

87-210-16024

REPORT ON THE ADAMS PLATEAU

Kamloops Mining Division, B.C.

NTS: 82M/4E

51°04.4' 119°37.2'

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P. Thiersch

FILMED

For ESSO MINERALS CANADA (Operator)

Owner: Adams Silver Resources Inc.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,024

APRIL 16, 1987

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SUMMARY

Stratiform, massive sulphide occurrences are exposed intermittently over a 2.5 km strike length within a volcanic-sedimentary rock sequence on Adams Plateau. The volcanic-sedimentary rock package has been mapped as part of the Paleozoic Eagle Bay Formation (Schiarizza and Preto, 1985) although recent lead isotope work suggest a Triassic age (Goutier, 1986). Rocks have been isoclinally folded into a gently north-northwest plunging synform. Most of the sulphide occurrences are on the western limb of the synform.

Apart from an airborne EM survey, most of the exploration to date has concentrated on finding and evaluating surface showings. EM geophysical surveys are of limited use to exploration, due to the extensive distribution of graphitic argillites within the stratigraphic sequence. Surface showings and shallow diamond drilling indicate that sulphides are laterally extensive but thin (less than 2 m) and of moderate grade (10% Pb + Zn; 100 gm Ag).

Sulphides occur near the contact between argillaceous limestone in the stratigraphic footwall and sericite-chlorite phyllite in the hanging wall. Sulphides are generally enclosed by a moderately well-developed alteration halo consisting of sericitization and local carbonatization and silicification. Characteristics of mineralization, alteration and host rock stratigraphy suggest distal volcanogenic mineralization deposited in a back-arc setting. Potentially, economic sized deposits may have formed, and be preserved, in paleo-topographic depressions. Tendency of tight fold hinges to form in zones of low competency, such as sulphide deposits, encourages drill testing of the sulphide horizon in a down-plunge, rather than down-dip, direction. Gravity surveys may contribute to defining favourable drill targets.

1.0 INTRODUCTION

1.1 Objectives

The Adams Plateau area has been explored intermittently for the last sixty years. Limited production has come from small surface operations on stratiform lead, zinc, silver and gold deposits. Recent exploration by Adams Silver Resources and regional geological studies by the B.C. Ministry of Energy, Mines and Petroleum Resources has shown that mineralization extends discontinuously for a 2500 m strike length along the westerly limb of the Nikwikwaia Syncline.

This study was initiated to evaluate the remaining exploration potential of the area and to propose drill targets in favourable areas. Present mineralization and associated alteration was examined to determine if a characteristic mineralogical or geochemical expression could be used to guide drilling towards the center of hydrothermal activity. Soil geochemistry was used to test for continuity of the mineralized horizon in areas of overburden and limited or no drilling. Detailed mapping was performed to establish the orientation of structural controls on localization of mineralization.

1.2 Location and Access

The Adams Plateau property is located 64 km northeast of Kamloops, B.C., on the east side of Adams Lake, at an elevation of 1700 m (Fig. 1). Access is provided by a system of logging roads that extend from various points along the northeast side of the Adams River. The most direct route is a 17 km gravel road that leads from paved highway at the south end of Adams Lake.

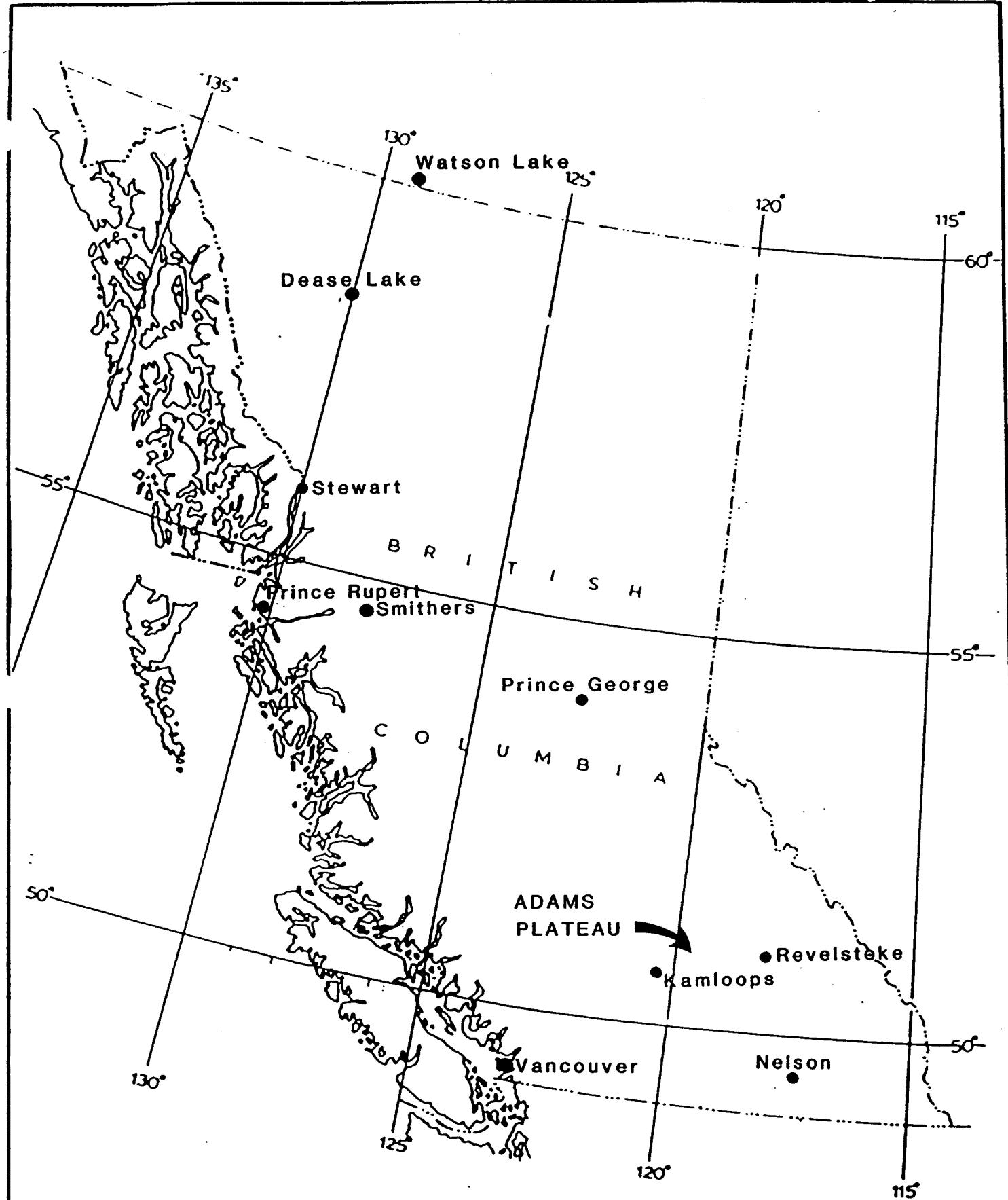
1.3 History

The property has been explored and worked intermittently since 1927, when the initial crown grants were established. In 1977, two pits were mined and 1,360 tons of mineralization were shipped to Trail (Spencer,

1985). A program of mapping, soil geochemistry and diamond drilling by Adams Silver Resources, in 1981, focussed on testing near-surface extensions of exposed mineralization. Additional drilling by the same group in 1984 tested for a shallow down-dip extension to the southern open pit area and tested an 800 m length of stratigraphy on strike but southwest of the pit area. Results of this work suggest that mineralization pinches out down dip and along strike, although some mineralization does occur in other horizons that continue to the southwest.

1.4 Current Work

A 1125 hectare area of the property was mapped at a 1:5,000 scale between July 8 and July 31, 1986. A 1:5,000 scale orthophoto was commissioned to assist in structural mapping. 900 m of drill core was relogged to characterize alteration and to sample for geochemical analyses. 127 soil samples collected from depths of 30 to 100 cm with hand augers established guides for sample and line spacing.



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Figure 1 Location Map

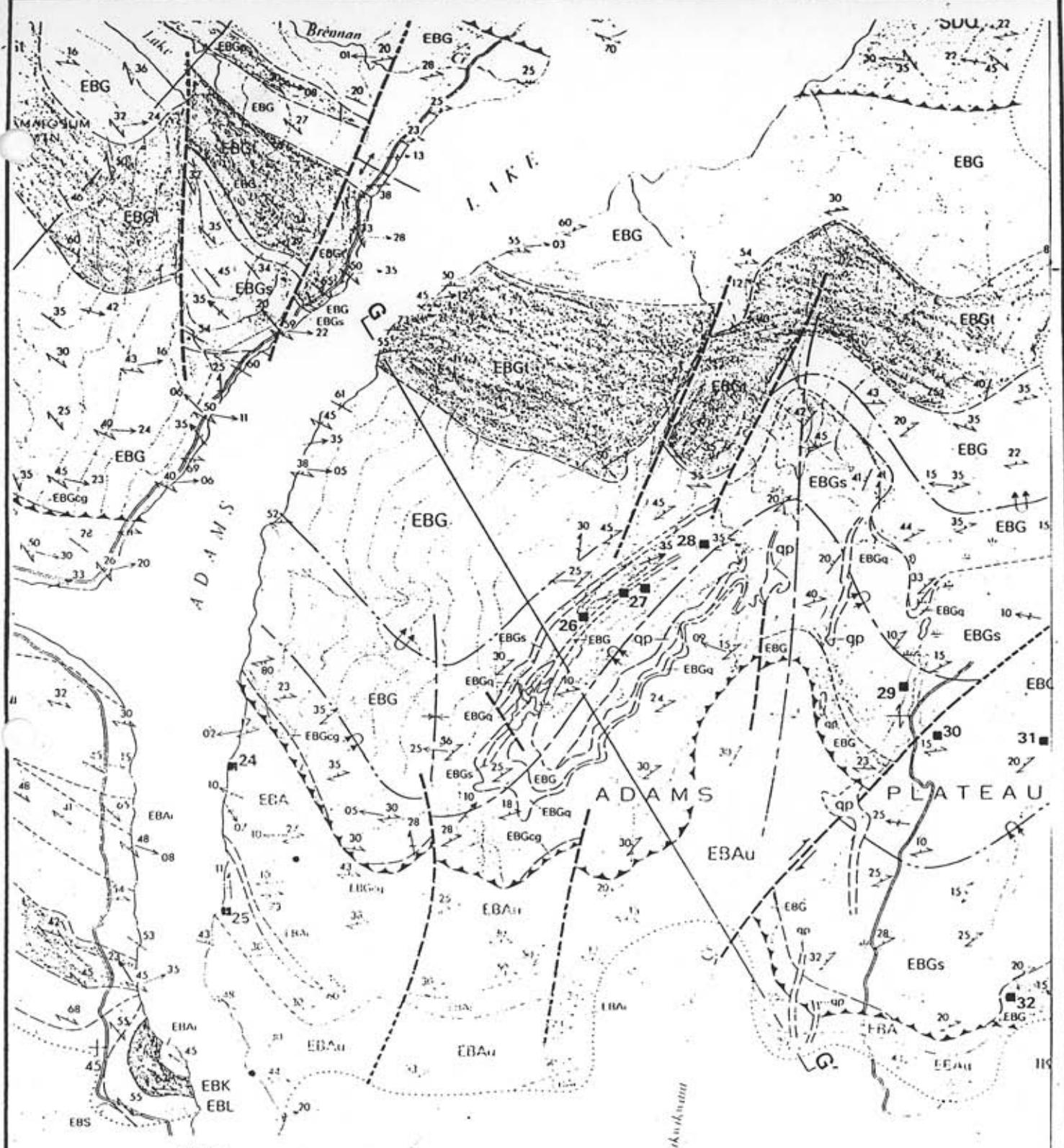
2.0 GEOLOGY

2.1 Regional Setting

Rocks of the Adams Plateau area are part of the Eagle Bay Formation, a multiply deformed sequence of low grade volcanics and associated sediments, that extends from Clearwater in the northeast, to Sicamous in the southwest (Fig. 2.1). The Eagle Bay Formation ranges in age from Cambrian to Permian (Schiarizza and Preto, 1984); although recent work by Goutier (1986) indicates that part of the Formation may be Upper Triassic in age. Internal stratigraphy of the Formation is complicated by multiple phases of folding and extensive thrust faulting. Stratigraphy is described by Preto and Schiarizza (1985) who recognize four intricate slices separated by southwesterly directed thrust faults.

The Eagle Bay Formation is bounded to the northeast by a low angle detachment fault which separates it from the Shuswap Metamorphic Complex (Goutier, 1986), and to the west by oceanic rocks of the Fennell Formation. Contact between the Eagle Bay and Fennell Formations is believed to be an easterly directed thrust fault (Schiarizza and Preto, 1984).

Numerous mineral deposits are hosted by the Eagle Bay Formation, most notably the Rea Gold and Homestake deposits. These stratiform sulphide deposits occur within altered felsic volcaniclastics and are considered volcanogenic in origin (Hoy and Goutier, 1986; Pirie, pers. comm. 1986). Stratiform sulphide deposits on the Adams Plateau exhibit both similarities and differences with the Homestake and Rea Gold deposits. The main differences include host rock lithologies, which on Adams Plateau are predominately sedimentary in character, and mineralogy where the copper and barite mineralization of the Rea and Homestake deposits is absent on the Plateau. Recent lead isotope work on showings and deposits of the Eagle Bay Formation by Goutier (1986) indicates a Devonian syngenetic origin for the Homestake and Rea deposits, and an Upper Triassic syngenetic origin for the Plateau deposits.



LEGEND

EBA sericite-chlorite-quartz phyllite derived from felsic to intermediate volcanics.

EBG calcareous chlorite schist derived from mafic to intermediate volcanics.

EBGt Tashinakin limestone.

EBGs siliceous graphitic phyllite; calc-silicate cherty quartzite.

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Figure 2.1 Regional Geology

2.2 Property Geology

The property area is underlain by a sequence of intermixed sedimentary and volcaniclastic to volcanic rocks. This sequence has been folded into a well defined synformal structure referred to as the Nikikwia Syncline (Schraizza and Preto, 1984; Olford, 1985). Most of the past work as well as this study were focussed on the western limb of the synform where outcrop is more abundant. No indications of younging were observed and the sequence is assumed to be overturned along the western limb, although minor folds may locally turn stratigraphy rightside up.

2.2.1 Stratigraphy

A schematic stratigraphic column which assumes that rocks young towards the core of the synform and illustrates facies relationships is given in Fig. 2.2. Brief lithological descriptions are as follows:

Greenstone:

Massive to foliated, fine to medium grained, dark green chloritic rock. This unit likely represents massive basaltic flow units with interbedded mafic ash tuffs. Diagnostic textures such as pillows are not preserved but in some locations thin to thick laminae are preserved, suggestive of ash layers. Predominate mineralogy consists of variable proportions of chlorite, epidote, albite and magnetite. On the extreme western edge of the map area, light grey to cream colored recrystallized limestone outcrops are observed. It is uncertain whether these were originally interbedded with the mafic rocks or represent fold keels of a mostly eroded overlying limestone.

Chert:

This unit has been referred to as a quartzite by many of the past workers and is a major marker for defining the Nikikwia

synform. The unit consists of massive to laminated, aphanitic, black to white quartz. The unit thickens towards the hinge area of the syncline and is often intensely fractured in this area, giving it a granular appearance. Interbeds of graphitic argillite or argillaceous greywacke are common, particularly on the west side of Nikikwia Lake. It is seldom foliated but laminations run parallel to the general foliation trend.

The origin of this unit is not of particular significance to exploration but a chert is more in keeping with the depositional environment of the argillites and limestones.

Limestone-Argillite Unit:

The limestone-argillite unit forms the core of the Nikwikwaia synform and consists of a number of interbedded and/or interfolded lithologies including: light grey laminated crystalline limestone; black and white banded graphitic limestone; dark grey-brown to black argillaceous graphitic phyllites; and green phyllitic mafic ash tuffs. Rare outcrops of felsic lapilli tuffs were observed within the phyllitic rocks, but their stratigraphic significance is unknown. Contacts between the various lithologies can be either sharp or gradational. Limited outcrop, structural complexity and discontinuity of lithologies prevents mapping the sub-divided rock types with the exception of the green phyllites and calc-silicates which are discussed below. In general, the unit is more limestone-rich near the base (outer portion of the synform) and becomes progressively more argillaceous towards the top. True thickness of this unit is approximately 500 m (including green phyllites). The mineralized horizon(s) occurs near the center of the unit on the northwest side of the synform, usually near a limestone-argillite or a limestone-green phyllite contact.

The mineralized horizon has not been clearly recognized on the southeastern limb of the synform; possibly due to intrusion of granitic dykes or sills and lack of exposure.

Green Phyllites:

Green phyllites and associated lithologies occur as layers or pods throughout the limestone-argillite unit but are most prominent along the southern part of the northwest limb of the synform. Three sub-types, based on mineralogy, were recognized during mapping and drill core logging. They are green phyllite, yellow to yellow-green phyllite, and grey-green phyllite. Colour changes reflect dominant mineralogy which ranges from chlorite through chlorite-muscovite to chlorite-graphite. This rock is interpreted to have been derived from mafic ash tuffs, lithic wackes, and tuffaceous shales. Presence of muscovite appears to be an alteration effect which is spatially related to mineralization. Weathering of iron-carbonates within the sericitic phyllites often gives them a red-brown earthy appearance. Changes between phyllite sub-types and enclosing rocks are invariably gradational. Occasionally fine fragmental textures within the green phyllites can be observed in drill core, supporting a pyroclastic/epiclastic origin for this unit.

Calc-Silicate:

This unit forms distinctive, resistive outcrops of laminated to banded epidote, quartz and carbonate. Disseminated pyrite, chalcopyrite and pale brown garnets occur erratically. Just below the old damsite (Figure 3), an irregular band of massive pyrrhotite and magnetite with a black manganeseiferous coating occurs within the

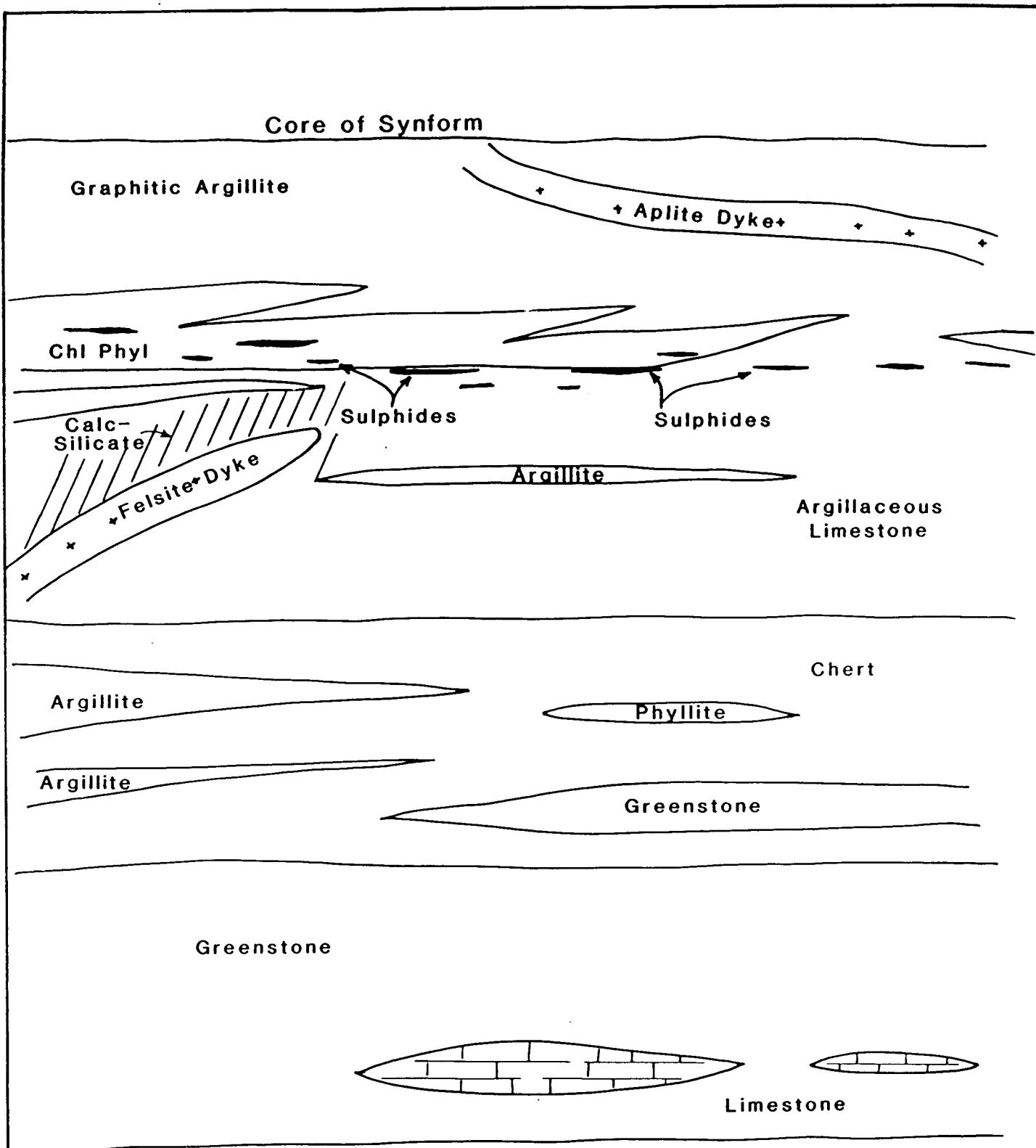


Figure 2.2 Schematic diagram illustrating facies relationships of lithologies within the Nikwikwaia Synform. Stratigraphic thicknesses not to scale. Diagram based mostly on data from the western limb of the synform.

calc-silicates. Contacts of the calc-silicate unit are irregular. This unit is interpreted to be a zone of contact metamorphism (skarnification), indicating proximity to a sub-surface granitic dyke or sill.

Granitic Dykes:

Granitic rocks on the property occur as dykes or sills which are generally conformable, but locally crosscutting. Lithologies range from aplites and felsites to medium grained quartz or feldspar porphyries. All varieties are leucocratic. Minor hornfelsing is observed near intrusive contacts on the northeast side of the map area. Outcrop patterns suggest two elongate bodies (Figure 3) that may be connected. Textural and mineralogical characteristics between the two bodies are different and indicate that two phases of intrusion are more likely.

2.2.2 Structure

Rocks of the Adams Plateau area have been deformed by at least three phases of folding, which have produced a northeasterly trending isoclinal inclined synform. At the property scale it is only the first phase that has significance for exploration.

The first phase of folding (F1) produced the Nikwikwaia synform during tight to isoclinal folding of regional scale. A penetrative axial planar foliation (S1) accompanied this phase. A subsidiary phase of folding coaxial to F1 may have produced the crenulation cleavage observed at two locations in drill core, however, clear evidence of a significant second phase of isoclinal folding was not observed. Definition of the Nikwikwaia synform by the chert unit indicates that thrusting, commonly associated with attenuated fold hinges, is minimal.

Second phase of folding (F2) is represented by a large north-trending antiform which runs along Nikwikwaia Creek, immediately east of the map area. F2 folding likely caused significant flattening of earlier structures, producing F1 fold limbs with little sense of vergence. Open to tight upright westerly trending folds and warps with limited amplitude are termed F3; although clear chronological relationships between F2 and F3 were not observed. Minor folds of the second and third phase structures are rare, but are easily recognized by orientation and folded S1 foliation. Neither phase significantly alters contact geometry within the map area.

Stereonets of field data (Figure 2.3) show a single cluster of poles to foliation typical of flattened isoclinal folds. Some scatter of points may have been introduced by second and third phases of deformation, but no clear trends are indicated. Fold axes demonstrate considerably more scatter, but cluster at 020/20 which is the average orientation of F1 fold axes. F3 folds plot along the western edge of the diagram. Observation of folds in the field is difficult due to the shallow plunge of the structures and limited outcrop. Previous mapping (Forster, 1981; Stewart, 19??) indicated closure of the Nikwikaia synform, but complete closure was not determined during this program.

Metamorphism of lower greenschist facies occurred during the early phase of deformation, as indicated by growth of chlorite and muscovite parallel to S1. Recrystallization of sulphides may have taken place during metamorphism. Significant accumulations of sulphides can be localized in fold axes during deformation due to competency contrast, and therefore drilling down the plunge direction is often more rewarding than drilling down-dip.

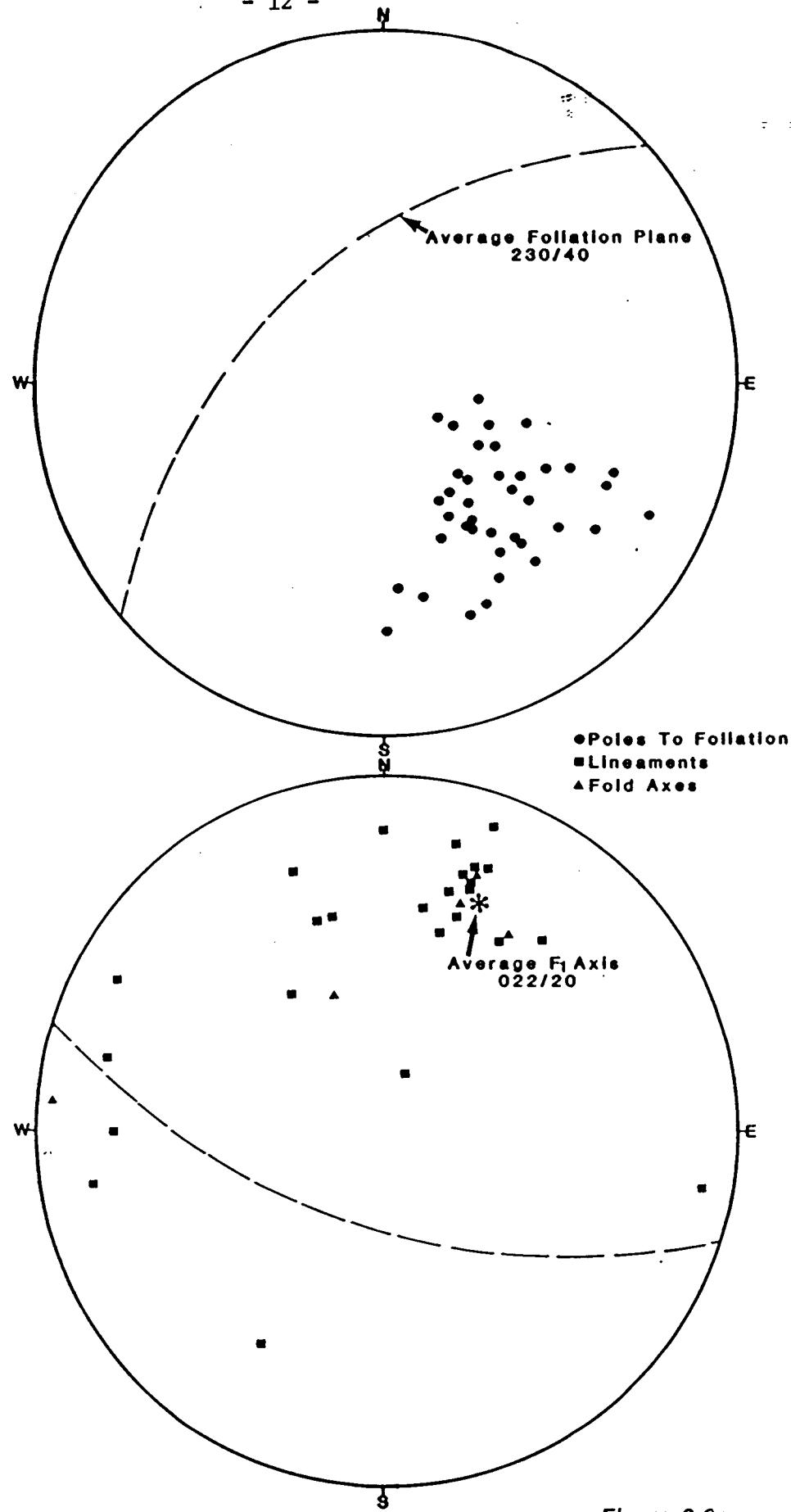


Figure 2.3

STEREONETS FOR ADAMS PLATEAU STRUCTURAL DATA

3.0 MINERALIZATION AND ALTERATION

3.1 Mineralization

Mineralization is exposed in trenches, open cuts and shallow drill holes along a 2500 m strike length. Massive to semi-massive base metal sulphides occur within a gangue of quartz and carbonate. Best exposures are in the open cuts or pit area of the Lucky Coon showing (Fig. 3.1). Here, sulphides can be seen to be finely laminated and up to 1.5 m thick. A maximum sulphide thickness of 2.8 m was cut by a 1981 drill hole just below the pit area (Tough, 1981).

Sulphides in the southwestern part of the property occur at the interface between laminated argillaceous limestones (footwall) and structurally underlying sericite-chlorite phyllites. Irregular, pale yellow coloured carbonate lenses are commonly associated with the sulphides. Immediately north of the Lucky Coon pits the chlorite phyllite unit pinches out and the sulphide horizon is difficult to trace. Sulphides and phyllites reappear about 2 km further north at the King Tut showing.

Immediately southeast of the main Lucky Coon pit a small cat trench exposes a narrow band of sulphides within a reversed hanging wall-footwall sequence, indicating that either a small fold or subordinate sulphide lenses occur within hanging wall stratigraphy.

Stratigraphy surrounding the sulphides becomes more complex towards the southwestern end of the property with phyllitic rocks becoming much more prominent. Longitudinal and cross-sections (Figs. 3.x - 3.y) illustrate the poor correlation of rock types hosting the mineralization. Sulphides can occur at three or more intervals, but are generally narrow zones (2 - 20 cm) of weak grades (2 - 5% combined Pb and Zn). Manganiferous dolomite associated with one sulphide horizon is exposed in surface trenches but does not appear in any of the drill core. A small trench exposes a narrow massive pyrite-arsenopyrite pod or lens 20m east of the main sulphide horizon near DDH-28. This mineralization, which is reminiscent of that at Rea Gold, was not intersected in any of the drill holes.

3.2 Alteration

Mineralization on Adams Plateau is frequently enclosed by a modest halo of hydrothermally altered rock. Such alteration is usually more extensive than the actual mineralization, and therefore can serve as a useful exploration guide. Three mineral assemblages characterize the alteration and include silicification, sericitization and carbonate alteration.

Intensity of sericite is largely controlled by wall rock composition and permeability; forming readily within the phyllites, less so within the argillites and not at all within the limestones.

Sericite alteration is spatially associated with mineralization and extends for significant distances both laterally and horizontally away from sulphides although the geometry of the alteration zone is complicated by lithological changes. Within phyllitic rocks, sericite alteration commonly extends for 5 to 15 m into both hanging and footwalls.

Carbonate alteration consists of spots (porphyroblasts), laminations and fine sheets along foliation planes of orange to brown weathering iron and manganese rich dolomite. Carbonate alteration is best developed within the chlorite phyllites, but is also observed within the argillaceous rocks where it is distinguished from "primary" carbonate by texture and its orange brown weathering colour. Carbonate alteration is strongly spatially associated with sulphides and less widespread than the sericite alteration.

Silicification is closely related to sulphides both spatially and temporally. It occurs as gangue, lamination, pervasive flooding and as fine stockworks peripheral to the sulphide horizon. Extensive quartz veining both above and below the sulphide horizon may be related to post-mineralization events. Only a few of the drill holes (Adams 28 and 29) had siliceous horizons (cherty tuffs) that suggest siliceous exhalatives.

Alteration appears to be best developed within drill holes near the Elsie showing, but this may be due to an increased thickness of phyllites in this area. Characteristics of the alteration and mineralization suggest a distal volcanogenic origin rather than a sedimentary exhalative ore.

Weak to moderate sericite and carbonate alteration was observed in outcrop immediately south of the old mine huts (Fig. 3.1). This alteration trends along strike towards the Nikwikwaia lakes but has never been tested.

4.0 GEOCHEMISTRY

4.1 Lithogeochemistry

Published studies of lithogeochemical exploration techniques applied to volcanogenic and sedimentary exhalative massive sulphide deposits have concentrated on chemical indicators of alteration and distal mineralization. Widely recognized trends include enrichment of MgO, Fe_2O_3 and S_iO_2 in chloritized footwall rocks close to stringer zones, and K_2O enrichment accompanied by Na_2O and CaO depletion in sericitized rocks (Ashley, 1983; Riverin and Hodgson, 1980; Vrabe, et al, 1983 Zzawa, et al, 1978 and Goodfellow, 1984). Trace element studies detail a host of elements that are enriched or depleted within altered zones. The most significant of these are F (Lavery, 1979 and Lalonde, 1976), As, Co, Mn and base metals (Ashley, 1983).

Objectives of lithogeochemical sampling of Adams Plateau drill core were to determine if there was a characteristic geochemical signature associated with mineralization, and whether this signature could be used to guide future drilling towards improving alteration and mineralization. Three drill holes with well developed alteration in both the hanging wall and footwall, composed predominately of chlorite phyllite, were selected for sampling. Drill core samples consisted of 4 to 6 cm lengths of core taken every 50 cm over the sample interval. Sample intervals ranged from 3 to 10 m depending on lithological and alteration homogeneity. Massive or semi-massive sulphide mineralization was deliberately avoided during sampling. Samples were analyzed for Cu, Zn, Mo, Ag, Cd, Co, Mn, Fe, As, Bl, Al, Ca, K, Mg, Na and Sr by D.C. plasma methods following multi-acid total digestion. F was analyzed by specific ion method following a potassium hydroxide fusion. All analyses were performed by Bondar Clegg Labs of North Vancouver, B.C.

Lithogeochemical results are contained within Appendix I and selected elements are plotted as drill hole histograms in Figures 4.1 to 4.3.

The drill hole histograms do not show well-defined chemical trends related to mineralization. Sporadic highs in elements such as Sr, Mn, Mg and Fe appear to be controlled by lithology rather than alteration. Na/Na+K, Zn, Cu, As and F display definitive but irregular signatures related to alteration and mineralization. The geochemistry correlates better with visibly observed alteration rather than with actual sulphide occurrences, suggesting that the sulphides may be minor distal depositions of a much larger hydrothermal system. Geochemistry of the sampled holes does not significantly improve on visibly observed alteration in terms of target size or definition. Other drill holes have added problems of intermixed lithologies within both the hanging and the footwall. Geochemistry of alteration haloes may however improve with increasing proximity to the hydrothermal source area.

4.2 Soil Geochemistry

Soil samples were collected from depths of 20 to 110 cm with hand augers and mattocks at 25 m spacings along six lines over the projected surface trace of the mineralized horizons. Sample location and method of collection are shown on Figures 4.4 and 4.5. The purpose of these lines was to establish the correct sampling density and to determine if there was any structural offset along the mineralized horizon between the Lucky Coon showing and the westernmost drill holes. Soils were analyzed for Ag, Pb, Zn, As and Mn by Atomic Absorption methods by Eco-Tech Labs Ltd. of Kamloops. Analytical results and statistical plots are located in Appendix I. Threshold values were determined from histograms and cumulative probability plots after the method of Sinclair (1976). Threshold values are similar to those reported by Spencer (1985) for a previous survey.

A well-developed soil profile overlies a clay rich glacial till on the property. Till depths range from 0 to 3 m. Boulder lithologies within the till indicate a locale derivation. Glacial direction is unknown. Fragments of massive sulphide within the till, observed 200 m northeast of the mine huts, indicate potential for transported anomalies. Background and mean values are 30 - 50% higher for the auger samples than for the mattock samples (Appendix I) suggesting that till may be a better sampling medium. Threshold values for the two sampling techniques are similar.

Most of the anomalous areas are multi-element and occur in two or more adjacent stations, indicating that 25 m spacing is appropriate. Lead, zinc and arsenic have log-normal distributions with small but distinct anomalous populations. Silver is normally distributed with minor deviations that may reflect lithological controls. Arsenic tends to show better dispersion and have broader anomalies than the other elements. Basal till samples would likely give higher contrast and better geographic control, but are extremely difficult to obtain with hand augers.

5.0 STATEMENT OF COSTS

Mapping, Core Logging and Geochemistry:

LABOUR:

| | | |
|------------------------------|-----------------|-----------|
| P. Holbek, Project Geologist | - 20 days @ 245 | \$ 4,900. |
| P. Theirsch, Geologist | - 20 days @ 140 | \$ 2,800. |

LOGISTICS:

| | | |
|------------------------|---------------------------|-----------|
| Road and Accommodation | - 40 mandays @ 40/man/day | \$ 1,600. |
| Truck Rental | - 20 days @ 45/day | \$ 900. |
| Gas | | \$ 170. |
| Equipment and Supplies | | \$ 200. |

GEOLOGY:

| | | |
|-------------------|--|-----------|
| Orthophoto 1:5000 | | \$ 3,300. |
|-------------------|--|-----------|

GEOCHEMISTRY:

| | | |
|------------------------|----------------------|---------|
| 26 Rock and Drill Core | - 21 element @ 17.50 | \$ 455. |
| 127 Soil samples | @ 6.00 | \$ 762. |

| | | |
|----------------|--|-----------|
| REPORT WRITING | | \$ 1,600. |
|----------------|--|-----------|

| | |
|-------|------------------|
| TOTAL | <u>\$16,687.</u> |
|-------|------------------|

6.0 CONCLUSIONS

Regional geological setting, local stratigraphy and the nature of alteration suggest that the stratiform massive sulphide mineralization on Adams Plateau is volcanogenic. Mineralization is thin but laterally extensive, and hosted by an interbedded sequence of ash tuffs, argillites and argillaceous limestones typical of a back-arc depositional environment. A significantly sized massive sulphide deposit could have formed and been preserved in a paleo-topographic depression. Locations of such depressions are difficult to determine, but may be indicated by rapid facies changes. Tendency of fold hinges to form in low competency zones encourages drilling the mineralized horizon in a down-plunge rather than a down-dip direction.

Alteration around the presently exposed mineralization indicates that a large sulphide deposit should have an extensive geochemical and mineralogical expression. Lithogeochemistry may be able to guide drill holes towards improving alteration when drilling a blind deposit.

STATEMENT OF QUALIFICATIONS

I certify that:

- 1) I graduated from the University of British Columbia in 1980 with a B.Sc. (Honors) Degree in Geological Sciences;
- 2) I have completed three years of post-graduate work in preparation for an M.Sc. Degree in Geology at the University of British Columbia;
- 3) I have practiced my profession in British Columbia for the last five years, and
- 4) The work described herein was done under my direct supervision.

Peter M. Holbek, B.Sc.

APPENDIX I
GEOCHEMISTRY DATA, STATISTICAL PLOTS

Geochem General Inquiry
PLATEAU SOILS

Sat Feb 21, 1987

Page 1

| SAMPLE # | NORTHING M | EASTING M | SILVER PPM | LEAD PPM | ZINC PPM | ARSENIC PPM |
|-----------|---------------|--------------|---------------|-------------|-------------|----------------|
| D6TAP-A01 | 6300.0 | 0.0 | 0.9 | 23 | 84 | 2 |
| D6TAP-A02 | 6300.0 | 25.0 | 0.8 | 21 | 86 | 4 |
| D6TAP-A03 | 6300.0 | 50.0 | 0.6 | 23 | 109 | 4 |
| D6TAP-A04 | 6300.0 | 75.0 | 0.5 | 22 | 100 | 4 |
| D6TAP-A05 | 6300.0 | 100.0 | 0.6 | 21 | 87 | 6 |
| D6TAP-A06 | 6300.0 | 125.0 | 0.9 | 19 | 89 | 2 |
| D6TAP-A07 | 6300.0 | 150.0 | 1.0 | 35 | 174 | 4 |
| D6TAP-A08 | 6300.0 | 175.0 | 0.9 | 45 | 148 | 62 |
| D6TAP-A09 | 6300.0 | 200.0 | 1.6 | 109 | 186 | 23 |
| D6TAP-A10 | 6300.0 | 225.0 | 1.9 | 216 | 564 | 10 |
| D6TAP-A11 | 6300.0 | 250.0 | 0.9 | 27 | 101 | 4 |
| D6TAP-A12 | 6300.0 | 275.0 | 0.6 | 30 | 118 | 6 |
| D6TAP-A13 | 6300.0 | 300.0 | 0.8 | 35 | 498 | 19 |
| D6TAP-A14 | 6300.0 | 325.0 | 0.6 | 30 | 130 | 14 |
| D6TAP-A15 | 6300.0 | 350.0 | 0.7 | 32 | 110 | 12 |
| D6TAP-A16 | 6300.0 | 375.0 | 1.1 | 25 | 95 | 10 |
| D6TAP-A17 | 6300.0 | 400.0 | 0.7 | 24 | 111 | 11 |
| D6TAP-A18 | 6300.0 | 425.0 | 0.5 | 60 | 103 | 32 |
| D6TAP-A19 | 6300.0 | 450.0 | 0.7 | 53 | 147 | 11 |
| D6TAP-A20 | 6300.0 | 475.0 | 1.0 | 97 | 341 | 11 |
| D6TAP-A21 | 6300.0 | 500.0 | 1.0 | 155 | 257 | 20 |
| D6TAP-B01 | 6500.0 | 0.0 | 0.8 | 24 | 96 | 10 |
| D6TAP-B02 | 6500.0 | 25.0 | 0.7 | 28 | 117 | 10 |
| D6TAP-B03 | 6500.0 | 50.0 | 0.7 | 22 | 102 | 11 |
| D6TAP-B04 | 6500.0 | 75.0 | 0.9 | 38 | 180 | 12 |
| D6TAP-B05 | 6500.0 | 100.0 | 1.1 | 38 | 164 | 16 |
| D6TAP-B06 | 6500.0 | 125.0 | 0.9 | 42 | 145 | 20 |
| D6TAP-B07 | 6500.0 | 150.0 | 0.9 | 58 | 184 | 9 |
| D6TAP-B08 | 6500.0 | 175.0 | 0.8 | 25 | 107 | 12 |
| D6TAP-B09 | 6500.0 | 200.0 | 0.7 | 21 | 96 | 7 |
| D6TAP-B10 | 6500.0 | 225.0 | 0.9 | 44 | 425 | 29 |
| D6TAP-B11 | 6500.0 | 250.0 | 1.3 | 122 | 780 | 37 |
| D6TAP-B12 | 6500.0 | 275.0 | 0.8 | 29 | 116 | 14 |
| D6TAP-B13 | 6500.0 | 300.0 | 0.4 | 34 | 104 | 15 |
| D6TAP-B14 | 6500.0 | 325.0 | 0.5 | 28 | 98 | 10 |
| D6TAP-B15 | 6500.0 | 350.0 | 0.6 | 30 | 93 | 16 |
| D6TAP-B16 | 6500.0 | 375.0 | 0.9 | 104 | 109 | 7 |
| D6TAP-B17 | 6500.0 | 400.0 | 0.5 | 366 | 250 | 6 |
| D6TAP-B18 | 6500.0 | 425.0 | 0.4 | 25 | 90 | 6 |
| D6TAP-B19 | 6500.0 | 450.0 | 0.5 | 40 | 75 | 8 |
| D6TAP-B20 | 6500.0 | 475.0 | 0.6 | 22 | 86 | 17 |
| D6TAP-B21 | 6500.0 | 500.0 | 0.5 | 53 | 134 | 8 |
| D6TAP-C01 | 7525.0 | 175.0 | 0.3 | 17 | 33 | 6 |
| D6TAP-C02 | 7525.0 | 225.0 | 0.5 | 28 | 89 | 13 |
| D6TAP-C03 | 7525.0 | 275.0 | 0.8 | 41 | 94 | 19 |
| D6TAP-C04 | 7525.0 | 325.0 | 0.2 | 16 | 35 | 9 |
| D6TAP-C05 | 7525.0 | 375.0 | 0.5 | 19 | 26 | 7 |
| D6TAP-C06 | 7525.0 | 425.0 | 0.3 | 18 | 25 | 8 |
| D6TAP-C07 | 7525.0 | 475.0 | 0.3 | 14 | 14 | 3 |
| D6TAP-C08 | 7525.0 | 525.0 | 0.4 | 16 | 25 | 3 |

Geochem General Inquiry
PLATEAU SOILS

Sat Feb 21, 1987

Page 2

| SAMPLE # | NORTHING M | EASTING M | SILVER ppm | LEAD ppm | ZINC ppm | ARSENIC ppm |
|-----------|---------------|--------------|---------------|-------------|-------------|----------------|
| D6TAP-C09 | 7525.0 | 575.0 | 0.2 | 12 | 18 | 18 |
| D6TAP-C10 | 7525.0 | 625.0 | 0.4 | 35 | 59 | 6 |
| D6TAP-C11 | 7525.0 | 675.0 | 0.7 | 16 | 53 | 4 |
| D6TAP-D01 | 7725.0 | 175.0 | 0.1 | 16 | 17 | 3 |
| D6TAP-D02 | 7725.0 | 200.0 | 0.8 | 30 | 231 | 4 |
| D6TAP-D03 | 7725.0 | 225.0 | 0.8 | 20 | 88 | 4 |
| D6TAP-D04 | 7725.0 | 250.0 | 0.4 | 22 | 119 | 1 |
| D6TAP-D05 | 7725.0 | 275.0 | 0.2 | 13 | 30 | 1 |
| D6TAP-D06 | 7725.0 | 300.0 | 0.6 | 21 | 110 | 1 |
| D6TAP-D07 | 7725.0 | 325.0 | 0.3 | 15 | 50 | 1 |
| D6TAP-D08 | 7725.0 | 350.0 | 0.9 | 94 | 175 | 2 |
| D6TAP-D09 | 7725.0 | 375.0 | 0.7 | 54 | 93 | 2 |
| D6TAP-D10 | 7725.0 | 400.0 | 0.5 | 21 | 77 | 1 |
| D6TAP-D11 | 7725.0 | 425.0 | 0.3 | 15 | 29 | 1 |
| D6TAP-D12 | 7725.0 | 450.0 | 0.7 | 22 | 94 | 3 |
| D6TAP-D13 | 7725.0 | 475.0 | 0.5 | 20 | 65 | 3 |
| D6TAP-D14 | 7725.0 | 500.0 | 1.3 | 269 | 254 | 17 |
| D6TAP-D15 | 7725.0 | 525.0 | 0.7 | 34 | 74 | 2 |
| D6TAP-D16 | 7725.0 | 550.0 | 0.7 | 33 | 162 | 8 |
| D6TAP-D17 | 7725.0 | 575.0 | 0.3 | 15 | 20 | 2 |
| D6TAP-D18 | 7725.0 | 600.0 | 0.5 | 29 | 104 | 2 |
| D6TAP-D19 | 7725.0 | 625.0 | 0.5 | 16 | 25 | 1 |
| D6TAP-D20 | 7725.0 | 650.0 | 0.8 | 43 | 153 | 7 |
| D6TAP-D21 | 7725.0 | 675.0 | 0.8 | 23 | 67 | 3 |
| D6TAP-E01 | 7925.0 | 175.0 | 0.4 | 14 | 36 | 3 |
| D6TAP-E02 | 7925.0 | 200.0 | 0.4 | 21 | 114 | 9 |
| D6TAP-E03 | 7925.0 | 225.0 | 0.8 | 16 | 139 | 4 |
| D6TAP-E04 | 7925.0 | 250.0 | 0.7 | 21 | 325 | 33 |
| D6TAP-E05 | 7925.0 | 275.0 | 0.5 | 16 | 70 | 8 |
| D6TAP-E06 | 7925.0 | 300.0 | 0.8 | 23 | 98 | 3 |
| D6TAP-E07 | 7925.0 | 325.0 | 2.1 | 125 | 170 | 13 |
| D6TAP-E08 | 7925.0 | 350.0 | 4.0 | 207 | 246 | 15 |
| D6TAP-E09 | 7925.0 | 375.0 | 0.8 | 20 | 30 | 4 |
| D6TAP-E10 | 7925.0 | 400.0 | 1.1 | 38 | 201 | 26 |
| D6TAP-E11 | 7925.0 | 425.0 | 1.8 | 138 | 114 | 12 |
| D6TAP-E12 | 7925.0 | 450.0 | 0.7 | 31 | 115 | 6 |
| D6TAP-E13 | 7925.0 | 475.0 | 1.2 | 115 | 236 | 17 |
| D6TAP-E14 | 7925.0 | 500.0 | 0.7 | 35 | 111 | 21 |
| D6TAP-E15 | 7925.0 | 525.0 | 0.7 | 68 | 61 | 15 |
| D6TAP-E16 | 7925.0 | 550.0 | 0.7 | 41 | 165 | 9 |
| D6TAP-E17 | 7925.0 | 575.0 | 0.8 | 22 | 99 | 5 |
| D6TAP-E18 | 7925.0 | 600.0 | 0.7 | 38 | 185 | 17 |
| D6TAP-E19 | 7925.0 | 625.0 | 0.6 | 20 | 50 | 12 |
| D6TAP-E20 | 7925.0 | 650.0 | 0.8 | 210 | 225 | 31 |
| D6TAP-E21 | 7925.0 | 675.0 | 0.9 | 31 | 108 | 1 |
| D6TAP-F01 | 8125.0 | 175.0 | 0.3 | 17 | 38 | 5 |
| D6TAP-F02 | 8125.0 | 200.0 | 0.6 | 23 | 95 | 6 |
| D6TAP-F03 | 8125.0 | 225.0 | 0.2 | 12 | 14 | 4 |
| D6TAP-F04 | 8125.0 | 250.0 | 0.4 | 19 | 68 | 4 |
| D6TAP-F05 | 8125.0 | 275.0 | 0.4 | 16 | 49 | 3 |

Geochem General Inquiry
PLATEAU SOILS

Sat Feb 21, 1987

Page 3

| SAMPLE # | NORTHING M | EASTING M | SILVER PPM | LEAD PPM | ZINC PPM | ARSENIC PPM |
|-----------|---------------|--------------|---------------|-------------|-------------|----------------|
| D6TAP-F06 | 8125.0 | 300.0 | 0.6 | 24 | 121 | 4 |
| D6TAP-F07 | 8125.0 | 325.0 | 0.8 | 17 | 51 | 2 |
| D6TAP-F08 | 8125.0 | 350.0 | 0.7 | 43 | 152 | 5 |
| D6TAP-F09 | 8125.0 | 375.0 | 0.5 | 22 | 50 | 3 |
| D6TAP-F10 | 8125.0 | 400.0 | 0.6 | 35 | 134 | 19 |
| D6TAP-F11 | 8125.0 | 425.0 | 0.4 | 20 | 50 | 9 |
| D6TAP-F12 | 8125.0 | 450.0 | 0.5 | 48 | 138 | 53 |
| D6TAP-F13 | 8125.0 | 475.0 | 0.4 | 28 | 89 | 11 |
| D6TAP-F14 | 8125.0 | 500.0 | 1.8 | 150 | 556 | 69 |
| D6TAP-F15 | 8125.0 | 525.0 | 0.5 | 58 | 63 | 20 |
| D6TAP-F16 | 8125.0 | 550.0 | 1.7 | 63 | 208 | 19 |
| D6TAP-F17 | 8125.0 | 575.0 | 0.6 | 59 | 73 | 9 |
| D6TAP-F18 | 8125.0 | 600.0 | 0.9 | 36 | 138 | 14 |
| D6TAP-F19 | 8125.0 | 625.0 | 0.3 | 15 | 28 | 9 |
| D6TAP-F20 | 8125.0 | 650.0 | 0.8 | 25 | 142 | 19 |
| D6TAP-F21 | 8125.0 | 675.0 | 0.5 | 24 | 53 | 9 |

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Geochemical
Lab Report

SEPT 18. 86

VANCOUVER

ESSO MINERALS CANADA

MR. PETER HOLBEK

1600-409 GRANVILLE ST.

VANCOUVER, B.C.

V6C 1Y2

ADAMS PLATEAU

DRILL Holes 15, 35, 38.



REPORT: 126-4023 (COMPLETE)

REFERENCE INFO:

CLIENT: ESSO MINERALS CANADA

SUBMITTED BY: P HOLBEK

PROJECT: MA12

DATE PRINTED: 17-SEP-86

| ORDER | ELEMENT | NUMBER OF ANALYSES | LOWER DETECTION LIMIT | EXTRACTION | METHOD |
|--------------|------------------|--------------------|-----------------------|------------|----------------------------|
| 1 | Cu | Copper | 25 | 1 PPM | MULT ACID TOT DIG |
| 2 | Zn | Zinc | 25 | 1 PPM | MULT ACID TOT DIG |
| 3 | Mo | Molybdenum | 25 | 1 PPM | MULT ACID TOT DIG |
| 4 | Aq | Silver | 25 | 0.5 PPM | MULT ACID TOT DIG |
| 5 | Cd | Cadmium | 25 | 1 PPM | MULT ACID TOT DIG |
| 6 | Co | Cobalt | 25 | 1 PPM | MULT ACID TOT DIG |
| 7 | Mn | Manganese | 25 | 1 PPM | MULT ACID TOT DIG |
| 8 | Fe | Iron | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 9 | As | Arsenic | 25 | 5 PPM | MULT ACID TOT DIG |
| 10 | Bi | Bismuth | 25 | 2 PPM | MULT ACID TOT DIG |
| 11 | Al | Aluminum | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 12 | Ca | Calcium | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 13 | K | Potassium | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 14 | Mg | Magnesium | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 15 | Na | Sodium | 25 | 0.05 PCT | MULT ACID TOT DIG |
| 16 | Sr | Strontium | 25 | 5 PPM | MULT ACID TOT DIG |
| 17 | Ca | Calcium | 1 | 0.05 PCT | HNO3-HCL HOT EXTR |
| 18 | Fe | Iron | 1 | 0.05 PCT | HNO3-HCL HOT EXTR |
| 19 | Mg | Magnesium | 1 | 0.05 PCT | HNO3-HCL HOT EXTR |
| 20 | Mn | Manganese | 1 | 1 PPM | HNO3-HCL HOT EXTR |
| 21 | Sr | Strontium | 1 | 1 PPM | HNO3-HCL HOT EXTR |
| SAMPLE TYPES | | NUMBER | SIZE FRACTIONS | NUMBER | SAMPLE PREPARATIONS NUMBER |
| R | ROCK OR BED ROCK | 1 | 2 -150 | 26 | CRUSH, PULVERIZE -150 26 |
| D | DRILL CORE | 25 | | | |

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INVOICE TO: MR. PETER HOLBEK

REPORT: 126-4023

PROJECT: MA12

PAGE 1A

| SAMPLE NUMBER | ELEMENT UNITS | Cu PPM | Zn PPM | Mo PPM | As PPM | Cd PPM | Co PPM | Mn PPM | Fe PCT | As PPM | Bi PPM | Al PCT |
|---------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| R2 R86-PT22 | | | | | | | | | | | | |
| D2 AD1501 | | 126 | 88 | <1 | <0.5 | <1 | 36 | 971 | 6.17 | 38 | <2 | 6.17 |
| D2 AD1502 | | 190 | 129 | 3 | 1.1 | 2 | 19 | 1142 | 7.08 | 41 | <2 | 6.19 |
| D2 AD1503 | | 193 | 635 | 3 | 0.6 | 2 | 55 | 2548 | >10.00 | 27 | 22 | 7.65 |
| D2 AD1504 | | 60 | 269 | 2 | <0.5 | 1 | 60 | 1966 | >10.00 | 45 | <2 | 8.66 |
| D2 AD1505 | | 61 | 2560 | 1 | 1.2 | 8 | 42 | 2074 | 7.31 | 53 | <2 | 7.06 |
| D2 AD1506 | | 71 | 174 | 2 | 2.2 | 1 | 55 | 1236 | >10.00 | 16 | <2 | 7.62 |
| D2 AD1507 | | 80 | 134 | 1 | 2.3 | <1 | 44 | 1042 | 8.23 | 14 | <2 | 7.80 |
| D2 AD1508 | | 68 | 606 | 3 | 2.8 | <1 | 22 | 3141 | 4.57 | 16 | <2 | 6.12 |
| D2 AD1509 | | 129 | 137 | <1 | 2.4 | <1 | 35 | 1745 | 8.23 | 25 | <2 | 6.53 |
| D2 AD3501 | | 14 | 1435 | <1 | 2.4 | 1 | 9 | 1442 | 2.40 | 20 | <2 | 6.77 |
| D2 AD3502 | | 48 | 134 | <1 | 2.6 | <1 | 25 | 754 | 3.66 | 12 | <2 | 4.51 |
| D2 AD3503 | | 79 | 960 | 3 | 1.2 | 5 | 31 | 463 | 3.66 | 37 | 4 | 6.43 |
| D2 AD3504 | | 41 | 222 | <1 | <0.5 | <1 | 17 | 549 | 3.20 | 19 | 4 | 5.02 |
| D2 AD3505 | | 22 | 99 | 12 | 2.5 | <1 | 19 | 600 | 2.97 | <5 | <2 | 6.33 |
| D2 AD3506 | | 87 | 859 | 3 | 1.3 | 1 | 20 | 1536 | 5.26 | 31 | <2 | 4.19 |
| D2 AD3507 | | 53 | 119 | 1 | <0.5 | <1 | 37 | 1469 | 7.08 | 25 | <2 | 4.81 |
| D2 AD3801 | | 33 | 86 | 3 | <0.5 | <1 | 28 | 659 | 3.88 | 11 | 7 | 5.15 |
| D2 AD3802 | | 55 | 121 | <1 | <0.5 | 2 | 27 | 1252 | 7.77 | 28 | 15 | 4.65 |
| D2 AD3803 | | 22 | 68 | <1 | <0.5 | <1 | 18 | 702 | 3.43 | 14 | 6 | 6.41 |
| D2 AD3804 | | 27 | 122 | 11 | 1.8 | 2 | 30 | 1017 | 3.43 | 6 | <2 | 4.47 |
| D2 AD3805 | | 130 | 2765 | 13 | 1.5 | 6 | 37 | 3002 | 6.74 | 43 | 13 | 4.48 |
| D2 AD3806 | | 240 | 7081 | <1 | 3.5 | 10 | 17 | 1951 | 4.11 | >2000 | 8 | 4.28 |
| D2 AD3807 | | 628 | 743 | <1 | 1.9 | 2 | 10 | 1998 | 3.08 | 113 | <2 | 5.13 |
| D2 AD3808 | | 188 | 157 | 8 | 0.8 | <1 | 21 | 2230 | 3.31 | 15 | <2 | 3.84 |
| D2 AD3809 | | 176 | 716 | <1 | 2.0 | <1 | 20 | 2121 | 4.69 | 30 | 12 | 6.68 |

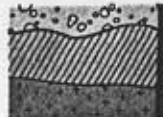
REPORT: 126-4023

PROJECT: MA12

PAGE 1B

| SAMPLE NUMBER | ELEMENT UNITS | Ca PCT | K PCT | Mg PCT | Na PCT | Sr PPM | Ca PCT | Fe PCT | Mg PCT | Mn PPM | Sr PPM |
|---------------|--------------------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| R2 R96-PT22 | | | | | | >10.00 | | | | | |
| D2 AD1501 | | 5.99 | 0.71 | 2.29 | 1.11 | 395 | | | | | |
| D2 AD1502 | | 5.54 | 0.83 | 2.12 | 1.33 | 303 | | | | | |
| D2 AD1503 | | 5.40 | 0.77 | 3.01 | 1.59 | 298 | | | | | |
| D2 AD1504 | | 5.11 | 0.76 | 2.20 | 2.35 | 323 | | | | | |
| D2 AD1505 | | 4.45 | 0.67 | 2.06 | 2.78 | 235 | | | | | |
| D2 AD1506 | | 4.43 | 0.24 | 3.34 | 2.68 | 308 | | | | | |
| D2 AD1507 | | 4.69 | 0.25 | 2.66 | 3.54 | 355 | | | | | |
| D2 AD1508 | | 6.55 | 1.14 | 1.23 | 0.51 | 394 | | | | | |
| D2 AD1509 | | 5.85 | 0.83 | 2.46 | 2.09 | 298 | | | | | |
| D2 AD3501 | | 5.03 | 1.03 | 1.61 | 0.61 | 116 | | | | | |
| D2 AD3502 | | 3.16 | 0.89 | 1.52 | 0.63 | 98 | | | | | |
| D2 AD3503 | | 3.75 | 1.10 | 1.90 | 1.34 | 120 | | | | | |
| D2 AD3504 | | 2.96 | 1.22 | 1.43 | 1.18 | 95 | | | | | |
| D2 AD3505 | | 5.71 | 1.08 | 1.33 | 0.58 | 323 | | | | | |
| D2 AD3506 | <i>(Core Part)</i> | 5.78 | 1.13 | 1.93 | 0.80 | 240 | | | | | |
| D2 AD3507 | | >10.00 | 0.32 | 1.76 | 1.97 | 694 | | | | | |
| D2 AD3801 | | 3.64 | 1.19 | 1.61 | 0.66 | 197 | | | | | |
| D2 AD3802 | | >10.00 | 0.38 | 2.07 | 1.59 | 524 | | | | | |
| D2 AD3803 | | 4.85 | 1.04 | 2.09 | 0.94 | 229 | | | | | |
| D2 AD3804 | | 4.12 | 1.06 | 1.26 | 0.63 | 185 | | | | | |
| D2 AD3805 | | >10.00 | 1.55 | 1.63 | 0.93 | 402 | | | | | |
| D2 AD3806 | | 3.01 | 1.25 | 1.06 | 0.61 | 142 | | | | | |
| D2 AD3807 | | 4.94 | 1.26 | 0.88 | 0.37 | 141 | | | | | |
| D2 AD3808 | | 4.33 | 1.21 | 1.13 | 1.26 | 168 | | | | | |
| D2 AD3809 | | 2.68 | 1.48 | 1.23 | 0.52 | 114 | | | | | |

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Peter
**Geochemical
Lab Report**

SEPT 30. 86

REPORT: 226-4023 (COMPLETE)

REFERENCE INFO:

CLIENT: ESSO MINERALS CANADA
PROJECT: NONE GIVEN

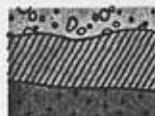
SUBMITTED BY: P HOLBEK
DATE PRINTED: 29-SEP-86

| ORDER | ELEMENT | NUMBER OF ANALYSES | LOWER DETECTION LIMIT | EXTRACTION | METHOD |
|-------|---------|--------------------|-----------------------|------------|-----------------------------------|
| 1 | F | Fluorine | 25 | 20 PPM | POT HYDROXIDE FUSION Specific Ion |

| SAMPLE TYPES | NUMBER | SIZE FRACTIONS | NUMBER | SAMPLE PREPARATIONS | NUMBER |
|--------------|--------|----------------|--------|---------------------|--------|
| D DRILL CORE | 25 | 2 -150 | 25 | AS RECEIVED, NO SP | 25 |

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REPORT: 226-4023

PROJECT: NONE GIVEN

PAGE 1

| SAMPLE NUMBER | ELEMENT UNITS | F PPM |
|---------------|---------------|-------|
| D2 AD1501 | | 550 |
| D2 AD1502 | | 460 |
| D2 AD1503 | | 480 |
| D2 AD1504 | | 500 |
| D2 AD1505 | | 570 |
| D2 AD1506 | | 460 |
| D2 AD1507 | | 430 |
| D2 AD1508 | | 970 |
| D2 AD1509 | | 480 |
| D2 AD3501 | | 730 |
| D2 AD3502 | | 650 |
| D2 AD3503 | | 900 |
| D2 AD3504 | | 1300 |
| D2 AD3505 | | 730 |
| D2 AD3506 | | 820 |
| D2 AD3507 | | 570 |
| D2 AD3801 | | 760 |
| D2 AD3802 | | 450 |
| D2 AD3803 | | 700 |
| D2 AD3804 | | 900 |
| D2 AD3805 | | 900 |
| D2 AD3806 | | 650 |
| D2 AD3807 | | 730 |
| D2 AD3808 | | 700 |
| D2 AD3809 | | 930 |

GENERAL PROJECT
PLATEAU SOILS

Elementary Statistics

Sat Feb 21, 1987

Variable: ARSENIC ppm

| | |
|-----------------------------------|---------|
| Number of Samples Selected: | 116 |
| Number of Missing or Null Values: | 0 |
| Minimum: | 1.000 |
| Maximum: | 69.000 |
| Range: | 68.000 |
| Mean: | 11.000 |
| Median: | 8.000 |
| Variance: | 125.828 |
| Standard Deviation: | 11.217 |
| Standard Error: | 1.041 |
| Coefficient of Variation (%): | 101.975 |
| Coefficient of Skewness: | 2.689 |
| Coefficient of Kurtosis: | 12.355 |
| Log 10 Transformed Mean: | 7.212 |
| Log 10 Variance: | 4.751 |
| Log 10 Standard Deviation: | 2.180 |

GENERAL PROJECT
PLATEAU SOILS

Elementary Statistics

Sat Feb 21, 1987

Variable: ZINC ppm

| | |
|-----------------------------------|-----------|
| Number of Samples Selected: | 116 |
| Number of Missing or Null Values: | 0 |
| Minimum: | 14.000 |
| Maximum: | 780.000 |
| Range: | 766.000 |
| Mean: | 128.509 |
| Median: | 101.000 |
| Variance: | 13245.888 |
| Standard Deviation: | 115.091 |
| Standard Error: | 10.686 |
| Coefficient of Variation (%): | 89.559 |
| Coefficient of Skewness: | 2.927 |
| Coefficient of Kurtosis: | 13.915 |
| Log 10 Transformed Mean: | 96.163 |
| Log 10 Variance: | 3.102 |
| Log 10 Standard Deviation: | 1.761 |

GENERAL PROJECT
PLATEAU SOILS

Elementary Statistics

Sat Feb 21, 1987

Variable:LEAD ppm

| | |
|-----------------------------------|----------|
| Number of Samples Selected: | 116 |
| Number of Missing or Null Values: | 0 |
| Minimum: | 12.000 |
| Maximum: | 366.000 |
| Range: | 354.000 |
| Mean: | 46.172 |
| Median: | 28.000 |
| Variance: | 2941.194 |
| Standard Deviation: | 54.233 |
| Standard Error: | 5.035 |
| Coefficient of Variation (%): | 117.457 |
| Coefficient of Skewness: | 3.306 |
| Coefficient of Kurtosis: | 15.589 |
| Log 10 Transformed Mean: | 32.771 |
| Log 10 Variance: | 2.986 |
| Log 10 Standard Deviation: | 1.728 |

GENERAL PROJECT
PLATEAU SOILS

Elementary Statistics

Sat Feb 21, 1987

Variable:SILVER ppm

| | |
|-----------------------------------|--------|
| Number of Samples Selected: | 116 |
| Number of Missing or Null Values: | 0 |
| Minimum: | 0.100 |
| Maximum: | 4.000 |
| Range: | 3.900 |
| Mean: | 0.738 |
| Median: | 0.700 |
| Variance: | 0.217 |
| Standard Deviation: | 0.466 |
| Standard Error: | 0.043 |
| Coefficient of Variation (%): | 63.153 |
| Coefficient of Skewness: | 3.510 |
| Coefficient of Kurtosis: | 22.621 |
| Log 10 Transformed Mean: | 0.641 |
| Log 10 Variance: | 2.192 |
| Log 10 Standard Deviation: | 1.481 |

MAP PLOT LEGEND FOR SILVER ppm

Range

| | | | | |
|-----|-----|---------------|---|---|
| 0.1 | 1.4 | Circle Radius | = | 2 |
| 1.4 | 2.7 | Circle Radius | = | 4 |
| 2.7 | 4.0 | Circle Radius | = | 6 |

MAP PLOT LEGEND FOR LEAD ppm

Range

| | | | | |
|-----|-----|---------------|---|----|
| 12 | 83 | Circle Radius | = | 2 |
| 83 | 154 | Circle Radius | = | 4 |
| 154 | 224 | Circle Radius | = | 6 |
| 224 | 295 | Circle Radius | = | 8 |
| 295 | 366 | Circle Radius | = | 10 |

MAP PLOT LEGEND FOR ZINC ppm

Range

| | | | | |
|-----|-----|---------------|---|----|
| 14 | 167 | Circle Radius | = | 2 |
| 167 | 320 | Circle Radius | = | 4 |
| 320 | 474 | Circle Radius | = | 6 |
| 474 | 627 | Circle Radius | = | 8 |
| 627 | 780 | Circle Radius | = | 10 |

MAP PLOT LEGEND FOR ARSENIC ppm

Range

| | | | | |
|----|----|---------------|---|----|
| 1 | 15 | Circle Radius | = | 2 |
| 15 | 28 | Circle Radius | = | 4 |
| 28 | 42 | Circle Radius | = | 6 |
| 42 | 55 | Circle Radius | = | 8 |
| 55 | 69 | Circle Radius | = | 10 |

MAP PLOT LEGEND FOR SILVER ppm

Range

| | | | | |
|-----|-----|---------------|---|----|
| 0.1 | 0.9 | Circle Radius | = | 2 |
| 0.9 | 1.7 | Circle Radius | = | 4 |
| 1.7 | 2.4 | Circle Radius | = | 6 |
| 2.4 | 3.2 | Circle Radius | = | 8 |
| 3.2 | 4.0 | Circle Radius | = | 10 |

GENERAL PROJECT
PLATEAU SOILS

Correlation Coefficients

Sat Feb 21, 1987

Page 1 of 1

| | NORTHING | EASTING | SILVER | LEAD | ZINC | ARSENIC |
|----------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| NORTHING | 1.000 (116) | 0.470 (116) | -0.071 (116) | -0.096 (116) | -0.239 (116) | -0.084 (116) |
| EASTING | | 1.000 (116) | -0.038 (116) | 0.128 (116) | -0.076 (116) | 0.061 (116) |
| SILVER | | | 1.000 (116) | 0.554 (116) | 0.523 (116) | 0.299 (116) |
| LEAD | | | | 1.000 (116) | 0.543 (116) | 0.302 (116) |
| ZINC | | | | | 1.000 (116) | 0.535 (116) |
| ARSENIC | | | | | | 1.000 (116) |

)

ARSENIC

SILVER

EASTING

8130

n = 116

7764

7398

7032

6666

6300

NORTHING



SILVER

8130

n = 116

7764

7398

7032

6666

6300

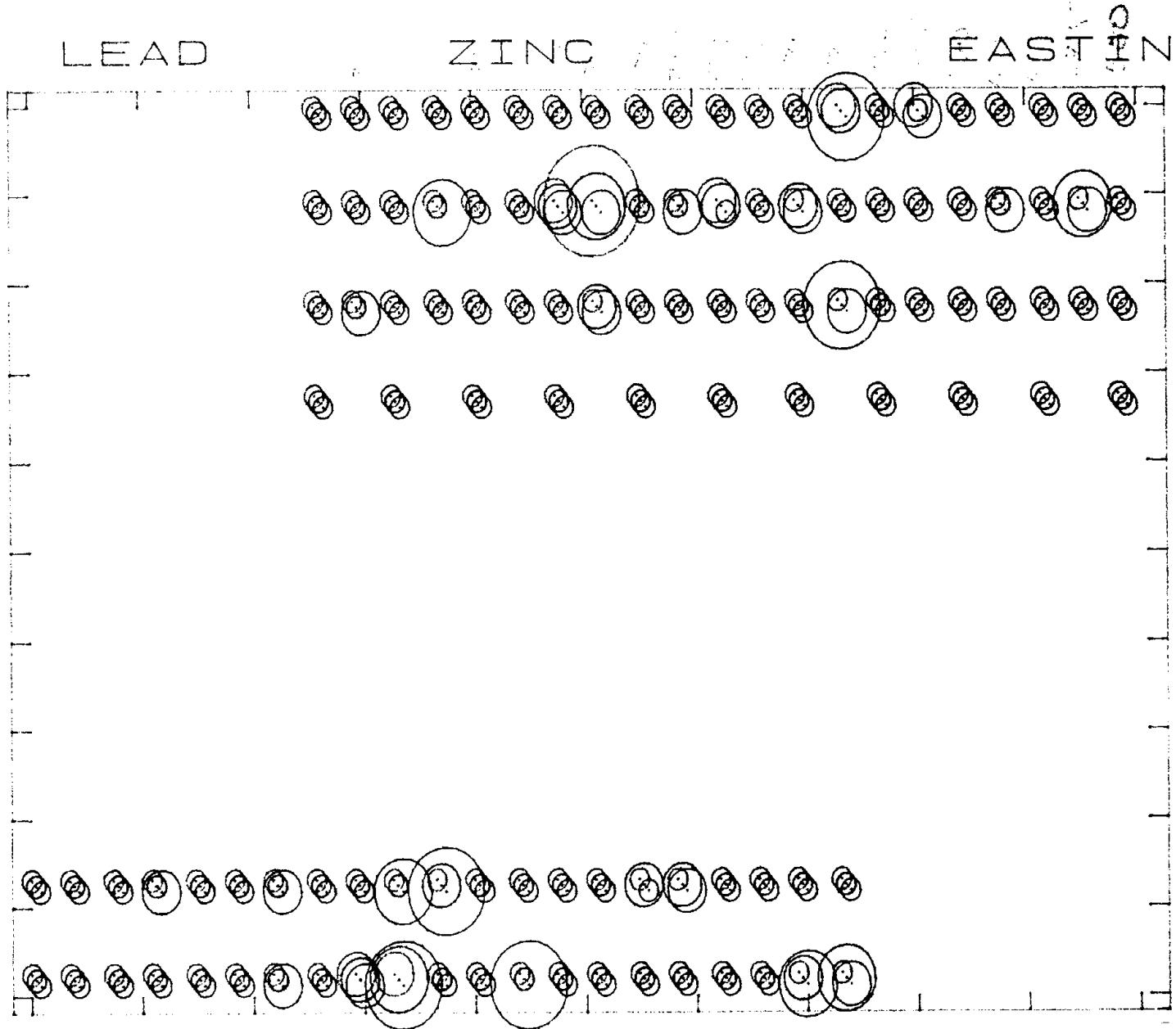
ZODIAC

Σ

LEAD

ZINC

EASTING



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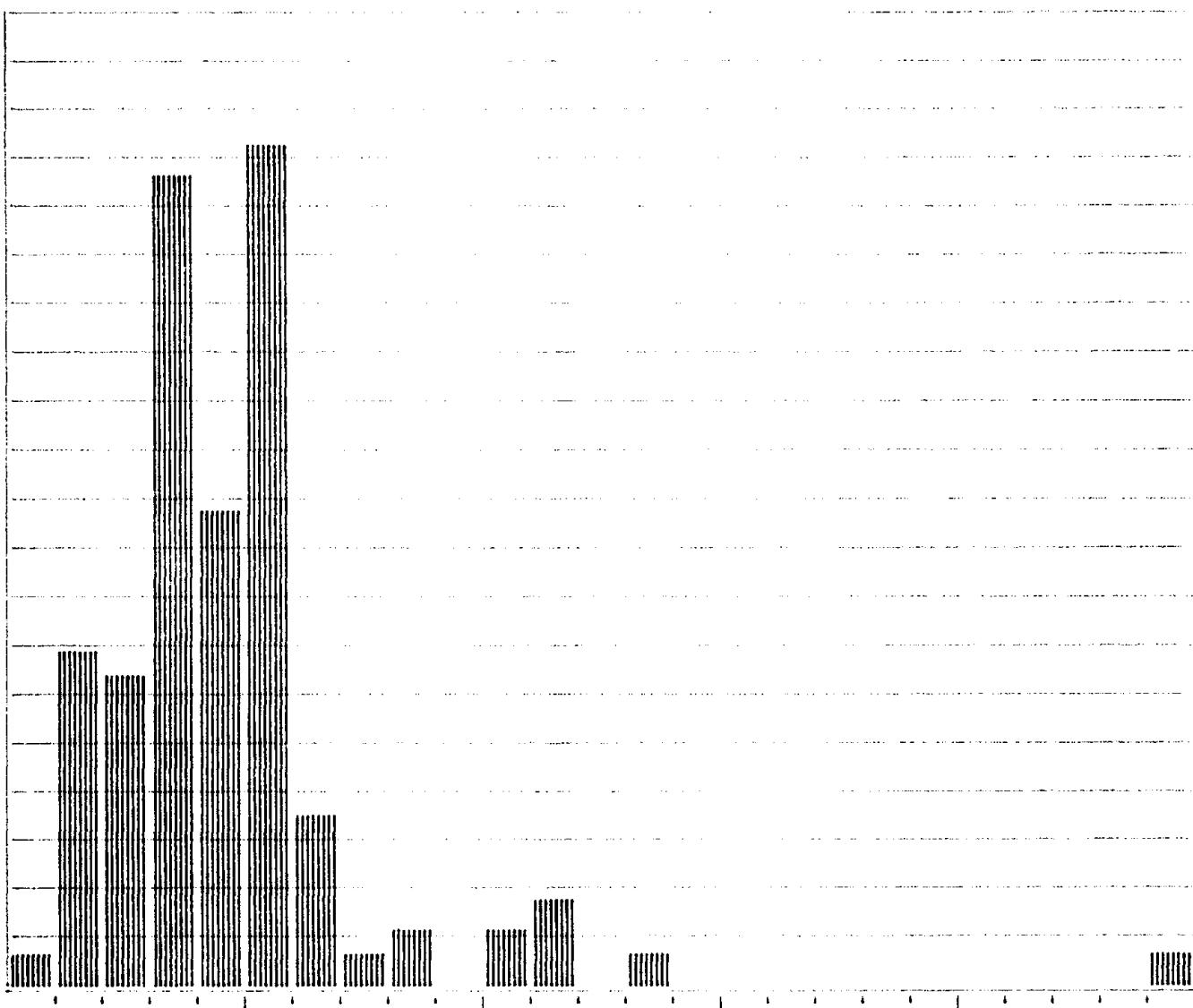
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27
24
21
18
15
12
9
6
3
0

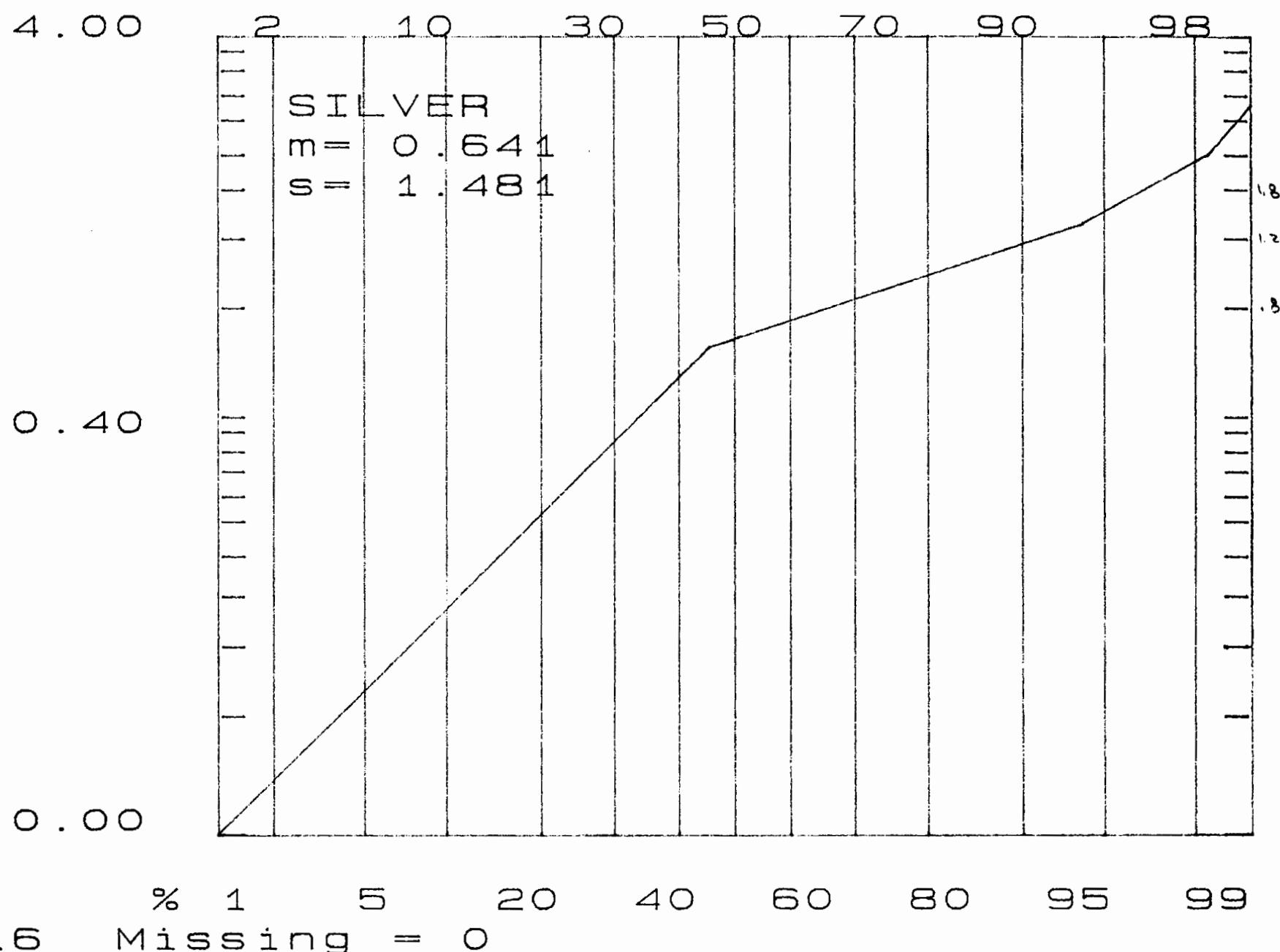
SILVER

TOTAL POPULATION

Freq
35
31
28
24
21
17
14
10
7
3
0

0.000 Interval = 0.160 4.000





%

30

27

24

21

18

15

12

9

6

3

0

ARSENIC

TOTAL POPULATION

Freq

35

31

28

24

21

17

14

10

7

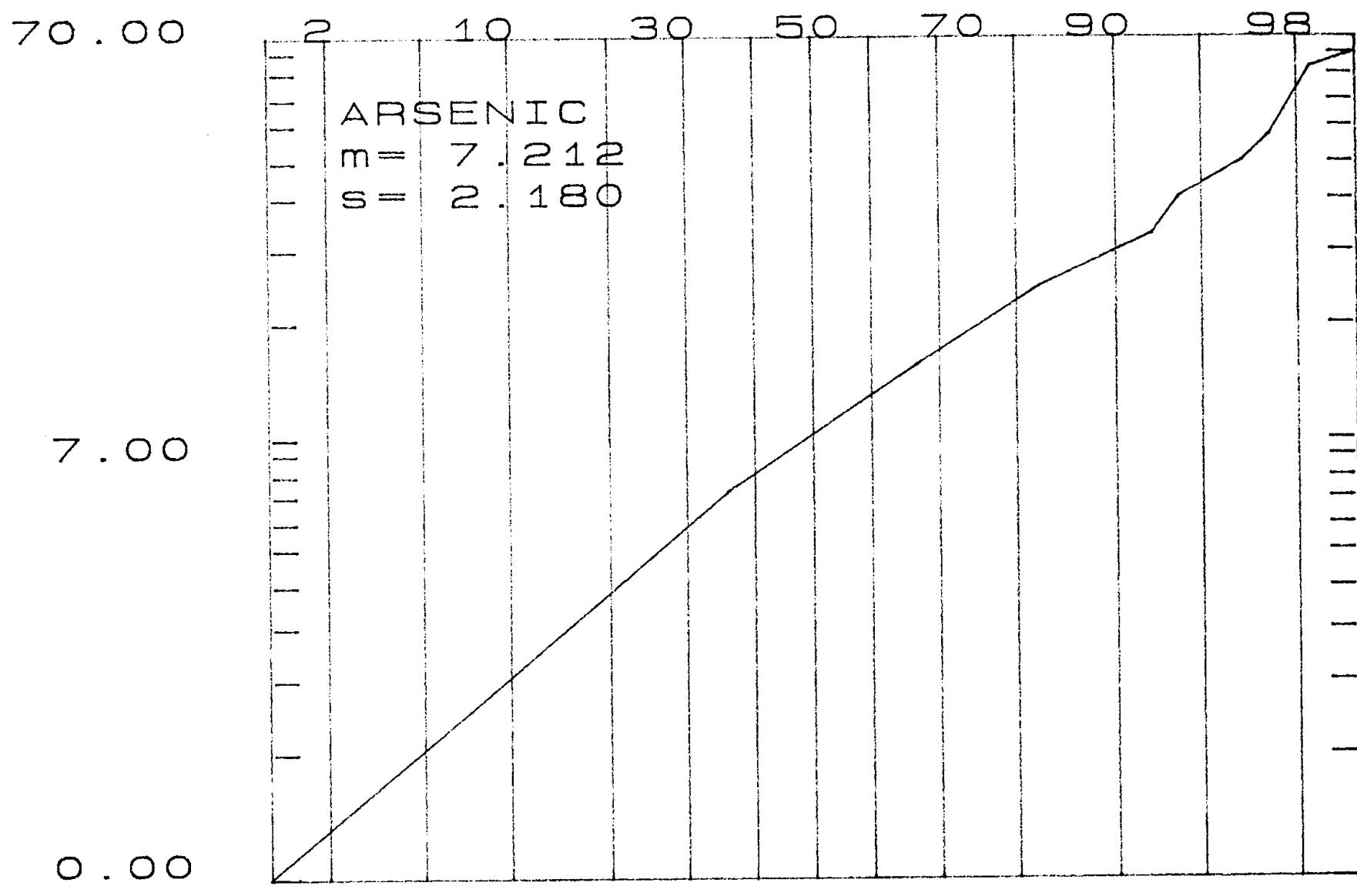
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0

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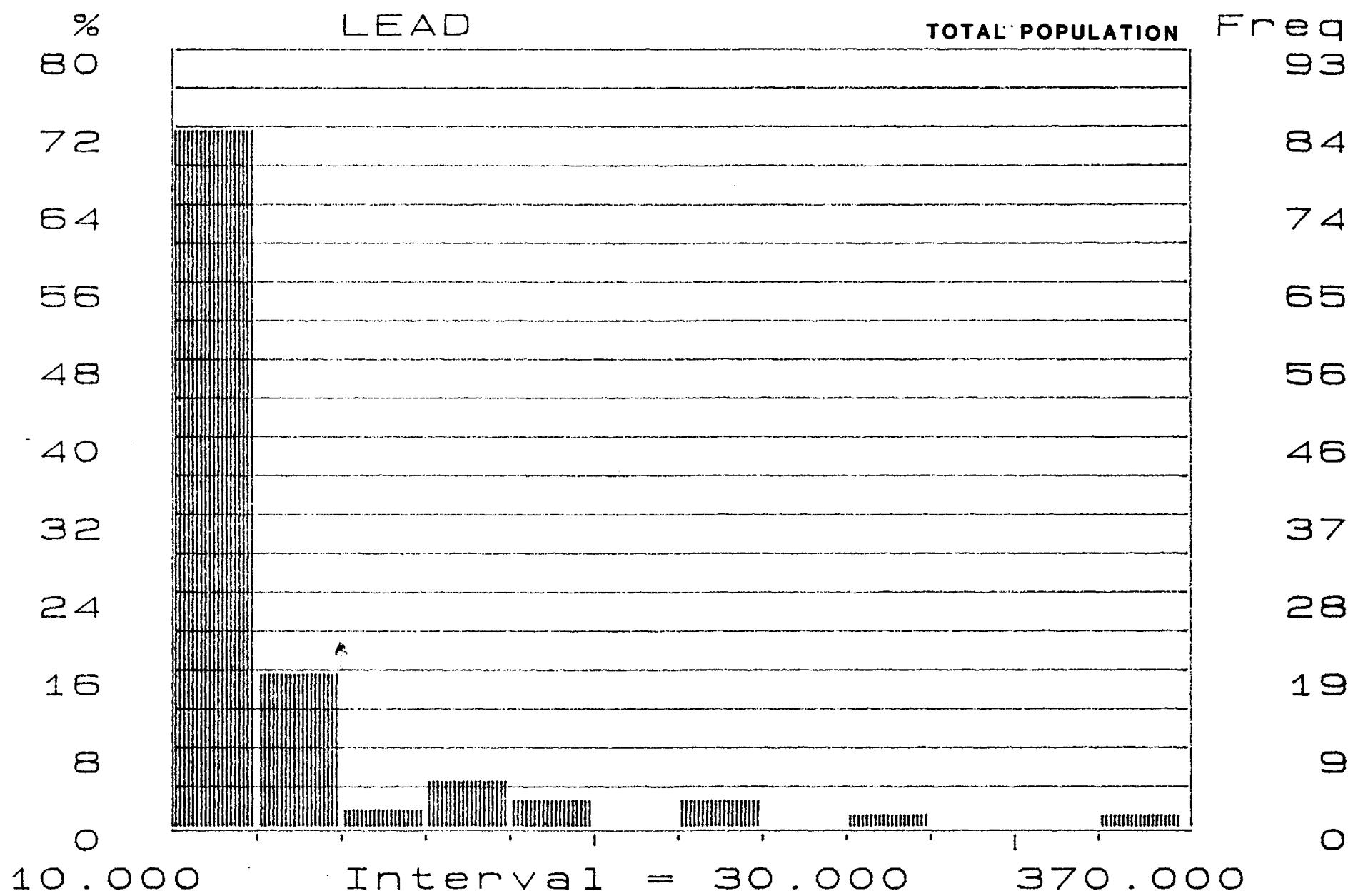
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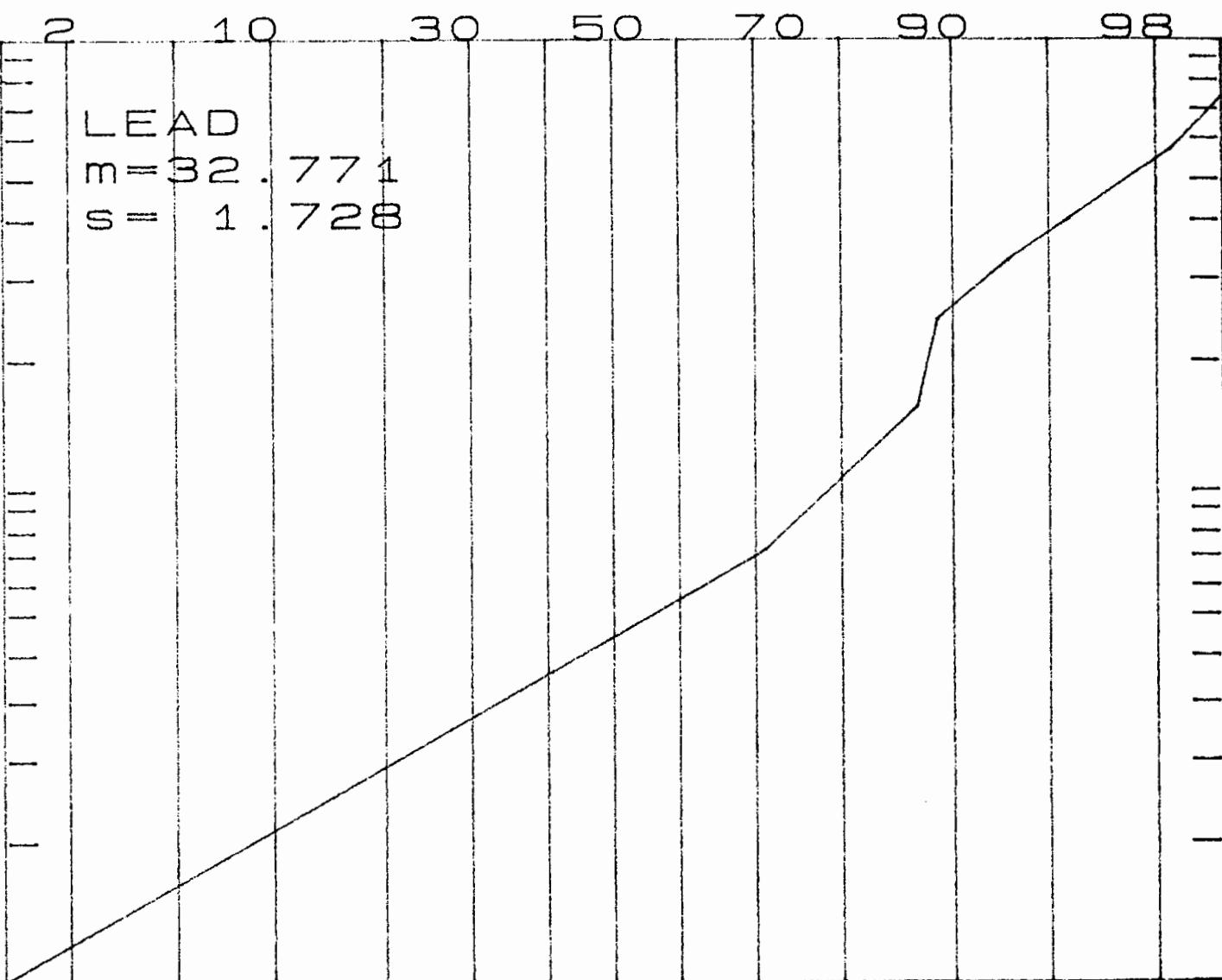


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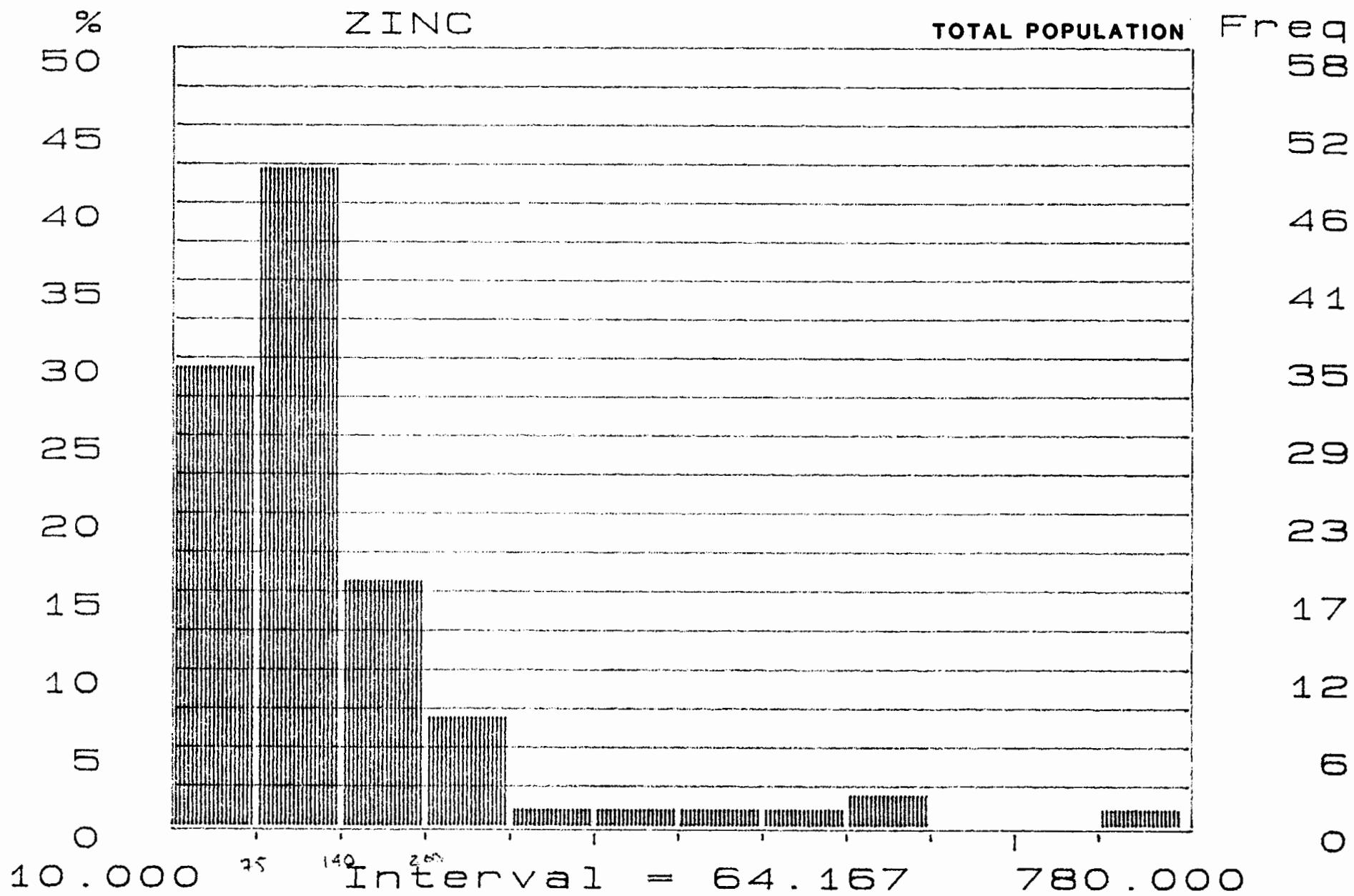
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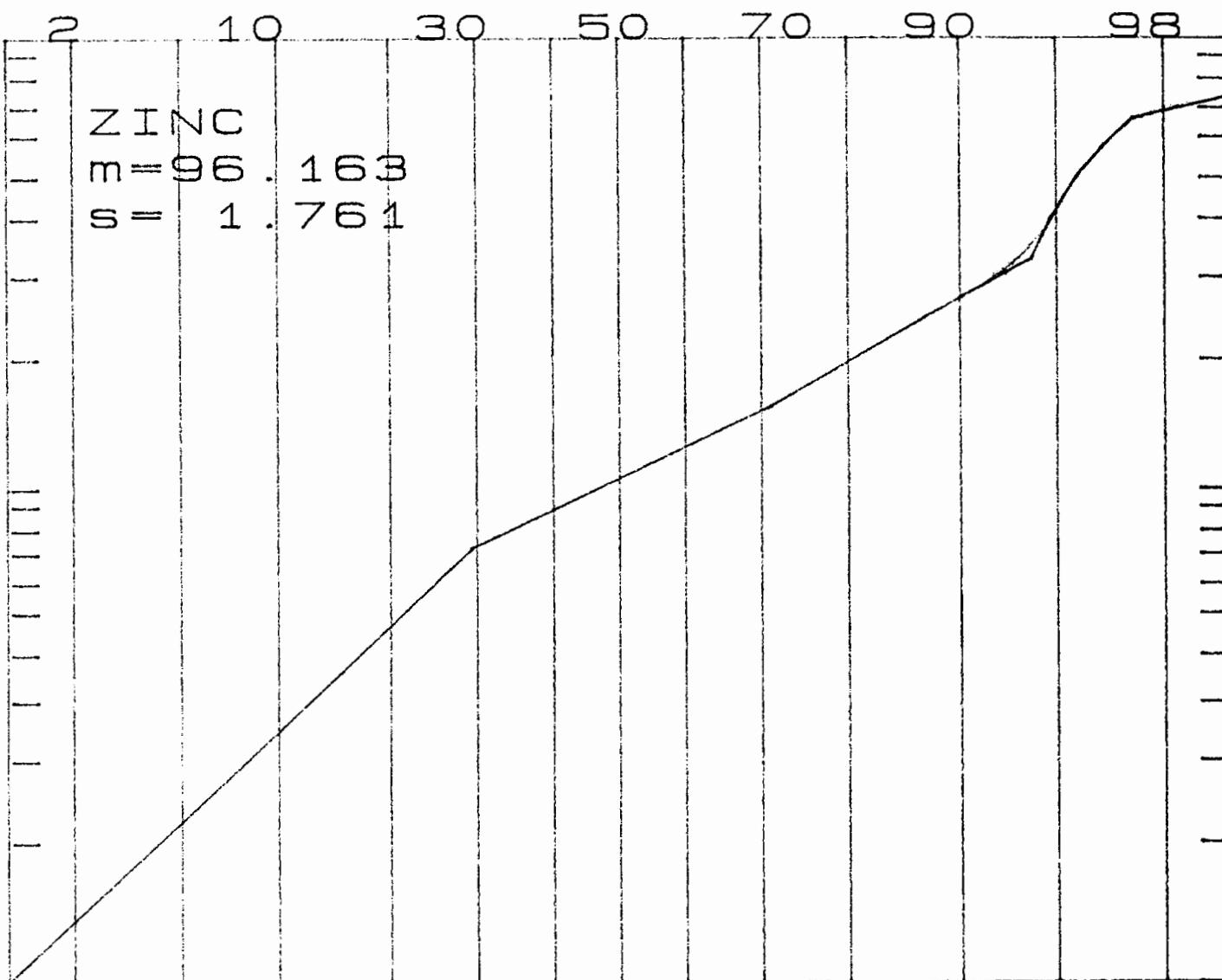
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780 . 00



10 . 00

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5

20

40

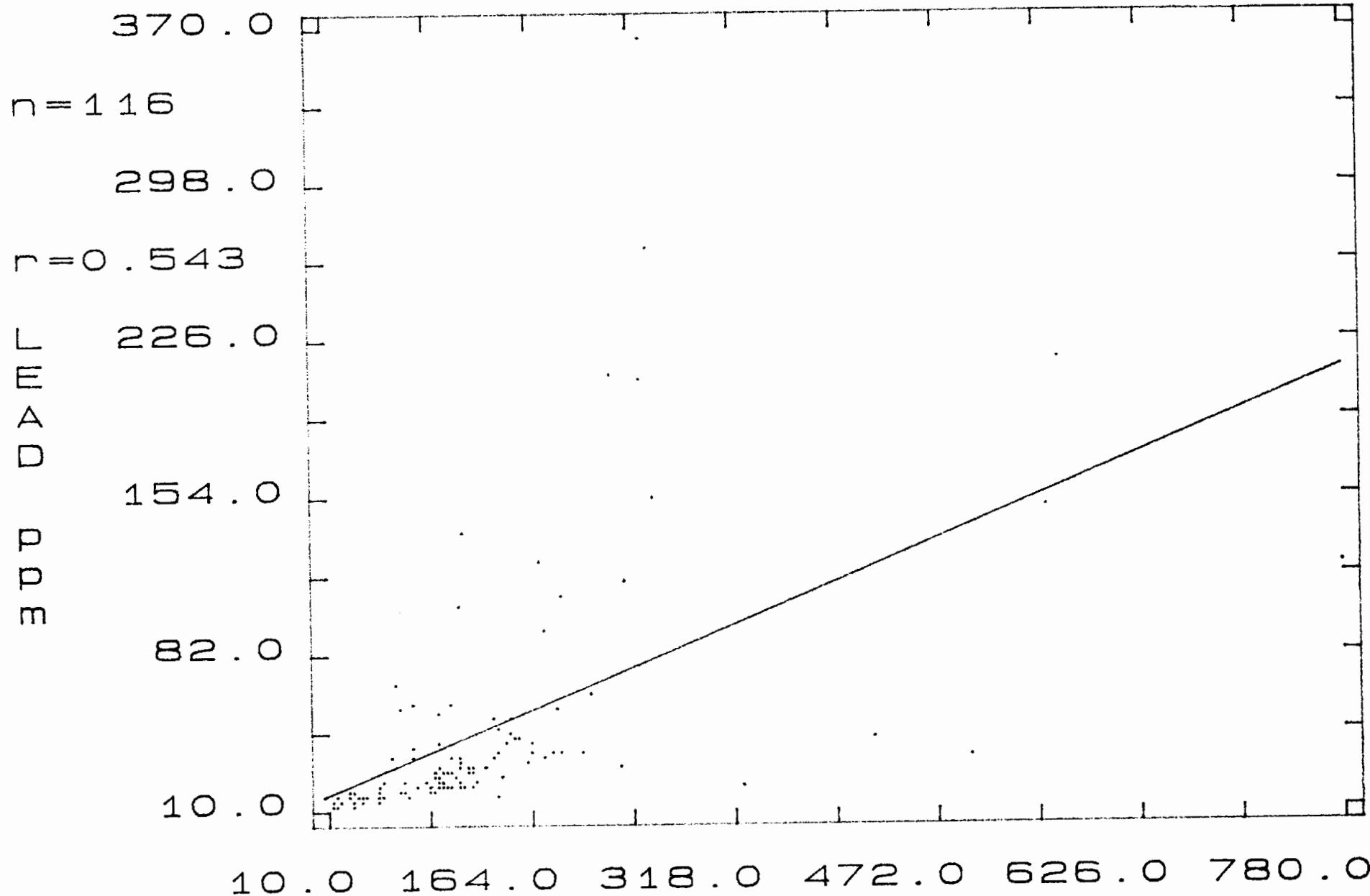
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80

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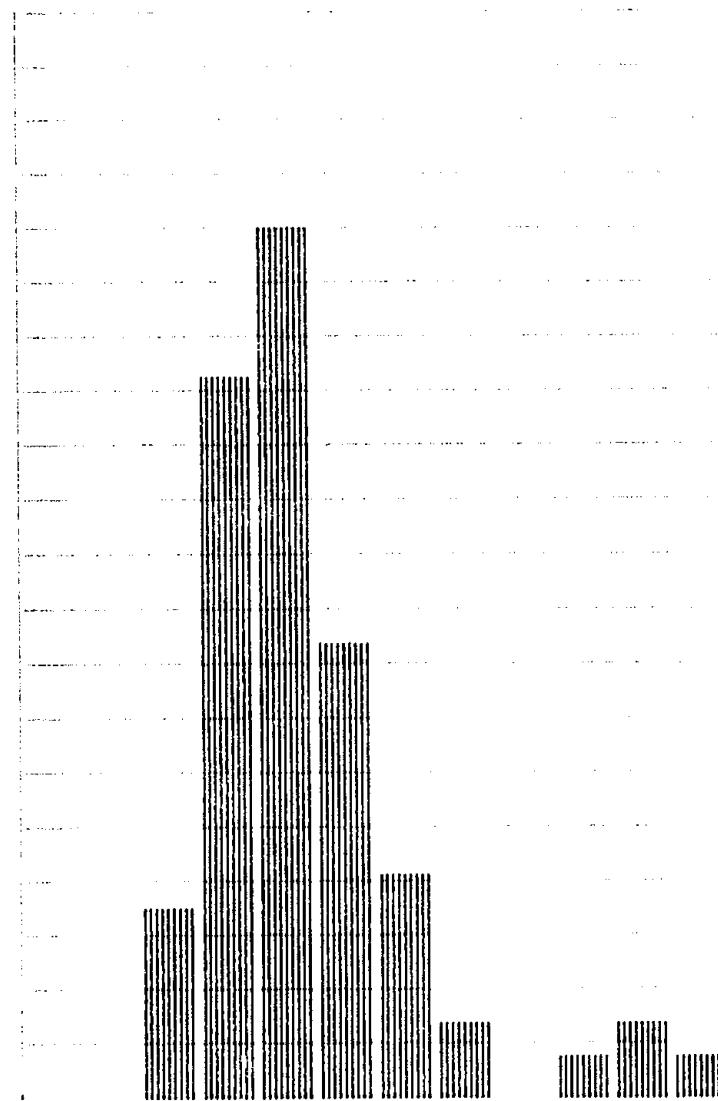
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ZINC ppm

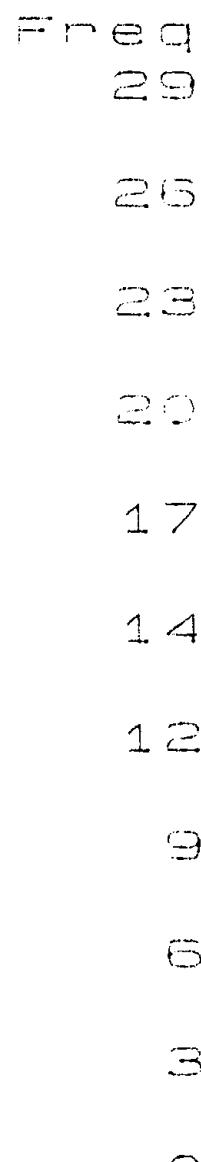


24
22
20
18
16
14
12
10
8
6
4
2
0

SILVER



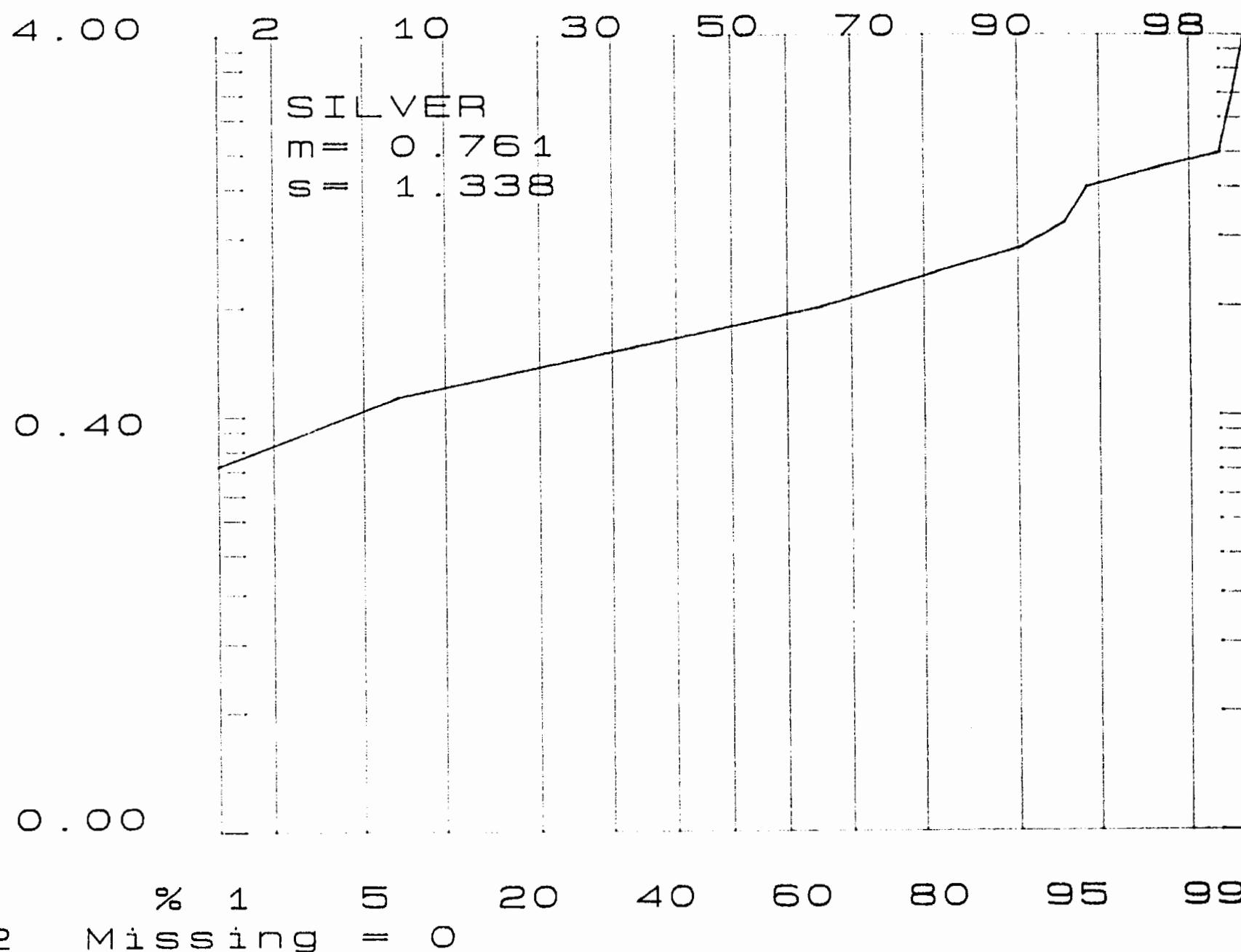
AUGER SAMPLES



0.000

Interval = 0.167

4.000



%

40

36

32

28

24

20

16

12

8

4

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LEAD

AUGER SAMPLES

Freq

29

26

23

20

17

14

12

9

6

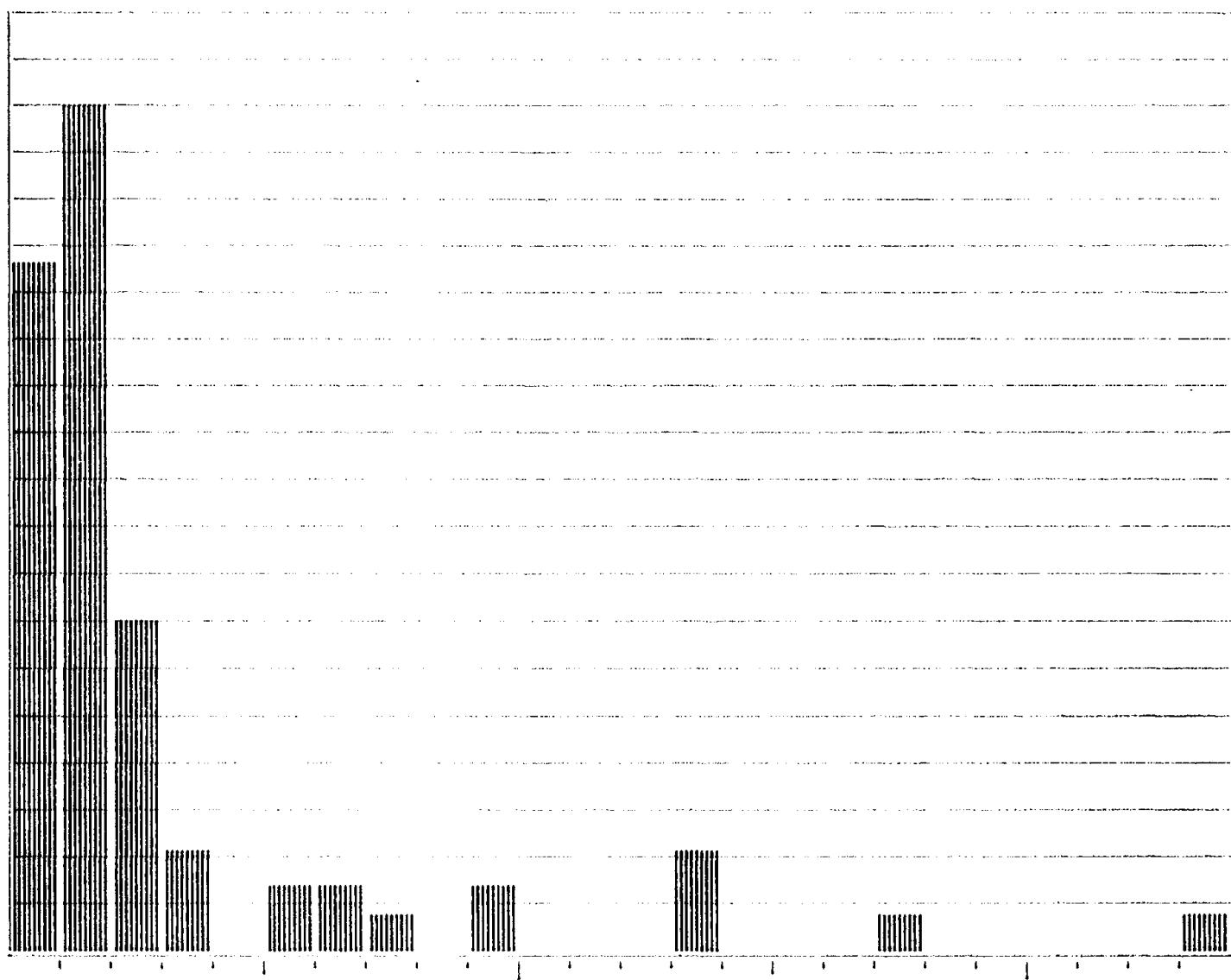
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0

10.000

Interval = 15.000

370.000



370.00

10

LEAD
 $m = 39.896$
 $s = 1.698$

30

50

70

90

98

46.00

10.00

% 1

5

20

40

60

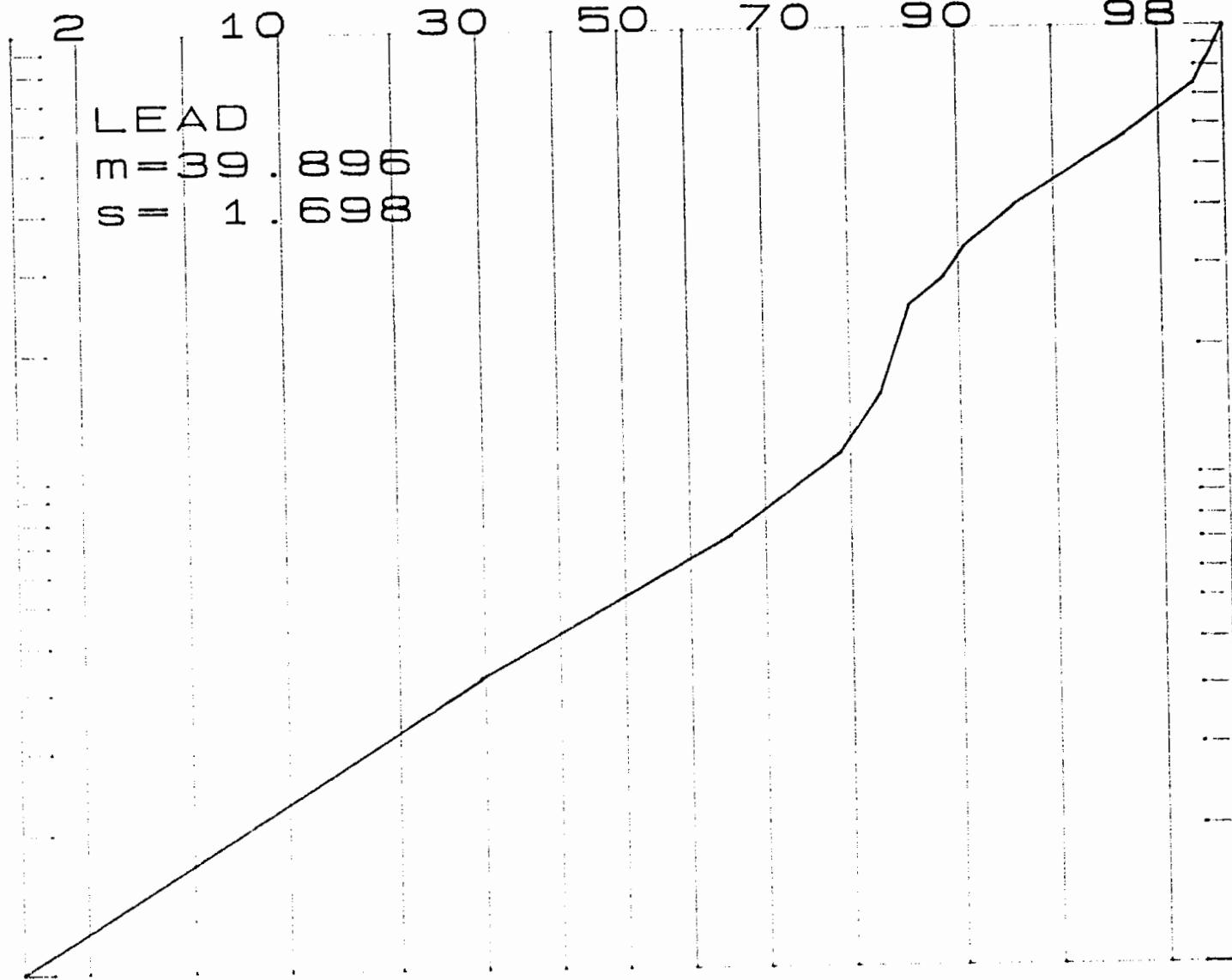
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95

99

n=72

Missing = 0



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40
36
32
28
24
20
16
12
8
4
0

ZINC

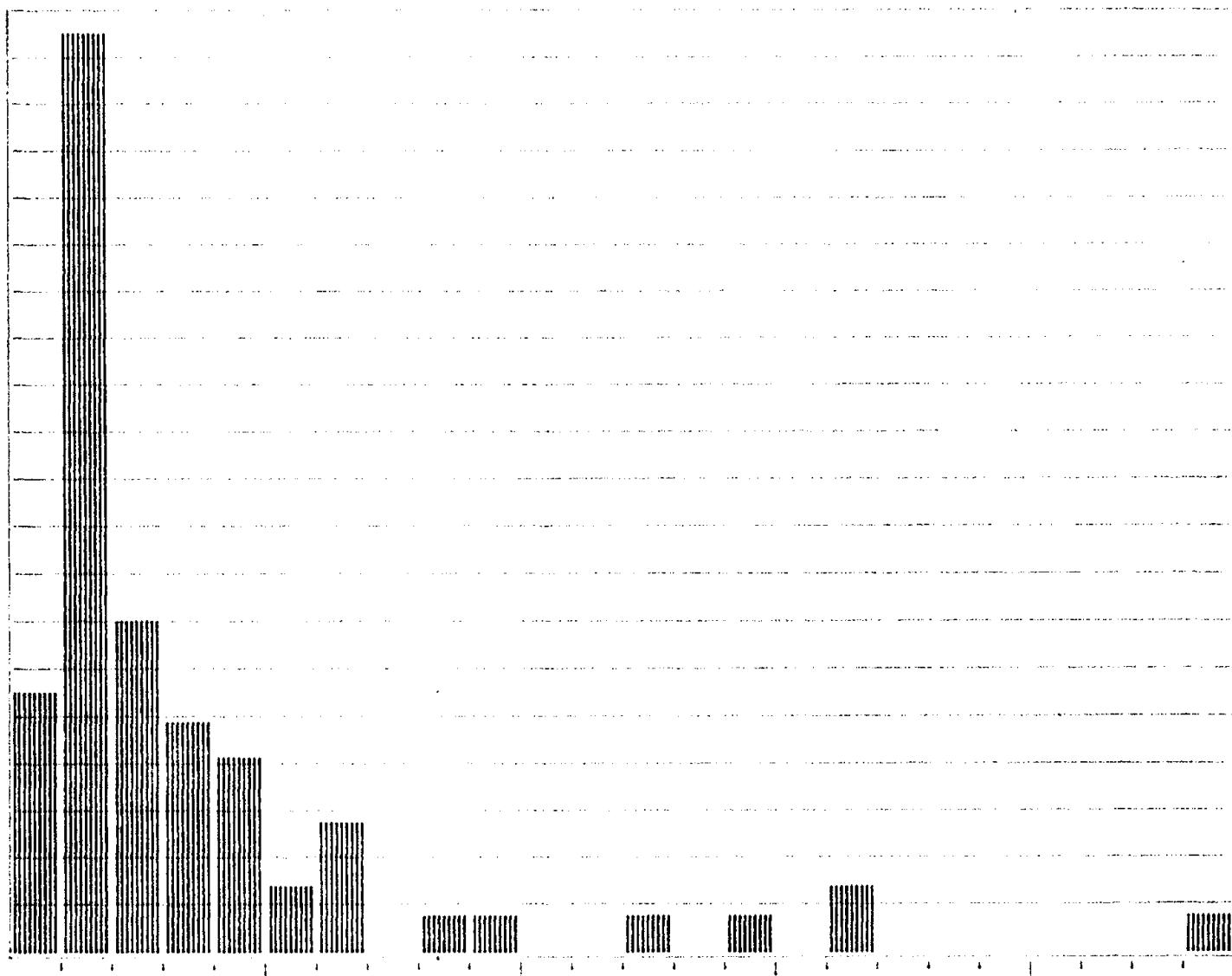
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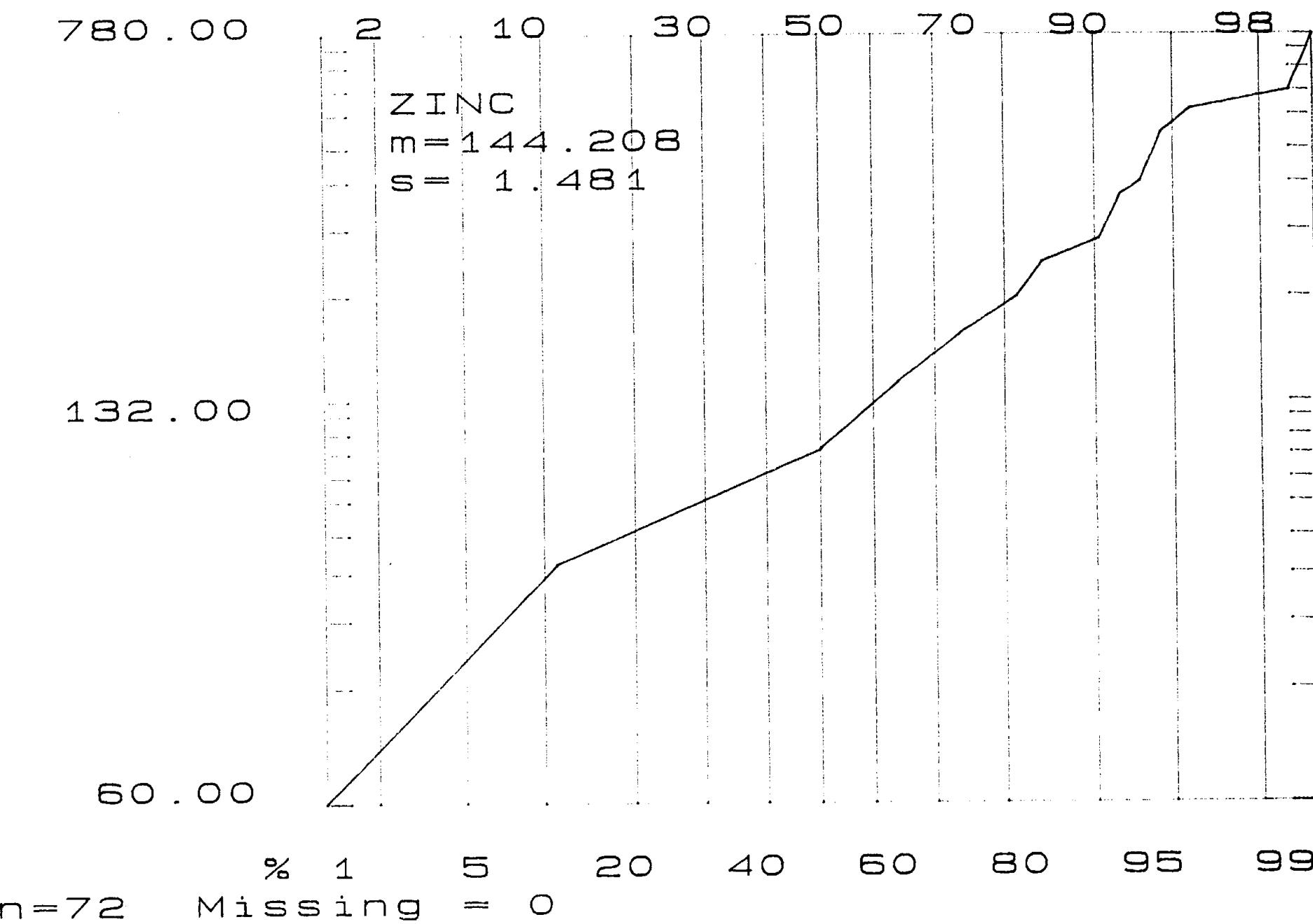
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2.6
2.3
2.0
1.7
1.4
1.2
1.0
0.9
0.6
0.4
0.2
0.0

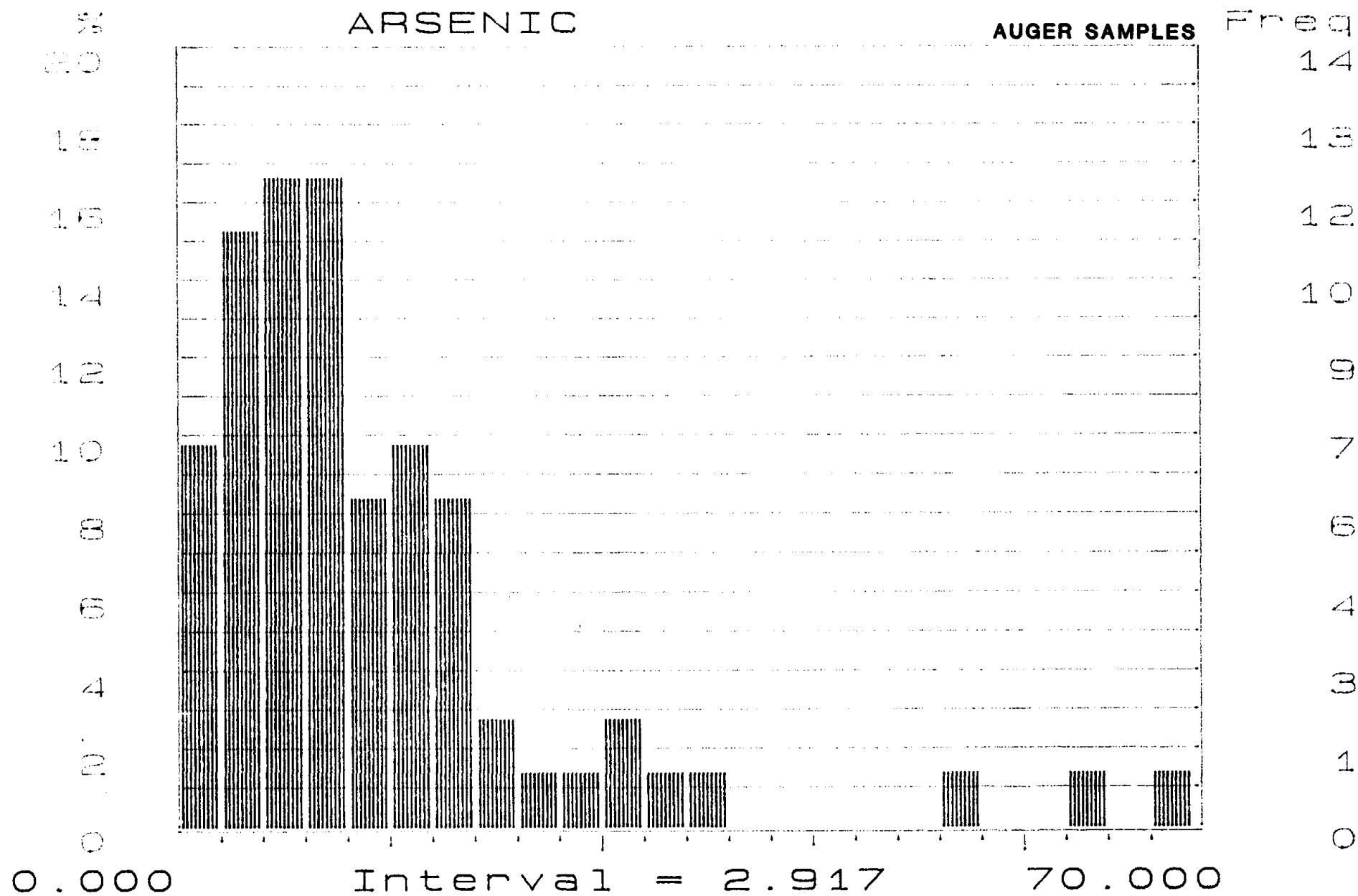
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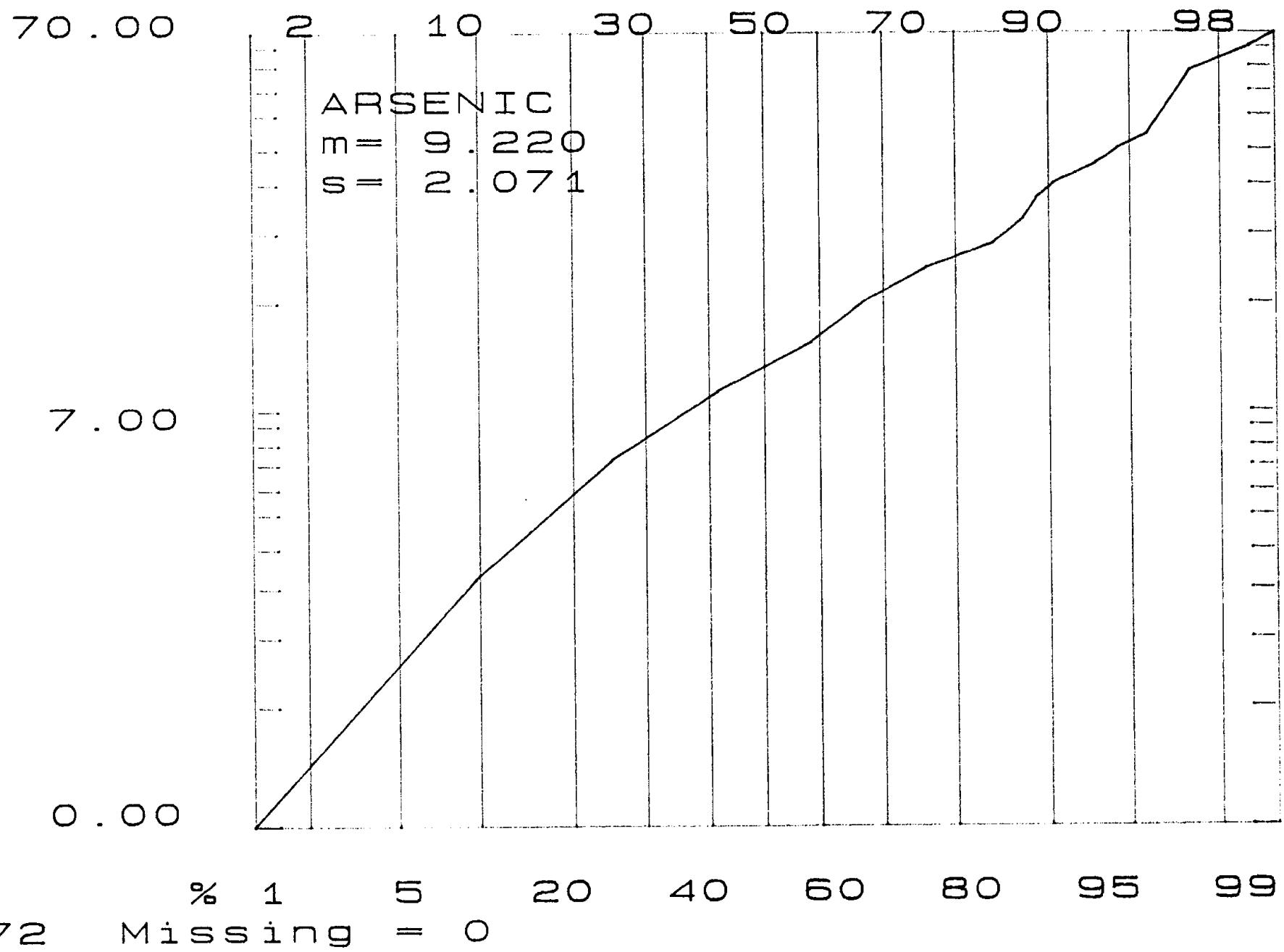
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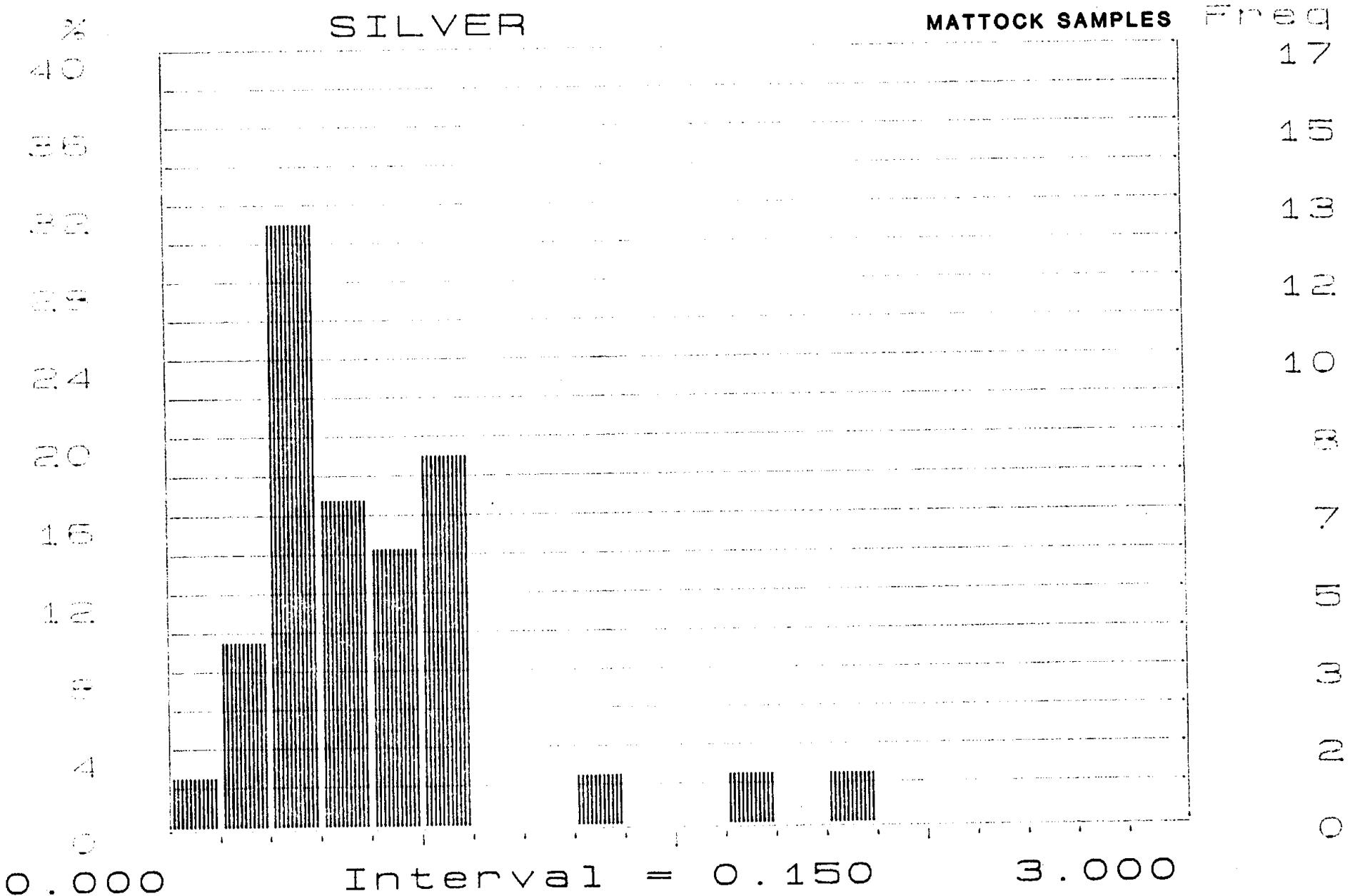
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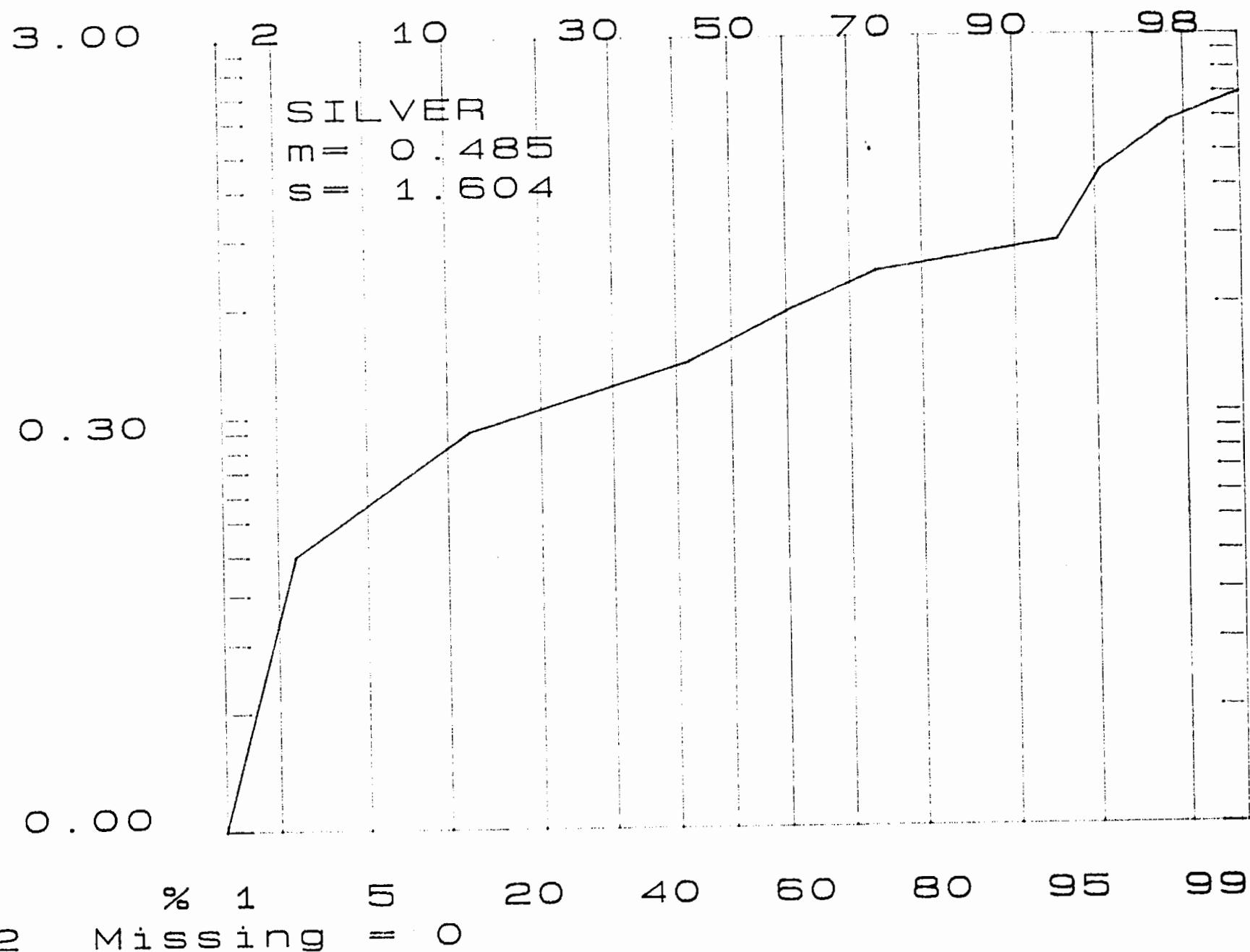






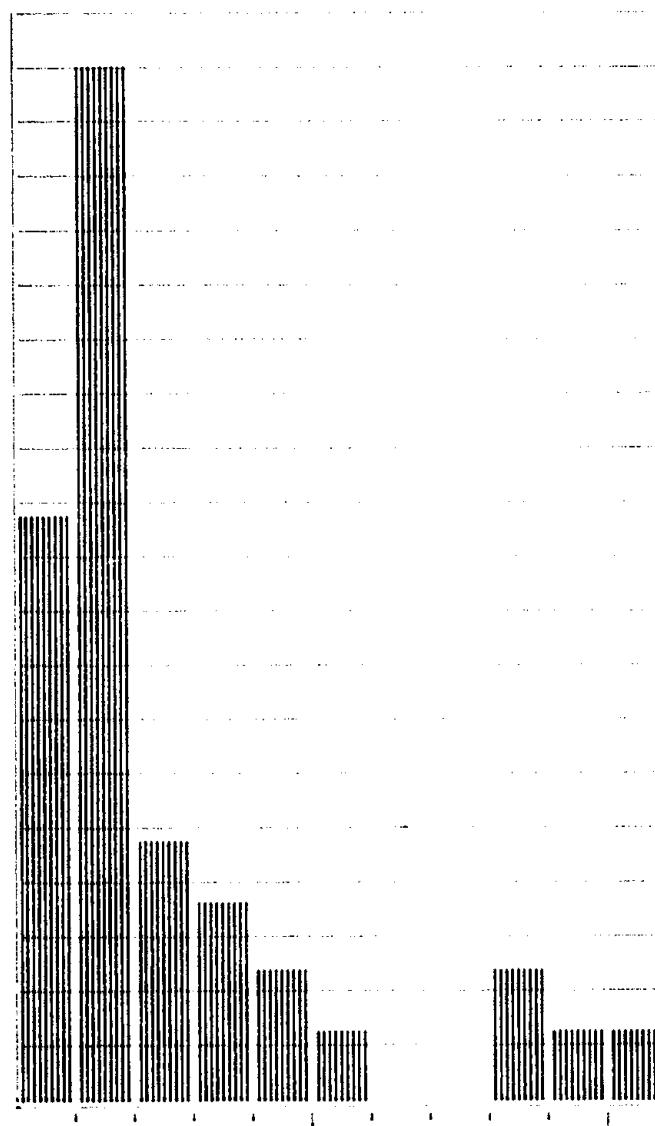




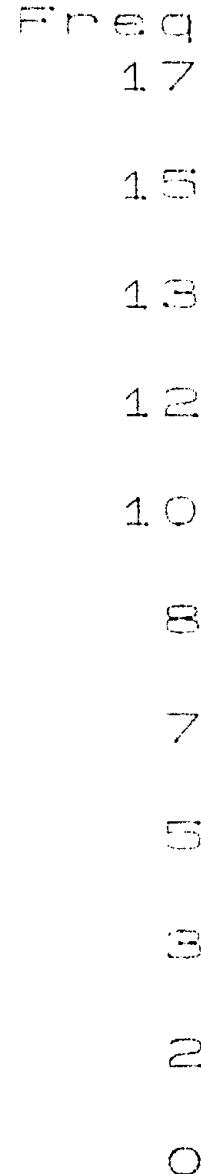


24
42
36
32
28
24
20
16
12
8
4
0

LEAD



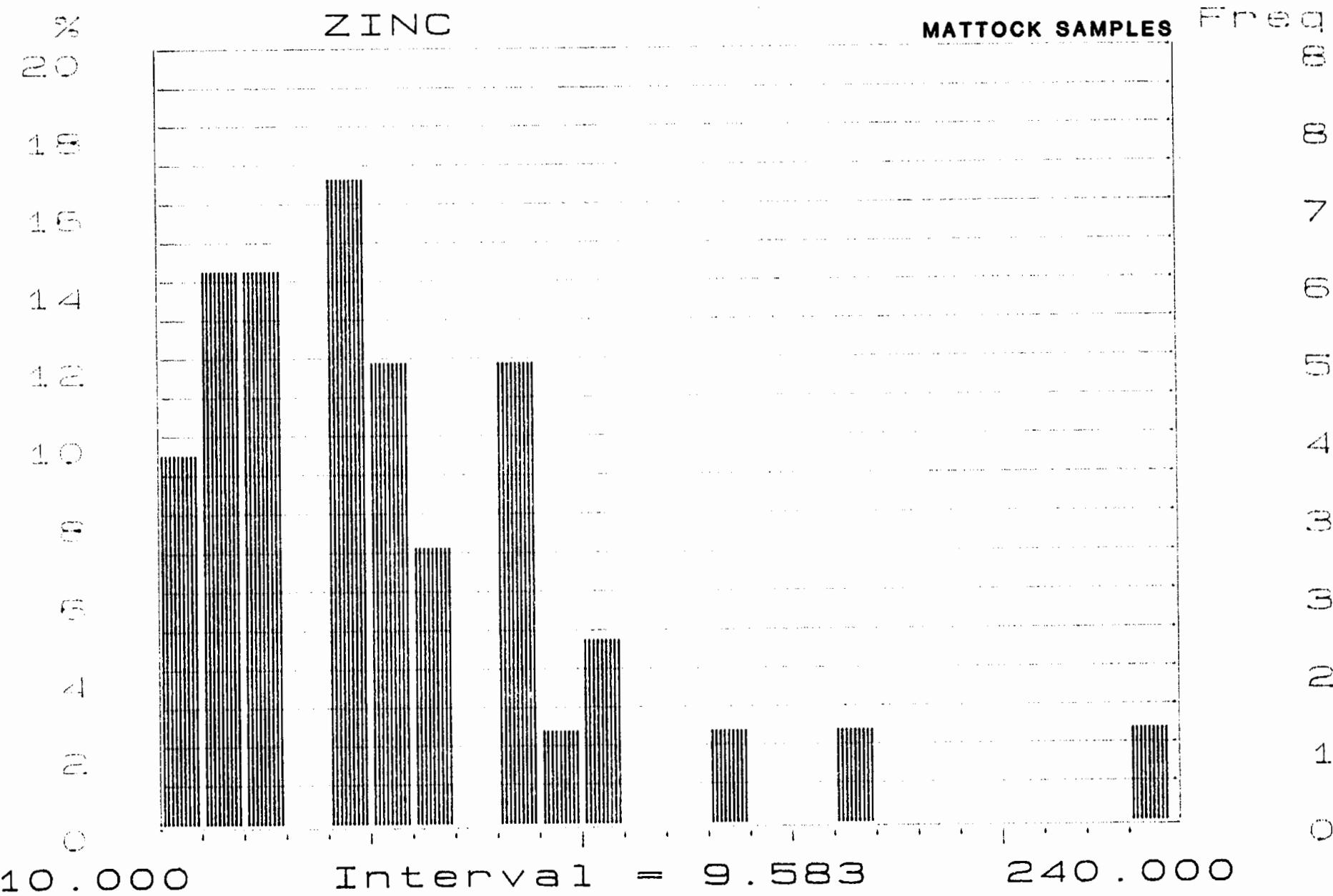
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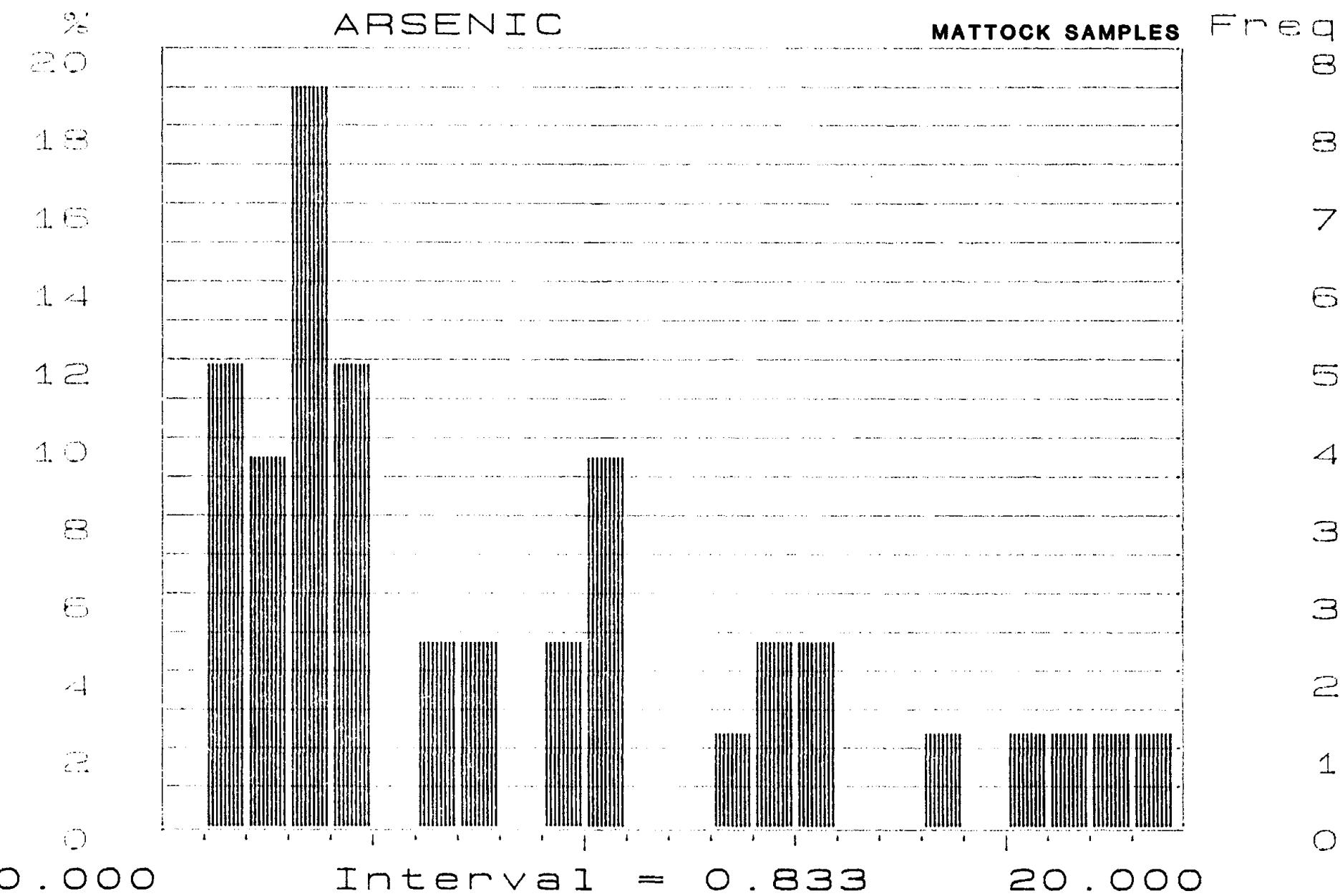


10,000

Interval = 5.417

140,000





APPENDIX II

DRILL LOGS

PLATES I, II



PLATE I Drill core from ADAMS-15 showing massive sulphides at 55 ft. Upper unit is limey graphitic argillite. Lower unit is chloritic phyllite (mafic ash tuff). Note carbonate alteration below sulphide horizon to approximately 88 ft.



PLATE II Typical sulphide intersection of semi-massive pyrite, galena and sphalerite at contact between argillaceous limestone and carbonate altered chloritic phyllite.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-15

PROJECT IDEN : ADAMS START DATE : 86/7/30 COMPLETION DATE :

COLLAR NORTHING: 60768.00 COLLAR EASTING : 16194.00 COLLAR ELEVATION: 1608.00 GEOLOGGED BY : PMH +

TOTAL LENGTH : 69.50 CORE/HOLE SIZE : BG GRID AZIMUTH : 0.00

| F - INTERVAL - K L (UNITS = FT) | CORE RECOV- | Z TYPICAL TEX- ERY I TM TM MAT TX TX F C X M | GRAIN FRAC- (FT.) X TYPE 1 2 BM1 1 2 F F C P # TK | STRUCTUR-1 ALTERATION MINS DRE-TYPE MINS H H H H H ANY H H H ANY |
|------------------------------------|----------------|--|---|---|
| E A | | | | T ID STK DIP A A A A A MIN A A A MIN |
| Y G F R O M - T O ----- | | | | 1 AZM RT QZ BI CY CB MG XX PY CP GL YY SUMMARY |
| K F | ROCK | FOR EN RT TM BM2 TX TX S R S O DIP F | | T ID STK DIP KF MU CL EP HE HA PR NO SL HA |
| E L | QUAL | MEM V Q LC- 3 3 4 0 N H / SML I | | 2 AZM RT H H H H H H H H |
| Y G | DESIG | AGE COL R D P C | | STRUCTUR-2 A A A A A A A A |

| P | 0.00 | 3.66 | OVER | P | | | |
|---|-------|-------|---|---|----|-------|----|
| P | 3.66 | 16.46 | ARGL CL CA2 LM CR EV LM BW PY SP2 BN GC | P | BD | 15 | U |
| L | 3.66 | 16.46 | Limey graphitic argillite. Black and white banded/thinly | | BD | 35 | P1 |
| R | 3.66 | 16.46 | laminated. Minor porphyroblastic pyrite. Last 2 m of the | | | | |
| R | 3.66 | 16.46 | interval become chloritic and strongly Fe-carb altered. | | | | |
| P | 16.46 | 17.68 | MSSF SP PY GA6 FG LM EX QZ SP2 | P | | P3 | |
| L | 16.46 | 17.68 | Fine grained massive sulphides in a siliceous matrix. | | | | |
| P | 17.68 | 62.80 | PHYL CB MS CL2 LM FG VC IN ST PY CA1 | P | | P2 | L= |
| L | 17.68 | 62.80 | Thinly bedded to laminated intermediate ash tuff. Top 4 m are | | | P1 P2 | |
| R | 17.68 | 62.80 | strongly musc. and Fe-carb altered. Chlorite increases down | | | | |
| R | 17.68 | 62.80 | the interval. Calcite is abundant (10%) throughout the | | | | |
| R | 17.68 | 62.80 | section. Clusters of laminated py occur sporadically to 35m. | | | | |
| P | 62.80 | 69.50 | ARGL PV SP2 LM | P | | | |
| L | 62.80 | 69.50 | Limey, weakly pyritic, graphitic argillite. Rusty weathering | | | | |
| R | 62.80 | 69.50 | looks to be Fe-carb (some as clasts). | | | | |

SUMMARY REMARKS

This is one of the better holes for sulphide bearing stratigraphy. The hanging wall tuffs are much thicker here than in the other holes and moderately altered. The footwall may also be less limey than normal. This hole suggests a possible correlation between thickness of tuffs and sulphide horizon.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-20

PROJECT IDEN : ADAMS START DATE : 86/7/16 COMPLETION DATE :

COLLAR NORTHING: 61144.00 COLLAR EASTING : 17067.00 COLLAR ELEVATION: 1785.00

TOTAL LENGTH : 27.40 CORE/HOLE SIZE : 80

GEOLOGGED BY : PCT +
GRID AZIMUTH :

| F - INTERVAL - K L (UNITS = FT) | CORE RECOV- | Z TYPICAL TEX- M ROCK FLYING MIN TURES CHARAC'S TURE | GRAIN FRAC- | STRUCTUR-1 ALTERATION MINS ORE-TYPE MINS |
|------------------------------------|--------------------|--|--|--|
| E A | ERY | I TM TM MAT TX TX F C Z M | | H H H H H ANY H H H ANY |
| Y G F R O M - T O | (FT,1) | X TYPE 1 2 0M1 1 2 F F C P # TK | T ID STK DIP A A A A A MIN A A A MIN | |
| K F | ROCK FOR EN RT | TM BM2 TX TX S R S 0 DIP F | 1 AZM RT QZ BI CY CB MG XX PY CP GL YY | SUMMARY |
| E L | QUAL MEM V 0 LC- 3 | 3 4 0 N H / SML I | 2 AZM RT | H H H H H H H H H |
| Y S | DESIG AGE COL | R D P C | STRUCTUR-2 | A A A A A A A A A |

| | | | | | |
|---|-------|-------|---|---|----|
| P | 0.00 | 5.79 | OVER | P | |
| P | 5.79 | 6.70 | ARBX AR QZ CA1 FR | P | #4 |
| L | 5.79 | 6.70 | Black argillite fragments in quartz-carbonate matrix. | 0 | 7 |
| R | 6.70 | 14.02 | LMST GP CA3 BN | P | 80 |
| L | | | 2A QZ1 | 8 | |
| R | 6.70 | 14.02 | Black and white banded argillaceous limestone, with minor | | |
| R | 6.70 | 14.02 | quartz stringers and disseminated pyrite. | | |
| P | 14.02 | 15.85 | QZBX QZ CB QZB IR | P | D/ |
| L | | | GP CB2 | | |
| R | 14.02 | 15.85 | White and iron stained quartz-carbonate breccia vein (fault?) | | |
| R | 14.02 | 15.85 | Very poor recovery. | | |
| P | 15.85 | 17.06 | ARGL GP BP3 | P | 75 |
| L | | | 2A CB2 | 9 | |
| R | 15.85 | 17.06 | Black and white banded argillite. High graphite content, trace | | |
| R | 15.85 | 17.06 | pyrite. Very poor recovery. | | |
| P | 17.06 | 18.28 | MISN PY GA | P | |
| L | | | MU | | |
| R | 17.06 | 18.28 | Suspected mineralized zone. Sulphide textures and | | |
| R | 17.06 | 18.28 | identification is impossible due to poor recovery. | | |
| P | 18.28 | 23.46 | ARGL GP QZ | P | 70 |
| L | | | CB | 9 | |
| R | 18.28 | 23.46 | Black and white banded argillite with zones of weakly | | |
| R | 18.28 | 23.46 | mineralized graphitic quartz-carbonate. Vein? Fault? Recovery | | |
| R | 18.28 | 23.46 | of mineralized zones is less than 20%. Sulphides include pyrite | | |
| R | 18.28 | 23.46 | galena and spalerite. | | |
| P | 23.46 | 27.43 | ARGL GP CB QZ2 BN | P | 70 |
| L | | | GP2 | 8 | |
| R | 23.46 | 27.43 | Pale green and black banded argillite with high graphite | | |
| R | 23.46 | 27.43 | content. Irregular veins and pods of quartz and minor carbonate | | |
| R | 23.46 | 27.43 | occur in lower section. Pyrite occurs thru-out. | | |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-20 (CONTINUED)

SUMMARY REMARKS

This hole has very poor recovery of suspected mineralized zones. Hanging wall is black and white banded limey argillite. Footwall is pale green and black banded tuffaceous argillite. Pyrite occurs throughout. Quartz carbonate alteration around the zone of poor recovery.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-21

PROJECT IDEN : ADAMS START DATE : 86/ 7/16 COMPLETION DATE : GEOLOGGED BY : PMH +
COLLAR NORTHING: 61150.00 COLLAR EASTING : 17210.00 COLLAR ELEVATION: 1795.00 GRID AZIMUTH :
 TOTAL LENGTH : 36.30 CORE/HOLE SIZE : BG

| | | | | | | | | | | |
|---|-------|-------|--|------|------|-----|-----|-----|----|-------------|
| P | 0.00 | 4.42 | OVER | | | | | P | | |
| P | 4.42 | 4.90 | DYKE | | | | | P | | |
| P | 4.90 | 11.00 | 80.0 | ALST | PY | CA6 | LB | FD | 3 | 0 |
| L | | | | EC | 3A | GP1 | RX | | | P |
| P | 11.00 | 14.80 | 110.0 | LY | ARBL | PY | LF | GP1 | LM | FR 3 5 1 L |
| L | | | | EC | 2A | CA2 | LB | | | 5 |
| R | 11.00 | 14.80 | Limy argillite with fine lenticular dolomitic fragments. | | | | | | | |
| P | 14.80 | 16.76 | 95.0 | GP | PHYL | OZ | PY | GP2 | LM | LB 3 0 |
| L | | | | EC | 3A | MS | CA3 | RX | | P |
| R | 14.80 | 16.76 | Rusty section of core. Basically a limy argillite with minor | | | | | | | |
| R | 14.80 | 16.76 | silicification. | | | | | | | |
| P | 16.76 | 36.27 | | GY | PHYL | OZ | MS | LF2 | LB | IB 3 6 2 M |
| L | | | | EC | 3A | GP | CA2 | LM | E | 0 3 LM 50 P |
| R | 16.76 | 36.27 | Pretty much like everything else. Mixed argillite, tuff and | | | | | | | |
| R | 16.76 | 36.27 | limestone. Coarse lenticular limy tuff fragments within a | | | | | | | |
| R | 16.76 | 36.27 | black argillite. Abundant quartz veining. Weak muscovite | | | | | | | |
| R | 16.76 | 36.27 | development. | | | | | | | |
| N | 16.76 | 36.27 | 100.0 | 3 | LMST | CA7 | | | | N |
| L | | | | EC | 7A | GP= | | | | |

SUMMARY REMARKS

Hole is entirely composed of mixed and /or interbedded argillite, limestone and minor chloritic tuff. Local fragmental textures. Core is split between 14.8-16.8m. Differences between units in this hole are relatively minor.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-22

PROJECT IDEN : ADAMS START DATE : 86/ 7/16 COMPLETION DATE : GEOLOGGED BY : PCT +
COLLAR NORTHING: 61250.00 COLLAR EASTING : 17210.00 COLLAR ELEVATION: 1770.00 GRID AZIMUTH :
TOTAL LENGTH : 24.70 CORE/HOLE SIZE : 80

| F - INTERVAL - | | CORE | Z | TYPI- | BAL | TEX- | GRAIN FRAC- | STRUCTUR-1 | ALTERATION MINS | DRE-TYPE MINS | | | | | |
|----------------|----------------|-----------|--------|-------|-------|------|-------------|------------|-----------------|---------------------------------|-----|---------|-------|--|---------------------------------------|
| K | L (UNITS = FT) | RECDV- | M | ROCK | FYING | MIN | TURES | CHARACS | H H H H H ANY | H H H ANY | | | | | |
| E | A | ERY | I | TM | TM | MAT | TX | TX F C X M | T ID | STK DIP A A A A A MIN A A A MIN | | | | | |
| Y | G | FROM - TO | (FT,1) | X | TYPE | 1 | 2 | GM1 | 1 | 2 | FF | C P # | TK | 1 AZM RT QZ BI CY CB MG XX PY CP GL YY SUMMARY | |
| K | F | | | ROCK | FOR | EN | RT | TM | GM2 | TX | TX | S R S O | DIP F | T ID | STK DIP KF MU CL EP HE HA PR MO SL HA |
| E | L | | | QUAL | MEM | V | Q LC- 3 | | 3 | 4 | DNH | / SML | I | 2 AZM RT | H H H H H H H H |
| Y | G | | | DESIG | AGE | | | COL | | R D | P C | | | STRUCTUR-2 | A A A A A A A A |

| P | 0.00 | 4.87 | OVER | | P | | |
|---|-------|-------|-------|---|---|----|--|
| P | 4.87 | 14.02 | 100.0 | GP ARGL GZ GP4 LM LB 2A CA2 | P | 70 | |
| L | | | | | | 8 | |
| R | 4.87 | 14.02 | | Banded black and white limy argillite with high graphite | | | |
| R | 4.87 | 14.02 | | content leading to high fissility. Lower meter of unit contains | | | |
| R | 4.87 | 14.02 | | increased quartz as irregular lenses. | | | |
| R | 12.08 | 13.41 | | Dark grey fine grained with 20% mafic specks: Lamprophyre dyke. | | | |
| N | 12.08 | 13.41 | | X DYKE | | N | |
| P | 14.02 | 17.37 | 100.0 | YL PHYL PY GZ MS3 YA CA2 | P | 70 | |
| L | | | | | | 5 | |
| R | 14.02 | 17.37 | | Yellow grey phyllite becoming more siliceous and sericitic down | | | |
| R | 14.02 | 17.37 | | section. Pyrite occurs finely disseminated and as nodules up to | | | |
| R | 14.02 | 17.37 | | 0.5cm, again increasing down section. | | | |
| P | 17.37 | 18.20 | 100.0 | MSSF PY GA CA1 BN SP GP2 | P | 70 | |
| L | | | | | | 7 | |
| R | 17.37 | 18.20 | | Mineralized zone consists of banded massive and porphyroblastic | | | |
| R | 17.37 | 18.20 | | pyrite, galena, significant arsenopyrite, wispy sphalerite and | | | |
| R | 17.37 | 18.20 | | trace chalcopyrite. Graphite laminations increase down section, | | | |
| R | 17.37 | 18.20 | | calcite layers occur throughout. | | | |
| F | 18.20 | 24.38 | 100.0 | GA PHYL PY GZ GP3 BN CA1 | P | 70 | |
| L | | | | | | 9 | |
| R | 18.20 | 24.38 | | Black and pale green banded phyllite. Graphitic and fissile, | | | |
| R | 18.20 | 24.38 | | contains pyrite cubes up to 1cm in size. Upper .3m section is | | | |
| R | 18.20 | 24.38 | | altered- iron stained and highly graphitic. | | | |
| P | 24.38 | 24.68 | 100.0 | A SILT PY GZ GA2 BN 4A | P | 70 | |
| L | | | | | | 6 | |
| P | 24.38 | 24.68 | | Siliceous grey siltstone with finely laminated graphite and | | | |
| P | 24.38 | 24.68 | | minor pyrite. | | | |

GO TO THE INDEX

This hole intersects .3m of massive sulphide; predominantly pyrite, galena, lesser sphalerite, arsenopyrite, and trace chalcopyrite. Upper section is highly graphitic banded limy.

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ADAMS

DRILLHOLE/TRaverse : ADAMS-22 (CONTINUED)

S U M M A R Y R E M A R K S

argillite. Immediate hanging wall is strongly sericitic and pyritized. The footwall is banded green and black graphitic phyllite grading into siliceous siltstone, both containing porphyroblastic pyrite.

INTERNATIONAL GEOSYSTEMS CORPORATION

PAGE: 1 DATE: 87/APR/13

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-23

PROJECT IDEN : ADAMS START DATE : 86/ 7/16 COMPLETION DATE : GEOLOGGED BY : PMH +
COLLAR NORTHING: 61131.00 COLLAR EASTING : 17000.00 COLLAR ELEVATION: 1794.00 GRID AZIMUTH :
TOTAL LENGTH : 35.40 CORE/HOLE SIZE : B6

S U M M A R Y R E M A R K S

Banded light and dark grey argillaceous limestone is underlain by muscovite altered, silicified and weakly mineralized yellow volcaniclastic. This material probably weathers to a rusty paper sericite schist. Underlain by graphitic argillite. Once again they probably stopped the hole too soon, as stacked mineralization zones are quite likely.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-24

| | | | |
|----------------------------|---------------------------|---------------------------|----------------------|
| PROJECT IDEN : ADAMS | START DATE : 86/7/16 | COMPLETION DATE : | GEOLOGGED BY : PMH + |
| COLLAR NORTHING: 611118.00 | COLLAR EASTING : 16944.00 | COLLAR ELEVATION: 1789.00 | GRID AZIMUTH : |
| | TOTAL LENGTH : 41.20 | CORE/HOLE SIZE : 89 | |

| F - I N T E R V A L - | C O R E | Z | T Y P I - G A L | T E X - | G R A I N F R A C - | S T R U C T U R - 1 | A L T E R A T I O N M I N S | D R E - T Y P E M I N S | |
|-----------------------|---------------|-----------|-----------------|-----------|---------------------|-------------------------|-----------------------------|---|---|
| K L (U N I T S = F T) | R E C O V - | M | R O C K | F Y I N G | M I N T U R E S | C H A R A C T U R E | H H H H H | A N Y H H H A N Y | |
| E A | E R Y | I | T M | T M | M A T | T X T X F C X M | T I D | S T K D I P A A A A A M I N A A A M I N | |
| Y G | F R O M - T O | (F T . 1) | X | T Y P E | 1 2 | G M I 1 2 F F C P # T K | I | A Z M R T B Z B I C Y C B M G X X P Y C P G L Y Y S U M M A R Y | |
| K F | ROCK | FOR | E N | R T | T M | G M 2 T X T X S R S 0 | D I P F | T I D | S T K D I P K F M U C L E P H E H A P R M O S L H A |
| E L | Q U A L | M E M | V | G | L C - 3 | 3 4 0 N H / S M L I | 2 | A Z M R T | H H H H H H H H H |
| Y G | D E S I G | A G E | C O L | | | R D P C | S T R U C T U R - 2 | A A A A A A A A A | |

| | | | | | | | | |
|---|-------|-------|---------|---|-------|-------|-------|----|
| P | 0.00 | 3.00 | O V E R | P | | | | |
| P | 3.00 | 3.70 | 100.0 | L M S T C A B B N L M | P | | | |
| L | | | | 5A | 4 | | | |
| R | 3.00 | 3.70 | | Dark to light grey banded limestone. Less graphite than the | | | | |
| R | 3.00 | 3.70 | | argillaceous limestone. I suspect this would weather a light | | | | |
| P | 3.00 | 3.70 | | grey colour. | | | | |
| P | 3.70 | 13.41 | | G N P H Y L M S B Z C L 2 F G | 3 0 | P F O | 60 3+ | 31 |
| L | | | | 76 C A 1 | | 4 | P1 P2 | D* |
| R | 3.70 | 13.41 | | Pale green chlorite-muscovite phyllite. Patches and | | | | |
| R | 3.70 | 13.41 | | segregations of calcite and chlorite. | | | | |
| P | 13.41 | 41.15 | | A L S T B Z P Y C A 6 L 8 L M | P F O | 70 | | N) |
| L | | | | 3 A B P 1 B X R X | 4 | | | |
| R | 13.41 | 41.15 | | Lensoid banded interbedded limestone and graphitic argillite. | | | | |
| R | 13.41 | 41.15 | | Carbonate predominates, but places with enough graphite to be | | | | |
| R | 13.41 | 41.15 | | conductive do occur. | | | | |
| R | 15.00 | 41.15 | | Layers are frequently folded and crenulated. Pyrite forms | | | | |
| R | 15.00 | 41.15 | | porphyroblasts to 1cm. Bedding or laminations are everywhere | | | | |
| R | 15.00 | 41.15 | | parallel to foliation. | | | | |
| N | 15.00 | 41.15 | | 3 A R G L B Z B P 3 I B | N | | | |
| L | | | | N N C A 2 | 4 | | | |

S U M M A R Y R E M A R K S

Bole is predominantly intermixed limestone and graphitic argillite. Some layers may have enough graphite and thickness to act as airborne conductors. Bole did not go far enough to intersect mineralization.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-25

PROJECT IDEN : ADAMS START DATE : 86/7/16 COMPLETION DATE :
 COLLAR NORTHING: 61147.00 COLLAR EASTING : 17070.00 COLLAR ELEVATION: 1785.00 GEOLOGGED BY : PMH +
 TOTAL LENGTH : 22.70 CORE/HOLE SIZE : 80 GRID AZIMUTH :

| F | - I N T E R V A L - | CORE | Z | T Y P I - | B A L | T E X - | G R A I N | F R A C - | S T R U C T U R - 1 | A L T E R A T I O N | M I N S | O R E - T Y P E | M I N S | | | | | | | | | | | | | | | |
|---|---------------------|---------------|------------|-----------|-----------|---------|-----------|---------------------|---------------------|---------------------|---------|-----------------|---------|-------|---|-----|---------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| K | L (UNITS = FT) | RECOV- | M | R O C K | F Y I N G | M I N | T U R E S | C H A R A C T U R E | H | H | H | H | H | | | | | | | | | | | | | | | |
| E | A | ER Y | I | T M | T M | M A T | T X | T X | A | A | A | A | A | | | | | | | | | | | | | | | |
| Y | G | F R O M - T O | (F T . 1) | X | T Y P E | 1 | 2 | G M 1 | A | A | A | A | A | | | | | | | | | | | | | | | |
| | | | | | | | | | M I N | M I N | M I N | M I N | M I N | | | | | | | | | | | | | | | |
| K | F | ROCK | FOR | E N | R T | T M | Q M 2 | T X | T X | S | R | S | D I P | F | T | I D | S T K | D I P | K F | M U | C L | E P | H E | H A | P R | M D | S L | H A |
| E | L | Q U A L | M E M | V | B | L C - | 3 | 3 | 4 | 0 | N | H | / | S M L | I | 2 | A Z M | R T | H | H | H | H | H | H | H | H | H | |
| Y | S | D E S I G | A G E | C O L | | | | R | D | P | C | | | | | | S T R U C T U R - 2 | | A | A | A | A | A | A | A | A | A | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| P | 0.00 | 6.71 | OVER | P | | | | | |
|---|-------|-------|------|--|---|-----|-----|-----|--|
| P | 6.71 | 16.90 | 50.0 | A L S T P Y C A 6 L M L B 3 0 P F O 8 0 | | | | | |
| L | | | EC | G P 2 | 9 | LM | 80 | D) | |
| R | 6.71 | 16.90 | | Banded black and white argillaceous limestone or limy | | | | | |
| R | 6.71 | 16.90 | | argillite. Calcite is recrystallized | | | | | |
| R | 6.71 | 16.90 | | Banded black and white argillaceous limestone or limy | | | | | |
| R | 6.71 | 16.90 | | argillite. Calcite is recrystallized into white layers. | | | | | |
| P | 16.90 | 17.37 | 70.0 | S M S F S P P Y G A 2 | P | P 6 | D 1 | M 2 | |
| L | | | EX | G 2 6 | 9 | | M 1 | | |
| R | 16.90 | 17.37 | | Core is badly ground up, zone is silicified with thin 5-10cm | | | | | |
| R | 16.90 | 17.37 | | zones of semi-massive galena +- sphalerite +- pyrite. Actual | | | | | |
| R | 16.90 | 17.37 | | thickness is hard to determine, but would appear to be 40cm | | | | | |
| R | 16.90 | 17.37 | | max. Other than silicification, there is no alteration to | | | | | |
| R | 16.90 | 17.37 | | speak of in this hole. | | | | | |
| P | 17.37 | 22.74 | 90.0 | L Y A R G L G Z P Y G P 3 L B L B 3 0 | P | F O | D 1 | | |
| L | | | EC | C A 3 B X | X | | M 1 | | |
| R | 17.37 | 22.74 | | Core is mostly rubble. Some of it is quite crumbled. Appears to | | | | | |
| R | 17.37 | 22.74 | | be changing from argillaceous limestone to limy argillite which | | | | | |
| R | 17.37 | 22.74 | | is typical of this unit. | | | | | |

SUMMARY REMARKS

Poor core recovery. Its very possible that this is not the main zone. If the dip displayed in the pit as 35-45° is consistent, then the hole stops about 100m short of intersecting the main zone.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-27

| | | | |
|---------------------------|---------------------------|---------------------------|----------------------|
| PROJECT IDEN : ADAMS | START DATE : 86/7/31 | COMPLETION DATE : | GEOLOGGED BY : PCT + |
| COLLAR NORTHING: 60714.00 | COLLAR EASTING : 16076.00 | COLLAR ELEVATION: 1813.00 | GRID AZIMUTH : |
| | TOTAL LENGTH : 47.90 | CORE/HOLE SIZE : BQ | |

| F - I N T E R V A L - | C O R E | % | T Y P I - Q A L | T E X - | G R A I N F R A C - | S T R U C T U R - 1 | A L T E R A T I O N M I N S | O R E - T Y P E M I N S | |
|-----------------------|-------------|-------|-----------------|-----------|----------------------|---------------------|-----------------------------|-------------------------|-------|
| K L (UNITS = FT) | R E C O V - | M | R O C K | F Y I N G | M I N T U R E S | H | H | H | |
| E A | E R Y | I | T M | T M | M A T | H | H | H | |
| Y E | F R O M - | (Ft.) | X | T Y P E | 1 | A N Y | A | A | |
| Y G | T O | | X | 2 | Q M 1 | A | A | A | |
| | | | X | 2 | F F C P | M I N | A | A | |
| | | | X | 2 | # T K | A | A | A | |
| | | | | | | S U M M A R Y | | | |
| K F | R O C K | F O R | E N | R T | T M | Q M 2 | T X | T X | |
| E L | Q U A L | M E M | V | Q | L C - | 3 | S | R | |
| Y G | D E S I G | A G E | C O L | | | 4 | R | S | |
| | | | | | | 0 | D | O | |
| | | | | | | P | P | P | |
| | | | | | | D I P | M U | S L | |
| | | | | | | F | C L | H A | |
| | | | | | | | E P | P R | |
| | | | | | | | H E | M O | |
| | | | | | | | H A | S L | |
| | | | | | | | H H | H A | |
| | | | | | | | H H | H H | |
| | | | | | | | H H | H H | |
| | | | | | | | H H | H H | |
| | | | | | | | A A | A A | |
| | | | | | | | A A | A A | |
| | | | | | | | A A | A A | |
| | | | | | | | A A | A A | |
| | | | | | | | A A | A A | |
| P | 0.00 | 4.57 | | OVER | | | P | | |
| P | 4.57 | 5.49 | 100.0 | GN | PHYL MS CL CB2 LM FG | | P | 90 | B2 |
| L | | | | | AG | | 5 | | L2 L1 |
| R | 4.57 | 5.49 | | | | | | | |
| R | 4.57 | 5.49 | | | | | | | |
| P | 5.49 | 18.29 | 100.0 | GA | PHYL QZ CB GP2 LB | | P | 70 | V2 |
| L | | | | | 7G PY CL2 | | 4 | | P2 |
| R | 5.49 | 18.29 | | | | | | | |
| R | 5.49 | 18.29 | | | | | | | |
| R | 5.49 | 18.29 | | | | | | | |
| R | 5.49 | 18.29 | | | | | | | |
| R | 5.49 | 18.29 | | | | | | | |
| P | 18.29 | 21.95 | 100.0 | AG | PHYL QZ MU | LB LM | P | 70 | B3 |
| L | | | | | AG CL | FG | 9 | | L2 X2 |
| R | 18.29 | 21.95 | | | | | | | |
| R | 18.29 | 21.95 | | | | | | | |
| R | 18.29 | 21.95 | | | | | | | |
| R | 18.29 | 21.95 | | | | | | | |
| R | 18.29 | 21.95 | | | | | | | |
| R | 18.29 | 21.95 | | | | | | | |
| P | 21.95 | 31.70 | 100.0 | AG | PHYL QZ CL | LB FG | P | 70 | N+ / |
| L | | | | | 7G GP | LM | 6 | | |
| R | 21.95 | 31.70 | | | | | | | |
| R | 21.95 | 31.70 | | | | | | | |
| R | 21.95 | 31.70 | | | | | | | |
| R | 21.95 | 31.70 | | | | | | | |
| P | 31.70 | 40.45 | 100.0 | YS | PHYL QZ MU | LB LM | P | 80 | 31 |
| L | | | | | 3G CL | FG | 4 | | P2 |
| R | 31.70 | 40.45 | | | | | | | |
| R | 31.70 | 40.45 | | | | | | | |
| P | 40.45 | 47.85 | 100.0 | AG | PHYL QZ CB GP | LB LM | P | 70 | |
| L | | | | | CL | FG | 5 | | |
| R | 40.45 | 47.85 | | | | | | | |
| R | 40.45 | 47.85 | | | | | | | |

| | | | | | | | | | |
|---|-------|-------|-------|----|---------------|-------|---|----|--|
| P | 40.45 | 47.85 | 100.0 | AG | PHYL QZ CB GP | LB LM | P | 70 | |
| L | | | | | CL | FG | 5 | | |
| R | 40.45 | 47.85 | | | | | | | |
| R | 40.45 | 47.85 | | | | | | | |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-27 (CONTINUED)

| F - I N T E R V A L - K L (UNITS = FT) | CORE RECOV- | % ERY | TYP1- GAL N ROCK F YING MIN | TEX- T URES CHARAC | GRAIN FRAC- TURE | STRUCTUR-1 ALTERATION MINS | DRE-TYPE MINS |
|---|----------------------------|---|--|-----------------------|---------------------|---|-------------------------|
| E A Y G F R O M - T O (FT.1) | | I | TM TM MAT | TX TX F C % M | | T ID STK DIP | H H H H H ANY H H H ANY |
| K F E L Y G | | X TYPE | 1 2 QM1 | 1 2 F F C P # TK | | 1 AZM RT 0Z BI CY CB MG XX PY CP GL YY | SUMMARY |
| R | 40.45 | 47.85 | yellow-green phyllite 20%. Trace pyrite, pervasive quartz, local graphite, local breccia texture. | | | | |
| R | 40.45 | 47.85 | | | | | |
| ROCK QUAL | FOR EN RT MEM V D LC- 3 | TM QM2 TX TX S R S O DIP F 3 4 0 N H / SML I | COL | R D P C | STRUCTUR-2 | KF MU CL EP HE HA PR MO SL HA 2 AZM RT | H H H H H H H H |
| DESIG | AGE | | | | | | A A A A A A A A |

S U M M A R Y R E M A R K S

Weak mineralization occurs at 30m in the form of wispy sphalerite. Pyrite is present throughout. Both hanging wall and footwall are similarly interbedded grey, green, and yellow phyllites with minor limestone. Mineralization is associated with quartz flooding.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-28

PROJECT IDEN : ADAMS START DATE : 86/ 7/25 COMPLETION DATE : GEOLOGGED BY : PMH +
 COLLAR NORTHING: 60508.00 COLLAR EASTING : 16080.00 COLLAR ELEVATION: 1837.00 GRID AZIMUTH :
 TOTAL LENGTH : 35.70 CORE/HOLE SIZE : BQ

| F - I N T E R V A L - | C O R E | % | T Y P I - D A L | T E X - | G R A I N | F R A C - | S T R U C T U R - 1 | A L T E R A T I O N | M I N S | O R E - T Y P E | M I N S | | | | | | | | | | | | | | | |
|-----------------------|---------------|-----------|-----------------|-----------|-----------|-----------|---------------------|---------------------|---------|-----------------|---------|---------------------|-----|----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| K L (U N I T S = F T) | R E C O V - | M | R O C K | F Y I N G | M I N | T U R E S | C H A R A C T | H | H | H | H | | | | | | | | | | | | | | | |
| E A | R E C O V - | I | T M | T M | M A T | T X | T X | A | A | A | A | | | | | | | | | | | | | | | |
| Y G | F R O M - T O | (F T . 1) | X | T Y P E | 1 | 2 | Q M I | A | A | A | A | | | | | | | | | | | | | | | |
| | | | | | | | | M I N | A | A | M I N | | | | | | | | | | | | | | | |
| K F | ROCK | FOR | EN | R T | TM | B M 2 | T X | T X | S R | S O | D I P | F | T | ID | STK | D I P | K F | M U | C L | E P | H E | P R | M B | S L | H A | |
| E L | QUAL | M E M | V | B L C - 3 | 3 | 4 | D N H | / | S M L | I | 2 | A Z M | R T | H | H | H | H | H | H | H | H | H | H | H | H | |
| Y G | DESIG | A G E | C O L | | | | R D | P C | | | | S T R U C T U R - 2 | | A | A | A | A | A | A | A | A | A | A | A | A | A |

| | | | | | | | | | | | | | | | | |
|---|-------|-------|-------|---|---|-------|-------|-------|-----|-----|----|-----|-----|-----|-----|-----|
| P | 0.00 | 3.50 | OVER | | | | P | | | | | | | | | |
| P | 3.50 | 4.50 | 100.0 | Y G | P H Y L | C A | Q Z | C L | L M | V N | P | F O | 60 | 3 = | P 2 | D) |
| L | | | | VC | 5 L | P Y | M S | | | | LM | 60 | P 2 | P 2 | | |
| R | 3.50 | 4.50 | | | Not chlorite altered. Chloritic phyllite with carbonate and | | | | | | | | | | | |
| R | 3.50 | 4.50 | | | muscovite alteration. | | | | | | | | | | | |
| P | 4.50 | 6.70 | 105.0 | L M S T | C A X | | L M | | P | | | | | L) | | |
| L | | | | E C | 7 A | | | | | | | | | | | |
| P | 6.70 | 19.50 | | C H T F | C L | C A | Q Z 8 | L M | F D | | P | F O | 65 | P 8 | | |
| L | | | | E C | | P O | M S 1 | G C | R X | | LM | 65 | L 2 | 0 1 | D = | L+ |
| R | 6.70 | 19.50 | | Tuffaceous chart but could be silicified phyllite. Most | | | | | | | | | | | | |
| R | 6.70 | 19.50 | | chlorite is converted to muscovite. | | | | | | | | | | | | |
| N | 11.30 | 15.30 | 100.0 | 4 | L M S T | C A X | | L M | F D | | N | L M | 65 | | | |
| L | | | | E C | 7 A | | | | | | | | | | | |
| P | 19.50 | 25.50 | 100.0 | Y L | P H Y L | C L | C A | Q Z 7 | M T | V D | P | | | P 7 | | D) |
| L | | | | E C | 7 L | | M S 2 | R X | | | | | | L 2 | 3 1 | D) |
| R | 19.50 | 25.50 | | Interval begins with muscovite phyllite. This becomes | | | | | | | | | | | | |
| R | 19.50 | 25.50 | | progressively more siliceous, but is more mottled than | | | | | | | | | | | | |
| R | 19.50 | 25.50 | | laminated and therefore looks silicified rather than primary. | | | | | | | | | | | | |
| R | 19.50 | 25.50 | | But, could be recrystallization. Towards the bottom of the | | | | | | | | | | | | |
| R | 19.50 | 25.50 | | interval rock becomes a mottled mess of quartz-chlorite veins. | | | | | | | | | | | | |
| P | 25.50 | 27.40 | 100.0 | M I N Z | D O | C A | C L 3 | M T | B N | | P | | 3 = | P 2 | D = | D* |
| L | | | | S F | M S 3 | B X | | | | | 5 | | P 3 | P 3 | | D) |
| R | 25.50 | 27.40 | | Very difficult to put a name to this rock. Banded to brecciated | | | | | | | | | | | | |
| R | 25.50 | 27.40 | | chlorite, muscovite, dolomite (pink and brown), calcite and | | | | | | | | | | | | |
| R | 25.50 | 27.40 | | sulphide. | | | | | | | | | | | | |
| P | 27.40 | 31.70 | 100.0 | C S B X | Q Z | C A | E P 3 | B X | M T | | P | | 3 = | 3 1 | D + | |
| L | | | | S F | C L 2 | G C | | | | | 5 | | P 1 | P 2 | P 3 | D* |
| R | 27.40 | 31.70 | | The middle of this interval is sulphide poor, and was not | | | | | | | | | | | | |
| R | 27.40 | 31.70 | | split. | | | | | | | | | | | | |
| P | 31.70 | 35.70 | | G N | P H Y L | C A | Q Z | C L 4 | L M | | P | F O | 70 | 3 = | 3 1 | D + |
| L | | | | V C | 3 G | M S 1 | | | | | 5 | LM | 70 | P 1 | P 4 | |
| R | 31.70 | 35.70 | | Dark green laminated fine chlorite phyllite. | | | | | | | | | | | | |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-28 (CONTINUED)

SUMMARY REMARKS

Upper portion of hole is interbedded phyllites and limestone. Overlying the mineralization is a highly silicified phyllite or a tuffaceous chert. Mineralized zone shows unusual alteration with the lower calc-silicate breccia suggestive of skarn affinities. The chlorite phyllite below the mineralization does not appear to be altered.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-29

| | | | |
|---------------------------|---------------------------|---------------------------|----------------------|
| PROJECT IDEN : ADAMS | START DATE : 86/ 7/25 | COMPLETION DATE : | GEOLOGGED BY : PMH + |
| COLLAR NORTHING: 60600.00 | COLLAR EASTING : 15976.00 | COLLAR ELEVATION: 1823.00 | GRID AZIMUTH : |
| | TOTAL LENGTH : 59.60 | CORE/HOLE SIZE : B9 | |

| F - I N T E R V A L - | C O R E | Z | T Y P I - Q A L | T E X - | G R A I N F R A C - | S T R U C T U R - 1 | A L T E R A T I O N M I N S | O R E - T Y P E M I N S |
|-----------------------|---------------|-----------|-----------------|-----------|---------------------|-------------------------|-----------------------------|---|
| K L (UNITS = FT) | R E C O V - | M | R O C K | F Y I N G | M I N T U R E S | C H A R A C T U R E | H H H H H | H H H H H |
| E A | E R Y | I | T M | T M | M A T | T X T X F C I M | A N Y | A N Y |
| Y G | F R O M - T O | (Ft.) | X | T Y P E | 1 2 | G M I 1 2 F F C P # T K | T I D | S T K D I P A A A A A M I N A A A M I N |
| - - - - - | - - - - - | - - - - - | ROCK | F O R E N | R T | T M Q M 2 | T X T X S R S O | D I P F T I D S T K D I P K F M U C L E P H E H A P R M O S L H A |
| K F | Q U A L | M E M V | Q L C - 3 | 3 | 3 4 0 | N H / S M L I | 2 A Z M R T | H H H H H H H H H |
| E L | D E S I G | A G E | C O L | R D P C | R D P C | STRUCTUR - 2 | A A A A A A A A A | |

| | | | | | | | | | | |
|---|-------|-------|--|-----------|----------------------|----|----|-------|----|----|
| P | 0.00 | 5.50 | OVER | | | | P | | | |
| P | 5.50 | 10.70 | GG | PHYL | CA PY CL2 LM FD 2 0 | P | FO | 60 | P2 | N* |
| L | | | EC | AG MS GP2 | 0 | LM | 60 | L) | | |
| R | 5.50 | 10.70 | Rock displays strong foliation plane slip as evidenced by | | | | | | | |
| R | 5.50 | 10.70 | dislocated folds. Laminations parallel to bedding as indicated | | | | | | | |
| Y | 5.50 | 10.70 | by thin grey limestone beds. | | | | | | | |
| P | 10.70 | 14.30 | 100.0 | LMST | CAX LM | P | LM | 60 | | |
| L | | | | 7A | | | | | | |
| R | 12.00 | 14.30 | As described above interlayered with limestone. Beds from | | | | | | | |
| R | 12.00 | 14.30 | 2-20cm. Slightly more muscovite. | | | | | | | |
| N | 12.00 | 14.30 | YG | PHYL | IB | N | | | | |
| P | 14.30 | 20.40 | 100.0 | YG | PHYL CA BZ CL3 LM IB | P | FO | 60 3+ | P2 | |
| L | | | | 7U | MS2 FD | LM | 60 | L2 | | |
| R | 14.30 | 20.40 | Finely laminated dark green-orange yellow layers interspersed | | | | | | | |
| R | 14.30 | 20.40 | with light grey limestone. | | | | | | | |
| N | 14.30 | 20.40 | 2 LMST | CAX | N | | | | | |
| L | | | 7A | | | | | | | |
| P | 20.40 | 25.60 | 100.0 | LMST | DO CAX LM | P | LM | 65 3+ | | |
| L | | | | 7A | QZ+ | | | | | |
| R | 20.40 | 25.60 | Some of the limestone is rusty. | | | | | | | |
| N | 20.40 | 25.60 | GN 3 | PHYL CA | CL3 LM | N | FO | 65 | | N* |
| L | | | | 56 | MS1 | LM | 65 | | | |
| P | 25.60 | 28.80 | 100.0 | 66 | PHYL MS CL2 LM WS | P | FO | 65 31 | P1 | D1 |
| L | | | | EC | AG GP2 | LM | 65 | L1 | | |
| P | 28.80 | 31.90 | 100.0 | 6Y | PHYL PY CL BP3 LM RX | P | | 31 | P2 | D+ |
| L | | | | EC | 2A CA2 BN | | | | | |
| P | 31.90 | 33.10 | 100.0 | LMST | CAX LM BN | P | LM | 70 | | |
| L | | | | 7A' | | | | | | |
| P | 33.10 | 36.30 | 100.0 | 6G | PHYL CA CL2 LM | P | | 3+ | P2 | D* |
| L | | | | EC | AS GP2 | | | | | |

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ADAMS

DRILLHOLE/TRAVERSE : ADAMS-29 (CONTINUED)

| F - INTERVAL - | | CORE | Z | TYPE-QAL | TEX- | GRAIN FRAC- | STRUCTUR-1 | ALTERATION MINS | ORE-TYPE MINS |
|----------------|----------------|-----------|--------------|-------------------------|-------------------|---------------------|------------|---------------------------------------|---------------|
| K | L (UNITS = FT) | RECOV- | M | ROCK | FLYING MIN | TURES CHARACS TURE | H | H H H H H ANY | H H H ANY |
| E | A | ERY | I | TM | TM MAT | TX TX F C % M | T ID | STK DIP A A A A A MIN A A MIN | |
| Y | G | FROM - TO | (FT.) | X TYPE | 1 2 QMI | 1 2 F F C P & TK | 1 | AZM RT GZ BI CY CB MG XX PY CP GL YY | SUMMARY |
| - | - | - | - | - | - | - | - | - | - |
| K | F | ROCK | FOR EN RT | TM | QMI 2 | TX TX S R S O DIP F | T ID | STK DIP KF MU CL EP HE HA PR MO SL HA | |
| E | L | QUAL | MEM V Q LC-3 | | 3 4 0 N H / SML I | | 2 | AZM RT H H H H H H H H | |
| Y | G | DESIG | AGE | COL | | R D P C | STRUCTUR-2 | A A A A A A A A A | |
| L | | | | | | | | | |
| R | 36.30 | 36.80 | | | | | | | |
| R | 36.30 | 38.80 | | | | | | | |
| N | 36.30 | 36.90 | | | | | | | |
| L | | | | | | | | | |
| P | 38.80 | 40.50 | 100.0 | LMST | CAX LM RX | | P | | |
| L | | | | 7A | | | | | |
| P | 40.50 | 44.70 | 100.0 | CHTF CL SF QZB LM RX | | P | PB | D1 | B/ |
| L | | | | 9A MS1 MT AP | | | L1 3= | | D* |
| R | 40.50 | 44.70 | | | | | | | |
| R | 40.50 | 44.70 | | | | | | | |
| R | 40.50 | 44.70 | | | | | | | |
| P | 44.70 | 45.30 | | LMST CL | CAB LM | | P | | |
| L | | | | 5A | GP1 | | | | |
| P | 45.30 | 45.60 | 100.0 | SMSF QZ PD BA2 BN | | P | | D1 | M2 |
| L | | | | PY SL1 | | | | M1 | M1 |
| R | 45.30 | 45.60 | | | | | | | |
| R | 45.30 | 45.60 | | | | | | | |
| R | 45.30 | 45.60 | | | | | | | |
| P | 45.60 | 50.40 | 100.0 | CHTF MS DO QZ7 LM RX | | P | P7 | D+ | D* |
| L | | | | 9G CL1 MT | | | L1 L1 | | |
| R | 45.60 | 50.40 | | | | | | | |
| R | 45.60 | 50.40 | | | | | | | |
| R | 45.60 | 50.40 | | | | | | | |
| R | 49.10 | 49.30 | | | | | | | |
| R | 49.10 | 49.30 | | | | | | | |
| N | 49.10 | 49.30 | | X SMSF PY QZ SL2 LM MX | | N | | D1 | M1 |
| L | | | | GA1 | | | | M2 | |
| P | 50.40 | 59.70 | 100.0 | LM ARGL QZ MS GP3 BN LM | | P | FO | 75 | |
| L | | | | EC BW CL CA3 LB BX | | | LM | 75 | L= L= |
| R | 50.40 | 59.70 | | | | | | | |
| R | 50.40 | 59.70 | | | | | | | |
| R | 51.10 | 51.70 | | | | | | | |
| L | 51.10 | 51.70 | | | | | | | |
| N | 51.10 | 51.70 | | LM X ARGL GP CA PY= | | N | | D= | D* |
| L | | | | EC QZ SL1 | | 5 | | D) | |

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ADAMS

DRILLHOLE/TRaverse : ADAMS-29 (CONTINUED)

S U M M A R Y R E M A R K S

This hole appears to be upside down relative to the Lucky Coon, where the hanging wall is argillaceous limestone and the footwall is yellow-green phyllite. The mineralization is impressive in tenor but is so thin as to border on insignificance.

DRILLHOLE/TRaverse : ADAMS-30

PROJECT IDEN : ADAMS START DATE : 86/ 7/26 COMPLETION DATE :

COLLAR NORTHING: 60537.00 COLLAR EASTING : 15884.00 COLLAR ELEVATION: 1831.00

TOTAL LENGTH : 58.20 CORE/HOLE SIZE : 80

GEOLOGGED BY : PCT +
GRID AZIMUTH :

| F - I N T E R V A L - K L (UNITS = FT) | CORE RECOV- | Z T Y P I - Q A L T E X - G R A I N F R A C - E R Y M R O C K F Y I N G M I N T U R E S C H A R A C S T U R E | STRUCTUR-1 ALTERATION MINS O R E - T Y P E M I N S |
|---|---|--|---|
| E A Y G F R O M - T O (FT.1) | X T Y P E 1 2 0 M I 1 2 F F C P # T K | H H H H H A N Y H H H A N Y | |
| K F | ROCK F O R E N R T T M B M 2 T X T X S R S D D I P F | T I D S T K D I P A A A A M I N A A M I N | |
| E L | QUAL M E M V Q L C - 3 3 4 0 N H / S M L I | 1 A Z M R T Q 2 B I C Y C B M S X X P Y C P S L Y Y S U M M A R Y | |
| Y G | D E S I G A G E C O L R D P C | STRUCTUR-2 A A A A A A A A | |

| P | 0.00 | 8.38 | O V E R | P | | | |
|---|-------|-------|--|-----|-------|----|--|
| P | 8.38 | 9.14 | 100.0 A G P H Y L C L A N C A I L M F S | P | | B1 | |
| L | | | 7G | 4 | | | |
| R | 8.38 | 9.14 | Green chloritic phyllite with pale buff ankerite finely disseminated. | | | | |
| R | 8.38 | 9.14 | Brecchia texture with grey limestone fragments up to 2cm, and 3% coarse pyrite interstitially. Lower contact with limestone is faulted, with 10cm gouge. | | | | |
| R | 8.38 | 9.14 | | | | | |
| P | 9.14 | 16.46 | 100.0 S A L M S T Q Z C A G P I B X L M | P | 70 | B1 | |
| L | | | S A | 5 | | B* | |
| R | 9.14 | 16.46 | Upper contact is brecciated and veined with quartz-carbonate, | | | | |
| R | 9.14 | 16.46 | 3% pyrite and increased graphite. Graphite decreases down section. Quartz-carbonate is 20% overall. | | | | |
| R | 9.14 | 16.46 | | | | | |
| R | 13.41 | 13.71 | Semi-massive pyrite zone. Dark chlorite and pale epidote are the only alteration minerals in otherwise unaltered limestone. | | | | |
| R | 13.41 | 13.71 | | | | | |
| R | 13.41 | 13.71 | Some rusty staining in the hanging wall. | | | | |
| N | 13.41 | 13.71 | 100.0 X M S S F Q Z C B C L I B N | N | | B4 | |
| L | | | E P | 6 | J1 C) | | |
| P | 16.46 | 23.47 | 100.0 G N P H Y L C B Q Z A N I L M I B | P | 70 | B1 | |
| L | | | 4G C L 2 | 4 | | | |
| R | 16.46 | 23.47 | Limey green phyllite with local chlorite and ankerite bands. | | | | |
| R | 16.46 | 23.47 | Interbeds of grey limestone and white carbonate. Lower contact faulted. | | | | |
| R | 16.46 | 23.47 | | | | | |
| P | 23.47 | 25.00 | 100.0 S A L M S T C A | B X | P | | |
| L | | | 36 | 7 | | | |
| R | 23.47 | 25.00 | Highly brecciated at upper contact, decreasing down section. | | | | |
| P | 25.00 | 58.21 | 100.0 G A A R G L C B Q Z G P 2 | P | | B+ | |
| L | | | 8G P Y | 6 | | * | |
| R | 25.00 | 58.21 | A mixture of interbedded black limey argillite, grey | | | | |
| R | 25.00 | 58.21 | argillaceous limestone and minor green ankeritic phyllite. | | | | |
| R | 25.00 | 58.21 | Pyrite occurs throughout. Trace sphalerite at 47.8m as wispy veinlets. Unit is highly deformed, quite graphitic, with local chlorite and ankerite. Quartz-carbonate about 20%. | | | | |
| R | 25.00 | 58.21 | | | | | |
| R | 25.00 | 58.21 | | | | | |
| R | 25.00 | 58.21 | | | | | |
| R | 25.00 | 58.21 | | | | | |

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ADAMS

DRILLHOLE/TRaverse : ADAMS-30 (CONTINUED)

SUMMARY REMARKS

20cm zone of semi-massive pyrite and trace sphalerite is intersected at 13.4m. Hanging wall and footwall are both limestone. Next unit down section is green phyllite with interbedded limestone, then grey argillite/limestone, highly deformed, graphitic and pyrite rich.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-35

PROJECT IDEN : ADAMS START DATE : 86/ 7/23 COMPLETION DATE : GEOLOGGED BY : PMH + PMH
COLLAR NORTHING: 60160.00 COLLAR EASTING : 15600.00 COLLAR ELEVATION: 1855.00 GRID AZIMUTH : 0.00
TOTAL LENGTH : 84.50 CORE/HOLE SIZE : 80

| | | | | | | | | | | | | | |
|---|-------|-------|-------|--|--|---|----|----|-------|-------|----|----|--|
| P | 0.00 | 5.20 | | OVER | | P | | | | | | | |
| P | 5.20 | 39.60 | 95.0 | GG PHYL CA QZ CL2 LM FD 3 5 = L EC AG GP2 CR 0 2 LM 70 | | P | FO | 70 | 31 | P2 | N) | | |
| L | | | | | | | | | | | | | |
| R | 5.20 | 39.60 | | Finely laminated argillaceous mafic tuff/siltstone. Some parts | | | | | | | | | |
| R | 5.20 | 39.60 | | are coarse enough to be wackes. This is probably the most | | | | | | | | | |
| R | 5.20 | 39.60 | | homogenous section so far. | | | | | | | | | |
| P | 39.60 | 39.70 | | SMSF QZ CL SL3 MX LM EX RU GA2 | | P | | | | B1 | M1 | | |
| L | | | | | | | | | | | M3 | | |
| R | 39.60 | 39.70 | | Laminated massive red sphalerite and galena. Virtually no | | | | | | | | | |
| R | 39.60 | 39.70 | | alteration visible. | | | | | | | | | |
| P | 39.70 | 40.80 | 100.0 | BY PHYL SP PY GP2 LM EC 2A CA CL1 | | P | | | | | N) | B1 | |
| L | | | | | | 5 | | | | | L+ | | |
| R | 39.70 | 40.80 | | A fading out of the above interval. Split. | | | | | | | | | |
| P | 40.80 | 45.90 | 100.0 | GG PHYL CA QZ GP2 LM LB EC AG CL2 | | P | FO | 70 | 31 | 31 | N* | | |
| L | | | | | | 4 | LM | 70 | | | | | |
| P | 45.90 | 50.30 | 100.0 | SY PHYL CA CL GP2 LM CR EC SA QZ2 | | P | FO | 65 | 32 | 31 | N* | | |
| L | | | | | | 4 | | | | | | | |
| P | 50.30 | 62.00 | 100.0 | YG PHYL QZ CA MS2 LM VC BG PY CL1 | | P | LM | 80 | 32 | P1 | D= | D1 | |
| L | | | | | | 3 | FO | 80 | P2 0+ | | | D* | |
| R | 50.30 | 62.00 | | A recognizably altered section. Rock looks as though it could | | | | | | | | | |
| R | 50.30 | 62.00 | | have been an intermediate ash tuff. | | | | | | | | | |
| N | 51.80 | 53.30 | | YG X PHYL QZ CA MS2 LM VC BG PY CL1 | | D | LM | 80 | 32 | P1 | D= | D1 | |
| L | | | | | | 5 | FO | 80 | P2 0+ | | | D+ | |
| N | 53.30 | 58.60 | | YG X PHYL QZ CA MS2 LM VC BG PY CL1 | | D | LM | 80 | 33 | P1 | D= | D* | |
| L | | | | | | 5 | FO | 80 | P2 0+ | | | D) | |
| P | 62.00 | 64.90 | | BRXX CA MS CL3 BX MT 3 6 5 M TC PY QZ2 VG RX C | | P | | | 32 | P2 | D+ | | |
| L | | | | | | 3 | | | | P1 P3 | | | |
| R | 62.00 | 64.90 | | Appears to be a tectonically brecciated footwall alteration | | | | | | | | | |
| R | 62.00 | 64.90 | | zone (eg: QZ + CL > MS). | | | | | | | | | |
| P | 64.90 | 66.60 | | GN PHYL QZ GP CL3 LB FR 3 5 1 L VC 36 MS CA2 | | P | | | 32 | 32 | D) | | |
| L | | | | | | 0 | 3 | | | P1 P3 | | | |

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ADAMS

DRILLHOLE/TRaverse : ADAMS-35 (CONTINUED)

| F | - I N T E R V A L - | CORE | % | T Y P I - G A L T E X - | G R A I N F R A C - | S T R U C T U R - 1 | A L T E R A T I O N M I N S | O R E - T Y P E M I N S |
|---|---------------------|---------------|-------------------|--|-----------------------|---------------------|---|-------------------------|
| K | L (U N I T S = F T) | R E C O V - | M | R O C K F Y I N G M I N T U R E S | C H A R A C T U R E S | H | H | H |
| E | A | E R Y | I | T M T M M A T | T X T X F C % M | T | I D S T K | D I P |
| Y | G | F R O M - T O | (F T . 1) | X T Y P E 1 2 B M I 1 2 F F C P # T K | 1 | A Z M | R T Q Z B I C Y C B M G X X P Y C P G L Y Y | S U M M A R Y |
| K | F | ROCK | FOR E N R T | T M Q M 2 T X T X S R S O D I P F | T | I D S T K | D I P K F M U C L E P H E H A P R M O S L H A | |
| E | L | Q U A L | M E M V Q L C - 3 | 3 4 0 N H / S M L I | 2 | A Z M | R T H H H H H H H H | |
| Y | G | D E S I G | A G E | C O L | R D P C | S T R U C T U R - 2 | A A A A A A A A A | |
| R | 64.90 | 68.60 | | | | | | |
| R | 64.90 | 68.60 | | Intermediate tuff/wacke with high chlorite content. Graphite increases towards the bottom of the interval. | | | | |
| P | 68.60 | 70.80 | Y G | P H Y L Q Z C A C L 2 L M V D 3 5 + L | P | F O | 80 32 | L 1 D) |
| L | | | | Y U L F M S 2 F R M T | 0 | L M | 80 | P 2 P 2 |
| R | 68.60 | 70.80 | | An altered tuff/wacke - becomes more sedimentary in character | | | | |
| R | 68.60 | 70.80 | | going down the interval (eg: up section.) | | | | |
| P | 70.80 | 82.90 | 100.0 G N | P H Y L C A C L 4 L M I B 2 4 2 5 | P | U F O | U 85 | D) D* |
| L | | | | E C S G Q Z 2 | 0 | 2 | 80 | 85 |
| R | 70.80 | 82.90 | | Rock is interbedded chlorite phyllite (Fe rich silt) and grey | | | | |
| R | 70.80 | 82.90 | | limestone. Channels, loadcasts and gradded bedding suggest | | | | |
| R | 70.80 | 82.90 | | that tops are up, although this data is not without ambiguity. | | | | |
| R | 70.80 | 82.90 | | Sphalerite and galena occur sporadically, usually along | | | | |
| I | 70.80 | 82.90 | | limestone - phyllite contacts. | | | | |
| N | 70.80 | 82.90 | | 4 L M S T C A X L M I B | N | | | |
| L | | | | E C 7 A | | | | |
| P | 82.90 | 84.40 | | C L S T C L 7 M X L B | P | | | |
| L | | | | V C 3 6 E A 1 | | | | |
| R | 82.90 | 84.40 | | Could also be called a greenstone, but textures and | | | | |
| R | 82.90 | 84.40 | | depositional environment indicate a mafic ash/wacke as opposed | | | | |
| R | 82.90 | 84.40 | | to a flow. | | | | |

S U M M A R Y R E M A R K S

This is the southernmost hole and displays the best clastic or sedimentary textures. Fairly intense muscovite alteration and more tuffaceous material above (footwall) the mineralization (normally its mostly argillite). Possibly a different horizon or a facies change?.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRAVERSE : ADAMS-36

PROJECT IDEN : ADAMS START DATE : 86/ 7/11 COMPLETION DATE : GEOLOGGED BY : P&P + PMH
COLLAR NORTHING: 60278.00 COLLAR EASTING : 15715.00 COLLAR ELEVATION: 1843.00 GRID AZIMUTH : 0.00
TOTAL LENGTH : 90.50 CORE/HOLE SIZE : 80

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-36 (CONTINUED)

| F | - I N T E R V A L - | CORE | % | TYP1 | GAL | TEX- | GRAIN | FRAC- | STRUCTUR-1 | ALTERATION MINS | DRE-TYPE MINS | | | |
|-----|---------------------|-----------|--------------|----------------|---------------|----------------|--------------|------------|----------------|---------------------|--|-----------|-------|----|
| K | L (UNITS = FT) | RECov- | M | ROCK | FYING | MIN | TURES | CHARACS | TURE | H H H H | ANY H H H ANY | | | |
| E | A | ERY | I | TM | TM | MAT | TX | TX | F C Z M | T ID | STK DIP A A A A A MIN A A MIN | | | |
| Y | G | FROM - TO | (FT.) | X TYPE | 1 | 2 | BMI | 1 | 2 F F C P # TK | 1 AZM | RT QZ BI CY CB MG XX PY CP GL YY SUMMARY | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | | |
| K | F | ROCK | FOR EN RT | TM | BM2 | TX | TX | S R S O | DIP F | T ID | STK DIP KF MU CL EP HE HA PR MO SL HA | | | |
| E | L | QUAL | MEM V Q LC-3 | 3 | 4 | D N H / | SML I | 2 AZM | RT | H H H H H H H H H H | STRUCTUR-2 A A A A A A A A | | | |
| Y | G | DESIG | AGE | COL | R | D | P | C | | | | | | |
| P | 31.39 | 33.83 | | ARBX | QZS | MT | LB | | P | | | | | |
| L | | | | | GP1 | | | | | | | | | |
| P | 33.83 | 37.49 | | Y6 | PHYL | MS | CB | SF= | MT LB 4 | P | FD | 75 | L) | |
| L | | | | | QZ | LM | | | 3 | LM | 75 | L) | D) | |
| R | 33.83 | 37.49 | | Yellow | grey, | finely | laminated | QZ-CB-MS | rock. | Resembles the | | | | |
| R | 33.83 | 37.49 | | ASHT | + | CBEX | units | of | Kutcho. | | | | | |
| P | 37.49 | 38.86 | | QZBX | CL | QZS | BX | RX | | P | | D= | D(AS | |
| L | | | | | | SFI | | | | | | D) | D) D) | |
| R | 37.49 | 38.86 | | Possible | vein. | | | | | | | | | |
| P | 38.86 | 89.00 | 98.0 | LATF | LF | MS | CL2 | FR | LM 3 K 1 L | P | 33 | P1 | D+ | |
| L | | | | VC | DC | SG | EP | QZ6 | WS CR | 0 | 2 | \$1 P2 L1 | D) | D* |
| R | 38.86 | 89.00 | | Minor | compositional | and | textural | variations | throughout | this | | | | |
| R | 38.86 | 89.00 | | interval. | In | places | this | rock | could | be | | | | |
| R | 38.86 | 89.00 | | calc-silicate. | Rock | is | strongly | deformed | and | sheared. | | | | |
| R | 38.86 | 89.00 | | Sulphides | are | scattered | throughout | but | concentrated | locally. | | | | |
| R | 38.86 | 89.00 | | Some | sections | of | argillaceous | phyllite | with | gradational | | | | |
| R | 38.86 | 89.00 | | contacts | but | an | overall | uniformity | to | the | interval. | | | |
| N | 68.86 | 71.02 | | X LATF | | PY2 | | | | N | | Q2 | | |
| N | 72.23 | 75.59 | | YL 5 | PHYL | CB2 | LN | | | N | | | | |
| L | | | | | | QZ3 | | | | | | | | |
| R | 76.00 | 79.00 | | Appears | to | be | a | tectonic | breccia | - | possible | fault | zone. | |
| N | 76.00 | 79.00 | 90.0 | X QZBX | | QZ6 | | | | N | | | | |
| P | 89.00 | 90.53 | | MARB | CR9 | RX | | | P | | | | | |
| L | | | | 5A | | | | | | | | | | |
| R | 89.00 | 90.53 | | Limestone | unit | recrystallized | to | marble. | (makes | sense | in | light | | |
| R | 89.00 | 90.53 | | of | calc-silicate | rocks | further | up | the | hole). | | | | |

SUMMARY REMARKS

Fine grained epiclastic rocks with volcanic parentage predominate in this hole. Deformation has overprinted many of the primary textures giving most of the core a fuzzy mottled look. Rock nomenclature is a bit misleading as most units are made up of a combination of lithologies. Fine grained, disseminated sulphides are ubiquitous with rare localized concentrations. Alteration is difficult to discern from metamorphic effects (both regional and contact). Increase in skarn type minerals (EP, PO, DO etc.) down the hole indicate proximity to an intrusive rock.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-38

PROJECT IDEN : ADAMS START DATE : 86/ 7/11 COMPLETION DATE : GEOLOGGED BY : P&P + PMH
 COLLAR NORTHING: 60233.00 COLLAR EASTING : 15625.00 COLLAR ELEVATION: 1851.00 GRID AZIMUTH : 0.00
 TOTAL LENGTH : 75.30 CORE/HOLE SIZE : 80

| F - I N T E R V A L - K L (UNITS = FT) | CORE RECOV- | Z T Y P I - Q A L T E X - G R A I N F R A C - E R Y I T M T M M A T T X T X F C X M | STRUCTUR-1 ALTERATION MINS ORE-TYPE MINS H H H H H ANY H H H ANY |
|---|--|---|--|
| E A Y G F R O M - T O (FT.) | X T Y P E 1 2 Q M I 1 2 F F C P # T K | T ID STK DIP A A A A A MIN A A MIN | |
| K F | ROCK F O R E N R T T M Q M 2 T X T X S R S O D I P F | 1 AZM RT QZ BI CY CB MS XX PY CP GL YY SUMMARY | |
| E L | QUAL M E M V B L C - 3 3 4 0 N H / S M L I | 2 AZM RT H H H H H H H H | |
| Y 6 | D E S I G A G E C O L R D P C | STRUCTUR-2 A A A A A A A A | |
| ----- | ----- | ----- | |
| K F | ROCK F O R E N R T T M Q M 2 T X T X S R S O D I P F | T ID STK DIP KF MU CL EP HE HA PR MD SL HA | |
| E L | QUAL M E M V B L C - 3 3 4 0 N H / S M L I | 2 AZM RT H H H H H H H H | |
| Y 6 | D E S I G A G E C O L R D P C | STRUCTUR-2 A A A A A A A A | |

| | | | | | | | | |
|---|-------|-------|---|---|----|-------|-----|----|
| P | 0.00 | 3.96 | OVER | P | | | | |
| P | 3.96 | 8.53 | 100.0 GN PHYL QZ CB CL1 LM LB EC 7G MS1 FO FG | P | FO | 65 31 | \$= | L* |
| R | 3.96 | 8.53 | Fine grained greenish siltstone or volcanic mud. Very similar | | | | | |
| R | 3.96 | 8.53 | to the GN-PHYL of ddh-036. | | | | | |
| N | 3.96 | 8.53 | 2 SILT QZ2 IB LM 5A | N | | | | |
| P | 8.53 | 30.18 | GY PHYL CB GP1 LB LM EC 1A QZ2 FG FO | P | FO | 60 | N* | |
| R | 8.53 | 30.18 | Protolith was likely a tuffaceous argillite. QZ segregation | | | | | |
| R | 8.53 | 30.18 | plus deformation give the rock a mottled or lensoid banded | | | | | |
| R | 8.53 | 30.18 | appearance. On a fine scale rock is composed of interlaminated | | | | | |
| R | 8.53 | 30.18 | graphitic and ash tuff material. | | | | | |
| P | 30.18 | 34.44 | GN PHYL QZ CB MS1 LM LB EC CL2 FG FO | P | FO | 60 32 | D1 | |
| R | 30.18 | 34.44 | Much the same as 3.9 to 8.5m. | | | | | |
| N | 30.18 | 34.44 | 4 SILT 5A | N | | | | |
| P | 34.44 | 49.07 | GY PHYL CB EP GP1 LB LM EC AG CL QZ2 CR | P | FO | 70 32 | 31 | N* |
| R | 34.44 | 49.07 | Looks like the grey phyllite above but with a bit more volcanic | | | | | |
| R | 34.44 | 49.07 | material and conspicuous epidote nodules. In some places | | | | | |
| R | 34.44 | 49.07 | excess quartz has caused breccia type textures. | | | | | |
| P | 49.07 | 54.56 | GN PHYL MS QZ CL2 LM LB EC 3G PY CB1 FG FO | P | FO | 60 3+ | L1 | D+ |
| R | 49.07 | 54.56 | More mafic than the preceding GN_PHYL interval. Also abundant | | | | | |
| R | 49.07 | 54.56 | carb-musc laminations suggesting an affinity with the yellow | | | | | |
| / | 49.07 | 54.56 | phyllite. | | | | | |
| P | 54.56 | 61.57 | GN PHYL MS CL QZ3 LM LB EC ST SF CB1 | P | | 33 | L1 | D+ |
| R | 54.56 | 61.57 | Slightly more QZ, CB and MS; relatively weak alteration. | | | | | |
| R | 57.00 | 58.27 | Quartz flooded zone with disseminated sulphides. This could be | | | | | |
| R | 57.00 | 58.27 | remobilized. | | | | | |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-3B (CONTINUED)

| F - I N T E R V A L - | C O R E | % | T Y P I - G A L | T E X - | G R A I N F R A C - | S T R U C T U R - 1 | A L T E R A T I O N M I N S | O R E - T Y P E M I N S |
|-----------------------|-------------|--------------|--|-----------------|---------------------|---------------------|-----------------------------|-------------------------|
| K L (UNITS = FT) | R E C O V - | M | R O C K | F Y I N G M I N | T U R E S | C H A R A C T U R E | H H H H H | A N Y H H H A N Y |
| E A | E R Y | I | T M | T M | M A T | T X | A A A A A | A M I N A A A M I N |
| Y G F R O M - T O | (F T . 1) | X | T Y P E | 1 2 | B M I | 1 2 | F F C P | # T K |
| K F | ROCK | FOR EN RT | TM | BM2 | TX | TX | S R S | 0 DIP F |
| E L | QUAL | MEM V Q LC-3 | 3 | 4 | 0 N H / | SML I | 2 | A Z M R T |
| Y G | DESIG | AGE | COL | | R D P C | | STRUCTUR-2 | A A A A A A A A |
| N L | 57.00 | 58.27 | X MINZ PY SP QZB | | | N | | D= AS |
| | | | AS SF1 | | | 5 | | 3+ D+ |
| P L | 61.57 | 72.29 | GN PHYL MS CB QZ2 LM BX | | P FO | 65 #2 | P1 | D+ |
| R R | 61.57 | 72.29 | EC 9G PY CLI FO | | 3 | \$1 #1 | | D1 |
| | | | Trending towards a yellow phyllite. About 10 % of this interval is a QZ fill breccia with bright green chlorite. | | | | | |

S U M M A R Y R E M A R K S

Hole is almost entirely composed of graphitic and chlorite phyllites. Deformation of QZ/CA rich layers produces a boudinage or lensoid banded texture. Mineralization consists of sulphide enrichment within siliceous zones. There is a minor increase in carb and musc peripheral to the siliceous zones. The patchy nature of the mineralization, lack of intense alteration, and presence of chlorite and breccia textures suggest that this area has more affinity to a stockwork-feeder zone than the overlying massive sulphides.

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-39

| | | | |
|---------------------------|---------------------------|---------------------------|--------------------------|
| PROJECT IDEN : ADAMS | START DATE : 86/ 7/17 | COMPLETION DATE : | GEOLOGGED BY : PMH + PMH |
| COLLAR NORTHING: 60645.00 | COLLAR EASTING : 15941.00 | COLLAR ELEVATION: 1834.00 | GRID AZIMUTH : 0.00 |
| | TOTAL LENGTH : 183.80 | CORE/HOLE SIZE : 80 | |

| F - INTERVAL - K L (UNITS = FT) | CORE | X | TYPI- QAL TEX- GRAIN FRAC- | STRUCTUR-1 ALTERATION MINS ORE-TYPE MINS |
|------------------------------------|--------------------|---------|------------------------------------|--|
| E A | RECOV- ERY | M | ROCK F YING MIN TURES CHARACS TURE | H H H H H ANY H H H ANY |
| Y S FROM - TO -----,----- | (FT.) | I | TM TM MAT TX TX F C % M | T ID STK DIP A A A A A MIN A A MIN |
| K F | X TYPE 1 | 2 | QMI 1 2 F F C P # TK | 1 AZM RT G1 BI CY CB MG XX PY CP GL YY SUMMARY |
| E L | QUAL MEM V O LC- 3 | 3 | 4 0 N H / SML I | T ID STK DIP KF MU CL EP HE HA PR MO SL HA |
| Y S | DESIG AGE COL | R D P C | STRUCTUR-2 | 2 AZM RT H H H H H H H H |

| | | | | | | | | |
|---|-------|-------|--|---|----|-------|-------|-------|
| P | 0.00 | 2.44 | OVER | P | | | | |
| P | 2.44 | 9.14 | GP ARGL QZ PY GP2 LM CR 2 0 | P | FO | 45 31 | 32 | D |
| L | | | EC NN CA2 BN | | | 4 | | |
| R | 2.44 | 9.14 | A black and white banded, highly crenulated limey, graphitic | | | | | |
| R | 2.44 | 9.14 | argillite . In outcrop this would be called a gy-PHYL. The | | | | | |
| R | 2.44 | 9.14 | white bands are mostly calcite +/- quartz. | | | | | |
| P | 9.14 | 23.80 | 100.0 GN PHYL CA PY CL3 IB LM 3 0 | P | FO | 35 31 | 31 | D |
| L | | | EC 46 QZ1 FG FO | | | 2 | BD | |
| R | 9.14 | 23.80 | Very fine grained, light to dark green laminated chlorite | | | | | |
| R | 9.14 | 23.80 | phyllite - interbedded with grey limestone. Minor QZ-CA | | | | | |
| R | 9.14 | 23.80 | veinlets. | | | | | |
| N | 9.14 | 23.80 | 2 LMST CAX IB | | | N | | |
| L | | | 6A | | | | | |
| P | 23.80 | 24.60 | 100.0 LMST CAX LM FG | P | | | | |
| L | | | 7A | | | | | |
| P | 24.60 | 36.60 | 100.0 GN PHYL PY QZ CL3 LM FD 3 0 | P | FO | 60 31 | 33 | N* |
| L | | | EC AG GP CA3 PA FG | | | 2 | LM | 50 Pt |
| R | 24.60 | 36.60 | This interval is similar to the previous GN-PHYL except that | | | | | |
| R | 24.60 | 36.60 | most of the carbonate beds have been squirted around and | | | | | |
| R | 24.60 | 36.60 | recrystallized as faintly banded irregular patches. Some minor | | | | | |
| R | 24.60 | 36.60 | intervals of chlorite schist or greenstone. When core is | | | | | |
| R | 24.60 | 36.60 | oriented bedding is steeper than foliation indicating westerly | | | | | |
| R | 24.60 | 36.60 | vergence. | | | | | |
| N | 24.60 | 36.60 | 4 LMST CAX IR PA | | | N | | |
| L | | | 7A RX | | | | | |
| P | 36.60 | 48.80 | 80.0 CL LMST QZ GP CA5 IB LM 3 0 | P | FO | 60 | 32 | D |
| L | | | AG CL3 RX GC | | | 5 | LM | 60 |
| R | 36.60 | 48.80 | Fine to coarsely interlaminated/beded grey LMST and chlorite | | | | | |
| R | 36.60 | 48.80 | PHYL. Minor graphitic laminae. | | | | | |
| N | 36.60 | 48.80 | GN 5 PHYL CL4 | | | N | | |
| L | | | 36 | | | | | |
| P | 48.80 | 67.50 | 100.0 UNKN DO FS QZ4 MT BX | P | | | | |
| L | | | AL ST CL MS2 VN FD | | | 4 | P4 X2 | D |
| | | | | | | | X2 31 | D |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-39 (CONTINUED)

| F - I N T E R V A L - | | | CORE | % | TYPI- | BAL | TEX- | GRAIN FRAC- | STRUCTUR-1 | ALTERATION MINS | DRE-TYPE MINS |
|-----------------------|-------|--------------|--------|-------|-------|-------|------|---------------|------------|--------------------------------------|--|
| K | L | (UNITS = FT) | RECOV- | M | ROCK | FYING | MIN | TURES | H H H H H | ANY H H H ANY | |
| E | A | | ERY | I | TM | TM | MAT | TX TX F C % M | T ID STK | DIP A A A A A MIN A A A MIN | |
| Y | G | FROM - TO | (FT.) | X | TYPE | 1 | 2 | BM1 | 1 | 2 | F F C P # TK |
| - | - | - | - | - | - | - | - | - | 1 | AZM RT QZ BI CY CB MG XX PY CP GL YY | SUMMARY |
| K | F | | | ROCK | FOR | EN | RT | TM | BM2 | TX TX S R S O DIP F | T ID STK DIP KF MU CL EP HE HA PR MO SL HA |
| E | L | | | QUAL | MEM | V | Q | LC | -3 | 3 4 0 N H / SML I | 2 AZM RT H H H H H H H H |
| Y | G | | | DESIG | AGE | | | COL | | R D P C | STRUCTUR-2 A A A A A A A A |
| R | 48.80 | 67.50 | | | | | | | | | |
| R | 48.80 | 67.50 | | | | | | | | | |
| R | 57.60 | 60.10 | | | | | | | | | |
| R | 57.60 | 60.10 | | | | | | | | | |
| N | 57.60 | 60.10 | 100.0 | X | QZVN | PY | SP | QZ9 | MX | N | VX |
| L | | | | | | | | | | 3= | D+ |
| | | | | | | | | CL+ | | | Df |
| P | 67.50 | 69.50 | 100.0 | GG | PHYL | CA | QZ | CL3 | LM | FD 3 | P FD 40 31 P1 N |
| L | | | | EC | AG | PY | GP2 | CR | IB | | |
| R | 67.50 | 69.50 | | | | | | | | | |
| R | 67.50 | 69.50 | | | | | | | | | |
| P | 69.50 | 76.20 | 95.0 | | ARCH | CL | PY | QZ6 | FO | CR 2 | P FD 50 BI P= L |
| L | | | | | | | | GP2 | LM | | 50 LM 50 |
| R | 69.50 | 76.20 | | | | | | | | | |
| R | 69.50 | 76.20 | | | | | | | | | |
| R | 69.50 | 76.20 | | | | | | | | | |
| N | 69.50 | 76.20 | 2 | UNKN | QZ | CL | MS3 | | | N | Q2 P3 X3 D |
| L | | | | | | | | PY | CB3 | | |
| P | 76.20 | 82.30 | 100.0 | AR | LMST | | CA9 | LM | FD | 0 | P FD 50 |
| L | | | | EC | 7A | GP= | | | | 3 LM | 50 |
| R | 76.20 | 82.30 | | | | | | | | | |
| R | 76.20 | 82.30 | | | | | | | | | |
| N | 79.20 | 82.30 | 3 | ARGL | | GP2 | | | | N | |
| L | | | | EC | NN | PYI | | | | | |
| P | 82.30 | 82.60 | | | | | | | | P | P6 P1 D= D+ |
| L | | | | | | | | | | | M= |
| R | 82.30 | 82.60 | | | | | | | | | |
| P | 82.60 | 90.50 | 100.0 | AR | LMST | | CA7 | LM | IB | | P |
| L | | | | | | | 2A | GP2 | GC | | |
| R | 82.60 | 90.50 | | | | | | | | | |
| R | 82.60 | 90.50 | | | | | | | | | |
| N | 82.60 | 90.50 | LM 5 | ARGL | | GP3 | LM | IB | | N | |
| L | | | | | | | | | | | |
| R | 90.50 | 97.80 | | | | | | | | | |
| R | 90.50 | 97.80 | UNKN | CL | MF | MS2 | MT | PP | | P FD 50 32 31 D | |
| R | 90.50 | 97.80 | | | | | | Y6 | QZ CB1 LM | 3 | L2 01 |
| R | 90.50 | 97.80 | | | | | | | | | |
| P | 97.80 | 104.90 | GG | PHYL | QZ | CB | GP2 | LM | FG 2 3 = M | P FD 45 31 3= N* | |

ESSO Minerals Canada
ADAMS

DRILLHOLE/TRaverse : ADAMS-39 (CONTINUED)

| F - I N T E R V A L - K L (UNITS = FT) | CORE % RECOV- | TYPI- QAL TEX- ERY | GRAIN FRAC- TURES CHARACS TURE | STRUCTUR-1 ALTERATION MINS | DRE-TYPE MINS |
|---|--|---|-----------------------------------|----------------------------|---------------|
| E A Y G F R O M - T O (FT.) | X TYPE 1 2 BM1 1 2 F F C P # TK | T ID STK DIP A A A A A MIN A A A MIN | H H H H H ANY H H H ANY | | |
| K F E L Y G | ROCK FOR EN RT TM BM2 TX TX S R S 0 DIP F QUAL MEM V Q LC- 3 3 4 0 N H / SML I DESIG AGE COL R D P C | 1 AZM RT QZ BI CY CB MG XX PY CP GL YY SUMMARY | | | |
| L R R | EC 2A CL1 FR CR 0 2 LM 45 97.80 104.90 97.80 104.90 | Grey-green, laminated siltstone, more grey(graphite) than green (chlorite), and more siliceous than limey. | | | |

TABLE,FLAG

| | | | |
|------|---|---------|--------------------------------|
| 'ALT | , | 0.0000, | , 'TOP OAF ALTERATION |
| 'ANH | , | 0.0000, | 0, 'ANHYDRITE |
| 'CEX | , | 0.0000, | , 'CARBONATE EXHALITE |
| 'CQE | , | 0.0000, | 0, 'CARBONATE, QUARTZ EXHALITE |
| 'D1 | , | 0.0000, | 0, 'ASSAY DATA 01 |
| 'F? | , | 0.0000, | 0, 'POSSIBLE FAULT |
| 'FLT | , | 0.0000, | 0, 'FAULT |
| 'FTZ | , | 0.0000, | 0, 'FAULT ZONE |
| 'HO1 | , | 0.0000, | 0, 'ASSAY HEADER 01 |
| 'HED | , | 0.0000, | 0, 'HEADER REMARK |
| 'MSF | , | 0.0000, | 0, 'MASSIVE SULPHIDE |
| 'MTF | , | 0.0000, | 0, 'MAFIC TUFF HORIZON |
| 'OXF | , | 0.0000, | 0, 'OXIDE FACIES |
| 'PSN | , | 6.7000, | , 'POLISHED THIN SECTION |
| 'QCE | , | 0.0000, | 0, 'QUARTZ, CARBONATE EXHALITE |
| 'QCT | , | 0.0000, | 0, 'TOP OF QZ-FX CRYSTAL TUFF |
| 'QEX | , | 0.0000, | , 'QUARTZ EXHALITE |
| 'REF | , | 0.0000, | 0, 'REDUCED FACIES |
| 'SER | , | 0.0000, | , 'TOP OF SERICITIZATION |
| 'SEX | , | 0.0000, | 0, 'SILICA EXHALITE |
| 'SMS | , | 0.0000, | 0, 'SEMI MASSIVE SULPHIDE |
| 'SUM | , | , | , 'SUMMARY REMARKS |
| 'TSN | , | 0.0000, | , 'THIN SECTION |

TABLE,ROCK

| | | | |
|-------|---|---------|-------------------------------------|
| 'ALST | , | , | , 'ARGILLACEOUS LIMESTONE |
| 'ANDS | , | 0.0000, | 275, 'ANDESITE FLOW |
| 'ARBX | , | , | 5050, 'BRECCIATED ARGILLITE |
| 'ARGL | , | 0.0000, | 3036, 'ARGILLITE |
| 'ASHT | , | 0.0000, | 3032, 'ASH TUFF (UNSPECIFIED) |
| 'VTF | , | 6.7000, | 3032, 'ASH TUFF |
| 'LARB | , | 0.0000, | 370, 'CARBONATE LAYER |
| 'CASH | , | , | , 'CALCITE STOCKWORK |
| 'CAVN | , | , | , 'CALCITE VEIN |
| 'CBBX | , | 6.7000, | 1084, 'CARBONATE BRECCIA |
| 'CBEX | , | 6.7000, | 375, 'CARBONATE EXHALITE |
| 'CBSF | , | 0.0000, | 3034, 'CARBONITE SULPHIDE |
| 'CDBX | , | , | 5010, 'CHALCEDONIC BRECCIA |
| 'CHBX | , | , | 5010, 'CHALCEDONIC BRECCIA |
| 'CHRT | , | 0.0000, | 3038, 'CHERT |
| 'CHTF | , | 0.0000, | 3080, 'TUFFACEOUS CHERT |
| 'CNGL | , | , | 5030, 'CONGLOMERATE |
| 'CQEX | , | 0.0000, | 3030, 'CARBONATE QUARTZ EXHALITE |
| 'CQSW | , | , | , 'CALCITE QUARTZ STOCKWORK |
| 'CSBX | , | , | , 'CALC-SILICATE BRECCIA |
| 'DIOR | , | , | 5080, 'DIORITE |
| 'DYKE | , | , | 5071, 'LATE ANDESITE DYKE |
| 'FLTZ | , | 0.0000, | 3035, 'FAULT ZONE |
| 'FQXT | , | 0.0000, | 721, 'FELDSPAR QUARTZ CRYSTAL TUFF |
| 'FXLT | , | , | , 'FELDSPAR CRYSTAL LITHIC TUFF |
| 'FXTF | , | 0.0000, | 3045, 'FELDSPAR CRYSTAL TUFF |
| 'FXXT | , | 0.0000, | 3045, 'FELDSPAR CRYSTAL TUFF |
| 'GABR | , | 0.0000, | 618, 'GABBRO |
| 'GBBR | , | 0.0000, | 618, 'GABBRO |
| 'GOUG | , | 0.0000, | 3035, 'FAULT GOUGE |
| 'GRWK | , | 0.0000, | 3037, 'GREYWACKE/EPIVOLCANICLASTICS |
| 'NHR | , | 0.0000, | 3031, 'LAHAR |
| 'LATF | , | 0.0000, | 2055, 'LITHIC ASH TUFF |
| 'LLAT | , | 0.0000, | 2057, 'LAPILLI ASH TUFF |
| 'LLTF | , | 0.0000, | 1214, 'LAPILLI TUFF |
| 'LLXT | , | 0.0000, | 1403, 'LAPILLI-CRYSTAL TUFF |
| 'LMST | , | 1.0000, | 5065, 'LIMESTONE |
| 'LTWK | , | , | 5060, 'LITHIC WACKE |

| | | | |
|----------------|--|----------|---------------------------------------|
| 'LXTF | | 0.0000, | 1386, 'LITHIC CRYSTAL TUFF |
| 'MATE | | 0.0000, | 3033, 'MAFIC ASH TUFF |
| 'MINZ | | 10.0000, | 1404, 'MINERALIZATION (TYPE UNKNOWN) |
| 'MISN | | 0.0000, | 0, 'MISSING CORE |
| 'MLAT | | 0.0000, | 2056, 'MAFIC LITHIC ASH TUFF |
| 'MLLT | | 0.0000, | 631, 'MAFIC LITHIC LAPILLI TUFF |
| 'MLTF | | 0.0000, | 631, 'MAFIC LITHIC TUFF |
| 'EXT | | 0.0000, | 631, 'MAFIC LITHIC CRYSTAL TUFF |
| 'MSBX | | 6.7000, | 3060, 'MASSIVE SULPHIDE BRECCIA |
| 'MSPC | | 0.0000, | 3064, 'MASSIVE PYRITE+CHALCOPYRITE |
| 'MSPS | | 6.7000, | 3066, 'MASSIVE SPHALERITE+PYRITE |
| 'MSPY | | 6.7000, | 3062, 'MASSIVE PYRITE |
| 'MSSC | | 0.0000, | 3070, 'MASSIVE PY, SP AND CP. |
| 'MSSF | | 0.0000, | 1405, 'MASSIVE SULPHIDE |
| 'MSSL | | 6.7000, | 3068, 'MASSIVE SPHALERITE |
| 'MTFW | | 0.0000, | 631, 'MAFIC TUFF/WACKE |
| 'MTGB | | 0.0000, | 618, 'METAGABBRO |
| 'MXLT | | 62.2000, | 2056, 'MAFIC CRYSTAL LITHIC TUFF |
| 'NXTF | | 6.7000, | 1381, 'MAFIC CRYSTAL TUFF |
| 'OVER | | 0.0000, | 5020, 'MINERALIZED TUFF |
| 'PHYL | | 1.0000, | 1381, 'MAFIC CRYSTAL TUFF |
| 'QBSW | | , | 1452, 'OVERBURDEN |
| 'QCEx | | 0.0000, | 5067, 'PHYLLITE |
| 'QCMS | | 0.0000, | 5071, 'QUARTZ BARITE STOCK WORK |
| 'QCSH | | 0.0000, | 3029, 'QUARTZ CARB. EXHALITE |
| 'QCSW | | , | 1325, 'QTZ-CARB-MUSC SCHIST |
| 'QFXT | | 0.0000, | 1325, 'QTZ CARBONATE SERICITE SCHIST |
| 'QMCS | | 0.0000, | , |
| 'QXAT | | 0.0000, | 721, 'QUARTZ FELDSPAR CRYSTAL TUFF |
| 'QXLT | | 0.0000, | 1325, 'QTZ-MUSC-CARB SCHIST |
| 'XTB | | 0.0000, | 3040, 'QUARTZ CRYSTAL ASH TUFF |
| 'ZXTF | | 0.0000, | 1386, 'QUARTZ CRYSTAL LITHIC TUFF |
| 'QZBX | | , | 3039, 'QTZ CRYSTAL TUFF - BRECCIA PHA |
| 'QZSW | | , | 3044, 'QUARTZ CRYSTAL TUFF |
| 'QZVN | | 0.0000, | , |
| 'RHYL | | 0.0000, | 1486, 'QUARTZ BRECCIA |
| 'SEXL | | 0.0000, | , |
| 'SILT | | , | 1486, 'QUARTZ STOCKWORK |
| 'SILZ | | , | 3082, 'RHYOLITE |
| 'SMBC | | 0.0000, | 1349, 'SILICA EXHALITE |
| 'SMCS | | 0.0000, | 5057, 'SILTSTONE |
| 'SMPB | | 0.0000, | , |
| 'SMPY | | 0.0000, | 3072, 'SILICIFIED ZONE |
| 'SMSC | | 0.0000, | 3070, 'SEMI-MASSIVE BO,CP AND PY |
| 'SMSF | | 0.0000, | 3072, 'SEMI-MASSIVE CP,SL AND PY |
| 'SMZN | | , | 3072, 'SEMI-MASSIVE PY+BO |
| 'SWZN | | , | 3062, 'SEMI-MASSIVE PYRITE |
| 'TFBR | | 0.0000, | 3070, 'SEMI-MASSIVE SL,CP AND PY |
| 'TFWK | | 0.0000, | 1404, 'SEMI-MASSIVE SULPHIDE |
| 'UNCN | | 0.0000, | , |
| 'VOBX | | , | , |
| 'VEIN | | 0.0000, | 3031, 'STOCKWORK ZONE |
| 'XATF | | 0.0000, | 3031, 'STOCKWORK ZONE |
| 'XLAT | | 0.0000, | 3084, 'TUFF BRECCIA |
| 'XLTF | | 0.0000, | 3084, 'TUFF WACKE |
| TABLE, MINERAL | | | 2032, 'UNKNOWN |
| 'H | | 0.0000, | 5040, 'VOLCANIC BRECCIA (UNDEFINED) |
| 'AK | | 0.0000, | 1486, 'VEIN |
| 'AR | | , | 898, 'CRYSTAL-ASH TUFF |
| 'AS | | , | 909, 'CRYSTAL-LITHIC ASH TUFF |
| 'AX | | 0.0000, | 917, 'CRYSTAL-LITHIC TUFF |
| 'BA | | , | |
| 'BI | | 0.0000, | |
| | | | , |
| | | | 'ANHYDRITE |
| | | | , |
| | | | 'ANKERITE |
| | | | , |
| | | | 'ARGILLITE |
| | | | , |
| | | | 'ARSENOPYRITE |
| | | | , |
| | | | 'AMPHIBOLE CRYSTALS |
| | | | , |
| | | | 'BARITE |
| | | | , |
| | | | 'BIOTITE' |

| | | | |
|----------------|---|---------|---------------------------|
| 'C | , | 0.0000, | O, 'O |
| 'C/ | , | 0.0000, | O, 'CHLORITE, NO MUSC. |
| 'C< | , | 0.0000, | O, 'CHLORITE < MUSC. |
| 'C> | , | 0.0000, | O, 'CHLORITE >> MUSC. |
| 'CA | , | 0.0000, | , 'CALCITE |
| 'CB | , | 0.0000, | O, 'CARBONATES, GENERAL |
| 'CC | , | 0.0000, | , 'CALCOCITE |
| 'CP | , | 0.0000, | O, 'CHLORITE |
| 'CY | , | , | O, 'CHALCOPYRITE |
| 'DO | , | 0.0000, | , 'CLAY GENERAL |
| 'EP | , | 0.0000, | , 'DOLOMITE |
| 'FC | , | 0.0000, | O, 'EPIDOTE |
| 'FL | , | 0.0000, | , 'FUSCHITE |
| 'FS | , | 0.0000, | , 'FLUORITE |
| 'FU | , | 0.0000, | O, 'FELDSPAR, GENERAL |
| 'FX | , | 0.0000, | O, 'FUCHSITE |
| 'GA | , | , | O, 'FELDSPARS, GENERAL |
| 'GP | , | , | , 'GALENA |
| 'GR | , | 0.0000, | , 'GRAPHITE |
| 'GY | , | 0.0000, | , 'GRAPHITE |
| 'HB | , | 0.0000, | , 'GYPSUM |
| 'HE | , | 0.0000, | , 'HORNBLENDE |
| 'KF | , | , | , 'HEMATITE |
| 'LF | , | 0.0000, | , 'KALIFILM |
| 'LI | , | 0.0000, | O, 'LITHIC FRAGMENT |
| 'LL | , | 0.0000, | , 'LIMONITE |
| 'M | , | , | , 'LITHIC LAPILLI |
| 'M/ | , | 0.0000, | O, 'M/ |
| 'M< | , | 0.0000, | O, 'MUSC., NO CHLORITE |
| 'MC | , | 0.0000, | O, 'CHLORITE > MUSC. |
| 'MF | , | 0.0000, | O, 'MAFICS, GENERAL |
| 'P | , | 0.0000, | , 'MAGNETITE |
| 'PH | , | 0.0000, | , 'MAGNETITITE |
| 'MN | , | 0.0000, | , 'MANGANESE |
| 'MS | , | 0.0000, | , 'MUSCOVITE |
| 'MU | , | 0.0000, | O, 'MUSCOVITE |
| 'MX | , | , | , 'MAFIC CRYSTALS GENERAL |
| 'PF | , | 0.0000, | O, 'PUMICE FRAGMENT |
| 'PO | , | 0.0000, | , 'PYRRHOTITE |
| 'PX | , | 0.0000, | O, 'PORPHYROBLAST (IC) |
| 'PY | , | 0.0000, | O, 'PYRITE |
| 'QX | , | 0.0000, | , 'QUARTZ CRYSTALS |
| 'QZ | , | 0.0000, | O, 'QUARTZ, GENERAL |
| 'RC | , | 0.0000, | , 'RHODOCROSITE |
| 'RY | , | 0.0000, | O, 'RHYOLIT (IC) |
| 'SF | , | 0.0000, | , 'SULPHIDE |
| 'SL | , | 0.0000, | , 'SPHALERITE |
| 'SP | , | , | , 'SPHALERITE |
| 'TT | , | , | , 'TETRAHEDRITE-TENANTITE |
| 'VF | , | 0.0000, | O, 'VOLCANIC FRAGMENT |
| 'XF | , | 0.0000, | O, 'CRYSTAL FRAGMENT |
| 'ZD | , | 0.0000, | , 'ZOISITE |
| TABLE, TEXTURE | , | | |
| 'ST | , | 0.0000, | O, 'SHEETED |
| 'AF | , | 0.0000, | , 'ANGULAR FRAGMENTS |
| 'AH | , | 0.0000, | O, 'APHANITIC |
| 'AL | , | 0.0000, | O, 'ALIGNED PHENOCRYSTS |
| 'P | , | 0.0000, | , 'APHANITIC |
| 'BD | , | 0.0000, | O, 'BEDDED |
| 'BL | , | 0.0000, | O, 'BLADED |
| 'BN | , | 0.0000, | O, 'BANDED |
| 'BR | , | 0.0000, | , 'BRECCIATED |
| 'BX | , | 0.0000, | O, 'BRECCIATED |
| 'CB | , | , | , 'CHALCEDONY BANDING |

| | | | |
|-----|---|---------|------------------------------|
| 'CL | , | 0.0000, | , 'CLASTIC |
| 'CO | , | 0.0000, | O, 'COLLOFORM BANDED |
| 'CR | , | 0.0000, | , 'CROWDED PHENOCRYSTS |
| 'DC | , | 0.0000, | , 'DENSELY PACKED XTAL FRAGM |
| 'EL | , | 0.0000, | , 'ELIPTICAL |
| 'EU | , | 0.0000, | , 'EUHEDRAL |
| 'F | , | 0.0000, | O, 'FISSILE |
| 'B | , | 0.0000, | O, 'FLOW BANDED |
| 'FD | , | 0.0000, | , 'FOLDED |
| 'FE | , | 0.0000, | O, 'FELTED |
| 'FG | , | 0.0000, | O, 'FINE GRAINED |
| 'FI | , | 0.0000, | , 'FISSILE |
| 'FM | , | 0.0000, | O, 'FRAMBOIDAL |
| 'FO | , | 0.0000, | O, 'FOLIATED |
| 'FR | , | 0.0000, | O, 'FRAGMENTAL |
| 'FT | , | 0.0000, | O, 'FLATTENED |
| 'GB | , | 0.0000, | O, 'GRADED BEDDING |
| 'GC | , | 0.0000, | , 'GRADATIONAL CONTACT |
| 'GR | , | 0.0000, | , 'GRANULAR |
| 'HG | , | 0.0000, | O, 'HYDRO. GRANULAR |
| 'IB | , | 0.0000, | O, 'INTERBEDDED |
| 'IN | , | 0.0000, | , 'INTERGROWN |
| 'IR | , | 0.0000, | O, 'IRREGULAR |
| 'KB | , | 0.0000, | O, 'KINK BANDED |
| 'LB | , | 0.0000, | O, 'LENSOID BANDED |
| 'LE | , | 0.0000, | O, 'LENTICULAR |
| 'LM | , | 0.0000, | O, 'LAMINATED |
| 'LN | , | 0.0000, | , 'LENTICULAR |
| 'MS | , | 0.0000, | O, 'MATRIX SUPPORTED |
| 'MT | , | 0.0000, | O, 'MOTTLED |
| 'MX | , | 0.0000, | O, 'MASSIVE |
| 'PA | , | 0.0000, | O, 'PATCHY |
| 'P | , | 0.0000, | O, 'PORPHYROBLASTIC |
| 'PF | , | 0.0000, | O, 'PTYGMATIC FOLDED |
| 'PG | , | 0.0000, | , 'POLYGGONIZED |
| 'PM | , | 0.0000, | O, 'POLYMICTIC |
| 'PO | , | 0.0000, | O, 'PORCELANEOUS |
| 'PP | , | 0.0000, | O, 'PORPHYRITIC |
| 'PS | , | 0.0000, | O, 'POORLY SORTED |
| 'RG | , | 0.0000, | O, 'RAGGED |
| 'RD | , | 0.0000, | O, 'ROUNDED |
| 'RT | , | 0.0000, | O, 'RETICULATE |
| 'RX | , | 0.0000, | O, 'RECRYSTALIZED |
| 'SA | , | 0.0000, | O, 'SUB-APHANITIC |
| 'SE | , | 0.0000, | O, 'SERIATE |
| 'SG | , | 0.0000, | O, 'SUGARY |
| 'SH | , | 0.0000, | O, 'SHEARED |
| 'SL | , | 0.0000, | , 'SLUMP FOLDED |
| 'ST | , | 0.0000, | O, 'SPOTTED |
| 'SU | , | 0.0000, | , 'SUBHEDRAL |
| 'SW | , | , | , 'STOCKWORK |
| 'SZ | , | 0.0000, | O, 'STRINGER ZONE |
| 'TB | , | 0.0000, | , 'TABULAR |
| 'TF | , | 0.0000, | O, 'TUFFACEOUS |
| 'UA | , | 0.0000, | , 'SUBANGULAR |
| 'US | , | 0.0000, | O, 'UNSORTED |
| 'VG | , | 0.0000, | O, 'VUGGY |
| 'VN | , | 0.0000. | O, 'VEINED |
| 'B | , | 0.0000, | O, 'WEAKLY BEDDED |
| 'WD | , | 0.0000, | , 'WELDED |
| 'WF | , | 0.0000, | O, 'WEAKLY FOLIATED |
| 'WL | , | 0.0000, | O, 'WELDED |
| 'WS | , | 0.0000, | O, 'WISPY |

TABLE , STRUCTURE
TABLE , FORMATION

| | | | | |
|------------------|---|---------|-------|-----------------------------|
| 'KE | , | 0.0000, | , | 'KUTCHO FM: EXHALITIVE HORI |
| 'KL | , | 0.0000, | , | 'KUTCHO FM: LAPILLI TUFFS |
| 'KO | , | 0.0000, | , | 'KUTCHO FM: ORE HORIZON |
| 'KX | , | 0.0000, | , | 'KUTCHO FM: CRYSTAL TUFFS |
| 'MG | , | 0.0000, | , | 'METAGABBRO UNIT |
| 'TA | , | 0.0000, | O, | 'TUFF ARGILLITE UNIT |
| TABLE, QMIN | , | 0.0000, | , | 'ANKERITE |
| 'AN | , | , | , | 'ANKERITE |
| 'BA | , | , | , | 'BARITE |
| 'BI | , | 0.0000, | , | 'BIOTITE |
| 'CA | , | 0.0000, | , | 'CALCITE |
| 'CB | , | 0.0000, | , | 'CARBONATE |
| 'CC | , | 6.7000, | , | 'CALCOCITE |
| 'CF | , | 0.0000, | , | 'CARBONATE FRAGMENTS |
| 'CL | , | 0.0000, | O, | 'CHLORITE |
| 'CP | , | 6.7000, | , | 'CALCOPYRITE |
| 'DO | , | 0.0000, | O, | 'DOLomite |
| 'EP | , | 0.0000, | O, | 'Epidote |
| 'FL | , | 0.0000, | , | 'FLUORITE |
| 'FS | , | 0.0000, | O, | 'FELDSPAR, GENERAL |
| 'FX | , | 0.0000, | O, | 'FELDSPAR CRYSTALS |
| 'GA | , | , | , | 'GALENA |
| 'GP | , | , | , | 'GRAPHITE |
| 'HB | , | 0.0000, | , | 'HORNBLENDE |
| 'HE | , | 0.0000, | , | 'HEMATITE |
| 'KF | , | , | , | 'POTASSIUM FELDSPAR |
| 'LF | , | 0.0000, | O, | 'LITHIC FRAGMENT |
| 'LI | , | 0.0000, | , | 'LIMONITE |
| 'LL | , | 0.0000, | , | 'LITHIC LAPILLI |
| 'MF | , | 0.0000, | O, | 'MAFICS, GENERAL |
| 'MN | , | 0.0000, | , | 'MANGANESE |
| 'S | , | 0.0000, | , | 'MUSCOVITE/SERICITE |
| 'MX | , | , | , | 'MAFIC CRYSTALS-GENERAL |
| 'PF | , | 0.0000, | O, | 'PUMICE FRAGMENT |
| 'PX | , | 0.0000, | O, | 'PORPHYROBLAST (IC) |
| 'PY | , | 0.0000, | O, | 'PYRITE |
| 'QI | , | 0.0000, | , | 'QUARTZ EYES |
| 'QV | , | 0.0000, | O, | 'QUARTZ VEIN |
| 'QX | , | 0.0000, | O, | 'QUARTZ CRYSTALS |
| 'QZ | , | 0.0000, | O, | 'QUARTZ, GENERAL |
| 'SF | , | 0.0000, | , | 'SULPHIDE |
| 'SL | , | 0.0000, | , | 'SPHALERITE |
| 'SX | , | 0.0000, | , | 'SILICA EXHALITE |
| 'VF | , | 0.0000, | O, | 'VOLCANIC FRAGMENT |
| 'XF | , | 0.0000, | O, | 'CRYSTAL FRAGMENT |
| TABLE, HOW-SCALE | , | 0.0000, | , | 'OVERGROWTHS |
| '1 | , | 0.0000, | 37, | 'BRECCIA FILLINGS |
| '# | , | 0.0000, | 3112, | 'SHEETING |
| '* | , | 0.0000, | 41, | 'CL/MG REPLACES MF |
| '*) | , | 0.0000, | 38, | 'CLASTS |
| '* | , | 0.0000, | O, | 'WITHIN QUARTZ VEIN |
| '+ | , | 0.0000, | 27, | 'FRESH, PRIMARY ROCK |
| '0 | , | 0.0000, | 28, | 'A, MINOR > AND/OR SCAT. C |
| '1 | , | 0.0000, | 29, | 'MACROVEINS AND VEINS |
| '2 | , | 0.0000, | 3120, | 'VEINS, SPOTS OR PATCHES |
| '3 | , | 0.0000, | O, | 'VEINS, AND/OR OCCAS. ENV. |
| '4 | , | 0.0000, | 32, | 'VEINS, AND/OR ABUNDANT EN |
|) | , | 0.0000, | O, | 'P OR D LESS THAN V,<,S & |
| '6 | , | 0.0000, | O, | 'P OR D EQUAL TO V,<,S & E |
| '7 | , | 0.0000, | 35, | 'P OR D GREATER THAN < & S |
| '8 | , | 0.0000, | 36, | 'P OR D, V, <, S & E |
| '9 | , | 0.0000, | 49, | 'MICROVEINS, FRACTURE FILL |
| '< | , | 0.0000, | 3116, | 'MS/CY REPLACES FS XTALS |

'A , 0.0000, 1, 'A, CAVITY FILLINGS
 'B , 0.0000, 2, 'BLEBS
 'C , 0.0000, 3, 'COATINGS & ENCRUSTATIONS
 'D , 0.0000, 5090, 'DISSEMINATED, SCATTERED XTALS
 'E , 0.0000, 5, 'ENVELOPES
 'F , 0.0000, 6, 'FRAMEWORK CRYSTALS
 'G , 0.0000, 7, 'GANGUE
 'H , 0.0000, 3116, 'REPLACED PHENOCRYSTS
 'I , 0.0000, 3118, 'EYES, AUGEN
 'J , 0.0000, 10, 'INTERSTITIAL
 'K , 0.0000, 11, 'STOCKWORK
 'L , 0.0000, 3102, 'LAMINATIONS/BEDDED
 'M , 0.0000, 13, 'MASSIVE
 'N , 0.0000, 14, 'NODULES
 'O , 0.0000, 3110, 'SPOTS
 'P , 0.0000, 3122, 'PERVASIVE
 'Q , 0.0000, 3124, 'PATCHES, AS IN QUILTS
 'R , 0.0000, 18, 'RIMMING
 'S , 0.0000, 19, 'SELVAGES
 'T , 0.0000, 20, 'STAININGS, AS IN TARNISH
 'U , 0.0000, 3118, 'EU-HEDRAL CRYSTALS
 'V , 0.0000, 22, 'VEINS
 'W , 0.0000, 23, 'BOXWORK
 'X , 0.0000, 24, 'MASSIVE, LAM.-SHEETED TO DISS.
 'Z , 0.0000, , 'LMNTD-MSSVE FRAM/CLSTS

TABLE, SIZE--SCALE

| | | | | |
|----|--------------|------------|--------|---------|
| '0 | , 0.0030, | 27, , | < .004 | MM |
| '1 | , 0.0080, | 28, , .004 | TO | .016 MM |
| '2 | , 0.0320, | 29, , .016 | TO | .06 MM |
| '3 | , 0.1280, | 30, , .06 | TO | .25 MM |
| '4 | , 0.5120, | 31, , .25 | TO | 1 MM |
| '5 | , 2.0000, | 32, , 1 | TO | 4 MM |
| '6 | , 8.0000, | 33, , 4 | TO | 16 MM |
| '7 | , 32.0000, | 34, , 16 | TO | 64 MM |
| '8 | , 128.0000, | 35, , 64 | TO | 256 MM |
| '9 | , 512.0000, | 36, , 256 | TO | 1 M |
| 'A | , 0.0030, | 1, , | < .004 | MM |
| 'B | , 0.0060, | 2, , .004 | TO | .008 MM |
| 'C | , 0.0110, | 3, , .008 | TO | .016 MM |
| 'D | , 0.0220, | 4, , .016 | TO | .03 MM |
| 'E | , 0.0440, | 5, , .032 | TO | .06 MM |
| 'F | , 0.0880, | 6, , .06 | TO | .12 MM |
| 'G | , 0.1770, | 7, , .128 | TO | .25 MM |
| 'H | , 0.3540, | 8, , .25 | TO | .5 MM |
| 'I | , 0.7070, | 9, , .5 | TO | 1 MM |
| 'J | , 1.4100, | 10, , 1 | TO | 2 MM |
| 'K | , 2.8300, | 11, , 2 | TO | 4 MM |
| 'L | , 5.6600, | 12, , 4 | TO | 8 MM |
| 'M | , 11.3000, | 13, , 8 | TO | 16 MM |
| 'N | , 22.6000, | 14, , 16 | TO | 32 MM |
| 'O | , 45.1000, | 15, , 32 | TO | 64 MM |
| 'P | , 90.5000, | 16, , 64 | TO | 128 MM |
| 'Q | , 181.0000, | 17, , 128 | TO | 256 MM |
| 'R | , 362.0000, | 18, , 256 | TO | .5 M |
| 'S | , 724.0000, | 19, , .5 | TO | 1 M |
| 'T | , 1450.0001, | 20, , 1 | TO | 2 M |
| 'U | , 2900.0002, | 21, , 2 | TO | 4 M |
| 'X | , 2000.0001, | 24, , 1 | TO | 4 M |

TABLE, G-SCALE

| | | | | |
|----|-----------|---------------|----|------|
| '(| , 0.1000, | 2036, , .05 | TO | <.2 |
| ') | , 1.0000, | 2038, , .5 | TO | <.2 |
| '* | , 0.3000, | 2037, , .2 | TO | <.5 |
| '+ | , 2.5000, | 2039, , .2 | TO | <.3 |
| '- | , 0.0800, | 2035, , .02 | TO | <.05 |
| '. | , 0.0100, | 2033, , TRACE | = | <.02 |

| | | | |
|----|---|-----------|-------------------------|
| '0 | , | 0.0000, | 2031, 'NIL, ABSENT |
| '1 | , | 10.0000, | 2041, 7 TO <15 |
| '2 | , | 20.0000, | 2042, 15 TO <25 |
| '3 | , | 30.0000, | 2043, 25 TO <35 |
| '4 | , | 40.0000, | 2044, 35 TO <45 |
| '5 | , | 50.0000, | 2045, 45 TO <55 |
| '6 | , | 60.0000, | 2046, 55 TO <65 |
| '7 | , | 70.0000, | 2047, 65 TO <75 |
| '8 | , | 80.0000, | 2048, 75 TO <85 |
| '9 | , | 90.0000, | 2049, 85 TO 99 |
| '= | , | 5.0000, | 2040, 3 TO <7 |
| '? | , | 0.0000, | 2032, 'POSS. PRESENT |
| 'F | , | 0.0700, | 2032, 'EST. IMPOSSIBLE |
| 'X | , | 100.0000, | 2050, 'ESSENTIALLY 100% |

TABLE,L-SCALE

TABLE,N-SCALE

TABLE,N001-SCALE

| | | | |
|----|---|-----------|-------------------------|
| '0 | , | 5.0000, | 2040, 3 TO <7 |
| '1 | , | 0.1000, | 2036, .05 TO <.2 |
| '2 | , | 1.0000, | 2038, .5 TO <.2 |
| '* | , | 0.3000, | 2037, .2 TO <.5 |
| '+ | , | 2.5000, | 2039, 2 TO <3 |
| '- | , | 0.0300, | 2035, .02 TO <.05 |
| '. | , | 0.0100, | 2033, 'TRACE = <.02 |
| '0 | , | 0.0000, | 2031, 'NIL, ABSENT |
| '1 | , | 10.0000, | 2041, 7 TO <15 |
| '2 | , | 20.0000, | 2042, 15 TO <25 |
| '3 | , | 30.0000, | 2043, 25 TO <35 |
| '4 | , | 40.0000, | 2044, 35 TO <45 |
| '5 | , | 50.0000, | 2045, 45 TO <55 |
| '6 | , | 60.0000, | 2046, 55 TO <65 |
| '7 | , | 70.0000, | 2047, 65 TO <75 |
| '8 | , | 80.0000, | 2048, 75 TO <85 |
| '9 | , | 90.0000, | 2049, 85 TO 99 |
| '? | , | 0.0000, | 2032, 'POSS. PRESENT |
| 'F | , | 0.0700, | 2032, 'EST. IMPOSSIBLE |
| 'X | , | 100.0000, | 2050, 'ESSENTIALLY 100% |

TABLE,N002-SCALE

| | | | |
|----|---|-----------|------------------------|
| '0 | , | 5.0000, | 2040, 3 TO <7 |
| '1 | , | 0.1000, | 2036, .05 TO <.2 |
| '2 | , | 1.0000, | 2038, .5 TO <.2 |
| '* | , | 0.3000, | 2037, .2 TO <.5 |
| '+ | , | 2.5000, | 2039, 2 TO <3 |
| '- | , | 0.0300, | 2035, .02 TO <.05 |
| '. | , | 0.0100, | 2033, 'TRACE = <.02 |
| '0 | , | 0.0000, | 2031, 'NIL, ABSENT |
| '1 | , | 10.0000, | 2041, 7 TO <15 |
| '2 | , | 20.0000, | 2042, 15 TO <25 |
| '3 | , | 30.0000, | 2043, 25 TO <35 |
| '4 | , | 40.0000, | 2044, 35 TO <45 |
| '5 | , | 50.0000, | 2045, 45 TO <55 |
| '6 | , | 60.0000, | 2046, 55 TO <65 |
| '7 | , | 70.0000, | 2047, 65 TO <75 |
| '8 | , | 80.0000, | 2048, 75 TO <85 |
| '9 | , | 90.0000, | 2049, 85 TO 99 |
| '? | , | 0.0000, | 2032, 'POSS. PRESENT |
| 'F | , | 0.0700, | 2032, 'EST. IMPOSSIBLE |
| 'X | , | 100.0000, | 2050, 'ESSENTIALLY 100 |

TABLE,N003-SCALE

| | | | |
|----|---|---------|-------------------------|
| '1 | , | 0.0000, | 0, 'ANKERITE |
| '2 | , | 0.0000, | 0, 'ANKERITE > DOLOMITE |
| '3 | , | 0.0000, | 0, 'DOLOMITE > ANKERITE |
| '4 | , | 0.0000, | 0, 'DOLOMITE |
| '5 | , | 0.0000, | 0, 'DOLOMITE + CALCITE |
| '6 | , | 0.0000, | 0, 'ANKERITE + CALCITE |

| | | | |
|----|---|---------|-------------------------------|
| '8 | , | 0.0000, | 0, 'METAMORPHIC |
| '9 | , | 0.0000, | 0, 'LATE VEINS |
| 'A | , | 0.0000, | 0, '10 TO 20 % DISS PY |
| 'B | , | 0.0000, | 0, '20 TO 50 % PY |
| 'C | , | 0.0000, | 0, '>50 % PY |
| 'D | , | 0.0000, | 0, 'SP > CU SULPHIDES |
| 'E | , | 0.0000, | 0, 'CP +-SL, <.1% BO+CC |
| 'F | , | 0.0000, | 0, 'CP + BO (+-CC,SL) |
| 'G | , | 0.0000, | 0, 'BO + CC > CP |
| 'H | , | 0.0000, | 0, 'MASSIVE PYRITE, MINOR CP, |
| 'I | , | 5.0000, | 3025, 'INTENSE |
| 'M | , | 3.0000, | 3015, 'MODERATE |
| 'W | , | 1.0000, | 3005, 'WEAK |
| 'X | , | 0.0000, | 0, 'NOT DISTINGUISHABLE |

TABLE, NO04-SCALE

| | | | |
|----|---|----------|----------------------------------|
| '0 | , | 0.0000, | 27, ' 0 UNFRACTURED |
| '1 | , | 1.0000, | 28, ' 1 SLIGHTLY FRACTURED |
| '2 | , | 3.0000, | 29, ' 3 VERY LIGHTLY FRACTURED |
| '3 | , | 6.0000, | 30, ' 6 LIGHTLY FRACTURED |
| '4 | , | 10.0000, | 31, ' 10 FAIRLY LIGHTLY FRACTURE |
| '5 | , | 15.0000, | 32, ' 15 MODERATELY FRACTURED |
| '6 | , | 21.0000, | 33, ' 21 FAIRLY WELL FRACTURED |
| '7 | , | 28.0000, | 34, ' 28 WELL FRACTURED |
| '8 | , | 36.0000, | 35, ' 36 VERY WELL FRACTURED |
| '9 | , | 45.0000, | 36, ' 45 EXTR. WELL FRACTURED |
| 'X | , | 55.0000, | 24, ' 55+ SHATTERED |

TABLE, ENVIRON

| | | | |
|-----|---|---------|------------------------|
| 'EC | , | , | , 'EPICLASTIC |
| 'EP | , | 0.0000, | 0, ' EPICLASTIC |
| 'EV | , | 0.0000, | 0, ' EPIVOLCANICLASTIC |
| 'EX | , | 6.7100, | , 'EXHALATIVE |
| 'PC | , | 0.0000, | 0, ' PYROCLASTIC |
| 'S | , | , | , 'VOLCANICLASTIC |
| 'VD | , | 0.0000, | 0, ' VOLCANIC-DISTAL |
| 'VP | , | 0.0000, | 0, ' VOLCANIC-PROXIMAL |

TABLE, ROCKQUAL

| | | | |
|-----|---|---------|---------------------------|
| 'AN | , | 0.0000, | 0, ' ANDESITIC |
| 'BS | , | 0.0000, | 0, ' BASALTIC |
| 'C | , | 0.0000, | , 'CLOSED-CLAST SUPPORTED |
| 'DA | , | 0.0000, | 0, ' DACI-ANDESITE |
| 'DC | , | 0.0000, | 0, ' DACITIC |
| 'FS | , | 0.0000, | 0, ' FELSIC |
| 'IN | , | 0.0000, | 0, ' INTERMEDIATE |
| 'MF | , | 0.0000, | 0, ' MAFIC |
| 'O | , | 0.0000, | , 'OPEN-MATRIX SUPPORTED |
| 'RD | , | 0.0000, | 0, ' RHYODACITE |
| 'RY | , | 0.0000, | 0, ' RHYOLITIC |

TABLE, C-SCALE

TABLE, COLOR2

TABLE, SHAPE-SCALE

| | | | |
|----|---|----------|-------------|
| 'C | , | 0.0000, | 0, 'COARSE |
| 'E | , | 14.8000, | , 'ELONGATE |
| 'F | , | 0.0000, | 0, 'FINE |
| 'M | , | 0.0000, | 0, 'MEDIUM |

TABLE, T-SCALE

| | | | |
|----|---|----------|------------------------------------|
| '0 | , | 0.0010, | 27, ' < 2 MM THINLY LAMINAR |
| '1 | , | 0.0035, | 28, ' 2 TO < 5 MM LAMINATED |
| '2 | , | 0.0100, | 29, ' .5 TO < 2 CM VERY THIN |
|) | , | 0.0350, | 30, ' 2 TO < 5 CM THIN BEDDED |
| '4 | , | 0.1200, | 31, ' 5 TO < 20 CM MEDIUM-THIN BED |
| '5 | , | 0.3500, | 32, ' 20 TO < 50 CM MEDIUM BEDDED |
| '6 | , | 1.2000, | 33, ' .5 TO < 2 M MEDIUM THICK BE |
| '7 | , | 3.5000, | 34, ' 2 TO < 5 M THICK BEDDED |
| '8 | , | 12.0000, | 35, ' 5 TO < 20 M VERY THICK BEDD |
| '9 | , | 30.0000, | 36, ' > 20Mm EXTR. THICK BED |

TABLE, I-SCALE
TABLE, I-SCALE
TABLE, FILTAB
TABLE, PHTSCALE
TABLE, WETNESS
TABLE, HOWDET
TABLE, FID
TABLE, ENDTAB
TABLE, TRTYPE

| | | | |
|-----------------|---|---------|---------------------|
| 'DH | , | 0.0000, | O, 'DRILLHOLE |
| 'TR | , | 0.0000, | O, 'TRAVERSE |
| TABLE, LC-SCALE | | | |
| '1A | , | 0.0000, | O, 'DARKEST GREY |
| '1B | , | 0.0000, | O, 'DARKEST BLUE |
| '1G | , | 0.0000, | O, 'DARKEST GREEN |
| '1O | , | 0.0000, | O, 'DARKEST ORANGE |
| '1R | , | 0.0000, | O, 'DARKEST RED |
| '1T | , | 0.0000, | O, 'DARKEST TAN |
| '1U | , | 0.0000, | O, 'DARKEST BROWN |
| '2A | , | 0.0000, | O, 'VERY DARK GREY |
| '2B | , | 0.0000, | O, 'VERY DARK BLUE |
| '2G | , | 0.0000, | O, 'VERY DARK GREEN |
| '2O | , | 0.0000, | O, 'VERY DARK ORANG |
| '2R | , | 0.0000, | O, 'VERY DARK RED |
| '2T | , | 0.0000, | O, 'VERY DARK TAN |
| '2U | , | 0.0000, | O, 'VERY DARK BROWN |
| '2Y | , | 0.0000, | O, 'VERY DARK YELLO |
| '3A | , | 0.0000, | O, 'DARKER GREY |
| '3B | , | 0.0000, | O, 'DARKER BLUE |
| '3G | , | 0.0000, | O, 'DARKER GREEN |
| '3O | , | 0.0000, | O, 'DARKER ORANGE |
| '3R | , | 0.0000, | O, 'DARKER RED |
| '3T | , | 0.0000, | O, 'DARKER TAN |
| '3U | , | 0.0000, | O, 'DARKER BROWN |
| '3Y | , | 0.0000, | O, 'DARKER YELLOW |
| '4A | , | 0.0000, | O, 'DARK GREY |
| '4B | , | 0.0000, | O, 'DARK BLUE |
| '4G | , | 0.0000, | O, 'DARK GREEN |
| '4O | , | 0.0000, | O, 'DARK ORANGE |
| '4R | , | 0.0000, | O, 'DARK RED |
| '4T | , | 0.0000, | O, 'DARK TAN |
| '4U | , | 0.0000, | O, 'DARK BROWN |
| '4Y | , | 0.0000, | O, 'DARK YELLOW |
| '5A | , | 0.0000, | O, 'MEDIUM GREY |
| '5B | , | 0.0000, | O, 'MEDIUM BLUE |
| '5G | , | 0.0000, | O, 'MEDIUM GREEN |
| '5O | , | 0.0000, | O, 'MEDIUM ORANGE |
| '5R | , | 0.0000, | O, 'MEDIUM RED |
| '5T | , | 0.0000, | O, 'MEDIUM TAN |
| '5U | , | 0.0000, | O, 'MEDIUM BROWN |
| '5Y | , | 0.0000, | O, 'MEDIUM YELLOW |
| '6A | , | 0.0000, | O, 'LIGHTER GREY |
| '6B | , | 0.0000, | O, 'LIGHTER BLUE |
| '6G | , | 0.0000, | O, 'LIGHTER GREEN |
| '6O | , | 0.0000, | O, 'LIGHTER ORANGE |
| '6R | , | 0.0000, | O, 'LIGHTER RED |
| '6T | , | 0.0000, | O, 'LIGHTER TAN |
| '6U | , | 0.0000, | O, 'LIGHTER BROWN |
| '6Y | , | 0.0000, | O, 'LIGHTER YELLOW |
| '7A | , | 0.0000, | O, 'LIGHT GREY |
| '7B | , | 0.0000, | O, 'LIGHT BLUF |
| '7G | , | 0.0000, | O, 'LIGHT GREEN |
| '7O | , | 0.0000, | O, 'LIGHT ORANGE |
| '7R | , | 0.0000, | O, 'LIGHT RED |
| '7T | , | 0.0000, | O, 'LIGHT TAN |

| | | | |
|-----|---|----------|--------------------|
| '7Y | , | 0.0000, | O, 'LIGHT YELLOW |
| '8A | , | 0.0000, | O, 'PALE GREY |
| '8B | , | 0.0000, | O, 'PALE BLUE |
| '8C | , | 0.0000, | O, 'PALE GREEN |
| '8L | , | 0.0000, | O, 'PALE LIME |
| '8O | , | 0.0000, | O, 'PALE ORANGE |
| '8R | , | 0.0000, | O, 'PALE RED |
| '8T | , | 0.0000, | O, 'PALE TAN |
| '8U | , | 0.0000, | O, 'PALE BROWN |
| '8Y | , | 0.0000, | O, 'PALE YELLOW |
| '9A | , | 0.0000, | O, 'PALEST GREY |
| '9B | , | 0.0000, | O, 'PALEST BLUE |
| '9B | , | 0.0000, | O, 'PALEST GREEN |
| '9D | , | 0.0000, | O, 'PALEST ORANGE |
| '9R | , | 0.0000, | O, 'PALEST RED |
| '9T | , | 0.0000, | O, 'PALEST TAN |
| '9U | , | 0.0000, | O, 'PALEST BROWN |
| '9Y | , | 0.0000, | O, 'PALEST YELLOW |
| 'AG | , | 0.0000, | O, 'GREY GREEN |
| 'AO | , | 7.0000, | , 'GREY-ORANGE |
| 'AT | , | 0.0000, | O, 'GREY TAN |
| 'BW | , | 25.3000, | , 'BLACK AND WHITE |
| 'NN | , | 0.0000, | O, 'BLACK |
| 'OF | , | 0.0000, | O, 'ORANGE TINTED |
| 'OA | , | 0.0000, | , 'ORANGE-GREY |
| 'OG | , | 21.5000, | , 'ORANGE GREEN |
| 'OR | , | , | , 'ORANGE RED |
| 'OU | , | 0.0000, | , 'ORANGE-BROWN |
| 'OW | , | 32.3000, | , 'ORANGE WHITE |
| 'RG | , | , | , 'RED AND GREEN |
| 'RP | , | 0.0000, | , 'MAROON |
| 'RU | , | 38.7000, | , 'RED BROWN |
| 'A | , | 0.0000, | , 'TANNED-GREY |
| 'UG | , | 0.0000, | , 'BUFF-GREY |
| 'VD | , | 0.0000, | , 'VARIED |
| 'WG | , | , | , 'WHITE GREEN |
| 'WW | , | 0.0000, | O, 'WHITE |
| 'YA | , | 0.0000, | , 'YELLOW-GREY |
| 'YG | , | , | , 'YELLOW-GREEN |
| 'YT | , | 25.3000, | , 'YELLOW-TAN |

TABLE, M1-SCALE

| | | | |
|----|---|---------|-------------------------------|
| '1 | , | 0.0000, | O, 'CARBONATE (ONLY) |
| '2 | , | 0.0000, | O, 'CARBONATE > MUSCOVITE |
| '3 | , | 0.0000, | O, 'MUSCOVITE > CARBONATE |
| '4 | , | 0.0000, | O, 'MUSCOVITE (ONLY) |
| '5 | , | 5.0000, | O, 'MUSCOVITE> CHLORITE> CARB |
| '6 | , | 6.0000, | O, 'CHLORITE> MUSCOVITE |
| '7 | , | 7.0000, | O, 'CHLORITE (ONLY) |
| '8 | , | 8.0000, | O, 'SEXL |
| '9 | , | 9.0000, | O, 'CBEX |
| 'X | , | 0.0000, | O, '+/-CB +/-MS +/-CL +/-SEXL |

TABLE, M2-SCALE

| | | | |
|----|---|---------|----------------------|
| 'A | , | 0.0000, | O, 'SULPHATE FACIES |
| 'C | , | 0.0000, | O, 'DOLOMITE FACIES |
| 'P | , | 0.0000, | O, 'PYRITE/SULPHIDES |
| 'S | , | 0.0000, | 3001, 'SEXL FACIES |
| 'X | , | 0.0000, | O, 'NOT APPLICABLE |

TABLE, M3-SCALE

| | | | |
|----|---|---------|-----------------|
| 'I | , | 5.0000, | 3022, 'INTENSE |
| 'M | , | 3.0000, | 3012, 'MODERATE |
| 'W | , | 1.0000, | 3002, 'WEAK |

TABLE, M4-SCALE

| | | | |
|----|---|---------|-----------------|
| 'I | , | 5.0000, | 3023, 'INTENSE |
| 'M | , | 3.0000, | 3013, 'MODERATE |
| 'W | , | 1.0000, | 3003, 'WEAK |

| | | | |
|----|---|----------|---------------------------|
| '0 | , | 0.0000, | O, 0 UNFRACTURED |
| '1 | , | 1.0000, | O, 1 SLIGHT FRACTURED |
| '2 | , | 3.0000, | O, 3 V LIGHTLY FRACTURED |
| '3 | , | 6.0000, | O, 6 LIGHTLY FRACTURED |
| '4 | , | 10.0000, | O, 10 FAIRLY LIGHTLY FRAC |
| '5 | , | 15.0000, | O, 15 MOD FRACTURED |
| '6 | , | 21.0000, | O, 21 FAIRLY WELL FRAC |
| '7 | , | 28.0000, | O, 28 WELL FRACTURED |
| '8 | , | 36.0000, | O, 36 VERY WELL FRACTURED |
| '9 | , | 45.0000, | O, 45 EXT WELL FRACTURED |
| 'X | , | 55.0000, | O, 55+ SHATTERED |

TABLE , SID

| | | | |
|-----|---|----------|------------------|
| 'BD | , | 0.0000, | O, 'BEDDING |
| 'BN | , | 0.0000, | O, 'BANDING |
| 'CN | , | 0.0000, | O, 'CONTACT |
| 'CV | , | 70.1000, | O, 'CALCITE VEIN |
| 'FO | , | 0.0000, | O, 'FOLIATION |
| 'FR | , | 0.0000, | O, 'FRACTURE |
| 'LM | , | 0.0000, | O, 'LAMINATED |
| 'PG | , | 0.0000, | O, 'POLYGONIZED |
| 'QV | , | 70.1000, | O, 'QUARTZ VEIN |
| 'VN | , | 0.0000, | O, 'VEIN, GEN |
| 'VQ | , | 0.0000, | O, 'QUARTZ VEIN |

TABLE , ROCKA

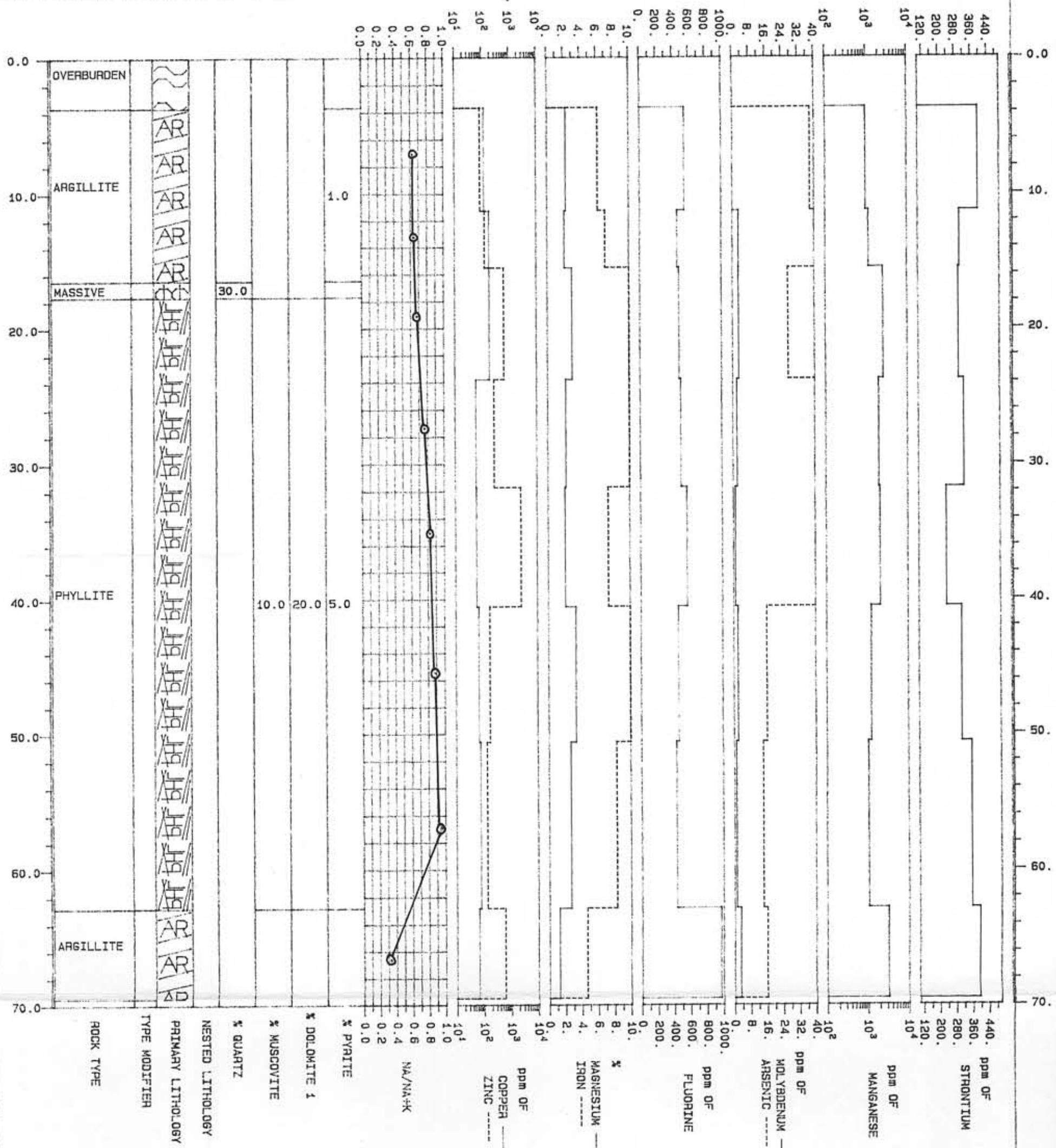
TABLE , TEXTUREA

TABLE , INSTR

ESSO MINERALS CANADA
STRATIFORM MASSIVE SULPHIDE
LITHOGEOCHEMISTRY: TOTAL ROCK
PROJECT ID : ADAMS

HOLE / TRAVERSE ID : ADAMS-15
 CORE HOLE SIZE : BQ
 DATE STARTED : 86/ 7/23
 DATE COMPLETED :
 GEOLOGGED BY : PMH
 PLOT DATE : 87/FEB/25
 PROJECT LEADER : PETER HOLBEK
 LOCATION : ADAMS PLATEAU

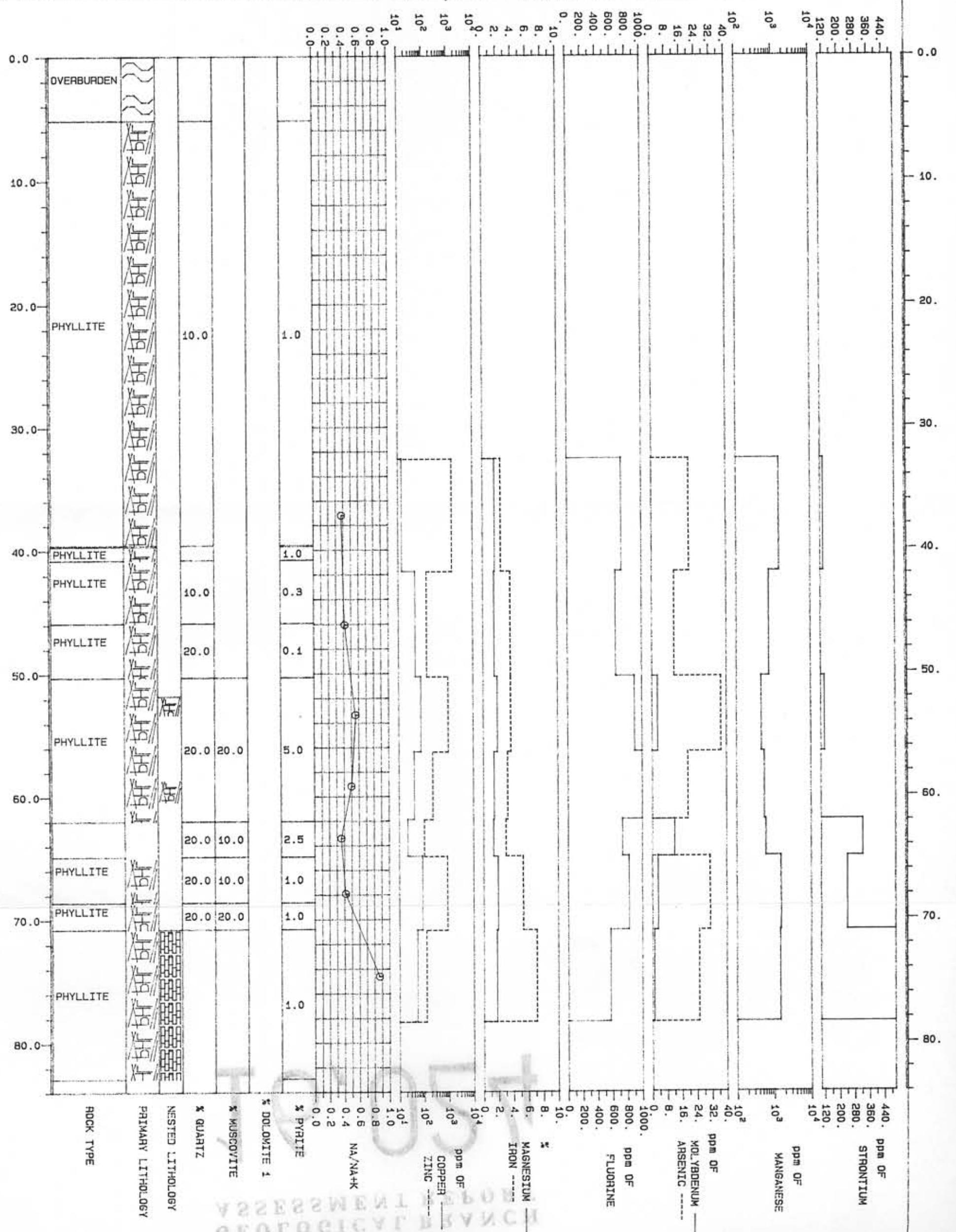
COLLAR AZIMUTH : 170.00
 COLLAR DIP : -45.00
 COLLAR ELEVATION : 1808.00
 COLLAR NORTHING : 60768.00
 COLLAR EASTING : 16194.00
 COLLAR OFFSET :
 COLLAR STATION :
 TOTAL LENGTH : 69.5



ESSO MINERALS CANADA
STRATIFORM MASSIVE SULPHIDE
LITHOGEOCHEMISTRY: TOTAL ROCK
PROJECT ID : ADAMS

HOLE / TRAVERSE ID : ADAMS-035
 CORE HOLE SIZE : 80
 DATE STARTED : 86/ 7/23
 DATE COMPLETED :
 GEOLOGGED BY : PMH
 PLOT DATE : 87/FEB/23
 PROJECT LEADER : PETER HOLBEK
 LOCATION : ADAMS PLATEAU

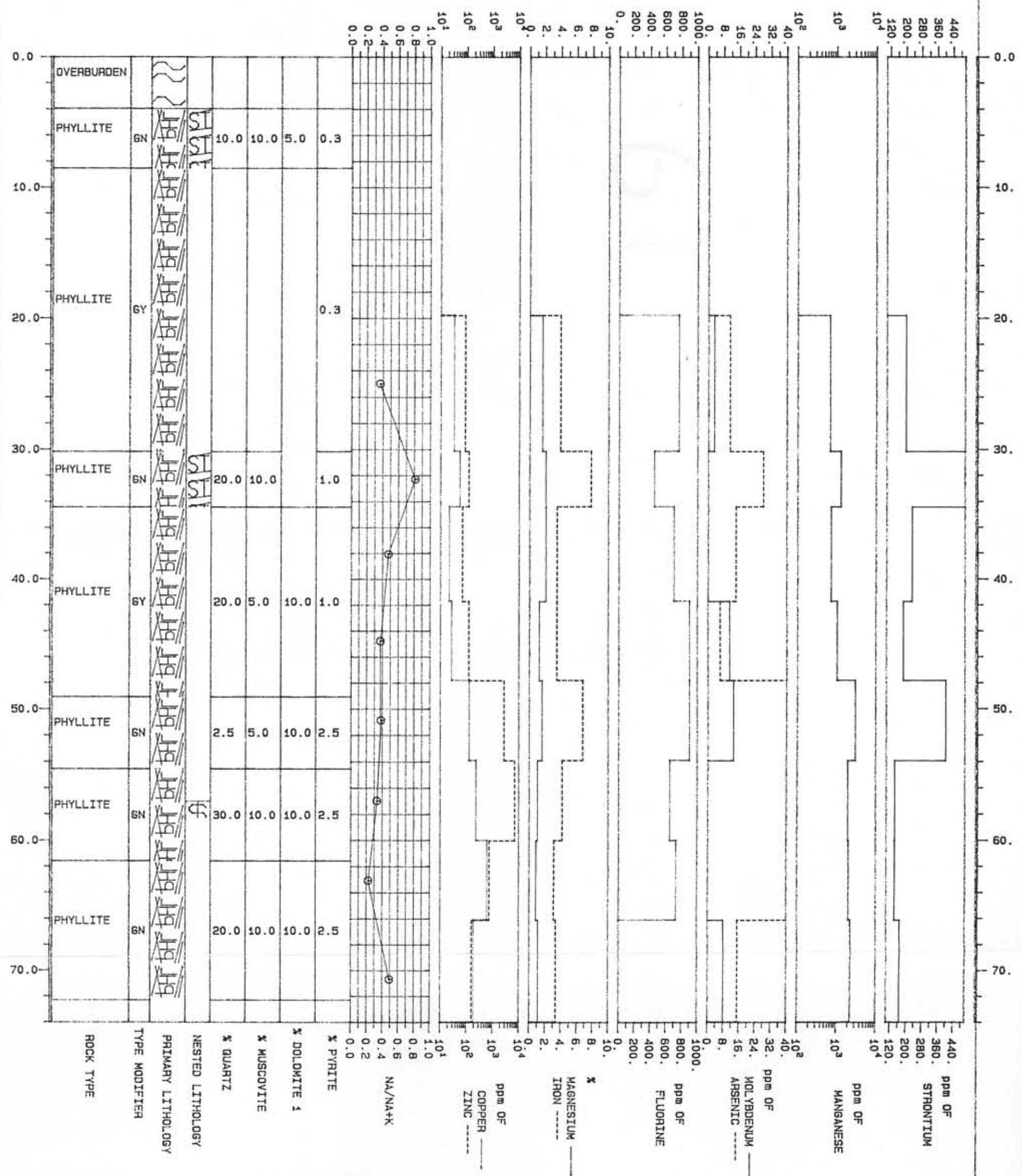
COLLAR AZIMUTH : 135.00
 COLLAR DIP : -45.00
 COLLAR ELEVATION : 1851.00
 COLLAR NORTHING : 60178.00
 COLLAR EASTING : 15636.00
 COLLAR OFFSET :
 COLLAR STATION :
 TOTAL LENGTH : 84.4



ESSO MINERALS CANADA
STRATIFORM MASSIVE SULPHIDE
LITHOGEOCHEMISTRY: TOTAL ROCK
PROJECT ID : ADAMS

HOLE / TRAVERSE ID : ADAMS-038
CORE HOLE SIZE : BQ
DATE STARTED : 86/ 7/11
DATE COMPLETED :
GEOLOGGED BY : P&P
PLOT DATE : 87/FEB/23
PROJECT LEADER : PETER HOLBEK
LOCATION : ADAMS PLATEAU

COLLAR AZIMUTH : 0.00
COLLAR DIP : -90.00
COLLAR ELEVATION : 1852.00
COLLAR NORTHING : 60232.50
COLLAR EASTING : 15624.50
COLLAR OFFSET :
COLLAR STATION :
TOTAL LENGTH : 75.3



ASSESSMENT REPORT

ADAMS-28

ADAMS-29

GEOLOGICAL BRANCH ASSESSMENT REPORT

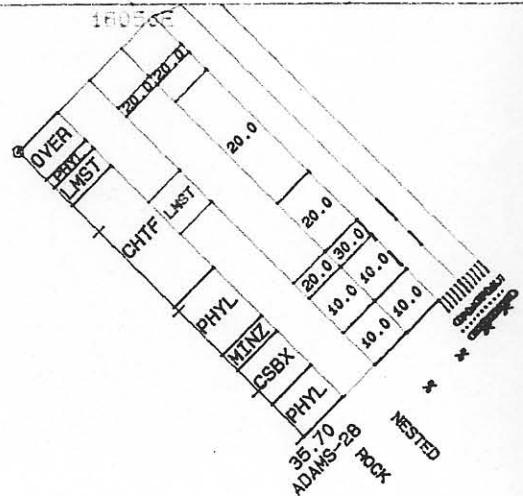
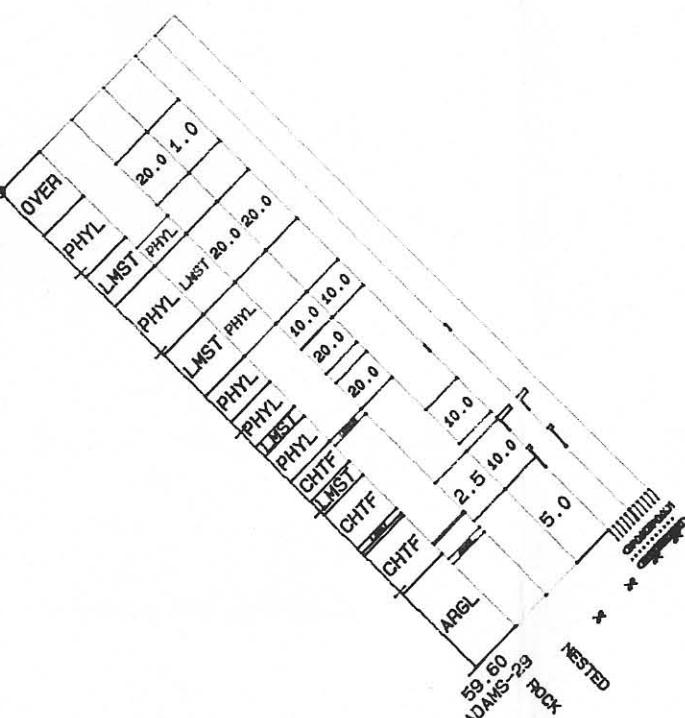
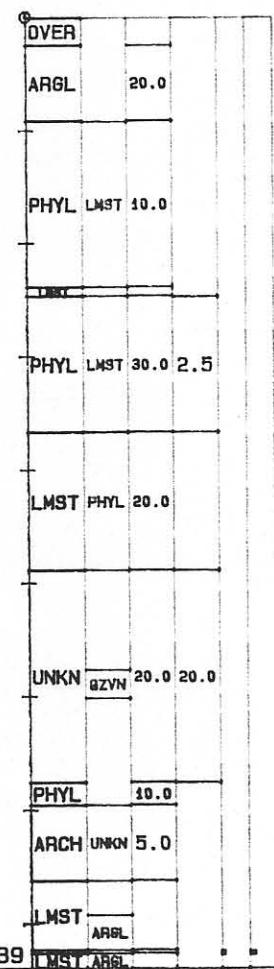
16,024

15-001

17450E

18000

16058



ESSO Minerals Canada
Stratiform Ag-Pb-Zn Massive Sulphide
Vertical Cross Section

SCALE 1: 500

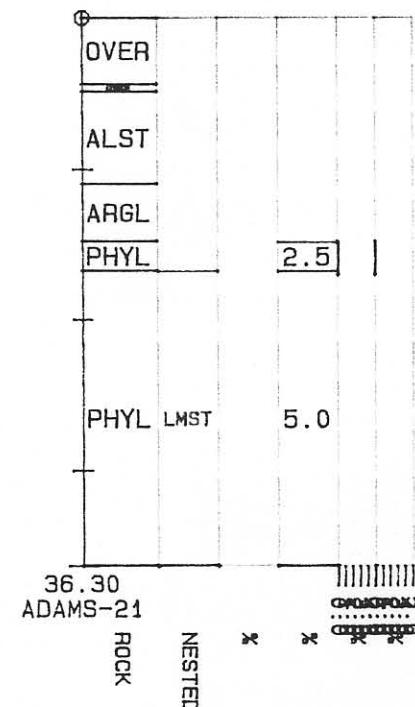
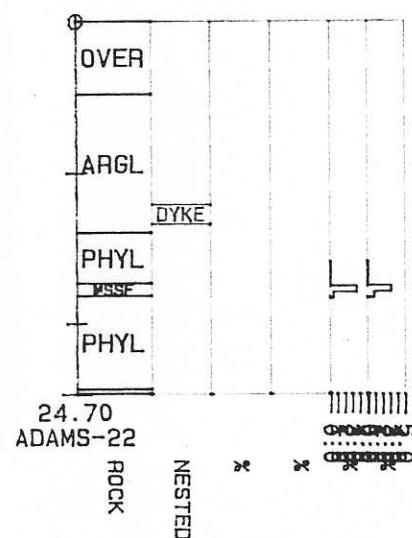
0 10 20 30 40 50 M

INTERNATIONAL GEOSYSTEMS CORPORATION

60N

61210N

61160N

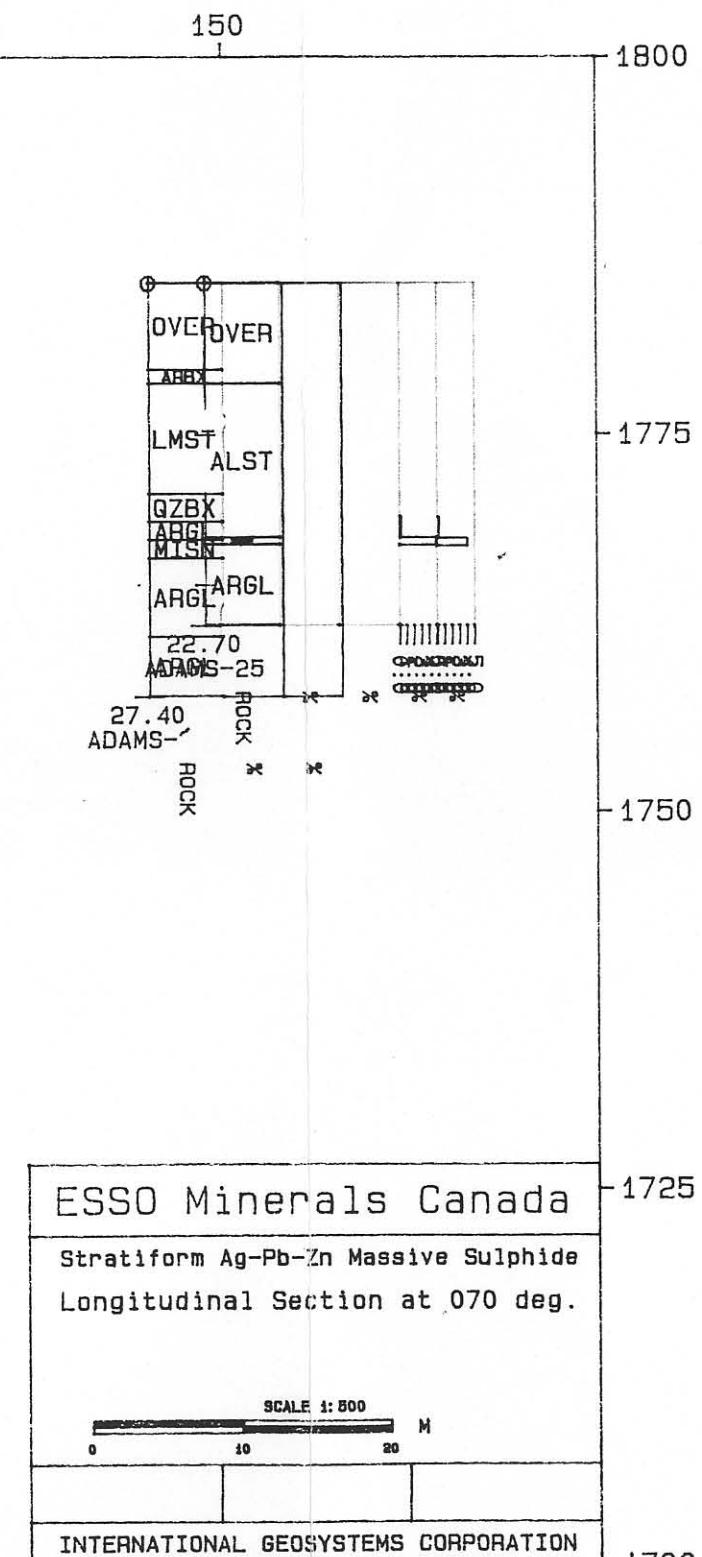
61110N
1800

ESSO Minerals Canada
Stratiform Ag-Pb-Zn Massive Sulphide
Vertical Cross Section
SCALE 1:500 M
0 10 20
INTERNATIONAL GEOSYSTEMS CORPORATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,024

16,024



ESSO Minerals Canada
Stratiform Ag-Pb-Zn Massive Sulphide
Longitudinal Section at 070 deg.

SCALE 1:500 M
0 10 20

INTERNATIONAL GEOSYSTEMS CORPORATION

0

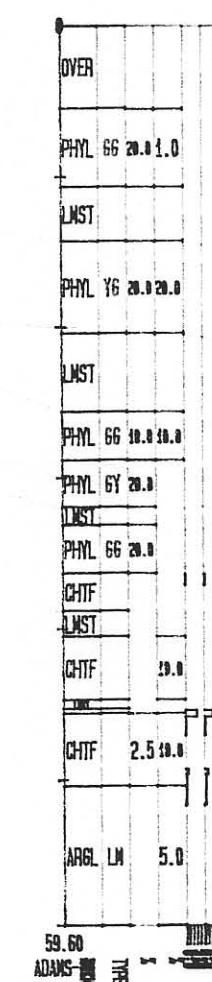
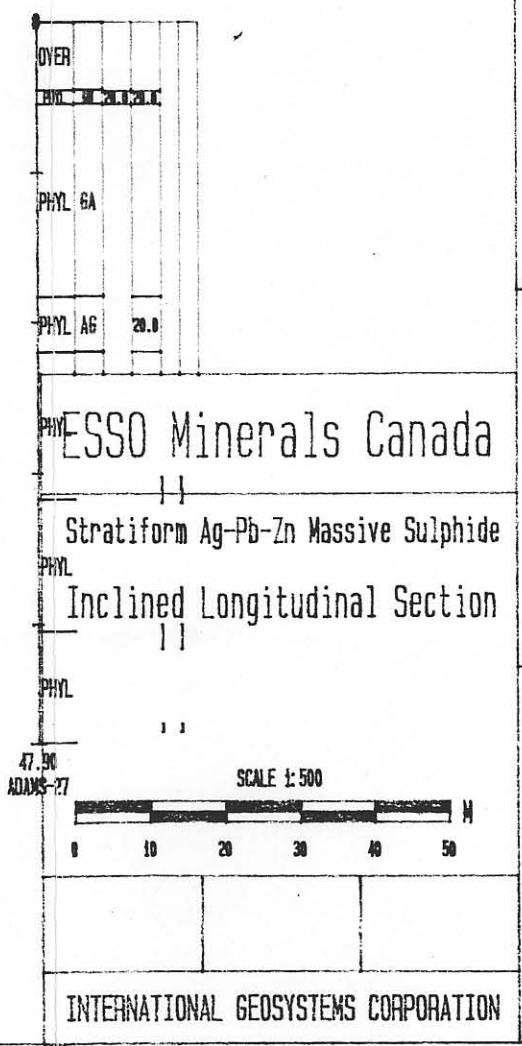
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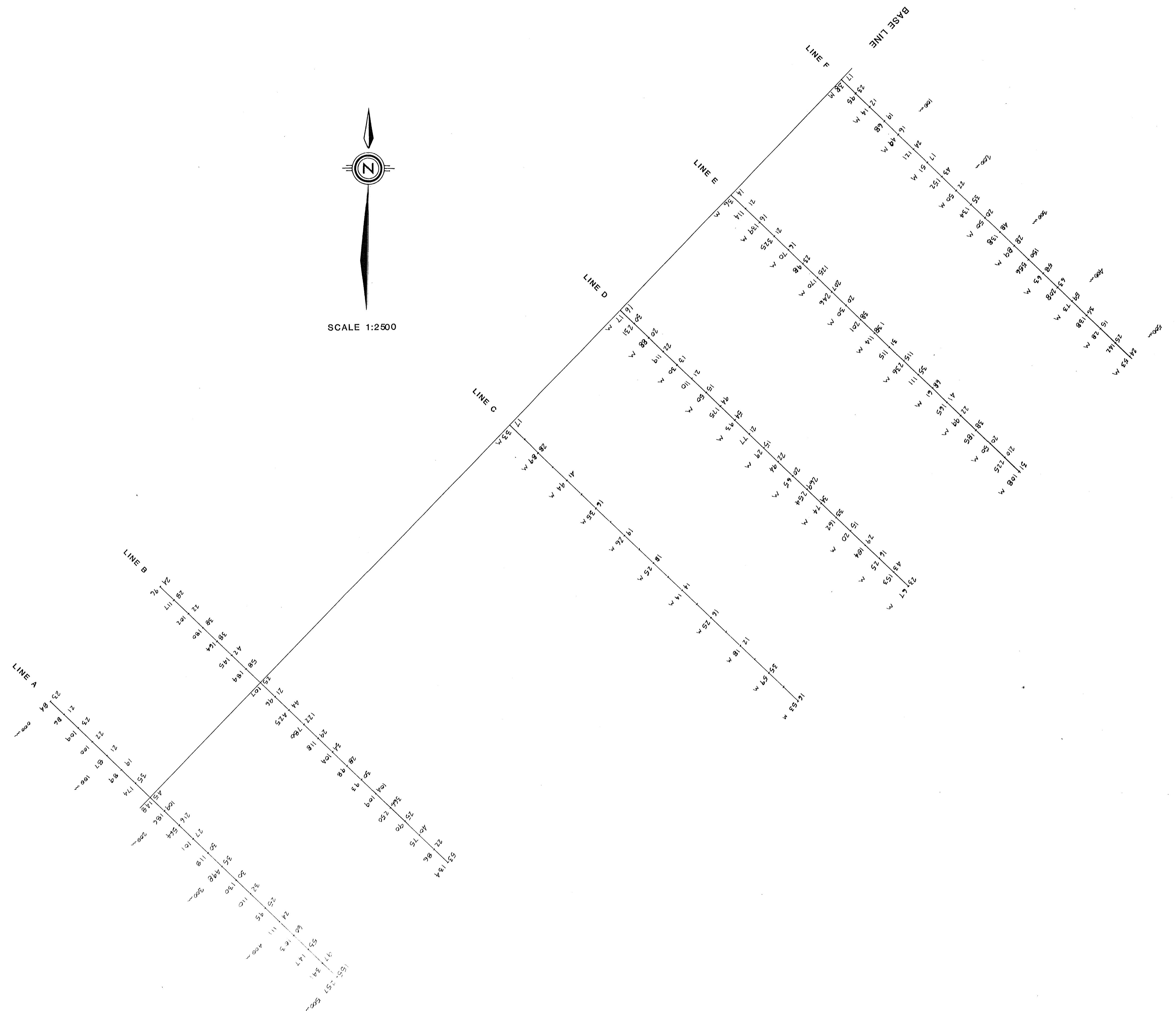
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6,024

GEOLoGICAL BRANCH
ASSESSMENT REPORT





GEOLOGICAL BRANCH ASSESSMENT REPORT

ESSO MINERALS CANADA

ADAMS PLATEAU GEOCHEMISTRY GRID

Lead / Zinc ppm

| | |
|------------------------------------|-------------|
| To accompany a report by P. HOLBEK | |
| Project No: | 112 |
| Mining Div: | Kamloops |
| Survey By: | PMH PCT |
| Date: | April 87 |
| Report No: | NTS: 82M/4E |
| Drafted By: | PCT |
| Map No: | |

