P	30P	.12
X 602-607	2085	5	.003	-.01	110P	180P	30P	.16
X 607-612	2086	5	-.001	.25	85P	190P	30P	.21
X 612-617	2087	5	-.001	.01	50P	190P	30P	.08
X 617-622	2088	5	-.001	.18	110P	155P	25P	.17
X 622-627	2089	5	.002	.13	80P	135P	25P	.19
X 650-655	2147	5	-.001	-.01	130P	130P	25P	.07
X 675-680	2148	5	-.001	-.01	205P	175P	40P	.11
X 700-705	2149	5	-.001	-.01	55P	170P	35P	.09
X 725-730	2150	5	-.001	-.01	65P	710P	40P	.12
X 750-755	2151	5	-.001	-.01	15P	40P	100P	.21
X 775-780	2152	5	-.001	.05	10P	50P	110P	.26
X 800-805	2153	5	-.001	.06	10P	45P	100P	.25
X 825-830	2154	5	-.001	-.01	10P	35P	105P	.22
X 850-855	2155	5	-.001	.03	30P	20P	50P	.12
X 875-880	2156	5	.001	-.01	10P	35P	105P	.25
X 900-905	2157	5	.001	-.01	10P	35P	105P	.25
X 925-930	2158	5	.001	-.01	10P	35P	105P	.25
X 950-955	2159	5	.001	-.01	10P	35P	105P	.25
X 975-980	2160	5	.001	-.01	10P	50P	105P	.25
X 1000-1005	2161	5	.001	.05	10P	40P	105P	.28
X 1025-1030	2162	5	.001	-.01	10P	35P	105P	.25
X 1050-1055	2163	5	.001	.03	5P	50P	105P	.27
X 1075-1080	2164	5	.001	-.01	10P	45P	105P	.25
X 1100-1105	2165	5	.001	-.01	10P	90P	105P	.25
X 1125-1130	2166	5	.001	.04	10P	45P	105P	.27
X 1150-1155	2167	5	.001	-.01	5P	30P	105P	.25



Footage Interval	Sample Number	Int.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 0-20	2852	20	-.001	.14	80P	100P	35P	.16
X 20-25	2853	5	-.001	.10	95P	55P	35P	.14
X 25-30	2854	5	-.001	.09	60P	40P	35P	.13
X 30-35	2855	5	-.001	.02	35P	35P	30P	.08
X 35-40	2856	5	-.001	.10	35P	35P	35P	.13
X 40-45	2857	5	-.001	.07	35P	35P	30P	.11
X 45-50	2858	5	-.001	.06	55P	125P	35P	.12
X 50-55	2859	5	-.001	.05	60P	120P	40P	.12
X 55-60	2860	5	-.001	.09	70P	70P	40P	.14
X 60-65	2861	5	-.001	-.01	50P	90P	40P	.09
X 65-70	2862	5	-.001	-.01	40P	80P	40P	.09
X 70-75	2863	5	-.001	-.01	25P	50P	40P	.09
X 75-80	2864	5	-.001	-.01	100P	55P	40P	.10
X 80-85	2865	5	-.001	.03	35P	55P	45P	.12
X 85-90	2866	5	-.001	.04	90P	70P	45P	.13
X 90-95	2867	5	-.001	-.01	65P	40P	45P	.10
X 95-100	2868	5	-.001	.01	50P	45P	35P	.08
X 100-105	2869	5	-.001	-.01	35P	50P	40P	.09
X 105-110	2870	5	-.001	.04	40P	70P	50P	.13
X 110-115	2871	5	-.001	.07	50P	70P	50P	.15
X 115-120	2872	5	-.001	.07	35P	65P	45P	.14
X 120-125	2873	5	-.001	.10	40P	60P	50P	.19
X 125-130	2874	5	-.001	.03	15P	55P	40P	.10
X 130-135	2875	5	-.001	.08	60P	50P	40P	.13
X 135-140	2876	5	-.001	.07	225P	70P	25P	.12
X 140-145	2877	5	.003	.11	70P	55P	25P	.20
X 145-150	2878	5	-.001	.08	40P	55P	30P	.11
X 150-155	2879	5	-.001	-.01	75P	55P	30P	.10
X 155-160	2880	5	-.001	.01	50P	60P	30P	.08
X 160-165	2881	5	-.001	.07	30P	50P	25P	.09
X 165-170	2882	5	-.001	.06	20P	40P	20P	.08
X 170-175	2883	5	-.001	.04	65P	60P	30P	.09
X 175-180	2884	5	-.001	.03	100P	60P	30P	.09
X 180-185	2885	5	-.001	-.01	275P	110P	35P	.11
X 185-190	2886	5	-.001	.09	105P	55P	25P	.11
X 190-195	2887	5	-.001	.05	115P	65P	30P	.10
X 195-200	2888	5	-.001	.13	100P	50P	30P	.14
X 200-205	2889	5	-.001	.13	95P	50P	30P	.14
X 205-210	2890	5	-.001	.04	120P	35P	30P	.10
X 210-215	2891	5	-.001	.15	250P	60P	35P	.18
X 215-220	2892	5	-.001	.03	80P	75P	30P	.09
X 220-225	2893	5	-.001	.07	105P	65P	30P	.11
X 225-230	2894	5	-.001	.50	100P	65P	30P	.34
X 230-235	2895	5	-.001	.15	100P	85P	30P	.16
X 235-240	2896	5	-.001	.14	110P	85P	25P	.14
X 240-245	2897	5	-.001	.12	85P	210P	25P	.13
X 245-250	2898	5	.003	.13	405P	615P	35P	.29
X 250-255	2899	5	.001	.06	185P	295P	40P	.15
X 255-260	2900	5	-.001	.04	95P	170P	25P	.09
X 260-265	2726	5	.023	.09	.011	.061	25P	.74



Footage Interval	Sample Number	F H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 265-270	2727	5	.005	-.01	.065	.13	40 <sup>P</sup>	.34
X 270-275	2728	5	.004	.06	.11	.17	90 <sup>P</sup>	.51
X 275-278	2729	3	.013	-.01	.031	.11	60 <sup>P</sup>	.55
X 278-280	2730	2	.184	.26	2.25	.17	.20	11.51
X 280-285	2731	5	.192	.43	1.80	.12	.18	10.92
X 285-290	2732	5	.112	.15	.78	.37	.14	6.91
X 290-292	2733	2	.184	.02	1.00	.58	.14	9.04
X 292-295	2734	3	.005	N	.13	.11	40 <sup>P</sup>	.39
X 295-300	2735	5	.002	"	.025	.070	25 <sup>P</sup>	.16
X 300-302	2736	2	.003	"	.020	.053	50 <sup>P</sup>	.23
X 302-305	2737	3	.026	-.001	.17	.18	575 <sup>P</sup>	2.14
X 305-310	2738	5	.052	N	.71	.11	950 <sup>P</sup>	4.12
X 310-315	2739	5	.322	.23	1.35	.061	535 <sup>P</sup>	11.10
X 315-320	2740	5	.114	N	7.0	.080	615 <sup>P</sup>	11.33
X 320-325	2741	5	.433	"	4.7	.72	630 <sup>P</sup>	17.73
X 325-330	2742	5	.142	"	2.4	2.5	720 <sup>P</sup>	8.70
X 330-335	2743	5	.075	"	1.05	2.8	850 <sup>P</sup>	5.99
X 335-340	2744	5	.043	"	.11	5.3	850 <sup>P</sup>	5.26
X 340-345	2745	5	.093	.15	.58	4.1	.11	7.14
X 345-350	2746	5	.126	N	.57	.51	.13	6.84
X 350-355	2747	5	.172	.37	.55	2.25	.11	8.53
X 355-360	2748	5	.053	N	.27	6.3	.11	6.63
X 360-365	2749	5	.076	-.01	.25	7.35	.13	8.07
X 365-370	2750	5	.056	-.01	.17	9.3	.11	7.87
X 370-375	2751	5	.054	-.01	.21	6.5	890 <sup>P</sup>	6.23
X 375-380	2752	5	.312	-.01	.13	3.7	720 <sup>P</sup>	11.41
X 380-385	2753	5	.082	-.01	.059	1.4	.14	5.75
X 385-390	2754	5	.056	-.01	.083	.16	.11	3.94
X 390-395	2755	5	.100	-.01	.062	.076	.15	5.88
X 395-400	2756	5	.058	-.01	.13	.11	.13	4.44
X 400-405	2757	5	.054	-.01	.075	.22	.13	4.35
X 405-410	2758	5	.070	-.01	.011	.081	960 <sup>P</sup>	3.91
X 410-415	2759	5	.058	-.01	.043	.23	850 <sup>P</sup>	3.4
X 415-420	2760	5	.058	-.01	.086	.84	840 <sup>P</sup>	3.7
X 420-425	2761	5	.056	-.01	.016	.85	800 <sup>P</sup>	3.55
X 425-430	2762	5	.081	N	.078	.77	890 <sup>P</sup>	4.4
X 430-435	2763	5	.079	N	.061	.47	.10	4.4
X 435-440	2764	5	.082	N	.062	1.13	860 <sup>P</sup>	4.5
X 440-445	2765	5	.037	N	.062	.85	720 <sup>P</sup>	2.9
X 445-450	2766	5	.029	N	.034	.70	550 <sup>P</sup>	2.2
X 450-455	2767	5	.074	N	.054	.32	760 <sup>P</sup>	3.7
X 455-460	2768	5	.057	N	.036	1.05	620 <sup>P</sup>	3.2
X 460-465	2769	5	.087	N	.088	1.05	600 <sup>P</sup>	4.0
X 465-470	2770	5	.063	.47	.095	.51	610 <sup>P</sup>	3.5
X 470-475	2771	5	.105	N	.089	.70	500 <sup>P</sup>	4.2
X 475-480	2772	5	.178	N	.10	.83	670 <sup>P</sup>	6.5
X 480-485	2773	5	.086	N	.094	1.27	530 <sup>P</sup>	4.0
X 485-490	2774	5	.103	N	.21	1.16	800 <sup>P</sup>	5.0
X 490-495	2775	5	.043	N	.36	.082	360 <sup>P</sup>	2.2
X 495-500	2776	5	.032	-.01	.11	.025	220 <sup>P</sup>	1.4



FOOTAGE INTERVAL	Sample Number	INCH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
✓ 500-505	2777	5	.078	-.01	.038	.020	690 <sup>P</sup>	2.12
✓ 505-510	2778	5	.054	-.01	.58	.031	260 <sup>P</sup>	2.56
✓ 510-515	2779	5	.049	-.01	.19	.022	260 <sup>P</sup>	2.04
✓ 515-520	2780	5	.055	-.01	.64	.13	320 <sup>P</sup>	2.82
✓ 520-525	2781	5	.110	N	1.10	.074	390 <sup>P</sup>	4.85
✓ 525-530	2782	5	.036	.01	.92	.048	330 <sup>P</sup>	2.59
✓ 530-535	2783	5	.095	N	.82	.36	470 <sup>P</sup>	4.46
✓ 535-540	2784	5	.127	N	.15	.094	330 <sup>P</sup>	4.23
✓ 540-545	2785	5	.040	N	.44	.100	360 <sup>P</sup>	2.29
✓ 545-550	2786	5	.081	N	.67	.060	370 <sup>P</sup>	3.61
✓ 550-555	2787	5	.059	-.01	.55	.056	310 <sup>P</sup>	2.78
✓ 555-560	2788	5	.029	-.01	.036	.026	305 <sup>P</sup>	1.45
✓ 560-565	2789	5	.052	-.01	.44	.031	265 <sup>P</sup>	2.38
✓ 565-570	2790	5	.024	-.01	.042	.047	170 <sup>P</sup>	1.05
✓ 570-575	2791	5	.019	-.01	.021	.12	165 <sup>P</sup>	.92
✓ 575-580	2792	5	.050	-.01	.092	.22	125 <sup>P</sup>	1.76
✓ 580-585	2793	5	.015	.03	.12	.22	140 <sup>P</sup>	.92
✓ 585-590	2794	5	.011	-.01	.068	.38	140 <sup>P</sup>	.81
✓ 590-595	2795	5	.017	-.01	.081	.39	95 <sup>P</sup>	.89
✓ 595-600	2796	5	.005	-.01	.069	.25	90 <sup>P</sup>	.50
✓ 600-605	2797	5	.015	-.01	.31	.41	155 <sup>P</sup>	1.20
✓ 605-610	2798	5	.019	-.01	.27	.21	125 <sup>P</sup>	1.12
✓ 610-615	2799	5	.008	-.01	.080	.19	105 <sup>P</sup>	.59
✓ 615-620	2800	5	.007	-.01	.074	.093	85 <sup>P</sup>	.48
✓ 620-625	2801	5	.001	-.01	.042	.085	75 <sup>P</sup>	.26
✓ 625-630	2802	5	.008	-.01	.16	.18	195 <sup>P</sup>	.86
✓ 630-635	2803	5	.002	-.01	.27	.039	50 <sup>P</sup>	.44
✓ 635-640	2804	5	.001	-.01	.617	.019	45 <sup>P</sup>	.12
✓ 640-645	2805	5	.003	N	375 <sup>P</sup>	370 <sup>P</sup>	60 <sup>P</sup>	.26
✓ 645-650	2806	5	.001	N	150 <sup>P</sup>	505 <sup>P</sup>	35 <sup>P</sup>	.14
✓ 650-655	2807	5	.001	N	165 <sup>P</sup>	555 <sup>P</sup>	35 <sup>P</sup>	.14
✓ 655-660	2808	5	.001	N	200 <sup>P</sup>	95 <sup>P</sup>	30 <sup>P</sup>	.11
✓ 660-665	2809	5	.001	.09	145 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>	.15
✓ 665-670	2810	5	.001	.09	135 <sup>P</sup>	85 <sup>P</sup>	30 <sup>P</sup>	.15
✓ 670-675	2811	5	.203	.51	3.2	.14	650 <sup>P</sup>	10.24
✓ 675-680	2812	5	.196	1.41	5.1	.13	.14	14.01
✓ 680-685	2813	5	.110	N	2.4	.18	.13	8.11
✓ 685-690	2814	5	.415	1.13	5.0	.16	.20	20.80
✓ 690-695	2815	5	.331	.10	5.35	.22	905 <sup>P</sup>	16.11
✓ 695-700	2816	5	.332	N	4.57	1.95	825 <sup>P</sup>	15.97
✓ 700-705	2817	5	.255	N	3.75	.37	.15	13.77
✓ 705-710	2818	5	.181	N	2.80	550 <sup>P</sup>	.14	10.53
✓ 710-715	2819	5	.344	N	2.60	470 <sup>P</sup>	.12	14.20
✓ 715-720	2820	5	.342	N	2.55	.12	735 <sup>P</sup>	13.15
✓ 720-725	2821	5	.224	N	2.05	.13	760 <sup>P</sup>	9.66
✓ 725-730	2822	5	.174	.26	1.75	.65	735 <sup>P</sup>	8.29
✓ 730-735	2823	5	.072	N	.48	.36	835 <sup>P</sup>	4.28
✓ 735-740	2824	5	.076	N	.65	.47	930 <sup>P</sup>	4.81
✓ 740-745	2825	5	.111	N	1.25	.65	790 <sup>P</sup>	6.11
✓ 745-750	2826	5	.052	-.01	.58	.59	690 <sup>P</sup>	3.65



Footprint	Sample Number	H.T.	Hu oz/Ton	Hg oz/Ton	Cu %	Zn %	Co %	Combined Metal Values
150-955	2827	5	.176	-.01	1.13	.42		660 P
755-760	2828	5	.066	-.01	.74	.28		450 P
765-770	2830	5	.065	.15	3.2	.32		810 P
770-775	2831	5	.062	-.01	3.8	.21		750 P
775-780	2832	5	.1070	.14	2.0	.30		660 P
780-785	2833	5	.002	.06	2.1	.26		660 P
785-790	2834	5	.064	-.01	1.85	2.85		470 P
790-795	2835	5	.085	.20	2.0	1.70		250 P
795-800	2836	5	.069	.39	1.3	5.6		355 P
800-805	2837	5	.108	.15	2.05	6.25		490 P
805-810	2838	5	.048	.08	.60	5.85		315 P
810-815	2839	5	.045	.18	1.05	2.40		215 P
815-820	2840	5	.031	-.01	1.25	2.80		210 P
820-825	2841	5	.1045	.19	.94	1.15		165 P
825-830	2842	5	.079	.32	.80	3.35		180 P
830-835	2843	5	.065	.23	1.10	2.55		170 P
835-840	2844	5	.141	.21	3.05	.89		120 P
840-845	2845	5	.1072	-.01	1.35	2.40		125 P
845-850	2846	5	.038	.35	.65	2.35		165 P
850-855	2847	5	.084	-.01	1.70	1.85		155 P
855-860	2848	5	.129	-.01	1.45	1.70		220 P
860-865	2849	5	.108	-.01	1.40	4.6		245 P
865-870	2850	5	.057	.11	1.15	2.15		115 P
870-875	2851	5	.035	-.01	1.10	.88		165 P
875-880	2901	5	.113	.10	1.79	.40		200 P
880-885	2902	5	.064	.54	.27	1.15		75 P
885-890	2903	5	.009	-.01	.21	.49		45 P
890-895	2904	5	.007	.05	.300 P	.17		95 P
895-900	2905	5	.018	-.01	400 P	480 P		940 P
900-905	2906	5	.012	-.01	230 P	120 P		520 P
905-910	2907	5	.015	-.01	300 P	160 P		700 P
910-915	2908	5	.028	-.01	180 P	.12		180 P
915-920	2909	5	.002	-.01	340 P	160 P		315 P
920-925	2910	5	.012	.02	965 P	.11		70 P
925-930	2911	5	.016	-.01	315 P	320 P		150 P
930-935	2912	5	.014	.26	415 P	365 P		95 P
935-940	2913	5	.018	-.01	935 P	680 P		80 P
940-945	2914	5	.019	.04	.14	720 P		105 P
945-950	2915	5	.011	.09	745 P	750 P		40 P
950-955	2916	5	.001	.15	185 P	.17		35 P
955-960	2917	5	.003	.29	225 P	720 P		40 P
960-965	2918	5	.004	.25	185 P	865 P		40 P
965-970	2919	5	.003	.20	230 P	.35		35 P
970-975	2920	5	.004	.19	230 P	.19		40 P
975-980	2921	5	.001	.09	145 P	.27		40 P
980-985	2922	5	.001	.13	285 P	440 P		35 P
985-990	2923	5	.001	.22	460 P	325 P		60 P
990-995	2924	5	-.001	.15	105 P	55 P		30 P



# TAB-10

ORC 5  
X JR 5

FOOTAGE INTERVAL	SAMPLE NUMBER	FT.	Au OZ/TON	Ag OZ/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 1000-1010	2926	10	-.001	-.01	.005	.006	25 <sup>P</sup>	.06
X 1010-1015	2927	5	.003	.27	.007	.010	55 <sup>P</sup>	.35
X 1015-1020	2928	5	-.001	.17	.010	.008	30 <sup>P</sup>	.17
X 1020-1025	2929	5	.014	.15	.077	.18	265 <sup>P</sup>	1.16
X 1025-1030	2930	5	.085	-.01	.35	.063	.12	5.14
X 1030-1035	2931	5	.04	-.01	.22	.15	.35	8.70
X 1035-1040	2932	5	.031	-.01	.15	.27	.17	4.66
X 1040-1045	2933	5	.055	-.01	.14	.097	740 <sup>P</sup>	3.19
X 1045-1050	2934	5	.085	.01	.19	.11	550 <sup>P</sup>	3.64
X 1050-1055	2935	5	.012	-.01	.042	.043	360 <sup>P</sup>	1.13
X 1055-1060	2936	5	.047	.06	.14	.055	.12	3.96
X 1060-1065	2937	5	.039	-.01	.16	.072	770 <sup>P</sup>	2.84
X 1065-1070	2938	5	.032	-.01	.15	.078	860 <sup>P</sup>	2.84
X 1070-1075	2939	5	.013	.03	.046	.092	60 <sup>P</sup>	.57
X 1075-1080	2940	5	.004	-.01	.055	.084	410 <sup>P</sup>	1.06
X 1080-1085	2941	5	.004	-.01	.004	.056	645 <sup>P</sup>	1.49
X 1085-1090	2942	5	.004	-.01	.02	.12	175 <sup>P</sup>	.54
X 1090-1095	2943	5	.001	.04	.046	.060	55 <sup>P</sup>	.23
X 1095-1100	2944	5	.005	.01	.12	.043	65 <sup>P</sup>	.41
/ 1115-1120	5501	5						
/ 1120-1125	5502	5						
/ 1145-1150	5503	5						
/ 1170-1175	5504	5						
/ 1195-1200	5505	5						
/ 1220-1225	5506	5						
/ 1245-1250	5507	5						
/ 1270-1275	5508	5						
/ 1295-1300	5509	5						
/ 1320-1325	5510	5						
/ 1345-1350	5511	5						
/ 1370-1375	5512	5						
/ 1395-1400	5513	5						
/ 1420-1425	5514	5						
/ 1445-1450	5515	5						
/ 1470-1475	5516	5						
/ 1495-1500	5517	5						
/ 1520-1525	5518	5						
/ 1545-1550	5519	5						
/ 1570-1575	5520	5						
/ 1595-1600	5521	5						



# TAB - #11

CRD 2/2  
22 5/2

Footage Interval	Sample Number	F H	Au oz / ton	Ag oz / ton	Cu %	Zn %	Co %	Combined METAL VALUES
X 20-25	3076	5	.008	-.02	.002	.008	35P	.29
X 40-45	3077	5	-.002	-.02	.003	.008	30P	.07
X 70-75	3078	5	-.002	.02	.010	.009	40P	.11
X 95-100	3079	5	-.002	-.02	.007	.010	35P	.08
X 120-125	3080	5	.002	.12	.007	.008	35P	.20
X 145-150	3081	5	.002	.06	.008	.008	35P	.17
X 178-188	2401	10	-.001	.19	75P	50P	30P	.17
X 188-198	2402	10	-.001	.17	70P	45P	30P	.16
X 198-203.5	2403	5.5	.001	-.01	810P	160P	35P	.19
X 203.5-208.6	2404	5.1	-.001	.16	155P	80P	30P	.17
X 208.6-213.2	2405	4.6	-.001	.01	135P	155P	20P	.07
X 213.2-218.2	2406	5	-.001	.15	70P	75P	25P	.14
X 218.2-223.2	2407	5	-.001	.13	90P	100P	30P	.15
X 223.2-228	2408	4.8	-.001	.15	85P	145P	30P	.16
X 228-232	2409	5	.001	.20	345P	.42	30P	.41
X 233-238	2410	5	.002	.03	275P	.45	25P	.34
X 238-243	2411	5	.009	-.01	745P	.21	60P	.53
X 243-248	2412	5	.031	.02	.20	830P	145P	1.37
X 248-255.6	2413	7.6	.023	.06	.22	.37	80P	1.18
X 255.6-258.6	2414	3	.006	.09	.13	1.35	40P	.99
X 258.6-259.7	2415	1.1	.057	-.01	1.25	.15	.21	7.23
X 259.7-264.7	2416	5	.002	-.01	235P	.19	40P	.24
X 264.7-269.7	2417	5	.013	.15	945P	700P	35P	.62
X 269.7-274.7	2418	5	.005	.12	555P	905P	50P	.39
X 274.7-279.7	2419	5	.004	-.01	545P	860P	45P	.29
X 279.7-284.7	2420	5	.005	.15	850P	885P	50P	.44
X 284.7-289.7	2421	5	.002	.17	255P	.12	40P	.30
X 289.7-294.7	2422	5	.007	.10	280P	750P	50P	.40
X 294.7-299.7	2423	5	.01	.15	305P	415P	45P	.49
X 299.7-304.7	2424	5	.001	.13	295P	680P	50P	.26

E.O. H. 1000'



TAB - # 11

FOOTAGE INTERVAL	Sample Number	INTERVAL	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combining METAL VALUES
0-5	5701	5	-.002	.30	.008	.015	30 <sup>P</sup>	.24
5-10	5702	5	-.002	.22	.008	.009	25 <sup>P</sup>	.18
10-15	5703	5	.002	.48	.004	.007	25 <sup>P</sup>	.37
15-20	5704	5	-.002	.22	.002	.005	25 <sup>P</sup>	.17
20-25	5705	5	-.002	.16	.002	.007	25 <sup>P</sup>	.14
25-30	5706	5	-.002	.56	.002	.007	25 <sup>P</sup>	.35
35-40	5707	5	-.002	.46	.002	.007	25 <sup>P</sup>	.30
40-45	5708	5	-.002	.34	.002	.007	20 <sup>P</sup>	.23
345-350	5709	5	-.002	.20	.008	.003	25 <sup>P</sup>	.17
395-400	5710	5	.002	-.02	.008	.005	25 <sup>P</sup>	.12
445-450	5711	5	-.002	.16	.007	.006	20 <sup>P</sup>	.16
495-500	5712	5	-.002	.56	.010	.006	25 <sup>P</sup>	.36
545-550	5713	5	-.002	.06	.010	.006	25 <sup>P</sup>	.10
595-600	5714	5	-.002	.02	.011	.007	25 <sup>P</sup>	.08
645-650	5715	5	-.002	.08	.007	.007	25 <sup>P</sup>	.10
695-700	5716	5	-.002	.20	.009	.008	30 <sup>P</sup>	.18
745-750	5717	5	-.002	.04	.010	.016	30 <sup>P</sup>	.10
795-800	5718	5	-.002	.10	.009	.006	30 <sup>P</sup>	.13
845-850	5719	5	-.002	.16	.015	.010	25 <sup>P</sup>	.16
895-900	5720	5	-.002	.22	.007	.005	25 <sup>P</sup>	.18
945-950	5721	5	-.002	.28	.012	.007	30 <sup>P</sup>	.23
995-1000	5722	5	-.002	.12	.010	.006	25 <sup>P</sup>	.13



Footage	Interval	Sample Number	H <sub>2</sub>	H <sub>4</sub>	H <sub>2</sub> /H <sub>4</sub>	H <sub>2</sub>	H <sub>4</sub>	H <sub>2</sub> /H <sub>4</sub>	Co
0-10		2426	10	15	1.5	105P	60P	1.75	35P
10-20		2427	10	21	2.1	90P	55P	1.64	35P
20-30		2428	10	15	1.5	110P	60P	1.83	35P
30-35		2429	5	10	2.0	65P	60P	1.08	35P
35-40		2430	5	08	1.6	95P	65P	1.44	40P
40-45		2431	5	21	4.2	45P	65P	1.56	35P
45-50		2432	5	24	2.4	85P	55P	1.54	35P
50-55		2433	5	19	1.9	105P	60P	1.75	40P
55-60		2434	5	19	1.9	85P	55P	1.54	35P
60-65		2435	5	13	1.3	80P	50P	1.60	35P
65-70		2436	5	05	1.05	95P	55P	1.73	40P
70-75		2437	5	13	1.3	80P	55P	1.45	35P
75-80		2438	5	12	1.2	60P	55P	1.09	35P
80-85		2439	5	11	1.1	30P	50P	1.50	35P
85-90		2440	5	10	1.0	95P	55P	1.73	40P
90-95		2441	5	19	1.9	75P	70P	1.07	35P
95-100		2442	5	19	1.9	70P	75P	1.07	40P
100-105		2443	5	06	1.06	50P	80P	1.60	35P
105-110		2444	5	10	1.0	75P	85P	1.13	35P
110-115		2445	5	19	1.9	115P	95P	1.57	35P
115-120		2446	5	16	1.6	90P	60P	1.50	35P
120-125		2447	5	12	1.2	85P	60P	1.42	35P
125-130		2448	5	17	1.7	70P	55P	1.27	35P
130-135		2449	5	17	1.7	75P	65P	1.34	35P
135-140		2450	5	19	1.9	100P	55P	1.82	35P
140-145		2451	5	20	2.0	95P	60P	1.75	35P
145-150		2452	5	17	1.7	100P	60P	1.67	35P
150-155		2453	5	18	1.8	90P	60P	1.50	35P
155-160		2454	5	08	1.08	80P	70P	1.13	35P
160-165		2455	5	17	1.7	90P	85P	1.11	30P
165-170		2456	5	14	1.4	85P	100P	1.18	35P
170-175		2457	5	10	1.0	100P	65P	1.54	25P
175-180		2458	5	13	1.3	115P	65P	1.65	30P
180-185		2459	5	17	1.7	420P	210P	2.00	35P
185-190		2460	5	14	1.4	105P	530P	5.05	25P
190-195		2461	5	08	1.08	160P	15	1.06	35P
195-200		2462	5	20	2.0	105P	660P	6.27	35P
200-205		2463	5	13	1.3	300P	915P	3.05	30P
205-210		2464	5	20	2.0	45P	190P	4.22	25P
210-215		2465	5	10	1.0	70P	11	0.16	25P
215-220		2466	5	01	1.01	215P	410P	1.91	30P
220-225		2467	5	14	1.4	110P	160P	1.45	25P
225-230		2468	5	06	1.06	115P	155P	1.35	25P
230-235		2469	5	05	1.05	150P	125P	1.20	25P
235-240		2470	5	03	1.03	210P	175P	1.75	20P
240-243		2471	3	09	1.09	135P	160P	1.20	20P
243-245		2472	2	03	1.03	1033	1012	0.99	40P
245-250		2473	5	02	1.02	1019	1014	0.99	45P
250-255		2474	5	02	1.02	1008	1013	1.01	35P
255-260		2475	5	01	1.01	809	816	1.02	40P



Footage Interval	Sample Number	ft H	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
X 260-265	2476	5	-.001	-.01	140 P	170 P	25 P
X 265-270	2477	5	-.001	-.01	165 P	175 P	30 P
X 270-275	2478	5	-.001	-.01	135 P	135 P	30 P
X 275-280	2479	5	-.001	-.01	190 P	175 P	25 P
X 280-285	2480	5	-.001	-.01	120 P	140 P	20 P
X 285-290	2481	5	-.001	-.01	80 P	140 P	25 P
X 290-295	2482	5	-.001	-.01	80 P	125 P	25 P
X 295-300	2483	5	.001	.03	95 P	175 P	25 P
X 300-305	2484	5	.001	-.01	125 P	290 P	30 P
X 305-310	2485	5	-.001	-.01	270 P	400 P	30 P
X 310-315	2486	5	-.001	-.01	195 P	415 P	30 P
X 315-320	2487	5	.001	.07	130 P	385 P	25 P
X 320-325	2488	5	-.001	-.01	120 P	640 P	25 P
X 325-330	2489	5	-.001	-.01	100 P	210 P	25 P
X 330-335	2490	5	-.001	-.01	70 P	230 P	30 P
X 335-340	2491	5	-.001	.01	110 P	200 P	20 P
X 340-345	2492	5	-.001	.04	80 P	290 P	25 P
X 345-350	2493	5	.001	-.01	100 P	185 P	25 P
X 350-355	2494	5	-.001	-.01	125 P	170 P	25 P
X 355-360	2495	5	-.001	-.01	165 P	310 P	20 P
X 360-365	2496	5	.001	-.01	110 P	180 P	25 P
X 365-370	2497	5	.001	-.01	135 P	210 P	25 P
X 370-375	2498	5	.001	-.01	50 P	195 P	25 P
X 375-380	2499	5	.005	.07	200 P	.16 P	25 P
X 380-385	2500	5	.001	-.01	180 P	.110 P	25 P
X 385-390	2501	5	-.001	.10	130 P	450 P	25 P
X 390-395	2502	5	.001	-.01	190 P	650 P	25 P
X 395-400	2503	5	.001	-.01	70 P	200 P	25 P
X 400-405	2504	5	.001	.06	100 P	130 P	25 P
X 405-410	2505	5	.002	-.01	50 P	170 P	20 P
X 410-415	2506	5	.002	.05	60 P	330 P	25 P
X 415-420	2507	5	.005	.07	105 P	145 P	30 P
X 420-425	2508	5	.020	2.68	170 P	105 P	20 P
X 425-430	2509	5	.001	.10	85 P	140 P	25 P
X 430-435	2510	5	.002	.11	65 P	100 P	25 P
X 435-440	2511	5	.001	.23	70 P	105 P	25 P
X 440-445	2512	5	-.001	-.01	60 P	95 P	25 P
X 445-450	2513	5	.001	.08	50 P	90 P	25 P
X 450-455	2514	5	-.001	.14	65 P	100 P	25 P
X 455-460	2515	5	-.001	.10	45 P	85 P	25 P
X 460-465	2516	5	-.001	.06	320 P	90 P	35 P
X 465-470	2517	5	-.001	-.01	95 P	130 P	35 P
X 470-475	2518	5	-.001	-.01	70 P	105 P	35 P
X 475-480	2519	5	-.001	-.01	135 P	120 P	35 P
X 480-485	2520	5	-.001	.03	100 P	105 P	40 P
X 485-490	2521	5	-.001	.07	100 P	90 P	35 P
X 490-495	2522	5	-.001	.10	110 P	120 P	35 P
X 495-500	2523	5	-.001	-.01	185 P	155 P	40 P
X 500-505	2524	5	-.001	-.01	85 P	120 P	35 P



FOOTAGE INTERVAL	Sample Number	Fe %	Au oz / TON	Ag oz / TON	Cu %	Zn %	Co %
X 510-515	2526	5	.002	-.01	155P	105P	30P
X 515-520	2527	5	-.001	.06	115P	105P	30P
X 520-525	2528	5	-.001	-.01	120P	120P	35P
X 525-530	2529	5	-.001	-.01	75P	125P	35P
X 530-535	2530	5	-.001	-.01	75P	115P	35P
X 535-540	2531	5	-.001	.02	85P	120P	35P
X 540-545	2532	5	-.001	.26	225P	130P	40P
X 545-550	2533	5	-.001	.34	60P	90P	50P
X 550-555	2534	5	.004	.08	170P	120P	60P
X 555-560	2535	5	.003	-.01	100P	80P	50P
X 560-565	2536	5	.001	.12	125P	90P	45P
X 565-570	2537	5	-.001	.07	150P	85P	40P
X 570-575	2538	5	-.001	.18	110P	100P	45P
X 575-580	2539	5	-.001	.05	135P	80P	35P
X 580-585	2540	5	-.001	.02	50P	70P	35P
X 585-590	2541	5	.002	-.01	130P	110P	40P
X 590-595	2542	5	.001	-.01	75P	90P	40P
X 595-600	2543	5	-.001	-.01	60P	80P	40P
X 600-605	2544	5	.001	.001	120P	75P	40P
X 605-610	2545	5	.001	.05	95P	75P	40P
X 610-615	2546	5	-.001	.06	150P	80P	45P
X 615-620	2547	5	-.001	.09	190P	85P	40P
X 620-625	2548	5	-.001	.03	145P	80P	35P
X 625-630	2549	5	-.001	.04	120P	80P	40P
X 630-635	2550	5	.001	.10	245P	90P	45P
X 635-640	2551	5	-.001	.12	150P	70P	35P
X 640-645	2552	5	-.001	.06	85P	75P	40P
X 645-650	2553	5	.002	.03	695P	85P	45P
X 650-655	2554	5	.002	.04	110P	65P	35P
X 655-660	2555	5	.002	.10	60P	75P	50P
X 660-665	2556	5	.001	-.01	160P	90P	45P
X 665-670	2557	5	.003	-.01	380P	65P	30P
X 670-675	2558	5	-.001	-.01	905P	65P	35P
X 675-680	2559	5	.001	.10	240P	85P	30P
X 680-685	2560	5	-.001	-.01	300P	160P	35P
X 685-690	2561	5	-.001	-.01	135P	140P	30P
X 690-695	2562	5	.004	.02	45P	210P	25P
X 695-700	2563	5	.006	-.01	100P	245P	25P
X 700-705	2564	5	-.001	-.01	45P	265P	30P
X 705-710	2565	5	-.001	-.01	120P	60P	85P
X 710-715	2566	5	-.001	-.01	230P	135P	45P
X 715-720	2567	5	-.001	-.01	90P	110P	30P
X 720-725	2568	5	-.001	-.01	190P	120P	55P
X 725-730	2569	5	-.001	.04	190P	95P	50P
X 730-735	2570	5	-.001	.05	295P	85P	60P
X 735-740	2571	5	-.001	.15	5P	35P	115P
X 740-745	2572	5	-.001	.07	5P	30P	120P
X 745-750	2573	5	-.001	.02	15P	15P	30P
X 750-755	2574	5	-.001	.03	90P	50P	25P
X 755-760	2575	5	-.001	-.01	300P	65P	25P



Range Interval	Sample Number	F <sub>2</sub> H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
X 760-765	2576	5	-.001	.12	120 <sup>P</sup>	115 <sup>P</sup>	25 <sup>P</sup>
X 765-770	2577	5	-.001	.05	165 <sup>P</sup>	125 <sup>P</sup>	25 <sup>P</sup>
X 770-775	2578	5	-.001	-.01	165 <sup>P</sup>	105 <sup>P</sup>	25 <sup>P</sup>
X 775-780	2579	5	.001	.05	100 <sup>P</sup>	135 <sup>P</sup>	35 <sup>P</sup>
X 780-785	2580	5	.001	.13	220 <sup>P</sup>	205 <sup>P</sup>	30 <sup>P</sup>
X 785-790	2581	5	.001	.23	730 <sup>P</sup>	650 <sup>P</sup>	35 <sup>P</sup>
X 790-795	2582	5	.001	-.01	120 <sup>P</sup>	110 <sup>P</sup>	35 <sup>P</sup>
X 795-800	2583	5	-.001	-.01	45 <sup>P</sup>	120 <sup>P</sup>	30 <sup>P</sup>
X 800-805	2584	5	-.001	-.01	25 <sup>P</sup>	95 <sup>P</sup>	30 <sup>P</sup>
X 805-810	2585	5	-.001	-.01	75 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
X 810-815	2586	5	-.001	-.01	70 <sup>P</sup>	75 <sup>P</sup>	25 <sup>P</sup>
X 815-820	2587	5	-.001	.06	60 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
X 820-825	2588	5	-.001	-.01	680 <sup>P</sup>	115 <sup>P</sup>	85 <sup>P</sup>
X 825-830	2589	5	-.001	.02	65 <sup>P</sup>	30 <sup>P</sup>	30 <sup>P</sup>
X 830-835	2590	5	-.001	-.01	20 <sup>P</sup>	15 <sup>P</sup>	25 <sup>P</sup>
X 835-840	2591	5	-.001	-.01	10 <sup>P</sup>	30 <sup>P</sup>	125 <sup>P</sup>
X 840-845	2592	5	-.001	-.01	10 <sup>P</sup>	25 <sup>P</sup>	130 <sup>P</sup>
X 845-850	2593	5	-.001	-.01	15 <sup>P</sup>	20 <sup>P</sup>	110 <sup>P</sup>
X 850-855	2594	5	-.001	-.01	10 <sup>P</sup>	30 <sup>P</sup>	115 <sup>P</sup>
X 855-860	2595	5	-.001	-.01	10 <sup>P</sup>	40 <sup>P</sup>	110 <sup>P</sup>
X 860-865	2596	5	-.001	-.01	10 <sup>P</sup>	35 <sup>P</sup>	115 <sup>P</sup>
X 865-870	2597	5	-.001	-.01	10 <sup>P</sup>	35 <sup>P</sup>	120 <sup>P</sup>
X 870-875	2598	5	-.001	-.01	10 <sup>P</sup>	40 <sup>P</sup>	115 <sup>P</sup>
X 875-880	2599	5	-.001	.05	10 <sup>P</sup>	35 <sup>P</sup>	120 <sup>P</sup>
X 880-885	2600	5	-.001	.02	15 <sup>P</sup>	40 <sup>P</sup>	115 <sup>P</sup>
X 885-890	2601	5	.001	-.01	65 <sup>P</sup>	35 <sup>P</sup>	35 <sup>P</sup>
X 890-895	2602	5	.001	.05	215 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
X 895-900	2603	5	-.001	.03	100 <sup>P</sup>	70 <sup>P</sup>	30 <sup>P</sup>
X 900-905	2604	5	-.001	-.001	235 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>
X 905-910	2605	5	.001	.05	80 <sup>P</sup>	105 <sup>P</sup>	30 <sup>P</sup>
X 910-915	2606	5	.001	-.01	120 <sup>P</sup>	95 <sup>P</sup>	35 <sup>P</sup>
X 915-920	2607	5	-.001	.05	95 <sup>P</sup>	100 <sup>P</sup>	30 <sup>P</sup>
X 920-925	2608	5	.001	.04	80 <sup>P</sup>	100 <sup>P</sup>	25 <sup>P</sup>
X 925-930	2609	5	.001	.02	85 <sup>P</sup>	115 <sup>P</sup>	25 <sup>P</sup>
X 930-935	2610	5	-.001	.05	60 <sup>P</sup>	120 <sup>P</sup>	25 <sup>P</sup>
X 935-940	2611	5	-.001	-.01	30 <sup>P</sup>	125 <sup>P</sup>	25 <sup>P</sup>
X 940-945	2612	5	-.001	.08	140 <sup>P</sup>	125 <sup>P</sup>	30 <sup>P</sup>
X 945-950	2613	5	-.001	-.01	115 <sup>P</sup>	95 <sup>P</sup>	30 <sup>P</sup>
X 950-955	2614	5	-.001	.02	160 <sup>P</sup>	115 <sup>P</sup>	35 <sup>P</sup>
X 955-960	2615	5	-.001	.04	125 <sup>P</sup>	125 <sup>P</sup>	35 <sup>P</sup>
X 960-965	2616	5	-.001	.01	190 <sup>P</sup>	115 <sup>P</sup>	25 <sup>P</sup>
X 965-970	2617	5	-.001	.09	155 <sup>P</sup>	100 <sup>P</sup>	30 <sup>P</sup>
X 970-975	2618	5	-.001	.03	85 <sup>P</sup>	100 <sup>P</sup>	35 <sup>P</sup>
X 975-980	2619	5	-.001	.09	120 <sup>P</sup>	90 <sup>P</sup>	30 <sup>P</sup>
X 980-985	2620	5	-.001	.04	200 <sup>P</sup>	85 <sup>P</sup>	35 <sup>P</sup>
X 985-990	2621	5	-.001	-.01	145 <sup>P</sup>	85 <sup>P</sup>	40 <sup>P</sup>
X 990-995	2622	5	-.001	-.01	110 <sup>P</sup>	90 <sup>P</sup>	35 <sup>P</sup>
X 995-1000	2623	5	-.001	-.01	120 <sup>P</sup>	85 <sup>P</sup>	35 <sup>P</sup>
X 1000-1005	2624	5	-.001	-.01	130 <sup>P</sup>	95 <sup>P</sup>	35 <sup>P</sup>



# TAB #12

OKO 5/21  
2.6 400

Footage Interval	Sample Number	Int H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
1010-1015	2626	5	.001	.12	215 <sup>P</sup>	155 <sup>P</sup>	35 <sup>P</sup>
1015-1020	2627	5	-.001	.08	300 <sup>P</sup>	105 <sup>P</sup>	30 <sup>P</sup>
1020-1025	2628	5	-.001	.06	25 <sup>P</sup>	105 <sup>P</sup>	35 <sup>P</sup>
1025-1030	2629	5	-.001	.10	90 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
1030-1035	2630	5	.001	.12	395 <sup>P</sup>	115 <sup>P</sup>	50 <sup>P</sup>
1035-1040	2631	5	-.001	.16	150 <sup>P</sup>	130 <sup>P</sup>	40 <sup>P</sup>
1040-1045	2632	5	.001	.11	105 <sup>P</sup>	260 <sup>P</sup>	40 <sup>P</sup>
1045-1050	2633	5	-.001	.12	45 <sup>P</sup>	80 <sup>P</sup>	35 <sup>P</sup>
1050-1055	2634	5	-.001	.04	75 <sup>P</sup>	80 <sup>P</sup>	35 <sup>P</sup>
1055-1060	2635	5	-.001	.09	85 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
1060-1065	2636	5	.002	.09	60 <sup>P</sup>	65 <sup>P</sup>	35 <sup>P</sup>
1065-1070	2637	5	.006	.13	45 <sup>P</sup>	70 <sup>P</sup>	35 <sup>P</sup>
1070-1075	2638	5	-.001	.19	100 <sup>P</sup>	90 <sup>P</sup>	40 <sup>P</sup>
1075-1080	2639	5	.001	.10	35 <sup>P</sup>	75 <sup>P</sup>	40 <sup>P</sup>
1080-1085	2640	5	.001	.10	185 <sup>P</sup>	105 <sup>P</sup>	40 <sup>P</sup>
1085-1090	2641	5	-.001	.07	735 <sup>P</sup>	105 <sup>P</sup>	75 <sup>P</sup>
1090-1095	2642	5	-.001	.06	180 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>
1095-1100	2643	5	.001	.11	.67	95 <sup>P</sup>	65 <sup>P</sup>
1100-1105	2644	5	-.001	.08	110 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>
1105-1110	2645	5	.001	.04	830 <sup>P</sup>	80 <sup>P</sup>	50 <sup>P</sup>
1110-1115	2646	5	.001	.09	65 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>
1115-1120	2647	5	.001	.22	100 <sup>P</sup>	60 <sup>P</sup>	30 <sup>P</sup>
1120-1125	2648	5	-.001	.03	220 <sup>P</sup>	75 <sup>P</sup>	35 <sup>P</sup>
1125-1130	2649	5	-.001	-.01	100 <sup>P</sup>	75 <sup>P</sup>	30 <sup>P</sup>
1130-1135	2650	5	-.001	.05	280 <sup>P</sup>	80 <sup>P</sup>	30 <sup>P</sup>
1135-1140	2651	5	-.001	-.01	210 <sup>P</sup>	295 <sup>P</sup>	35 <sup>P</sup>
1140-1145	2652	5	-.001	-.01	235 <sup>P</sup>	105 <sup>P</sup>	30 <sup>P</sup>
1145-1150	2653	5	-.001	.06	160 <sup>P</sup>	110 <sup>P</sup>	30 <sup>P</sup>
1150-1155	2654	5	-.001	.04	100 <sup>P</sup>	110 <sup>P</sup>	30 <sup>P</sup>
1155-1160	2655	5	-.001	-.01	120 <sup>P</sup>	90 <sup>P</sup>	30 <sup>P</sup>
1160-1165	2656	5	-.001	.09	245 <sup>P</sup>	85 <sup>P</sup>	35 <sup>P</sup>
1165-1170	2657	5	.001	.10	110 <sup>P</sup>	85 <sup>P</sup>	35 <sup>P</sup>
1170-1175	2658	5	-.001	-.01	55 <sup>P</sup>	90 <sup>P</sup>	40 <sup>P</sup>
1175-1180	2659	5	-.001	.12	40 <sup>P</sup>	85 <sup>P</sup>	45 <sup>P</sup>
1180-1184.2	2660	4.2	.001	.10	220 <sup>P</sup>	25 <sup>P</sup>	225 <sup>P</sup>
1184.2-1185	2661	8	.005	.07	.23	40 <sup>P</sup>	375 <sup>P</sup>
1185-1190	2662	5	.001	.05	20 <sup>P</sup>	25 <sup>P</sup>	30 <sup>P</sup>
1190-1195	2663	5	.001	-.01	25 <sup>P</sup>	25 <sup>P</sup>	35 <sup>P</sup>
1195-1199.5	2664	4.5	.002	.08	25 <sup>P</sup>	30 <sup>P</sup>	30 <sup>P</sup>
1199.5-1202.4	2665	2.9	.001	.11	100 <sup>P</sup>	75 <sup>P</sup>	90 <sup>P</sup>
1202.4-1204.4	2666	2	-.001	.03	5 <sup>P</sup>	25 <sup>P</sup>	30 <sup>P</sup>

E.O.H.



Footage Interval	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 250-255	3376	5	-.001	.15	.007	.01	35P	.16
X 255-260	3377	5	-.001	.19	.007	.009	40P	.20
X 260-265	3378	5	-.001	.08	.007	.010	35P	.13
X 265-270	3379	5	-.001	.14	.008	.014	40P	.17
X 270-275	3380	5	-.001	.14	.007	.009	30P	.15
X 275-280	3381	5	.002	.13	.008	.016	40P	.22
X 280-285	3382	5	.006	.35	.057	.069	45P	.52
X 285-290	3383	5	.015	.51	.084	1.4	820P	3.06
X 290-295	3384	5	.017	.83	.12	4.7	730P	4.52
X 295-300	3385	5	.057	.43	.95	2.2	790P	5.27
X 300-305	3386	5	.080	.24	.81	6.6	540P	6.95
X 305-310	3387	5	.042	.93	.33	3.1	660P	4.62
X 310-315	3388	5	.071	.95	.49	2.3	770P	5.45
X 315-320	3389	5	.091	-.01	1.18	6.5	310P	6.96
X 320-325	3390	5	.116	1.14	1.46	1.1	630P	6.91
X 325-330	3391	5	.093	-.01	.28	2.3	910P	8.13
X 330-335	3392	5	.039	-.01	.12	1.4	290P	2.34
X 335-340	3393	5	.032	.21	.15	1.4	480P	2.76
X 340-345	3394	5	.015	-.01	.16	2.3	360P	2.28
X 345-350	3395	5	.016	.22	.078	2.4	230P	2.11
X 350-355	3396	5	.006	-.01	.071	10.4	80P	4.77
X 355-360	3397	5	.012	-.01	.044	1.4	300P	1.58
X 360-365	3398	5	.002	-.01	.013	.63	50P	.44
X 365-370	3399	5	.001	.10	.007	.066	30P	.18
X 370-375	3400	5	.001	.15	.017	.30	25P	.30
X 375-380	3401	5	-.002	.24	170P	.25	25P	.30
X 380-385	3402	5	-.002	.44	20P	.21	25P	.22
X 385-390	3403	5	-.002	.08	85P	.20	25P	.19
X 390-395	3404	5	-.002	.02	130P	.22	25P	.17
X 395-400	3405	5	-.002	.06	125P	.24	30P	.21
X 400-405	3406	5	.076	-.02	.33	.29	165P	2.80
X 405-410	3407	5	.120	-.02	.58	.32	355P	4.62
X 410-415	3408	5	.104	-.02	.77	.34	350P	4.39
X 415-420	3409	5	.094	-.02	.95	.44	450P	4.56
X 420-425	3410	5	.126	-.02	1.55	.47	475P	6.06
X 425-430	3411	5	.098	-.02	.47	.34	355P	3.94
X 430-435	3412	5	.228	-.02	.42	1.05	460P	7.83
X 435-440	3413	5	.188	-.02	.36	.25	370P	6.19
X 440-445	3414	5	.174	.11	1.05	.19	255P	6.30
X 445-450	3415	5	.054	-.02	.22	.086	155P	2.06
X 450-455	3416	5	.068	-.02	.33	.053	150P	2.46
X 455-460	3417	5	.008	.15	.10	.074	40P	.51
X 460-465	3418	5	.046	.13	.49	.43	50P	2.06
X 465-470	3419	5	.074	.13	.68	1.10	115P	3.40
X 470-475	3420	5	.122	.12	.75	.41	110P	4.43
X 475-480	3421	5	.124	.12	1.10	.14	85P	4.67
X 480-485	3422	5	.054	.15	.95	.20	55P	2.65
X 485-490	3423	5	.050	.11	.53	.097	50P	2.05
X 490-495	3424	5	.044	.22	.032	.071	155P	1.66
X 495-500	3425	5	.068	-.02	.31	.069	340P	2.89



Footage Interval	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
500-505	2201	5	.040	-.02	.39	.34	315P	2.25
505-510	2276	5	.021	-.02	.090	.23	305P	1.36
510-515	2277	5	.010	-.02	.027	.098	215P	.78
515-520	2278	5	.012	.02	.008	.089	190P	.77
520-525	2279	5	.014	-.02	.023	.20	245P	.99
525-530	2280	5	.030	-.02	.21	.18	230P	1.56
530-535	2281	5	.012	-.02	.023	.22	170P	.79
535-540	2282	5	.032	-.02	.013	.095	175P	1.26
540-545	2283	5	.030	-.02	.14	.067	230P	1.44
545-550	2284	5	.040	-.02	.39	.029	210P	1.88
550-555	2285	5	.106	-.02	.45	.019	315P	3.91
555-560	2286	5	.054	-.02	.42	.093	255P	2.42
560-565	2287	5	.050	-.02	.37	.22	290P	2.39
565-570	2288	5	.104	-.02	1.25	.22	290P	4.69
570-575	2289	5	.134	-.02	.62	.13	325P	4.89
575-580	2290	5	.062	-.02	.40	.18	410P	2.97
580-585	2291	5	.038	-.02	.52	.49	80P	1.89
585-590	2292	5	.020	-.02	.16	.17	315P	1.42
590-595	2293	5	.016	-.02	.18	.048	280P	1.21
595-600	2294	5	.016	-.02	.28	.34	110P	1.08
600-605	2295	5	.008	-.02	.04	.039	170P	.62
605-610	2296	5	.018	-.02	.085	.067	260P	1.13
610-615	2297	5	.022	.16	.03	.038	230P	1.16
615-620	2298	5	.026	-.02	.06	.083	310P	1.43
620-625	2299	5	.022	-.02	.047	.048	275P	1.23
625-630	2300	5	.018	-.02	.058	.072	150P	.87
630-635	2302	5	.080	-.02	.57	.285	175P	4.04
635-640	2303	5	.062	-.02	.17	1.85	165P	2.93
640-645	2304	5	.026	-.02	.049	1.10	145P	1.50
645-650	2305	5	.024	-.02	.022	.30	130P	1.05
650-655	2306	5	.036	-.02	.11	.16	160P	1.46
655-660	2307	5	.038	-.02	.11	.43	135P	1.57
660-665	2308	5	.048	-.02	.45	.69	125P	2.27
665-670	2309	5	.062	-.02	.67	.49	135P	2.79
670-675	2310	5	.024	-.02	.44	.79	190P	1.80
675-680	2311	5	.020	-.02	.18	.41	105P	1.10
680-685	2312	5	.046	-.02	.44	.61	155P	2.23
685-690	2313	5	.018	-.02	.085	.059	245P	1.14
690-695	2314	5	.026	-.02	.35	.29	145P	1.46
695-700	2315	5	.032	.11	1.75	.60	330P	3.60
700-705	2316	5	.018	-.02	.45	.12	160P	1.31
705-710	2317	5	.012	.15	.23	.15	70P	.84
710-715	2318	5	.018	.12	.18	.16	90P	.97
715-720	2319	5	.008	.11	.39	.17	80P	.90
720-725	2320	5	-.02	.16	.048	.17	45P	.35
725-730	2321	5	.002	-.02	.11	.15	45P	.32
730-735	2322	5	.002	-.02	.033	.072	50P	1.18
735-740	2323	5	.002	-.02	.064	.085	80P	.32
740-745	2324	5	.002	-.02	.044	.074	85P	.31
745-750	2325	5	.002	-.02	.025	.12	65P	.30



FOOTAGE INTERVAL	SAMPLE	THICK IN	AU OZ/TON	AG OZ/TON	CU %	ZN %	CO %	Combined METAL VALUES
X 750-755	2326	5	.006	-.02	.052	.13	60 <sup>p</sup>	.39
X 755-760	2327	5	.046	-.02	.17	.06	175 <sup>i</sup>	2.03
X 760-765	2328	5	.096	-.02	.59	.22	315 <sup>p</sup>	3.87
X 765-770	2329	5	.080	-.02	.87	.26	450 <sup>p</sup>	4.03
X 770-775	2963	5	-.002	.02	.007	.010	40 <sup>p</sup>	.11
X 775-780	2964	5	-.002	.04	.004	.010	35 <sup>p</sup>	.10
X 780-785	2965	5	-.002	-.02	.006	.015	40 <sup>p</sup>	.10
X 785-790	2966	5	-.002	.16	.009	.022	40 <sup>p</sup>	.19
X 790-795	2967	5	-.002	.08	.006	.012	35 <sup>p</sup>	.13
X 795-800	2968	5	-.002	.04	.008	.006	40 <sup>p</sup>	.12
X 800-805	2969	5	.102	.08	.006	.008	35 <sup>p</sup>	.18
X 805-810	2970	5	-.002	.02	.006	.006	35 <sup>p</sup>	.09
X 810-815	2971	5	-.002	-.02	.011	.007	40 <sup>p</sup>	.10
X 815-820	2972	5	-.002	-.02	.007	.007	35 <sup>p</sup>	.08
X 820-825	2973	5	-.002	.06	.006	.006	35 <sup>p</sup>	.11
X 825-830	2974	5	-.002	.10	.006	.007	35 <sup>p</sup>	.14
X 830-835	2975	5	-.002	-.02	.007	.007	35 <sup>p</sup>	.08
X 835-840	2976	5	-.002	.02	.010	.008	40 <sup>p</sup>	.11
X 840-845	2977	5	-.002	.02	.012	.009	40 <sup>p</sup>	.11
X 845-850	2978	5	-.002	.06	.014	.008	40 <sup>p</sup>	.13
X 850-855	2979	5	.004	.14	.009	.009	40 <sup>p</sup>	.28
X 855-860	2980	5	-.002	-.02	.009	.010	40 <sup>p</sup>	.10
X 860-865	2981	5	-.002	.08	.009	.009	40 <sup>p</sup>	.14
X 865-870	2982	5	-.002	.14	.009	.020	40 <sup>p</sup>	.18
X 870-875	2983	5	.002	.14	.011	.063	35 <sup>p</sup>	.24
X 875-878.5	2330	3.5	.004	.06	.077	.28	50 <sup>p</sup>	.44
X 878.5-880	2331	1.5	.104	1.16	.28	5.4	655 <sup>p</sup>	7.54
X 880-885.3	2332	5.3	.090	.49	.52	3.8	590 <sup>p</sup>	5.46
X 885.3-890	2333	4.7	.042	-.02	.19	.18	170 <sup>p</sup>	1.73
X 890-895	2334	5	.134	1.97	1.45	5.7	925 <sup>p</sup>	10.36
X 895-900	2335	5	.062	1.04	.48	1.35	.13	5.97
X 900-905	2336	5	.108	1.89	.48	2.45	725 <sup>p</sup>	6.88
X 905-910	2337	5	.086	.55	.82	.36	705 <sup>p</sup>	5.01
X 910-915	2338	5	.064	.76	1.10	4.7	545 <sup>p</sup>	6.31
X 915-919.5	2339	4.5	.068	.39	1.50	.88	535 <sup>p</sup>	4.99
X 919.5-925	2340	5.5	.002	-.02	.036	.12	35 <sup>p</sup>	.21
X 925-930	2341	5	.002	-.02	.020	.41	35 <sup>p</sup>	.32
X 930-934.4	2342	4.4	.002	-.02	.013	.076	40 <sup>p</sup>	.18
X 934.4-937.7	2343	3.3	.206	.55	3.5	.18	.11	11.60
X 937.7-940	2344	2.3	.002	-.02	.032	.14	35 <sup>p</sup>	.22
X 940-945	2345	5	.004	-.02	.068	.17	45 <sup>p</sup>	.34
X 945-950	2346	5	.002	-.02	.021	.022	30 <sup>p</sup>	.15
X 950-955	2347	5	.002	-.02	.023	.031	30 <sup>p</sup>	.15
X 955-960	2348	5	.004	-.02	.009	.023	30 <sup>p</sup>	.19
X 960-965	2349	5	.002	-.02	.015	.026	35 <sup>p</sup>	.15
X 965-970	2350	5	.028	-.02	.50	.14	180 <sup>p</sup>	1.67
X 970-975	2351	5	.058	-.02	.70	.27	200 <sup>p</sup>	2.76
X 975-980	2352	5	.102	.18	1.35	.33	140 <sup>p</sup>	4.56
X 980-985	2353	5	.048	.02	.52	.64	175 <sup>p</sup>	2.43
X 985-990	2354	5	.074	.03	.37	.55	120 <sup>p</sup>	2.82



Footage Interval	Sample Number	F H	Au oz / TON	Ag oz / TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 990-995	2355	5	.029	.01	.25	1.35	130 P	1.93
X 995-1000	2356	5	.062	.08	.60	3.25	100 P	3.85
X 1000-1005	2357	5	.062	.20	.53	3.35	165 P	4.02
X 1005-1010	2358	5	.048	.03	.42	2.05	130 P	2.83
X 1010-1015	2359	5	.052	.19	.76	2.25	75 P	3.25
X 1015-1020	2360	5	.054	.23	.64	2.30	90 P	3.34
X 1020-1025	2361	5	.134	.17	1.60	1.60	75 P	6.05
X 1025-1030	2362	5	-.002	.10	.027	.022	30 P	.15
X 1030-1035	2363	5	.04	.04	1.20	1.60	30 P	3.01
X 1035-1040	2364	5	.086	.15	1.35	1.80	45 P	4.54
X 1040-1045	2365	5	.116	-.02	2.75	2.05	50 P	6.77
X 1045-1050	2366	5	.106	-.02	1.70	1.15	50 P	5.08
X 1050-1055	2367	5	.204	-.02	3.20	2.50	40 P	9.70
X 1055-1060	2368	5	.050	.01	.69	1.40	75 P	2.76
X 1060-1065	2369	5	.012	-.02	.25	.13	80 P	.79
X 1065-1070	2370	5	.020	.24	.50	.17	45 P	1.32
X 1070-1075	2371	5	.020	-.02	.14	.32	35 P	.87
X 1075-1080	2372	5	.008	.09	.062	.16	35 P	.46
X 1080-1085	2373	5	.002	.08	.028	.080	40 P	.24
X 1085-1090	2374	5	.014	.01	.070	.12	45 P	.59
X 1090-1095	2375	5	-.002	.06	.022	.17	45 P	.22
X 1095-1100	2376	5	-.002	.14	.028	.14	35 P	.23
X 1100-1105	2377	5	-.002	.02	.045	.12	40 P	.19
X 1105-1110	2378	5	.196	-.02	2.85	.71	60 P	8.43
X 1110-1115	2379	5	.048	.07	.73	4.2	60 P	3.92
X 1115-1120	2380	5	.006	-.02	.08	.20	10 P	.34
X 1120-1125	2381	5	.030	.07	.28	.63	20 P	1.41
X 1125-1130	2382	5	.004	.06	.081	.56	25 P	.50
X 1130-1135	2383	5	-.002	-.02	.010	.45	25 P	.25
X 1135-1140	2384	5	.014	.01	.48	.093	125 P	1.16
X 1140-1145	2385	5	.008	-.02	.064	1.02	95 P	.90
X 1145-1150	2386	5	.002	-.02	.022	.93	40 P	.55
X 1150-1155	2387	5	-.002	-.02	.008	.53	40 P	.31
X 1155-1160	2388	5	.014	-.02	.040	.15	120 P	.72
X 1160-1165	2389	5	.010	.05	.024	.051	180 P	.71
X 1165-1170	2390	5	.006	-.02	.015	.064	130 P	.47
X 1170-1175	2391	5	.032	-.02	.054	.25	220 P	1.46
X 1175-1180	2392	5	.050	-.02	.078	.19	205 P	1.91
X 1180-1185	2393	5	.110	.07	.40	.071	150 P	3.68
X 1185-1190	2394	5	.052	-.02	.23	.23	330 P	2.39
X 1190-1195	2395	5	.080	-.02	.14	.10	255 P	2.82
X 1195-1200	2396	5	.060	-.02	.24	.18	275 P	2.47
X 1200-1205	2397	5	.100	-.02	.32	.24	250 P	3.58
X 1205-1210	2398	5	.044	-.02	.11	.27	250 P	1.91
X 1210-1215	2399	5	.018	-.02	.080	.14	180 P	.99
X 1215-1220	2400	5	.090	.179	1.3	12.0	780 P	11.30
X 1220-1225	2451	5	.072	.01	.35	.26	160 P	2.70
X 1225-1230	2452	5	.044	.06	.36	.16	90 P	1.81
X 1230-1235	2453	5	.038	.12	.24	.086	65 P	1.26
X 1235-1240	2454	5	.090	-.02	.58	.043	250 P	3.49



FOOTAGE INTERVAL	SAMPLE No.	INCH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 20-25	3082	5	-.002	.14	.008	.007	40 <sup>P</sup>	.17
X 45-50	3083	5	-.002	.30	.022	.005	40 <sup>P</sup>	.27
L 70-75	3084	5	-.002	.16	.008	.006	35 <sup>P</sup>	.17
+ 95-100	3085	5	-.002	.18	.008	.007	40 <sup>P</sup>	.19
+ 120-125	3086	5	-.002	.20	.008	.006	35 <sup>P</sup>	.19
+ 145-150	3087	5	-.002	.20	.010	.007	35 <sup>P</sup>	.19
+ 170-175	3088	5	-.002	-.02	-.008	.007	45 <sup>P</sup>	.11
+ 195-200	3089	5	-.002	.04	.008	.006	45 <sup>P</sup>	.13
+ 220-225	3090	5	-.002	.30	.008	.006	40 <sup>P</sup>	.25
+ 245-250	3091	5	-.002	-.02	.007	.007	45 <sup>P</sup>	.10
X 1240-1245	2955	5	.026	-.02	.36	.42	70 <sup>P</sup>	1.37
+ 1245-1250	2956	5	.010	-.02	.17	.31	80 <sup>P</sup>	.73
+ 1250-1255	2957	5	.008	-.02	.04	.10	135 <sup>P</sup>	.58
X 1255-1260	2958	5	.280	.14	2.60	1.55	65 <sup>P</sup>	10.83
+ 1260-1265	2959	5	.004	-.02	.095	.057	60 <sup>P</sup>	.35
+ 1265-1270	2960	5	.004	.06	.066	.054	55 <sup>P</sup>	.34
X 1270-1275	2961	5	.004	-.02	.028	.39	30 <sup>P</sup>	.36
X 1275-1280	2962	5	.018	.06	.36	.067	110 <sup>P</sup>	1.13
X 1280-1285	5476	5	.010	-.02	.052	.033	125 <sup>P</sup>	.59
X 1285-1290	5477	5	.002	-.02	.067	.027	60 <sup>P</sup>	.26
X 1290-1295	5478	5	.002	-.02	.010	.006	40 <sup>P</sup>	.15
X 1295-1300	5479	5	-.002	-.02	.011	.006	35 <sup>P</sup>	.09
X 1300-1305	5480	5	-.002	-.02	.014	.007	40 <sup>P</sup>	.10
X 1305-1310	5481	5	-.002	-.02	.013	.008	45 <sup>P</sup>	.11
X 1310-1315	5482	5	-.002	-.02	.009	.007	45 <sup>P</sup>	.11
X 1315-1320	5483	5	-.002	-.02	.014	.006	45 <sup>P</sup>	.11
X 1320-1325	5484	5	-.002	-.02	.012	.006	35 <sup>P</sup>	.09
X 1325-1330	5485	5	-.002	-.02	.013	.009	35 <sup>P</sup>	.09
X 1330-1335	5486	5	-.002	-.02	.013	.006	40 <sup>P</sup>	.10
X 1335-1340	5487	5	-.002	-.02	.013	.006	40 <sup>P</sup>	.10
X 1340-1345	5488	5	-.002	.02	.011	.004	40 <sup>P</sup>	.11
X 1345-1350	5489	5	.002	-.02	.013	.006	35 <sup>P</sup>	.14
/ 1370-1375	5490	5	.002	.02	.011	.006	25 <sup>P</sup>	.13
/ 1395-1400	5491	5	.002	-.02	.009	.005	25 <sup>P</sup>	.12
/ 1420-1425	5492	5	-.002	-.02	.010	.007	25 <sup>P</sup>	.07
/ 1445-1450	5493	5	-.002	-.02	.010	.005	25 <sup>P</sup>	.06
/ 1470-1475	5494	5	.002	-.02	.008	.005	25 <sup>P</sup>	.12
/ 1495-1500	5495	5	.002	.32	.011	.005	25 <sup>P</sup>	.29
/ 1520-1525	5496	5	.002	-.02	.007	.005	20 <sup>P</sup>	.10
/ 1545-1550	5497	5	.002	.32	.008	.005	20 <sup>P</sup>	.27
/ 1570-1575	5498	5	.002	-.02	.013	.006	30 <sup>P</sup>	.13
/ 1595-1600	5499	5	.006	-.02	.009	.006	25 <sup>P</sup>	.22
/ 1620-1625	5500	5	.002	-.02	.007	.006	25 <sup>P</sup>	.11
/ 1645-1650	5601	5	.002	.20	.011	.006	25 <sup>P</sup>	.22
/ 1670-1675	5602	5	-.002	.06	.010	.006	25 <sup>P</sup>	.10
/ 1695-1700	5603	5	.002	.08	.010	.006	30 <sup>P</sup>	.17
/ 1720-1725	5604	5	.002	-.02	.006	.005	20 <sup>P</sup>	.10
/ 1745-1750	5605	5	.002	.14	.010	.007	30 <sup>P</sup>	.19
/ 1770-1775	5606	5	.002	-.02	.011	.006	25 <sup>P</sup>	.12
/ 1795-1800	5607	5	.002	-.02	.007	.006	25 <sup>P</sup>	.11





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TAB-14

Footage Interval	Sample Number	F <sub>2</sub> H	Au oz/Ton	Ag oz/Ton	Cu %	Zn %	Co %	Combined Metal Values
X 0-5	3101	5	.018	.06	.014	.007	45 <sup>P</sup>	.62
X 5-10	3102	5	.010	.17	.009	.010	40 <sup>P</sup>	.45
X 10-15	3103	5	.012	.53	.012	.015	35 <sup>P</sup>	.69
X 15-20	3104	5	.006	.25	.014	.008	40 <sup>P</sup>	.39
X 20-25	3105	5	.012	.21	.009	.008	45 <sup>P</sup>	.53
X 25-30	3106	5	.014	.23	.008	.007	45 <sup>P</sup>	.60
X 30-35	3107	5	.090	.05	.012	.016	50 <sup>P</sup>	2.52
X 35-40	3108	5	.014	.09	.015	.027	55 <sup>P</sup>	.56
X 40-45	3109	5	.002	.20	.021	.024	55 <sup>P</sup>	.31
X 45-50	3110	5	.006	.19	.023	.023	65 <sup>P</sup>	.43
X 95-100	3111	5	.016	.10	.010	.013	45 <sup>P</sup>	.58
X 120-125	3112	5	-.002	.14	.009	.007	30 <sup>P</sup>	.15
X 141-146	3113	5	-.002	.14	.007	.005	25 <sup>P</sup>	.14
X 170-175	3114	5	-.002	.12	.008	.15	105 <sup>P</sup>	.36
X 195-200	3115	5	-.002	.10	.009	.009	35 <sup>P</sup>	.14
X 220-225	3116	5	-.002	.02	.008	.008	35 <sup>P</sup>	.10
X 245-250	3117	5	-.002	.14	.008	.007	30 <sup>P</sup>	.15
X 270-275	3118	5	-.002	.26	.008	.024	35 <sup>P</sup>	.23
X 295-300	3119	5	.002	.08	.011	.009	30 <sup>P</sup>	.173
X 345-350	3120	5	-.002	.06	.009	.018	30 <sup>P</sup>	.11
X 395-400	3121	5	-.002	.10	*	*	+	.05
X 440-450	3122	5	-.002	.18	.001	.004	95 <sup>P</sup>	.30
X 445-500	3123	5	-.002	.18	-.001	.004	95 <sup>P</sup>	.30
X 545-550	3124	5	-.002	.06	.001	.004	110 <sup>P</sup>	.27
X 595-600	3125	5	-.002	.22	.001	.004	105 <sup>P</sup>	.34
X 645-650	3526	5	-.002	.06	.002	.004	105 <sup>P</sup>	.26
X 695-700	3527	5	-.002	-.02	.002	.004	100 <sup>P</sup>	.21
X 745-750	3528	5	-.002	-.02	.001	.003	105 <sup>P</sup>	.22
X 795-800	3529	5	-.002	-.02	.001	.003	100 <sup>P</sup>	.21
X 845-850	3530	5	-.002	.16	.001	.004	110 <sup>P</sup>	.32

E.O.H. 862'



STAGE INTERVAL	Sample Number	Fe %	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 0-10	3426	10	-.002	.38	130 P	635 P	160 P	.58
X 10-15	3427	5	-.002	.02	60 P	625 P	95 P	.24
X 15-20	3428	5	.002	.14	30 P	185 P	40 P	.22
X 20-25	3429	5	-.002	.34	70 P	520 P	55 P	.32
X 25-30	3430	5	-.002	.02	40 P	110 P	30 P	.08
X 30-35	3431	5	-.002	.22	55 P	95 P	30 P	.19
X 35-40	3432	5	-.002	.36	45 P	60 P	30 P	.26
X 40-45	3433	5	-.002	.16	40 P	155 P	35 P	.17
X 45-50	3434	5	-.002	.22	85 P	65 P	35 P	.20
X 75-80	3435	5	.002	.06	155 P	75 P	35 P	.18
X 100-105	3436	5	-.002	.22	210 P	75 P	35 P	.21
X 125-130	3437	5	-.002	.06	80 P	65 P	35 P	.12
X 150-155	3438	5	-.002	.14	75 P	60 P	30 P	.15
X 175-180	3439	5	-.002	.04	85 P	60 P	30 P	.10
X 200-205	3440	5	-.002	.14	85 P	70 P	30 P	.15
X 205-210	3441	5	-.002	.04	80 P	70 P	30 P	.10
X 210-215	3442	5	-.002	.08	80 P	65 P	30 P	.12
X 215-220	3443	5	-.002	-.01	80 P	60 P	30 P	.07
X 220-225	3444	5	-.001	-.01	75 P	55 P	30 P	.07
X 225-230	3445	5	.001	.12	90 P	245 P	35 P	.18
X 230-235	3446	5	-.001	.26	80 P	70 P	30 P	.21
X 235-240	3447	5	.003	.04	135 P	80 P	30 P	.18
X 240-245	3448	5	-.001	-.01	85 P	65 P	35 P	.08
X 245-250	3701	5	.016	.18	.074	.23	60 P	.81
X 250-253	3702	5	.075	.46	.37	.40	115 P	3.00
X 253-255	3703	5	.356	-.01	.114	.128	.12	13.57
X 255-260.5	3704	5.5	.154	.14	.158	10.0	160 P	10.91
X 260.5-265	3705	4.5	.061	.04	.009	.28	20 P	.22
X 265-270	3706	5	-.001	-.01	.010	.33	35 P	.22
X 270-275	3707	5	-.001	.05	.009	.44	50 P	.33
X 275-280	3708	5	-.001	.01	.006	.26	35 P	.19
X 280-285	3709	5	-.001	-.01	.008	.24	30 P	.17
X 285-290.5	3710	5.5	-.001	-.01	.012	1.75	40 P	.83
X 290.5-295	3711	4.5	.036	-.01	.09	.32	760 P	2.77
X 295-300	3712	5	.014	-.01	.20	.092	850 P	2.40
X 300-305	3713	5	.014	-.01	.07	.30	.11	3.10
X 305-310	3714	5	.019	-.01	.14	3.3	.13	4.76
X 310-315	3715	5	.039	-.01	.10	4.3	.13	5.67
X 315-320	3716	5	.026	-.01	.24	3.1	.13	4.96
X 320-325	3717	5	.032	-.01	.12	1.26	.13	4.23
X 325-330	3718	5	.064	-.01	.21	.82	.14	5.19
X 330-335	3719	5	.032	-.01	.061	.18	.23	5.82
X 335-340	3720	5	.026	-.01	.06	.59	.16	4.36
X 340-345	3721	5	.042	-.01	.10	.96	.14	4.56
X 345-350	3722	5	.02	-.01	.064	.25	.13	3.43
X 350-355	3723	5	.082	-.01	.12	.73	.12	5.11
X 355-360	3724	5	.022	-.01	.026	.45	1000 P	2.90
X 360-365	3725	5	.022	-.01	.03	.15	.12	3.20
X 365-370	3726	5	.02	-.01	.084	.11	.11	2.97
X 370-375	3727	5	.034	-.01	.23	.13	.11	3.49



Footage Interval	Sample Number		Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 375-380	3728	5	.056	-.01	.22	.098	.14	4.68
X 380-385	3729	5	.036	-.01	.26	.33	.12	3.87
X 385-390	3730	5	.045	-.01	.21	.25	.14	4.45
X 390-395	3731	5	.045	-.01	.93	.30	.21	6.66
X 395-400	3732	5	.065	-.01	.68	.17	.15	5.62
X 400-405	3733	5	.034	-.01	.22	.057	.14	4.09
X 405-410	3734	5	.032	-.01	.19	.084	.11	3.38
X 410-415	3735	5	.069	-.01	.42	.051	1000 P	4.36
X 415-420	3736	5	.058	-.01	.28	.040	960 P	3.84
X 420-425	3737	5	.085	-.01	.30	.033	820 P	4.28
X 425-430	3738	5	.200	-.01	.88	.055	760 P	7.77
X 430-435	3739	5	.114	.06	1.04	.24	810 P	5.88
X 435-440	3740	5	.078	-.01	.89	.43	720 P	4.64
X 440-445	3741	5	.112	-.01	.93	.17	850 P	5.74
X 445-450	3742	5	.075	-.01	.74	.15	640 P	4.12
X 450-455	3743	5	.096	-.01	.37	.16	530 P	4.08
X 455-460	3744	5	.05	-.01	.38	.086	590 P	2.97
X 460-465	3745	5	.085	-.01	.66	.12	380 P	3.75
X 465-470	3746	5	.039	-.01	.48	.10	400 P	2.39
X 470-475	3747	5	.069	-.01	.45	.065	370 P	3.07
X 475-480	3748	5	.123	-.01	.48	.11	430 P	4.67
X 480-485	3749	5	.048	.15	.37	.085	370 P	2.53
X 485-490	3750	5	.032	-.02	.47	.11	390 P	2.18
X 490-495	3751	5	.150	-.02	.53	.064	330 P	5.20
X 495-500	3752	5	.04	.03	.72	.089	200 P	2.25
X 500-505	3753	5	.05	-.02	.59	.18	270 P	2.53
X 505-510	3754	5	.044	-.02	.57	.048	260 P	2.00
X 510-515	3755	5	.034	-.02	.17	.043	310 P	1.74
X 515-520	3756	5	.032	-.02	.048	.46	1000 P	3.27
X 520-525	3757	5	.032	-.02	.032	.23	1000 P	3.08
X 525-530	3758	5	.05	-.02	.066	.22	920 P	3.41
X 530-535	3759	5	.02	-.02	.092	.13	950 P	2.67
X 535-540	3760	5	.02	-.02	.098	.31	.13	3.49
X 540-545	3761	5	.012	-.02	.062	.52	980 P	2.66
X 545-550	3762	5	.014	-.02	.055	.84	1000 P	2.88
X 550-555	3763	5	.028	-.02	.08	.40	.11	3.30
X 555-560	3764	5	.026	-.02	.10	.75	.12	3.63
X 560-565	3765	5	.019	-.02	.11	.85	.11	3.26
X 565-570	3766	5	.044	-.02	.14	.15	.12	3.89
X 570-575	3767	5	.036	-.02	.042	.18	.11	3.38
X 575-580	3768	5	.030	-.02	.008	.11	570 P	2.04
X 580-585	3769	5	.080	-.01	.054	.025	680 P	3.60
X 585-590	3770	5	.058	-.01	.045	.024	590 P	2.82
X 590-595	3771	5	.028	.13	.085	.023	300 P	1.53
X 595-600	3772	5	.03	-.02	.026	.035	270 P	1.40
X 600-605	3773	5	.04	.16	.069	.024	300 P	1.85
X 605-610	3774	5	.014	.13	.071	.031	190 P	.92
X 610-615	3775	5	.004	-.02	.007	.018	140 P	.41
X 615-620	3776	5	.02	.26	.705 P	.460 P	160 P	1.09
X 620-625	3777	5	.116	-.01	.15	.435 P	140 P	3.52



Footage Interval	Sample Number	Int.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 625-630	3778	5	.114	-.01	.61	490P	120P	388
X 630-635	3779	5	.024	.10	.14	650P	140P	1.15
X 635-640	3780	5	.068	.02	630P	.11	240P	2.41
X 640-645	3781	5	.008	-.02	60P	180P	180P	.60
X 645-650	3782	5	.024	-.02	520P	610P	470P	1.70
X 650-655	3783	5	-.002	-.02	230P	465P	45P	.14
X 655-660	3784	5	-.002	.10	100P	95P	35P	.14
X 660-665	3785	5	.002	.12	535P	775P	46P	.30
X 665-670	3786	5	.002	.06	215P	565P	40P	.21
X 670-675	3787	5	.002	.08	160P	.13	50P	.27
X 675-680	3788	5	.002	.06	180P	.16	50P	.27
X 680-685	3789	5	-.002	.10	145P	895P	45P	.20
X 685-690	3790	5	-.002	.06	410P	700P	40P	.23
X 690-695	3791	5	.01	.13	550P	705P	65P	.55
X 695-700	3792	5	.002	.24	490P	615P	50P	.36
X 700-705	3793	5	.002	.11	505P	485P	45P	.28
X 705-710	3794	5	.002	.16	.12	355P	75P	.43
X 710-715	3795	5	.002	.06	675P	450P	90P	.36
X 715-720	3796	5	-.002	.06	250P	375P	35P	.15
X 720-725	3797	5	-.002	.10	460P	960P	30P	.20
X 725-730	3798	5	-.002	-.02	130P	455P	30P	.10
X 730-735	3799	5	-.002	-.02	130P	150P	30P	.08
X 735-740	3800	5	-.002	-.02	95P	140P	35P	.09
X 740-745	3801	5	-.002	.18	100P	60P	25P	.16
X 745-750	3802	5	-.002	.16	110P	75P	25P	.15
X 750-755	3803	5	-.002	.10	120P	80P	30P	.13
X 755-760	3804	5	-.002	-.02	105P	60P	30P	.08
X 760-765	3805	5	-.002	-.02	80P	45P	25P	.06
X 765-770	3806	5	.002	-.02	75P	135P	30P	.13
X 770-775	3807	5	-.002	.16	60P	60P	30P	.16
X 775-780	3808	5	.002	-.02	95P	430P	25P	.13
X 780-785	3809	5	.002	.54	130P	.13	25P	.46
X 785-790	3810	5	-.002	.10	110P	75P	30P	.13
X 790-795	3811	5	-.002	.32	85P	70P	30P	.24
X 795-800	3812	5	-.002	.02	70P	60P	30P	.08
X 800-805	3813	5	.002	.50	110P	65P	25P	.38
X 805-810	3814	5	.002	.12	120P	80P	30P	.19
X 810-815	3815	5	-.002	-.02	65P	60P	25P	.06
X 815-820	3816	5	-.002	-.02	180P	130P	30P	.09
X 820-825	3817	5	.026	-.02	.18	265P	120P	1.13
X 825-830	3818	5	.058	-.02	.21	415P	150P	2.07
X 830-835	3819	5	.078	-.02	.19	265P	180P	2.63
X 835-840	3820	5	.204	-.02	.14	370P	440P	6.45
X 840-845	3821	5	.04	-.02	50P	.11	280P	1.69
X 845-850	3822	5	.042	-.02	170P	505P	145P	1.45
X 850-855	3823	5	.054	-.02	315P	790P	130P	1.76
X 855-860	3824	5	.058	-.02	.11	290P	280P	2.24
X 860-865	3825	5	.030	-.02	235P	305P	145P	1.19
X 865-870	3826	5	.018	-.02	750P	300P	175P	.93
X 870-875	3827	5	.036	-.02	.24	585P	200P	1.63



TAB #15

X  
ORD 5A  
J.L. 5A

FOOTAGE INTERVAL	Sample Number	INT.	Au oz/Ton	Ag oz/Ton	Cu %	Zn %	Co %	Combined METAL VALUES
X 875-880	3828	5	.018	-.02	.655 <sup>P</sup>	.745 <sup>P</sup>	.135 <sup>P</sup>	.85
X 880-885	3829	5	.020	.06	.85 <sup>P</sup>	.625 <sup>P</sup>	.115 <sup>P</sup>	.84
X 885-890	3830	5	.014	.11	.315 <sup>P</sup>	.11	.120 <sup>P</sup>	.76
X 890-895	3831	5	.016	-.02	.165 <sup>P</sup>	.46	.150 <sup>P</sup>	.95
X 895-900	3832	5	.022	-.02	.50 <sup>P</sup>	.910 <sup>P</sup>	.130 <sup>P</sup>	.90
X 920-925	3833	5	.004	.04	.006	.11	.50 <sup>P</sup>	.28
X 945-950	3834	5	.006	-.02	.049	.027	.125 <sup>P</sup>	.48
X 970-975	3835	5	-.002	-.02	.008	.007	.30 <sup>P</sup>	.07
X 995-1000	3836	5	-.002	.06	.005	.006	.25 <sup>P</sup>	.09
X 1020-1025	3837	5	-.002	.04	.009	.005	.25 <sup>P</sup>	.08
X 1045-1050	3838	5	-.002	-.02	.010	.007	.30 <sup>P</sup>	.08
X 1070-1075	3839	5	-.002	-.02	.009	.006	.25 <sup>P</sup>	.06
X 1095-1100	3840	5	-.002	-.02	.008	.008	.25 <sup>P</sup>	.06
X 1120-1125	3841	5	.012	.13	.007	.006	.20 <sup>P</sup>	.44
X 1145-1150	3842	5	-.002	-.02	.006	.005	.25 <sup>P</sup>	.06
X 1170-1175	3843	5	-.002	-.02	.001	.008	.10 <sup>P</sup>	.03
X 1195-1199	3844	4	-.002	.10	.008	.006	.25 <sup>P</sup>	.12

E.O.H. = 1199'



FOOTAGE INTERVAL	SAMPLE NO.		AU OZ/TON	AG OZ/TON	CU %	ZN %	CO %	COMBINED METAL VALUES
X 180-185	3576	5	.001	-.01	.013	.027	40 <sup>P</sup>	.13
X 185-190	3577	5	.001	-.01	.009	.024	35 <sup>P</sup>	.05
X 190-194.8	3578	48	.002	.06	.015	.036	120 <sup>P</sup>	.37
X 194.8-200	3579	52	.102	-.01	.44	3.80	690 <sup>P</sup>	6.17
X 200-205	3580	5	.136	-.01	.67	4.30	720 <sup>P</sup>	7.57
X 205-207	3581	2	.086	.76	.20	.63	730 <sup>P</sup>	4.67
X 207-211	3582	4	.009	.02	.067	.45	20 <sup>P</sup>	.55
X 211-215	3583	4	.097	.61	.76	4.40	290 <sup>P</sup>	6.18
X 215-220	3584	5	.058	-.01	.12	.48	650 <sup>P</sup>	3.22
X 220-222	3585	2	.250	-.01	3.10	.40	730 <sup>P</sup>	11.38
X 222-227	3586	5	.003	.04	.019	.82	65 <sup>P</sup>	.60
X 227-230	3587	3	.009	-.01	.076	1.60	.11	3.30
X 230-235	3588	5	.009	-.01	.19	.20	920 <sup>P</sup>	2.45
X 235-240	3589	5	.015	-.01	.18	.058	.11	2.91
X 240-245	3590	5	.012	-.01	.14	.061	.11	2.80
X 245-250	3591	5	.02	-.01	.14	.12	.11	3.03
X 250-255	3592	5	.018	-.01	.12	.10	.12	3.16
X 255-260	3593	5	.012	-.01	.082	.15	1000 <sup>P</sup>	2.57
X 260-265	3594	5	.022	-.01	.09	1.06	720 <sup>P</sup>	2.76
X 265-270	3595	5	.017	-.01	.11	.71	970 <sup>P</sup>	2.90
X 270-275	3596	5	.019	-.01	.13	1.29	710 <sup>P</sup>	2.67
X 275-280	3597	5	.029	-.01	.17	1.90	.13	4.47
X 280-285	3598	5	.023	-.01	.12	4.80	850 <sup>P</sup>	4.53
X 285-290	3599	5	.024	-.01	.13	5.90	.11	5.56
X 290-295	3600	5	.028	-.01	.18	3.60	.14	5.38
X 295-300	3601	5	.031	-.01	.18	4.80	.11	4.07
X 300-305	3602	5	.096	-.01	.25	2.30	990 <sup>P</sup>	5.83
X 305-310	3603	5	.082	-.01	.38	4.20	940 <sup>P</sup>	6.28
X 310-315	3604	5	.075	-.01	.22	1.20	1000 <sup>P</sup>	4.88
X 315-320	3605	5	.038	-.01	1.65	.87	1000 <sup>P</sup>	5.12
X 320-325	3606	5	-.001	.01	.40	.46	830 <sup>P</sup>	2.35
X 325-330	3607	5	.05	-.01	.10	.51	.12	4.16
X 330-335	3608	5	.027	-.01	.04	.49	840 <sup>P</sup>	2.72
X 335-340	3609	5	.053	-.01	.094	.37	.11	3.96
X 340-345	3610	5	.035	-.01	.15	.69	.11	3.68
X 345-350	3611	5	.040	-.01	.057	1.41	760 <sup>P</sup>	3.30
X 350-355	3612	5	.025	-.01	.047	1.28	680 <sup>P</sup>	2.67
X 355-360	3613	5	.025	-.01	.051	.82	820 <sup>P</sup>	2.78
X 360-365	3614	5	.034	-.01	.048	1.37	.12	4.04
X 365-370	3615	5	.030	-.01	.059	.27	.15	4.12
X 370-375	3616	5	.054	-.01	.14	1.07	770 <sup>P</sup>	3.62
X 375-380	3617	5	.036	-.01	.092	.46	660 <sup>P</sup>	2.62
X 380-385	3618	5	.055	-.01	.14	.25	810 <sup>P</sup>	3.40
X 385-390	3619	5	.051	-.01	.067	.28	870 <sup>P</sup>	3.36
X 390-395	3620	5	.064	-.01	.11	.074	200 <sup>P</sup>	3.51
X 395-400	3621	5	.092	-.01	.13	.086	700 <sup>P</sup>	4.06
X 400-405	3622	5	.087	-.01	.096	.060	410 <sup>P</sup>	3.27
X 405-410	3623	5	.086	-.01	.056	.044	370 <sup>P</sup>	3.12
X 410-415	3624	5	.420	-.01	.046	.30	320 <sup>P</sup>	11.90
X 415-420	3625	5	.026	-.01	.058	.97	420 <sup>P</sup>	2.0



TAC- #16

FOOTAGE INTERVAL	Sample No.	INCH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X 420-425	3626	5	.051	-.01	.16	.45	300 <sup>r</sup>	2.32
X 425-430	3627	5	.075	-.01	.042	.24	230 <sup>p</sup>	2.60
X 430-435	3628	5	.037	-.01	.049	.70	.14	4.26
X 435-440	3629	5	.100	-.01	.015	.57	.13	5.62
X 440-445	3630	5	.038	-.01	.029	.20	.18	4.90
X 445-450	3631	5	.037	.20	.031	.54	.18	5.13
X 450-455	3632	5	.039	-.01	.12	1.86	.17	5.51
X 455-460	3633	5	.025	.21	.063	.56	940 <sup>p</sup>	3.05
X 460-465	3634	5	.023	-.01	.11	.55	.17	4.52
X 465-470	3635	5	.029	-.01	.067	.024	.12	3.37
X 470-475	3636	5	.025	-.01	.059	.18	1000 <sup>p</sup>	2.90
X 475-480	3637	5	.018	-.01	.066	.76	.11	3.17
X 480-485	3638	5	.033	-.01	.015	.079	490 <sup>p</sup>	1.95
X 485-490	3639	5	.071	-.01	.081	.26	340 <sup>p</sup>	2.77
X 490-495	3640	5	.021	-.01	.020	.16	570 <sup>p</sup>	1.84
X 495-500	3641	5	.025	-.01	.020	.53	510 <sup>p</sup>	1.97
X 500-505	3642	5	.060	.02	.11	.093	500 <sup>p</sup>	2.79
X 505-510	3643	5	.089	-.01	.20	.81	300 <sup>p</sup>	3.46
X 510-515	3644	5	.054	-.01	.093	.10	345 <sup>p</sup>	2.28
X 515-520	3645	5	.044	-.01	.13	.20	490 <sup>p</sup>	2.40
X 520-525	3646	5	.035	.04	.034	.034	295 <sup>p</sup>	1.61
X 525-530	3647	5	.075	-.01	.12	.11	270 <sup>p</sup>	2.71
X 530-535	3648	5	.042	-.01	.096	.048	390 <sup>p</sup>	2.04
X 535-540	3649	5	.010	-.01	.076	.031	190 <sup>p</sup>	.75
X 540-545	3650	5	.038	.07	.416	.074	250 <sup>p</sup>	2.05

E.O.H. = 1000'



	FOOTAGE INTERVAL	Sample Number	INTERVAL	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
/	1090-1095	5077	5					
/	1095-1100	5078	5					
/	1100-1105	5079	5					
/	1105-1110	5080	5					
/	1110-1115	5081	5					
/	1115-1120	5082	5					
/	1120-1125	5083	5					
/	1125-1130	5084	5					
/	1130-1135	5085	5					
/	1135-1140	5086	5					
/	1140-1145	5087	5					
X	1090-1095	3001	5	-.002	.08	.008	.034	50P
X	1095-1100	3002	5	-.002	.18	.009	.030	50P
X	1100-1105	3003	5	.002	.12	.008	.11	40P
X	1105-1110	3004	5	-.002	.28	.008	.15	35P
X	1110-1115	3005	5	-.002	.16	.008	.18	40P
X	1115-1120	3006	5	-.002	-.02	.014	.089	45P
X	1120-1125	3007	5	-.004	.12	.020	.22	115P
X	1125-1130	3008	5	.004	-.06	.007	.21	220P
X	1130-1135	3009	5	.008	-.02	.022	.31	230P
X	1135-1140	3010	5	.018	.12	.025	1.25	280P
X	1140-1145	3011	5	.018	-.02	.076	.042	180P
X	1145-1150	3012	5	.006	-.02	.005	.027	125P
X	1150-1155	3013	5	.012	.09	.027	.11	65P
X	1155-1160	3014	5	.028	.28	.005	.15	65P
X	1160-1165	3015	5	.008	-.02	.030	.38	215P
X	1165-1170	3016	5	.014	.01	.006	.031	140P
X	1170-1175	3017	5	.012	.03	.029	.033	345P
X	1175-1180	3018	5	.008	-.02	.023	.044	310P
X	1180-1185	3019	5	.006	-.02	.020	.026	345P
X	1185-1190	3020	5	.016	-.02	.030	.027	385P
X	1190-1195	3021	5	.006	.07	.022	.044	420P
X	1195-1200	3022	5	-.002	.12	.025	.13	170P
X	1200-1205	3023	5	-.002	.14	.010	.12	60P
X	1205-1210	3024	5	.004	.08	.11	.083	150P
X	1210-1215	3025	5	.002	.02	.013	.099	85P
X	1215-1220	3026	5	.008	.21	.054	.11	185P
X	1220-1225	3027	5	.004	.14	.007	.079	160P
X	1225-1230	3028	5	.002	.22	.006	.041	115P
X	1230-1235	3029	5	.008	.09	.052	.11	60P
X	1235-1240	3030	10	.020	.04	.17	.14	125P
X	1245-1250	3031	5	.004	.02	.069	.075	85P
X	1250-1255	3032	5	.006	.09	.046	.033	55P



	FOOTAGE INTERVAL	Sample Number	ft m	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %	Combined METAL VALUES
X	355-360	2176	5	.018	.34	.40	1.45	801	1.83
X	360-365	2177	5	.006	-.02	.19	1.05	501	.89
X	365-370	2178	5	.0016	.33	.20	1.20	401	1.12
X	370-375	2179	5	.004	.04	.029	.31	451	.38
L	375-380	2180	5	.014	-.02	.083	.50	501	.77
X	380-385	2181	5	.062	.24	.29	2.60	1651	3.49
X	385-390	2182	5	.042	.08	.53	6.05	3251	4.90
X	390-395	2183	5	.0916	.16	.79	6.75	3401	6.95
X	395-400	2184	5	.084	-.02	.70	3.95	4401	5.50
X	400-405	2185	5	.178	-.02	1.55	1.95	3851	7.86
L	405-410	2186	5	.030	-.02	.45	1.05	3751	2.26
X	410-415	2187	5	.118	-.02	1.40	1.75	3001	5.87
X	415-420	2188	5	.074	-.02	1.65	4.6	1951	5.94
X	420-425	2189	5	.062	-.02	.70	3.45	2551	4.40
X	425-430	2190	5	.038	-.02	.12	2.40	3151	2.79
X	430-435	2191	5	.050	-.02	.12	2.70	2951	3.19
X	435-440	2192	5	.054	-.02	.21	3.15	3151	3.62
X	440-445	2193	5	.050	-.02	.21	1.55	2701	2.75
X	445-450	2194	5	.142	.26	.72	3.40	2451	6.54
X	450-455	2195	5	.102	.32	.52	3.80	1601	5.3
X	455-460	2196	5	.068	.21	.85	2.95	1751	4.36
X	460-465	2197	5	.130	.45	1.80	3.70	1501	7.3
X	465-470	2198	5	.042	.14	.48	2.70	1701	3.15
X	470-475	2199	5	.180	.40	2.20	4.60	1451	9.39
X	475-480	2200	5	.120	.18	.98	2.10	1651	5.4
X	480-485	2201	5	.054	.05	1.25	1.05	2001	3.5
X	485-490	2202	5	.054	.07	1.25	1.75	2101	3.5
X	490-495	2203	5	.060	.04	1.25	1.25	2051	3.91
X	495-500	2204	5	.268	-.02	1.70	1.20	2951	9.88
X	500-505	2205	5	.056	.18	1.05	.39	1401	3.08
X	505-510	2206	5	.052	-.02	1.00	.50	1051	2.80
X	510-515	2207	5	.008	-.02	.10	2.05	651	1.31
X	515-520	2208	5	.008	.13	.14	.59	551	.78
X	726.8-731.7	2209	4.9	.314	-.02	3.60	1.10	2401	12.83
X	920.7-925	2210	4.3	.056	-.02	.64	4.05	3601	4.5
X	925-930	2211	5	.062	.46	.86	10.2	3051	7.70
X	930-935	2212	5	.062	.54	1.20	5.5	3701	6.2
X	935-940	2213	5	.048	.35	.92	7.5	2801	6.11
X	940-945	2214	5	.038	.58	.84	8.65	2451	6.30
X	945-950	2215	5	.038	-.02	.85	8.75	2251	6.00
X	950-955	2216	5	.092	.21	1.45	8.40	2201	7.91
X	955-960	2217	5	.048	.35	.90	7.0	2301	5.71
X	960-965	2218	5	.090	.35	1.55	4.3	2201	6.31
X	965-970	2219	5	.094	.61	3.30	5.0	1701	8.51
X	970-975	2220	5	.074	.33	1.80	4.55	1551	6.16
X	975-980	2221	5	.066	.53	1.30	5.65	1451	6.01
X	980-985	2222	5	.058	.38	1.50	5.25	1651	5.78
X	985-990	2223	5	.136	.36	2.65	2.55	1301	7.70
X	990-995	2224	5	.178	.36	2.80	3.6	1401	9.4
X	995-1000	2225	5	.062	.08	1.35	2.6	1251	4.3



	FOOTAGE INTERVAL	Sample Number	INT	Hu oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X	1005-1010	2227	5	.178	.54	4.75	2.0	135P	10.85
X	1010-1015	2228	5	.102	.130	3.35	1.45	90P	6.99
X	1015-1020	2229	5	.088	-.02	1.55	.85	125P	4.49
X	1020-1025	2230	5	.058	-.02	*	*	*	<4.0>
X	1025-1030	2231	5	.204	.30	4.10	1.85	120P	10.66
X	1030-1035	2232	5	.048	.01	.89	.79	90P	2.68
X	1035-1040	2233	5	.080	-.02	1.35	1.50	115P	4.33
X	1040-1045	2234	5	.060	.04	1.30	1.40	95P	3.69
X	1045-1050	2235	5	.020	-.02	.82	.13	95P	1.60
X	1050-1055	2236	5	.002	-.02	.042	.065	.50	.24
X	1055-1060	2237	5	.004	-.02	.070	.048	60P	.32
X	1060-1065	2238	5	.072	.49	.91	12.0	135P	8.39
X	1065-1070	2239	5	.014	-.02	.082	5.2	50P	2.74
X	1070-1075	2240	5	.020	.01	.24	1.4	55P	1.48
X	1075-1080	2241	5	.006	-.02	.077	4.0	60P	2.04
X	1080-1085	2242	5	.002	-.02	.056	.74	45P	.514
X	1085-1090	2243	5	.006	-.02	.039	.22	80P	.46
X	1090-1095	2244	5	.052	-.02	.24	.061	225P	2.11
X	1095-1100	2245	5	.022	-.02	.18	.086	165P	1.14
X	1100-1105	2246	5	.050	.15	.24	.092	240P	2.18
X	1105-1110	2247	5	.036	-.02	.060	.072	245P	1.55
X	1110-1115	2248	5	.014	-.02	.038	.32	215P	.99
X	1115-1120	2249	5	.010	-.02	.054	.48	215P	.97
X	1120-1125	2250	5	.026	-.02	.027	.44	220P	1.36
X	1125-1130	2251	5	.014	-.02	.011	.11	270P	.99
X	1130-1135	2252	5	.022	-.02	.051	.10	375P	1.46
X	1135-1140	2253	5	.024	-.02	.12	.18	275P	1.41
X	1140-1145	2254	5	.038	-.02	.11	.16	285P	1.78
X	1145-1150	2255	5	.032	-.02	.10	.17	285P	1.61
X	1150-1155	2256	5	.028	-.02	.29	.51	210P	1.68
X	1155-1160	2257	5	.026	-.02	.080	.32	85P	1.13
X	1160-1165	2258	5	.042	-.02	.27	.54	120P	1.85
X	1165-1170	2259	5	.020	-.02	.058	1.8	330P	2.04
X	1170-1175	2260	5	.026	-.02	.035	.47	260P	1.46
X	1175-1180	2261	5	.006	.17	.026	.19	80P	.52
X	890-895	2262	5	-.002	.08	.008	.008	40P	.14
X	895-900	2263	5	-.002	-.02	.008	.008	40P	.10
X	900-905	2264	5	-.002	-.02	.009	.014	40P	.10
X	905-910	2265	5	.004	.08	.011	.79	45P	.59
X	910-915	2266	5	.002	-.02	.010	.24	50P	.27
X	915-920	2267	5	.002	.12	.008	.11	45P	.27

E.O.H. = 1591.7'



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TAB # 19

[illegible]



	Footage Interval	Sample Number	Int. T	Au oz/T	Ag oz/T	Cu %	Zn %	Co %	Combined Metal Values
X	430-435	2701	5	.002	.14	.034	.12	120 <sup>P</sup>	.46
X	435-440	2702	5	.001	-.01	.017	.09	65 <sup>P</sup>	.22
X	440-445	2703	5	.001	-.01	.018	.067	125 <sup>P</sup>	.34
X	445-450	2704	5	.004	-.01	.042	.084	230 <sup>P</sup>	.67
X	450-455	2705	5	.002	-.01	.023	.094	300 <sup>P</sup>	.75
X	455-460	2706	5	.004	-.01	.045	.075	335 <sup>P</sup>	.89
X	460-465	2707	5	.005	.03	.042	.065	350 <sup>P</sup>	.95
X	465-470	2708	5	.008	-.01	.12	.076	760 <sup>P</sup>	1.96
X	470-475	2709	5	.005	-.01	.038	.028	730 <sup>P</sup>	1.72
X	475-480	2710	5	.025	-.01	.10	.024	.15	3.93
X	480-485	2711	5	.022	-.01	.074	.028	.15	3.82
X	485-490	2712	5	.013	-.01	.068	.020	.16	3.79
X	490-495	2713	5	.028	-.01	.045	.059	.12	3.33
X	495-500	2714	5	.021	-.01	.051	.13	.11	2.97
X	500-505	2715	5	.018	-.01	.068	.025	.14	3.50
X	505-510	2716	5	.011	-.01	.079	.054	950 <sup>P</sup>	2.39
X	510-515	2717	5	.02	-.01	.12	.048	910 <sup>P</sup>	2.58
X	515-520	2718	5	.012	-.01	.063	.045	.11	2.71
X	520-525	2719	5	.024	-.01	.12	.14	950 <sup>P</sup>	2.81
X	525-530	2720	5	.032	-.01	.11	.026	1000 <sup>P</sup>	3.07
X	530-535	2721	5	.027	-.01	.14	.12	980 <sup>P</sup>	2.96
X	535-540	2722	5	.031	-.01	.20	.11	900 <sup>P</sup>	2.96
X	540-545	2723	5	.023	-.01	.32	.076	790 <sup>P</sup>	2.62
X	545-550	2724	5	.045	-.01	.33	.046	800 <sup>P</sup>	3.22
X	550-555	2725	5	.052	-.01	.36	.051	850 <sup>P</sup>	3.54
X	555-560	3451	5	.067	-.01	.59	.034	820 <sup>P</sup>	3.69
X	560-565	3452	5	.020	-.01	.072	.020	680 <sup>P</sup>	2.04
X	565-570	3453	5	.064	-.01	.095	.085	810 <sup>P</sup>	3.52
X	570-575	3454	5	.046	-.01	.081	.060	480 <sup>P</sup>	2.33
X	575-580	3455	5	.037	-.01	.13	.090	650 <sup>P</sup>	2.51
X	580-585	3456	5	.066	-.01	.12	.079	650 <sup>P</sup>	3.26
X	585-590	3457	5	.047	-.01	.057	.17	490 <sup>P</sup>	2.40
X	590-595	3458	5	.056	-.01	.22	.13	620 <sup>P</sup>	3.05
X	595-600	3459	5	.041	-.01	.33	.047	680 <sup>P</sup>	2.86
X	600-605	3460	5	.044	-.01	.31	.042	880 <sup>P</sup>	3.34
X	605-610	3461	5	.030	-.01	.15	.14	460 <sup>P</sup>	1.97
X	610-615	3462	5	.006	.01	.016	.016	95 <sup>P</sup>	.39
X	615-620	3463	5	-.001	-.01	.009	.009	35 <sup>P</sup>	.09
X	730-735	3464	5	-.001	.03	.004	.034	40 <sup>P</sup>	.12
X	735-740	3465	5	-.001	.14	.003	.12	40 <sup>P</sup>	.21
X	740-745	3466	5	.031	-.01	.13	.086	115 <sup>P</sup>	1.22
X	745-750	3467	5	.006	-.02	.003	.054	140 <sup>P</sup>	.48
X	750-755	3468	5	.008	-.02	.005	.071	120 <sup>P</sup>	.50
X	755-760	3469	5	.072	-.02	.067	.031	285 <sup>P</sup>	2.57
X	760-765	3470	5	.062	-.02	.043	.035	220 <sup>P</sup>	2.15
X	765-770	3471	5	.028	-.02	.066	.036	140 <sup>P</sup>	1.11
X	770-775	3472	5	.084	-.02	.80	.044	210 <sup>P</sup>	3.47
X	775-780	3473	5	.076	-.02	.84	.058	225 <sup>P</sup>	3.49
X	780-785	3474	5	.108	-.02	.58	.060	345 <sup>P</sup>	4.17
X	785-790	3475	5	.040	-.02	.25	.030	220 <sup>P</sup>	1.78



TAB #19

	FOOTAGE INTERVAL	Sample Number	FT T	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
X	795-800	3477	5	.058	-.02	.44	.041	280 P	2.57
X	800-805	3478	5	.046	-.02	.49	.037	270 P	2.81
X	805-810	3479	5	.076	-.02	.82	.037	295 P	3.46
X	810-815	3480	5	.046	-.02	.44	.033	200 P	2.29
X	815-820	3481	5	.054	-.02	.65	.066	250 P	2.63
X	820-825	3482	5	.050	.05	.56	.055	255 P	2.46
X	825-830	3483	5	.050	-.02	.57	.053	175 P	2.28
X	830-835	3484	5	.046	-.02	.32	.042	180 P	1.93
X	835-840	3485	5	.028	-.02	.26	.040	200 P	1.43
X	840-845	3486	5	.026	-.02	.33	.047	195 P	1.44
X	845-850	3487	5	.040	-.02	.60	.043	205 P	2.10
X	850-855	3488	5	.081	-.02	.88	.084	195 P	3.4
X	855-860	3489	5	.028	-.02	.38	.042	170 P	1.4
X	860-865	3490	5	.042	-.02	.46	.076	265 P	2.10
X	865-870	3491	5	.028	-.02	.31	.051	175 P	1.4
X	870-875	3492	5	.056	-.02	.43	.18	250 P	2.5
X	875-880	3493	5	.036	-.02	.24	.49	195 P	1.8
X	880-885	3494	5	.054	-.02	.47	.21	150 P	2.3
X	885-890	3495	5	.132	-.02	1.70	.72	170 P	5.8
X	890-895	3496	5	.086	-.02	.99	.26	110 P	3.5
X	895-900	3497	5	.028	-.02	.98	.29	95 P	2.0
X	900-905	3498	5	.138	-.02	.90	.098	90 P	4.1
X	905-910	3499	5	.052	-.02	.43	.041	110 P	2.1
X	910-915	3500	5	.044	-.02	.21	.065	125 P	1.0
X	915-920	3501	5	.012	-.02	.11	.045	85 P	.1
X	920-925	3502	5	.058	.18	.59	.052	150 P	2.1
X	925-930	3503	5	.060	-.02	.42	.045	170 P	2.3
X	930-935	3504	5	.058	.12	.076	.052	145 P	1.9
X	935-940	3505	5	.058	-.02	.042	.048	120 P	1.8
X	940-945	3506	5	.062	-.02	.032	.04	110 P	1.9
X	945-950	3507	5	.132	-.02	.13	.36	140 P	4.0
X	950-955	3508	5	.044	-.02	.23	.58	145 P	1.9
X	955-960	3509	5	.030	-.02	.20	.081	95 P	1.2
X	960-965	3510	5	.040	-.02	.21	.43	110 P	1.6
X	965-970	3511	5	.004	-.02	.049	.20	75 P	.4
X	970-975	3512	5	.032	-.02	.16	.18	80 P	1.25
X	975-980	3513	5	.014	.03	.063	.15	130 P	.7
X	980-985	3514	5	.044	-.02	.034	.034	675 P	2.6
X	985-990	3515	5	.034	-.02	.029	.030	625 P	2.2
X	990-995	3516	5	.004	.06	.011	.015	65 P	.29
X	1010-1015	3517	5	-.002	-.02	.014	.007	30 P	.08

TAB # 19

	Footage Interval	Sample Number	TH	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
X	0-5	5052	5	.004	-.02	.006	.352	100 <sup>P</sup>
X	5-10	5053	5	.002	.12	.012	.043	85 <sup>P</sup>
X	10-15	5054	5	-.002	.18	.008	.037	50 <sup>P</sup>
X	15-20	5055	5	-.002	.20	.006	.023	35 <sup>P</sup>
X	20-25	5056	5	-.002	.16	.007	.020	35 <sup>P</sup>
X	25-30	5057	5	-.002	.22	.007	.009	30 <sup>P</sup>
X	30-35	5058	5	-.002	-.02	.004	.013	31 <sup>P</sup>
X	35-40	5059	5	-.002	.10	.004	.004	25 <sup>P</sup>
X	40-45	5060	5	-.002	.02	.003	.004	25 <sup>P</sup>
X	45-50	5061	5	-.002	.06	.001	.005	25 <sup>P</sup>
X	70-75	5062	5	-.002	-.02	.003	.006	25 <sup>P</sup>
X	95-100	5063	5	.002	.08	.009	.006	25 <sup>P</sup>
X	120-125	5064	5	-.002	-.02	.008	.008	30 <sup>P</sup>
/	145-150	5065	5	-.002	.24	.008	.006	30 <sup>P</sup>
/	170-175	5066	5	-.002	.02	.011	.006	25 <sup>P</sup>
/	195-200	5067	5	-.002	.10	.007	.007	25 <sup>P</sup>
/	220-225	5068	5	-.002	.20	.009	.013	25 <sup>P</sup>
/	245-250	5069	5	-.002	.24	.009	.007	30 <sup>P</sup>
/	270-275	5070	5	-.002	.22	.008	.007	30 <sup>P</sup>
/	295-300	5071	5	-.002	.04	.008	.007	25 <sup>P</sup>
/	320-325	5072	5	-.002	.24	.009	.007	30 <sup>P</sup>
/	345-350	5073	5	-.002	.40	.014	.008	25 <sup>P</sup>
/	370-375	5074	5	-.002	.14	.008	.008	25 <sup>P</sup>
/	395-400	5075	5	-.002	.40	.007	.039	30 <sup>P</sup>
/	420-425	5076	5	-.002	.12	.016	.23	40 <sup>P</sup>



TAB # 20

FOOTAGE INTERVAL	Sample Number	INCHES	AU oz/TON	AG oz/TON	CU %	ZN %	CO %	Combined METAL VALUES
/ 0-5	3651	5	.006	.07	.005	.006	25 <sup>P</sup>	.26
/ 5-10	3652	5	.002	.20	.003	.006	25 <sup>P</sup>	.16
/ 10-15	3653	5	.002	.20	.004	.006	25 <sup>P</sup>	.17
/ 15-20	3654	5	.002	.22	.004	.006	25 <sup>P</sup>	.18
/ 20-25	3655	5	.002	.04	.002	.007	30 <sup>P</sup>	.09
/ 25-30	3656	5	.002	.22	.002	.007	25 <sup>P</sup>	.17
/ 30-35	3657	5	.002	.28	.003	.008	30 <sup>P</sup>	.22
/ 35-40	3658	5	.002	.14	.003	.008	25 <sup>P</sup>	.13
/ 40-45	3659	5	.002	.12	.003	.008	25 <sup>P</sup>	.12
/ 45-50	3660	5	.002	.12	.003	.008	25 <sup>P</sup>	.12
/ 70-75	3661	5	.002	.02	.009	.009	25 <sup>P</sup>	.07
/ 95-100	3662	5	.002	.16	.008	.006	25 <sup>P</sup>	.15
/ 120-125	3663	5	.002	.24	.006	.006	25 <sup>P</sup>	.19
/ 145-150	3664	5	.002	.08	.010	.008	30 <sup>P</sup>	.12
/ 170-175	3665	5	.002	.20	.012	.007	35 <sup>P</sup>	.19
/ 195-200	3666	5	.002	.18	.010	.009	25 <sup>P</sup>	.16
/ 220-225	3667	5	.002	.20	.008	.007	25 <sup>P</sup>	.17
/ 245-250	3668	5	.002	.16	.009	.009	35 <sup>P</sup>	.17
/ 270-275	3669	5	.002	.22	.009	.010	40 <sup>P</sup>	.21
/ 295-300	3670	5	.002	.26	.008	.009	30 <sup>P</sup>	.21
/ 320-325	3671	5	.002	.16	.008	.053	30 <sup>P</sup>	.18
X 595-600	3873	5	.014	.12	.018	.013	30 <sup>P</sup>	.52
X 620-625	3875	5	.002	.02	.006	.013	25 <sup>P</sup>	.06
X 645-650	3876	5	.002	.06	.039	.011	40 <sup>P</sup>	.16
X 670-675	3877	5	.002	.06	.010	.008	35 <sup>P</sup>	.12
X 695-700	3878	5	.002	.02	.003	.005	105 <sup>P</sup>	.23
X 720-725	3879	5	.002	.20	.001	.004	100 <sup>P</sup>	.37
X 745-750	3880	5	.002	.04	.002	.004	105 <sup>P</sup>	.25
X 770-775	3881	5	.002	.06	.002	.007	100 <sup>P</sup>	.30
X 795-800	3882	5	.002	.02	.002	.004	115 <sup>P</sup>	.25

E.O.H. = 818'



FRITAGE INTERVAL	Sample Number	kg	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co ppm	Combined METAL VALUES
342.9-350	3676	7.1	.002	.20	.009	.026	45 P	.27
350-355	3677	5	.004	.16	.008	.033	40 P	.30
355-360	3678	5	.002	.18	.007	.11	50 P	.31
360-365	3679	5	.002	.20	.009	.24	55 P	.38
365-370	3680	5	.068	.13	.008	.085	45 P	2.00
370-375	3681	5	-.002	.26	.009	.13	55 P	.32
375-380	3682	5	-.002	.18	.009	.14	80 P	.33
380-385	3683	5	-.002	.06	.011	.13	85 P	.28
385-390	3684	5	.022	-.02	.12	.15	645 P	2.12
390-395	3685	5	.026	.15	.19	.046	615 P	2.27
395-400	3686	5	.012	.03	.044	.090	310 P	1.07
400-405	3687	5	.030	-.02	.077	.070	165 P	1.24
405-410	3688	5	.006	-.02	.011	.22	200 P	.68
410-415	3689	5	.012	.07	.040	.11	435 P	1.35
415-420	3690	5	.016	-.02	.17	.16	830 P	2.41
420-425	3691	5	.046	-.02	.25	.11	820 P	3.23
425-430	3692	5	.008	.01	.047	.063	420 P	1.17
430-435	3693	5	.006	.03	.059	.29	460 P	1.32
435-440	3694	5	-.002	.16	.030	.066	330 P	.84
440-445	3695	5	.004	-.02	.077	.16	550 P	1.41
445-450	3696	5	.004	.02	.064	.051	535 P	1.33
450-455	3697	5	.008	.01	.086	.038	660 P	1.71
455-460	3698	5	.006	.03	.048	.041	525 P	1.34
460-465	3699	5	.010	.03	.072	.037	780 P	2.01
465-470	3700	5	.020	-.02	.14	.027	960 P	2.70
470-475	3851	5	.010	-.29	.062	.040	750 P	2.08
475-480	3852	5	.008	.06	.045	.041	1035 P	1.69
480-485	3853	5	.010	-.02	.076	.048	655 P	1.74
485-490	3854	5	.020	-.02	.095	.035	995 P	2.73
490-495	3855	5	.028	-.02	.097	.020	.12	3.37
495-500	3856	5	.020	-.02	.18	.12	.12	3.28
500-505	3857	5	.026	-.02	.084	.089	.13	3.54
505-510	3858	5	.016	-.02	.067	.11	.13	3.27
510-515	3859	5	.020	-.02	.087	.065	.15	3.80
515-520	3860	5	.034	-.02	.12	.23	.13	3.58
520-525	3861	5	.018	-.02	.063	.14	.12	3.12
525-530	3862	5	.020	-.02	.085	.34	.11	3.07
530-535	3863	5	.028	-.02	.071	.21	.12	3.42
535-540	3864	5	.060	-.22	.056	.075	895 P	3.55
540-545	3865	5	.040	-.22	.067	.052	600 P	2.40
545-550	3866	5	.004	.16	.051	.041	295 P	.88
550-555	3867	5	.002	.14	.030	.059	195 P	.59
555-560	3868	5	-.002	.14	.010	.020	40 P	.18
560-565	3869	5	-.002	.98	.008	.019	40 P	.62
565-570	3870	5	-.002	.08	.009	.016	50 P	.16
570-575	3871	5	-.002	.12	.018	.027	55 P	.21
575-578	3872	3	-.002	.14	.003	.008	45 P	.18



	Footage Interval	Sample Number	IN	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %	Combined METAL VALUES
X	0-5	3051	5	-.002	-.02	.006	.006	25 <sup>P</sup>	.06
X	5-10	3052	5	-.001	-.02	.005	.007	25 <sup>P</sup>	.06
X	10-15	3053	5	-.002	.10	.005	.006	25 <sup>P</sup>	.11
X	15-20	3054	5	-.002	.10	.007	.007	30 <sup>P</sup>	.13
X	20-25	3055	5	-.002	.02	.003	.005	30 <sup>P</sup>	.08
X	25-30	3056	5	-.002	-.02	.002	.006	30 <sup>P</sup>	.07
X	30-35	3057	5	-.002	.02	.002	.009	30 <sup>P</sup>	.08
X	35-40	3058	5	-.002	.10	.004	.009	30 <sup>P</sup>	.12
X	40-45	3059	5	.002	-.02	.008	.010	30 <sup>P</sup>	.13
X	45-50	3060	5	-.002	.12	.015	.034	30 <sup>P</sup>	.16
X	70-75	3061	5	-.002	.20	.009	.010	30 <sup>P</sup>	.18
X	95-100	3062	5	-.002	.02	.008	.012	25 <sup>P</sup>	.08
X	120-125	3063	5	-.002	.08	.007	.013	30 <sup>P</sup>	.12
X	145-150	3064	5	-.002	.16	.007	.007	30 <sup>P</sup>	.16
X	170-175	3065	5	-.002	.22	.008	.010	30 <sup>P</sup>	.19
X	176.9-180	3066	3.1	-.002	.06	.008	.007	30 <sup>P</sup>	.11
X	180-185	3067	5	-.002	-.02	.002	.007	30 <sup>P</sup>	.07
X	185-190	3068	5	.002	.10	.012	.008	30 <sup>P</sup>	.18
X	190-195	3069	5	.002	.02	.012	.006	20 <sup>P</sup>	.15
X	195-200	3070	5	-.002	-.02	.008	.009	20 <sup>P</sup>	.05
X	200-205	3071	5	-.002	-.02	.014	.009	30 <sup>P</sup>	.08
X	205-210	3072	5	-.002	-.02	.009	.008	35 <sup>P</sup>	.09
X	210-215	3073	5	-.002	.02	.013	.018	30 <sup>P</sup>	.09
X	215-220	3074	5	-.002	.02	.014	.028	20 <sup>P</sup>	.08
X	220-225	3075	5	-.002	.04	.017	.015	40 <sup>P</sup>	.13
X	225-230	3551	5	.002	-.02	.010	.010	35 <sup>P</sup>	.14
X	230-235	3552	5	-.002	-.02	.009	.008	30 <sup>P</sup>	.08
X	235-240	3553	5	-.002	.02	.007	.010	35 <sup>P</sup>	.10
X	240-245	3554	5	-.002	-.02	.010	.008	35 <sup>P</sup>	.09
X	245-250	3555	5	-.002	-.02	.010	.009	40 <sup>P</sup>	.10
X	250-255	3556	5	-.002	-.02	.014	.017	60 <sup>P</sup>	.15
X	255-260	3557	5	.002	-.02	.010	.019	40 <sup>P</sup>	.15
X	260-265	3558	5	.002	.06	.009	.027	35 <sup>P</sup>	.18
X	265-270	3559	5	.002	.04	.008	.040	35 <sup>P</sup>	.17
X	270-275	3560	5	-.002	.20	.009	.029	40 <sup>P</sup>	.21
X	275-280	3561	5	-.002	.02	.007	.073	30 <sup>P</sup>	.11
X	280-285	3562	5	-.002	-.02	.008	.067	30 <sup>P</sup>	.10
X	285-290	3563	5	-.002	-.02	.007	.12	30 <sup>P</sup>	.12
X	290-295	3564	5	-.002	.08	.007	.24	30 <sup>P</sup>	.21
X	295-300	3565	5	-.002	.10	.008	.31	30 <sup>P</sup>	.25
X	300-305	3566	5	-.002	.12	.009	.21	30 <sup>P</sup>	.22
X	305-310	3567	5	-.002	.12	.014	.26	30 <sup>P</sup>	.25
X	310-315	3568	5	-.002	.10	.012	.18	25 <sup>P</sup>	.19
X	315-320	3569	5	-.002	.10	.035	.29	55 <sup>P</sup>	.33
X	320-325	3570	5	-.002	-.02	.074	.29	40 <sup>P</sup>	.28
X	325-330	3571	5	.004	.06	.031	.50	160 <sup>P</sup>	.71
X	330-335	3572	5	.022	.07	.10	.095	475 <sup>P</sup>	1.76
X	335-340	3573	5	.020	-.02	.17	.090	871 <sup>P</sup>	2.61
X	340-345	3574	5	.026	-.02	.17	.081	970 <sup>P</sup>	2.93
X	345-350	3575	5	.022	-.02	.18	.053	.14	3.73



FOOTAGE INTERVAL	Sample Number	IN	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUE
350-355	5000	5	.028	-.02	.14	.040	880 <sup>P</sup>	2.75
355-360	5001	5	.012	-.02	.12	.041	925 <sup>P</sup>	2.40
360-365	5002	5	.024	-.02	.24	.068	.17	4.48
365-370	5003	5	.022	-.02	.29	.060	.21	5.31
370-375	5004	5	.016	-.02	.17	.093	.12	3.16
375-380	5005	5	.010	-.02	.082	.052	525 <sup>P</sup>	1.47
380-385	5006	5	.014	-.02	.18	.060	.11	2.89
385-390	5007	5	.016	-.02	.29	.048	.13	3.49
390-395	5008	5	.078	-.02	.19	.041	.15	5.42
395-400	5009	5	.044	-.02	.35	.067	.17	5.11
400-405	5010	5	.024	-.02	.090	.071	480 <sup>P</sup>	1.76
405-410	5011	5	.002	.02	.026	.12	175 <sup>P</sup>	1.64
410-415	5012	5	.008	.07	.11	.088	555 <sup>P</sup>	1.56
415-420	5013	5	.028	-.02	.16	.34	.18	4.83
420-425	5014	5	.042	-.02	.22	.066	.14	4.30
425-430	5015	5	.014	-.02	.17	.24	.12	3.17
430-435	5016	5	.012	.03	.12	.14	680 <sup>P</sup>	1.94
435-440	5017	5	.014	-.02	.17	.18	.11	2.93
440-445	5018	5	.032	-.02	.44	.31	.22	6.04
445-450	5019	5	.024	-.02	.19	.070	.15	4.06
450-455	5020	5	.022	-.02	.19	.31	.17	4.48
455-460	5021	5	.012	-.02	.13	.056	.11	2.78
460-465	5022	5	.012	-.02	.16	.038	91 <sup>P</sup>	.68
465-470	5023	5	.026	.23	.13	.64	75 <sup>P</sup>	1.36
470-475	5024	5	.002	.34	.010	.084	110 <sup>P</sup>	.51
475-480	5025	5	-.002	-.02	.008	.005	25 <sup>P</sup>	.06
480-485	5026	5	-.002	.02	.007	.005	70 <sup>P</sup>	.20
485-490	5027	5	-.002	.12	.002	.005	30 <sup>P</sup>	.13
490-495	5028	5	-.002	-.02	.005	.005	30 <sup>P</sup>	.07
495-500	5029	5	-.002	.18	.012	.005	30 <sup>P</sup>	.17
500-505	5030	5	-.002	.02	.011	.006	35 <sup>P</sup>	.10
505-510	5031	5	-.002	.08	.003	.006	45 <sup>P</sup>	.14
510-515	5032	5	-.002	-.02	.001	.002	20 <sup>P</sup>	.04
515-520	5033	5	-.002	-.02	.001	.001	15 <sup>P</sup>	.03
520-525	5034	5	-.002	.04	.001	.002	15 <sup>P</sup>	.05
525-530	5035	5	-.002	.06	.002	.003	25 <sup>P</sup>	.09
530-535	5036	5	.002	.10	.001	.002	20 <sup>P</sup>	.15
535-540	5037	5	-.002	.08	.002	.004	40 <sup>P</sup>	.13
540-545	5038	5	-.002	.24	.002	.004	55 <sup>P</sup>	.25
545-550	5039	5	-.002	.18	.002	-.004	65 <sup>P</sup>	.24
550-555	5040	5	-.002	.08	.001	.005	105 <sup>P</sup>	.27
555-560	5041	5	-.002	.06	.003	.006	120 <sup>P</sup>	.29
560-565	5042	5	-.002	-.02	.008	.003	30 <sup>P</sup>	.07
565-570	5043	5	-.002	-.02	.010	.007	25 <sup>P</sup>	.07
570-575	5044	5	.002	.04	.012	.020	30 <sup>P</sup>	.16
575-580	5045	5	-.002	.02	.008	.008	25 <sup>P</sup>	.07
580-585	5046	5	.002	.16	.014	.010	40 <sup>P</sup>	.19
585-590	5047	5	.002	-.02	.008	.011	25 <sup>P</sup>	.12
590-595	5048	5	.012	-.02	.15	.13	965 <sup>P</sup>	2.55
595-600	5049	5	-.002	.12	.019	.042	25 <sup>P</sup>	.15



TAB-<sup>#</sup>21

E.O.H. = 865'

TAB #22

FOOTAGE INTERVAL	SAMPLE NUMBER	INT.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	COMBINED METAL VALUES
0-5	5101	5	-.002	-.02	.010	.007	45 <sup>P</sup>	.11
5-10	5102	5	-.002	.02	.008	.007	45 <sup>P</sup>	.12
10-15	5103	5	-.002	.10	.009	.012	35 <sup>P</sup>	.14
15-20	5104	5	-.002	.04	.008	.007	40 <sup>P</sup>	.11
20-25	5105	5	.018	.06	.008	.004	40 <sup>P</sup>	.60
25-30	5106	5	-.002	.02	.008	.006	40 <sup>P</sup>	.11
30-35	5107	5	-.002	-.02	.008	.007	45 <sup>P</sup>	.11
35-40	5108	5	-.002	.16	.009	.006	40 <sup>P</sup>	.18
40-45	5109	5	-.002	.12	.008	.006	45 <sup>P</sup>	.16
45-50	5110	5	-.002	-.02	.009	.007	45 <sup>P</sup>	.10
70-75	5111	5	-.002	.10	.009	.007	45 <sup>P</sup>	.15
95-100	5112	5	-.002	.12	.008	.007	40 <sup>P</sup>	.16
120-125	5113	5	.002	.16	.008	.011	45 <sup>P</sup>	.24
145-150	5114	5	.002	.04	.007	.008	40 <sup>P</sup>	.17
160-165	5115	5	-.002	.18	.007	.010	45 <sup>P</sup>	.19
165-170	5116	5	-.002	.34	.007	.010	45 <sup>P</sup>	.28
170-175	5117	5	-.002	.36	.007	.008	40 <sup>P</sup>	.29
175-180	5118	5	-.002	.08	.018	.020	40 <sup>P</sup>	.15
180-185	5119	5	.004	.22	.035	.067	35 <sup>P</sup>	.36
185-190	5120	5	.004	.10	.024	.12	45 <sup>P</sup>	.32
190-195	5121	5	.042	.34	.042	.19	370 <sup>P</sup>	2.19
195-200	5122	5	.114	-.02	.070	.16	620 <sup>P</sup>	4.44
200-205	5123	5	.028	-.02	.17	.30	955 <sup>P</sup>	3.04
205-210	5124	5	.060	-.02	.42	.12	920 <sup>P</sup>	3.99
210-215	5125	5	.046	-.02	.44	5.15	485 <sup>P</sup>	4.83
215-220	5126	5	.002	.28	.014	.48	105 <sup>P</sup>	.64
220-225	5127	5	.004	.22	.017	.31	125 <sup>P</sup>	.63
225-230	5128	5	.016	.24	.17	.068	590 <sup>P</sup>	1.99
230-235	5129	5	.026	.15	.11	.050	405 <sup>P</sup>	1.75
235-240	5130	5	.024	-.02	.15	.043	890 <sup>P</sup>	2.67
240-245	5131	5	.060	.20	.22	.078	620 <sup>P</sup>	3.24
245-250	5132	5	.006	.05	.048	.096	255 <sup>P</sup>	.81
250-255	5133	5	-.002	.12	.010	.48	70 <sup>P</sup>	.42
255-260	5134	5	-.002	.26	.004	.24	45 <sup>P</sup>	.34
260-265	5135	5	.002	.24	.018	.27	135 <sup>P</sup>	.60
265-270	5136	5	.002	.16	.030	.12	140 <sup>P</sup>	.51
270-275	5137	5	.002	.10	.021	.23	160 <sup>P</sup>	.56
275-280	5138	5	.002	-.02	.031	.26	160 <sup>P</sup>	.53
280-285	5139	5	.002	.16	.044	.16	190 <sup>P</sup>	.61
285-290	5140	5	.008	.07	.060	.28	310 <sup>P</sup>	1.08
290-295	5141	5	.002	.12	.033	.39	165 <sup>P</sup>	.66
295-300	5142	5	.004	-.02	.023	.17	140 <sup>P</sup>	.49
300-305	5143	5	.006	.17	.041	.39	215 <sup>P</sup>	.91



TAB #22

Footage Interval	Sample Number	FT.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
340-345	5151	5						
345-350	5152	5						
370-375	5153	5						
395-400	5154	5						
420-425	5155	5						
445-450	5156	5						
470-475	5157	5						
495-500	5158	5						
520-525	5159	5						
545-550	5160	5						
550-555	5626	5	.002	.02	.002	.004	85 <sup>P</sup>	.18
570-575	5627	5	.002	.02	.008	.006	25 <sup>P</sup>	.06
595-600	5628	5	.002	.02	.005	.012	25 <sup>P</sup>	.06
620-625	5629	5	.002	.02	.014	.004	20 <sup>P</sup>	.06
645-650	5630	5	.002	.02	.007	.005	35 <sup>P</sup>	.08
670-675	5631	5	.002	.02	.007	.003	25 <sup>P</sup>	.06
695-700	5632	5	.002	.02	.008	.006	25 <sup>P</sup>	.12

E.O.H. = 738.5'

Combined Metal Values	Co	Zn	Cu	Hg 12/TON	Pb 12/TON	Sample No	INTERVAL
.09	35 <sup>p</sup>	.017	.010	-.02	-.002	5176	5-10
.08	30 <sup>p</sup>	.012	.010	-.02	-.002	5177	11-15
.13	30 <sup>p</sup>	.007	.010	-.02	.002	5178	15-20
.06	25 <sup>p</sup>	.007	.008	-.02	-.002	5179	20-25
.07	30 <sup>p</sup>	.007	.008	-.02	-.002	5180	25-30
.06	25 <sup>p</sup>	.007	.008	-.02	-.002	5181	30-35
.08	30 <sup>p</sup>	.007	.009	-.02	-.002	5182	35-40
.06	25 <sup>p</sup>	.007	.009	-.02	-.002	5183	40-45
.08	30 <sup>p</sup>	.016	.009	-.02	-.002	5184	45-50
.15	30 <sup>p</sup>	.013	.008	.14	-.002	5185	70-75
.12	30 <sup>p</sup>	.007	.009	.08	-.002	5186	95-100
.12	25 <sup>p</sup>	.007	.009	-.02	-.002	5187	130-135
.06	25 <sup>p</sup>	.007	.009	-.02	-.002	5188	130-135
.09	35 <sup>p</sup>	.008	.010	-.02	-.002	5189	135-140
.08	30 <sup>p</sup>	.008	.009	-.02	-.002	5190	140-145
.07	30 <sup>p</sup>	.008	.007	-.02	-.002	5191	145-150
.12	35 <sup>p</sup>	.009	.008	.06	-.002	5192	150-155
.48	35 <sup>p</sup>	.008	.008	.64	.002	5193	155-160
.13	30 <sup>p</sup>	.015	.014	.08	-.002	5194	160-165
.51	40 <sup>p</sup>	.062	.033	.19	.010	5195	165-170
3.96	710 <sup>p</sup>	1.10	.37	-.02	.062	5196	170-175
8.18	955 <sup>p</sup>	8.20	.99	-.02	.066	5197	175-180
3.11	835 <sup>p</sup>	1.25	.20	-.02	.024	5198	180-185
2.68	875 <sup>p</sup>	.26	.18	.22	.024	5199	185-190
2.64	680 <sup>p</sup>	.92	.16	.16	.022	5200	190-195
195-200	5801	.18	.13	.13	.028	5801	195-200
200-205	5802	.16	.01	.01	.018	5802	200-205
205-210	5803	.080	-.02	-.02	.016	5803	205-210
210-215	5804	.10	-.02	-.02	.016	5804	210-215
215-220	5805	.15	.09	-.02	.016	5805	215-220
220-225	5806	.14	-.02	-.02	.014	5806	220-225
225-230	5807	.079	.18	-.02	.014	5807	225-230
230-235	5808	.060	.12	.03	.016	5808	230-235
235-240	5809	.083	.12	.01	.034	5809	235-240
240-245	5810	.055	.14	.12	.040	5810	240-245
245-250	5811	.070	.10	.02	.020	5811	245-250
250-255	5812	.10	.13	.06	.020	5812	250-255
255-260	5813	.39	.20	.24	.022	5813	255-260
260-265	5814	.17	.26	.05	.030	5814	260-265
265-270	5815	.63	.33	.34	.042	5815	265-270
270-275	5816	.37	.25	.30	.044	5816	270-275
275-280	5817	.045	.25	.32	.038	5817	275-280
280-285	5818	.12	.25	.03	.034	5818	280-285
285-290	5819	.58	.33	-.02	.032	5819	285-290
290-295	5820	1.70	.20	.24	.036	5820	290-295
295-300	5821	.19	.19	.18	.040	5821	295-300
300-305	5822	.90	.089	.05	.026	5822	300-305
305-310	5823	2.75	.16	.39	.028	5823	305-310
310-315	5824	3.90	.12	.21	.054	5824	310-315
315-320	5825	.14	.14	.14	.041	5825	315-320
320-325	5826	.17	.26	.05	.030	5826	320-325
325-330	5827	.58	.33	-.02	.032	5827	325-330
330-335	5828	1.70	.20	.24	.036	5828	330-335
335-340	5829	.19	.19	.18	.040	5829	335-340
340-345	5830	.90	.089	.05	.026	5830	340-345
345-350	5831	2.75	.16	.39	.028	5831	345-350
350-355	5832	3.90	.12	.21	.054	5832	350-355
355-360	5833	.14	.14	.14	.041	5833	355-360
360-365	5834	.17	.26	.05	.030	5834	360-365
365-370	5835	.63	.33	.34	.042	5835	365-370
370-375	5836	.37	.25	.30	.044	5836	370-375
375-380	5837	.045	.25	.32	.038	5837	375-380
380-385	5838	.12	.25	.03	.034	5838	380-385
385-390	5839	.58	.33	-.02	.032	5839	385-390
390-395	5840	1.70	.20	.24	.036	5840	390-395
395-400	5841	.19	.19	.18	.040	5841	395-400
400-405	5842	.90	.089	.05	.026	5842	400-405
405-410	5843	2.75	.16	.39	.028	5843	405-410
410-415	5844	3.90	.12	.21	.054	5844	410-415
415-420	5845	.14	.14	.14	.041	5845	415-420
420-425	5846	.17	.26	.05	.030	5846	420-425
425-430	5847	.63	.33	.34	.042	5847	425-430
430-435	5848	.37	.25	.30	.044	5848	430-435
435-440	5849	.045	.25	.32	.038	5849	435-440
440-445	5850	.12	.25	.03	.034	5850	440-445
445-450	5851	.58	.33	-.02	.032	5851	445-450
450-455	5852	1.70	.20	.24	.036	5852	450-455
455-460	5853	.19	.19	.18	.040	5853	455-460
460-465	5854	.90	.089	.05	.026	5854	460-465
465-470	5855	2.75	.16	.39	.028	5855	465-470
470-475	5856	3.90	.12	.21	.054	5856	470-475
475-480	5857	.14	.14	.14	.041	5857	475-480
480-485	5858	.17	.26	.05	.030	5858	480-485
485-490	5859	.63	.33	.34	.042	5859	485-490
490-495	5860	.37	.25	.30	.044	5860	490-495
495-500	5861	.045	.25	.32	.038	5861	495-500
500-505	5862	.12	.25	.03	.034	5862	500-505
505-510	5863	.58	.33	-.02	.032	5863	505-510
510-515	5864	1.70	.20	.24	.036	5864	510-515
515-520	5865	.19	.19	.18	.040	5865	515-520
520-525	5866	.90	.089	.05	.026	5866	520-525
525-530	5867	2.75	.16	.39	.028	5867	525-530
530-535	5868	3.90	.12	.21	.054	5868	530-535
535-540	5869	.14	.14	.14	.041	5869	535-540
540-545	5870	.17	.26	.05	.030	5870	540-545
545-550	5871	.63	.33	.34	.042	5871	545-550
550-555	5872	.37	.25	.30	.044	5872	550-555
555-560	5873	.045	.25	.32	.038	5873	555-560
560-565	5874	.12	.25	.03	.034	5874	560-565
565-570	5875	.58	.33	-.02	.032	5875	565-570
570-575	5876	1.70	.20	.24	.036	5876	570-575
575-580	5877	.19	.19	.18	.040	5877	575-580
580-585	5878	.90	.089	.05	.026	5878	580-585
585-590	5879	2.75	.16	.39	.028	5879	585-590
590-595	5880	3.90	.12	.21	.054	5880	590-595
595-600	5881	.14	.14	.14	.041	5881	595-600
600-605	5882	.17	.26	.05	.030	5882	600-605
605-610	5883	.63	.33	.34	.042	5883	605-610
610-615	5884	.37	.25	.30	.044	5884	610-615
615-620	5885	.045	.25	.32	.038	5885	615-620
620-625	5886	.12	.25	.03	.034	5886	620-625
625-630	5887	.58	.33	-.02	.032	5887	625-630
630-635	5888	1.70	.20	.24	.036	5888	630-635
635-640	5889	.19	.19	.18	.040	5889	635-640
640-645	5890	.90	.089	.05	.026	5890	640-645
645-650	5891	2.75	.16	.39	.028	5891	645-650
650-655	5892	3.90	.12	.21	.054	5892	650-655
655-660	5893	.14	.14	.14	.041	5893	655-660
660-665	5894	.17	.26	.05	.030	5894	660-665
665-670	5895	.63	.33	.34	.042	5895	665-670
670-675	5896	.37	.25	.30	.044	5896	670-675
675-680	5897	.045	.25	.32	.038	5897	675-680
680-685	5898	.12	.25	.03	.034	5898	680-685
685-690	5899	.58	.33	-.02	.032	5899	685-690
690-695	5900	1.70	.20	.24	.036	5900	690-695
695-700	5901	.19	.19	.18	.040	5901	695-700
700-705	5902	.90	.089	.05	.026	5902	700-705
705-710	5903	2.75	.16	.39	.028	5903	705-710
710-715	5904	3.90	.12	.21	.054	5904	710-715
715-720	5905	.14	.14	.14	.041	5905	715-720
720-725	5906	.17	.26	.05	.030	5906	720-725
725-730	5907	.63	.33	.34	.042	5907	725-730
730-735	5908	.37	.25	.30	.044	5908	730-735
735-740	5909	.045	.25	.32	.038	5909	735-740
740-745	5910	.12	.25	.03	.034	5910	740-745
745-750	5911	.58	.33	-.02	.032	5911	745-750
750-755	5912	1.70	.20	.24	.036	5912	750-755
755-760	5913	.19	.19	.18	.040	5913	755-760
760-765	5914	.90	.089	.05	.026	5914	760-765
765-770	5915	2.75	.16	.39	.028	5915	765-770
770-775	5916	3.90	.12	.21	.054	5916	770-775
775-780	5917	.14	.14	.14	.041	5917	775-780
780-785	5918	.17	.26	.05	.030	5918	780-785
785-790	5919	.63	.33	.34	.042	5919	785-790
790-795	5920	.37	.25	.30	.044	5920	790-795
795-800	5921	.045	.25	.32	.038	5921	795-800
800-805	5922	.12	.25	.03	.034	5922	800-805
805-810	5923	.58	.33	-.02	.032	5923	805-810
810-815	5924	1.70	.20	.24	.036	5924	810-815
815-820	5925	.19	.19	.18	.040	5925	815-820
820-825	5926	.90	.089	.05	.026	5926	820-825
825-830	5927	2.75	.16	.39	.028	5927	825-830
830-835	5928	3.90	.12	.21	.054	5928	830-835
835-840	5929	.14	.14	.14	.041	5929	835-840
840-845	5930	.17	.26	.05	.030	5930	840-845
845-850	5931	.63	.33	.34	.042	5931	845-850
850-855	5932	.37	.25	.30	.044	5932	850-855
855-860	5933	.045	.25	.32	.038	5933	855-860



FOOTAGE Interval	Sample No.	Grain No.	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Com. Res. METAL VALUES
X 320-325	5226	5	.036	.18	.21	3.15	.14	5.52
X 325-330	5227	5	.054	-.02	.22	1.85	.20	6.63
X 330-335	5228	5	.054	-.02	.23	3.70	.12	5.73
X 335-340	5229	5	.038	.08	.15	2.25	.12	4.66
X 340-345	5230	5	.160	-.02	.11	1.55	815 <sup>P</sup>	6.68
X 345-350	5231	5	.106	-.02	.36	2.20	.13	6.81
X 350-355	5232	5	.028	.11	.50	2.80	650 <sup>P</sup>	3.84
X 355-360	5233	5	.024	-.02	.071	1.10	665 <sup>P</sup>	2.56
X 360-365	5234	5	.042	-.02	.064	.93	640 <sup>P</sup>	2.91
X 365-370	5235	5	.048	-.02	.12	2.20	990 <sup>P</sup>	4.39
X 370-375	5236	5	.072	-.02	.12	1.00	730 <sup>P</sup>	3.97
X 375-380	5237	5	.036	-.02	.25	1.95	1000 <sup>P</sup>	4.12
X 380-385	5238	5	.042	-.02	.062	1.05	.13	4.34
X 385-390	5239	5	.050	-.02	.29	1.80	.17	5.94
X 390-395	5240	5	.050	-.02	.088	.90	.13	4.52
X 395-400	5241	5	.042	-.02	.18	.61	.13	4.28
X 400-405	5242	5	.046	-.02	.23	.62	.13	4.44
X 405-410	5243	5	.056	-.02	.22	.71	.12	4.52
X 410-415	5244	5	.070	-.02	.21	1.25	.14	5.52
X 415-420	5245	5	.052	-.02	.35	.99	.13	4.87
X 420-425	5246	5	.050	-.02	.57	.91	.13	5.00
X 425-430	5247	5	.272	-.02	1.60	1.30	.11	11.62
X 430-435	5248	5	.074	-.02	1.03	.85	.11	5.62
X 435-440	5249	5	.092	-.02	1.90	.56	.12	7.02
X 440-445	5250	5	.082	-.02	1.95	.29	.13	6.92
X 445-450	5251	5	.028	-.02	.88	.15	.14	4.62
X 450-455	5252	5	.040	-.02	.85	.26	.14	4.92
X 455-460	5253	5	.018	-.02	.42	.11	.12	3.42
X 460-465	5254	5	.026	-.02	.26	.080	.15	4.14
X 465-470	5255	5	.038	-.02	.40	.14	.17	5.02
X 470-475	5256	5	.076	-.02	.54	.16	.16	5.92
X 475-480	5257	5	.056	-.02	.48	.18	.11	4.32
X 480-485	5258	5	.070	-.02	.61	.064	.11	4.72
X 485-490	5259	5	.042	-.02	.56	.66	.11	4.22
X 490-495	5260	5	.050	-.02	.20	.058	870 <sup>P</sup>	3.32
X 495-500	5261	5	.112	-.02	.46	.11	.12	5.92
X 500-505	5262	5	.074	-.02	.47	.046	800 <sup>P</sup>	4.12
X 505-510	5263	5	.060	-.02	.36	.036	925 <sup>P</sup>	3.92
X 510-515	5264	5	.060	-.02	.41	.032	655 <sup>P</sup>	3.32
X 515-520	5265	5	.068	-.02	.24	.032	940 <sup>P</sup>	4.02
X 520-525	5266	5	.096	-.02	.048	.039	1000 <sup>P</sup>	4.72
X 525-530	5267	5	.076	-.02	.12	.014	.12	4.02
X 530-535	5268	5	.128	-.02	.56	.063	840 <sup>P</sup>	5.72
X 535-540	5269	5	.042	-.02	.11	.020	830 <sup>P</sup>	2.92
X 540-545	5270	5	.128	-.02	.63	.086	640 <sup>P</sup>	5.32
X 545-550	5271	5	.070	-.02	.41	.075	450 <sup>P</sup>	3.22
X 550-555	5272	5	.086	-.02	.52	.14	500 <sup>P</sup>	3.82
X 555-560	5273	5	.072	-.02	.47	.23	540 <sup>P</sup>	3.62

TAB #23

Location INTERVAL	Sample No.	Interval	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined Metal Values
X 570-575	5301	5	.058	-.02	.62	.21	340 <sup>P</sup>	2.95
X 575-580	5302	5	.092	-.02	1.01	.26	360 <sup>P</sup>	4.46
X 580-585	5303	5	.064	-.02	.76	.25	370 <sup>P</sup>	3.33
X 585-590	5304	5	.052	-.02	.65	.27	375 <sup>P</sup>	2.92
X 590-595	5305	5	.050	-.02	.87	.50	340 <sup>P</sup>	3.11
X 595-600	5306	5	.042	-.02	1.15	1.80	280 <sup>P</sup>	3.60
X 600-605	5307	5	.044	-.02	.57	.71	290 <sup>P</sup>	2.64
X 605-610	5308	5	.096	-.02	.72	.21	300 <sup>P</sup>	3.97
X 610-615	5309	5	.088	-.02	.82	.45	360 <sup>P</sup>	4.08
615-620	5310	5	.032	-.02	.90	.28	440 <sup>P</sup>	2.79
620-625	5311	5	.068	-.02	.50	.080	270 <sup>P</sup>	2.89
625-630	5312	5	.040	-.02	.66	.23	365 <sup>P</sup>	2.58
630-635	5313	5	.091	-.02	1.20	.30	315 <sup>P</sup>	4.38
635-640	5314	5	.023	-.02	.48	.15	295 <sup>P</sup>	1.77
640-645	5315	5	.035	-.02	.20	.16	350 <sup>P</sup>	1.93
645-650	5316	5	.021	-.02	.064	.039	370 <sup>P</sup>	1.41
650-655	5317	5	.035	-.02	.041	.028	290 <sup>P</sup>	1.58
655-660	5318	5	.048	-.02	.047	.058	660 <sup>P</sup>	2.72
660-665	5319	5	.012	-.02	.059	.028	875 <sup>P</sup>	2.23
665-670	5320	5	.018	-.02	.067	.038	655 <sup>P</sup>	1.94
670-675	5321	5	.032	-.02	.045	.039	905 <sup>P</sup>	2.81
675-680	5322	5	.036	-.02	.047	.025	.13	374
680-685	5323	5	.110	-.02	.071	.020	820 <sup>P</sup>	4.70
685-690	5324	5	.042	-.02	.069	.036	930 <sup>P</sup>	3.15
690-695	5325	5	.032	-.02	.048	.044	695 <sup>P</sup>	2.37
695-700	5326	5	.050	1.12	.081	.031	.12	4.53
700-705	5327	5	.022	-.02	.15	.026	.12	3.27
705-710	5328	5	.020	-.02	.12	.026	.11	2.97
710-715	5329	5	.022	-.02	.25	.019	.15	3.99
715-720	5330	5	.040	-.02	.14	.094	825 <sup>P</sup>	2.97
720-725	5331	5	.092	-.02	.46	.13	705 <sup>P</sup>	4.42
725-730	5332	5	.106	-.02	.47	.15	730 <sup>P</sup>	4.86
730-735	5333	5	.120	-.02	.096	.064	610 <sup>P</sup>	4.55
735-740	5334	5	.068	-.02	.044	.033	700 <sup>P</sup>	3.32
740-745	5335	5	.148	-.02	.076	.063	770 <sup>P</sup>	5.61
745-750	5336	5	.024	-.02	.075	.041	510 <sup>P</sup>	1.80
750-755	5337	5	-.002	.04	.009	.009	30 <sup>P</sup>	.10
755-760	5338	5	-.002	.30	.007	.007	31 <sup>P</sup>	.23
760-765	5339	5	-.002	.12	.028	.005	20 <sup>P</sup>	.14
765-770	5340	5	-.002	.10	.013	.005	30 <sup>P</sup>	.13
770-775	5341	5	-.002	.42	.003	.005	25 <sup>P</sup>	.39
775-780	5342	5	-.002	.22	.005	.005	25 <sup>P</sup>	.18



Footwall Interval	Sample No	Interval	Au oz/ton	Ag oz/ton	Cu %	Zn %	Cl %	Combined METAL VALUES
195-1000	5351	5						
1020-1025	5352	5						
1045-1050	5353	5						
1070-1075	5354	5						
1095-1100	5355	5						
1125-1140	5551	5	-.002	-.02	.008	.10	35 <sup>P</sup>	.12
1140-1145	5552	5	-.002	-.02	.007	.096	30 <sup>P</sup>	.11
1145-1150	5553	5	-.002	-.02	.006	.063	25 <sup>P</sup>	.09
1150-1155	5554	5	-.002	-.02	.008	.076	30 <sup>P</sup>	.10
1155-1160	5555	5	-.002	-.02	.006	.057	30 <sup>P</sup>	.09
1160-1165	5556	5	-.002	-.02	.008	.023	30 <sup>P</sup>	.08
1165-1170	5557	5	-.002	-.02	.010	.012	35 <sup>P</sup>	.09
1170-1175	5558	5	-.002	-.02	.010	.009	40 <sup>P</sup>	.10
1175-1180	5559	5	-.002	-.02	.008	.029	35 <sup>P</sup>	.09
1180-1175	5560	5	.006	-.02	.025	.19	110 <sup>P</sup>	.49
1185-1190	5561	5	.008	-.02	.026	.044	85 <sup>P</sup>	.43
1190-1195	5562	5	.032	.34	.48	.47	365 <sup>P</sup>	2.47
1195-1200	5563	5	.030	-.02	.39	.16	130 <sup>P</sup>	1.52
1200-1205	5564	5	.068	-.02	1.03	.43	215 <sup>P</sup>	3.45
1205-1210	5565	5	.024	-.02	.44	.094	335 <sup>P</sup>	1.82
1210-1215	5566	5	.010	-.02	.033	.13	190 <sup>P</sup>	.75
1215-1220	5567	5	.016	-.02	.16	.18	160 <sup>P</sup>	.99
1220-1225	5568	5	.024	-.02	.14	.076	170 <sup>P</sup>	1.16
1225-1230	5569	5	.034	-.02	.048	.042	175 <sup>P</sup>	1.33
1230-1235	5570	5	.074	-.02	.077	.15	245 <sup>P</sup>	2.60
1235-1240	5571	5	.048	-.02	.075	.051	265 <sup>P</sup>	1.92
1240-1245	5572	5	.038	-.02	.036	.072	245 <sup>P</sup>	1.58
1245-1250	5573	5	.026	-.02	.020	.17	355 <sup>P</sup>	1.52
1250-1255	5574	5	.020	-.02	.046	.18	370 <sup>P</sup>	1.43
1255-1260	5575	5	.014	-.02	.057	.081	310 <sup>P</sup>	1.11
1260-1265	5576	5	.056	-.02	.21	.11	400 <sup>P</sup>	2.57
1265-1270	5577	5	.060	-.02	.13	.043	305 <sup>P</sup>	2.37
1270-1275	5578	5	.011	-.02	.047	.082	530 <sup>P</sup>	1.49
1275-1280	5579	5	.014	.02	.058	.036	730 <sup>P</sup>	1.99
1280-1285	5580	5	.026	-.02	.16	.058	.18	4.66
1285-1290	5581	5	.032	.02	.38	.18	460 <sup>P</sup>	2.28
1290-1295	5582	5	.052	-.02	.34	.21	860 <sup>P</sup>	3.61
1295-1300	5583	5	.010	.02	.026	.056	395 <sup>P</sup>	1.15
1300-1305	5584	5	.014	-.02	.015	.074	255 <sup>P</sup>	.95
1305-1310	5585	5	.014	.03	.048	.064	225 <sup>P</sup>	.93
1310-1315	5586	5	.006	.03	.010	.17	65 <sup>P</sup>	.39
1315-1320	5587	5	.138	-.02	.17	.098	65 <sup>P</sup>	3.98
1320-1325	5588	5	.014	-.02	.005	.090	50 <sup>P</sup>	.52
1325-1330	5589	5	.004	-.02	.004	.074	65 <sup>P</sup>	.28
1330-1335	5590	5	-.002	-.02	.002	.051	30 <sup>P</sup>	.09
1335-1340	5591	5	.008	-.02	.022	.049	190 <sup>P</sup>	.65
1340-1345	5592	5	.038	-.02	.066	.028	270 <sup>P</sup>	1.65
1345-1350	5593	5	.022	-.02	.16	.039	165 <sup>P</sup>	1.10
1350-1355	5594	5	.006	-.02	.017	.058	155 <sup>P</sup>	.48



FOOTAGE INTERVAL	Sample No.	INTERVAL	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
0-5	5401	5	.002	.14	.007	.024	30 <sup>P</sup>	
5-10	5402	5	.002	.12	.003	.014	30 <sup>P</sup>	
10-15	5403	5	.002	.26	.004	.005	25 <sup>P</sup>	
15-20	5404	5	.002	.22	.005	.004	25 <sup>P</sup>	
20-25	5405	5	.002	.12	.02	.006	30 <sup>P</sup>	
25-30	5406	5	.002	.26	.008	.004	25 <sup>P</sup>	
30-35	5407	5	.002	.18	.009	.007	30 <sup>P</sup>	
35-40	5408	5	.002	.14	.004	.005	30 <sup>P</sup>	
40-45	5409	5	.002	.42	.003	.004	20 <sup>P</sup>	
45-50	5410	5	.002	.02	.003	.005	25 <sup>P</sup>	
70-75	5411	5	.002	.22	.003	.005	25 <sup>P</sup>	
90-95	5412	5	.002	.56	.003	.005	25 <sup>P</sup>	
120-125	5413	5	.002	.02	.009	.006	25 <sup>P</sup>	
145-150	5414	5	.002	.02	.009	.007	30 <sup>P</sup>	
170-175	5415	5	.002	.02	.011	.008	30 <sup>P</sup>	
195-200	5416	5	.002	.02	.009	.007	30 <sup>P</sup>	
220-225	5417	5	.002	.02	.008	.007	30 <sup>P</sup>	
245-250	5418	5	.002	.02	.012	.009	20 <sup>P</sup>	
250-255	5419	5	.002	.02	.009	.009	30 <sup>P</sup>	.08
255-260	5420	5	.002	.02	.010	.009	45 <sup>P</sup>	.16
260-265	5421	5	.004	.02	.048	.086	45 <sup>P</sup>	.28
265-270	5422	5	.010	.06	.047	.16	135 <sup>P</sup>	.69
270-275	5423	5	.038	.24	.094	2.4	785 <sup>P</sup>	3.88
275-280	5424	5	.042	.33	.17	1.85	850 <sup>P</sup>	4.02
280-285	5425	5	.026	.08	.059	.15	685 <sup>P</sup>	2.29
285-290	5426	5	.018	.25	.12	.16	685 <sup>P</sup>	2.24
290-295	5427	5	.260	.44	4.8	.16	545 <sup>P</sup>	13.09
295-300	5428	5	.330	.24	4.6	.17	485 <sup>P</sup>	14.51
300-305	5429	5	.211	.15	7.8	.20	370 <sup>P</sup>	14.30
305-310	5430	5	.270	.01	4.45	.22	280 <sup>P</sup>	12.24
310-315	5431	5	.191	.29	3.65	.24	305 <sup>P</sup>	9.57
315-320	5432	5	.144	.01	6.95	.16	295 <sup>P</sup>	11.43
320-325	5433	5	.250	.43	7.50	3.1	345 <sup>P</sup>	16.34
325-330	5434	5	.112	.41	1.95	2.5	290 <sup>P</sup>	6.77
330-335	5435	5	.065	.20	.24	3.3	910 <sup>P</sup>	5.3
335-340	5436	5	.022	.04	.15	7.6	950 <sup>P</sup>	5.9
340-345	5437	5	.023	.64	.085	4.45	.15	6.0
345-350	5438	5	.040	.56	.062	2.85	660 <sup>P</sup>	4.0
350-360	5439	10	.004	.02	.026	.11	70 <sup>P</sup>	.3
360-365	5440	5	.002	.02	.022	.23	35 <sup>P</sup>	.2
365-370	5441	5	.002	.02	.045	.089	35 <sup>P</sup>	.24
370-375	5442	5	.004	.02	.050	.080	30 <sup>P</sup>	.25
375-380	5443	5	.062	.02	.65	.13	50 <sup>P</sup>	2.4
380-385	5444	5	.082	.02	.65	.074	45 <sup>P</sup>	2.85
385-390	5445	5	.078	.02	.55	.056	165 <sup>P</sup>	2.97
390-395	5446	5	.098	.02	.65	.085	175 <sup>P</sup>	3.63
395-400	5447	5	.038	.02	.13	.045	150 <sup>P</sup>	1.46
400-405	5448	5	.066	.02	.39	.11	225 <sup>P</sup>	2.65



FOOTAGE INTERVAL	SAMPLE No		Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
✓ 415-420	5451	5	.056	-.02	.17	.24	130 <sup>P</sup>	2.02
✓ 420-425	5452	5	.122	-.02	.18	.085	250 <sup>P</sup>	3.95
✓ 425-430	5453	5	.046	-.02	.11	.023	270 <sup>P</sup>	1.90
✓ 430-435	5454	5	.026	-.01	.072	.072	260 <sup>P</sup>	1.33
✓ 435-440	5455	5	.027	-.01	.23	.23	310 <sup>P</sup>	1.69
✓ 440-445	5456	5	.045	-.01	.48	.15	225 <sup>P</sup>	2.20
✓ 445-450	5457	5	.034	-.01	.43	.12	170 <sup>P</sup>	1.73
✓ 450-455	5458	5	.076	-.01	.86	.47	300 <sup>P</sup>	3.69
✓ 455-460	5459	5	.032	-.01	.32	.094	340 <sup>P</sup>	1.92
✓ 460-465	5460	5	.028	-.02	.081	.400	310 <sup>P</sup>	1.64
✓ 465-470	5461	5	.014	-.02	.041	.420	135 <sup>P</sup>	.87
✓ 470-475	5462	5	.022	-.02	.031	.054	145 <sup>P</sup>	.94
✓ 475-480	5463	5	.042	-.02	.26	.092	135 <sup>P</sup>	1.69
✓ 480-485	5464	5	.032	-.02	.38	.073	105 <sup>P</sup>	1.47
✓ 485-490	5465	5	.030	.09	.46	.073	170 <sup>P</sup>	1.69
✓ 490-495	5466	5	.004	.10	.032	.029	40 <sup>P</sup>	.29
✓ 495-500	5467	5	.002	.16	.034	.014	40 <sup>P</sup>	.26
✓ 500-505	5468	5	.002	.14	.014	.008	35 <sup>P</sup>	.22
✓ 505-510	5469	5	.004	-.02	.015	.013	35 <sup>P</sup>	.20
✓ 510-515	5470	5	.012	.09	.011	.025	30 <sup>P</sup>	.45
✓ 515-520	5471	5	.002	.18	.009	.007	25 <sup>P</sup>	.21
✓ 520-525	5472	5	.002	.14	.006	.006	25 <sup>P</sup>	.19
✓ 525-530	5473	5	.002	-.02	.011	.006	25 <sup>P</sup>	.12
✓ 530-535	5474	5	-.002	-.02	.011	.006	30 <sup>P</sup>	.08
✓ 535-540	5475	5	-.002	-.02	.012	.006	25 <sup>P</sup>	.07
✓ 1195-1200	5678	5	.002	.26	.007	.036	35 <sup>P</sup>	
✓ 1200-1205	5679	5	-.002	.16	.007	.016	40 <sup>P</sup>	
✓ 1205-1210	5680	5	-.002	.16	.016	.007	35 <sup>P</sup>	
✓ 1210-1215	5681	5	-.002	.20	.008	.007	35 <sup>P</sup>	
✓ 1215-1220	5682	5	-.002	.16	.006	.017	35 <sup>P</sup>	
✓ 1220-1225	5683	5	-.002	-.02	.006	.018	35 <sup>P</sup>	
✓ 1225-1230	5684	5	-.002	-.02	.010	.010	35 <sup>P</sup>	
✓ 1230-1235	5685	5	-.002	.10	.009	.016	40 <sup>P</sup>	
✓ 1235-1240	5686	5	-.002	.04	.037	.019	40 <sup>P</sup>	
✓ 1240-1245	5687	5	-.002	.20	.011	.016	30 <sup>P</sup>	
✓ 1245-1250	5688	5	-.002	.18	.004	.034	35 <sup>P</sup>	
✓ 1250-1255	5689	5	-.002	.14	.009	.026	40 <sup>P</sup>	
✓ 1255-1260	5690	5	.002	-.02	.006	.023	35 <sup>P</sup>	
✓ 1260-1265	5691	5	.002	.06	.014	.016	35 <sup>P</sup>	
✓ 1265-1270	5692	5	-.002	-.02	.008	.015	35 <sup>P</sup>	
✓ 1270-1275	5693	5	.002	-.02	.011	.015	35 <sup>P</sup>	
✓ 1275-1280	5694	5	-.002	.04	.009	.019	40 <sup>P</sup>	
✓ 1280-1285	5695	5	-.002	.06	.010	.023	40 <sup>P</sup>	
✓ 1285-1290	5696	5	-.002	-.02	.018	.039	40 <sup>P</sup>	
✓ 1290-1295	5697	5	-.002	-.02	.002	.016	40 <sup>P</sup>	
✓ 1295-1300	5698	5	-.002	.08	.005	.015	35 <sup>P</sup>	
✓ 1305-1310	5699	15	-.002	.08	.008	.021	50 <sup>P</sup>	



TAB - # 26

FOOTHOLE INTERVALL	Sample No.	ft H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUE
/ 370-375	5356	5	.002	-.02	.026	.019	30 <sup>P</sup>	.15
/ 375-380	5357	5	.002	-.02	.011	.015	35 <sup>P</sup>	.14
/ 380-385	5358	5	-.002	-.02	.030	.042	30 <sup>P</sup>	.11
/ 385-390	5359	5	-.002	-.02	.011	.029	30 <sup>P</sup>	.09
/ 390-395	5360	5	.002	-.02	.020	.095	15 <sup>P</sup>	.14
/ 395-399.2	5361	42	.006	-.02	.016	.065	35 <sup>P</sup>	.27
/ 399.2-401.2	5362	2	.158	-.02	.36	.086	.14	7.50
/ 401.2-408.5	5363	73	.002	-.02	.053	.15	35 <sup>P</sup>	.24
/ 408.5-410	5364	15	.008	-.02	.42	.15	890 <sup>P</sup>	2.57
/ 410-415	5365	5	.066	-.02	.51	.36	925 <sup>P</sup>	4.35
/ 415-420	5366	5	.040	.28	.20	4.65	470 <sup>P</sup>	4.34
/ 420-425	5367	5	.044	.02	.37	4.00	480 <sup>P</sup>	4.23
/ 425-430	5368	5	.014	-.02	.048	6.00	345 <sup>P</sup>	3.66
/ 430-435	5369	5	.018	-.02	.19	7.2	415 <sup>P</sup>	4.56
/ 435-440	5370	5	.034	-.02	.51	4.85	470 <sup>P</sup>	4.43
/ 440-445	5371	5	.036	-.02	.45	2.85	515 <sup>P</sup>	3.68
/ 445-450	5372	5	.068	-.02	.21	.53	545 <sup>P</sup>	3.35
/ 450-455	5373	5	.074	-.02	.16	1.75	600 <sup>P</sup>	4.11
/ 455-460	5374	5	.236	.10	.93	3.50	740 <sup>P</sup>	10.22
/ 460-465	5375	5	.240	.26	3.45	2.10	435 <sup>P</sup>	11.70
/ 465-470	5376	5	.560	.02	4.40	7.0	310 <sup>P</sup>	22.74
/ 470-475	5377	5	.680	-.02	13.5	3.15	155 <sup>P</sup>	33.05
/ 475-480	5378	5	.488	2.11	15.5	1.00	160 <sup>P</sup>	30.2
/ 480-485	5379	5	.600	2.64	17.0	3.95	190 <sup>P</sup>	36.2
/ 485-490	5380	5	.960	.88	8.55	4.05	300 <sup>P</sup>	36.6
/ 490-493.8	5381	39	.276	.80	2.05	6.5	640 <sup>P</sup>	13.8
/ 493.8-495	5382	12	.500	.44	3.45	1.80	145 <sup>P</sup>	17.9
/ 495-500	5383	5	.060	.22	.019	.16	50 <sup>P</sup>	1.8
/ 500-505	5384	5						
/ 505-510	5385	5						
/ 510-515	5386	5						
/ 515-520	5387	5						
/ 520-525	5388	5						
/ 525-530	5389	5						
/ 530-535	5390	5						
/ 545-550	5391	5						
/ 570-575	5392	5						
/ 595-600	5393	5						
0-5	5769	5						
5-10	5770	5						
10-15	5771	5						
15-20	5772	5						
20-25	5773	5						
25-30	5774	5						



FOOTAGE INTERVAL	SAMPLE NUMBER	INTERVAL	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Comb METAL VAL
685-690	5726	5	.002	.18	.011	.310	31°	11
690-695	5727	5	.002	.26	.011	.015	30°	12
695-700	5728	5	.002	.10	.021	.020	30°	11
700-705	5729	5	.002	.50	.014	.020	30°	13
705-710	5730	5	.002	.24	.011	.013	20°	11
710-715	5731	5	.002	.52	.026	.022	35°	12
715-721.7	5732	6.7	.002	-.02	.034	.23	30°	12
721.7-723.9	5733	2.2	.072	.43	.47	2.00	850°	5.22
723.9-730.5	5734	6.6	.034	.14	.051	1.24	40°	1.8
730.5-735	5735	4.5	.068	3.29 *	.91	32.0 *	240°	18.3
735-740	5736	5	.084	1.97	1.50	13.5	210°	11.2
740-745	5737	5	.044	1.06	1.00	8.30	290°	6.8
745-750	5738	5	.036	1.08	.86	8.15	230°	6.3
750-755	5739	5	.043	1.07	2.05	4.20	205°	6.0
755-760	5740	5	.064	1.06	2.80	3.60	175°	6.9
760-765	5741	5	.052	.63	.84	6.50	91°	5.4
765-770	5742	5	.018	.54	1.20	8.45	115°	5.7
770-775	5743	5	.038	-.02	.37	3.20	251°	3.2
775-780	5744	5	.124	-.02	3.35	.12	315°	7.1
780-785	5745	5	.264	-.02	2.70	.062	725°	11.1
785-790	5746	5	.134	-.02	2.30	.090	325°	7.1
790-795	5747	5	.138	-.02	2.50	.24	750°	7.1
795-800	5748	5	.080	-.02	1.45	.25	721°	5.1
800-805	5786	5	.098	-.02	.93	.34	625°	4.1
805-810	5787	5	.070	-.02	.90	2.30	340°	4.1
810-815	5788	5	.042	-.02	.95	3.40	270°	4.1
815-820	5789	5	.040	-.02	.96	1.70	185°	3.1
820-825	5790	5	.086	-.02	1.60	2.25	185°	5.1
825-830	5791	5	.076	.68	1.55	1.70	150°	4.1
830-835	5792	5	.128	.45	1.70	2.45	125°	6.1
835-840	5793	5	.064	-.02	1.20	2.35	125°	4.1
840-845	5794	5	.108	.31	1.25	3.50	110°	5.1
845-850	5795	5	.084	.42	1.65	1.90	115°	5.1
850-855	5796	5	.076	.23	1.20	1.15	75°	4.1
855-860	5797	5	.028	.23	.68	1.65	30°	2.1
860-865	5798	5	.068	-.02	1.55	.75	70°	3.1
865-870	5799	5	.048	.21	.91	.35	20°	2.1
870-875	5800	5	.018	-.02	.83	.088	65°	1.1
875-880	5801	5	.010	-.02	.46	.19	50°	1.1
880-885	5802	5	.002	.04	.022	.12	30°	1.1
885-890	5803	5	.050	.25	.014	.16	30°	1.1
890-895	5804	5	.012	.10	.52	.48	35°	1.1
895-900	5805	5	.002	-.02	.020	.17	35°	1.1
900-905	5806	5	.002	.02	.009	.10	30°	1.1
905-910	5807	5	.002	-.02	.009	.11	25°	1.1
910-915	5808	5	.002	.02	.042	1.05	50°	1.1
915-920	5809	5	.004	-.02	.011	.42	40°	1.1
920-925	5810	5	.004	.03	.026	.18	550°	1.1
925-930	5811	5	.008	.03	.044	.13	535°	1.1

TAB - #27

FOOTAGE INTERVAL	Sample No.	F H	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %	Combined METAL VALUES
935-940	5813	5	.012	-.02	.072	.23	100 <sup>P</sup>	3.02
940-945	5814	5	.020	-.02	.046	.17	50 <sup>P</sup>	
945-950	5815	5	.004	-.02	.026	.090	45 <sup>P</sup>	
950-955	5816	5	.012	.13	.034	.091	45 <sup>P</sup>	
955-960	5817	5	.014	.17	.13	.18	50 <sup>P</sup>	
960-965	5818	5	.026	.21	.54	1.60	175 <sup>P</sup>	
965-970	5819	5	.084	.04	.24	.67	130 <sup>P</sup>	
970-975	5820	5	.012	.27	.021	.26	60 <sup>P</sup>	
975-980	5821	5	.006	.27	.034	.32	110 <sup>P</sup>	
980-985	5822	5	.030	.03	.027	.31	60 <sup>P</sup>	
985-990	5823	5	.008	.11	.025	.029	50 <sup>P</sup>	
990-995	5824	5	.006	-.02	.021	.11	80 <sup>P</sup>	
995-1000	5825	5	.018	.08	.049	.25	100 <sup>P</sup>	
1000-1005	5826	5	.044	-.02	.23	.081	135 <sup>P</sup>	
1005-1010	5827	5	.076	.02	.19	.063	180 <sup>P</sup>	
1010-1014.9	5828	4.9	.020	-.02	.073	.14	80 <sup>P</sup>	



# TAB- #28

FOOTAGE INTERVAL	Sample No.	TAI T	Au oz/TON	Ag oz/TON	Cu %	Zn %	Co %
166-171	5874	5	-.002	.26	.008	.007	30 <sup>P</sup>
171-176	5875	5	-.002	.20	.009	.007	30 <sup>P</sup>
400-405	6014	5					
405-410	6015	5					
410-415	6016	5					
415-420	6017	5					
420-422.7	6018	2.7					
422.7-425	6019	2.3					
425-430	6020	5					
430-435	6021	5					
435-440.7	6022	5.7					
440.7-443.2	6023	2.5					
443.2-445	6024	1.8					
445-450	6025	5					
450-455	6026	5					
455-460	6027	5					
460-465	6028	5					
465-470	6029	5					
470-475	6030	5					
475-480	6031	5					
480-485	6032	5					
485-490	6033	5					
490-495	6034	5					
495-500	6035	5					
500-505	6036	5					
505-510	6037	5					
510-515	6038	5					
515-520	6039	5					
520-525	6040	5					
525-530	6041	5					

FOOTAGE INTERVAL	SAMPLE NO.	IN.	AU oz/TON	Ag oz/TON	CU %	ZN %	CO %	
360-365	5876	5	.006	-.02	.041	.062	30 <sup>P</sup>	
365-370	5877	5	-.002	-.02	.020	.010	35 <sup>P</sup>	
370-375	5878	5	-.002	-.02	.005	.006	30 <sup>P</sup>	
375-380	5879	5	-.002	-.02	.007	.008	30 <sup>P</sup>	
380-385	5880	5	.004	-.02	.016	.091	25 <sup>P</sup>	
385-392.5	5881	7.5	.002	-.02	.018	.093	25 <sup>P</sup>	
392.5-395	5882	2.5	.030	-.02	.22	.16	.16	3.18
395-400	5883	5	.072	-.02	.59	.26	790 <sup>P</sup>	4.26
400-405	5884	5	.076	-.02	.27	.38	.18	6.06
405-410	5885	5	.006	.02	.72	.29	.17	4.59
410-415	5886	5	.084	.44	.26	.21	890 <sup>P</sup>	4.66
415-420	5887	5	.074	.47	.75	.33	.18	6.87
420-425	5888	5	.176	-.02	1.20	.20	.17	9.49
425-430	5889	5	.190	-.02	.91	3.90	550 <sup>P</sup>	8.70
430-435	5890	5	.242	-.02	2.50	4.90	300 <sup>P</sup>	11.56
435-440	5891	5	.284	-.02	2.55	2.95	320 <sup>P</sup>	11.94
440-445	5892	5	.286	-.02	1.00	8.15	305 <sup>P</sup>	12.59
445-450	5893	5	.228	-.02	.66	7.60	340 <sup>P</sup>	10.57
450-455	5894	5	.152	.87	1.10	14.0	300 <sup>P</sup>	12.07
455-460	5895	5	.228	.11	.75	3.40	130 <sup>P</sup>	8.51
460-465	5896	5	.480	.68	2.80	3.75	100 <sup>P</sup>	17.58
465-470	5897	5	.100	.58	2.60	2.95	100 <sup>P</sup>	6.99
470-475	5898	5	.148	.47	1.10	3.75	100 <sup>P</sup>	7.03
475-480	5899	5	.266	.57	2.55	2.85	155 <sup>P</sup>	11.38
480-485	5900	5	.070	.27	.38	2.45	80 <sup>P</sup>	3.64
485-490	5901	5	.028	.03	.26	.30	60 <sup>P</sup>	1.26
490-495	5902	5	.022	.20	.15	.22	70 <sup>P</sup>	1.07
495-500	5903	5	.012	.09	.09	.32	30 <sup>P</sup>	.65
500-505	5904	5	.006	-.02	.082	.22	35 <sup>P</sup>	.40
505-510	5905	5	.090	.31	.82	.13	65 <sup>P</sup>	3.54
510-515	5906	5	.094	.23	2.35	.83	80 <sup>P</sup>	5.43
515-520	5907	5	.19	.21	2.20	.46	100 <sup>P</sup>	7.72
520-525	5908	5	.006	.01	.085	.21	30 <sup>P</sup>	.40
525-530	5909	5	.010	-.02	.15	.31	45 <sup>P</sup>	.09
530-535	5910	5	.004	-.02	.018	.18	30 <sup>P</sup>	.16
535-540	5911	5	-.002	-.02	.010	.17	35 <sup>P</sup>	.15
540-545	5912	5	.002	-.02	.065	.39	50 <sup>P</sup>	.39
545-550	5913	5	.004	.16	.032	1.60	40 <sup>P</sup>	.98
550-555	5914	5	.004	.18	.024	.32	30 <sup>P</sup>	.42
555-560	5915	5	.002	-.02	.029	.47	45 <sup>P</sup>	.37
625-630	5916	5	-.002	.02	.009	.008	25 <sup>P</sup>	.07
630-635	5917	5	-.002	-.02	.015	.013	35 <sup>P</sup>	.09
635-640	5918	5	.002	-.02	.022	.022	35 <sup>P</sup>	.09
640-645	5919	5	.004	.06	.051	.081	35 <sup>P</sup>	
645-650	5920	5	.002	-.02	.012	.11	30 <sup>P</sup>	
650-655	5921	5	.002	.24	.027	.026	30 <sup>P</sup>	.28
655-660	5922	5	.01	.09	.034	.022	30 <sup>P</sup>	
660-662	5923	2	.002	.30	.024	.026	35 <sup>P</sup>	.32
662-666.7	5924	4.7	.016	.18	.12	.38	55 <sup>P</sup>	.91



	Footage Interval	Sample No		Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %	Meta Values
1	670-675	5926	5	.114	-.02	4.45	8.25	505 <sup>P</sup>	11.9
2	675-677.5	5927	25	.024	.34	.27	4.25	355 <sup>P</sup>	3.0
3	677.5-680	5928	25	.020	.12	.12	.12	40 <sup>P</sup>	.8
4	680-685	5929	5	.002	.08	.011	.032	25 <sup>P</sup>	.1
5	685-690	5930	5	.002	.16	.018	.42	35 <sup>P</sup>	.4
6	690-695	5931	5	.002	.12	.011	.43	30 <sup>P</sup>	.37
7	695-700	5932	5	.002	.40	.009	.11	30 <sup>P</sup>	.3
8	700-705	5933	5	-.002	-.02	.011	.014	30 <sup>P</sup>	.08
9	720-725	5934	5	-.002	-.02	.01	.015	35 <sup>P</sup>	.09
10	725-730	5935	5	-.002	-.02	.012	.035	30 <sup>P</sup>	.09
11	730-735	5936	5	-.002	.04	.008	.018	30 <sup>P</sup>	.10
12	735-740	5937	5	.002	.10	.041	.60	35 <sup>P</sup>	.47
13	740-745.5	5938	55	.036	.28	.54	.71	45 <sup>P</sup>	2.03
14	745.5-748.8	5939	33	.008	.13	.057	.21	40 <sup>P</sup>	.51
15	748.8-750	5940	112	.088	.51	.59	10.50	385 <sup>P</sup>	8.40
16	750-755	5941	5	.026	.79	.18	24.00	225 <sup>P</sup>	11.84
17	755-760	5942	5	.036	-.02	.37	18.50	285 <sup>P</sup>	9.69
18	760-765	5943	5	.05	3.23	1.10	1.15	435 <sup>P</sup>	5.53
19	765-770	5944	5	.07	2.39	.83	.24	940 <sup>P</sup>	6.02
20	770-775	5945	5	.100	2.96	1.60	4.25	.14	10.53
21	775-780	5946	5	.132	2.93	2.55	7.85	960 <sup>P</sup>	12.90
22	780-785	5947	5	.188	4.03	3.25	22.00	430 <sup>P</sup>	20.48
23	785-790	5948	5	.262	2.60	6.30	13.00	615 <sup>P</sup>	21.33
24	790-795	5949	5	.434	1.57	5.00	7.85	445 <sup>P</sup>	21.49
25	795-800	5950	5	.202	.60	3.60	12.00	420 <sup>P</sup>	15.16
26	800-805	5951	5	.144	.82	4.50	2.6	575 <sup>P</sup>	11.03
27	805-810	5952	5	.298	1.28	6.95	1.80	340 <sup>P</sup>	16.94
28	810-815	5953	5	.302	.22	5.75	1.40	205 <sup>P</sup>	14.83
29	815-820	5954	5	.218	1.63	5.80	.90	250 <sup>P</sup>	13.31
30	820-825	5955	5	.174	-.02	5.00	1.02	235 <sup>P</sup>	10.50
31	825-830	5956	5	.188	.09	2.95	1.15	185 <sup>P</sup>	8.82
32	830-833.5	5957	35	.102	-.02	2.75	.071	175 <sup>P</sup>	5.83
33	844.7-850	5958	53	.006	.14	.14	.51	40 <sup>P</sup>	.67
34	850-855	5975	5	-.002	-.02	.084	.041	125 <sup>P</sup>	.37
35	855-860	5959	5	.020	.19	.099	.078	115 <sup>P</sup>	1.00
36	860-865	5960	5	.004	.08	.051	.055	45 <sup>P</sup>	.32
37	865-870	5961	5	.006	.18	.027	.055	45 <sup>P</sup>	.40
38	870-875	5962	5	-.002	-.02	.029	.047	35 <sup>P</sup>	.12
39	875-880	5963	5	.004	.16	.036	.049	45 <sup>P</sup>	.34
40	880-885	5964	5	-.002	.02	.033	.040	35 <sup>P</sup>	.13
41	885-890	5965	5	.004	.16	.031	.052	45 <sup>P</sup>	.34
42	890-895	5966	5	.01	.01	.28	.12	40 <sup>P</sup>	.68
43	895-900	5967	5	.002	.04	.037	.13	40 <sup>P</sup>	.26
44	900-905	5968	5	.002	-.02	.034	.052	40 <sup>P</sup>	.19
45	905-910	5969	5	.002	-.02	.037	.048	45 <sup>P</sup>	.20
46	910-915	5970	5	.002	.04	.056	.076	45 <sup>P</sup>	.17
47	915-920	5971	5	.002	-.02	.042	.14	45 <sup>P</sup>	.25
48	920-925	5972	5	-.002	-.02	.023	.028	30 <sup>P</sup>	.10
49	925-930	5973	5	-.002	-.02	.013	.011	25 <sup>P</sup>	.07
50	930-935.7	5974	5.7	.016	-.02	.016	.014	25 <sup>P</sup>	.44

RAYROCK MINES, INC.  
TAB PROJECT  
MINERAL RESERVE ESTIMATES  
FOR  
TURNER-ALBRIGHT DEPOSIT  
JOSEPHINE COUNTY, OREGON

T. Antoniuk, P.Eng.  
Rayrock Mines, Inc.

O'Brien, Oregon  
October 31, 1984



RAYROCK MINES, INC.  
TAB PROJECT  
MINERAL RESERVE ESTIMATES

INTRODUCTION

Results of diamond drilling by Rayrock in 1984 led to an extensive revision of the structural controls of the sulphide bodies at the Turner-Albright deposit. Mineral reserves were calculated to potential mining limits within the constraints of the new structural interpretation. Three estimates were made:

1. sulphides at an approximate 0.10 ounce per ton gold equivalent cut-off,
2. all the massive and semi-massive sulphide portion of the mineralization, and
3. the total sulphide zone to include non-massive and stringer zone sulphides adjoining the massive sulphide.

## CONCLUSIONS

Mineral reserves have been calculated for the Turner-Albright deposit based on current understanding of the structural controls. Table 1 is a summary of the calculations. With a 15 percent dilution factor the massive sulphide portion totals 2.3 million tons grading 0.090 oz/ton gold, 0.360 oz/ton silver, 1.04% copper, 2.75% zinc and 0.057% cobalt. At a cut-off of approximately 0.10 oz/ton gold equivalent, the minable portion is 1.4 million tons grading 0.118 oz/ton gold, 0.550 oz/ton silver, 1.57% copper, 4.10% zinc and 0.040% cobalt, including 15 percent dilution.

Exploration potential for expansion of reserves is good. The MUZ above R2 between F2 and F4 has not been explored fully. The area between F1 and F2 may contain additional blocks of mineralization similar to the South Zone. The best potential for substantial additional reserves is the MLZ to the east of the known mineralization. The deposit is thickest and highest grade in this area. The wedge F2-F2A (TAB 43 and 56) is expanding to the east. The wedge F2A-F3 is narrowing but F3-F3A is expanding and has not been cut by any drill hole. A 250-foot length between F2 and F3A is favorable for mineralization with a thickness in the order of 100 feet.



RAYROCK MINES, INC.,  
TAB PROJECT  
MINERAL RESERVE ESTIMATES  
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1. Calculated to an approximate 0.10 ounce gold equivalent cut off:

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
UHP	61,100	.244	1.146	2.72	1.37	.069
MUZ, above R2	118,200	.114	.908	1.28	5.96	.035
MUZ, R1-R2	<u>546,000</u>	<u>.161</u>	<u>.258</u>	<u>1.81</u>	<u>3.13</u>	<u>.056</u>
Total MUZ:	664,200	.153	.374	1.72	3.63	.052
MLZ	<u>509,100</u>	<u>.102</u>	<u>.908</u>	<u>1.82</u>	<u>6.51</u>	<u>.036</u>
Total:						
MUZ + MLZ	1,173,300	.131	.606	1.76	4.88	.045
15% dilution	1,349,000	.114	.527	1.53	4.24	.039
Total:						
MUZ + MLZ + UHP	1,234,400	.136	.632	1.81	4.71	.046
15% dilution	1,419,000	.118	.550	1.57	4.10	.040

2. Calculated to include all the massive sulphide:

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
UHP	61,100	.244	1.146	2.72	1.37	.069
MUZ, above R2	162,500	.098	.915	1.02	5.08	.042
MUZ, R1-R2	<u>1,300,700</u>	<u>.099</u>	<u>.123</u>	<u>.89</u>	<u>1.69</u>	<u>.079</u>
Total MUZ:	1,463,200	.099	.211	.90	2.07	.075
MLZ	<u>510,900</u>	<u>.102</u>	<u>.907</u>	<u>1.81</u>	<u>6.49</u>	<u>.036</u>
Total:						
MUZ + MLZ	1,974,100	.100	.391	1.14	3.21	.065
15% dilution	2,270,000	.087	.340	.99	2.79	.057
Total:						
MUZ + MLZ + UHP	2,035,200	.104	.414	1.19	3.16	.065
15% dilution	2,340,000	.090	.360	1.04	2.75	.057

2(a). Added massive sulphides:

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
MUZ, above R2	44,300	.055	.932	.32	2.74	.060
MUZ, R1-R2	<u>754,700</u>	<u>.054</u>	<u>.024</u>	<u>.23</u>	<u>.66</u>	<u>.095</u>
	799,000	.054	.074	.24	.78	.093
MLZ	<u>1,800</u>	<u>.077</u>	<u>.001</u>	<u>.84</u>	<u>.29</u>	<u>.054</u>
Total:						
MUZ + MLZ	800,800	.054	.074	.23	.55	.091



3. Calculated to include nonmassive and stringer zone sulphides adjoining the massive sulphides:

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
UHP	61,100	.244	1.146	2.72	1.37	.069
MUZ, above R2	271,300	.070	.611	.72	3.88	.040
MUZ, R1-R2	<u>2,138,200</u>	<u>.078</u>	<u>.081</u>	<u>.64</u>	<u>1.12</u>	<u>.068</u>
Total MUZ:	2,409,500	.077	.141	.65	1.43	.065
MLZ	<u>770,500</u>	<u>.088</u>	<u>.603</u>	<u>1.35</u>	<u>4.36</u>	<u>.030</u>
Total:						
MUZ + MLZ	3,180,000	.080	.253	.82	2.14	.057
15% dilution	3,657,000	.070	.220	.71	1.86	.050
Total:						
MUZ + MLZ + UHP	3,241,000	.083	.272	.86	2.13	.057
15% dilution	3,727,000	.072	.237	.74	1.85	.050

3(a). Added nonmassive sulphides:

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
MUZ, above R2	108,800	.030	.157	.29	2.09	.037
MUZ, R1-R2	<u>837,500</u>	<u>.046</u>	<u>.016</u>	<u>.25</u>	<u>.23</u>	<u>.052</u>
	946,300	.044	.032	.26	.44	.050
MLZ	<u>259,600</u>	<u>.061</u>	<u>.008</u>	<u>.44</u>	<u>.18</u>	<u>.018</u>
Total:						
MUZ + MLZ	1,205,900	.048	.027	.30	.38	.043

## GEOLOGY

The present configuration of the deposit is the result of complex structural dislocations. An originally flat-lying body has been extensively faulted. The distribution of faults and sulphide blocks suggests the following geological history. The sulphide body was deposited by fumarolic activity from a group of undersea vents over a long period of time. Activity was intermittent and random. The vents were gradually sealed. Renewal of volcanic activity caused a build-up of magma in a chamber, at least in part below the sulphides, and a doming of the overlying rocks. A rupture of the chamber with the outflow of molten rock and release of pressure resulted in the collapse of the dome and formation of a crater. The F-series faults at Turner-Albright appear to be those faults along the sides of the down dropped blocks near the crater rim. The molten magma moved into the depression as a thick gabbroic-textured flow such as overlies the sulphides of parts of the MUZ and MLZ. Continued periodic extrusion of molten rock covered the area with basaltic pillow lavas, flows, and gabbroic flows. This volcanic activity produced additional movement along some of the F faults, extending them into overlying rocks. Deposition of the Galice sediments followed.

At some point the area was uplifted and the rocks tilted to the present 50 degree dip. Later thrust faulting produced the R-series faults and moved the sulphide blocks to their present location.

The F-series faults within the area of mineralization trend N65°W. The strike varies up to 15 degrees and branching, interconnecting structures strike about east-west. Dips are from 60 to 85 degrees to the north with the interconnecting breaks usually the steepest. The F faults are sub-parallel with a separation of 120 to 180 feet. Lateral movement appears to have been minimal. Vertical displacement varies up to a maximum of 120 feet with blocks being down dropped progressively from south to north. The dip of the zone remained relatively constant,



but minor tilting produced different strikes for the sulphides in each block between F faults. Both the main upper zone (MUZ) and main lower zone (MLZ) are bounded to the north and south by F-series faults.

The R-series are undulating reverse faults with an approximately east-west strike and dip at 10 to 30 degrees to the north. The MUZ and MLZ are parts of the same sulphide body displaced by R1. The MUZ has been moved about 300 feet to the east of the MLZ. Some north-south displacement and a possible rotational element have the effect of bringing the MUZ almost vertically above the MLZ. A second R-series fault (R2) and a splay (R2A), with apparent small displacement, occur about 300 feet above R1. Other R faults may be present but have not been definitely identified.

The sulphide mineralization of the upper high grade pod in drill hole TAB 33 appears to be from a single vent. Faulting is much more intense in this area and this pod may be from a fringe vent of the MUZ deposition.

#### ASSUMPTIONS

The R-series faults make direct correlation of structure through the deposit impossible. The deposit is divided into fault-bounded blocks and requires separate consideration of each block to determine the attitude of the sulphides for calculation of true thickness and area of influence of drill hole intersections. All information is from drill core. Most holes were surveyed down hole with calculations of coordinates at five-foot intervals. However, the number of holes within any one block is small and errors can arise in calculations of attitudes.

The Noranda nomenclature has been retained for the sulphide zones: upper high grade pods (UHP), main upper zone (MUZ) and main lower zone (MLZ). The faults have been re-numbered. The fault hosting the Selco

South Zone has been retained as F1. Newly defined F-series faults have been numbered in sequence towards the north (F2, etc.). The flat-lying faults have been termed the R series with R1 being the fault causing the dislocation of the MLZ from the MUZ. This is the lowest of the R faults known. Additional R faults have been numbered in sequence upward.

The following attitudes were assumed for the sulphide blocks for reserve calculations.

Zone	Strike	Dip
UHP	N22°E	52°SE
MUZ above R2	N40°E	50°SE
MUZ between R1-R2	N55°E	50°SE
MLZ (F2A-F3)	N67°E	51°SE
MLZ (F2-F2A)	N79°E	47°S

The sulphide zones appear to form distinct minable blocks between the F faults. In the MLZ there is a 100 foot elevation difference between the two known blocks. In the MUZ the F faults can be identified, but no elevation differences are apparent. Most of the available information is within the sulphides and elevation differences may be obscured. Lateral movement appears to be minor but some tilting may have occurred.

#### CALCULATION METHODS

Three different methods of calculation were employed. All three are variations of the polygon method. This was made necessary by the fault pattern and the differences in direction of drill holes. In each case modified polygons were drawn about each drill hole piercing point with projections half the distance to the adjoining hole, to an F fault or up to 50 feet. The area of the polygon and calculated true thickness of intersection were used in arriving at a tonnage influenced by the grade of the intersection. New polygons were drawn as required to fit the sulphide parameters for each of the three mineral reserve subdivisions. The grade for each was weighted by the tonnage and grade applicable to each drill hole.



A factor of nine cubic feet per ton was used throughout. This is probably low for the non-massive sulphide portions of the deposit. It would affect only the reserve calculations for the total sulphide zone. Using a factor of 10 cubic feet per ton would decrease the added tonnage by about 150,000 tons and raise the overall grades by about one percent.

The drill holes intersecting the UHP were projected to a longitudinal section drawn in the plane of the zone, assumed strike  $N30^{\circ}E$ , dip  $50^{\circ}SE$ . Modified polygons were drawn about each drill hole piercing point with projections up to 50 feet or half the distance to the adjoining hole.

The MUZ above R2 was also calculated by projection of drill holes to a longitudinal section in the plane of the zone, assumed strike  $N40^{\circ}E$ , dip  $50^{\circ}SE$ . The zone is divided in two by Fault F3 and bounded north and south by faults F4 and F2. Modified polygons were drawn heavily weighted in the strike dimension. Between F2 and F3 it was assumed that the mineralization was continuous along strike between the faults. One hole only cut mineralization between F3 and F4. Mineralization was projected to F3 and 50 feet in the other directions. The polygons were redrawn where required for each of the three mineral reserve estimates.

The MUZ between R1 and R2 required a different approach. Separate calculations were made for 50-foot thick horizontal slices through the zone. Modified polygons were drawn around piercing points and projections of drill holes on horizontal planes through the middle of each slice. Again the zone was divided in two: F2 to F3 and F3 to F4. Mineralization was assumed to be continuous along strike between the faults, where there was supporting evidence. Dip dimensions were obtained by projection from above and below. True thicknesses were calculated using an assumed strike  $N55^{\circ}E$  and dip  $50^{\circ}SE$ . Polygons were redrawn for each of the three mineral reserve estimates.

The standard polygon method was used in calculating tonnage for the MLZ. Drill holes were projected to a horizontal plane. Polygons were constructed around the drill holes, modified to the limitations of the F faults. Volumes were calculated taking into account the dip and thickness of the zone.

#### MINERAL RESERVE ESTIMATES

Reserves were calculated for three levels of mineralization.

1. To define the minable areas with a grade higher than approximately 0.10 ounce gold per ton equivalent. This was not a rigid cut-off and absorbed some lower grade material where it fell within a mining block.
2. To include all areas with a sulphide content greater than 20 percent which adjoin the higher grade zone. On the summary table this is the total of 1 plus 2a.
3. To provide an estimate of tonnage and grade for the total area of sulphide mineralization including weakly mineralized stringer zone. This includes only areas adjacent to higher grade mineralization. Zones of non-massive sulphides which would require a separate mining block were not included. On the summary table, 3 is the total of 2 plus 3a.

The bulk of the potentially economic mineralization is found between faults F2 and F4. The UHP (TAB 33) is north of this area. The extent of vertical movement along the F faults is unknown with the exception of F2A in the MLZ where there is north side 100-foot drop. Probable minable blocks between identifiable F faults were calculated separately. Reserve blocks were further divided along the R faults. These reserves are considered accurate to within 20 percent based on current understanding of the structural controls.



Table 1 provides a summary of reserves for the various zones. The following estimates are a complete breakdown showing tonnages in the blocks between F faults.

ESTIMATE 1

Approximate 0.10 ounce per ton gold equivalent cut-off.						
Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
<u>UHP</u>	61,100	0.244	1.146	2.72	1.37	0.069
<u>MUZ above R2</u>						
F2-F3	75,500	0.108	0.851	1.21	2.85	0.042
F3-F4	<u>42,700</u>	<u>0.124</u>	<u>1.010</u>	<u>1.39</u>	<u>11.45</u>	<u>0.024</u>
	118,200	0.114	0.908	1.28	5.96	0.035
<u>MUZ: R1-R2</u>						
F2-F3	316,400	0.164	0.287	1.88	3.29	0.034
F3-F4	<u>229,600</u>	<u>0.157</u>	<u>0.219</u>	<u>1.71</u>	<u>2.91</u>	<u>0.087</u>
	546,000	0.161	0.258	1.81	3.13	0.056
<u>Totals MUZ</u>	664,200	0.153	0.374	1.72	3.63	0.052
<u>MLZ</u>						
F2-F2A	190,100	0.063	1.427	1.08	11.05	0.019
F2A-F3	<u>319,000</u>	<u>0.126</u>	<u>0.599</u>	<u>2.26</u>	<u>3.80</u>	<u>0.046</u>
	509,100	0.102	0.908	1.82	6.51	0.036
<u>TOTALS</u>						
MUZ+MLZ	1,173,300	0.131	0.606	1.76	4.88	0.045
15% dilution	1,349,000	0.114	0.527	1.53	4.24	0.039
MUZ+MLZ+UHP	1,234,400	0.136	0.632	1.81	4.71	0.046
15% dilution	1,419,000	0.118	0.550	1.57	4.10	0.040

ESTIMATE 2

Including all areas with a sulphide content greater than 20 percent.

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
<u>UHP</u>	61,100	0.244	1.146	2.72	1.37	0.069
<u>MUZ above R2</u>						
F2-F3 Est. 1	75,500	0.108	0.851	1.21	2.85	0.042
added	21,900	0.046	0.589	0.45	3.61	0.069
	97,400	0.094	0.792	1.04	3.02	0.048
F3-F4 Est. 1	42,700	0.124	1.010	1.39	11.45	0.024
added	22,400	0.064	1.270	0.20	1.88	0.052
	65,100	0.103	1.100	0.98	8.16	0.034
<u>Totals MUZ above R2</u>						
Est. 1	118,200	0.114	0.908	1.28	5.96	0.035
added	44,300	0.055	0.932	0.32	2.74	0.060
	162,500	0.098	0.915	1.02	5.08	0.042
<u>MUZ: R1-R2</u>						
F2-F3 Est. 1	316,400	0.164	0.287	1.88	3.29	0.034
added	196,500	0.069	0.054	0.21	0.73	0.062
	512,900	0.129	0.199	1.25	2.32	0.046
F3-F4 Est. 1	229,600	0.157	0.219	1.71	2.91	0.087
	558,200	0.047	0.013	0.22	0.62	0.105
	787,800	0.079	0.073	0.66	1.28	0.100
<u>Totals MUZ: R1-R2</u>						
Est. 1	546,000	0.161	0.258	1.81	3.13	0.056
added	754,700	0.054	0.024	0.23	0.66	0.095
	1,300,700	0.099	0.123	0.89	1.69	0.079
<u>Totals MUZ</u>						
Est. 1	664,200	0.153	0.374	1.72	3.63	0.052
added	799,000	0.054	0.075	0.22	0.77	0.094
	1,463,200	0.099	0.211	0.90	2.07	0.075
<u>MLZ</u>						
F2-F2A Est. 1	190,100	0.063	1.427	1.08	11.05	0.019
F2A-F3 Est. 1	319,000	0.126	0.599	2.26	3.80	0.046
added	1,800	0.077	0.001	0.84	0.29	0.054
	320,800	0.125	0.596	2.25	3.78	0.046
<u>Totals MLZ</u>						
Est. 1	509,100	0.102	0.908	1.82	6.51	0.036
added	1,800	0.077	0.001	0.84	0.29	0.054
	510,900	0.102	0.907	1.81	6.49	0.036
<u>TOTALS MUZ+MLZ</u>						
Est. 1	1,173,300	0.131	0.606	1.76	4.88	0.045
added	800,800	0.054	0.074	0.23	0.55	0.091
	1,974,100	0.100	0.391	1.14	3.21	0.065
15% dilution	2,270,000	0.087	0.340	0.99	2.79	0.057
<u>TOTALS MUZ+MLZ+UHP</u>						
Est. 1	1,234,400	0.136	0.632	1.81	4.71	0.046
added	800,800	0.054	0.074	0.23	0.55	0.091
	2,035,200	0.104	0.414	1.19	3.16	0.065
15% dilution	2,340,000	0.090	0.360	1.04	2.75	0.057



ESTIMATE 3

Including stringer zone non-massive sulphides which adjoin the massive sulphides.

Zone	Tons	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
<u>UHP</u>	61,100	0.244	1.146	2.72	1.37	0.069
<u>MUZ above R2</u>						
F2-F3 Est. 2	97,400	0.094	0.792	1.04	3.02	0.043
added	108,800	0.030	0.157	0.29	2.09	0.037
	206,200	0.060	0.457	0.64	2.53	0.042
F3-F4 Est. 2	65,100	0.103	1.100	0.98	8.16	0.034
<u>Totals MUZ above R2</u>						
Est. 2	162,500	0.098	0.915	1.02	5.08	0.042
added	108,800	0.030	0.157	0.29	2.09	0.037
	271,300	0.070	0.611	0.72	3.88	0.040
<u>MUZ: R1-R2</u>						
F2-F3 Est. 2	512,900	0.129	0.199	1.25	2.32	0.046
added	334,700	0.045	0.019	0.34	0.46	0.046
	847,600	0.096	0.128	0.89	1.59	0.046
F3-F4 Est. 2	787,800	0.079	0.073	0.66	1.28	0.100
added	502,900	0.046	0.014	0.20	0.08	0.056
	1,290,600	0.066	0.050	0.48	0.81	0.083
<u>Totals MUZ: R1-R2</u>						
Est. 2	1,300,700	0.099	0.123	0.89	1.69	0.079
added	837,500	0.045	0.016	0.25	0.24	0.051
	2,138,200	0.078	0.081	0.64	1.12	0.068
<u>Totals MUZ</u>						
Est. 2	1,463,200	0.099	0.211	0.90	2.07	0.075
added	946,300	0.044	0.032	0.26	0.44	0.050
	2,409,500	0.077	0.141	0.65	1.43	0.065
<u>MLZ</u>						
F2-F2A Est. 2	190,100	0.063	1.427	1.08	11.05	0.019
F2A-F3 Est. 2	320,800	0.125	0.596	2.25	3.78	0.046
added	23,900	0.053	0.078	0.91	0.89	0.003
	344,700	0.120	0.560	2.16	3.58	0.043
F3A-F4	235,700	0.062	0.001	0.39	0.11	0.020
<u>Totals MLZ</u>						
Est. 2	510,900	0.102	0.907	1.81	6.49	0.036
added	259,600	0.061	0.008	0.44	0.18	0.018
	770,500	0.088	0.603	1.35	4.36	0.030
<u>TOTALS</u>						
MUZ+MLZ Est. 2	1,974,100	0.100	0.391	1.14	3.21	0.065
added	1,205,900	0.048	0.027	0.30	0.38	0.043
	3,180,000	0.080	0.253	0.82	2.14	0.057
15% dilution	3,657,000	0.070	0.220	0.71	1.86	0.050
<u>MUZ+MLZ+UHP</u>						
Est. 2	2,035,200	0.104	0.414	1.19	3.16	0.065
added	1,205,900	0.048	0.027	0.30	0.38	0.043
	3,241,000	0.083	0.272	0.86	2.13	0.057
15% dilution	3,727,000	0.072	0.237	0.74	1.85	0.050

Drill holes included in the estimates:

Estimate 1	UHP	22, 9, 33, 48, 3
	MUZ above R2, F2-F3	41, 8, 13, 35
	F3-F4	35
	MUZ: R1-R2, F2-F3	18, 13, 26, 30, 43
	F3-F4	24, 10, 6, 23
	MLZ F2-F2A	43, 56, 38
	F2A-F3	30, 10, 4, 18, 27, 13

Estimate 2: Drill holes added or with increased tonnage

	MUZ above R2, F2-F3	13
	F3-F4	35
	MUZ: R1-R2, F2-F3	13, 24, 30, 10, 6, 43
	F3-F4	23, 16, 15, 24, 10, 6
	MLZ F2A-F3	4

Estimate 3: Drill holes added or with increased tonnage

	MUZ above R2, F2-F3	35, 13
	MUZ: R1-R2, F2-F3	13, 24, 30, 10, 6, 16
	F3-F4	16, 19, 15, 23
	MLZ F2A-F3	4, 18, 27
	F3A-F4	1, 15, 19



## OBSERVATIONS

The sulphide mineralization included in reserves is terminated to the south at fault F2. Large, angular, blocks of massive sulphides are found in fault F1 and in the area F1-F2 below R1. An example is the south zone explored by Selco. These large sulphide blocks occur over a wide range above, below and laterally from the known massive sulphide area. Obviously, there has been considerable later movement along F1. The significance of this and the implications for possible additional massive sulphides south of F1 require further study.

The distribution of the various base metal sulphides within each pod indicates a complex depositional history. It is apparent that the deposit was built up from a long series of exhalative events from a group of vents. Each individual event had its own mineralogical zoning, from the source vent outward: chalcopyrite, sphalerite, and pyrite with cobalt. As a result pockets of high concentrations of chalcopyrite or sphalerite are scattered throughout the deposit. Gold mineralization is widespread with an apparent association with chalcopyrite. Two prominent events are identified by copper-rich zones overlying zinc in the north end of the MUZ and zinc-rich zones overlying copper in the MLZ. It appears that there is sufficient continuity to the higher grade horizons and that they could be mined separately.

## EXPLORATION POTENTIAL

The exploration potential in the Turner-Albright deposit for additional mineralization is good. The new structural interpretation is permissive for extensions to the massive sulphides in a number of locations.

The UHP (TAB 33), north of F4, is open for extension down dip to the southeast. Potentially 50,000 tons could be added to this high grade pod. Surface mapping has located a small massive sulphide zone to

the north. Faulting in this area is intense, but a faulted extension of sufficient size to be mined may be present.

The gossan zones above the UHP and MUZ are not included in reserves. No work has been done on the gossans in recent years. Old records indicate that they do contain appreciable gold. Possible tonnage is modest.

The new structural interpretation indicates that the area above R2 is an extension of the MUZ. Few holes have been drilled into this area and additional mineralization is probable. Maximum potential is about 400,000 tons. The massive sulphide fault block in F1 (South Zone) may be from this zone.

The South Zone has not been included in reserves. There is uncertainty as to the actual size of this fault block of massive sulphides. Drilling has indicated the possibility of other large fault blocks of massive sulphides within F1. Some of these may prove to be large enough to be mined.

The MLZ has the best potential for locating substantial additional tonnage. See figure 1. TAB 43 and 56 cut true thicknesses of sulphides of 67 and 87 feet respectively. The zone is thickening to the east. Both holes had extremely good continuity of values throughout these intersections. Holes TAB 10 and 27 cut true thicknesses of 142 and 93 feet of good grade sulphides respectively. No drill holes cut the favorable horizon in the wedge immediately to the north. The sulphides in this area have an apparent strike of  $N70-80^{\circ}E$  and dip  $50^{\circ}S$  so that extensions to the east are essentially along strike. The distance between F2 and F3A is approximately 300 feet. A 100-foot extension of the zone to the east with the apparent 80 to 100 foot thickness would add 400,000 tons. The easternmost hole drilled, TAB 56, cut a true thickness of 86 feet which averaged 0.060 ounces gold per ton, 1.228 ounces silver per ton, 1.20 percent copper, and 9.86 percent zinc.



Massive sulphides are found immediately north of F2. The area F1 to F2 appears to be strongly sheared. Large massive sulphide blocks are found within F1. This strongly suggests that there should be an extension of the massive sulphides south of F1. The size and grade of the massive sulphides at F2 make this a target worth pursuing. Hole TAB 59 tested an area south of F1 immediately south of the MLZ without success. It appears probable that there has been substantial later movement along F1. Determining the displacement along F1 is made difficult by the lack of a good marker horizon other than the sulphides. Also the strike of the sulphide body is not known with certainty. The attitudes obtained from depositional contacts in the MLZ probably relate only to the individual blocks and are not indicative of the overall strike. Research into this displacement problem is hampered by a lack of stratigraphic data south of the fault. Detailed surface geological mapping is currently in progress in this area and may provide some useful information.

RAYROCK MINES, INC.

TAB PROJECT

TABLE OF SIGNIFICANT INTERSECTIONS

Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-1	128.0	159.0	31.0	0.099	0.353	0.223	1.088	0.121
	253.0	288.0	35.0	0.039	0.357	0.124	0.813	0.081
	288.0	313.0	25.0	0.056	0.366	0.108	1.600	0.084
	253.0	313.0	60.0	0.046	0.361	0.118	1.141	0.083
	410.0	598.0	188.0	0.047	0.085	0.047	0.495	0.047
	977.6	1130.0	152.4	0.054	0.050	0.244	0.096	0.021
TAB-3	96.0	115.5	19.5	0.493	2.221	5.170	2.418	0.067
	507.0	546.0	39.0	0.189	0.202	0.164	0.473	0.107
TAB-4	923.0	940.0	17.0	0.071	Nil	0.590	0.135	0.048
	940.0	955.0	15.0	0.083	Nil	1.117	0.457	0.061
	923.0	955.0	32.0	0.077	Nil	0.837	0.286	0.054
	940.0	1090.0	150.0	0.105	0.090	1.355	0.739	0.034
	955.0	1090.0	135.0	0.108	0.090	1.381	0.770	0.031
	923.0	1090.0	167.0	0.102	0.090	1.277	0.678	0.036
	1090.0	1147.1	57.1	0.040	0.070	0.346	0.411	0.007
	1245.0	1262.0	17.0	0.079	0.145	1.096	2.199	0.014
TAB-6	392.8	420.0	27.2	0.148	1.232	0.962	4.340	0.120
	425.0	442.5	17.5	0.294	0.305	1.587	6.649	0.056
	392.8	442.5	49.7	0.185	0.781	1.090	4.758	0.086
	442.5	508.0	65.5	0.041	0.020	0.165	0.750	0.117
	508.0	547.0	39.0	0.094	0.012	0.058	0.862	0.118
	547.0	615.7	68.7	0.071	Nil	0.065	0.799	0.077
	615.7	658.0	42.3	0.111	0.033	0.167	1.942	0.045
	508.0	658.0	150.0	0.088	0.012	0.092	1.138	0.078
	658.0	711.0	53.0	0.081	0.010	0.228	0.372	0.021
	508.0	711.0	203.0	0.086	0.012	0.127	0.938	0.063



Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-8	242.5	263.5	21.0	0.172	0.512	1.810	5.405	0.030
TAB-9	181.8	196.5	14.7	0.040	0.648	0.223	0.331	0.079
	196.5	205.7	9.2	0.205	0.239	1.912	1.746	0.090
	181.8	205.7	23.9	0.104	0.491	0.873	0.876	0.084
TAB-10	278.0	292.0	14.0	0.161	0.247	1.390	0.280	0.163
	292.0	302.0	10.0	0.003	Nil	0.060	0.130	0.003
	302.0	310.0	8.0	0.042	Nil	0.510	0.140	0.081
	310.0	330.0	20.0	0.253	0.060	3.860	0.840	0.063
	330.0	380.0	50.0	0.106	0.050	0.390	4.810	0.103
	380.0	490.0	110.0	0.075	0.020	0.070	0.670	0.087
	490.0	555.0	65.0	0.066	Nil	0.510	0.080	0.036
	555.0	610.0	55.0	0.023	Nil	0.140	0.210	0.016
	278.0	310.0	32.0	0.082	0.108	0.750	0.200	0.093
	310.0	380.0	70.0	0.148	0.054	1.380	3.680	0.092
	278.0	490.0	212.0	0.100	0.050	0.608	1.590	0.089
	670.0	730.0	60.0	0.259	0.284	3.430	0.350	0.112
	730.0	755.0	25.0	0.097	Nil	0.940	0.500	0.078
	755.0	785.0	30.0	0.073	0.070	2.190	0.270	0.065
	785.0	850.0	65.0	0.068	0.177	1.380	3.090	0.025
	850.0	880.0	30.0	0.088	0.020	1.430	1.830	0.018
	670.0	755.0	85.0	0.211	0.200	2.690	0.390	0.102
	670.0	880.0	210.0	0.130	0.150	2.040	1.410	0.061
	1025.0	1075.0	50.0	0.044	0.010	0.160	0.100	0.109
TAB-13	285.0	310.0	25.0	0.042	0.588	0.459	3.600	0.071
	310.0	330.0	20.0	0.092	0.523	1.483	3.050	0.066
	330.0	355.0	25.0	0.022	0.086	0.116	3.580	0.029
	285.0	330.0	45.0	0.065	0.559	0.914	3.360	0.068
	285.0	355.0	70.0	0.049	0.390	0.629	3.440	0.054
	355.0	400.0	45.0	0.002	0.088	0.016	0.390	0.006

Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-13 contd.	400.0	445.0	45.0	0.134	0.013	0.720	0.410	0.036
	445.0	500.0	55.0	0.065	0.103	0.500	0.250	0.012
	500.0	550.0	50.0	0.024	0.003	0.130	0.150	0.023
	550.0	575.0	25.0	0.090	0.001	0.620	0.140	0.030
	575.0	715.0	140.0	0.031	0.017	0.280	0.450	0.019
	400.0	500.0	100.0	0.096	0.063	0.599	0.321	0.023
	400.0	575.0	175.0	0.075	0.037	0.470	0.250	0.024
	878.5	919.5	41.0	0.080	0.924	0.790	2.580	0.069
	919.5	965.0	45.5	0.017	0.041	0.280	0.120	0.011
	934.4	937.7	3.3	0.206	0.550	3.500	0.180	0.110
	965.0	1055.0	90.0	0.072	0.190	1.030	1.500	0.010
	878.5	1055.0	176.5	0.060	0.322	0.780	1.400	0.024
	1105.0	1115.0	10.0	0.122	0.025	1.790	2.460	0.006
	1180.0	1240.0	60.0	0.067	0.171	0.340	1.150	0.025
TAB-15	250.0	260.5	10.5	0.170	0.865	1.150	5.596	0.035
	290.5	300.0	9.5	0.024	0.001	0.148	0.200	0.081
	300.0	325.0	25.0	0.026	0.001	0.134	2.992	0.126
	325.0	420.0	95.0	0.042	0.001	0.231	0.303	0.135
	420.0	455.0	35.0	0.109	0.009	0.736	0.177	0.073
	455.0	495.0	40.0	0.075	0.020	0.478	0.093	0.041
	420.0	495.0	75.0	0.091	0.010	0.598	0.519	0.056
	300.0	455.0	155.0	0.055	0.001	0.330	0.708	0.120
	300.0	495.0	195.0	0.059	0.001	0.360	0.582	0.103
	830.0	840.0	10.0	0.141	0.001	0.165	0.032	0.031
TAB-16	825.0	860.0	35.0	0.076	0.001	0.101	0.053	0.023
	194.8	222.0	27.2	0.095	0.149	0.594	2.424	0.054
	222.0	275.0	53.0	0.014	0.005	0.118	0.522	0.091
	275.0	310.0	35.0	0.045	0.001	0.201	3.500	0.110
	310.0	380.0	70.0	0.037	0.001	0.225	0.805	0.096
	380.0	440.0	60.0	0.095	0.001	0.081	0.335	0.066
	440.0	500.0	60.0	0.032	0.035	0.057	0.475	0.110



Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-16 contd.	500.0	545.0	45.0	0.049	0.015	0.147	0.167	0.034
	194.8	310.0	115.2	0.043	0.038	0.255	1.876	0.088
	275.0	440.0	165.0	0.060	0.001	0.167	1.206	0.088
	310.0	440.0	130.0	0.064	0.001	0.158	0.588	0.082
	194.8	440.0	245.2	0.054	0.001	0.204	1.193	0.085
	194.8	545.0	350.2	0.050	0.001	0.171	0.938	0.083
TAB-18	380.0	510.0	130.0	0.087	0.107	0.906	2.752	0.024
	920.7	985.0	64.3	0.064	0.365	1.320	6.550	0.024
	950.0	1030.0	80.0	0.102	0.314	2.294	3.800	0.015
	920.7	1030.0	109.3	0.088	0.318	1.918	4.800	0.020
	1030.0	1050.0	20.0	0.052	0.013	1.090	0.960	0.010
	920.7	1050.0	129.3	0.082	0.271	1.790	4.210	0.018
TAB-19	520.0	610.0	90.0	0.042	0.001	0.185	0.081	0.075
	550.0	595.0	45.0	0.051	0.001	0.147	0.080	0.067
	755.0	885.0	130.0	0.054	0.003	0.429	0.076	0.023
	885.0	950.0	65.0	0.071	0.024	0.508	0.163	0.012
	755.0	950.0	195.0	0.060	0.010	0.455	0.105	0.019
TAB-20	385.0	490.0	105.0	0.014	0.043	0.088	0.090	0.058
	490.0	545.0	55.0	0.027	0.001	0.089	0.132	0.116
TAB-21	330.0	470.0	140.0	0.022	0.016	0.177	0.127	0.110
TAB-22	190.0	215.0	25.0	0.058	0.068	0.228	1.184	0.067
TAB-23	170.0	185.0	15.0	0.051	0.001	0.520	3.517	0.083
	185.0	305.0	120.0	0.027	0.109	0.179	0.525	0.092
	305.0	395.0	90.0	0.053	0.065	0.182	2.149	0.112
	395.0	425.0	30.0	0.053	0.001	0.293	0.848	0.130
	425.0	445.0	20.0	0.130	0.001	1.620	0.750	0.118

Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-23 contd.	445.0	505.0	60.0	0.053	0.001	0.511	0.168	0.125
	170.0	505.0	335.0	0.048	0.057	0.351	1.074	0.109
	505.0	565.0	60.0	0.080	0.001	0.378	0.083	0.074
	170.0	565.0	395.0	0.052	0.048	0.355	0.923	0.103
	565.0	685.0	120.0	0.052	0.001	0.505	0.277	0.047
	685.0	720.0	35.0	0.033	0.161	0.123	0.039	0.106
	720.0	745.0	25.0	0.107	0.001	0.229	0.088	0.070
	505.0	745.0	240.0	0.062	0.024	0.389	0.174	0.065
	565.0	745.0	180.0	0.056	0.032	0.393	0.205	0.062
	1190.0	1245.0	55.0	0.036	0.032	0.264	0.169	0.023
	1245.0	1320.0	75.0	0.033	0.009	0.114	0.107	0.048
	1190.0	1320.0	130.0	0.034	0.018	0.178	0.133	0.037
TAB-24	265.0	290.0	25.0	0.027	0.192	0.100	0.940	0.063
	290.0	330.0	40.0	0.221	0.245	5.210	0.840	0.036
	330.0	350.0	20.0	0.038	0.360	0.070	4.550	0.101
	350.0	375.0	25.0	0.004	0.001	0.030	0.120	0.003
	375.0	425.0	50.0	0.076	0.001	0.425	0.101	0.017
	425.0	490.0	65.0	0.035	0.007	0.290	0.170	0.022
	290.0	350.0	60.0	0.160	0.284	3.520	1.570	0.058
	265.0	350.0	85.0	0.121	0.257	2.510	1.750	0.059
TAB-26	408.5	415.0	6.5	0.053	0.001	0.480	0.310	0.092
	415.0	440.0	25.0	0.030	0.061	0.260	5.340	0.044
	440.0	455.0	15.0	0.059	0.001	0.270	1.710	0.055
	455.0	495.0	40.0	0.512	0.841	8.210	3.770	0.035
	415.0	495.0	80.0	0.276	0.440	4.240	3.870	0.042
	408.5	495.0	86.5	0.260	0.407	3.950	3.610	0.045



Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-27	730.5	770.0	39.5	0.052	1.310	1.440	10.320	0.020
	750.0	855.0	105.0	0.087	0.257	1.620	2.370	0.032
	750.0	795.0	45.0	0.098	0.367	2.010	2.940	0.041
	795.0	855.0	60.0	0.079	0.175	1.330	1.940	0.025
	730.5	795.0	64.5	0.086	0.804	1.837	6.606	0.036
	730.5	855.0	124.5	0.083	0.501	1.547	4.358	0.031
	855.0	870.0	15.0	0.048	0.147	1.050	0.920	0.007
TAB-30	395.0	420.0	25.0	0.061	0.186	0.520	0.290	0.109
	420.0	485.0	65.0	0.219	0.274	1.550	4.700	0.034
	395.0	485.0	90.0	0.175	0.250	1.260	3.480	0.055
	485.0	505.0	20.0	0.017	0.080	0.150	0.265	0.005
	505.0	520.0	15.0	0.125	0.250	1.790	0.470	0.008
	485.0	520.0	35.0	0.063	0.153	0.850	0.350	0.006
	420.0	520.0	100.0	0.165	0.232	1.310	4.480	0.024
	395.0	520.0	125.0	0.144	0.223	1.150	3.640	0.082
	748.8	800.0	51.2	0.149	2.073	2.430	11.070	0.061
	770.0	833.5	63.5	0.214	1.470	4.420	5.970	0.049
	748.8	833.5	84.7	0.172	1.660	3.410	7.220	0.048
	666.7	677.5	10.8	0.103	0.079	4.110	6.610	0.041
TAB-33	136.9	165.0	28.1	0.615	2.211	7.698	0.356	0.042
	165.0	190.0	25.0	0.083	0.938	1.606	3.675	0.094
	136.9	190.0	53.1	0.365	1.612	4.830	1.918	0.066
TAB-35	98.5	110.0	11.5	0.034	1.340	0.130	1.150	0.057
	98.5	125.0	26.5	0.064	1.270	0.200	1.880	0.052
	110.0	175.5	65.5	0.116	1.055	1.130	9.390	0.029
	98.5	175.5	77.0	0.103	1.100	0.980	8.160	0.034
	125.0	175.5	50.5	0.124	1.010	1.390	11.450	0.024
	175.5	185.0	9.5	Not sampled				
	185.0	245.0	60.0	0.021	0.100	0.225	1.134	0.031
	245.0	270.0	25.0	0.082	0.140	0.277	1.158	0.045

Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-36	607.0	608.2	1.2	0.025	0.180	1.540	1.170	0.032
	631.3	660.0	28.7	0.085	0.440	0.910	8.480	0.019
	660.0	701.5	41.5	0.034	0.230	0.530	1.870	0.015
TAB-37	478.2	483.3	5.1	0.075	0.280	3.340	0.140	0.028
	494.7	496.0	1.3	0.040	0.200	1.510	0.060	0.013
	499.0	506.5	7.5	0.038	0.170	1.660	0.500	0.019
	530.0	533.4	3.4	0.190	0.350	9.940	0.920	0.069
	537.5	550.0	12.5	0.041	0.160	2.620	0.090	0.023
	550.0	558.9	8.9	0.015	0.060	0.580	0.090	0.010
	537.5	558.9	21.4	0.030	0.150	1.770	0.090	0.018
TAB-41	167.5	178.6	11.1	0.117	2.660	1.540	7.310	0.043
	194.0	201.5	7.5	0.297	3.320	4.330	2.010	0.039
TAB-43	477.0	495.0	18.0	0.056	0.600	0.182	0.125	0.050
	495.0	530.4	35.4	0.100	2.071	0.873	1.863	0.070
	477.0	530.4	53.4	0.083	1.580	0.640	1.277	0.060
	746.0	840.3	94.3	0.071	2.010	0.730	14.560	0.029
TAB-48	136.3	145.0	8.7	0.047	0.800	0.054	0.107	0.073
	145.0	159.7	14.7	0.251	1.692	2.059	0.218	0.064
	136.3	159.7	23.4	0.175	1.360	1.314	0.192	0.067
TAB-53	755.8	791.8	36.0	0.084	2.220	0.490	2.930	0.052



Hole No.	Interval		Core Length	Au oz/ton	Ag oz/ton	Cu %	Zn %	Co %
	From	To						
TAB-56	742.6	748.5	5.9	0.090	6.030	2.150	8.610	0.020
	748.5	751.0	2.5	0.006	0.070	0.090	0.390	0.003
	751.0	760.0	9.0	0.003	1.190	0.060	1.060	0.010
	742.6	760.0	17.4	0.033	2.670	0.770	3.520	0.012
	760.0	835.0	75.0	0.059	1.440	0.800	15.510	0.021
	815.0	870.0	55.0	0.080	0.530	1.860	4.140	0.010
	815.0	860.0	45.0	0.080	0.640	2.060	4.780	0.010
	760.0	870.0	110.0	0.060	1.180	1.170	10.460	0.019
	742.6	870.0	127.4	0.060	1.380	1.120	9.510	0.018
	870.0	895.0	25.0	0.013	0.040	0.188	0.358	0.001
	895.0	910.0	15.0	0.021	0.290	0.440	3.650	0.002
	910.0	921.0	11.0	0.055	3.280	0.380	16.810	0.009
	895.0	921.0	26.0	0.036	1.560	0.420	9.220	0.005
	991.8	995.0	3.2	0.308	0.190	1.120	0.440	0.027