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GEOLOGICAL DEVELOPMENT REPORT

ON THE

LAPOINTE CREEK PROPERTY

FT. STEELE/SLOCAN MINING DIVISION

NTS 82F / 10E // 15E

49° 45' N Latitude 116° 37' W Longitude

PREPARED FOR OPERATOR TELSTAR RESOURCES LTD.

CALGARY, ALBERTA

# GEOLOGICAL BRANCH ASSESSMENT REPORT

Copies - Telstar Resources Ltd.

- BRL File

- Assessment Reports (EMPR)

Μ. Bapty, P.Eng

President

January 15, 1992

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#### 1.00 SUMMARY OF WORK AND RECOMMENDATIONS

The Lapointe Creek property, consisting of 55 units in 7 claims, is located at Rose Pass, 44 kilometers west of Kimberley in British Columbia. The property is located on the coincident margins of the Kootenay Arc and the Aldridge Basin, both geologic sub-provinces which have contributed enormous wealth to the region.

Potential economic mineralization might exist in three settings: narrow veins which have been the focus of historical work, strataform bedded sulphides at the base of the Horsethief Creek Formation, and replacement limestone deposits. All types of occurrences are seen on the property.

A staged program of airborne geophysical work (\$26,000) to be followed by a contingent drilling program (\$340,000) is recommended.

#### 2.00 INTRODUCTION

#### 2.10 Location and Access

The Lapointe Creek mineral claims are located at Rose Pass, 44 kilometres west of Kimberley and 24 kilometres east of Ainsworth, B.C. The claims straddle the height of land which separates the Fort Steele and Slocan Mining Divisions (Figure 1).

The claims are geographically situated at Longitude  $116^{\circ}$  37' W, Latitude  $49^{\circ}$  45' N.

Access is by good gravel logging roads west from Kimberley or east from Crawford Bay on the east side of Kootenay Lake.

#### 2.20 Physiography

The Rose Pass summit forms the divide for Kootenay Lake and Lake Koocanusa, both of which are part of the Kootenay River drainage.

The Bob and Rose mineral claims have alpine and subalpine terrain with forests of larch, pine, fir and cedar to 6500 feet (1981 m).

Rainfall and snowfall levels are above average with reported snowfall reaching 5.0 metres. The property is typically free of snow between May and October.



#### 2.30 Property

#### 2.31 Geological Target

The Lapointe Creek property is located on the margin of the Kootenay Arc mineral province where silver-lead-zinc vein systems typically have grades of 300-900 gm/t silver, 4-8% lead, and 2-4% zinc (Sangster, 1984) and sizes up to one million tons. The nearest producer is Cominco's now dormant Bluebell operation, 17 kilometres west of the claims, which produced a total of 4.7 million tonnes of lead/zinc ore grading 14% combined metal.

Three mineralized settings exist on the property. Low grade strataform sulphides are seen at the bottom of the Precambrian aged Horsethief Creek Formation; numerous small, steeply dipping mineralized quartz veins associated with mountain building and intrusive activity radiate through the section; and the potential exists for replacement limestone deposits where hydrothermally active vein conduits carrying silica/sulphide rich brines have intersected and reacted with the bedded limestone.

#### 2.32 Claim Group and Status

The original Bob and Rose mineral claims (Figure 2) were staked by C. Kennedy and S. Sanders in October, 1989 and transferred to South Kootenay Goldfields Inc. (SKGI), a subsidiary of Dragoon Resources Ltd. and Greenstone Resources Ltd. Telstar Resources optioned the group from SKGI in September of 1991, and expanded the holding by staking to the south (Hi, Ex, Po) and the northeast (Tan, Ken). The data is summarized below:

CLAIM NAME	NO. UNITS	RECORD NO.	MINING DISTRICT	RECORD DATE	DUE DATE	OWNER
Bob Rose Hi Ex Po Tan Ken	12 6 4 6 12 9	3618 6124 304290 304213 304212 304350 304351	Ft. Steele Slocan Slocan Slocan Slocan Ft. Steele Ft. Steele	21/09/89 25/09/89 15/09/91 14/09/91 16/09/91 16/09/91 16/09/91	1992 1992 1992 1992 1992 1992 1992	SKGI SKGI Kary Kary Kary SKGI SKGI



#### 2.40 History

The West Kootenay region of British Columbia has a long mining history, with much of the production coming from the Kootenay Arc, an arcuate shaped structural zone curving northward through Kootenay Lake, and including the many small vein deposits centered at Ainsworth and the Bluebell workings (Figure 3).

In 1890, the Bluebell limestone deposit was discovered on the east shore of Kootenay Lake, north of Pilot Bay. Argentiferous galena and sphalerite in fractured lower Cambrian Badshot -Mohican Formation was the target of extensive exploration and underground development by Cominco Ltd. This deposit yielded 4.7 million tonnes of 14% lead and zinc ore before closing in 1975 due to the high cost of pumping water from the workings.

East of Crawford Bay, lead-zinc veins similar to those at Ainsworth were the target of small scale operations in the Canyon Creek and Rose Pass areas, active between 1890 and 1910.

Remnants of trenches, adits, and shafts are being found on the Lapointe claims, but no written record exists of their history or location (see Appendix V).



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#### 2.50 1990 Program

The 1990 Program was designed to geochemically prospect the area surrounding known showings and workings near one of the abandoned shafts. It consisted of laying out a contour grid, some mapping, and geochemical soil sampling on a 25m x 100m grid. There were 10.4 kilometers of lines established by flagging while 375 soil samples were being collected. Seven rock samples were collected and assayed, and two of these are the subject of a petrographic study. There were two days of reconnaissance work completed on the property by contract geologists.

One finding of the study was the identification of large (200m x 1200m) lead, zinc soil anomaly which conformed to stratigraphy, trending in a NNE direction through the property, and centered over the Toby Conglomerate. The values peak where the conglomerate is intersected by a steeply dipping quartz feldspar porphyry dike. As this structure is sufficiently far from the old shaft and tunnel to offer a different character of mineralization, it was proposed to further investigate the zone with core drilling in a subsequent program.

#### 3.00 GEOLOGY

#### 3.10 Regional Geology\*

In the Crawford Bay - Rose Pass area, intensely deformed Precambrian metasedimentary clastic and carbonate rocks of the Dutch Creek, Mount Nelson, Toby and Horsethief Creek Formations form a linear northeast trending belt (Table 1).

Cretaceous quartz monzonites to diorites are in part responsible for the levels of deformation and metamorphism evident in the Rose Pass area. Foliation in the sediments follows batholith margins with metamorphic and deformational intensity increasing towards the batholith contacts. The contact zones are generally gneissic with included lineated fragments of metamorphosed sediments.

Numerous minor felsic and lamprophyric intrusions are prevalent throughout the region, typically in silicified structures which parallel foliation; their occurrence is commonly coincident with galena, sphalerite and tetrahedrite.

\* Extracted from Geochemical Survey Report on the Lapointe Creek Property by H. Shear and M. Bapty, 1990.

	MESOZOIC
CRETACE	DUS
Kgr	Porphyritic granite

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PRECAMBRIAN				
HADRYNIAN	HADRYNIAN			
WINDERME	RE SUPERGROUP			
Hh	HORSETHIEF CREEK FORMATION Green, argillaceous quartzite; blue-gray limestone, arkose, pebble conglomerate, white quartzite, phyllites			
Ht	TOBY FORMATION Conglomeratic pelite			
HELIKIAN				
PURCELL	SUPERGROUP			
Hmn	MOUNT NELSON FORMATION Laminated argillite, magnesian limestone, quartzite			
Hdc	DUTCH CREEK FORMATION Laminated argillite,and\or siltstones; magnesian limestone; interbedded dolomite and\or quartzite			

Table 1Formations & Descriptive Lithologies of the<br/>Rose Pass Area



HELDLAN			
Hgr	Granite, pegmatite		
PURCEL	L SUPERGROUP ( N mo to Ma )		
Hmo	MOUNT NELSON FORMATION: Undivided 12		
Himna	Dolomite, white or dark grey, buil or brown weathering		
1 Hmnsi	Black argilite and argillaceous grey sutstone, thun-bedded		
Hmn <sub>3</sub>	Dolomite, dolomitic suititone, argillite		
	unite of green, procession does this		
Mdc	DUTCH CREEK FORMATION: undivided		
Hac,	UPPER: siltstone, argilite, quartzite 2a-carbonate bearing beds and dolomite		
Ħdc,	LOWER: black arguiliste and arguilaceous grey sultstone, thinly interbedded; la-thin successions of dolomiste and/or white quartiste		
Ħm	NOYIEINTRUSIONS meta-diorite, meta-quartz diorite		
Mk	KITCHENER FORMATION: undivided		
HL,	Red weathering dolomite, black argillite, quartzite		
Mks	Black argillite, grev suistone, tan suistone all thuniy interbedded: rare carbonate bearing horizons		
Mk,	Doiomitic siltstone, dolomite, green argillite, black argillite b-olack argillite: buff dolomite and dolomitic siltstone, white siltstone a-green argillite, buff dolomitic siltstone, dolomite		
Mc	CRESTON FORMATION: undivided		
Hcs	UPPER CRESTON: deep green siltstone, light and dark, thinly laminated argulate and siltstone; purple argulate.		
Hc3	WIDDLE CRESTON: grey, blocky substone and very fine quartzite in beds to 30 cm or more, commonly ripple marked, and commonly purple lined or mottled; black to deep purple arglilite and thin-bedged substone; white, medium-grained quartzite commonly associated with purple mud-coup breccusa.		
Hc,	LOWER CRESTON: thin-bedded dark argillite and grey silistone characterized by uregular pinching and swelling beds, rippie cross-iamination, mud-cracks, munor cut and fill leatures; green suisione with thin interbeds of argillite.		
H o	ALDRIDGE FORMATION: undivided		
Ho,	UPPER ALDRIDGE: rusty weathering, black argillite and silty argillite, fine, regular, white laminae of siltstone.		
Hoz	WIDDLE ALDRIDCE: light grey weathering, grey quartzite and silistone in beds 10 to 70 cm; interbeds of dark argillite and thin bedded alternating black argillite and grey silistone.		
Ha,	LOWER ALDRIDGE: rusty weathering, laminated or cross-bedded quartzite, argilite and silty argilite.		
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SOUTH KOOTENAY GOLDFIELDS INC
BOB and ROSE CLAIMS
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SCALE 1: 50 000 NTS BZF/IDE ISE FIG NO
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#### 3.20 Property Geology

#### 3.21 Structure and Stratigraphy

The Bob and Rose claims straddle the geological boundary between the Mount Nelson Formation and the Horsethief Creek Group. The contact is defined by the Toby Creek Conglomerate, the basal formation of the Horsethief Creek Group. The formations trend 020°, and in the area of this season's work the dips are predominantly steeply east.

The stratigraphic units encountered in the drill hole apparently constitute an unfaulted sequence. Interpretation of the easterly dip is based on correlation of drill hole lithology with surface mapping.

Although similar lithologies are repeated down the hole, there is no indication that any unit is repeated. This, in conjunction with the lack of any major fault structures in the core, indicates that the drill section is discrete and without fold or fault repetitions.

The logged rock types were compared (refer to "Lithology") with the gross lithology of the Horsethief Creek Group and Mount Nelson Formation as described in previous reports. The comparison indicates that the units are disposed from youngest to oldest down the hole, i.e. from west to east. To provide consistency with the dip direction, the drilled interval must then represent a section of either the overturned east limb of a synclinal fold, (assuming a N - S fold axis) or the overturned west limb of an anticline. The blurred distinction between formational units as a consequence of metamorphism, and the lack of definitive evidence in the core to identify the tops of beds does not assist with describing the orientation.

Regional mapping gives no clues either, as units to the north and south show the presence of overturned folds.

From our little information on stratigraphic symmetry, bed identification, and regional dips, we are arbitrarily describing the structure as the east limb of an overturned syncline. (Note below).

The structural relationship of the mineralized igneous "intrusive(s)" with the enclosing metasediments is also a problem. Field mapping in 1990 indicated a low angle cross-cutting intrusive relationship. DDH L91-01 shows two major and one minor intersections of the "intrusion" in the core, rather than the single structure interpreted from surface mapping. Lack of both a "chill zone" and baking of the enclosing sediments indicate a cold, or relatively cold, contact. This evidence suggests that it is possible that the "intrusion(s)" may be conformable rhyo-dacite tuffs deposited in a sub-aqueous environment. This is consistent with an earlier petrographic study (see Appendix, 1990 Report).

\* \* \*

A series of 'Z' folds are apparent on section 1100S (Figure 5, insert) and at the trench at 400S. Their shape indicates the direction to fold axis and implies we are on the east limb of an anticline (or west limb of a syncline), and opposite to our structural interpretation.

Two features, however, signal the unit is intrusive: it cross cuts the stratigraphy, and it has a relatively massive texture, devoid of the pervasive shearing and deformation which characterizes the adjoining sediments. If it were the same age, it must have undergone the same deformation. If the deformation is absent, then it follows that it must have been introduced at a later stage in the geologic history. To further the intrusive argument, an age dated sample of lead taken from the unit indicated an "Ordovician" origin with an unusual mix of radioactive isotopes (see Appendix II). Our interpretation is that the lead is likely a mix of "new" (possibly Cretaceous age) and "old" (possibly Helikian aged, Precambrian) lead introduced and/or remobilized during the relatively recent intrusive event, giving rise to the apparently "intermediate" aged (Ordovician) sample.

Again, somewhat arbitrarily, we are going to describe the felsic unit as a quartz feldspar porphyry intrusive.

# 3.22 Lithology

The main lithological types encountered in the diamond drill hole are limestone, phyllite, pelitic conglomerate and quartz feldspar porphyry.

Drill Hole Interval (m)	Lithology	Inferred Formational Category
0.3 - 22.5	<u>Limestone</u> : re-crystallized sugary- textured, blue-gray laminated/very thin bedded, with turbidite intervals	Horsethief Creek Formation
22.5 - 59.1	<u>Phyllite</u> : dark gray to black, variably graphitic, intensely deformed	Horsethief Creek Formation
59.1 - 127.8	<u>Conglomerate</u> : Pelitic matrix with highly variable amount of contained quartz and quartzite pebbles and cobbles. Lower section strongly silicified and locally gradational with pale grayish white quartzite. A quartz feldspar porphyry (qfp) occurs between 62.0 - 64.9 meters.	Toby Formation
127.8 - E.O.H.	Phyllite and Intra-Formational QFP Phyllite as described above. Quartz feldspar porphyry is leucocratic in a very fine grained matrix, with quartz and feldspar crystals to 5mm.	Mount Nelson Formation
	Phyllite: Dark gray to black and slightly graphitic near top, becoming increasingly lighter down hole.	Mount Nelson Formation

Table 2. DDH 91-01 Lithological Types and Inferred Formation Category.

#### 3.23 Mineralization

Silver, lead, zinc, and copper values are seen in several locations on the property.

Traditionally, the quartz veins have been the focus of development and two settings are known to exist. One stratabound vein is described on the Humboldt claim, and lies between a limestone and conglomerate unit, (possibly a repeat of the limestone/Toby at Rose Pass). Unexplored mineralization possibly exists north and south along strike. The other vein system hosting potentially economic mineralization is developed within the phyllite between the Toby Conglomerate and the intrusive, centered over the Rose Pass area. Two centres of mineralization are seen and they are almost mirror images of the other; one at the renamed Macrob shaft site which explored continuity of the nearby showing in the creek, and the second at the renamed Laboucane shaft site on section 2100S. The veins seem to require at least 100 meters of phyllite thickness to provide a minimum dilatancy, proximity to the intrusive, and they appear to require the relatively impervious conglomerate unit to provide a dam to allow the development of hydrothermal channels. Grades within the veins typically average 5% Pb, 5 oz/ton Ag with minor values of zinc and copper over a width of 0.3 - 1.5 meters thickness.

The second feature of interest is the presence of the large pronounced stratabound lead zinc anomaly centered at the bottom of the Horsethief Creek formation.

Many instances of anomalous zinc values are known at this stratigraphic horizon on the margin of the Aldridge basin, and the values seen here warrant follow-up. The drilling confirmed that the lead and zinc mineralization is strataformed within the phyllites, and is accompanied with a significant quantity of pyrrohtite, although much of it has been oxidized to pyrite. The Sullivan mine is the most famous local model of this type of mineralization and lies 44 kilometers to the east.

A third mode of occurrence of potentially economic mineralization lies with the carbonates. The best example of massive sphalerite seen on the property is within a limey saddle reef structure in the pit on line 400S. It would be useful to explore the relationship between the intrusives and the limestones, as potential exists for a substantial replacement deposit within the structure.

The drill hole L-91-01 was collared at 600S, 25E, centered on the apex of the lead and zinc geochemical anomaly, and coincident with intrusive crossing the stratabound sulphides.

Within the drill hole, fine to medium grained galena and sphalerite mineralization occur predominantly within the quartz feldspar porphyry. It is associated with hair-line fractures and narrow quartz veinlets.

Sphalerite mineralization also occurs within the phyllite and limestone overlying the Toby Conglomerate in the lower Horsethief Creek Formation. In this instance, it is concentrated near the phyllite/limestone contact. The sphalerite mineralization may by syngenetically associated with the phyllite, and remobilized in part into the overlying limestone by subsequent intrusive and tectonic activity.

Field work also shows lead and zinc mineralization disseminated within the Toby Formation in several locations.

The coincidence of the surface geochemical anomalies, with the general strike of the enclosing sediments indicates that the mineralization occurrences are lithologically controlled.

#### 4.00 1991 PROGRAM

In the summer of 1991, Telstar Resources Ltd. negotiated an option to acquire control of the property from South Kootenay Goldfields Inc. They immediately mobilized a fall program.

Initial work consisted of increasing the claim holding by staking NE and SW along the structure and geologically mapping the property through additional field work. Structural controls were investigated by drilling one diamond drill hole across the favourable stratigraphy on line 600S, and analyzing the information.

## Statement of Costs

-

	<u>\$ rounded</u>
Field Mapping (Rodgers)	321
Geological Analysis & Core Logs Geologist Daignault, 35 hours	984
Drill Program Roadwork - Control line, Labour, Saws, Cat Drilling - 650 feet @ \$20/feet Sampling and Assaying	1,433 13,000 1,939
	16,372
Field Support for Program Support & Expediting - Cunningham - 7 days @ \$225/day Supervision - Bapty - 2 days @ \$425/day	1,575 850
	2,425
Mobilization & Demobilization Camland, Rotwald, Labour, Fuel, Trucks	3,469
Office Review, Reports, Drafting Report Preparation - Bapty - 2 days @ \$425/day Drafting - Milner - 27 hrs @ \$25/hr Typing - 2 days @ 8 hrs/day @ \$15/hr Reproducing, Binding	850 675 240 25
	1,790

THIS PROGRAM \$ 25,361

21

#### 5.00 CONCLUSIONS

The previously indicated strataformed mineralization at the bottom of the Horsethief Creek Formation has been confirmed. Drilling has indicated low grade metal within the phyllite immediately overlying the Toby Conglomerate. Grades averaged about 1000 ppm (0.10%) zinc over a thickness of about 6 meters. This is believed to be original metal due to the presence of pyrrhotite within the beds. If this mineralization exists in economic proportions it will be accompanied by significant quantities of iron which will be detectable by magnetic, gravity, or input EM geophysical techniques.

The vein mineralization demonstrates potentially economic thicknesses and grades of lead and silver in particular locations. Copper and zinc appear as accessory minerals. As lead is a good conductor, airborne input EM or groundbased horizontal loop EM geophysical techniques would be effective in identifying zones for follow-up programs.

Potential exists for a limestone replacement deposit to exist at depth within the structure. As this may be a zinc rich occurrence lying within the flanks of the syncline, and proximate to intrusives penetrating metal source phyllites, it may be virtually undetectable, except by blind drilling. If a deposit exists, and if it has sufficient lead to be conductive, it would show up on a deep search EM technique, such as UTEM.

Considering the widespread occurrence of low grade lead and zinc metal in both a strataform and hydrothermal setting, ongoing work is warranted to search for a large conductor to provide focus for subsequent programs.

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#### 6.00 ENGINEER'S QUALIFICATION

I, Michael Bruce Bapty, of the City of Kimberley, in the Province of British Columbia, hereby certify that:

- 1. I am a Consulting Mining Engineer and Contractor at 901-Industrial Road #2, Cranbrook, B.C.
- 2. I am a graduate of the University of British Columbia with a BASc in Mineral Engineering, and have been active in mine exploration, development, operations and administration for twenty-two years.
- 3. I am a Member of the Association of Professional Engineers of British Columbia.
- This report is based upon property fieldwork conducted by our staff and consultants, under my supervision, from the period September 1, 1991 to December 15, 1991.

Dated at Cranbrook, British Columbia, this 15th day of January, 1992.

1. Bapty, P.Eng.

# APPENDIX I

# Bibliography

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Shear, H. and Bapty, M.

1990: Geochemical Survey Report on the Lapointe Creek Property, Bapty Research Ltd. Report to South Kootenay Goldfields Inc.

#### APPENDIX II

Lead Age Date Report, UBC

- A. LeCoutier radiogenic source likely Jurassic or younger.
- B. Godwin may be a mixture of intrusive origin radiogenic plus mantle lead intrusive, or deep source origin.

The resulting mixture is younger than Cambrian.

C. <u>Inference</u>

The lead observed in the quartz feldspar porphyry intrusive could be a mixture of remobilized stratabound lead, leached from the surrounding Precambrian phyllites, plus lead introduced with the hydrothermal system associated with the intrusive itself. BAPTY RESEARCH UMITED

606 Trail Street Kimberley, B.C. V1A 2M2 Fax (604) 427-2006

> Tel (604) 427-7631 Tel (604) 426-6277

> > October 22, 1991

C.I. Godwin, Ph.D., Professor Department of Geological Sciences University of B.C. Vancouver, B.C. V6T 2B4

Re: Age Date Request Lapointe Creek B.C.

Dear Colin:

Enclosed is a sample of material that we would like to have lead age dated. It is located at  $49^{\circ}$  45' N latitude and 116° 37' W longitude.

The host formation is a Pre-Cambrian aged (Hadrinian -Helikian contact) phyllite which appears to be intruded conformably by a rhyo-dacite dyke. As well as the surrounding phyllites, the dyke contains lead and zinc sulphides; and we have enclosed a specimen for examination.

Our curiosity is whetted. The dyke appears to have cold contacts and uniform porphyritic texture leading us to believe that it could be a tuff, and the mineralization contemporaneously placed, save for minor remobilization due to compaction and silicification. This would be unusual for the area, as most volcanic events of this age are basic in character (gabbro or diorite).

Another possibility is that the dyke unit is a much younger syenite intrusive related to the Jurassic-Cretaceous orogeny, again with contemporaneous mineralization.

We are hoping for some resolution based upon the lead isotope ratios, and are requesting your assistance.

Thank you for your attention.

Yours sincerely,

r'

M. Bapty, P. Eng. President

Sample Enclosed

#### THE UNIVERSITY OF BRITISH COLUMBIA Department of Geological Sciences Vancouver, B.C. V6T 1Z4 November 8, 1991

Mike Bapty, P. Eng. Fax no. 427-2006

Dear Mr. Bapry:

#### RE: GALENA LEAD ISOTOPE ANALYSES FOR SHOWING 311101 MAP SHEET 082F

Your sample has been analyzed twice with the following results:

31101-001A1	31101-001A2
18.558(0.02)	18.580(0.02)
15.593(0.02)	15.609(0.02)
38.534(0.03)	38.534(0.02)
0.84020(0.01)	0.84007(0.01)
2.0763(0.01)	2.0764(0.01)
	31101-001A1 18.558(0.02) 15.593(0.02) 38.534(0.03) 0.84020(0.01) 2.0763(0.01)

As I discussed with you Wednesday, run 'A1' should be discarded due to mass spec problems during the run. 'A2' is considered 'good'.

The lead isotope signature of this showing is very similar to some of the results found in Peter LeCoutier's PhD thesis, 1973. They are as follows:

DEPOSIT:	Pitt Creek	Leader	Polaris
SAMPLE #:	30826-501	30822-501	30825-501
LAT/LONG:	49.60/116.01	49.54/116.13	49.61/116.01
206 <sub>Рb/</sub> 204 <sub>Рb</sub>	18.613	18.532	18.520
207 <sub>Pb/</sub> 204 <sub>Pb</sub>	15.618	15.612	15.655
208 <sub>Рb/</sub> 204 <sub>Рb</sub>	38.600	39.009	38.657
207 <sub>Рb/</sub> 206 <sub>Рb</sub>	0.83909	0.84244	0.84530
208 <sub>Pb/</sub> 206 <sub>Pb</sub>	2.0738	2.1050	2.0873

LeCoutier describes these deposits as 'radiogenic' and assigns them to his Cenozoic/Mesozoic cluster. LeCoutier's thesis was published in 1973 before Colin's shale curve came into being and, therefore, we can give a tighter age than this.

I have plotted your results on the shale curve along with LeCoutier's. I am faxing you these plots but I'm sure they will not reproduce very well so I'll mail you the original copies as well.

The above showings plot on the shale curve as Ordivician on the 208pb/204pb versus 206pb/204pb graph. On the 207Pb/204pb versus 206pb/204pb graph they plot below the shale curve. This may be because the lead is mixed with a more primitive, perhaps mantle type, lead. This could imply an origin related to either intrusive or deep structures. An Ordivician-Silurian age is implied but is not accurate. However, we can be sure that it is not Cambrian and that it is not related to the Precambrian Moyie intrusions.

Because of the lateness of these results we will not be billing you. I am very sorry that we could not have an accurate result before your meeting. Hopefully this will not happen again.

Yours very truly

Anne Pickering



# APPENDIX III

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42.2

Drill Hole Log

DRILL HOLE RECORD: Lapointe Creek

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HOLE NO .: L-91-01

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COMMENCED: COMPLETED: LOGGED BY: DATE LOGGED	October         1, 1991         DISTRICT: Fort Step           October         13, 1991         PROPERTY: Lapointe           P.N. Daignault         LOCATION: Bob & Roi:           : October         5,6,12,13, 1991         CO-ORD.: 600 S, 25           ELEV.:         1403 m	ele Creek se Claims E	COLLAR DIP: -40° BEARING: 120° Az LENGTH: 197.4 m CORE SIZE: NG % RECOVERY: 100%	TES	TS ଘି: ppm ex	None cept A	lu ppł	
FOOTAGE FROM TO	DESCRIPTION			Cu	A	NALYSI   Zn	S Ag	Cd
0 - 0.2	Casing			 	   			
0.2 - 0.3	Phyllite? The first 0.15m of heavily broken core and dark grayish black non-calcareous phyllit to tell if this represents a contact betwee phyllite "float" overlying limestone bedre	d rock fragment: e fragments and een the two roci ock.	consists of an admixture of limestone fragments. Difficul types or perhaps represents	t				
0.3 - 15.3	Limestone Pale-medium bluish gray generally laminate irregularly banded and slumped (turbidite bedding types. Several short (<1 dm) sec and dark gray schistose and crenulated lin	ed to very thin ?); transitional tions of very f mestone and weak	bedded, with one section beir contacts between different nely interlaminated light gra ly calcareous mudstone.	y j				
	0.3 - 9.5m - generally laminated to very a recrystallization? imparts a fine-grained particularly the lighter gray sections, w have a phyllitic to schistose appearance a to grayish black frequently crenulated la medium dark chocolate brown with very fine oxidation and leaching of a pre-existing m (< 2cm) elliptical bleb of coarse grained axis angles: $60^{\circ}$ a $^{-}0.5m$ , $72^{\circ}$ a $3.6m$ , $85^{\circ}$ mineralization observed.	thin parallel-ba sugary texture while many of th and are slightly aminae often are e (< 1mm) caviti mineral (magneti white calcite i a 6.4m, 65 <sup>0</sup> a 7	edded. Metamorphic to much of the core, we darker finely laminated bar crumpled. The dark gray weakly stained a light to es; presumably this represent te?). An occasional small s present. Bedding to core 2.6m, 72° a 8.7m. No sulphide	ds s				
	9.5 - 13.7m - bedding is moderately to str numerous examples of slump structures, att rectangular ragged-ended rip-up clasts? fl light to medium gray to slightly bluish gr blebs and thin (< 3mm) discontinuous rando coarse grained calcite. Disturbed bedding 55° - 75°. No sulphide mineralization obs	rongly disturbed tenuated beds, s lame structures ray fine grained omly oriented wh g has an approxi served.	; a turbidite sequence with mooth elliptical and more etc. Limestone is mainly I recrystallized with small ite veinlets of medium to mate core axis angle of					
	13.7 - 15.3m - generally pale to medium gr 14.5 meters, followed by a laminated pale narrow (< 1cm) dark gray bed up to approxi is very fine grained dull, to glassy in ap is transitional between the more typical v limestone, and a finely laminated slightly contact with the underlying schist is irre core axis and non-conformable; possible er	ray parallel thi gray to grayish imately 14.9 met opearance. The very thin beddec v crumpled calca egular, approxim osional surface	n-bedded to approximately cream section with occasiona ers. The section 13.7 - 14.9 final section from 14.9 - 15. to laminated bluish gray reous schistose sediment. Th ately at right angles to the	l   3   e				
	Bedding to core axis angles: 50 <sup>0</sup> @ 13.9m, contact is approached. No sulphide minera 0.2m (15.1 - 15.3) which contains small (<	. 55 <sup>0</sup> a 14.7m, s alization was ob < 0.5mm) euhedra	teepening to 65 <sup>0</sup> - 85 <sup>0</sup> as served except for the last l grains.					
15.3 - 16.4	Schist Talcose, strongly calcareous (to non-calca brownish gray (weakly - moderately oxidize parallel to original bedding surfaces. An intersects the schistosity at an acute ang bedding appears to be highly contorted. O apparently incompetent unit which has abso more distorted near the contacts with the	areous in the mi ed) wavy and fir nother stress in gle (~ 10 <sup>0</sup> - 20 <sup>0</sup> Driginally a cal orbed much of th central section	ddle). Medium gray to ely laminated. Schistosity duced foliation plane locally ). Locally the original careous mud (marl?). An e tectonic stress. Bedding i having bedding to core axis	s				

#### ORILL HOLE RECORD: Lapointe Creek

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FOOTAGE			A)	ALYSI	s	
FROM TO	DESCRIPTION	Cu	РЪ	Zn	Ag	ca
15.3 - 16.4	Continued angles at approximately 60° <u>+</u> 5°.					
	   Locally has a porous leached appearance with weak iron-oxide? staining on fractures.   Occasional reddish-brown earthy mineral may be sphalerite. 					
	Samples					
	1 52370 15.0 - 16.7 1.7 m	30	7	188	0.1	1.0
16.4 - 22.5	Limestone Generally medium gray banded with local crenulated sections; crenulation more pronounced where there is an increase in the proportion of dark grayish-black to black, frequently non-calcareous, argillitic interbeds.					
	Strongly crenulated section between 17.9m - 18.8m (turbidite) and 19.4m - 20.1m. The section 21.6m - 22.5m is again a turbidite sequence similar to the interval 9.5m - 13.7m. Bedding to core axis in the relatively undisturbed zones is as follows: 75° - 85° from 16.9m - 17.2m, 65° a 19.3m, 75° a 21.0m.					
	Throughout the section subhedral-euhedral single pyrite grains (< 1mm) and pyrite aggregate up to 3mm.					
	Sphalerite(?) mineralization occurs sporadically throughout the section, particularly in the highly deformed (turbidite?) section 17.9m - 18.8m. The sphalerite occurs as small (< 1mm) earthy medium dark reddish brown amorphous blebs or euhedral (cubic?) grains, either insolated or in association with the pyrite. The occasional bleb of ZnS is up to 3 - 4mm in diameter. Pyrite locally makes up 1 - 2% of the rock.					
	Samples				1	
	52371       16.7 - 17.8         52372       17.8 - 19.3         52373       19.3 - 20.7         52374       20.7 - 22.5	5 13 9 8	8 18 15 15	99 548 34 86	0.2 0.4 0.1 0.1	1.1 9.1 0.2 0.2
22.5 • 59.1	Phyllite, carbonaceous Consisting of dark gray to black soft argillaceous bands with generally less than 25% pale gray harder, siliceous interlaminae. (Note: occasionally the light laminae are soft and calcareous.) The unit is intensely deformed into minutely crenulated zones and occasional very tight drag folds 1 - 3dm in amplitude. Pyrite mineralization is ubiquitous as small disseminated subhedral-euhedral grains and clots up to 2 - 3mm in diameter. The pyrite also occurs as occasional narrow (2 - 5mm) replacement (?) beds conformable to the enclosing fold structures. Pyrite locally comprises up to 2 - 4% of the rock, but generally much less. Pyrhottite is locally common, particularly at about 30.8 meters.					
	Disseminated sphalerite, frequently with associated pyrite, is prevalent between 22.5m - 29.5m and appears to be preferentially deposited in the light gray siliceous beds which are frequently partially leached. This section contains occasional small blebs and narrow erratic discontinuous veins of white quartz, 23.3m - 23.5m is ~ 1/3 quartz, with small (4 - 5mm) irregular blebs of sphalerite - the sphalerite frequently occurs as a rim surrounding a core of pyrite. Estimated 0.5 - 2% Zn maximum, probably more sphalerite has been leached out of the rock than what remains.					
	Notes: 1. Axial planes of drag-folds $\Im$ 29.3m, 29.7m, and 31.2m are at 25° $\pm$ 5° to the core axis.					
	<ol> <li>Sphalerite mineralization in narrow siliceous irregular veinlets occasionally transects the original bedding, eg. between 26.5m - 27.3m where crumpled bedding is approximately parallel to the core axis.</li> </ol>					

#### ORILL HOLE RECORD: Lapointe Creek

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14 M

FOOTAGE				141 90		
FROM TO	DESCRIPTION	Cu	Pb	Zn	Ag	Cd
22.5 - 59.1	Continued					
	3. An open fold with axis @ 25.5m. Note progression of bedding to core axis angles: 75° - 80° @ 24.7m, "20° @ 25.2m, parallel to core @ 25.5m, "35° @ 25.8m, generally fairly flat (parallel to sub-parallel to the core to axis) through to 30.9m.					
	4. Typical geological sample of the highly distorted graphite argillite taken @ 39.8m for reference.					
	<ol> <li>A narrow Fe S rich and quartz veined leached zone @ 42.65 - 42.7 up - possibly traces of ZnS. (Start of Box 8)</li> </ol>					
	Samples					
	52375 22.5 - 23.6 1.1m	12	12	117	0.1	0.6
	52376 23.6 - 25.1 1.5m	17	17	295	0.1	3.2
	52377 25.1 - 26.5 1.4m	18	29	105	0.2	0.9
	52378 26.5 - 28.0 1.5m	22	20	56	0.1	0.2
	52379 28.0 - 29.5 1.5m	21	10	51	0.1	0.2
	52380 42.0 - 43.0 1.0m	61	111	1648	1.5	12.9
	6. The section from about 41.0 - 59.1m is mainly grayish-black with up to 5% pyrite in narrow (< 1mm) beds or as discrete recrystallized anhedral or subhedral clots and grains (< 0.5cm) and also associated with narrow (usually $\leq$ 1mm) siliceous veinlets. Section is more graphitic. Although strongly crenulated the predominant bedding to core axis angle is between 45 - 90° for the interval 40m - 59m flattening to < 45° near 59 meters.					
1	Samoles		1			
1	52381 43.0 - 43.9 0.9m	12	77	379	0.3	7.9
1	52382 43.9 - 45.6 1.7m	25	257	1564	0.5	9.9
	52383 45.6 - 47.2 1.6m	26	523	1706	1.0	10.2
ĺ	52384 47.2 - 48.7 1.5m	35	51	450	0.2	1.1
1	52385 48.7 - 50.3 1.6m	32	36	267	0.2	1.4
	52386 50.3 - 51.8 1.5m	42	14	128	0.1	0.9
	52387 51.8 - 53.3 1.5m	54	19	57	0.2	0.2
	52388 53.3 - 54.8 1.5m	36	16	63	0.1	0.2
1	52387 54.8 - 56.4 1.6m	34	13	49	0.1	0.7
l	5239U 56.4 - 57.9 1.5m	30	42	6/9	0.1	4.0
	JCJ41 J1.9 9 J4.4 1.3M		21	442	0.1	2.1
59.1 - 62.0	Conglomerate (Toby Creek ?) Fine grained pelitic matrix with sub-rounded pebbles and cobbles of white quartzite up to 4 cm in diameter. Rock is irregularly bedded with mainly very pale gray beds alternating with very fine light brown mica-rich beds. The unit has been intruded by several narrow (< 3cm) irregular quartz/muscovite veinlets. Gradational contact with overlying phyllite is a "30° to core axis.					
1	Samole	1   			1	
	52392 59.4 - 61.0 1.6 m	201	54	144	0.1	0.2
	52393 61.0 - 62.0 1.0 m	4	21	164	0.1	1.3
62.0 - 64.9         	Rhyo-dacite? (Reference: Petrographic description for surface grab sample #52757 from December 12, 1990 Geochemical Survey Report on the Lapointe Creek Property) Aphenitic very pale slightly lemonish gray groundmass with angular to sub-rounded small ( $\leq 2mm$ ) fragments of white quartz and feldspar (porphyritic texture). The upper contact ( $^{25^{\circ}}$ to core axis) shows no sign of chilling; porphyritic texture apparent right to the contact. The lower contact appears to have a narrow (1 - 2 cm) chill zone with contact at 25° to core axis. Note: a large (1 dm long) inclusion of conglomerate is at $^{62.4}$ meters. Very fine hair line fractures sub-parallel to the core axis (up to 30° to core axis). Locally contains fine grained galena mineralization					

#### DRILL HOLE RECORD: Lapointe Creek

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HOLE NO .: L-91-01

PAGE: 4

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FOOTAGE		$\vdash$	AI	ALYS	l s——	<del> </del>
FROM TO	DESCRIPTION	Cu	Pb	Zn	Ag	Cd
2.0 - 64.9	Continued					
	Texture indicates this could also be a quartz feldspar porphyry. To be consistent, it will be referred to as this throughout the balance of the report (MBB).					
	Sample					
	52394 62.0 - 63.5 1.5 m 52395 63.5 - 65.0 1.5 m	4	65 53	63	0.1	   0.   0
		-				
4.9 -127.8	Conglomerate (Toby Creek) Fine grained (pelitic) bedded with pebbles and cobbles of white quartz and pale gray quartzite. The bedding consists of white/light gray bands alternating with medium gray to black beds ("Zebra-rock"). Beds are thin (generally < 1 cm) attenuated and slightly to strongly contorted particularly around the included pebbles which are sub-angular to sub-rounded and up to 5 cm in diameter. Bedding appears to be mainly 0 60 - 70° to the core axis.					
	Sample					
	52396 65.0 - 66.5 1.5 m 52397 66.5 - 68.0 1.5 m	12 9	20 26	108 479	0.1 0.1	1.4   5.4
	Note: Fault? @ 67.5 - 67.6 with crushed rock rubble and granular gouge.					
	From approximately ??? the "zebra-rock" structure gives way to a more conglomeratic phase with pebbles/cobbles as before, contained in a generally more chaotic crudely bedded pale gray to light brown fine grained matrix. Medium to very coarse grained galena and/or sphalerite randomly occurs, associated with irregular quartz-filled fractures. Note: fracturing may be preferentially controlled by the more highly conglomeratic phases.					
	Samples					1
   	52398 87.9 - 89.4 1.5 m 52399 89.4 - 90.9 1.5 m	15	22 347	68 83	0.1	0.
	52400 90.9 - 92.4 1.5 m	7	99	30	0.4	0.
	52772 92.4 - 92.9 1.5 m	10	17	114	0.1	0.
	52773 93.9 - 95.4 1.5 m	5	89	62	0.4	0.
	52774 95.4 - 96.9 1.5 m	3	26	63	0.1	0.
1	52775 96.9 - 97.9 1.0 m	10	22	124	0.Z	1.
	52777 00 1 . 100 6 1 5 -	236	144	307	1.8	4.   0
1	52778 100.6 - 102.1 1.5 m	26 15	6 178	108	0.4 3.0	0.
	The lower section of the conglomerate (from ~115 - 125 meters) is increasingly silicified with a decreasing number and size of contained pebbles, mottled pale to medium gray and in places appears to be grading into a quartzite. Occasional barren, narrow veinlets and blebs of white quartz are present. This latter section exclusive of a rare pyrite, and rarer galena grain, is barren. An occasional sample was taken as a check on visual inspection.					
	Samples					
   	52779 109.8 - 111.3 1.5 m 52780 118.3 - 120.1 1.8 m	16 13	36 64	75 78	0.5 0.4	0. 0.
	Lower contact of the conglomerate and weakly defined bedding appears to be at <sup>-</sup> 80 <sup>0</sup> to the core axis. From 127.2 - 127.5 is an inclusion which appears to be a clastic melange of conglomerate and graphitic phyllite.					

#### DRILL HOLE RECORD: Lapointe Creek

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FOOTAGE			AI	ALYS	s	
FROM TO	DESCRIPTION	Cu	Pb	Zn	Ag	Cđ
127.8 -132.9	Phyllite graphitic dark grayish black similar to that previously described. Very little light colored banding. 1 - 2% fine grained pyrite in very thin (< 1 mm) conformable beds. Bedding strongly distorted; overall the typical gross bedding angle is very steep to the core axis. A second tectonic fabric superimposed on the original folding, locally imparts a vague foliation sub-parallel to the core axis. The contact with underlying rhyo-dacite is extremely irregular in outline and overall appears to sub- parallel the core axis. No evidence of a chill margin. No base-metal mineralization observed.					
	Samples					
	52781 129.5 - 131.0 1.5 m 52782 131.0 - 132.6 1.6 m	90 85	295 105	235 364	1.5 0.8	0.6 1.5
132.9 -141.9	Quartz Feldspar Porphyry Both contacts are irregular with no evidence of a chill margin, or baking of the graphitic phyllite. Rhyo-dacite may have been deposited sub-aqueously. Lithologic description of the rhyo-dacite is as before. Pyrite is ubiquitous as fine grained (< 0.5 mm) sub/euhedral disseminated grains. Several very fine fractures are coated with pyrite and lesser amounts of Po, Sphalerite, Galena and chalcocite? Minimum fractures are at 50° to the core axis, maximum fracture thickness usually with quartz fill, is <sup>-</sup> 2 mm. Minor to moderate Fe-oxide staining is present on numerous fractures.					
	Samples					
	52783       132.6 - 134.1       1.5 m         52784       134.1 - 135.6       1.5 m         52785       135.6 - 137.1       1.5 m         52786       137.1 - 138.7       1.6 m         52787       138.7 - 140.2       1.5 m         52788       140.2 - 141.9       1.7 m	18   6   13   13   7   7	148 258 442 207 260 209	167 625 595 239 204 143	0.8 1.0 1.7 0.8 0.6 0.8	0.7 3.6 4.0 1.6 1.4 0.7
  141.9 -153.6	Phyllite graphitic		1			
	Identical in lithology to the previous section 127.8 - 132.9. Minor fine grained pyrite mineralization throughout. No sphalerite clearly identifiable; occasional check sample taken. A tectonic foliation parallels to sub-parallels the core axis and parallels or is discordantly superimposed upon the original folded bedding.					
	Samples			1		
	52789       141.9 - 143.3       1.4 m         52790       143.3 - 144.8       1.5 m         52791       150.9 - 152.4       1.5 m         52792       152.4 - 153.6       1.2 m	36 33 37 45	11 9 2 8	195 216 158 97	0.1 0.1 0.1 0.2	0.5 0.2 0.2 0.5
153.6 -158.8	Quartz Feldspar Porphyry Lithology and mineralization as previously described. Cold contacts as before but very sharp. The contact @ 153.6 m is 68 <sup>0</sup> and @ 158.8 m is curvilinear phyllite.					
	Samples					
	52793153.6 - 155.41.8 m52794155.4 - 157.11.7 m52795157.1 - 158.81.7 m	22 9 15	373 479 218	271 799 255	1.3 1.0 0.4	2.6 5.9 1.9

DRILL HOLE RECORD: Lapointe Creek HOLE NO.: L-91-01

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F <b>00</b> 1	TAGE			AN	ALYS	s	
FROM	TO	DESCRIPTION	Cu	РЪ	Zn	Ag	Cd
158.8	-159.7	Phyllite, graphitic?					
		Medium dark bluish gray.		1			1
		Samples					
		52796 158.8 - 159.7 0.9 m	52	9	110	0.1	0.5
159.7	-165.4	Quartz Feldspar Porphyry		ĺ			
		Lithology and mineralization as previously described. Quartz veining and associated					!
		mineralization is more common with white quartz up to 2 cm thick. Also several weakly					
		mineralized micro-fractures. Contact a 159.7 is sharply defined, planar and 78° to					1
		Porphyritic texture uniform throughout.		1			
		Samples					
				(12)			
		52708 141 2 - 142 7 1 5 m	17	412	403	0.7	3.4
		$52700 \qquad 167.7 - 167.2 - 15 m$	1 2	2/7	788	0.2	0.9
		52800 $164.2 - 165.4 + 2 m$	0   20	177	200	0.4	
165 4	- 197 4	52000   (34.2 = 105.4   1.2 m)		116	72	0.5	1 0.1
10214		Dark grav to black, variably graphitic. Redding parallel to sub-parallel to locally					
		at steep angle to core axis. As before a later tectonic fabric sub-paralleling the	i   	l			/ 
		core is superimposed on the original crumeled bedding. Ninor fine grained ovrite is	; ;	i			· ·
		occasionally present but is relatively scarce compared to most of the previous sections.		1			1
		Minor Po present. Phyllite becoming increasingly lighter with depth.					
		Samples		 			
				-	404		
		52908 165.4 - 166.9 1.5 m	25	1	101	0.1	0.2
		52969 166.9 - 168.4 1.5 m	UC   	4	102	0.1	0.2
		Note: Occasional sample taken as check for mineralization considering the inclination and direction of the holes, and the assumed eastward dip of the units, the hole may have steepened considerably near the end and is basically paralleling the tectonic fabric. No acid tests were taken. This possible steepening of the hole should be kept in mind when doing the structural interpretation.					
		Samples					
		52970 170.7 - 172.2 1.5 m	321	7	91	0.1	i 1 0.2
		52971 178.3 - 179.8 1.5 m	37	21	76	0.1	0.2
		52972 184.4 - 185.9 1.5 m	66	51	73	0_1	0.2
		52973 190.5 - 192.0 1.5 m	10	6	471	0.1	0.2
	:						

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Core is stored at Bapty's farm near Cranbrook

# APPENDIX IV

# Geochemical Analysis and Assay Certificates

# <u>Index</u>

# Sample Number

Sample Number	Sample Type	<u>File Number</u>
D 83279 - D 83282 D 83283 - D 83286 B 52370 - B 52400 B 52772 - B 52800	Rock - Outcrop Mapping Rock - Outcrop Mapping Core Samples Core Samples	91 - 4721 91 - 4884 91 - 5214 91 - 5214 91 - 5279
B 52968 - B 52973 B 52974 - B 52977	Core Samples Core Samples	91 - 5279 91 - 5279

ן <b>רב</b> י									<u>Bap</u>	<u>oty</u>	<u>Re</u>	<u>sea</u> 901	arc Indu	h stri	<u>Lim</u> al Ro	ited ad #2,	<u> </u> Cra	l anbro	Fi] pok	le BC V	# 1C 4	91- 69	-47	721													T
SAMPLE	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppma	N1 ppm p	Co pm	Mn ppm	F∙ % (	As ppm	A U Aq mqq	u Ti mappi	h Sr nppm	Co	l Sb ippmi	B1 ppm ppr	/ C	C	Р % р	La C pm pp	r m	Mg B % pf	3a om	T 1 % PI	8 pm	A1 X	Na X	K X	W ppm	Au*' ppl	• Ci	u Pi X 7	ь Z %	Zn %o	Ag z/t oz	Au :/t	w s %
D 83279	9	19	6	20	. 1	26	3	225	1.48	4	5 h	D	1 3	.2	2 2	2	1.0	04 .00	04	2 2	2.	02	5.	01	2.	. 05	. 02	.02	1	;	7		-	-	-	-	-
D 83280	3	78 4	40700	6007	152.7	10	6	822	1.32	5	5 M	ID I	1 115	78.1	123	169	1 3.4	45 .00	3	2 1	01.	74 1	16.	01	2.	. 02	.01	.01	3	2	3	- 7.6	7.6	68 4	.35 .0	001.	01.0
D 83281	8	38	1119	215	2.3	5	2 12 12	127	7.09	16	5 1	0 1	5 15	.9	2	4	7.0	04.05	55 i \	25 1	5. 42	31 6	55. 19	01	2.	.87	.02	.20	1	، م	4 .			- 5	21 0	-	- 0
			ICP - THIS Assay - Sam	.50 LEAC REC IPLE	0 GRA H IS Ommen Type:	N SAM PARTI DED F Rock	PLE I Al fo Dr ro	IS DI DR MN DCK AI AU -	GESTE FES NDCO 10G	D WI GR CA DRE S GM RE	TH 31 P LI Sampli Gulai	AL 3 V CR Es 11 R Ass	•1-2 MG B ₹ CU SAY.	HCL- IA TI PB Z	hno3 b w in as J- n	H20 A AND L > 1%, A20,	T 95 IMITI AG Fus	ED FO Sten	.C F OR N PPP Cir	FOR O NA K 4 & A ~~Wys	AND U >	HOUR AL. 1000	AND AL D PF	DEN DEN DEN	DII TECI ≥	LUTI TIOI Sin-	ED T N LI - N	го 1 іміт Ін <sub>іч</sub>	O ML BY L J	I WI ICP	TH W IS :	ater. 3 ppn <i>QN</i>	i. 10 4	ysii	s h	7 I	cf.
DATE R	ECEI	VED	: :	EP 2	5 199	1 D	ATE	REI	PORT	с м)	AILE	D:	0	it	2/	91.	S	IGN	ED	BY.	Ċ	<u>.</u>	v	·	70.	. TOY	Æ,	C.L	EONG	i, J	.WANG	i; CEI	RTI	FIE	D B.C	. AS	SAYE
															/																						
ME ANA	LYTI	CAL	LAI	IOR <i>i</i>	TOR	es y F	LTD	ear	8 ch	152 Li	E. GE mit	HAS OCH	TIN IEM PR	GS ICI OJI	ST. AL/I	VAN ASSA LAF	COU VY 201	VER CEF	в. RT] E_]	.c. [ <b>fi</b> [ <u>fi</u> ]	V CA	6a Te <u>Ar</u>	1R6	Fi	) .1e	PI	10N # 9	<b>™</b> () 91	604 48	<b>1)2</b> 884	<del>53-</del> :	3158	3	PA	<b>x (6</b> 0	94):	253
ME ANA	LYTI ( Mo	CAL	LAI	IOR <i>I</i>	TOR Bapt	IES Y F	LTD .es:	• ear	8 <u>ch</u> 901 t	152 Li Indus	E. GE mit stria	HAS OCH ed Rot	TIN IEM PR d #2	GS ICI OJI , Cr Sr	ST. AL/ ECT anbro	VAN( A887 <u>LAF</u> pok BC sb B1	COUT Y VIC VIC	VER CEF NTE : 409	в. ?Т] <u>?</u>	.C. IFI Submi	V CA ST. tte	6 <b>A</b> TE AR d by:	1R <i>t</i> ; M.	Fi BAF	.1е рту	PI 2	10N # 9	91: Na	604 -48 -	B84	53-: 1 <sub>Cu</sub>	<b>3158</b> Рь	3	PA in Aş	<b>X (60</b>	••	253 <b>A</b> V S
ME ANA	LYTI Mo ppm	CAL Cu ppr	LAF 4 P n pp	10R7 1 b m 1	ATOR Bapt Zn Zn	Y F	<b>LTD</b> .856 i Co n ppm	Bar M	8 <u>ch</u> 901 [ m	152 Li Indus F• / X pr	E. GE mit stria	HAS OCI ed Ros Au ppm	TIN IEM PR ad #2 Th PPm F	GS IC7 OJI , Cr Sr Sr	ST. AL/ <u>ECT</u> anbro cd ppm	VANG ASSA LAF Dok BC Sb B1	COUT Y VIC VIC	VER CEF NTF : 4C9 / Ca	В. २ <b>Т</b> ] २ २	.C. [FI Submi P Lu % ppr	CA ST. tteo	6 <b>A</b> TE AR d by: r M	1R6 ; M. 19 8 % p;	Fi BAF	.]е РТҮ 11 Хр	PI 2	HOB 4 5 4 1 8	ПЕ ( 91 Na X	604 48 	B84	53-: 1 Cu X	3158 Рь х	3	<b>FA</b>	<b>X (6</b> 0 ,** Au	)4):  /t	253 A W X
ME ANA A SAMPLE# D 83283	LYTI Mo ppm 4	CAL, Cu ppr 28	<b>LAI</b> 4 P n PF 8 4707	1 1	<b>3apt</b> 2n 19 175	(ES y F Ag N Ag N Ag N	LTD .936 1 Co n ppm 2 1	• • • • • • • • • • • • • • • • • • • •	8 <u>Ch</u> 901 I m 5 . 8	152 1.1 Indus F• / X pr 56	E. GE mit stria	HAS OCH Ed Ros Au PPm ND	TIN IEM PRod #2 ad #2 Th ppm p	GS ICI OJI , Cr Sr Spm 9	ST. AL/ ECT cd ppm 16.2	VANG ASSA LAF Sok BC Sb B1 ppm ppn 26 338	COUT Y OI V1C	VER CEF : 4C9 / Ca 	B. RT] E S	.C. IFI Submi P La X ppr	V CA ST. ttec Cla Cla Cla 2 10	6A TE d by: m m	1R( ; M. 19 E % pp	Fi BAF 3. 1 3. 7.0	.le PTY 11 X P	PI B spm 2	An (14)	1 <b>E</b> (1 91 <u>×</u> .01	604 48 	1)2 884 v ppm 1	53-: 1 <u>Cu</u> × -	8158 Pb % 5.57	3 Z .0	<b>PA</b> (n Aş % oz	<b>X (60</b> <b>)**</b> Au t/t oz, .37 .00	)4);  /t 01 .0	253 <b>A</b> w s x 201.0
ME ANA SAMPLE#	LYTI Mo ppm 4 1	CAL Cu ppr 28 181	LAI 4 P 9 P 8 4707 3 173	<b>I</b> <b>I</b> <b>I</b> <b>I</b> <b>I</b> <b>I</b> <b>I</b> <b>I</b>	222 93	(ES .y F Ag N opm pp 0.6 1	LTD .ese i Co n ppm 2 1 0 15	ваг м рр 17: 104	8 <u>ch</u> 901 I m 5 .t	152 Li Indus F• / × pr 56 52 3	E. GE mit stria	HAS OCI Roc Ppm ND ND	TIN IEM PR ad #2 Th ppm p	GS IC2 OJI , Cr Sr Sr Spm 9 56 2	ST. AL/2 anbro cd ppm 16.2 28.7	VAN ABBA LAF Dok BC Sb B1 ppm ppn 26 338 128 9	COU Y VIC VIC	VER CEF : 4C9 / Ca 	B. <b>RT</b> ] <u>5</u> <u>6</u> 	C. <b>FEL</b> Submi P L X ppr 04 2 46 2	V CA ST. ttec c C n ppu	6A TE AR d by: r M m 0 .0 5 2.5	1R( ; M. 9 8 % pp 2 1 2	5 F1 BAF 3a T 7.0 28.0	.]е РТҮ 11 Хр	PI 8 99m 2 10	HON # 9 A1 %	DE ( 91: Na X.01	604 48 48 	884 W ppm 1 1	53-: 1 <u>cu</u> x	3158 Рь х 5.57 4.41	3 Z .0 2.2	<b>FA</b> (n Aş % 02	<b>X (60</b> y** Au z/t oz .37 .00 .84 .00	)4); /t 01 .( 01 .(	253: A V s x D1 .0 D1 .0
ME ANA SAMPLE# D 83283 D 83285 D 83285 D 83285	Ho ppm 4 1	CAL Cu ppr 28 181 5189 21561	LAF 4 P 9 4707 3173 9 420	IOR/ I b m 1 2 221 0 17 6 30	2n 19 175 22 93 72 35 14 180	Ag N Ag N pm pp 0.6 1 0.9 1 0.0 1	<b>LTD</b> <b>Co</b> <b>ppm</b> <b>2</b> 1 <b>1</b> 5 <b>2</b> 6 <b>1</b> 8	на пре м ре 17: 104 974( 1)86	8 <u>ch</u> 901 [ m 5 .: 6 18.3 6 18.3	152 Indus Fe / % pp 56 52 3 36 57 2	E. GE stria m ppm 2 5 11 9 5 5 3	HAS OCI ed Ror Ppm ND ND	TIN IEM PR d #2 Th ppm p	GS IC7 OJI , Cr Sr Spm 9 56 2 18 23	ST. AL/2 Canbro cd ppm 16.2 28.7 9.7 21.4	VANG <u>LAF</u> <u>500k BC</u> <u>50 81</u> <u>26 338</u> <u>128 9</u> <u>50 14</u> <u>50 14</u>	COUT Y VIC VIC VIC	VER CEF 14C9 1	B. RT] S	.C. <b>FEL</b> Submi P Lu * ppr 04 2 46 2 08 2	V CA ST tted C C C C C C C C C C C C C C C C C C C	6A TE <u>AR</u> d bγ; r M m 0 .0 5 2.5 2 2.3 2 2.7	1R6 ; M. /9 8 % pr 2 1 2 0 19 6 5	5 F1 BAF 7 .0 88 .0 96 .0 96 .0	.]е рту хр ој ој	PI 8 99m 2 10 4 4	A1 * .03 .13 .24 .10	<b>RE (</b> 91 - .01 .01 .01	604 -4{ х .01 .08 .15	1)2 884 wppm 1 1 1	53-: 1 Cu X - .46 2.44	Pb x 5.57 4.41 .60 2.65	3 7 .0 2.2 .2	<b>FA</b> (n Aş 2 02 01 4. 27 2. 21 1.	<b>X (60</b> <b>y**</b> Au z/t oz .37 .00 .84 .00 .16 .00 .97 .00	)4): /t 01 .0 02 .0 05 .0	253 A v s z 01.0 01.0 01.0
ME ANA SAMPLE# D 83283 D 83284 D 83285 D 83286 RE D 8328	LYTI Mo ppm 4 1 1 3 4	CAL, Cu ppr 28 1819 21561 28	LAI A P PF 3 4707 3 173 420 2025 3 4724	IORF b m 1 1 2 221 0 17 6 39 8	Zn 2n 19 175 22 93 72 35 14 185 17 180	(ES y R Ag N pm pp 0.6 1 0.9 1 0.0 1 0.9 1 0.7 1	<b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b>	м рен 17: 104 974( 1186 11)	<b>Ch</b> 901 I 5 . 5 4 7.5 6 18.3 1 24.5 6 . 5	<b>Li</b> Indus Fe // % pr 56 52 3 36 57 2 53	E. GE mit stria 2 5 1 9 5 5 2 5	HAS OCF ed Ror PPM ND ND ND ND ND	TIN PR d #2 Th ppm p 1 1 2 1 1	GS IC2 OJH , Cr Sr Spm 9 58 2 18 23 9	ST. AL/: anbro Cd ppm 16.2 28.7 9.7 21.4 15.9	VANG AB87 LAF Dok BC Sb B1 ppm ppn 26 338 128 9 50 14 27 35 27 341	COU VIC VIC VIC VIC 1 1 1 1 1 1 1 1 1 1	VER CEF 2 4C9 7 Ca 1 0.7 1 6.59 1 .57 1 .84 1 .03	B. RTJ 5 	. C . <b>FFI</b> . Submi P Lu X ppr 04 4 46 - 08 - 04 - 0	CA ST. ttee CI n ppu	6A TE d by: r M m 0 .0 5 2.5 2 2.3 2 2.7 9 .0	1 R 6 ; M. ; M. 2 1 2 0 19 6 5 1	F1 BAF 7.0 7.0 66.0 7.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1	PI 8 99m 2 10 4 4 2	A1 * .03 .13 .24 .10 .02	<b>B</b> (1 91 .01 .01 .01	604 4{ x .01 .08 .15 .05	B84 w ppm 1 1 1 1 1 1	53-: 1 cu x - .46 2.44 .01	Pb x 5.57 4.41 .60 2.65 5.79	3 2 2.2 .2 .5 .0	FA	X (60 x	)4); /t 01 .0 02 .0 05 .0 01 .0	253 <b>A</b> <b>V</b> <b>S</b> <b>X</b> <b>D</b> <b>1</b> .0 <b>D</b> <b>1</b> .0 <b>D1</b> .0 <b>D</b>

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ACME ANALY	TICA	L LA	BOR	ATOR	IES	LTD	•	8	52 E	. на	STIN	IGS	ST.	VAN	couv	/ER )	B.C.	V	5 <b>a</b> 1)	R6	P	HONE	\$(60	4)25	3-31	158	FAX	(604	1)253	-17	16
AA									GI	EOCI	iemi	[CA]	l ai	VAL	¥818	8 C)	2RTI	[FI(	CATE	3											
TT			Baj	<u>pty</u>	Res	<u>sea</u> )	<u>cch</u>	Li	<u>mit</u> e	<u>ed I</u> 901	<u>PROJ</u> I Indu	IEC' Istri	<u>r L</u> al Ro	1 <u>P0</u> ad #2	<u>INT</u> , Crai	TE1	STA	<u>AR</u> (10 4)	Fil C9	.e #	91	-52	14	Pa	age	1				ÉĽ	
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	N i ppm	Co ppn	Mn ppm	Fe X	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	8i ppm	V ppm	Ca X	P X	La ppm	Cr ppm	Mg X	8a ppm	Ti X	B ppm	Al X	Na X	K X I	V V ppna (	lu* ppb
B 52370 B 52371 B 52372 B 52373 B 52374	1 1 1 1	30 5 13 9 8	7 8 18 15 15	188 99 548 34 86	.1 .2 .4 .1 .1	41 7 17 10 11	17 4 8 6 6	536 141 193 180 251	3.44 .90 1.79 1.44 1.55	26 21 39 33 33	5 5 5 5 5	nd Nd Nd Nd	8 3 6 4 3	161 775 166 819 543	1.0 1.1 9.1 .2 .2	2 3 4 2 7	2 2 2 2 2	3 1 3 2 2	14.45 33.57 18.42 26.51 23.67	.061 .063 .045 .036 .144	13 6 20 10 8	8 6 4 6 10	.31 .44 .13 .56 1.99	20 7 24 15 16	.01 .01 .01 .01 .01	3 2 2 2 3	.34 .08 .23 .15 .19	.01 .01 .01 .01 .01	.03 .01 .04 .03 .03	1 1 2 1 1	6 3 3 5 2
B 52375 B 52376 B 52377 B 52378 B 52379	3 2 3 1 2	12 17 18 22 21	12 17 29 20 10	117 295 105 56 51	,1 .1 .2 .1 .1	16 18 19 20 21	8 9 9 9 12	141 197 204 157 338	1.65 1.85 2.10 2.98 2.76	44 32 31 33 14	5 5 5 5 5	ND ND ND ND	4 5 5 3 4	45 29 40 22 102	.6 3.2 .9 .2	3 2 2 2 2	2 2 2 2 2	2 2 3 2 2	1.95 1.92 1.77 .37 2.82	.014 .012 .012 .012 .013 .017	11 15 13 9 6	20 6 21 4 8	.07 .09 .40 .21 .86	19 22 20 12 17	.01 .01 .01 .01 .01	2 2 3 2 2	.20 .20 .23 .14 .22	.01 .01 .01 .01 .01	.05 .05 .06 .05 .06	1	1 2 4 6 2
B 52380 B 52381 B 52382 B 52383 B 52384	2 2 3 2	61 12 25 26 35	111 77 257 523 51	1648 379 1564 1706 450	1.5 .3 .5 1.0 .2	23 17 23 23 29	13 9 14 12 15	397 581 448 554 586	3.47 3.62 3.21 3.30 3.55	71 42 34 20 4	5 5 5 5 5	ND ND ND ND ND	4 3 4 3 3	79 245 153 202 67	12.9 7.9 9.9 10.2 1.1	2 2 2 2 2	3 2 2 2 2	2 4 2 2 2	2.26 8.03 4.67 6.92 1.69	.011 .141 .016 .039 .016	4 3 3 2 6	12 9 7 19 8	.95 2.96 .97 1.61 .85	17 22 19 17 16	.01 .01 .01 .01 .01	2 5 2 2 2	. 15 .33 .23 .33 .37	.01 .01 .01 .01 .01	.04 .08 .06 .05 .06	3 1 5 1	1 2 1 2 2
B 52385 B 52386 B 52387 B 52388 B 52388 B 52389	3 4 3 2 2	32 42 54 36 34	36 14 19 16 13	267 128 57 63 49	.2 .1 .2 .1 .1	34 39 34 29 26	17 19 20 14 15	473 363 441 424 590	3.32 3.76 3.82 3.11 3.39	10 5 11 6 7	5 5 5 5 5	nd Nd Nd Nd Nd	4 3 3 3 1	43 22 28 40 67	1.4 .9 .2 .2 .7	2 2 2 2 2	2 2 2 2 2	3 3 2 3 2	1.00 .48 .65 .94 1.79	.017 .014 .016 .013 .036	10 13 10 11 8	6 11 6 7 6	.51 .38 .46 .71 1.02	19 21 17 24 21	.01 .01 .01 .01 .01	2 2 2 2 2	.28 .28 .21 .40 .24	.01 .01 .01 .01 .01	.09 .11 .06 .12 .09	1	3 1 3 3 2
B 52390 B 52391 B 52392 B 52393 B 52393 B 52394	1 5 3 1	30 70 20 4 4	42 21 54 21 65	679 442 144 164 63	.1 .1 .1 .1	25 34 16 10 3	13 17 8 6 1	1767 687 606 562 513	3.96 4.06 2.58 2.17 .25	40 5 9 7 2	5 5 5 15	ND ND ND ND ND	1 2 1 1 19	173 56 271 325 32	4.0 3.1 .2 1.3 .2	2 2 2 2 2	2 2 2 2 2	2 3 18 11 1	5.85 1.70 9.41 12.92 .98	,119 ,024 ,012 ,014 ,010	3 7 3 4 7	7 6 16 6 5	2.50 .92 4.74 6.23 .44	18 26 21 24 12	.01 .01 .02 .02 .01	2 2 2 2 2	.24 .25 .84 .70 .20	.01 .01 .01 .01 .03	.06 .09 .19 .19 .09	1	1 4 3 8 1
B 52395 B 52396 B 52397 B 52398 B 52399	1 1 1 1	2 12 9 15 16	53 20 26 22 347	46 108 479 68 83	.2 .1 .1 .1 1.9	1 13 12 12 10	1 7 8 5 7	615 550 492 639 767	.21 1.76 2.36 1.60 1.60	2 8 7 4 10	20 5 5 5 5	nd Nd Nd Nd Nd	23 1 1 1	22 235 159 173 141	.2 1.4 5.4 .2 .7	3 2 2 2 2	2 2 2 3	1 8 11 8 5	.76 13.85 9.27 15.79 16.78	.010 .014 .019 .013 .015	10 4 3 4 4	3 9 8 8 4	.16 5.71 4.33 6.31 6.42	12 32 42 37 24	.01 .03 .04 .01 .01	3 2 2 2 2	.19 .53 .65 .36 .18	.03 .01 .01 .01 .01	.06 .13 .20 .06 .03	1 1 1 3	2 2 3 1 2
B 52400 B 52772 B 52773 B 52774 B 52775	1 1 1 1	7 10 5 3 10	99 17 89 26 22	30 114 62 63 124	.4 .1 .4 .1 .2	9 17 16 15 12	5 8 6 7 5	679 649 796 805 626	1.54 1.80 1.86 1.87 1.59	8 8 10 8 9	5 5 5 5 5	ND ND ND ND ND	1 1 1 1	145 117 169 174 198	.2 .2 .2 .2 .2 1.8	2 2 2 2 2	2 2 2 2 2	5 10 6 4	16.96 14.93 18.01 19.79 13.26	.014 .012 .011 .009 .007	4 6 6	6 10 7 4 3	6.47 5.73 7.17 8.10 5.50	13 32 30 24 22	.01 .03 .01 .01 .01	2 7 2 3 2	.14 .54 .30 .24 .18	.01 .01 .01 .01 .01	.02 .10 .05 .04 .04	2 1 2 2 1	3 3 1 1 1
RE B 52772 B 52776 Standard C/AU-R	1 1 20	11 236 59	9 144 37	108 307 133	.1 1.8 7.4	13 17 71	6 10 33	517 911 1063	1.81 2.21 3.94	6 11 42	5 5 17	ND ND 6	1 1 38	107 161 51	.7 4.4 17.0	2 2 16	2 2 21	8 4 59	11.12 13.62 .50	.011 .015 .090	4 4 37	6 4 60	5.03 4.53 .88	28 24 178	.02 .01 .09	2 2 36 1	.48 .13 .90	.01 .01 .06	.14 .03 .16	1 4	2 1 460
		ICP THIS ASSA - SA	50 LEAC Y REC MPLE	0 GRA H IS OMMEN TYPE:	M SAMI PARTI/ IDED F( CORE	PLE I AL FO OR RO	S DIGE R MN F CK ANE AU* AI	ESTED FE SR COR NALYS	WITH CA P E SAM Is by	3ML 3 LA CF PLES 1 ACID	3-1-2 R MG E IF CU LEACH	HCL- BA TI PB Z I/AA	HNO3- BW NAS FROM	H2O A AND L > 1%, 10 GM	T 95 Imitei Ag > Sampi	DEG. ( D FOR 30 PI LE. (	C FOR NA K PM & A Sampte	ONE AND U 2	HOUR / AL. 1900 F sinnir	ND IS NU DET PB ng (RE	DILU) ECTIO <u>'are</u>	red t i Lim dupl	O 10 IT BY <u>icate</u>	ML WIT ICP 1 sampl	'H WA' S 3   <u>C\$-</u>	TER. PPM.					
DATE RECE	SIVE	Dı	OCT 2	3 199	מ וי	ATE	REPO	DRT	MAI	LED:	$\mathcal{O}$	U	28	91.	81	GNEI	D BY			العود	D.TOY	E, C	.LEON	G, J.W	ANG;	CERTI	FIED	B.C.	ASSAYE	RS	

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ACRE AMALYTICAL			Baj	pty	Re	Sea	rch	Limited			PROJ	JEC	r Li	LAPOINT		TELSTAR			FILE # 9			91-5214				'Page 2					
SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	۷	Ca	P	La	Cr	Mg	Ba	Ti	B	AL	Na	ĸ	W	Au*
	- ppm	phii	phu	ppiii	Мин	phu	ppu	ppii	^	. Hhuii	ppm	ppiii	ppii	hhm	Рри	ppii	ppin	ppm	<u>^ 0</u>		ppa	ppm		ppm	<u>- 2000 👧 - 2000</u>	ppm			<b>A</b>	ppm	ppb
B 52777	1	26	6	49	.4	16	6	604	1.86	3	5	ND	1	108	.2	2	2	5	12.32	012	3	1	5.81	24	.01	2	.40	.01	.33	1	2
8 52778	1	15	178	108	3.0	16	8	778	2.32	8	5	ND	1	137	.2	2	8	5	14.73	023	2	4	6.50	20	.01	2	.30	.01	.22		7
8 52779	1	16	36	75	.5	13	9	822	1.67	8	5	ND	1	185	.6	2	2	3	16.23	009	3	1	7.07	18	.01	2	.15	.01	.10	2	4
B 52780	1	13	64	78	.4	18	10	695	1.90	10	5	ND	4	192	.5	2	2	3	9.44	032	5	2	4.11	54	.01	2	.28	.01	. 18	5 Ť.	3
8 52781	5	90	295	235	1.5	48	26	218	4.22	2	5	ND	14	7	.6	2	2	3	.28	038	5	12	.68	20	.01	2	.40	.01	. 18	<u>i</u>	6
B 52782	6	85	105	364	.8	43	21	270	3.89	2	5	ND	13	6	1.5	2	3	3	.22 .	043	7	10	.56	34	.01	3	.42	.01	.27	1	5
B 52783	3	18	148	167	.8	8	- 4	800	1.02	2	16	ND	21	54	.7	2	2	1	.94	017	6	4	. 14	35	.01	2	.25	.02	.17	880 <b>i</b> -	2
B 52784	2	6	258	625	1.0	2	1	1053	.51	4	15	ND	22	65	3.6	2	2	1	1.09	015	5	12	.04	38	.01	4	.21	.03	. 15	8 <b>1</b> -	1
RE B 52788	1	7	190	142	.6	1	1	698	.45	2	9	ND	24	16	.6	2	2	1	. 29 💲	015	8	1	.03	35	.01	2	.23	.03	.14	8 i.	3
B 52785	1	13	442	595	1,7	2	1	1115	.66	2	16	ND	23	74	4.0	2	3	1	1.25 ,	013	8	2	.03	41	,01	3	.23	.02	.17	1	5
B 52786	1	13	207	239	.8	1	1	855	.60	3	13	ND	24	71	1.6	2	2	1	1.08 .	014	9	1	.07	38	.01	2	.23	.03	.17	1	3
B 52787	1	7	260	204	.6	2	1	789	.51	2	12	ND	25	59	1.4	2	2	1	.78 🕴	013	10	2	.04	36	.01	3	.22	.03	.17	÷.	3
B 52788	1	7	209	143	. 8	1	1	726	.48	2	10	ND	25	16	.7	2	2	1	.30 🖇	016	9	1	.04	: 36	.01	2	.24	.03	.15		1
B 52789	3	36	11	195		27	14	354	2.98	27	5	NÐ	13	5	,5	2	2	6	11 ŝ	033	18	14	.42	43	.05	2	.87	.01	.46	1	1
B 52790	2	33	9	216	•1	28	14	392	3.28	49	5	ND	11	9	.2	2	2	8	.30	030	14	19	.17	30	.04	2	1.30	.01	.26	1	1
B 52791	2	37	2	158	.1	32	17	299	2.54	29	5	ND	14	4	.2	2	2	8	. 10	032	16	17	.52	59	,07	2	.98	.01	.51	1	1
B 52792	2	45	8	97	.2	38	16	406	2.85	3	5	ND	14	18	.5	2	2	5	.24 🖁	045	13	7	.27	78	.05	4	.63	.01	.53	ŝŝ (	3
B 52793	1	22	373	271	1.3	4	2	640	1.14	- 4	12	ND	23	70	2.6	2	2	1	.92	017	8	3	.03	40	.01	2	.17	.02	.13	1	3
B 52794	1	9	479	799	1.0	1	1	1310	.91	20	10	ND	22	101	5.9	2	2	1	1.30	018	10	1	.04	49	.01	2	.21	.02	.16	8 <b>t</b>	1
STANDARD C/AU-R	20	58	40	131	7.5	70	33	1044	3.92	37	15	6	36	47	18.1	16	20	54	.49	088	36	59	.87	174	.09	32	1.87	.06	.14	11	450

Sample type: CORE. Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-171														1716																
									G	eoci	iem:	ICA	l ai	NAL	¥81	8 C)	BRT]	[FIC	CAT	E									A	A
				Ba	oty	Re	seal	rch	Liı	nite	be	PRO	JEC	с г	APO	INT	TEI	LSTZ	١R	Fi	le #	91	1-52	279						
										90	1 Ind	ustri	al Ro	ad #2	, Cra	nbrool	C BC \	V1C 40	9											
SAMPLE#	Mo	Cu	Pb	Zn	PA	NÍ	Co	Mn	Fe	As	U	Au	Th	۶r	Cd	Sb	Bi	v	Ca	P	La	Cr	Mg	Ba	TI	8	AL	Na	ĸv	Au*
	ppm	ppm	ppm	ppn	ppm	ppm	ppm	ppm	*	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	<b>X</b>	X	ppm	ppm	<u>×</u>	ppm	*	ppm	<b>X</b>	X	X ppm	ppb
B 52795	1	15	218	255	.4	4	1	982	.82	13	13	ND	23	77	1.9	2	2	1	.98	.018	13	2	.02	66	.01	3	.22	.03	.14 1	8
B 52796	1	52	9	110	.1	36	15	323	3.05	2	5	ND	10	34	.5	2	2	4	.32	.022	16	11	.29	77	.02	3	.51	.01	.39 1	5
8 52797	1	17	412	463	.7	6	3	831	.93	3	9	ND	20	78	3.4	2	2	1	1.01	.022	10	1	.02	68	.01	2	.26	.02	. 19 1	9
B 52799	1	8	247	388	.4	3	1	843	.91	11	10	NÐ	18	84	3.1	2	2	1	1.00	.021	9	1	.03	62	.01	2	.22	.03	. 15 🔅 1	6
8 52800	2	29	172	92	.5	4	1	642	.74	3	9	ND	21	82	.7	3	2	1	.83	.022	14	16	.04	78	.01	2	.22	.04	.16 1	6
8 52968	3	25	3	101	.1	32	14	290	3.20	17	5	ND	14	13	,2	2	2	12	.25	,030	16	16	.64	128	. 15	2 1	1.35	.01	1.10 1	4
8 52969	1	30	4	102	88 <b>4</b>	29	16	369	3.21	77	5	ND	11	15	.2	2	2	9	.41	.034	13	15	.66	87	.09	2 1	1.18	.01	.63 1	2
<b>B 52970</b>	1	32	3	91	831.	36	11	173	2.92	37	5	ND	14	3	.2	2	2	7	.07	.019	17	17	.54	49	.05	2 1	1.09	.01	.22 1	4
8 52971	1	37	2	74	<b>\$</b> 1	24	19	165	3.10	115	5	ND	11	3	.2	2	2	6	.09	.030	13	15	.65	47	.03	2 1	1.23	.01	. 17 💮 1	6
8 52972	1	66	5	73	.1	34	17	179	3.57	26	5	ND	12	3	.2	2	2	7	.08	.030	15	16	.69	82	.03	2 1	1.34	.01	.24 1	6
в 52973	1	10	6	47	<b>1</b>	16	11	328	2.04	43	5	ND	14	7	2	2	2	8	.21	.018	24	19	.77	157	.06	2 1	.25	.01	.53 1	8
B 52974	1	20	2	47		25	10	188	3.10	6	5	ND	3	52	2	2	2	2	1.08	.019	6	8	.62	27	.01	2	.33	.01	.18 1	1
RE B 52971	1	43	3	73	S.C.	24	19	167	3.28	118	5	ND	12	3	.2	2	2	6	.09	.031	14	16	.66	51	.03	2 1	.26	.01	.18 1	5
8 52975	1	24	12	31		24	10	176	2.99	8	5	ND	4	74	.2	ž	2	2	1.72	.018	4	6	.63	19	.01	2	.23	.01	.15 1	4
B 52977	1	5	104	123	.2	3	1	704	.91	22	9	ND	17	99	.9	2	2	1	.95	,020	7	12	.06	53	.01	3	.20	.03	.14 1	4
STANDARD C/AU-R	17	58	42	133	7.3	70	32	1049	4.02	42	17	6	36	53	18.4	15	18	54	.51	.092	37	59	.88	186	.09	33 1	.91	.06	. 15 13	480

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. <u>Samples beginging 'RE' are duplicate samples</u>.

## APPENDIX V

Historical Information

- A. Physical Development
- B. Humboldt Claim

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l ar r A. <u>Physical Development</u> (see Figure 2, page 6, and Figure 5)

 The property hosts two vertical shafts, one located at 125N, 50E, and one at 2100S, 300E on the geochemical grid. No records exist on either working so it is assumed that the low grades provided insufficient encouragement for the early prospectors, and the work was eventually abandoned and forgotten.

A third inclined shaft was driven on the Humboldt claim - a crown grant (M.L. 2015) located within the claim block but under different ownership - which did intersect ore grades and widths (see next section).

- 2. At least 1 short tunnel was driven into the Toby conglomerate, at position 30W, 170E. No records exist on the history. The best mineralization is hosted in a 50cm quartz vein within the tunnel (B 83283; 5.5% Pb, 4.37 oz/ton Ag), but it is also observed as disseminated blebs within the conglomerate (also see outcrop at 1060S, 100E, B 83284; 4.41% Pb, 2.27% Zn, 2.84 oz/ton Ag).
- 3. Several other claims were crown granted in the area of the Humboldt (M.L. 3268) and south of the Hi, Ex, and Po L.C.P.'s (M.L. 3637, 3638), and from their shape it is concluded that they were located to fill in around prior claims.

All the prior crown grants with the exception of the Humboldt (M.L. 2015) and the Sailor Boy (M.L. 2016) have been returned to the crown, and are now included within the Telstar holdings.

These lots are all likely to have workings of some sort (trenches, adits), but they have not been systematically examined.

Rice, in his 1944 Paper, refers to the Humboldt and describes some of the showings on this and adjoining claims.

He notes two small trenches 1700 feet apart, and a short cross cut adit located about 1000 feet southwest of an open cut #1. Mineralization consists of quartz veins carrying galena, sphalerite, chalcopyrite, pyrite, and stannite ( $Cu_2FeSnS_4$ , assaying up to 1.5% Sn. Note: Dana describes this as a rare mineral, usually associated with cassiterite).

Rice describes the mineralization as related to the nearby granitic porphyrys, with the veins being conformable with the stratigraphy.

B. <u>Humboldt Claim</u> (see Figure 5)

No mapping of claim boundaries, geology or workings have been carried out west of the Rose Pass. The references noted to position the incline are the elevation at 1400M (4600 feet), and its position at approximately 60m (200 feet) south of a northwesterly flowing creek.

The property was staked about the turn of the century to cover surface outcrop of a high grade lens of lead/silver ore. Underground development followed, and consists of an adit with a short raise and an inclined shaft (subsequently flooded), totalling about 80 meters.

#### Subsequent Work

B.C. Ministry of Mines Reports refers to work carried out on the Humboldt and adjoining claims by Rose Pass Mines Ltd. of Calgary, Alberta.

# YearActivity1969Road building, drilling and trenching1970Road building, trenching, drilling1971Drilling1972Drilling1973Drilling and surface geological mapping

No reports are on record with the assessment files.

The Humboldt and Sailor Boy are presently held in a company named Briar Investments Ltd., of Calgary, a private holding company controlled by the Wade family.





Graphitic Phyllite ?? FORMATION -HORSETHIEF CREEK(?) Limestone pale med. gray to bluish gray laminated to very thin banded Mainly recrystallized w/fine-grained sugary texture Phyllite Turbidites? Stamp structures, rip-up clasts, Pale to medium grey, sine grained, dull to glossy Falcose schist. 1900 m -75-85° Limestone: Generally med. gray, banded with local crenulated sections, Turbidite section 21 6 - 225. Pyritic (locally - 2%) throughout, with weak, sporodic In 5 min. 15 0 atz in -== Phyllite Primarily dk.gray to blk. soft argillaceous N/ 2 25% Dale gry Ford Axis + 1 siliceous Interlaminae, all highly deformed into crenulated or tightly drag folded zones. Pyritic throughout W Po after 30.8 m. common. Dissem. Ins, Fregently w/assa. Py preferentially 25 deposited in light gray siliceous beds; sphalerite mings strongest between 22.5-29.5m ?# 1/2 Ofz between 23.2 - 23.5 m. Grayist-block Phyllites # 25% Py in narrow (cimm) beds, as discrete recry stallized on hedval - an hedval e lats and grains (22.5 cm), and assoc. W/ narrow ( = Imm) siliceous Veinlets More graphitic than previous section 50m strongly crenulated with gross bedding angles mainly 45° - 90° To the care AKIS, Flattening to = 45° near 59 metres. - Gradutional contact @ 30° to 59 m' Core Axis. Conglomerate has F. grn. Matrix w/ white gtz/gtzite peobles & cobbies Rhyo Docite see next section for description Contacts@ 25° to care Axis Fine grn. PbS. Minzn. · + FAULT : I dom of crushed rock and gouge Bedding 60° To to core Axis 100m GILICIFIED QUARTZITIC 80°---ZONE Phyllite, dk. grayish - black. graphitic 1-2% F. grn. Py in Very thin (21 mm) conformable beds. strongly distorted bedding Bhyo dacite Aphanitic, Very pale lemonish-grey ground mass w/ angular to sub-rounded, small((2 2 mm) fragments of whiter Qtz. & Feldspar (Porphyritic texture) Both contacts highly irregular. No chill margin. Sub-aqueous Tuff deposit ? Fine fractures coated w/ Py, Po, Sphal., Gol. Anyllite graphitic, identical to previous section. F2 foliation, Parallel to sub-parallel the core Axis, superimposed on original folded bedding. 150 m to Gre Axis Rhyo-dacite. Lithology and mineralization as in previous Section = + Phyllite : med. dk. bluish gray Rhyo-dacite : As above. Qtz verning and assoc. min. is more common upper contact @ 78° to Core Axis. 78°-Phyllite is structually similar to the previous Phyllite section Dark gray to black and slightly graphitic near top and becoming increasingly lighter with depth Very minor Py /Po minzn. 111111111 197.4 m Y

