Kamaka Resources Ltd. 6074 - 45A Avenue, Delta, B.C. V4K 1M7 (604) 940-1591



ASSESSMENT REPORT ON THE

QUATSE PROPERTY

NANAIMO MINING DIVISION

BRITISH COLUMBIA

N.T.S.: 92L\12

Latitude: 50° 39' N Longitude: 127° 35' W

For

WINFIELD RESOURCES LTD.

700, 625 Howe Street, Vancouver, B.C. Canada V6C 2T6

Вy

David J. Pawliuk, P. Geo.

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT February 13, 1997

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- ii -TABLE OF CONTENTS

Page
1
3
3
3
4
4
5
6
6
7
8
8
9
10
10
11
13
14

Appendices

Appendix 1: Geochemical analysis certificatesAppendix 2: Rock sample descriptionsAppendix 3: Magnetometer survey data

List of Figures

Figure 1:	Location Map	Following Page 3
Figure 2:	Claim Map	Following Page 4
Figure 3:	Regional Geology Map	Following Page 6
Figure 4:	Regional Mineralization Model	Following Page 7
Figure 5:	Geology PICK 7 claim	Pocket
Figure 6:	Soil Geochemistry PICK 7 claim	Pocket
Figure 7:	Magnetic Survey PICK 7 claim	Pocket

SUMMARY

The Quatse property is located on northern Vancouver Island, twelve km southwest of Port Hardy, and seven km northwest of the now-depleted Island Copper mine. The property includes the old Caledonia mine, and the area south and southeast to the south shore of Quatse Lake.

A conformable sequence of generally east-west striking, moderately southdipping Karmutsen Formation basalt flows with interlaminated limestone, Quatsino Formation limestone and Parson Bay Formation siliceous siltstone (collectively the Triassic Vancouver Group) and mafic to intermediate volcaniclastics of the Jurassic Bonanza Group underlie the property. This sequence appears to have been intruded by several phases of dykes, sills and stocks, and later cut by a series of northeast and northwest trending faults.

The Caledonia mine was developed on a series of massive copper-zinc showings in the 1920's, and has had several periods of sporadic exploration since then. The mineralization is associated with the contact of a limestone horizon which trends northwest-southeast across the property.

Winfield Resources Ltd. optioned the Quatse property from Hisway Resources Corp. in October 1993, for the purpose of exploring for porphyry copper deposits such as the adjacent Island Copper orebody (345 M Tonnes, 0.41 % copper, 0.017 % molybdenum, 0.19 g/T gold). Work prior to 1994 was concentrated within the extensive areas of copper mineralization found in the Karmutsen Formation rocks. The most prospective area for porphyry style copper mineralization is in the younger Bonanza Formation rocks, which occur to the south of the Karmutsen Formation.

Two diamond drill holes were completed in October 1994 following geophysical and geochemical surveys on the eastern and central portions of the property. These holes intersected intensely chlorite-hydrobiotite-magnetite altered Bonanza Formation rocks, and extensive pyrite mineralization in the Parson Bay sediments. No copper mineralization was intersected (Dasler, 1995).

In January 1995 further exploration was carried out on the western portion of the property to determine an extension of the mineralized system, and to identify further mineralization in the vicinity of the Caledonia mine workings. The previously explored copper zones in the Karmutsen Formation volcanics were also reviewed (Dasler, 1995). The current fieldwork on the property was performed along the southern shore of Quatse Lake, within an area that had undergone little previous work.

The Bonanza Formation rocks along the southern shore of Quatse Lake are relatively fresh and unaltered, and are not as prospective for porphyry copper deposits as the Bonanza Formation rocks north of the lake. The rocks and soils from this area contain low metal concentrations in comparison with the northern part of the property.

The recommendations outlined by Dasler (1995) should be followed to further explore the Quatse property of Winfield Resources Ltd. He recommended more work in several areas within the northern part of the property, including diamond drilling.

INTRODUCTION

At the request of Mr. M. Foley, President of Winfield Resources Limited, Kamaka Resources Ltd. conducted a mineral exploration program on the Quatse property located at northern Vancouver Island, British Columbia. Hipchain surveying, geochemical soil sampling, ground magnetometer surveying and geological mapping were done.

LOCATION AND ACCESS

The Quatse Lake property is located 12 km southwest of Port Hardy and 3 km north of Coal Harbour on northern Vancouver Island, British Columbia (Figure 1).

The claims are centred at 50° 39'N latitude and 127° 35'W longitude, within map sheet (NTS 92L/12E) in the Nanaimo Mining Division. The claims cover the Quatse Lake area (Figure 2).

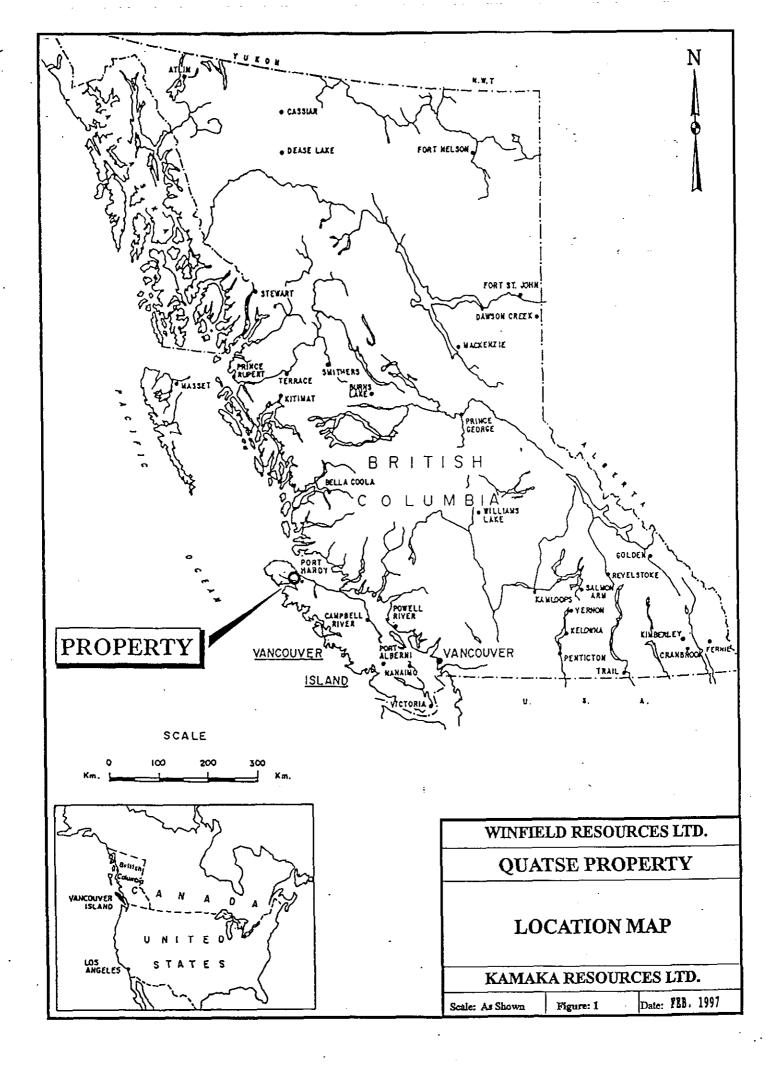
Property access is via the Coal Harbour-Port Hardy road and an old 6.5 km (4 mile) tractor road built by North Island Mines. The area immediately south of the Caledonia mine can also be accessed by walking from "CH Main" logging road. The access road and bridges built by North Island Mines, which lead to the centre of the property, were repaired during earlier work programmes. The bridge over Kettle Pot Creek was not replaced during these programmes because of possible work approval delays. A request has been made to the Ministry of Environment and Fisheries to upgrade the bridge and road access. Quatse Lake is a water reservoir for the small settlement of Coal Harbour. However, during the 1994 drill programme the company received permission to operate a boat with an outboard motor on the lake for quicker access to the property.

Ground elevations within the property area gently rise from Quatse Lake at 70 m (230 feet) up to 305 m to 427 m (1000 to 1400 feet) a.s.l. along an easterly trending ridge in the northern part of the claim area.

TOPOGRAPHY AND VEGETATION

The western half of the Quatse property is predominantly covered with old growth fir and cedar forest. The eastern half is within an old logging area with forest cover ranging from mature fir, hemlock, spruce and cedar stands to dense second growth in old open clear-cut areas. The area south of Quatse Lake is partly open clear cut, and partly dense second growth. Traverses are difficult in areas of previous logging activity, because of the dense second growth.

Rock outcrops are exposed within creek gullies, in logging road cuts and on the steeper hillsides. Thick accumulations of sand and gravel are present throughout most of the southern property area.



PROPERTY

The property consists of 24 claims totalling 46 claim units and three crown grants within N.T.S. map-sheet 92L/12 in the Nanaimo Mining Division. The claims are depicted on Figure 2 and listed below:

Name	<u>Tenure</u> No.	<u>Units</u>	Expiry_	Recorded Owner
PICK 7	229629	18	13 February 1997	P.G. Dasler*
PICK 9	229630	6	13 February 1997	P.G. Dasler*
CAL #1-63	15542-47	6	4 February 1997	R. Bilquist**
QU #1-8 3	15548-55	8	2 February 1997	R. Bilquist**
QU #15-223	15556-63	8	2 February 1997	R. Bilquist**

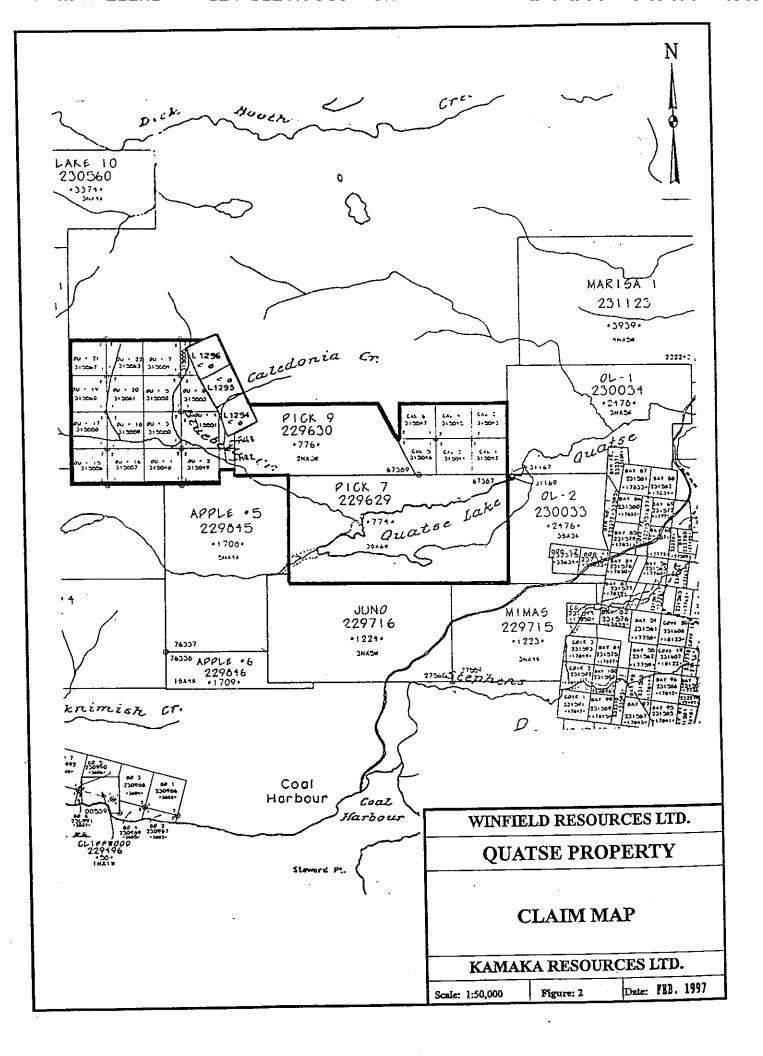
Crown Grants: Caledonia (lot 1294), Cascade (lot 1295) and Bluebell (lot 1296).

* Held in trust for Hisway; ** Bills of sale held by Dasler for Hisway Resources Corp.

HISTORY

Exploration of the Quatse property began prior to 1923 and has intermittently continued to the present. The history of the property was reviewed by Dasler (1995), who compiled all of the available data pertaining to the claims.

Geophysical and geochemical surveys were carried out across the central part of the property in October 1993 following an option agreement between Winfield Resources Ltd. and Hisway Resources Corp. Follow-up geological and geochemical work was carried out in February 1994. Two of four targets identified during 1993 work were tested by diamond drilling in October 1994. In January 1995, the property grid was extended to the Caledonia mine area, and further prospecting, new and infill geochemical soil sampling, and ground magnetometer surveys were carried out (Dasler, 1995).



REGIONAL GEOLOGY

Vancouver Island north of Holberg and Rupert inlets is underlain by rocks of the Vancouver Group. These rocks range in age from Upper Triassic to Lower Jurassic. They are intruded by rocks of Jurassic and Tertiary age and disconformably overlain by Cretaceous sedimentary rocks. Figure 3 shows the regional geological mapping of the northern part of the island.

Faulting is prevalent in the area. Large-scale faults with hundreds to thousands of metres of displacement are offset by younger, strike-slip faults with displacements of up to 750 metres (2,500 ft.). Faults are particularly evident from the regional airborne magnetic survey data. The strong northwest orientation of the belt of volcanics and intrusives contrasts with the more northerly trending geology to the south of Holberg Inlet.

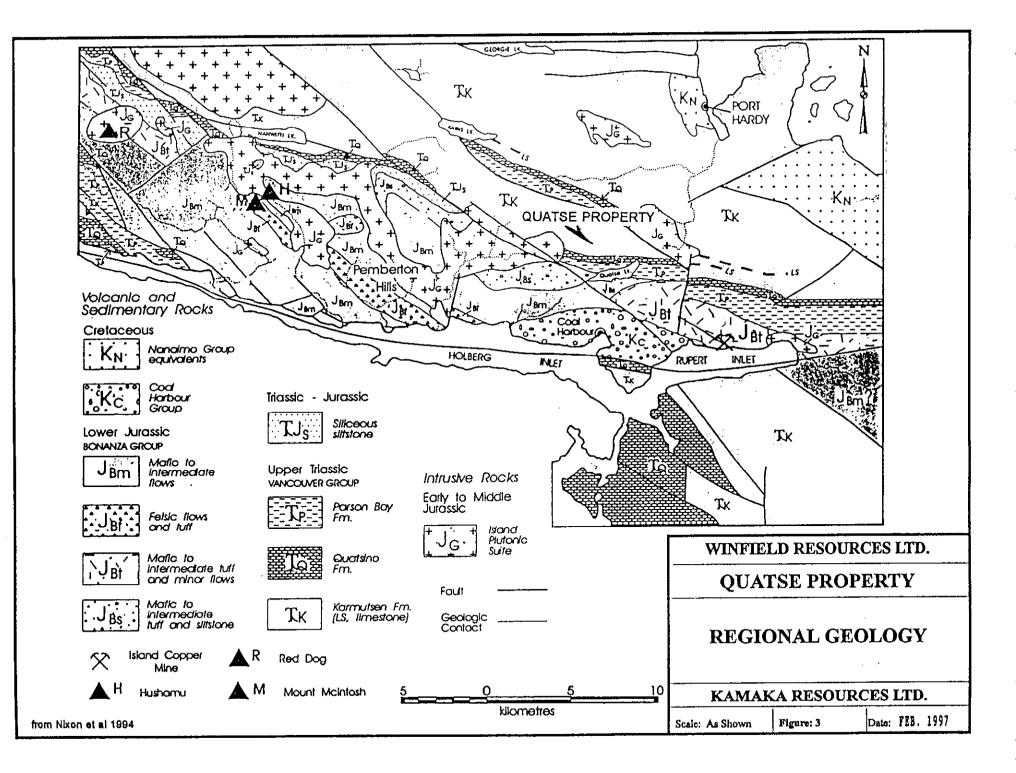
Vancouver Group

The Vancouver Group rocks consist of the Harbledown Formation sills and argillites, the Karmutsen Formation basalts, the Quatsino Formation limestone, the Parson Bay Formation argillites and cherty tuffs and the Bonanza Formation volcanic breccias and flows.

Intrusive Rocks

The Vancouver Group rocks are intruded by a number of Jurassic-aged stocks and batholiths. In the Holberg Inlet area a belt of northwest-trending stocks extends from the east end of Rupert Inlet to the mouth of the Stranby River on the northern coast of Vancouver Island.

Quartz-feldspar porphyry dykes and irregular bodies occur along the southern edge of the belt of stocks for over 40 km northwest of Island Copper, and are associated with numerous copper showings, and zones of advanced argillic alteration. The mine at Island Copper (345 M Tonnes @ 0.41 % copper, 0.017 % molybdenum, 0.19 g/T gold) was developed around one of these porphyry dykes. The quartz-feldspar porphyries are thought to be differentiates of middle Jurassic felsic intrusive rocks and generally follow northwesterly trending structural breaks. Some of the larger intrusive stocks near the porphyry dykes are locally intensely altered by zeolite veining.



REGIONAL MINERALIZATION

A number of types of mineral occurrences are known on northern Vancouver Island. These include:

- 1. Skarn deposits: copper-iron and lead-zinc skarns,
- 2. Copper in basic volcanic rocks (Karmutsen): in amygdules, fractures, small shears and quartz-carbonate veins, with no apparent relationship to intrusive rocks,
- 3. Veins: with gold and/or base metal sulphides, related to intrusive rocks,
- 4. Porphyry copper deposits: largely in the country rock surrounding or enveloping granitic rocks and their porphyritic phases.

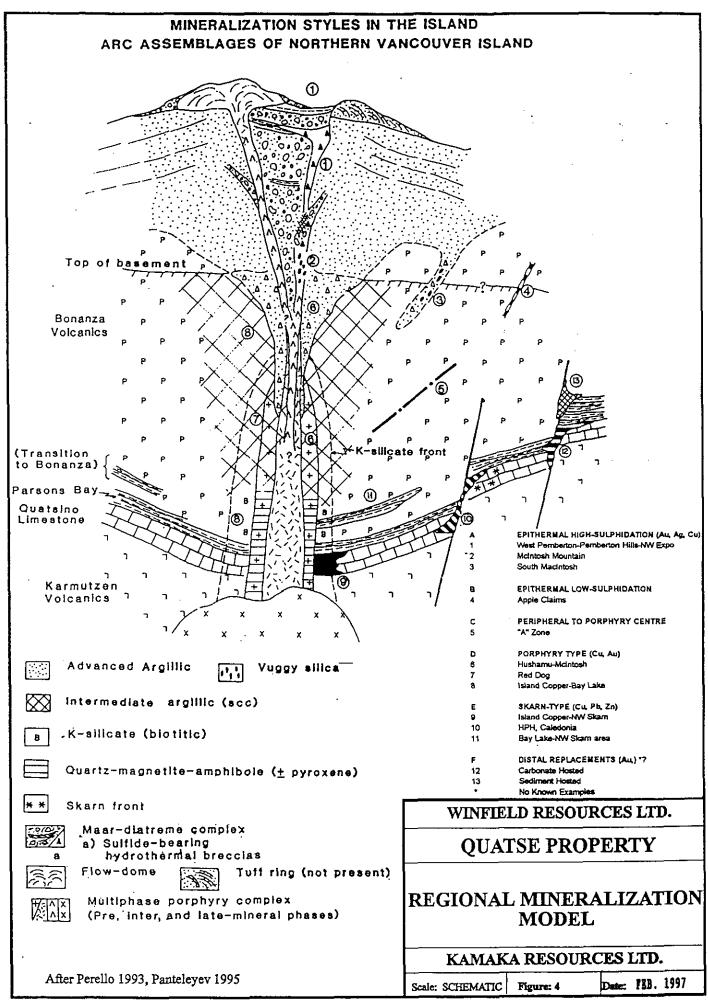
The variety of mineral occurrences indicates that extensive hydrothermal mineralizing systems operated throughout the northwesterly trending belt of rocks.

There is a general trend of higher-level mineralizing systems from east to west, for example the copper molybdenum porphyry at Island Copper, (345 M Tonnes @ 0.41 % copper, 0.017 % molybdenum, 0.19 g/T gold), to the high-level epithermal copper-gold mineralization at the higher levels of the Hushamu deposit, (172.5 M Tonnes @ 0.28 % copper, 0.009 % molybdenum, 0.34 g/T gold) and other zones to the west. Figure 4 schematically shows the diverse deposit types in relation to the regional geology.

PROPERTY GEOLOGY

The Quatse property is underlain by a conformable sequence of generally easterly striking, moderately south-dipping basalt flows and intercalated limestone of the Karmutsen Formation, limestone of the Quatsino Formation, clastic sediments of the Parson Bay Formation (collectively the Triassic Vancouver Group) and intermediate volcaniclastics of the Jurassic Bonanza Group. This sequence has been intruded by several phases of dykes, sills and stocks, and later cut by a complex series of faults. The geology of the central portion of the property is described by Dasler (1995). The geology of the PICK 7 claim area along the southern shore of Quatse Lake is shown in figure 5.

There is strong evidence from the airborne magnetic surveys that the feldspar porphyry dyke system that forms the core of the Island Copper orebody extends northwesterly, in an en echelon fashion, to the edge of the Quatse property. A major northeast-trending break then appears to offset the system. The magnetic features re-appear at central Quatse Lake, and trend northwest to west across the Quatse property. This postulated dyke system has a definite ground magnetic and IP response, coupled with elevated copper mineralization identified in the earlier surveys completed on the property (Dasler, 1995).



There is evidence of extensive skarn mineralization in the vicinity of the Caledonia workings. The skarns extend for greater than 5 km to the east, and locally contain precious metals. The abundant overburden and thick vegetation cover appear to mask further skarn mineralization on the property. The 1994 drill results indicated that a significant fluid flow from local intrusive activity has altered the wallrock volcanics and sediments. The intrusive dyke system has produced a number of precious metal-enriched skarns in the area north of the Island Copper mine (Little Billy showings). A copper-bearing skarn associated with Quatsino Formation limestone also was intersected in a drillhole below the bottom of the Island Copper pit (pers comm J. Fleming).

Dasler (1995) thought that the limestone horizon(s) which cross the Caledonia and Bluebell claims, and which show copper and iron mineralization, are most likely part of the upper Karmutsen Formation.

The present work has identified mainly Bonanza Formation volcaniclastic rocks along the southern shore of Quatse Lake (Figure 5). Lapilli tuff, ash tuff and agglomerate are all present. These rocks are locally pyritic and epidote altered. Chalcopyrite(?) was identified in sample 97857. Occasional dusty disseminated hematite is also present. An exposure of moderately magnetic Karmutsen Formation(?) basalt with 1 % very finely disseminated sulphide was mapped at the western end of the logging road (Figure 6). This area is near a circular magnetic high outlined during the 1988 airborne survey (Figures 5 and 7).

MINERALIZATION

The main exploration targets in the past were the limestone, sediments and tuffs which extend along the ridge north of Quatse Lake. Sporadically distributed showings in these rock units contain significant mineralization along a discontinuous strike length of 5 km. The mineralization within the northern portion of the property was examined and reviewed by Dasler (1995).

The Bonanza Formation and Karmutsen Formation rocks examined along the southern shore of Quatse Lake during the current work programme as shown on figure 5 are relatively fresh and only locally altered with hematite, epidote, magnetite, pyrite and chalcopyrite(?). The more intensely altered rocks on the northern side of Quatse Lake are likely closer to the intrusive porphyry dyke system presumed to drive the mineralizing and altering fluids.

GEOCHEMICAL SURVEY

Sixty soil samples were collected at southern PICK 7 mineral claim during the current work programme. Samples of "B" horizon soil were obtained using a long handled auger from depths of 15 to 60 cm. The samplers paid particular attention to collecting good "B" horizon soils. Each sample was placed in a numbered kraft envelope for drying and then transport to Acme Analytical Laboratories at Vancouver, British Columbia. The soils were further dried, screened at -100 mesh, and a .5 gm sample was taken for ICP analysis. The samples were digested in HCL-HNO3 and analysed for 30 elements including copper, molybdenum, zinc and arsenic, plus gold (Appendix 1). Copper and zinc results are plotted on figure 6.

No significant anomalies were produced during the survey. The soils contain up to 102 ppm copper, up to 103 ppm zinc and up to 13 ppb gold.

Seven rock samples were also collected; these are described in Appendix 2 and plotted on Figure 5. The rocks were also analyzed for 30 trace elements by I.C.P., and for gold by acid leach and atomic absorption at Acme Analytical Laboratories Ltd. (Appendix 1). The samples contain up to 95 ppm copper, 106 ppm zinc, and up to 2 ppb gold.

MAGNETOMETER SURVEY

Survey Procedure

The earth's total magnetic field was measured at 25 m intervals along the logging road which follows the southern shore of Quatse Lake. A Scintrex MP-2 proton magnetometer was used. The work was done to quickly ground check two of the 1988 airborne magnetic survey anomalies which lie in the area (Figure 7). The diurnal variation was monitored in the field by the closed loop method to enable the variation to be removed from the raw data prior to plotting. However, loops were closed within 31 nT (gammas). The raw data are presented in appendix 3. No diurnal corrections were needed because the magnetic anomalies being explored for are expected to have amplitudes in the order of hundreds of gammas (Figure 7). A total of 2,700 m was surveyed. The data were contoured on a 1:5,000 plan (Figure 7) at an interval of 400 nT (gammas).

Results

Figure 7 shows the results of the ground magnetic survey. As well, the location of the magnetic highs detected during the 1988 airborne survey are shown by the heavy-weight lines in order to put the present survey results in context of the overall magnetic signature of the area. There is a reasonable correlation

between the ground magnetic survey results and the airborne magnetic survey results; however, the ground magnetic results average about 300 to 400 nT lower than the airborne survey measurements. The area of moderately magnetic rock mapped at the western end of the logging road was detected during the ground magnetic survey (Figure 7). In the eastern part of the area a magnetic high more limited than that shown by the airborne survey results was delineated. The ground survey readings in this area are lower than those obtained during the 1988 airborne survey (Figure 7).

INTERPRETATION

The Quatse property is an extensive claim group covering Bonanza Formation volcanic rocks. Elsewhere in this 40 km long northwest trending belt of rocks, the Bonanza Formation hosts four significant porphyry style copper-gold deposits. The landholdings of BHP Minerals Canada, including the now-depleted Island Copper mine, are adjacent to the Quatse property. Numerous zones of copper mineralization occur on the BHP Minerals ground.

Airborne magnetic surveys clearly outline the mineralizing dyke system at Island Copper. These surveys also show that the dyke system trends northwesterly towards the Quatse property. Ground surveys by Winfield have identified copper-in-soil anomalies with coincident magnetic and IP anomalies along the trend of the airborne anomalies.

These targets have so far been tested by two drillholes (Dasler, 1995). Both of the drillholes identified sulphide mineralization or alteration suggesting a significant hydrothermal event, similar to that at Island Copper. Drillhole Q94-1 appears to have been drilled either too far north or east of the main part of the anomaly; another hole is warranted to test the centre of this anomaly. Drillhole Q94-2 intersected significant sulphide mineralization as predicted from the geophysical survey, but did not reach the target limestone horizon.

The extensive copper and iron skarns on the Caledonia property, and the replacement zones in the volcanics to the east and west indicate the presence of a strongly mineralized hydrothermal system in the local area. These mineral occurrences, which are similar to those around the Island Copper deposit, indicate good potential for porphyry-style mineralization on the Quatse property.

CONCLUSIONS

- 1) A strong correlation between a geological model similar to Island Copper and the geochemical, geophysical and drilling results obtained from the Quatse property was developed by Dasler (1995).
- 2) The Bonanza Formation rocks along the southern shore of Quatse Lake are relatively fresh and unaltered, and are not as prospective for porphyry copper deposits as the Bonanza Formation rocks north of the lake.

RECOMMENDATIONS

- 1) The southern portion of the PICK 7 mineral claim explored during the current programme does not warrant any further work.
- 2) The recommendations outlined by Dasler (1995) should be followed to further explore the Quatse property of Winfield Resources Ltd. He recommended more work in several areas within the northern part of the property, including diamond drilling.

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CERTIFICATE OF QUALIFICATIONS

I, David J. Pawliuk, do hereby certify that:

- 1.0 I am a consulting geologist operating Nanoose Geoservices with an office at 2960 Anchor Drive, RR 2, Box 133, Garry Oaks, Nanoose Bay, British Columbia.
- 2.0 I received a degree of B.Sc. in Geology from the University of Alberta, Edmonton, Canada in 1975.
- 3.0 I am a member, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4.0 I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 5.0 I have practised my profession since 1975.
- 6.0 This report is based upon my personal fieldwork including supervision of the geochemical survey, and upon reports of others working in the area.
- 7.0 I have no direct or indirect interest in the property or securities of Winfield Resources Ltd., or in companies with claims contiguous to the Quatse property, nor do I expect to receive any such interest.

David J. Pawłuk, B.Sc., P.Geo. February 13, 1997



STATEMENT OF COSTS

The following expenditures were incurred for exploration on the Quatse Project from January 2 to 28, 1997.

Personnel

P. Dasler, Geologist 1 day @ \$380/day	\$380.00
D. Pawliuk, Geologist 4 days @ \$340/day	1,360.00
S. Oakley, Field Technician 3 days @ \$275/day	825.00
D. O'Neill, Field Technician 3 days @ \$275 day	825.00

3,390.00

\$3,390.00

Disbursements_

Total Personnel

MOB/DEMOB, Gas, truck rental	1,360.00
Equipment Rental	150.00
Food & Accommodation	770.09
Supplies, shipping	27.52
Analyses	837.30
Office, report & miscellaneous	1,250.00

4,394.91

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Total Disbursements	4,394.91
Disbursement Fees	350.00
SUBTOTAL	8,134.91
GST	569.44

TOTAL

<u>\$8,704.35</u>

APPENDIX 1

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GEOCHEMICAL ANALYSIS CERTIFICATES

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	GST Taxable		825.79
	7.00 % GST		57.0
Projec UNIT	7.00 % GST TOTAL :: QUATSE PRICE REFLECTS 15% DISCOUNT		883.6

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Kamaka Resources Ltd. PROJECT QUATSE FILE # 97-0422

Page 2

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Q 090N		23		20		8			3.98			<2			<.2		6 18				70					3.02				2	
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Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only_____

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FROM : KAMAKA-RESOURCES-LTD

PHONE NO.

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604 9401591

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Kamaka Resources Ltd. PROJECT QUATSE FILE # 97-0422

FROM :

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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	y ppm	168 163 207	158 171 185	146 188 172	180 143 205	131
ppm ppm <td>Bi ppm</td> <td>S <2 <2</td> <td><2 2 4</td> <td><2 3 2</td> <td><2 ≪2 ≪2</td> <td><2</td>	Bi ppm	S <2 <2	<2 2 4	<2 3 2	<2 ≪2 ≪2	<2
ppm ppm <td>Sb ppm</td> <td>2 2 2</td> <td><2 <2 2</td> <td><2 <2 <2</td> <td><2</td> <td>12</td>	Sb ppm	2 2 2	<2 <2 2	<2 <2 <2	<2	12
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ppm ppm <td>As ppm</td> <td><2 Z</td> <td>2 2 2 2 2 2</td> <td>3 <2 2</td> <td><2</td> <td>×2</td>	As ppm	<2 Z	2 2 2 2 2 2	3 <2 2	<2	×2
ppm ppm <td>Fe %</td> <td>5.84 4.78 5.89</td> <td>5.04 4.85 4.90</td> <td>3.75 4.91 4.66</td> <td>4.71 3.45 5.33</td> <td>5.50</td>	Fe %	5.84 4.78 5.89	5.04 4.85 4.90	3.75 4.91 4.66	4.71 3.45 5.33	5.50
ppm ppm <td>Mn ppm</td> <td>290 1 143 4 206 1</td> <td>231 5 233 4 322 4</td> <td>504 3 628 4 395 4</td> <td>310 4 522 3 268 5</td> <td>644 3</td>	Mn ppm	290 1 143 4 206 1	231 5 233 4 322 4	504 3 628 4 395 4	310 4 522 3 268 5	644 3
ppm ppm <td>Co ppn</td> <td>6 6 6</td> <td>10 5 7</td> <td>11 13 14</td> <td>7</td> <td>18</td>	Co ppn	6 6 6	10 5 7	11 13 14	7	18
ppm ppm <td>Nî pper</td> <td>19 19 18</td> <td>18 18 17</td> <td>24 15 16</td> <td>17 8 17 8</td> <td>35</td>	Nî pper	19 19 18	18 18 17	24 15 16	17 8 17 8	35
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ppm ppm Q 450W 1 56 Q 400W 3 46 Q 350W 2 41 Q 300W 3 48 Q 250W 5 39 RE Q 250W 5 37 Q 0+00 6 83 Q 0+50E 2 57 Q 1+50E 2 61 Q 1+50E 2 61 Q 2+50E 2 102 O 3+00E 2 70 Q 3+50E 2 70 Q 3+50E 2 72 Q 4+00E 3 75 Q 4+50E 2 72 Q 5+00E 2 60 Q 5+50E 2 93	Pb ppn	8 5	6	8 8 3 5 5	-	Ś
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Q 450W Q 400W Q 350W Q 300W Q 250W RE Q 250W Q 0+00 0 0+50E Q 1+00E Q 1+50E Q 1+50E Q 2+00E Q 2+50E Q 3+50E Q 3+50E Q 4+50E Q 5+50E Q 5+50E	Mo ppm	1 3 2 3 5	5 6 2 2 2	2 2 4	2 2 5	3
	SAMPLE#	Q 400H Q 350H Q 390N	Q D+00 Q D+50E Q 1+00E	Q 2+50E Q 3+00E Q 3+50E	Q 5+00E	9 6+50E

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

APPENDIX 2

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ROCK SAMPLE DESCRIPTIONS

- 97851 Grab sample from few places across 3 m. Outcrop light brownish green Bonanza Formation lapilli tuff with local pervasive limonite stain. Traces disseminated pyrite crystals to 0.5 mm across; non-magnetic rock. About 40 % unsorted lapilli av. 5-6 mm across, max. 50 mm, in a medium grained ash tuff matrix. Matrix probably weakly clay-altered; greyish weathered surface on outcrop.
- 97852 Grab sample from few places as above except here local 2 % pyrite crystals 1.5 mm across. Weakly chlorite-altered rock. Sample from outcrop at base of peninsula in Quatse Lake.
- 97853 Grab sample of medium brownish green to medium greyish green interbanded fine grained faintly banded ash tuff and fine grained lapilli tuff. Bonanza Fm. Interbanded on a 50 to 200 cm scale. Lapilli tuff contains 2 to 5 % subround lapilli to 15 mm in a coarse grained ash tuff matrix. Beds(?) dip say 12° southerly. volcanic with weak chlorite alteration, and traces of hematite, epidote, pyrite and chalcopyrite (?). Rock is locally very weakly magnetic. Grab from few places across 10 m² area at 475 W along main road on south shore of Quatse Lake.
- 97854 Grab sample of medium green, fine grained Bonanza Fm ash tuff with 3 % pyrite as blebby masses to 8 mm. 5 m south of sample site is fault strike 062° dip 72 NW marked by 10 cm wide band of finely broken, chloritic rock. Grab from 1 m by 0.5 m area 20 m north of main road at 1145 W.
- 97855 Grab sample of dark greyish green, medium grained basalt with local 1 % very finely disseminated sulphide. Moderately magnetic Karmutsen(?) Fm or possibly Bonanza Fm. Traces disseminated hematite. No amygdules; brownish weathered surface. Site near centre of circular airborne magnetic high from 1988 assessment work. Grab from few places across 10 m in roadcut at 1690 W.
- 97856 Grab of float. Location 270 m due south of station 700 E along main road. Moderately brecciated, light grey vein quartz with say 7 % pyrite filling irregular fractures. Subangular boulder 20 by 20 by 12 cm.
- 97857 Grab from 6 places across 20 m² at 580 N along de-activated spur road. Light grey-green agglomerate with local 0.5 to 1 % pyrite across couple of cm. One small speck of chalcopyrite(?) seen. Weakly mineralized, tough rock. Traces dusty disseminated hematite; local trace epidote. Clasts mostly andesite and dacite, but about 0.5 % dark grey argillite clasts present.

APPENDIX 3

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MAGNETOMETER SURVEY DATA

Nanoose Geoservices QUATSE PROPERTY

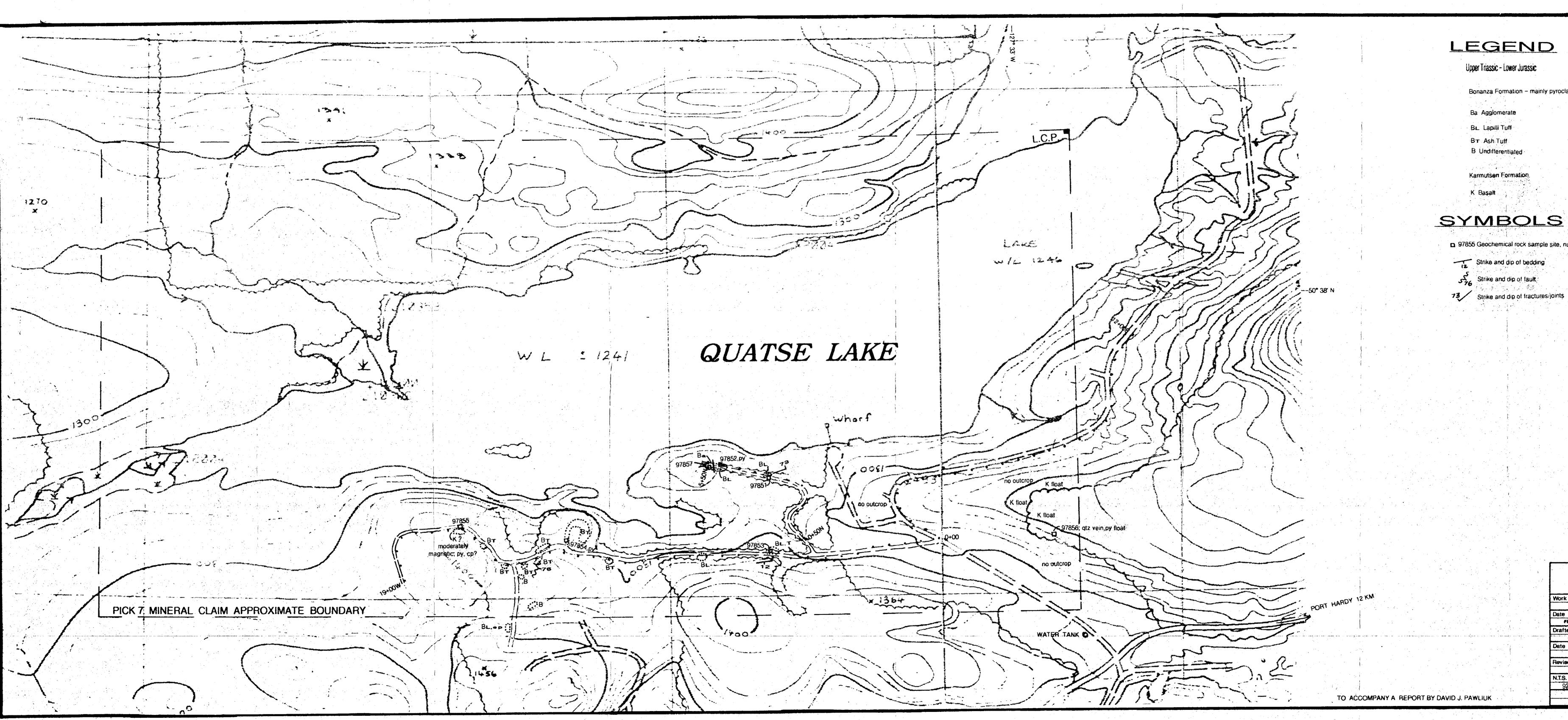
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PICK 7 claim

LINE	STATION	READING	TIME	REMARKS	LINE	STATION	READING	TIME	FREMAR	ĸs
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	Z+50W	55548	8:51		V	11+50W	55490	9:12		
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		55508					55534			
		55503					55519			<u> </u>
		55515					55495			
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		55553					55560			
		55514					55681			
		55483				13+75W	55701	9:/8		
<u> </u>		5554Z					55598			<u> </u>
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	1+75E	55944	9:57		,					
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	2+25E	55622	9:59							
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	2+75E	55639	10:00							
	3+00E	55583	10:0/							
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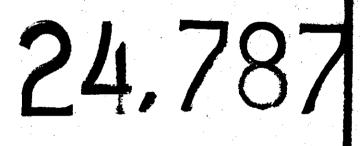


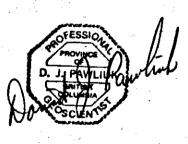
Bonanza Formation - mainly pyroclastics

97855 Geochemical rock sample site, numbe

GEOLOGICAL SURVEY BRANCI ASSESSMENT REPORT

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Date Drafted								
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