ASSESSMENT REPORT

QUARTZ CREEK PROJECT

(GEOLOGICAL, GEOPHYSICAL & GEOCHEMICAL WORK)

ANGELA (1039) ANDREA (1128) CLAIMS

GOLDEN MINING DIVISION

BRITISH COLUMBIA

NTS 82 N / 6W

Latitude 51° 24' North

Longitude 117° 19' West

Owner/Operator Aurun Mines Ltd.

Author E. Horne

Date June 1984

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1.0 INTRODUCTION

1.1 General

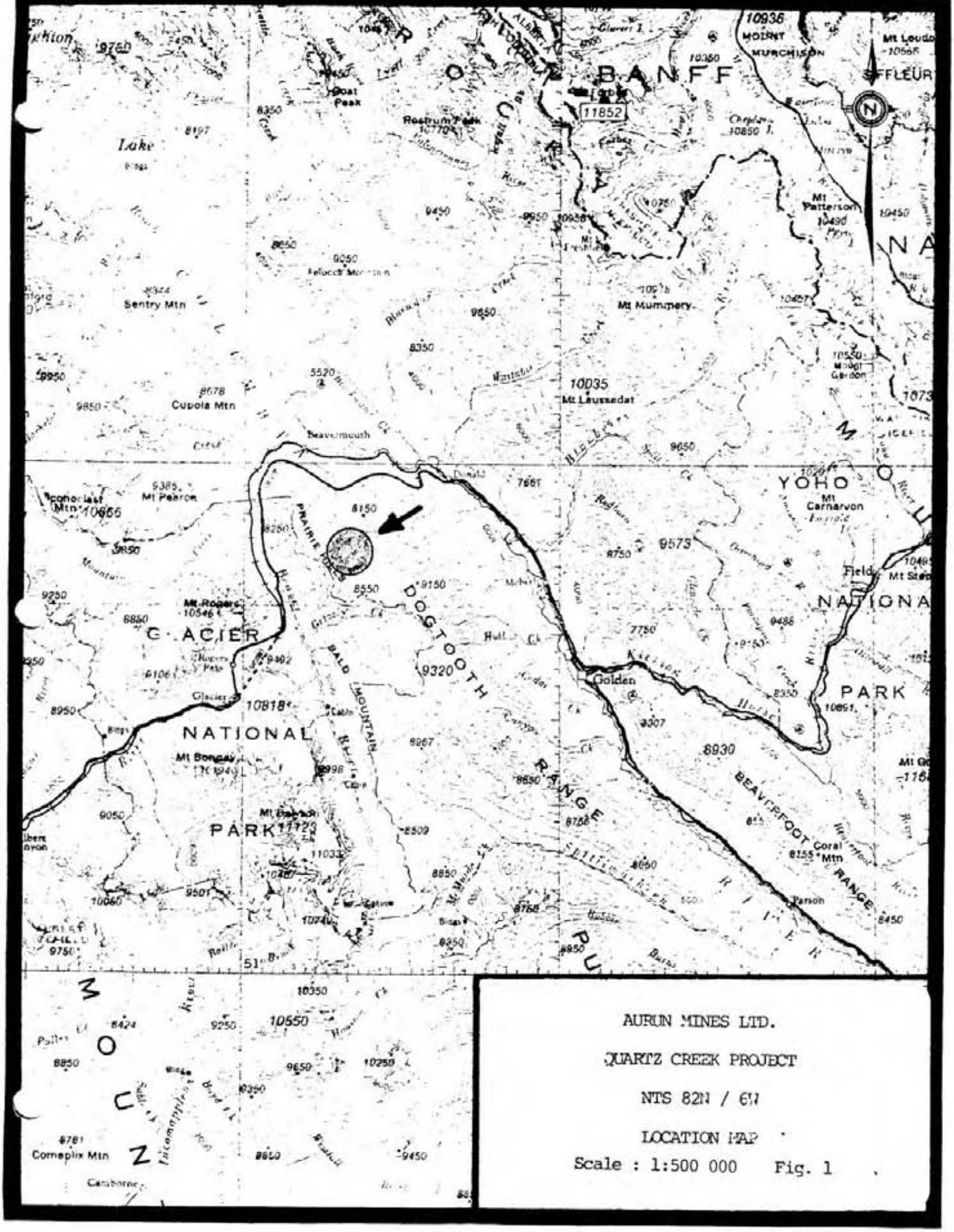
This assessment report on the Quartz Creek Project is submitted to the Department of Mines and Petroleum Resources, British Columbia in compliance with the Mines and Regulations Act pertaining to application for assessment credit for all work done on the Quartz Creek Project Claims to date during 1984.

The Quartz Creek Project area consists of two 20 unit modified grid claims owned and operated by Aurun Mines Ltd., of #910 640 - 8 Ave. S.W., Calgary, Alberta, T2P 1G7,

The claim names are Andrea, record number 1128, recording date: June 23, 1983 and Angela, record number 1039, recording date: October 8, 1982. Both claims are located in the vicinity of the upper fork of Quartz Creek, NTS 28N/6W in the Golden Mining Division and are shown on Figure 1, and Figure 2.

1.2 Location and Access

The Angela and adjoining Andrea claims comprise the Quartz Creek Project area and are located in the Golden Mining Division, NTS 82N/6W, latitude 51° 24 & 25' north and longitude 117° 18, 19 & 20' west. The property is accessed by TransCanada Highway 1, for a distance of 40.2 kilometres northwest of Golden and then by generally well maintained dirt road; the Quartz Creek Forestry Service Road that runs southward and parallel to Quartz Creek for a distance of 9.8 kilometres.



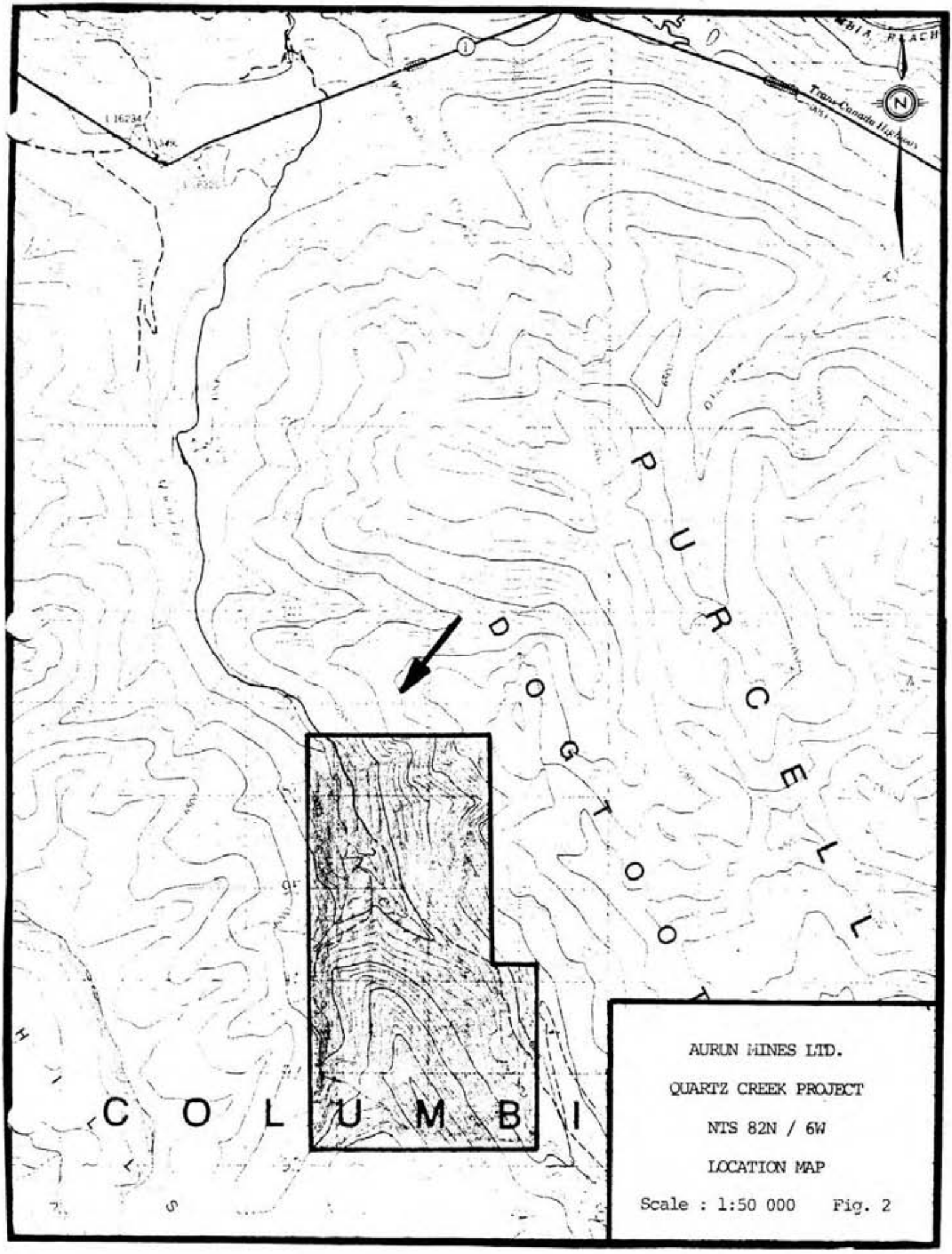
AURUN MINES LTD.

QUARTZ CREEK PROJECT

NTS 82N / 6W

LOCATION MAP

Scale : 1:500 000 Fig. 1


PURCELL
DOGTOOTH
COLUMBIA
Trans-Canada Highway
N
AURUN MINES LTD.
QUARTZ CREEK PROJECT
NTS 82N / 6W
LOCATION MAP
Scale : 1:50 000 Fig. 2

The topography of the claims is rugged with relief from 1500 to 2320 metres AMSL. The terrain consists of glacial ridges, well forested valleys and ridge base slopes. The forested areas in many locations have been intensely logged. The low lying and intermediate areas are covered with glaciofluvial deposits and drift estimated to be 2.0 to 6.0 metres thick. Outcrop in these locations is restricted to the river bank cuts and localized portions of road cuts.

1.3 History and Ownership

The Quartz Creek area has been known to contain placer gold since 1884. Numerous small placer holdings have been tested and operated on Quartz and the Eastern junction of Quartz Creek (Porcupine Creek) since the gold discovery date. References to this production are cited in Bulletin 28, Placer Gold, produced by British Columbia, Ministry of Energy, Mines and Petroleum Resources, and Summary Report 1932, Canada Department of Mines and Geological Survey.

During 1980 the immediate area of the claims was staked with two (20 unit) claims, Jolly Good, record number 780 and Quartz, record number 779. Both claims were allowed to lapse without assessment by Welcome North Mines Ltd. Presently the claims held in the area of Quartz Creek consist of the Angela Claim (20 unit), record number 1039, recording date; October 8, 1982 and the Andrea Claim (20 unit), record number 1128; recording date June 23, 1983. Both claims were staked by E. Horne and were transferred with all interest by Bills of Sale, dated the 21st of December 1982 and the 25th of October 1983, to Aurun Mines Ltd., the

present owner and operator. Application to group the claims was made in May 1984. One other two post claim EB 1, record number 402 that falls within the Angela Claim and was held by Mr. Ed Bushby of Lumby, British Columbia, this two post claim lapsed in August of 1983 and was two post staked and recorded by E. Horne in June 1984.

No assessment work was done on the Angela Claim during 1983; a rent cash payment of $2200.00 was made by Aurun Mines Ltd., on September 20, 1983.

1.4 Summary of Work Done

1.4.1 General

The Angela and Andrea 20 unit modified grid claims were worked on by personnel for Aurun Mines Ltd., of Calgary, Alberta. The field work lasted ten (10) days from May 23rd to June 1, 1984. The personnel performing the work were as follows:

E. Horne (geologist)	May 23rd to June 1st. 1984
T. Wall (geologist)	May 23rd to June 1st, 1984
R. Chapman (assistant)	May 23rd to June 1st, 1984
J. Schindler (consulting geol.)	May 28, and 29th, 1984

The work performed on the claims consisted of magnetometer and VLF geophysical surveys, geochemical soil, silt and rock chip sampling, geological mapping and prospecting. High ground on the claims was not field checked due to snow conditions. The property was accessed on a daily basis by rental 4 x 4 vehicle. Accommodation and meals were in

a motel and restaurants in Golden, B.C. Other visits to the property were made in 1983 by personnel of Aurun Mines Ltd., or on behalf of them, notes on this data are included in Appendix 5. However, no assessment has been claimed on this work and the data is supplied for only purposes of historic documentation.

1.4.2 Geophysics

The 1984 geophysical field survey consisted of a total field Proton Precession Magnetometer survey using a Geometric G-816 model instrument and a VLF Survey using a Geonics Ltd. EM16 VLF Electromagnetic Unit. The field surveys were primarily done on traverse lines along the main access roads and portions on Quartz Creek. Readings were generally taken on 50 metre stations, all readings locations and base stations are numbered and shown on the Geophysical maps 1 and 2 which are included in the map folder of this report.

The total number of 50 metre stations on which magnetometer survey readings were taken is 377 or 18.85 line kilometres. The data is included on Table 1, Appendix 1, and Map 2.

The total number of 50 and 20 metre stations on which VLF survey readings were taken is 396 or 18.5 line kilometres. The data is included on Table 1, Appendix 2, and Map 2.

1.4.3 Geochemical Survey

The 1984 field program consisted of collecting one hundred and fifteen geochemical soil samples,, thirty-three silt samples and nine rock geochemical samples. These samples were analysed by Loring Laboratories Ltd., of 629 Beaverdam Road N.E., Calgary, Alberta. The laboratory procedures used are included in Appendix 3.

- Soil Samples These samples were prepared and anlaysed for Au, Ag, As. One half of the samples were also analysed for Hg. The samples were predominantly collected in the "B" soil horizon except for some test analyses in the "A" soil horizon. The samples were collected, analysed and plotted with sequential numbers prefixed with the letters RCZ and TWZ. All the analytical results are plotted on Map 3 included in the map folder and are shown in the laboratory results included on Table 1, Appendix 3.

- Silt Samples. These samples were prepared and analyses for Au, Ag. and As, four of them were also analysed for Hg. The samples were collected above drainage confluences with Quartz Creek and on Quartz Creek, all samples consisted of fine sand and silt and were taken at localities of established Creek drainage. The samples were taken off the upper 0 to 7.0 cm of silt, i.e., most recently deposited material. The samples were field labelled and are reported

with sequential numbers, prefixed with the letters RCS and TWS. All of the analytical results are plotted on Map 3 and are shown on the laboratory result sheets included on Table 2 of Appendix 3.

- Rock Geochemical Samples. These samples were prepared and analysed for Au, Ag, As and Hg. The samples were collected on outcrop, float and any rock types that were well oxidized, rusty or altered. Frequent minerals of interest seen on the property are quartz, ankerite-siderite, mariposite, graphite and limonite. The samples are numbered sequentially from #1776, to 1784, the results are plotted on Map 3 and are shown on Table 3 of Appendix 1.

1.4.4 Geological Mapping and Prospecting

Preliminary reconnaissance geological mapping was done over a total of 20 line kilometres. The mapping consisted of identifying the rock types, attempts at stratigraphic correlation and structural geology measurements. The results of this mapping are shown on Map 4, Scale 1:5000, which is included in the Map folder of this report.

The rock types encountered during the 1984 field survey belong to the Horsethief Creek group, considered to be of Lower Proterozoic age. These rocks form part of th Dogtooth Range to the east of the Purcell Mountains.

These rock types are considered to belong to the Windermere system and are as follows:

- Lower Grit (LG) This unit consists generally of gritty feldspathic sandstone with slate interbeds. Graded bedding is frequently observed and the unit has some characteristic bluish quartz and some quartzite interbeds.

- Middle Slate (MS) This unit is comprised predominantly of buff to dark grey laminated slate and slaty siltstone. The lower section frequently has gritty interbeds and the upper section has some dolomitic interbeds.

- Upper Carbonate (UC) This unit consists of interbedded limestone, dolomite and slate. Individiual carbonate beds do not appear to be traceable along strike.

During the field program snow conditions impeded gelogical mapping in the well exposed high ground or ridge areas. In general the lower parts of the claim group has poor exposure (less than 10%).

1.5 List of Claims Work Performed On

1.5.1 VLF Survey

The electromagmetic VLF survey was done on a total of 396 stations, generally on 50 metre stations for a distance of 18.5 line kilometres. All the data points are plotted on a scale of 1:5000 on the VLF Electromagnetic Plan (Map 1). The work performed on individial claims is as follows:

Claim	Grid	Data Points	Stations	Line Kilometres	Percent
Angela	50 m	292	1-173 182-254	14.6	78.9%
	20 m	42	284-310 347-376	0.8	4.3%
Open ground (Trisha Claim)	50 m		173-182	0.5	2.7%
Andrea	50 m	52	254-283 310-346	2.6	14.1%
		396		18.5	100.0%

1.5.2 Magnetometer Survey

A ground Magnetometer Survey was done on a total of 377 - 50 metre stations for a distance of 18.8 line kilometres all the data points, except 77 readings, are plotted on a scale of 1:5000 on the enclosed Magnetometer Plan (Map 2). 77 spurious readings were obtained and these results are tabulated in Appendix 1, but they were not plotted on the map nor used in the interpretation. The work performed on individual claims is as follows:

Claim	Grid	Data Points	Line Kilometres	Percent
Angela	50 m	295	14.7	78.2%
Open Ground (Trisha Claim)	50 m	10	0.5	2.7%
Andrea	50 m	72	3.6	19.1%
		377	18.8	100.0%

1.5.3 Geochemical Survey

The Geochemical Survey consisted of sampling and analysing 115 soil geochemical samples, 33 geochemical silt samples and 9 rock geochemical samples. The sample results are enclosed in Appendix 3 and the sampling locations are shown on the 1:5000 scale Geochemical Plan (Map 3). The work performed on individual claims is as follows:

Claim	Number of Samples	Type of Sample	Overall Percent	Percent By Type
Angela	83	Soil	52.9)	Soil 72.2%
	21	Silt	13.4)	Silt 63.6%
	5	Rock	3.2)	Rock 55.5%
Open Ground	3			
(Trisha Claim)	nil		1.9	Soil 2.6%
Open Adjacent Ground	6	Soil	3.8)	Soil 5.2%
	6	Silt	3.8)	Silt 18.2%
Andrea	23	Soil	14.6)	Soil 20.0%
	6	Silt	3.9)	Silt 18.2%
	4	Rock	2.5)	Rock 44.5%
	157 Samples		100.0%	

Only the 142 samples collected on Andrea and Angela claims are claimed for assessment purposes.

1.5.4 Geological Mapping and Prospecting

Preliminary reconnaissance geological mapping was conducted along portions of the claims. This work was done primarily along the road cuts, the Quartz Creek Channel and some tributary creek gullies, all of the results of this mapping is shown on the 1:5000 scale Geological Plan (Map 4) enclosed with this report.

Claim	Area Investigated	Total Available Area	Percent Prospected	Percent Overall
Angela	2.35 km²	4.75 km²	48.5%	73.4%
Open Ground (Trisha Claim)	0.25 km²	(approx.) .25 km²	100.0%	7.8%
Andrea	0.6 km²	5.0 km²	12.0%	18.8%
	3.2 km²	10.0 km²	32.0%	100.0%

2.0 DETAILED TECHNICAL DATA AND INTERPRETATION

2.1 General

The purpose of the 1984 field program was as follows:

- To investigate for potential gold bearing zones (the source of placer gold) by geophysical, geochemical and geological reconnaissance.
- Determine the lithology, stratigraphy, and structural geology. An attempt was also made to determine if a fault exists along the Quartz Creek linament.
- To obtain sufficient data and prepare geological base maps for a second phase if a more detailed program of geological reconnaissance, sampling and geophysics is warranted.

The results of the program to date indicate that some anomalous gold soil geochemical values are present, these zones should be further detailed. The geophysical work to date indicates that the magnetometer survey does not seem to indicate magnetic anomalies or rock-type magnetic susceptibility variations. The VLF electromagnetic survey would seem to indicate some very low frequency in-phase and out-of-phase crossovers, or conductive zones. Attempts to outline the cause of these will be made in a future field program which would appear to be justified on the basis of the results obtained during this preliminary investigation.

2.2 Geophysics (VLF Survey)

2.2.1 Program and Results

The VLF survey was done with an EM 16 VLF electomagnetic unit, the specifications are enclosed in Appendix 4. The transmitter station used was NSS Annapolis - Maryland, frequency 21.4 kHZ. The strike of the geology is generally north-northwest and thus generally pointed towards the transmitter station. All readings (data points) were located by belt chain measurements from established stations or known points on the property. These data points were subsequently numbered and are shown on the VLF electromagnetic survey (Map 2) and the table enclosed in Appendix 2, the total number of data points measured during the field traverses are 396, all but 52 are on 50 metre intervals. The separate 52 readings were taken on a previously established 20 metre grid. Two readings were taken at each data point, these are a vertical in-phase component and a vertical out-of-phase component of the secondary field expressed as a percentage of the primary field (quadrature). The direction faced for all readings was south. Profiles of the tilt angle (in-phase and quadrature) are illustrated with Map 2, no smoothing factors were applied to this preliminary data. Also shown on Map 2 are contours of the in-phase component, this was done to confirm trends for further VLF grid work.

2.2.2 Conclusions

The results of the data are that there are some indications of conductive zones, these may be related to the interpreted Quartz Creek fault zone, discussed in the geology section of this report.

The conductive zones, possibly conductive clay zones or overburden are shown on the profiles illustrated on Map 2. Further geophysical surveys (VLF) work are required to outline the areas of interest and determine the nature of these conductive zones. These zones are not the same in nature. Profiles A, B, C, and D have positive in-phase and generally positive out-of-phase components in the crossover (conductive) areas whereas profiles E, F, G and H have strongly negative in-phase and out-of-phase components to the east of the conductive areas.

2.3 Geophysics (Magnetometer Survey)

2.3.1 Program and Results

The magnetometer survey was done with a Geometrics G-816 model proton precession magnetometer, due to the topography the sensor was not staff-mounted. The same individual using a back harness did all of the surveys. Data was collected on magnetically quiet, unsettled and active days. This was necessary because of the short duration of the program and the preliminary nature of the surveys. The base station, "Station A" was used for all base-level corrections. The time, date, reading, base-level and diurnal drift

corrections and the corrected reading for each station are given in Appendix 1. The total number of readings (data points) taken is 377. All of these readings are at 50 metre spacing on the traverse lines. Only 300 of the readings are plotted on the magnetometer plan (Map 1). The remaining 77 readings are considered to be spurious and are so designated on Map 1 and the table enclosed in Appendix 1. The regional total magnetism measured at Station A was 58 447 gammas. No aeromagnetic maps are available for map sheet NTS 82N/6W.

2.3.2 Conclusions

The magnetometer data to date indicates that there are no magnetic anomalous areas and that the rock type magnetic susceptabilities do not substantially differ; no magnetic trends are evident on the 1:5 000 scale magnetometer plan (Map 2). The differences in the magnetometer readings are attributed to magnetic minerals within the quarternary fluvial, glaciofluvial and till formations which would be expected to show differences in magnetic readings as typified by the magnetometer readings taken to date. Further magnetometer in-fill work is recommended in the areas not covered to date to ascertain that no magnetic anomalous zones occur and that in fact rock types beneath the overburden cover cannot be determined by means of a magnetometer survey.

2.4 Geochemistry

2.4.1 Program and Results

The geochemcial survey consisted of stream, soil and geochemical sampling. The purpose of this sampling was to attempt to establish the source area for the placer gold which predominantly occurs on bench glaciofluvial gravels above the eastern fork of Quartz Creek (Porcupine Creek). All samples were located by Brunton Compass and belt chain traverse surveys from field established locations and know topographic locations. The sample locations are shown on the 1:5 000 geochemcial plan (Map 3) and the analyses are included on Tables 2 to 3 of Appendix 3. All of the samples were analysed by Loring Laboratories Ltd., of Calgary, Alberta for gold (Au), silver (Ag), arsenic (As). Mercury (Hg) was frequently analysed for.

The geochemical soil sampling was generally done in the "B" soil horizon. This horizon is generally poorly developed on the property. It consists of 10 to 20 cm of dark to medium brown silty clay soil, which is predominantly covered by 5 to 20 cm black organic peat and an upper moss. On some occasions the "B" horizon was yellow-ochre or rusty in color. Some minor sampling was done on the "A" horizon; when sampled the portion taken was the lower organic section; ie, peat. When sampling adjacent to the roads care was taken to collect a non-disturbed section from the road bank cut and the outer 30 cm was cleared away before taking the sample.

The geochemical silt sampling consisted of taking the uppermost recently deposited light grey to buff silt and fine sand from established drainage systems of Quartz and Porcupine Creeks and their tributary systems. The purpose of this sampling was to isolate possible drainage patterns for gold mineralization. The rock geochemical sampling was done on the most favourable looking rock types encountered. This sampling was done on "float rock" and outcrops. The samples were of the "grab" or selective channel chip type. Rock types sampled consisted of argillaceous slate, slightly graphitic and rusty slate, quartz ankerite (often rusty and vuggy) and gritty sandstone (often rusty with minor pyrite).

2.4.2 Conclusions

The preliminary conclusions are that some slightly anomalous gold, arsenic, mercury and silver samples were noted from the stream sediment and soil geochemical sampling. Samples with greater than 15 ppb gold (Au) are considered slightly anomalous, and are shown with a shaded outline on the geochemical plan (Map 3). Further detailed work is required in order to establish if these zones are of any economic significance. At this time it is not known if the soil horizons sampled reflect local bedrock dispersion patterns or transported glaciofluvial and/or bench gravels.

A statistical analysis of the geochemical soil samples indicates that anomalous values with a high degree of certainty (values above the 95th percentile) are very rare and any conclusions regarding anomalous zones would be premature. The data does however indicate some areas where more intensive sampling should be done.

The problem of distinguishing the glaciofluvial placer bench gravels from other Pleistocene glacial deposits and recent soil should be further investigated; and an attempt should be made to outline the glaciofluvial placer bench gravels.

The interval over which the "B" horizon soil samples were taken was maintained from the top of the "B" soil horizon for a depth of 10 to 20 cm. The depth of the "B" soil horizon is relatively constant in the area of study. The slope of the terrain sampled was low to moderate varying from 5% to 30%.

The geochemical silt sampling, in conjunction with the soil sampling seems to indicate that the most prospective area is to the east of Quartz Creek and Porcupine Creek. One must bear in mind however that a large portion of the claims has not been sampled or prospected to date. The rock geochemical sampling appears to indicate that no gold bearing rock types have been sampled. In other words, no

significant gold values were encountered in any of the most favourable rock types seen to date. However, no conclusions can be made at this time on what rock types future prospecting should be concentrated.

2.5 Geological Mapping

2.5.1 Program and Results

Geological reconnaissance mapping was done along road cuts and accessible stream and tributary valleys. The ridge outcrop areas were not accessible at the time of the field work. All outcrop encountered was plotted on the geological plan (Map 4). All outcrop was located by belt chain and Brunton Compass, survey from established stations or well established topographic features. Structural data ie, strike and dip, jointing foliation or folding was compiled and are shown on the map at all locations where this type of data was available. When outcrop areas shown on the map do not have this data it is primarily due to poor exposure; that is very small outcrop areas or very broken up outcrop, which was very common in the main rock type encountered; namely, the Middle Slate.

A thrust fault, called the Quartz Creek Thrust Fault by P.S. Simony (1970), is interpreted to occur along the extension of Quartz Creek and the eastern fork of Quartz Creek (Porcupine Creek). This structural feature was a target are for the preliminary field work done. No

direct evidence for the fault was encountered during this program. The interpreted location of this fault is shown on the geological plan (Map 4) to assist in the data analysis for all of the field work done during the program. There appears to be some minor correlation of VLF crossovers, slightly anomalous geochemical values and the interpreted location of this fault. It should also be noted tha the main Quartz Creek placer workings are in the general vicinity of this interpreted fault zone.

The rock types encountered during the field program consisted of Lower Grit, Middle Slate and Upper Carbonate of the Windermere formation, Horsethief Creek group. No outcrop of Lower Grit was encountered during the field program. However, "float" of this member was frequently encountered. One outcrop of Upper Carbonate was encountered on the northwest corner of the Andrea claim. The lithologies of the rock types are described previously in this report. None of the above mentioned rock types returned favorable gold values or indicated that there was any preferential lithological target. This may be due in part to the low sampling population. Further lithological geochemical sampling should be conducted in the future to attempt to relate the gold mineralization to a rock type or structurally controlled feature on which to intensify exploration and geological interpretation.

2.5.2 Conclusions

Further geological mapping is required during the late summer and early fall. The mapping should be commenced on the Ridge (outcrop) areas and extended into the areas of poor outcrop. This will assist in the delineation of geologically favourable structural areas in which intensified geochemical and geophysical work should be done. The prime economic target (lode gold) remains to be a viable proposition in light of the known placer operating history and limited nature of the encouraging results (slightly anomalous gold geochemical values and the VLF data).

3.0 ITEMIZED COST STATEMENT

3.1 Wages

Number of mandays = 30.5

9.75 mandays R. Chapman	May 23rd to June 3nd	@ 62.85/day	$ 612.78
9.75 mandays E. Horne	May 23rd to June 3nd	@ 215.00/day	$2096.25
9.75 mandays T. Wall	May 23rd to June 3nd	@ 104.60/day	$1019.85
1.25 mandays J.Schindler	May 28th and May 29th	@ 300.00/day	$ 375.00
Total 30.5 mandays at average rate of $134.55/manday			$4103.88

Note: Only travel in British Columbia is included. Total: $255.92

3.2 Food, Accommodation and Supplies

Food - 30.5 mandays at average rate of $20.92/manday	$ 638.06
Accommodation - 30.5 mandays at average rate of $17.82/manday	$ 543.51
Supplies - Batteries for equipment, base maps flagging ribbon and topofil sample bags	$ 256.25
The average rate for accommodation, food, supplies for 30.5 mandays is $47.14	$1437.82

3.3	Transportation and Equipment Rental	
	Number of equipment days while in B.C. = 10	
	Transportation 4x4 vehicle $22.50/day	$ 225.00
	Fuel (For transportation to and from property from Golden and transporation while in B.C. for work on the property)	$ 147.00
	Proton magnetometer unit rental Model G-816 (Geometrics) 10 equipment days @ $12.00/day	$ 120.00
	VLF Electromagnetic Unit rental Model EM16 (Geonics) 10 equipment days @ $14.50/day	$ 145.00
3.4	Surveys	
3.4.1	Geochemical Samples (Silt) Total number of samples analysed 33 for Au, Ag, As @ $13.45/sample plus $20 for 4 Hg analyses, total reduced by $95.70 for samples not on claims	$ 368.15
3.4.2	Geochemical Samples (Soil) Total number of samples analysed 115 for Au, Ag. As @ $13.45 and $290 for 58 Hg analyses, the total shown is reduced by $151.05 for samples not on claims	$1685.70
3.4.3	Geochemical Samples (Rock) Total number of samples analysed 9 for Au, Ag, As and Hg @ $20.15/sample	$ 181.35
		$2235.20
3.5	Cost of Report	
	Compilation and drafting (15 mandays)	$ 950.00
	Report writing (5 mandays)	$1075.00
	Xerox, Printing & Supplies	$ 325.00
	Typing	$ 150.00
		$2500.00

3.6 The Apportionment of Costs

3.6.1 Wages

The apportionment of wages per field accomplishment is as follows:

- Geological mapping
  Number of days = 5.75

Date - 23rd May to June 1 (partial days)
average rate per day $207.67
Number of kilometres = 3.2 km²
Total Cost 5.75 x 207.67 = $1194.10
Personnel - J. Schindler, E. Horne

- Geochemical Sampling
  Number of days = 4.75

Date - 23rd May to June 1 (partial days)
Average rate per day $215.
Number of Samples (142 on claims)
Unit cost $7.19
Total cost 4.75 x 215 = $1021.25
Personnel - E. Horne, T. Wall,
R. Chapman

- Geophysical Survey
  (VLF and Magnetometer)
  Number of days 9.5 each (19 mandays)

Dates - 23 May to June 1
(stations established on 23rd May)
Average rate per day for 2 personnel
= 171.86
Line kilometres surveyed = 37.3
9.5 x 171.86 = $1632.67
Personnel - R. Chapman, T. Wall,
E. Horne, J. Schindler

- Travel

Number of days 0.25 each (1 manday total)
Dates - 23rd May, June 3 (E. Horne,
R. Chapman, T. Wall)
- 27th and 29th May (J. Schindler)
Average rate per day $255.00
1.0 x 255.92 = $ 255.92

3.6.2 Other

Other costs are apportioned as shown in Section 3.7

3.7 Distribution of Costs

3.7.1 Wages

The distribution of field wages per claim is as follows:

Claim	Travel	Geological Mapping	Geochemical Sampling	Geophysical Survey	Total
Angela		808.37	798.62	1317.53	2924.53
Andrea		385.70	222.63	315.10	923.43
Travel	255.92				
	355.92	1194.08	1021.25	1632.63	4103.88

Travel includes total of 0.25 days for each individual from B.C. border to site and return and end of field program.

3.7.2 Rental and Analyses
The distribution of rental charges and analyses is as follows:

Claim	Geochemical Analyses	Rental of Geophysical Equip.	Vehicle Rental
Angela	1715.75	213.85	168.75
Andrea	519.45	51.15	56.25
	2235.20	265.00	225.00

3.7.3 Miscellaneous - $147.00 (Fuel) for Andrea.

3.8 The Distribution of other costs is as follows:

Claim	Report	Food, Accommodation and Supplies
Angela	1875.00	1078.36
Andrea	625.00	359.46
	2500.00	1437.82

Please note that a notice to group the Angela and Andrea claims was filed in May 1984. Also enclosed is a copy of the Statement of Exploration and Development. Please note a request for a withdrawal from the PAC Account also.

4.0 Qualifications

4.1 Statement of Qualifications (Author)

I, Emmett J. Horne, of the City of Calgary in the Province of Alberta and the City of Victoria, British Columbia do certify the following.

1. I have been employed as a geologist with Aurun Mines Ltd., since July of 1982, both as a permanent employee and as a contract geologist.

2. I am a graduate of the University of Saskatchewan with a degree in Geology in 1967 and have practiced my profession continually since then.

3. I am a member of the Canadian Institute of Mining and Metallurgy.

4. Previous employers and positions are as follows:
   a) Saskatchewan Department of Mines and Resources (field season)
   b) Ontario Department of Mines (field season, Senior Geologist)
   c) Noranda Mines, Geco Division (two years Staff Geologist)
   d) Scurry-Rainbow Oil Ltd., and Bolivia Limitada (two years Project Geologist)
   e) Iron Ore Company of Canada (six years, Geologist and supervisory positions)
   f) Syncrude Canada Ltd. (four years, Senior Geologist, Operations)
   g) Alsands Energy Ltd. (one and a half years, Senior Geologist)
   h) Contract geologist since February 1983 in both tarsand and mineral exploration geological work.

5. I worked on the site with Messrs. T. Wall and R. Chapman from May 23rd to June 1st, 1984.

6. I have financial interest in the property and I do have shares in Aurun Mines Ltd.

E. J. Horne
Geologist

4.2 Professional Certification

I, John Norman Schindler, of the City of Calgary, in the Province of Alberta, do hereby declare that:

(1) I am registered as a Professional Geologist in the Province of Alberta.

(2) I am a practising Consulting Geologist, and my office is located at 22 Lake Christina Close S.E., Calgary, Alberta, T2J 2R9.

(3) I hold the following degrees: B.Sc, Hons. Geology (1960), McGill University, Montreal; MSc. Geology, University of London, England (1963); Ph.D. Geology, McMaster University, Hamilton, Ontario (1975).

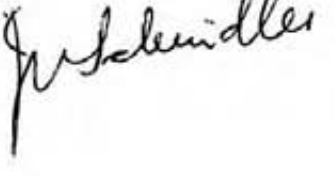
(4) I have practised my profession since graduation in 1960, and have held permanent positions with the following companies: The Iron Ore Company of Canada Ltd., Amax Exploration Inc., Western Mines Ltd. (now Westmin Resources Ltd.), Union Oil Company of Canada Ltd.

(5) That this report entitled "Assessment Report, Quartz Creek Project, (Geology, Geophysical and Geochemical Work, Angela (1039) Andrea (1128) Claims, Golden Mining Division, British Columbia" is a summary of work performed on said claim in 1984.

(6) That to the best of my knowledge the acquisition of the data and expenditure claimed for the performance of work as presented on the Statement of Exploration dated June 15, 1984 is correct.

(7) That I have no financial interest, direct or indirect, in the property or in Aurun Mines Ltd.

J. N. Schindler, Ph.D., P. Geol.



5.0 REFERENCES

Simony, P.S., 1970
Structure of the Dogtooth Range and Adjacent Portions of the Rocky Mountain Trench. The Geological Association of Canada, Special Paper Number 6.

Collins, W.H., 1932
Summary Report 1932 Part A II , Canada Department of Mines, Geological Survey.

6.0 STATEMENT OF EXPLORATION AND DEVELOPMENT (Copy)

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH–TITLES DIVISION
MINERAL ACT

COPY

STATEMENT OF EXPLORATION AND DEVELOPMENT

I, EMMETT J. HORNE (Name) Agent for AHRUN MINES LTD. (Name)

c/o AHRUN MINES LTD (Address)
910-640 8th AVE. S.W
CALGARY ALBERTA

910-640 8th AVE. S.W (Address)
CALGARY, ALBERTA

Valid subsisting F.M.C. No. 266468

Valid subsisting F.M.C. No. 257889

STATE THAT

1. I have done, or caused to be done, work on the ANGELA (20 UNIT) AND THE ANDREA (20 UNIT) MODIFIED GRID Claim(s)
Record No.(s) 1039 (10) AND 1128(6)
Situate at QUARTZ-CREEK. in the GOLDEN Mining Division,
to the value of at least $ 14000.00 dollars. Work was done from the 23rd day
of MAY 19 84, to the 1st day of JUNE 19 84

2. The following work was done in the 12 months in which such work is required to be done:

(COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)

A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by section 13 of regulations.)	COST
TOTAL PHYSICAL	NIL

I wish to apply $ ..... of physical work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

B. PROSPECTING (Details in report submitted as per section 9 of regulations.)

APPENDIX 1

PROTON MAGNETOMETER SURVEY DATA

(Readings and Corrections)

Energy, Mines and Resources Canada
Earth Sciences
Earth Physics Branch
Division of Seismology and Geomagnetism
1 Observatory Crescent
Ottawa, Ontario
K1A 0Y3

Énergie, Mines et Ressources Canada
Sciences de la Terre
Direction de la physique du globe
Division de la séismologie et géomagnétisme
1, place de l'Observatoire
Ottawa (Ontario)
K1A 0Y3

FORECAST OF GEOMAGNETIC ACTIVITY FOR PERIOD: May 9 - June 4, 1984

LA PREVISION DE L'ACTIVITE GEOMAGNETIQUE
POUR LA DUREE: mai 9 - juin 4, 1984

The geomagnetic field is expected to be:

Le champ géomagnétique sera probablement:

active : May 16-18, 22-25, 31 June 1-2
actif : mai 16-18, 22-25, 31 juin 1-2

unsettled: The rest of the forecast period
agité : Le reste de la période prévue

quiet : May 26-27, 29-30
calme : mai 26-27, 29-30

The 72 hour forecast of geomagnetic activity is available by calling 1-613-992-1299 (24 hrs./7 days a week).

The 72 hour forecast will be up-dated every Tuesday and Friday (between 9:00 - 10:00 a.m.).

Pour la prévision de 72 heures s.v.p. composé 1-613-992-1299 (24 hrs./7 jours par semaine).

La prévision de 72 heures sera mise à jour chaque mardi et vendredi matin (entre 9:00 - 10:00).

A new telephone number for information on the forecast of geomagnetic activity (J. Hruska) is 613-995-5545.

Le nouveau numéro de téléphone pour l'information sur les prévisions de l'activité magnétique (J. Hruska): 613-995-5545.

Canada

THE REVIEW OF GEOMAGNETIC ACTIVITY IN MARCH 1984

LA REVISION DE L'ACTIVITE GEOMAGNETIQUE DE MOIS DE MARS

OTTAWA

Geomag. Co-ord.: 57,0° Lat. N., 351,5° Long. E.

active: 2,3,6,7,8,28,29,30
actif

unsettled: 1,4,9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,27,31
agité

quiet: 5,20
calme

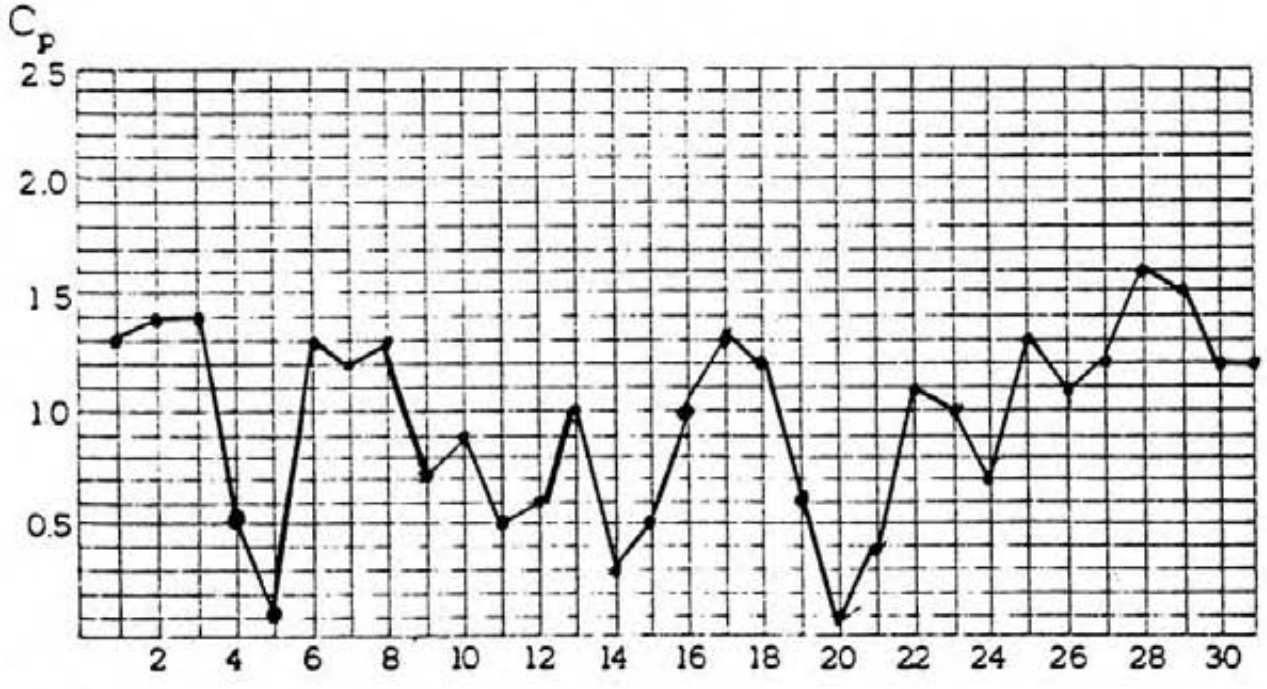
MEANOOK

Geomag. Co-ord.: 61,8° Lat. N., 301,0° Long. E.

active: 1,2,3,6,7,8,17,18,19,22,23,25,28.29,30,31
actif

unsettled: 4,9,10,11,13,14,15,16,21,24,26,27
agité

quiet: 5,12,20
calme



Daily Geomagnetic Planetary C_p Index
L'indice journalier C_p de l'activite géomagnétique planétaire.

TABLE 1

Date: May 24, 1984 Forecast: Active

Station	Time (min)	Reading** (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
*1(A)	0	58384 58390 58376	58383	0	58383	+64	58447
2	4.37	58361 58359	58360	-2	58358	+64	58422
3	8.75	58390 58394	58392	-4	58488	+64	58452
4	13.12	58406 58424 58417	58416	-6	58410	+64	58474
5	17.5	58430 58426	58428	-8	58420	+64	58484
6	21.87		58434	-10	58424	+64	58488
7	26.25	58442 58439	58441	-11	58431	+64	58495
8	30.62	58435 58432	58432	-13	58421	+64	58485
9	34.69		58418	-15	58403	+64	58467
10	38.75	58424 58421	58423	-17	58406	+64	58470
11	42.5	58407 58400 58425	58408	-18	58390	+64	58454
12	46.25	58431 58434	58433	-20	58413	+64	58477
13	50	58439 58442	58441	-22	58419	+64	58483
14	53.75		58438	-23	58415	+64	58479
15	57.5		58439	-25	58414	+64	58478

* Open Loop

** All magnetometer survey readings agree within 2 gammas unless otherwise indicated.

Date: May 24, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
16	61.25		58434	-27	58407	+64	58471
17	65		58451	-28	58423	+64	58487
18	69.69		58459	-30	58429	+64	58493
19	74.38	58440 58424 58407	58424	-32	58392	+64	58456
20	79.07		58461	-34	58427	+64	58491
21	83.76		58457	-36	58421	+64	58485
22	88.45		58456	-38	58418	+64	58482
23	93.14		58453	-41	58412	+64	58476
24	97.83	58443 58446	58445	-43	58402	+64	58466
25	102.52		58465	-45	58420	+64	58484
26	107.21		58451	-47	58404	+64	58468
27	111.9		58477	-49	58428	+64	58492
28	116.59		58471	-51	58420	+64	58484
29	121.28		58464	-53	58411	+64	58475
30	125.97		58460	-55	58405	+64	58469
31	130.66		58463	-57	58406	+64	58470
32	135.35		58456	-59	58397	+64	58461
33	140.04		58455	-61	58394	+64	58458
34	143.4		58461	-62	58399	+64	58463
35	146.8		58443	-64	58379	+64	58443
36	150.2	58483 58476	58482	-65	58417	+64	58481

Date: May 24, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
37	153.6		58434	-67	58367	+64	58431
38	157	58469 58464	58466	-68	58398	+64	58462
39	166		58452	-72	58380	+64	58444
40	177		58441	-77	58364	+64	58428
41	188		58456	-82	58374	+64	58438
42	196.75	58464 58475 58470	58470	-86	58384	+64	58448
43	205.5		58484	-89	58395	+64	58459
44	214.25		58415	-93	58322	+64	58386
45	223		58505	-97	58408	+64	58472
46	231.75		58515	-101	58414	+64	58478
47	240.5	58522 58519	58521	-105	58416	+64	58480
48	249.25	58524 58540 58532	58532	-108	58424	+64	58490
49	258		58525	-112	58413	+64	58477
50	264.5	58530 58526 58529	58528	-115	58413	+64	58477
51	271		58527	-118	58409	+64	58473
52	277.5		58504	-121	58383	+64	58447
53	284	58523 58529 58538	58530	-124	58406	+64	58470
54	290.5		58526	-126	58400	+64	58464
55	287	58476 58479	58478	-129	58349	+64	58413

Date: May 24, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
56	303.5	58515 58510	58513	-132	58381	+64	58445
57	310		58503	-135	58368	+64	58432
58	314.37		58513	-137	58376	+64	58440
59	318.75		58528	-139	58389	+64	58453
60	323.12	58495 58505 58511	58504	-141	58363	+64	58427
61	327.5	58510 58516 58512	58513	-142	58371	+64	58435
62	331.87	58514 58523 58531	58523	-144	58379	+64	58443
63	336.25	58507 58501	58504	-146	58358	+64	58422
64	340.62	58533 58535 58539	58536	-148	58388	+64	58452
65	345		58533	-150	58383	+64	58447
66	349		58545	-152	58393	+64	58457
67	353		58541	-154	58387	+64	58451
68	357		58538	-155	58383	+64	58447
69	361	58554 58561 58557	58557	-157	58400	+64	58464
70	365	58548 58551	58549	-159	58390	+64	58454
71	369	58545 58532 58525	58534	-161	58373	+64	58437
72	373	58555 58552	58553	-162	58391	+64	58455
**1 (A)	377		58547	-164	58383	+64	58447

** Close Loop

Date: May 25, 1984

Forecast: Active

Station	Time	Reading (Gammas)	
*1	0	57940	
		57872	
		58031	
75		57979	
		58007	
		58136	
76		58177	
		58190	
		58250	Spurious Readings
77		58348	Data omitted from
		58376	
		58336	survey results.
78		58219	
		58193	
		58315	
79		57986	
		58164	
		58193	
80		57745	
		57781	
		57802	
81		57985	
		58060	
		58056	
82		57833	
		58103	
		57942	
83		57930	
		57853	
		57869	
84		58035	
		58175	
		58188	

* Open Loop

Date: May 25, 1984

Station	Time	Reading (Gammas)	
85		57841	
		57876	
		58043	
86		57837	
		57926	
		57946	
87		58106	
		58241	
		58234	
88		58009	
		58013	
		58054	Spurious Readings
89		58159	Data omitted from
		58213	
		58230	survey results.
90		58046	
		58008	
		58156	
91		57726	
		57787	
		57988	
92		57624	
		57629	
		57731	
93		57902	
		57879	
		57948	
94		57948	
		58047	
		58033	
95		57861	
		58139	
		58005	
96		57865	
		57885	
		58045	

Date: May 25, 1984

Station	Time	Reading (Gammas)	
97		58012	
		58008	
		58114	
98		57902	
		57855	
		58124	
99		57801	
		57973	
		58078	
100		57857	
		57885	
		57854	
			Spurious Readings
101		57939	
		58056	Data omitted from
		58160	
			survey results.
102		58269	
		58126	
		58239	
103		57844	
		58008	
		58117	
104		58148	
		58130	
		58109	
105		57466	
		57759	
		57767	
106		58230	
		58285	
		58192	
107		58144	
		58408	
		58447	
108		57719	
		57671	
		57761	

Date: May 25, 1984

Station	Time	Reading (Gammas)	
109		57749	
		57809	
		57829	
110		57526	
		57685	
		57626	
111		58018	
		58037	
		57936	
112		58125	Spurious Readings
		58235	
		58256	Data omitted from
113		57931	survey results.
		57811	
		58011	
114		58433	
		58431	
		58357	
115		58460	
		58450	
		58348	
116		58347	
		58379	
		58427	
117		58468	
		58495	
		58450	
118		58393	
		58488	
		58505	
119		58349	
		58478	
		58485	
120		58310	
		58381	
		58413	

Date: May 25, 1984

Station	Time	Reading (Gammas)	
121		58433	
		58434	
		58460	
122		58428	
		58508	
		58415	
123		57785	
		57852	
		57925	
124		57605	
		57684	
		57545	Spurious Readings
125		57876	Data omitted from
		57858	
		57953	survey results.
126		57891	
		57777	
		57954	
127		57618	
		57947	
		58299	
128		57939	
		57919	
		57970	
129		57613	
		57621	
		57685	
130		57828	
		57981	
		58055	
131		57674	
		57686	
		57752	
132		58023	
		58026	
		58210	

Date: May 25, 1984

Station	Time	Reading (Gammas)	
133		57727	
		57840	
		57876	
134		57987	
		58017	
		58008	
135		57869	
		57815	
		58225	
136		57587	
		57427	Spurious Readings
		57490	
			Data omitted from
137		57252	
		57226	survey results.
		57403	
138		58098	
		57996	
		57963	
139		57685	
		57692	
		57596	
140		58171	
		58045	
		58033	
141		58044	
		57997	
		58019	
142		57850	
		57806	
		57878	
143		58144	
		58170	
		58359	

Date: May 25, 1984

Station	Time	Reading (Gammas)	
144		57635	
		57642	
		57725	
145	255	57756	
		57638	
		57820	
146		58165	
		58224	
		58186	
147		57730	Spurious Readings
		57790	Data omitted from
		57885	survey results.
148		57519	
		57704	
		57772	
149		57848	
		58010	
		58169	
150		57673	
		57970	
		58123	
151		57423	
		57773	
		58096	
**152		58258	
		58387	
		58388	

** Close Loop

Date: May 26, 1984

Forecast: Quiet

Station	Time	Reading (Gammas)	
*1	0	56433	
		56484	
		56592	
153		56428	
		56506	
		56593	
154		56604	
		56667	
		56704	
155		56444	
		54428	Spurious Readings
		56436	
156		56510	Data omitted from
		56634	
		56638	survey results.
157		56591	
		56595	
		56553	
158		56442	
		56360	
		56371	
159		56347	
		56435	
		56444	
160		56393	
		56377	
		56277	
161		56419	
		56496	
		56429	
162		56553	
		56538	
		56534	

* Open Loop

Date: May 26, 1984

Station	Time	Reading (Gammas)	
185		56635	
		56662	
		56702	
186		56553	
		56577	
		56485	
187		56573	
		56517	
		56657	
188		56675	Spurious Readings
		56636	
		56737	Data omitted from
189		56546	survey results.
		56496	
		56597	
190		56451	
		56394	
		56388	
191		56440	
		56604	
		56662	
192		56653	
		56571	
		56455	
193		56500	
		56489	
		56499	
194		56512	
		56529	
		56472	
** Close Loop			
**1		56608	
		56602	
		56497	

Date May 28, 1984 — Forecast: Unsettled

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
*1A	0		58447	0	58447	0	58447
194	13.33		58439	-1	58438	0	58438
195	26.66		58441	-3	58438	0	58438
196	39.99		58438	-4	58434	0	58434
197	53.32		58440	-6	58434	0	58434
197A	66.65		58440	-7	58433	0	58433
198	79.98		58440	-9	58431	0	58431
199	93.31		58440	-10	58419	0	58419
200	106.64		59419	-12	58407	0	58407
201	119.97		58441	-13	58428	0	58428
202	133.3		58442	-15	58427	0	58427
203	146.66		58437	-16	58421	0	58421
204	159.99		58434	-17	58417	0	58417
205	173.32		58437	-19	58418	0	58418
206	186.65		58439	-20	58419	0	58419
207	199.98	58443 58444 58447	58444	-22	58422	0	58422
208	213.31		58449	-23	58426	0	58426
209	226.64		58443	-25	58418	0	58418
210	239.97		58431	-26	58405	0	58405
211	259.47		58439	-28	58411	0	58411

* Open Loop

Date: May 28, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
212	274.97		58448	-30	58418	0	58418
213	292.47		58448	-32	58416	0	58416
214	309.97		58445	-34	58411	0	58411
215	327.47	58454 58451 58453	58452	-36	58416	0	58416
216	344.97		58456	-38	58418	0	58418
217	363.47		58463	-39	58424	0	58424
218	379.97		58468	-41	58427	0	58427
218A	390.39	58471 58475 58477	58475	-43	58432	0	58432
219	400.8		58490	-44	58446	0	58446
220	411.22		58489	-45	58444	0	58444
221	421.63		58488	-46	58442	0	58442
222	432.05	58465 58466 58568	58466	-47	58419	0	58419
233	442.47		58478	-48	58430	0	58430
224	452.89	58469 58472 58474	58472	-49	58423	0	58423
225	463.31		58482	-50	58432	0	58432
226	473.73	58483 58486	58485	-52	58433	0	58433
374	484.15		58487	-53	58434	0	58434
375	494.57		58495	-54	58441	0	58441
**1A	504.99		58502	-55	58447	0	58447

** Close Loop

Date: May 29, 1984 Forecast: Quiet

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
*1A	0		58460	0	58460	-13	58447
376	5.28		58440	0	58460	-13	58447
227	10.56		58448	0	58460	-13	58477
228	15.84		58446	-1	58445	-13	58432
229	21.12		58449	-1	58449	-13	58435
230	26.4		58457	-1	58456	-13	58443
231	31.68		58456	-1	58455	-13	58442
232	36.96		58455	-1	58454	-13	58441
233	42.24		58459	-2	58457	-13	58444
234	47.52		58450	-2	58448	-13	58435
235	52.8		58449	-2	58447	-13	58434
236	58.08		58446	-2	58444	-13	58431
237	63.36		58446	-3	58443	-13	58430
238	68.64	58447 58449 58450	58449	-3	58446	-13	58433
239	73.92		58445	-3	58442	-13	58429
240	79.2		58459	-3	58456	-13	58443
241	84.48		58442	-3	58439	-13	58426
242	89.76		58439	-4	58435	-13	58422
243	95.04		58437	-4	58433	-13	58420
244	104		58440	-4	58436	-13	58423
245	113	58430 58431 58432	58431	-5	58426	-13	58413
246	122		58441	-5	58436	-13	58423

* Open Loop

Date: May 29, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
247	131		58433	-5	58428	-13	58415
248	140		58436	-6	58430	-13	58417
249	145		58439	-6	58433	-13	58420
250	150		58437	-6	58431	-13	58418
251	155		58439	-6	58433	-13	58420
252	160		58434	-6	58428	-13	58415
253	165		58438	-7	58431	-13	58418
254	170		58676	-7	58669	-13	58656
255	180		58440	-7	58433	-13	58420
256	190		58438	-8	58430	-13	58417
257	200	58434 58437 58435	58436	-8	58428	-13	58415
258	210		58420	-9	58411	-13	58398
38	220		58433	-9	58424	-13	58411
259	230		58442	-9	58433	-13	58420
260	240		58440	-10	58430	-13	58417
261	250		58438	-10	58428	-13	58415
262	260		58437	-11	58426	-13	58413
263	262.5		58439	-11	58428	-13	58415
264	265		58442	-11	58431	-13	58418
265	267.5		58442	-11	58431	-13	58418
266	270		58440	-11	58429	-13	58416
267	272.5	58442 58445 58443	58444	-11	58433	-13	58420

Date: May 29, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
268	275	58446 58449 58448	58448	-11	58437	-13	58424
269	280	58441 58438 58439	58439	-11	58428	-13	58415
270	285		58452	-12	58440	-13	58427
271	290		58447	-12	58435	-13	58422
272	295		58452	-12	58440	-13	58427
273	300		58448	-12	58436	-13	58423
274	305		58437	-12	58425	-13	58412
275	310		58435	-13	58422	-13	58409
276	315		58429	-13	58416	-13	58403
277	320	58382 58383 58386	58384	-13	58371	-13	58358
278	327.14	58434 58435 58437	58436	-13	58423	-13	58410
279	334.28		58437	-14	58423	-13	58410
280	341.42-13		58441	-14	58427	-13	58414
281	348.56		58441	-14	58427	-13	58414
282	355.7		58448	-14	58434	-13	58421
283	362.84		58445	-15	58430	-13	58417
**1A	369.98		58475	-15	58460	-13	58447

** Close Loop

Date: May 30, 1984 Forecast: Quiet

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
*1	0		58463	0	58463	-16	58447
224	4.6		58466	+1	58467	-16	58451
283	9.3		58467	+3	58470	-16	58454
284	13.9		58464	+4	58468	-16	58452
285	18.6	58463 58464 58466	58464	+6	58470	-16	58654
286	23.2		58462	+7	58469	-16	58453
287	27.9		58428	+9	58437	-16	58421
388	32.5		58419	+10	58429	-16	58413
289	37.1		58462	+12	58474	-16	58458
290	41.8		58444	+12	58457	-16	58441
291	46.4		58443	+15	58458	-16	58442
292	51.1	58477 58476 58479	58477	+16	58493	-16	58477
293	55.7		58432	+17	58449	-16	58433
294	60.4	58474 58477 58475	58475	+19	58494	-16	58478
295	65		58441	+20	58461	-16	58445
296	68.13		58423	+21	58444	-16	58428
297	71.25		58433	+22	58455	-16	58439

* Open Loop

Date: May 30, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
298	74.38		58419	+23	58442	-16	58426
299	77.5		58337	+24	58361	-16	58345
300	80.63		58397	+25	58422	-16	58406
301	83.75		58410	+26	58436	-16	58420
302	86.88		58409	+27	58436	-16	58420
303	90		58348	+28	58376	-16	58360
304	97.5		58376	+30	58406	-16	58390
305	105		58396	+33	58429	-16	58413
305A	112.5		58383	+35	58418	-16	58402
305B	120		58381	+38	58419	-16	58403
306	127.5		58402	+40	58442	-16	58426
307	135		58412	+42	58454	-16	58438
308	140.5		58417	+44	58461	-16	58445
309	146		58406	+46	58452	-16	58436
310	151.5		58424	+47	58471	-16	58455
**1A	159.5		58413	+50	58463	-16	58417

** Close Loop

Date: May 31, 1984 Forecast: Active

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
1A	0		58416	0	58416	+31	58447
310	0		58393	+0	58393	+31	58424
311	1.58	58378 58375	58377	0	58377	+32	58408
312	3.16	58376 58373	58375	0	58375	+32	58406
313	4.74		58371	0	58371	+31	58402
314	6.32		58369	+1	58370	+31	58401
315	7.90		58365	+1	58366	+31	58397
316	9.48		58352	+1	58353	+31	58384
317	11.06		58388	+1	58389	+31	58420
318	12.64		58384	+1	58385	+31	58416
319	14.22		58379	+1	58380	+31	58411
320	15.8		58390	+1	58391	+31	58422
321	17.38		58387	+2	58388	+31	58419
322	26.86		58385	+2	58387	+31	58418
324	28.44		58364	+3	58367	+31	58398
325	30.02		58385	+3	58388	+31	58419
326	31.60		58359	+3	58362	+31	58393
327	33.18		58375	+3	58378	+31	58409
328	34.76		58383	+3	58366	+31	58397
329	36.34		58352	+4	58380	+31	58411
330	37.92		58376	+4	58380	+31	58411
331	39.5		58406	+4	58410	+31	58441

Date: May 31, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
332	41.08		58367	+4	58410	+31	58441
333	42.66		58355	+4	58359	+31	58390
334	44.24		58335	+4	58339	+31	58370
335	45.82		58355	+4	58359	+31	58390
336	47.4		58371	+4	58375	+31	58406
337	48.98						
338	50.56		58388	+5	58393	+31	58424
339	52.4		58388	+5	58393	+31	58424
340	53.72		58386	+5	58391	+31	58422
431	55.3		58383	+5	58388	+31	58419
342	56.88		58387	+5	58392	+31	58423
343	58.46		58402	+5	58407	+31	58438
344	60.04		58395	+6	58401	+31	58432
345	61.76		58400	+6	58406	+31	58437
346	63.52		58408	+6	58414	+31	58445
347	65.28		58395	+6	58401	+31	58432
348	67.04		58258	+6	58264	+31	58295
349	68.8		58370	+6	58376	+31	58407
350	70.56		58388	+7	58395	+31	58426
351	72.32		58368	+7	58375	+31	58406
352	74.08		58372	+7	58379	+31	58410
353	75.84		58375	+7	58382	+31	58413
354	77.6		58389	+7	58396	+31	58427
355	79.36		58375	+7	58382	+31	58413
356	81.12		58403	+8	58411	+31	58442

Date: May 31, 1984

Station	Time (min)	Reading (Gammas)	Average Reading	Diurnal	Corrected Reading	Base Level Correction	Final Reading
357	82.88		58426	+8	58434	+31	58465
358	84.64		58418	+8	58426	+31	58457
359	86.4		58410	+8	58418	+31	58449
360	88.16		58410	+8	58418	+31	58449
361	89.92		58407	+8	58415	+31	58446
362	91.68		58412	+9	58421	+31	58452
363	93.44		58413	+9	58422	+31	58453
364	95.2		58412	+9	58421	+31	58452
365	96.96		58416	+9	58425	+31	58456
366	98.72		58409	+9	58418	+31	58449
367	100.48		58414	+9	58423	+31	58454
368	102.24		58412	+10	58422	+31	58453
369	104		58413	+10	58423	+31	58454
370	105.76		58413	+10	58423	+31	58454
371	107.52		58412	+10	58422	+31	58453
372	109.28		58409	+10	58419	+31	58450
373	111.04		58404	+10	58414	+31	58455
374	112.8		58412	+11	58423	+31	58454
375	114.56		58408	+11	58419	+31	58450
376	116.32		58405	+11	58416	+31	58447
**377	118.08		58405	+11	58416	+31	58447

** Close Loop

APPENDIX 2

VLF ELECTROMAGNETIC SURVEY DATA

(Readings)

TABLE 1

Date: May 24, 1984

1-69

Station	Reading		Station	Reading		Station	Reading	
	In - Phase (%)	Out - Phase (%)		In - Phase (%)	Out - Phase (%)		In - Phase (%)	Out - Phase (%)
1	+04	0.0	24	-82	-22.0	47	+01	-5.0
2	+03	+1.0	25	-58	-14.0	48	+02	-8.0
3	+02	-0.7	26	-54	-16.0	49	+02	-4.0
4	00	0.0	27	-92	-25.0	50	+05	-3.0
5	-02	+0.4	28	-56	-14.0	51	+09	0.0
6	00	+1.7	29	-57	-16.0	52	+03	-10.0
7	00	0.0	30	-72	-19.0	53	+04	-4.0
8	+01	+1.7	31	-74	-19.0	54	-06	-4.0
9	-03	+1.0	32	-62	-13.0	55	+11	-3.0
10	-06	-1.0	33	-53	-12.0	56	+10	-4.0
11	-05	+2.1	34	-52	-14.0	57	-02	-7.0
12	-07	-1.8	35	-42	-12.0	58	+05	-4.0
13	-06	-1.8	36	-24	-4.0	59	+02	-4.0
14	-10	-1.2	37	-34	-6.0	60	+04	-4.0
15	-10	-1.1	38	-47	-12.0	61	+03	0.0
16	-16	-2.0	39	-04	-4.0	62	+05	+2.0
17	-15	-3.8	40	-08	-8.0	63	+04	-6.0
18	-16	-4.0	41	-06	-5.0	64	+07	-2.0
19	-16	-2.7	42	-02	-6.0	65	+11	+3.0
20	-17	-5.0	43	+03	-4.0	66	+04	+3.0
21	-26	-8.0	44	+03	-2.0	67	+01	+1.0
22	-20	-5.8	45	+03	-3.0	68	-03	+2.0
23	-52	-14.0	46	-01	-6.0	69	-06	0.0

Date: May 25, 1984

1,75-152,74,73

Station	Reading		Station	Reading		Station	Reading	
	In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)
1	+06	+2.0	101	-28	-8.0	128	-13	+3.0
75	+04	0.0	102	-54	-15.7	129	+04	+1.2
76	-09	-2.0	103	-66	-21.0	130	00	+9.0
77	-14	-4.7	104	-27	-7.0	131	-01	+13.0
78	-11	-3.0	105	-20	-4.0	132	-04	+13.0
79	-03	-3.0	106	-17	-7.0	133	-04	+13.0
80	-07	-1.0	107	-22	-6.0	134	-03	+10.0
81	+21	+5.0	108	-34	-8.0	135	-07	+8.0
82	+29	+7.0	109	-26	-4.5	136	-05	+14.0
83	+34	+8.5	110	-04	+1.7	137	-05	+12.0
84	-03	0.0	111	-09	-1.0	138	-09	+8.0
85	-16	-6.0	112	-02	+2.0	139	-08	+4.0
86	+20	+4.3	113	-04	+4.0	140	-03	+7.0
87	-11	0.0	114	+01	-1.0	141	-01	+4.0
88	-01	+1.0	115	-17	-3.0	142	-03	+6.0
89	-10	+4.0	116	-16	0.0	143	-02	+1.0
90	-12	-1.0	117	-08	+2.0	144	-02	+2.0
91	-03	0.0	118	-12	+2.0	145	-01	0.0
92	+01	+1.0	119	-15	0.0	146	-02	+1.0
93	-11	0.0	120	-07	+4.0	147	00	0.0
94	-24	-4.0	121	-03	+3.0	148	00	-2.0
95	-07	-3.8	122	-19	0.0	149	+03	-4.0
96	+07	+1.7	123	-20	0.0	150	+04	-4.0
97	+02	+2.0	124	-18	+1.5	151	+03	-3.0
98	+03	+2.0	125	-18	+3.0	152	+02	-4.0
99	-06	0.0	126	-11	+3.0	74	+01	-3.0
100	-43	-8.0	127	-16	+3.0	73	-01	0.0

Date: May 26, 1984

1, 153-269

Station	Reading		Station	Reading		Station	Reading	
	In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)
1	-03	-5.0	170	-10	-5.0	188	-19	-7.0
153	-03	-6.0	171	-14	-4.0	189	-17	-5.0
154	-06	-7.0	172	-12	-3.0	190	-14	-4.0
155	-05	-7.8	173	-20	-5.0	191	-11	-4.0
156	-04	-10.0	174	-17	-10.0	192	-09	0.0
157	-08	-9.0	175	-14	-10.0	193	-12	-1.0
158	-02	-9.0	176	-16	-9.0	194	-49	-11.0
159	00	-6.0	177	-17	-10.0	259	-41	-9.0
160	-08	-9.0	178	-21	-9.0	260	-31	-7.0
161	-13	-11.0	179	-18	-10.0	261	-38	-12.0
162	-10	-12.0	180	-17	-8.0	262	-35	-10.0
163	-08	-11.0	181	-15	-7.0	263	-37	-10.0
164	-10	-11.0	182	-13	-7.7	264	-43	-9.0
165	-11	-12.0	183	-11	-4.0	265	-31	-6.0
166	-07	-12.7	184	-10	-6.0	266	-23	-8.0
167	-16	-10.0	185	-05	-2.0	267	-03	-1.0
168	-20	-4.5	186	-07	-2.0	268	-01	-1.0
169	-14	-4.0	187	-11	-1.0	269	-16	-6.0

Date: May 27, 1984

310 - 376

Station	Reading		Station	Reading		Station	Reading	
	In - Phase (%)	Out - Phase (%)		In - Phase (%)	Out - Phase (%)		In - Phase (%)	Out - Phase (%)
310	-31	-8.0	332	+70	0.0	354	+08	-2.0
311	-02	0.0	333	-6.0	-3.2	355	+02	-5.0
312	-01	-2.0	334	-80	-1.5	356	+10	-2.0
313	+03	-2.0	335	-24	-4.0	357	+04	-3.0
314	+08	-1.0	336	-21	-2.0	358	+05	-3.0
315	+04	-1.0	337	-14	-2.0	359	+04	-2.0
316	+07	0.0	338	-17	0.0	360	-09	-5.0
317	+06	-2.0	339	-07	+2.0	361	-11	-3.0
318	+04	-4.0	340	-08	0.0	362	+03	-1.0
319	+04	+1.0	341	-06	-1.0	363	-01	-2.0
320	-03	-3.0	342	-04	-2.0	364	+11	-1.0
321	-03	-1.0	343	-04	-2.0	365	+09	+4.0
322	-12	-4.0	344	+03	0.0	366	+03	+3.0
323	-10	0.0	345	-13	-4.0	367	+02	0.0
324	-08	0.0	346	-02	0.0	368	-03	-3.0
325	-02	-1.0	347	-04	+1.0	369	+07	0.0
326	-03	-1.0	348	+09	+2.0	370	-01	-3.0
327	00	+1.0	349	+11	+1.5	371	+40	-2.0
328	-05	+1.0	350	+09	0.0	372	+12	+1.5
329	-02	0.0	351	+07	+2.0	373	+12	+2.0
330	00	0.0	352	+13	0.0	374	+03	-2.0
331	+08	+2.0	353	+06	-3.0	375	-13	-5.0
						376	-07	-1.0

Date: May 28, 1984

194-374

Station	Reading		Station	Reading		Station	Reading	
	In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)		In-Phase (%)	Out-Phase (%)
194	+03	+1.0	204	-03	-2.5	215	-11	+10.0
195	+11	+3.0	205	-09	-5.0	216	-09	+15.0
196	-02	-0.5	206	-07	-7.0	219	-04	+4.0
197	-05	+1.5	207	-06	-5.0	220	+03	+2.0
142	-03	+4.0	208	-07	-5.0	221	+02	+1.0
198	-05	-1.0	209	-13	-4.0	222	+07	+2.0
199	-03	0.0	210	-09	-2.5	223	+12	+5.0
200	-08	-2.0	211	-11	-2.0	224	+13	+3.0
201	-03	-2.0	212	-15	+5.0	225	+10	+5.0
202	-04	-2.0	213	-12	+10.0	226	+07	+3.0
203	-02	-2.0	214	-13	+11.0	374	+09	+3.0

Date: May 30, 1984

376, 283 - 309

Station	Reading		Station	Reading		Station	Reading	
	In - Phase (%)	Out- Phase (%)		In- Phase (%)	Out- Phase (%)		In- Phase (%)	Out- Phase (%)
376	+14	+3.0	292	+17	+1.5	302	+12	-1.0
383	+12	+3.0	293	+10	-1.0	303	+07	-1.0
384	+07	-2.0	294	+14	0.0	304	+06	0.0
285	-02	-2.0	295	+22	+3.0	305	-08	-3.0
286	-01	-3.0	296	+16	-1.0	305A	-02	0.0
287	+03	-3.5	297	+19	-3.0	305B	-02	+2.0
288	+06	-1.0	298	+34	0.0	306	+19	-3.0
289	+08	-1.0	299	+42	+2.0	307	+12	0.0
290	+02	-2.0	300	+18	-1.5	308	+22	+1.5
291	+14	+1.0	301	+14	-1.5	309	+22	+1.0

APPENDIX 3

Analyses Certificates

And Laboratory Procedures

LORING LABORATORIES LTD.
629 Beaverdam Rd. N.E.
Calgary 67, Alberta
Phone 274-2777

METHODS OF ANALYSIS FOR GEOCHEMS

1. COPPER, LEAD, ZINC, NICKEL, COBALT, SILVER

500 milligrams of -80 mesh material are weighed into test tubes. Aqua regia added and digested in water bath at 100°C for three hours.

The test tubes are then bulked to the 10 ml. level, mixed and allowed to settle overnite.

The samples are then put through the atomic absorption with appropiate standards and reported in PPM.

2. MOLYBDENUM GEOCHEMS

The same sample weight is used; aqua regia is also used, but just prior to bulking up to 10 mls. volume, 3 mls. of aluminum chloride solution is added to enhance the molybdenum atom. After standing overnite the samples are put through the atomic absorption using a nitrous oxide and acetylene flame. Reported in PPM Mo.

LORING LABORATORIES LTD.
629 Beaverdam Rd. N.E.
Calgary 67, Alberta
Phone 274-2777

As (silver diethyldithiocarbamate method)

- .5 gm sample into 150 ml beaker.
- add .5 gm HClO3.
- add 10 ml water and 15 ml HNO3.
- dry over night on one switch hot plate.
- add a little HCl twice and dry.
- bring up the sample into 100 ml flask with 20 ml HCl.
- take 50 ml sample into 125 ml erlenmeyer.
- add 3 ml KI (15%) solution and 12 drops 40% SnCl2.
- allow 15 min. for reduction of As to the trivalent state.
- prepare scrubber-absorber assembly.
- add 3 gm zinc to the generator and connect scrubber-absorber assembly immediately.
- allow 30 min for complete evolution of arsine.
- read absorbance at 535 mu using reagent blank reference and standards.

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Calgary, Alberta T2K 4W2
Phone 274-2777

Au Geochems (Soils & Sediments) *-1

1. Weigh 10 g sample to fire assay crucible (carry blank)
2. Place crucibles in fire assay furnace at fusion temperature for 15 minutes.
3. Allow crucibles to cool on steel table.
4. Add 1 tablespoon flux and 1 inquart to each crucible.
5. Fuse for ½ hr. at fusion temperature.
6. Pour pots, remove slag and cupel.
7. Place beads into 50 ml flasks.
8. Pipette stds. and blank into 50 ml flasks.

   1 ml of 10 ppm = 1000 ppb
   1 ml of 5 ppm = 500
   1 ml of 1 ppm = 100
   0 ml = 0

9. Add 5 mls H_2O, 2 mls HNO_3 and place on 1 switch plate for 5 minutes. Take off plate. Add 5 mls HCl.
10. Digest until total dissolution approximately ½ hr.
11. Bulk flasks to approximately 25 mls with distilled H_2O. Cool to room temperature.
12. Add 5 mls MIBK. Stopper and shake each flask for exactly 1 minute. *-2
13. Allow MIBK to settle.
14. Set 1100 AA unit as follows:

    mu - 2428
    slit - .5
    lamp MA - 3
    flame - air-acetylene - extremely lean

Stds. 100 ppb - 10
1000 ppb - 100
500 ppb - reading

15. Report directly in ppb. Detection limit 5 ppb at reading of .5.

*-1 - for rock geochems steps 2 and 3 can be eliminated.

*-2 - it is important to maintain as closely as possible standard conditions for all samples and standards in a series.

Reagents & Material

- MIBK - 4-Methyl-2-Pentanone
- HCl - conc .
- HNO3 - conc
- Flux - 2980 g PbO
  777 g Na2CO3
  68 g Na2B4O7
  68 g SiO2
  167 g Flour

LORING LABORATORIES LTD.
629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2
Phone 274-2777

Hg - Geochemical (Cold Vapor Volatilization Method)

1/ Suitable sample (typically .5 g) weighed to 150ml beaker

2/ Digestion accomplished using combination of HNO_3, H_2SO_4, $KMnO_4$, and $(NH_4)_2S_2O_8$

3/ Aliquot taken to volatilization flask and generated to Atomic Absorption by 40% $SnCl_2$

4/ Absorbance versus std absorbance determines sample concentration

5/ Typical D.L. = 10 p.p.b.

TABLE 1

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26336
Date June 14, 1984
Samples Soil Samples
PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag (* Added)	PPM As	PPB Au	PPB Hg (* Added)	Soil Horizon	Color
Geochemical Analysis Soil Samples							
84-RCZ- 1	161	4.9	4	15	-	A	Grey-Brown
- 2	166	.4	5	10	65	B	Dark Brown
- 3	166	.1	7	Nil	-	A	Black Organic
- 4	372	Nil	4	Nil	80	B	Brown Ochre
- 5	370	.4	4	Nil	-	B	Medium Brown
- 6	366	.1	10	5	105	B	Medium Brown
- 7	362	.1	9	5	-	B	Dark Brown
- 8	360	Nil	13	Nil	65	B	Dark Brown
- 9	356	.2	15	5	-	B	Dark Brown
-10	351	.1	61	5	70	B	Dark Brown
-11	349	1.3	37	5	-	A	Black Organic
-12	349	.1	3	Nil	110	B	Dark Brown
-13	343	.1	9	5	-	B	Dark Brown
-14	340	Nil	9	Nil	90	B	Dark Brown
-15	333	Nil	20	20	-	B	Dark Brown
-16	325	Nil	7	Nil	110	B	Dark Brown
-17	80 m west of 317	.6	8	5	-	B	Rusty Brown
-18	194	.5	32	10	100	B	Dark Brown
-19	195	.1	10	5	-	B	Dark Brown
-20	196	.1	27	Nil	50	B	Dark Brown
-21	149	.2	18	5	-	B	Reddish Brown
-22	147	Nil	19	10	55	B	Dark Brown
-23	146	Nil	18	5	-	B	Dark Brown
-24	145	.1	35	5	75	B	Dark Brown
-25	144	.1	18	5	-	B	Dark Brown
-26	143	Nil	21	10	145	B	Dark Brown
-27	199	Nil	29	70	-	B	Dark Brown
-28	201	.3	2	65	110	A	Black Organic
-29	202	Nil	3	110	-	A	Black Organic

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D. Eveleth

Assayer

TABLE 1

To: AURUN MINES LTD.
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26336
Date June 14, 1984
Samples Soil Samples

PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au	PPB Hg	Soil Horizon	Color
Geochemical Analysis Soil Samples							
84-RCZ-30	80	Nil	22	Nil	75	B	Dark Brown
-31	204	.1	3	Nil	-	A	Black Organic
-32	205	.1	8	95	165	A	Black Organic
-33	206	Nil	35	10	-	B	Light Ochre
-34	207	.2	18	Nil	65	B	Reddish Brown
-35	207	Nil	10	15	-	B	Reddish Brown
-36	209	Nil	6	5	70	B	Buff Grey
-37	210	Nil	16	Nil	-	B	Dark Brown
-38	211	.3	1	25	85	A	Black Organic
-39	212	Nil	13	5	-	B	Dark Brown
RCZ-41	214	.3	11	10	110	B	Dark Brown
-42	215	.2	5	Nil	-	B	Dark Brown
-43	217	.1	4	Nil	45	B	Grey Buff
-44	218	.1	5	5	-	B	Dark Brown
-45	218	.1	4	95	25	A	Black Organic
-46	228	.1	16	10	-	B	Light Ochre
-47	230	Nil	18	5	60	B	Light Ochre
-48	232	Nil	16	Nil	-	B	Light Ochre
-49	234	.1	3	15	165	B	Light Ochre
-50	236	.1	4	Nil	-	B	Light Ochre
-51	236	.1	5	5	160	A	Black Organic
-52	239	.1	23	Nil	-	B	Medium Brown
-53	240	.2	12	Nil	95	B	Medium Brown
-54	241	Nil	8	Nil	-	B	Medium Brown
-55	246	Nil	8	5	75	A	Black Organic
-56	246	Nil	2	Nil	-	B	Medium Brown
-57	248 +25 m	3.6	2	10	95	B	Medium Brown
-58	250	4.3	13	10	-	B	Medium Brown
-59	264	.7	57	5	35	B	Medium Brown

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D. Enclos

Assayer

TABLE 1

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26336
Date June 14, 1984
Samples Soil Samples
PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au	PPB Hg	Soil Horizon	Color
Geochemical Analysis							
Soil Samples							
RCZ-60	281	.2	33	20	-	B	Medium Brown
-61	283	4.9	15	85	70	B	Medium Brown
-62	Up road from 283	.6	25	5	-	B	Medium Brown
84-TWS- 1	Up creek from	Nil	22	10	45		
- 2	Station B	Nil	8	Nil	-		
- 3		Nil	10	10	40	Stream Silt	Light Grey Silt & Fine Sand
- 4		Nil	13	15	-		
- 5		Nil	18	5	40		
- 6		Nil	22	10	-		
- 7		Nil	16	10	60		
84-TWZ- 1	Along upper	.5	33	Nil	-	B	Brown
- 2	road from creek	.2	35	10	55	B	Brown
- 3		Nil	29	Nil	-	B	Brown
- 4		.1	34	Nil	35	B	Brown

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

jects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D. Enclos

Assayer

TABLE 1

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26344
Date June 14, 1984
Samples Soil Samples
PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au	PPB Hg	Soil Horizon	Color
Geochemical Analysis Soil Samples							
84-RC7-63	288	.4	14	5	-	B	Dark Brown
-64	291	.3	10	Nil	70	B	Dark Brown
-65	295	.2	15	Nil	-	B	Dark Brown
-66	296	.2	22	5	35	B	Dark Brown
-67	300	.3	10	80	-	B	Dark Brown
-68	186	.4	6	35	125	A	Black Organic
-68A	186	.1	5	Nil	-	B	Dark Brown
-69	1400 + 00N 120E	.1	13	5	-	B	Light Brown
-70	1400 + 00N 140E	.1	14	Nil	20	B	Light Brown
-71	1400 + 00N 160E	.2	9	Nil	-	B	Light Brown
-72	1400 + 00N 180E	.2	23	5	50	B	Light Brown
-73	1400 + 00N 200E	.2	5	5	-	B	Dark Brown
Welcome -74	1400 + 00N 220E	.2	7	Nil	70	B	Dark Brown
North -75	1450 + 00N 220E	.3	7	Nil	-	B	Dark Brown
Grid -76	1550 + 00N 140E	.3	7	5	70	B	Dark Brown
-77	1550 + 00N 160E	.1	5	Nil	-	B	Dark Brown
-78	1550 + 00N 120E	.2	18	Nil	45	B	Dark Brown
-79	1550 + 00N 100E	1.0	11	Nil	-	B	Dark Brown
-80	1550 + 00N 80E	1.2	24	10	110	B	Dark Brown
-81	1550 + 00N 60E	Nil	135	45	-	B	Dark Brown
-82	1500 + 00N 60E	1.1	12	5	65	B	Dark Brown
-83	1600 + 00N 120E	.6	7	Nil	-	B	Dark Brown
-84	along road 70 m	.2	7	5	40	B	Light Brown
-85		.1	12	Nil	-	B	Dark Brown
Along -86		Nil	18	Nil	70	B	Dark Brown
Andrea -87		.1	20	Nil	-	B	Dark Brown
Claim -88		.2	10	Nil	50	C	Light Brown
Leading -89		.1	12	Nil	-	B	Dark Brown
East -90		Nil	5	5	35	C	Dark Brown

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

P. Erdmer
Assayer

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: E. Horne

File No. 26417
Date July 5, 1984
Samples Soil Samples

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	PPM Ag	PPM As	PPB Au	PPB Hg	Soil Horizon	Color
Soil Samples						
RCZ-100	.2	29	Nil	135	A	Black organic
-101	.2	56	5	110	B	Dark Brown
-102	Nil	62	40	60	B	Dark Brown
-103	Nil	22	5	90	B	Dark Brown
-104	.1	13	Nil	75	B	Dark Brown
-105	.1	20	Nil	65	B	Rusty Brown
-106	Nil	9	Nil	75	B	Rusty Brown
-107	.9	25	5	50	B	Rusty Brown
-108	.3	12	Nil	80	B	Dark Brown
-109	.3	20	Nil	85	B	Dark Brown
-110	.6	106	20	-	B	Dark Brown
-111	.2	6	Nil	-	B	Dark Brown
-112	.8	18	5	-	B	Dark Brown
-113	.8	40	10	-	B	Dark Brown
RCZ-114	.9	14	5	-	B	Dark Brown

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.
Pulps Retained one month unless specific arrangements made in advance.

R. Enclos

Assayer

TABLE 1

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26344
Date June 14, 1984
Samples Soil Samples

PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au	PPB Hg	Soil Horizon	Color
Geochemical Analysis							
Soil Samples							
84-TWZ- 5	Along line on Trisha Claim Az. 045	.5	58	45	-	B	Dark Bronw
- 6		Nil	54	20	80	B	Dark Brown
- 7		.7	24	5	-	B	Dark Brown
- 8		.1	8	5	115	B	Dark Brown
- 9	Off Claims	.2	6	Nil	-	B	Dark Brown
-10		.2	8	Nil	60	B	Dark Brown

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D. Eades

TABLE 2

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26344
Date June 14, 1984
Samples Silt Samples

PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au
Geochemical Analysis				
Silt Samples				
84-RCS-30	292	1	8	Nil
84-RCS-31	370	.2	9	Nil

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D. Ryder

Assayer

TABLE 2

To: AURUN MINES LTD.
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26336
Date June 14, 1984
Samples Silt

PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au
Geochemical Analysis Silt Samples				
84-RCS- 1	122	.4	6	Nil
- 2	124	.2	6	Nil
- 3	126	.1	9	Nil
- 4	128	.1	23	Nil
- 5	138	Nil	16	Nil
- 6	139	.1	21	5
- 7	157	.2	4	5
- 8	-	.4	22	5
- 9	149	.1	30	225
-10	142	.2	26	15
-11	201	.2	29	5
-12	80	.2	27	Nil
-13	203	Nil	3	Nil
-14	218	Nil	3	10
-15	218	Nil	18	5
-16	219	.2	24	935
-17	219	5.6	12	10
-18	222	6.2	11	15
-19	243	2.5	10	45
-20	258	4.2	24	10
-21	271	3.3	36	10
-22	274	1.5	18	10
-23	278	.9	26	215
-24	283 + 450 m	1.1	46	185

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

D Eades

Assayer

TABLE 3

To: AURUN MINES LTD
910, 640 - 8th Avenue S.W.,
Calgary, Alberta T2P 1G7
Attn: J. Schindler

File No. 26336
Date June 14, 1984
Samples Rock Samples

PROJECT QUARTZ CREEK

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	Station Number	PPM Ag	PPM As	PPB Au	PPB Hg	Type of Sample
Geochemical Analysis						
Rock Samples	Station					
1776	152	Nil	2	Nil	10	Grab
1777	341	Nil	4	5	55	Channel Grab 20 cm
1778	339	.1	11	Nil	55	Channel Grab 20 cm
1779	339	.1	5	Nil	30	Channel Grab 20 cm
1780	339	Nil	14	5	35	
1781	242	Nil	4	Nil	5	
1782	248 + 25 m	Nil	1	Nil	15	
1783	162	Nil	1	Nil	15	Grab
1784	258	Nil	13	Nil	35	

Sample Description

1776 Rusty lower grit float with blue Quartz & minor pyrite.
1777 Slightly graphitic middle slate, minor pyrite, minor rust.
1778 Slightly graphitic middle slate, minor pyrite & rusty spots.
1779 Quartz carbonate lens, rusty & vuggy
1780 Quartz carbonate float, rusty, minor pyrite vuggy .
1781 Sideritic iron carbonate float minor pyrite
1782 Gritty rusty float, minor pyrite
1783 Conglomeritic LG, minor pyrite, manganese and iron stain.

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.
Pulps Retained one month unless specific arrangements made in advance.

D. Enders
Assayer

APPENDIX 4

DATA ON GEOPHYSICAL SURVEY EQUIPMENT

676-958

GEONICS LIMITED

2 Thorncliffe Park Drive, Toronto 17, Ontario, Canada. Tel. (416) 425-1821, Cables: Geonics

EM16 VLF Electromagnetic Unit

OPERATING INSTRUCTIONS

Subsidiary of Deering Milliken Inc.

EM16 OPERATING MANUAL
INDEX

EM16

VLF Electromagnetic Unit

Pioneered and patented exclusively by Geonics Limited, the VLF method of electromagnetic surveying has been proven to be a major advance in exploration geophysical instrumentation.

Since the beginning of 1965 a large number of mining companies have found the EM16 system to meet the need for a simple, light and effective exploration tool for mining geophysics.

The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained. The EM16 system provides the in-phase and quadrature components of the secondary field with the polarities indicated. Interpretation technique has been highly developed particularly to differentiate deeper targets from the wealth of surface indications.

PRINCIPLE OF OPERATION

The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter station.

Specifications

Source of primary field:	VLF transmitting stations.
Transmitting stations used:	Any desired station frequency supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.
Operating frequency range:	About 15 – 25 kHz.
Parameters measured:	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).
Method of reading:	In-phase from a mechanical inclinometer; out-of-phase from a calibrated dial. Nulling by audio tone.
ale range:	In-phase ± 150%; Out-of-phase ± 40%.
Readability:	± 1%.
Reading time:	10 – 40 seconds depending on signal strength.
Operating temperature range:	– 40 to 50° C.
Operating controls:	ON-OFF switch, battery testing push button and meter, station selector switch, volume control, quadrature dial ± 40%, inclinometer dial ± 150%.
Power Supply:	6 size AA (penlight) alkaline cells. Life about 200 hours.
Dimensions:	16 x 5.5 x 3.5 in (42 x 14 x 9 cm).
Weight:	2.5 lbs (1.1 kg).
Instrument supplied with:	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
Shipping weight:	10 lbs (4.5 kg).

By selecting a suitable transmitter station as a source, the EM16 user can survey with the most suitable primary field azimuth.

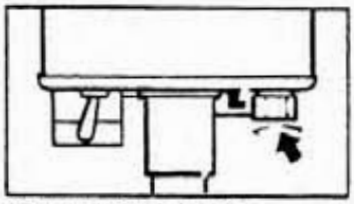
The EM16 has two receiving coils, one for the pick-up of the horizontal (primary) field and the other for detecting any anomalous vertical secondary field. The coils are thus orthogonal, and are mounted inside the instrument "handle".

The actual measurement is done by first tilting the coil assembly to minimize the signal in the vertical (signal) coil and then further sharpening the null by using the reference signal to buck out the remaining signal. This is done by a calibrated "quadrature" dial.

The tangent of the tilt angle is the measure of the vertical in-phase component and the quadrature reading is the signal at right angles to the total field. All readings are obtained in percentages and do not depend on the absolute amplitude of the primary signals present.

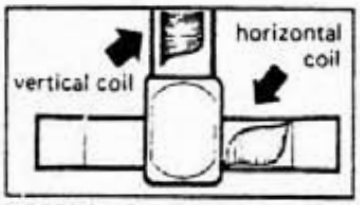
The "null" condition of the measurement is detected by the drop in the audio signal emitted from the patented resonance loudspeaker. A jack is provided for those preferring the use of an earphone instead.

The power for the instrument is from 6 penlight cells. A meter is provided for testing the battery condition.



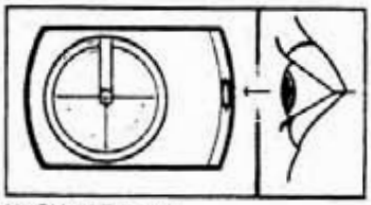
STATION SELECTOR

after selection of 2 VLF stations and insertion of proper plug-in units, knob rotation allows switching.



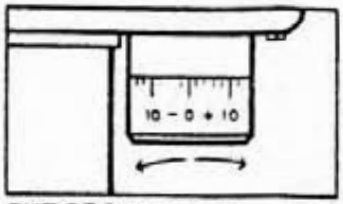
RECEIVING COILS

vertical receiving coil circuit in instrument picks up any vertical signal present. Horizontal receiving coil circuit, after automatic 90° signal phase shift, feeds signal into out-of-phase dial in series with the receiving coil.



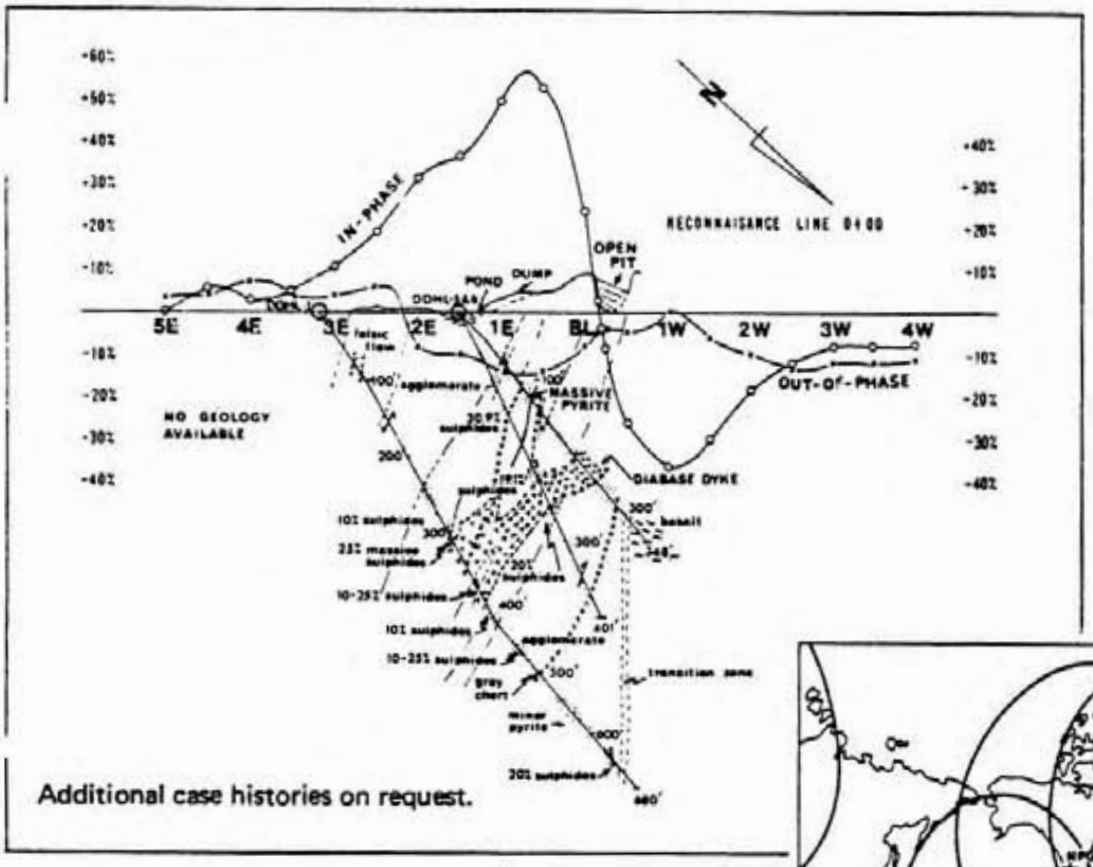
IN-PHASE DIAL

shows the tilt-angle of the instrument for minimum signal. This angle is the measure of the vertical in-phase signal expressed in percentage when compared to the horizontal field.



OUT-OF-PHASE DIAL

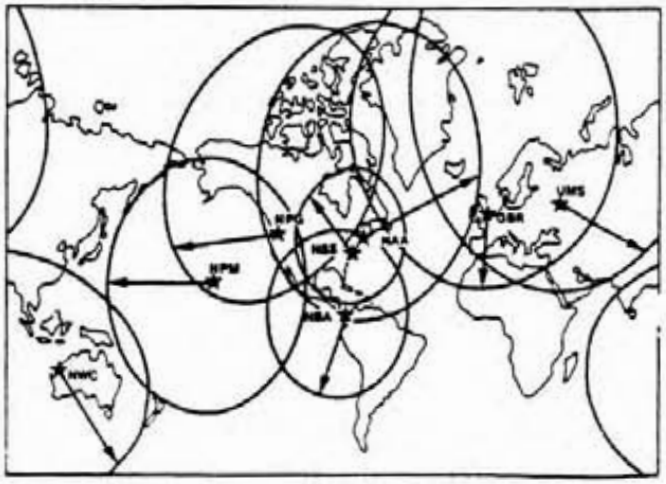
is calibrated in percentage markings and nulls the vertical quadrature signal in the vertical coil circuit.



EM16 PROFILE

over Lockport Mine property, Newfoundland

Additional case histories on request.



AREAS OF VLF SIGNALS

Coverage shown only for well-known stations. Other reliable, fully operational stations exist. For full information regarding VLF signals in your area consult Geonics Limited. Extensive field experience has proved that the circles of coverage shown are very conservative and are actually much larger in extent.

geoMetrics

MODEL G 816
PORTABLE PROTON MAGNETOMETER

MANUAL P/N 18017

OPERATING MANUAL

MODEL G-816

PORTABLE PROTON MAGNETOMETER

geoMetrics, INC.
395 Java Drive
Sunnyvale, California 94086 U.S.A.
(408) 734-4616
Cable "GEOMETRICS" Sunnyvale
Telex No 357-439

WARRANTY

GeoMetrics, Inc. warrants all equipment of its own manufacture against defective parts and workmanship for a period of one year from date of receipt, but in no event to exceed fifteen months from date of shipment. In the event of malfunction, GeoMetrics, at its own expense, will repair or replace any materials, equipment, work, or parts which prove defective or deficient under normal operating conditions. Except for the express warranty stated above, GeoMetrics disclaims all warranties of merchantability and fitness and any stated express warranties herein are in lieu of all obligations or liability on the part of GeoMetrics for damages, including but not limited to special, indirect, or consequential damages arising out of or in connection with the use or performance of the equipment.

WARRANTY SERVICE

If warranty service is necessary, or if technical advice is required, contact either of the following as most convenient:

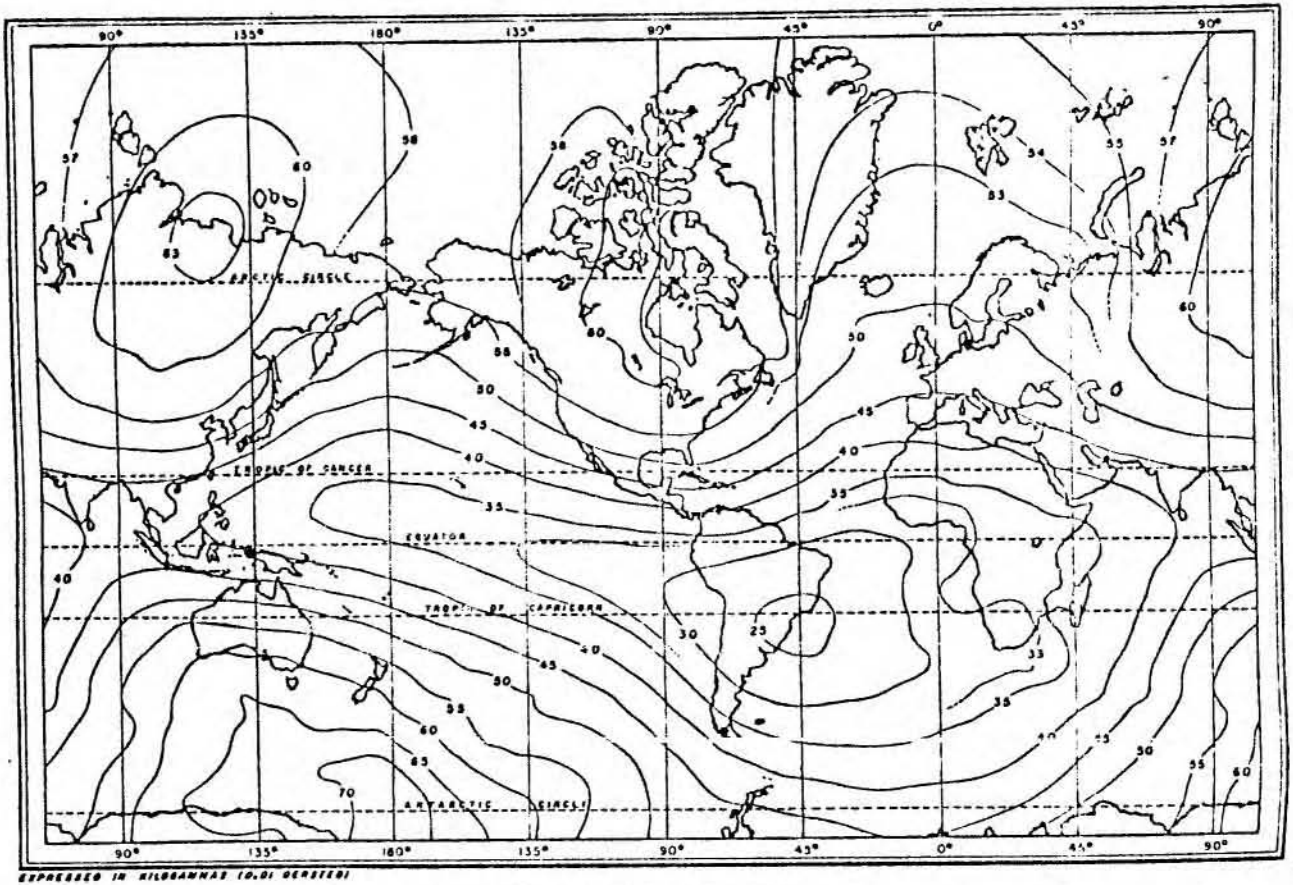
GeoMetrics, Inc.
395 Java Drive
Sunnyvale, California 94086

Telephone: (408) 734-4616
Cable: "GEOMETRICS"
Telex: 357-435

GeoMetrics Services (Canada) Ltd.
436 Limestone Crescent
Downsview (Toronto) Ontario M3J 2S4

Telephone: (406) 661-1966
Cable: "EXPLOR"
Telex: 06-22694

PROPRIETARY INFORMATION



The Total Intensity of the Earth's Magnetic Field

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LIST OF FIGURES

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The Model G-816 Portable Proton Magnetometer is a complete system designed for all man-carry field applications requiring simple operation and stable measurements of the total intensity of the earth's magnetic field. The G-816 is accurate and stable to within ±1 gamma over a range from 20,000 to 90,000 gammas. Since the instrument measures a total field intensity, the accuracy of each measurement is independent of sensor leveling. Furthermore, the measurement is based upon an atomic constant* and is independent of temperature, humidity, and sensor orientation. The inherent simplicity of the G-816 proton magnetometer allows rapid, accurate measurements to be obtained from a rugged, compact field instrument. This is a precision instrument and reasonable attention must be given to handling, battery condition, and magnetic environment.

1.2 MAGNETIC ENVIRONMENT

It is important that the earth's magnetic field is not obscured by allowing unwanted magnetic objects to come close to the sensor. Such objects include rings, keys, watches, belt buckles, pocket knives, metal pencils, zippers, some hats, etc. When the sensor is used on the staff, 1 gamma surveys are easily performed provided the sensor is kept at a distance of 3 feet from the operator. When the sensor is used in the backpack, certain articles of clothing and some types of batteries within the console will cause a 5 to 10 gamma shift in readings. The G-816, however, still provides 1 gamma sensitivity and repeatability despite the presence of such a base line shift. The backpack feature is recommended for use in difficult terrain where "hands free" operation is required.

Prior to survey use, objects that are suspected to be magnetic may be checked in the following manner:

1. Attach sensor to staff and connect coiled signal cable to console. Sensor should not be moved or turned during the test, and the suspected article should be far away initially.

* Proton Gyromagnetic Ratio: $(2.67513 \pm 0.00002) \times 10^4$ Radians/Gauss second.

2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.

3. Observe measurement readings. Each reading should repeat to ±1 gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)

4. Place the suspected article at the distance from the sensor expected during actual survey operation.

5. Cycle magnetometer several times and note the readings.

6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.

7. If the readings obtained in step 5 differ by more than ±1 gamma (one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRECESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF ±1 COUNT REPEATABILITY.

The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack". The sensor will NOT operate properly when placed directly on the ground.

1.3 SPECIFICATIONS

Sensitivity:	±1 gamma throughout range
Range:	20,000 to 90,000 gammas (worldwide)
Tuning:	Multi-position switch with signal amplitude indicator light on display
Gradient Tolerance:	Exceeds 800 gammas/ft
Sampling Rate:	Manual pushbutton, one reading each 6 seconds.

2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.

3. Observe instrument readings. Each reading should repeat to ±1 gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)

4. Place the suspected article at the distance from the sensor expected during actual survey operation.

5. Cycle magnetometer several times and note the readings.

6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.

7. If the readings obtained in step 5 differ by more than ±1 gamma (one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRECESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF ±1 COUNT REPEATABILITY.

The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack". The sensor will NOT operate properly when placed directly on the ground.

1.3 SPECIFICATIONS

Sensitivity:	±1 gamma throughout range
Range:	20,000 to 90,000 gammas (worldwide)
Tuning:	Multi-position switch with signal amplitude indicator light on display
Gradient Tolerance:	Exceeds 800 gammas/ft
Sampling Rate:	Manual pushbutton, one reading each 6 seconds.

7.	Batteries: Type D Premium Carbon Zinc with cardboard jacket (12 each within console).	24 each
8.	Applications Manual for Portable Magnetometers	1 each
9.	Operator's Manual	1 each
10.	Storage/carrying case	1 each

2.0 FIELD OPERATION

2.1 INTRODUCTION

The G-816 comes complete and ready for field survey operation. A few simple procedures should be observed to obtain optimum results, and it is recommended that the operator follow each step as outlined to initially become familiar with the various controls and survey considerations.

2.2 TURN ON PROCEDURE

PRELIMINARY CONSIDERATIONS: BEFORE OPERATING THE G-816, CHECK FOR:

a. Presence of sensor fluid:

Shake sensor and listen for "sloshing" sound. If it is necessary to add or replace the sensor fluid, remove blue "cap plug" and fill with STRAINED kerosene or white gasoline to within 1½ inches of top. (Fluid should be strained several times through paper filters, i.e. paper towels, coffee filters, etc.)

b. Batteries in place and fully charged:

Remove cover, check battery polarity, and insure that batteries are held firmly in place by retaining straps. (See Figure 2-1) Check battery charge by pressing push button and counting the blinks of the BAT charge indicator light. (See Section 3.2)

THE FOLLOWING STEPS SHOULD BE PERFORMED TO CORRECTLY TUNE AND TURN ON THE MAGNETOMETER

1. Attach signal cable to sensor. There are two (2) cables provided: a long coiled cable for staff use and a shorter cable for use with the "backpack".

APPENDIX 5

DATA OF HISTORIC INTEREST

TO: FILE 83/07/01

RE: QUARTZ CREEK PROJECT, FIELD TRIP

ON JULY 1ST THE FOLLOWING INDIVIDUALS TRAVELED TO QUARTZ CREEK NEAR GOLDEN B.C. TO CONDUCT GENERAL PROSPECTING ON AURUN'S ANGELA MINERAL CLAIM: JED DAGENAIS, PAUL DAGENAIS, JOHN CHAPMAN, ROB CHAPMAN AND GLEN LARSON ALL OF CALGARY.

THE ROAD FROM HIGHWAY ONE TO THE 1615 METER ELEVATION, AT THE ROAD JUNCTION BY THE BRIDGE, IS IN FAIR CONDITION PASSABLE BY AUTOMOBILE. THERE ARE NO STEEP GRADES ON THE ROAD, THE CLIMB IS STEADY AND GRADUAL FROM HIGHWAY ONE.

A TRAVERSE WAS MADE UP THE ROAD FOLLOWING THE SOUTHWEST FORK OF PORCUPINE CREEK. AT THE BRIDGE BY THE ROAD JUNCTION A STRONG IRON SEEP WAS LOCATED ON THE WEST STREAM BANK JUST 10 METERS DOWNSTREAM FROM THE BRIDGE. AT FIRST WE THOUGHT THE STAIN MAY BE FROM RUSTING WASTE STEEL IN THE LOGGING ROAD, HOWEVER A PERSISTENT ODOR OF ROTTEN EGGS (HYDROGEN SULFIDE) FROM THE SEEP INDICATES THE PRESENCE OF SULFUR (SULFIDE MINERAL OXIDATION). A SAMPLE (NO. 83/07/01/01) WAS TAKEN OF THE RUSTY BROWN SILTS IN THE SEEP AREA. AT SEVERAL LOCATIONS ALONG THE ROAD TRAVERSE QUARTZ VEINS WERE SEEN IN THE ROAD CUTS IN THE MAINLY PHYLLITE HOST ROCK. THE VEINS CONTAINED IRON CARBONATE MINERALS AS WELL AS MINOR IRON SULFIDES. MARIPOSITE AND CHLORITE WERE FOUND IN SEVERAL FLOAT BOULDERS ALONG THE ROAD. THE ROAD ENDED AT A NARROW GAP IN THE CREEK VALLEY WHERE A LARGE SIGN MARKS THE SNOWMOBILE TRAIL TO PRAIRIE HILLS.

THE RETURN TRAVERSE WAS TAKEN OVER THE NOSE OF THE HILL BETWEEN THE TWO HEADWATER TRIBUTARIES OF PORCUPINE CREEK. THE WEST SLOPE OF THIS HILL HAS BEEN LOGGED SO THERE ARE SEVERAL SWITCHBACK ROADS ALONG THE FACE OF THE SLOPE. THE EAST SLOPE OF THIS HILL IS VERY STEEP AND HEAVILY TIMBERED DOWN TO THE MORE GENTLE SLOPE OF THE VALLEY FLOOR WHICH HAS BEEN LOGGED. APPROXIMATELY 75% OF THE ANGELA MINERAL CLAIM HAS BEEN LOGGED, BUT HEAVY SLASH REMAINS, MAKING TRAVERSING DIFFICULT.

SPOT READINGS WERE TAKEN ALONG THE TRAVERSE USING A PROTON MAGNETOMETER. READINGS WERE FAIRLY UNIFORM, WITH NO SIGNIFICANT HIGHS.

A TRAVERSE WAS MADE BY JOHN CHAPMAN DOWN THE WEST SIDE OF THE EASTERN, TRIBUTARY FROM ONE KILOMETER ABOVE THE BRIDGE. SEVERAL PILES OF ROCK COVERED WITH MOSS AND TREES ALONG THE CREEK CHANNEL INDICATED PRE 1900 PLACER MINING. MINOR WORK IN THE PAST FIVE YEARS WAS INDICATED BY A WOODEN SLUICE BOX AND A FEW SMALL EXCAVATIONS ON THE CREEK BANKS ABOUT 300 METERS UPSTREAM FROM THE BRIDGE. AN OLD CAVED ADIT WAS FOUND ON THE WEST SIDE OF THE CREEK ONLY TWO METERS ABOVE WATER LEVEL AND ABOUT 200 METERS UPSTREAM FROM THE BRIDGE. SEVERAL TIMBERS ARE LAYING AT THE PORTAL, AND A SMALL WASTE DUMP OF PYLLITE/QUARTZITE AND AN ORE DUMP OF QUARTZ CONTAINING MINOR IRON SULFIDES ARE AT THE DOWNSTREAM SIDE OF THE PORTAL. THE CURRENT TWO POST CLAIMS WITHIN AURUN'S BLOCK COVER THIS PORTAL AND COINCIDE WITH THE 1897 CLAIMS SHOWN ON F.C. LANG'S MAP. APPROXIMATELY 60 METERS UPSTREAM FROM THIS PORTAL THERE IS A QUARTZITE LEDGE IN THE PYLLITES WHICH CONTAINS QUARTZ STRINGERS AND

SOME MINOR SULFIDES.

AN ATTEMPT WAS MADE TO LOCATE THE PLACER BENCH THAT C.S. EVANS REFERRED TO IN HIS G.S.C. SUMMARY REPORT, 1926, PART A. NOW THE AREA HAS BEEN LOGGED THE BENCH REFERRED TO BY EVANS ON THE EAST SIDE OF PORCUPINE CREEK, AT THE 1800 METER ELEVATION, IS CLEARLY VISIBLE. THIS BENCH, WHICH IS SOME THREE KILOMETERS LONG, WAS BEING HAND SLUICED BY TWO MEN JUST 250 METERS UPSTREAM FROM THE BRIDGE. THE BENCH AT THIS POINT IS SOME 100 METERS ABOVE THE EAST FORK OF PORCUPINE CREEK.

JOHN A. CHAPMAN
83/07/02

F2w/06

D.D.H. GEOMANAGEMENT LTD.

July 25, 1983

Mr. J.E. Dagenais, President
Aurun Mines Ltd.
Suite 910 - 640 - 8th Avenue, S.W.
Calgary, Alberta T2P 1G7

Dear Mr. Dagenais:

Re: Field examination of the Groundhog Basin Project near Revelstoke, B.C., and of the Angela and Nicole Mineral Claims - both near Golden, B.C.

Reports on the subject properties were submitted earlier in 1983, but respective field examinations were not possible at that time due to excessive snow cover. This letter report addresses the recommended work program for each property.

(a) Groundhog Basin Project

The Aurun Mines Ltd. - Ark Energy Ltd. joint venture project on the Groundhog Basin, north of Revelstoke, B.C. was examined on 21 July, 1983. From the examination, it can be stated that the claims are properly located and that the recommendations outlined in the 25 March, 1983 report by A.D. Drummond, Ph.D., P.Eng., titled "Report on the Groundhog Basin Project, Revelstoke Mining Division, British Columbia (82M9W)" should be carried out as stated.

(b) Angela Mineral Claim

The Angela mineral claim of Aurun Mines Ltd. near Golden, B.C. was examined on 21 July, 1983. From the examination, it can be stated that the claim is as described and that the recommendations outlined in the 25 March, 1983 report by A.D. Drummond, Ph.D., P.Eng.,

422 - 470 Granville Street Vancouver, B.C Canada V6C 1V5 • Telephone (604) 681-4413

titled "Report on the Angela Mineral Claim Quartz Creek Area, Golden Mining Division (82N/6W)" should be carried out as stated.

(c) Nicole Mineral Claim

The Nicole mineral claim of Aurun Mines Ltd. near Golden, B.C. was examined on the 22nd July, 1983. From the examination, it can be stated that the claim is as described, and that the recommendations outlined in the 25th March, 1983 report by A.D. Drummond, Ph.D., P.Eng., titled "Report on the Nicole Mineral Claim, Golden Mining Division (82N/3E)" should be carried out as stated.

Please be advised that notification of these field examinations should be made to the regulatory authorities.

Respectfully submitted,
D.D.H. GEOMANAGEMENT LTD.

ADD:mjw

A.D. Drummond, Ph.D., P.Eng.
Geological Engineer

82N/6W.02 01 01

D.D.H. GEOMANAGEMENT LTD.

REPORT

ON THE

ANGELA MINERAL CLAIM

QUARTZ CREEK AREA

GOLDEN MINING DIVISION

LAT. 51°24'45". LONG. 117°19'.

82N/6W

FOR

AURUN MINES LIMITED.

BY

A.D.DRUMMOND, PhD.,P.ENG.

D.D.H. GEOMANAGEMENT LTD.

MARCH 25,1983

422-470 Granville Street, Vancouver, B.C. Canada V6C 1V5 • Telephone (604) 681-4413

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ILLUSTRATIONS.

SUMMARY.

Aurun Mines Limited is the owner of the 20 unit Angela mineral claim located near the junction of Porcupine and Quartz Creeks approximately 13 air kilometers southwest of Donald in the Golden Mining Division.

Placer gold was discovered in the creeks in 1881, and to 1945 approximately 245 ounces had been produced.

Geological evidence suggests that the gold has been derived from stringers and veins of quartz that have been eroded from the underlying or nearby sedimentary rocks.

An evaluation program has been recommended to locate and define mineralized zones within and near the Angela claim. The program includes prospecting, geological and geochemical surveys, and trenching and sampling, and is estimated to cost $30,000.00.

INTRODUCTION.

The firm of D.D.H. Geomanagement Limited was commissioned on March 1,1983 by the directors of Aurun Mines Limited; Suite 910-640-8th Ave.SW,Calgary,Alberta, to appraise the exploration potential of the Angela mineral claim located in the Golden Mining Division of British Columbia, and to recommend an exploration program to test that potential.

The property is up to 2286 meters (7500 feet) above sea-level and snow conditions would preclude a field examination at the time. Consequently, the assignment was accomplished by reviewing published and private reports on the subject area.

This report summarizes the known information, outlines the exploration potential, and proposes a preliminary work program to evaluate that potential.

PROPERTY AND TITLE.

The property is comprised of the 20 unit Angela claim staked 5 units north and 4 units west of the Legal corner post. The claim was recorded in the Golden Mining Division on October 8,1982. Record Number 1039.

The claim is overstaked on mineral claim E.B.1, Record 402(8), a one unit claim owned by E.Bushby of Lumby, British Columbia. (Figure 2).

British Columbia government claim map Placer 82N/6W shows a number of placer claims in the mineral claim area. Title to these claims is shown in appendix 2. (Fig.3)

LOCATION AND ACCESS.

The Angela claim is located in Quartz Creek Valley approximately 13 air kilometers southwest of the Canadian Pacific Railway station at Donald, in southeast British Columbia. Lat. 51°24'45". Long. 117°19', NTS 82N/6W. Donald is on the Trans Canada Highway about 25 kilometers northwest of Golden, British Columbia, and 290 kilometers (180 miles) west of Calgary, Alberta.

Access to the claim is by an 8 kilometer forestry road that runs south from the Tran Canada Highway about 17 kilometers west of Donald. The area has been intensively logged and logging roads provide local access.

The topography in the claim area is rugged with elevations ranging fron 1524 meters (5000 feet) in Quartz Creek to 2286 meters (7500 feet) in the Dogtooth Mountains on the east boundary of the claim. In spite of the rugged terrain, bedrock in much of the valley is obscured by surficial deposits.

HISTORY.

Placer gold was discovered in Quartz and Porcupine Creeks in 1881, and to 1945 the creeks had recorded production of 257 ounces as follows:

Table XVII.—Placer Gold Production from Golden Mining Division—Continued

Year	Porcupine Creek[2] (141)		Quartz Creek (142)		Toby Creek (177)	
	Ounces	Value	Ounces	Value	Ounces	Value
		$		$		$
1874-75						
1876-80						
1881-85			31	600	(1)	
1886-90	168	3,262[3]	(3)			
1891-95						
1896-1900			20	389		
1901-05						
1906-10						
1911-15						
1916-20						
1921-25						
1926-30	30	582				
1931-35					7	188
1936-40	8	264				
1941-45						
Totals	206	4,108	51	989	7	188

[1] Production for 1885 from Toby and Dutch Creeks is combined with production from Canyon (Cannon) Creek.
[2] Tributary of Quartz Creek.
[3] Production for 1888 from Quartz Creek is combined with production from Porcupine Creek.

* Source: B.C.Department of Mines Bulletin 28, 1950, PP35,36.

A limited amount of prospecting for silver,copper and gold was recorded for the years 1926 to 1930.

REGIONAL GEOLOGY.

Quartz Creek is in the Dogtooth Mountains immediately west of the Rocky Mountain Trench in southeastern British Columbia. The Dogtooth Mountains are mainly comprised of deformed sedimentary and lesser volcanic rocks

or their metamorphosed equivalents, of Proterozoic or Paleozoic age. (Map 43-1962).

Bedrock in much of the Quartz Creek valley is obscured by Pleistocene and Recent surficial deposits of glacial and glaciofluvial origin. The upper slopes of the valley are underlain by Horsethief Creek Group rocks comprised of pale grey, dark green, green and maroon slate and phyllite quartzite, feldspathic quartzite and grit, pebble conglomerate and minor limestone. The succession passes upward to Horsethief Creek Group limestone and marble, or to quartzite, slate, phyllite, argillite or schist of the Cambrian Hamil Group.

The sedimentary rocks have been extensively faulted and folded in a northeasterly direction, coincident with the trend of the Rocky Mountain Trench.

PROPERTY GEOLOGY.

Gravels in the Quartz-Porcupine Creek drainage contain an abundance of quartz debris. Because some of the placer gold was coarse, rough and locally attatched to quartz fragments, much of the quartz was believed to have been derived locally.

The old placer ground near the Porcupine-Quartz Creek confluence is partly underlain by slate and phyllite, within which a number of veins and stringers of quartz are reported. The veins are mineralized with small amounts of pyrite, and locally galena and chalcopyrite. These minerals are also reported along with minor native silver in the placer fines.

Stronger veins are also reported in the more massive overlying (?) strata. The 1930 British Columbia Minister of Mines Report describes a large quartz vein occurring at elevation 7,050 feet near the head of Porcupine Creek. The vein is greater than 10 to 12 feet in width, with attitude 290/55N and mineralized with pyrite, malachite and chalcopyrite. A select sample of the vein yielded 1.41% copper. A 100 inch channel sample from another section yielded 0.02 oz/ton gold, 0.40 oz/ton silver and 0.57% copper.

The above description suggests a similarity to veins on the Nicole property some 32 kilometers (20 miles) to the southeast.

CONCLUSIONS ON EXPLORATION POTENTIAL.

Limited work in the Angela claim area since the discovery of gold in 1881, has shown the presence of veins and stringers of quartz mineralized with variable but generally low amounts of gold, pyrite, chalcopyrite and galena.

The extent and nature of the surface gravels in the Creek valleys have precluded and continue to deter detailed examinations of underlying bedrock in more than small areas.

An abundance of quartz in the gravels, and the presence of mineralized veins of substantial widths at the upper elevations indicates that the veins may have a wider distribution than previously believed. For this reason, the known veins should be further investigated and a search initiated for others.

RECOMMENDATIONS.

A preliminary exploration program including prospecting, geological and geochemical surveys followed by trenching and sampling is proposed as a first step in the re-evaluation of the claim.

Note. Owing to heavy snow conditions in the claim area, the property has not been visited. The above recommended program is reasonable in light of known data, but a field examination will be required before the physical work commences.

COST ESTIMATE.

Wages, Two men, two months.	$10,000.00
Geochemical analyses.	4,000.00
Truck and fuel.	2,500.00
Camp, Camp costs, Field supplies.	7,500.00
Engineering and Supervision.	3,000.00
	27,000.00
Contingency.	3,000.00
Total.	$30,000.00

Respectfully Submitted,
D.D.H. Geomanagement Limited.

March 25,1983

A.D. Drummond, PhD., P.Eng.
Geological Engineer.

REFERENCES.

(1) Evans, C.S. Geological Survey of Canada, Summary Report, Part A, 1926.

(2) Horne,E.J. B.Sc. Preliminary Report, Angela claim, Quartz Creek Area, Golden Mining Division, NTS. 82N/6W. Lat. 51°24'45", Long. 117°19',. March 2,1983.

(3) Wheeler, J.O. Geological Survey of Canada Paper 62-32. Rogers Pass Map Area, British Columbia and Alberta, 82N/W½. With Map 43-1962.

(4) British Columbia Department of Mines.
Bulletin 1,1933, Page 46.
Bulletin 28,1950, Pages 35 and 36.

(5) British Columbia Minister of Mines Annual Reports.
1884-424; 1888-306; 1889-285; 1890-371; 1892-535;
1899-610,663; 1900-802; 1926-235; 1929-292
1930-236; 1935-E36.

CERTIFICATION.

I, Arthur Darryl Drummond of the City of Vancouver, Province of British Columbia, hereby certify as follows:

(1) I am a geological engineer residing at 3249 West 35th Ave., Vancouver, B.C. and employed by D.D.H. Geo-management Ltd. with an office at 422 - 470 Granville Street, Vancouver, B.C.

(2) I am a registered Professional Engineer of the Province of British Columbia, certificate no. 5778. I graduated from the University of British Columbia in 1959 with a B.A.Sc. in geological engineering , and in 1961 with a M.A.Sc. in geological engineering. I graduated from the University of California in 1966 with a PhD. in geology.

(3) I have practised my profession continuously for 24 years primarily with the Placer Development Group of Companies at Craigmont, Endako and Gibraltar mines, and in mineral exploration in Canada, United States of America, Chile, Argentina, Mexico and the Phillippines.

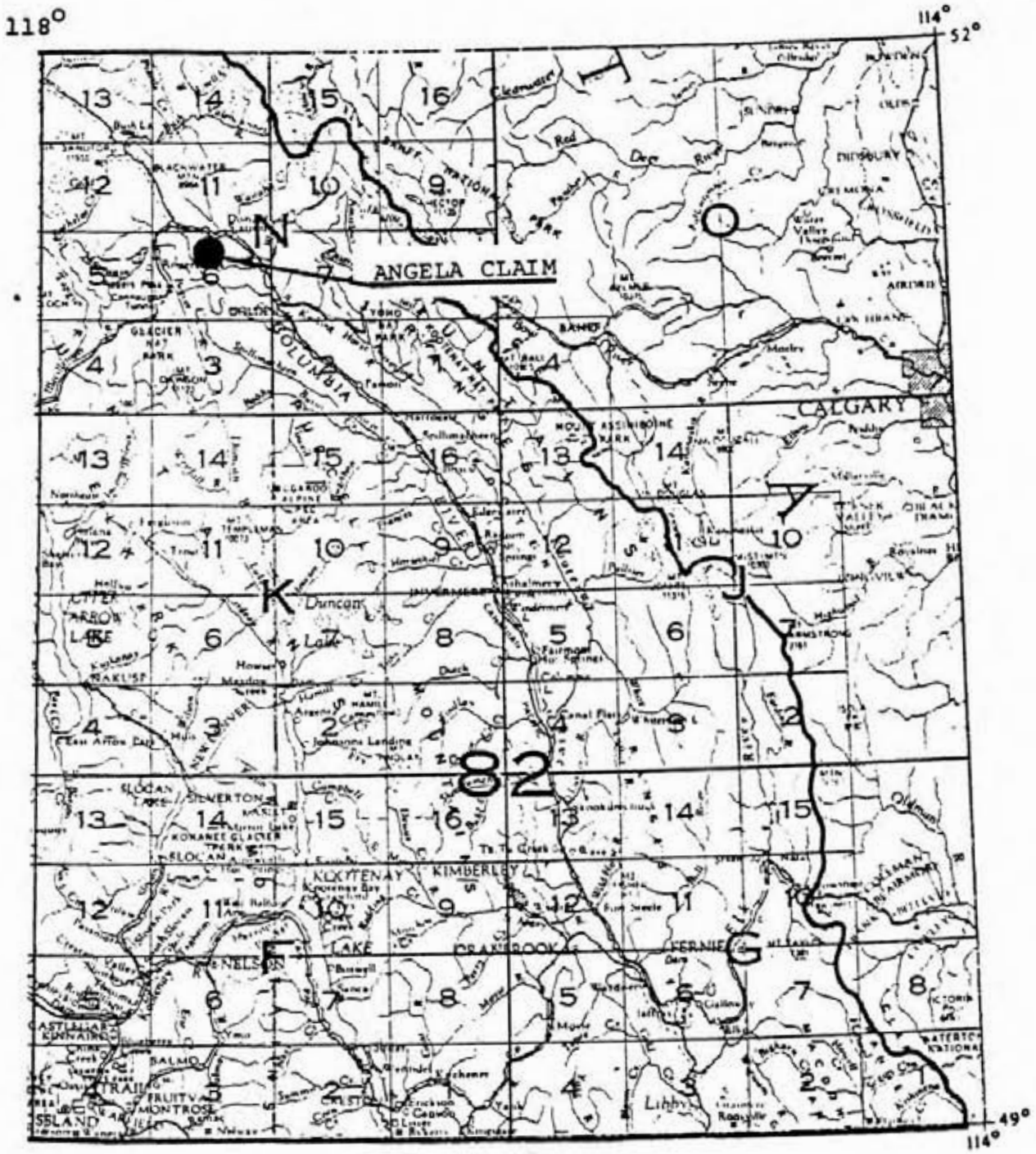
(4) I am the author of this report which is based on published and unpublished, government and private reports. The property was not visited due to snow cover.

(5) I have no interest, direct or indirect, in the property discussed in this report or in the securities of Aurun Mines Limited, nor do I expect to receive any.

(6) I consent to the use of this report to satisfy requirements of the Vancouver Stock Exchange and the British Columbia Securities Commission.

Dated at Vancouver, B.C. this 25 day of March, 1983.

A.D.Drummond, PhD., P.Eng.
D.D.H. Geomanagement, Ltd,
Geological Engineer.

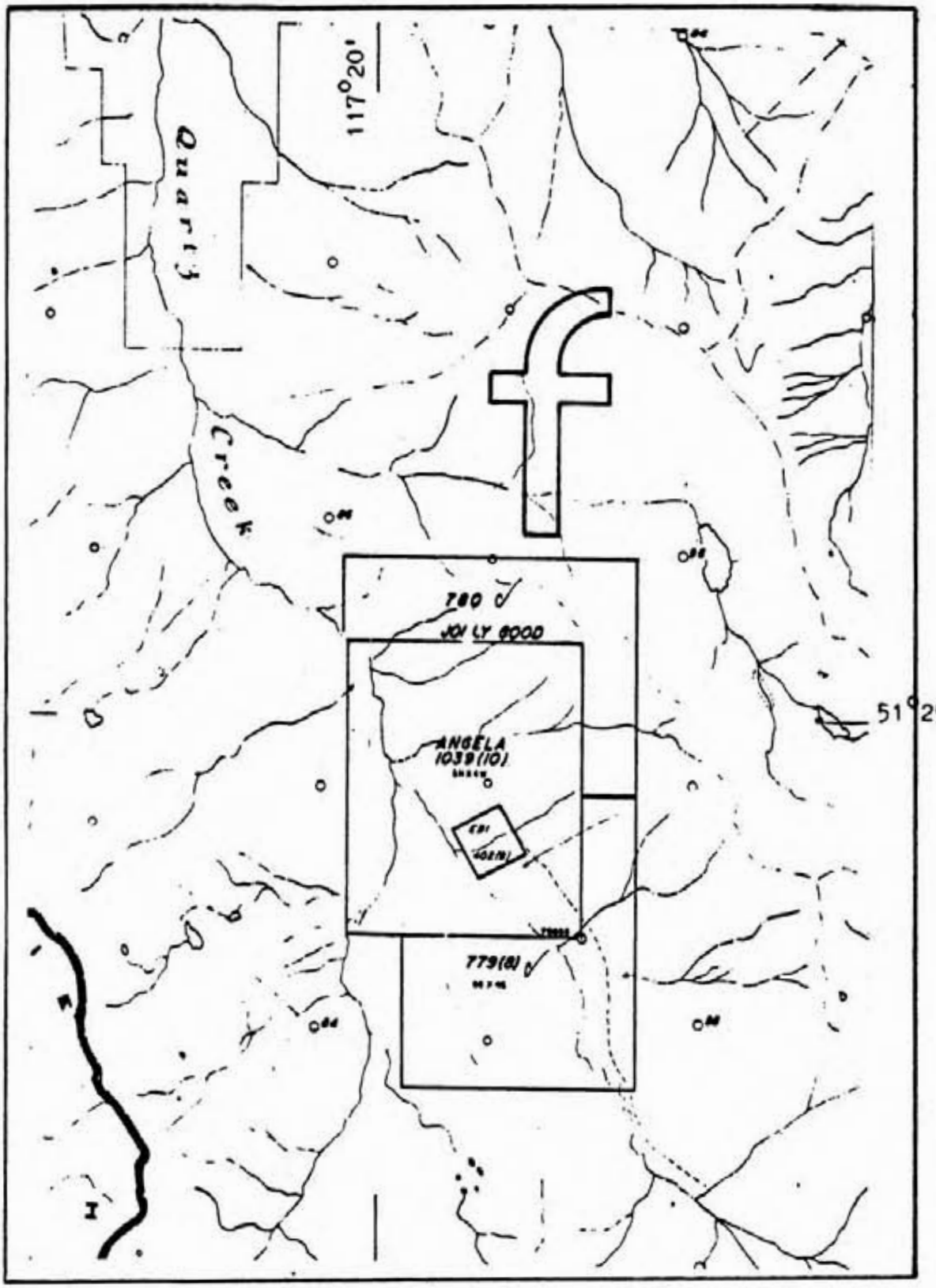


AURUN MINES LIMITED.

LOCATION MAP-ANGELA MINERAL CLAIM

GOLDEN MINING DIVISION.

FIGURE 1



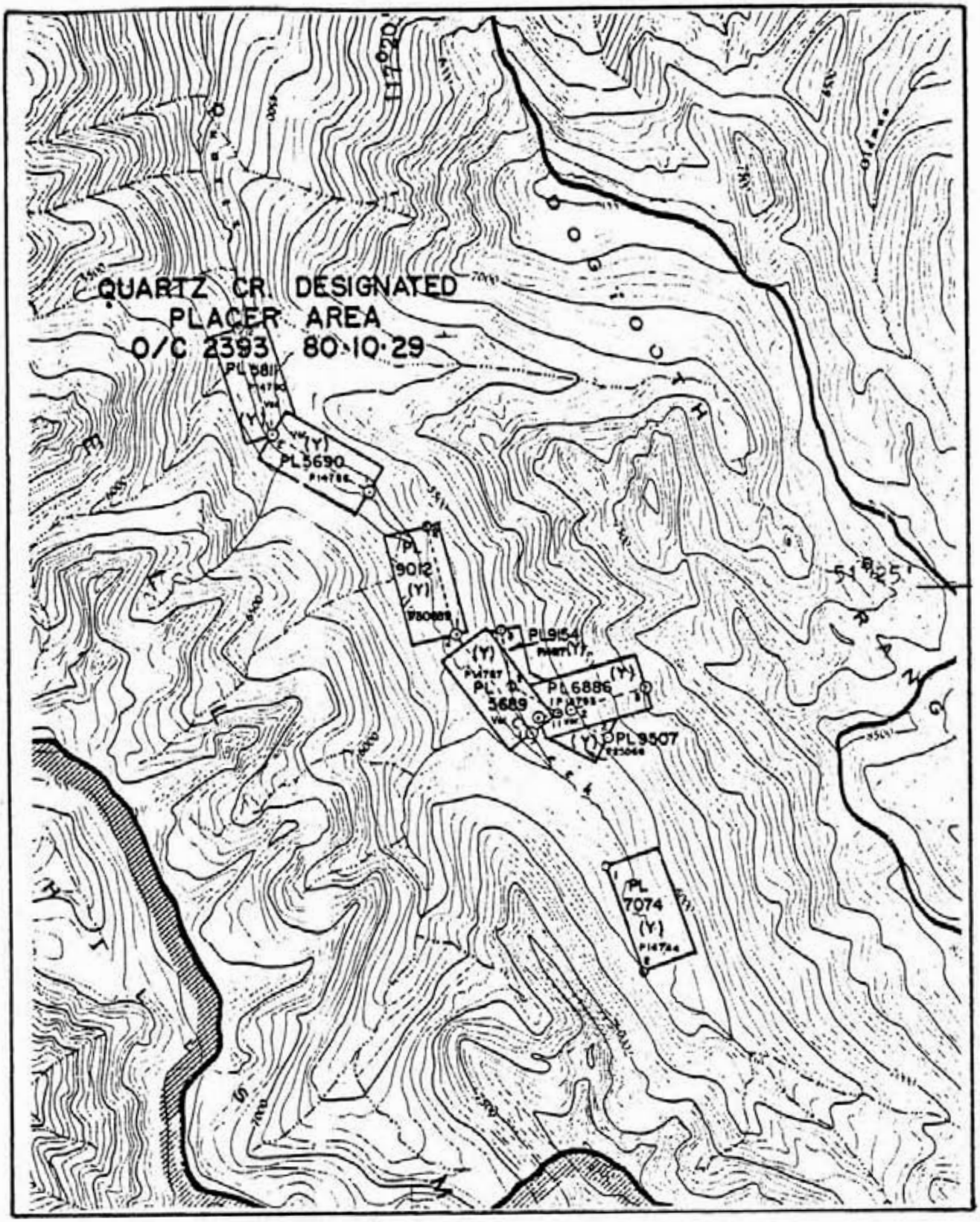
M 82N/6W

AURUN MINES LIMITED

CLAIM MAP-ANGELA CLAIM

GOLDEN MINING DIVISION.

FIG. 2.



82N/6

GOLDEN MINING DIVISION

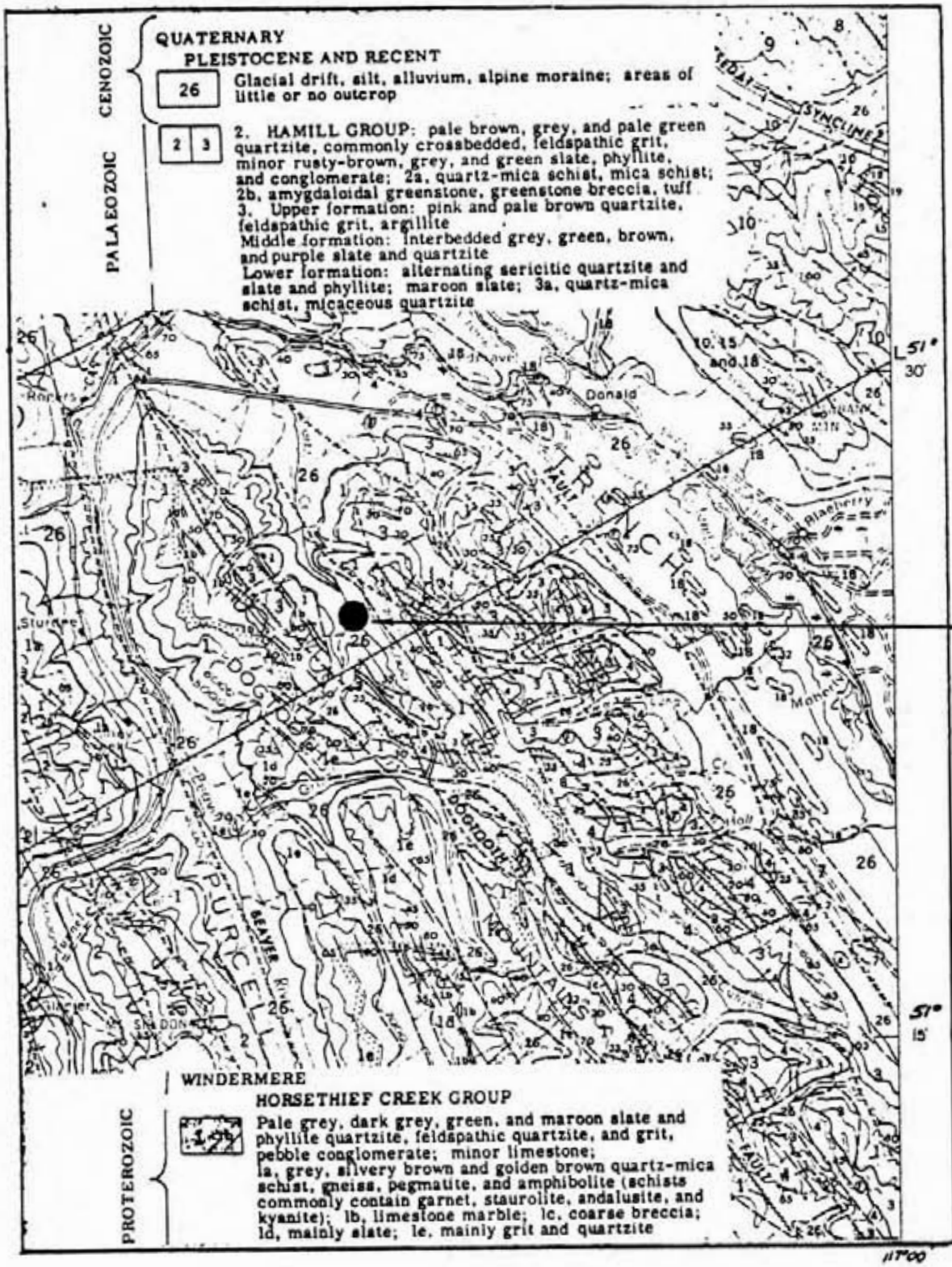
AURUN MINES LIMITED.

MAP SHOWING PLACER CLAIMS

QUARTZ CREEK, GOLDEN M.D.

Scale 1:50,000

Figure 3.



AURUN MINES LIMITED.

GEOLOGY-ANGELA CLAIM AREA.

MODIFIED AFTER GSC MAP 43-1962

Scale 1:250,000 Figure 4

APPENDIX A PLACER CLAIM OWNERSHIP

P.L.	5811 Y	Barry Edmund Nagle, P.O.Box 331, Golden.B.C.
P.L.	5690 Y	Owen R. Brown, P.O.Box 567, " B.C.
P.L.	9012 Y	J.M.Logan, 5058 Ross St. Vancouver, B.C.
P.L.	5689 Y	C.L.Williams,Box 567 Golden, B.C.
P.L.	6886 Y	R.Elford, 6716 Silverridge Way, Calgary, Alta.
		C.J. Tegart, Box 233, Canal Flats. B.C.
P.L.	9507 Y	???
P.L.	9154 Y	E.Bushby, RR1, Lumby, B.C. V0E-2G0
P.L.	7074 Y	D.Hagman, Box 186, Golden, B.C. VoA-1H0

8.5 KM TO HIGHWAY

ANGELA
1039

TRISHA
1318

ANDREA
1128

QUARTZ CREEK

QUARTZ CREEK (PORCUPINE)

LCP.

LEGEND

PROTON MAGNETOMETER SURVEY
MODEL G816 GEOMETRICS.
BASE MAGNETISM 58447 GAMMAS (STATION A).
ALL READINGS REDUCED BY 58000.
CONTOUR INTERVAL 50 GAMMAS
001 LOCATION OF READING
401 READING

TRAVERSES TAKEN

DATE:	STATIONS:
MAY 24	1 - 74
MAY 25	75 - 152
MAY 26	153 - 193
MAY 28	194 - 227
MAY 29	228 - 282
MAY 30	283 - 309
MAY 31	310 - 376

NOTE: CONTROL SURVEY BY BELT CHAIN AND BRUNTON COMPASS. FROM ESTABLISHED POINTS AND STATIONS ex. STN A to E.

SCALE

200 100 0 100 200 300 METERS

AURUN MINES LTD.

QUARTZ - CREEK PROJECT

GOLDEN M.D. NTS 82N/6W
MAGNETOMETER PLAN
MAP 1

SCALE: 1:5000	DRAWN BY: R.C. & E.H.
DATE: 15-06-84	APPROVED BY:

8.5 KM TO HIGHWAY

ANGELA
1039

TRISHA
1318

ANDREA
1128

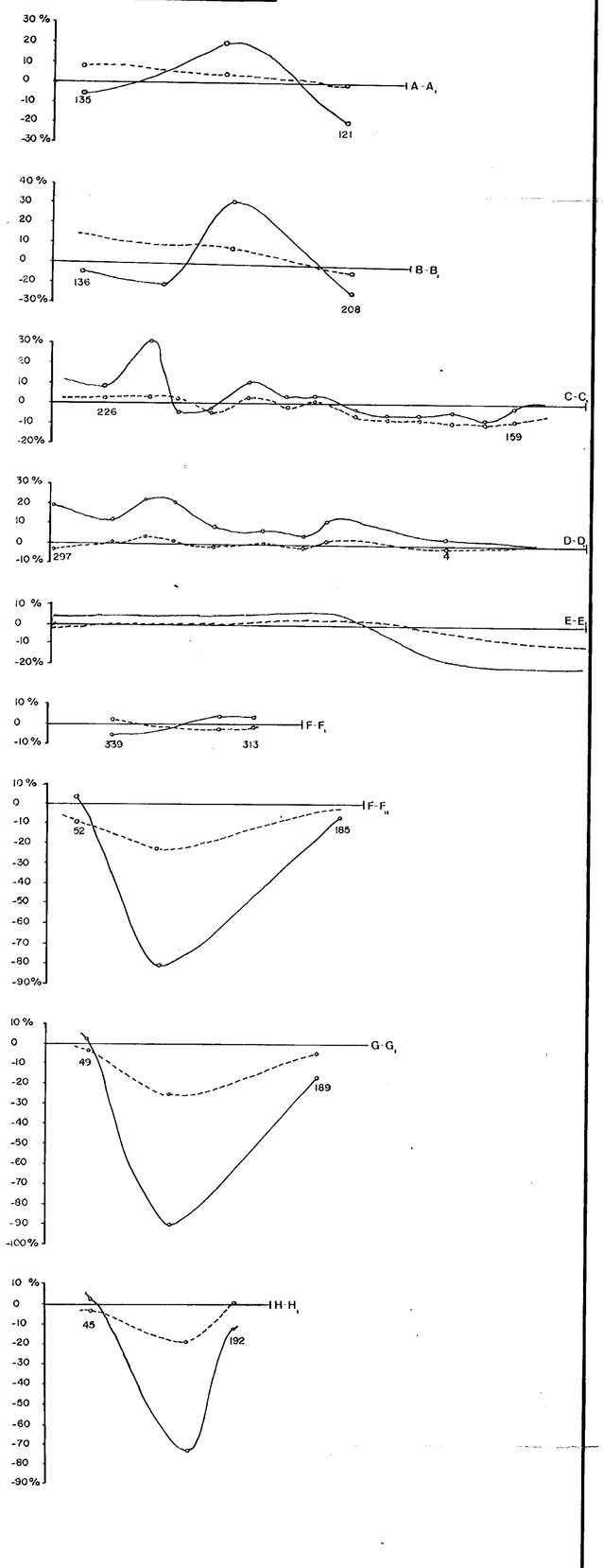
QUARTZ CREEK

QUARTZ CREEK (PORCUPINE)

LCP.

LCP.

PROFILES



LEGEND

CONTOUR INTERVAL- 20% OF IN-PHASE VLF READINGS (IN POSITIVE AND NEGATIVE).

001 LOCATION OF READING

-01/ IN-PHASE VLF READING

/-02 OUT-OF-PHASE VLF READING

TRAVERSES TAKEN

DATE:	STATIONS:
MAY 24	1 - 74
MAY 25	75 - 152
MAY 26	153 - 193
MAY 28	194 - 227
MAY 29	228-282
MAY 30	283 - 309
MAY 31	310 - 376

NOTE: CONTROL SURVEY BY BELT CHAIN AND BRUNTON COMPASS. FROM ESTABLISHED POINTS AND STATIONS ex. STN A to E.

SCALE

200 100 0 100 200 300

METERS

AURUN MINES LTD.

QUARTZ - CREEK PROJECT

GOLDEN M.D. NTS 82N/6W
VLF ELECTROMAGNETIC PLAN
MAP 2

SCALE: 1:5000	DRAWN BY: R.C. & E.H.
DATE: 15-06-84	APPROVED BY:

8.5 KM TO HIGHWAY.

ANGELA
1039

TRISHA
1318

ANDREA
1128

QUARTZ CREEK

QUARTZ CREEK (PORCUPINE)

LCP.

LEGEND

Z001	SOIL SAMPLE NUMBER RCZ-001 PLOTTED NEXT TO LOCATION.
S001	SILT SAMPLE NUMBER AS ABOVE
TWZ001	SOIL SAMPLE NUMBER
TWS001	SILT SAMPLE NUMBER
1/1/1/1	SOIL AND SILT ANALYSIS RESULTS PPM Ag/PPM As/PPB Au/PPB Hg
1/1/1	AS ABOVE BUT Hg NOT ANALYZED
▲	MAIN STATION LOCATION
201	STATION DATA POINT
	ANOMALOUS AREA≥ 15 PPB Au

TRAVERSES TAKEN

DATE:	STATIONS:
MAY 24	1 - 74
MAY 25	75 - 152
MAY 26	153 - 193
MAY 28	194 - 227
MAY 29	228-282
MAY 30	283 - 309
MAY 31	310 - 376

NOTE: CONTROL SURVEY BY BELT CHAIN AND BRUNTON COMPASS. FROM ESTABLISHED POINTS AND STATIONS

SCALE

200 100 0 100 200 300 METRES

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,761

AURUN MINES LTD.

QUARTZ - CREEK PROJECT

GOLDEN M.D. NTS 82N/6W
GEOCHEMICAL PLAN
MAP 3

SCALE: 1:5000	DRAWN BY: R.C. & E.H.
DATE: 15-06-84	APPROVED BY:

8.5 KM TO HIGHWAY

MS & THIN QTZ. VEINLETS

MS & LG BLOCKY TALUS

INTERPRETED

QUARTZ CREEK

OLD WORKINGS

ANGELA 1039

FLOAT LG WITH PY

OLD WORKINGS

MS BLACK GRAPHITIC

TRISHA 1318

INTERPRETED

PLACER WORKINGS

FLOAT

MS QTZ CARB I cm

QTZ - CARB & GRAPHITIC

BLACK GRAPHITIC

QTZ. CARB.

QTZ. CARB. 0.5m a 0.5m

ANDREA 1128

QUARTZ CREEK

QUARTZ CREEK (PORCUPINE)

INTERPRETED

LCP.

LCP.

LEGEND

US	UPPER SLATE	WINDERMERE SYSTEM (HORSETHIEF CREEK GROUP)
UC	UPPER CARBONATE	
MS	MIDDLE SLATE	
LG	LOWER GRIT	

STRIKE AND DIP

CLEAVAGE

MINOR FOLD AND PLUNGE DIRECTION AND MAGNITUDE

JOINT STRIKE AND DIP

OUTCROP

INTERPRETED THRUST FAULT AND DIRECTION OF DIP

TRAVERSES TAKEN

DATE:	STATIONS:
MAY 24	1 - 74
MAY 25	75 - 152
MAY 26	153 - 193
MAY 28	194 - 227
MAY 29	228-282
MAY 30	283 - 309
MAY 31	310 - 376

NOTE: CONTROL SURVEY BY BELT CHAIN AND BRUNTON COMPASS. FROM ESTABLISHED POINTS AND STATIONS ex. STN A to E.

SCALE

200 100 0 100 200 300

AURUN MINES LTD.

QUARTZ - CREEK PROJECT

GOLDEN M.D. NTS 82N/6W
GEOLOGICAL PLAN
MAP 4

SCALE: 1:5000	DRAWN BY: R.C. & E.H.
DATE: 15-06-84	APPROVED BY: