RECONNAISSANCE GEOLOGICAL AND GEOCHEMICAL SURVEYS<br>OF THE<br>SADIM GROUP<br>(SADIM 1-4 Claims)<br>Missezula Mountain Area<br>Similkameen Mining Division, B.C.<br>NTS Ref. 92H/10E<br>Latitude: $49^{\circ} 44^{\prime} 40^{\prime \prime}$<br>Longitude: $\mathbf{1 2 0}^{\circ} \mathbf{3 0} \mathbf{0}^{\prime \prime} \mathbf{n}^{\prime \prime}$

## For <br> LARAMIDE RESOURCES LTD.


I. M. Watson, P.Eng. Vancouver, B.C.

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## INTRODUCTION

This report summarises the results of geological and geochemical reconnaissance surveys over the SADIM 1-4 claims, in the Missezula Mountain area of southeastern B.C.

The work was done by I.M. Watson \& Associates Ltd. on behalf of Laramide Resources Ltd. during the period 24th July to 6th September 1985.

The objective of the programme was to make a first assessment of the precious metal potential of the property. The claims are underlain by rocks of the Nicola Belt which form the southern extension of the Quesnel Trough. Interest in the area derives initially from the similarity of the geological setting to that hosting the porphyry copper-gold deposits of the Quesnel-Cariboo area.

## LOCATION, ACCESS \& PHYSIOGRAPHY (Figures 1 and 2)

The SADIM claims are situated four kilometres east of Highway $5,30 \mathrm{kms}$. north of Princeton and 45 kms . south of Merritt, within the Similkameen Mining Division. The centre of the property is at $49^{\circ} 44^{\prime} 40^{\prime \prime} \mathrm{N}, 120^{\circ} 30^{\prime} 40^{\prime \prime} \mathrm{W}$. The NTS reference is $92 \mathrm{H} / 10 \mathrm{E}$.

Access to the property from Highway 5 is by the Dillard-Ketchan Creek main logging roads which branch east from the highway about 12 kms . south to the village of Aspen Grove. The Ketchan Creek road traverses the SADIM 1 and 3 claims in a southeasterly direction. Distance from Highway 5 to the property is approximately 16 kms .

An alternate access route is by gravel logging road from Highway 5 at a point 2.5 kms . north of Allison Lake. This road climbs east for 5 kms . to join the Ketchan Creek road at the northwestern corner of the SADIM 1 claim.

Within the property boundaries, logging and 'mining' roads, and the B.C. Telephone microwave tower road, provide good access to all areas of the property. Also, the B.C. Hydro power line crosses the centre of the SADIM 1 and 3 claims.


Figure 1: Index Map
I. M. Watson \& Associates Ltd.


The property occupies the summit area of the broad, north trending ridge separating the deep fault controlled valleys of Summers Creek to the east and Allison Creek to the west. Elevations on the property range from 1615 metres at the summit of Microwave Hill, on the common boundary between SADIM 1 and 2, to 1200 metres on the headwaters of Allison Creek, in the northwestern corner of the SADIM 1 claim. The topography is typical of this part of the Thompson Plateau, reflecting the effects of a predominantly northerly structural trend, accentuated by glaciation; heavily forested, relatively gentle upland slopes are cut by deep, steep-sided, north trending valleys. Bedrock exposure is variable and is largely a function of glacial action; generally outcrop is abundant on ridges and along the upper slopes of steep valleys but lower slopes and valley bottoms bear a thick mantle of glacial overburden.

Away from the main north-south river valleys, drainage is weakly developed and consists of ill-defined water courses and seepages.

Vegetation is dense on shaded and northerly slopes, but is more open on south facing hillsides; mixed conifers, alder and poplar predominate. Logging operations are active immediately south and north of the SADIM claims; logging on the property is so far confined to a small area east of the Ketchan Creek road near the south boundary of the claim group.

## CLATMS (Figure 2)

The SADIM Group consists of four mineral claims containing a total of 60 units, as follows:

| Claim Name | No. of Units | Record No. | Recording Date |
| :---: | :---: | :---: | :---: |
| SADIM 1 | 20 | 2284 | 10 October 1985 |
| SADIM 2 | 8 | 2285 | 10 October 1985 |
| SADIM 3 | 20 | 2286 | 10 October 1985 |
| SADIM 4 | 12 | 2287 | 10 October 1985 |

The claims were staked by and on behalf of I.M. Watson on the 17 th and 18 th September 1985. Ownership was transferred to Laramide Resources Ltd. by bill of sale dated 12 November, 1985.

## HISTORY

The earliest records of work over the SADIM claim area refer to the early 1960's - the beginning of the porphyry copper exploration which prevailed throughout much of the Nicola Belt and persisted until the early 1980's. Most of the work recorded within the present SADIM claim area was concentrated in the northeastern and eastern part of the claim group, over the SADIM 2 and 4 claims.

The following is a summary of the past activity in the immediate property area, as obtained from the B.C. Government assessment work file records.

1962 The 40 claim KR group was staked by Plateau Metals Ltd. Work recorded consisted of a magnetometer survey, bulldozer trenching, and an undisclosed amount of diamond drilling. The claims occupied the area presently covered by the SADIM 2 claim, and by the northern part of the SADIM 4 claim.

1966 Adera Mining Ltd. optioned the KR claims and carried out soil sampling and magnetometer surveys followed by diamond drilling. The claims were subsequently allowed to lapse.

Amax Explorations Inc. staked the RUM claims; the southern half of the property lay within the area now covered by the SADIM 2 and 4 claims. Work done by Amax consisted of geological mapping, soil sampling, and magnetometer and I.P. surveys, followed by a nine-hole, 1879-foot percussion drilling programme.

1972 Kalco Valley Mines Ltd. optioned the RUM claims, then relinquished the property after a programme of mapping and trench sampling.

1973-74 Bronson Mines Ltd. staked the CINDY claims, covering ground now lying within the SADIM 1 claim. Mapping and prospecting programmes were carried out.

Ruskin Developments Ltd. acquired the RUM claims, and completed geological mapping and soil sampling surveys before allowing the ground to lapse.

1979-81 Cominco Ltd. staked 55 claims, (RUM 1-55), coincident with the main area of interest covered by the original RUM claims staked by Amax. Cominco refurbished and renumbered the old Amax grid and used it for control of geological, soil and rock geochemical, and magnetometer surveys. Since then Cominco allowed the claims to lapse as they came due.

## SUMMARY OF WORK DONE 1985

The 1985 work programme was intended as a reconnaissance of the SADIM claims to determine their potential for hosting precious metals. V.A. Preto's $1^{11}=1 / 4$ mile preliminary geological map of the Allison Lake-Missezula area (Preto, 1975) showing outcrop distribution, provided excellent control and served as an initial guide in selecting targets for investigation.

Criteria for target selection included the presence of sulphide mineralisation, dioritic intrusions, calcareous sediments, and major fault zones. Access roads and the welldefined Amax/Cominco grid provided control for geological and geochemical traverses. More detailed mapping and sampling was carried out over the south central part of the property where encouraging soil and rock geochemical results were obtained; a $900 \mathrm{~m} . \times 300 \mathrm{~m}$. area chain and compass grid was established to provide control, using $100 \mathrm{~m} . \times 25 \mathrm{~m}$. sample spacing.

Totals of 347 soil and 173 rock samples were collected.

## GEOLOGY

## Regional

The Upper Triassic Nicola Group rocks extend from the 49th parallel north to Kamloops Lake, and continue north beneath Tertiary cover to emerge in the Quesnel area as the Quesnel Belt (Preto, 1979).

The volcanics of the Quesnel and Nicola Belts form a mixed alkaline and calc-alkaline sequence of basalts and derived volcaniclastic monolithic and polylithic breccias and tuffs, and minor sediments.

The volcanic rocks are intruded by comagmatic alkaline plutons, ranging in composition from syenogabbro to alkali syenite. The intrusions appear to be structure related and occur in belts along major lineaments and faults. They vary in size from plugs to small batholiths, and have been emplaced into the volcanic centres which produced the abundance of volcanic material (Barr et al, 1976).

In the Allison Lake-Missezula area, Preto has delineated three assemblages - a Western Belt of easterly dipping calc-alkaline flows, pyroclastics and sediments; a Central Belt of alkaline and calc-alkaline volcanics and intrusions, and minor sediments; and an Eastern Belt of westerly dipping volcanic sediments, tuffs and alkaline flows associated with small monzonite porphyry stocks. The belts are separated by major north-striking faults.

Preto believes that the Central Belt of dominantly volcanic rocks originates from eruptive centres along the major fault system, and points out the greater concentrations of mineral deposits along this belt.

The SADIM property straddles the main fault system and is underlain by Preto's Central Belt flows, tuffs and agglomerates, intruded by bodies of diorite. The intrusions are magnetic and are readily recognizable on airborne and ground magnetic maps.

SADIM Property (Figures 3 and 6)

The SADIM claims lie immediately west of the Summers Creek Fault, which marks the eastern boundary of Preto's Central Belt.

The property is underlain by northerly striking intermediate to basic flows, green monolithic and polylithic volcanic breccias, tuffs, and less abundant argillites and limestones. These rocks have been intruded by irregular bodies of gabbroic to dioritic composition. Volcanics and sediments marginal to the intrusions have been variably propylitised (epidote-pyrite-chlorite-carbonate) and locally host erratically distributed copper-pyrite zones.

The results of the reconnaissance mapping programme are shown in Figure 3. This preliminary work was confined to areas known to be underlain by favourable geology, i.e. intrusive rocks and their contact zones, sediments, particularly calcareous rocks, and major fault zones. More detailed mapping was carried out over the south central part of the property where geochemical sampling and mapping indicated the presence of gold in pyritic, rusty, quartz veined tuffs.

## Lithology

For the sake of uniformity, Preto's classification of rock types for the Central Belt has been adapted and amended as necessary.

## Andesites (Unit 1a)

- Green to grey-green, fine to medium grained pyroxene andesites, intercalated with tuffs, breccias and sediments, underlie the south and central parts of the SADIM 4 claim. Locally, adjacent to the dioritic intrusions, the andesites are variably altered, with development of chlorite, carbonate, and epidote. The marginal, fine grained altered phases of the diorites are difficult to distinguish from andesites in the field.


## Breccia (Unit 1d)

- The breccias in the SADIM area are predominantly green in colour. Andesite fragments of variable size occur in a tuffaceous matrix. Monolithic and polylithic breccias were noted but could not be spatially differentiated at this reconnaissance stage of mapping. The monolithic breccias may be the andesitic autobreccias mapped by Preto (Unit 1b). Breccias containing limestone fragments (Unit 1df) are developed locally adjacent to limestone units; presumably these breccias overlie the limestones and are in part derived from them.


## Tuffs (Unit 1e)

- Intimately associated with the breccias and flow rocks are tuffs of green-grey hue and andesitic appearance. The tuffs are less abundant than the breccias and andesites and their occurrence appears to be lenticular, but this may be a function of structural disruption by cross faulting, more than depositional discontinuity. Possibly significant varieties of the tuffaceous unit were noted in the south central part of the SADIM 2 and 4 claims; here a fairly distinctive purplish grey tuff (Unit let) containing small andesitic fragments, is intercalated with rusty-buff weathering, fine to medium grained rock containing orange hematite along numerous fracture planes (Unit leth). This latter unit is highly fractured and contains narrow ( $2-30 \mathrm{cms}$.) sulphide bearing quartz veins, which trend generally east-west and dip at varying degrees to the south. The fractures/quartz veins appear to have developed as a result of late-stage eastwest cross faulting. The quartz veins tend to be vuggy along their margins and centres, and contain patchily and weakly disseminated pyrite, chalcopyrite, and rare galena. The wall rocks are finely pyritised. The host tuffs are not well exposed, occurring as small outcrops and distinctive float over a total distance of nearly 1000 m ., but more continuously over 300 m . apparent strike length. Sampling of the tuff and quartz veins revealed anomalous gold content. (See below.)


## Limestone (Unit 1f)

- Dominantly pale grey, fine grained limestones occur as apparently lenticular bodies within the tuffaceous/breccia sequence. Several narrow beds have been identified in the south and central part of the claim group.


## Argillite (Unit 1g)

- Dark grey, fine grained and finely bedded argillites also occur within the pyroclastic rocks, but have been noted so far only in isolated outcrops.


## Diorite (Unit 5)

- Grey-pale grey, fine to medium grained crystalline pyroxene diorite underlies the eastern part of the property, bound on the east by the north trending Summers Creek Fault. Contacts with host volcanics are ill-defined and gradational. Magnetite is an accessory mineral. Pyrite, chalcopyrite and malachite are erratically disseminated in local zones of fracturing, particularly along the Summers Creek Fault zone.


## GEOCHEMISTRY

The reconnaissance sampling programme was intended as a preliminary geochemical assessment of the property, to provide a guide for further more detailed work, if warranted.

The areas sampled were selected primarily on the basis of favourable geology, as indicated by earlier mapping by Preto (1973) and by Amax Explorations Inc. (1970), and included all of the SADIM 4 claim, the eastern and northern portions of the SADIM 3 claim, and the southern end of the SADIM 2 claim. As far as possible, sample traverses were spaced to provide coverage of attractive geology and regularity of sampling interval. The clearly marked and still visible Amax-Cominco grid provided good sampling control, as did SADIM claim lines, and the B.C. Tel microwave tower access road. Samples were collected at 50 m . intervals along the traverse lines/roads.

Samples were taken from the ' B ' horizon, wherever possible, by digging holes at least 30 cms. deep using a tree planter's spade. In some low lying areas, where the overburden consists of fine grey glacial clay or silt, no 'B' horizon sample could be obtained, and this was noted by the sampler. In areas of outcrop, composite rock chip samples were taken, usually from a 10 square metre 'panel'.

Rock samples were also collected from sulphide showings, zones of notable alteration, and from any calcareous rocks encountered.

A $100 \mathrm{~m} . \times 25 \mathrm{~m}$. sampling grid with an east-west orientation was established along the common boundary of the SADIM 3 and 4 claims where reconnaissance sampling had revealed anomalous gold values in the rusty quartz veined tuffs (Unit leth).

## Sample Analysis

Analyses were done by Acme Analytical Laboratories in Vancouver. A -80 mesh fraction of soil was analysed by the inductively coupled argon plasma method (ICP) and a separate analysis for gold was carried out by atomic absorption (A.A.)

Ten elements were reported by the ICP analysis method as follows: $\mathrm{Mo}, \mathrm{Cu}, \mathrm{Pb}, \mathrm{Zn}$, $\mathrm{Ag}, \mathrm{Co}, \mathrm{As}, \mathrm{Sb}, \mathrm{Ca}, \mathrm{W}$.

The sample is prepared by dissolving 0.5 grams in hot aqua-regia ( $3: 1: 3$ nitric acid to hydrochloric acid to water) at $90^{\circ} \mathrm{C}$ for 1 hour. This is diluted to 10 ml water and converted to an aerosol.

A brief description of the ICP analysis is as follows: high frequency currents in a few turns of induction coil (powered by a high frequency generator) surround a plasma cell and generate a magnetic field. The cell consists of argon plasma enclosed between two concentric quartz tubes surrounding a glass sample injector. The plasma gas is seeded with electrons - resulting temperatures range from 7000 to $10,0000 \mathrm{~K}$.

The sample, in aerosol form, is injected into the centre of the cell and rises into the doughnut-shaped plasma ring. The high temperatures vaporize the sample and dissociate molecular species. Spectral intensities of the excited samples are recorded and compared with standards by a computer-controlled spectrometer.

The anomalous/threshold value for each element was established as the mean plus two standard deviations. The data base used included analyses not only from the SADIM property, but from adjoining, geologically continuous areas sampled by I.M. Watson \& Associates Ltd. between July and September 1985 (Lisle, 1985).

Certificates of Analyses are reproduced in Appendix 1. Analyses for five elements $(\mathrm{Cu}, \mathrm{Pb}, \mathrm{Zn}, \mathrm{Ag}, \mathrm{Au})$ are plotted on the accompanying plans (Figures $4,5,7, \& 8$ ).

## Discussion of Results

## a) Soil Sampling (Figure $4 \& 7$ )

Copper is weakly to moderately anomalous in soils along the Summers Creek Fault, in the northeastern part of the SADIM 4 claim. The anomalies (up to 242 ppm Cu ) probably originate from copper mineralisation in fractured diorites/volcanics along the faulted eastern contact of the intrusion. There are a few weak, one- and twospot anomalies scattered through the south central part of the property and on the B.C. Telephone microwave tower access road.

A broad, weak zinc anomaly (max. 203 ppm Zn ) lies east of the copper anomaly on the eastern boundary of the SADIM 4 claim. There are no other zinc anomalies or trends of significance.

Gold soil anomalies (max. 65 ppb Au ) have been detected in the northeastern corner of the SADIM 4 claim, close to the eastern diorite contact (Line 100 South). However, the most significant anomaly was that obtained from a close sampling of soils overlying the rusty quartz-veined tuff (Unit leth) exposed along the common boundary betwen the SADIM 3 and 4 claims, in the southern part of the property.

Here, a continuous string of anomalous samples contain from 11 to 85 ppb Au; these soils are also weakly enriched in lead (up to 64 ppm ) and silver (max. 1.7 ppm).

Further sampling of this area (Figuire 7) confirmed and extended the gold anomaly which correlates well with the outcrop and float distribution of the tuff.

## b) Rock Sampling (Figures 5 \& 8)

Two main areas of metal concentration are indicated by the work done to date.

1. Copper (up to 4856 ppm ) and low gold ( $20-55 \mathrm{ppb}$ ) concentrations occur in fractured weakly to moderately mineralised (pyrite, chalcopyrite) diorites, and in fractured and altered volcanics/sediments immediately east of the diorites (SADIM 4 claim).
2. The rusty weathering fractured tuffs (Unit 1eth) which outcrop along the boundary of the SADIM 3 and 4 claims (Figure 8) contain up to 560 ppb Au , along with silver and lead. Quartz veins within the tuff range from a few cms. to 30 cms . in width and yield assays ranging from 915 ppb to over 6000 ppb Au . The tuffs are poorly exposed in outcrop and float over a distance of approximately 300 metres. 150 metres of this strike length has been sampled at close intervals. All of the grab samples contain anomalous gold, silver and lead. The silver : gold ratio is very consistently $10: 1$.

Similar quartz bearing tuffs were found in scattered small outcrops up to 400 metres northwest of the main zone. Samples from these outcrops are also anomalous in gold and silver.

Trenching and further sampling will be required to establish the extent of the tuff unit, and the abundance, dimensions and tenor of the gold bearing quartz veins.

## SUMMARY

Geological and geochemical reconnaissance surveys of the SADIM claims have indicated the presence of gold and silver bearing quartz veins within hematitic northerly striking tuffs in the south central part of the claim group. The mineralised zone lies adjacent to a northerly trending fault, but the veins appear to be related to cross faulting and fracturing. The quartz veins and host tuffs are poorly exposed but can be traced in outcrop and float over a strike distance of 300 m ., with apparently isolated or dislocated occurrences extending a further 700 metres. The full width of the zone is not exposed.

Preliminary chip sampling of the quartz veins and host tuff revealed gold contents up to 4120 ppb in the vein material and from 225 ppb to 560 ppb in the pyritised wallrock. A grab sample of vein material yielded $6130 \mathrm{ppb} \mathrm{Au}(0.20 \mathrm{ozs} / \mathrm{ton})$. Ag : Au ratios are consistently $10: 1$.

The host tuffs are part of a sequence of Nicola Central Belt limestones, limestone and volcanic breccias, and tuffs, flanked by diorites.

Erratic, patchy pyrite and copper mineralisation occurs in fractured altered diorites in the eastern part of the property.

Trenching and rock sampling will be required to delineate the host tuffs and to fully evaluate the extent, frequency and tenor of the gold bearing quartz veins. Further mapping and geochemical sampling is warranted to test the unexplored parts of the property, and to follow up anomalies and showings detected by this preliminary reconnaissance.


## COST STATEMENT - SADIM GROUP

(July 24 - September 5, 1985)

## Salaries

a) Field Work:
R. Gibbs (Prospector/Sampler)
(July 24-25; August 7, 9-17, 1985)
11.5 days @ $\$ 110.00 /$ day $\quad 1,265.00$
J. Randa (Prospector)
(July 24-25; August 7, 9-15, 17, 1985) 10.5 days @ $\$ 185.00 /$ day

1,942.50
I. M. Watson (Geologist/Supervisor)
(July 24-25; August 7, 9-15, 17, 1985)
10.5 days @ $\$ 400.00 /$ day $4,200.00$
a) Report Preparation:
I. M. Watson (Sept. 4-5, 1985)
2.5 days @ $\$ 400.00 /$ day
$1,000.00$
\$ 8,407.50

## Accommodation/Board*

546.93

Telephone/Freight ${ }^{*} \quad 43.55$
Vehicle Expense* (Rental \& fuel)
$\begin{array}{lrr}4 \times 4 \text { truck } & 522.71 & \\ \text { Trail bike } & 90.00 & 582.71\end{array}$

## Equipment Rental*

Hand helds and mobile telephone
10 days @ $\$ 12.50 /$ day 125.00
Equipment Purchase* ..... 49.75
Geochemical Analyses ( 10 element ICP + Au/AA)
347 soils
173 rocks ..... 4,863.59
Reproduction, Maps ..... 89.09
DraftingD. L. Phillips Drafting Services31.75 hrs . @ \$20.00/hr/.635.00

TOTAL
$\$ 15,343.12$

[^0]

## CERTIFICATE OF QUALIFICATIONS

I, Ivor Moir Watson, of 584 East Braemar Road, North Vancouver, British Columbia, hereby certify that:

1. I am a consulting geologist with offices at 816-675 West Hastings Street, Vancouver, B.C.
2. I am a graduate of the University of St. Andrews, Scotland (B.Sc. Geology 1955).
3. I have practised my profession continuously since graduation.
4. I am a member in good standing of the Association of Professional Engineers of B.C., and a Fellow of the Geological Association of Canada.
5. Work on the SADIM Group was carried out during the periods July 2425, August 7-17, 1985 by the following personnel:
I. M. Watson - Geologist
J. H. Randa - Prospector/Sampler
R. Gibbs - Propsector/Sampler

November 20, 1985
Vancouver, B.C.


## REFERENCES

Barr, D.A., Fox, P.E., Northcote, K.E., and Preto, V.A., 1976. The Alkaline Porphyry Deposits - A Summary; in CIM Special Vol. No. 15.<br>Preto, V.A., 1975. Notes to Accompany Preliminary Map No. 17. Geology of the Allison Lake - Missezula Lake Area. B.C. MEMPR.<br>1979. Geology of the Nicola Group between Merritt and Princeton, Bull. 69, B.C. MEMPR.<br>Lisle, T.E., 1985. Reports on Reconnaissance Geological and Geochemical Surveys on the BLAK, MICKEY-FINN and THOR properties, by I.M. Watson \& Associates Ltd. for Vanco Explorations Ltd.

## Assessment Reports

\#517 - 1963 Report on the K.R. Group of Plateau Metals Ltd. by Asarco Smelting \& Refining Co. (Geology, magnetometer survey.)
\#985 - 1967 Geochemical report on the K.R. Group by C. Lammle for Adera Mining Ltd.
\#3363-1971 Geological, Geochemical and Geophysical Report on the Ketchan Creek property by J. Christofferson, G. DePaoli, and C. Hodgson for Amax Exploration Inc.
\#5044-1973 Geological and Prospecting Reports on the Cindy Group by D.C. Malcolm and E. Sleeman.
\#6036 - 1976 Geochemical Report on Rum Claim Group by D.G. Mark for Ruskin Developments Ltd.
\#8352-1980 Ground Magnetic and Soil Geochemical Survey over part of the Rum Property, by D.T. Mehner for Cominco Ltd.
\#9407 - 1981 Soil Geochemical Survey over part of the Rum Property, by D.T. Mehner for Cominco Ltd.

## Appendix

Geochemical Analytical Reports

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. VBA ARG PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 171985
DATE REPORT MAILED:

## GEGMTHEMICAL ICFMNAMYSS


. 500 GRAM SAMPLE IS DIGESTED WITH SAL $3-1-2$ HCL-HNDJ-H2O AT 95 DEG. © FOR ONE HOUR AND 15 DILUTED TO 10 ML WITH HATER. THIS LEACH IS PARTIAL. FUR MM.FE.CA.F.CR.MG.BA.TI.B.AL.NA.K. H.SI.IR.EE.SN.Y. NB AND TA. AU DETECTION LIMIT BY IVF IS 3 PF M. SAMPLE TYPE: ROCK GULES AUK GMALYSIS BY AA FROM 10 GRAM SAMFLE. HE ANALYSIS bY FLAMLESS AA.

ASSAYER: Y-Xaundy. DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER
LARAMIDE RESOURCES
FILE \# 85-1427
FGGE


ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. VGA 1 RE FHONE 253-315日 DATA LINE 251-1011

DATE RECEIVED: JULY 291985
DATE REPORT MAILED:

## GEOCHEMICAL ICFANALYSIS


 - sample type: soils - pulverizing flit analysis by aa from 10 gram sample.

I.M. WATSON \& ASSOCIATES FILE \# ES-16. 9
page


## I.M. WATSON \& ASSDCIATES FILE \# 85-16:9

| SAMPLE\# | Mo | Cu | Pb | In | Ag | Co | As | Ca | 56 | H | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | PFM | PFM | PFM | PPM | PFM | FPM | \% | ffl | PPM | PPB |
| SL 130S 10+004 | 2 | 28 | 6 | 75 | .1 | 9 | 4 | . 36 | 2 | 1 | 1 |
| SL $13059+00 \mathrm{~W}$ | 1 | 43 | 9 | 71 | . 3 | 9 | 5 | . 45 | 2 | 1 | 2 |
| ${ }^{5 L} 1305{ }^{\text {7 }}$ +00 H | 1 | 97 | 8 | 69 | . 2 | 10 | 2 | . 96 | 2 | 1 | 4 |
| SL 1305 S +00W | 2 | 43 | 11 | 117 | . 2 | 12 | 2 | . 49 | 2 | 1 | 1 |
| 3L 1305 4+004 | 2 | 44 | 9 | 97 | . 2 | 12 | 3 | . 55 | 2 | 1 | 1 |
| SL $13053+004$ | 1 | 40 | 8 | 88 | .1 | 10 | 2 | . 50 | 2 | 1 | 2 |
| SL $13052+00 \mathrm{H}$ | 2 | 45 | 9 | 90 | . 1 | 11 | 3 | . 57 | 2 | 1 | 3 |
| SL $13051+00 \mathrm{H}$ | 1 | 42 | 10 | 71 | . 1 | 11 | 2 | . 63 | 2 | 1 | 1 |
| SL $13050+00 \mathrm{H}$ | 2 | 31 | 8 | 76 | . 1 | 10 | 4 | . 51 | 2 | 1 | 1 |
| SL 8+15H 11+00S | 1 | 48 | 64 | 69 | 1.7 | 11 | 6 | . 24 | 2 | 1 | 85 |
| St 8+154 $11+335$ | 1 | 49 | 7 | 74 | 1.2 | 10 | 4 | . 27 | 4 | 1 | 31 |
| SL $8+15 \mathrm{~W} 11+665$ | 2 | 53 | 10 | 88 | . 9 | 11 | 7 | . 24 | 2 | 1 | 60 |
| SL 8+154 11+965 | 2 | 54 | 7 | 83 | . 9 | 11 | 5 | . 26 | - | 1 | 18 |
| SL 8+154 12+315 | 1 | 52 | 18 | 90 | . 6 | 11 | 6 | . 34 | 2 | 1 | 13 |
| $5 \mathrm{SL} 8+15 \mathrm{H}_{12+645}$ | 2 | 37 | 20 | 91 | . 7 | 9 | 4 | . 37 |  | 1 | 15 |
| SL 8+154 12+975 | 1 | 38 | 18 | 113 | . 7 | 10 | 5 | . 44 | 2 | 1 | 11 |
| SL 8+154 13+335 | 2 | 59 | 24 | 76 | . 5 | 14 | 6 | . 32 | 3 | 1 | 23 |
| SL 8+154 13+685 | 2 | 33 | 17 | 103 | . 4 | 12 | 4 | . 36 | 2 | 1 | 18 |
| SL 8+154 14+015 | 2 | 44 | 28 | 93 | . 6 | 15 | 3 | . 34 | 2 | 1 | 20 |
| 5 STD C/AU-0.5 | 20 | 59 | 41 | 135 | 7.2 | 28 | 39 | . 40 | 15 | 12 | 480 |


| SAMPLE* | InM. WATEON |  |  |  | FILE \# 日G-16З9 |  |  |  |  | W | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no | Cu | Pb | In | Ag | Co | As | Ca | Sb |  |  |
|  | PPM | PPM | PPM | PPM | PPM | PPM | PPM | $\%$ | PPM | PPM | PPB |
| 5-2194 | 6 | 4856 | 18 | 131 | 2.0 | 29 | 2 | 7.95 | 2 | 2 | 110 |
| 5-2195 | 1 | 11 | 3 | 39 | . 1 | 13 | 3 | 5.43 | 3 | 1 | 3 |
| 9-2196 | 1 | 205 | 2 | 40 | . 1 | 12 | 7 | 1.08 | 2 | 1 | 16 |
| 5-2197 | 1 | 38 | 3 | 21 | . 1 | 9 | 5 | . 98 | 5 | 1 | 20 |
| S-2198 | 1 | 24 | 8 | 41 | .4 | 5 | 4 | 27.82 | 2 | 3 | 6 |
| 5-2199 | $\stackrel{ }{ }$ | 21 | 6 | 19 | . 5 | 2 | 2 | 27.80 | 3 | 3 | 1 |
| S-2200 | 1 | 20 | 6 | 39 | . 3 | 4 | 24 | 27.83 | 2 | 4 | 1 |
| \$-2216 | 1 | 13 | 4 | 13 | 9.3 | 2 | 3 | . 72 | 5 | 1 | 1850 |
| 5-2217 | 1 | 191 | 7 | 79 | .1 | 21 | 2 | 8.49 | 2 | 1 | 7 |
| 5-2218 | 1 | 268 | 4 | 55 | . 3 | 21 | 5 | 9,83 | 2 | 1 | 30 |
| 5-2219 | 1 | 512 | 5 | 33 | . 6 | 19 | 4 | 11.45 | 2 | 2 | 25 |
| 5-2220 | 13 | 30 | 14 | 76 | . 1 | - | 3 | 6.23 | 2 | 1 | 3 |
| 5-2221 | 2 | 13 | 2 | 137 | .1 | 5 | 2 | 6.69 | 2 | 1 | 1 |
| 5-2222 | 2 | 2260 | 8 | 23 | 2.9 | 5 | 2 | 27.77 | 4 | 5 | 10 |
| S-2223 | 1 | 81 | 5 | 83 | . 2 | 13 | 2 | 6.63 | 2 | 1 | 6 |
| 9-2301 | 1 | 2236 | 4 | 49 | 2.8 | 10 | 9 | 5.91 | 2 | 2 | 15 |
| SNW 2400 R | 1 | 154 | 7 | 73 | .1 | 14 | 5 | . 93 | 4 | 1 | 4 |
| Smi 2700 | 1 | 453 | 7 | 123 | . 1 | 16 | 13 | 1.59 | 2 | 1 | 6 |
| SWW 2800 | 1 | 137 | 3 | 122 | .1 | 17 | 5 | 1.18 | 2 | 1 | 2 |
| STD C/AU-0.5 | 21 | 60 | 40 | 131 | 6.8 | 27 | 39 | . 48 | 17 | 11 | 480 |

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. VGA 1 RB FHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 201985 DATE REPORT MAILED:

GEOCHEMICAL IMP ANALYSIS

 SAMPLE TYPE: ROCK CHIPS AUK ANAlYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER:
 DEAN TOME OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER I.M. WATSON \& ASSOCIATES FILE \# 85-1974


| I.M. WATSON \& ASSICIATES |  |  |  |  |  |  | FILE \# |  | $85-1774$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE\# | Ho | Cu | Ft | In | Ag | Co | As | Ca | Sb | H | Aut |
|  | PFM | PFM | FPM | FFH | FFH | FFM | FFM | \% | PFM | FFM | FPB |
| 5-2315 | 1 | 112 | 4 | 85 | . 1 | 19 | 39 | 1.14 | 3 | 1 | 1 |
| 5-2316 | 1 | 121 | 2 | 76 | . 1 | 16 | 7 | 3.74 | 2 | 1 | 1 |
| 5-2317 | $j$ | 130 | 8 | 71 | . 1 | 19 | 5 | 1.65 | 2 | 1 | 1 |
| S-2318 | 2 | Ti | 4 | 101 | . 1 | 14 | 2 | $1.4{ }^{\circ}$ | 2 | 1 | 1 |
| S-2319 | 1 | 56 | 4 | 89 | . 1 | 19 | 2 | 1.37 | 2 | 1 | 1 |
| 5-2320 | 1 | 68 | 5 | 94 | .1 | 21 | 11 | 2.17 | 2 | 1 | 2 |
| 3-2321 | 1 | 52 | 8 | $6 i$ | .1 | 17 | 19 | 3.28 | 2 | 1 | 1 |
| 5-2322 | 1 | 04 | 10 | 78 | . 1 | 23 | - | 3.53 | 5 | 1 | 1 |
| 3-2323 | 1 | 94 | 2 | 85 | . 1 | 19 | ¢ | 2.06 | 2 | 1 | 4 |
| 5-2324 | 1 | 88 | 5 | 87 | . 1 | 23 | 7 | 2.81 | 2 | 1 | 1 |
| 5-2325 | 1 | 78 | 0 | 82 | . 1 | 15 | 2 | 1.38 | 2 | 1 | 1 |
| 5-2326 | 3 | 5 | 3 | 64 | . 1 | 1 | 4 | 38.82 | 2 | 1 | 1 |
| 5-2327 | 2 | 25 | 2 | 39 | . 1 | 3 | ¢ | 32.07 | 2 | 1 | 1 |
| 5-2328 | 1 | 71 | 5 | 117 | . 1 | 16 | 5 | 3.97 | 2 | 1 | 2 |
| 5-2329 | 1 | 92 | 2 | 81 | . 1 | 25 | 5 | 4.79 | 2 | 1 | 1 |
| 5-230 | 1 | 107 | 2 | 82 | . 1 | 26 | $\dot{0}$ | 2.45 | 2 | 1 | 1 |
| 5-2331 | 1 | 88 | 11 | 98 | . 1 | 24 | 4 | 3.74 | 5 | 1 | 1 |
| 5-2332 | 2 | 147 | 3 | 27 | . 1 | 17 | 5 | 1.12 | 2 | 1 | 2 |
| 5-2Jju | 1 | 52 | 2 | 48 | .1 | 18 | 4 | 2.92 | 2 | 1 | 1 |
| 5-2334 | 2 | 302 | 5 | 44 | .1 | 36 | 4 | . 95 | 2 | 1 | 4 |
| 5-2335 | 2 | 98 | 6 | 75 | . 1 | 23 | 2 | 2.56 | 2 | 1 | 2 |
| S-2336 | 2 | 8 | 4 | 20 | . 1 | 2 | 2 | 38.46 | 2 | 1 | 1 |
| 3-2337 | 1 | 32 | 3 | 202 | . 1 | 20 | ¢ | 2.85 | 2 | 1 | 2 |
| 5-2338 | 1 | 130 | 6 | 79 | . 1 | 21 | 9 | 3.00 | 5 | 1 | 2 |
| 5-2339 | 1 | 13 | 9 | 54 | .1 | 17 | 7 | 2.55 | 2 | 1 | 1 |
| 5-2340 | 1 | 31 | 2 | 97 | . 1 | 12 | 2 | . 52 | 2 | 1 | 1 |
| 3-2341 | 2 | 79 | $j$ | 108 | .1 | 21 | 2 | 1.00 | 2 | 1 | 1 |
| S-2342 | 1 | 83 | 5 | 69 | . 1 | 18 | 2 | 1.94 | 2 | 1 | 1 |
| 5-234, | 1 | 125 | 9 | 85 | . 1 | 21 | $j$ | 1.99 | 2 | 1 | 3 |
| S-2352 | - | 112 | 13 | 97 | . 4 | 24 | $\stackrel{\circ}{\circ}$ | 3.00 | 2 | 1 | 1 |
| S-2584 | 2 | 45 | 4 | 91 | . 1 | 12 | 2 | 2.69 | 2 | 1 | 1 |
| 5-2585 | 6 | 8 | ¢ | 143 | . 1 | 16 | 3 | . 95 | 2 | 1 | 13 |
| 3-2586 | 1 | 15 | 7 | 79 | . 1 | 5 | 2 | . 81 | 2 | 1 | 1 |
| 5-2587 | 2 | 2 | 8 | 24 | . 1 | 1 | J | . 09 | 2 | 1 | 1 |
| 3-2588 | 1 | 109 | 12 | 104 | . 1 | 22 | 4 | 5.99 | 2 | 1 | 3 |
| 5-2589 | 2 | 7 | 6 | 26 | .1 | 25 | 5 | 7.22 | 2 | 1 | 21 |
| 3 SO C/AU-0.5 | 21 | 60 | 40 | 134 | 0.9 | 30 | 37 | . 48 | 16 | 12 | 490 |


| I. M. WATSON |  |  | ASSDCIATES |  |  |  | FILE \# |  | 85-1774 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLEI | Mo | Cu | Pb | ? ${ }^{\text {a }}$ | Ag | Co | As | Ca | St | $W$ | Gu* |
|  | PFM | FPM | FFM | FFH | PFM | FFM | FFM | : | PFM | PFM | FFE |
| 5-2590 | J | 3220 | 24 | 51 | 2.0 | 18 | $\dot{0}$ | 1.96 | 2 | 1 | 50 |
| 5-2591 | 1 | 373 | 2 | 145 | 3.1 | 16 | 2 | 4.06 | 2 | 1 | 3 |
| 5-2592 | 2 | 58 | 3 | 94 | . 1 | 17 | J | C.40 | 2 | 1 | 2 |
| 5-2593 | 1 | 98 | 7 | 73 | 12 | 21 | $\dot{6}$ | 1.36 | 2 | 1 | 2 |
| SM1 15+00 | 2 | 146 | 2 | $80^{\circ}$ | . 1 | 27 | 8 | 2.28 | 2 | 1 | 2 |

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. VGA IR FHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 201985
DATE REPORT MAILED:

## GEOCHEMICAL IMP ANALYSIS

.500 fam sample is digested with sal $3-1-2$ hCl-hnoj-hzo at 95 deg. C for one hour and is diluted to 10 ml with hater. THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K. W.SI. IR.CE.SH.Y.NB AND TA. AU DETECTION LIMIT BY ISP IS S PPM. - SAMPLE TYPE: FI-10 SOILS \& PULVERIZED FII-12 ROCKS AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.
I.W. WATSDN FILE \# 85-1772

I.M. WATSON \& ASSOCIATES FILE \# 85-1972

| SAMPLE | Ho | Cu | fb | In | Ag | Co | As | Ca | Sb | $N$ | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | FFH | PPM | PPM | PFM | FPM | PFM | $\%$ | FFM | PPM | PFB |
| L1005 S12+00W | 1 | 33 | 7 | 80 | . 1 | 13 | 2 | . 58 | 2 | 1 | 1 |
| L100S 511+50W | 1 | 46 | 8 | 88 | .1 | 12 | 2 | . 59 | 2 | 1 | 1 |
| L100S 511+004 | 1 | 33 | 6 | 43 | . 1 | 8 | 2 | . 92 | 2 | 1 | 1 |
| $11005510+50 \mathrm{H}$ | 1 | 54 | 8 | 88 | . 1 | 15 | 2 | .67 | 2 | 1 | 1 |
| L1005 510+00W | 1 | 43 | 7 | 68 | .1 | 14 | 2 | . 49 | 2 | 1 | 2 |
| L1005 59+50W | 1 | 35 | 8 | 74 | . 1 | 12 | 2 | . 58 | 2 | 1 | J |
| L1005 59+00H | 7 | 74 | 7 | 91 | .1 | 24 | 3 | 1.42 | 2 | 1 | 2 |
| L1005 58+50H | 1 | 67 | 8 | 55 | .2 | 12 | 3 | . 72 | 2 | 1 | 2 |
| L1005 58+00H | 1 | 32 | 8 | 72 | . 2 | 11 | 2 | .41 | 2 | 1 | 1 |
| Ll00S 57+004 | 2 | 33 | 6 | 82 | . 1 | 12 | 2 | . 53 | 2 | 1 | 2 |
| L100S Sóto0\% | 1 | 33 | 9 | 73 | . 2 | 12 | 3 | . 51 | 2 | , | 1 |
| Ll00S 54+00W | 1 | 43 | 8 | 84 | . 1 | 14 | 4 | . 41 | 2 | 1 | 1 |
| L100S $53+504$ | 1 | 24 | 10 | 95 | .1 | 15 | 2 | . 5 | 2 | 1 | 3 |
| L1005 52+00W | 1 | 48 | 13 | 94 | . 1 | 15 | 6 | . 52 | 2 | 1 | 2 |
| L100S 51+50W | 1 | 48 | 13 | 92 | .1 | 13 | 4 | . 55 | 2 | 1 | 1 |
| L100s S1+00H | 2 | 73 | 16 | 157 | . 1 | 19 | J | . 52 | 2 | 1 | 1 |
| L1005 S0t50H | 2 | 69 | 15 | 100 | . 3 | 15 | 4 | . 50 | 2 | 1 |  |
| LIOOS 50+00 | 1 | 39 | 2 | 96 | .2 | 13 | 2 | . 51 | J | 1 | 2 |
| Ll00S 50+50E | 2 | 69 | 13 | 92 | .1 | 14 | 5 | . 49 | 3 | 1 | 9 |
| L100S S1+00E | 2 | 55 | 9 | 102 | . 2 | 17 | 3 | . 33 | 2 | 1 | 7 |
| L100S S1+50E | 9 | 171 | 12 | 39 | . 1 | 24 | 2 | .31 | 2 | 1 | 11 |
| L100S S2+00E | 2 | 91 | 4 | 65 | . 1 | 16 | 2 | . 42 | 2 | 1 | 8 |
| LIOOS 52+50E | 2 | 39 | 17 | 102 | . 3 | 12 | 4 | .62 | 2 | 1 | 2 |
| L100S SJ+00E | 1 | 51 | 12 | 180 | .3 | 13 | 4 | . 62 | 2 | 1 | 2 |
| L100S SJ+50E | 2 | 56 | 12 | 183 | . 5 | 17 | 9 | . 48 | 2 | 1 | 2 |
| L100S 54+00E | 2 | 70 | 12 | 135 | . 1 | 18 | 10 | . 47 | 2 | 1 | 4 |
| LIOOS 54+50E | 2 | 56 | 7 | 147 | . 3 | 16 | 11 | .43 | 2 | 1 | 3 |
| 11005 55+50E | 1 | 27 | 7 | 111 | . 1 | 13 | 2 | . 57 | 2 | 1 | 1 |
| LIOOS Sót00E | 1 | 49 | 10 | 126 | . 1 | 16 | 4 | . 50 | 2 | 1 | 1 |
| L100S S6+50E | 3 | 49 | 9 | 148 | .2 | 18 | 8 | . 68 | 2 | 1 | 1 |
| LIOOS S7+00E | 2 | 41 | 4 | 170 | . 2 | 14 | 9 | 1.88 | 2 | 1 | 1 |
| LILOS S14+00H | 1 | 29 | ¢ | 54 | . 1 | 10 | 3 | . 47 | 2 | 1 | 16 |
| L110S 513+50W | 1 | 54 | 5 | $90^{\circ}$ | .1 | 14 | 2 | . 77 | 2 | 1 | 1 |
| L110S S13+00N | 1 | 36 | 3 | 90 | . 2 | 14 | 2 | . 53 | 2 | 1 | 3 |
| L110S S12+50H | 1 | 47 | 10 | 102 | . 1 | 15 | 3 | . 54 | 2 | 1 | 1 |
| L110S 512+00H | 1 | 24 | 5 | 96 | . 1 | 11 | 2 | . 83 | 2 | 1 | 1 |
| STO C/AU-0.5 | 21 | 59 | 41 | 139 | 6.8 | 30 | 36 | . 48 | 15 | 12 | 480 |

I.M. WATSON \& ASSOCIATES FILE \# 85-1972

| SAMPLE | Ho | Cu | Pb | In | Ag | Co | As | Ca | Sb | H | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | PPM | PPM | PFM | PFP | FFM | PFM | $\%$ | FPM | FFH | PPB |
| L1105 510+003 | 1 | 75 | 5 | 109 | .2 | 14 | 2 | . 90 | 2 | 1 | , |
| LIIOS $59+00 \mathrm{H}$ | 1 | 44 | 5 | 93 | . 1 | 11 | 2 | . 56 | 3 | 1 | 3 |
| L110S 57+504 | 1 | 54 | 7 | 80 | . 5 | 11 | 2 | 1.65 | 2 | 1 | 1 |
| L1105 57+00W | 3 | 91. | 4 | 76 | .1 | 17 | 2 | . 71 | 2 | 1 | 2 |
| L110S Sót50H | 1 | 48 | 3 | 80 | . 1 | 15 | 2 | . 71 | 2 | 1 | 1 |
| L110S 55+50W | 1 | 27 | 6 | 81 | . 1 | 12 | 2 | . 57 | 2 | 1 | 1 |
| L110S 55+00H | 1 | 29 | 5 | 69 | .1 | 11 | 2 | . 50 | 2 | 1 | 2 |
| LILOS 54+50H | 1 | 34 | 2 | 77 | . 1 | 12 | 2 | . 58 | 3 | 1 | J |
| L110S 54+00W | 1 | 47 | 6 | 83 | . 1 | 14 | 2 | . 51 | 2 | 1 | 1 |
| L110S S3 +504 | 1 | 51 | 6 | 87 | . 1 | 13 | 2 | 1.09 | 2 | 1 | 2 |
| $1110553+004$ | 2 | 36 | 5 | 94 | .1 | 14 | 2 | . 67 | 2 | 1 | 2 |
| L1105 52+5014 | 1 | 34 | 2 | 86 | . 1 | 12 | 2 | . 50 | 2 | 1 | 1 |
| L110S 52+00\% | 1 | 34 | 5 | $80^{\circ}$ | .1 | 13 | 3 | . 47 | 2 | 1 | 1 |
| L110S 51+50H | 1 | 56 | 10 | 93 | . 1 | 15 | 2 | . 50 | 2 | 1 | 1 |
| L110S 51+00H | 1 | 47 | 7 | 107 | .1 | 15 | 2 | . 48 | 2 | 1 | 2 |
| L110S 50+50H | 1 | 67 | 4 | 107 | . 1 | 17 | 5 | . 67 | 2 | 1 | 4 |
| $1110550+00$ | 1 | 44 | 9 | 88 | . 1 | 14 | 7 | . 49 | 2 | 1 | 3 |
| LILOS 50+50E | 1 | 48 | 10 | 113 | . 1 | 14 | 2 | . 48 | 2 | 1 | J |
| L110S S1+00E | 1 | 61 | 13 | 124 | . 1 | 15 | 3 | . 50 | 2 | 1 | 2 |
| L110S S1+50E | 1 | 15 | 2 | 60 | .1 | 6 | 2 | . 92 | 2 | 1 | 15 |
| L10S S2+00E | 1 | 33 | 0 | 82 | . 2 | 9 | 2 | . 47 | 2 | 1 | 4 |
| L.110S S2+50E | 1 | 37 | 7 | 84 | . 2 | 11 | 2 | . 50 | 2 | 1 | 3 |
| LIIOS S3+00E | 1 | 46 | 9 | 95 | . 3 | 13 | 2 | . 57 | 2 | 1 | 2 |
| L110S S3+50E | 2 | 86 | 9 | 120 | . 2 | 18 | 2 | . 44 | 3 | 1 | 6 |
| LILOS S4+00E | 2 | 58 | 11 | 140 | . 2 | 15 | 9 | . 45 | 2 | 1 | 2 |
| Ll105 54+50E | 1 | 63 | 14 | 180 | . 1 | 15 | 5 | . 57 | 2 | 1 | 2 |
| L110S S5+00E | 2 | 55 | 11 | 101 | . 2 | 10 | 10 | . 46 | 4 | 1 | 3 |
| LIIOS 55+50E | 1 | 72 | 14 | 203 | . 2 | 15 | 10 | . 45 | 3 | 1 | 1 |
| LI105 56+00E | 1 | 44 | 11 | 198 | .1 | 15 | 11 | . 46 | 2 | 1 | 1 |
| L110S S6+50E | 1 | 22 | 8 | 124 | . 1 | 7 | 2 | . 56 | 2 | 1 | 2 |
| L120s 511+504 | 1 | 38 | 2 | 71 | .1 | 11 | 2 | . 60 | 2 | 1 | 1 |
| L1205 511+003 | 1 | 40 | 7 | 108 | . 1 | 12 | 2 | . 58 | 2 | 1 | 1 |
| L120S 510+50H | 1 | 52 | 7 | 91 | . 1 | 14 | 2 | . 90 | 2 | 1 | 2 |
| L120S 510+00W | 1 | 49 | 3 | 103 | . 1 | 14 | 2 | . 68 | 2 | 1 | 1 |
| L120S 59+50W | 1 | 35 | 8 | 87 | . 1 | 13 | 2 | . 59 | 2 | 1 | 2 |
| L1205 59+0001 | 1 | 49 | 5 | 52 | . 4 | 9 | 2 | 1.64 | 2 | 1 | 1 |
| STO C/AU-0.5 | 20 | S0 | 41 | 138 | 7.5 | 29 | 37 | . 48 | 15 | 11 | 480 |

## I.M. WATSON FILE \# 85-1972

FAGE 4

| SAMFLE | Mo | Cu | Pb | In | Ag | Co | As | Ca | Sb | W | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFM | FPH | PFM | PFM | PFM | FFM | FFM | 4 | PPM | PFM | PFB |
| L120S 58+5014 | 1 | 184 | 8 | -ó | . 2 | 13 | 2 | 1.48 | 2 | 1 | 2 |
| L120s 56+50W | 1 | 50 | 13 | 82 | . 2 | 12 | 3 | . 55 | n | 1 | 1 |
| $1120555+50 \mathrm{H}$ | 1 | 42 | 12 | 75 | . 1 | 12 | 2 | . 52 | 2 | 1 | 1 |
| L120s 55+00W | 1 | 42 | 13 | 76 | . 1 | 13 | 2 | . 79 | 2 | 1 | 2 |
| L1205 54+004 | 1 | 30 | 12 | 84 | .1 | 11 | 2 | . 42 | 2 | 1 | 1 |
| L1209 53+50H | 1 | 35 | 7 | 78 | . 1 | 11 | 2 | . 85 | 2 | 1 | 1 |
| L120s $32+0011$ | 1 | 40 | 9 | 84 | . 1 | 13 | 2 | . 56 | 2 | 1 | 65 |
| L120S S1+50H | 1 | 36 | 11 | 97 | . 1 | 11 | J | . 55 | 2 | 1 | 1 |
| L120s 51+00W | 1 | 41 | 7 | 85 | . 1 | 12 | 4 | 1 | 2 | 1 | 1 |
| L120S 50450 | 1 | 57 | 14 | 92 | . 1 | 15 | J | . 51 | 2 | 1 | J |
| L120s 50+00 | 1 | 44 | 15 | 103 | .1 | 11 | 2 | . 48 | 2 | 1 | 1 |
| L120S 51+00E | 2 | 51 | 13 | 113 | .3 | 13 | 5 | . 55 | 2 | 1 | 2 |
| L1205 52+00E | 1 | 90 | 9 | 87 | . 1 | 10 | 3 | . 40 | 2 | 1 | 2 |
| L120S 52+50E | 1 | $242^{\prime \prime}$ | 11 | 75 | . 1 | 21 | 4 | . 1 | 2 | 1 | 7 |
| L120S SJ+50E | 2 | 144 | a | 72 | . 1 | 24 | 2 | 4.50 | 2 | 1 | 4 |
| L120s 54+00E | 1 | 26 | 12 | 121 | .1 | 15 | 5 | . 50 | 2 | 1 | 1 |
| L120s $54+505$ | 2 | 80 | 16 | 148 | . 1 | 14 | 4 | . 49 | 2 | 1 | 2 |
| L120S 55+00E | 1 | 33 | 10 | 128 | .1 | 12 | 2 | . 49 | 2 | 1 |  |
| L120S 55t50E | 1 | 43 | 7 | 149 | . 1 | 12 | 5 | . 47 | 2 | 1 | 1 |
| L120S S6+00E | 1 | 32 | 9 | 110 | .1 | 13 | 2 | . 45 | 2 | 1 | 1 |
| L120S Sót50E | 2 | 41 | 10 | 131 | .1 | 13 | 3 | . 44 | 2 | 1 | 2 |
| L120S 57+00E | 1 | 50 | 16 | 123 | . 1 | 14 | 4 | . 76 | 2 | 1 | 6 |
| L1305 $39+50 \mathrm{H}$ | 1 | 34 | 9 | 88 | . 1 | 11 | 2 | . 78 | 2 | 1 | 3 |
| L1305 58+75W | 1 | 35 | 10 | 67 | .2 | 11 | 2 | . 46 | 2 | 1 | 2 |
| L130S $58+50 \mathrm{~K}$ | 1 | 31 | 3 | 62 | . 2 | 10 | 2 | . 37 | 2 | 1 | 1 |
| L1305 58+25 | 1 | 41 | 4 | 63 | . 2 | 10 | 2 | . 57 | 2 | 1 | 1 |
| L1305 57+754 | 1 | 31 | 7 | 69 | . 1 | 12 | 2 | . 44 | 2 | 1 | 2 |
| L1J0S 57+501 | 1 | 50 |  | 80 | . 1 | 12 | 2 | . 58 | 2 | 1 | 1 |
| L1305 57+25W | 1 | 59 | 9 | 82 | .2 | 11 | 2 | . 88 | 2 | 1 | 1 |
| L1505 36+754 | 1 | 42 | 10 | 100 | . 7 | 10 | 2 | . 49 | 2 | 1 | 1 |
| L130S Sót50 | 1 | 45 | 5 | 89 | . 1 | 13 | 2 | . 56 | 2 | 1 | 4 |
| L130S 53+504 | 1 | 48 | 18 | 99 | . 1 | 12 | 2 | . 49 | 2 | 1 | 2 |
| L130S 51+504 | 1 | 44 | 0 | 78 | . 1 | 15 | 4 | . 98 | 2 | 1 | 1 |
| LISOS 50+50E | 1 | 36 | 7 | 85 | 1 | 13 | 2 | . 45 | 2 | 1 |  |
| LI30S $51+00 \mathrm{E}$ | 1 | 54 | 17 | 108 | . 1 | 14 | ó | .43 | 2 | 1 | 2 |
| $1130551+50 \mathrm{E}$ | 1 | 79 | 16 | 116 | . 1 | 15 | 5 | . 50 | 2 | 1 | 2 |
| STD C/AU-0.5 | 20 | 59 | 41 | 136 | 0.9 | 28 | 38 | . 48 | 15 | 11 | 490 |


| SAFPLEI | I.M. WATSON |  |  |  | FILE \# $35-1972$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mo | Cu | Pb | In | Ag | co | As | Ca | Sb | W | Aut |
|  | PPM | PPM | FPM | PFM | fPM | PPM | fFM | : | PPM | PPM | PPB |
| L1305 52+50E | 2 | 57 | 9 | 133 | . 1 | 15 | 5 | . 43 | 2 | 1 | 1 |
| LISOS S3+00E | 2 | 56 | 15 | 114 | . 1 | 16 | J | . 56 | 2 | 1 | 1 |
| L1305 53+50E | 1 | 59 | 9 | 118 | . 1 | 14 | 4 | . 51 | 2 | 1 | 1 |
| LIJOS 54+00E | 1 | 68 | 8 | 109 | . 1 | 15 | j | . 49 | 3 | 1 | 5 |
| LI30S S4+50E | 2 | 92 | 18 | 124 | . 1 | 15 | \% | . 58 | 2 | 1 | 5 |
| L150S S5+00E | 1 | 80 | 14 | 119 | . 1 | 15 | 5 | . 81 | 2 | 1 | 4 |
| LIJ0S 55 +50E | 1 | 5 | 15 | 125 | . 1 | 14 | 2 | . 44 | 2 | 1 | 4 |
| LIJOS St+00E | 1 | 40 | 10 | 133 | . 1 | 15 | 2 | . 51 | 2 | 1 | 2 |
| 11305 Só+50E | 1 | 48 | 3 | 50 | .3 | 3 | 2 | 16.46 | 2 | 1 | 1 |
| LIEOS 57+00E | 1 | 90 | 2 | 26 | . 1 | 4 | 2 | 19.81 | 2 | 1 | 1 |
| $130+1005$ 59+504 | 1 | 37 | 11 | 97 | . 1 | 13 | 3 | . 92 | 2 | 1 | 1 |
| $130+100559+0011$ | 1 | 20 | 5 | 76 | . 2 | 10 | 2 | . 63 | 3 | 1 | 1 |
| $130+1005588755$ | 1 | 189 | 7 | 41 | . 3 | 14 | 2 | 1.41 | 2 | 1 | 4 |
| $130+100558+000$ | 1 | 57 | 7 | 91 | . 1 | 14 | 2 | . 53 | 2 | 1 | j |
| $130+100557+254$ | 1 | 20 | 9 | 62 | . 2 | 14 | 2 | . 49 | 2 | 1 | 1 |
| $130+100557+004$ | 1 | 36 | : | 77 | .1 | 15 | 2 | . 3 | 3 | 1 | 1 |
| 130+1005 56t75 | 1 | 40 | 10 | 104 | . 2 | 12 | 2 | . 49 | j | 1 | 6 |
| $130+1005$ 56+50W | 1 | 45 |  | 106 | . 2 | 13 | 2 | . 53 | j | 1 | J |
| $130+200559+25 \mathrm{~W}$ | 1 | 26 | 5 | 88 | . 1 | 16 | 8 | . 45 | 2 | 1 | 3 |
| $130+200599+004$ | 1 | 44 | 8 | 74 | . 1 | 13 | j | . 57 | 2 | 1 | 1 |
| 130+200s 57+504 | 1 | 61 | 19 | 85 | 4 | 13 | 2 | . 50 | \% | 1 | 19 |
| $130+200557+25 \mathrm{H}$ | 1 | 31 | 8 | 97 | . 2 | 11 | 3 | . 58 | 4 | , | 1 |
| 130+200s $56+754$ | 1 | 44 | 5 | 90 | . 4 | 13 | 2 | . 57 | 2 | 1 | 4 |
| $130+200556+50 \mathrm{~K}$ | 1 | 21 | 。 | 107 | . 1 | 8 | 3 | . 28 | 4 | 1 | 1 |
| $130+300559+25 \mathrm{~W}$ | 1 | 35 | 4 | 86 | . 1 | 12 | 2 | . 45 | 3 | 1 | 1 |
| $130+300559+004$ | 1 | 55 |  | 90 | . 1 | 15 | 3 | . 55 | 4 | 1 | 1 |
| $130+300558+75 W$ | 1 | 34 | 7 | 92 | . 1 | 13 | 2 | . 54 | 2 | 1 | 1 |
| $130+3005$ S8+50W | 2 | 90 | 4 | 49 | . 2 | 15 | 2 | 1.56 |  | 1 | 4 |
| $130+300558+25 \mathrm{H}$ | 1 | 30 | 13 | 107 | . 1 | 12 | 2 | . 43 | j | 1 | 1 |
| $130+300557+50 \mathrm{~W}$ | 1 | 42 | 8 | 83 | . 1 | 15 | : | . 61 |  | 1 | 3 |
| $130+300557+25 \mathrm{~W}$ | $!$ | 45 | 8 | 81 | .1 | 14 | 2 | . 55 |  | 1 | 1 |
| 130+300s 57+00H | 1 | 28 | 5 | 77 | . 1 | 12 | 2 | . 74 | 2 | 1 | 1 |
| $130+300556+75 W$ | 1 | 27 | 8 | 71 | . 1 | 11 | 2 | . 76 | 2 | 1 | 1 |
| $130+300556+50 W$ | 1 | 34 | 10 | 91 | .1 | 14 | 2 | . 57 | 2 | 1 | 1 |
| $130+400559+70 \mathrm{H}$ | 1 | 52 | 5 | 80 | . 1 | 14 | 3 | . 83 | 4 | 1 | 1 |
| $130+400559+25 \mathrm{~W}$ | 1 | 72 | 2 | 81 | . 1 | 18 | 4 | . 74 | 2 | 1 | 3 |
| STD C/AU-0.5 | 21 | 58 | 40 | 134 | 7.0 | 29 | 37 | . 48 | 15 | 12 | 500 |

## I.M. WATSON FILE \# 8S-1972

| SAMFLE\# | Mo | Cu | Pb | In | Ag | Co | As | Ca | Sb | H | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | FFM | PPM | PFM | PFY | PFM | FPM | $\%$ | PPM | PFH | PPB |
| $130+400558+754$ | 1 | 32 | 4 | 69 | . 2 | 11 | 2 | . 50 | 2 | 1 | 2 |
| $130+400558+50 \mathrm{H}$ | 1 | 30 | d | 63 | . 1 | 15 | 2 | 1.06 | 2 | 1 | 1 |
| $130+400557+50 \mathrm{H}$ |  | 50 | 17 | 87 | .1 | 16 | 4 | . 49 | 3 | 1 | 8 |
| 130+4005 57+254 | 1 | 23 | 11 | 02 | .3 | 10 | 2 | . 37 | 3 | 1 | 6 |
| 130+4005 5it 75 | 2 | 35 | 9 | 89 | .1 | 14 | 3 | . 55 | 2 | 1 | 3 |
| $130+400556+50 \mathrm{~W}$ | 1 | 25 | 8 | 64 | . 4 | 11 | 2 | . 41 | 3 | 1 | 6 |
| $130+400530+00 W$ | 1 | 39 | 10 | 95 | . 1 | 12 | 3 | . 45 | 2 | 1 | 2 |
| 130+400s $55+50 \mathrm{~W}$ | 1 | 29 | 12 | 86 | .2 | 11 | 2 | . 55 | 2 | 1 | 2 |
| $130+400555+00 W$ | 1 | 42 | 9 | 96 | . 3 | 14 | 4 | . 57 | 2 | 1 | 5 |
| $130+400 \mathrm{~S} 54+50 \mathrm{H}$ | 2 | 35 | : | 90 | .1 | 13 | 2 | . 44 | 2 | 1 | 1 |
| $130+400554+004$ | 1 | 58 | ó | 83 | .4 | 15 | 2 | . 71 | 2 | 1 | 2 |
| 130+4005 53+50w | 2 | 37 | 12 | 107 | . 2 | 12 | 6 | . 40 | 2 | 1 | 1 |
| 130+4005 $53+00 \mathrm{H}$ | 1 | 32 | 12 | 81 | .2 | 11 | 5 | . 50 | 3 | 1 | 1 |
| $130+400552+50 \mathrm{~W}$ | $\because$ | 38 | 8 | 104 | .1 | 14 | 10 | . 39 | 2 | 1 | 1 |
| 130+400s 52+00W | 2. | 39 | 19 | 104 | . 4 | 13 | 11 | .41 | 2 | 1 | 5 |
| $130+400551+504$ | 1 | 33 | 9 | 95 | .1 | 12 | 2 | . 43 | 2 | 1 | 6 |
| $130+400551+00 \mathrm{H}$ | 1 | 45 | 12 | 100 | . 1 | 14 | 2 | . 54 | 2 | 1 | 1 |
| $130+400550+50 \mathrm{~W}$ | 1 | 45 | 9 | 94 | . 1 | 13 | 3 | . 59 | 2 | 1 | 1 |
| 130+4005 50+00 | 1 | 46 | 5 | 103 | .1 | 14 | , | . 57 | 2 | 1 | 10 |
| 130+4005 50+50E | 1 | ${ }_{2} 8$ | 11 | 98 | .1 | 11 | $=$ | . 55 | n | 1 | 2 |
| $130+400551+00 E$ | 1 | 42 | 3 | 95 | . 1 | 15 | 2 | . 57 | 2 | 1 | 1 |
| $130+400551+50 \mathrm{E}$ | 1 | 34 | 2 | 91 | . 1 | 11 | 2 | . 57 | 2 | 1 | 1 |
| 130+400S $52+00 \mathrm{E}$ | 1 | 37 | 8 | 115 | . 1 | 13 | 2 | . 61 | 2 | , 1 | 2 |
| 130+4005 52+50E | 2 | 52 | 14 | 114 | . 1 | 14 | $\checkmark$ | . 52 | 2 | 1 | 1 |
| $130+400553+005$ | 2 | 108 | 19 | 155 | . 1 | 19 | 9 | . 53 | 3 | 1 | 2 |
| 130+4005 $53+50 \mathrm{E}$ | 1 | 44 | 4 | 98 | . 1 | 13 | 4 | . 55 | 2 | 1 | 1 |
| $130+400554+50 \mathrm{E}$ | 1 | 61 | 9 | 103 | . 1 | 15 | 3 | . 52 | 2 | 1 |  |
| 130+400S 55+00E | 1 | 56 | 2 | 110 | . 1 | 15 | 3 | . 51 | 2 | 1 | 2 |
| 130+400S S6+00E | 1 | 50 | 10 | 161 | . 1 | 15 | 2 | . 49 | 2 | 1 | 1 |
| $130+4005$ S6́t50E | 2 | 35 | 8 | 115 | . 1 | 14 | 2 | .48 | 2 | 1 | 1 |
| 130+4005 57+00E | 1 | 68 | 5 | 122 | . 1 | 15 | 5 | . 55 | 2 | 1 | 5 |
| $130+400557+50 \mathrm{E}$ | 1 | 23 | 6 | 98 | . 1 | 18 | 2 | . 38 | 2 | 1 | 1 |
| $130+500559+504$ | 1 | 41 | 5 | 89 | . 1 | 14 | 2 | . 40 | 2 | 1 | 4 |
| $130+500559+254$ | 1 | 33 | ¢ | 125 | . 1 | 12 | 2 | . 57 | 2 | 1 | 1 |
| $130+500559+004$ | 1 | 42 | 11. | 102 | . 1 | 14 | 2 | .68 | 2 | 1 | 2 |
| $130+500558+754$ | 1 | 42 | 5 | 98 | . 1 | 13 | 5 | . 52 | 2 | 1 | 1 |
| STD C/AU-0.5 | 21 | 59 | 41 | 138 | 6.9 | 29 | 38 | .46 | 10 | 11 | 480 |


| SAMPLE: | WATSON |  |  |  | FILE \# 85-1972 |  |  |  |  | W | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mo | Cu | Pb | In | Ag | Co | As | Ca | 5b |  |  |
|  | PPM | PFM | PFM | PFM | FFM | PPM | FPM | \% | PFM | PFH | PPB |
| $130+500558+50 \mathrm{H}$ | 1 | 33 | 2 | $88_{6}$ | .1 | 12 | 5 | . 45 | 2 | 1 | 2 |
| $130+500558+25 \mathrm{~W}$ | 1 | 48 | 9 | 52 | . 1 | 13 |  | 1.11 | 2 | 1 | 24 |
| $130+500557+75 \mathrm{~K}$ | 1 | 32 | 14 | 94 | .3 | 13 | 5 | . 57 | 2 | 1 | 5 |
| $130+500557+504$ | 1 | 39 | 5 | 98 | .1 | 15 | - | . 46 | 2 | 1 | 4 |
| 130+5005 57+00H | 1 | 42 | 9 | 120 | . 1 | 17 | 3 | . 57 | 2 | 1 | 1 |
| $130+600559+50 \mathrm{H}$ | 1 | 32 | 9 | 04 | .1 | 10 | 2 | . 74 | 2 | 1 | 1 |
| $130+600559+25 \mathrm{~W}$ | 1 | 54 | 10 | 120 | .1 | 14 | 2 | . 51 | 2 | 1 | 1 |
| $130+600559+00 \mathrm{H}$ | 1 | 43 | 11 | 81 | . 1 | 20 | 8 | . 47 | 2 | 1 | 1 |
| $130+600558+754$ | 2 | 37 | 3 | 90 | . 1 | 24 | 4 | 1.53 | 2 | 1 | 1 |
| $130+600558+50 \mathrm{H}$ | 1 | 36 | 5 | 91 | .1 | 11 | 2 | . 47 | 2 | 1 | 2 |
| 130+6005 58+25N | 1 | 36 | 4 | 89 | .1 | 14 | 3 | . 55 | 2 | 1 | 1 |
| $130+600558+00 \mathrm{H}$ | 1 | 42 | 2 | 65 | .1 | 12 | 4 | . 59 | 2 | 1 | 1 |
| $130+600557+7514$ |  | 30 | ¢ | 62 | . 1 | 10 | 3 | . 44 | 2 |  | 2 |
| $130+600557+50 \mathrm{H}$ | 1 | 82 | 13 | 105 | . 2 | 14 | 5 | . 57 | 2 | 1 | 11 |
| $130+600557+25 \mathrm{~K}$ | 1 | 25 | 12 | 64 | .3 | 10 | 2 | . 63 | 2 | 1 | 7 |
| $130+600557+00 \mathrm{H}$ | 1 | 31 | 10 | 125 | . 5 | 13 | 5 | . 39 | 3 | 1 | 5 |
| $130+600556+75 \mathrm{H}$ | 1 | 60 | 2 | 82 | .1 | 21 | 5 | . 22 | \% | 1 | 30 |
| $130+600556+5011$ | 1 | 100 | 15 | 80 | . 6 | 18 | 4 | . 45 | 2 | 1 | 7 |
| $130+700559+254$ | 1 | 76 | 9 | 135 | . 1 | 11 | 2 | 1.14 | 2 | 1 | 4 |
| 130+7005 59+00H | 1 | 116 | 5 | 75 | . 1 | 14 | 2 | . 77 | 2 | 1 | 1 |
| $130+700558+5$ OH | 1 | 28 | 11 | 102 | . 2 | 15 | 5 | . 30 | 2 | 1 | 1 |
| $130+700558+25 \mathrm{H}$ | 1 | 47 | 7 | 69 | . 1 | 15 | 5 | . 77 | 2 | 1 | 1 |
| $130+700558+001$ | 1 | $80^{6}$ | 8 | 75 | . 1 | 16 | 7 | 1.22 | 2 | 1 | 11 |
| $130+700557+75 \mathrm{~K}$ | 1 | 34 | 3 | 28 | .1 | 5 | 2 | . 76 | 2 | 1 | I |
| $130+700557+50 \mathrm{H}$ | 1 | 43 | 8 | 88 | . 1 | 13 | 2 | . 59 | 2 | 1 | 1 |
| $130+700597+25 \mathrm{~W}$ | , | 73 | 6 | 84 | . 2 | 15 | 3 | . 79 | 2 | 1 | 0 |
| $130+700557+0011$ | 1 | 39 | 9 | 93 | .2 | 12 | 2 | . 72 | 2 | 1 | 9 |
| $130+700556+7514$ | 1 | 41 | 11 | 85 | . 5 | 13 | 4 | . 71 | 2 | 1 | 24 |
| $130+700550 .+50 \mathrm{~K}$ | 1 | 62 |  | 70 | . 1 | 16 | 4 | . 94 | 2 | 1 | 46 |
| $130+800559+50 \mathrm{~K}$ | 1 | 40. | 5 | 58 | . 1 | 12 | 9 | 2.25 | 2 | 1 | 1 |
| 130+8005 $59+25 \mathrm{~W}$ | 2 | 64 | 2 | 5 | . 1 | 2 | 2 | 4.89 | 2 | 1 | 1 |
| $130+8005$ S9+00H | 1 | 177 | 5 | 79 | . 4 | 16 | 6 | 1.52 | 2 | 1 | 5 |
| $130+800558+50 \mathrm{H}$ | 1 | 30 | 4 | 104 | . 2 | 17 | 3 | .65 | 2 | 1 | 1 |
| $130+800558+250$ | 1 | 38 | 6 | 78 | . 1 | 13 | 2 | . 43 | 2 | 1 | 1 |
| 130+8005 57+75 | 1 | 28 | b | 45 | .2 | 8 | 2 | 1.25 | 2 | 1 | 1 |
| 130+8005 57+504 | 1 | 35 | 6 | 63 | .1 | 10 | 2 | . 66 | 2 | 1 | 2 |
| STD C/AU-0.5 | $2!$ | 58 | 41 | 137 | 0.9 | 29 | 37 | . 48 | 10 | 12 | 500 |

I.M. WATSON FILE \# 85-1972

| SAMPLE | Mo | Cu | Pb | In | $\mathrm{Ag}^{\text {g }}$ | Co | As | Ca | St | H |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | FPM | PPM | PFM | PFM | FPM | FFM | \% | PFM | FPM | PPB |
| $130+800557+254$ | 1 | 48 | 9 | 107 | . 1 | 10 | 2 | . 52 | 2 | 1 | 2 |
| $130+800557+00 \mathrm{H}$ | 1 | 72 | 5 | 91 | . 1 | 16 | 3 | . 79 | 3 | 1 | 22 |
| $130+800556+754$ | 1 | 33 | 11 | 88 | . 1 | 12 | 3 | . 55 | 2 | 1 | 2 |
| $130+800556$ | 1 | 35 | 2 | 106 | . 1 | 13 | 2 | . 60 | 2 | 1 | 1 |
| $130+920559+501 \mathrm{H}$ | 1 | 9 | 3 | 6 | . 1 | 1 | 2 | 3.58 | 2 | 1 | 1 |
| $130+920559+25 \mathrm{~K}$ | 1 | 29 | 5 | 74 | $\therefore$ | 9 | 9 | . 64 | 20 | 1 | 1 |
| $130+920559+00 \mathrm{~W}$ | 1 | 51 | 2 | 105 | . 1 | 13 | 2 | .79 | 2 | 1 | 2 |
| 130+9205 $58+75 \mathrm{H}$ | 1 | 44 | 8 | 77 | . 1 | 10 | 2 | .65 | 2 | 1 | 1 |
| $130+920558+50 \mathrm{H}$ | 1 | 44 | 4 | 93 | . | 12 | 2 | . 49 | 2 | 1 | 75 |
| $130+920558+254$ | 1 | 34 | 5 | 83 | . 1 | 12 | 2 | . 76 | 2 | 1 | 6 |
| $130+920558+00 \mathrm{H}$ | 2 | 44 | 10 | 91 | . 1 | 12 | 2 | . 54 | 2 | 1 | 1 |
| $130+920557+754$ | 1 | 47 | 7 | 101 | .1 | 14 | 2 | . 57 | 2 | 1 | 15 |
| $130+920597+50 \mathrm{H}$ | 1 | 37 | 2 | 83 | . 1 | 11 | 2 | . 57 | 2 | 1 | 3 |
| $130+920557+25 \mathrm{H}$ | 1 | 44 | 7 | 105 | .1 | 14 | J | . 50 | 3 | 1 | 4 |
| $130+920557+001 \mathrm{~N}$ | 1 | 38 | 13 | 68 | .4 | 9 | 2 | . 53 | 2 | 1 | 1 |
| 130+920S Sot 75 H | 2 | 112 | 16 | 122 | . 1 | 17 | 5 | . 81 | 2 | 1 | 2 |
| $130+9205 \mathrm{Sót50H}$ | 1 | 36 | 9 | 75 | .1 | 12 | 2 | . 54 | 2 | 1 | 1 |
| $130+920556+00 \mathrm{~W}$ | 1 | 44 | 5 | 104 | . 1 | 12 | 4 | . 52 | 3 | 1 | 1 |
| $130+920555+50 \mathrm{H}$ | 1 | 45 | 2 | 96 | . 1 | 12 | 2 | . 63 | 2 | 1 | 2 |
| $130+920 \mathrm{~S} 55+00 \mathrm{H}$ | 1 | 47 | 4 | 92 | .1 | 12 | 2 | . 52 | 2 | 1 | 2 |
| $130+920554+504$ | 1 | 36 | 12 | 102 | .3 | 11 | 2 | . 57 | 3 | 1 | 3 |
| $130+920554+00 \mathrm{H}$ | 1 | 48 | 12 | 87 | .2 | 14 | 2 | .82 | 2 | 1 | 4 |
| $130+920 \mathrm{~S} 33+50 \mathrm{~W}$ | 1 | 38 | 11 | 82 | . 1 | 15 | 2 | . 55 | 2 | 1 | 1 |
| $130+920553+0014$ | 1 | 45 | 2 | 88 | .1 | 12 | 2 | . 61 | 2 | 1 | 2 |
| $130+920552+504$ | 1 | 51 | 3 | 110 | . 1 | 13 | 2 | . 76 | 2 | 1 | 1 |
| 130+9205 $51+004$ | 2 | 37 | 15 | 116 | . 2 | 14 | 3 | . 61 | 2 | 1 | 1 |
| $130+920550+50 \mathrm{H}$ | 2 | 32 | 13 | 110 | .1 | 14 | 2 | . 67 | 2 | 1 | 4 |
| 130+920S 50+50E |  | 54 | 7 | 100 | . 1 | 14 | 4 | . 63 | 2 | 1 | 2 |
| 130+920S $51+00 E$ | 1 | 53 | 8 | 197 | . 1 | 11 | 2 | . 58 | 2 | 1 | 2 |
| 130+920S S1+50E | 2 | 96 | 18 | 177 | . 1 | 19 | 10 | . 51 | 2 | 1 | 1 |
| $130+920552+00 E$ | 2 | 56 | 8 | 112 | .1 | 14 | 2 | .61 | 2 | 1 | 6 |
| $130+920553+00 E$ | 1 | 37 | 8 | 100 | . 1 | 13 | 2 | . 62 | 2 | 1 | 1 |
| $130+920553+50 E$ | 2 | 48 | 5 | 113 | . 1 | 14 | 2 | . 67 | 2 | 1 | 2 |
| 130+9205 34+00E | 2 | 11 | 15 | 112 | . 3 | 14 | 5 | . 67 | 3 | 1 | 1 |
| $130+920554+50 \mathrm{E}$ | 2 | 36 | 11 | 127 | . 1 | 12 | 4 | . 59 | 3 | 1 | 2 |
| 130+9205 $35+00 E$ | 2 | 47 | 8 | 117 | . 1 | 11 | 2 | .49 | 2 | 1 | 3 |
| STD C/AU-0.5 | 20 | 59 | 40 | 135 | 6.9 | 27 | 37 | . 48 | 10 | 11 | 510 |

I.M. WATSON \& ASSOCIATES FILE \# 85-1972

FAGE 9

| SAMPLE | Mo | Cu | Fb | In | $A g$ | Co | As | Ca | Sb | N | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | FFM | PFM | PPM | FFM | FFM | FFM | $\%$ | PFM | PPM | FPB |
| $130+920555+50 E$ | 2 | 20 | 日 | 95 | . 3 | 7 | 4 | . 34 | 2 | 1 | 1 |
| 130+9205 56+00E | 2 | 38 | B | 113 | . 1 | 12 | 3 | .44 | 3 | 1 | 1 |
| 130+9205 56+50E | 2 | 25 | 10 | 100 | . 2 | 10 | 4 | .44 | 2 | 1 | 1 |
| 130+920S 57+00E | 2 | 29 | 10 | 81 | . 1 | 15 | J | . 55 | 2 | 1 | 7 |


| SAMPLE\# | Ho | Cu | Pb | $2 n$ | Ag | Co | As | Ca | 5b | W | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | PPM | PFM | PFM | PFM | PPM | PPM | ${ }_{6}$ | PFM | PPM | PFB |
| BL84 $5130+0305$ | 2 | 50 | 11 | 93 | . 1 | 14 | 10 | . 39 | 2 | 1 | 1 |
| BLEM S130+250S | 1 | 46 | 6 | 87 | .2 | 12 | 2 | . 55 | 2 | 1 | 2 |
| BL84 S130+300S | 1 | 35 |  | 80 | . 2 | 12 | 16 | . 49 | 386 | 1 | 2 |
| BLAM 5130+450S | 1 | 45 | 22 | 101 | 1.4 | 13 | 3 | . 35 | 7 | 1 | 75 |
| BL8 S $5130+5505$ | 1 | 26 | 11 | 79 | .4 | 9 | 2 | . 76 | 2 | 1 | 3 |
| BLAN SI30tob50s | 1 | 28 | \% | 68 | .2 | 10 | 3 | . 82 | 3 | 1 | 5 |
| BL64 S130+750S | 1 | 39 |  | 93 | . 1 | 14 | 5 | . 59 | 2 | 1 |  |
| BL 130+500S | 1 | 37 | 5 | 51 | . 4 |  | 2 | 15.68 | 2 | I | 1 |
| BL8 $130+350 \mathrm{H}$ | 1 | 37 | 7 | 85 | .6 | 13 | 4 | . 64 | 3 |  | 21 |
| BLEW 130+800 | 1 | 43 | 15 | 106 | . 1 | 12 | 2 | . 70 | 2 | 1 | 1 |
| BLO+00 130+9205 | 1 | 35 | 3 | 120 | . 1 | 11 | $\checkmark$ | . 52 | 2 | 1 | 1 |
| SMW 14+50 | 1 | 83 | 8 | 73 | . 1 | 15 | 4 | . 81 | 2 | 1 | 2 |
| SMW 15+50 | 1 | 74 | 4 | 79 | . 1 | 16 | 2 | . 81 | 2 | 1 | 6 |
| SAM 16+50 | 1 | 63 | 7 | 83 | . 1 | 15 | 2 | . 74 | 2 | 1 | 2 |
| STD C/AU 0.5 | 21 | 57 | 41. | 139 | 7.0 | 28 | 36 | . 48 | 17 | 12 | 480 |


| SAMPLEI | Ho | Cu | Fb | In | Ag | Co | As | Ca | 56 | W | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | PPM | PPH | PFM | PPM | FFM | PFM | * | PFM | PPM | FFB |
| L855 519+0014 | 2 | 5 | 2 | 18 | . 1 | 1 | 6 | 39.88 | 2 | 1 | 1 |
| L855 517+00H | 1 | 92 | 2 | 86 | . 1 | 18 | J | 3.08 | ${ }^{2}$ | 1 | 1 |
| L8SS 51ot504 | 1 | 97 | 4 | 83 | . 1 | 18 | 2 | 2.11 | 2 | 1 | 2 |
| L85S S16+001 | 1 | 104 | ¢ | 101 | . 1 | 22 | 8 | 3.00 | 2 | 1 | 1 |
| L855 513+00W | 1. | 72 | 2 | 134 | . 1 | 18 | 2 | . 88 | 2 | 1 | 1 |
| L855 512+501 | 2 | 19 | 2 | 125 | . 1 | 16 | 4 | 2.29 | 2 | 1 | 3 |
| LB5S S11+50H | 1 | 181 | 0 | 104 | . 2 | 18 | \& | 1.20 | 3 | 1 | 2 |
| L855 $511+00 \mathrm{H}$ | 1 | 12 | 2 | 109 | . 1 | 17 | 6 | 1.83 | 2 | 1 | 1 |
| L85S 510+504 | 1 | 39 | 8 | 100 | . 1 | 18 | 7 | 2.19 | 2 | 1 | 2 |
| L855 59+50H | 1 | 35 | 4 | 113 | . 1 | 17 | 3 | 3.48 | 2 | 1 | 2 |
| L855 $39+004$ | 1 | 82 | J | 87 | . 1 | 17 | 2 | 2.20 | 2 | 1 | 1 |
| L85S 58+50H | 1 | 45 | 7 | 117 | . 1 | 18 | 2 | 2.41 | 2 | 1 | 1 |
| L85S 58+004 | 1 | 83 | 2 | 105 | . 1 | 16 | 2 | 5.17 | 2 | 1 | 1 |
| 1955 510+004 | 1 | 85 | 2 | 111 | . 1 | 16 | 3 | 1.50 | 2 | 1 | 1 |
| L955 59+50H | , | 120 | 2 | 116 | .1 | 18 | 2 | 1.92 | 2 | 1 | 1 |
| L955 59+00W | 2 | 108 | 13 | 143 | . 1 | 19 | 5 | 1.14 | 2 | 1 | 2 |
| L955 57+00H | 2 | 25 | 2 | 39 | . 1 | 19 | 6 | 3.11 | 2 | 1 | 1 |
| L955 56+00H | 1 | 50 | 2 | 101 | . 1 | 17 | 4 | 1.64 | J | 1 | 1 |
| L95S 55+50H | 1 | 93 | 5 | 73 | .1 | 18 | 2 | 2.32 | 2 | 1 | 1 |
| L109+505 54+00H | 2 | 31 | 2 | 28 | . 1 | 10 | 9 | . 59 | 2 | 1 | J |
| L1105 511+50H | , | 185 | 12 | 139 | . 1 | 19 | 2 | 5.34 | 2 | 1 | 1 |
| L110S 511+00N | 1 | 91 | 2 | 71 | . 1 | 14 | 2 | 6.82 | 2 | 1 | 1 |
| $11105510+50 \mathrm{H}$ | 1 | 398 | 3 | 147 | .3 | 25 | 2 | 3.80 | 2 | 1 | 2 |
| L1105 59+501 | 1 | 19 | 4 | 99 | . 1 | 12 | 2 | 4.15 | 2 | 1 | 1 |
| L110S 58+504 | 1 | 106 | 2 | 163 | .1 | 21 | 2 | 1.81 | 2 | 1 | 1 |
| 11105 58+004 | 5 | 81 | 5 | 162 | .1 | 19 | 2 | 1.36 | 2 | 1 | 1 |
| L110S Sót00H | 1 | 126 | 2 | 68 | . 1 | 16 | 2 | 1.82 | 2 | 1 | 1 |
| L120S S8+OOH | 1 | 30 | 2 | 78 | .1 | 10 | 3 | 2.18 | 2 | 1 | 2 |
| L1205 57+50W | 1 | 14 | 2 | 117 | . 1 | 16 | 2 | 2.46 | 2 | 1 | 1 |
| LI20S 37 +006 | 1 | 163 | 11 | 162 | .1 | 20 | J | 5.19 | 2 | 1 | 2 |
| 1120550.004 | 1 | 11 | 3 | 121 | . 1 | 12 | 1 | 4.54 | 2 | 1 | 1 |
| LI20S $54+50 \mathrm{~W}$ | 1 | 21 | 2 | 37 | . 1 | 7 |  | 15.30 | 2 | 1 | 1 |
| $1120553+004$ | 1 | 5 | 6 | 82 | .1 | 9 | 5 | 4.23 | 2 | 1 | 3 |
| L120S 5s+504 | \% | 93 | 5 | 54 | . 1 | 14 | ¢ | 2.90 | 2 | 1 | 30 |
| L120S 50+50E | 1 | 134 | 2 | 75 | . 1 | 14 | 2 | 1.08 | 2 | 1 | 2 |
| LI20S SI +50E | 1 | 74 | 2 | 90 | . 1 | 12 | 5 | 3.37 | 2 | 1 | 1 |
| L130+1005 57+75\% | 1 | 30 | 2 | 57 | . 1 | 13 | 9 | 2.95 | 2 | 1 | 2 |
| STD C/AU-0.5 | 20 | 59 | 39 | 137 | 7.0 | 27 | 36 | . 48 | 15 | 12 | 490 |

I.M. WATSDN \& ASSOCIATES FILE \# 85-1972 FAGE 12

| SAMPLE | Mo | Cu | Pb | In | Ag | Co | A5 | Ca | 5 Sb | N | Aut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPM | FFM | PFM | PFM | PPM | FFM | PFM | \% | PFM | PFM | FFB |
| 1130+1005 57+504 | 1 | 71 | 2 | $80^{\circ}$ | . 1 | 15 | 40 | 1.67 | 2 | 1 | 3 |
| L130+2005 $59+654$ | 2 | 114 | $J$ | 86 | . 1 | 19 | 11 | 2.53 | 2 | 1 | 2 |
| 1130+2005 58+501 | 2 | 375 | 2 | 85 | .2 | 26 | 17. | 3.81 | 2 | 1 | 1 |
| $1130+200598+25 \mathrm{~W}$ | 1 | 148 | 2 | 06 | . 1 | 15 | 17 | 2.18 | 2 | 1 | 1 |
| L130+200S S8+05H | 1 | 69 | 2 | 80 | . 1 | 15 | 3 | 6.74 | 2 | 1 | 1 |
| L130+2005 $57+00 \mathrm{~W}$ | 1 | 55 | 6 | 68 | . 1 | 15 | $J$ | 4.61 |  | 1 | 2 |
| L130+225s 57+754 | 1 | 138 | 2 | 115 | . 1 | 21 | 9 | 3.05 | 2 | 1 | 1 |
| L130+2255 $57+50 \mathrm{~W}$ | 1 | 91 | 3 | 97 | . 1 | 18 | 9 | 4.08 | 2 | 1 | 2 |
| $1130+400554+00 \mathrm{E}$ | 1 | 95 | 2 | 98 | . 1 | 19 | 2 | 5.59 | 2 | 1 | 1 |
| LIJO+400S S5+50E | 1 | 68 | 2 | 77 | .1 | 19 | 2 | 2.29 | 2 | 1 | 1 |
| L130+700s 58+75H | 1 | 92 | 4 | 96 | . 1 | 22 | 4 | 5.36 | 2 | 1 | 1 |
| BL8+00世 $5130+1505$ | 1 | 98 | 2 | 83 | . 1 | 16 | 5 | 4.13 | 2 | 1 | 2 |







5ro



No





[^0]:    *Pro-rated costs

