

ASSESSMENT REPORT

ON THE

BT 1-7 & 11 CLAIMS

CARIBOO MINING DIVISION BRITISH COLUMBIA

LAT 54° 03' N LONG 121° 36' W

N.T.S. 93 I 4

FOR

26BT RESOURCE DEVELOPMENT CO. LTD.

BY

S. JAIN, P. GEOPH (ALBERTA), P. GEO. (B.C.)

&

W. L. KELSCH, P. GEOPH (ALBERTA)

GEOLOGICAL SURVEY BRANCH
REPORT

26,098

December 3, 1999

Calgary, Alberta

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Since 1974, Dr. Jain has explored for numerous companies in Canada and overseas as well as in Madagascar and Southeastern Alberta on his own account. He is also associated with ore exploration in British Columbia and diamond exploration in Saskatchewan. He is a registered Geoscientist in British Columbia, a member of Association of Professional Engineers, Geologists and Geophysicists of Alberta, and honorary member of Canadian Society of Exploration Geophysicists.

LORNE KELSCH graduated with B.Sc. from University of Manitoba in 1952. After working on seismic data acquisition, processing and interpretation for 22 years with Petty Ray Geophysical, Mr. Kelsch moved to PanCanadian where he worked in various capacities including Chief Geophysicist till his retirement in 1995.

Mr. Kelsch is a professional member of Association of Professional Engineers, Geologists and Geophysicists of Alberta, Canadian Society of Exploration Geophysicists and Canadian Society of Petroleum Geologists.

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INTRODUCTION

Claim Data

The B.T. Properties are presently held in the name of 26BT Resource Development Co. Ltd. They were originally staked by Brendan A. Gordon on behalf of Malcolm T. MacDonald, one of the principals of the Company.

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Anniversary Date</u>
BT 1-4	313837-313840	October 8, 1993
BT 5,6	313845-313846	October 8, 1993

These were then sold to the company.

BT 7, 8, 9, 10 and 11 were acquired on behalf of the company in 1993. Details are as follows:

BT 8-10	323096-323098	December 21, 1994
BT 7,11	323202-323203	December 29, 1994

BT 12, 13, 14, 15, 16, 17, 18, 19 and 20 were acquired on behalf of the company by Brendan A. Gordon in June 1996. The details are as follows:

BT 12-17	346620-346625	June 09, 1996
BT 18	346941	June 10, 1996
BT 19	346626	June 10, 1996

Stone 1 and Stone 2 were acquired on behalf of the company by Malcolm McDonald in 1996. The details are as follows:

Stone 1 and 2	349810-349811	August 04, 1996
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The total area of claim is approximately 75 sq. km.

This report covers claims 1-11 only. Claims 12-19 were relinquished this year and Stone 1 and 2 are reported separately.

Location & Access

The property lies north of the Fraser River and south of the West Torphy River. The centre of the claims is about 6 kilometres N.N.E. of Sinclair Mills (Figure 1). Access to the claims is by old logging roads. The claims lie between the elevation of 700 meters and 1690 meters in generally rugged terrain. Devil's club and windfall trees make the claims difficult to traverse.

History

Two of the principals of the company entered the area north and east of MacGregor in 1989. This was based on projections of the trends seen in the configuration of the North American Continental mass as demonstrated by Government gravity and magnetic maps. Later, while studying reports and maps in the Provincial offices in Prince George, the magnetic feature shown on Aeromagnetic Map 1536 G of the Geophysics Division of Mines and Technical Surveys (Figure 2) was noted. Subsequent sampling along Creeks Crossing the old logging road north of Sinclair Mills yielded unusually high amounts of magnetite. The decision to stake the area at the north west end of Bearpaw Ridge was then made and carried out in 1992. An aeromagnetic survey was flown, processed and interpreted in 1993. As a result of this survey, additional areas surrounding the claims were staked. 9 holes were drilled to the depth of 100' on the claims in October 1994. The chemical analysis from the cores showed that Fe_2O_3 content averaged between 10 - 20% in the holes and reached up to 35% in some zones. The magnetic separation in 20 samples from two of the holes showed that in samples with high Fe_2O_3 content (greater than 10%), magnetite is more than 75% of total Fe_2O_3 percentage.

Three holes were drilled to the depths of 300' in June 1995. Two of the holes confirmed the presence of magnetite in a variable amount to at least 300'. The third hole was mislocated and missed the anomaly. This hole does not appear to have any commercial significance.

Three holes were drilled in July 1996, two to the depth of 300' and one to 500'. One hole confirmed magnetic concentration while the other two were discouraging. Detailed surface geology was undertaken in 1997 together with mineral and chemical analysis of 60 stream samples and 109 chip samples. The report of professional geologist is included as Appendix 7 in Assessment Report Number 25280.

In summer of 1998, ground magnetic and VLF-EM data was collected along eleven cut lines and four roads. 25 silt samples and 81 rock samples were also collected by E. R. Kruchkowski, P. Geol. and his crew. His report is included as Appendix 2 in Assessment Report Number 25664. Ground geophysical data results are discussed in a later section (Integration of Geology and Geophysics).

In summer of 1999, ground magnetic data was collected along three extended and two new lines. 63 rock samples and magnetic data at 25' intervals were collected by E.R. Kruchkowski, P. Geol. and his crew. Two gravel samples were also collected for detailed analysis. Five cores

from previous holes (94-4, 94-6, 95-2, 96-1, and 96-3) were analysed in detail in 3.3 m (10') sections by Overburden Drilling Management for mineralogical content. Core for 94-4 was analyzed by MD Technologies of Perth, Australia for metallurgical analysis in July to October 1999.

Geology

Following summary of known geology of Bearpaw ridge closely follows the report by Pell (1994). The area is mapped as Silurian volcanoclastics, felsic and intermediate tuffs, agglomerates of Nonda formation over the ridge, foliated hornblende gneiss on the western slope and coarse grained massive pink syenites in the southwest (Figure 3). Pell notes sodalite syenite outcrop and two flanking syenite sills in southeast portion of the claim area which intrude the volcanoclastics whose southeastern extent is not defined. These volcanoclastics "largely comprise clinopyroxene crystal tuffs, calcareous tuffs and minor basaltic flows. Flow rocks contain clinopyroxene phenocrysts and altered phenocrysts (now chlorite) in a ground mass of opaque oxides, plagioclase and clinopyroxene microphenocrysts and chlorite". These may be classified as alkali basalts. Folded and foliated dioritic orthogneiss vary from a banded gneiss containing 5 - 10% magnetite-ilmenite to a mafic gneiss with 15 - 20% magnetite-ilmenite. Chemical analyses indicates Fe_2O_3 content of 6.9 and 14.5% in two volcanic samples and 1.5, 7 and 11.2% in three samples from mafic gneiss. Corresponding TiO_2 content is .59 and 2.06% in volcanics and .27, .80 and 2.01% in mafic gneisses.

Kelsch in an appendix to Kelsch and Jain (1994) reported that the accessible part of the terrain is generally covered by a thin layer of soil. The vegetation is thick. Devil's club and mosquitoes are plentiful and they make the work quite difficult. In spite of these problems, he obtained several surface samples. The majority of these samples were from glacial erratics which had not moved very far from their original location. The magnetic susceptibility of these samples ranged from .001 to .250 emu. Two of the samples were analyzed chemically by Terramin Research Labs Ltd (Table 1). The analysis showed 22 and 25% Iron Oxide and 4.34 and 5% Titanium Oxide in these samples. These figures support more work on the prospect to define concentrations of magnetite and ilmenite which may have economic interest.

The magnetic data acquired by 26BT strongly suggest a magnetite rich intrusive of elliptical shape on the ridge. This is confirmed by the mineralogical analysis of samples from fifteen holes drilled so far which contain crystalline gabbro with high mafic content. The gabbro is quite heterogeneous laterally as well as vertically. Pell (1994) does not mention this intrusive. Incidentally, the sodalite body mapped by Pell was not encountered in hole 95-3.

Geophysics

Data Acquisition in 1993

26BT engaged Geonex Aerodat to conduct an aeromagnetic and electromagnetic survey over a

12 km X 13 km area including the company's claims. The data were acquired in February, 1993 by a helicopter with mean terrain clearance of 100 m for helicopter and 70 m for sensing equipment. The survey comprises 321 line kilometres, with east-west traverse lines spaced 500 m apart and two north-south tie lines. In addition to the total field map with variable contour interval, Geonex also supplied maps for vertical gradient of the magnetic field and VLF-EM total field. The VLF-EM map is relatively quiet and indicates general absence of sulphide ores in the area. The vertical gradient measurements did not provide meaningful data probably because magnetic anomalies were very strong and very sharp. The details of acquisition and preliminary processing are contained in the report submitted by Geonex and included in Kelsch, and Jain (1993). Final processing and interpretation are described by Jain and Kelsch (1997) in Assessment Report Number 25280.

Data Acquisition in 1997

26BT engaged Dighem, A Division of CGG Canada Ltd. to conduct an aeromagnetic and multi-coil, multi-frequency electromagnetic survey over an approximately 62 sq km area. Total coverage amounted to 361 km including tie-lines. The survey was flown on February 8 and February 9, 1997. Dighem processed the data in their Mississauga, Ontario facility and final maps and their report was received by 26BT on April 8, 1997.

The survey was conducted to evaluate claims 12 - 21 which have now been relinquished. However, the survey area overlapped claims BT 6, BT 8, BT 9, and BT 10. 22.5% of the survey covered these claims and 22.5% is assigned to claims covered by this report. Overall costs of the survey were distributed accordingly.

Sixteen traverse lines were flown with the spacing of 200 m in a NE - SW direction. The length of lines was variable. Two tie lines were flown six kilometers apart. The survey employed the DIGHEM5 electromagnetic system installed in an Aerospatiale AS350BA turbine helicopter. Ancillary equipment consisted of an optically pumped Cesium vapour (model Picodas 3340) magnetometer, radar altimeter, video camera, analog and digital recorders and GPS navigational system (model Sercel NR106, Real-time differential positioning). In addition, a field work station was employed to verify data quality and completeness. Magnetic base station used a digital recording cesium vapour magnetometer. The helicopter flew at an average speed of 107 km/h, with average terrain clearance of 60 m. Clearance was 40 m for magnetic and 30 m for EM bird. For technical details of the Dighem report see Assessment Report Number 25034.

Interpretation of E-M Data

This is included in Assessment Report Number 25543 (D.R. Stevenson, P.Geo. electromagnetic data), Assessment Report Number 25664 (Appendix 2) and Assessment Report Number 25034 (Dighem maps).

DRILLING AND CORE ANALYSIS

9 holes were drilled to a depth of 30.46 m (100 ft) in October 1994, 3 holes to the depth of 91.38 m (300 ft) in June 1995 and three holes, two to the depth of 91.38 m (300 ft) and one to 152.29 m (500 ft) in July 1996. All holes were cored in hard rock. Location of the holes is shown in Figure 4. Core diameter was 43 mm (1 ¾"). Hole 7 did not hit the hard rock till it reached the bottom. Susceptibility was measured at 1 ft intervals on the cores as an indicator of the magnetite content. Two boulder specimens collected in 1994 were analyzed. The holes were drilled to determine the source of magnetic anomaly and not for details of local geology. No obvious metals have been noted in the cores. Appendix 1 gives details of the drilling logistics. Core logs are given in Assessment Report Number 25034.

140 samples were selected from fourteen cores to include a wide variety of susceptibility and core type (grain-size, colour, rock type) and two from boulders picked up on the site. Magnetic susceptibility of the samples was measured several times at different locations on the sample and the average recorded.

The samples were chemically analyzed by Terramin Research Labs of Calgary in December, 1994, August, 1995 and October, 1996. The results of their analyses, measured susceptibility and rock type are given in Assessment Report Number 25664.

Cores from five holes, 94-4, 94-6, 95-2, 96-1 and 96-3 were cut in two halves along the diameter. One part was sent to Stu Averill, Overburden Drilling Management Limited, Napean, Ontario. His reports and analyses conducted by them are included in Assessment Report Number 26044 (Appendix 3). Overall results of this study are generally negative. The summary of Stu Averill's work is as follows:

1. The magnetite in the gabbro contains approximately 10% of its weight in TiO_2 in intercrystalline form. The titaniferous magnetite is of little commercial value.
2. There is no rutile contained in these cores.
3. Ilmenite content ranges from 2.5% to 5% in all holes except 96-4 where it is 10%. 94-4 also contained 2.5% P_2O_5 . However, apatite contained in the core is very fine-grained and may be deleterious to Ilmenite instead of being a by-product. As a result of this analysis, core from 94-4 was sent to MD Technologies in Perth, Australia for metallurgical analysis and review of commerciality of the core. Preliminary results from their analysis show that recoverable ilmenite is only 3.2% because substantial proportion of TiO_2 is contained in Pyroxenes as well as in magnetite and that calcium and phosphorus content makes it unsuitable for chloride feed stock but acceptable as sulphate feed stock.

Composite Sample Separation and Analyses of Ilmenite and Magnetite

The crushed core for hole 94-4 was shipped to MD Mineral Technologies in Australia to determine the recoverable grade of ilmenite, magnetite and apatite, composition of ilmenite and magnetite and grain size of ilmenite and magnetite. The report of this analysis (Appendix 2) can be summarised as follows:

1. Recoverable percentage of ilmenite totals only 2.9%. This could increase to almost 4.0% on optimum crushing.
2. Ilmenite is suitable for sulfate feedstock.
3. Magnetite contains approximately 15% TiO_2 .
4. Apatite, if any, is not recoverable.

These findings show that the hole itself is not commercial but the areas of higher TiO_2 content could be potentially commercial. Therefore, two crushed rock sample residuals from geochemical analysis for samples R65 and R222 located on the northwest slope of the ridge were sent to MD Minerals for similar analysis. The geochemical analysis had shown that TiO_2 content in these samples was approximately 10%. Unfortunately, fines (-45 micrometer) were 65.2% in R65 and 42% in R222. Even with this unfavorable ratio, the recoverable ilmenite was respectively 2.6% and 8.3% of the whole sample. This translates into maximum of 7.5% and 12.7% respectively. In R222, all of TiO_2 appears to be in ilmenite and magnetite and none in pyroxenes. Recovery of more than 10% ilmenite is probable in an optimally ground sample R222.

INTEGRATION OF GEOLOGY AND GEOPHYSICS

The geological study conducted in the summer of 1997, 1998 and 1999 by Ed Kruckowski (see Assessment Report Numbers 25280, 25664 and 26044) provided encouraging results from silt and rock samples. Analyses of these samples generally supported the magnetic data interpretation and drill hole results of previous years. General conclusions from magnetic separation and petrographic studies are:

1. Recoverable magnetite is expected to be 60 - 75% of Fe_2O_3 content of the rock. However, this magnetite is of little commercial interest due to its TiO_2 content.
2. Recoverable ilmenite is expected to be about the same percentage as TiO_2 since pyroxenes and magnetite also contain TiO_2 .
3. Rutile is absent in all five holes analysed in detail.

4. Apatite is present along the rims of zones with concentrated ilmenite. This apatite is very fine-grained, widely dispersed and probably not commercial.

Silt Samples

86 silt samples were collected in 1997 and 1998 from the stream beds. The chemical analyses showed Fe_2O_3 and TiO_2 content ranges of 5 - 36% and 0.5 - 14% respectively. Iron and titanium contents increased in tandem, TiO_2 being 20 - 40% of Fe_2O_3 . Generally the percentage was at the higher end of the spectrum when the Fe_2O_3 content was higher.

Higher concentrations were noted in streams which flowed through highly magnetic areas than in streams which bypassed such areas. The ground magnetic survey shows that many streams have moved since concentrating magnetite along several kilometers of their lengths. The data indicates the width of concentrated zones ranges from 100 - 200 m. It should be noted that string anomalies are also caused by sources other than streams.

If the surface samples are representative of the overburden, approximately 2.4 sq km of overburden could be ore grade. This overburden is estimated to contain 0.3 m tons (worth \$15 m) of ilmenite for one sq km area each metre of thickness. Unless a thick zone can be isolated, environmental approval may be a problem for a project stripping off all top soil for a large area.

Two bulk samples collected last summer were analyzed by Loring Laboratories for their chemical content. The samples proved to be of no commercial interest (Table 2).

Rock Samples

Rock samples were collected from accessible outcrops in 1997, 1998 and 1999. Chemical analyses of these samples showed that generally TiO_2 is 15 - 35% of Fe_2O_3 , its proportion increases when Fe_2O_3 concentration is high.

The chemical analysis done in 1997 did not include P_2O_5 and V_2O_5 . The analysis for these samples was repeated by Loring Lab in 1999 in Assessment Report Number 26044 (Table 2). This analysis indicates that ilmenite enrichment noted in 94-4 probably extends eastwards and may be better than in 94-4. P_2O_5 content seems to be higher along the rims of high ilmenite zones. There is indication of local concentration of V_2O_5 but not to economic levels.

Ground Geophysical Survey

In June 1998 and 1999, total magnetic field data were collected along slashed lines and four roads. Station spacing was 25 m and line spacing averaged 1 km. The meter, ENVI MAG/VLF, S/N 9602230, was manufactured by and rented from Scintrex.

Manually contoured map of magnetic field (Figure 4, contour interval 1000 nT) shows very strong (2000 -6000 nT) string like anomalies. When these strings follow the dips on topographic map, they indicate magnetite concentration in existing or old streams. When string like anomalies follow the trend of the topographic strikes, they may be due to the outcropping gabbro. Thickness and magnetite and ilmenite content of enriched stream beds is of vital importance in estimating reserves. Rectangular rims of high anomalies indicate edges of magnetite concentrations, one such concentration is noted west of the top of the ridge.

Modelling with 10 m thick, 100 m wide and 4 km long horizontal plate placed 1 m and 70 m below observation plane shows that narrow anomalies are ten times as strong and half as wide on ground data than on aeromagnetic data. The magnitude of the anomalies with the susceptibility of 0.01 cgs units was 1600 nT on the surface and 125 nT at flight level. Therefore, the overburden anomalies are expected to be subdued by deeper-source anomalies on aeromagnetic data. Following parameters are estimated for magnetic overburden from ground magnetic data:

Width 100 - 200 m
Thickness 5 - 20 m
Susceptibility .01 - .03 cgs
Magnetite content 5 - 10%
Ilmenite content 2-5%

These estimates do not apply to magnetite rich gabbros which are the probable source of anomalies on aeromagnetic map.

In shallow models a very strong negative field is observed at the northern edge of the source. Some very strong negative anomalies were observed in the field. These could be the northern edges of streams located south of the stations.

Continuation of ground magnetic data to the flight height for aeromagnetic data resembles the aeromagnetic map within the limits set by field parameters of the data sets. This supports the validity of both data sets.

CONCLUSIONS AND FUTURE WORK

The surface geology, ground magnetic survey and integration of all data with 15 holes drilled in 1995 and 1996 and aeromagnetic surveys in 1993 and 1997 lead to following conclusions:

1. The best prospect so far drilled is in the vicinity of hole 94-4 in west slope of the ridge. The metallurgical analysis shows that recoverable percentage of ilmenite is only about $\frac{1}{3}$ of ore grade and impurities make it unsuitable as chlorite feed stock.
2. P_2O_5 is contained as fine particles in other minerals and is not separable.

3. Magnetite contains 8-15% TiO_2 which is inseparable. Therefore, magnetite is unsuitable as iron ore and almost worthless.
4. From surface geology and magnetic data, there is a possibility of different phase of gabbro intrusion on top of the ridge which has higher grade ilmenite concentration. Surface rock samples have significantly higher TiO_2 .

Based on these conclusions, we plan to drill one or two holes to test the depth of ilmenite rich gabbro where surface sampling has indicated better than 7.5% TiO_2 .

References

- Kelsch, W.L., Jain, S., 1993, Assessment report on the BT 1-6 claims: Prince George Mining Division, British Columbia
- Kelsch, W.L., Jain, S., 1994, Assessment Report on the BT 1-11 claims: Prince George Mining Division, British Columbia
- Pell, J., 1994, Carbonatites, Nepheline Syenites, Rimberlites and Related rocks in British Columbia: Province of British Columbia, Mineral Resources Division, Bulletin 88, p 14-18
- Jain, S., Kelsch, W.L., 1996, Assessment report number 25034, BT claims 12-19
- Jain, S., Kelsch, W.L., 1997, Assessment report number 25164 & 25280, BT claims 1-11
- Jain, S., Kelsch, W.L., 1997, Assessment report number 25543, BT claims 12-19
- Jain, S., Kelsch, W.L., 1998, Assessment report number 25664, BT claims 1-11

Table 1:

Chemical analysis of two boulder samples collected in May, 1994.

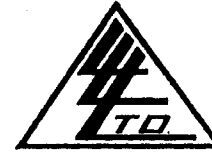
Sample Number	SiO ₂ %	Al ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	Fe ₂ O ₃ %	MnO %	TiO ₂ %	LOI %	Total %
93-2	37.9	10.0	13.850	9.882	0.949	0.151	22.45	0.182	4.34		99.67
93-3	34.7	8.7	8.982	13.513	0.325	0.245	27.60	0.219	5.00		99.23

TABLE 2



Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541



TO: 26 BT RESOURCE CO., LTD
Suite 200, 5920 McLeod Trail S.W.,
Calgary, Alberta
T2H 0K2

FILE: 41422

DATE: Sept. 22, 1999

Attn: Sudhir Jain

WHOLE ROCK ANALYSIS BY ICP

Sample No.	Al ₂ O ₃ %	Ba ppm	CaO %	Cr ppm	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	Ni ppm	P ₂ O ₅ %	SO ₃ %	SiO ₂ %	Sr ppm	TiO ₂ %	V ₂ O ₅ %	LOI %	SUM %
99-P1	10.38	149	12.53	89	28.26	0.17	8.27	0.28	1.46	42	0.199	0.34	31.38	442	4.83	0.22	0.06	98.39
99-P2	13.38	1366	7.99	131	11.64	1.89	4.32	0.14	1.29	54	0.257	0.11	49.07	341	1.53	0.02	6.65	98.44
99-P3	15.01	701	0.49	60	5.57	4.79	0.18	0.17	5.05	<1	0.17	0.05	61.28	32	0.61	<0.01	1.75	95.12

0.2g sample fused with lithium metaborate and dissolved in 5%HNO₃.

Certified by: *Hans Jwally*

APPENDIX 1

Drill hole and core information

Hole diameter	1 ¾" 43 mm
Inclination	90°
Azimuth	n.a.
Minerals noted	no obvious metals noted, detailed analysis planned.
Number of holes	15
Total hole depth	2900' 883.2 m
Total length of core	2611' 795.2 m
Location of cores	7203 Keewatin Street S.W., Calgary, AB, T2V 2M6
Collar elevation of holes (estimated from topo map)	94-1 3620' 94-2 3700' 94-3 4080' 94-4 3990' 94-5 3630' 94-6 3880' 94-7 2810' 94-8 2695' 94-9 2490' 95-1 2400' 95-2 4575' 95-3 5320' 96-1 2470' 96-2 5250' 96-3 5200'

STATEMENT OF COSTS

(December 20, 1998 to December 03, 1999)

BT 8, 9 and 10

A. EXPLORATION COSTS

- Cutting of Core	550.91
- Maps	3,395.04
- 20% of \$331.43 Transportation Expense	<u>62.28</u>

TOTAL EXPLORATION EXPENSES **\$ 4,008.23**

B. SAMPLE ANALYSIS

- Edward Kruchkowski	\$ 400.00
- Loring Laboratories Ltd.	1,778.00
- Overburden Drilling Management Limited	4,868.15
- Intertek Testing Services	<u>805.46</u>

TOTAL SAMPLE ANALYSIS EXPENSES **\$ 7,851.61**

TOTAL EXPENSES **\$11,859.84**

APPENDIX 2

26BT RESOURCE DEVELOPMENT CO. LTD

DRILL-HOLE 94-4, 5 TO 100M COMPOSITE SAMPLE
SEPARATION AND ANALYSES OF ILMENITE, MAGNETITE AND
OTHER MINERALS
PLUS SMALL SAMPLES R65 AND R222

Report No. MS.99/80171/1
October 22, 1999

MD mineral technologies
(incorporating *MD metallurgical services*)
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MD mineral technologies (incorporating MD metallurgical services)
is a division of Evans Deakin Pty Ltd

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1.0 INTRODUCTION

1.1 Material

The sample material submitted by *26BT Resource Development* was made up of 19 drill-core samples in 5m increments from hole 94-4 from 5 to 100m (ref list in the appendices). The drill-core samples as received were crushed to -2mm. The total weight of the samples was 25.5kg.

Two small samples were subsequently supplied for analyses. These samples were as follows;

R65	243.1g
R222	447.7g

1.2 Scope-of-Work (Hole 94-4, Composite)

1. Receive sample, treat the sample to meet quarantine requirements and split out a sub-sample for characterisation.
2. Characterise the sub-sample by wet screening at 45µm, carrying out size analyses of the +45µm material, carrying out densimetric analyses of the +45µm material and mineralogy of the +2.85sg densimetric fractions.
3. Wet screen the sample at 45µm retaining the -45µm material.
4. Separate the +45µm material using a wet shaking table to concentrate the HM (Heavy Mineral)
5. Carry out electrostatic and magnetic separation of the HM to produce a 'clean' ilmenite product and other products present.
6. Despatch a sample of the ilmenite (and other products) for chemical analyses.
7. Carry out size analyses of the ilmenite and other products.
8. Prepare a comprehensive report.

1.3 Terms of Reference

1. Proposed scope-of-works in fax from Bruce Selvey to Mr Sudhir Jain, June 22, 1999.
2. Faxed letter from Sudhir Jain to Bruce Selvey accepting proposal and outlining further information.

1.4 Conclusions for Bulk Sample (Hole 94-4, Composite)

- Two ilmenite fractions were generated. These are summarised as follows;

Ilmenite	IRM fraction	yield%	Ilmenite Products							
			%							
			TiO ₂	Fe ₂ O ₃	FeO	SiO ₂	P ₂ O ₅	MnO	CaO	MgO
ilmenite 1	2.0a mag	2.36	44.8	4.4	36.9	4.4	0.9	0.94	2.0	3.6
ilmenite 2	0.6a mag	0.55	34.3	5.7	32.7	12.3	1.2	0.86	4.3	6.6
total		2.91	42.8	4.6	36.1	5.9	1.0	0.92	2.4	4.2

Ilmenite 1 although relatively low-grade is a typical hard rock ilmenite and may be a potential sulphate feed stock.

- Two magnetite products were produced one from the wet shaking table concentrate and the second from the table middling. Analyses of the magnetite products are summarised as follows;

Magnetite (HS)	table fraction	yield%	Magnetite Products								
			%								
			TiO ₂	Fe ₂ O ₃	FeO	SiO ₂	P ₂ O ₅	Al ₂ O ₃	MnO	CaO	MgO
1	conc	7.30	15.1	30.6	30.8	8.9	3.2	1.4	0.66	4.2	3.8
2	middling	6.00	8.0	17.9	15.0	30.0	4.6	2.4	0.51	11.5	9.0
total		13.30	11.9	24.9	23.7	18.4	3.8	1.9	0.59	7.5	6.1

The magnetite products were produced using a wet LIMS and therefore can be regarded as 'clean' products. Magnetite 2, produced from the table middling, was significantly coarser than magnetite 1 and contained composite particles resulting in a lower grade product.

- A non-conductor/non-magnetic product was isolated and is believed to be pyroxene. Microscopic examination of this material showed it to be a smoky-grey and translucent in appearance. Analysis of this product is given as follows;

mag fraction	yield%	'Pyroxene' Product					
		%					
		Fe ₂ O ₃	SiO ₂	P ₂ O ₅	Al ₂ O ₃	CaO	MgO
5.5a mag	1.74	11.4	48.8	1.2	3.1	21.3	12.6

This material reported in other fractions and it is estimated that the feed sample contained 15.4% 'pyroxene'.

- The non-magnetic fraction generated from the table middling floated in bromoform at 2.8sg and was off white in colour. It is believed this material is feldspar and the chemical analysis is given as follows.

yield%	'Feldspar' Product				
	%				
	Fe ₂ O ₃	SiO ₂	P ₂ O ₅	Al ₂ O ₃	Na ₂ O
3.30	11.4	57.0	0.6	25.1	6.5

- The grind size at 2mm for the bulk sample was too coarse resulting in a significant amount of un-liberated material. It is believed the grind size should be in the order of 600µm to effectively liberate the minerals and facilitate separation.

6. High concentrations of P_2O_5 , which is an indicator of apatite, were not evident. Apatite may be present however other minerals with the similar properties may dilute it.
7. The results show that 48.2% of the TiO_2 in the total feed, or, 81.7% of the TiO_2 in the $-1mm +45\mu m$ fraction was recovered into the ilmenite and magnetite products. It would be expected that if the $+1mm$ material was ground to $-1mm$ a similar TiO_2 recovery (81.7%) of would be achieved on the resulting $-1mm +45\mu m$ material.

1.5 Conclusions for Small Samples (R65 and R222)

8. The yields and grades for the ilmenite generated from each sample are summarised as follows;

Ilmenite	yield%	%								
		TiO ₂	Fe ₂ O ₃	FeO	SiO ₂	P ₂ O ₅	MnO	CaO	MgO	
R65 Ilmenite	2.56	45.9	7.3	33.4	5.0	0.02	0.58	2.0	5.5	
R222 ilmenite	8.34	48.9	9.0	34.3	1.6	0.11	0.86	0.46	4.6	

For a hard rock ilmenite, the ilmenite produced from sample R222 is relatively high grade.

9. The yields and grades for the magnetite generated from each sample are summarised as follows;

Magnetite (HS)	yield%	%				
		TiO ₂	Fe ₂ O ₃	FeO	SiO ₂	Al ₂ O ₃
R65 Magnetite	8.20	13.7	42.4	29.4	5.1	4.20
R222 Magnetite	11.50	14.8	43.1	31.9	2.3	3.70

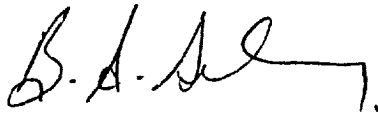
10. Following are TiO_2 recovery calculations based on the feed assays as supplied;

	R65			R222		
	wt%	TiO ₂ %	TiO ₂ rec%	wt%	TiO ₂ %	TiO ₂ rec%
Magnetite	8.2	13.7		11.5	14.8	
Ilmenite	2.56	45.9		8.3	48.9	
calculated TiO ₂ content in feed	100	2.3	27.0	100.0	5.8	57.8
Calculated TiO ₂ content in $+45\mu m$	34.5	6.7	78.4	58.0	10.0	99.7
Feed Sample Assay (Total)		8.5			10.0	

Note: The above calculation assumes the same TiO_2 content in the fines as in the $+45\mu m$ material

The overall TiO_2 recovery for R65 and R222 are respectively 27% and 58%. The recovery of TiO_2 from the $+45\mu m$ fractions were 78.4% and 100%. Most of the TiO_2 losses therefore occurred in the fines.

11. The $-45\mu\text{m}$ content of R65 and R222 were respectively 65.5% and 42%. The R65 was ground very fine resulting in the generation of a large amount of $-45\mu\text{m}$ material and fine grained sand making separation difficult.
12. Testwork should be carried out to optimise grind size in terms of liberation and minimisation of fines.
13. The conclusions contained within this report pertain to the samples as received, and any variations in feed type or specification are beyond the scope of this report.



B A Selvey
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for **R MachUNTER**
METALLURGICAL SERVICES MANAGER
MD metallurgical services Carrara
October 22, 1999

2.0 TESTWORK PROCEDURES

2.1 Head Feed Sample (Hole 94-4, Composite)

The samples from each drilling increment were combined and blended. A sub-sample of the blended feed material was taken using a carousel splitter.

The sub-sample was wet-screened at 45 μ m and the +45 μ m material screened at 1mm. The -1mm +45 μ m material was subjected to heavy liquid fractionation in bromoform and methylene iodide with sg respectively of 2.8 and 3.3.

HS (highly susceptible magnetic material) was separated using a hand held magnet and the remaining sample material was fractionated using bench scale induced roll magnet.

Each magnetic fraction was microscopically scanned for mineral content.

A size analysis was also carried out on the feed sample.

2.2 Main sample (Hole 94-4, Composite)

The composited material was wet screened at 45 μ m and the +45 μ m material screened at 1mm. The -1mm +45 μ m material was separated on a small wet shaking table to produce a concentrate, middling and tailings.

The concentrate and middlings fractions were processed using a wet LIMS (low-intensity magnetic separator) to remove HS material.

The remaining concentrate material was separated on a HT roll and ES plate machine to separate conductors from n/conds. The conductors and n/conds were then magnetically separated using an IRM at the amperages given with the results.

2.3 Small Samples (R65 and R222)

Each sample was wet screened at 45 μ m, separated in methylene iodide at 3.3sg, HS removed by a hand magnet, non-conductors separated on a HT roll and ES plate separator, and ilmenite separated from the non-magnetics using a hand held RE magnet.

3.0 RESULTS AND DISCUSSION

3.1 Feed Sample (Hole 94-4, Composite)

The results of mineralogical assessment are given as follows;

Fraction	%	% magnetite	% ilmenite	% Quartz, feldspar?	translucent smokey grey pyroxene?	% others	total
-45µm	24.0						
+1mm	16.0						
-2.8sg	18.6			100			100.0
-3.3sg	7.6					100	100.0
HS	15.4	100.0					100.0
RE mag	7.6		20.0		30	50	100.0
RE n/mag	10.8		10.0		65	25	100.0
total	100.0						
-1mm +45µm	60.0	25.61	4.34	31.02	15.54	23.49	100.00

The clear to translucent and 'other' minerals were difficult to identify by microscopic examination. The -2.8sg material appears to contain feldspar as indicated by chemical analyses of the shaking table middling-n/mag fraction. The -3.3sg material contains mainly clear minerals some of which may be apatite. The smoky grey mineral is believed to be pyroxene due to its magnesium and calcium content as determined by analyses of fractions from the bulk sample.

The magnetite was readily separated as a 'clean' product at low magnetic intensity.

The ilmenite reported with the pyroxene and others, which have approximately the same magnetic susceptibility as the ilmenite. This indicates from a flowsheet point of view that electrostatic separation should precede magnetic separation.

3.2 TiO₂ Analyses of Feed Sample (Hole 94-4, Composite)

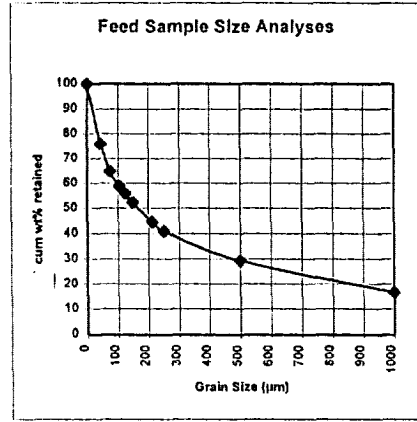
TiO₂ Analyses was carried out on the -45µm and +45µm material and the results are given as follows.

Fraction	wt%	TiO ₂	
		%	rec %
+45µm	76.0	6.07	78.6
-45µm	24.0	5.24	21.4
feed	100.0	5.87	100.0

The results show that 21.4% of the TiO₂ units was contained in the -45µm fraction.

3.3 Size Analyses of Feed Sample (Hole 94-4, Composite)

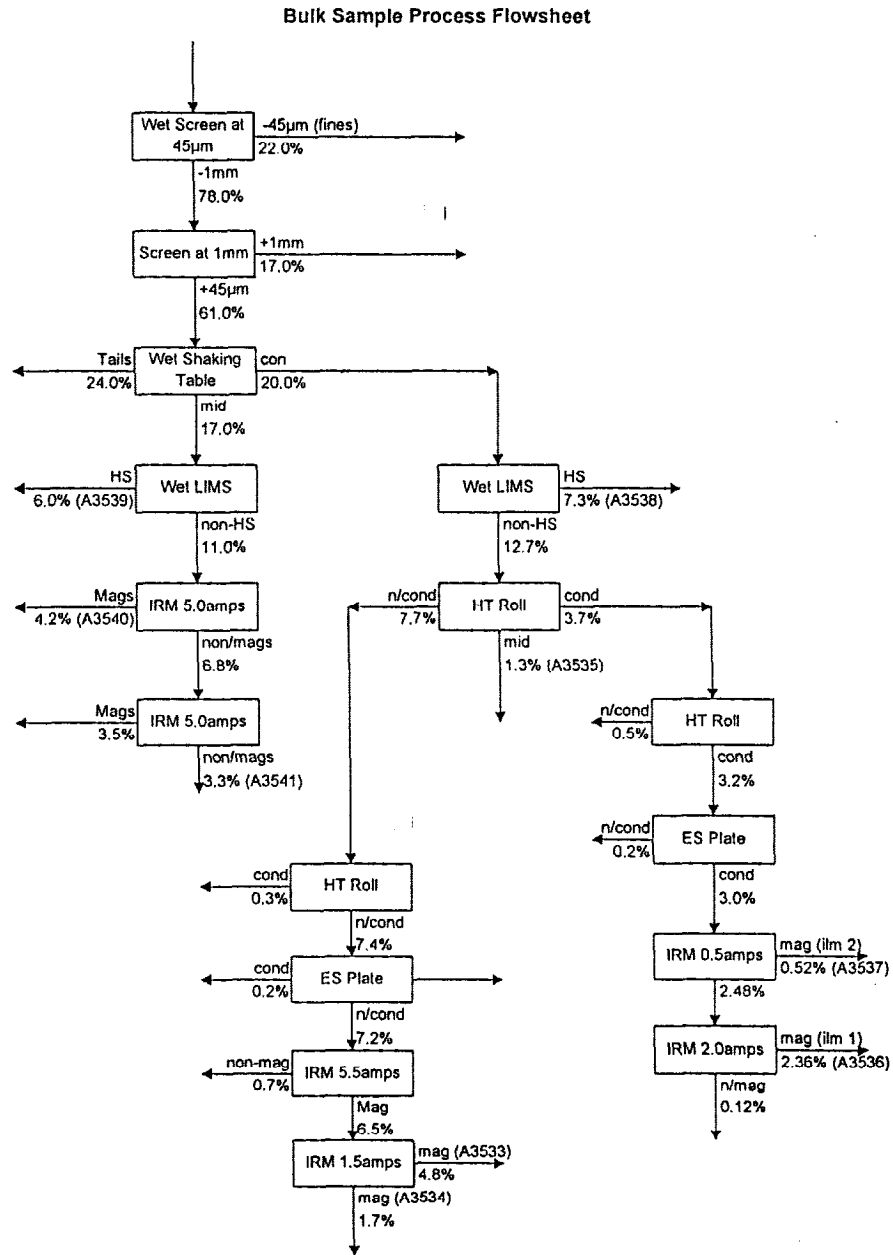
Feed Sample Size Analyses		
screen size (µm)	wt% retained	cum wt% retained
1000	16.5	16.5
500	12.6	29.1
250	11.7	40.7
212	3.7	44.5
150	7.7	52.1
125	3.7	55.9
106	2.9	58.8
75	6.1	64.9
45	11.1	76.0
0	24.0	100.0
total	100.0	



The results show that 24% of the feed material was fines (-45µm) and 16.5% +1mm material. The d50 was approximately 150µm.

3.4 Bulk Sample (Hole 94-4, Composite)

The bulk sample was treated according to the following flowsheet;



HS was separated from the table concentrate by wet LIMS prior to drymill separation. The remaining non-HS material was then electrostatically separated removing non-conducting gangue enabling a 'clean' ilmenite product to be generated in the final magnetic separation stage.

The table middling was magnetically separated only as it contained coarse low-grade composite mineral. The non/mags fraction appeared to be a relatively clean feldspar product.

3.5 Mass Balance and Chemical Analyses (Hole 94-4, Composite)

Chemical analyses were carried out on the major products generated from the bulk sample and the results are fully tabulated in the appendices and summarised as follows;

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Hole 94-4, 5 to 100m
Bulk Sample - Mineral Separation Table

Lab No.	shaking table	ES sep	magnetic separation	description	yield%	TiO ₂ %	Fe ₂ O ₃ %	FeO%	SiO ₂ %	Al ₂ O ₃ %	P ₂ O ₅ %	CaO%	MgO%	Na ₂ O%
A3533	con	n/cond	1.5a mag	Pyroxene, Forsterite?	4.80	1.2	27.7		39.7	1.7	2.1	11.6	17.6	0.53
A3534	con	n/cond	5.5a mag	Pyroxene, Diopside?	1.74	1.2	11.4		48.8	3.1	1.2	21.3	12.6	0.96
A3535	con	mid		mixed	1.30	6.8	28.1		37.5	2.0	1.1	11.2	15.2	0.61
A3536	con	cond	2.0a mag	ilmenite 1	2.36	44.8	4.4	36.9	4.4	0.5	0.9	2.0	3.6	0.26
A3537	con	cond	0.6a mag	ilmenite 2	0.55	34.3	5.7	32.7	12.3	0.8	1.2	4.3	6.6	0.32
A3538	con		hs	magnetite	7.30	15.1	30.6	30.8	8.9	3.2	1.4	4.2	3.8	0.39
	con	cond	n/mag	Rutile, pyrite, others	0.12									
A3539	mid		hs	magnetite comp	6.00	8.0	17.9	15.0	30.0	4.6	2.4	11.5	9.0	1.10
A3540	mid		RE mag	magnetic comp?	4.20	4.6	24.0		39.6	4.4	1.8	12.9	12.9	1.10
	mid		IRM mags 5a	mixed mag & feld	3.50									
A3541	mid		n/mag	Feldspar?	3.30	0.1	0.7		57.0	25.1	0.6	8.3	0.4	6.50
A3542	+1mm			composites	17.00	6.0	23.0		37.9	9.7	2.4	11.3	7.5	2.50
	-45µm				22.00									
	tails				24.00									
total					98.17									
total of analysed samples					48.55	8.7			32.6	6.9	1.9	10.0	8.3	1.7
total ilmenite					2.91	42.82	4.65	36.11	5.89	0.57	0.96	2.43	4.17	0.27

The TiO₂ content of the ilmenite 1 product is 44.8% which is relatively low grade however is a typical hard rock ilmenite and could be considered a potential feed stock for the sulphate process. The FeO/Fe₂O₃ ratio is relatively high.

The magnetite produced from the table concentrate contained 15.1% TiO₂.

The 'pyroxene' (forsterite, diopside?) fractions have relatively high levels of Ca, Mg, Si and Fe, which is consistent for pyroxene. This mineral appears smoky grey under the microscope and has a sg of approximately 3.3.

The n/mag produced from the mid appeared to be feldspar as it floated in bromoform at 2.8sg and has a relatively high Al₂O₃ and Na₂O content.

There does not appear to be a significant concentration of P₂O₅, which is an indicator for apatite.

3.6 TiO₂ Recovery Calculations

A TiO₂ balance giving estimates of TiO₂ recovery for the ilmenite and magnetite products are given as follows;

Magnetite and ilmenite TiO ₂ Balance			
total product	wt%	TiO ₂	
		%	rec %
ilmenite	2.91	42.8	44.0
magnetite	13.30	11.9	56.0
total sample	100.0	2.8	48.2
-1mm +45µm	59.0	4.8	81.7
feed assay		5.9	

The results show that 48.2% of the TiO₂ in the total feed, or, 81.7% of the TiO₂ in the -1mm +45µm fraction was recovered into the ilmenite and magnetite products. It would be expected that if the +1mm material was ground to -1mm a similar TiO₂ recovery (81.7%) of would be achieved on the resulting -1mm +45µm material.

3.7 XRD Analyses (Hole 94-4, Composite)

To confirm mineral composition, XRD analyses were carried out on the two samples believed to contain pyroxene. The results however were inconclusive as large proportion of the minerals was listed as unknown. The results show the presence of diopside, hydroxyapatite and forsterite. The results are given in the appendices.

3.8 Small Samples R65 and R222

The results of separation and analyses of samples R65 and R222 are attached. The results give yield of each fraction and chemical analyses of the ilmenite and magnetite products. Due to the limited amount of sample material available further work was not carried out on the non-conductor / non-magnetics fractions.

The results show for sample R222 that, for hard rock ilmenite, a relatively high-grade ilmenite product was produced at high recovery, any TiO₂ loss occurring in the -45µm fraction.

The R65 sample was ground to a very fine size resulting in an excessive amount of -45µm material being generated and the residual +45µm material also being very fine making separation difficult.

3.9 Size Analyses of Products (Including Hole 94-4, R65 and R222)

Size analyses tabulations and plots are given in the appendices for various products from all feed the samples. The products sized together with d50s are listed as follows:

<u>Sample</u>	<u>Product</u>	<u>d50</u>
Hole 94-4	Ilmenite 1	135µm
"	Magnetite 1	169µm
"	Magnetite 2	+500µm
R65	n/cond	73µm
R222	Ilmenite	131µm

Sizing was carried out on the R65 n/cond fraction as there was insufficient ilmenite for sizing. The d50 for this was 73µm which is indicative of the ilmenite sizing and the fine size of the +45µm material.

Magnetite 2 for sample Hole 94-4 was very coarse as it was produced from the shaking table-middling fraction.

4.0 DISCLAIMER

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5.0 APPENDICES

Hole 94-4 interval	Excess < 2.0mm fraction weight (grams)
0 - 2.5	NO EXCESS SAMPLE
2.5 - 5	NO EXCESS
5 - 10	423.9
10 - 15	510.6
15 - 20	966.8
20 - 25	964.0
25 - 30	1173.8
30 - 35	1460.8
35 - 40	1158.2
40 - 45	1395.3
45 - 50	1658.7
50 - 55	1400.7
55 - 60	2085.4
60 - 65	1291.7
65 - 70	1452.1
70 - 75	1650.5
75 - 80	2172.7
80 - 85	2184.0
85 - 90	1210.3
90 - 95	1576.7
95 - 100	846.5

26BT Resource Development Co. Ltd
Hole 94-4, 5 to 100m
Mineral Separation Table

Lab No.	shaking table	electrostatic separation	magnetic separation	description	yield%	TiO ₂ %	Fe ₂ O ₃	FeO%	SiO ₂ %	Al ₂ O ₃ %	P ₂ O ₅ %	MnO%	CaO%	MgO%	Na ₂ O%	K ₂ O%	SO ₃	Cr ₂ O ₃
A3533	con	n/cond	1.5a mag	Pyroxene, Forsterite?	4.80	1.2	27.7		39.7	1.7	2.1	0.69	11.6	17.6	0.53	0.05	0.14	<0.0
A3534	con	n/cond	5.5a mag	Pyroxene, Diopside?	1.74	1.2	11.4		48.8	3.1	1.2	0.36	21.3	12.6	0.96	0.09	0.05	<0.0
A3535	con	mid		mixed	1.30	6.8	28.1		37.5	2.0	1.1	0.68	11.2	15.2	0.61	0.06	0.33	<0.0
A3536	con	cond	2.0a mag	ilmenite 1	2.36	44.8	4.4	36.9	4.4	0.5	0.9	0.94	2.0	3.6	0.26	0.03	0.26	<0.0
A3537	con	cond	0.6a mag	ilmenite 2	0.55	34.3	5.7	32.7	12.3	0.8	1.2	0.86	4.3	6.6	0.32	0.04	1.30	<0.0
A3538	con		hs	magnetite	7.30	15.1	30.6	30.8	8.9	3.2	1.4	0.66	4.2	3.8	0.39	0.06	0.91	<0.0
	con	cond	n/mag	Rutile, pyrite, others	0.12													
A3539	mid		hs	magnetite comp	6.00	8.0	17.9	15.0	30.0	4.6	2.4	0.51	11.5	9.0	1.10	0.15	0.77	<0.0
A3540	mid		RE mag	magnetic comp?	4.20	4.6	24.0		39.6	4.4	1.8	0.53	12.9	12.9	1.10	0.19	0.51	<0.0
	mid		IRM mags 5a	mixed mag & feld	3.50													
A3541	mid		n/mag	Feldspar?	3.30	0.1	0.7		57.0	25.1	0.6	<0.02	8.3	0.4	6.50	0.47	<0.02	<0.0
A3542	+1mm			composites	17.00	6.0	23.0		37.9	9.7	2.4	0.39	11.3	7.5	2.50	0.28	0.53	<0.0
	-45µm				22.00													
	tails				24.00													
	total				98.17	4.3												
total of analysed samples					48.55	8.7			32.6	6.9	1.9	0.5	10.0	8.3	1.7	0.2	0.5	0
total ilmenite					2.91	42.82	4.65	36.11	5.89	0.57	0.96	0.92	2.43	4.17	0.27	0.03	0.46	0.0

Note: Fe₂O₃ is total Fe expressed as Fe₂O₃ unless FeO given.

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 Small Samples Nos R65 & R222
 Distribution and Ilmenite + Magnetite Analyses Table

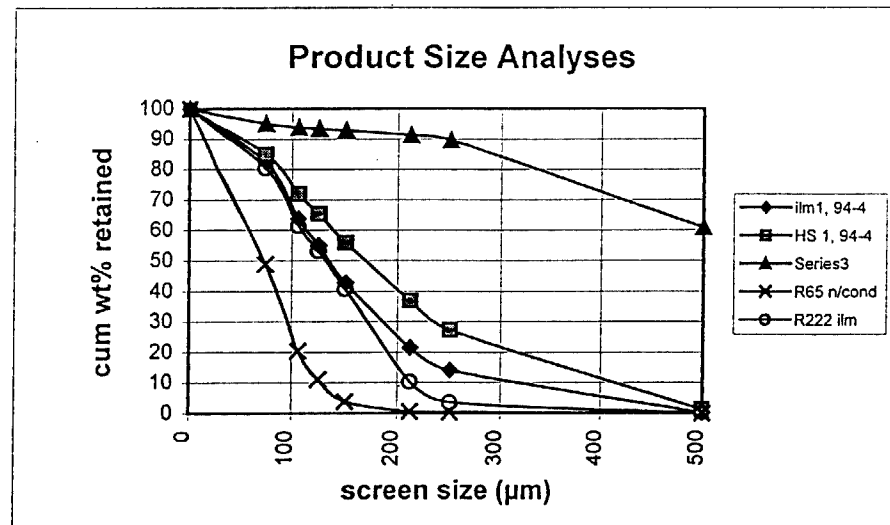
R65		%													
Fraction	wt%	TiO ₂	Fe ₂ O ₃	FeO	Cr ₂ O ₃	V ₂ O ₅	MnO	Nb ₂ O ₅	Al ₂ O ₃	SiO ₂	P ₂ O ₅	ZrO ₂	MgO	CaO	S
-45µm	65.5														
3.3sg float	5.4														
HS	8.2	13.7	42.4	29.4	0.02	0.66	0.4	< 0.1	4.2	5.1	0.01	< 0.1	3.1	1.7	< 0.02
HT n/cond	17.1														
ES n/cond	1.1														
n/mag	0.13														
ilmenite	2.56	45.9	7.3	33.4	0.02	0.09	0.58	< 0.1	0.62	5.0	0.02	< 0.1	5.5	2.0	< 0.02
total	100.0	2.3													
+45µm	34.5	6.7													

R222		%													
Fraction	wt%	TiO ₂	Fe ₂ O ₃	FeO	Cr ₂ O ₃	V ₂ O ₅	MnO	Nb ₂ O ₅	Al ₂ O ₃	SiO ₂	P ₂ O ₅	ZrO ₂	MgO	CaO	S
-45µm	42.0														
3.3sg float	6.6														
HS	11.5	14.8	43.1	31.9	< 0.1	0.7	0.34	< 0.1	3.7	2.3	0.2	< 0.1	2.9	0.8	0.03
HT n/cond	29.6														
ES n/cond	1.7														
n/mag	0.23														
ilmenite	8.34	48.9	9.0	34.3	0.01	0.1	0.54	< 0.1	0.28	1.6	0.11	< 0.1	4.6	0.46	0.03
total	100.0	5.8													
+45µm	58.0	10.0													

Product Size Analyses

screen size (µm)	Hole 94-4 Composite						*R65		R222	
	Ilmenite 1		magnetite 1		magnetite 2		n/cond (ilm all used)		Ilmenite	
	wt% retained	cum wt% retained	wt% retained	cum wt% retained	wt% retained	cum wt% retained	wt% retained	cum wt% retained	wt% retained	cum wt% retained
500	0.2	0.2	1.3	1.3	60.9	60.9	0.0	0.0	0.0	0.0
250	13.9	14.1	25.9	27.2	28.7	89.6	0.2	0.3	3.7	3.7
212	7.4	21.5	9.6	36.8	1.6	91.2	0.2	0.5	6.7	10.4
150	21.2	42.7	19.0	55.8	1.6	92.8	3.3	3.8	30.3	40.7
125	12.3	55.0	9.5	65.4	0.5	93.4	7.3	11.1	12.5	53.2
106	8.7	63.7	6.5	71.9	0.4	93.8	9.3	20.4	8.2	61.5
75	18.7	82.4	13.2	85.1	1.3	95.1	28.4	48.8	19.0	80.5
0	17.6	100.0	14.9	100.0	4.9	100.0	51.2	100.0	19.5	100.0
total	100.0	135.2	100.0	169.1	100.0		100.0	73.3	100.0	131.4

*note :-indicative of ilmenite size



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Queensland University of Technology
Facsimile Transmission

FROM		TO	
Name	Tony Raftery	Name	Bruce Selvey
Position	Technologist	Position	Senior Metallurgist
Address	GPO Box 2434 BRISBANE QLD 4001	Company	MD Metallurgical Services
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Fax	07-3864 5100	No of pages (incl.this page)	2
		Date	1 September, 1999

Powder Xray Diffraction of Sand Residue Series

Our Reference: XAF2024

Your Reference : MD/MT A/3534 , A/3535

INTRODUCTION

The two(2) samples were sent on behalf of Mr. Bruce Selvey of MD-Mineral Technologies for powder X-ray diffraction analysis to determine the concentration of the minerals. The samples were received by this laboratory on 27 August, 1999.

PROCEDURE

A portion of the dried samples were mixed with 10% by weight of an internal standard [corundum - Al₂O₃] and crushed in a micronising mill with ethanol as a fluid. The powder samples (with internal standard added) were examined in a Philips vertical diffractometer using cobalt K α radiation and the usual conditions. Compound concentrations were to be determined using a Rietveld Analysis approach (SiroQuant).

RESULTS

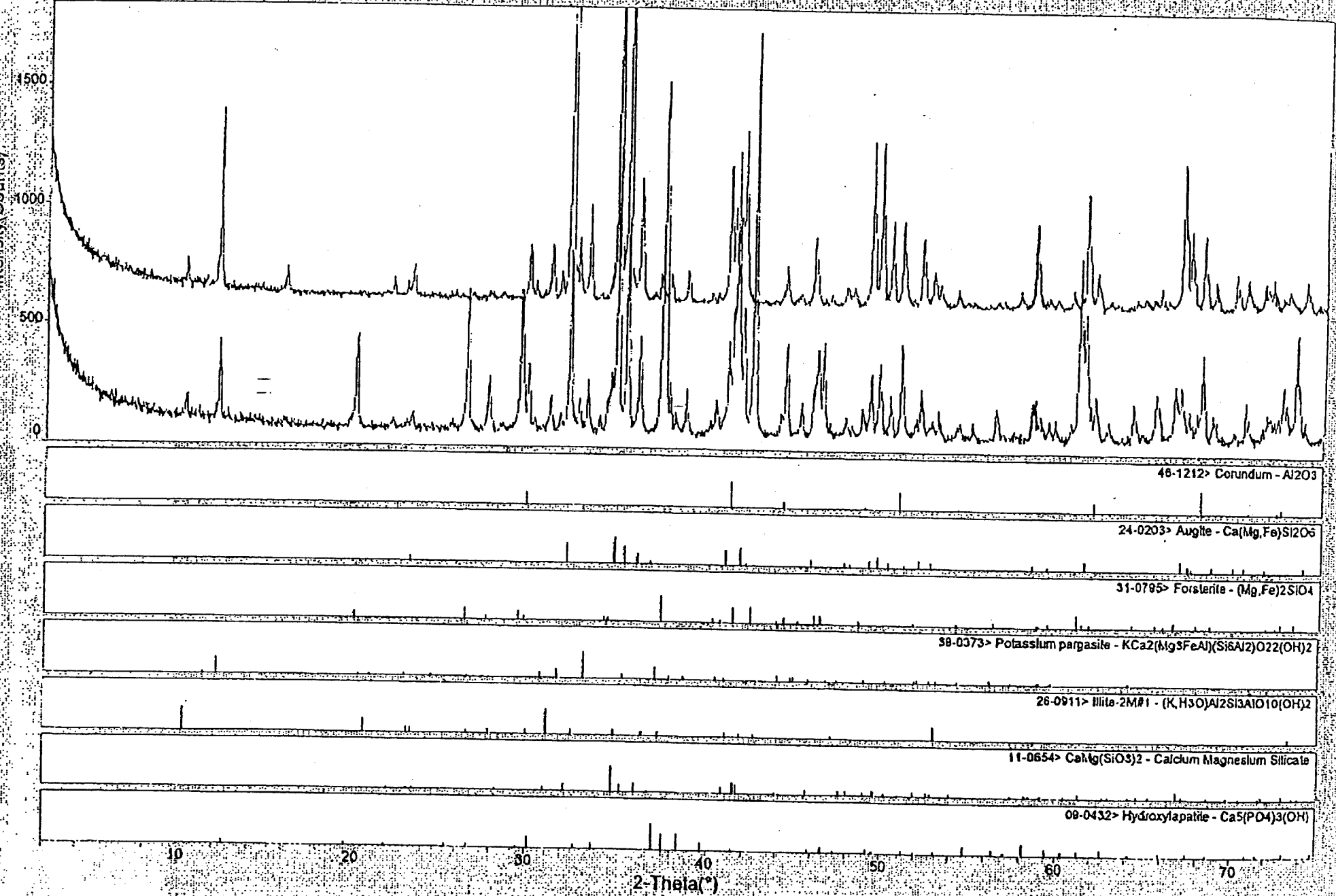
The following compounds were identified. The crystallographic structures of some compounds were not available and the concentrations of these compounds cannot presently be determined. The unknown is the sum of the concentration of any amorphous content plus unmodeled structures.

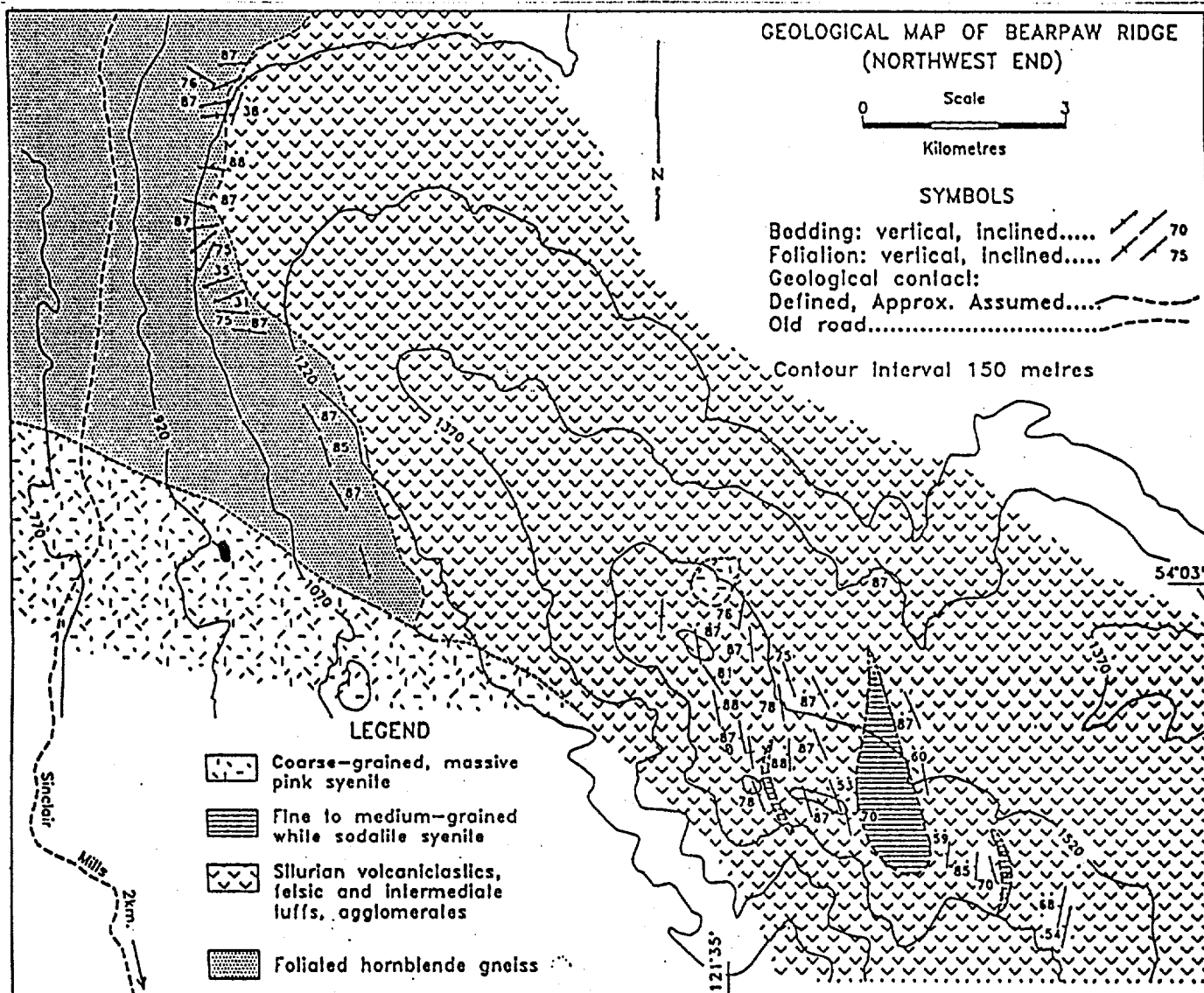
Mineral	A/3533	A/3535
Diopside	25	35
Hydroxyapatite	15	6
Mica	6	9
Forsterite	15	<1
Augite	major	abundant
Paragasite	major	major
Essenite?		minor
Unknown	39	50

Tony Raftery

N. A. Raftery
Senior Technologist

[2024-2.CP] 2024.2 MD_MT_A/3534
[2024-1.CP] 2024.1 MD_MT_A/3533 1





**FIGURE 2
GEOLOGICAL MAP OF BEARPAW RIDGE**

26,098

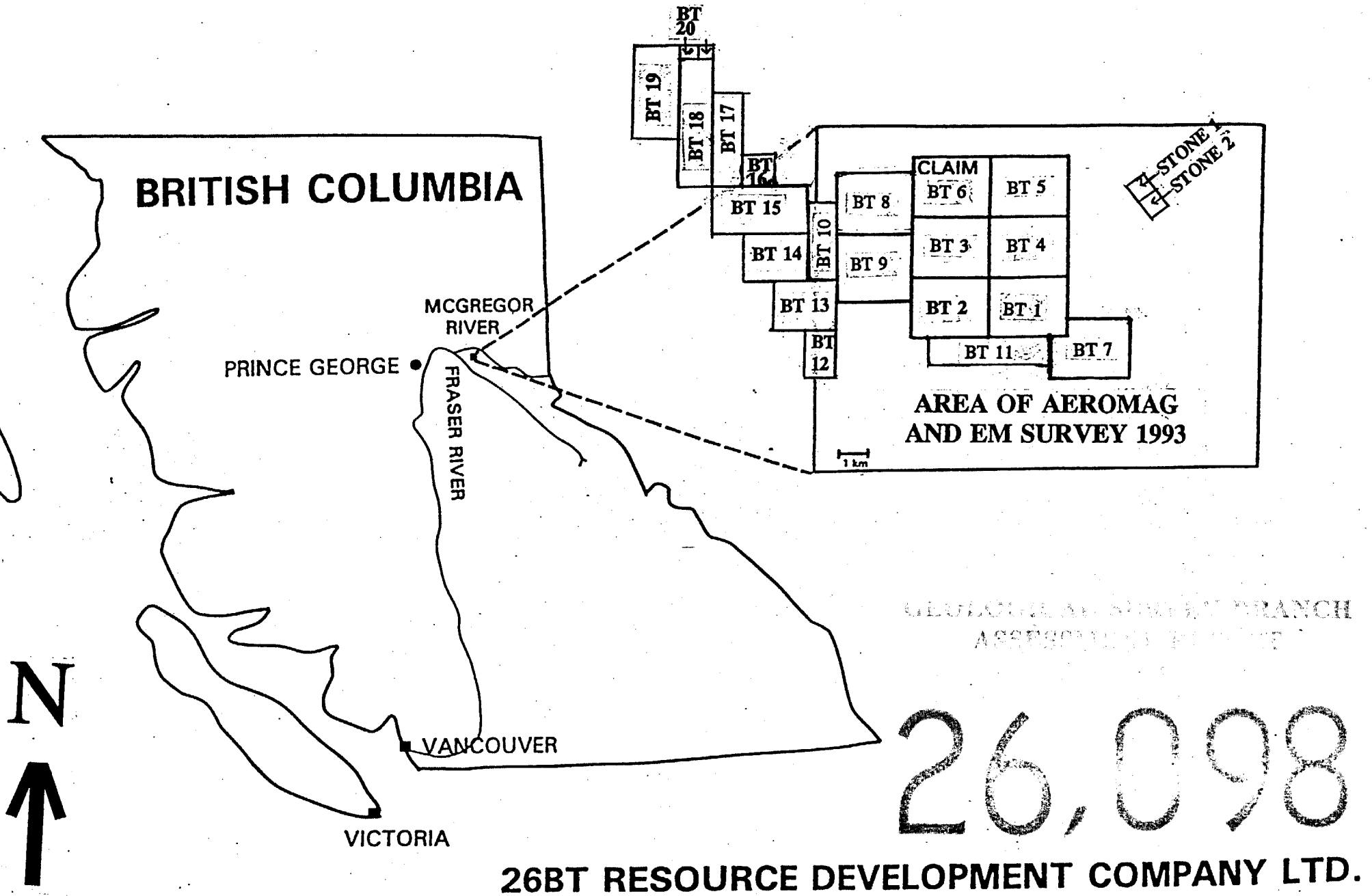
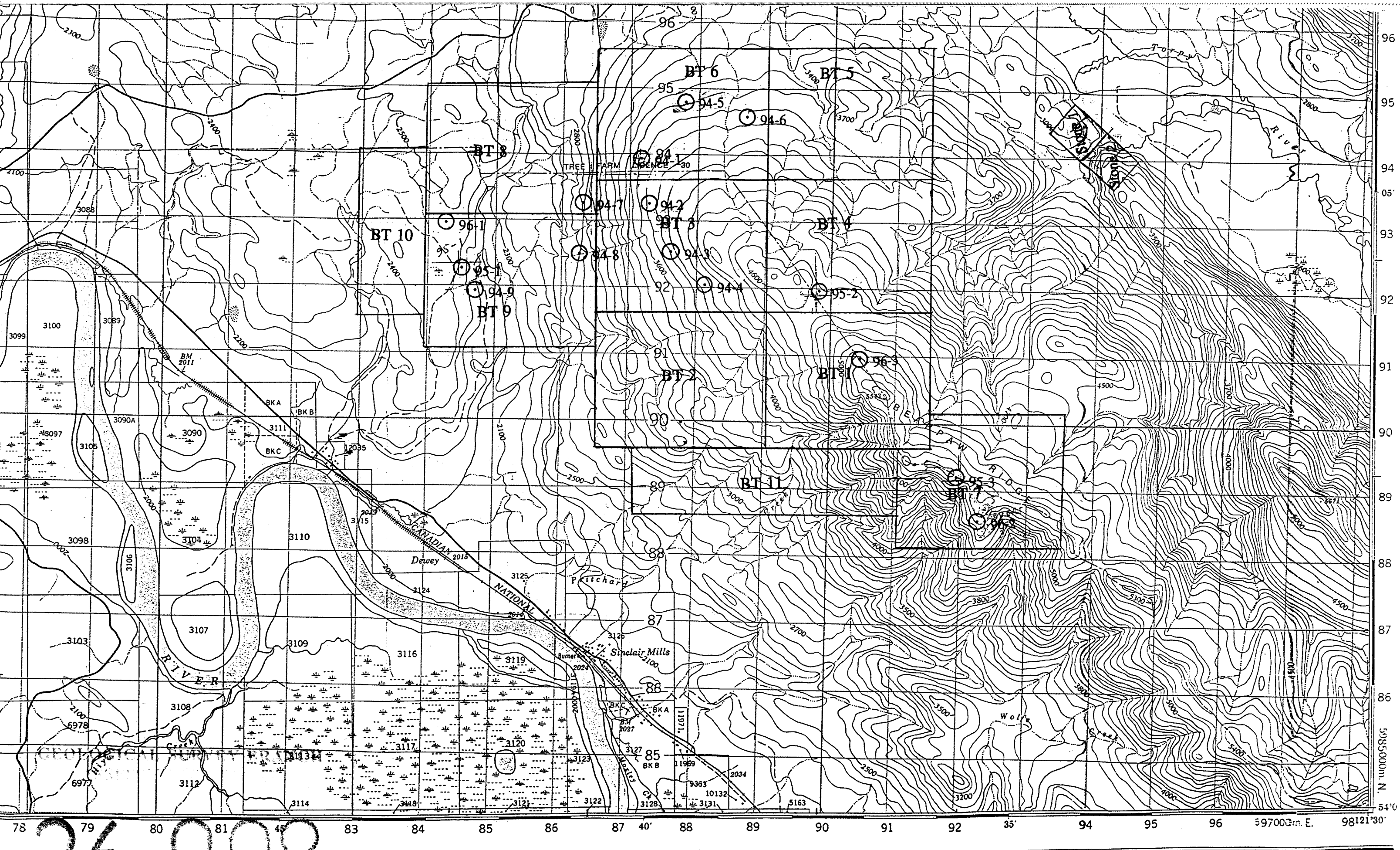


FIGURE 1
AREA OF AEROMAG AND EM SURVEY 1993

CALGARY ALBERTA



26,000
SINCLAIR MILLS
 CARIBOO LAND DISTRICT
 BRITISH COLUMBIA

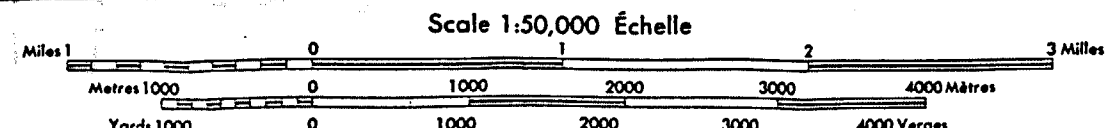
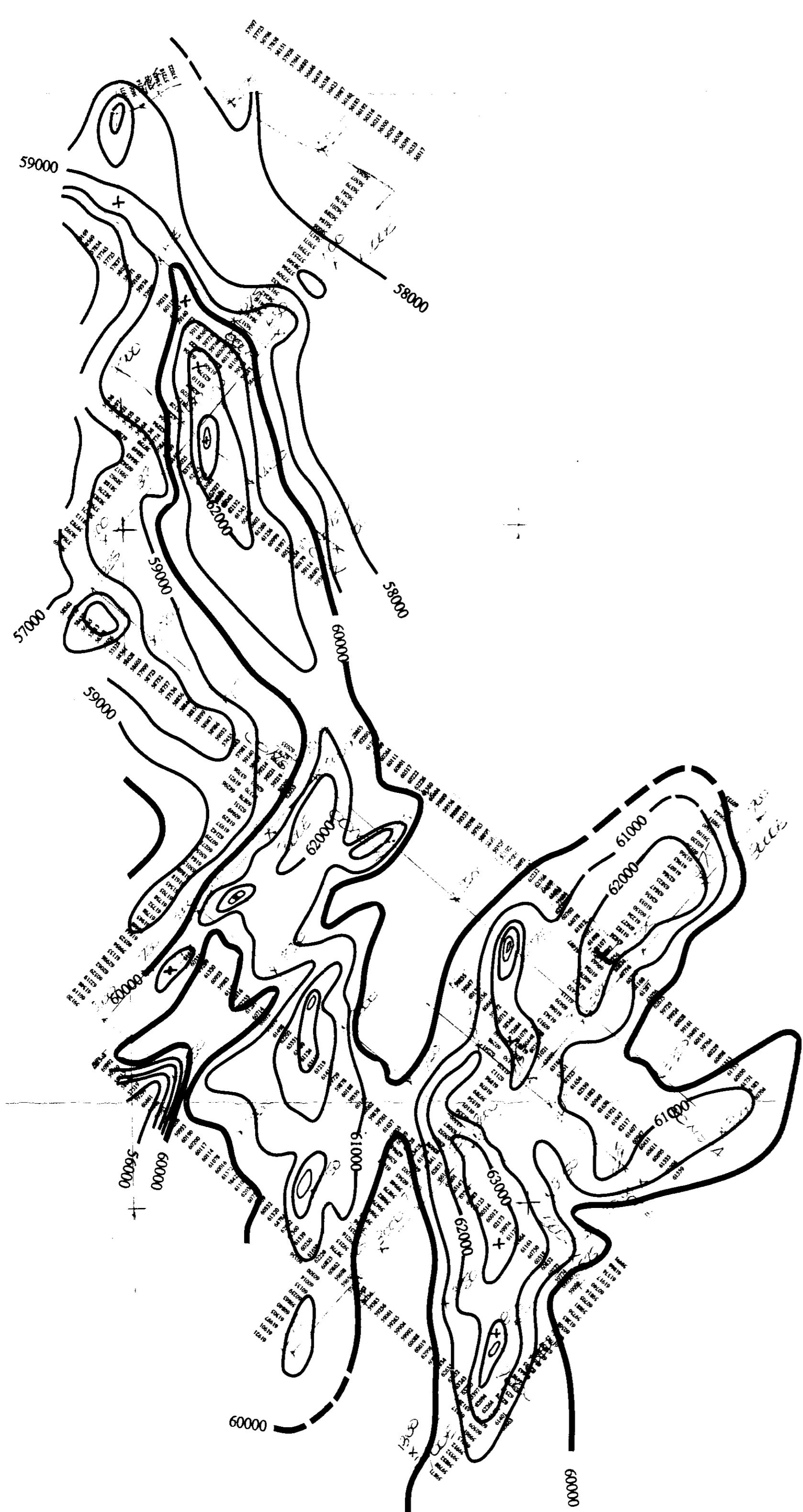


FIGURE 3
LOCATION OF HOLES DRILLED



GROUND MAGNETIC DATA

contour interval 1000 nT
5000 nT

GEOLOGICAL SURVEY BRANCH
MONTREAL

26,098

FIGURE 4B
TOTAL OF MAGNETIC FIELD FROM GROUND MAGNETIC SURVEY,
EASTERN PART