Heather-Monthly Reports 842121

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER PROJECT

M524

February, 1983

ESTIMATE

CURRENT YEAR TOTAL BUDGET:

US \$ 26,000.

EXPENDITURES TO END OF PERIOD:

US \$ 2,000.

PROJECTION TO YEAR END:

% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Geological mapping and prospecting, small magnetic and VLF Program: -

survey over known mineralization and potential extension and

geochemistry on soil and silt samples.

Objective: - To upgrade current mineralization to be able to get ore grade

numbers over some widths.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Preparation for field and await deal to be signed by Falconbridge and the prospector (Canamin).

Note: This Option will not be taken unless the properties can be upgraded and some potential is clearly indicated.

WORK PROGRAM FOR NEXT PERIOD:

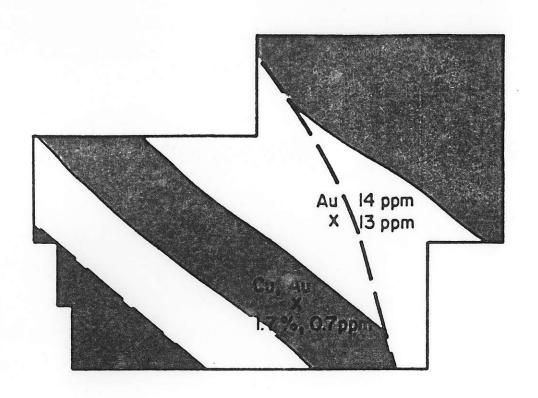
Geological mapping and prospecting, geophysical surveys (magnetic and VLF) and geochemistry.

CHANGES IN LAND STATUS:

191 units are located on the Cowichan group. 32 units are located on the Nimpkish group.

HEATHER OPTION

COWICHAN GROUP



- FRANKLIN Fm
- MYRA Fm
- NITINAT Fm
- -- FAULT
 - x SHOWING

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

ESTIMATE

HEATHER

M524

March, 1983

CURRENT YEAR TOTAL BUDGET:

US \$ 26,000.

EXPENDITURES TO END OF PERIOD: PROJECTION TO YEAR END:

US \$ 8,000.

% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

As before.

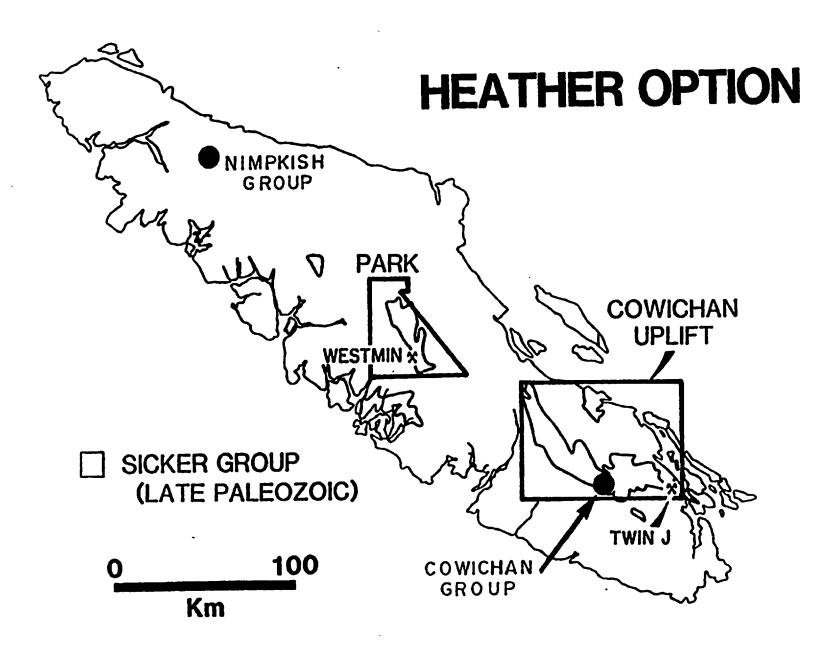
WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Field examination was delayed because of legal problems between Falconbridge and prospector. We expect to be partially completed the examination by the end of March. Our first priority is the Cowichan Group.

WORK PROGRAM FOR NEXT PERIOD:

Field program completed on both properties and data compiled, so a decision can be made on the property.

CHANGES IN LAND STATUS:



MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

Same Same

HEATHER

M524

March, 1983

CURRENT YEAR TOTAL BUDGET: US \$26,000. EXPENDITURES TO END OF PERIOD: US \$14,000.

ESTIMATE

PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

To upgrade two properties on Vancouver Island - one property that has volcanogenic massive sulphides potential and one that has some gold potential. Program consists of geological mapping and prospecting, soil sampling for geochemical analysis.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Half of the geological mapping and soil sampling has been completed. Some geochemical results have returned with anomalous values. No pattern has yet unfolded.

WORK PROGRAM FOR NEXT PERIOD:

Completion of field work and compilation of field work.

CHANGES IN LAND STATUS:

m 524 -> Gio

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

M524

April, 1983

CURRENT YEAR TOTAL BUDGET: US \$ 26,000. EXPENDITURES TO END OF PERIOD: US \$ 25,000. PROJECTION TO YEAR END: 100% OF BUDGET CURRENT YEAR PROGRAM AND OBJECTIVES:

ESTIMATE

Geological mapping and prospecting, geochemical soil sampling and possible magnetic or VLF-EM surveys along the extensive logging roads on both properties. Objective was to carefully evaluate the properties to see if they were of interest to Chevron.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Completion of soil sampling and mapping on both properties.

Nimpkish property was covered by 300 soil samples and geological mapping. The mineralization is very minimal and associated with quartz veins in a shear zone. Careful chip sampling across the shear indicates the values are not ore grade. Two other shear zones were located with minor copper mineralization.

The Cowichan property has been covered by 800 soil samples and 50 rock samples plus geological mapping. A soil anomaly of 300 - 800 ppm Cu, 200 - 1300 ppm Zn has been correlated with a felsic unit within the prospective Myra formation. This unit is highly sheared and has undergone some clay and carbonate alteration. Sulphide mineralization in the known showing may be stratiform or associated with faults. Some clearing around the mineralization has been completed but further work is required.

Heather (Cont'd)

Elsewhere on the claims copper quartz mineralization is associated with a dioritic stock that underlies the south west portion of the claims.

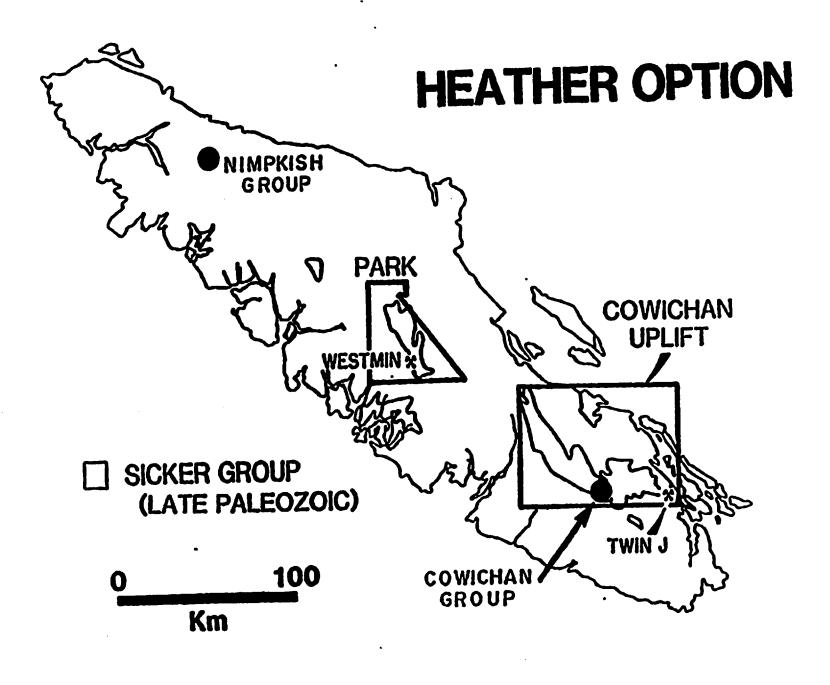
WORK PROGRAM FOR NEXT PERIOD:

Exposing the mineralization to determine the true nature of the mineralization.

CHANGES IN LAND STATUS:

None.

G. Walton



MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
HEATHER	M524	May, 1983

US \$ CURRENT YEAR TOTAL BUDGET: EXPENDITURES TO END OF PERIOD: US \$

PROJECTION TO YEAR END:

100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Upgrade Cowichan property and evaluate massive sulphide showing by geological mapping and prospecting, geochemical sampling of rock and soil samples.

ESTIMATE

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Compilation of data and presentation to San Francisco. One sample from trench returned .66% Cu, .284 oz/ton Au. Approval by San Francisco to continue has been obtained.

WORK PROGRAM FOR NEXT PERIOD:

New program of more back hoe and bulldozer trenching in combination with an airborne input (helicopter) survey to be completed in July.

CHANGES IN LAND STATUS:

pie

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

June 1983

CURRENT YEAR TOTAL BUDGET: US \$184,000. EXPENDITURES TO END OF PERIOD: US \$ 40,000.

PROJECTION TO YEAR END: 100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

ESTIMATE

Exploration of Sicker Group rocks on the Heather property for massive sulphidetype mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Property visit to examine the prospect from a geophysical point of view to determine if the mineralization is amenable to geophysical techniques, whether ground or airborne work is most feasible and what specific technique is suitable. It was decided that a helicopter-borne Input EM system was appropriate with flight lines in two perpendicular directions at a 100 meter line spacing.

WORK PROGRAM FOR NEXT PERIOD:

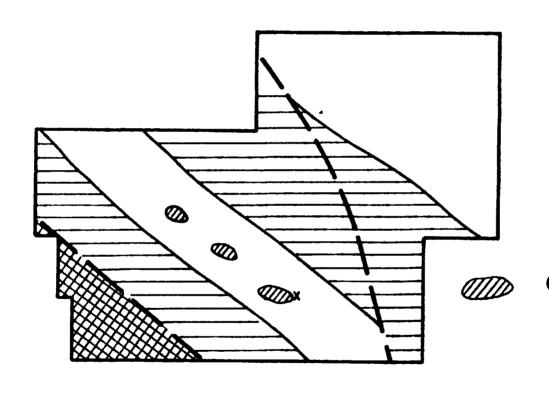
Airborne input survey over the entire extent of Myra Formation on the property.

CHANGES IN LAND STATUS:

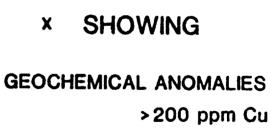
HEATHER OPTION

COWICHAN GROUP

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Km



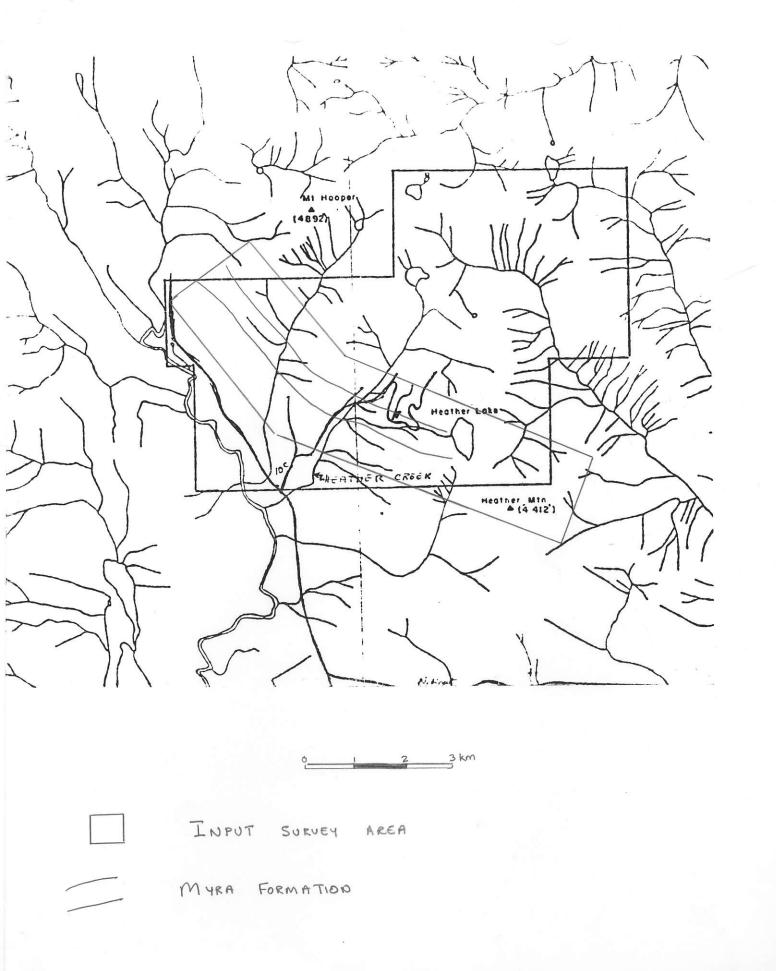
FRANKLIN Fm

MYRA Fm

NITINAT Fm

- FAULT

>200 ppm Zn up to 840 ppm Cu 1340 ppm Zn



HEATHER: CLAIM AREA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

July 1983

ESTIMATE

CURRENT YEAR TOTAL BUDGET:

US \$ 184,000.

EXPENDITURES TO END OF PERIOD: US \$

PROJECTION TO YEAR END:

100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Exploration of Sicker Group rocks on the Heather property for massive sulphide-type mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Backhoe trenching of main showing area. Extensive and, in places, intensive pyrite mineralization occurs in chlorite-sericite altered tuff with quartz veining (up to 10 cm wide), and occasional massive pyrite bands (up to 3 cm wide). Grab and chip sampling along trenches, results pending.

WORK PROGRAM FOR NEXT PERIOD:

Airborne input survey over the entire extent of Myra Formation on the property. Bad weather in northern B.C. has held up this survey to-date.

CHANGES IN LAND STATUS:

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

August 1983

CURRENT YEAR TOTAL BUDGET: US \$184,000. EXPENDITURES TO END OF PERIOD: US \$55,000.

ESTIMATE

PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Exploration of Sicker Group rocks on the Heather property for massive sulphide-type mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Grab and chip sampling along backhoe trenches reconfirmed values in "main" showing with results of 0.14 oz/t Au, 0.18% Cu (grab) and that best values are associated with massive pyrite. A second grab of massive Fes across 20 cm and 40 m along trench from the main showing assayed 0.26 oz/t Au, 0.9% Cu.

WORK PROGRAM FOR NEXT PERIOD:

Airborne input survey over the entire extent of Myra Formation on the property. Bad weather in northern B.C. has held up this survey to-date.

CHANGES IN LAND STATUS:

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

September 1983

CURRENT YEAR TOTAL BUDGET: US \$184,000. EXPENDITURES TO END OF PERIOD: US \$100,000.

PROJECTION TO YEAR END: 100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

ESTIMATE

Exploration of Sicker Group rocks on the Heather property for massive sulphide-type mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Airborne Input/Mag survey flown over Myra Formation on the property.

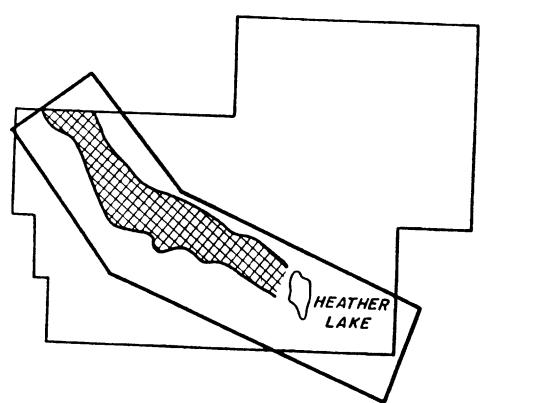
WORK PROGRAM FOR NEXT PERIOD:

Compilation and interpretation of airborne survey data.

CHANGES IN LAND STATUS:

HEATHER OPTION

AIRBORNE GEOPHYSICS



- MYRA Fm
- INPUT
 SURVEY AREA



MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

October, 1983

CURRENT YEAR TOTAL BUDGET: US \$ 184,000.

EXPENDITURES TO END OF PERIOD: US \$ 125,000. ESTIMATE PROJECTION TO YEAR END: 100% OF BUDGET CURRENT YEAR PROGRAM AND OBJECTIVES:

Exploration of Sicker Group rocks on the Heather property for massive sulphide-type mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Interpretation of data by Questor Surveys showed 6 Input anomalies, all of which are weak (3 channels or less). Anomalies were rated as medium priority or low priority zones based merely on the geophysical attributes of the Input responses, without taking the geological relationship into consideration.

WORK PROGRAM FOR NEXT PERIOD:

John Steele reviewed the Questor interpretation and recommended EM-37 ground follow-up in 3 areas:

- (i) Main showing: Mise-a-la-masse work plus a limited grid EM-37 work.
- (ii) Zone 1: area of coincident Cu geochemistry anomaly, plus a spot high Au value: grid EM-37.
- (iii) Zone 4: a one line 3 channel anomaly remote from previous ground coverage (prospecting, geochem). A small EM-37 grid + geochem and mapping proposed.

CHANGES IN LAND STATUS:

file."

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF CANADA

MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

November 1983

ESTIMATE

CURRENT YEAR TOTAL BUDGET:

US \$ 184,000.

EXPENDITURES TO END OF PERIOD: US \$ 140,000.

PROJECTION TO YEAR END:

100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Exploration of Sicker Group rocks on the Heather property for massive sulphide-type mineralization. The formation of primary interest is the Myra Formation which hosts the mineralization at Westmin (HW, Price, Lynx deposits).

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

MPH Consultants were contracted to perform EM-37 and Mise-a-la-masse surveys over selected Input anomalies defined by the Questor airborne work. In conjunction with recommendations by John Steele, two Input anomaly areas were followed up. Work was completed by MPH on December 5, 1983. An interpretation of the results is pending.

WORK PROGRAM FOR NEXT PERIOD:

Compilation and interpretation of results.

CHANGES IN LAND STATUS:

MONTHLY PROJECT REPORTS

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

May 1984

CURRENT YEAR TOTAL BUDGET: ESTIMATED EXPENDITURES TO END OF PERIOD: US \$15,000.

US \$35.000. (Chevron's portion)

PROJECTION TO YEAR END: 100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Geological mapping, rock and soil geochemical sampling. The objective is to locate massive sulphide type mineralization within favourable Paleozoic stratigraphy.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

- **(1)** A total of about 350 rock and soil geochemical samples were collected. These are to be analyzed for Na₂0, K₂0, Ba, Au, Cu, Pb, Zn, Ag. These elements are expected to indicate enrichment or depletion patterns caused by nearby exhalative massive sulphide deposits.
- Geological mapping of a 12 km² area of Myra Formation on the property indi-(2) cates no major rhyolitic build-up.
- (3) Minor pyrite and traces of chalcopyrite occur in a zone of intense shearing traceable for over 3 km in the western parts of the Myra belts on the property. This zone is most intense near the contact of a concordant granitic intrusion. The mineralization occurs in pods of quartz which are enclosed in phyllitic tuff. The shearing parallels the axial planes of tight fold. It appears that the folding of the Myra is related to the nearby intrusion and subsequent shearing and faulting (Tertiary) developed along pre-existing planes of weakness in the folded rocks.

WORK PROGRAM FOR NEXT PERIOD:

Contingent on favourable geochemical patterns from the initial sampling further geochemical and geological work would be carried out to better define such anomalies.

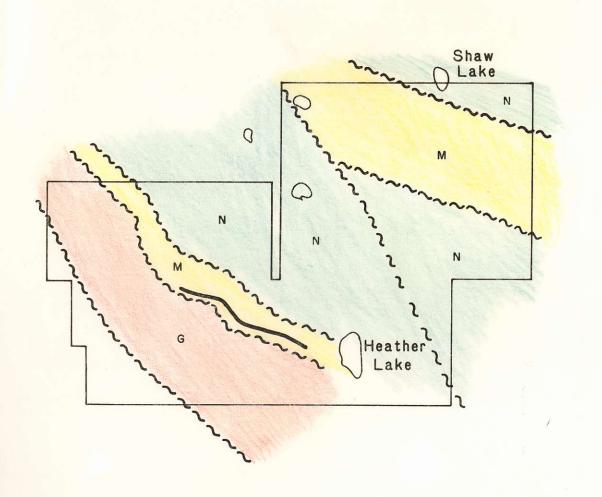
CHANGES IN LAND STATUS:

None.

R. U. BRUASET

HEATHER PROPERTY

GENERAL PROPERTY GEOLOGY



JURASSIC

G GRANITE, DIORITE

PALEOZOIC SICKER GROUP

MYRA Fm.CHERT, TUFF

N NITINAT Fm. ANDESITE

MINERALIZED ZONE
MINOR PYRITE,
CHALCOPYRITE,
SPHALERITE, TRACE Au.

~~~ FAULT

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### MONTHLY PROJECT REPORTS

PROJECT NAME

NUMBER

PERIOD COVERED

**HEATHER** 

M524

June 1984

CURRENT YEAR TOTAL BUDGET: US \$40,000. (Chevron's portion) ESTIMATED EXPENDITURES TO END OF PERIOD: US \$20,000.

PROJECTION TO YEAR END: 100% OF BUDGET

**CURRENT YEAR PROGRAM AND OBJECTIVES:** 

As before.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Geochemical analysis of samples. Compilation of data.

### WORK PROGRAM FOR NEXT PERIOD:

Contingent on favourable geoochemical pattern from the initial sampling, further geochemical and geological work would be carried out to better define such anomalies.

### **CHANGES IN LAND STATUS:**

None.

C. V. DYSON

### MONTHLY PROJECT REPORTS

PROJECT NAME

NUMBER

PERIOD COVERED

HEATHER

M524

August 1984

**CURRENT YEAR TOTAL BUDGET:** ESTIMATED EXPENDITURES TO END OF PERIOD: US \$ 25.000.

US \$ 40,000. (Chevron's portion)

PROJECTION TO YEAR END: 100% OF BUDGET

### **CURRENT YEAR PROGRAM AND OBJECTIVES:**

As before, plus diamond drilling (300 m) to evaluate a possible remobilized massive sulphide target, see below.

### WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

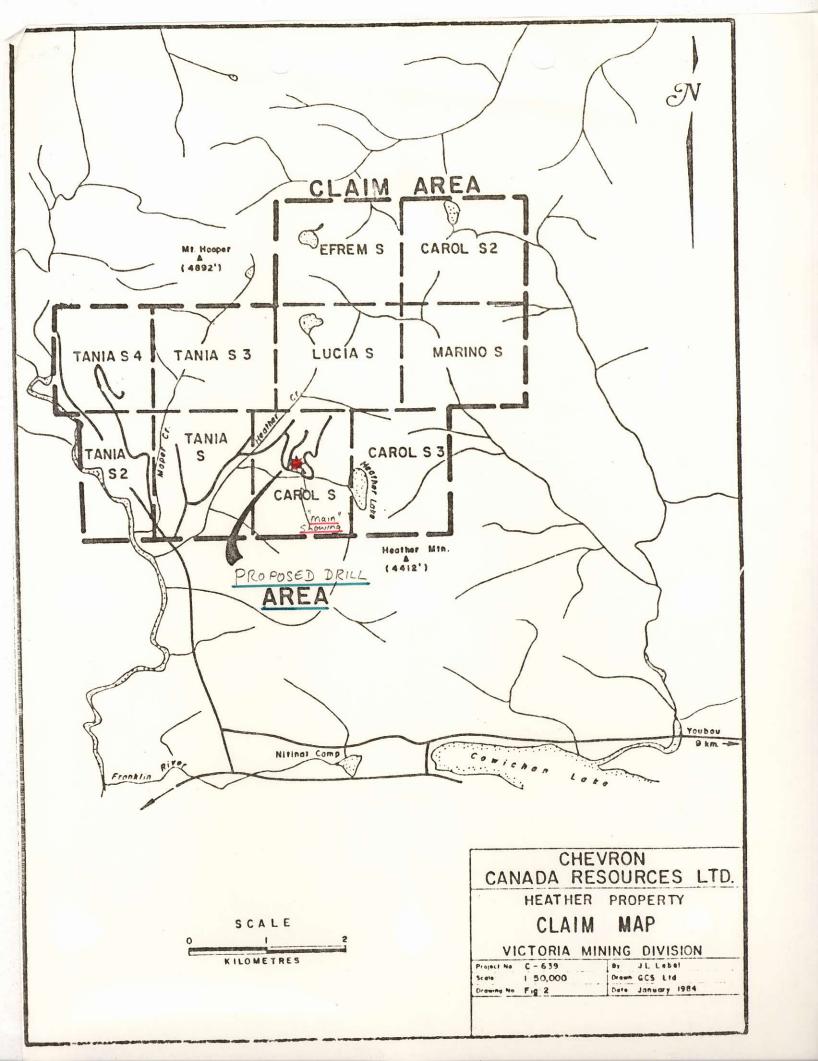
Interpretation of soil and rock geochemical data shows that overall the western belt of Myra rocks (which hosts the "main showing") is the most anomalous area for major and minor elements. The strongest multi-element response property-wide targets the "main showing" where mineralization consists of pyrite (sometimes massive) and minor chalcopyrite within and associated with elongated pods of white and grey quartz which are aligned parallel to cleavage surfaces in phyllitic tuff. In this "main showing" area are coincident copper, zinc and gold soil and rock geochemical anomalies plus sodium and potassium lithogeochemical depletion anomalies. The "main showing" host lithology is interpreted to be a wide zone of shearing developed along pre-existing planes of weakness in folded Myra rocks during faulting in Tertiary time. During this phase of faulting and shearing we postulated that stratabound massive sulphide type mineralization in the Myra rocks was mobilized into the shear zone with concentration in the "main showing" area. This shear zone, or "showing lithology" has been traced along regional strike for approximately 2 km and has been recognized at six different localities with variable sulphide and quartz content at each locality.

The "main showing" mineralization and multi-element geochemical anomaly will be tested by diamond drilling in early October 1984. This program will be funded from the current project budget.

### WORK PROGRAM FOR NEXT PERIOD:

Plan logistics and support for drill program.

### CHANGES IN LAND STATUS:



### MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

PERIOD COVERED

**HEATHER** 

M524

September 1984

CURRENT YEAR TOTAL BUDGET: US \$ 40,000. (Chevron's portion) ESTIMATED EXPENDITURES TO END OF PERIOD: US \$ 27,000.

PROJECTION TO YEAR END: 100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

As before.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Repair logging road to "main showing" area for drill mobilization and access.

WORK PROGRAM FOR NEXT PERIOD:

Diamond drilling (300 m) to test "main showing".

CHANGES IN LAND STATUS:

None.

C. V. DYSON

### MONTHLY PROJECT REPORT

PROJECT NAME

**NUMBER** 

PERIOD COVERED

HEATHER

M524

October 1984

CURRENT YEAR TOTAL BUDGET: ESTIMATED EXPENDITURES TO END OF PERIOD: US \$ 40,000.

US \$ 40,000. (Chevron's portion)

PROJECTION TO YEAR END: 100% OF BUDGET

### CURRENT YEAR PROGRAM AND OBJECTIVES:

As before.

### WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Two drill holes (330 m) tested the "main showing" mineralization which is hosted within a strong shear zone.

Hole 84-1 ( $-40^{\circ}$ ) was drilled to cut the down-dip extension directly beneath the "main showing" where surface assays were up 0.28 oz/t Au. The hole intersected the structure and returned at best 3000 ppb (0.09 oz/t Au) Au, 208 ppm Cu, 920 ppm Zn across 1.52 m.

Hole 84-2 (-60°) was drilled on section and beneath the intersection in hole 84-1. The hole intersected at best 255 ppb Au, 710 ppm Cu, 85 ppm Zn, across 1.5 m in the same structure.

The drill results show that there is no wide zone of gold or base metal enhancement beneath the "main showing", and suggest that values are restricted to very narrow vein zones within the overall wide shear zone

We have drill tested the "main showing" which is the best surface mineralization and strongest multi-element lithogeochemical anomaly on the Heather property. Results do not encourage further work. We recommend that the Heather option be terminated forthwith and prior to December 31st, 1984 when a \$40,000. US option payment would become due.

Monthly Report continued - M524.

### **WORK PROGRAM FOR NEXT PERIOD:**

Compilation of data and production of final report for the joint venture. Start to process the necessary paper work to drop the option.

### **CHANGES IN LAND STATUS:**

None.

C. V. DYSON

### MONTHLY PROJECT REPORT

PROJECT NAME

NUMBER

**PERIOD COVERED** 

**HEATHER** 

M524

November 1984

CURRENT YEAR TOTAL BUDGET: US \$ 40,000. (Chevron's portion) ESTIMATED EXPENDITURES TO END OF PERIOD: US \$ 44,000.

PROJECTION TO YEAR END: 110% OF BUDGET

### **CURRENT YEAR PROGRAM AND OBJECTIVES:**

As before.

### WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Compilation of data and final report. Documentation to assign the land and drop the option completed.

### **WORK PROGRAM FOR NEXT PERIOD:**

Complete final report. Terminate the option with Falconbridge.

### CHANGES IN LAND STATUS:

None.

C. V. DYSON