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VANCOUVER, B.C.

ASSESSMENT REPORT

JUN 30 1994

Geological Survey Branch
MEMPR

AIRBORNE GEOPHYSICAL SURVEY
ON THE
MICROGOLD PROPERTY OF CANQUEST RESOURCE CORPORATION
KAMLOOPS AND NICOLA MINING DIVISIONS, B.C.

NTS	921/8W
Latitude	50°24'N
Longitude	120°22'W
Date	June 7, 1994
Author	Darrel Johnson, B.Sc., P. Geo.


**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

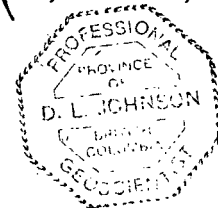
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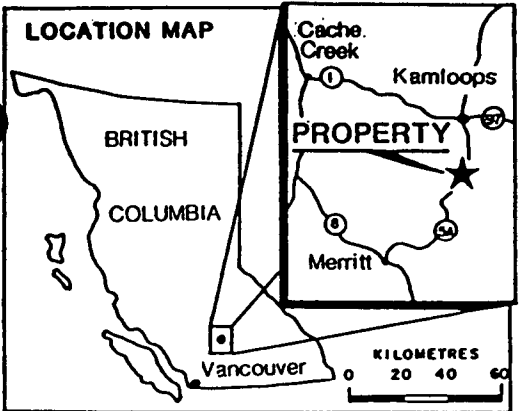
**ASSESSMENT REPORT ON THE MICROGOLD PROPERTY
OF CANQUEST RESOURCE CORPORATION**

1. In January, 1994 an airborne geophysical survey encompassing 381 line kilometres was conducted by Dighem, a division of CGG Canada Ltd. of Mississauga, Ontario, over the Microgold Property of CanQuest Resource Corporation at Stump Lake, B.C. The program consisted of electromagnetic, resistivity, magnetic and VLF surveys.
2. A statement of expenses is attached as Appendix "A" to this submission.
3. The airborne survey was carried out on the basis of my recommendations outlined in Part 12.0 of a report entitled "REPORT AND PROPOSAL FOR EXPLORATION ON THE MICROGOLD PROPERTY" and prepared for CanQuest Resource Corporation in January, 1994. A copy of that report is attached as "Appendix "B" to this submission.
4. A report authored by Ruth A. Pritchard, Geophysicist, of Dighem, and dated March 18, 1994 is also attached to this submission.
5. In general, the results of the resistivity survey appear to confirm and possibly enlarge the known zones of gold-bearing silicification on the property. The results of the magnetic survey appear to outline some faults crosscutting the regional, north-trending fault systems. These potential cross faults may explain the apparent offset of the two main zones of silicification, and the possible presence of these faults substantiates and re-enforces my earlier recommendations that ground geophysics be carried out in the area between the two main systems. It also appears from the results of the resistivity survey that other, previously unknown zones of silicification may lie under cover in the northwest part of the property.
6. CanQuest Resource Corporation intends to submit to expert analysis the Dighem survey results in conjunction with all the historical exploration data. The results of that analysis, expected in the Summer of 1994, may modify, but not substantially change the recommendations for work on the property contained in my above-mentioned report dated January, 1994.

June 7, 1994


Darrel Johnson, B.Sc., P.Geo.





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CIN
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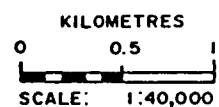
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KAMLOOPS MINING DISTRICT
NICOLA MINING DISTRICT

EPIC 5 322520	MICROGOLD 237068	
EPIC 4 322519	EPIC 2 322517	EPIC 1 322516
EPIC 3 322518	LAKE	

STUMP



PROFESSIONAL
PROVINCE OF
D. L. JOHNSON
BRITISH COLUMBIA
GEOLOGIST

Darrel Johnson
June 7 1994

PROFESSIONAL
PROVINCE OF
D. L. JOHNSON
BRITISH COLUMBIA
GEOLOGIST

CanQuest Resource Corporation
MICROGOLD PROPERTY
CLAIM MAP
Kamloops and Nicola M.D. B.C.
Figure 1 Jan. 1994 NTS 921/8W
Darrel Johnson P.Geo.

SURVEY AREA

Outline of the Survey Area

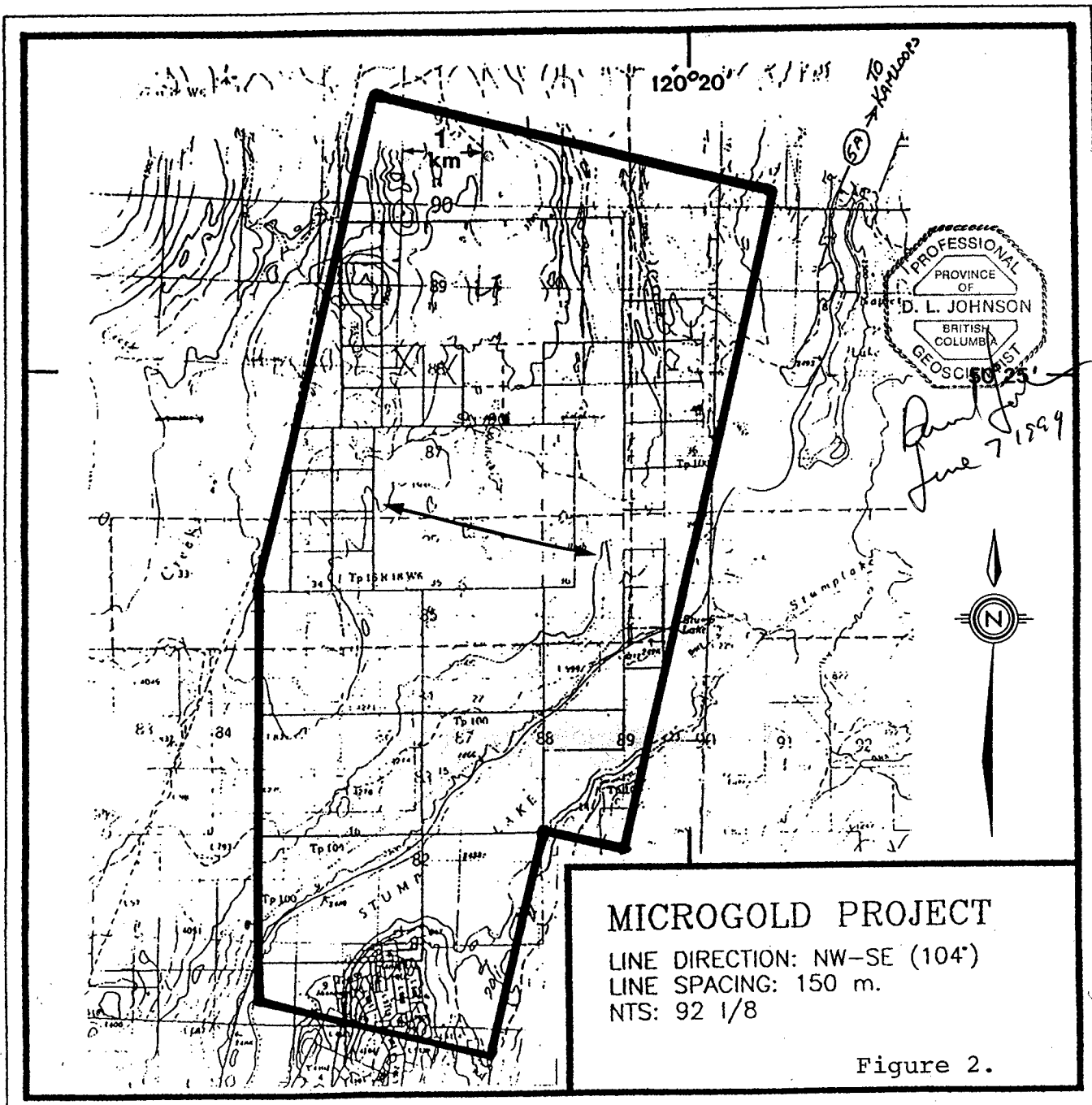


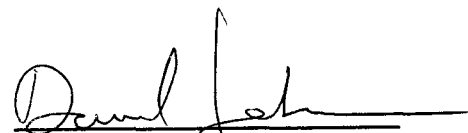
Figure 2.

Appendix "A" to Assessment Report dated June 7, 1994

MICROGOLD PROJECT
(MINFILE: "CINDY" PROPERTY)
KAMLOOPS & NICOLA MINING DIVISIONS
NTS 921/08W

STATEMENT OF COSTS:

Airborne Geophysical Survey Jan 19-30/94.....	\$28,452.27
Field supervision & travel.....	2,610.55
Base maps and misc. supplies.....	<u>\$ 240.61</u>
TOTAL PROJECT COSTS.....	<u>\$31,303.43</u>


Darrel Johnson P. Geo

June 7, 1994



Appendix "B" to Assessment Report dated June 7, 1994

REPORT AND
PROPOSAL FOR EXPLORATION
ON THE
MICROGOLD
PROPERTY
KAMLOOPS AND NICOLA
MINING DIVISIONS, B.C.

NTS: 92 I/BW
Latitude: 50°24'N
Longitude: 120°22'W
Prepared For: CanQuest Resource Corporation
Date: January 1994
Author: Darrel Johnson, B.Sc., P.Geo.

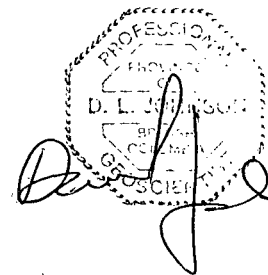


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CanQuest Resource Corporation

1.0 SUMMARY AND CONCLUSIONS

The area north of Stump Lake B.C. now encompassed by CanQuest Resource Corporation's 'Microgold' property has been explored by several companies and individuals since 1980. This work has developed and enhanced targets displaying potential for gold mineralization which have not yet been adequately explored.

Diamond drilling carried out by three mining companies, in particular BP Minerals, did not encounter sufficient sub-surface alteration zones or structures to account for the large volume of epithermal gold mineralization exposed at surface. It follows therefore, that the ultimate source of silicification and gold mineralization, the 'feeder' system, remains undiscovered.

Two main areas of gold enrichment, alteration, silicification, brecciation and pyritization have been outlined which require further testing. The 1.5km square 'Kullagh Lake' zone holds untested potential for 'bonanza' type epithermal gold deposit(s). The 2.2 km long 'West' zone displays several features typical of epithermal gold deposits. The favourable 'Nicola' volcanic package which hosts these two zones also underlies most of the remainder of the 4.5 x 8 km Microgold property. As exploration has concentrated on the two known zones, much of the peripheral area, especially the northern portion of the property, remains underexplored.

A comprehensive exploration programme with an estimated cost of \$508,000 is recommended.

2.0 INTRODUCTION

This report, prepared at the request of Mr. John Bissett, President of CanQuest Resource Corporation, is based on personal examinations of the property, most recently on January 19, 1994, on my evaluation of earlier exploration work on the property filed for assessment credits, on private reports provided by CanQuest and on various government reports and maps.

3.0 LOCATION, ACCESS AND PHYSIOGRAPHY

The Microgold property is located at Stump Lake in southwestern British Columbia, approximately 40 kilometres northeast of the town of Merritt and about the same distance south of Kamloops.

The centre of Kullagh Lake in the east central portion of the property has UTM co-ordinates of 5,586,000m.N. and 688,000m.E. Latitude is 50° 24' North and longitude is 120° 22' West. Property location is shown as an inset on Figures 1 and 3.

Paved Provincial Highway 5A cuts through the southern boundary of the property. Dirt or gravel ranch roads provide good access to most parts of the property. Off-road travel by 4-wheel drive vehicles is possible with the prior consent of the ranchers who own or lease all of the surface rights for the purpose of grazing. All parts of the property are readily accessible on foot. Relations between CanQuest Resource Corporation and the ranchers are good,

with particular care taken during breeding and calving seasons to coordinate exploration activities with ranchers' requirements.

The property covers rolling semi-arid grasslands. Patches of fir, pine and deciduous trees, with sparse undergrowth, occur mainly in creek beds or gulleys. Terrain rises gently from Stump Lake at 756 metres elevation to 1189 metres near the northern property boundary.

4.0 CLIMATE AND WATER

The property lies in the interior dry belt of the province. Climatic conditions are moderate, with warm, dry summers and cool winters with light snowfalls. The property encompasses numerous small lakes, plus Kullagh Lake which has been dammed. In the springtime water is also available in streams and gullies.

5.0 THE PROPERTY

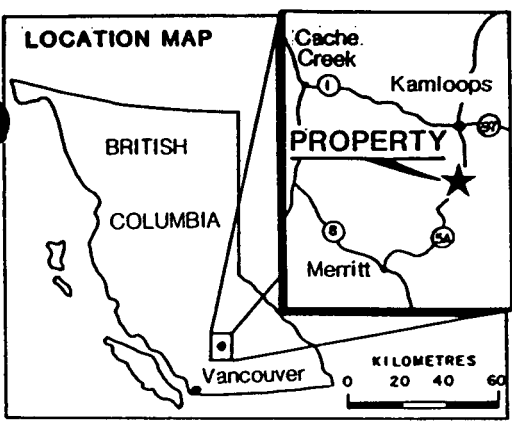
The property consists of 9 four-post and 32 two-post contiguous mineral claims which in aggregate contain 144 units or 3600 hectares. The property straddles a Mining Division boundary with seven of the claims in the Nicola Mining Division and the remainder in the Kamloops Mining Division. All of the claims are recorded in the name of CanQuest Resource Corporation and are plotted on B.C. government Mineral Titles Reference Map 92I/8W.

None of the mineral claims have been surveyed.

As part of its 1985 exploration work, BP Resources Canada Limited commissioned Webber and Company, Barristers and Solicitors, of Kamloops, B.C. to search legal land title for the area covered by the Microgold, Cin and Dy claims. This search reportedly showed that mineral rights in the area were not attached to the surface rights but had been retained by the Crown and were available for staking. No title searches other than inspection of the records at the Mining Division offices has been carried out on the balance of the claims.

Claim information is listed below and shown on Figure 1.

<u>CLAIM NAME</u>	<u>MINING DIV.</u>	<u>TENURE NO.</u>	<u>UNITS</u>	<u>EXPIRY DATE</u>
Microgold *	Nicola	237060	9	94/06/21
Dy	Nicola	237068	16	94/11/01
Cin	Kamloops	217069	20	94/10/07
Epic 1	Nicola	322516	2	94/11/10
Epic 2	Nicola	322517	9	94/11/10
Epic 3	Nicola	322518	12	94/11/10
Epic 4	Nicola	322519	12	94/11/12
Epic 5	Nicola	322520	12	94/11/12
Epic 6	Kamloops	322521	1	94/11/12
Epic 7	"	322522	1	"
Epic 8	"	322523	1	"
Epic 9	"	322524	1	"
Epic 10	"	322525	1	"
Epic 11	"	322526	1	"



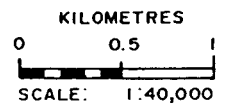
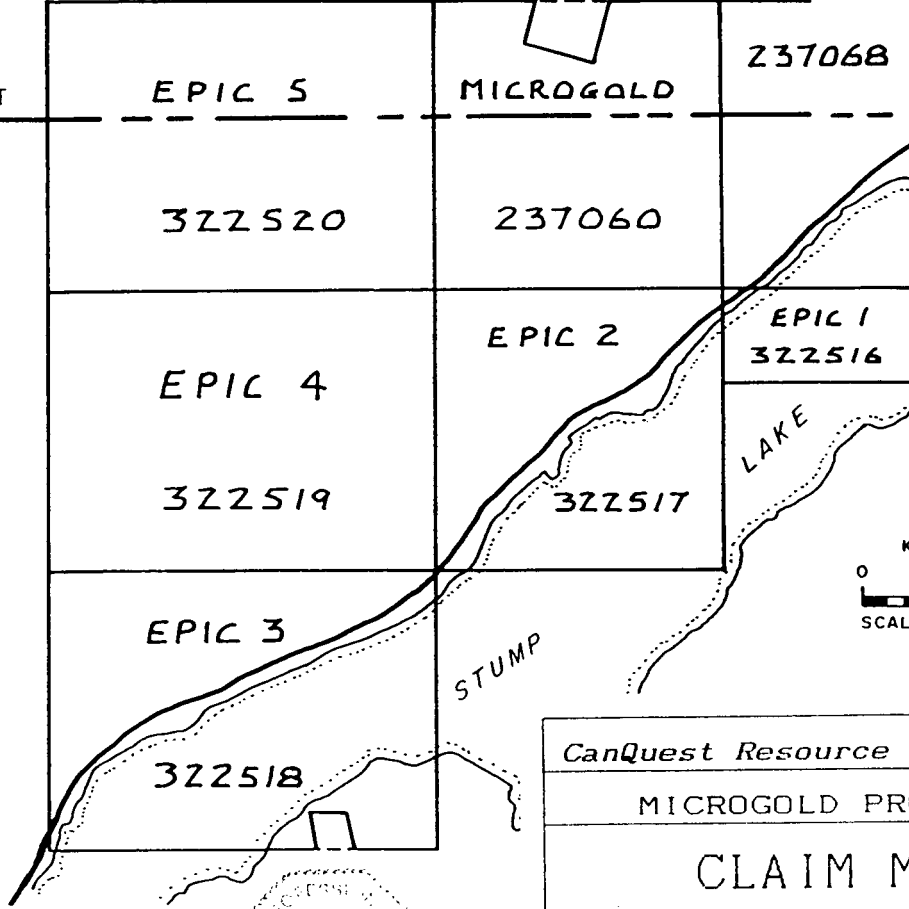
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EPIC 17 322532			EPIC 20 322539		
EPIC 16 322531			EPIC 24 322540	EPIC 26 322542	EPIC 27 322543
EPIC 15 322530			EPIC 25 322541	EPIC 28 322544	EPIC 29 322545
EPIC 14 322529			EPIC 21 322534	EPIC 22 322535	EPIC 30 322546

EPIC 13 322528	EPIC 12 322527	CIN Z17069	
EPIC 11 322526	EPIC 10 322525		
EPIC 9 322524	EPIC 8 322523		
EPIC 7 322522	EPIC 6 322521		
EPIC 5 322520	EPIC 4 322519		

EPIC 32 322548	EPIC 33 322549
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EPIC 35 322551	
EPIC 36 322552	
EPIC 37 322553	
EPIC 38 322554	



KAMLOOPS MINING DISTRICT
NICOLA MINING DISTRICT



CanQuest Resource Corporation
MICROGOLD PROPERTY
CLAIM MAP
Kamloops and Nicola M.D. B.C.
Figure 1 Jan. 1994 NTS 921/8W
Darrel Johnson P.Geo.

Epic 12	"	322527	1	"
Epic 13	"	322528	1	"
Epic 14	"	322529	1	94/11/11
Epic 15	"	322530	1	"
Epic 16	"	322531	1	"
Epic 17	"	322532	1	"
Epic 18	"	322533	1	"
Epic 19	"	322538	1	"
Epic 20	"	322539	1	"
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Epic 23	"	322537	20	"
Epic 24	"	322540	1	"
Epic 25	"	322541	1	"
Epic 26	"	322542	1	"
Epic 27	"	322543	1	"
Epic 28	"	322544	1	"
Epic 29	"	322545	1	"
Epic 30	"	322546	1	"
Epic 31	"	322547	1	"
Epic 32	"	322548	1	"
Epic 33	"	322549	1	"
Epic 34	"	322550	1	"
Epic 35	"	322551	1	"
Epic 36	"	322552	1	94/11/12
Epic 37	"	322553	1	"
Epic 38	"	322554	1	"

* Unless otherwise specified, 'Microgold' is used throughout this report to refer to the entire property rather than the specific mineral claim.

Expiry dates shown are as at the date of this report and do not reflect any assessment credits that may be earned by carrying out all or part of the work recommended herein.

Five separate claims totalling five units located internally within the Microgold property are not presently owned by Canquest.

6.0 HISTORY AND PREVIOUS WORK

Recorded mineral exploration history in the Stump Lake area dates from the late 1800's. Narrow quartz veins at Mineral Hill, southeast of Stump Lake, were mined primarily between 1916 and 1941. Total production is reported as 70395 tonnes averaging 3.74 grams per ton gold, 111.75 grams per ton silver, 0.03% copper, 1.42% lead and 0.24% zinc. A small quantity of scheelite was recovered by re-working the tailings during the Second World War.

During the 1960's and 1970's, sporadic base metal-oriented exploration targeted areas west and northwest of the Microgold property. Most of this work investigated copper and copper-molybdenum showings along the fault contact between the Nicola Horst and the regional volcanic assemblages. No commercial deposits were found.

On the Microgold property several ancient, shallow pits attest to some early, unrecorded exploration of silicified zones.

The area north of Stump Lake now encompassed by the Microgold has been explored by several companies and individuals during the 1980's and 1990's. This work has in general enhanced rather than downgraded the apparent mineral potential of the area and has generated an extensive data base which should be of great value to ongoing work on the property. This work has covered approximately 60% of the present claim group and has outlined two main zones of silicification and associated mineralization. These are the 'Kullagh Lake' zone and the 'West' zone.

6.1 The Kullagh Lake Zone.

The earliest recorded work in the Kullagh Lake area took place in 1981 when a local prospector commissioned a limited soil geochemical survey on what is now the southern half of the Microgold claim. The samples were analyzed for copper, zinc and silver. Results did not warrant recommendation of further work and the claim was allowed to lapse.

Serious gold exploration north of Stump Lake started in 1982 with the identification of gold-bearing epithermal quartz veins and alteration zones by Mr. John DeLatre of Vancouver. These occurrences were staked by DeLatre as the 20 unit Microgold claim.

Chevron

In October 1982, Chevron Canada Resources Ltd. optioned the Microgold from DeLatre and expanded the property to 45 units by staking the Cin and Dy claims to protect inferred extensions of favourable geology.

Chevron carried out a limited program of geological mapping and geochemical soil sampling followed by four diamond drill holes totalling 666m (2186'). Three of these were angle holes drilled to less than 110m. The fourth was drilled vertically to a depth of 410m. Narrow drill intersections in siliceous veins and brecciated volcanics returned gold values as high as 1125 ppb but were not pursued. The 45 unit property was returned to DeLatre in 1983.

BP

In 1985 the three claims were optioned by BP Minerals Canada Ltd. A grid was established with 78 kilometres of picket lines 100m apart and 50m station intervals. BP's three-month program in the summer of 1985 consisted of geological mapping of the three claims, soil geochemistry over most of the southern half of the Microgold, Cin and Dy claims and limited magnetometer and VLF-EM surveys over a small portion of the southern half. This work outlined a broad, "X" shaped, weakly gossanous, bleached alteration envelope with secondary silicification and widespread gold values in rock and soil samples over a 1.5km square area.

BP followed its surface work with 22 diamond drill holes clustered in two main areas. Holes C-85-1 through C-85-7 were drilled over a 200m x 200m area on the original 'discovery' silicified knoll.

Holes C-85-8 through C-85-21 probed a 600 m x 600m area at the south end of Kullagh Lake. BP's objective was to outline a near-surface gold reserve suitable for open pit extraction, with little focus on vein potential. Holes averaged slightly less than 100m each. Some 49% of the drilling was in vertical holes. While appropriate to the bulk tonnage, open pit objective, vertical holes are less than ideal in the search for steeply dipping vein type mineralization.

Results were presented as averages over entire drill hole lengths. (Appendix I). With one exception, all the holes returned highly anomalous gold values. (Hole C-85-22 was drilled in the extreme northwest corner of their property away from the main silicified area). The highest results were in C-85-13 which averaged 221ppb gold over 120.76m.

Despite surface evidence of fault structures within the alteration envelope, apparently none of the angle holes were designed to test for 'bonanza' gold mineralization in high-angle structurally controlled veins. This concept remains untested.

BP's work outlined overall alteration/mineralization patterns on the south central portion of the property and confirmed the pervasiveness of the alteration and silicification below surface. This work also demonstrated extraordinary widespread gold enrichment and secondary silica enrichment over a 1.5km square area.

Having failed to achieve its primary objective, BP dropped the option and returned the property to DeLatre.

Asamera

In 1986 the property was optioned by Asamera Inc. which carried out limited I.P. and VLF-EM work over a small portion of the southern half of the three claims. Three widely-spaced holes totalling 917.7m were drilled. These failed to give Asamera sufficient encouragement to continue and the three claims again reverted to DeLatre.

In January, 1988 DeLatre sold the three claims to a Vancouver-based junior mining company which, in turn, sold them to CanQuest Resource Corporation in July, 1989. Since then, CanQuest, because of budgetary considerations, performed only limited work programmes on the claims. That work successfully confirmed and extended the geophysical and geochemical anomalies.

Chevron, BP and Asamera drill holes are shown on Figure 4.

In November, 1993, CanQuest Resource Corporation staked 38 additional claims surrounding the original three claims whose epithermal exposures are now designated as the "Kullagh Lake Zone".

6.2 The West Zone

In July, 1982 the Canadian Nickel Company Limited ('Canico'), a division of Inco Ltd., staked two 4-post mineral claims, Bag 1 & 2, adjacent to the western boundary of the Microgold claim. CanQuest's recently acquired Epic 3 and Epic 4 claims now cover this area.

Work by Canico in 1983 consisted of prospecting and geological, geochemical and geophysical surveys and outlined two areas of interest. On the south west part of the property intermittent exposures of parallel quartz-chalcedony veins 6 to 10 cm wide were mapped in and adjacent to a small creek. This zone has an exposed width of 5m and a strike length of 325m. The highest analytical results were 35 ppb gold, 0.4 ppm silver and 58 ppm arsenic. In the central part of the two claims a zone of altered volcanics exhibiting brecciation, fracturing, quartz-carbonate veining, silicification and pyritization over widths up to 200m was traced for 2200m to the northern boundary of the property. An arsenic soil anomaly is coincident with the zone. At the north end where the zone is characterized by narrow quartz veins, rock chip analyses returned values up to 880 ppb gold, 3.7 ppm silver, 429 ppm arsenic, 115 ppm molybdenum and 162 ppm copper.

In June of 1984 Goldbrae Developments Ltd. optioned the Bag 1&2 claims from Canico and conducted detailed ground magnetometer, VLF-EM and IP surveys over the two claims. This work extended to the north into Goldbrae's Anderson 4 claim, an area now covered by CanQuest's Epic 5 claim. Data from these programs, when correlated with Canico's earlier work, delineated several areas within the main north-south zone with coincident alteration and conductive characteristics. These areas were designated by Goldbrae's consultants as high priority diamond drill targets, including one on the Anderson 4 claim. Further work on the southwest showings, which are characterized by poor exposure and spotty geochemical results, was considered a lower priority. Neither Goldbrae nor Canico followed up on the recommendations.

In 1987 the Bag 1&2, Anderson 4 and other contiguous Anderson claims to the west and northwest were optioned by Lectus Developments Ltd. A three-hole diamond drilling program totalling 616.15m was carried out in February, 1987 to test the southwest zone geochemical and geophysical anomalies outlined in 1983 and 1984. Drill cores confirmed the presence of what was defined as a fossil geothermal environment but no gold or silver values were found in the portions tested. Two of the holes encountered graphite which appeared to correlate with EM conductors. Recommendations were made to focus future work on the 2200m long central alteration zone, but no further work was performed.

The Bag 1&2 and Anderson 4 claims were forfeited in 1991 and re-staked twice by one individual who performed no work. The ground was staked by CanQuest in November, 1993.

7.0 REGIONAL GEOLOGY

The geology of the area surrounding Nicola Lake, including Stump Lake, has been mapped on a regional scale several times since 1896 starting with a classic study by G.M. Dawson. Mapping at a scale of 1:253440 was completed by Cockfield (GSC) in 1948 followed by more detailed mapping of selected areas in the 1960's and 1970's. A new regional map sheet was compiled by Monger and McMillan (GSC) in 1984. Geological mapping in 1988 and 1989, in conjunction with the LITHOPROBE multidisciplinary earth science project based on seismic surveys, was published by the BC government as Open File 1990-29 "Nicola Lake Region Geology and Mineral Deposits" by J.M. Moore et al. Regional geology is shown on Figure 2, after Gamble (1985), modified from Moore's work.

The area north of Stump Lake is underlain by mafic volcanoclastic rocks of the Late Triassic Nicola Group. These are bordered on the west by the Triassic Nicola Horst complex, unconformably overlain on the east by Eocene clastic and volcanic rocks of the Kamloops Group, and obscured on the north by Miocene olivine basalts. Small Tertiary intrusions of mainly intermediate composition have been noted and a small Tertiary sedimentary basin occupies a structural depression at the south end of Kullagh Lake.

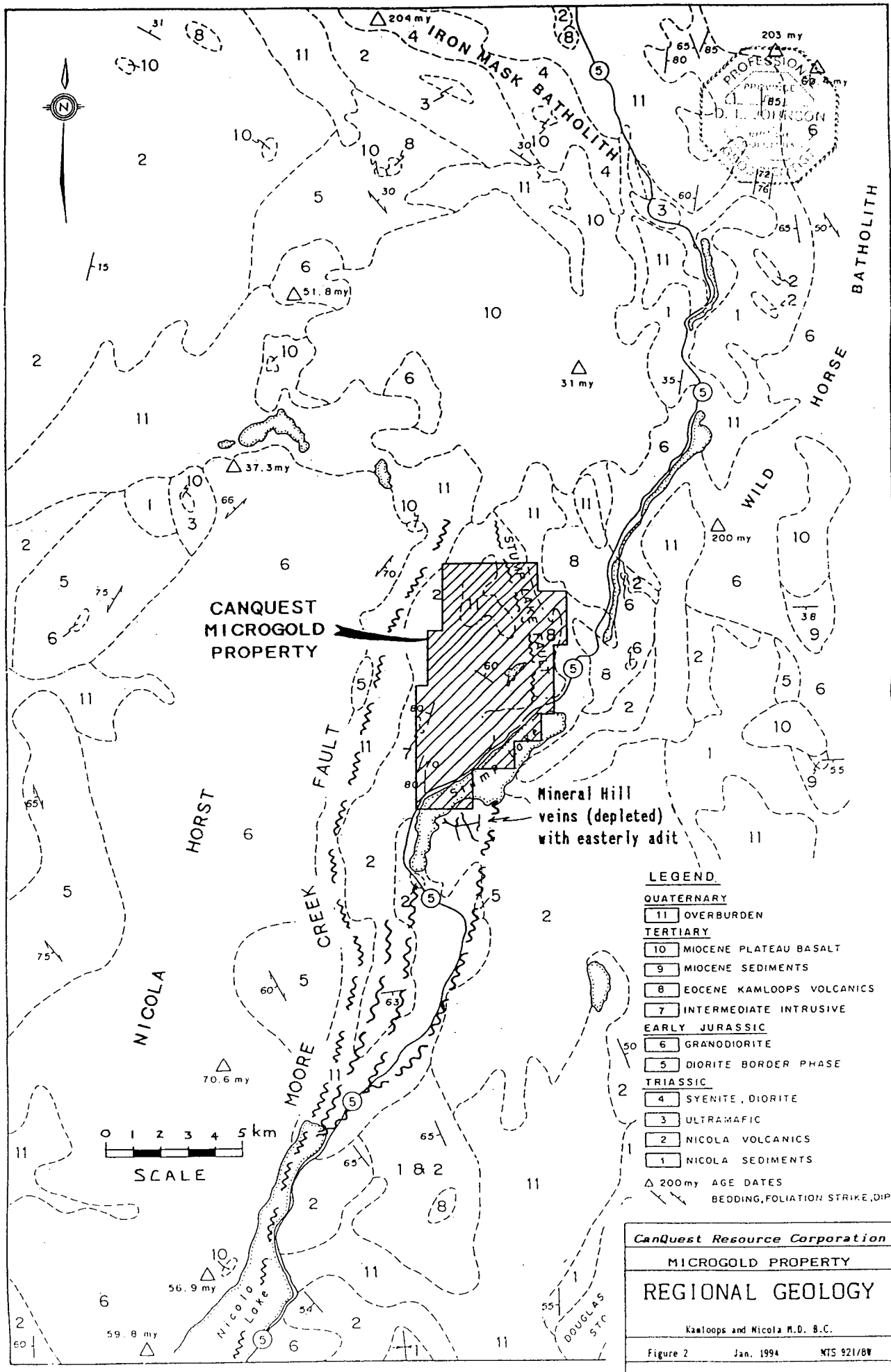
Structurally, the area is dominated by major faults trending north to northeasterly. The Quilchena-Moore Creek fault system, which marks the eastern edge of the Nicola Horst, passes a few km west of the Microgold property. This 015° trending system can be traced for at least 50 km and has been tentatively dated as Tertiary. To the east, the contact of the Nicola and Kamloops formations is marked by the 345° trending Stump Lake fault which cuts along the eastern side of the Microgold claim block and appears to coalesce with the Quilchena-Moore Creek fault a few km north of the property. South of Stump Lake, the Stump Lake fault curves westerly, joining the Quilchena fault at the northeast end of Nicola Lake. This fault-bounded, 25 km long elliptical block of mainly Nicola Group rocks is cut by numerous northerly and northeasterly trending faults. The recently expanded Microgold property covers nearly 10km of this block.

Some observers have suggested that the polymetallic sulphide assemblages mined at Mineral Hill are mesothermal equivalents of the epithermal gold-bearing quartz veins north of Stump Lake and postulated the presence of a fault structure coincident with the lake or a syncline bordering and parallel to the north shore of Stump Lake. Hard evidence to support this hypothesis is not readily apparent.

8.0 PROPERTY GEOLOGY

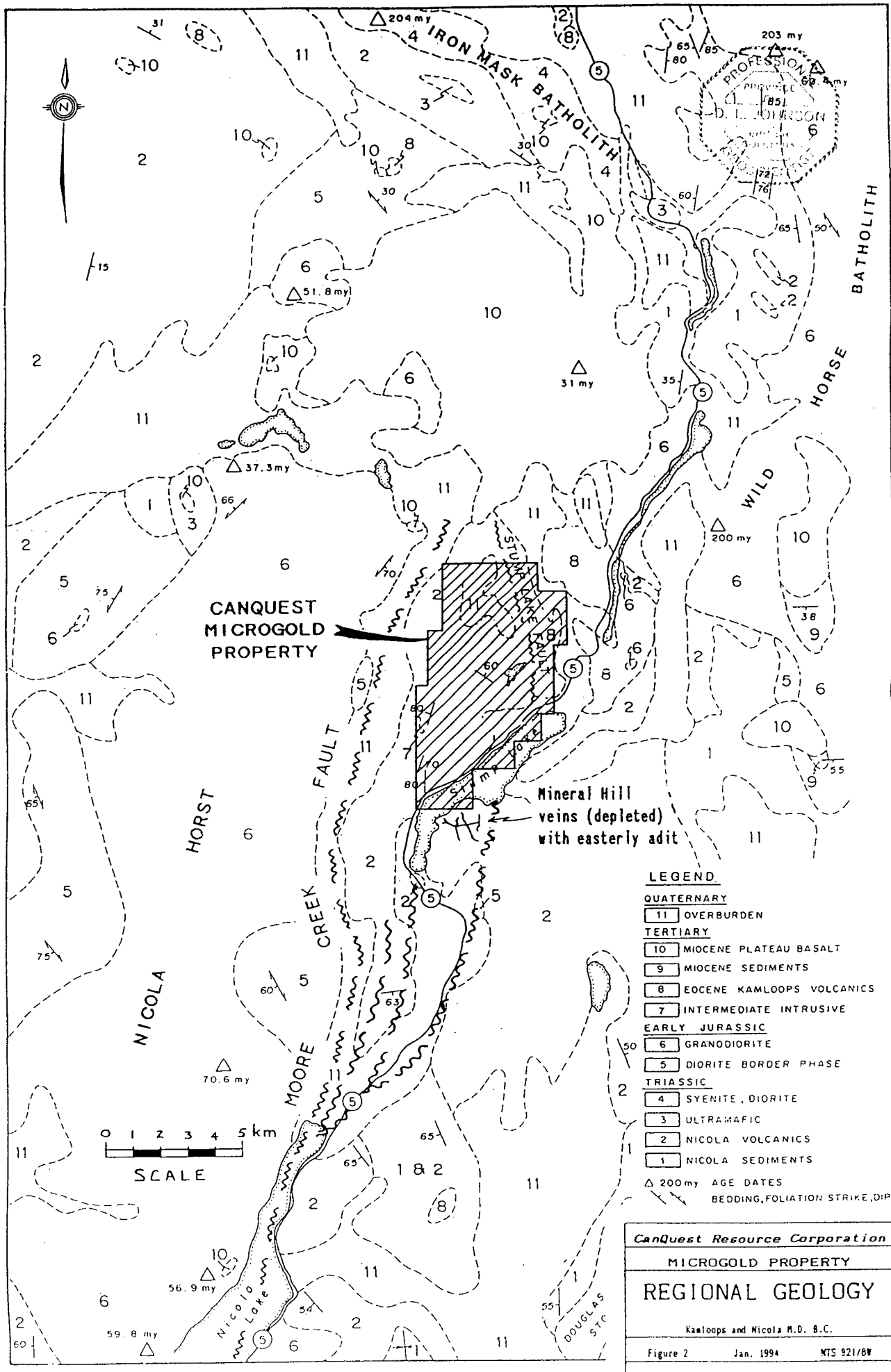
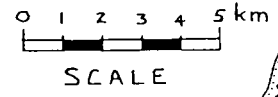
Triassic

The Kullagh Lake (eastern) portion of the Microgold property is underlain mainly by Triassic 'Nicola' Group intermediate to mafic volcanoclastic rocks. This package consists of augite porphyry, red and green pyroclastics and maroon (hematitic) conglomerates. The most common rock type on the property is an andesitic flow breccia.



CANQUEST
MICROGOLD
PROPERTY

Mineral Hill
veins (depleted)
with easterly adit



This typical 'Nicola' package, with an apparent slight increase in sedimentary component, extends to the West zone area where argillite, occasionally graphitic, is found interbedded with tuffs.

Tertiary

Mudstone, siltstone, sandstone and multilithic conglomerate occur in a small, probably structurally controlled sedimentary basin at the extreme south end of Kullagh Lake. This unit is thought to be the basal remnant of a more extensive Lower Eocene basin which covered the area. Minor coal seams reported on the western portion of the property may correlate with this unit.

Basaltic flows and breccias of the Upper Eocene 'Kamloops Group' outcrop east of the Stump Lake fault, near the eastern property boundary.

Intrusives

Blocky, angular slabs of granitic float can be found on the claims. Various workers have speculated on the presence of a buried intrusive beneath the Kullagh Lake area which might be the ultimate heat source driving the epithermal system. The only known intrusive body on the Microgold property was mapped by Gamble (1985) about 3.5 km southwest of Kullagh Lake.

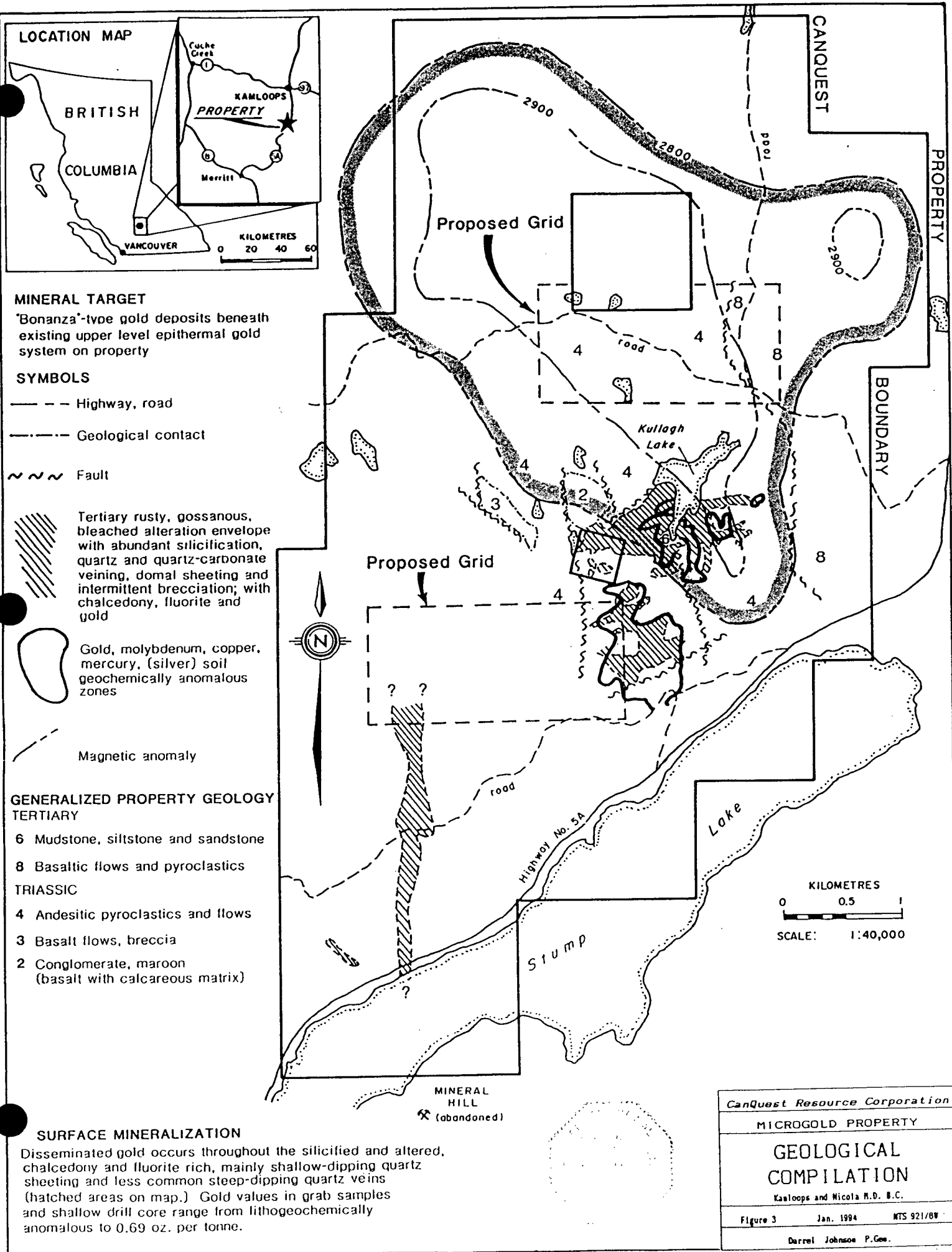
8.1 Alteration

Silicification, generally as chalcedony, is widespread, occurring as finely laminated veins or brecciated veins. Chalcedony veins are extensive and persistent. Individual veins, of which flat lying examples are the strongest, can be traced for more than 250 metres, with thickness to 2m. Exact relationships between flat and vertical veins are unclear, although this is obviously a multi-episodic system.

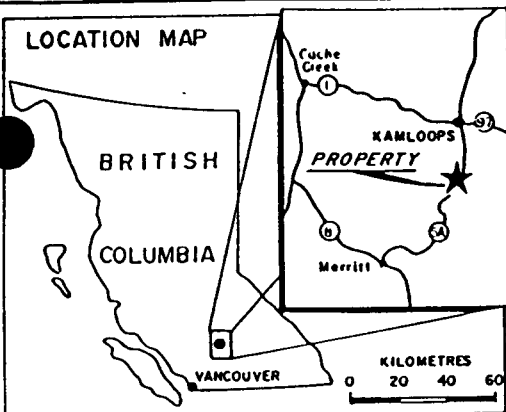
Within veins and breccia zones, minor pyrite is the only common sulphide.

Fluorite, a common accessory mineral in epithermal systems, is found both within veins as fine laminations and along selvages, in amounts up to 10% of the vein material.

One of the main features of the Kullagh Lake area is a broad 'X' shaped, gossanous, bleached alteration envelope, probably controlled by two main structures. Trending 010° and 080°, two limbs of the 'X' intersect at the south end of the 'tongue' extending southerly from Kullagh Lake. BP drill holes C-85-9, 13 and 15, all with estimated secondary silica greater than 10% and the highest average gold values on the property, are located within the intersection zone. The presence of secondary silicification in Eocene sediments dates at least some of the alteration and mineralization events as late Tertiary.



LOCATION MAP



MINERAL TARGET

"Bonanza"-type gold deposits beneath existing upper level epithermal gold system on property

SYMBOLS

- Highway, road
- - - Geological contact
- ~ ~ ~ Fault

Tertiary rusty, gossanous, bleached alteration envelope with abundant silicification, quartz and quartz-carbonate veining, domal sheeting and intermittent brecciation; with chalcedony, fluorite and gold

Gold, molybdenum, copper, mercury, (silver) soil geochemically anomalous zones

Magnetic anomaly

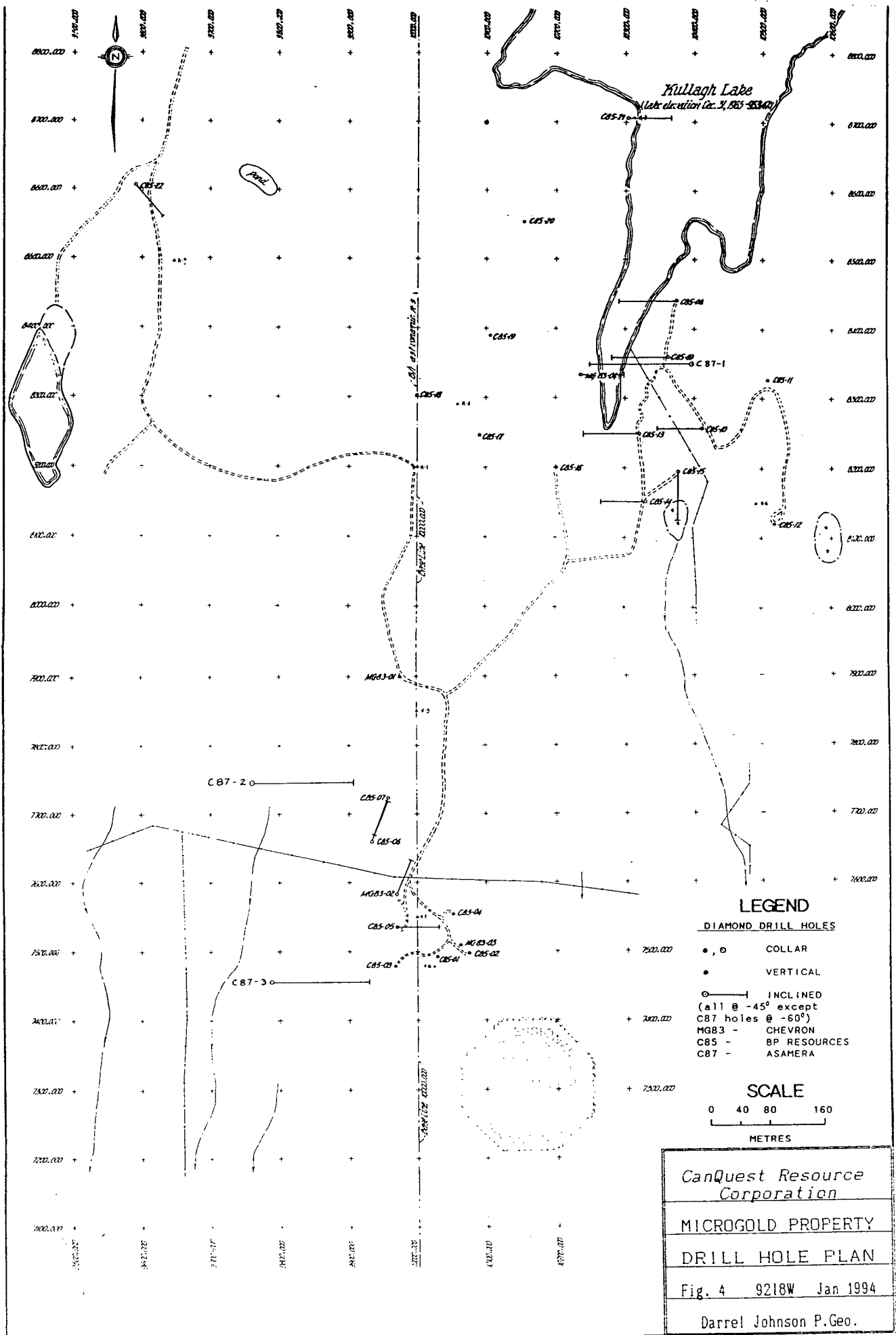
GENERALIZED PROPERTY GEOLOGY

- TERTIARY**
- 6 Mudstone, siltstone and sandstone
 - 8 Basaltic flows and pyroclastics
- TRIASSIC**
- 4 Andesitic pyroclastics and flows
 - 3 Basalt flows, breccia
 - 2 Conglomerate, maroon (basalt with calcareous matrix)

SURFACE MINERALIZATION

Disseminated gold occurs throughout the silicified and altered, chalcedony and fluorite rich, mainly shallow-dipping quartz sheeting and less common steep-dipping quartz veins (hatched areas on map.) Gold values in grab samples and shallow drill core range from lithogeochemically anomalous to 0.69 oz. per tonne.

CanQuest Resource Corporation
 MICROGOLD PROPERTY
**GEOLOGICAL
 COMPILATION**
 Kamloops and Nicola M.D. B.C.
 Figure 3 Jan. 1994 MTS 921/8W
 Darrel Johnson P. Geol.

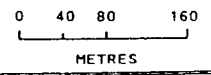


LEGEND

DIAMOND DRILL HOLES

- , ○ COLLAR
- VERTICAL
- — INCLINED
(all @ -45° except
C87 holes @ -60°)
- MG83 - CHEVRON
- C85 - BP RESOURCES
- C87 - ASAMERA

SCALE



CanQuest Resource Corporation
 MICROGOLD PROPERTY
 DRILL HOLE PLAN
 Fig. 4 9218W Jan 1994
 Darrel Johnson P. Geo.

8.2 Structure

As mentioned in section 7.0, Regional Geology, the Microgold lies within an elliptical, fault bounded block. This type of extensional environment is a common setting for subsequent intrusive/extrusive activity and related mineral deposition. Ground preparation, especially high angle faulting, is a critical requirement in the emplacement of epithermal mineralization.

Two dominant directions of high angle faulting are evident on the property, trending northeasterly (045° to 060°) and northwesterly (330° to 355°), roughly corresponding to the limbs of the 'X' shaped alteration pattern. Most exploration work to date has been focused on the northwesterly structures with east west grid lines and mainly east-west oriented drill holes.

8.3 Mineralization

Work to date in the Kullagh lake area, primarily by BP, has highlighted extraordinary widespread gold enrichment, associated with secondary silicification, over an area approximately 1.5km square. Records in CanQuest files show that grab samples collected on behalf of CanQuest and other companies have assayed up to 0.692 ounce per ton Au. These samples were collected at random from both chalcedony veins and silicified zones.

Gold mineralization in the West area is less well defined. Although anomalous gold values are known in some of the exposed quartz veins in the 2200m long West zone, most of the encouragement in that zone is derived from geochemically anomalous epithermal indicator elements such as arsenic.

Exact mode of occurrence of gold is uncertain. No visible gold has been recognized on the property.

9.0 GEOCHEMISTRY

Epithermal systems are usually marked by a variety of economic and accessory minerals. Previous work on the Microgold has shown fluorine, arsenic, antimony and mercury to be the commonest and most reliable indicators of and companions to gold.

Regional stream geochemical data published jointly by the B.C. and Federal governments (GSC Open File #966, 1981) shows several sample sites (3097,3098,3099) with highly elevated fluorine-in-water values, located from 1 to 3 km north and west of Kullagh Lake. This suggests that epithermal activity, with possible associated gold mineralization, is much more widespread than currently recognized.

The West zone was covered by soil geochemical work by Canico in 1983 and Goldbrae in 1984. The zone is defined by a weak but consistent arsenic anomaly, more than 2 km long, with values generally up to 30 ppb and a spot high of 135 ppb. The low level of geochemical response is believed to be due to deep, clay rich, organic soil cover which presents less than ideal conditions for geochemical exploration.

On the Kullagh Lake zone, closely spaced soil and lithogeochemical sampling undertaken in 1985 by BP defined a major gold anomaly extending 1.5 km from the main silicified knoll at the south end of the grid to the west side of Kullagh Lake.

Within the 1.5km long main gold anomaly are several clusters of sample sites containing 400 to 600 ppb gold. Typical epithermal indicator minerals, most notably arsenic and antimony, partially coincide with the elevated gold values. Soil geochemical plans (after Gamble 1985) showing gold, silver, arsenic and antimony are attached as Appendices II to V.

BP's soil geochemical work also outlined several irregular areas of elevated calcium values. This suggests a possible subsurface 'caliche' (calcium soil cement) layer, common in semi-arid parts of the B.C. interior, which could seriously hamper geochemical response.

Limited soil sampling by CanQuest in 1991 attempted, with little success, to trace the main gold anomaly to the north of Kullagh Lake. Lack of geochemical response may be due to a substantial increase in soil depth north of the lake, a possible caliche layer, or an offsetting fault, (suggested by topography) trending NNE through Kullagh Lake.

10.0 GEOPHYSICS

Airborne magnetic coverage of the Stump Lake area was published by the GSC in 1968 at a scale of 1 mile to the inch (1:63360). The northeast half of the Microgold property shows magnetic response elevated approximately 200 gammas over regional background. A second, egg shaped, anomaly near the eastern property boundary may represent a buried intrusive emplaced along the Stump Lake fault zone.

Magnetic, VLF EM, Pulse EM and Induced Polarization surveys by Goldbrae have outlined the West zone over a strike length of 2,200 metres. Both pulse and VLF EM show a series of subparallel northerly trending conductors. These coincide well with zones of high (700 ohm-metres) resistivity potentially representing silicification.

On the Kullagh Lake zone, magnetic, VLF EM and Induced Polarization work conducted by Chevron, BP, Asamera and CanQuest has covered an area 1.5km x 2km extending approximately from Hwy 5A to Kullagh Lake. The most notable feature of this work is a 1 km long, northerly trending zone of +500 ohm-metres resistivity, with highs to 1500 ohm-metres, extending southerly from Kullagh Lake. This coincides well with mapped silicification and partially with strong gold soil and lithogeochemical anomalies. The use of resistivity to outline silicification should be continued.

11.0 EXPLORATION POTENTIAL

The Microgold property displays several areas of exploration potential. The prime target is structurally hosted 'bonanza' type epithermal gold mineralization. The immediately apparent areas of potential are:

South of Kullagh Lake...an area of very high resistivity believed indicative of silicification extends southerly from the south end of Kullagh Lake to the main silicified knoll.

West Zone...in spite of several generations of exploration, the main 2200m long gossanous silicified zone has not been drilled.

The potential for mineralization in the 1.8 km long east-west area between the Kullagh Lake and West zones is unknown, but demands investigation.

The northern half of the Microgold property covers approximately 4km of the favourable extensional terrain. This area has not been covered by modern geological, geochemical or geophysical work and represents an area of untested potential.

12.0 RECOMMENDED WORK PROGRAM

A \$508,000 work program is recommended for the Microgold, with two main components:

The two known mineralized zones, in particular the Kullagh Lake zone, require extensive testing for 'bonanza' type mineralization in high angle structures. This work must concentrate on locating ore shoots within the known areas of silicification, by extensive closely spaced diamond drilling probing the main structures deeper than previous 'surface mineable' oriented work. Drilling should be complemented by fluid inclusion and trace element studies.

The remainder of the property, with emphasis on the area between the Kullagh Lake and West zones, should be covered by an integrated geological, geophysical, geochemical program.

Helicopter-borne geophysical surveying, combining magnetometer, VLF EM and multichannel EM coverage is recommended to provide a quick, cost effective 'overview' of the Microgold property. The survey should comprise approximately 350 km of lines, oriented NW, at 150m spacing, to best explore the two recognized main structural trends (060° & 355°).

Airborne geophysical work should have the following objectives:

- Highlight previously unrecognized zones of silicification and/or sulphide enrichment,
- Help trace structures under drift cover,
- Probe the relationship between the Kullagh Lake and West zones and
- Refine target areas for detailed investigation.

The existing grid should be rehabilitated and expanded. The Kullagh Lake and West zones, which have never been worked as one integrated property, should be tied together. This will require approximately 5 km of baseline. Traditional picketed grid lines on the Microgold are shortlived, mainly due to dislocation by cattle. The new baseline should use semi-permanent steel or plastic stations. Two new grids totalling 60 km, tentatively located north and west of the Kullagh Lake zone, should be established.

Grids should be covered by soil and rock geochemical sampling and VLF EM and magnetometer surveys, with selected areas tested by Induced Polarization.

Geological mapping, prospecting and lithogeochemical sampling, tied to the new grids is essential.

13.0 COST ESTIMATES

PHASE I

<u>Airborne Geophysics</u>	350 km @	80	\$28000
<u>Kullagh Lake and West Zones</u>			
Geological Mapping/Prospecting			\$5000
Diamond Drilling 11000' @ \$17 (3340m @ \$56)			187000
Supervision etc			14000
Assays etc			7500
Petrographics			3500
			\$212000
	Contingency		\$25000
Support Costs			
Motel, meals, vehicle, fuel etc.			9000
Miscellaneous			
Telephone, courier, freight etc.			2000
Report Preparation, drafting etc			7000
			\$18000
	PHASE I		\$288000
	GST		\$20160
TOTAL, PHASE I			\$308160

COST ESTIMATES

PHASE II

Remainder of Property

Grid Establishment			
Baseline	5 km @	400	2000
Grid Lines	60 km @	200	12000
Geological Mapping/Prospecting			8000
Geochemical Sampling			
Collection	1200 @	5	6000
Analysis	1200 @	15	18000
Lithogeochemical Analysis	200 @	25	5000
Geophysical Surveying			
Magnetometer, VLF EM	60 km @	200	12000
Induced Polarization	30 km @	800	24000
			\$87000

Targets resulting from work on remainder of property:

Diamond Drilling 4000' @ \$17 (1214m @ \$56)		68000
Supervision etc		6000
Assays etc		3000
		\$77000
	Contingency	\$ 12000
Support Costs		
Motel, meals, vehicle, fuel etc.		6000
Miscellaneous		
Telephone, courier, freight etc.		1000
Report Preparation, drafting etc		4000
		\$11000

PHASE II	\$187000
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GST	\$13090
-----	---------

TOTAL, PHASE II	\$200090
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GRAND TOTAL	\$508250
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14.0 REFERENCES

- Debicki, E.J. (1983): Geological, Geochemical and Geophysical Report on the Bag 1 -2 Claims, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Assessment Report 11,719
- Dekker, L. (1983) Assessment Report Drill Hole MGB3-4 CIN and DY Claims *B.C. Ministry of Energy, Mines and Petroleum Resources*, Assessment Report 11,372
- Dupre G.D. (1987) Diamond Drill Report CINDY Project, ASAMERA INC.
- Gamble, A.P.D (1985): Geology Report and Summary of Lithochemical Survey, Soil Geochemical Survey, Magnetometer Survey, VLF-EM and Resistivity Test Surveys on the CIN, DY and MICROGOLD Claims, BP Minerals Limited.
- Gamble, A.P.D (1986): Diamond Drill Report CINDY Project, BP Minerals Limited.
- Gamble, A.P.D., S.J. Hoffman (1985) Assessment Report, Soil Geochemistry Survey and Ground Geophysical Survey on the CIN, DY and MICROGOLD Claims, BP Minerals Limited.
- Geological Survey of Canada (1981) Regional Geochemical Survey 92I Open File 966
- Geological Survey of Canada (1968) Aeromagnetic Map 5213 G, Stump Lake 1 mile to 1 inch
- Moore, J.M., A. Pettitas, Meyers, R.E., Hubner, T.B. (1990): Nicola Lake Region Geology and Mineral Deposits; *B.C. Ministry of Energy, Mines and Petroleum Resources*, Open File 1990-29
- Pudifin, S. M., G. Salazar (1987): Report on the Anderson Claims Project (Gold) Drilling, Lectus Developments Ltd.
- Rayner, G.H. (1992) A Report On The Microgold Property, CanQuest Resource Corporation
- Rayner, G.H. (1991) A Geochemical Report On The Microgold Property, CanQuest Resource Corporation
- Rayner, G.H. (1992) A Geophysical Report On The Microgold Property, CanQuest Resource Corporation
- Scott, A. (1992): Geophysical Report, Induced Polarization Survey, Microgold Project, Stump Lake B.C.
- White, G.E. (1985): Geophysical-Geochemical Exploration Report, Anderson 4 - Bag 1 & 2 Claims, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Assessment Report 13,788

15.0

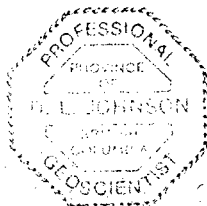
STATEMENT OF QUALIFICATIONS

DARREL JOHNSON, P.Geo.

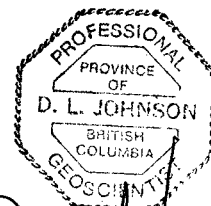
I, Darrel Johnson, resident of Coquitlam B.C. hereby state that:

1. I am a graduate of the University of British Columbia with a B.Sc. degree in geology;
2. I am registered as a 'Professional Geoscientist' with the Association of Professional Engineers and Geoscientists of the Province of British Columbia;
3. I have worked as a mineral exploration geologist throughout Western Canada since 1970;
4. This report is based on a field examination of the Microgold property on January 19, 1994, on the references listed, and a general familiarity with epithermal gold deposits and the geology of the area.
5. I have no interest in the properties or shares of CanQuest Resource Corporation or in any mineral properties within 10 km of the Microgold, nor do I expect to receive any such interest.
6. CanQuest Resources Corporation are hereby granted permission to use this report.

Dated at Vancouver, B.C. this 31ST day of January 1994.



Darrel Johnson
Darrel Johnson, P. Geo.



Darrel Johnson
June 7 1994

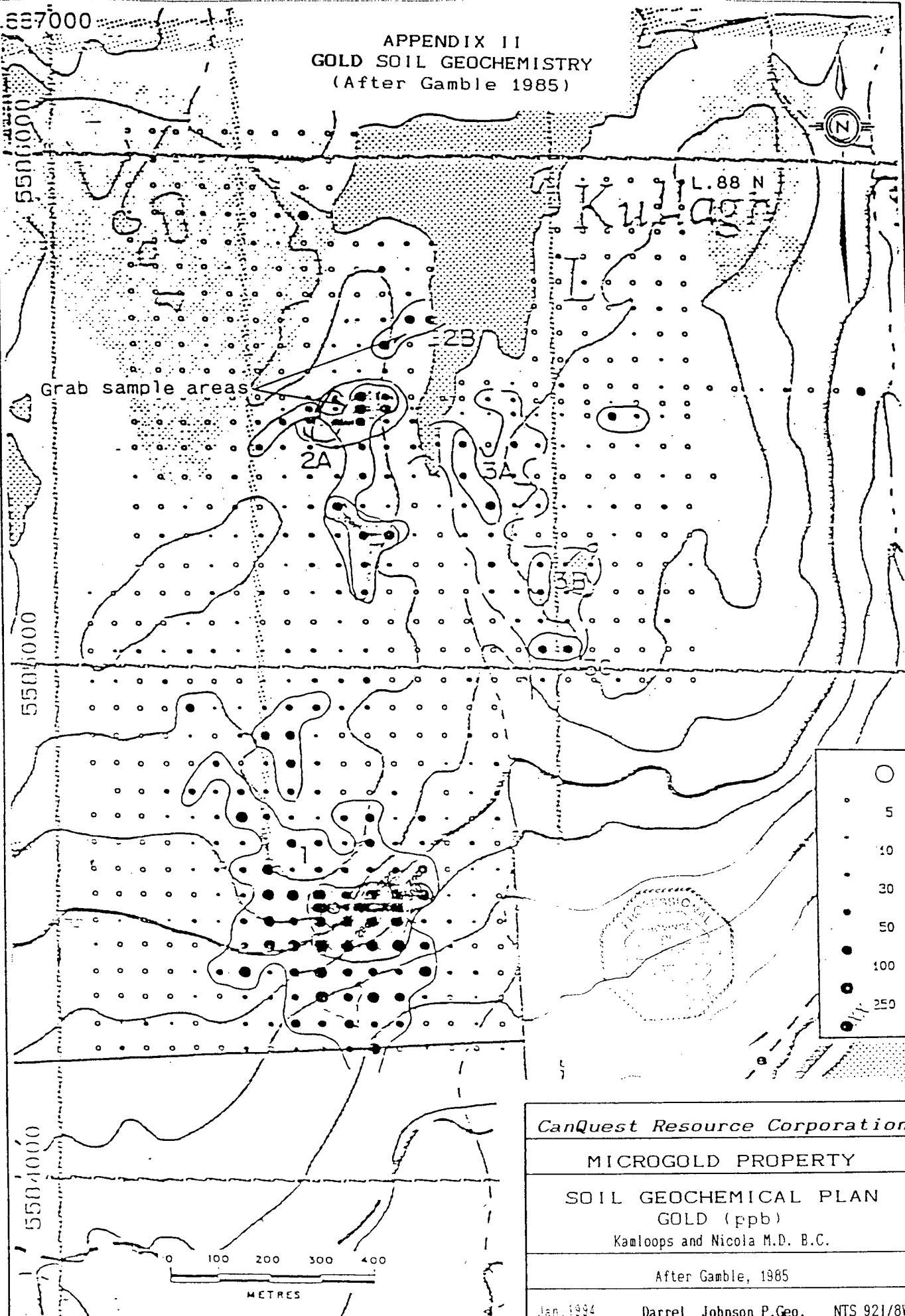
Appendix I

(After Gamble 1985)

BP MINERALS LIMITED 1985 DRILL RESULTS
GOLD VALUES AVERAGED OVER ENTIRE HOLE LENGTHS

DDH	LENGTH (m)	Au (ppb)	Estimated % Sec. Silica
C-85-1	92.35	72.4	4.9
C-85-2	85.34	56.7	2.9
C-85-3	91.13	119.0	5.9
C-85-4	91.44	98.5	4.8
C-85-5	90.22	124.0	7.2
C-85-6	89.9	65.0	5.1
C-85-7	93.30	105.0	2.8
C-85-8	121.92	85.8	3.9
C-85-9	117.65	100.5	12.3
C-85-10	95.10	68.0	4.2
C-85-11	124.05	39.0	9.1
C-85-12	120.40	39.0	6.1
C-85-13	120.76	221.8	10.0
C-85-14	93.27	129.0	7.0
C-85-15	102.41	145.0	13.9
C-85-16	89.61	127.0	6.0
C-85-17	90.22	45.0	2.4
C-85-18	89.00	25.0	5.6
C-85-19	93.5	104.0	7.7
C-85-20	93.62	97.0	2.3
C-85-21	93.27	25.0	4.5
C-85-22	92.05	3.2	0.9

APPENDIX II
 GOLD SOIL GEOCHEMISTRY
 (After Gamble 1985)



CanQuest Resource Corporation

MICROGOLD PROPERTY

SOIL GEOCHEMICAL PLAN
 GOLD (ppb)

Kamloops and Nicola M.D. B.C.

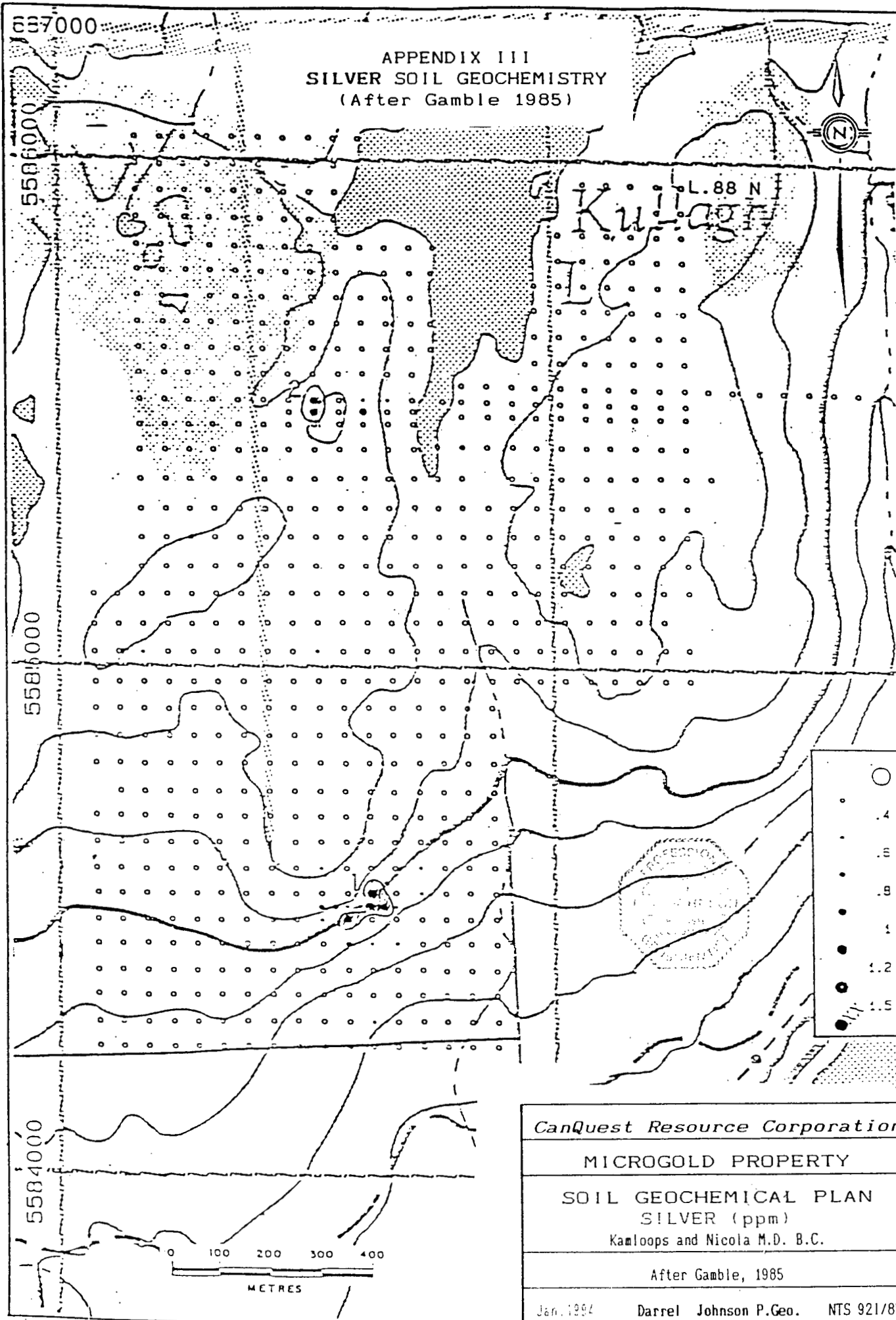
After Gamble, 1985

Jan. 1994

Darrel Johnson P.Geo.

NTS 921/8W

APPENDIX III
 SILVER SOIL GEOCHEMISTRY
 (After Gamble 1985)



CanQuest Resource Corporation

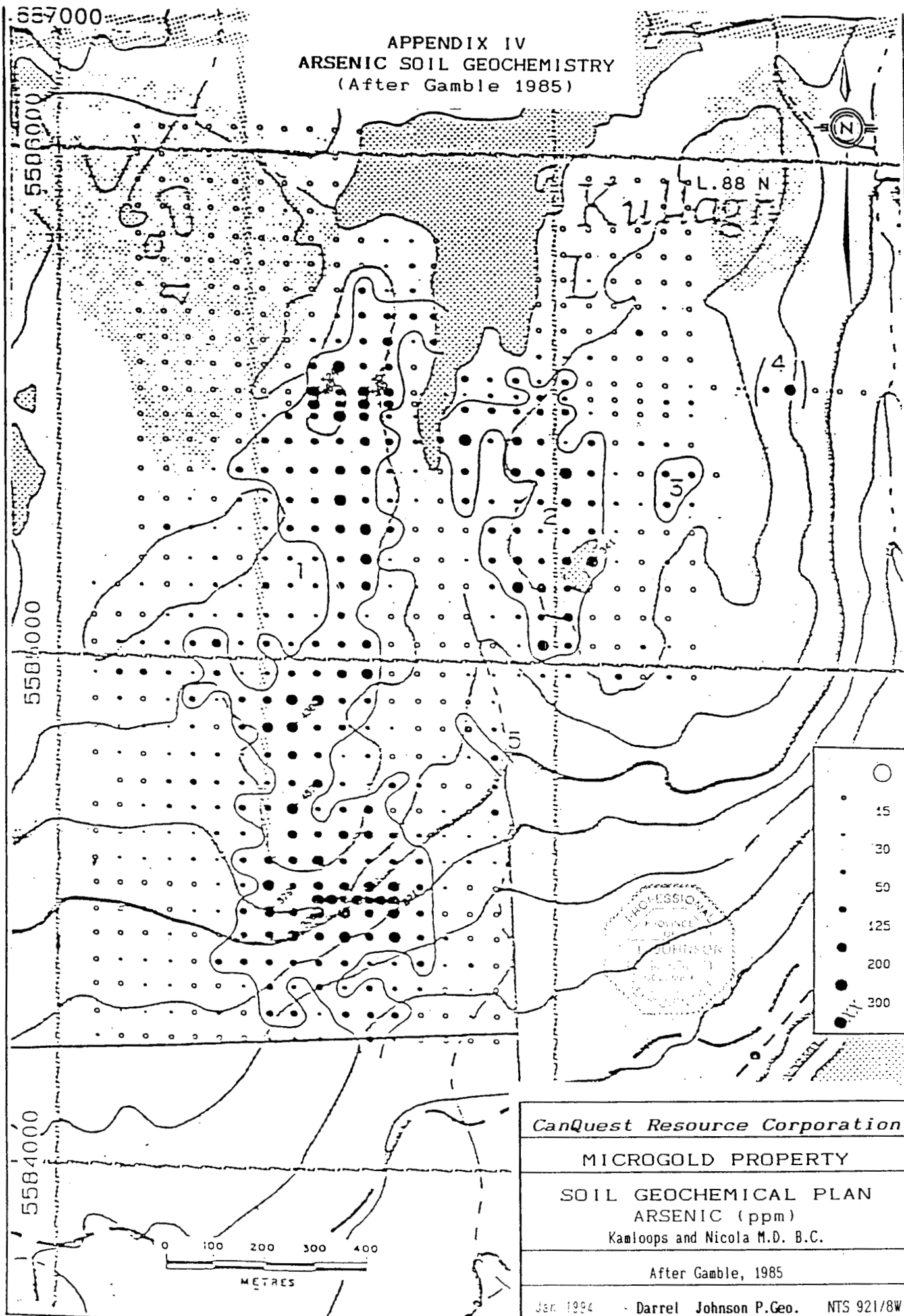
MICROGOLD PROPERTY

SOIL GEOCHEMICAL PLAN
 SILVER (ppm)
 Kamloops and Nicola M.D. B.C.

After Gamble, 1985

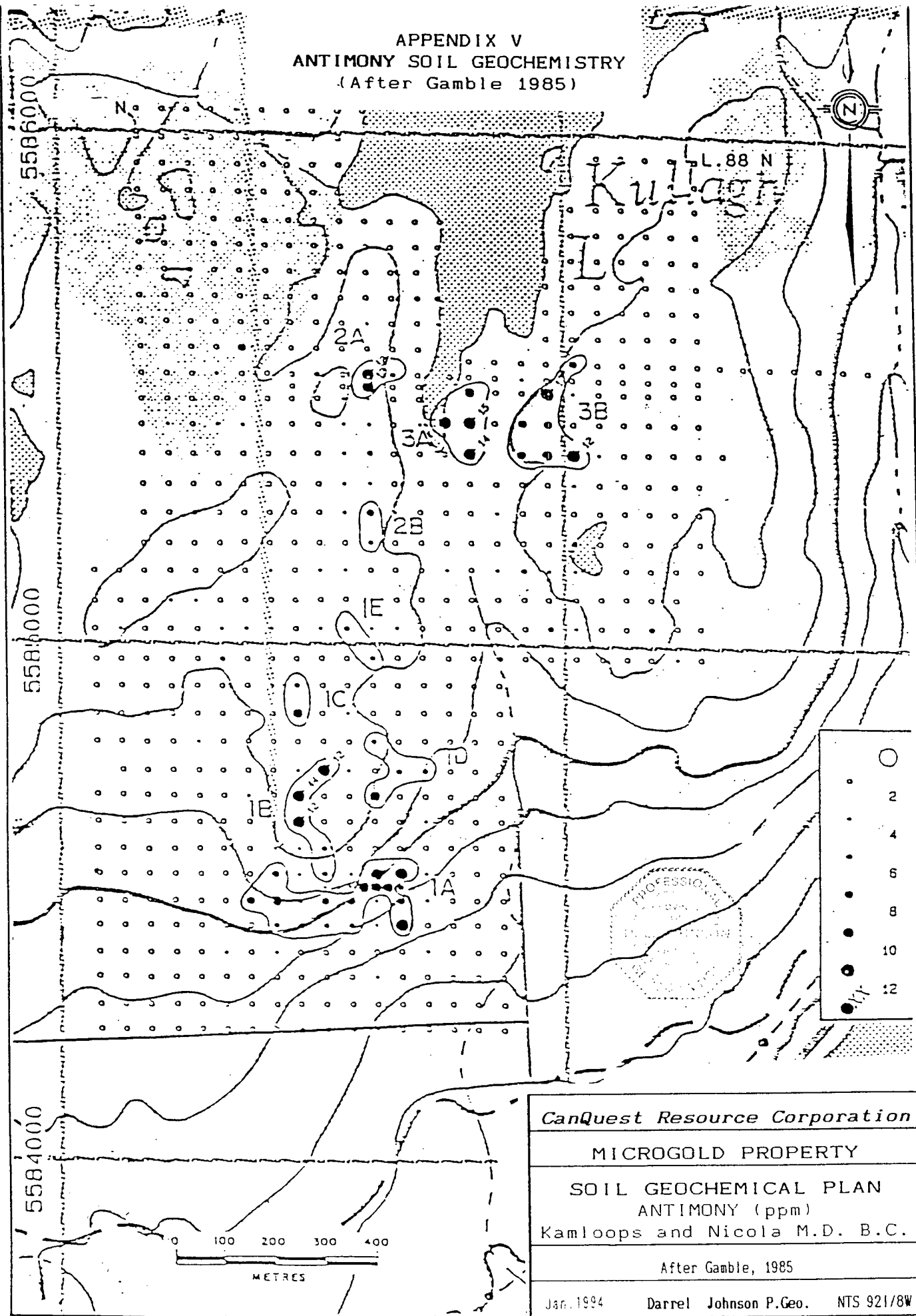
Jan. 1994 Darrel Johnson P.Ge. NTS 921/8W

APPENDIX IV
 ARSENIC SOIL GEOCHEMISTRY
 (After Gamble 1985)



CanQuest Resource Corporation
MICROGOLD PROPERTY
SOIL GEOCHEMICAL PLAN ARSENIC (ppm) Kamloops and Nicola M.D. B.C.
After Gamble, 1985
Jan. 1994 - Darrel Johnson P.Geo. NTS 921/8W

APPENDIX V
 ANTIMONY SOIL GEOCHEMISTRY
 (After Gamble 1985)



CanQuest Resource Corporation

MICROGOLD PROPERTY

SOIL GEOCHEMICAL PLAN
 ANTIMONY (ppm)
 Kamloops and Nicola M.D. B.C.

After Gamble, 1985

Jan. 1994 Darrel Johnson P.Geo. NTS 921/8W

Report #1162-M

DIGHEM^V Survey
for
Canquest Resource Corporation
Microgold Project
British Columbia

NTS 92I/8

Dighem, A division of CGG Canada Ltd.
Mississauga, Ontario
March 18, 1994

Ruth A. Pritchard
Geophysicist

A1162MAR.94R

SUMMARY

This report describes the logistics and results of a DIGHEM^V airborne geophysical survey carried out for Canquest Resource Corporation over a property south of Kamloops, British Columbia. Total coverage of the survey block amounted to 381 km. The survey was flown on January 19, 1994.

The purpose of the survey was to detect zones of conductive mineralization and to provide information that could be used to map the geology and structure of the survey area. This was accomplished by using a DIGHEM^V multi-coil, multi-frequency electromagnetic system, supplemented by a high sensitivity Cesium magnetometer and a four-channel VLF receiver. The information from these sensors was processed to produce maps which display the magnetic and conductive properties of the survey area. A GPS electronic navigation system, utilizing a UHF link, ensured accurate positioning of the geophysical data with respect to the base map. Visual flight path recovery techniques were used to confirm the location of the helicopter where visible topographic features could be identified on the ground.

The survey property contains several anomalous features, many of which are considered to be of moderate to high priority as exploration targets. Most of the inferred bedrock conductors appear to warrant further investigation using appropriate surface exploration techniques. Areas of interest may be assigned priorities on the basis of supporting geophysical, geochemical and/or geological information. After initial

investigations have been carried out, it may be necessary to re-evaluate the remaining anomalies based on information acquired from the follow-up program.

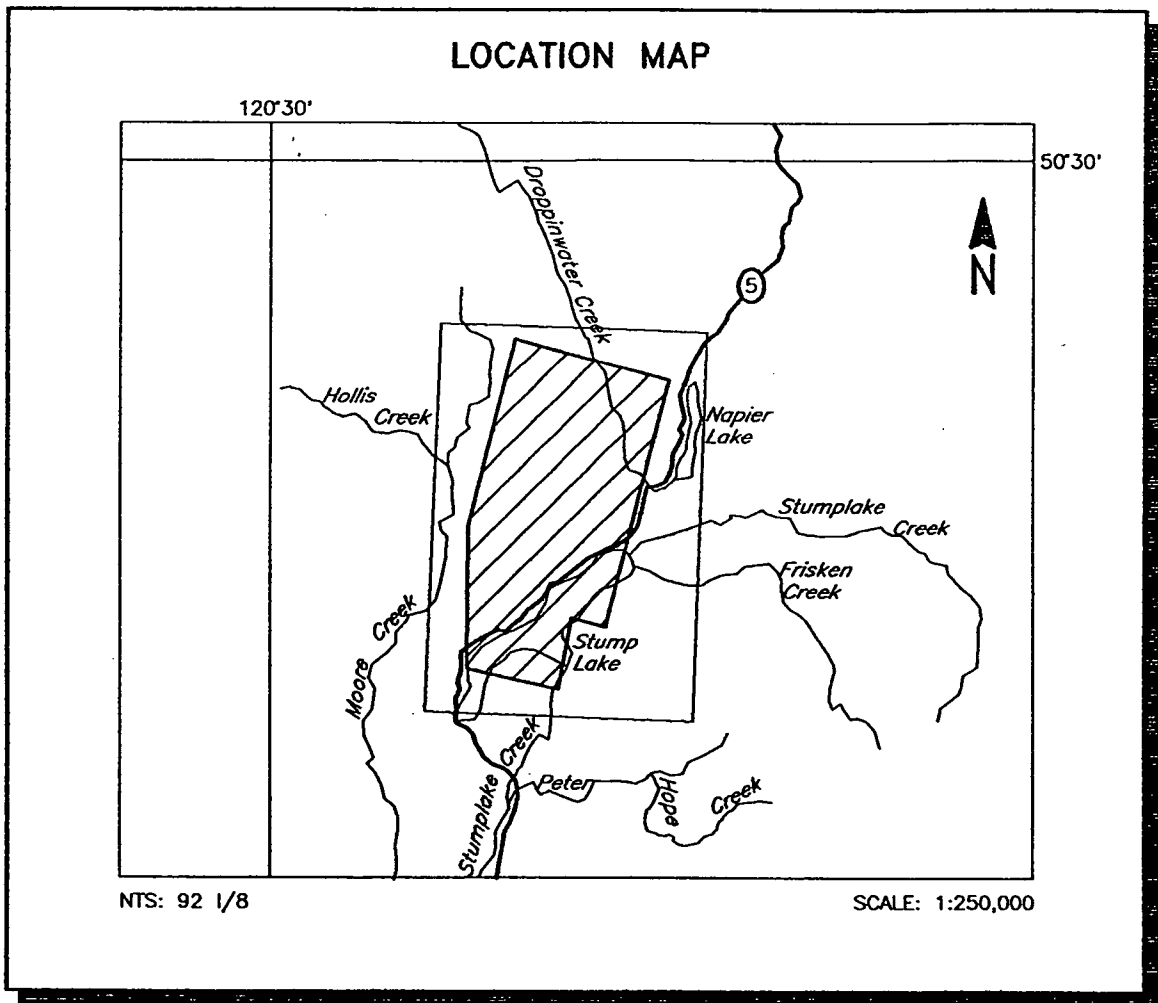


FIGURE 1
CANQUEST RESOURCE CORPORATION
MICROGOLD PROJECT, BRITISH COLUMBIA - 1162

CONTENTS

	<u>Section</u>
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SURVEY EQUIPMENT	2.1
PRODUCTS AND PROCESSING TECHNIQUES	3.1
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Electromagnetics	5.1
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CONCLUSIONS AND RECOMMENDATIONS	6.1
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A. List of Personnel	
B. Statement of Cost	
C. EM Anomaly List	

INTRODUCTION

A DIGHEM^V electromagnetic/resistivity/magnetic/VLF survey was flown for Canquest Resource Corporation on January 19, 1994, over a survey block near Kamloops, British Columbia, known as the Microgold Project. The survey area can be located on NTS map sheet 92I/8 (see Figure 1).

Survey coverage consisted of approximately 381 line-km, including tie lines. Flight lines were flown in an azimuthal direction of 104°/284° with a line separation of 150 metres.

The survey employed the DIGHEM^V electromagnetic system. Ancillary equipment consisted of a magnetometer, radar altimeter, video camera, analog and digital recorders, a VLF receiver and an electronic navigation system. Details on the survey equipment are given in Section 2.

The instrumentation was installed in an A-Star B2 turbine helicopter (Registration C-FCFM) which was provided by Northern Air Support. The helicopter flew at an average airspeed of 96 km/h with an EM bird height of approximately 30 m.

Section 2 also provides details on the data channels, their respective sensitivities, and the navigation/flight path recovery procedure. Noise levels of less than 2 ppm are

generally maintained for wind speeds up to 35 km/h. Higher winds may cause the system to be grounded because excessive bird swinging produces difficulties in flying the helicopter. The swinging results from the 5 m² of area which is presented by the bird to broadside gusts.

In some portions of the survey area, the steep topography forced the pilot to exceed normal terrain clearance for reasons of safety. It is possible that some weak conductors may have escaped detection in areas where the bird height exceeded 120 m. In difficult areas where near-vertical climbs were necessary, the forward speed of the helicopter was reduced to a level which permitted excessive bird swinging. This problem, combined with the severe stresses to which the bird was subjected, gave rise to aerodynamic noise levels which are slightly higher than normal. Where warranted, reflights were carried out to minimize these adverse effects.

Due to the numerous cultural features in the Microgold survey area, any interpreted conductors which occur in close proximity to cultural sources, should be confirmed as bedrock conductors prior to drilling.

SURVEY EQUIPMENT

This section provides a brief description of the geophysical instruments used to acquire the survey data:

Electromagnetic System

Model: DIGHEM^V

Type: Towed bird, symmetric dipole configuration operated at a nominal survey altitude of 30 metres. Coil separation is 8 metres for 900 Hz, 5500 Hz and 7200 Hz, and 6.3 metres for the 56,000 Hz coil-pair.

Coil orientations/frequencies:

coaxial	/	900 Hz
coplanar	/	900 Hz
coaxial	/	5,500 Hz
coplanar	/	7,200 Hz
coplanar	/	56,000 Hz

Channels recorded:

5 inphase channels
5 quadrature channels
2 monitor channels

Sensitivity:

0.1 ppm at	900 Hz
0.2 ppm at	5,500 Hz , 7,200 Hz
0.5 ppm at	56,000 Hz

Sample rate: 10 per second

The electromagnetic system utilizes a multi-coil coaxial/coplanar technique to energize conductors in different directions. The coaxial coils are vertical with their axes

in the flight direction. The coplanar coils are horizontal. The secondary fields are sensed simultaneously by means of receiver coils which are maximum coupled to their respective transmitter coils. The system yields an inphase and a quadrature channel from each transmitter-receiver coil-pair.

Magnetometer

Model: Picodas 3340
Type: Optically pumped Cesium vapour
Sensitivity: 0.01 nT
Sample rate: 10 per second

The magnetometer sensor is towed in a bird 20 m below the helicopter.

Magnetic Base Station

Model: Scintrex ME710
Type: Digital recording cesium vapour
Sensitivity: 0.01 nT
Sample rate: 1.0 per second

A digital recorder is operated in conjunction with the base station magnetometer to record the diurnal variations of the earth's magnetic field. The clock of the base station is synchronized with that of the airborne system to permit subsequent removal of diurnal drift.

VLF System

Manufacturer:	Herz Industries Ltd.	
Type:	Totem-2A	
Sensitivity:	0.1 %	
Stations:	Seattle, Washington;	NLK, 24.8 kHz
	Annapolis, Maryland;	NSS, 21.4 kHz
	Cutler, Maine;	NAA, 24.0 kHz

The VLF receiver measures the total field and vertical quadrature components of the secondary VLF field. Signals from two separate transmitters can be measured simultaneously. The VLF sensor is housed in the same bird as the magnetic sensor, and is towed 20 m below the helicopter.

Radar Altimeter

Manufacturer: Honeywell/Sperry
Type: AA 220
Sensitivity: 1 ft

The radar altimeter measures the vertical distance between the helicopter and the ground. This information is used in the processing algorithm which determines conductor depth.

Analog Recorder

Manufacturer: RMS Instruments
Type: GR33 dot-matrix graphics recorder
Resolution: 4x4 dots/mm
Speed: 1.5 mm/sec

The analog profiles are recorded on chart paper in the aircraft during the survey. Table 2-1 lists the geophysical data channels and the vertical scale of each profile.

Table 2-1. The Analog Profiles

Channel Name	Parameter	Scale units/mm	Designation on digital profile
1X9I	coaxial inphase (900 Hz)	2.5 ppm	CXI (900 Hz)
1X9Q	coaxial quad (900 Hz)	2.5 ppm	CXQ (900 Hz)
3P9I	coplanar inphase (900 Hz)	2.5 ppm	CPI (900 Hz)
3P9Q	coplanar quad (900 Hz)	2.5 ppm	CPQ (900 Hz)
2P7I	coplanar inphase (7200 Hz)	5 ppm	CPI (7200 Hz)
2P7Q	coplanar quad (7200 Hz)	5 ppm	CPQ (7200 Hz)
4X7I	coaxial inphase (5500 Hz)	5 ppm	CXI (5500 Hz)
4X7Q	coaxial quad (5500 Hz)	5 ppm	CXQ (5500 Hz)
5P5I	coplanar inphase(56000 Hz)	10 ppm	CPI (56 kHz)
5P5Q	coplanar quad (56000 Hz)	10 ppm	CPQ (56 kHz)
ALTR	altimeter	3 m	ALIT
MAG	magnetics, fine	2.0 nT	MAG
VF1T	VLF-total: primary stn.	2%	
VF1Q	VLF-quad: primary stn.	2%	
VF2T	VLF-total: secondary stn.	2%	
VF2Q	VLF-quad: secondary stn.	2%	
CXSP	coaxial spherics monitor		CXS
CPSP	coplanar spherics monitor		
CXPL	coaxial powerline monitor		
CPPL	coplanar powerline monitor		
3PSP	coplanar spherics monitor		3SP
3PPL	coplanar powerline monitor		
4XSP	coaxial spherics monitor		

Table 2-2. The Digital Profiles

<u>Channel Name (Freq)</u>	<u>Observed parameters</u>	<u>Scale units/mm</u>
MAG	magnetics	5 nT
ALT	bird height	6 m
CXI (900 Hz)	vertical coaxial coil-pair inphase	2 ppm
CXQ (900 Hz)	vertical coaxial coil-pair quadrature	2 ppm
CPI (900 Hz)	horizontal coplanar coil-pair inphase	2 ppm
CPQ (900 Hz)	horizontal coplanar coil-pair quadrature	2 ppm
CXI (5500 Hz)	vertical coaxial coil-pair inphase	4 ppm
CXQ (5500 Hz)	vertical coaxial coil-pair quadrature	4 ppm
CPI (7200 Hz)	horizontal coplanar coil-pair inphase	4 ppm
CPQ (7200 Hz)	horizontal coplanar coil-pair quadrature	4 ppm
CPI (56 kHz)	horizontal coplanar coil-pair inphase	10 ppm
CPQ (56 kHz)	horizontal coplanar coil-pair quadrature	10 ppm
CXS	coaxial spherics monitor	
3PS	coplanar spherics monitor	
<u>Computed Parameters</u>		
DFI (900 Hz)	difference function inphase from CXI and CPI	2 ppm
DFQ (900 Hz)	difference function quadrature from CXQ and CPQ	2 ppm
RES (900 Hz)	log resistivity	.06 decade
RES (7200 Hz)	log resistivity	.06 decade
RES (56 kHz)	log resistivity	.06 decade
DP (900 Hz)	apparent depth	6 m
DP (7200 Hz)	apparent depth	6 m
DP (56 kHz)	apparent depth	6 m
CDT	conductance	1 grade

Digital Data Acquisition System

Manufacturer: Scintrex/Picodas
Model: PDAS-1000
Type: Microprocessor-based; E.L. display
Recorder: Internal 40 megabyte cassette drive; RMS GR-33

The digital data are used to generate several computed parameters. Both measured and computed parameters are plotted as "multi-channel stacked profiles" during data processing. These parameters are shown in Table 2-2. In Table 2-2, the log resistivity scale of 0.06 decade/mm means that the resistivity changes by an order of magnitude in 16.6 mm. The resistivities at 0, 33 and 67 mm up from the bottom of the digital profile are respectively 1, 100 and 10,000 ohm-m.

Tracking Camera

Type: Panasonic Video
Model: AG 2400/WVCD132

Fiducial numbers are recorded continuously and are displayed on the margin of each image. This procedure ensures accurate correlation of analog and digital data with respect to visible features on the ground.

Navigation System (RT-DGPS)

Model: Sercel NR106, Real-time differential positioning
Type: SPS (L1 band), 10-channel, C/A code, 1575.42 MHz.
Sensitivity: -132 dBm, 0.5 second update
Accuracy: < 5 metres in differential mode,
± 50 metres in S/A (non differential) mode

The Global Positioning System (GPS) is a line of sight, satellite navigation system which utilizes time-coded signals from at least four of the twenty-four NAVSTAR satellites. In the differential mode, two GPS receivers are used. The base station unit is used as a reference which transmits real-time corrections to the mobile unit in the aircraft, via a UHF radio datalink. The on-board system calculates the flight path of the helicopter while providing real-time guidance. The raw XYZ data are recorded for both receivers, thereby permitting post-survey processing for accuracies of approximately 2 metres.

Although the base station receiver is able to calculate its own latitude and longitude, a higher degree of accuracy can be obtained if the reference unit is established on a known benchmark or triangulation point. The GPS records data relative to the WGS84 ellipsoid, which is the basis of the revised North American Datum (NAD83). Conversion software is used to transform the WGS84 coordinates to the system displayed on the base maps.

Field Workstation

Manufacturer: Dighem
Model: FWS: V2.41
Type: 80386 based P.C.

A portable PC-based field workstation is used at the survey base to verify data quality and completeness. Flight tapes are dumped to a hard drive to permit the creation of a database. This process allows the field operators to display both the positional (flight path) and geophysical data on a screen or printer.

PRODUCTS AND PROCESSING TECHNIQUES

The following products are available from the survey data. Those which are not part of the survey contract may be acquired later. Refer to Table 3-1 for a summary of the products which accompany this report, some of which may be sent under separate cover. Most parameters can be displayed as contours, profiles, or in colour.

Base Maps

A base map of the survey area has been produced from published topographic maps. It provides a relatively accurate, distortion-free base which facilitates correlation of the navigation data to the UTM grid. Photomosaics are useful for visual reference and for subsequent flight path recovery, but usually contain scale distortions. Orthophotos are ideal, but their cost and the time required to produce them, usually precludes their use as base maps.

Electromagnetic Anomalies

Anomalous electromagnetic responses are selected and analysed by computer to provide a preliminary electromagnetic anomaly map. This preliminary map is used, by the geophysicist, in conjunction with the computer-generated digital profiles, to produce

Table 3-1 Survey Products

Preliminary Maps @ 1:15,000

- EM profile map with anomalies
- Total field magnetics
- Resistivity (7200 Hz)

Final Transparencies (+3 prints) @ 1:15,000

- DIGHEM EM anomalies with interpretation
- Total field magnetics
- Calculated vertical magnetic gradient
- Resistivity (7200 Hz)
- Filtered total field VLF

Colour Maps (2 copies) @ 1:15,000

- Total field magnetics
- Calculated vertical magnetic gradient
- Resistivity (7200 Hz)
- Filtered total field VLF

Other Products

- Shadow magnetic maps (2 copies) @ 1:30,000
- Digital archive
- Grid archives in I-POWER VISION format
- Survey report (3 copies)
- VISION software
- Multi-channel stacked profiles
- Analogs
- Flight path video cassettes

the final interpreted EM anomaly map. This map includes bedrock surficial and cultural conductors. A map containing only bedrock conductors can be generated, if desired.

Resistivity

The apparent resistivity in ohm-m may be generated from the inphase and quadrature EM components for any of the frequencies, using a pseudo-layer halfspace model. A resistivity map portrays all the EM information for that frequency over the entire survey area. This contrasts with the electromagnetic anomaly map which provides information only over interpreted conductors. The large dynamic range makes the resistivity parameter an excellent mapping tool.

EM Magnetite

The apparent percent magnetite by weight is computed wherever magnetite produces a negative inphase EM response.

Total Field Magnetics

The aeromagnetic data are corrected for diurnal variation using the magnetic base station data. The regional IGRF can be removed from the data, if requested.

Enhanced Magnetics

The total field magnetic data are subjected to a processing algorithm. This algorithm enhances the response of magnetic bodies in the upper 500 m and attenuates the response of deeper bodies. The resulting enhanced magnetic map provides better definition and resolution of near-surface magnetic units. It also identifies weak magnetic features which may not be evident on the total field magnetic map. However, regional magnetic variations, and magnetic lows caused by remanence, are better defined on the total field magnetic map. The technique is described in more detail in Section 5.

Magnetic Derivatives

The total field magnetic data may be subjected to a variety of filtering techniques to yield maps of the following:

first vertical derivative (vertical gradient)

second vertical derivative

magnetic susceptibility with reduction to the pole

upward/downward continuations

All of these filtering techniques improve the recognition of near-surface magnetic bodies, with the exception of upward continuation. Any of these parameters can be produced on request. Dighem's proprietary enhanced magnetic technique is designed to provide a general "all-purpose" map, combining the more useful features of the above parameters.

VLF

The VLF data are digitally filtered to remove long wavelengths such as those caused by variations in the transmitted field strength.

Multi-channel Stacked Profiles

Distance-based profiles of the digitally recorded geophysical data are generated and plotted by computer. These profiles also contain the calculated parameters which are used in the interpretation process. These are produced as worksheets prior to interpretation, and can also be presented in the final corrected form after interpretation. The profiles display electromagnetic anomalies with their respective interpretive symbols. The differences between the worksheets and the final corrected form occur only with respect to the EM anomaly identifier.

Contour, Colour and Shadow Map Displays

The geophysical data are interpolated onto a regular grid using a modified Akima spline technique. The resulting grid is suitable for generating contour maps of excellent quality.

Colour maps are produced by interpolating the grid down to the pixel size. The parameter is then incremented with respect to specific amplitude ranges to provide colour "contour" maps. Colour maps of the total magnetic field are particularly useful in defining the lithology of the survey area.

Monochromatic shadow maps are generated by employing an artificial sun to cast shadows on a surface defined by the geophysical grid. There are many variations in the shadowing technique. These techniques may be applied to total field or enhanced magnetic data, magnetic derivatives, VLF, resistivity, etc. Of the various magnetic products, the shadow of the enhanced magnetic parameter is particularly suited for defining geological structures with crisper images and improved resolution.

Conductivity-depth Sections

The apparent resistivities for all frequencies can be displayed simultaneously as coloured conductivity-depth sections. Usually, only the coplanar data are displayed as the quality tends to be higher than that of the coaxial data.

Conductivity-depth sections can be generated in two formats:

- (1) Sengpiel resistivity sections, where the apparent resistivity for each frequency is plotted at the depth of the centroid of the inphase current flow^{*}; and,
- (2) Differential resistivity sections, where the differential resistivity is plotted at the differential depth^{**}.

Both the Sengpiel and differential methods are derived from the pseudo-layer halfspace model. Both yield a coloured conductivity-depth section which attempts to portray a smoothed approximation of the true resistivity distribution with depth. The Sengpiel method is most useful in conductive layered situations, but may be unreliable in areas of

^{*} Approximate Inversion of Airborne EM Data from Multilayered Ground: Sengpiel, K.P., Geophysical Prospecting 36, 446-459, 1988.

^{**} The Differential Resistivity Method for Multi-frequency Airborne EM Sounding: Huang, H. and Fraser, D.C., presented at Intern. Airb. EM Workshop, Tucson, Ariz., 1993.

moderate to high resistivity where signal amplitudes are weak. In areas where inphase responses have been suppressed by the effects of magnetite, the computed resistivities shown on the sections may be unreliable. The differential technique was developed by Dighem to overcome problems in the Sengpiel technique. The differential resistivity section is more sensitive than the Sengpiel section to changes in the earth's resistivity and it reaches deeper.

SURVEY RESULTS

GENERAL DISCUSSION

The survey results are presented on one map sheet for each parameter at a scale of 1:15,000. Table 4-1 summarizes the EM responses in the survey area, with respect to conductance grade and interpretation.

The anomalies shown on the electromagnetic anomaly map are based on a near-vertical, half plane model. This model best reflects "discrete" bedrock conductors. Wide bedrock conductors or flat-lying conductive units, whether from surficial or bedrock sources, may give rise to very broad anomalous responses on the EM profiles. These may not appear on the electromagnetic anomaly maps if they have a regional character rather than a locally anomalous character. These broad conductors, which more closely approximate a half space model, will be maximum coupled to the horizontal (coplanar) coil-pair and should be more evident on the resistivity parameter. Resistivity maps, therefore, may be more valuable than the electromagnetic anomaly maps, in areas where broad or flat-lying conductors are considered to be of importance. Contoured resistivity maps, based on the 7200 Hz coplanar data are included with this report.

TABLE 4-1
EM ANOMALY STATISTICS
MICROGOLD PROJECT

CONDUCTOR GRADE	CONDUCTANCE RANGE SIEMENS (MHOS)	NUMBER OF RESPONSES
7	>100	7
6	50 - 100	6
5	20 - 50	17
4	10 - 20	49
3	5 - 10	105
2	1 - 5	248
1	<1	88
*	INDETERMINATE	209
TOTAL		729

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK CONDUCTOR	58
B	DISCRETE BEDROCK CONDUCTOR	246
S	CONDUCTIVE COVER	235
H	ROCK UNIT OR THICK COVER	36
E	EDGE OF WIDE CONDUCTOR	57
L	CULTURE	97
TOTAL		729

(SEE EM MAP LEGEND FOR EXPLANATIONS)

Excellent resolution and discrimination of conductors was accomplished by using a fast sampling rate of 0.1 sec and by employing a common frequency (900 Hz) on two orthogonal coil-pairs (coaxial and coplanar). The resulting "difference channel" parameters often permit differentiation of bedrock and surficial conductors, even though they may exhibit similar conductance values.

Anomalies which occur near the ends of the survey lines (i.e., outside the survey area), should be viewed with caution. Some of the weaker anomalies could be due to aerodynamic noise, i.e., bird bending, which is created by abnormal stresses to which the bird is subjected during the climb and turn of the aircraft between lines. Such aerodynamic noise is usually manifested by an anomaly on the coaxial inphase channel only, although severe stresses can affect the coplanar inphase channels as well.

Magnetics

A Scintrex cesium magnetometer was operated at the survey base to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to permit subsequent removal of diurnal drift.

The background magnetic level has been adjusted to match the International Geomagnetic Reference Field (IGRF) for the survey area. The IGRF gradient across the survey block is left intact.

The total field magnetic data have been presented as contours on the base map using a contour interval of 5 nT where gradients permit. The map shows the magnetic properties of the rock units underlying the survey area.

The total field magnetic data have been subjected to a processing algorithm to produce a first vertical magnetic derivative map. This procedure enhances near-surface magnetic units and suppresses regional gradients. It also provides better definition and resolution of magnetic units and displays weak magnetic features which may not be clearly evident on the total field map. A map of the second vertical magnetic derivative can also be prepared from existing survey data, if requested.

There is some evidence on the magnetic map which suggests that the survey area has been subjected to deformation and/or alteration. These structural complexities are evident on the contour map as variations in magnetic intensity, irregular patterns, and as offsets or changes in strike direction.

If a specific magnetic intensity can be assigned to the rock type which is believed to host the target mineralization, it may be possible to select areas of higher priority on the basis of the total field magnetic data. This is based on the assumption that the magnetite content of the host rocks will give rise to a limited range of contour values which will permit differentiation of various lithological units.

The magnetic results, in conjunction with the other geophysical parameters, should provide valuable information which can be used to effectively map the geology and structure in the survey area.

VLF

VLF results were obtained from the transmitting stations at Cutler, Maine (NAA - 24.0 kHz), Seattle, Washington (NLK - 24.8 kHz) and Annapolis, Maryland (NSS - 21.4 kHz). The VLF map shows the contoured results of the filtered total field from Seattle for all of the area.

The VLF method is quite sensitive to the angle of coupling between the conductor and the propagated EM field. Consequently, conductors which strike towards the VLF station will usually yield a stronger response than conductors which are nearly orthogonal to it.

The VLF parameter does not normally provide the same degree of resolution available from the EM data. Closely-spaced conductors, conductors of short strike length or conductors which are poorly coupled to the VLF field, may escape detection with this method. Erratic signals from the VLF transmitters can also give rise to strong, isolated anomalies which should be viewed with caution. The filtered total field VLF contours are presented on the base map with a contour interval of one percent.

Resistivity

A resistivity map, which displays the conductive properties of the survey area, was produced from the 7200 Hz coplanar data. The maximum resistivity value, which is calculated for this frequency, is limited to 8,000 ohm-m. This cutoff eliminates the meaningless higher resistivities which would result from very small EM amplitudes. In general, the resistivity patterns show some agreement with the magnetic trends. This suggests that many of the resistivity lows are probably related to bedrock features, rather than conductive overburden. There are some areas, however, where contour patterns appear to be strongly influenced by conductive surficial material.

There are other resistivity lows in the area. Some of these are quite extensive and often reflect "formational" conductors which may be of minor interest as direct exploration targets. However, attention may be focused on areas where these zones appear to be faulted or folded or where anomaly characteristics differ along strike.

Electromagnetics

The EM anomalies resulting from this survey appear to fall within one of three general categories. The first type consists of discrete, well-defined anomalies which yield marked inflections on the difference channels. These anomalies are usually

attributed to conductive sulphides or graphite and are generally given a "B", "T" or "D" interpretive symbol, denoting a bedrock source.

The second class of anomalies comprises moderately broad responses which exhibit the characteristics of a half space and do not yield well-defined inflections on the difference channels. Anomalies in this category are usually given an "S" or "H" interpretive symbol. The lack of a difference channel response usually implies a broad or flat-lying conductive source such as overburden. Some of these anomalies may reflect conductive rock units or zones of deep weathering.

The third class consists of cultural anomalies which are usually given the symbol "L" or "L?"

The effects of conductive overburden are evident over portions of the survey area. Although the difference channels (DFI and DFQ) are extremely valuable in detecting bedrock conductors which are partially masked by conductive overburden, sharp undulations in the bedrock/overburden interface can yield anomalies in the difference channels which may be interpreted as possible bedrock conductors. Such anomalies usually fall into the "S?" or "B?" classification but may also be given an "E" interpretive symbol, denoting a resistivity contrast at the edge of a conductive unit.

In areas where EM responses are evident primarily on the quadrature components, zones of poor conductivity are indicated. Where these responses are coincident with magnetic anomalies, it is possible that the inphase component amplitudes have been suppressed by the effects of magnetite. Most of these poorly-conductive magnetic features give rise to resistivity anomalies which are only slightly below background. In areas where magnetite causes the inphase components to become negative, the apparent conductance and depth of EM anomalies may be unreliable.

It is difficult to assess the relative merits of EM anomalies on the basis of conductance. It is recommended that an attempt be made to compile a suite of geophysical "signatures" over areas of interest. Anomaly characteristics are clearly defined on the computer-processed geophysical data profiles which are supplied as one of the survey products.

A complete assessment and evaluation of the survey data should be carried out by one or more qualified professionals who have access to, and can provide a meaningful compilation of, all available geophysical, geological and geochemical data.

The electromagnetic anomaly map shows the anomaly locations with the interpreted conductor type, dip, conductance and depth being indicated by symbols. Direct magnetic correlation is also shown if it exists. The strike direction and length of

the conductors are indicated when anomalies can be correlated from line to line. When studying the map sheets, consult the anomaly listings appended to this report.

In areas where several conductors or conductive trends appear to be related to a common geological unit, these have been outlined as "zones" on the EM anomaly map. The zone outlines usually approximate the limits of conductive units defined by the resistivity contours, but may also be related to distinct rock units which may be inferred from the magnetic data.

Survey coverage in the Microgold Project amounted to 381 km including two tie lines. The magnetic map displays generally quite complex features and exhibits a dynamic range of almost 2,000 nT. The northwest portion of the survey block is dominated by a large, moderately magnetic zone. This zone is quite complex. It is intersected by several possible linear structural features trending northeast/southwest, northwest/southeast, and a possible linear structural break which trends approximately north/south through the middle of this magnetic unit. This magnetic feature exhibits a very sharp contact at its eastern edge with a less magnetic unit. Most of the bedrock anomalies interpreted from the survey data are associated with this relatively non-magnetic zone and the contacts between it and several highly magnetic features.

Another dominant feature is the arcuate, highly magnetic zone situated in the southern portion of the survey block over lines 10500 through 10720. This zone displays

a general correlation with the southern portion of a highly conductive zone associated with Stump Lake.

The resistivity patterns generally exhibit moderately good correlation with magnetic trends. This suggests that many of the resistivity lows are probably related to bedrock features rather than surficial conductivity. The largest zone of conductivity is that associated with Stump Lake. It displays resistivities of lower than 15 ohm-metres on the 7200 Hz resistivity map. This zone reflects a broad conductive unit, the top of which appears to be at a depth of ten to twelve metres. The southern portion of this zone is coincident with the strong, broad magnetic anomaly mentioned previously.

Another large area of high conductivity is associated with Zone A. The limit of this zone is defined by the 100 ohm-metre contour on the 7200 Hz resistivity map. This zone displays a general association with a relatively non-magnetic zone. The eastern limit of Zone A is coincident with a sharp contact between the non-magnetic zone and a highly magnetic zone to the northeast. Zone A contains many north-northwest/south-southeast trending probable bedrock conductors. Few of the bedrock conductors extend over two or three lines due to the complexity of the underlying rock units inferred from the magnetic data. One exception is conductor 10120F-10330G. It reflects a moderately strong, thin bedrock conductor which extends north-northwest/south-southeast for over 3.5 km. It is coincident with a thin magnetic low which displays a sharp contact with a highly magnetic unit to the west. Another less extensive conductor within Zone A,

10260K-10310L, trends north/south for approximately 750 metres. It is coincident with a thin magnetic feature. It reflects a possible thin, moderately strong bedrock source. Few other conductive trends contain anomalies with well-defined shapes. Conductivities and anomaly characteristics vary greatly throughout the zone, as does magnetic correlation.

There are several other anomalous features not within Zone A which may be of interest.

Anomalies 10010K, 10030I and 10050K all reflect weak bedrock sources situated northeast of Zone A. They are coincident with a magnetic contact and are located at the western edge of a resistivity low. Anomaly 10030I reflects a thin bedrock source. Several isolated anomalies such as 10400D, 10430E, 10460B, and 10590C are associated with two north/south trending magnetic dyke-like features. Other anomalies seem to be situated in the vicinity of possible structural breaks inferred from the magnetic data (anomalies 10200D, 10290F, 10310B, 10360E, 10430F). Most are indicative of poorly defined, weak bedrock sources.

Conductors 10640F-10650G, 10620F-10630F and anomalies 19020B, 10640G, and 10640I are all associated with the strong magnetic unit coincident with Stump Lake. All flank the magnetic feature and are located near the lake shore. They reflect moderately weak, poorly defined, possible bedrock sources.

Conductor 10710E-10720E reflects a weak, possible bedrock source. It is located near the peak of Mineral Hill and is coincident with a small lake. It is situated on the east flank of a small, circular magnetic high. The magnetic high is in the vicinity of a mine symbol on the topographic map. This conductor gives rise to a weak resistivity low. There is no visible culture on the video flight path records over this anomaly.

BACKGROUND INFORMATION

This section provides background information on parameters which are available from the survey data. Those which have not been supplied as survey products may be generated later from raw data on the digital archive tape.

ELECTROMAGNETICS

DIGHEM electromagnetic responses fall into two general classes, discrete and broad. The discrete class consists of sharp, well-defined anomalies from discrete conductors such as sulfide lenses and steeply dipping sheets of graphite and sulfides. The broad class consists of wide anomalies from conductors having a large horizontal surface such as flatly dipping graphite or sulfide sheets, saline water-saturated sedimentary formations, conductive overburden and rock, and geothermal zones. A vertical conductive slab with a width of 200 m would straddle these two classes.

The vertical sheet (half plane) is the most common model used for the analysis of discrete conductors. All anomalies plotted on the electromagnetic map are analyzed according to this model. The following section entitled **Discrete Conductor Analysis** describes this model in detail, including the effect of using it on anomalies caused by broad conductors such as conductive overburden.

The conductive earth (half space) model is suitable for broad conductors. Resistivity contour maps result from the use of this model. A later section entitled **Resistivity Mapping** describes the method further, including the effect of using it on anomalies caused by discrete conductors such as sulfide bodies.

Geometric interpretation

The geophysical interpreter attempts to determine the geometric shape and dip of the conductor. Figure 5-1 shows typical DIGHEM anomaly shapes which are used to guide the geometric interpretation.

Discrete conductor analysis

The EM anomalies appearing on the electromagnetic map are analyzed by computer to give the conductance (i.e., conductivity-thickness product) in Siemens (mhos) of a vertical sheet model. This is done regardless of the interpreted geometric shape of the conductor. This is not an unreasonable procedure, because the computed conductance increases as the electrical quality of the conductor increases, regardless of its true shape. DIGHEM anomalies are divided into seven grades of conductance, as shown in Table 5-1 below. The conductance in Siemens (mhos) is the reciprocal of resistance in ohms.

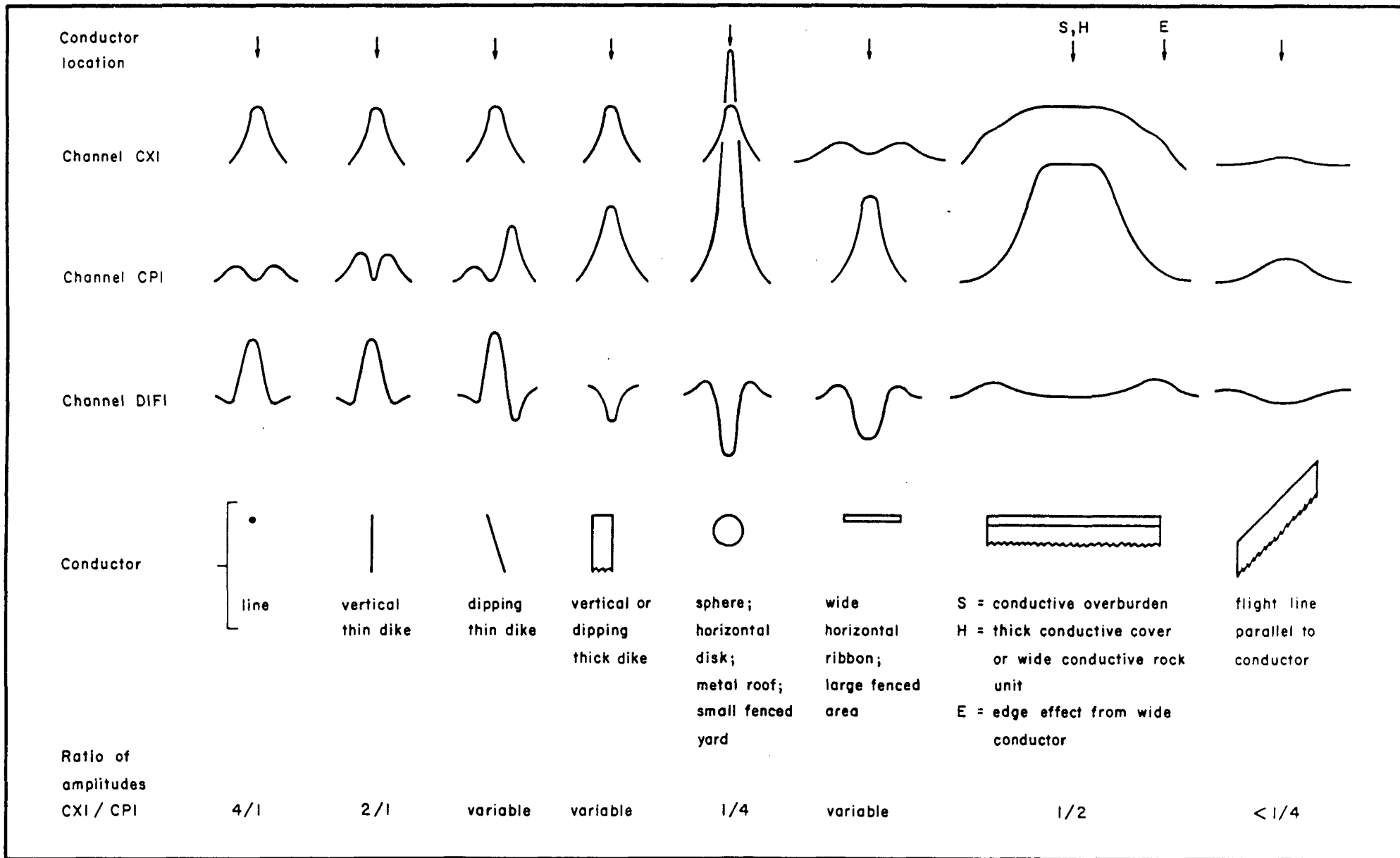


Fig. 5-1 Typical DIGHEM anomaly shapes

Table 5-1. EM Anomaly Grades

<u>Anomaly Grade</u>	<u>Siemens</u>
7	> 100
6	50 - 100
5	20 - 50
4	10 - 20
3	5 - 10
2	1 - 5
1	< 1

The conductance value is a geological parameter because it is a characteristic of the conductor alone. It generally is independent of frequency, flying height or depth of burial, apart from the averaging over a greater portion of the conductor as height increases. Small anomalies from deeply buried strong conductors are not confused with small anomalies from shallow weak conductors because the former will have larger conductance values.

Conductive overburden generally produces broad EM responses which may not be shown as anomalies on the EM maps. However, patchy conductive overburden in otherwise resistive areas can yield discrete anomalies with a conductance grade (cf. Table 5-1) of 1, 2 or even 3 for conducting clays which have resistivities as low as 50 ohm-m. In areas where ground resistivities are below 10 ohm-m, anomalies caused by weathering variations and similar causes can have any conductance grade. The anomaly shapes from the multiple coils often allow such conductors to be recognized, and these are indicated by the letters S, H, and sometimes E on the electromagnetic anomaly map (see EM map legend).

For bedrock conductors, the higher anomaly grades indicate increasingly higher conductances. Examples: DIGHEM's New Inco copper discovery (Noranda, Canada) yielded a grade 5 anomaly, as did the neighbouring copper-zinc Magusi River ore body; Matabi (copper-zinc, Sturgeon Lake, Canada) and Whistle (nickel, Sudbury, Canada) gave grade 6; and DIGHEM's Montcalm nickel-copper discovery (Timmins, Canada) yielded a grade 7 anomaly. Graphite and sulfides can span all grades but, in any particular survey area, field work may show that the different grades indicate different types of conductors.

Strong conductors (i.e., grades 6 and 7) are characteristic of massive sulfides or graphite. Moderate conductors (grades 4 and 5) typically reflect graphite or sulfides of a less massive character, while weak bedrock conductors (grades 1 to 3) can signify poorly connected graphite or heavily disseminated sulfides. Grades 1 and 2 conductors may not respond to ground EM equipment using frequencies less than 2000 Hz.

The presence of sphalerite or gangue can result in ore deposits having weak to moderate conductances. As an example, the three million ton lead-zinc deposit of Restigouche Mining Corporation near Bathurst, Canada, yielded a well-defined grade 2 conductor. The 10 percent by volume of sphalerite occurs as a coating around the fine grained massive pyrite, thereby inhibiting electrical conduction.

Faults, fractures and shear zones may produce anomalies which typically have low conductances (e.g., grades 1 to 3). Conductive rock formations can yield anomalies of any

conductance grade. The conductive materials in such rock formations can be salt water, weathered products such as clays, original depositional clays, and carbonaceous material.

On the interpreted electromagnetic map, a letter identifier and an interpretive symbol are plotted beside the EM grade symbol. The horizontal rows of dots, under the interpretive symbol, indicate the anomaly amplitude on the flight record. The vertical column of dots, under the anomaly letter, gives the estimated depth. In areas where anomalies are crowded, the letter identifiers, interpretive symbols and dots may be obliterated. The EM grade symbols, however, will always be discernible, and the obliterated information can be obtained from the anomaly listing appended to this report.

The purpose of indicating the anomaly amplitude by dots is to provide an estimate of the reliability of the conductance calculation. Thus, a conductance value obtained from a large ppm anomaly (3 or 4 dots) will tend to be accurate whereas one obtained from a small ppm anomaly (no dots) could be quite inaccurate. The absence of amplitude dots indicates that the anomaly from the coaxial coil-pair is 5 ppm or less on both the inphase and quadrature channels. Such small anomalies could reflect a weak conductor at the surface or a stronger conductor at depth. The conductance grade and depth estimate illustrates which of these possibilities fits the recorded data best.

Flight line deviations occasionally yield cases where two anomalies, having similar conductance values but dramatically different depth estimates, occur close together on the same

conductor. Such examples illustrate the reliability of the conductance measurement while showing that the depth estimate can be unreliable. There are a number of factors which can produce an error in the depth estimate, including the averaging of topographic variations by the altimeter, overlying conductive overburden, and the location and attitude of the conductor relative to the flight line. Conductor location and attitude can provide an erroneous depth estimate because the stronger part of the conductor may be deeper or to one side of the flight line, or because it has a shallow dip. A heavy tree cover can also produce errors in depth estimates. This is because the depth estimate is computed as the distance of bird from conductor, minus the altimeter reading. The altimeter can lock onto the top of a dense forest canopy. This situation yields an erroneously large depth estimate but does not affect the conductance estimate.

Dip symbols are used to indicate the direction of dip of conductors. These symbols are used only when the anomaly shapes are unambiguous, which usually requires a fairly resistive environment.

A further interpretation is presented on the EM map by means of the line-to-line correlation of anomalies, which is based on a comparison of anomaly shapes on adjacent lines. This provides conductor axes which may define the geological structure over portions of the survey area. The absence of conductor axes in an area implies that anomalies could not be correlated from line to line with reasonable confidence.

DIGHEM electromagnetic maps are designed to provide a correct impression of conductor quality by means of the conductance grade symbols. The symbols can stand alone with geology when planning a follow-up program. The actual conductance values are printed in the attached anomaly list for those who wish quantitative data. The anomaly ppm and depth are indicated by inconspicuous dots which should not distract from the conductor patterns, while being helpful to those who wish this information. The map provides an interpretation of conductors in terms of length, strike and dip, geometric shape, conductance, depth, and thickness. The accuracy is comparable to an interpretation from a high quality ground EM survey having the same line spacing.

The attached EM anomaly list provides a tabulation of anomalies in ppm, conductance, and depth for the vertical sheet model. The EM anomaly list also shows the conductance and depth for a thin horizontal sheet (whole plane) model, but only the vertical sheet parameters appear on the EM map. The horizontal sheet model is suitable for a flatly dipping thin bedrock conductor such as a sulfide sheet having a thickness less than 10 m. The list also shows the resistivity and depth for a conductive earth (half space) model, which is suitable for thicker slabs such as thick conductive overburden. In the EM anomaly list, a depth value of zero for the conductive earth model, in an area of thick cover, warns that the anomaly may be caused by conductive overburden.

Since discrete bodies normally are the targets of EM surveys, local base (or zero) levels are used to compute local anomaly amplitudes. This contrasts with the use of true zero levels

which are used to compute true EM amplitudes. Local anomaly amplitudes are shown in the EM anomaly list and these are used to compute the vertical sheet parameters of conductance and depth. Not shown in the EM anomaly list are the true amplitudes which are used to compute the horizontal sheet and conductive earth parameters.

Questionable Anomalies

DIGHEM maps may contain EM responses which are displayed as asterisks (*). These responses denote weak anomalies of indeterminate conductance, which may reflect one of the following: a weak conductor near the surface, a strong conductor at depth (e.g., 100 to 120 m below surface) or to one side of the flight line, or aerodynamic noise. Those responses that have the appearance of valid bedrock anomalies on the flight profiles are indicated by appropriate interpretive symbols (see EM map legend). The others probably do not warrant further investigation unless their locations are of considerable geological interest.

The thickness parameter

DIGHEM can provide an indication of the thickness of a steeply dipping conductor. The amplitude of the coplanar anomaly (e.g., CPI channel on the digital profile) increases relative to the coaxial anomaly (e.g., CXI) as the apparent thickness increases, i.e., the thickness in the horizontal plane. (The thickness is equal to the conductor width if the conductor dips at 90

degrees and strikes at right angles to the flight line.) This report refers to a conductor as thin when the thickness is likely to be less than 3 m, and thick when in excess of 10 m. Thick conductors are indicated on the EM map by parentheses "()". For base metal exploration in steeply dipping geology, thick conductors can be high priority targets because many massive sulfide ore bodies are thick, whereas non-economic bedrock conductors are often thin. The system cannot sense the thickness when the strike of the conductor is subparallel to the flight line, when the conductor has a shallow dip, when the anomaly amplitudes are small, or when the resistivity of the environment is below 100 ohm-m.

Resistivity mapping

Areas of widespread conductivity are commonly encountered during surveys. In such areas, anomalies can be generated by decreases of only 5 m in survey altitude as well as by increases in conductivity. The typical flight record in conductive areas is characterized by inphase and quadrature channels which are continuously active. Local EM peaks reflect either increases in conductivity of the earth or decreases in survey altitude. For such conductive areas, apparent resistivity profiles and contour maps are necessary for the correct interpretation of the airborne data. The advantage of the resistivity parameter is that anomalies caused by altitude changes are virtually eliminated, so the resistivity data reflect only those anomalies caused by conductivity changes. The resistivity analysis also helps the interpreter to differentiate between conductive trends in the bedrock and those patterns typical of conductive overburden. For

example, discrete conductors will generally appear as narrow lows on the contour map and broad conductors (e.g., overburden) will appear as wide lows.

The resistivity profiles and the resistivity contour maps present the apparent resistivity using the so-called pseudo-layer (or buried) half space model defined by Fraser (1978)¹. This model consists of a resistive layer overlying a conductive half space. The depth channels give the apparent depth below surface of the conductive material. The apparent depth is simply the apparent thickness of the overlying resistive layer. The apparent depth (or thickness) parameter will be positive when the upper layer is more resistive than the underlying material, in which case the apparent depth may be quite close to the true depth.

The apparent depth will be negative when the upper layer is more conductive than the underlying material, and will be zero when a homogeneous half space exists. The apparent depth parameter must be interpreted cautiously because it will contain any errors which may exist in the measured altitude of the EM bird (e.g., as caused by a dense tree cover). The inputs to the resistivity algorithm are the inphase and quadrature components of the coplanar coil-pair. The outputs are the apparent resistivity of the conductive half space (the source) and the sensor-source distance. The flying height is not an input variable, and the output resistivity and sensor-source distance are independent of the flying height. The apparent depth, discussed above, is

¹ Resistivity mapping with an airborne multicoil electromagnetic system: Geophysics, v. 43, p.144-172

simply the sensor-source distance minus the measured altitude or flying height. Consequently, errors in the measured altitude will affect the apparent depth parameter but not the apparent resistivity parameter.

The apparent depth parameter is a useful indicator of simple layering in areas lacking a heavy tree cover. The DIGHEM system has been flown for purposes of permafrost mapping, where positive apparent depths were used as a measure of permafrost thickness. However, little quantitative use has been made of negative apparent depths because the absolute value of the negative depth is not a measure of the thickness of the conductive upper layer and, therefore, is not meaningful physically. Qualitatively, a negative apparent depth estimate usually shows that the EM anomaly is caused by conductive overburden. Consequently, the apparent depth channel can be of significant help in distinguishing between overburden and bedrock conductors.

The resistivity map often yields more useful information on conductivity distributions than the EM map. In comparing the EM and resistivity maps, keep in mind the following:

- (a) The resistivity map portrays the apparent value of the earth's resistivity, where resistivity = $1/\text{conductivity}$.
- (b) The EM map portrays anomalies in the earth's resistivity. An anomaly by definition is a change from the norm and so the EM map displays anomalies, (i)

over narrow, conductive bodies and (ii) over the boundary zone between two wide formations of differing conductivity.

The resistivity map might be likened to a total field map and the EM map to a horizontal gradient in the direction of flight². Because gradient maps are usually more sensitive than total field maps, the EM map therefore is to be preferred in resistive areas. However, in conductive areas, the absolute character of the resistivity map usually causes it to be more useful than the EM map.

Interpretation in conductive environments

Environments having background resistivities below 30 ohm-m cause all airborne EM systems to yield very large responses from the conductive ground. This usually prohibits the recognition of discrete bedrock conductors. However, DIGHEM data processing techniques produce three parameters which contribute significantly to the recognition of bedrock conductors. These are the inphase and quadrature difference channels (DFI and DFQ), and the resistivity and depth channels (RES and DP) for each coplanar frequency.

² The gradient analogy is only valid with regard to the identification of anomalous locations.

The EM difference channels (DFI and DFQ) eliminate most of the responses from conductive ground, leaving responses from bedrock conductors, cultural features (e.g., telephone lines, fences, etc.) and edge effects. Edge effects often occur near the perimeter of broad conductive zones. This can be a source of geologic noise. While edge effects yield anomalies on the EM difference channels, they do not produce resistivity anomalies. Consequently, the resistivity channel aids in eliminating anomalies due to edge effects. On the other hand, resistivity anomalies will coincide with the most highly conductive sections of conductive ground, and this is another source of geologic noise. The recognition of a bedrock conductor in a conductive environment therefore is based on the anomalous responses of the two difference channels (DFI and DFQ) and the resistivity channels (RES). The most favourable situation is where anomalies coincide on all channels.

The DP channels, which give the apparent depth to the conductive material, also help to determine whether a conductive response arises from surficial material or from a conductive zone in the bedrock. When these channels ride above the zero level on the digital profiles (i.e., depth is negative), it implies that the EM and resistivity profiles are responding primarily to a conductive upper layer, i.e., conductive overburden. If the DP channels are below the zero level, it indicates that a resistive upper layer exists, and this usually implies the existence of a bedrock conductor. If the low frequency DP channel is below the zero level and the high frequency DP is above, this suggests that a bedrock conductor occurs beneath conductive cover.

The conductance channel CDT identifies discrete conductors which have been selected by computer for appraisal by the geophysicist. Some of these automatically selected anomalies on channel CDT are discarded by the geophysicist. The automatic selection algorithm is intentionally oversensitive to assure that no meaningful responses are missed. The interpreter then classifies the anomalies according to their source and eliminates those that are not substantiated by the data, such as those arising from geologic or aerodynamic noise.

Reduction of geologic noise

Geologic noise refers to unwanted geophysical responses. For purposes of airborne EM surveying, geologic noise refers to EM responses caused by conductive overburden and magnetic permeability. It was mentioned previously that the EM difference channels (i.e., channel DFI for inphase and DFQ for quadrature) tend to eliminate the response of conductive overburden. This marked a unique development in airborne EM technology, as DIGHEM is the only EM system which yields channels having an exceptionally high degree of immunity to conductive overburden.

Magnetite produces a form of geological noise on the inphase channels of all EM systems. Rocks containing less than 1% magnetite can yield negative inphase anomalies caused by magnetic permeability. When magnetite is widely distributed throughout a survey area, the inphase EM channels may continuously rise and fall, reflecting variations in the magnetite percentage, flying height, and overburden thickness. This can lead to difficulties in recognizing

deeply buried bedrock conductors, particularly if conductive overburden also exists. However, the response of broadly distributed magnetite generally vanishes on the inphase difference channel DFI. This feature can be a significant aid in the recognition of conductors which occur in rocks containing accessory magnetite.

EM magnetite mapping

The information content of DIGHEM data consists of a combination of conductive eddy current responses and magnetic permeability responses. The secondary field resulting from conductive eddy current flow is frequency-dependent and consists of both inphase and quadrature components, which are positive in sign. On the other hand, the secondary field resulting from magnetic permeability is independent of frequency and consists of only an inphase component which is negative in sign. When magnetic permeability manifests itself by decreasing the measured amount of positive inphase, its presence may be difficult to recognize. However, when it manifests itself by yielding a negative inphase anomaly (e.g., in the absence of eddy current flow), its presence is assured. In this latter case, the negative component can be used to estimate the percent magnetite content.

A magnetite mapping technique was developed for the coplanar coil-pair of DIGHEM. The technique yields a channel (designated FEO) which displays apparent weight percent

magnetite according to a homogeneous half space model.³ The method can be complementary to magnetometer mapping in certain cases. Compared to magnetometry, it is far less sensitive but is more able to resolve closely spaced magnetite zones, as well as providing an estimate of the amount of magnetite in the rock. The method is sensitive to 1/4% magnetite by weight when the EM sensor is at a height of 30 m above a magnetitic half space. It can individually resolve steep dipping narrow magnetite-rich bands which are separated by 60 m. Unlike magnetometry, the EM magnetite method is unaffected by remanent magnetism or magnetic latitude.

The EM magnetite mapping technique provides estimates of magnetite content which are usually correct within a factor of 2 when the magnetite is fairly uniformly distributed. EM magnetite maps can be generated when magnetic permeability is evident as negative inphase responses on the data profiles.

Like magnetometry, the EM magnetite method maps only bedrock features, provided that the overburden is characterized by a general lack of magnetite. This contrasts with resistivity mapping which portrays the combined effect of bedrock and overburden.

³ Refer to Fraser, 1981, Magnetite mapping with a multi-coil airborne electromagnetic system: Geophysics, v. 46, p. 1579-1594.

Recognition of culture

Cultural responses include all EM anomalies caused by man-made metallic objects. Such anomalies may be caused by inductive coupling or current gathering. The concern of the interpreter is to recognize when an EM response is due to culture. Points of consideration used by the interpreter, when coaxial and coplanar coil-pairs are operated at a common frequency, are as follows:

1. Channels CXP and CPP monitor 60 Hz radiation. An anomaly on these channels shows that the conductor is radiating power. Such an indication is normally a guarantee that the conductor is cultural. However, care must be taken to ensure that the conductor is not a geologic body which strikes across a power line, carrying leakage currents.
2. A flight which crosses a "line" (e.g., fence, telephone line, etc.) yields a center-peaked coaxial anomaly and an m-shaped coplanar anomaly.⁴ When the flight crosses the cultural line at a high angle of intersection, the amplitude ratio of coaxial/coplanar response is 4. Such an EM anomaly can only be caused by a line. The geologic body which yields anomalies most closely resembling a line is the vertically dipping thin dike. Such a body, however, yields an amplitude ratio of 2 rather than 4. Consequently, an

⁴ See Figure 5-1 presented earlier.

m-shaped coplanar anomaly with a CXI/CPI amplitude ratio of 4 is virtually a guarantee that the source is a cultural line.

3. A flight which crosses a sphere or horizontal disk yields center-peaked coaxial and coplanar anomalies with a CXI/CPI amplitude ratio (i.e., coaxial/coplanar) of 1/4. In the absence of geologic bodies of this geometry, the most likely conductor is a metal roof or small fenced yard.⁵ Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.
4. A flight which crosses a horizontal rectangular body or wide ribbon yields an m-shaped coaxial anomaly and a center-peaked coplanar anomaly. In the absence of geologic bodies of this geometry, the most likely conductor is a large fenced area.⁵ Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.
5. EM anomalies which coincide with culture, as seen on the camera film or video display, are usually caused by culture. However, care is taken with such coincidences because a geologic conductor could occur beneath a fence, for example. In this example, the fence would be expected to yield an m-shaped coplanar anomaly as in case #2 above.

⁵ It is a characteristic of EM that geometrically similar anomalies are obtained from: (1) a planar conductor, and (2) a wire which forms a loop having dimensions identical to the perimeter of the equivalent planar conductor.

If, instead, a center-peaked coplanar anomaly occurred, there would be concern that a thick geologic conductor coincided with the cultural line.

6. The above description of anomaly shapes is valid when the culture is not conductively coupled to the environment. In this case, the anomalies arise from inductive coupling to the EM transmitter. However, when the environment is quite conductive (e.g., less than 100 ohm-m at 900 Hz), the cultural conductor may be conductively coupled to the environment. In this latter case, the anomaly shapes tend to be governed by current gathering. Current gathering can completely distort the anomaly shapes, thereby complicating the identification of cultural anomalies. In such circumstances, the interpreter can only rely on the radiation channels and on the camera film or video records.

MAGNETICS

The existence of a magnetic correlation with an EM anomaly is indicated directly on the EM map. In some geological environments, an EM anomaly with magnetic correlation has a greater likelihood of being produced by sulfides than one that is non-magnetic. However, sulfide ore bodies may be non-magnetic (e.g., the Kidd Creek deposit near Timmins, Canada) as well as magnetic (e.g., the Mattabi deposit near Sturgeon Lake, Canada).

The magnetometer data are digitally recorded in the aircraft to an accuracy of 0.01 nT for cesium magnetometers. The digital tape is processed by computer to yield a total field magnetic contour map. When warranted, the magnetic data may also be treated mathematically to enhance the magnetic response of the near-surface geology, and an enhanced magnetic contour map is then produced. The response of the enhancement operator in the frequency domain is illustrated in Figure 5-2. This figure shows that the passband components of the airborne data are amplified 20 times by the enhancement operator. This means, for example, that a 100 nT anomaly on the enhanced map reflects a 5 nT anomaly for the passband components of the airborne data.

The enhanced map, which bears a resemblance to a downward continuation map, is produced by the digital bandpass filtering of the total field data. The enhancement is equivalent to continuing the field downward to a level (above the source) which is 1/20th of the actual sensor-source distance.

Because the enhanced magnetic map bears a resemblance to a ground magnetic map, it simplifies the recognition of trends in the rock strata and the interpretation of geological structure. It defines the near-surface local geology while de-emphasizing deep-seated regional features. It primarily has application when the magnetic rock units are steeply dipping and the earth's field dips in excess of 60 degrees.

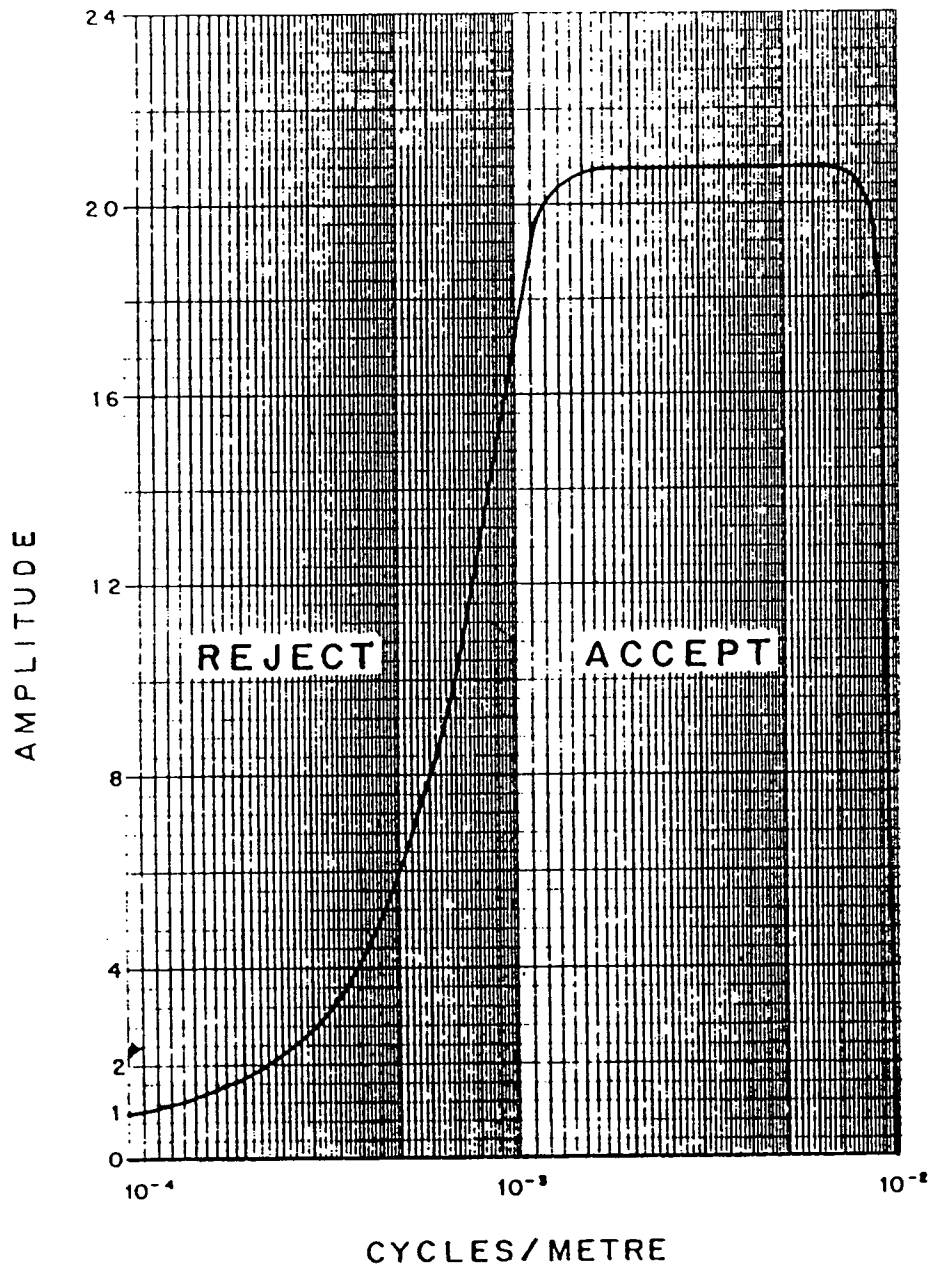


Fig. 5-2 Frequency response of magnetic enhancement operator.

Any of a number of filter operators may be applied to the magnetic data, to yield vertical derivatives, continuations, magnetic susceptibility, etc. These may be displayed in contour, colour or shadow.

VLF

VLF transmitters produce high frequency uniform electromagnetic fields. However, VLF anomalies are not EM anomalies in the conventional sense. EM anomalies primarily reflect eddy currents flowing in conductors which have been energized inductively by the primary field. In contrast, VLF anomalies primarily reflect current gathering, which is a non-inductive phenomenon. The primary field sets up currents which flow weakly in rock and overburden, and these tend to collect in low resistivity zones. Such zones may be due to massive sulfides, shears, river valleys and even unconformities.

The VLF field is horizontal. Because of this, the method is quite sensitive to the angle of coupling between the conductor and the transmitted VLF field. Conductors which strike towards the VLF station will usually yield a stronger response than conductors which are nearly orthogonal to it.

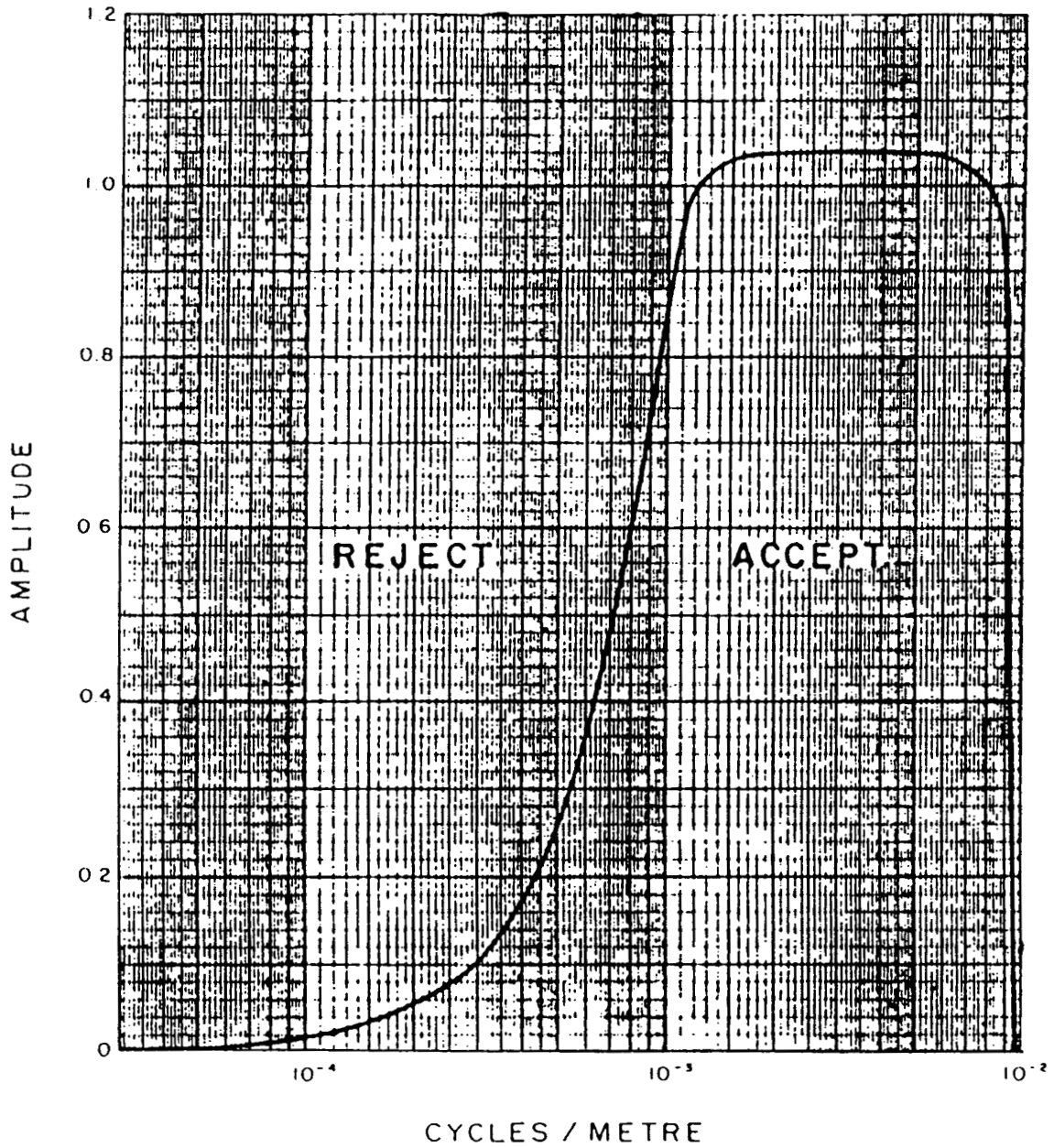


Fig. 5-3 Frequency response of VLF operator.

The Herz Industries Ltd. Totem VLF-electromagnetometer measures the total field and vertical quadrature components. Both of these components are digitally recorded in the aircraft with a sensitivity of 0.1 percent. The total field yields peaks over VLF current concentrations whereas the quadrature component tends to yield crossovers. Both appear as traces on the profile records. The total field data are filtered digitally and displayed as contours to facilitate the recognition of trends in the rock strata and the interpretation of geologic structure.

The response of the VLF total field filter operator in the frequency domain (Figure 5-3) is basically similar to that used to produce the enhanced magnetic map (Figure 5-2). The two filters are identical along the abscissa but different along the ordinant. The VLF filter removes long wavelengths such as those which reflect regional and wave transmission variations. The filter sharpens short wavelength responses such as those which reflect local geological variations.

CONCLUSIONS AND RECOMMENDATIONS

This report provides a very brief description of the survey results and describes the equipment, procedures and logistics of the survey.

There are several anomalies in the survey block which are typical of massive sulphide responses. The survey was also successful in locating a few moderately weak or broad conductors which may warrant additional work. The various maps included with this report display the magnetic and conductive properties of the survey area. It is recommended that the survey results be reviewed in detail, in conjunction with all available geophysical, geological and geochemical information. Particular reference should be made to the computer generated data profiles which clearly define the characteristics of the individual anomalies.

The interpreted bedrock conductors defined by the survey should be subjected to further investigation, using appropriate surface exploration techniques. Anomalies which are currently considered to be of moderately low priority may require upgrading if follow-up results are favourable.

It is also recommended that image processing of existing geophysical data be considered, in order to extract the maximum amount of information from the survey results. Current software and imaging techniques often provide valuable information on

structure and lithology, which may not be clearly evident on the contour and colour maps. These techniques can yield images which define subtle, but significant, structural details.

Respectfully submitted,

DIGHEM

A handwritten signature in cursive script, appearing to read "R. Pritchard".

Ruth A. Pritchard
Geophysicist

RAP/sdp

A1162MAR.94R

APPENDIX A

LIST OF PERSONNEL

The following personnel were involved in the acquisition, processing, interpretation and presentation of data, relating to a DIGHEM^V airborne geophysical survey carried out for Canquest Resource Corporation over the Microgold Project, British Columbia.

Steve Kilty	Vice President, Operations
Dave Miles	Senior Geophysical Operator
Del Rokosh	Pilot (Northern Air Support)
Gordon Smith	Data Processing Supervisor
Ruth Pritchard	Interpretation Geophysicist
Lyn Vanderstarren	Drafting Supervisor
Steve Mast	Draftsperson (CAD)
Susan Pothiah	Word Processing Operator
Albina Toneilo	Secretary/Expeditor

The survey consisted of 381 km of coverage, flown on January 19, 1994.

All personnel are employees of Dighem, except for the pilot who is an employee of Northern Air Support.

DIGHEM



Ruth A. Pritchard
Geophysicist

RAP/sdp

A1162MAR.94R

APPENDIX B
STATEMENT OF COST

Date: March 18, 1994

IN ACCOUNT WITH DIGHEM

To: Dighem flying of Agreement dated January 3, 1994, pertaining to an Airborne Geophysical Survey of the Microgold Project, British Columbia.

Survey Charges

Fixed price for up to 350 km of flying \$26,590.00

Allocation of Costs

- Data Acquisition	(60%)
- Data Processing	(20%)
- Interpretation, Report and Maps	(20%)

DIGHEM



Ruth A. Pritchard
Geophysicist

RAP/sdp

A1162MAR.94R

APPENDIX C

EM ANOMALY LIST

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* M .SIEMEN	COND DEPTH M .SIEMEN	RESIS M OHM-M	DEPTH M	NT		
LINE 10000	(FLIGHT	1)											
A 6842B?	1	2	1	2	2	4	-	-	-	-	0		
B 6869B?	1	2	1	2	2	4	-	-	-	-	50		
C 6874B?	13	15	22	32	71	15	6.1	7	3	39	15	18	0
D 6888B?	37	37	73	77	72	74	10.4	1	4	28	8	13	0
E 6895B?	11	14	32	26	64	67	5.2	19	3	39	21	17	120
F 6902B?	8	8	18	20	43	38	5.9	34	2	45	34	20	0
G 6907B?	1	2	1	2	2	4	-	-	-	-	-	-	0
H 6916S?	4	16	7	26	84	119	1.4	3	1	25	122	0	0
I 6951S	16	22	25	22	71	31	5.4	10	2	31	49	6	0
LINE 10010	(FLIGHT	1)											
A 6764S	2	3	1	6	19	28	2.3	43	1	25	630	0	0
B 6751B?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 6721B?	1	2	1	2	2	4	-	-	-	-	-	-	0
D 6713B?	8	13	19	29	64	33	3.9	1	3	33	21	10	0
E 6709B?	6	10	19	29	64	33	3.2	22	3	59	23	35	0
F 6698B?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 6691B	37	43	46	81	181	90	9.0	3	4	26	10	10	0
H 6684B	25	31	19	56	83	85	7.3	11	3	36	15	18	0
I 6659S	3	10	5	16	38	90	1.5	7	1	34	133	0	0
J 6644S	4	7	4	12	24	59	2.5	34	1	21	314	0	0
K 6618B?	17	41	26	75	81	100	3.4	7	1	29	48	6	0
LINE 10020	(FLIGHT	1)											
A 6385B?	1	2	1	2	2	4	-	-	-	-	-	-	0
B 6400S	0	4	1	5	12	21	0.5	0	1	36	317	11	0
C 6425D?	9	4	8	6	7	17	18.4	36	1	42	69	11	0
D 6443D	1	2	1	2	2	4	-	-	-	-	-	-	0
E 6450B?	5	8	8	15	35	21	3.7	15	2	41	30	15	0
F 6453B?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 6464B?	11	12	68	56	65	38	6.4	11	3	46	15	25	0
H 6468B?	26	20	112	115	25	80	13.4	14	5	28	7	14	0
I 6470B	26	30	111	115	25	80	8.2	15	5	31	6	18	0
J 6475B	13	32	11	2	87	75	3.1	1	5	29	7	14	0
K 6478B	32	16	8	30	74	5	24.6	10	4	28	8	12	0
L 6487B	13	16	6	7	9	55	6.3	18	2	38	35	14	0
M 6501B?	5	12	10	15	35	62	2.2	16	1	39	98	8	0
N 6535S?	5	17	18	11	31	5	1.8	0	2	33	36	7	0
LINE 10030	(FLIGHT	1)											
A 6348S	4	8	8	13	36	25	2.4	7	1	50	106	12	0

* ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART
 OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT
 LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS OHM-M	DEPTH M	NT		
LINE 10030	(FLIGHT	1)											
B 6314S	1	2	1	2	2	4	-	-	-	-	30		
C 6299S	1	2	1	2	2	4	-	-	-	-	0		
D 6271B?	1	2	1	2	2	4	-	-	-	-	0		
E 6263D	41	35	76	38	69	62	13.0	0	4	31	10	14	0
F 6258D	14	7	21	4	4	13	17.9	34	6	34	5	20	0
G 6254D	36	18	21	4	38	21	24.3	13	5	30	6	16	0
H 6215S	2	8	4	16	28	56	1.1	19	1	31	254	0	0
I 6192D	13	26	13	37	85	112	3.6	2	2	42	37	16	0
J 6181B?	12	30	18	59	122	221	2.9	12	1	29	57	6	0
LINE 10040	(FLIGHT	1)											
A 6023S	0	6	3	10	25	33	0.4	0	1	25	477	0	0
B 6036S	0	2	1	2	2	4	-	-	-	-	-	-	0
C 6058S?	1	2	1	2	2	4	-	-	-	-	-	-	0
D 6081B	29	40	63	66	148	106	6.7	2	3	35	14	17	0
E 6084B	24	40	33	66	148	106	5.4	7	4	28	8	14	0
F 6086B	16	3	103	13	23	6	93.3	42	5	26	5	13	0
G 6089B	76	55	103	13	192	65	19.5	2	6	19	5	7	0
H 6091B	76	55	103	13	192	65	19.5	3	5	20	7	6	0
I 6094B	16	36	90	93	192	65	3.7	0	4	27	9	11	0
J 6097B	29	29	4	2	47	63	9.7	6	3	29	14	11	60
K 6113S?	10	33	12	60	144	192	2.2	3	1	29	59	4	0
LINE 10050	(FLIGHT	1)											
A 5923S	0	8	4	14	35	47	0.4	0	1	32	252	0	0
B 5902S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 5890S	7	9	8	16	30	28	4.4	16	2	34	34	9	40
D 5860B	21	10	116	101	212	65	21.1	21	4	29	8	14	0
E 5857B	21	10	12	3	4	10	21.1	22	5	27	6	13	0
F 5852B	28	21	54	40	77	46	13.5	16	5	25	6	12	0
G 5848B	5	45	53	40	104	113	0.8	0	4	28	9	12	0
H 5844B	14	11	30	48	95	111	10.6	12	3	34	13	14	0
I 5836B?	1	2	1	2	2	4	-	-	-	-	-	-	0
J 5832D?	1	2	1	2	2	4	-	-	-	-	-	-	0
K 5787B?	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10060	(FLIGHT	1)											
A 5607E	7	73	6	124	282	427	0.8	0	1	24	103	0	0
B 5612S?	0	73	14	124	282	427	0.4	7	1	13	136	0	320
C 5622B?	7	9	16	3	8	77	4.8	21	2	32	39	7	0
D 5627B?	11	2	17	4	73	59	66.1	35	2	33	30	9	0

* ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART
 OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT
 LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	M	COND DEPTH SIEMEN	M	RESIS OHM-M	DEPTH M	NT
LINE 10060	(FLIGHT 1)												
E 5631B?	8	20	16	34	75	59	2.6	1	2	57	35	29	0
F 5660B	38	65	60	74	146	169	5.9	0	4	28	8	13	0
G 5663B	47	3	76	99	193	146	507.1	19	5	18	6	5	0
H 5667D	20	55	76	70	138	173	3.3	1	4	23	8	9	0
I 5670B	20	69	55	70	138	173	2.8	1	4	29	10	14	0
J 5675B?	25	11	5	76	171	118	25.8	22	4	34	11	17	0
K 5682B?	5	11	16	14	28	93	2.6	25	2	37	33	15	0
L 5691B?	6	23	15	43	97	118	1.5	5	2	29	29	9	0
M 5699B?	16	35	7	60	146	2	3.6	2	2	32	24	11	0
N 5703E	8	29	30	59	147	3	1.7	0	2	45	36	19	0
LINE 10070	(FLIGHT 1)												
A 5488S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 5473E	1	2	1	2	2	4	-	-	-	-	-	-	0
C 5462S?	1	2	1	2	2	4	-	-	-	-	-	-	0
D 5454B?	11	1	21	49	76	58	49.0	48	2	28	35	5	0
E 5430E	32	41	14	31	60	94	7.7	0	3	31	16	10	0
F 5426D	32	41	16	33	69	94	7.7	2	3	32	13	14	0
G 5423D	8	14	16	33	69	94	3.6	11	3	31	12	13	120
H 5419B?	1	2	1	2	2	4	-	-	-	-	-	-	0
I 5416D	20	29	28	46	106	94	5.8	10	3	32	14	14	0
J 5412B?	32	39	56	65	135	101	8.0	5	4	30	11	14	0
K 5401B?	9	25	5	33	91	122	2.5	5	2	31	30	9	0
L 5396B	4	25	14	33	91	122	1.0	0	2	40	25	18	0
M 5392B	25	33	14	19	38	100	6.8	3	3	35	20	14	0
N 5362S	1	11	3	21	24	75	0.4	0	1	41	142	8	0
LINE 10080	(FLIGHT 1)												
A 5217S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 5233B	16	13	21	27	55	32	10.1	15	2	31	43	5	0
C 5255B	1	2	1	2	2	4	-	-	-	-	-	-	0
D 5257B	11	18	49	39	79	21	4.1	15	3	30	14	12	0
E 5261D	34	12	54	62	130	57	37.8	24	3	35	15	17	0
F 5264B	34	33	54	62	130	53	10.6	6	4	27	9	12	0
G 5274B?	4	10	6	11	31	51	2.0	15	2	37	24	16	0
H 5284H	8	19	17	24	48	76	2.7	9	2	31	23	11	0
I 5291B?	1	2	1	1	2	4	-	-	-	-	-	-	0
LINE 10090	(FLIGHT 1)												
A 5093S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 5066S?	1	2	1	2	2	4	-	-	-	-	-	-	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND .SIEMEN	DEPTH* M	COND .SIEMEN	DEPTH M	RESIS OHM-M	DEPTH M	NT
LINE 10090	(FLIGHT	1)											
C 5053D	13	19	18	39	82	69	5.0	22	2	46	25	24	0
D 5037B	19	14	20	29	75	88	12.3	6	3	37	22	14	0
E 5035D	19	29	13	28	36	9	5.6	0	3	28	19	7	0
F 5028B	7	19	20	42	42	73	2.2	5	3	25	14	8	0
G 5024B	11	10	19	18	53	76	7.7	32	3	30	14	13	0
H 5019B	23	44	0	72	156	108	4.5	2	4	27	11	11	30
I 5015E	1	2	1	2	2	4	-	-	-	-	-	-	0
J 5008S	1	2	1	2	2	4	-	-	-	-	-	-	0
K 4994H	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10100	(FLIGHT	1)											
A 4820S?	13	22	21	9	11	123	4.1	8	2	27	45	2	0
B 4830B?	9	8	16	17	31	0	7.7	32	3	53	18	31	0
C 4832B?	7	6	16	17	31	10	6.8	18	3	45	18	21	0
D 4838B?	1	2	1	2	2	4	-	-	-	-	-	-	0
E 4840B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 4849B?	36	61	56	107	182	173	5.9	0	3	23	16	6	0
G 4856B?	1	2	1	2	2	4	-	-	-	-	-	-	0
H 4861B	29	30	83	97	217	111	9.3	9	4	28	10	12	60
I 4863B	34	30	83	97	217	111	11.8	14	4	27	9	12	0
J 4879B?	3	7	6	7	25	34	1.7	19	2	41	36	16	0
K 4890B?	13	17	23	30	59	27	5.9	13	3	36	20	15	0
L 4897E	8	5	27	37	120	59	11.6	33	2	44	30	19	0
LINE 10110	(FLIGHT	1)											
A 4695S?	1	2	1	2	2	4	-	-	-	-	-	-	0
B 4680S?	4	11	4	15	34	55	1.9	12	1	32	233	0	0
C 4658S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 4649B?	1	2	1	2	2	4	-	-	-	-	-	-	0
E 4644B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 4637B?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 4629D	20	25	13	44	86	51	6.9	2	2	24	24	3	0
H 4621B	18	25	14	42	98	61	5.9	10	3	33	19	13	0
I 4618B	1	2	1	2	2	4	-	-	-	-	-	-	0
J 4613B	34	41	66	81	166	94	8.6	6	4	26	11	10	0
K 4603B	9	24	6	42	98	132	2.4	7	2	32	33	10	0
L 4597B?	1	0	1	2	2	4	-	-	-	-	-	-	0
M 4591B	3	6	21	13	26	53	2.4	37	1	45	57	17	0
N 4583B	23	15	28	58	81	39	15.6	17	2	29	29	7	0
LINE 10120	(FLIGHT	1)											
A 4366L	10	16	7	16	13	47	4.1	8	1	24	246	0	0

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 . LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS. .

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* .SIEMEN	M	COND DEPTH .SIEMEN	M	RESIS OHM-M	DEPTH M	NT
LINE 10120	(FLIGHT	1)											
B 4394S	0	2	1	2	2	4	-	-	-	-	-	-	0
C 4438S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 4450B?	6	10	11	22	43	48	3.0	17	2	39	30	15	0
E 4455B	1	2	1	2	2	4	-	-	-	-	-	-	0
F 4458D	3	3	9	8	15	45	6.0	49	2	46	36	19	0
G 4465B?	22	36	39	83	160	105	5.2	3	2	25	23	5	0
H 4486B	30	56	61	97	192	207	5.1	3	3	30	13	13	0
I 4492B?	7	44	28	62	147	322	1.1	1	1	28	45	7	0
J 4502B	12	15	21	52	108	152	5.9	24	2	37	40	13	0
K 4512B?	1	2	1	2	2	4	-	-	-	-	-	-	0
L 4515B?	10	21	12	44	122	80	3.1	8	1	28	54	3	0
M 4520D	8	12	12	16	36	48	4.4	19	2	38	51	11	180
LINE 10130	(FLIGHT	1)											
B 4308S	0	2	0	2	2	4	-	-	-	-	-	-	0
C 4272S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 4260S	1	2	1	2	2	4	-	-	-	-	-	-	0
E 4254S?	6	16	9	28	61	83	2.0	6	1	30	68	3	0
F 4248B?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 4238B?	28	41	56	92	188	136	6.5	6	3	27	16	9	0
H 4221B?	18	29	50	53	91	99	5.1	12	3	35	21	15	0
I 4218B?	26	38	50	65	147	95	6.3	0	3	26	17	7	0
J 4207D	6	10	17	17	23	38	3.1	26	2	52	46	24	0
K 4202B?	11	7	17	23	25	1	11.6	40	2	53	25	29	0
L 4200B?	11	7	27	23	25	14	11.2	35	2	42	30	18	0
M 4195B?	6	15	23	32	71	73	2.2	10	1	59	90	24	0
N 4186E	5	19	14	37	96	83	1.7	2	1	41	85	10	0
LINE 10140	(FLIGHT	1)											
A 3967L	5	6	0	3	10	5	5.2	24	1	141	994	0	0
B 3999S	0	2	0	2	2	4	-	-	-	-	-	-	0
C 4031S?	4	8	6	12	29	49	2.5	25	1	26	199	0	0
D 4043B?	3	15	0	31	44	91	1.1	6	1	0	309	0	0
E 4061B?	11	15	15	24	49	54	4.8	15	1	35	61	7	0
F 4064D	11	10	15	23	49	15	7.2	27	2	51	47	23	0
G 4075B?	39	68	66	125	166	240	6.0	4	3	26	17	9	0
H 4081B	14	15	48	64	72	20	7.1	17	2	31	25	9	0
I 4096B?	11	61	31	100	246	322	1.4	0	1	24	43	3	0
J 4107S?	1	2	1	2	2	4	-	-	-	-	-	-	0
K 4122B?	11	33	36	60	126	104	2.4	8	2	41	29	19	0
L 4131B?	1	2	1	2	2	4	-	-	-	-	-	-	0

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND .SIEMEN	DEPTH* M	COND .SIEMEN	DEPTH M	RESIS OHM-M	DEPTH M	NT
LINE 10140	(FLIGHT	1)											
M 4135B?	1	2	1	2	2	4	-	-	-	-	-	-	40
LINE 10150	(FLIGHT	1)											
A 3927L	5	6	1	4	8	10	3.7	32	1	96	947	0	0
B 3870S?	7	12	8	17	41	58	3.2	18	1	23	161	0	0
C 3859S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 3838D	13	22	8	43	97	52	4.5	10	1	31	63	4	0
E 3834D	6	14	8	13	10	34	2.5	11	1	44	61	15	0
F 3822S?	24	39	44	75	171	99	5.6	3	3	25	20	6	0
G 3808B?	5	17	9	29	130	69	1.8	3	2	32	38	8	0
H 3803B?	5	33	9	55	139	162	1.1	0	1	25	51	1	0
I 3789B?	1	2	1	2	2	4	-	-	-	-	-	-	0
J 3786B	31	31	45	54	78	15	9.7	4	3	32	15	13	0
K 3774B?	7	9	15	27	14	30	4.2	25	1	49	123	13	20
LINE 10160	(FLIGHT	1)											
A 3577L	5	8	0	6	14	28	2.9	21	1	100	981	0	0
B 3585S	0	3	0	6	13	30	0.4	0	1	35	741	0	0
C 3639S	1	2	1	1	2	1	-	-	-	-	-	-	0
D 3661S?	1	2	1	2	2	4	-	-	-	-	-	-	0
E 3669S?	17	20	28	35	27	42	7.0	9	2	28	47	3	0
F 3675D	14	26	28	18	56	65	4.0	13	1	40	68	12	0
G 3686S?	24	36	34	66	156	28	5.7	3	2	24	26	3	0
H 3708B?	1	2	1	2	2	4	-	-	-	-	-	-	0
I 3711B?	1	2	1	2	2	4	-	-	-	-	-	-	0
J 3719B	50	54	76	91	200	64	10.7	0	4	22	11	6	0
LINE 10170	(FLIGHT	1)											
A 3543L	3	5	0	3	9	3	2.4	22	1	119	994	0	0
B 3490S	1	0	1	2	2	4	-	-	-	-	-	-	0
C 3458S?	15	10	21	9	39	30	12.9	24	1	31	65	3	0
D 3450D	5	7	6	10	24	23	3.5	34	1	45	82	14	0
E 3441B?	5	7	9	10	26	56	3.1	27	1	42	70	12	0
F 3432B?	15	34	28	56	136	123	3.3	2	2	29	32	7	0
G 3411B	18	20	19	25	86	50	7.4	13	3	36	16	17	0
H 3405B?	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10180	(FLIGHT	1)											
A 3215L	4	4	2	2	7	5	4.0	17	1	105	994	0	0
B 3274S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 3280S?	1	2	1	2	2	4	-	-	-	-	-	-	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND SIEMEN	DEPTH* M	COND SIEMEN	DEPTH M	RESIS OHM-M	DEPTH M	NT
LINE 10180	(FLIGHT	1)											
D 3304D	11	20	12	27	69	77	3.8	10	1	24	102	0	0
E 3313B	4	12	3	14	30	67	1.6	13	1	46	88	15	0
F 3323D	1	2	1	2	2	4	-	-	-	-	-	-	0
G 3331B	1	2	1	2	2	4	-	-	-	-	-	-	0
H 3350B	25	46	45	73	52	181	5.0	11	3	43	16	24	0
I 3353B	1	2	1	2	2	4	-	-	-	-	-	-	0
J 3362B	1	2	1	2	2	4	-	-	-	-	-	-	0
K 3366E	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10190	(FLIGHT	1)											
A 3132L	1	2	0	2	2	4	-	-	-	-	-	-	0
B 3077B?	8	15	7	27	67	114	3.0	19	1	25	89	0	0
C 3071B?	6	9	12	12	28	12	4.1	15	1	25	57	0	0
D 3061S	6	7	9	13	47	49	4.7	34	1	20	176	0	0
E 3052S?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 3042D	8	11	7	18	51	46	4.2	21	1	32	83	3	0
G 3038D	7	12	6	16	39	59	3.4	18	1	40	82	9	0
H 3025B	24	51	47	96	216	202	4.2	7	2	32	37	10	0
I 3022B	25	57	47	96	216	202	4.0	4	2	31	25	11	0
J 3007B?	1	2	1	2	2	4	-	-	-	-	-	-	0
K 3003B?	20	22	48	42	95	59	8.0	1	3	40	13	20	0
L 2997E	25	23	49	42	95	59	10.3	7	4	34	10	17	0
LINE 10200	(FLIGHT	1)											
A 2820L	4	8	0	2	9	9	2.5	14	1	121	994	0	0
B 2844S	1	2	1	2	2	4	-	-	-	-	-	-	0
C 2881B	8	4	17	10	34	54	14.6	32	1	29	54	2	0
D 2886B?	1	17	14	22	2	99	0.4	2	1	12	370	0	0
E 2903B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 2912D	13	20	7	30	56	44	4.6	14	1	34	59	7	50
G 2917D	8	12	7	29	75	42	3.7	23	1	39	67	11	0
H 2930B	17	27	34	53	112	78	5.0	6	2	33	31	10	0
I 2934B?	2	29	29	53	112	90	0.5	0	2	38	24	16	0
J 2946B?	8	4	36	11	27	25	13.6	19	3	38	18	15	0
K 2952B?	13	21	17	20	35	38	4.2	0	4	31	9	14	0
L 2956B?	1	1	1	2	2	4	-	-	-	-	-	-	0
M 2959B	22	34	10	62	144	106	5.6	6	2	35	25	14	0
LINE 10210	(FLIGHT	1)											
A 2787L	5	8	1	4	9	9	3.0	12	1	111	994	0	0
B 2739S	2	10	2	15	15	28	1.0	5	1	7	453	0	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* .SIEMEN	M	COND DEPTH .SIEMEN	M	RESIS OHM-M	DEPTH M	NT
LINE 10210	(FLIGHT 1)												
C 2721S?	10	16	15	27	78	71	4.1	6	1	27	75	0	0
D 2704S	1	2	1	2	2	4	-	-	-	-	-	-	0
E 2691D	17	24	22	35	93	40	5.3	5	1	27	58	1	0
F 2681D	3	3	3	1	10	3	3.6	49	1	45	73	13	0
G 2671D	11	13	6	30	79	25	5.5	21	1	31	58	5	320
H 2665B	10	25	22	45	104	116	2.7	7	2	28	31	7	0
I 2656B?	4	9	4	6	16	32	2.3	19	3	46	18	25	0
J 2650B?	1	2	1	2	2	4	-	-	-	-	-	-	0
K 2647B	13	21	23	29	71	90	4.5	11	3	38	14	19	0
L 2643B	6	3	23	29	71	90	13.8	57	2	44	22	22	0
M 2638D	7	12	17	27	58	38	3.2	18	3	38	22	17	0
LINE 10220	(FLIGHT 1)												
A 2465L	7	10	1	11	22	52	4.6	20	1	138	994	0	0
B 2517S	1	2	2	21	49	77	1.7	63	1	4	417	0	0
C 2526S	9	15	13	5	82	51	3.6	12	1	20	106	0	0
D 2558D	15	30	11	46	102	110	3.8	8	1	23	72	0	0
E 2572D	7	15	7	13	56	79	3.1	21	1	36	92	7	0
F 2577B?	1	2	1	2	2	4	-	-	-	-	-	-	170
G 2587B?	17	23	36	41	103	117	6.0	9	2	30	40	6	0
H 2605D	9	22	23	59	128	177	2.8	7	2	35	23	14	0
I 2609D	17	19	23	26	3	106	7.1	10	3	35	19	14	0
LINE 10230	(FLIGHT 1)												
A 2430L	5	9	0	53	162	142	3.3	10	1	94	994	0	0
B 2367S	6	9	8	15	37	30	3.7	20	1	20	159	0	0
C 2351B	0	12	0	14	36	54	0.4	0	1	10	440	0	0
D 2342B	1	2	1	2	2	4	-	-	-	-	-	-	0
E 2335B?	6	12	1	21	47	44	2.6	11	1	27	77	0	0
F 2323D	10	21	6	26	72	53	3.2	8	1	33	94	3	0
G 2305B?	10	37	54	57	178	148	1.9	0	2	26	44	4	10
H 2285B?	42	30	27	55	121	130	16.0	11	3	27	19	8	0
LINE 10240	(FLIGHT 1)												
A 2118L	1	2	0	2	2	4	-	-	-	-	-	-	0
B 2127S	0	6	1	8	26	31	0.4	0	1	25	659	0	0
C 2134S?	0	8	0	14	30	65	0.4	0	1	27	668	0	10
D 2160S	1	7	2	11	19	28	0.4	0	1	15	453	0	0
E 2181S?	2	11	4	25	16	42	0.9	0	1	18	295	0	0
F 2190B?	6	20	3	28	81	77	1.7	3	1	0	386	0	0
G 2212B?	3	10	11	14	31	46	1.7	17	1	22	140	0	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL QUAD PPM	REAL QUAD PPM	REAL QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS DEPTH OHM-M	DEPTH M	NT					
LINE 10240	(FLIGHT	1)											
H 2218B?	6	9	9	14	9	46	4.2	28	1	24	89	0	0
I 2230B?	9	16	12	29	7	75	3.4	9	1	39	58	10	0
J 2245E	15	19	42	47	13	43	6.0	7	2	44	54	15	0
K 2250H	24	15	27	48	23	33	16.5	18	3	36	17	17	0
LINE 10250	(FLIGHT	1)											
A 2075S	0	5	1	8	10	32	0.4	0	1	27	725	0	0
B 2048S	1	2	1	2	2	4	-	-	-	-	-	-	0
C 2018B?	5	15	7	22	57	72	2.0	4	1	6	276	0	0
D 2009S?	5	8	5	7	31	39	3.3	26	1	14	265	0	0
E 1998S	1	2	1	2	2	4	-	-	-	-	-	-	0
F 1982B?	15	26	16	49	113	157	4.4	14	1	33	49	9	0
G 1976D	14	27	16	44	17	75	3.9	4	2	34	46	9	0
H 1957B?	26	38	37	76	154	94	6.2	8	2	28	40	5	0
I 1952B?	17	23	37	25	33	53	5.8	11	2	30	43	6	0
LINE 10260	(FLIGHT	1)											
A 1781L	3	5	0	3	5	5	2.8	16	1	83	989	0	0
B 1813S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 1819S	2	5	2	7	21	26	1.7	14	1	12	415	0	0
D 1851B?	6	16	10	27	66	80	2.3	12	1	15	162	0	30
E 1863B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 1872E	12	34	12	60	157	152	2.5	2	1	0	287	0	0
G 1882B?	1	2	1	2	2	4	-	-	-	-	-	-	0
H 1885B?	0	2	1	2	2	4	-	-	-	-	-	-	0
I 1889D	23	19	29	11	10	59	11.8	15	1	29	52	4	0
J 1895D	15	28	29	6	87	59	4.1	9	1	35	54	9	0
K 1912B	13	24	19	46	112	72	3.8	7	1	25	70	0	150
L 1916B?	15	15	16	42	97	50	7.4	12	1	26	56	0	0
LINE 10270	(FLIGHT	1)											
A 1699L	4	7	1	4	8	6	2.4	14	1	124	994	0	80
B 1681S	1	2	1	2	2	4	-	-	-	-	-	-	0
C 1664S	3	14	4	22	34	83	1.2	0	1	10	302	0	0
D 1619S	5	15	6	38	91	95	2.1	7	1	16	134	0	0
E 1608B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 1605B?	10	37	14	62	159	207	2.0	0	1	10	108	0	0
G 1581D	22	11	25	13	44	111	21.1	21	1	22	65	0	0
H 1578B?	1	2	1	2	2	4	-	-	-	-	-	-	0
I 1573D	19	56	22	86	175	264	3.0	6	1	27	65	4	0
J 1562B?	1	2	1	2	2	4	-	-	-	-	-	-	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	M	COND DEPTH SIEMEN	M	RESIS OHM-M	DEPTH M	NT
LINE 10270	(FLIGHT	1)											
K 1554B?	16	27	25	52	138	62	4.6	11	1	26	69	1	110
L 1549B?	14	21	18	45	22	60	4.7	11	2	26	45	2	0
LINE 10280	(FLIGHT	1)											
A 1373S	0	5	2	7	6	20	0.4	0	1	32	408	0	0
B 1392S	1	2	1	2	2	4	-	-	-	-	-	-	20
C 1396S?	4	7	2	19	48	23	3.0	25	1	1	416	0	0
D 1411S	0	2	0	2	2	4	-	-	-	-	-	-	0
E 1436S	5	16	3	57	141	173	1.7	13	1	1	330	0	0
F 1448S	8	12	10	27	88	25	4.4	18	1	8	149	0	0
G 1474D	13	7	10	13	33	56	13.8	30	1	31	124	0	0
H 1484D	11	30	13	17	51	60	2.6	3	1	32	75	5	0
I 1502B?	19	29	31	47	128	97	5.4	9	1	25	94	0	190
J 1507H	19	29	32	47	127	97	5.4	5	2	31	29	9	0
LINE 10290	(FLIGHT	1)											
A 1321L	3	4	2	5	10	11	3.4	18	1	51	296	0	0
B 1303S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 1295S?	1	2	1	2	0	4	-	-	-	-	-	-	0
D 1282S?	6	7	8	5	31	43	4.5	17	1	23	169	0	16
E 1274S?	0	12	1	13	21	70	0.4	4	1	19	481	0	0
F 1259B?	0	8	2	10	23	46	0.4	0	1	17	508	0	0
G 1235S?	1	2	1	2	2	4	-	-	-	-	-	-	0
H 1228B?	6	19	6	24	61	101	1.9	4	1	7	233	0	0
I 1220B?	1	2	1	2	2	4	-	-	-	-	-	-	0
J 1208B?	1	2	1	2	2	4	-	-	-	-	-	-	70
K 1203D	10	10	10	16	50	37	6.6	16	1	35	92	2	0
L 1199D	10	10	17	10	54	43	6.6	35	1	35	115	5	0
M 1195D	9	20	17	10	54	81	3.1	2	1	31	72	2	0
N 1171B?	22	28	28	26	124	99	6.8	14	1	34	49	10	17
LINE 10300	(FLIGHT	1)											
A 973L	3	4	2	6	14	17	3.6	31	1	71	159	25	0
B 995S	6	17	10	14	65	46	2.1	0	1	33	52	5	0
C 1008S?	1	2	1	2	2	4	-	-	-	-	-	-	70
D 1022S?	2	13	2	19	56	85	0.9	2	1	4	402	0	0
E 1044S	0	5	0	8	13	41	0.4	0	1	24	628	0	100
F 1067B?	13	47	14	79	221	182	2.3	0	1	9	112	0	0
G 1091B?	8	12	13	20	13	22	4.1	5	1	41	56	10	0
H 1101D	8	21	5	30	72	23	2.5	0	1	44	65	13	0
I 1119D	11	12	6	26	59	49	5.9	11	1	50	69	17	50

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS OHM-M	DEPTH M	NT		
LINE 10300	(FLIGHT	1)											
J 1124B?	2	4	13	26	59	49	2.6	32	2	61	44	30	0
LINE 10310	(FLIGHT	1)											
A 927L	7	4	3	6	6	9	12.3	26	1	53	166	8	0
B 908B?	8	35	10	60	141	191	1.5	0	1	24	67	0	0
C 900B?	9	17	11	24	63	54	3.2	7	1	27	67	0	0
D 885B?	1	8	4	4	17	45	0.5	0	1	9	502	0	0
E 876S?	5	28	3	48	127	166	1.2	0	1	0	405	0	40
F 837S?	19	64	31	119	307	210	2.8	0	1	10	57	0	0
G 834E	20	64	31	119	307	210	2.8	0	1	15	150	0	0
H 808E	11	30	22	49	116	130	2.8	0	1	16	210	0	0
I 807B?	11	29	22	49	116	129	2.9	1	1	23	102	0	0
J 795D	10	21	10	31	76	54	3.2	11	1	32	72	5	0
K 782B?	2	4	1	7	20	34	2.5	42	1	62	89	26	0
L 776D	12	16	9	24	59	57	5.0	12	1	43	78	11	40
LINE 10321	(FLIGHT	1)											
A 588L	7	9	3	7	19	16	4.3	4	1	68	131	23	0
B 606S	1	2	1	2	2	4	-	-	-	-	-	-	0
C 624B?	6	17	6	17	41	73	2.2	5	1	23	248	0	40
D 632B?	3	12	1	16	42	69	1.3	0	1	15	363	0	0
E 639S?	4	18	4	30	85	89	1.3	0	1	10	348	0	0
F 675B?	8	24	10	39	119	93	2.2	0	1	12	130	0	0
G 676B?	8	24	10	39	119	93	2.2	0	1	10	145	0	0
H 711B?	6	10	6	15	18	28	3.4	21	1	45	69	14	0
I 719S?	5	23	7	39	103	95	1.4	0	1	32	59	3	0
J 729L	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10330	(FLIGHT	1)											
A 76L	7	7	2	10	19	16	5.5	34	1	74	289	23	0
B 95S?	10	21	13	41	108	87	3.3	8	1	21	69	0	0
C 100D?	5	12	9	30	73	45	2.2	14	1	36	111	4	0
D 121S?	2	10	4	19	43	82	0.7	4	1	5	399	0	0
E 167D	1	14	2	18	43	79	0.4	0	1	8	486	0	0
F 205S?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 214B?	6	14	5	20	46	20	2.7	0	1	35	61	6	0
LINE 10340	(FLIGHT	1)											
A 1629L	8	14	3	5	15	14	3.8	3	1	52	368	1	0
B 1616B?	10	20	15	69	207	158	3.4	4	1	10	101	0	0
C 1613B?	9	20	15	69	207	158	2.9	5	1	11	83	0	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS OHM-M	DEPTH M	NT		
LINE 10340	(FLIGHT	1)											
D 1599S	4	12	3	20	56	57	1.9	10	1	24	125	0	0
E 1588S	1	2	1	2	2	4	-	-	-	-	-	-	0
F 1576S	1	14	2	21	58	96	0.4	0	1	9	498	0	0
G 1560S	0	5	2	4	13	5	1.0	0	1	27	514	0	0
H 1543S	0	5	1	6	13	2	0.4	0	1	45	593	0	0
I 1533S?	0	10	1	9	20	51	0.4	0	1	27	613	0	0
J 1519S	0	2	0	2	2	4	-	-	-	-	-	-	0
K 1495E	1	2	1	2	1	4	-	-	-	-	-	-	0
L 1493H	1	2	1	2	2	4	-	-	-	-	-	-	0
M 1466L	8	3	4	9	18	28	18.4	40	2	46	26	21	0
LINE 10350	(FLIGHT	1)											
A 1282L	16	21	8	6	16	75	5.7	16	1	18	510	0	80
B 1288S?	28	65	55	135	286	92	4.1	0	2	7	32	0	0
C 1301S?	5	28	4	48	126	173	1.0	0	1	10	178	0	0
D 1303S?	2	27	4	48	126	173	0.5	0	1	10	277	0	0
E 1314S	6	21	5	27	93	109	1.9	5	1	18	175	0	0
F 1419E	9	19	16	33	60	69	3.1	6	1	38	89	6	0
G 1422S	9	10	16	32	60	69	6.1	17	2	35	43	8	0
H 1435L	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10360	(FLIGHT	1)											
A 1251L	12	12	17	52	127	26	7.1	18	1	32	494	0	0
B 1247S?	11	28	24	65	143	66	2.8	0	1	14	95	0	0
C 1245S?	9	28	24	65	143	66	2.3	0	1	12	59	0	0
D 1215S	5	13	2	23	68	66	1.9	8	1	19	205	0	0
E 1182B?	2	5	1	5	9	23	0.4	0	1	20	452	0	0
F 1145S?	0	3	0	5	7	32	0.4	0	1	69	817	0	0
G 1114S	1	2	1	2	2	4	-	-	-	-	-	-	6
H 1104L	6	2	5	19	47	53	26.2	45	2	43	36	16	0
I 1097B?	8	11	6	16	37	48	4.5	22	2	34	42	9	0
LINE 10370	(FLIGHT	1)											
A 905L	19	18	5	15	25	60	8.5	20	1	65	206	22	0
B 944S?	3	10	3	15	39	59	1.2	5	1	15	389	0	0
C 1001S?	0	11	0	18	31	105	0.4	1	1	19	510	0	0
D 1007S?	0	10	0	12	18	65	0.4	0	1	35	668	0	0
E 1055L	1	0	1	2	2	4	-	-	-	-	-	-	0
F 1059E	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10380	(FLIGHT	1)											
A 868L	8	7	3	3	8	21	6.4	22	1	60	284	11	0

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR					
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	COND DEPTH SIEMEN	RESIS OHM-M	DEPTH M	NT
LINE 10380	(FLIGHT	1)										
B 856S	0	2	1	2	2	4	-	-	-	-	-	0
C 832S	1	7	1	9	23	33	0.4	0	1	32	306	0
D 788S	0	2	1	2	2	4	-	-	-	-	-	0
E 777S?	0	6	0	11	14	66	0.4	0	1	31	644	0
F 768S?	0	6	0	7	30	40	0.4	0	1	27	680	0
G 729L	11	11	16	1	52	36	7.2	16	1	26	64	0
H 725L?	1	2	1	2	2	4	-	-	-	-	-	0
I 715S	1	2	1	2	2	4	-	-	-	-	-	0
LINE 10390	(FLIGHT	1)										
A 564S	0	2	1	2	2	4	-	-	-	-	-	0
B 606S?	0	2	0	2	2	4	-	-	-	-	-	0
C 637S?	0	18	0	23	56	107	0.4	0	1	14	461	0
D 661L	1	2	1	2	2	4	-	-	-	-	-	20
E 678D	10	27	8	37	130	134	2.7	5	1	16	46	0
F 682B?	1	2	1	2	2	4	-	-	-	-	-	0
LINE 10400	(FLIGHT	1)										
A 310S	1	2	1	2	2	4	-	-	-	-	-	0
B 273S	1	2	0	2	2	4	-	-	-	-	-	0
C 261S	0	2	0	2	2	4	-	-	-	-	-	0
D 237D?	0	2	0	2	2	4	-	-	-	-	-	0
E 194S	1	2	0	2	2	4	-	-	-	-	-	0
F 183S	1	0	1	2	2	4	-	-	-	-	-	0
G 171L	1	0	1	2	2	4	-	-	-	-	-	0
H 167L?	5	5	24	75	184	180	5.1	26	1	32	97	0
I 165E	27	5	39	111	246	25	93.5	18	1	25	60	0
J 153B?	1	4	9	80	152	196	0.5	10	1	15	65	0
K 150B?	9	33	9	80	152	250	2.0	6	1	14	53	0
L 146B?	19	33	23	80	152	250	4.9	9	1	19	49	0
LINE 10410	(FLIGHT	1)										
A 7348S	0	7	1	11	21	50	0.4	0	1	22	545	0
B 7318S	0	8	0	12	28	61	0.4	0	1	25	676	0
C 7306S	0	6	0	6	16	32	0.4	0	1	43	721	0
D 7283S	0	2	1	2	2	4	-	-	-	-	-	0
E 7271S	0	3	1	5	11	20	0.4	0	1	32	626	0
F 7235L	1	2	1	2	2	4	-	-	-	-	-	0
G 7225H	1	2	1	2	2	4	-	-	-	-	-	0
H 7216B?	15	31	13	40	107	59	3.6	8	2	17	32	0
I 7208B?	26	52	33	84	194	241	4.6	6	2	18	21	2

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND SIEMEN	DEPTH* M	COND SIEMEN	DEPTH M	RESIS OHM-M	DEPTH M	NT
LINE 10420	(FLIGHT	1)											
A 7421S	0	2	1	2	2	4	-	-	-	-	-	-	0
B 7448S	0	2	1	2	2	4	-	-	-	-	-	-	0
C 7468S	0	5	0	5	10	27	0.4	0	1	39	703	0	0
D 7480S	2	12	2	16	52	61	0.5	0	1	6	470	0	0
E 7506S	8	9	7	23	37	43	5.6	27	1	21	116	0	0
F 7508S?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 7516L	1	2	1	2	2	4	-	-	-	-	-	-	0
H 7525E	10	78	51	129	319	233	1.1	0	2	18	19	1	0
I 7538S	5	37	13	61	178	182	1.0	0	2	17	23	0	0
LINE 10430	(FLIGHT	1)											
A 7717S?	1	2	1	2	2	4	-	-	-	-	-	-	0
B 7704S	0	5	1	9	19	45	0.4	0	1	37	652	0	0
C 7671S	0	5	0	10	17	42	0.4	0	1	35	708	0	0
D 7654S	0	6	0	5	15	27	0.4	0	1	31	682	0	0
E 7645B?	2	12	0	18	39	72	0.5	0	1	16	535	0	0
F 7635B?	1	2	1	2	2	4	-	-	-	-	-	-	0
G 7626B?	1	2	1	2	2	4	-	-	-	-	-	-	0
H 7622B?	1	2	1	2	2	4	-	-	-	-	-	-	0
I 7619B?	1	2	1	2	2	4	-	-	-	-	-	-	0
J 7616S	1	2	1	2	2	4	-	-	-	-	-	-	0
K 7608L	14	16	19	28	59	63	6.4	5	1	29	93	0	0
L 7605L?	14	16	15	56	61	20	6.4	9	1	27	54	0	0
M 7595S?	1	2	1	2	2	4	-	-	-	-	-	-	0
N 7585S	1	2	1	2	2	4	-	-	-	-	-	-	0
O 7576B?	72	101	133	184	377	271	9.1	2	4	19	10	5	0
LINE 10440	(FLIGHT	1)											
A 7768S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 7829S	0	3	3	8	18	27	0.4	0	1	29	367	0	0
C 7845S	3	8	3	9	28	31	1.7	20	1	19	240	0	0
D 7853S?	3	15	0	24	51	94	1.0	6	1	8	339	0	0
E 7860B?	1	2	1	2	2	4	-	-	-	-	-	-	0
F 7864B?	12	35	14	38	116	48	2.7	0	1	16	70	0	0
G 7867B?	5	24	14	37	157	134	1.2	0	1	19	95	0	0
H 7877L?	21	30	5	17	34	93	6.0	3	2	21	36	0	0
I 7889E	33	22	44	51	92	62	16.7	14	3	20	15	4	0
J 7895E	37	22	56	55	85	62	19.7	13	3	21	17	4	0
K 7900S	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10450	(FLIGHT	2)											
A 160S	1	2	1	2	2	4	-	-	-	-	-	-	0

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JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	M	COND DEPTH SIEMEN	M	RESIS OHM-M	DEPTH M	NT
LINE 10450	(FLIGHT	2)											
B 145S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 138S?	9	6	12	38	103	19	10.4	33	1	18	66	0	0
D 132L	1	2	1	2	2	4	-	-	-	-	-	-	100
E 126L?	9	13	40	74	165	106	4.6	3	1	24	52	0	0
F 111H	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10460	(FLIGHT	2)											
A 319S?	0	2	0	2	2	14	0.4	6	1	108	941	11	0
B 360B?	0	13	0	12	3	51	0.4	4	1	40	672	0	160
C 369S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 388S	5	7	4	12	26	71	3.7	33	1	11	308	0	0
E 397S	1	2	1	2	2	4	-	-	-	-	-	-	0
F 405S	1	2	1	2	2	4	-	-	-	-	-	-	0
G 413L	5	8	3	11	26	45	3.0	24	1	21	64	0	0
H 416L?	8	14	34	49	97	45	3.8	13	1	21	54	0	0
I 437H	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10470	(FLIGHT	2)											
A 580S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 529E	1	2	1	2	2	4	-	-	-	-	-	-	0
C 516L	13	4	4	12	32	30	29.0	33	1	20	71	0	0
D 512L?	8	17	24	12	32	47	3.1	10	1	25	56	0	0
E 503E	1	2	1	2	2	4	-	-	-	-	-	-	0
F 495B?	7	7	32	39	111	84	5.7	43	4	25	7	12	0
G 488B?	84	118	145	213	428	285	9.6	2	4	22	9	8	0
H 485E	32	25	144	213	428	283	13.7	10	2	25	22	6	0
I 478S	4	16	9	30	81	95	1.4	0	1	15	197	0	0
LINE 10480	(FLIGHT	2)											
A 661S	0	3	0	6	9	33	0.4	7	1	51	706	0	0
B 681S?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 703S?	1	8	1	10	20	63	0.7	17	1	30	555	0	0
D 715S?	1	9	2	12	30	44	0.6	8	1	21	478	0	0
E 725S?	1	2	0	2	2	4	-	-	-	-	-	-	0
F 736S	6	21	5	35	99	116	1.9	4	1	12	248	0	0
G 751L?	10	39	18	20	35	137	2.0	0	1	19	50	0	0
H 762H	1	2	1	2	2	4	-	-	-	-	-	-	0
I 777E	38	6	85	105	195	64	136.8	9	2	19	38	0	0
LINE 10490	(FLIGHT	2)											
A 930S	1	2	1	2	2	4	-	-	-	-	-	-	0

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN M	COND DEPTH SIEMEN M	RESIS OHM-M	DEPTH M	NT		
LINE 10490	(FLIGHT	2)											
B 867L	3	2	7	16	41	36	7.2	49	1	35	134	0	0
C 862L?	1	2	1	2	2	4	-	-	-	-	-	-	0
D 843H	30	128	18	238	507	342	2.6	0	4	22	9	8	0
E 837E	18	24	142	230	486	322	6.1	0	1	32	73	2	20
LINE 10500	(FLIGHT	2)											
A 1000E	1	11	0	46	135	216	0.5	6	1	22	500	0	0
B 1014S	4	26	4	51	141	170	0.9	0	1	4	335	0	0
C 1026S	1	2	1	2	2	4	-	-	-	-	-	-	0
D 1068L	3	1	6	42	102	122	23.2	78	1	26	183	0	0
E 1070L?	6	18	12	48	116	122	2.1	9	1	23	157	0	0
F 1091H	1	2	1	2	2	4	-	-	-	-	-	-	0
G 1100E	38	24	108	151	10	158	18.7	9	2	17	27	0	0
LINE 10510	(FLIGHT	2)											
A 1279S	1	2	1	2	2	4	-	-	-	-	-	-	0
B 1266S	2	20	2	37	98	148	0.5	0	1	3	331	0	0
C 1236S	2	12	1	20	38	105	0.7	8	1	10	386	0	0
D 1211L	5	3	2	5	16	15	9.4	49	1	21	179	0	0
E 1207L?	9	11	4	36	113	46	5.1	22	1	17	211	0	0
F 1201E	1	2	1	2	2	4	-	-	-	-	-	-	0
G 1192H	1	2	1	2	1	4	-	-	-	-	-	-	0
H 1179E	41	45	135	174	336	52	9.8	1	2	18	27	0	0
LINE 10520	(FLIGHT	2)											
A 1350S	1	2	0	2	2	4	-	-	-	-	-	-	0
B 1377S	3	12	4	20	46	86	1.2	8	1	13	409	0	0
C 1393S	7	17	7	30	90	99	2.4	10	1	7	353	0	0
D 1398L	8	3	9	1	90	60	27.7	42	1	20	178	0	0
E 1402L	9	8	5	9	7	65	7.5	34	1	14	273	0	0
F 1408S?	9	5	47	109	298	181	12.9	44	1	13	134	0	0
G 1412E	9	10	107	9	11	181	5.9	33	2	19	23	1	0
H 1417H	1	2	1	2	2	4	-	-	-	-	-	-	0
I 1429E	11	5	155	197	419	155	17.1	41	4	21	9	6	0
J 1444S	2	5	0	7	23	39	1.5	14	1	32	733	0	0
LINE 10530	(FLIGHT	2)											
A 1596S	2	11	1	14	50	68	0.6	0	1	12	507	0	0
B 1572S	1	2	1	2	2	4	-	-	-	-	-	-	0
C 1547L	9	14	10	3	18	58	4.3	9	1	25	193	0	0
D 1543L	8	9	3	4	18	10	5.5	23	1	21	131	0	0

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS SIEMEN	DEPTH M	OHM-M	DEPTH M	NT
LINE 10530	(FLIGHT 2)												
E 1527H	26	22	26	45	91	73	11.8	17	4	24	8	9	0
F 1517E	65	83	120	149	308	169	9.7	0	2	21	24	1	0
G 1502S	2	10	1	17	48	67	1.1	0	1	14	543	0	0
H 1489S?	4	7	0	8	11	35	2.6	36	1	129	994	0	0
LINE 10540	(FLIGHT 2)												
A 1700S	0	2	0	2	2	4	-	-	-	-	-	-	0
B 1718S	0	6	1	22	38	42	0.4	0	1	14	469	0	0
C 1744S	1	7	1	12	30	48	0.5	7	1	22	293	0	0
D 1758L	4	4	6	8	27	33	5.3	43	1	32	176	0	0
E 1764L	10	27	13	40	239	176	2.5	0	1	25	101	0	0
F 1777H	58	48	115	105	151	128	15.3	9	4	22	8	8	0
G 1794E	57	9	114	132	283	96	150.5	6	2	18	23	0	0
H 1806S	1	13	5	7	13	87	0.4	0	1	21	255	0	0
I 1812E	2	23	3	40	121	135	0.5	0	1	13	279	0	0
LINE 10550	(FLIGHT 2)												
A 1949S	1	9	3	12	35	72	0.5	8	1	25	415	0	0
B 1932B?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 1919L	5	2	5	4	18	25	12.3	53	1	45	102	10	0
D 1909L	9	2	36	54	118	48	78.6	43	1	32	79	2	0
E 1886H	2	92	127	173	345	194	0.5	0	4	27	7	12	0
F 1881E	67	92	127	173	346	195	9.1	0	2	18	21	0	0
G 1871S?	4	25	7	36	105	113	1.0	0	1	22	179	0	0
H 1866S	3	13	7	32	76	64	1.3	0	1	17	211	0	0
I 1854S?	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10560	(FLIGHT 2)												
A 2016S	0	9	2	16	22	85	0.4	2	1	36	396	0	0
B 2041S	0	13	3	19	31	101	0.4	0	1	26	437	0	0
C 2064S	3	8	8	11	27	30	1.8	18	1	39	152	4	0
D 2072L	7	17	11	9	28	85	2.3	11	1	30	106	1	0
E 2081L	18	18	47	118	273	138	8.3	21	1	29	59	4	0
F 2085E	35	84	118	163	322	165	4.4	0	2	19	22	2	0
G 2100H	15	4	11	29	7	55	40.4	41	5	26	7	13	0
H 2114E	42	61	87	118	49	118	7.3	0	1	19	56	0	0
LINE 10570	(FLIGHT 2)												
A 2231S	0	2	1	2	2	4	-	-	-	-	-	-	50
B 2221S?	2	7	1	10	23	56	0.9	18	1	20	516	0	0
C 2211S	1	2	1	2	2	4	-	-	-	-	-	-	0

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MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND SIEMEN	DEPTH* M	COND SIEMEN	DEPTH M	RESIS OHM-M	DEPTH M	NT
LINE 10570	(FLIGHT	2)											
D 2195S	3	5	2	7	16	28	2.1	31	1	35	526	0	0
E 2184L	1	2	1	2	2	4	-	-	-	-	-	-	0
F 2174L	19	12	24	35	72	17	14.2	24	2	26	45	2	0
G 2170E	38	33	76	66	116	52	12.5	5	2	20	20	2	0
H 2150H	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10580	(FLIGHT	2)											
A 2287S?	1	2	0	2	2	4	-	-	-	-	-	-	0
B 2300S	1	8	0	11	16	72	0.5	7	1	23	555	0	0
C 2314S	0	5	1	7	13	45	0.4	0	1	28	534	0	0
D 2322L	1	2	1	2	2	4	-	-	-	-	-	-	0
E 2333L?	1	9	29	95	203	128	0.4	0	2	24	40	1	0
F 2347H	32	41	38	76	171	165	7.5	11	4	23	7	10	0
G 2367B?	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10590	(FLIGHT	2)											
A 2476S?	0	13	0	23	39	119	0.4	4	1	16	451	0	17
B 2462S	0	5	0	9	14	48	0.4	0	1	34	510	0	0
C 2455B?	0	2	1	2	2	4	-	-	-	-	-	-	19
D 2453S	0	6	3	9	17	46	0.4	0	1	23	434	0	0
E 2446L	2	1	4	17	41	55	6.8	77	1	57	212	12	0
F 2436L	17	8	32	38	78	123	22.8	31	1	30	52	5	0
G 2431E	50	42	92	86	171	76	14.1	2	3	22	13	5	0
H 2414H	1	2	1	2	2	4	-	-	-	-	-	-	0
I 2399E	27	70	6	137	299	293	3.8	3	2	19	35	1	0
LINE 10600	(FLIGHT	2)											
A 2538S?	0	15	2	12	17	86	0.4	8	1	25	494	0	0
B 2552S	0	8	4	13	27	70	0.4	0	1	35	273	0	0
C 2562L	4	2	5	20	14	82	7.5	60	1	39	206	1	0
D 2570L?	10	20	41	95	231	351	3.3	14	1	30	97	2	0
E 2576E	7	98	69	190	476	425	0.8	0	2	18	21	1	0
F 2595H	1	2	1	2	2	4	-	-	-	-	-	-	0
LINE 10610	(FLIGHT	2)											
A 2731S	1	6	1	12	23	63	0.4	0	1	26	529	0	0
B 2710S	2	8	2	12	24	57	1.0	13	1	29	388	0	0
C 2703L	1	2	1	2	2	4	-	-	-	-	-	-	0
D 2697L	8	16	14	27	80	72	3.0	9	1	30	120	0	0
E 2691E	40	42	89	84	168	24	10.2	0	2	21	24	0	0
F 2685H	1	2	1	1	2	4	-	-	-	-	-	-	0

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MICROGOLD AREA

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ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS SIEMEN	DEPTH M	OHM-M	DEPTH M	NT
LINE 10610	(FLIGHT	2)											
G 2662H	73	80	114	142	282	291	11.8	10	4	20	9	7	0
H 2652E	24	50	70	15	33	20	4.4	5	1	14	63	0	0
LINE 10620	(FLIGHT	2)											
A 2779S	0	11	0	16	13	60	0.4	4	1	22	507	0	0
B 2802L	4	7	9	16	35	70	3.0	23	1	43	218	3	0
C 2808L	9	17	23	41	111	99	3.4	13	1	32	135	0	0
D 2824H	28	15	17	15	30	3	21.9	22	4	24	8	10	0
E 2840H	4	12	2	23	16	20	1.6	12	2	19	24	0	0
F 2858B?	19	40	27	78	190	108	3.9	0	1	9	60	0	0
LINE 10630	(FLIGHT	2)											
A 2955L	1	2	1	2	2	4	-	-	-	-	-	-	0
B 2951L	2	7	14	29	52	51	1.1	4	1	54	118	16	0
C 2946E	25	37	62	23	143	61	6.0	0	2	21	42	0	0
D 2936H	14	0	23	12	15	18	49.0	38	5	27	7	12	0
E 2909S?	39	93	78	174	419	152	4.5	0	2	17	24	0	0
F 2899D	8	19	6	33	92	95	2.8	0	1	13	218	0	0
LINE 10640	(FLIGHT	2)											
A 3023S	0	2	1	2	2	4	-	-	-	-	-	-	0
B 3035L	3	2	4	9	4	7	8.3	54	1	64	156	19	0
C 3044E	51	12	93	157	347	210	75.8	16	1	19	55	0	0
D 3056H	68	11	76	29	59	52	162.4	18	4	25	7	11	0
E 3066S?	1	2	1	2	2	4	-	-	-	-	-	-	80
F 3089B	10	28	14	52	132	84	2.4	0	1	14	196	0	280
G 3090B	10	28	14	52	132	84	2.4	0	1	17	138	0	0
H 3099S?	3	6	1	11	27	31	1.8	13	1	21	688	0	0
I 3101B?	2	6	1	11	27	31	1.7	15	1	32	545	0	0
LINE 10650	(FLIGHT	2)											
A 3216B?	1	2	1	2	2	4	-	-	-	-	-	-	0
B 3209L	4	1	4	5	4	6	75.5	70	1	37	230	0	0
C 3205L	1	1	1	2	2	4	-	-	-	-	-	-	0
D 3190H	5	10	9	21	33	20	2.9	16	5	26	7	11	0
E 3181E	15	45	79	85	171	80	2.7	0	2	28	32	3	0
F 3173L	1	2	1	2	2	4	-	-	-	-	-	-	0
G 3151B?	2	5	0	3	10	15	0.6	0	1	22	578	0	60
H 3141S	0	2	1	2	2	4	-	-	-	-	-	-	30
LINE 10660	(FLIGHT	2)											
A 3287S	2	7	2	10	21	47	1.0	10	1	50	148	12	0

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MICROGOLD AREA

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ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN M	COND DEPTH SIEMEN M	RESIS OHM-M	DEPTH M	NT		
LINE 10660	(FLIGHT	2)											
B 3293L	1	1	1	2	2	4	-	-	-	-	0		
C 3300E	18	34	89	52	278	16	4.2	0	2	23	47	0	
D 3310H	1	2	1	2	2	4	-	-	-	-	-	0	
E 3328L	1	2	1	2	2	4	-	-	-	-	-	0	
F 3356S	0	2	0	2	2	4	-	-	-	-	-	0	
G 3374S	0	5	1	9	5	6	0.4	0	1	55	724	0	
LINE 10670	(FLIGHT	2)											
A 3550B?	5	4	1	3	7	11	6.8	35	1	74	205	24	0
B 3540L	9	6	3	95	253	201	10.9	14	1	61	111	19	0
C 3537E	10	84	112	175	359	215	1.0	0	1	19	66	0	0
D 3530H	1	2	1	2	2	4	-	-	-	-	-	-	0
E 3513L	8	6	39	31	56	6	7.6	0	1	79	117	32	0
F 3477S	0	2	0	2	2	4	-	-	-	-	-	-	0
LINE 10680	(FLIGHT	2)											
A 3613L	5	3	6	54	145	138	10.3	34	1	77	87	36	0
B 3617E	29	28	111	31	52	177	10.0	10	2	21	39	0	0
C 3627H	14	11	20	21	56	40	10.0	28	5	25	7	11	0
D 3638E	30	22	29	113	241	109	14.0	0	2	18	28	0	0
E 3643L	5	8	17	27	82	16	3.2	10	1	111	291	43	0
F 3703B?	1	2	0	2	2	4	-	-	-	-	-	-	0
LINE 10690	(FLIGHT	2)											
A 3818L	6	0	17	12	135	76	286.0	55	2	86	43	52	0
B 3813E	51	63	16	124	29	123	9.4	0	2	19	27	0	0
C 3802H	6	69	93	7	176	188	0.7	0	4	25	8	10	0
D 3799E	4	71	96	82	176	188	0.6	0	3	23	15	6	0
E 3790L	5	3	14	33	92	54	8.9	8	1	160	994	0	0
F 3747S	0	2	0	2	2	4	-	-	-	-	-	-	0
G 3730D	0	2	0	2	2	4	-	-	-	-	-	-	0
LINE 10700	(FLIGHT	2)											
A 3853L	1	2	1	2	2	4	-	-	-	-	-	-	0
B 3857E	71	9	42	63	420	150	240.5	6	2	24	43	0	0
C 3863H	13	4	50	67	404	162	34.7	45	4	22	8	9	0
D 3871E	26	25	120	148	306	149	9.9	9	2	20	24	1	0
E 3884L	5	16	10	23	108	11	1.9	0	1	40	753	0	0
F 3929S	0	2	0	2	2	4	-	-	-	-	-	-	0
LINE 10710	(FLIGHT	2)											
A 4068L	9	13	2	11	30	72	4.5	9	1	46	167	6	0

* ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* SIEMEN	COND DEPTH M	RESIS OHM-M	DEPTH M	NT		
LINE 10710	(FLIGHT 2)												
B 4051B?	10	70	58	131	301	234	1.1	0	2	19	21	1	0
C 4038B?	1	2	1	2	2	4	-	-	-	-	-	-	0
D 4033L	5	11	4	48	125	70	2.1	0	1	74	269	20	0
E 4005B?	0	12	1	19	40	103	0.4	0	1	41	680	0	0
F 3980S?	0	2	0	2	2	4	-	-	-	-	-	-	0
LINE 10720	(FLIGHT 2)												
A 4098L	5	0	41	4	434	387	999.0	75	1	35	103	2	0
B 4107B?	16	157	21	285	668	513	1.0	0	3	20	11	6	0
C 4110B?	16	85	124	153	229	66	1.7	0	3	19	16	4	0
D 4128L	3	8	2	10	20	14	1.9	6	1	62	848	0	0
E 4156B?	0	5	0	6	10	29	0.4	0	1	106	994	0	0
F 4179S?	0	10	0	12	4	64	0.4	0	1	36	714	0	0
LINE 10730	(FLIGHT 2)												
A 4293B?	33	50	147	110	625	426	6.5	10	3	18	12	4	0
B 4286E	9	17	109	253	566	367	3.3	7	1	27	152	0	0
C 4274L	3	7	4	20	19	93	2.3	11	1	70	891	0	0
D 4254S	0	2	0	2	2	4	-	-	-	-	-	-	4
E 4217S?	0	10	0	17	35	83	0.4	0	1	19	644	0	0
LINE 19010	(FLIGHT 2)												
A 4433H	1	2	1	2	2	4	-	-	-	-	-	-	0
B 4453E	46	74	17	11	292	40	6.7	0	2	17	20	0	0
C 4466L	6	8	23	14	4	17	3.6	24	1	49	227	7	0
D 4515S	1	5	1	9	17	43	0.4	3	1	29	584	0	0
E 4585S	1	2	0	2	2	4	-	-	-	-	-	-	0
F 4604S	4	5	6	10	34	47	3.1	31	1	29	131	0	0
G 4618S	1	12	1	17	44	65	0.4	0	1	22	186	0	0
H 4664S	2	6	3	11	22	30	1.3	6	1	36	157	0	0
I 4714S	4	7	5	11	27	35	2.6	31	1	51	140	15	0
J 4738S	7	10	18	19	42	19	3.9	24	2	50	29	25	0
LINE 19020	(FLIGHT 2)												
A 5156S	1	3	1	5	10	6	1.4	35	1	82	186	34	0
B 5115B?	1	2	1	2	2	4	-	-	-	-	-	-	0
C 5080H	1	2	1	2	2	4	-	-	-	-	-	-	0
D 5045L	1	2	1	2	2	4	-	-	-	-	-	-	0
E 5038S	10	23	14	36	94	82	3.0	2	1	35	66	6	0
F 4994B	7	18	9	8	7	18	2.3	3	1	29	149	0	0
G 4988B	1	2	1	2	2	4	-	-	-	-	-	-	0

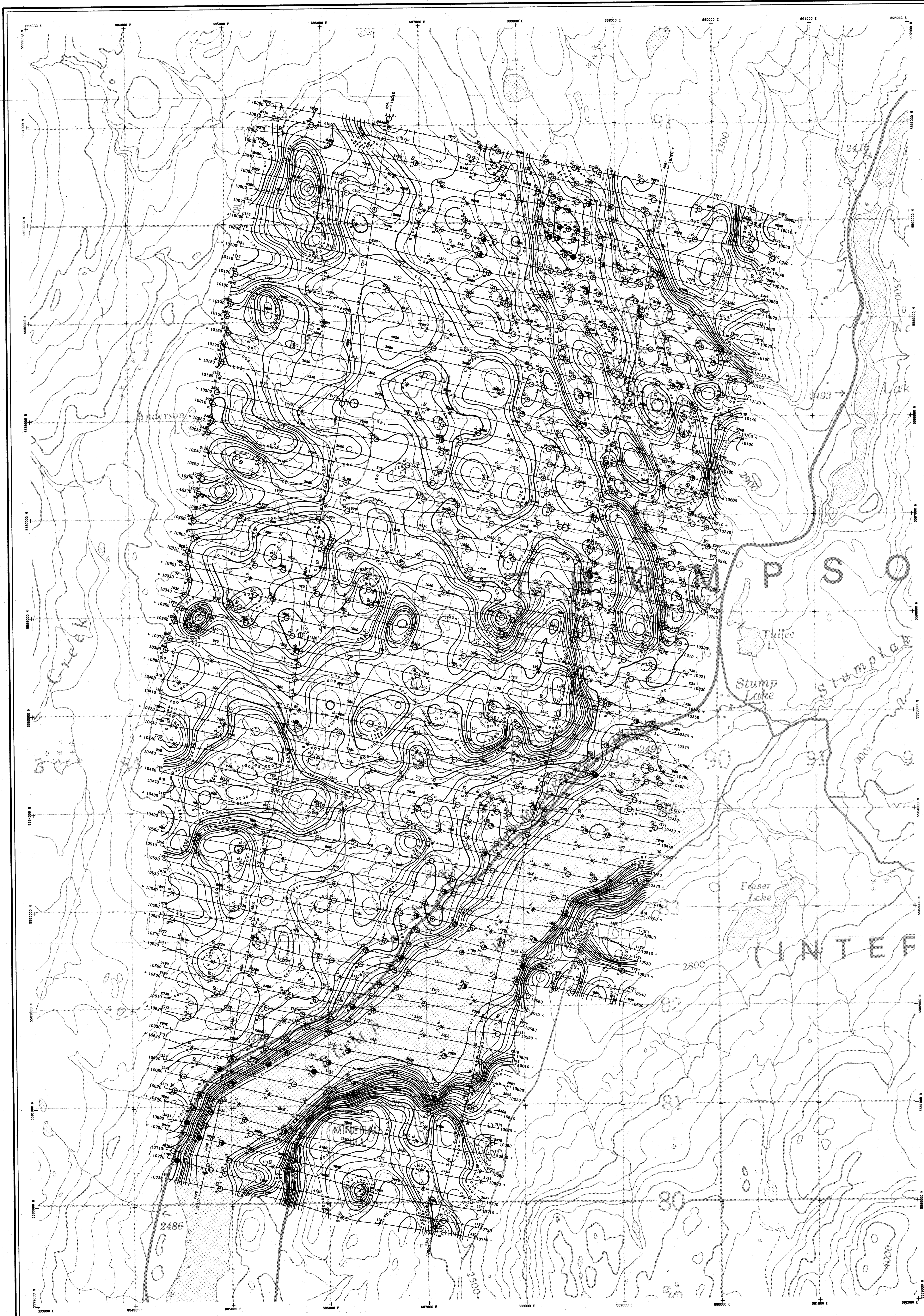
* ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART
OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT
LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.

JOB# 1162

MICROGOLD AREA

	COAXIAL 1074 HZ	COPLANAR 865 HZ	COPLANAR 7258 HZ	VERTICAL DIKE	HORIZONTAL SHEET	CONDUCTIVE EARTH	MAG CORR						
ANOMALY/ FID/INTERP	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	REAL PPM	QUAD PPM	COND DEPTH* .SIEMEN M	COND DEPTH .SIEMEN M	RESIS OHM-M	DEPTH M	DEPTH M	NT	
LINE 19020	(FLIGHT	2)											
H 4985B	1	2	1	2	2	4	-	-	-	-	-	0	
I 4975B	9	20	9	33	47	68	3.1	12	1	27	75	1	0
J 4969B	14	21	12	35	87	83	4.7	16	2	31	44	7	0
K 4961B	4	12	7	12	35	46	1.7	10	1	40	60	11	0
L 4954B	2	11	10	8	10	60	1.0	10	1	44	74	15	280
M 4945B	26	43	28	73	182	153	5.4	11	2	30	32	9	0
N 4939B	1	2	1	2	2	4	-	-	-	-	-	-	0
O 4927E	10	15	5	54	143	134	4.6	11	2	36	32	12	0
P 4920H	1	2	1	2	2	4	-	-	-	-	-	-	0
Q 4902B?	14	41	25	74	170	224	2.7	4	2	34	22	15	0
R 4900B?	16	41	25	74	170	224	3.1	8	2	31	22	13	6

* ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.



TECHNICAL SUMMARY

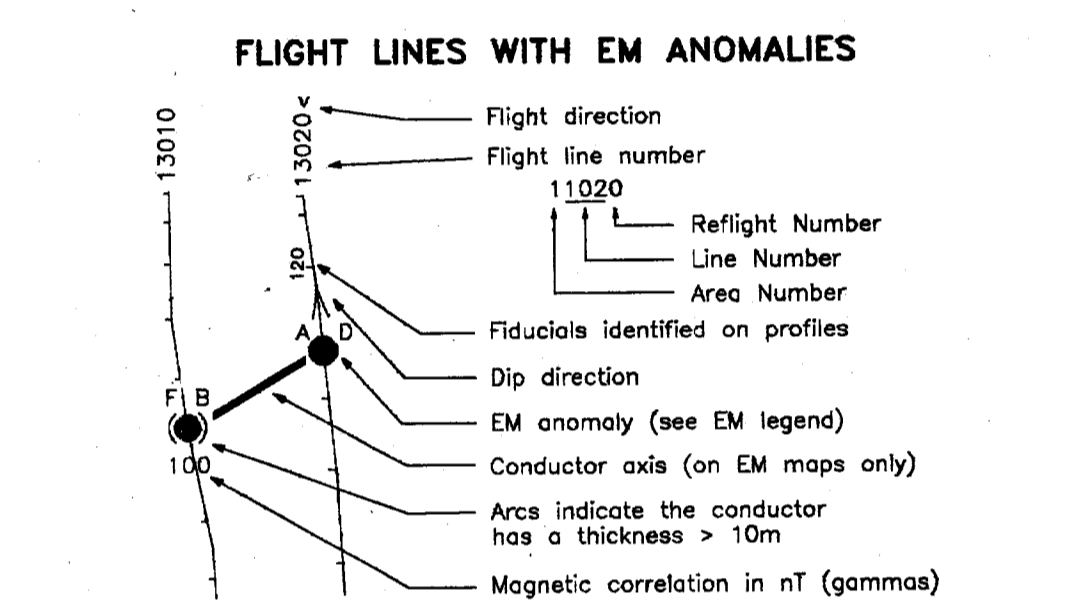
Navigation: Serial real time differential GPS positioning
 Data reduction grid interval: 40 metres
 Terrain clearance: Helicopter 80 m
 Data sampling interval: Electromagnetic sensor 30 m
 Magnetometer: VLF receiver 40 m
 Magnetometer sensitivity: 0.1 second
 VLF receiver sensitivity: Schtrax cesium / 0.01 nT
 Electromagnetic system: Herz 2A / 15
 Electromagnetic system: DIGHEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
2200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

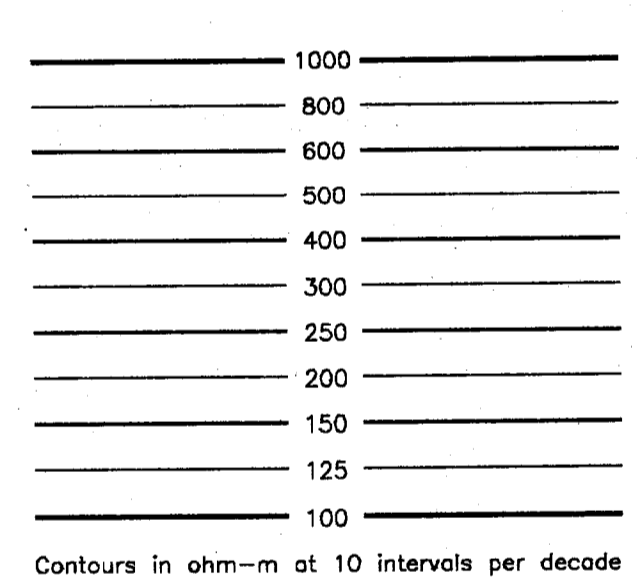
ELECTROMAGNETIC ANOMALIES

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
	*	Questionable anomaly

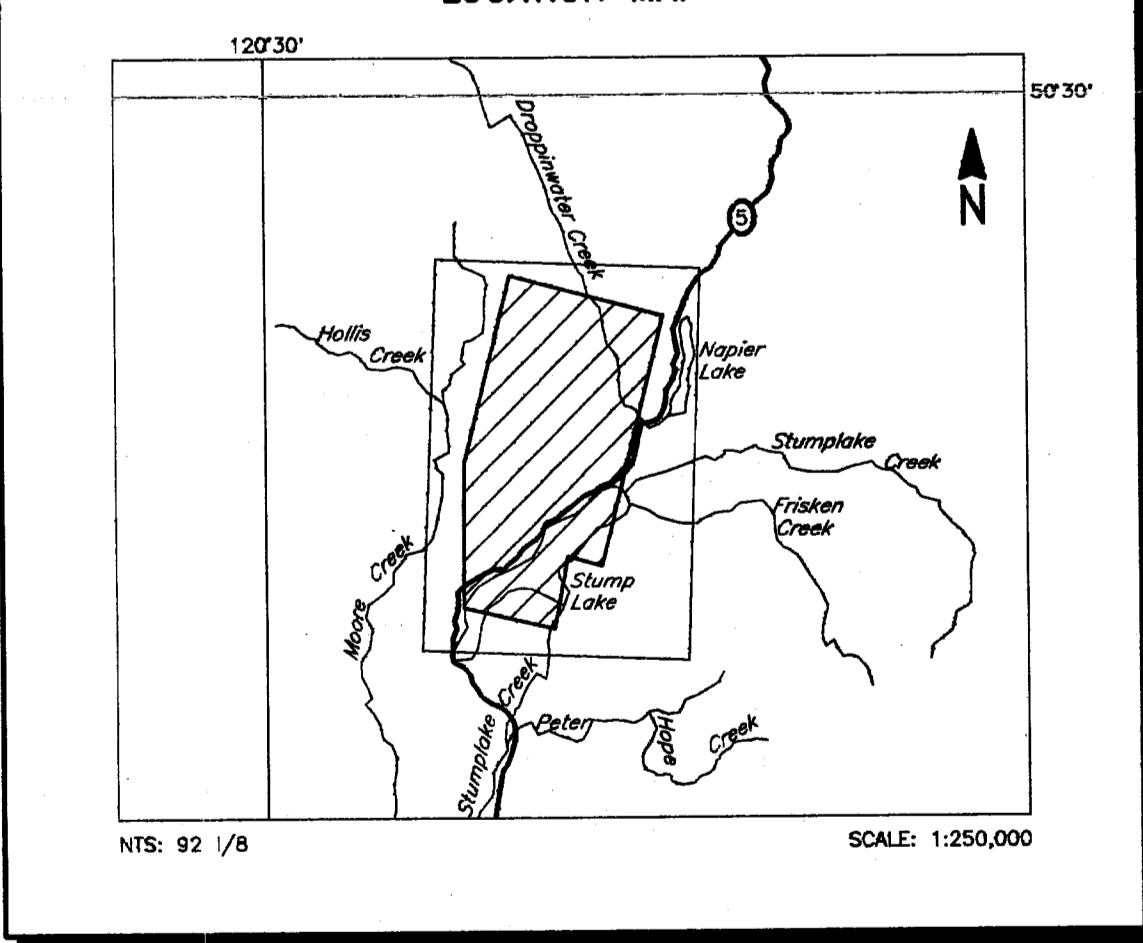
Anomaly Identifier	Interpretive Symbol	Conductor ("model")
●	S	Bedrock conductor
○	D	Narrow bedrock conductor ("thin dike")
○	S	Conductive cover ("horizontal thin sheet")
○	H	Broad conductive rock unit, steep conductive weathering, thick conductive cover ("half space")
○	E	Edge of broad conductor ("edge of half space")
○	L	Culture, e.g. power line, metal building or fence



RESISTIVITY CONTOURS



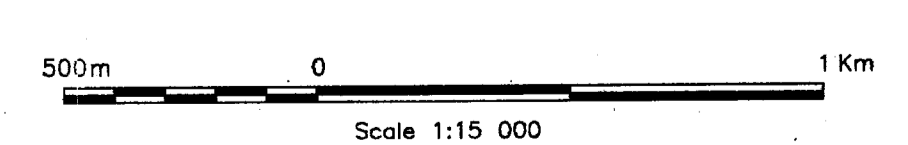
LOCATION MAP



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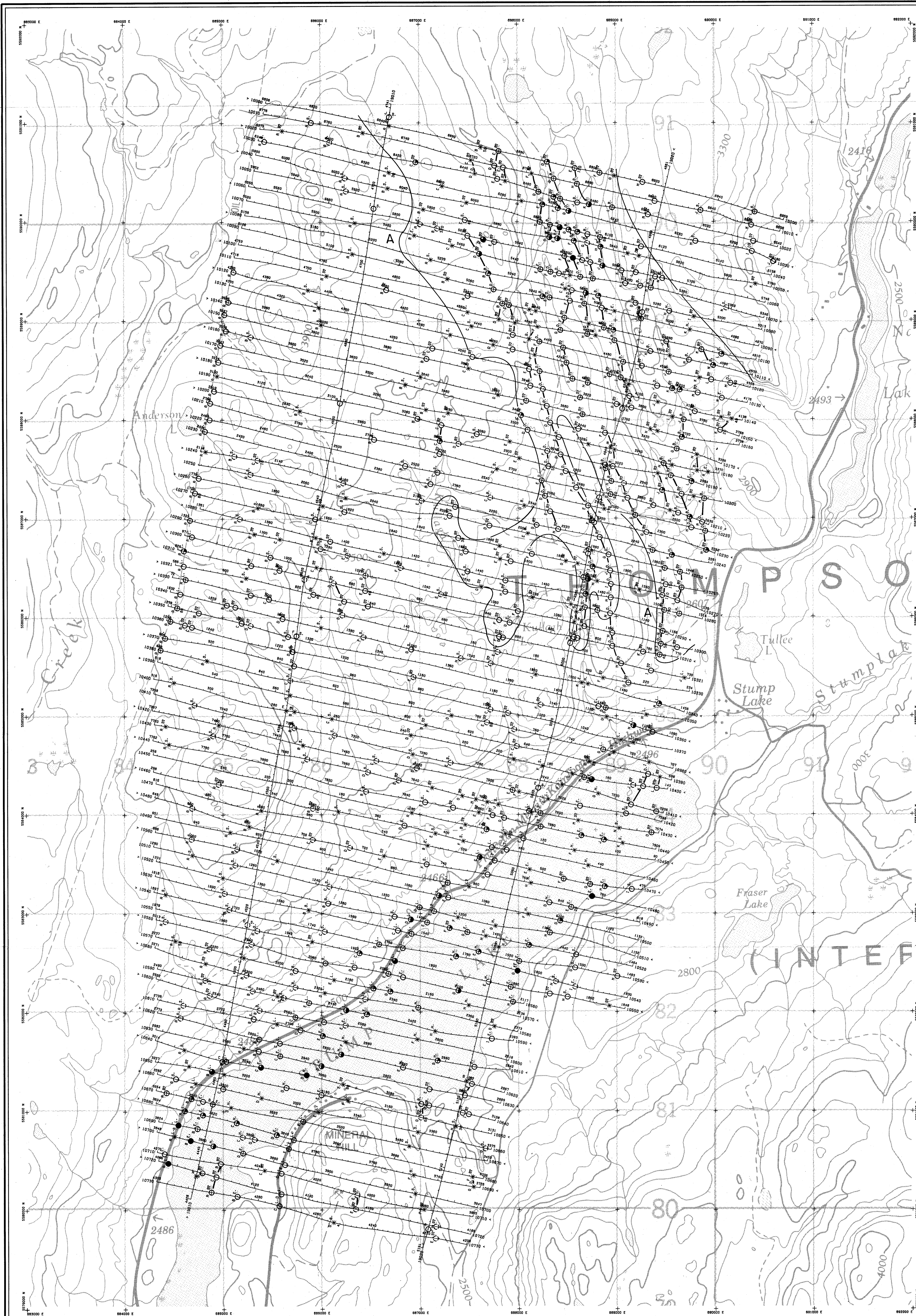
RESISTIVITY
7200 Hz COPLANAR

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TECHNICAL SUMMARY

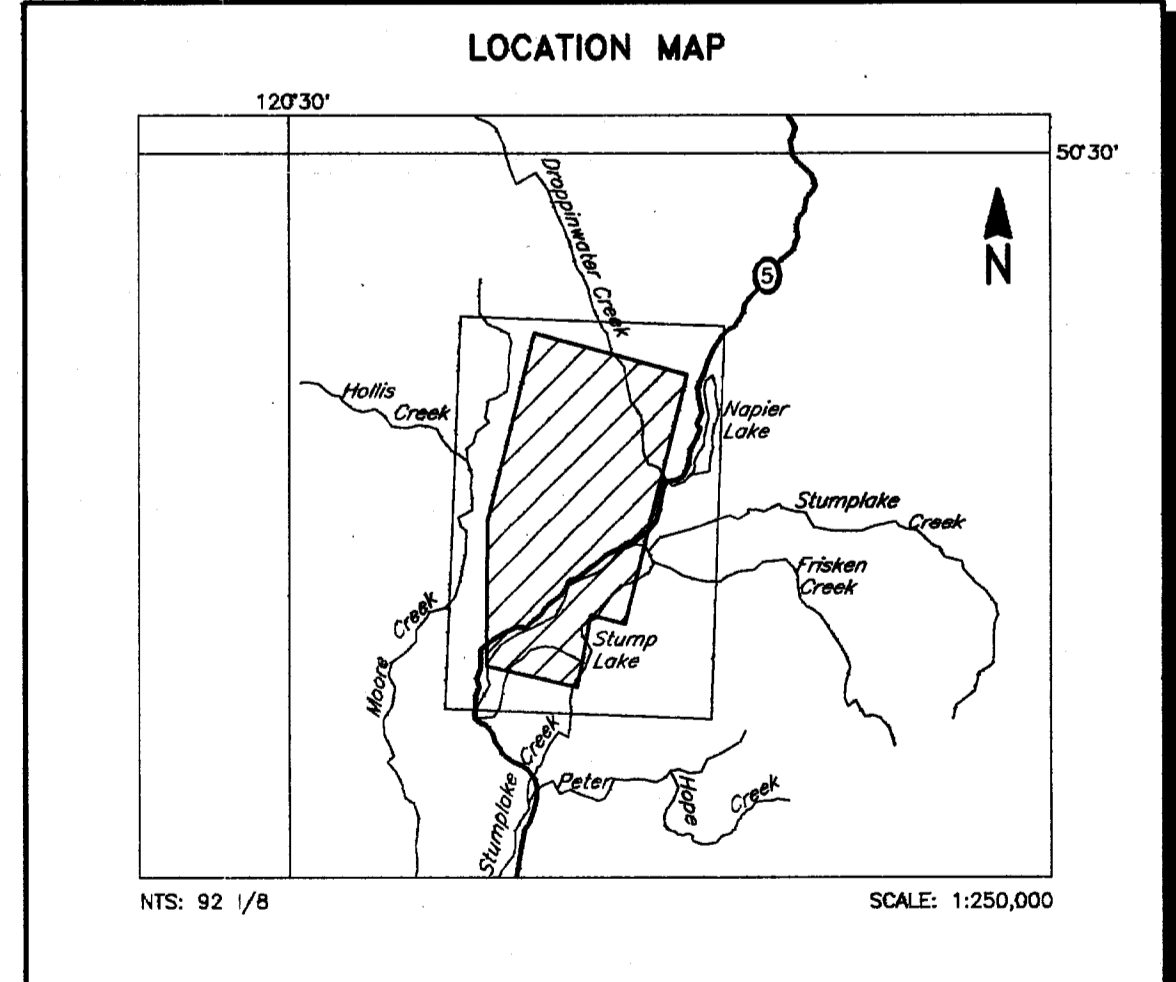
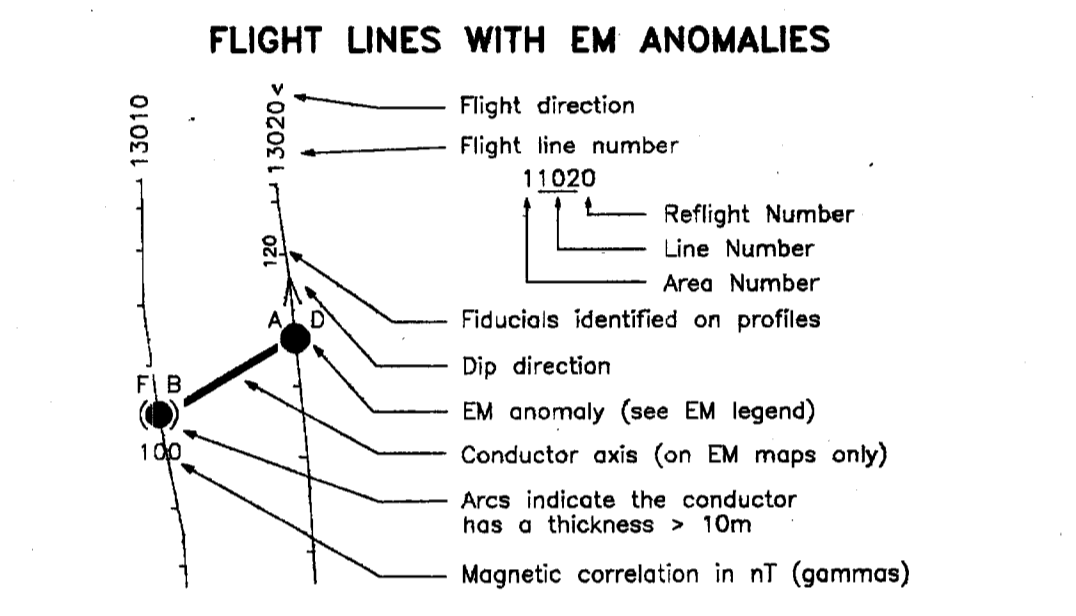
Navigation: Real time differential GPS positioning
 Data reduction grid interval: 40 metres
 Terrain clearance: Helicopter 60 m
 Electromagnetic sensor: 30 m
 Magnetometer: VLF receiver 40 m
 Data sampling interval: 0.1 second
 Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
 VLF receiver / sensitivity: Herz 2A / 1%
 Electromagnetic system: DIGHEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7500 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

ELECTROMAGNETIC ANOMALIES

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

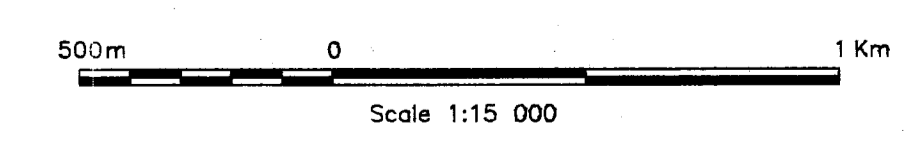
Anomaly Identifier	Interpretive symbol	Conductor (mode?)
B	—	Bedrock conductor
D	—	Narrow bedrock conductor ("thin wire")
S	—	Conductive cover ("horizontal thin sheet")
H	—	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	—	Edge of broad conductor ("edge of half space")
L	—	Culture, e.g. power line, metal building or fence



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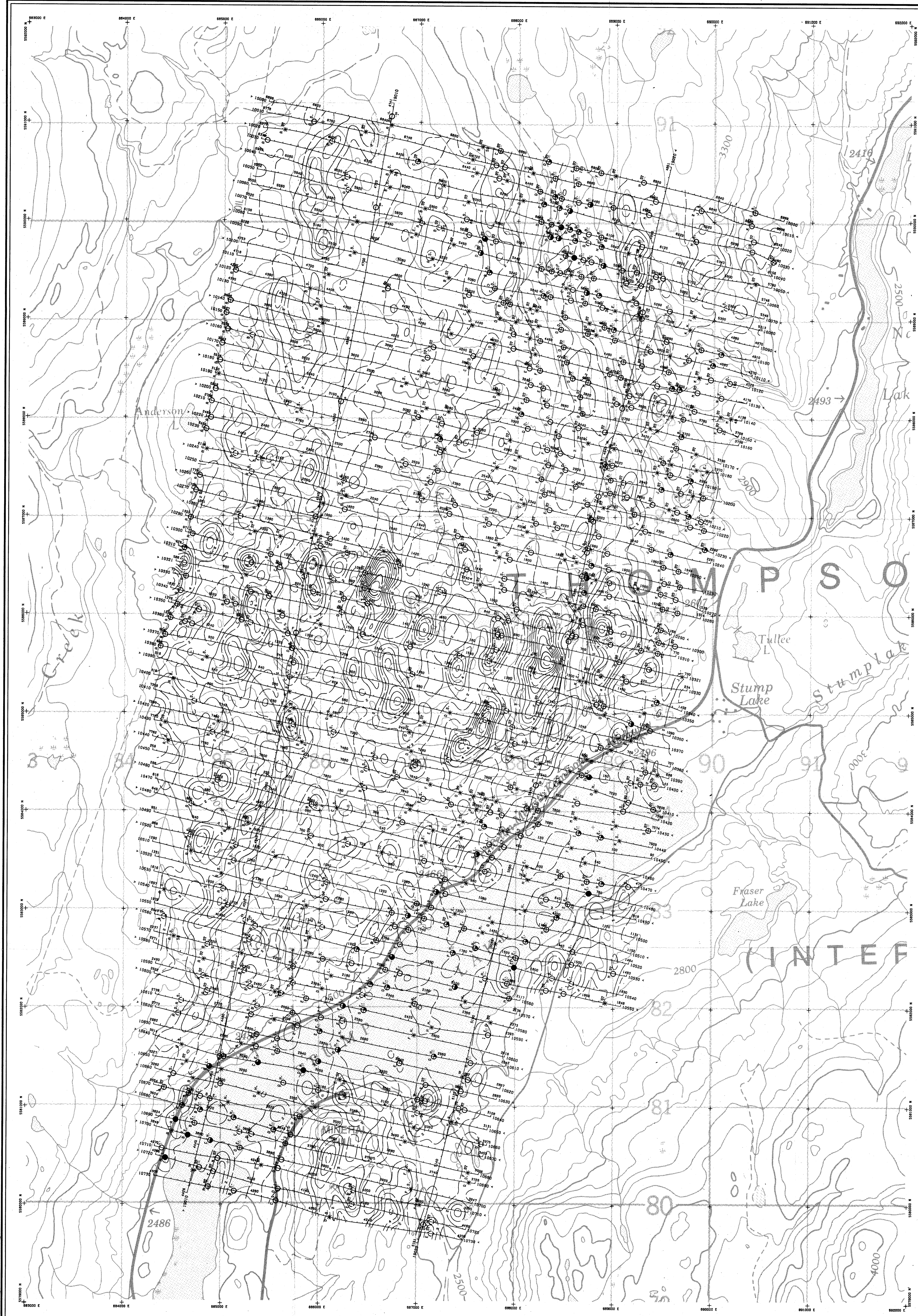
ELECTROMAGNETIC ANOMALIES

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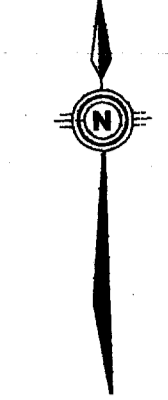
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TECHNICAL SUMMARY

Navigation: Serial real time differential GPS positioning
 Data reduction grid interval: 40 metres
 Terrain clearance: Helicopter 60 m
 Data sampling interval: 0.1 second
 Magnetometer sensitivity: Scintrex cesium / 0.01 nT
 VLF receiver sensitivity: Herz 2A / 1%
 Electromagnetic system: DIGHEM*

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
58000 Hz	1.0 ppm	Horizontal coplanar



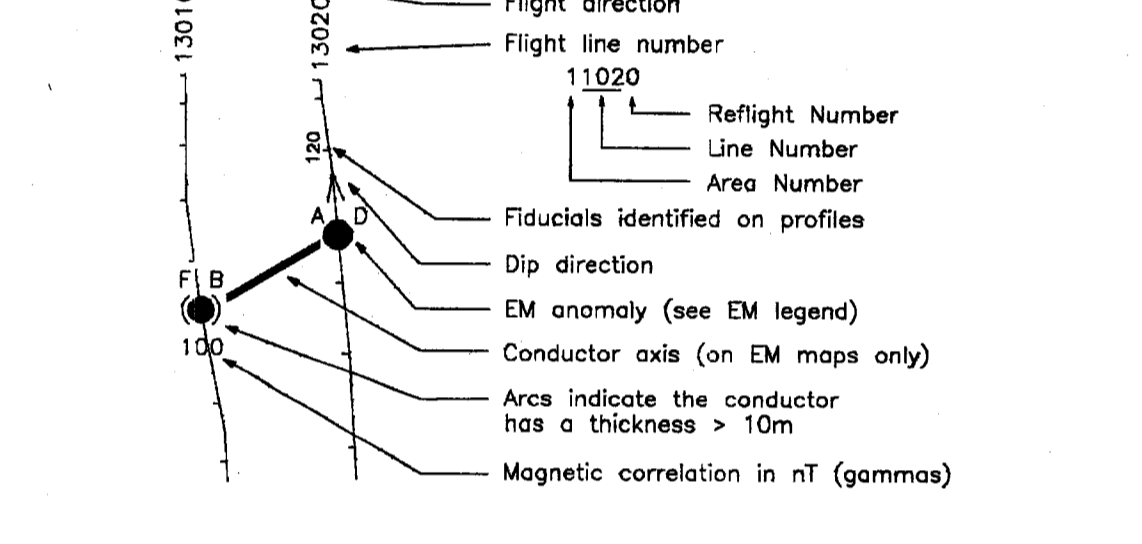
ELECTROMAGNETIC ANOMALIES

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
	*	Questionable anomaly

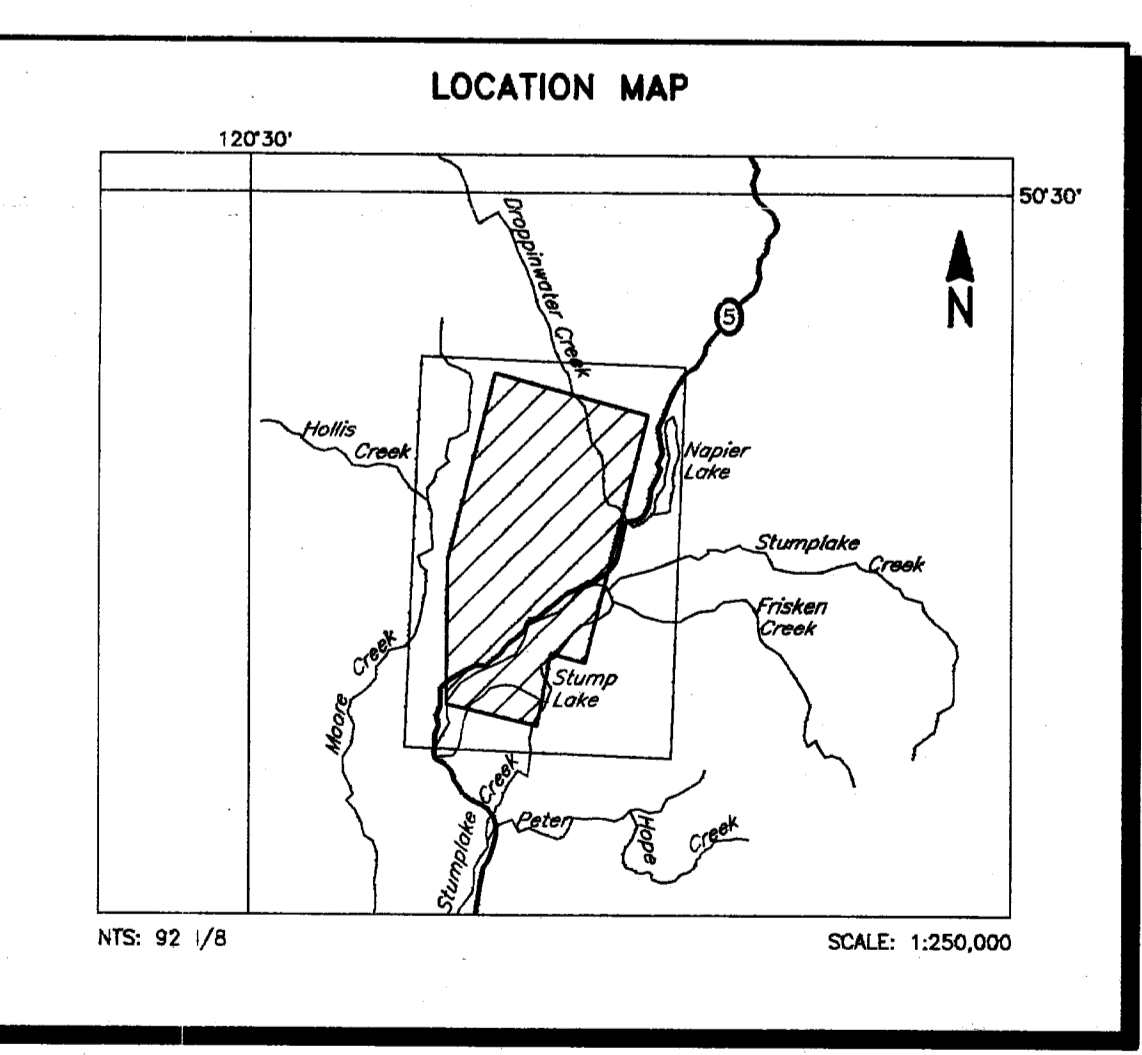
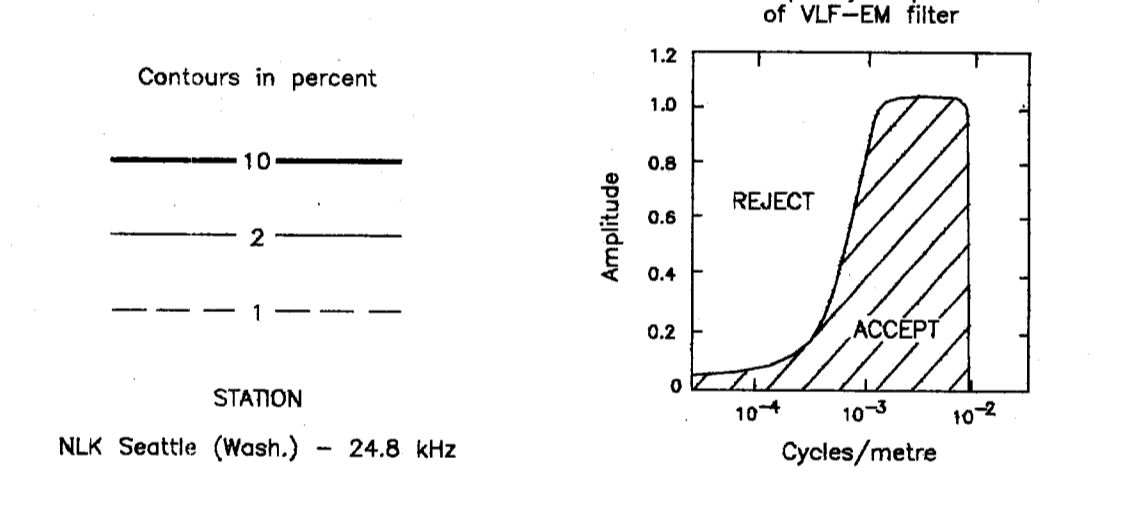
Anomaly Identifier	Interpretive symbol	Conductor (model)
B	—	Bedrock conductor
D	—	Narrow bedrock conductor ("thin disc")
S	—	Conductive cover ("horizontal thin sheet")
H	—	Broad conductive rock unit, steep conductive weathering, thick conductive cover ("half space")
E	—	Edge of broad conductor ("edge of half space")
L	—	Culture, e.g. power line, metal building or fence

Depth is greater than	Interpretive symbol	Interpretation
15 m	—	Edge of broad conductor
30 m	—	Edge of broad conductor
45 m	—	Edge of broad conductor
60 m	—	Edge of broad conductor

FLIGHT LINES WITH EM ANOMALIES

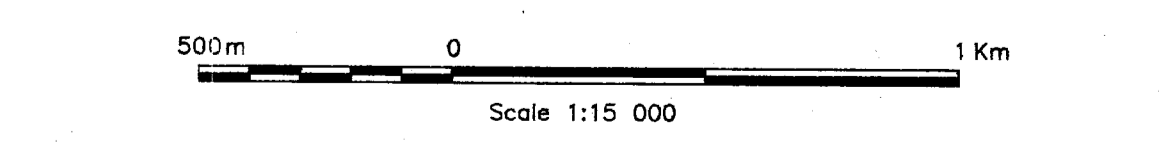


VLF CONTOURS

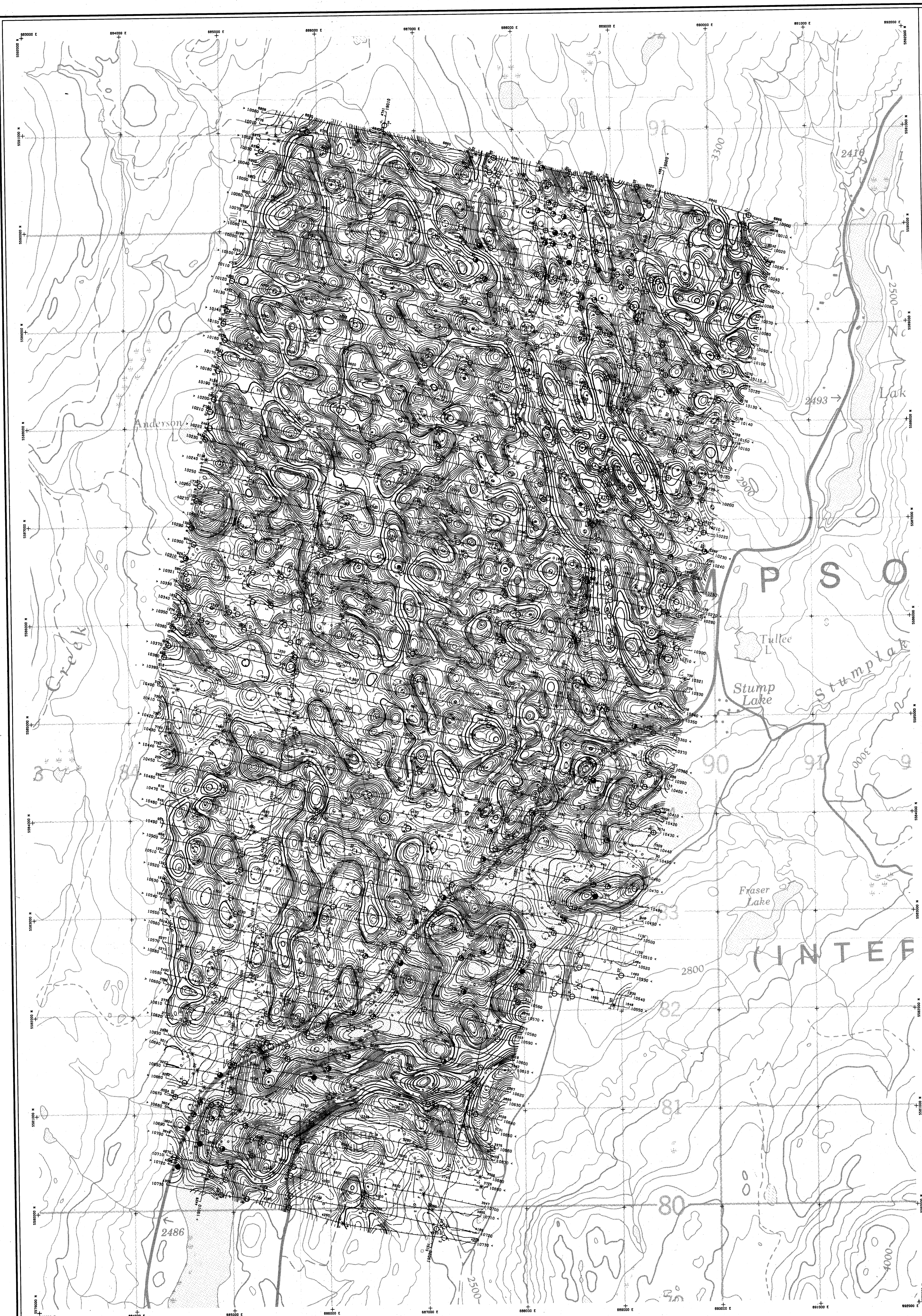


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FILTERED VLF
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TECHNICAL SUMMARY

Navigation Scani real time differential GPS positioning
 Data reduction grid interval 40 metres
 Terrain clearance Helicopter 60 m
 Electromagnetic sensor 30 m
 Magnetometer, VLF receiver 40 m
 Data sampling interval 0.1 second
 Magnetometer / sensitivity Scintrex cesium / 0.01 nT
 VLF receiver / sensitivity Herz 2A / 1%
 Electromagnetic system DIGHEM

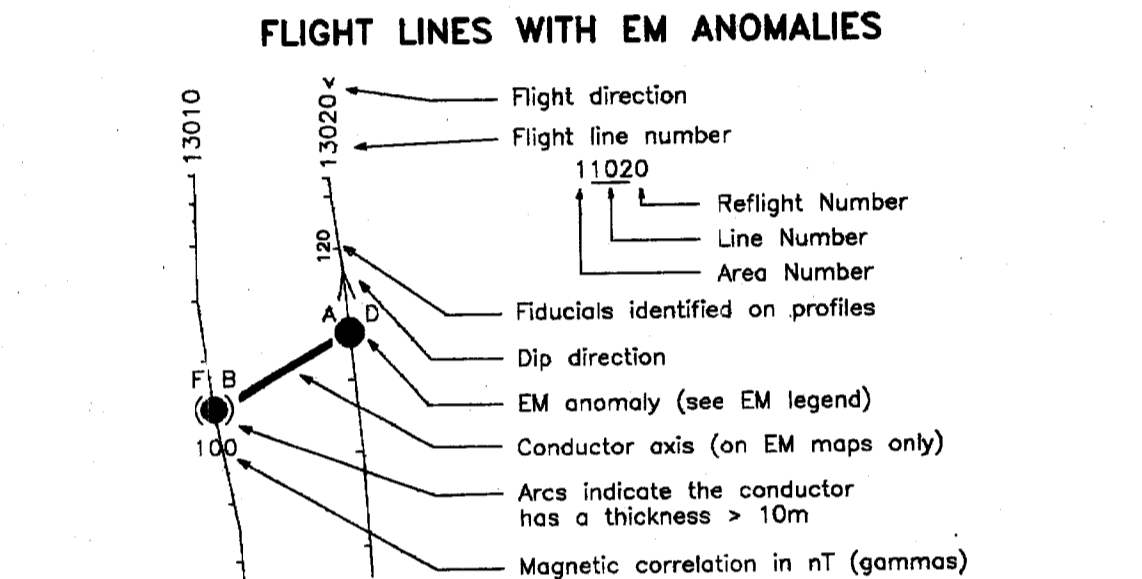
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar



ELECTROMAGNETIC ANOMALIES

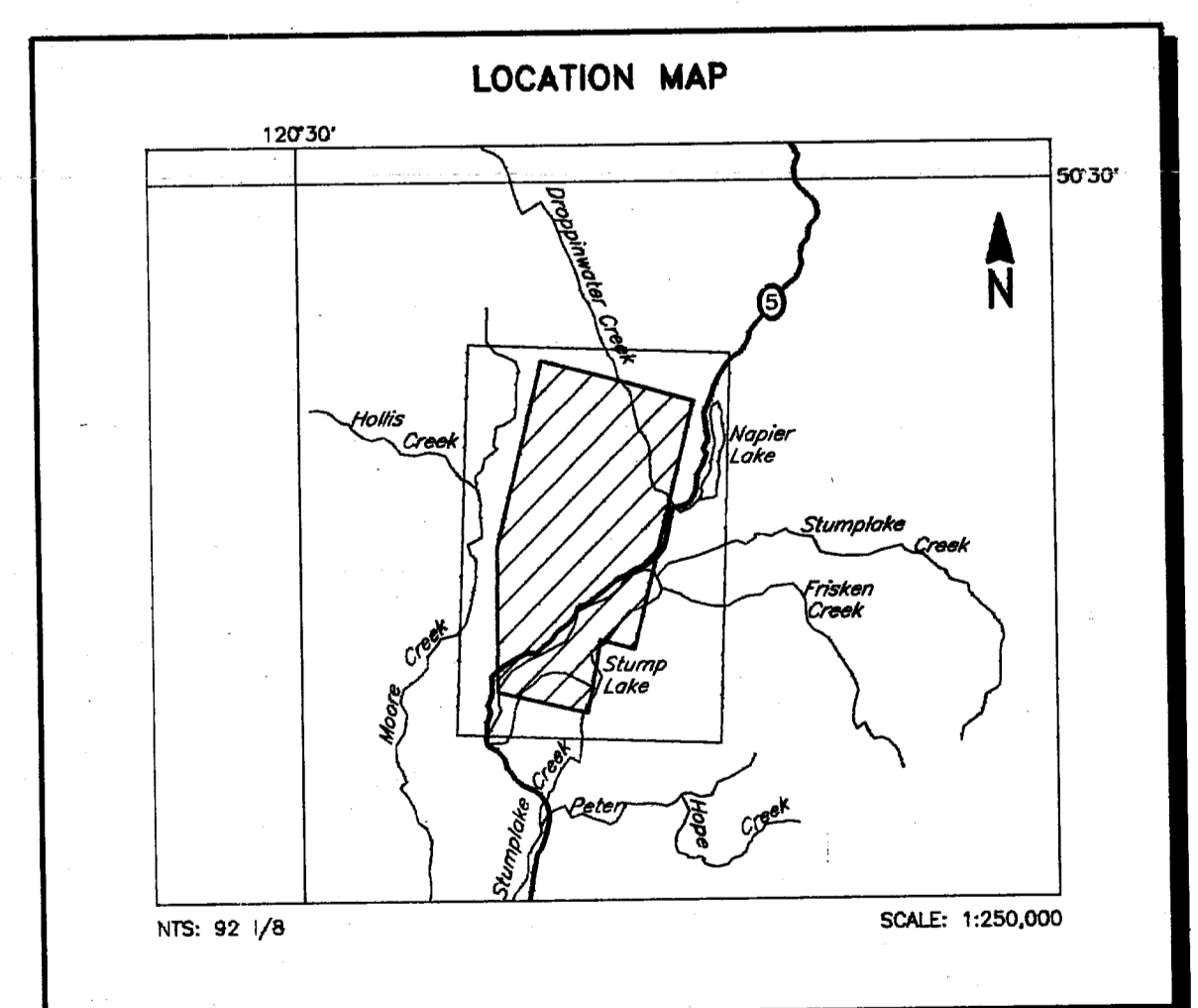
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

Anomaly Identifier	Interpretive symbol	Conductor ("mode")
B	—	Bedrock conductor
D	—	Narrow bedrock conductor ("thin slice")
S	—	Conductive cover ("horizontal thin sheet")
H	—	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	—	Edge of broad conductor ("edge of half space")
L	—	Culture, e.g. power line, metal building or fence



CALCULATED VERTICAL GRADIENT CONTOURS

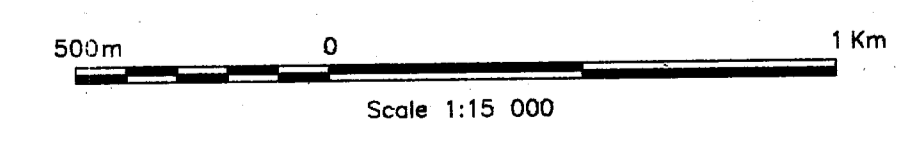
—————	2.5 nT/metre
—————	0.5 nT/metre
—————	0.1 nT/metre
—————	0.05 nT/metre



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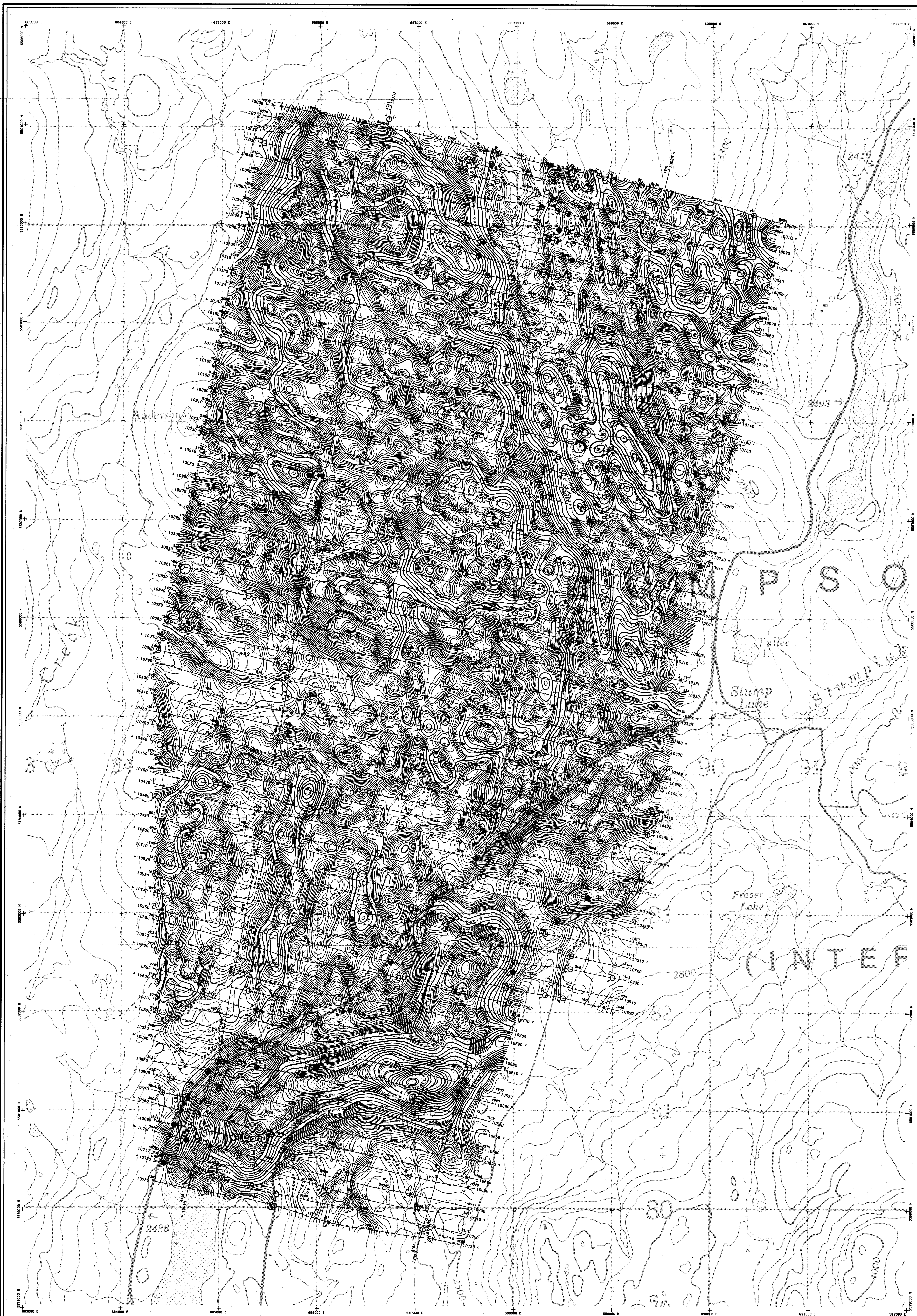
CALCULATED VERTICAL GRADIENT MAGNETICS

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TECHNICAL SUMMARY

Navigation: Serial real time differential GPS positioning
 Data reduction grid interval: 40 metres
 Terrain clearance: Helicopter 60 m
 Magnetometer: VLF receiver 40 m
 Data sampling interval: 0.1 seconds
 Magnetometer / sensitivity: Schlumberger / 0.01 nT
 VLF receiver / sensitivity: Schlumberger / 0.01 nT
 Electromagnetic system: DINGEM



Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
2	1-5 siemens	Horizontal coplanar
1	< 1 siemens	Horizontal coplanar
*	Questionable anomaly	

ELECTROMAGNETIC ANOMALIES

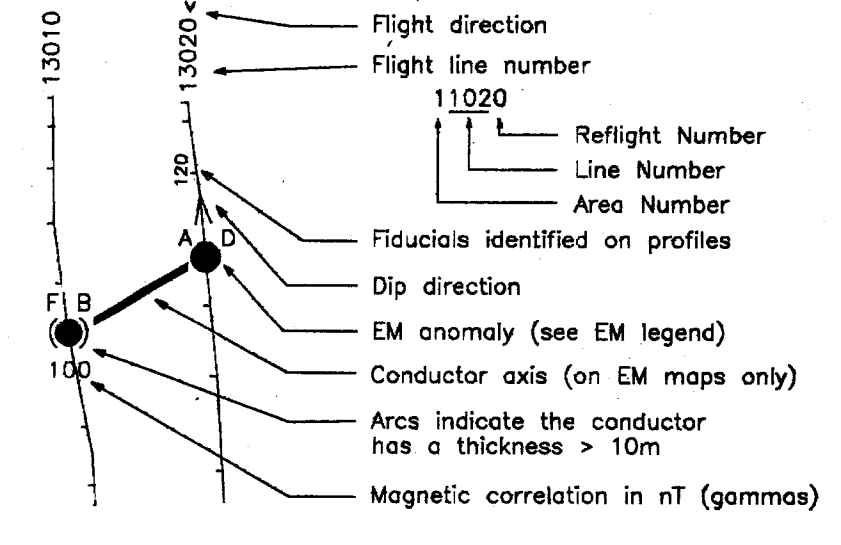
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	○	1-5 siemens
1	○	< 1 siemens
-	*	Questionable anomaly

Interpretive symbol	Interpretive symbol	Interpretive symbol
B	B	Conductor ("model")
D	D	Bedrock conductor
S	S	Narrow bedrock conductor ("thin sheet")
H	H	Conductive cover ("horizontal thin sheet")
E	E	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
L	L	Edge of broad conductor ("edge of half space")
		Culture, e.g. power line, metal building or fence

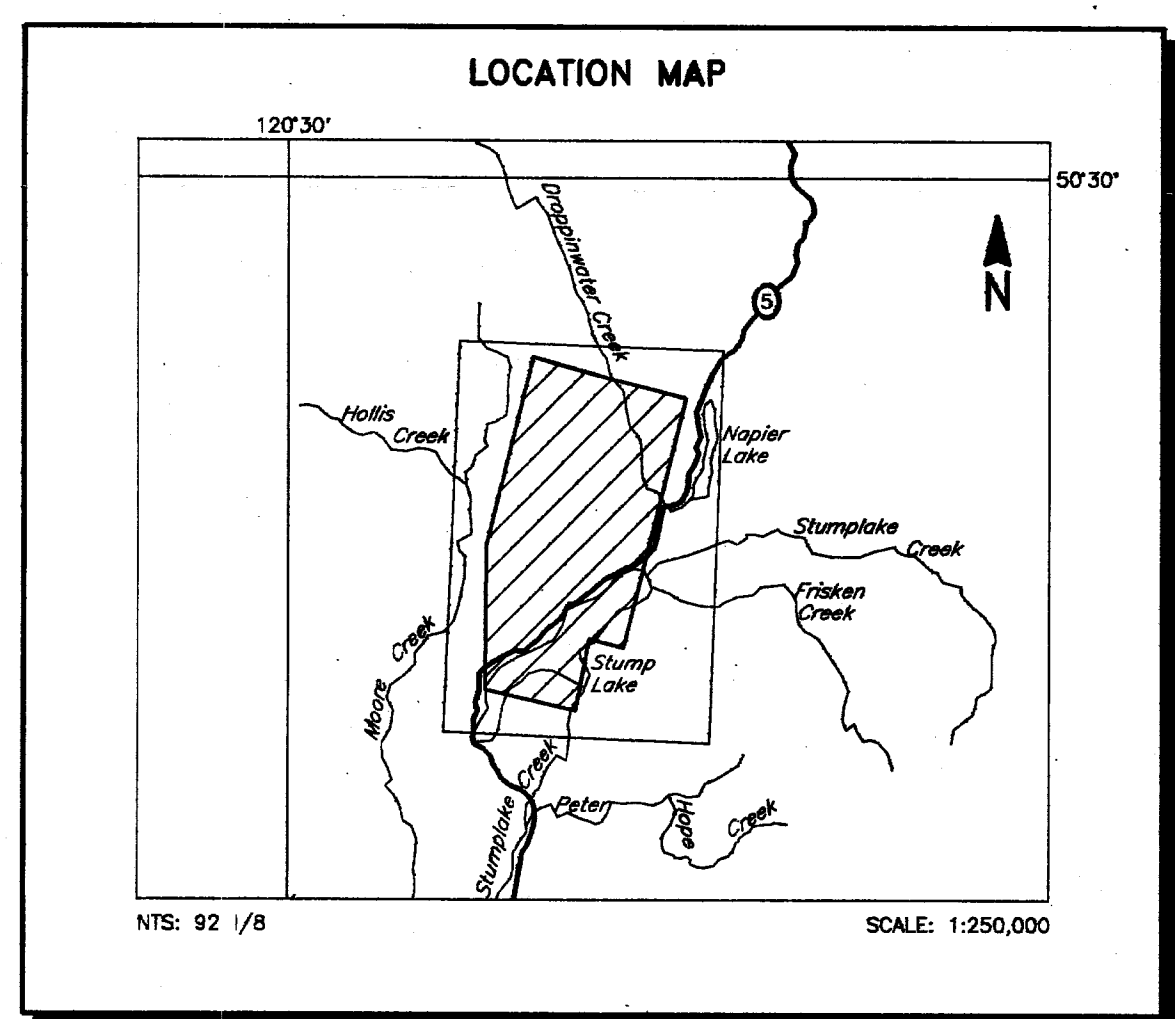
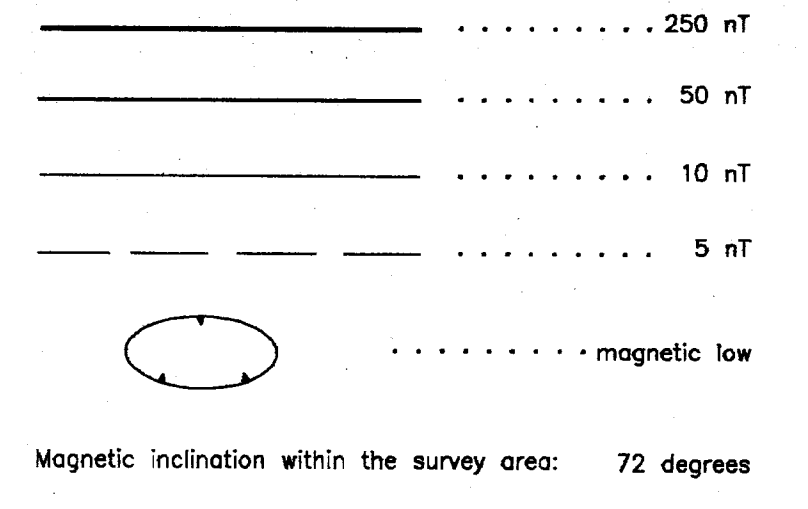
Depth is greater than:
 15 m
 30 m
 45 m
 60 m

Inphase and Quadrature of conductance is greater than:
 5 ppm
 10 ppm
 15 ppm
 20 ppm

FLIGHT LINES WITH EM ANOMALIES



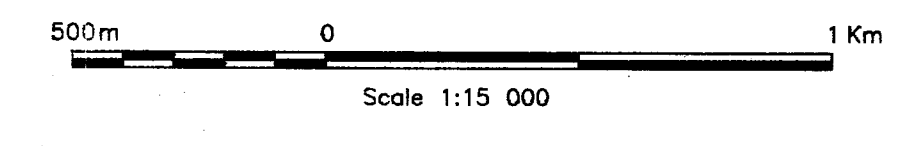
TOTAL FIELD MAGNETIC CONTOURS



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TOTAL FIELD MAGNETICS

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