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REPORT
ON THE PHASE II
EXPLORATION PROGRAM

ON

THE DARLIN CLAIMS
ST MARY'S LAKE AREA, KIMBERLEY
BRITISH COLUMBIA

Fort Steele Mining Division
NTS 82 F/9E

Latitude 49 deg. 35'
Longitude 116 deg. 08'

for

Chapleau Resources Ltd.
Ste 605 - 375 Howe St.
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V6B 1N2

Barkhor Resources Inc.
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by

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December, 1991

DARLIN - STEPHENSON

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1.0 SUMMARY

This report summarizes the Phase II work done on the 68 two post Darlin Claims in the Fort Steele Mining Division, 12 kilometres south of Cominco's Sullivan Mine at Kimberley, British Columbia by Kokanee Explorations Ltd. on behalf of Barkhor Resources Inc. and Chapleau Resources Ltd.

Although the base metal discoveries which lead to the commencement of mining at the Sullivan mine were located in the latter part of the 19th Century, little work has been recorded on the area of these claims 12 kilometres to the south. Some regional work had identified favourable stratigraphy and showings during previous exploration periods. Kokanee explored the property and Chapleau and Barkhor carried out a Phase I drill program in 1991.

The claims lie within the central portion of the Purcell Anticlinorium, which consists of sedimentary argillites and quartzites and related intrusions of gabbro sills and dikes of the Middle and Lower Aldridge formations. The Pre-Cambrian Hellroaring Stock intrudes this rock assemblage to the southwest of the property and a major structural break (St. Mary's Fault) has juxtaposed younger Pre-Cambrian to this rock formation to the south of the property.

A core drill program of over 4,500 feet in 7 holes confirmed the sulphides found over 70 - 100 metres of stratigraphy in Phase I and continued to add to the geologic data base. This stratigraphy is a continuation of those found in outcrop 1 kilometre along strike off the property to the east and continuing for over 6 kilometres of strike length and down dip on this property. They are related to the geochemical and geophysical anomalies. Lines of UTEM geophysical surveying identified were conducted over the northern part of the property. Numerous stratigraphic anomalies related to sulphides were outlined. The mineralization encountered was found in discreet beds varying from 10 cm to over 1 metre in thickness consisting mainly of pyrrhotite occurrences of galena and sphalerite and minor chalcopyrite.

The following conclusions can be made. A significant amount of bedded sulphide layers can be found on the Darlin Property with base metals and thicknesses that suggests a nearby source. The stratigraphy and geologic environment is similar to that which hosts the nearby Sedex type Sullivan deposit with additional untested zones and targets along strike and at depth.

It is my recommendation that a Third phase of the exploration be proceeded with to continue the evaluation of the property. A program of geological exploration and drilling is recommended with a total expenditure of \$400,000.

2.0 INTRODUCTION

This report summarizes the Phase II work done on the Darlin Claims in the Fort Steele Mining Division, 12 kilometres south of Cominco's Sullivan Mine at Kimberley, British Columbia. The work, following the recommendations in the Summary Report on Phase I, by this author, involved geophysics, and core drilling during the Month of November 1991. Current work is being carried out by Kokanee Explorations Ltd. on behalf of Barkhor Resources Inc. who are earning a 50% joint venture interest in the claims from Chapleau Resources Ltd. Kokanee Explorations Ltd. has provided expertise and operatorship to initially develop the property and in that regard retains a 60% back in right by providing senior financing.

This report reviews all the available data to guide the continuing exploration program.

3.0 LOCATION, CLAIMS AND ACCESS

The property, between 1,000 and 2,000 metres A. S.L. is located south of the St Mary's River in south eastern British Columbia. Access is readily available off well maintained logging roads, which leads to Kimberley, British Columbia (Map 1).

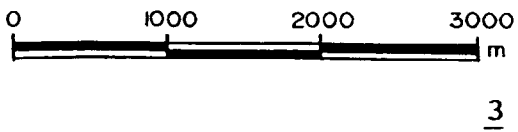
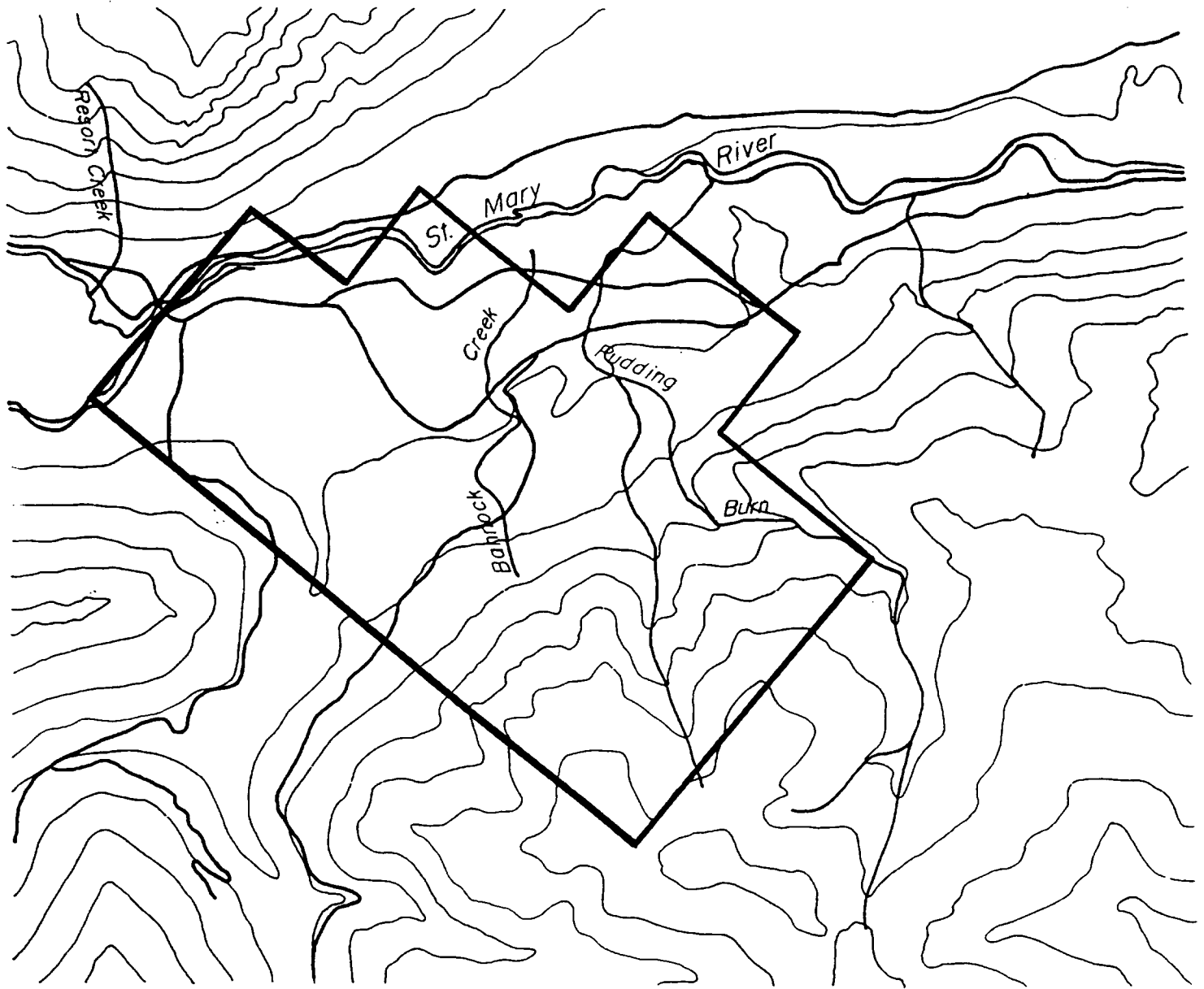
The property consists of 68 two post claims (Darlin 1 -68) staked by local prospectors and optioned to Chapleau Resources Ltd. All claims are in good standing according to the regulatory statutes. These claims are listed in Appendix I outlined on Map 1.

4.0 PREVIOUS WORK

Although the base metal discoveries which lead to the commencement of mining at the Sullivan mine were located in the latter part of the 19th Century, little work has been recorded on the area of these claims 12 kilometres to the south.

Some regional work had identified favourable stratigraphy north and west of the claims during previous exploration periods. Some drilling was reported in these areas by Cominco in the late 1970's and early 1980's and extensive workings on the massive sulphide vein on the "Boy Scout" Property, 5 kilometres to the southwest in the 1950's. No serious work was undertaken on this property until this most recent program.

Kokanee carried out geological and geochemical work in the summer of 1991 on behalf of Chapleau. Subsequently, Kokanee directed an initial exploration program (Phase I) in the fall of 1991, on behalf of Barkhor Resources which included geophysics and diamond drilling of 6 holes.



NTS. 82F/9E

CHAPLEAU RESOURCES

DARLIN PROPERTY

CLAIM LOCATION MAP

Scale: 1:50 000

Date: August, 1991

5.0 GEOLOGY

5.1 Regional

The claims lie within the central portion of the Purcell Anticlinorium, which consists of sedimentary argillites and quartzites and related intrusions of gabbro sills and dikes of the Middle and Lower Aldridge formations. The Pre-Cambrian Hellroaring Stock intrudes this rock assemblage to the southwest of the property and a major structural break (St. Mary's Fault) has juxtaposed younger Pre-Cambrian to this rock formation to the south of the property.

The Sullivan, North Star and related Mines are located in the same rock formations 12 kilometres to the northeast.

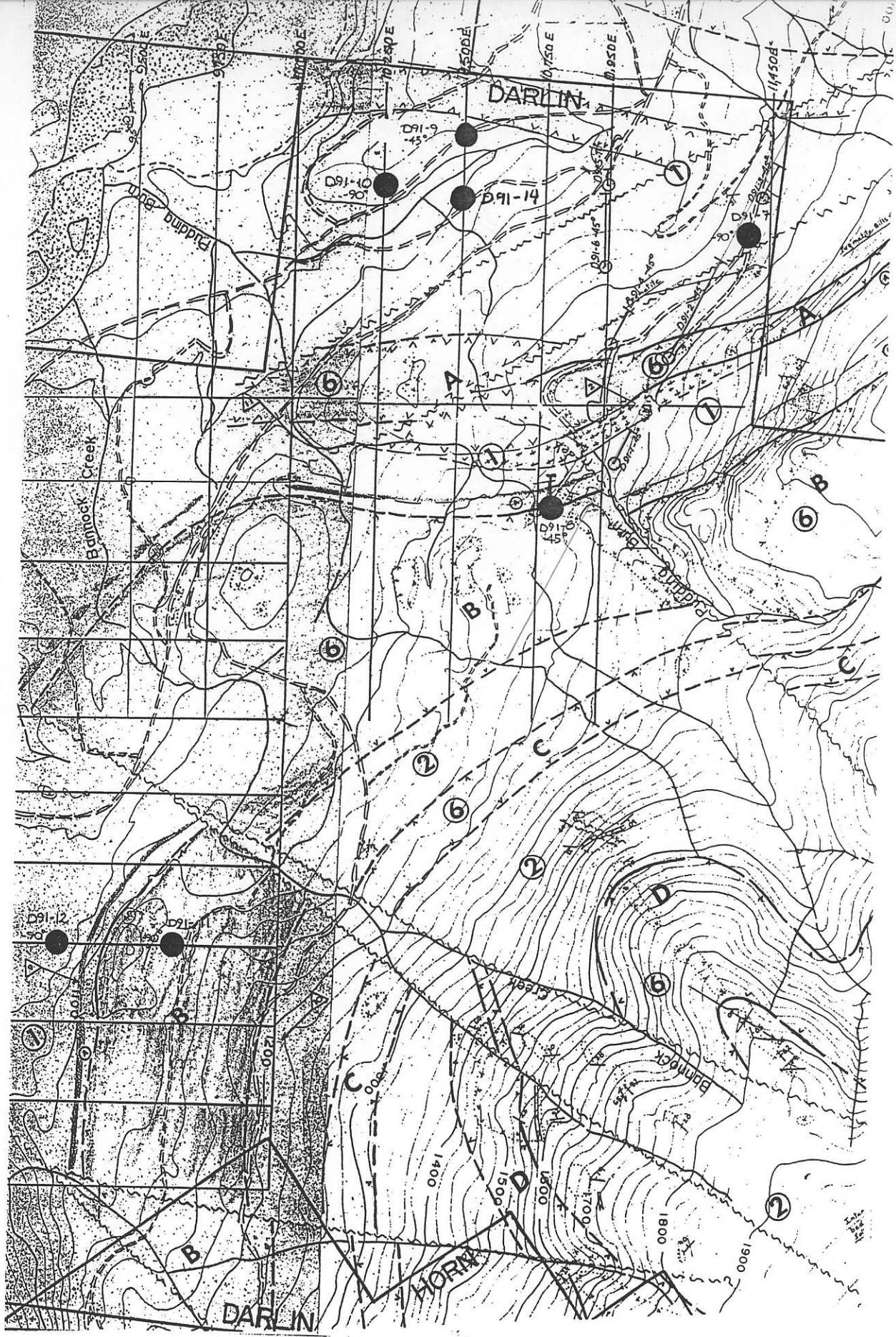
5.2 Property (Map 2)

Mapping has identified the sediments and intrusions related to the Aldridge formation that host the Sullivan. Higher grade metamorphism related to the Hellroaring stock complicates the identification but drilling results have confirmed the geology. As well, the drilling confirmed the presence of pegmatitic sills and dikes seen in outcrop. Although continuous, their importance appears relatively minor.

The property has been mapped in sufficient detail to identify that the mineralized sulphide beds intersected in the drilling are related to those found in the initial geological mapping. This has confirmed that the geochemical and initial VLF geophysical anomalies are definitely related to the known sulphide occurrences and continue to suggest a potential strike length of the zone of interest in excess of 6 kilometres.

From the initial drilling and this continued drill program co-relation of the gabbro sills is possible confirming the stratigraphic nature of the mineralization. The direct co-relation of the sulphide beds between drill holes was made on a tentative basis since no significant "marker" horizons have been identified. This tentative co-relation remains intact after this continued drilling program confirming the spatial relationships and association of the sulphide beds with the gabbros.

The sulphide beds horizon was intersected along strike another 700 metres. The zone remains open along strike although complicated somewhat by a re-interpretation of the geology due to identified fault blocks. Some evidence has also suggested that the area of the claims has is related to the area to the east around Marysville, that was drilled by Texas Gulf Sulphur Company in the early 1970's. It would represent the westward moved portion of the "Sullivan Corridor" and is subject to additional geological interpretation.



Drill hole Location ●

Chapleau Resources/
 Barkhor Resources
GEOLOGY AND DRILL HOLE LOCATION
 MAP

6.0 GEOPHYSICS (See Appendix II and Map 3)

Grid lines (Map 2) were established at right angles to the projected trace of the Lower - Middle Aldridge contact. Geophysical surveying using the UTEM geophysical instrument identified the continuation of the three anomalies found in the original surveying as well as identifying additional stratigraphic anomalies and some discreet isolated anomalies. Most of these anomalies were investigated by drilling.

The association of geophysics and the intersected sulphides was continued in the subsequent drill testing, including down hole surveying results.

The grid was established based on the geologic data available, the subsequent drilling suggested that the western part of the geophysical surveying was not cutting the favourable stratigraphy at the best angle. As well, the drilling identified a down dropped fault block of unmineralized Middle Aldridge which has affected the geophysical response. A re-evaluation of the geophysical survey data is recommended with this new geological interpretation.

7.0 MINERALIZATION

The mineralization encountered in this drilling was found to be the same as found in the initial program, that is in discreet beds varying from 10 cm to over 1 metre in thickness. The sulphides consisted mainly of pyrrhotite with occurrences of galena and sphalerite and minor chalcopyrite and with a massive and disseminated component. A significant number of thick sulphide beds (mainly pyrrhotite) were intersected in hole D91-14, is not unlike a thickened "Concentrator Hill" sulphide zone found at the Sullivan mine.

These new drill locations were not conducive to confirming the tentative co-relation suggesting an increasing thickness to the south indicated in the Phase I drill program.

8.0 CURRENT WORK PROGRAM

The current drill program has consisted of over 4500 additional feet of core drilling in a total of 7 holes. This drilling confirmed the sulphides found in Phase I extend to the west on the Darlin Property. The strike of the mineralized horizon was extended by over 2 kilometres to the west but was also found to be disrupted by faults which had been suggested by surface mapping and are now confirmed by the drilling. Although complicating the geological picture these faults are not considered major structural displacements. The zone of sulphides beds was continued to be found over 70 - 100 metres of stratigraphy with some significant concentrations of beds in areas of the property.

This drilling program has continued to demonstrated that the potential of continuing the mineralized zone along the over 6 kilometres of strike length on the Darlin property and down dip (to the south) remains very promising and has excellent exploration potential.

The drill hole location is roughly plotted on Map 2. All holes continued to encounter metamorphosed argillites and quartzites of the Lower and Middle Aldridge formation and the related gabbro sills.

Drill hole D91-7 tested the down hole EM anomaly encountering similar beds of sulphides as encountered in hole D91-3 and hole D91-2. The continuity and alteration associated with these sulphide beds confirms that this horizon is extremely promising and should be further tested. Only minor assay values were encountered.

Drill hole D91-8 tested the projected trace of the "Sullivan Horizon" with an associated weak geophysical response. Again sulphide beds were intersected but the projected contact is now interpreted to be farther south. Only minor assay values were encountered.

Drill hole D91-9 and 10 tested the westward (700 metres) extention of the northern most and strongest conductor found in holes D91-3, 5 and 6. Again several small beds of massive sulphides and a granopheric fragmental at the top of a gabbro sill were intersected as well as a small graphitic zone beneath this gabbro sill.

Drill hole D91-11 and 12 drilled 2000 metres to the southwest of D91-10 and 9 tested the western projection of the geological horizon associated with a weak geophysical zone. Both holes encountered Middle Aldridge rock units and gabbro with minor disseminations and vein sulphides (pyrrhotite). These holes confirm two faults which had been identified in surface mapping as down dropping a block of Middle Aldridge sediments into the Lower - Middle Aldridge units mapped to the east and west.

Drill hole D91-14 drilled 450 metres to the west of D91-4 tested the western projection of that zone. Numerous beds of sulphides, up to 30 cm. were intersected in the same stratigraphic zone as encountered in hole D91-4 and 2. The thickening of the individual beds and number of beds bears some resemblance as a less "distal" phase to the small thinly bedded "Concentrator Hill" horizon located distal to the Sullivan Mine. It represents more confirmation that this horizon warrents additional investigation.

9.0 CONCLUSIONS

Upon review of the available data and the results of the current exploration program (Phase II) and the Phase I exploration program, the following conclusions can be made or reiterated.

1.) This drill program as with Phase I has confirmed that a significant amount of bedded sulphide layers can be found over a substantial area of the Darlin Property. These beds, in my opinion, represent a distal phase of a sulphide depositional event that 12 kilometres to the northeast deposited the mineralized zones in the Sullivan - North Star area. Some resemblance to a less distal phase has been interpreted from the intersections to date.

*Thinks
Po beds
are Sullivan
related not
locally produced*

2.) The base metals in and the thickness of the sulphide beds and their continuity suggests that the source of the sulphides could be located on the property. This source represents a target where the sulphides would be thickest and remains untested. ?

3.) The stratigraphy and geologic environment has been confirmed to be similar to that which hosts one of the largest base metal mines in the world and in that regards is one of the most potential target areas for Sedex type deposits.

4.) The full economic potential of the property has yet to be fully developed, given that this current work covers only the north part of the property and targets along projected horizon to the south and at depth, downdip, remain untested.

In my opinion, this property has excellent continuing exploration potential that warrents investigation.

10.0 RECOMMENDATIONS

It is my recommendation that a third phase of exploration on the property be proceeded with to continue the thorough evaluation of the property's potential and to follow up on the zones of indicated thickening sulphides and their associated alteration. In that regard the following program is recommended.

1.) Re-evaluation of the geophysical survey results with respects to the new geological interpretation.

2.) Using the geologic data from the drill hole results and the geophysical surveying, a more detailed mapping of the favourable stratigraphic horizon and the property is warrented.

3.) Drilling an additional 7-10 holes to test the southern extensions of the known mineralized stratigraphy and the down dip extension of the mineralized stratigraphy is required. These holes would include two deep tests stratigraphically down dip from holes D91-2 and D91-14. Additional targets can be expected to be developed from the geological exploration work.

A total expenditure of \$400,000 is recommended to carry this investigation.

11.0 BUDGET

1. Surveying, grid establishment	\$ 3,000
2. Geological Surveying	\$ 10,000
3. Geophysics (UTEM, surface & down hole)	\$ 25,000
4. Road and drill site preparation	\$ 12,000
5. Core Diamond drilling (4,000 metres) including 2 1000 metre holes	\$290,000
6. Supervision and reporting, etal.	\$ 15,000
7. Contingency and Administration	\$ 45,000
	=====
<u>TOTAL EXPENDITURES</u>	\$ 400,000

STATEMENT OF QUALIFICATIONS

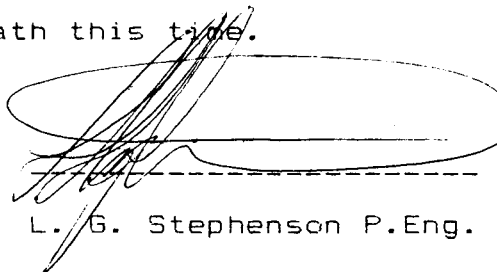
The following outlines the qualifications of the author of this report.

1. Graduate of Carleton University 1975 Bachelor of Science Degree in Geology. Graduate of York University 1985 Masters of Business Administration.
2. Registered as a Professional Engineer for the Province of Ontario (1981) and is currently a member in good standing.
3. Has had over 24 years experience in the field of mining exploration.

With respects to this report ;

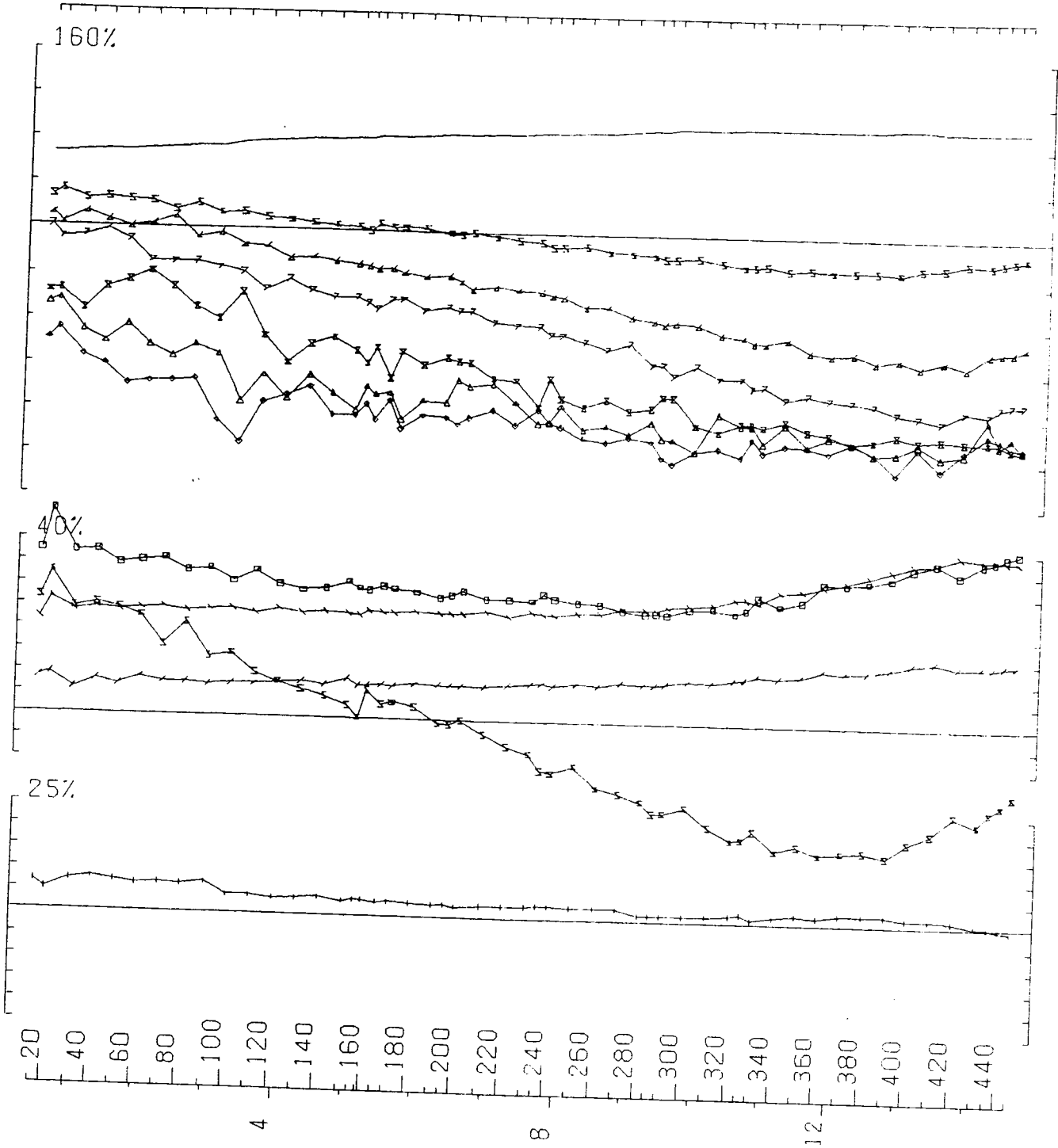
1. I have examined the available data including reviewing the current work and inspecting the core. I am well acquainted with the area and all aspects of the exploration program. I have conferred with the project geologist and made various field inspections during the program.
2. This report represents, in my opinion, the best interpretation of the data ath this time.

Dated at: Cranbrook,
British Columbia
December 17, 1991



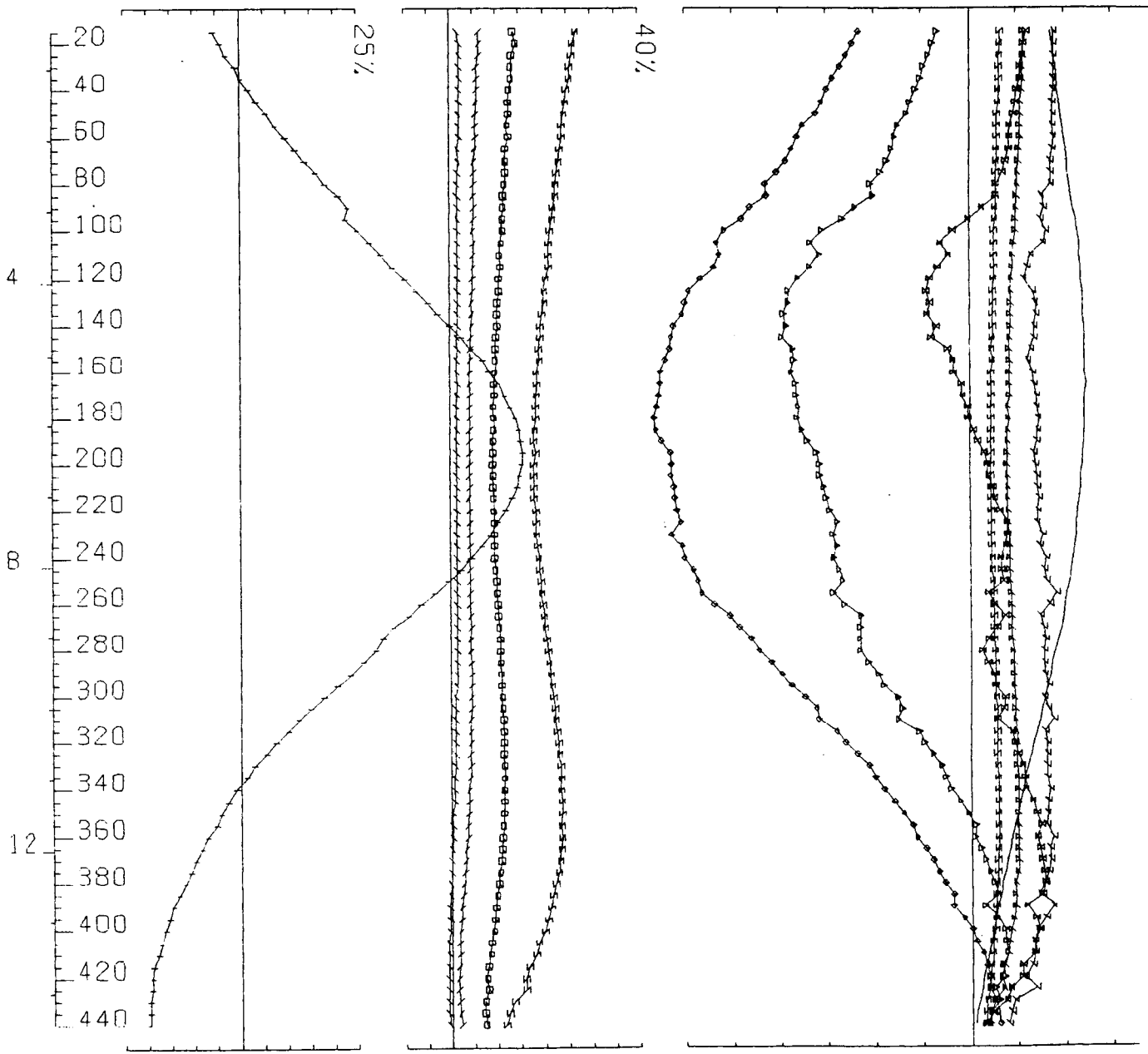
L. G. Stephenson P.Eng.

APPENDIX I

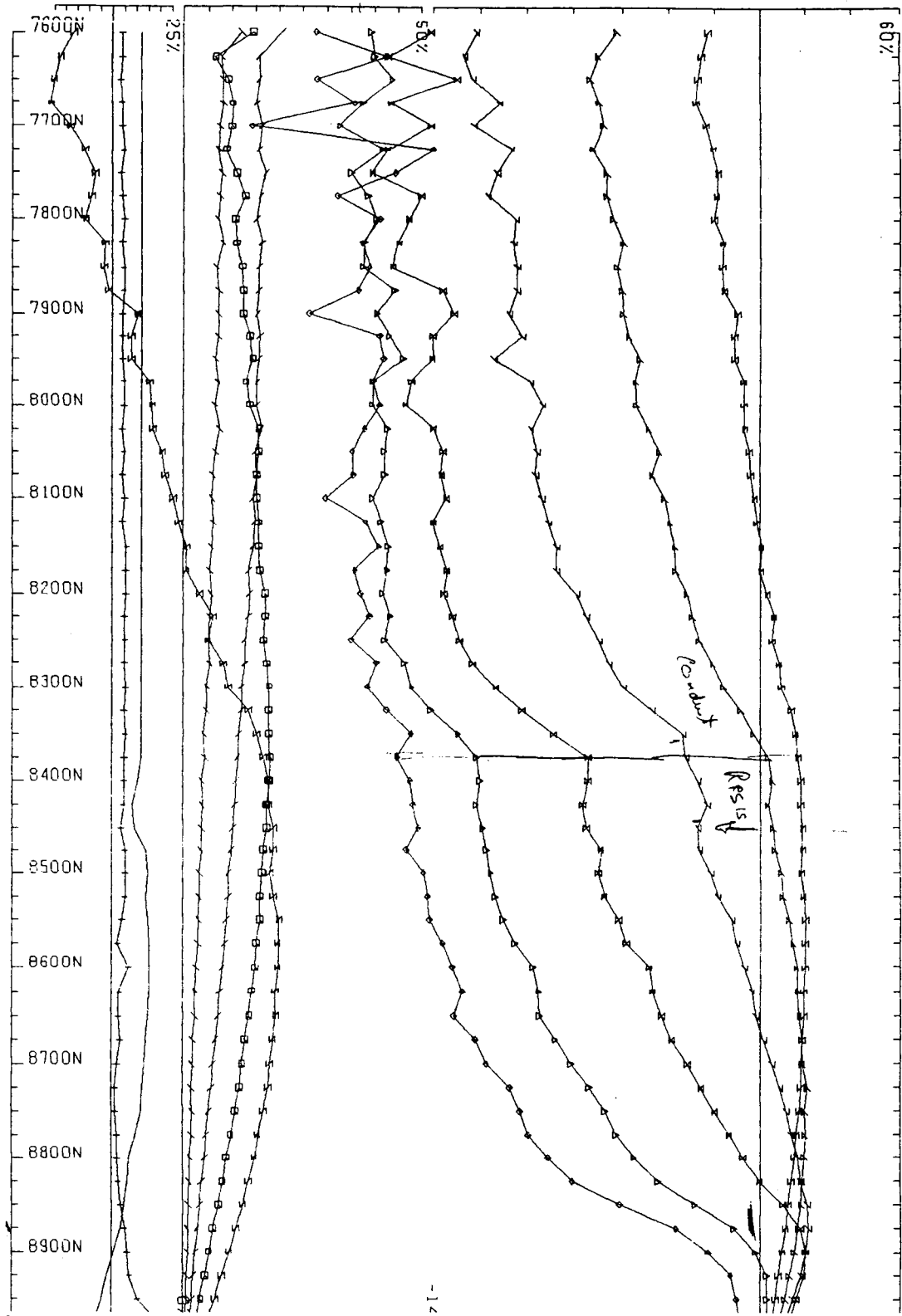


Down hole Survey D91-2

UTEM SURVEY AT DARLIN PROPERTY FOR KOKINEE EXPLORATIONS LTD.
 CONDUCTED BY SJ GEOPHYSICS LTD. JOB 9104 BASE FREQ (HZ) 30.96



UTEM SURVEY AT DARLIN PROPERTY FOR KOKANEE EXPLORATIONS LTD.
 CONDUCTED BY SJ GEOPHYSICS LTD. JOB 9104 BASE FREQ (HZ) 30.96
 LOOP NO 2 HOLE BH91-2 AXIAL COMPONENT SECONDARY FIELD CH1 CONTIN. NORM



Line 10750 E

Line 10750

Line 10950 E

