

LOG NO:

0712

RD.

ACTION:

FILE NO:

GEOCHEMICAL SAMPLING

BARNATO PROPERTY

GREENWOOD MINING DIVISION

Lat: $49^{\circ} 35'N$

Long: $118^{\circ} 54'W$

NTS: 82E/7W

Owner/Operator: Carmac Resources Ltd.
860 - 625 Howe St.
Vancouver, B.C.
V6C 2T6

Work Conducted: May 28 to June 8, 1990

Reported By: David A. Visagie

SUB-RECORDER

RECEIVED

JUL 6 - 1990

M.R. # \$

VANCOUVER, B.C.

June 1990

LOG NO: 11-07

RD.

ACTION: Date received back
from amendment

FILE NO:

GEOLOGICAL BRANCH
ASSESSMENT REPORT

200, 122

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1.0 INTRODUCTION

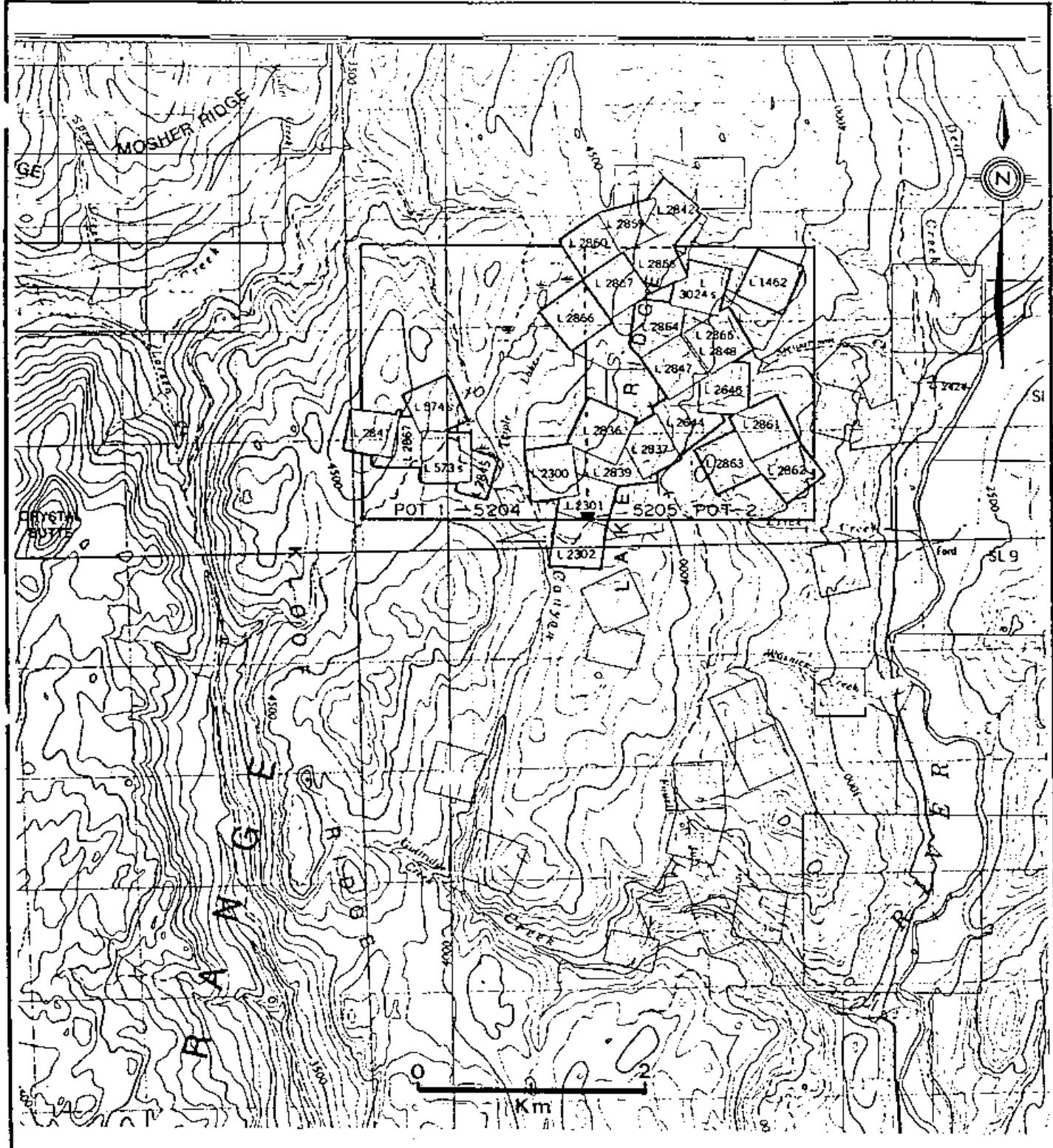
Between May 28 and June 8, 1990, Carmac Resources Limited personnel completed a preliminary evaluation of gold bearing showings located on it's Barnato property. The evaluation consisted of hand trenching, rock chip sampling and mapping. The property, consisting of a 68 unit claim block, is located approximately 50 km east of Penticton, 33 km north of Westbridge in south central B.C.

1.1 LOCATION, ACCESS, AND PHYSIOGRAPHY

The Barnato claims centred at latitude $49^{\circ}35'N$, longitude $118^{\circ}45'W$ occur on NTS map sheet 82E7W. Access to the property is by logging roads from either the main Kettle Valley road to the east or from Beaverdell to the west. The property has been extensively logged resulting in a network of four wheel drive roads, providing access to many of the showings (Figures 1 and 2).

The claims straddle Lake Ridge which separates Canyon Creek drainage system to the west from that of Crick Creek to the east. The property occurs primarily on east facing slopes and benches with elevations ranging from 880 to 1000 m.

Average annual precipitation consists of 24 cm of rain and 100 cm of snow, while the temperature averages $1^{\circ}C$ in the winter and $15^{\circ}C$ in the summer. The property is snow free from June to October. Work in 1990 was hampered by an unusually cold and wet spring.



CARMAC RESOURCES LTD.

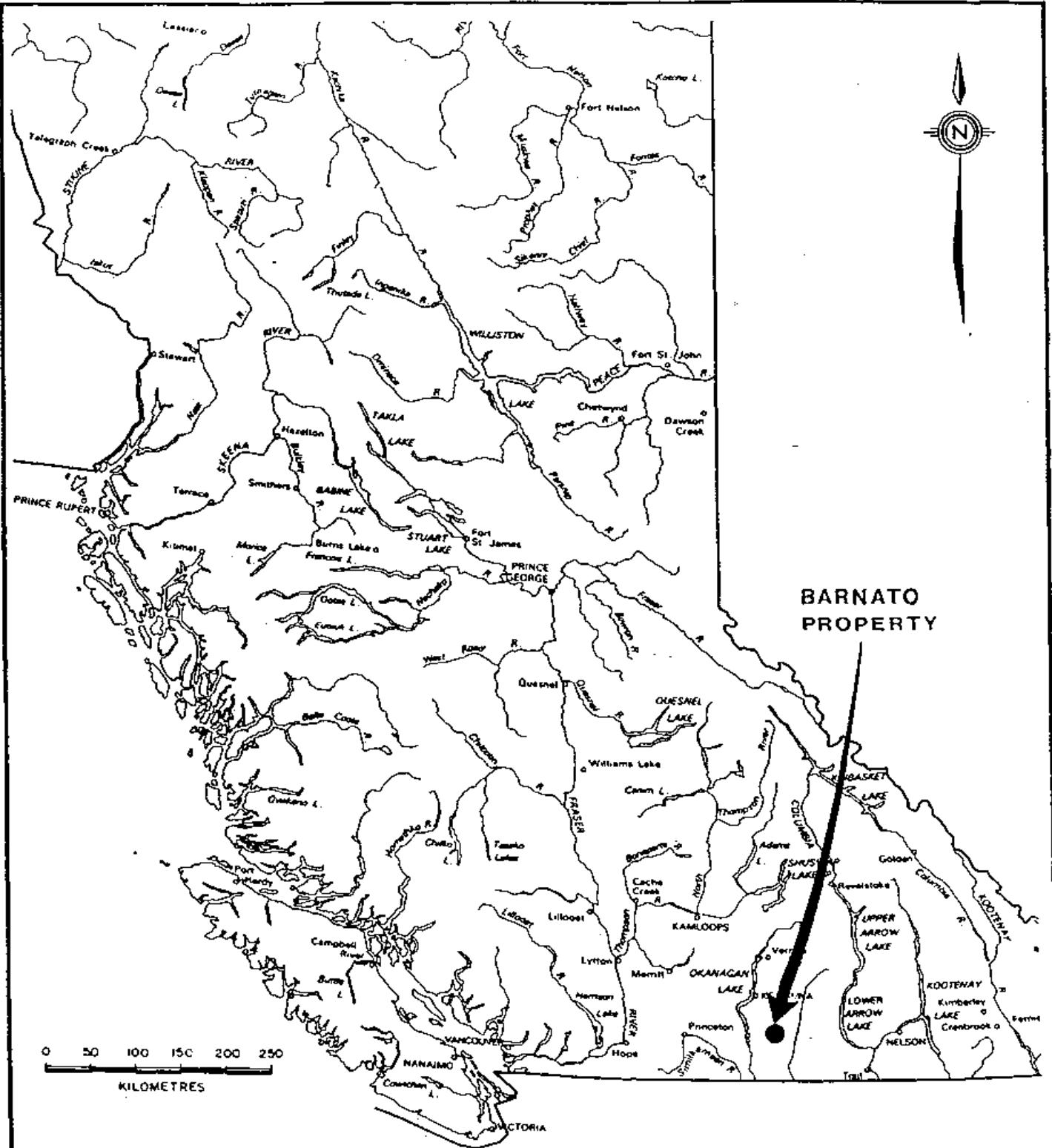
INDEX MAP

DATE : December 3, 1988

SCALE : 1 : 50,000

MINING DIVISION - Greenwood

FIGURE : 2



CARMAC RESOURCES LTD.

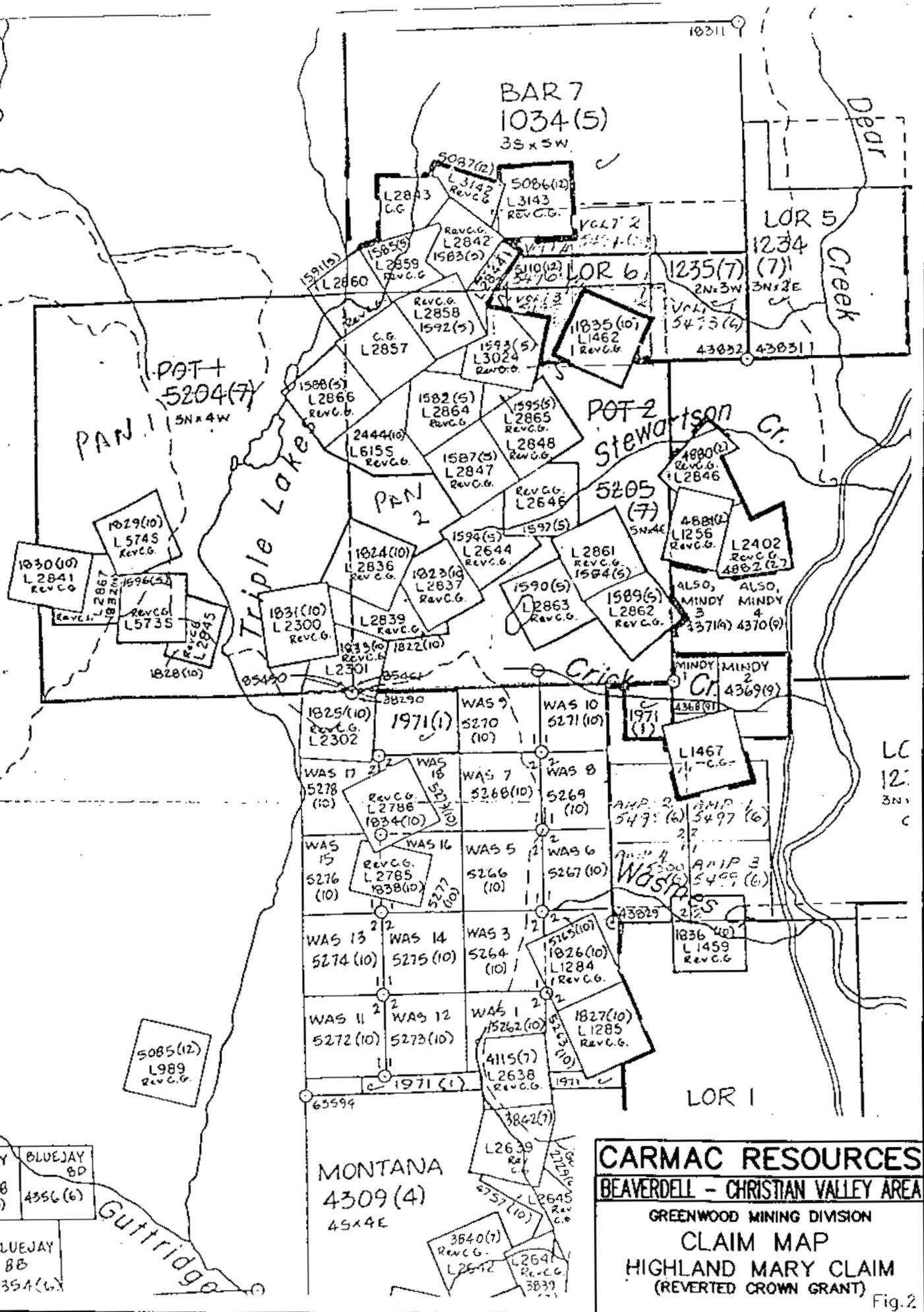
LOCATION MAP

1.2 PROPERTY DESCRIPTION

The property presently consists of the following:

<u>CLAIM</u>	<u>RECORD NO</u>	<u>DU^E DATE</u>
Name	1582	May 22, 1991
Silver Dollar	1583	May 22, 1991
Rambler	1584	May 22, 1991
Hunter	1585	May 22, 1991
Barnato Fr.	1586	May 22, 1991
Hackla	1587	May 22, 1991
Anchor	1588	May 22, 1991
Denver	1589	May 22, 1991
Champion	1590	May 22, 1991
Utopia	1591	May 22, 1991
Monetor	1592	May 22, 1991
Yorkshire Lass	1593	May 22, 1991
Silver Bell	1594	May 22, 1992
Barnato	1595	May 22, 1991
OK	1596	May 22, 1991
Kaffir King	1597	May 22, 1991
Kingston Fr.	1822	Oct. 22, 1990
North Star	1823	Oct. 22, 1990
Caledonia	1824	Oct. 22, 1990
Houston	1825	Oct. 22, 1990
Boston	1828	Oct. 22, 1990
Ivanhoe	1829	Oct. 22, 1990
Mona	1830	Oct. 22, 1990
Kingston	1831	Oct. 22, 1990
Mexico	1832	Oct. 22, 1990
Boston	1833	Oct. 22, 1990
Highland Mary	1835	Oct. 22, 1990
Coin Fr.	2444	Oct. 27, 1990
Pan 1	5518	July 17, 1990
Pan 2	5519	July 18, 1990

Carmac Resources Ltd. holds a 100% interest in the property and is the operator (Figure 3).



CARMAC RESOURCES
BEAVERDELL - CHRISTIAN VALLEY AREA
GREENWOOD MINING DIVISION
CLAIM MAP
HIGHLAND MARY CLAIM
(REVERTED CROWN GRANT)

1.3 PROPERTY HISTORY

The Barnato property has been sporadically worked on for over a century with many of the claims being originally staked prior to 1878. Surface programs consisting of prospecting and trenching led to the discovery of gold in 1896. Subsequent development in 1938, centred on the Barnato crown grant, resulted in the shipping of two cars of hand sorted ore totalling 84.9 tons to Tacoma, Washington for smelting. The ore averaged 1.58 opt Au, 0.23 opt Ag and 10.17% As.

In 1938, Cominco optioned the property and completed an exploration program consisting of mapping, prospecting, test pitting and drilling. The results showed the veins in the vicinity of the main Barnato workings to diminish in thickness and grade with depth and to be erratic along strike.

During 1965 and 1966, Amcana Gold Mines conducted a program of road building, claim surveying, trenching and diamond drilling (four short holes). The work was again concentrated in the vicinity of the Barnato main workings.

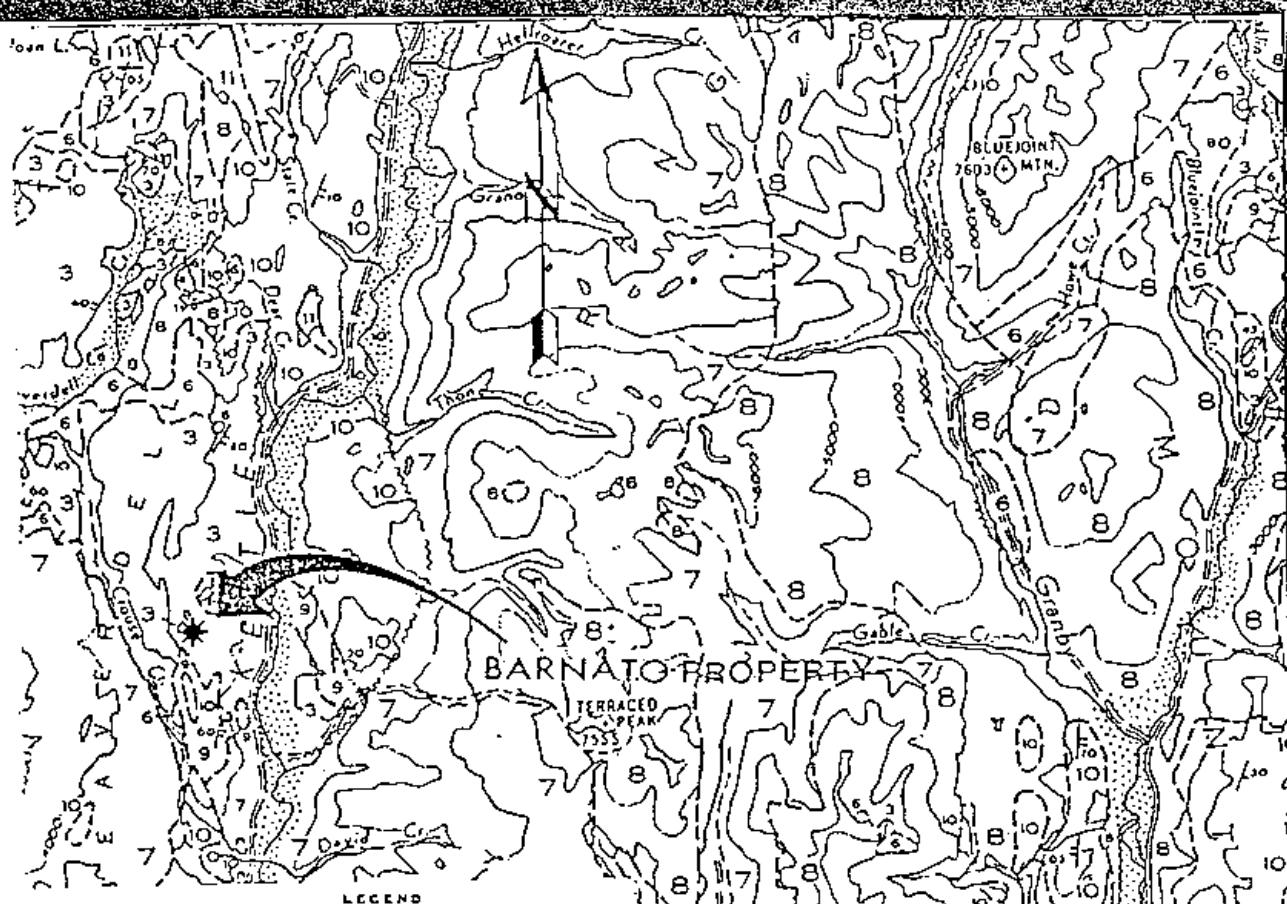
In 1977, Carmac Resources Ltd. acquired the property from G. Bleiler. Since then it has completed several programs consisting of ground and air geophysics, soil and rock chip sampling, mapping, trenching, prospecting and limited diamond drilling (5 NQ holes totalling 302.9 m)

Golden Seal Resources optioned the property in 1986 and completed a small percussion drill program totalling 202.4 m in four holes. Due to negative results Golden Seal terminated the option. Since then limited soil and rock chip sampling and mapping programs have been completed by Carmac Resources Ltd.

2.0 PROPERTY GEOLOGY

The Barnato property is primarily underlain by Late Paleozoic to Early Mesozoic andesitic volcanic and volcaniclastic rocks of the Wallace (Anarchist) Formation. These rocks locally consist of metamorphosed andesitic tuffs and flows, chert and volcanic derived sedimentary rocks. The Wallace Formation is in turn intruded by quartz diorite plugs and dykes associated with the West Kettle Pluton. The volcanic rocks trend approximately north-northwest.

N



TERTIARY	
MIOCENE	
11	Brayton, clastic breccia
PALEOCENE OR EOCENE	
10	Andesitic, tachytic; minor breccia; locally interbedded silt, shale, sand and/or lignite
9	Kettle River Formation: rhyolite and dacite tuff; locally conglomeratic, sandstone, and shale; minor chert flows and intrusive porphyritic rhyolite
PALeogene	
8	Coatell Intrusions: syenite, monzonite, granodiorite and gneiss
MESOZOIC	
LOWER CRETACEOUS	
7	Valhalla Intrusions: granite, porphyritic granite
6	Nelson Intrusions: granodiorite, porphyritic granite, diorite, monzonite, quartz monzonite
5	Ulrichsberg Intrusions: syenite
JURASSIC	
4	Rossland Group Andesitic, tachytic, sandstone and flint breccia, minor gneissic
PALeozoic	
PERMIAN	
3	Anarchist Group Gritstone, limestone, dolomite, carbonates
PENNSYLVANIAN AND/OR PERMIAN	
2	Mount Roberts Formation: shales, dolomite, limestone, partings
PROTEROZOIC	
1	Monashie and Grand Forks Groups Partings; minor crystalline limestone and pegmatites

0 .5 1 Km

CARMAC RESOURCES
BEAVERDELL - CHRISTIAN VALLEY AREA
GREENWOOD MINING DIVISION
REGIONAL GEOLOGY

Bedrock exposure on the claim is in excess of 15%. Trenching and pitting is widespread throughout the property. Mapping has shown two dominant rock types to exist on the property:

Quartz Diorite - Granodiorite - medium coarse grained, and in part porphyritic with variable mafic content.

Andesite - fine grained, in part foliated. Variably silicified.

Limestone has been observed to be interbedded within the andesites. Porphyritic dykes are observed to cross-cut all the units.

The andesitic rocks are generally intensely hornfelsed along the contact with the intrusive plugs.

Mineralization consisting of pyrite, pyrrhotite, minor magnetite, arsenopyrite and chalcopyrite with some gold values occurs in quartz veins, fracture fillings, and a dissemination within both quartz diorite and the andesitic volcanics. The mineralization appears to be in part localized along the contact between the intrusive and host rocks.

Additional information on the regional geology is provided by GSC Memoir 79 (Reincke 1910, 1915 and Geological Series and Geology No. 65 (Little, 1953, 1956).

3.0 1990 WORK PROGRAM

The purpose of the 1990 work program was to determine the extent and nature of the gold bearing mineralization on the Barnato property. Twelve days were spent evaluating the showings by a combination of trenching, rock chip sampling and mapping. A total of 158 rock chip and grab samples were collected. The program was hampered by unusually cold and wet weather resulting in the loss of three days of work.

4.0 GEOCHEMISTRY

4.1 Method *Sample locations identified with spray paint*

Two to five kg representative rock chip samples over measured lengths were taken from trenches, pits and bedrock exposures, stored in plastic bags, sorted and sent for analysis. In addition, grab samples were taken from dumps and selected outcrops.

All samples were sent to Eco-Tech labs, 10041 East Trans Canada Highway, Kamloops, B.C. to be analyzed by the 30 element I.C.P (Inductively Coupled Plasma) method with gold being determined by atomic absorption. After the initial analysis, some samples were fire assayed for gold and assayed for arsenic. In addition a program of check sampling resulted in six samples being sent to Vangeochem, 1988 Triumph St., Vancouver, B.C.

The following is an outline of the procedure used for the preparation and analysis of the samples:

Samples dried (if necessary), crushed to pulp size and pulverized to approximately -140 mesh.

For the 30 element I.C.P. analysis, a 10 g sample is digested with 3 ml of 3:1:3 nitric acid to hydrochloric to water at 90°C for 1 1/2 hours. The sample is then diluted to 20 ml with demineralized water and analyzed. The leach is partial for Al, B, Ba, Ca, Cr, Fe, K, Mg, Ma, Na, Q, Sb, Ti, U, and W.

For gold determination by atomic absorption a 10.0 g sample that has been ignited overnight at 600°C is digested with hot dilute aqua regia and the clear solution obtained is extracted with Methyl Isobutyl Ketone (MIBK). Gold is determined in the MIBK extract by atomic absorption using a background detection (Detection limit 5 ppb).

For fire assay analysis a one assay ton subsample was used.

For arsenic analysis a 2 g sample is digested by aqua regia then assayed by I.C.P.

4.2 Results

The sample locations are plotted on Figure 5 while the results for gold and arsenic are listed in Table 1. All assay results are listed in Appendix 1.

The results are grouped into five areas of exploration as listed below:

<u>Area</u>	<u>Claim (s)</u>
A	Highland Mary
B	Boston, Houston
C	Kingston
D	Ivanhoe, OK, Mona
E	Hackla

Area A - Highland Mary:

Trench and pitting completed prior to Carmac acquiring the property exposed the Highland Mary vein for 75 m. In addition, a pit referred to as Pit 90-3 exposed a parallel vein (B) 15 m to the west of the southernmost exposure. Sampling completed in 1989 showed the Highland Mary vein assaying up to 0.349 opt Au over 2.0 m to be associated with arsenopyrite and pyrite.

Sampling and mapping completed in 1990 show the Highland Mary vein to range in width from 20 to 140 cm with grades of up to 0.276 opt Au with 31.00% As, while Vein B assayed 0.542 opt Au and 28.84% As over 30 cm. Sampling of barren quartz breccia showed negligible gold values. Both veins are open along strike. In addition, the ground between the veins is overburden covered.

Area B - Boston, Houston:

The Boston and Houston claims host both gold and arsenic in soil anomalies. An examination of the anomalies has shown both pits and adits to exist within the anomalies. These were resampled and mapped. Mapping has shown the showings to consist of 1-5% pyrite occurring within veins and as disseminations in both diorite and andesites.

Assay results demonstrate that the rocks are locally anomalous in gold with the majority of values ranging from 100 - 500 ppb. A grab sample of quartz vein material from the Shaft 90-1 area assayed 0.415 opt Au with minor (30 ppm) arsenic. A 2 m chip sample of weakly quartz veined diorite assayed 0.053 opt Au.

Area C - Kingston:

Several gold and arsenic soil anomalies occur on the Kingston claim. Rock chip and grab samples were taken from previously excavated trenches and pits, the ages of which are not known. Mapping has shown that up to 5% pyrite occur in both veins and as disseminations with arsenic generally being less than 100 ppm.

Assay results show extensive gossanous zones to contain anomalous gold values. A 5 m chip sample of a gossanous zone located in Trench 90-1 on the Pan 1 claim averaged 0.050 opt Au with arsenic values being negligible. In addition, sampling of Adit 1 located on the Kingston claim showed gold to be associated with arsenopyrite with a grab sample assaying 0.226 opt Au and 21.25% As. Elsewhere low grade, 100 - 500 ppb, Au on rock anomalies were detected in gossanous zones in both andesite and diorite.

Area D - OK, Mona:

Soil sampling and mapping have shown that an area that is weakly anomalous in arsenic and gold coincides with extensive pyrrhotite rich gossans in which several pits and trenches occur along with limited underground development. Assays from the 1990 program showed the area to contain weak <300 ppb Au gold bearing gossans. A grab sample of a 10 cm quartz vein assayed 0.040 opt Au.

Area E - Hackla:

One trench was resampled in 1990. The assay results failed to outline any significant precious or base metal zones of mineralization.

5.0 SUMMARY AND CONCLUSIONS

The Barnato property occurs in south central British Columbia and is road accessible. The property, a gold +/- silver prospect, has been intermittently worked since 1878. Mapping has shown the claims to be underlain by Late Paleozoic to Early Mesozoic volcanic flows, tuffs and volcanic derived sediments that have been intruded by quartz diorite to granodiorite plugs and dykes. Mineralization consisting of trace to massive pyrite, pyrrhotite and arsenopyrite occurs in both the volcanic and intrusive rock as disseminations, along fracture faces and within quartz veins generally in close proximity to the volcanic-intrusive contact.

Sampling and mapping outlined two areas of interest; one on the Highland Mary claim while the other is located in the Pan 1 and Kingston.

On the Highland Mary, a 75 m long by up to 2.0 m wide northwest striking, steeply east dipping vein to contain variable gold and arsenic. Assaying has shown gold values to be associated with arsenic. Grab samples of the vein range up to 1.838 opt Au with 36.06% As while a 40 cm chip sample assayed 0.276 opt Au with 31.00% As. Sampling of weakly arsenic mineralized quartz vein material assayed 0.01 opt Au. A second vein located 15 m to the west and parallel to the above was exposed in trench located at the south end. A 30 cm chip ample of the vein assayed 0.542 opt Au with 28.84% As. Both veins are open along strike. In addition, the ground between the two has not been trenched therefore offering the potential for the existence of additional veins.

The second area of interest occurs within the vicinity of the Pan #1 and Kingston claims. Here extensive gossanous quartz diorite occur, with several trenches assaying weakly anomalous, <500 ppb Au. Trench 90-1 averaged 0.051 opt Au over 5 m. In contrast to other mineralized areas arsenic was negligible, <50 ppm. In addition, grab samples of arsenopyrite bearing quartz vein material located in the vicinity of Adit 90-1 assayed 0.226 opt Au along with 21.25% As. Grab samples of the same vein that contain little sulphide returned negligible values. Elsewhere on the areas samples, gold values are generally weakly anomalous with no significant zones of interest being located. An exception to this is in the Shaft 90-1 area, located on the Boston claim, where a 2 m chip sample assayed 0.053 opt Au with a grab sample of the dump assaying 0.415 opt Au. In both cases arsenic values assayed <50 ppm.

Rock chip sampling has shown gold to be associated with three styles of mineralization: i) in arsenopyrite bearing quartz veins, ii) weakly pyritic quartz veins, and iii) within pyritic gossans.

Soil sampling is an effective exploration method as the major showings occur within areas defined by gold and arsenic soil anomalies.

6.0 RECOMMENDATIONS

It is recommended that additional work be completed on the Barnato property. The program would include the trenching, mapping and stripping of the showing located on the Highland Mary, and the Kingston and Pan #1 claims, followed up by, if the results are positive, limited drilling. In addition, limited trenching should be completed in the vicinity of the Boston-Shaft 90-1 showing. Prospecting of unmapped areas on the property is proposed, while wide spaced soil sampling should be completed. If the sampling outlines zones of interest, they should be trenched, sampled and mapped.

7.0 COST STATEMENT

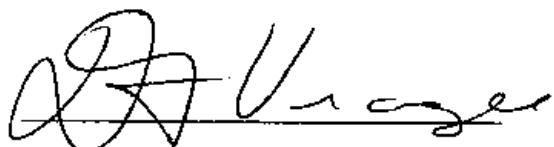
1) Room & Board			
a) Rooms - Edelweiss - Rock Creek, B.C.	\$ 216.00		
Four Season, Kelowna, B.C.	\$ 630.93		
		\$1,429.33	
2) Transportation			
a) * Truck Rental 70/day x 12 days	\$ 840.00		
b) Gas	\$ 527.33		
		\$1,367.33	
* includes insurance and mileage charges			
3) Miscellaneous Equipment			
- includes equipment rental and purchase of supplies	\$ 800.00		
4) Labour			
a) D. Visagie (Geologist) 12 days x 192/day	\$2,304.00		
b) T. Kirby (Technician) 12 days x 163/day	\$1,956.00		
		\$4,260.00	
5) Assaying			
a) Eco-Tech			
i Preparation 158 samples x \$3.75 =	\$ 592.50		
ii Geochem Au 158 samples x \$6.75 =	\$1066.50		
iii I.C.P.Analysis 158 samples x \$7.00 =	\$1106.00		
iv Screening Au 1.5 samples x \$5.00 =	\$ 7.50		
v Assay Au 15 samples x \$8.50 =	\$ 136.00		
vi Assay As 10 samples x \$10.00 =	\$ 100.00		
b) Vangeochem			
i Assay Au 6 samples x \$7.50 =	\$45.00		
ii I.C.P.Analysis 6 samples x \$6.50 =	\$39.00		
		\$3,092.50	
6) Office Supervision		\$ 600.00	
7) Report Preparation		<u>\$1,500.00</u>	
	Total		\$13,049.16

8.0 STATEMENT OF QUALIFICATIONS

I, D.A. Visagie of #860 - 625 Howe Street, Vancouver, B.C., hereby declare:

1. That I graduated from the University of British Columbia with a Bachelor of Science degree majoring in Geology in 1976.
2. That I have been steadily employed in the mining industry since then and have been employed by Northair Mines Ltd. since January 1990 as the Senior Geologist.
3. That the work undertaken on the Barnato property was carried out in my presence and under my supervision.

Dated at Vancouver, B.C., June 29, 1990.



D.A. Visagie
Senior Geologist
NORTHAIR MINES LTD.

TABLE 1
Sample Description and Results

16

Sample #	Claim	Location	Intervals (m)			Assays			Sample Description
			From	To	Int	Au (ppb)	Au (opt)	As (%)	
85505	Mona	Pit 90-1	1E	0E	1.0	95			gossanous sil andesite - 2% py
85506	Mona	Pit 90-1	ON	1N	1.0	255			gossanous sil andesite - 5% py
85507	Mona	Pit 90-1	1N	2N	1.0	230			gossanous sil andesite - 10% py
85508	Mona	Pit 90-1	2N	2.6N	0.6	75			gossanous sil andesite - 2% py
85509	Mona	Pit 90-1	0	1E	1.0	35			gossanous sil andesite - 2% py
85510	Mona	Pit 90-2	ON	0.7N	0.7	115			gossanous sil andesite - 2% py
85511	Mona	Pit 90-2	0.7N	1.5N	0.8	20			gossanous sil andesite - 2% py
85512	Mona	Pit 90-2	0	1.0E	1.0	15			gossanous sil andesite - 10% py
85513	Mona	Pit 90-2	1.0E	2.0E	1.0	35			gossanous sil andesite - 2% py
85514	Mona	Pit 90-2	2.0E	3.0E	1.0	40			gossanous sil andesite - 2% py
85515	Mona	Pit 94-3	0	1.0N	1.0	305			gossanous sil andesite - 5% py
85516	Mona	Pit 94-3	1.0N	2.0N	1.0	185			gossanous sil andesite - 5% py
85517	Mona	Pit 94-3	2.0N	3.0N	1.0	50			gossanous sil andesite - 5% py
85518	Mona	Pit 94-3	3.0N	4.0N	1.0	55			gossanous sil andesite - 5% py
85519	Mona	Pit 90-4	ON	1.0N	1.0	15			gossanous sil andesite - 2% py
85520	Mona	Pit 90-4	1.0N	2.0N	1.0	45			gossanous sil andesite - 2% py
85521	Mona	Pit 90-4	2.0N	3.0N	1.0	10			gossanous sil andesite - 2% py
85522	O.K.	Pit 90-1			grab	>1000	0.040		10 cm qu with 5% py
85523	O.K.	Pan 1&2	0	1N	1.0	50			rhyolite with 10% py
85524	O.K.	Pan 1&2	1N	1.6N	0.6	35			gossanous sil andesite - 10% py
85525	O.K.	Pan 1&2	2.8N	3.6N	0.8	400			gossanous sil andesite - 5% py
85527	O.K.	Pan 1&2			grab	>1000	0.035		gossanous sil andesite
85551	Ivanhoe	Pit 90-1 N.Wall	0	1.0E	1.0	40			limestone - barren
85553	Ivanhoe		1.0E	2.0E	1.0	100			gossanous sil andesite - 5% py
85554	Ivanhoe		2.0E	2.4E	0.4	555			semi-massive pyrrhotite
85555	Ivanhoe		2.4E	3.4E	1.0	100			gossanous sil andesite - 5% py
85556	Ivanhoe		3.4E	4.2E	0.8	90			gossanous sil andesite - 5% py
85557	Ivanhoe	S.Wall	0	1.0E	1.0	35			limestone
85558	Ivanhoe		1.0E	1.6E	0.6	830			gossanous sil andesite - 20% py
85559	Ivanhoe		1.6E	2.6E	1.0	95			gossanous sil andesite - 20% py
85560	Ivanhoe		2.6E	3.6E	1.0	115			gossanous sil andesite - 20% py

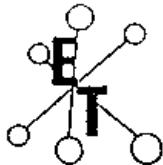
Sample #	Claim	Location	Intervals (m)			Assays			Sample Description	17
			From	To	Int	Au (ppb)	Au (opt)	As (%)		
85833	Hackla	Pit 90-1	0S	1S	1.0	155			gossanous andesite - 5% py	
85834	Hackla	Pit 90-1	8S	9S	1.0	40			gossanous andesite - 5% py	
85835	Hackla	Pit 90-1	9S	10S	1.0	45			gossanous andesite - 10% py	
85836	Hackla	Pit 90-1	10S	11S	1.0	20			gossanous andesite - 1% py	
85837	Hackla	Pit 90-1	11S	12S	1.0	25			gossanous andesite - 5% py	
85838	Hackla	Pit 90-1	12S	13S	1.0	95			gossanous andesite - 10% py	
85839	Hackla	Pit 90-1	13S	14S	1.0	10			gossanous andesite - 10% py	
85840	Hackla	Pit 90-1	14S	15S	1.0	15			gossanous andesite - 10% py	
85841	Hackla	Pit 90-1	15S	16S	1.0	25			gossanous andesite - 10% py	
85842	Hackla	Pit 90-1	16S	17S	1.0	25			gossanous andesite - 10% py	
85843	Hackla	Pit 90-1	17S	18S	1.0	25			gossanous andesite - 10% py	
85844	Hackla	Pit 90-1	18S	19S	1.0	25			gossanous andesite - 10% py	
85845	Hackla	Pit 90-1	19S	20S	1.0	10			gossanous andesite - 20% py	
85846	Hackla	Pit 90-1	20S	21S	1.0	15			gossanous andesite - 20% py	
85847	Hackla	Pit 90-1	21S	22S	1.0	110			gossanous andesite - minor qu	
85848	Hackla	Pit 90-1	22S	23S	1.0	10			partly brx andesite - 5% py	
85849	Hackla	Pit 90-1	23S	24S	1.0	45			partly brx andesite - 5% py	
85850	Hackla	Pit 90-1	24S	25S	1.0	40			partly brx andesite - 5% py	
85601	Hackla	Pit 90-1	25S	26S	1.0	30			gossanous andesite - tr py	
85602	Hackla	Pit 90-1	26S	27S	1.0	95			gossanous andesite - 20% py	
85603	Hackla	Pit 90-1	48.5S	49.5S	1.0	15			gossanous andesite - 10% py	
85604	Hackla	Pit 90-1	49.5S	50.0S	0.5	10			gossanous andesite - 10% py	
85605	Hackla	Pit 90-1	55.0S	56.0S	1.0	75			gossanous andesite - 10% py	
85606	Hackla	Pit 90-1	56.0S	57.0S	1.0	15			gossanous andesite - 2% py	
85607	Hackla	Pit 90-1	57.0S	58.0S	1.0	25			gossanous andesite - tr py	
85608	Hackla	Pit 90-1	58.0S	59.0S	1.0	120			gossanous andesite - 10% py	
85609	Hackla	Pit 90-2	0	0.5	0.5	35			gossanous andesite - 10% py	
85610	Silver Bell	Pit 90-1			grab	10			gossanous andesite - 5% py	
85611	Houston	Pit 90-1			grab	115			gossanous quartz diorite - 5% py	
85612	Pan 1	o/c 90-1			grab	35			gossanous quartz diorite - 5% py	
85613	Pan 1	o/c 90-1			grab	5			gossanous siltsonte - 5% py	
85614	Pan 1	o/c 90-1			grab	10			5 cm qu with tr py	

Sample #	Claim	Location	Intervals (m)			Assays			Sample Description
			From	To	Int	Au (ppb)	Au (opt)	As (%)	
85801	H. Mary	Pit 90-1	0	0.7E	0.7E	480			sil andesite - 5% py
85802	H. Mary	Pit 90-1	0.7E	2.0E	1.3E	90			sil andesite - 5% py
85803	H. Mary	Pit 90-1	2.0E	3.5E	1.5	35			sil andesite - 5% py
85804	H. Mary	Pit 90-1	3.5E	5.0E	1.5	15			sil andesite - 5% py
85805	H. Mary	Pit 90-1	5.0E	6.0E	1.0	55			sil andesite - 5% py
85806	H. Mary	Pit 90-1	6.0E	6.5E	0.5	140			sil andesite - 5% py
85807	H. Mary	Pit 90-1	6.5E	7.0E	0.5	35			sil andesite - 5% py
85808	H. Mary	Pit 90-1	7.0E	8.4E	0.9	>1000	0.085	23.58	qu with 30% Asp
85809	H. Mary	Pit 90-1	8.4E	9.0E	0.6	150			sil andesite - 5% py
85810	H. Mary	Pit 90-1	9.0E	10.0E	1.0	>1000	0.031	1.84	sil andesite - 10% Asp
85811	H. Mary	Pit 90-1	10.0E	10.7E	0.7	715		1.26	sil andesite - 5% pu
85812	H. Mary	Pit 90-1			grab	>1000	1.838	36.06	qu with 40% Asp
85813	H. Mary	Pit 90-1			grab	345			qtz bx
85814	H. Mary	o/c 90-1	0	1.0E	1.0	>1000	0.070		20% qu in sil andesite ~ 5% py
85815	H. Mary	o/c 90-1	1.0E	2.0E	1.0	>1000	0.029		sil andesite - 5% py
85816	H. Mary	o/c 90-1	2.0E	3.0E	1.0	450			sil andesite - 5% py
85817	H. Mary	o/c 90-1			grab	>1000	0.066		quartz vein with weak gossan
85818	H. Mary	Trench 90-1	0	1.0W	1.0	65			gossanous andesite - 5% py
85820	H. Mary	Trench 90-1	1.0W	2.0W	1.0	>1000	0.032		gossanous andesite - 10% Asp minor qu
85821	H. Mary	Trench 90-1	2.0W	3.0W	1.0	55			gossanous andesite ~ 5% py
85822	H. Mary	Trench 90-1	3.0W	4.0W	1.0	10			gossanous andesite - 5% py
85823	H. Mary	Pit 90-2 N.Wall 0	1E	1E	1	45			gossanous andesite
85824	H. Mary	Pit 90-2	1.0E	1.7E	0.7	80			gossanous andesite
85825	H. Mary	Pit 90-2	1.7E	2.1E	0.4	>1000	0.276	31.00	quartz vein - 50% Asp
85826	H. Mary	Pit 90-2	2.1E	3.2E	1.1	80			gossanous sil andesite
85827	H. Mary	Pit 90-2 S.Wall 1E	1.7E	1.7E	0.7	60			gossanous sil andesite
85828	H. Mary	Pit 90-2	1.7E	1.9E	0.2	>1000	1.306		quartz vein with 60% Asp
85829	H. Mary	Pit 90-2	1.9E	3.2E	1.3	595			gossanous sil andesite
85830	H. Mary	Pit 90-3	0	1E	1.0	250			gossanous andesite ~ 5% py
85831	H. Mary	Pit 90-3	1.0E	1.3E	0.3	>1000	0.542	28.84	quartz vein - 40% Asp
85832	H. Mary	Pit 90-3	1.3E	2.7E	2.7	110			gossanous andesite - 5% py

Sample #	Claim	Location	Intervals (m)			Assays			Sample Description	19
			From	To	Int	Au (ppb)	Au (opt)	As (%)		
85651	Kingston	o/c 90-1	0W	1.0W	1.0	35			porphyrytic gossanous andesite	
85652	Kingston	o/c 90-1	1.0W	2.0W	1.0	20			porphyrytic gossanous andesite	
85653	Kingston	o/c 90-1	2.0W	3.0W	1.0	20			porphyrytic gossanous andesite	
85654	Kingston	o/c 90-1	3.0W	4.0W	1.0	55			porphyrytic gossanous andesite	
85655	Kingston	o/c 90-2			grab	75			weakly gossanous andesite	
85656	Kingston	o/c 90-2			grab	55			weakly gossanous andesite	
85657	Kingston	o/c 90-1			grab	80			5 cm qu in andesite (hematite stained)	
85658	Kingston	o/c 90-1			grab	75			0.5 m x 0.5 m gossanous zone in andesite	
85659	Kingston	o/c 90-3	0	1.0W	1.0	490			gossanous sil andesite tr py	
85660	Kingston	o/c 90-3	1.0W	2.0W	1.0	630			gossanous sil andesite tr py	
85661	Kingston	o/c 90-3	2.0W	3.0W	1.0	35			gossanous sil andesite tr py	
85662	Kingston	o/c 90-3	0	1.5W	1.5	30			gossanous sil andesite - 3% py	
85663	Pan 1	o/c 90-1	0	1.0W	1.0	25			gossanous quartz diorite - 2% py	
85664	Pan 1	o/c 90-1	1.0W	2.0W	1.0	60			gossanous quartz diorite - 2% py	
85665	Pan 1	o/c 90-1	2.0W	3.0W	1.0	25			gossanous quartz diorite - 2% py	
85666	Pan 1	o/c 90-1	3.0W	4.0W	1.0	35			gossanous quartz diorite - 2% py	
85667	Pan 1	o/c 90-1	4.0W	5.0W	1.0	20			gossanous quartz diorite - 2% py	
85668	Pan 1	o/c 90-1	5.0W	6.0W	1.0	80			gossanous quartz diorite - 2% py	
85669	Pan 1	o/c 90-1	6.0W	7.0W	1.0	35			gossanous quartz diorite - 2% py	
85670	Pan 1	o/c 90-1	0	1.5W	1.0	25			gossanous quartz diorite - 2% py	
85671	Kingston	o/c 90-4	0	1.0W	1.0	10			gossanous quartz diorite - 2% py	
85672	Kingston	o/c 90-4	1.0W	2.0W	1.0	20			gossanous quartz diorite - 2% py	
85673	Kingston	Pit 90-1	0	1.0W	1.0	145			sil andesite (?) - 5%py	
85674	Kingston	Pit 90-1	1.0W	2.0W	1.0	>1000	0.056	1.88	sil andesite (?) - 5%py	
85675	Kingston	Pit 90-1	2.0W	3.0W	1.0	440			sil andesite (?) - 5%py	
85676	Kingston	Pit 90-1	3.0W	3.5W	0.5	480			sil andesite (?) - 5%py	
85677	Kingston	Pit 90-1	3.5W	4.7W	1.2	45			sil andesite (?) - 5%py	
85678	Kingston	Pit 90-1	4.7W	5.7W	1.0	65			sil andesite (?) - 5%py	
85679	Kingston	Adit 90-1	0	1.0N	1.0	60			sil quartz diorite - barren	
85680	Kingston	Adit 90-1	1.0N	2.0N	1.0	120			sil quartz diorite - barren	
85681	Kingston	Adit 90-1	2.0N	3.0W	1.0	460			gossanous sil andesite - 10% py	
85682	Kingston	Adit 90-1	3.0W	4.2W	1.2	375			gossanous sil andesite - 10% py	
85683	Kingston	Adit 90-1	4.2W	5.25W	1.0	145			quartz diorite	

Sample #	Claim	Location	Intervals (m)			Assays			Sample Description	20
			From	To	Int	Au (ppb)	Au (opt)	As (%)		
85684	Kingston	Adit 90-1			grab	295			quartz diorite with gossan - dump	
85685	Kingston	Adit 90-1			grab	>1000	0.226	21.25	quartz vein with 40% Asp - dump	
85686	Kingston	Adit 90-1			grab	45			barren quartz vein - dump	
85687	Pan 1	Trench 90-1	0W	1.0W	1.0	114			gossanous quartz diorite	
85688	Pan 1	Trench 90-1	1.0W	2.0W	1.0	124			gossanous quartz diorite	
85689	Pan 1	Trench 90-1	2.0W	3.0W	1.0	>1000	0.055		gossanous quartz diorite	
85690	Pan 1	Trench 90-1	3.0W	4.0W	1.0	>1000	0.045		gossanous quartz diorite	
85691	Pan 1	Trench 90-1	4.0W	5.0W	1.0	>1000	0.044		gossanous quartz diorite	
85692	Pan 1	Trench 90-1	5.0W	6.0W	1.0	>1000	0.035		gossanous quartz diorite	
85693	Pan 1	Trench 90-1	6.0W	7.0W	1.0	>1000	0.072		gossanous quartz diorite	
85694	Pan 1	Trench 90-1	5.0W	6.0W	1.0	100			gossanous quartz diorite	
85701	Boston	Shaft 90-1	0	2.0W	2.0	100			gossanous quartz diorite - 2% py	
85702	Boston		2.0W	4.0W	2.0	85			gossanous quartz diorite - 2% py	
85703	Boston		4.0W	6.0W	2.0	810			gossanous quartz diorite - 2% py	
85704	Boston		6.0W	8.0W	2.0	130			gossanous quartz diorite - 2% py	
85705	Boston		8.0W	10.0W	2.0	135			gossanous quartz diorite - 2% py	
85706	Boston		10.0W	12.0W	2.0	335			gossanous quartz diorite - 2% py	
85707	Boston		12.0S	14.0S	2.0	>1000	0.053		gossanous quartz diorite - 2% py	
85708	Boston	o/c 90-1	2.0S	4.0S	2.0	585			gossanous quartz diorite - 2% py	
85709	Boston		4.0S	6.0S	2.0	280			gossanous quartz diorite - 2% py	
85710	Boston	Shaft 90-1			grab	>1000	0.415		gossanous quartz diorite - 2% py	
85711	Boston	Shaft 90-1			grab	225			gossanous quartz diorite - 2% py	
85712	Boston	o/c 90-2		2.0E	2.0	195			gossanous quartz diorite - 2% py	
85713	Boston	o/c 90-2		4.0E	2.0	60			gossanous quartz diorite - 2% py	
85714	Boston	Adit 90-1		1E	1.0	135			gossanous quartz diorite - 2% py	
85715	Boston	Adit 90-1		3.5E	2.0	165			gossanous quartz diorite - 2% py	
85716	Boston	Adit 90-1		5.0S	2.0	85			gossanous quartz diorite - 2% py	
85718	Boston	o/c 90-3			1.0	55			gossanous quartz diorite - 2% py	
85719	Boston	Adit 90-1	1.0E	3.0E	2.0	195			gossanous quartz diorite - 2% py	
85720	Boston	Adit 90-1	3.0E	5.0E	2.0	35			gossanous quartz diorite - 2% py	
85721	Boston	Adit 90-1			grab	165			qtz vein - 5% py	

APPENDICES



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JUNE 7, 1990

CERTIFICATE OF ANALYSIS ETK 90-151

Barnato

CARMAC RESOURCES
C/O NORTHAIR GROUP
860, 625 HOWE STREET
VANCOUVER, B.C.
V6C 2T6

A S S A Y S

SAMPLE IDENTIFICATION: 64 ROCK CHIP samples received JUNE 4, 1990

ET#	Description	AU (g/t)	AU (oz/t)	AS (%)
151 - 24	85674	1.93	.056	1.88
151 - 35	85685	7.75*	.226	21.25
151 - 39	85689	1.87	.055	
151 - 40	85690	1.56	.045	
151 - 41	85691	1.51	.044	
151 - 42	85692	1.19	.035	
151 - 43	85693	2.48	.072	
151 - 51	85707	1.81	.053	
151 - 54	85710	14.22*	.415	

NOTE: * SAMPLE SCREENED & METALLICS ASSAYED

Jutta Jealouse
ECO-TECH LABORATORIES LTD.

JUTTA JEALOUSE
B.C. Certified Assayer

SC90/CARMAC

ECO-TECH LABORATORIES LTD.

CARMAC RESOURCES - ETK 90-151

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

C/O NORTHAIR GROUP
860, 625 HOWE STREET
VANCOUVER, B.C.
V6C 2T6

23 JUNE 7, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

64 ROCK CHIP SAMPLES RECEIVED JUNE 4, 1990

ETL	DESCRIPTION	AU(ppb)	Ag	Al(%)	As	B	BA	Bi	Ca(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	Mg(%)	Mn	Mo	Na(%)	Ni	P	PB	SB	SH	SR	Ti(%)	U	V	W	X	Y	ZR
151 - 1	85651	35	<2	1.52	5	<2	35	<5	1.09	<1	14	55	88	2.63	.12	<10	.88	303	9	.1	21	550	6	<5	<20	44	.16	<10	81	<10	3	31	
151 - 2	85652	20	<2	1.59	5	<2	30	<5	.89	<1	16	74	64	2.80	.09	<10	1.10	363	6	.06	25	650	2	5	<20	26	.19	<10	113	<10	3	35	
151 - 3	85653	20	<2	1.96	5	4	30	<5	1.31	<1	13	50	55	2.83	.08	<10	.92	334	6	.11	15	590	2	5	<20	42	.19	<10	108	<10	3	29	
151 - 4	85654	55	<2	2.37	5	2	40	<5	1.55	<1	15	63	112	2.91	.08	<10	.79	263	7	.18	18	506	4	5	<20	75	.15	<10	87	<10	3	28	
151 - 5	85655	75	<2	1.51	5	2	30	<5	1.24	<1	13	80	28	2.18	.09	<10	.80	406	7	.07	20	260	2	5	<20	27	.12	<10	74	<10	2	31	
151 - 6	85656	55	<2	.87	45	<2	20	<5	.89	<1	13	39	39	1.61	.03	<10	.40	196	6	.04	6	990	2	<5	<20	40	.10	<10	38	<10	2	18	
151 - 7	85657	80	<2	.14	105	<2	5	<5	.08	<1	1	231	71	.95	.01	<10	.07	82	22	.02	3	130	4	<5	<20	5	.01	<10	11	<10	1	3	
151 - 8	85658	75	<2	.88	20	2	35	<5	1.26	<1	12	80	200	6.82	.04	<10	.42	424	11	.02	23	826	6	5	<20	39	.09	<10	72	<10	3	37	
151 - 9	85659	480	<2	.65	45	<2	30	<5	.76	<1	10	81	91	2.53	.03	<10	.23	190	9	.03	11	990	2	<5	<20	25	.14	<10	40	<10	3	60	
151 - 10	85660	630	<2	.68	45	<2	40	<5	.65	<1	9	74	59	2.08	.04	<10	.25	199	6	.06	14	900	2	<5	<20	28	.15	<10	45	<10	4	23	
151 - 11	85661	35	<2	.83	45	6	35	<5	.57	<1	9	67	30	2.04	.04	<10	.50	191	6	.05	10	860	2	<5	<20	25	.17	<10	75	<10	3	33	
151 - 12	85662	30	<2	.88	45	<2	20	<5	1.12	<1	8	104	75	3.19	.1	<10	.33	166	8	.09	14	2480	4	5	<20	41	.11	<10	64	<10	6	56	
151 - 13	85663	25	<2	1.06	45	6	55	<5	.51	<1	8	139	64	4.09	.19	<10	.82	175	7	.09	21	820	10	10	<20	56	.17	<10	107	<10	4	53	
151 - 14	85664	60	<2	1.96	45	<2	50	<5	1.02	<1	6	38	27	3.64	.17	<10	.89	333	7	.17	4	880	8	10	<20	98	.15	<10	78	<10	2	32	
151 - 15	85665	25	<2	1.72	5	6	45	<5	.90	<1	6	67	25	2.88	.15	<10	.62	307	7	.16	2	1000	6	10	<20	90	.11	<10	58	<10	2	28	
151 - 16	85666	35	<2	1.85	45	<2	45	<5	1.13	<1	6	91	26	2.83	.13	<10	.59	261	7	.12	1	1070	4	5	<20	112	.13	<10	58	<10	2	24	
151 - 17	85667	20	<2	1.24	5	<2	55	<5	.87	<1	5	106	35	2.55	.19	<10	.40	173	9	.13	9	860	6	5	<20	80	.16	<10	51	<10	4	18	
151 - 18	85668	80	<2	1.83	5	<2	40	<5	.95	<1	7	83	26	2.87	.15	<10	.66	310	7	.17	1	1010	6	10	<20	103	.13	<10	58	<10	2	31	
151 - 19	85669	35	<2	1.67	45	<2	25	<5	.91	<1	7	62	20	2.99	.09	<10	.64	312	6	.15	1	1010	4	5	<20	84	.10	<10	53	<10	1	34	
151 - 20	85670	25	<2	.57	45	6	25	<5	1.14	<1	10	112	66	2.24	.03	<10	.10	131	9	.07	25	690	4	5	<20	77	.09	<10	25	<10	3	32	
151 - 21	85671	10	<2	1.13	45	<2	30	<5	.73	<1	8	65	63	1.74	.04	<10	.35	88	7	.12	1	930	6	<5	<20	70	.07	<10	23	<10	1	8	
151 - 22	85672	20	<2	1.45	45	4	35	<5	.87	<1	11	90	79	1.93	.04	<10	.31	105	8	.16	2	890	4	<5	<20	95	.07	<10	25	<10	1	11	
151 - 23	85673	145	<2	1.85	210	<2	35	<5	.62	2	12	83	131	4.06	.07	<10	.68	208	17	.1	11	930	40	5	<20	48	.07	<10	65	<10	3	24	
151 - 24	85674	>1000	2.8	1.53	>10000	<2	95	<5	.31	5	26	75	180	6.71	.15	<10	.66	320	10	.06	9	910	188	20	<20	38	.04	<10	82	<10	2	152	
151 - 25	85675	440	<4	1.17	255	2	15	<5	.47	<1	11	107	138	5.69	.06	<10	.57	253	28	.06	6	1260	16	5	<20	39	.08	<10	81	<10	3	16	
151 - 26	85676	180	<2	.90	90	2	10	<5	.67	<1	9	118	79	4.13	.03	<10	.47	325	18	.08	5	876	12	5	<20	39	.09	<10	53	<10	4	16	
151 - 27	85677	45	<2	.96	80	<2	35	<5	.74	<1	14	118	67	3.57	.1	<10	.83	386	13	.04	27	990	8	5	<20	20	.09	<10	70	<10	4	23	
151 - 28	85678	65	<2	.84	40	2	30	<5	.64	<1	13	112	49	2.21	.05	<10	.60	420	11	.05	22	1280	5	<5	<20	23	.08	<10	71	<10	5	16	
151 - 29	85679	60	<2	1.33	60	8	20	<5	.60	<1	15	62	90	3.01	.04	<10	.94	456	10	.03	13	950	8	5	<20	34	.06	<10	67	<10	3	20	
151 - 30	85680	120	<2	1.21	70	<2	25	<5	.49	<1	13	128	51	2.51	.05	<10	.96	468	8	.04	32	790	6	5	<20	24	.08	<10	63	<10	4	22	
151 - 31	85681	460	<2	1.03	1125	2	20	<5	.31	1	12	124	80	3.19	.05	<10	.49	251	13	.04	4	570	10	5	<20	34	.06	<10	47	<10	2	19	
151 - 32	85682	375	<2	1.19	1625	6	20	<5	.26	<1	11	101	120	4.82	.06	<10	.55	382	13	.04	2	680	14	10	<20	27	.08	<10	56	<10	2	66	
151 - 33	85683	145	<2	1.33	340	<2	25	<5	.58	<1	13	81	45	2.18	.07	<10	.80	435	9	.06	3	820	8	5	<20	35	.08	<10	54	<10	2	47	
151 - 34	85684	295	<2	1.40	510	<2	20	<5	.10	<1	8	57	100	3.91	.05	<10	.64	174	6	.03	11	660	8	<5	<20	11	.11	<10	55	<10	1	16	
151 - 35	85685	>1000	1.6	.15	>10000	<2	5	40	.01	<1	403	84	69	9.51	.02	<10	.01	10	11	.01	8	190	14	115	<20	9	.01	<10	10	<10	1	11	

ECO-TECH LABORATORIES LTD.

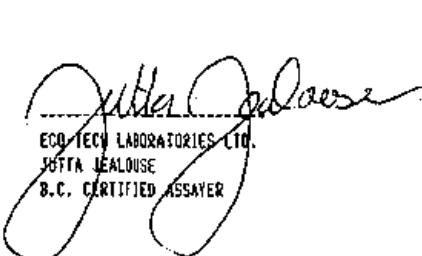
CARMAC RESOURCES - ETK 90-151

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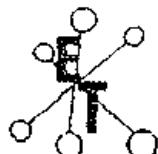
24

ET#	DESCRIPTION	AU(ppb)	AG AL(Z)	AS	B	BA	BI CA(I)	CD	CO	DR	CU FE(Z)	K(Z)	LA MG(Z)	MN	MO MA(Z)	N1	P	PB	SB	SN	SR TI(Z)	U	V	W	X	Y	ZM
151 - 36	85686	45	<.2 .16	650	<2	20	<5 .09	<1	4	192	2 .39	.06	<10 .09	53	17 .02	1	230	4	<5 <20	4 .02	20	11 <10	<1	<1			
151 - 37	85687	510	<.2 1.61	295	<2	60	<5 .39	<1	14	63	39 4.26	.12	<10 .77	616	6 .05	<1	919	6	5 <20	27 .12	10	85	10	4	34		
151 - 38	85688	320	<.2 1.31	80	<2	155	<5 .34	<1	12	91	105 6.30	.07	<10 .64	247	9 .04	<1	780	8	5 <20	30 .10	10	69	380	3	15		
151 - 39	85689	>1000	<.2 .73	35	<2	30	<5 .14	<1	6	39	37 8.47	.08	<10 .34	83	6 .02	2	240	8	30 <20	10 .05	10	80	163	1	7		
151 - 40	85690	>1000	<.2 .86	15	<2	50	<5 .08	<1	5	46	109 8.90	.1	<10 .30	67	5 .03	2	880	8	15 <20	27 .12	<10	92	50	2	12		
151 - 41	85691	>1000	<.4 1.01	15	<2	45	<5 .09	<1	4	41	220 10.94	.05	<10 .19	44	7 .03	<1	810	8	15 <20	32 .18	10	99	30	1	14		
151 - 42	85692	>1000	<.4 2.93	30	<2	85	<5 1.10	<1	10	45	221 6.25	.04	<10 .87	276	4 .16	<1	900	15	10 <20	187 .06	<10	104	20	3	21		
151 - 43	85693	>1000	<.4 1.66	30	<2	50	<5 .69	<1	8	50	168 9.38	.05	<10 .42	149	8 .09	<1	910	14	15 <20	84 .06	10	69	10	2	17		
151 - 44	85694	540	<.2 1.24	5	<2	20	<5 .11	<1	3	60	72 6.38	.06	<10 .67	200	7 .03	<1	710	12	10 <20	12 .04	10	76	40	3	16		
151 - 45	85701	500	<.2 1.18	135	<2	40	<5 .34	<1	7	60	99 3.25	.08	<10 .80	167	6 .04	<1	980	8	5 <20	20 .04	<10	66	<10	3	13		
151 - 46	85702	85	<.2 1.10	20	<2	40	<5 .35	<1	4	63	76 2.92	.07	<10 .75	179	8 .04	<1	1050	6	5 <20	19 .03	10	70	<10	3	13		
151 - 47	85703	310	<.2 1.18	10	<2	35	<5 .35	<1	7	55	66 2.91	.08	<10 .76	222	9 .04	<1	1000	8	5 <20	27 .03	<10	66	<10	3	15		
151 - 48	85704	190	<.2 1.26	5	<2	35	<5 .35	<1	7	62	106 3.79	.07	<10 .81	253	6 .05	<1	950	8	5 <20	29 .07	10	61	<10	2	14		
151 - 49	85705	135	<.2 1.05	5	<2	25	<5 .37	<1	4	61	63 2.72	.06	<10 .69	154	6 .04	<1	940	6	5 <20	22 .05	<10	67	<10	3	11		
151 - 50	85706	335	<.2 1.33	5	<2	30	<5 .49	<1	5	70	28 2.48	.1	<10 .89	217	7 .06	1	960	4	5 <20	31 .07	<10	75	<10	3	18		
151 - 51	85707	>1000	<.2 1.30	<5	<2	40	<5 .42	<1	7	76	30 2.58	.12	<10 .91	290	8 .05	<1	930	4	5 <20	25 .07	<10	65	<10	3	18		
151 - 52	85708	585	<.2 1.61	380	<2	50	<5 .43	<1	9	77	53 3.33	.1	<10 1.02	206	7 .06	<1	940	6	5 <20	29 .04	<10	79	<10	4	18		
151 - 53	85709	280	<.2 2.19	50	<2	65	<5 .23	<1	10	38	92 5.06	.1	<10 1.13	445	5 .04	<1	1070	6	10 <20	31 .04	<10	121	<10	4	29		
151 - 54	85710	>1000	1.2 .20	30	<2	10	140 .13	<1	2	211	8 .57	.03	<10 .11	60	18 .02	1	180	6	5 <20	6 .01	<10	12	10	1	1		
151 - 55	85711	225	<.2 .49	10	<2	20	<5 4.28	<1	2	81	26 .90	.08	<10 .35	203	8 .03	<1	570	6	5 <20	161 .01	<10	26	<10	7	8		
151 - 56	85712	195	<.2 1.89	5	<2	55	<5 .64	<1	12	72	49 3.78	.1	<10 1.18	624	7 .05	2	1090	6	5 <20	48 .10	<10	116	<10	3	35		
151 - 57	85713	60	<.2 2.09	10	<2	70	<5 .66	<1	15	38	16 4.32	.1	<10 1.23	936	6 .05	1	1060	6	10 <20	56 .10	<10	137	<10	6	41		
151 - 58	85714	115	<.2 1.56	5	4	35	<5 .57	<1	15	62	53 3.17	.08	<10 .90	475	10 .06	1	1000	4	10 <20	40 .07	<10	100	<10	4	24		
151 - 59	85715	105	<.2 2.50	20	<2	60	<5 .69	<1	27	84	83 5.43	.15	<10 1.47	728	11 .05	6	1080	6	5 <20	55 .17	<10	139	<10	5	40		
151 - 60	85716	85	<.2 2.12	10	2	45	<5 .59	<1	16	91	42 3.83	.12	<10 1.38	637	10 .07	4	1120	6	5 <20	40 .13	<10	127	<10	4	34		
151 - 61	85718	55	<.2 1.04	10	<2	40	<5 1.05	<1	9	130	33 1.94	.06	<10 .61	366	13 .05	5	690	4	5 <20	64 .09	20	54	<10	2	22		
151 - 62	85719	195	<.2 2.59	10	<2	95	<5 .70	<1	18	52	70 4.97	.1	<10 1.59	749	6 .06	4	1200	6	5 <20	66 .17	<10	145	<10	3	43		
151 - 63	85720	35	<.2 1.63	5	<2	70	<5 .96	<1	11	64	5 3.13	.11	<10 .71	528	6 .1	4	1210	4	5 <20	89 .12	<10	99	<10	3	31		
151 - 64	85721	165	<.2 .53	10	<2	5	<5 .21	<1	8	114	68 3.31	.02	<10 .24	116	14 .02	3	350	8	5 <20	24 .05	<10	20	<10	1	6		

NOTE: < = LESS THAN


 Jutta Jealouse
 ECO-TECH LABORATORIES LTD.
 B.C. CERTIFIED ASSAYER

cc: DAVID VISAGIE C/O NORTHAIR GROUP
 BC90/KI
 CARMAC RESOURCES: 687-7545 (GUS.)


ECO-TECH LABORATORIES LTD.

 ASSAYING - ENVIRONMENTAL TESTING
 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 873-6700 Fax 873-4557

JUNE 14, 1990

CERTIFICATE OF ANALYSIS ETK 90-161 A

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CARMAC RESOURCES
 C/O NORTHAIR GROUP
 660, 625 HOWE STREET
 VANCOUVER, B.C.
 V6C 2T6

ASSAYS

SAMPLE IDENTIFICATION: 98 ROCK samples received JUNE 8, 1990

ET#	Description	AU (g/t)	AU (oz/t)	PB (%)	ZN (%)	AS (%)
161	1 85501	2.35	.069	.54		
161	- 3 85503			1.25	.94	
161	- 4 85504	109.18 *	3.184	.54	1.02	
161	- 22 85522	1.37	.040			
161	- 26 85527	1.19	.035			
161	- 43 85808	2.90	.085			23.58
161	- 45 85810	1.05	.031			1.84
161	- 46 85811					2.26
161	- 47 85812	63.04 *	1.838			36.06
161	- 49 85814	2.41	.070			
161	- 50 85815	1.01	.029			
161	- 52 85817	2.25	.066			
161	- 54 85820	1.11	.032			3.68
161	- 59 85825	9.46 *	.276			31.00
161	- 62 85828	44.77 *	1.306			41.80
161	- 65 85831	18.58 *	.542			28.84

NOTE: * SAMPLE SCREENED & METALLICS ASSAYED

Jutta Jealouse
 ECO-TECH LABORATORIES LTD.
 JUTTA JEALOUSE
 B.C. Certified Assayer

SC90/CARMAC

JUNE 30, 1981

18041 EAST TORONTO CANADA MAP
GARIBOLDI, B.C. P.O. 213
PHONE - 604-523-5700
FAX - 604-523-6550

C/B MINE SITE GROUP
800, 425 HOME STREET
VANCOUVER, B.C.
V6C 2T6

VALUES IN PPM UNLESS OTHERWISE REPORTED

26

SHIPMENT NO. L-2
73 ROCK SAMPLES RECEIVED JUNE 6, 1981

BT	DESCRIPTION (wt.-%)	AG	AL(%)	AS	B	BA	BL	CM(%)	D	DP	CR	DU	FE(%)	FLY	LA(%)	MG(%)	MN	MO(%)	NI	P	PE	PH	SH	SI(%)	T	V	W	X	Z				
161 - 1	15501	21080	22.2	.56	385	2	25	6	.02	4	1	150	978	5.21	.02	10	.18	1534	41	.02	3	360	1985	75	C9	10	.01	.04	24	18	1	1444	
161 - 2	15502	105	5.6	.21	69	2	35	5	1.41	13	3	256	209	1.32	.06	10	.13	158	27	.02	10	120	418	5	C9	15	.01	.00	13	14	1	1624	
161 - 3	15503	620	27.4	.05	45	2	18	5	1.30	39	3	111	195	.82	.01	10	.02	242	2	.02	11	500	110300	15	C9	51	.01	.00	8	14	1	10000	
161 - 4	15504	21000	28.8	.12	55	2	25	6	1.00	102	7	288	299	1.80	.06	10	.04	253	51	.02	10	350	5882	15	C9	20	.01	.00	5	14	2	10000	
161 - 5	15505	95	1.2	1.34	15	2	20	5	.99	0	2	112	128	1.65	.05	10	.00	158	10	.04	9	970	92	10	C9	21	.00	.00	6	14	1	157	
161 - 6	15506	255	3.4	3.38	40	2	20	6	2.59	0	4	162	24	4.58	.03	10	.06	521	16	.02	10	810	32	10	C9	29	.02	.01	52	14	3	89	
161 - 7	15507	200	2.0	1.22	1200	2	20	6	1.88	0	15	94	423	8.26	.04	10	.06	384	14	.02	11	390	20	15	C9	24	.00	.00	82	14	1	46	
161 - 8	15508	75	.6	2.42	90	2	50	5	1.33	3	12	105	61	4.56	.07	10	.12	121	356	12	.06	6	360	8	18	C9	20	.00	.03	3	14	1	87
161 - 9	15509	25	1.0	2.04	65	2	35	5	.87	0	15	62	71	2.88	.05	10	.12	320	8	.05	6	1020	8	5	C9	22	.02	.04	49	14	3	58	
161 - 10	15510	115	2.0	.97	30	2	15	6	.64	0	10	175	67	5.18	.04	10	.07	520	12	.04	4	1820	10	15	C9	23	.01	.01	76	14	2	61	
161 - 11	15511	10	1.3	1.10	75	2	25	6	.34	0	8	80	34	5.09	.05	10	.03	458	8	.03	2	1850	8	20	C9	16	.02	.00	66	14	2	36	
161 - 12	15512	15	.8	.75	35	2	20	6	.32	0	10	172	208	5.17	.04	10	.06	346	16	.03	2	1810	8	13	C9	20	.00	.00	50	14	2	40	
161 - 13	15513	35	1.2	.49	30	2	10	6	.34	0	7	68	194	8.99	.03	10	.18	244	10	.02	1	300	10	15	C9	27	.01	.00	48	14	1	77	
161 - 14	15514	40	0.0	.53	10	2	15	6	.48	0	8	131	192	8.71	.04	10	.17	311	19	.02	2	220	10	16	C9	34	.01	.00	39	14	2	39	
161 - 15	15515	305	1.0	.39	70	2	10	5	.26	0	6	103	105	5.74	.03	10	.12	175	24	.02	2	990	8	10	C9	11	.03	.03	22	14	1	14	
161 - 16	15516	165	.8	.24	225	2	35	6	.37	0	9	234	108	4.78	.03	10	.05	411	24	.03	2	210	8	5	C9	25	.05	.01	61	14	2	36	
161 - 17	15517	50	.8	1.56	65	2	10	6	.33	0	10	130	71	3.35	.07	10	.13	366	11	.06	4	650	6	10	C9	17	.03	.01	61	14	5	40	
161 - 18	15518	55	.6	1.42	65	2	35	5	.31	0	15	132	113	3.13	.08	10	.06	364	14	.06	17	490	6	5	C9	19	.09	.00	71	14	2	34	
161 - 19	15519	15	1.0	.82	5	2	15	5	.38	0	46	63	680	13.34	.05	10	.08	276	3	.05	25	870	12	15	C9	14	.06	.00	141	14	2	12	
161 - 20	15520	45	.6	.63	15	2	10	5	.47	0	7	172	447	5.72	.07	10	.05	195	18	.06	17	220	8	10	C9	19	.02	.00	76	14	2	34	
161 - 21	15521	10	.6	1.30	10	2	20	5	.70	0	6	129	135	4.18	.05	10	.09	211	11	.05	22	210	6	5	C9	19	.09	.01	61	14	2	61	
161 - 22	15522	2100	.6	.50	5	2	20	10	.16	0	7	299	51	2.32	.09	10	.23	127	39	.06	9	360	8	5	C9	15	.05	.02	15	14	1	3	
161 - 23	15524	58	.6	.29	5	2	20	5	3.38	0	9	92	58	1.99	.04	10	.07	295	8	.03	11	448	8	15	C9	30	.01	.00	16	14	2	14	
161 - 24	15525	25	.2	1.32	15	2	10	5	.27	0	7	204	64	3.24	.07	10	.16	213	11	.06	22	570	6	5	C9	22	.18	.00	181	14	4	40	
161 - 25	15526	180	1.0	.08	5	2	5	10	1.30	0	57	36	207	9.26	.02	10	.00	341	11	.02	35	493	6	15	C9	12	.01	.01	10	14	0	35	
161 - 26	15527	1100	2.2	.29	5	2	5	5	.61	0	14	52	1547	3.55	.07	10	.08	493	26	.03	5	400	4	15	C9	14	.04	.00	61	14	1	29	
161 - 27	15531	40	.2	.20	95	2	5	5	5.06	0	9	9	59	.45	.02	10	.06	427	1	.02	3	280	10	15	C9	32	.04	.00	10	14	4	15	
161 - 28	15530	180	.2	.24	10	1	5	5	2.40	0	5	17	101	2.76	.04	10	.13	266	31	.03	3	400	4	15	C9	18	.02	.00	12	14	1	38	
161 - 29	15534	555	.6	.03	10	2	5	5	.57	0	36	13	252	6.32	.01	10	.02	175	5	.02	17	220	8	10	C9	3	.01	.00	10	8	0	26	
161 - 30	15535	110	.6	.49	15	4	10	5	.92	0	5	25	107	4.19	.06	10	.09	382	6	.05	5	518	4	10	C9	12	.05	.00	16	10	1	30	
161 - 31	15556	90	.4	.10	5	2	5	5	1.02	0	1	20	156	3.77	.03	10	.08	393	10	.02	8	270	8	10	C9	2	.01	.00	11	10	1	12	
161 - 32	15552	35	.4	.05	6	2	10	5	5.37	0	6	6	46	.22	.02	10	.03	252	3	.01	11	170	12	5	C9	31	.01	.00	8	10	0	11	
161 - 33	15558	400	.6	.85	11	2	5	5	5.17	0	16	9	105	4.73	.01	10	.02	258	4	.02	3	170	12	5	C9	34	.01	.00	9	10	0	9	
161 - 34	15559	75	1.0	1.09	15	2	10	5	.53	0	12	27	63	4.35	.05	10	.06	303	5	.19	8	720	10	5	C9	21	.05	.00	10	10	1	58	
161 - 35	15560	115	1.0	.24	5	2	15	5	.43	0	5	18	475	3.12	.04	10	.07	215	6	.03	11	460	6	15	C9	20	8	.03	10	14	0	10	



MAIN OFFICE
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• FAX (604) 254-5717

BRANCH OFFICES
PASADENA, NFLD.
BATHURST, N.B.
MISSISSAUGA, ONT.
RENO, NEVADA, U.S.A.

REPORT NUMBER: 900069 GA

JOB NUMBER: 900069

NORTHLAND GROUP CARMAC RESOURCES

PAGE 1 OF 1

SAMPLE #	10
	ppb
90-151-10A	20
90-151-20A	10
90-151-30A	60
90-151-40A	1410
90-151-50A	290
90-151-60A	60

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

Barnet

ICAP GEOCHEMICAL ANALYSES

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95° C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Si, Sr and W.

ANALYST: Ryan L

REPORT #: 90009 PA	NORTHAIR GROUP CARMAC RES.						PROJECT: None Given						DATE IN: JUNE 11 1990			DATE OUT: JUNE 14 1990			ATTENTION:			PAGE 1 OF 1			
Sample Name	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Si	U	V	Zn	
90-151-16A	.7.0	.50	8	35	<3	.73	.1.1	.11	.75	48	1.82	.11	.23	193	5	.01	14	.09	12	<2	5	30	9	13	21
90-151-20A	3.9	.80	12	21	<3	1.13	.8	.13	118	47	1.93	.16	.09	134	10	.01	30	.07	15	<2	5	66	37	13	29
90-151-30A	1.0	1.53	70	33	7	.57	.7	.15	150	42	2.62	.09	.92	474	9	.01	38	.08	15	<2	4	30	15	4	34
90-151-40A	.5	1.14	21	59	24	.11	1.8	5	.58	102	9.13	.01	.30	87	5	.04	2	.09	29	7	<4	29	<5	55	4
90-151-50A	2.9	1.93	13	38	<3	.55	.8	6	.84	14	2.63	.09	.93	228	7	.01	4	.10	8	<2	3	42	<5	13	1E
90-151-60A	5.5	2.66	12	52	10	.63	1.4	15	.95	26	3.56	.10	1.28	658	8	.01	7	.11	5	<2	4	48	8	13	26
Mineral Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Major Detection	\$0.0	\$0.00	3000	1000	1000	\$0.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000
- Less Than Mintrace	% - Greater Than Maxtrace	is - Insufficient Sample	ns - No Sample	ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested																					

