

ASSESSMENT REPORTS

MAP No. 105 D 6 **TYPE OF WORK:** Geological, Geophysical

| | | |
|---------------------------|---|----------------------------------|
| REPORT FILED UNDER | Hycroft Resources and Development Corp. | |
| DATE PERFORMED | May 1985 | DATE FILED: June 10, 1985 |
| LOCATION - | LAT. | 60°15'N |
| | LONG. | 135°17'W |
| CLAIM Nos. | STONE 1-70; YA82292-YA82361 | |
| WORK DONE BY | G.C. MacDonald | |
| WORK DONE FOR | Hycroft Resources and Development Corp. | |
| REMARKS | The property is underlain by volcanic rocks of the Skukum Group and is cut along the western margin by Eocene rhyolite dykes. | |
| | | |
| | | |
| | 85 4EX p105 ✓ | |

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In May, 1985 an exploration program of grid development, 12 line-km VLF-EM and 17 line-km of magnetometer surveys (using 25 m-spaced stations) was conducted on the eastern side of the property. The magnetometer survey outlined a strong north-trending anomaly on the STONE 33 claim and may outline either a magnetite-bearing basalt flow in the Skukum Group, or a skarn zone within Yukon Group metasedimentary rocks. A second weaker magnetic anomaly was also found.



SUMMARY REPORT
on the
STONE MINERAL CLAIMS
in the
Wheaton River Area
Whitehorse Mining District, Yukon Territory

N.T.S. 105 D/3 and 105 D/6₅
Latitude 60°15'N - Longitude 137°17'W

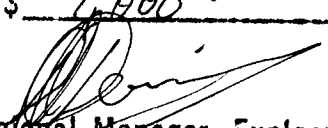
for
HYCROFT RESOURCES AND DEVELOPMENT CORPORATION

by
G. C. MACDONALD AND ASSOCIATES LTD.

May 27, 1985

09 165 1

This report has been prepared by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 7,000-00.


Regional Manager, Exploration and
Geological Services for Communities
of Yukon Territory.

SUMMARY AND RECOMMENDATIONS

The STONE 1-70 claims, owned by Hycroft Resources and Development Corporation, lie in the Mount Skukum-Wheaton River area of the Yukon Territory.

The property, located north of the Wheaton River and west of Vesuvius Hill, is primarily underlain by Skukum Group volcanic rocks which, eight kilometers to the west, host the AGIP-Erickson Gold Mines' Mount Skukum gold deposit. Also Eocene rhyolite dykes known to be auriferous elsewhere in the district outcrop along the western margin of the claim group. Presently there are no known mineral showings on the STONE claims.

In May 1985, a program of grid development and VLF-EM and Magnetometer geophysical surveys was conducted on the eastern side of the property. A strong magnetic anomaly exists in STONE # 33 and probably outlines either a skarn zone occurring along a contact between granitic rock and Yukon Group material or a magnetic basaltic flow of the Skukum Group.

The STONE claims represent a viable exploration target and it is recommended that an initial program of exploration consisting of geological mapping, grid development, soil and silt geochemical sampling, and geophysical surveys be undertaken in the 1985 field season. Further evaluation comprising trenching and diamond drilling would commence after a successful initial program.

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INTRODUCTION

This report summarizes the physical and geological settings and the exploration history of the STONE I-70 mineral claims. The report was prepared at the request of Hycroft Resources and Development Corporation of 1250-1055 West Georgia Street, Vancouver, B.C. at the conclusion of a brief exploration program conducted in May 1985 by MBW Surveys of Whitehorse, Y.T.

Available geological data on the Wheaton River area was reviewed in conjunction with this summary. The writer was involved in the May 1985 exploration program and is familiar with the region.

LOCATION AND ACCESS

The STONE I-70 claims are located north of the Wheaton River and to the west of Vesuvius Hill, covering the upper reaches of Summit and Towle Creeks at latitude $60^{\circ}15'N$ and longitude $135^{\circ}17'W$ on N.T.S. map sheets 105 D/3 and 105 D/6. The property, situated 65 kilometers south-southwest of Whitehorse in the Yukon Territory, is accessible from the government maintained Wheaton River Road via a four-wheel drive track and then a three kilometer flagged trail (Figures 1 and 2).

Helicopter charter services are available on a year-round basis at Whitehorse and are presently available (June - August) from the Wheaton River airstrip located 10 kilometers east of the STONE claims. Other services, supplies and facilities can be obtained in Whitehorse.

• Tuktoyaktuk

Aklavik Inuvik

• Old Crow

Fort McPherson

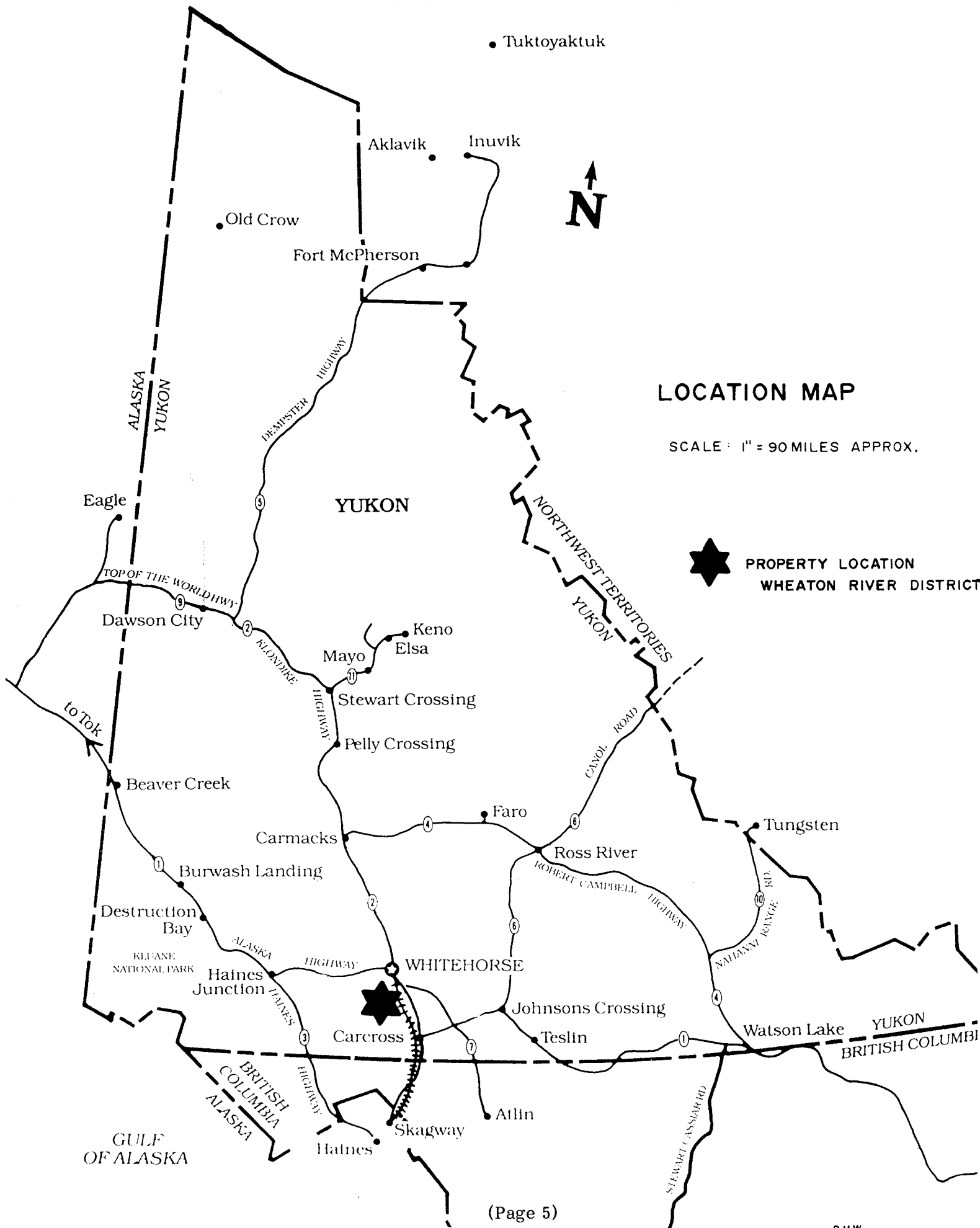


LOCATION MAP

SCALE: 1" = 90 MILES APPROX.



PROPERTY LOCATION
WHEATON RIVER DISTRICT



PROPERTY COMPOSITION

The property, situated in the Whitehorse Mining District of the Yukon Territory, is composed of 70 contiguous claims located in accordance with the Yukon Quartz Mining Act (Figure 3).

Table 1 - Claim Composition

| <u>Claim Name</u> | <u>Record Number</u> | <u>Expiry Date</u> | <u>Owner</u> |
|-------------------|----------------------|--------------------|---|
| STONE 1-70 | YA82292-YA82361 | 14 June 1985 | Hycroft Resources and Development Corporation |

Several claim posts were mapped during the exploration program in May 1985; further work should include a survey to accurately locate the property boundaries.

PHYSIOGRAPHY AND CLIMATE

The Wheaton River area consists of a deeply dissected plateau region characterized by rolling uplands and steep walled stream valleys lying in the Boundary Ranges of the Coast Mountains. The topography becomes progressively more severe to the southwest, culminating in 2,500 meter mountains and icefields at the headwaters of the Wheaton River. Major stream valleys have been modified by glacial action with outwash, morainal debris and terraces present in valley bottoms.

Low-lying areas feature grassy meadows, bogs and pine, balsam fir and spruce forests. At treeline (approximately 1200 meters a.s.l.) willow and alder brush cover the terrain but all upper slopes and plateau surfaces are bare.

The property lies in the Summit and Towle Creek drainages where glacial potholes and ridges produce a rough surface near the streams; higher slopes are rocky and steep.

(Physiography and Climate - cont'd)

The climate of the Wheaton district features short, warm summers with moderate rainfall and long cold winters, especially at upper elevations. The exploration season lasts for five months commencing in early May and ending in late October.

HISTORY AND PREVIOUS WORK

During the Klondike Gold Rush, numerous men passed along the Bennett Lake-Yukon River system en route to Dawson City. The southeast corner of the Wheaton River area lies 10 kilometers to the north of this well-travelled trail (Cairnes, 1912). Prospectors Frank Corwin and Thomas Rickman entered the region in 1893 and located claims on Carbon, Chieftain and Idaho Hills. They returned to Juneau in the fall carrying samples of antimony ore taken from Carbon and Chieftain Hills, and some very rich gold-bearing quartz samples collected at an unknown site. Their untimely deaths occurred before informing anyone of the location of the auriferous quartz veins. Subsequent searches found little until 1898 when W. F. Schnabel discovered an old camp on Schnabel Creek and identified gold-bearing quartz veins on Idaho Hill.

Elsewhere in the Wheaton district, intensive exploration began in 1906 after the discovery of free gold and gold-silver tellurides on Gold Hill by D. Hodnett and J. Stagar, and of the old workings of Corwin and Rickman on Carbon and Chieftain Hills. Exploration and limited mining occurred sporadically at many locations. A full history of the various old properties is published in G.S.C. Memoirs No. 31 by D. D. Cairnes (1912) and No. 312 by J. O. Wheeler (1961).

In 1981, AGIP Canada staked Mount Skukum and, over several seasons, proceeded to outline a gold-silver deposit with reserves of 235,000 tonnes at a grade of 20 grams gold per tonne in the Main Zone (1983 - Yukon Exploration and Geology). Presently, Erickson Gold Mines are conducting a pre-production examination on the ore body and are planning to construct a mill in the Wheaton Valley.

(History and Previous Work - cont'd)

Major staking ventures in 1983-84 sealed up most of the ground to the north and south of the Wheaton River. AGIP Canada located the BEAR claims in 1983 (currently under option to Shakwak Exploration Co. Ltd.) over Vesuvius Hill and MBW Surveys staked the STONE 1-70 claims in June 1984 to cover an open area lying between Vesuvius Hill and other AGIP claims to the west. The STONE claims were sold to JMT Mining Services in 1984, and JMT entered into an agreement with the present owners in 1985.

Prior to the exploration program conducted in May 1985, no known investigations have taken place on the property.

REGIONAL GEOLOGY

The geology of the Wheaton River area was initially mapped by Cairnes (1912) and later by Wheeler (G.S.C. Map 1093A, 1961). Paleozoic Yukon Group and volcanic rocks of uncertain age occur as inclusions within a Cretaceous granitic batholith complex. On the flanks of the granitic intrusive rocks, the Upper Triassic Lewes River Group outcrops as volcanic, volcanogenic sedimentary and marine sedimentary rocks. They, in turn, are overlain by fluvial, lacustrine and marine sediments of the Labarge Group.

The Cretaceous Coast Range Intrusives form a large granitic complex exposed over much of the Wheaton River drainage. Granodiorite and quartz diorite are the dominant rock types. Cutting and overlying the intrusive rocks are basalt, andesite, rhyolite flows, tuffs and breccias of the Tertiary Skukum Group. Many of these rocks weather to characteristic bright colours. Eocene granitic porphyry and rhyolite dykes are exposed as isolated bodies throughout the area.

Table 2 summarizes the regional stratigraphy.

Table 2 - Table of Formations

| | | |
|-------------------------|------------------------|---|
| QUARTERNARY | | Alluvium; glacial deposits |
| QUARTERNARY (?) | Miles Canyon Volcanics | Basalt; minor pyroclastic rocks |
| LATE TERTIARY | Upper Skukum Group | Rhyolite, andesite dykes, sills |
| TERTIARY | Skukum Group | Basalt, andesite, rhyolite flows; associated tuffs and breccias |
| CRETACEOUS | Coast Range Intrusions | Medium-grained quartz-monzonite; granodiorite |
| JURASSIC/ CRETACEOUS | Hutshi Group (?) | Andesite, rhyolite flows and pyroclastic equivalents |
| JURASSIC | Tantalus Group | Mainly conglomerate |
| TRIASSIC | Lewes River Group | Andesite, basalt flows and pyroclastic equivalents; limestone; minor rhyolite flows |
| LOWER PALEOZOIC | "Yukon Group" | Metamorphic terraine; quartz-biotite schist; micaceous quartzite; minor gneissic units. |



LEGEND

| | | |
|-----------------------------------|------|---|
| RECENT AND PLEISTOCENE | I | Superficial deposits Sand, gravel, silt, clay, and mud; volcanic ash, ground iv., slide rock, and mineral materials |
| TERTIARY | II | Diabase, granite porphyry, and related volcanic, with their associated tuffs and breccias |
| | III | Basalt, andesite, and related volcanics, with their associated tuffs and breccias |
| | IV | Granite Range plutonism Granitic rocks, ranging in composition from granite to diorite, with associated porphyritic phases |
| MESOZOIC | V | Andesite, basalt, and diorite, with their associated tuffs and breccias |
| CRETACEOUS TO JURASSIC | VI | Tantalus conglomerate Conglomerate with some sandstone, shale, and seams of coal |
| CARBONIFEROUS? | VII | Enlarged section Argillite, shale, sandstone, arkose, graystone, conglomerate, and tuff |
| | VIII | Limestone, more or less dolomitic |
| DEVONIAN? | | Pumice and poudrette |
| PRE-CAMBRIAN? | | Mount St. Helens Group Schist, gneiss, quartzite, and limestone |
| Symbols | | |
| Geological boundary (dashed line) | | |
| Geological boundary (solid line) | | |
| Dip and strike | | |

FIGURE 4

GEOLOGY MAP

SCALE 1:62,500

MAGNETOMETER SURVEY

A Geometrics proton magnetometer was used in a 17-kilometer survey with readings taken at 25 meter intervals. The proton magnetometer measures the total intensity of the earth's magnetic field; local variations in its strength depend on the concentration of magnetic minerals at or close to the earth's surface.

The survey outlined a strong north-south trending anomaly located between lines 9+00N and 13+00N, centred at approximately 2+50W (Figure 5). This anomaly may outline a magnetite bearing basaltic flow within Skukum Group volcanics, or it may delineate a skarn zone occurring along a contact between granitic rock and Yukon Group material. A second, weaker, anomaly exists on lines 2+00N and 4+00N at 4+50E to 5+00E.

VLF-EM SURVEY

G. Davidson conducted a VLF electromagnetic survey using a Ronka EM-16 unit. Readings were taken at 25 meter stations along 12 kilometers of grid line utilizing the Lualualei, Hawaii, frequency (Figure 6). Other VLF signals originating in the western and eastern United States were not detectable during this survey.

The technique utilizes the horizontal primary electromagnetic field emanating from VLF marine broadcasting stations. Variations in conductivity in the survey area create secondary fields with measurable vertical component and amplitude.

The survey did not generate any strong cross-overs. The anomalies delineated during the magnetometer survey trend north-south, indicating that the Hawaii channel may not respond well to conductive structures of this attitude. An alternative frequency and signal directions - such as the Seattle, Maine, channel - should be tried over the strong magnetic anomaly.

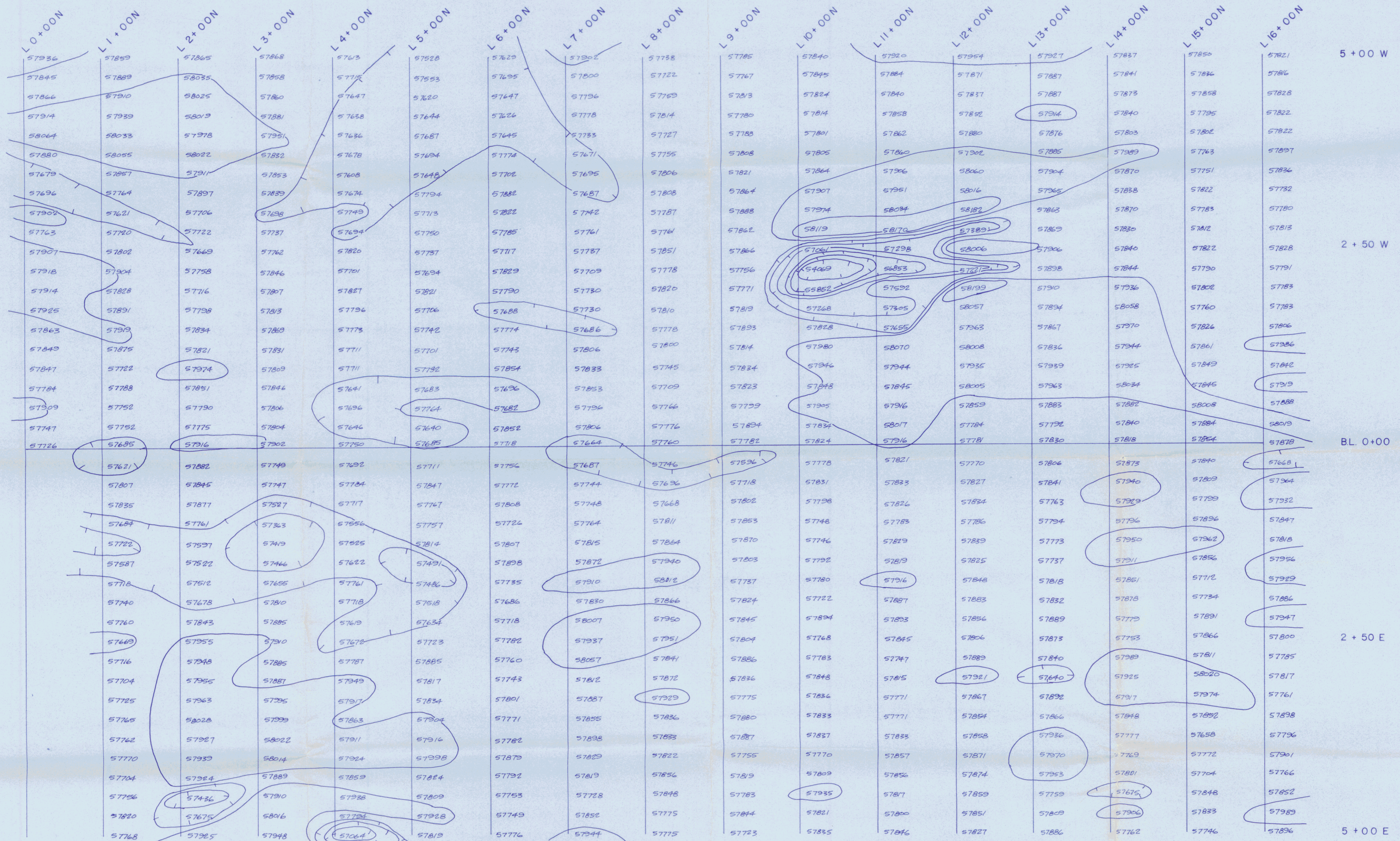
CONCLUSIONS

The STONE 1-70 mineral claims contain no known reserves of mineralization; however, they are underlain by Skukum Group rocks which host a significant gold-silver deposit eight kilometers west of the property. In addition, Eocene rhyolite dykes occurring along the western side of the claims are known to be auriferous elsewhere in the district. Areas containing Skukum Group and Eocene rhyolites should be examined in detail using geological, geochemical and geophysical methods.

The May 1985 exploration program outlined two magnetic anomalies. A program of soil sampling, geological mapping and a VLF-EM survey (Seattle frequency) should be conducted in the anomalous locations.

Further stages of exploration involving trenching and diamond drilling would follow a successful preliminary program.

The STONE property represents a viable exploration target in the active Wheaton River-Mount Skukum district.

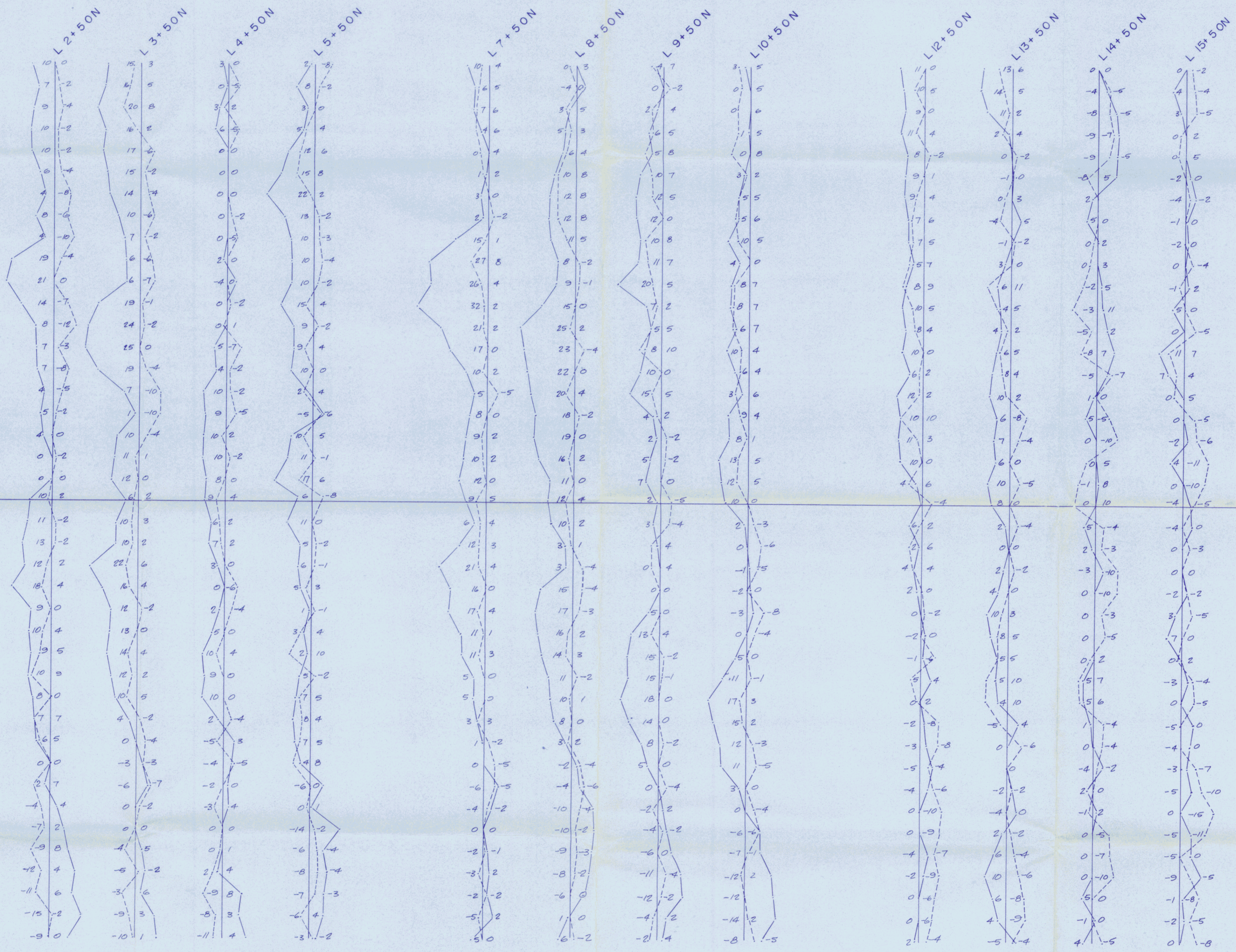


CONTOURS (GAMMA'S)

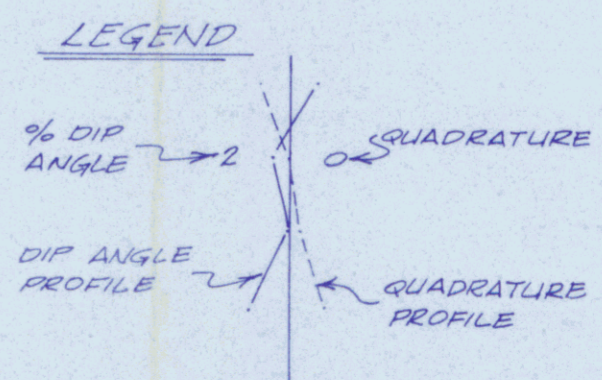
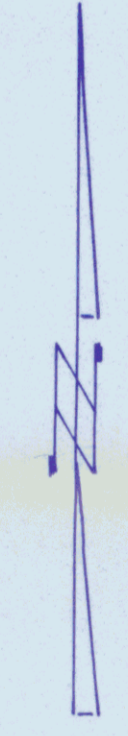
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| 57, 900 | 58, 100 |
| 57, 700 | 57, 900 |
| 57, 500 | 57, 700 |
| 57, 250 | 57, 500 |
| 57, 000 | 57, 250 |
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| HYCROFT RESOURCE AND DEVELOPMENT CORPORATION | |
| MAGNETOMETER SURVEY | |
| STONE CLAIMS | 5 |
| SCALE: 1:2,500 | DATE: May, 1985 |
| DRWN. WMB | |



HAWAII STATION
LUALUALEI (23.4 kHz)



091651
~~091651~~

SHEET 105-D-6

HYCROFT RESOURCE AND DEVELOPMENT CORPORATION

VLF EM SURVEY RONKA EM 16
(LUALUALEI, HAWAII 23.4 kHz.)

STONE CLAIMS

SCALE: 1:2,500 DATE May, 1985

DRWN. WMS 6

APPENDIX 1

STATEMENT OF QUALIFICATIONS

G. MACDONALD AND ASSOCIATES LIMITED
Consulting Professional Geologists

4 Hyland Crescent
Whitehorse, Y.T.
Y1A 4P6

(403) 668-2044

(403) 667-7229

STATEMENT OF QUALIFICATIONS

I, GLEN C. MACDONALD, with business and residential address in Whitehorse, Yukon Territory, DO HEREBY CERTIFY that:

1. I am a consulting professional geologist.
2. I am a graduate of the University of British Columbia (B.Sc., Geology, 1973 and B.A. Economics 1971).
3. I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta. (No. 36214).
4. I am registered as a Professional Geologist in the Northwest Territories. (No. L166).
5. I am a member in good standing of the Canadian Institute of Mining and Metallurgy.
6. I have practised Mining and Exploration Geology in the Yukon, Northern British Columbia and the Northwest Territories since 1973. I began private practice in 1982, after leaving the position of Regional Geologist for Noranda Exploration Company Limited, Whitehorse, Yukon Territory.
7. I have examined the area of the Stone property in the Wheaton River area of the Whitehorse Mining District, and have reviewed all available private and public information on the property to compile this report.
8. I have not received, nor do I expect to receive, any interest in the properties or securities of Hycroft Resource and Development Corp.
9. I hereby grant my permission for Hycroft Resource and Development Corp. to use this report for filing with the Vancouver Stock Exchange as partial requirement of a Statement of Material Facts or for any legal purpose normal to the business of Hycroft Resource and Development Corp.

DATED at Whitehorse, Yukon Territory,
This 5th day of June, 1985



Glen C. Macdonald, P.Geol.

APPENDIX 2

RECOMMENDED PROGRAM

RECOMMENDED PROGRAM

Phase I

| | |
|--------------------------------------|----------|
| Transportation: | |
| 4 hrs helicopter @ \$550/hr | \$2,200 |
| Grid Construction: | |
| 30 km @ \$150/km | \$4,500 |
| Geology and Prospecting: | |
| 15 days @ \$300/day | \$4,500 |
| Geochemical Survey (Au, Ag, As, Cu): | |
| 750 samples @ \$20 each | \$15,000 |
| Geophysical Survey: | |
| Magnetometer: 30 km @ \$50/km | \$1,500 |
| VLF-EM: 30 km @ \$75/km | \$2,250 |
| Assays: | \$1,000 |
| | <hr/> |
| | \$30,950 |
| | ===== |

Phase II

| | |
|------------------------------|----------|
| Road Building and Trenching: | |
| D7 cat - 100 hrs @ \$75/hr | \$7,500 |
| Geology: | |
| 10 days @ \$300/day | \$3,000 |
| Assistant: | |
| 10 days @ \$200/day | \$2,000 |
| Assays: | \$2,000 |
| | <hr/> |
| | \$14,500 |
| | ===== |

Phase III

| | |
|----------------------------------|----------|
| Diamond Drilling: | |
| 750 ft @ \$40/ft | \$30,000 |
| Assays: | \$3,000 |
| Geology: | |
| 15 days @ \$300/day | \$4,500 |
| Assistant: | |
| 15 days @ \$200/day | \$3,000 |
| Road and Drill Pad Construction: | |
| (D7) - 25 hrs @ \$75/hr | \$1,875 |
| | <hr/> |
| | \$42,375 |
| | ===== |

STATEMENT OF COSTS FOR
MAY, 1985 EXPLORATION PROGRAM

| | |
|---------------------|-------------|
| Transportation | 600.00 |
| Camp and supplies | 600.00 |
| Grid construction | 4,800.00 |
| Geophysical surveys | |
| Magnetometer | 850.00 |
| VLF-EM | 600.00 |
| | <hr/> |
| Total field costs | 7,450.00 |
| Geological report | 900.00 |
| | <hr/> <hr/> |
| Total costs | 8,350.00 |