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## 1.0 Introduction

Skyline Explorations Ltd. has been actively exploring the Reg claim group on Johnny Mountain in the lower Iskut River area of British Columbia since 1980. In 1986 a program consisting of underground development of surface explored veins and continuing surface drilling was undertaken. The program was estimated to cost \$625,000, and application was made for financial assistance from the government of British Columbia under its Financial Assistance for Mineral Exploration Program.

In a letter dated July 4, 1986, financial assistance in the amount of \$100,000 was granted to Skyline by Anthony J. Brummet, Minister, Department of Energy, Mines and Resources.

This report is submitted in compliance with the regulations governing this grant.

## 2.0 Program Summary

The program was initiated on June 1986 and at the date of writing was still in progress. During the period reported on herein (June 1-September 30, 1986), a total of 21 surface diamond drill holes totalling 3,339 feet were drilled and 1,080 feet of underground development completed. Statements of expenditures are appended to this report.

Major highlights of the program are the intersection and development of both the target zones (Cloutier and 16) as well as a third hitherto unknown zone between the Cloutier and 16 zones. All three zones contain good mining widths (8' and greater), and contain good visual gold with assays indicating ore grade mineralization over substantial strike lengths. An example is the Cloutier west drift where the arithmetic average of 189 samples for a length of 124' over the width of the drift returned an average uncut grade of 0.659 oz/ton gold.

Development of the 16 Zone and the third zone (now referred to as the Zephrin Zone) is progressing.

An underground drill program of some 10,000 feet was commenced in the first

## 5.0 History

Work on the property dates back to 1907 when a number of veins and stringers were reported to contain galena and gold-silver bearing mineralization.

Sporadic work is reported until 1954 when Hudsons Bay Mining & Smelting located the Pick Axe Zone and by 1961 had drilled 5 holes totalling 810 feet. Subsequently, Cominco and Texasgulf worked in the area.

In 1980, Skyline re-staked the area and commenced the program leading up to this year's work. Assistance with this work was provided by Placer Development (1983) and Anaconda Canada Ltd. (1984). Both companies dropped their interest, and in 1985 Skyline continued the development program of trenching and drilling which identified the zones presently being developed underground.

## 6.0 Regional Geology

The area contains a complex assemblage of Paleozoic through Cenozoic sedimentary and volcanic rocks with Triassic to Tertiary intrusion of the Coast Plutonic Complex. Extensive structural modification of this assemblage has occurred, notably major east-west trending thrusts along the Iskut and the King Salmon Fault, along with more minor movements and deformations. For a detailed discussion, please refer to Grove, pp. 13-19 incl. appended.

## 7.0 Property Geology

Erosion has exposed a window of intercalated volcanoclastic, feldspar-porphyry and mixed sedimentary rocks on Johnny Mountain.

In the main gold zone sequence, feldspar-porphyry members are sandwiched with medium to dark green volcanoclastics of a primarily acidic volcanic sequence.

Deformation within these rocks has been variable with textures ranging from

fine schistose to coarse breccias. Sericitization, carbonatization and pyritization are seen as alteration products.

Structurally, rocks in the gold zone sequence has been cut by a number of discrete faults, as well as more complex shears. Of these, the north-trending faults appear to be the most important.

This extensive structural activity has resulted in the development of a system of mineralized shears and veins which possibly represent local remobilization in and around the major sulphide lenses of the volcanoclastic sequence. These now also appear to be controlled by major fracture zones trending 050°-055°/60°-80°N. Again, please refer to Grove, pp. 19-25, for detailed discussion.

## 8.0 Mineralization

A large number of mineralized structures and areas are known to occur on Johnny Mountain and are discussed by Grove. For the purpose of this report the writer will restrict himself to the zones pertaining to the underground development of this year.

### 8.1 Cloutier Zone

First discovered in the P-12 trench, disseminated fine to medium-grained pyrite and chalcopyrite veins in volcaniclastics were noted. Assay results from this trench averaged 3.62% Cu, 1.26 oz/ton Ag, and 0.329 oz/ton Au over 7.2 feet in the 40 feet exposed by the trench. By 1985, drilling and trenching indicated a mineralized strike length of 1300 feet containing four gold-silver bearing sulphide lenses.

Mineralization appears controlled by a strong fracture system with an attitude of 053°/65°N.

## 8.2 16 Zone

First indicated by a VLF-EM anomaly and subsequently trenched and drilled between 1982 and 1985. The system has a hanging wall vein up to 8' in apparent width and a footwall vein up to 5' in apparent width.

Known strike length of the structure is 700 feet with additional strike length potential. The veins are largely banded coarse pyrite and quartz with "abundant" free gold and scattered galena, tetrahedrite and minor sulfosalts.

## 8.3 Zephrin Zone

This new zone has a different tenor than the two discussed above. Where the Cloutier and 16 have the appearance of a true fracture controlled vein system, the Zephrin zone consists of a brecciated smoky grey quartz containing fine native gold.

Within the drift it has been exposed for 45', which may or may not represent true width. The underground drill program commencing in November will allow a greater resolution of its extent and attitude.

Sixty-two samples of this material returned an uncut arithmetic average of 1.76 oz/ton gold.

Surface expression of this zone is a depression which most probably reflects the different tenor of the material and accounts for it not being recognized on surface.

Work on the main Stonehouse Gold Zone resumed in August starting with drilling the R-19 exposure. This was followed by drilling on the Pick Axe, '16', and Cloutier mineralization. In late September trenching and drilling was resumed on the R-19 and R-20 showings resulting in the discovery of high grade gold mineralization in two veins and the extension of the Stonehouse Gold Zone another 600 feet to the east for a total length of over 4,700 feet. In 1985 drilling on the Stonehouse Gold Zone included 24 core holes totalling about 6,000 feet. This work added to the definition of the mineral deposit and allowed a substantial increase in all categories of mineral reserves.

This report provides an overall interpretation of results from the various programs. The various geologic interpretations and calculations have been made by the writer from a growing, extensive data file.

#### GENERAL GEOLOGY

The writer's detailed and regional studies in the Stewart District have extended from the Iskut River to Alice Arm and have resolved many of the perplexing stratigraphic and lithostructural problems which still confuse most of the current workers (Table I). During the past four years the writer has been studying several mineral deposits found along the Iskut River east of Craig River. These rocks were mapped as pre-Permian and Triassic by Kerr on the basis of appearance. The shaly units forming Snippaker Mountain are fossiliferous and appear to represent variably deformed thick slabs of Carboniferous strata trending along the river and dipping northerly down the slope very much like the zone west of Craig River. The ridge east of Snippaker was also mapped in some detail in 1983 and 1984 and deformed units which include blocks of crinoidal Mississippian limestone form the crude dip slope. The property mapping provides information which suggests that these Carboniferous slope forming slabs unconformably overlie correlatives of the Middle Jurassic Betty Creek Formation and Lower Jurassic Unuk River Formation mapped as extending from Tom McKay Lake southeasterly through Stewart to Alice Arm.

The highly contorted, deformed nature of the Carboniferous strata can be seen in the steep cliffs between Bronson Creek and Snippaker Creek. The unconformable nature of the Carboniferous/Middle Jurassic overlap is well exposed on both sides of Snippaker Ridge north of Snippaker Peak. The same unconformable relationship between these major rock units appears to extend from Forrest Kerr Creek west along the Iskut River to the Stikine River junction. Present interpretation suggests an east-west trending thrust along the axis of the Iskut River which like the King Salmon Thrust Fault pushed up

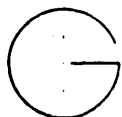
### STRUCTURE - REGIONAL

At present, rock structure is probably the least studied and understood element in the local geological picture, probably because of the apparent simplicity of the system. The deeply eroded Iskut River valley trends due east-west over a length of 40 miles representing a major structural zone terminated on the west by the Tertiary Coast Plutonic Complex and on the east by the Late Jurassic/Cretaceous Meziadin Hinge or Graben (Grove, 1973). The Iskut zone marks one of the region's major thrusts involving Paleozoic strata that have been pushed southerly across Mesozoic units. Prior to this major event mass gravity sliding of Middle Jurassic and younger rocks across Lower Jurassic and Triassic strata took place during development of the Bowser Basin (Grove, 1972, 73). These major structures are exposed in the REG area and probably represent only part of the region's complex tectonic development.

### STRUCTURE - LOCAL

At the local scale the Stonehouse Gold Zone strata comprise a 3,200 foot thick sequence of dominantly lenticular feldspar porphyry with intercalated volcanic conglomerate and minor fine grained sedimentary members (Figure 4). These feldspar porphyry members form irregular lenses up to 450 feet thick trending about  $080^{\circ}/65^{\circ}\text{N}$ . A few bedding determinations in the epiclastic and sedimentary members of this sequence confirm this general attitude. At the west end of the Gold Zone the thinned out sedimentary bands expand to the northwest and swing to attitude  $100^{\circ}/55^{\circ}\text{N}$  marking the facies lens-out. Below the main Gold Zone the juncture of the hillside slope and hummocky Johnny Flats is marked by a strong northeast trending fault that separates the feldspar porphyry/volcaniclastic sequence from a thick, tightly folded, greywacke, lithic wacke, siltstone sequence. Movement on this fault is right lateral and exhibits about a 500 foot offset.

Rocks in the Gold Zone sequence have been cut by a number of discrete faults as well as more complex shears. Although numerous faults and narrow shears have been logged in the drill core only a few have been mapped in the surface outcrop. Of these the north trending faults appear to be the most important, but no major offsets have been determined. One northerly trending fault at the east end of the Gold Zone which cuts across the R-19 showing cuts across both the Betty Creek and underlying Unuk River Formation rocks forming a steep fault scarp along the west edge of Johnny Glacier. The Betty Creek strata have been dropped down on the east side suggesting a vertical offset of about 300 to 400 feet near the head of Johnny Glacier cirque.



Small scale structural features in the Gold Zone rocks include various cataclasites, semi-schists, minor schists, and fractures. The deformation features are marked by the development of secondary biotite and sericite imparting a strong foliation to the crushed rocks which is sub-parallel to rock contacts. No detailed studies of the fracture systems have yet been made but strong sets are present in all the various rock types. Kink-band zones trending  $160^{\circ}/V$  are common in the volcanoclastics and are commonly marked by late quartz-green chlorite veins and veinlets. Other late vein sets are also possibly in part representing local remobilization in and around the major sulfide lenses which now also appear to be controlled by major fracture zones trending  $050^{\circ}-055^{\circ}/60^{\circ}-80^{\circ}N$ .

Extensive outcrop areas are rare on Johnny Flats and along the steep slopes of Bronson Creek where Skyline explored a number of polymetallic sulfide showings in 1985. Scattered outcrop and trenches on Johnny Flats have revealed a ubiquitous flat to rolling phyllitic structure imposed upon the sedimentary rocks which has obscured primary structure. As previously indicated this structural feature which is sometimes marked by sericite relates to gravity sliding of the thick Betty Creek Formation strata down and across the underlying Unuk River strata.

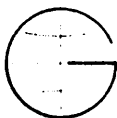
Scattered outcrop along Bronson Creek below the phyllite zone show open upright folds in the massive wacke and conglomerate and complex slump folds in the intercalated fine grained banded sedimentary members. The overall fold structure in this thick sedimentary package is still uncertain except that deformation becomes more complex towards the Iskut River where the strata have been both intruded by at least one large stock and extensively deformed under the sole of the major Iskut River thrust.

Work along Bronson Creek has disclosed that the Bonanza Zone sulfide mineralization is confined to strong, throughgoing shears cutting sharply across the folded sedimentary rocks. Three parallel shears have now been investigated by surface mapping, trenching and geophysics and by drill hole 84-51 and found to trend uniformly at about  $110^{\circ}/45^{\circ} W$ . Each of these shears is marked by sericite, calcite, quartz and sulfide alteration and replacement.

## MINERALIZATION

### STEWART DISTRICT

More than 500 mineral deposits have been found within the various rocks forming the Stewart Complex. Of these, 70



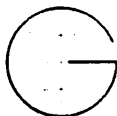
deposits have shown some production including the world class Hidden Creek and Granduc copper mines, the B.C. Molybdenum mine, the Silbak Premier gold-silver base metal mine, and the Torbrit-Dolly Varden silver mine, as well as 16 other major B.C. producers. All of these mineral deposits plus several hundred other small or poorly explored showings are located in Mesozoic and Cenozoic units bounded by the Coast Plutonic Complex on the west and the Upper Jurassic strata forming part of the Bowser Basin on the east. The northerly limit of this irregular area lies crudely along the Iskut River where Paleozoic strata predominate.

#### STONEHOUSE GOLD ZONE

Nomenclature of the various parts of the Gold Zone still retains the flavour of the original prospect finds. These showings include the original Pick Axe, P-10, P-13, No. 16, R-19, and R-20 (Figure 5). Early work on the original Pick Axe find included two short drill holes and a narrow trench which exposed a four foot wide massive sulfide lens over a length of about 40 feet comprising coarse grained pyrite with inclusions of altered country rock cut by lenses, pods and irregular veins of chalcopyrite, quartz and calcite. This material gave assays of up to 11.0 per cent copper, 8.42 ounces/ton silver, and 0.732 ounces/ton gold. Further sampling averaged 5.4% copper, 4.0 ounces silver and 0.28 ounces/ton gold across 30.0 feet. Subsequent review of the core from holes 81-1 and 81-2 confirmed the grade and showed that the host rock was a strongly brecciated, altered feldspar porphyry. In 1984 Anaconda cleaned off a large area around the Pick Axe showing exposing a zone width of at least 70 feet in which pyrite and chalcopyrite are found disseminated and as lenses, pods and veins.

In 1985 these showings were mapped and Skyline drilled five short core holes through the western end of the original Pick Axe showing. This work has revealed a zone of extensive pyritization, pods and lenses of chalcopyrite/pyrite, extensive K feldspar alteration and abundant late quartz-chlorite veining. This mineralized rock is marked by low angle cataclastic deformation and by several low angle faults. At present this portion of the zone represents only a small fraction of the overall mineral reserves.

The Cloutier mineralization was first reported from the P-12 trench prospect which revealed disseminated fine to medium grained pyrite and chalcopyrite veins in volcanoclastics. The assay results from this trench over a length of 40 feet averaged 3.62 per cent copper, 1.26 ounces silver and 0.329 ounces/ton gold across 7.2 feet. Drilling in 1982 to outline the extension of the Cloutier zone intersected high grade mineralization in





holes 82-11, and in 82-14 which included visible free gold. Core rejects from this 1982 drilling were examined by Placer geologists who recognized a wide variety of sulfide and sulfosalt minerals.

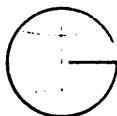
Metallic minerals identified from the high grade Cloutier drill core include:

arsenopyrite (rare)	galena	molybdenite
bornite	native gold	pyrargyrite
chalcopyrite	hematite	pyrite
covellite	ilmenite	sphalerite
electrum	magnetite	stephanite
→ enargite	marcasite	tetrahedrite

As a result of trenching, mapping and drilling in 1983, 1984, and 1985 the Cloutier mineralization has now been shown to extend over a length of 1,300 feet and now includes four gold-silver bearing sulfide lenses three of which are included in the mineral reserve calculations. The general trend of the mineralization which is  $053^{\circ}/65^{\circ}N$  cuts across the host country rocks at an acute angle reflecting a strong fracture control. This mineral system remains open horizontally and at depth but the relationship to the '16' mineralization has yet to be determined.

The '16' mineralization was indicated by a surface V.L.F.-E.M. anomaly and confirmed by drill holes 82-15 and 82-16 which intersected good to high grade gold-silver/sulfide mineralization. Four sulfide lenses have now been outlined over a length of about 500 feet and more lenses are indicated which remain to be drilled. The mineralogy of the '16' sulfide lenses is similar to the Cloutier except that chalcopyrite is less abundant, and galena and sphalerite are more abundant. The '16' lenses lie in the footwall of the Cloutier and in the hangingwall of the Pick Axe mineralization and like the latter lie along fractures cutting the volcaniclastic and volcanic country rocks which are marked by K feldspar flooding and general pyritization.

The 1985 trenching and drilling showed that the R-19 and R-20 mineralization which had been previously disregarded in spite of the strong geochemical gold anomaly are part of a high-grade quartz-pyrite vein system which has now been traced on the surface over a length of 700 feet below the toe of Johnny Glacier. The main vein has an apparent width of up to eight feet over this length and the footwall vein a width of up to five feet over about 200 feet. These veins are largely banded coarse pyrite and quartz with "abundant" free gold, with scattered galena, tetrahedrite, and minor sulfosalts.



The attitude of these new veins as well as the strong V.L.F.-E.M. conductor axis suggest that this mineralization represents the easterly extension of the broad low grade Pick Axe showing. Most of the 850 foot long interval between these showings is covered by thick marginal moraine leaving the easterly extension for further surface trenching and core drilling.

In summary, surface work and core drilling have shown that the Stonehouse Gold Zone mineralization comprises a number of gangue minerals, simple sulfide minerals and native gold and electrum, localized as overlapping lenses within a steep, complex fracture system cutting across altered country rocks. The fracture zone has now been shown to have a length of at least 4,750 feet with a width of at least 900 feet which has so far been partly explored to a depth of only 525 feet. A number of other mineralized showings exposed in the area south of the main showings have not yet been studied and suggest that the 3,200 foot thick volcanoclastic-volcanic section requires further examination.

#### ZONING

Drilling has confirmed that there are at least seven overlapping sulfide-rich lenses with a similar mineralogy in the Cloutier-16 portion of the Gold Zone. The proposed outline of each of these lenses based upon the available core drilling is shown here in a composite longitudinal projection (Figure 6). Unfortunately most of the 1983 holes were drilled to intersect geophysical rather than geological targets and, as a result, some were too short or in the wrong place to intersect the mineralization. Therefore, the proposed outlines reflect only drill limits, not mineral boundaries. These flexible boundaries reflect gold assay results above 3 grams/tonne, but as can be seen by the projections, high, medium, and low grades are apparently scattered within the lens outlines. Obviously, further core drilling is required to test and extend these limits.

Most of the cores were assayed for copper, silver, and gold and some were tested for a variety of elements including lead, zinc, and mercury. Contouring of these available results has produced the indication that first, the mineral content varies from lens to lens, and second, that there are high grade shoots within each lens. Copper content appears to be strongly variable with an average 1.55% in the Cloutier Main lens and only 0.01% in the Cloutier Footwall lens. Copper content also ranges from 0.54% in the '16' Hangingwall lens to 0.04% in the Footwall lens. With regard to metal concentration, contouring all the available assay data for each lens suggests that copper

and gold minerals together form crudely overlapping shoots plunging 40° to 50° northwesterly within both main lenses and in the '16' Hangingwall lens. The silver as well as the available zinc values appear to crudely follow lens outlines, but also appear to extend beyond the current outlines. Mercury results are very incomplete, but unlike gold, silver, copper, lead and zinc, mercury appears to cut across the Stonehouse Gold Zone in a roughly east-west direction forming a crude halo involving the Pick Axe, '16' and Cloutier lenses. Taken together these various clues provide possible guidance for further exploration.

#### ALTERATION

Macroscopic examination of the drill core revealed three major rock types including feldspar porphyry and volcanic conglomerate which are the major hosts to the local gold mineralization. The pyrite, chalcopyrite and other sulfides are intimately associated with quartz veins, calcite, biotite, sericite, K feldspar, epidote, and chlorite in late quartz veins. The writer stained 160 rock slices from 28 holes and also examined thin sections from each slice. The results of the staining show that K feldspar alteration has effected replacement of from a few per cent to almost 100 per cent of both porphyry and volcanoclastic rocks hosting the sulfides. Very fine quartz veinlets and stockwork with sulfides have cut the early K-feldspar alteration and have in turn been cut by later sulfide and calcite veins and veinlets. Rock forming minerals have also been altered to calcite, sericite, epidote and biotite clusters and lenses. Fine grained dark brown to black biotite is present throughout the mineral zone but generally in only scant amounts except in the R-19/R-20 veins. These veins comprise banded quartz and dark massive pyrite with dark selvages against the country rock host. Very fine black biotite makes up a significant part of the pyrite banding and forms most of the selvages. Together with the greater amount of quartz, and lesser K feldspar, this abundant dark biotite alteration marks an apparent change in the type and character of the Stonehouse Gold Zone mineralization to the east.

Although still incomplete, this study shows that the Gold Zone sulfide mineralization has an envelope of extensive K feldspar alteration and a biotite tail involving both volcanoclastics and feldspar porphyry. Because this envelope is broader and more extensive than the mineralization it provides a useful tool for local exploration.

Cataclastic deformation has imposed a platy or foliated fabric on these rocks which in part exhibit hartscheifer/recrystallization texture. Epidote is prominent in many of the volcanoclastic members ranging from small grains and pebbles to

cobble sized clasts. These are mainly detrital and secondary epidote is minor and largely associated with carbonate. Almost all of the chlorite is found as blebs, streaks, clots and veins in late quartz-calcite stringers which cut virtually all rocks in the general area including Betty Creek strata.

#### BONANZA ZONE

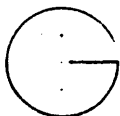
Exploration on the REG property concentrated on the Bonanza showings during the early part of the 1985 field season. This work involved tracing extensions of the 1984 Bonanza showing by ground geophysics, soil geochemistry, mapping, and trenching. Compilation of the 1984 trenching and core drilling suggested that the polymetallic showing was localized within a strong shear (Figure 7). Soil sampling, mapping and sampling on a detailed grid showed the extensive nature of the mineralized zone, and revealed the presence of two similar sub-parallel mineralized shears at lower elevations (Figures 8, and 9). Together these zones have been traced along the slope a length of over 4,600 feet with widths of up to 60 feet.

These showing comprise essentially stratabound pyrite, pyrrhotite, chalcopyrite, sphalerite, galena plus tetrahedrite replacement mineralization which shows evidence of sulfide remobilization into secondary fractures and kink folds. The shears cut sharply across the folded sedimentary sequence at about 110° and dip about 45° westerly. Alteration includes sericitization, carbonatization, silicification and pyritization which together have produced a bleached envelope in the otherwise dark sediments. Grab samples have assayed as high as 14.1% Cu, 405.5 oz./T Ag, and 2.88 oz./T Au, but the overall results from the trenching suggest a large tonnage that would grade about 0.7 per cent Cu, 0.6 per cent Pb, 3.5 per cent Zn, 3.7 oz./T Ag, and about 0.055 oz./T Au.

Skyline's work on the Bonanza area has shown the potential for large tonnages of relatively low grade mineralization. Continued exploration would be expensive because of the structure and location, and not pressing because of the current market conditions.

#### C-3 ZONE

The C-3 zone mineralization was first observed in 1983 but was not examined until 1985. The C-3 comprises a 3,600 foot wide pyritic alteration zone localized in sedimentary rocks near the north boundary of the REG property. Work in 1985 involving soil geochemistry, trenching, and mapping concentrated on a small accessible area west of the main Sky Creek showings. Results from this work showed the presence of massive pyrite



lenses 20 feet wide in K-feldspar, quartz, calcite alteration zones within the sediments (Figure 10). One pyrite lens assayed 1.790 oz./T Au across 12 inches. Other samples showed the presence of up to 3.51 oz./T Ag, and up to 5.8 per cent Cu plus minor lead and zinc. The C-3 zone is very large, has relatively easy access early in the season and could be explored when other priorities are satisfied.

#### GEOCHEMICAL AND GEOPHYSICAL SURVEYS - 1985

In 1985 geochemical soil surveys were successfully combined with a pulse electromagnetometer survey on the Bonanza area in order to trace the new sulfide zone (Figures 8, 10, 11). The geophysical work on Johnny Flats located a number of strong conductors which mainly reflected pyritic/pyrrhotitic lenses and shears with relatively low amounts of commercial sulfides, gold and silver as disclosed by trenching and core drilling. The Groove Ridge conductors were not correlated to any specific structure or mineral zone.

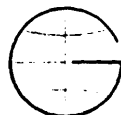
The V.L.F.-E.M. conductor axis connecting the Pick Axe and R-19/R-20 showings remains the most interesting feature worth exploring. This in conjunction with the strong geochemical soil gold anomaly overlying the R-19/R-20 vein system at the toe of Johnny Glacier, and the overlapping McFadden moraine train provide a good target area for further surface trenching and drilling.

#### MINERAL RESERVES

Sufficient surface work, core drilling and assaying have now been completed to make a preliminary estimate of the mineral reserves of the Stonehouse Gold Zone. Surface drilling carried out over a length of 4,700 feet within part of the Zone over a ~~width of 900 feet to a depth of 525 feet~~ has now confirmed the presence of at least eight gold bearing sulfide lenses and indicates the presence of several more.

Considerable work has also been done on the compilation of drill core sections and plans showing geology, mineralization and assay values (Figure 12). This material is voluminous and is not included here but has been reduced to vertical longitudinal sections to show the relative location of the drill holes, the relationship of the mineral lenses within the drilled zone and the true widths and grades of the assay intersections (Figure 6).

Both Placer and Anaconda surveyed the drill hole sites but these show differences in location of up to ten meters as well as variations in direction. In addition, the Gold Zone



survey is 'floating' and does not agree with the current topographic map. This poses a small problem with regard to mineral reserve calculations and could become a major problem if the proposed underground development and surface data are not tied precisely.

The calculations shown in the following reflect common operating practice, terminology and methodology. Core intersections grading 3.0 ppm Au and greater have been included as lens boundaries and internal material grading less than 3.0 ppm have also been included. No cut-off grade has yet been applied to the calculations, but this should be done when underground results are available. Likewise, no dilution factor has been applied to the tonnage calculations as this will probably vary from lens to lens and with mining methods. Tonnage has been calculated based upon a 65 foot (20 meter) square block, and a tonnage factor of 10 cubic feet per ton has been applied because of the generally heavy sulfide content.

REG PROPERTY

MINERAL RESERVES - 1985

TABLE II

DRILL INDICATED MINERAL RESERVES - CLOUTIER MAIN LENS

Drill Hole No.	True Width Ft.	oz./Ton		P e r C e n t			Tons
		Au	Ag	Cu	Pb	Zn	
3, 4, 5, 6	av. 10	.216	.415	1.23	.01	.01	4,238
9	16.5	.134	1.06	3.46	-	-	7,063
10	29.5	.271	1.25	3.48	-	-	10,171
11	32.8	.436	.31	.32	-	-	14,126
13	9.8	.388	.26	.37	-	-	2,851
14	19.0	3.418	1.55	.74	-	-	8,475
18	9.8	.167	.284	2.32	-	-	4,238
25	6.6	.10	.27	1.01	-	-	2,825
31	6.8	.232	.07	.01	-	-	2,851
80	13.0	.107	.41	-	-	-	5,595
81	25.0	.540	.360	-	-	-	10,716
TOTAL							73,194
Average (x)		.668	.663	1.55(+)	-	-	
Average (cut to 2x)		.427	.637	1.50(+)	-	-	

....continued

