WHITEHORSE M.D.

ASSESSMENT REPORTS

MAP No. 105 D 3 TYPE OF WORK: Geophysical

REPORT FILED UNDER	Walhalla Exploration Ltd.
DATE PERFORMED	October 1984 DATE FILED: June 14, 1985
LOCATION – LAT.	60°12'N
LONG.	135°14'W
CLAIM Nos.	TECH 1-18; YA82362-YA82379
	TECH 19-21; YA86013-YA86015
WORK DONE BY	G.C. MacDonald
WORK DONE FOR	Walhalla Exploration Ltd.
REMARKS	

091649

Yex ES p. 101 – 102

The property is underlain by Cretaceous hornblende-biotite-oligoclase granodiorite cut by Eocene rhyolite and granite porphyry (feldspar and quartz) stocks and dykes. A small body of volcanic rock outcrops on the TECH 14-16 claims. West of the property, a stock of rhyolite-granite porphyry occurs in contact with volcanic rocks and Tantalus Formation Conglomerates. Presently, there are no known mineral showings on the TECH claims.

In October, 1984 exploration conducted by Walhalla Exploration Ltd. consisted of the establishment of a 12 km grid in the central and southern portion of the claims with a southwest trending baseline and crosslines at 100 m centres. This was used for a VLF-EM survey with readings taken at 25 m intervals. Several moderately linear, northeast-trending anomalies occur in the southern part of the grid, with one in the northern part. These anomalies probably trace out rhyolite-granite porphyry dykes.

SUMMARY REPORT

on the

TECH 1-21 CLAIMS
Wheaton River Area

NTS 105 D/3
Latitude 60°12' - Longitude 135°14'
Whitehorse Mining District
Yukon Territory

for

WALHALLA EXPLORATION LTD.

by

G. Macdonald and Associates Ltd.

June 7, 1985

091649

This report has been exam...
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of $ 2,100.00 .

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

SUMMARY

The TECH 1-21 claims, owned by Walhalla Exploration Ltd., lie in the Wheaton River area of the Yukon Territory.

The property located south of the Wheaton River on the northeast facing slope of Carbon Hill is primarily underlain by Coast Range Intrusive granodiorite. Eocene rhyolite-granite porphyry dykes outcrop at the top of several small gullies. These dyke structures are known to be auriferous elsewhere in the district. Presently there are no identified mineral showings on the TECH claims.

In October 1984 a program of grid development and a VLF-EM geophysical survey was conducted on the southern section of the property. Several northeasterly trending conductors were delineated during the survey. These anomalies may trace rhyolite-granite porphyry dyke structures which warrant further investigation.

The TECH claims are bounded by properties containing numerous showings of precious metals. It is recommended that a program consisting of geological mapping, geochemistry, grid development 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 TECH 1-21 mineral claims. The report was prepared at the request of Walhalla Exploration Ltd. of Whitehorse, Yukon Territory. Data collected during an exploration program in October 1984 is presented in this summary.

Available geological literature on the Wheaton River area was reviewed in conjunction with this report. The author is familiar with the region, having conducted exploration programs throughout the Wheaton River district.

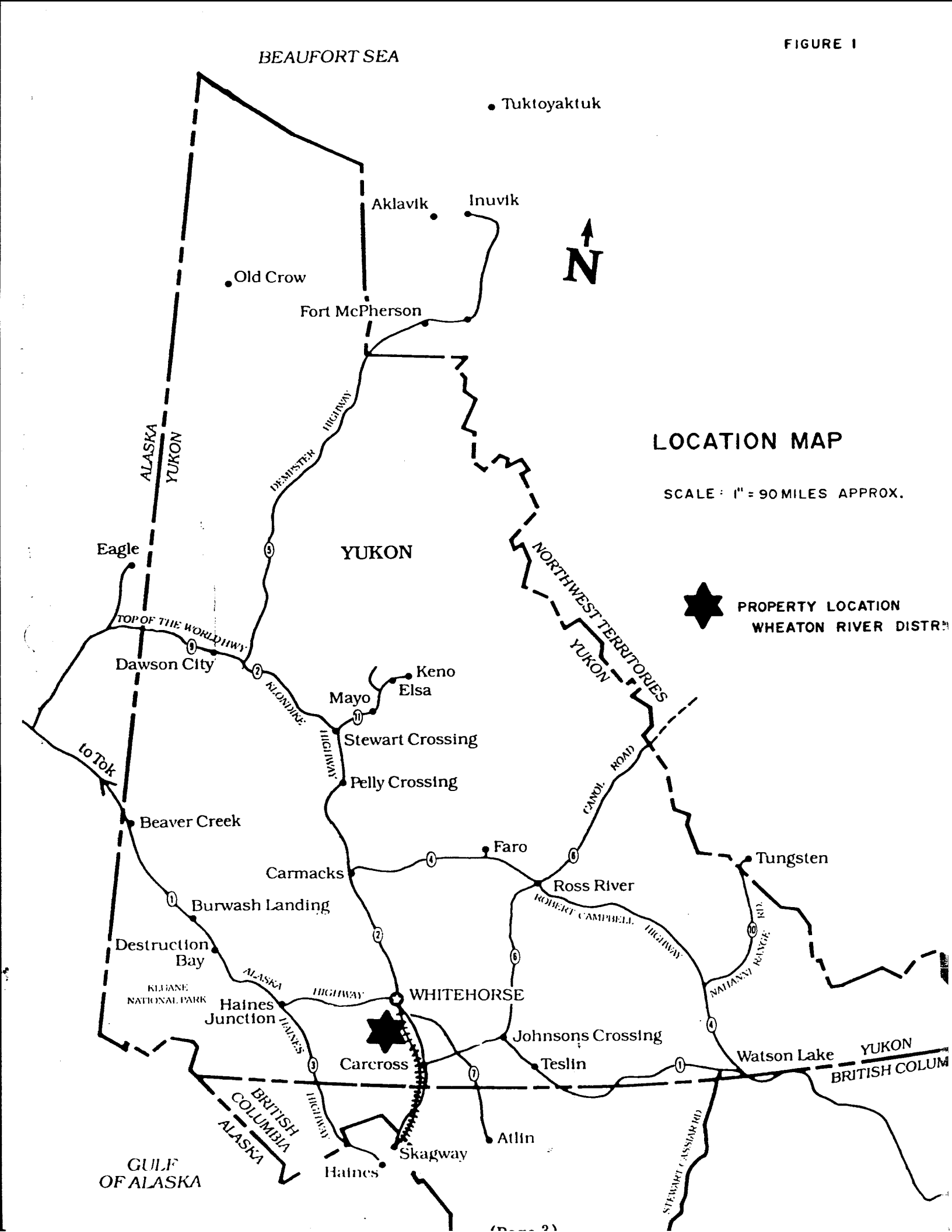
LOCATION AND ACCESS

The TECH 1-21 claims are located south of the Wheaton River and to the west of Becker Creek, covering the northeast facing slope of Carbon Hill at latitude 60°15'N and longitude 135°15' on N.T.S. map sheet 105 D/3. The property, situated 60 km south of Whitehorse, Yukon Territory, is accessible from the government-maintained Wheaton River Road via a four-wheel drive road along Becker Creek (Figure 1).

Helicopter charter services are available on a year-round basis at Whitehorse and are presently (June-August) available from the Wheaton River airstrip located 5 km from the TECH claims.

Other services, supplies and facilities are available in Whitehorse.

FIGURE 1


BEAUFORT SEA
Tuktoyaktuk
Aklavik
Inuvik
N
Old Crow
Fort McPherson
LOCATION MAP
SCALE: 1" = 90 MILES APPROX.
ALASKA
YUKON
DEMPSTER HIGHWAY
YUKON
NORTHWEST TERRITORIES
YUKON
PROPERTY LOCATION
WHEATON RIVER DISTR
Eagle
TOP OF THE WORLD HWY
Dawson City
KLONDIKE HIGHWAY
Keno
Elsa
Mayo
Stewart Crossing
Pelly Crossing
to Tok
CANOL ROAD
Beaver Creek
Faro
Tungsten
Carmacks
Ross River
Burwash Landing
ROBERT CAMPBELL HIGHWAY
Destruction Bay
KLUANE NATIONAL PARK
ALASKA HIGHWAY
Haines Junction
HAINES
WHITEHORSE
NAHANNI RANGE RD.
Johnsons Crossing
Carcross
Teslin
Watson Lake
YUKON
BRITISH COLUM
BRITISH COLUMBIA
ALASKA
HIGHWAY
Atlin
Skagway
Haines
GULF OF ALASKA
STEWART CASSIAR RD

PROPERTY COMPOSITION

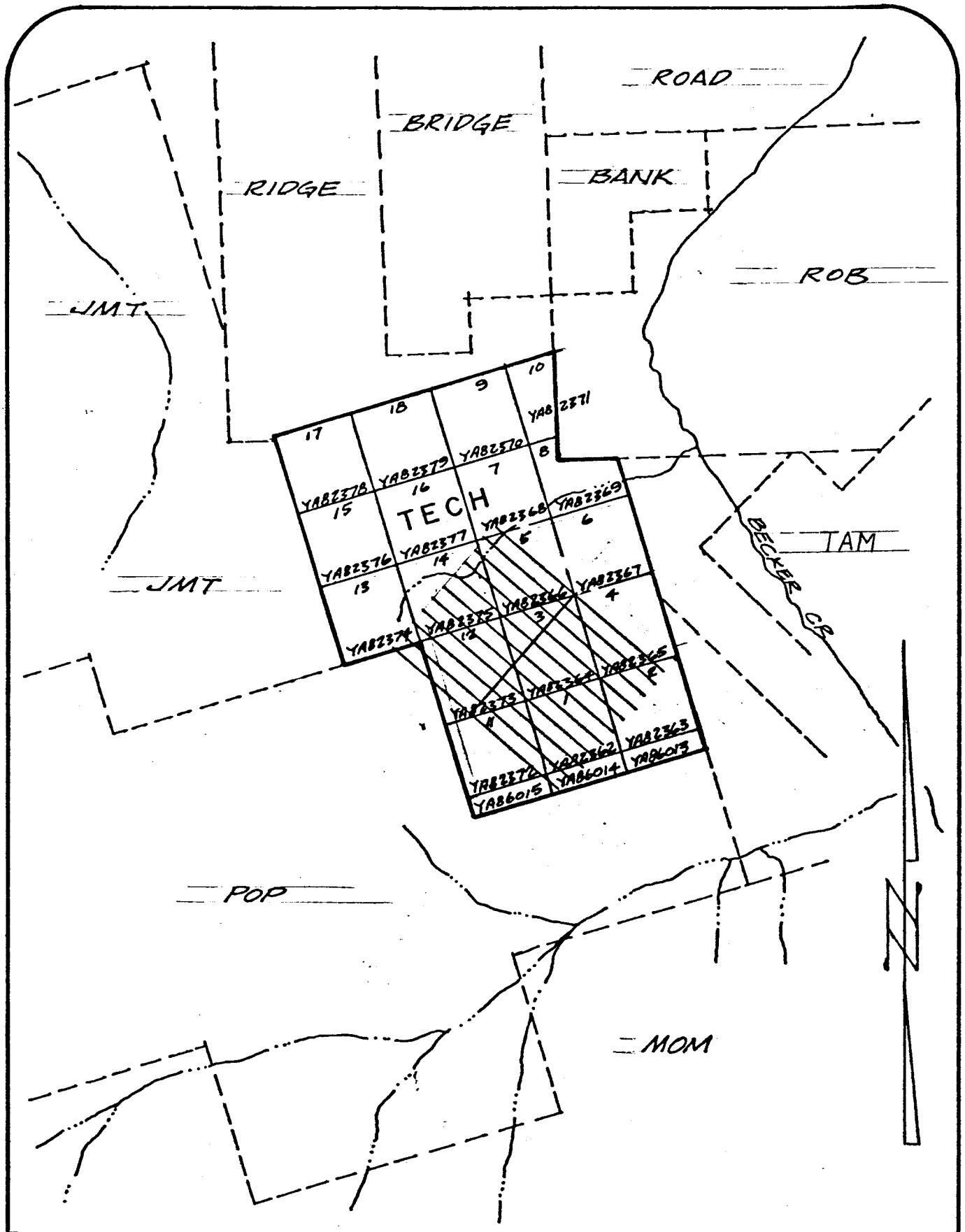
The property, situated in the Whitehorse Mining District of the Yukon Territory, is comprised of 21 contiguous claims located in accordance with the Yukon Quartz Mining Act (Figure 2).

Table I - Claim Composition

Claim Name	Record Number	Expiry Date	Owner
TECH 1-18	YA82362-YA82379	June 7, 1985	Walhalla Exploration Ltd.
TECH 19-21	YA86013-YA86015	June 7, 1985	Walhalla Exploration Ltd.

Several claim posts were mapped during the exploration program in October 1984; further work should include a survey to accurately locate the property boundaries.

FIGURE 2



CLAIM SKETCH SHOWING

TECH CLAIMS 1 - 21

DATE May/85 | SCALE Approx 1:30,000 | DRWN WMB

PHYSIOGRAPHY AND CLIMATE

The Wheaton River area consists of a deeply disected 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 (± 1200 meters a.s.l.) willow and alder brush cover the terrain but upper slopes and plateau surfaces are bare.

The property lies on the moderately steep northeast facing slope of Carbon Hill overlooking Becker Creek. Several narrow gullies disect the slope.

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 month, commencing in early May and ending in late October.

HISTORY AND PREVIOUS WORK

The first prospectors entered the Wheaton River area in the early 1890's during the Klondike Gold Rush. Frank Korwin and Thomas Rickman located claims on Carbon, Chieftain and Idaho Hills in 1893. They returned to Juneau in the fall, carrying samples of antimony-silver ore taken from Carbon and Chieftain Hills, and some very rich gold bearing quartz samples collected at an unknown site. Both men died over the winter without revealing the location of the auriferous quartz veins. Subsequent searches for these veins found little until 1898 when W. F. Schnabel discovered an old camp on Schnabel Creek and identified gold-bearing quartz on Idaho Hill.

Elsewhere in the Wheaton district, intensive exploration began in 1906 when D. Hod nett and J. Stager discovered free gold and gold-silver tellurides on Gold Hill. In the same year the antimony-silver workings of Korwin and Rickman were rediscovered on Carbon and Chieftain Hills.

On the north and west faces of Carbon Hill, the old claims are known as the Fleming Property and Goddell's Claims. Cairnes (1912)reported that numerous quartz veins containing stibnite, sphalerite, galena and tetrahedrite occurred in shear zones within granodiorites. By 1961 Wheeler noted that most of the old pits and adits had sloughed in.

On the east side of Carbon Hill the Becker-Cochran showing lies 1 km southwest of the TECH claims. Yukon Antimony Corp. Ltd. conducted a program of diamond drilling and the driving of three adits along the mineralized zone (Yukon Exploration and Geology, 1983). An estimate of 140,000 metric tons of 4% antimony was calculated for the ore zone in 1974. Exploration in 1976 consisted of 17 diamond drill holes and a VLF-EM survey. Most of Carbon Hill, including the Becker-Cochran showing, is presently held by Berglynn Resources Inc.

On the east side of Becker Creek, opposite the TECH claims, two quartz veins discovered in 1906 by W. McGrew and associates, extend for over 2,000 feet across the hillside. By 1915 two adits were driven on the lower vein and one adit was collared on the upper vein. A small mill was erected beside Becker Creek to process the mineralized quartz. Partners W. Hyde and K. Djukastein, and Sanfred Resources Ltd. currently own the claims east of Becker Creek.

North of the TECH group, New Ridge Mines Ltd. hold a claim block which contains old showings known as the Fleming group. Skarn type mineralization is reported in trenches and some diamond drilling has taken place.

Interest in the Wheaton area increased in the 1980's with the discovery of gold-silver bearing structures on Mount Skukum by AGIP Canada. Reserves of 235,000 tonnes grading 20 grams gold per tonne are reported by Erickson Gold Mines Ltd., the property developer.

Staking ventures in 1983 and 1984 have sealed up most of the ground in the Wheaton River-Mount Skukum area. Shakwak Exploration Co. Ltd., Tally Ho Exploration Co., J.M.T. Exploration Ltd., New Ridge Mines Ltd., Noranda Mines Ltd. and Berglynn Resources Inc. all hold claims near the TECH property. Walhalla Exploration Ltd. staked the TECH 1-21 claims in June 1984.

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). Much of the Wheaton River drainage is underlain by a Cretaceous granitic intrusive complex which is part of the more extensive Coast Range Intrusives. Precambrian Yukon Group metamorphic rocks and volcanic rocks of uncertain age occur as inclusions within the intrusive complex. Pennsylvanian and Permian Taku Group, Upper Triassic Lewes River Group and Jurassic marine and fluvial sedimentary rocks of the Laberge Group outcrop on the flanks of the granitic batholiths. Tantalus Formation Jurassic conglomerates are exposed as isolated outcrops within granites and occur in fault contact with rocks of the Laberge and Lewes River Groups.

Skukum Group (Tertiary) volcanics and volcanogenic sediments intrude and overlie the Coast Range granitic complex. Stocks and dykes of granite porphyry and rhyolite are the youngest (Eocene) intrusive rocks in the area. Table 2 summarizes the regional geology.

Table 2 - Table of Formations

QUATERNARY		Alluvium; glacial deposits
QUATERNARY (?)	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
JURASSIC	Laberge Group	Greywacke, arkose, quartzite, conglomerate, siltstone, argillite, hornfels
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

PROPERTY GEOLOGY

The property is underlain by Cretaceous Coast Range Intrusive rock primarily a hornblende-biotite-oligoclase granodiorite, unit IV on Cairnes' (1912) geology map (Figure 3). Eocene rhyolite and granite porphyry stocks and dykes (unit II) are exposed at the tops of several small gullies. The granite porphyry is pale brown containing feldspar and quartz phenocrysts of up to 6 mm across (Wheeler, 1961). A small body of volcanic rock (unit V) outcrops on the north side of a creek in TECH claims 14-16. West of the property a stock of rhyolite-granite porphyry occurs in contact with volcanic rocks and Tantalus Formation conglomerate.

On the old Becker-Cochran showing, mineralization is exposed in a 2-3 meter wide shear zone cutting brownish altered andesite. In the shear zone, lenses and bands of stibnite up to 25 cm in width carrying 13.28% antimony occur in brown to blue clayey material (Wheeler, 1961).

Presently, there are no known mineral showings on the TECH claims. The property should be mapped at 1:5,000 scale in the course of further exploration.

FIGURE 3 – GEOLOGY MAP

EXPLORATION PROGRAM

In October 1984, an exploration program was conducted by Walhalla Exploration Ltd. under the supervision of Mr. S. Ridgeway. A 0.9 km baseline bearing 225° was establilshed in the southern portion of the claims with starting point 0+00S, 0+00E located at the #1 claim posts of TECH 5 and 6 (Figure 2). Twelve kilometers of flagged crosslines at 100 meter centers extend for 600 meters to the northwest and to the southeast of the baseline.

A VLF-EM survey was conducted by Mr. S. Ridgeway using a Ronka EM-16 unit. Readings were taken at 25 meter stations along 12 km of grid line utilizing the Seattle, Washington (18.6 KHz) and Maine (23.4 KHz) frequencies.

The VLF-EM technique uses 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.

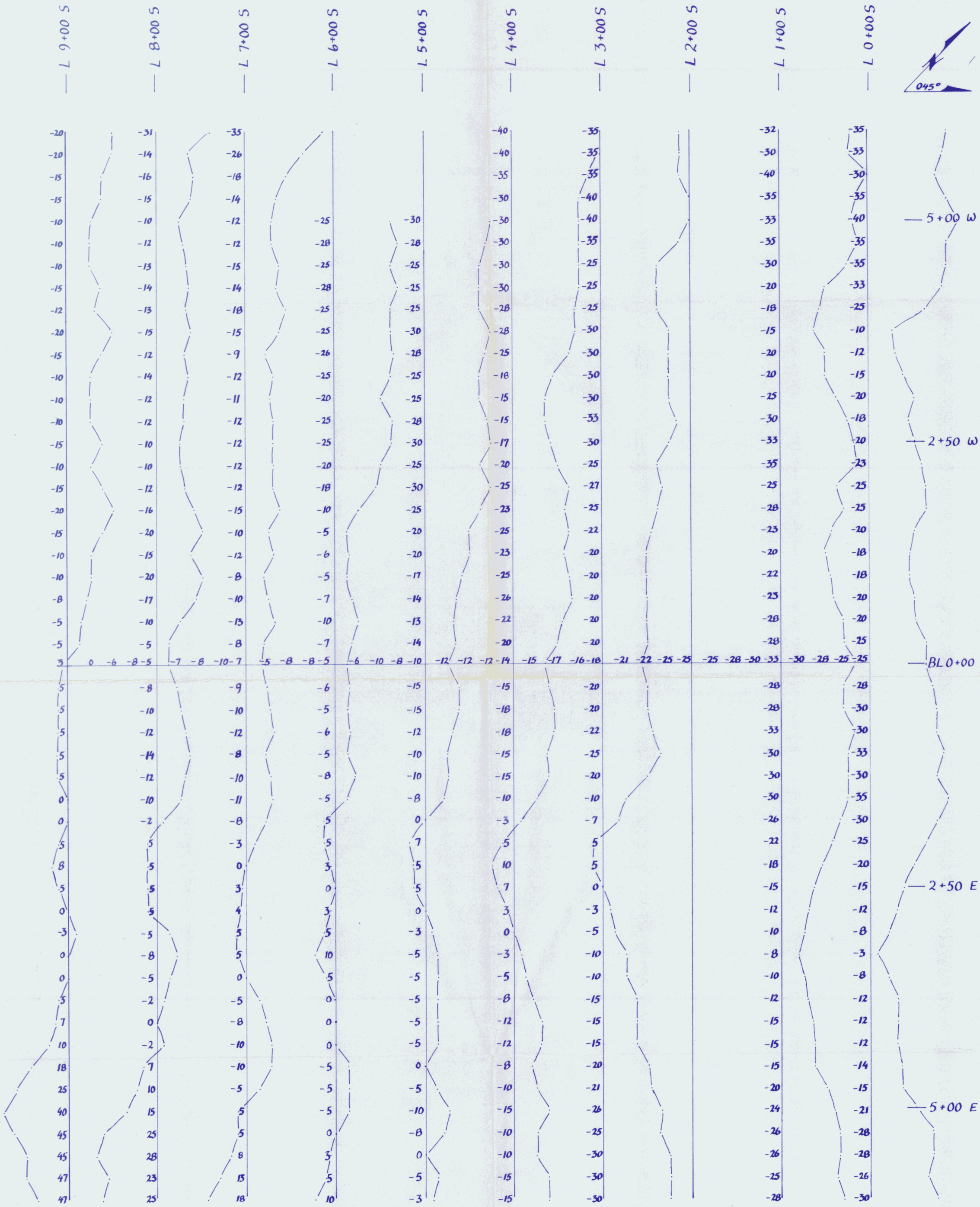
The survey generated several moderate linear anomalies in the southern section of the grid and one anomaly in the northern part of the grid (Figures 4, 5 and 6). The conductors all trend in a northeasterly direction similar to the attitudes of rhyolite-granite porphyry dykes. The VLF-EM anomalies probably trace the Eocene intrusive rocks.

CONCLUSIONS

The TECH 1-21 claims contain no known mineral showings. Geologically, the area contains structures which host gold-silver mineralization elsewhere in the district. The property should be mapped and prospected in detail, with particular attention on rhyolite-granite porphyry dykes and andesitic volcanic rocks. Geological, geophysical and geochemical methods should be employed in a future program.

The October 1984 exploration program outlined several northeasterly trending conductors which may correspond to rhyolite-granite porphyry dykes. These anomalies require further investigation to discern their nature.

A proposed program of exploration is presented in the Appendix. The TECH property represents a viable exploration target in the active Wheaton River district.



WALHALLA EXPLORATION

TECH GRID

VLF EM SURVEY

RONKA EM 16 - MAINE

SCALE 1:2,500

OCT. 26, 1984

091649

L 9+00 S
L 8+00 S
L 7+00 S
L 6+00 S
L 5+00 S
L 4+00 S
L 3+00 S
L 2+00 S
L 1+00 S
L 0+00 S

5+00 W
2+50 W
BL 0+00
2+50 E
5+00 E

CONTOURS (0, 10, 20)

WALHALLA EXPLORATION

TECH GRID

VLF EM SURVEY - FRAZER FILTER

RONKA EM 16 - MAINE

SCALE 1:2,500 OCT. 28, 1984

091649

WALHALLA EXPLORATION

TECH GRID

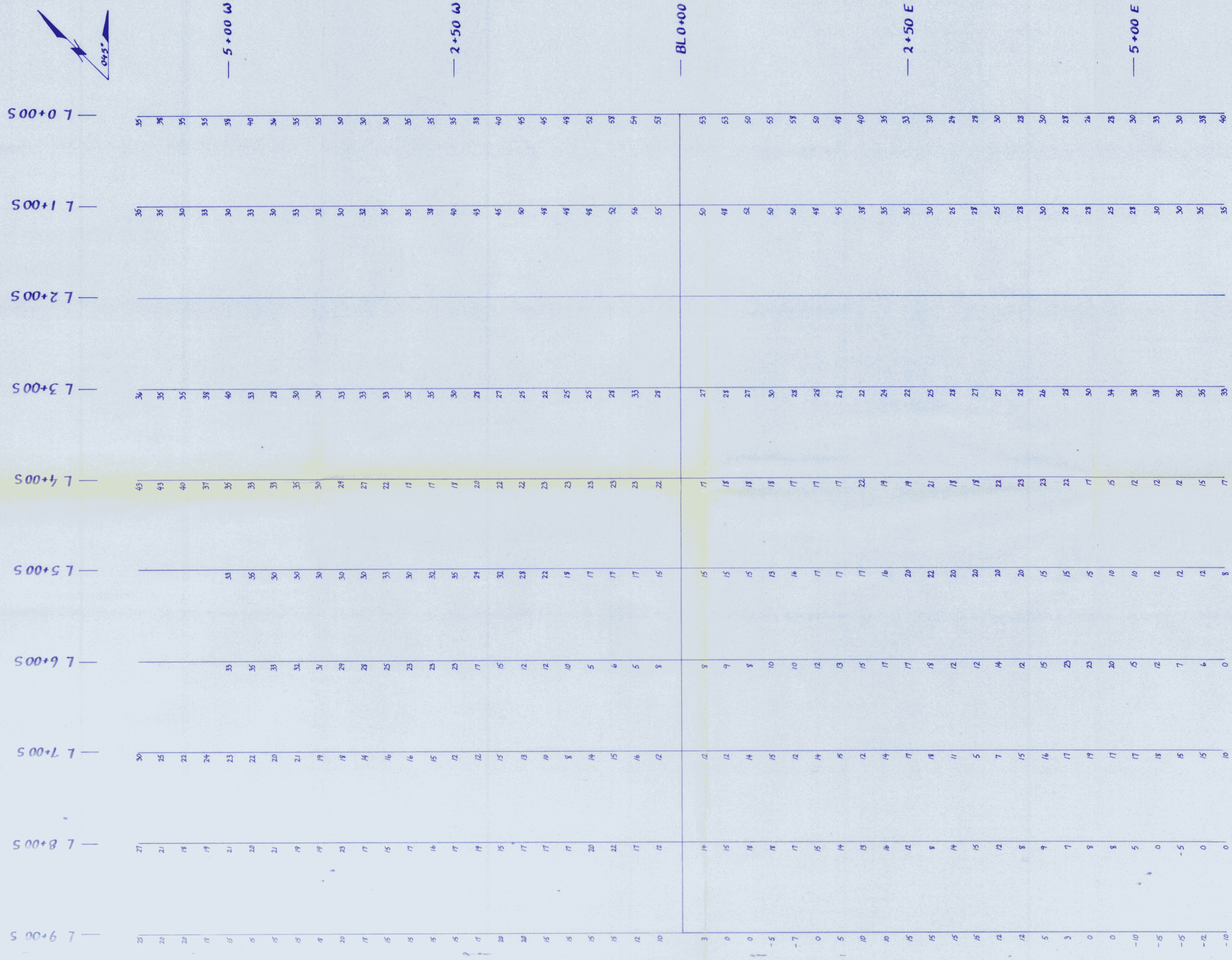
VLF EM SURVEY

RONKA EM 16 - SEATTLE

SCALE 1:2,500

OCT. 27, 1984

091649



APPENDIX I

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 with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (# 36214).

4. I am registered as a Professional Geologist in the Northwest Territories (# 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 in Whitehorse, Yukon Territory.

7. I have examined the area of the TECH 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 Walhalla Exploration Ltd.

9. I hereby grant my permission for Walhalla Exploration Ltd. 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 Walhalla Exploration Ltd.

DATED at Whitehorse, Yukon Territory, this 12th day of June, 1985.

G Macdonald

Glen C. Macdonald, P.Geol.

APPENDIX II

PROPOSED EXPLORATION PROGRAM

PROPOSED EXPLORATION PROGRAM

PHASE I

Grid construction: 15 km @ $150/km	$ 2,250
Geology and prospecting: 10 day @ $300/day	3,000
Geochemical survey: 600 samples @ $20/each	12,000
Geophysical survey: Magnetometer: 27 km @ $50/km	1,350
VLF-EM: 15 km @ $75/km	1,075
Assays	1,000
Camp and supplies	1,500
	$22,175

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
Camp and supplies	1,000
	$15,500

PHASE III

Diamond drilling

STATEMENT OF COSTS

TECH 1-21 CLAIMS

OCTOBER 1984

GRID CONSTRUCTION AND VLF-EM SURVEY	$250/km. for 13.1km.	$3275
REPORT AND DRAFTING		$900
	TOTAL COSTS	$4175