

LOG NO: 02-01	RD.
ACTION:	
FILE NO:	

GEOLOGICAL AND TRENCHING REPORT

ON THE

KECHIKA PROPERTY

RAR GROUP (RAR 1,4,6,7,8 CLAIMS)

&

REE GROUP (REE 1,2,7,8 CLAIMS)

KECHIKA YTTRIUM PROJECT

N.T.S. 94L/11, 12 & 13

Lat. 58°43'00" N, Long. 127°31'00" W

KECHIKA RIVER - TERMINUS MOUNTAIN AREA

LIARD MINING DIVISION

NORTHERN BRITISH COLUMBIA

Jennifer Pell, Ph.D., F.G.A.C.,

December, 1990

Owners: Golden Rule Resources Ltd.

Andrew G. Harman

Garth E. Johnson

Operator: Formosa Resources Corporation

20,895

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

CONTENTS

	Page
Summary.....	i
1. Introduction.....	1
1.1 Location, Access and Physiography.....	1
1.2 Claims.....	3
1.3 Property History.....	5
2. Geology.....	6
2.1. Regional Geology.....	6
2.2. Property Geology.....	8
2.2.1 Stratigraphy.....	8
2.2.2 Structure.....	11
2.2.3 Alkaline Rocks.....	13
2.2.4 Mineralization.....	13
3. Geophysical Survey.....	14
4. Trenching.....	15
5. Conclusions.....	15
6. References.....	16
7. Statement of Costs.....	17
8. Statement of Qualifications.....	18

FIGURES

Figure	Page
1. Location Map.....	2
2. Claims Map.....	4
3. Regional Geology, Eastern Cassiar Mountains.....	7
4. Generalized Geology, Kechika Property.....	9
5. Generalized Stratigraphy, Sandpile Group, RAR and REE Claims.....	10
6. Property Geology, North End.....	in pocket
7. Radiometric Survey Map, RAR 7 Grid.....	in pocket
8. Rar 7 Grid Area- Location of 1990 Trenches and Samples.....	in pocket

APPENDIX

Appendix I Assays/Geochemistry

KECHIKA YTTRIUM PROJECT

SUMMARY

1. The Kechika project involves yttrium and rare earth element exploration on the RAR and REE claims in the Liard Mining Division of north central British Columbia.
2. The property consists of 17 claims (291 units) owned by A. Harman, G. Johnson and Golden Rule Resources Ltd. Formosa Resources Corporation, the current operator, may acquire a 60% working interest in the claims by satisfying the terms of an option agreement.
3. The property is located in the Kechika Ranges of the Cassiar Mountains, west of the Rocky Mountain Trench and 150 km southeast of Watson Lake. Access is by air from Terminus Mountain airstrip, 20 km to the east.
4. The property covers a complex suite of alkaline igneous rocks (trachytes, trachytic breccias and tuffs, syenites, a diatreme and related dykes) hosted by Middle Paleozoic carbonates, tuffs and sandstones. This sedimentary and igneous rock package is exposed in a fault slice within Lower Paleozoic phyllites.
5. In 1988, high grade yttrium mineralization (up to 1.13% Y_2O_3) in rocks of igneous protolith was found on the RAR 7 claim.
6. The 1989 program delineated a mineralized zone (RAR 7 - 2237 "Ridge Zone") and a number of smaller mineralized areas on the RAR 7 grid. The Ridge Zone covers about 200 x 25 to 50 metres and encompasses numerous pods of high-grade mineralization. Due to an early snowfall, the planned program was not completed.
7. Between September 3-15, 1990, a small exploration program was run on the property, the purpose of which was to complete geological survey work interrupted by adverse weather during 1989. The program concentrated on geological mapping (1:5000 scale) and prospecting of the northern claims and the "RAR 7" showings. A number of pits were also excavated.

KECHIKA YTTRIUM PROJECT

1. INTRODUCTION

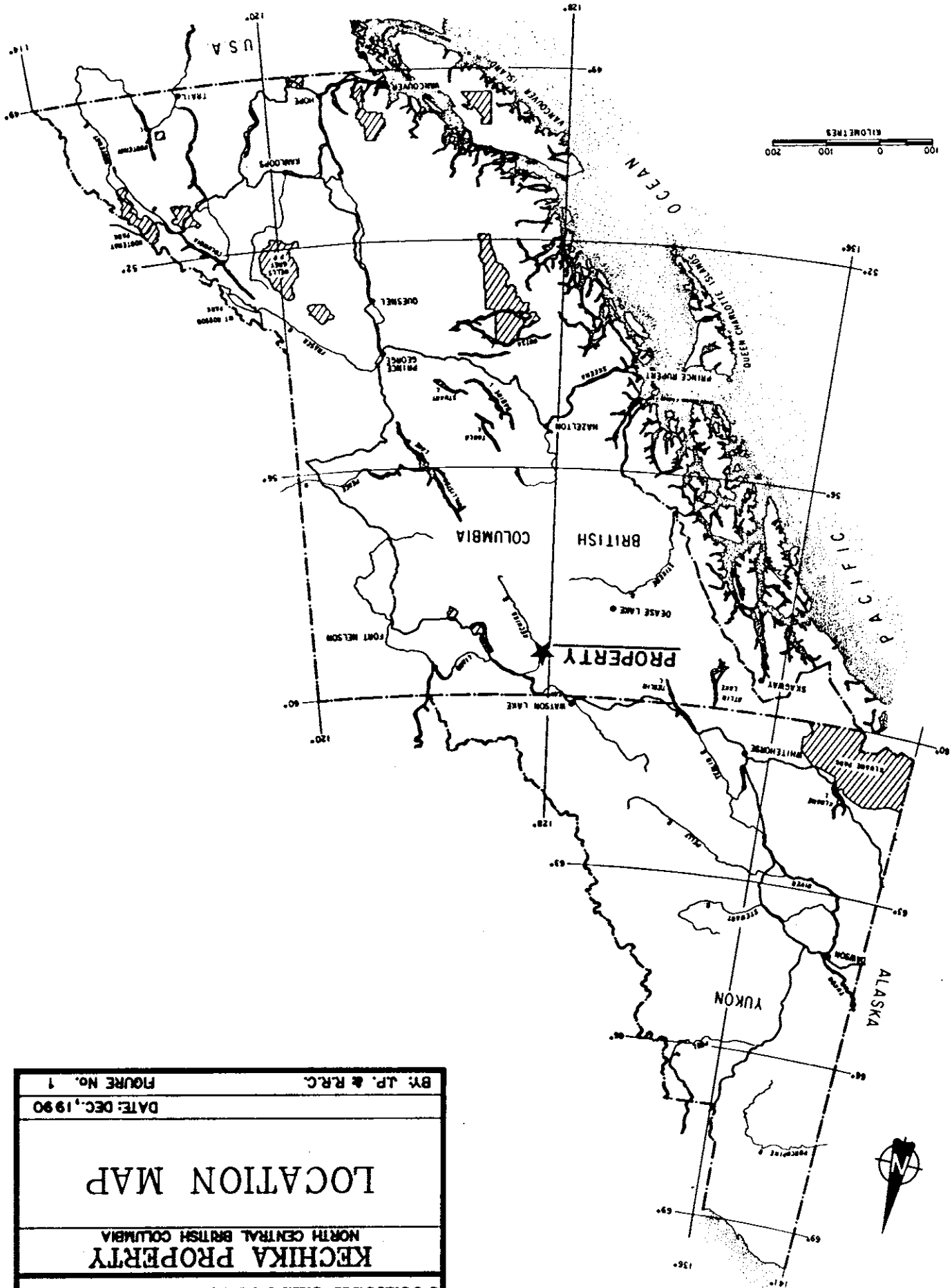
Between September 3 and 15, 1990, an exploration program was completed on the Kechika property. The purpose of the program was to complete survey work interrupted by adverse weather during the previous field season. Work concentrated on geological mapping and prospecting of the northern claims and the "RAR 7" showings. A number of trenches were also excavated. Mapping of the northern claims was done on a 1:5,000 scale using airphotos for control. Ground control in the vicinity of the showings was provided by a previously established grid.

Boundary Drilling Inc. was enlisted to carry out the program, completed under the direction of Jennifer Pell. A helicopter was used on a full-time basis.

This report updates and expands upon material (data and maps) in the assessment report which describes the 1989 program results.

1.1 Location, Access and Physiography

Alkaline rocks on the RAR and REE claims are intermittently exposed in a northwest trending zone in excess of 20 kilometres long, the centre of which is located approximately at $58^{\circ}43'$ north and $127^{\circ}31'$ west (Figures 1, 2). Elevations on the property range from 1180 to 2373 metres and excellent exposure exists on the ridges and steep slopes. Most of the property is above tree line; some spruce trees exist to elevations of 1500 metres and buckbrush is present in most valleys to approximately 1650 metres elevation.



FORMOSA RESOURCES CORPORATION
KECHIKA PROPERTY
NORTH CENTRAL BRITISH COLUMBIA
LOCATION MAP
DATE: DEC., 1990
BY: J.P. & R.C.
FIGURE NO. 1

Access is currently by air from Dease Lake, 160 kilometres to the west, or from Watson Lake, Yukon, 150 kilometres north of the property. The nearest air strip is at Terminus Mountain in the Rocky Mountain Trench, 20 kilometres east of the property. Small float planes can land on Colt Lake, eight kilometres east of the main showings; larger float planes (Otters or Twin Otters) can land on Dall Lake, 15 kilometres to the southwest. From these staging points, the property can be reached by helicopter.

1.2 Claims

The Kechika property consists of 17 contiguous claims (Figure 2). Of these, the RAR (96 units) and the REE Group (73 units), are considered to have exploration merit. Claims are as follows:

RAR GROUP

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>RECORD NO.</u>	<u>EXPIRY DATE</u>
RAR 1	20	3363	Aug. 06, 1995
RAR 4	20	3366	Aug. 06, 1995
RAR 6	20	3689	Oct. 28, 1992*
RAR 7	20	3690	Oct. 28, 1993*
RAR 8	16	3691	Oct. 28, 1992*

REE GROUP

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>RECORD NO.</u>	<u>EXPIRY DATE</u>
REE 1	20	3712	Oct. 28, 1992*
REE 2	15	3924	Mar. 09, 1993*
REE 7	18	3928	Mar. 09, 1993*
REE 8	20	3929	Mar. 09, 1993*

Claims which are not grouped are listed below:

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>RECORD NO.</u>	<u>EXPIRY DATE</u>
RAR 5	16	3367	Aug. 06, 1995
RAR 9	9	3692	Oct. 28, 1990
REE 3	15	3925	Mar. 09, 1991
REE 4	12	3713	Oct. 28, 1990
REE 5	20	3926	Mar. 09, 1991
REE 6	20	3927	Mar. 09, 1991
REO 1	18	3930	Mar. 09, 1991
REO 2	12	3931	Mar. 09, 1991

*Upon acceptance of this report

FORMOSA RESOURCES CORPORATION

KECHIKA PROJECT

LIARD MINING DIVISION, B.C.

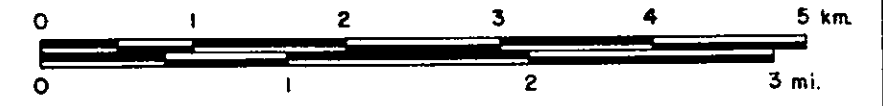
CLAIM LOCATION MAP



NTS: 94L/11, 12, 13

DRAWN BY:

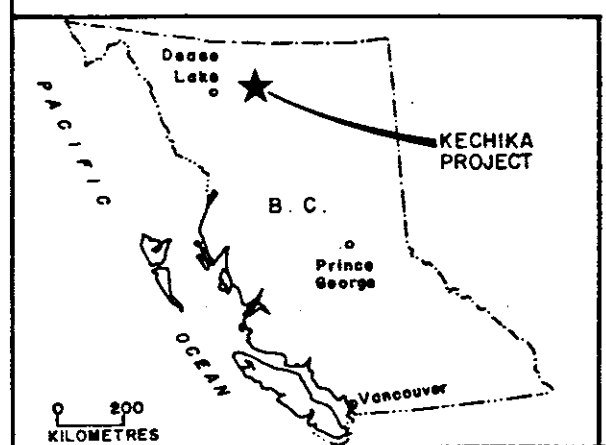
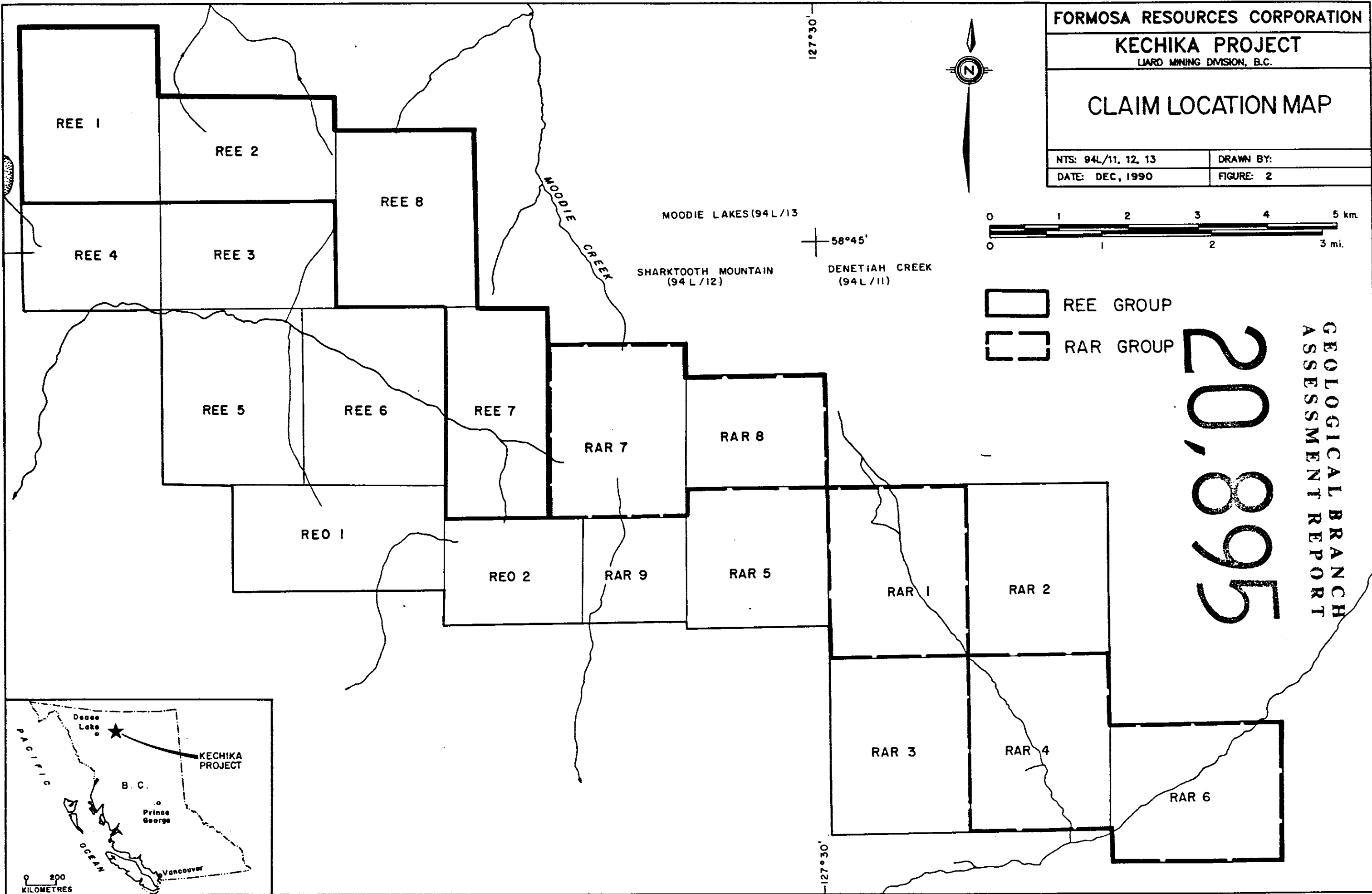
DATE: DEC, 1990

FIGURE: 2



-  REE GROUP
-  RAR GROUP

20,895
GEOLOGICAL BRANCH
ASSESSMENT REPORT



The claims are owned by A. G. Harman, G. E. Johnson and Golden Rule Resources Ltd. Formosa may acquire a 60% working interest in these claims by satisfying the terms of an option agreement with the owners.

1.3 Property History

During the course of regional mapping in the late 1950's and early 1960's, federal government representatives noted fluorite and copper showings on what are now the RAR and REE claims (Gabrielse, 1962). Rare earth mineralization was discovered on the property by prospectors Andy Harman and Barry Watson in the summer of 1968. Claims were staked in 1985 to 1987 by Harman and agents for Golden Rule Resources.

In 1986, Golden Rule carried out a reconnaissance geological and geochemical (stream sediment sampling) program to evaluate this discovery (Fox, 1986; 1987). In 1988, the B. C. Ministry of Energy, Mines and Petroleum Resources examined the alkaline igneous rocks and fluorine geochemistry of the area (Pell, Culbert and Fox, 1989; Pell, in prep.) and Formosa Resources Corporation completed a reconnaissance exploration program that included sampling of known yttrium & REE-rich zones for mineralogical test purposes, remapping of previously identified areas of interest and reconnaissance surveys to assess the area for potential new discoveries (Leighton and Culbert, 1989).

The 1989 program, involving radiometric surveys and trenching, delineated a mineralized zone (RAR 7 - 2237 "Ridge Zone") and a number of smaller mineralized areas on the RAR 7 grid. The Ridge Zone covers about 200 x 25 to 50 metres and encompasses numerous pods of high-grade yttrium mineralization. The area was trenched and sampled; however, due to an early snowfall, the planned program was not completed. The limited trenching and sampling supported the observation that there is commonly an association between yttrium mineralization and radiometric response in this area. The best assay returned was 1700 ppm yttrium across 0.6 metres. The 1989 program also included bench scale metallurgical work on three selected bulk samples of Kechika mineralization.

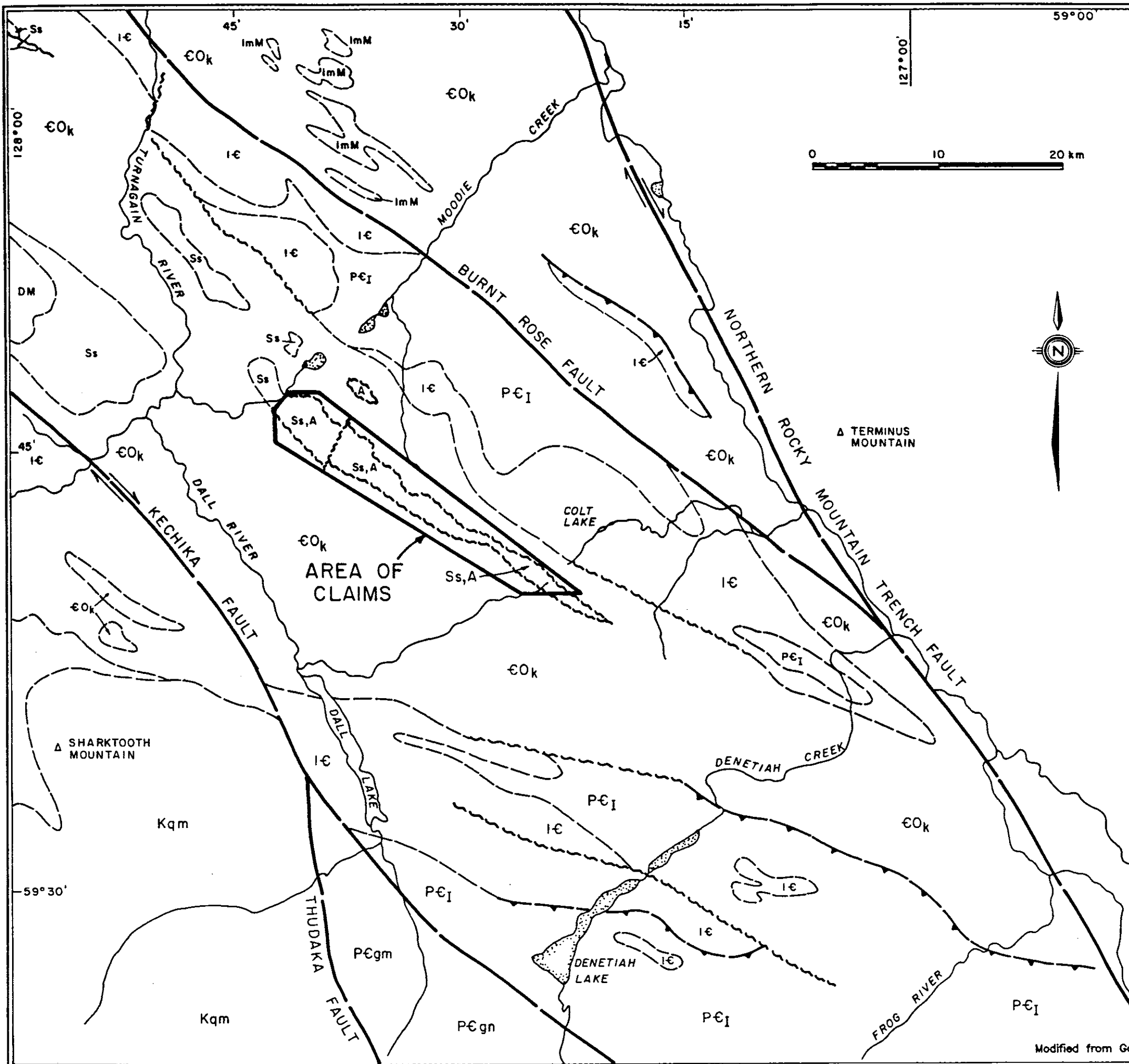
2. GEOLOGY

2.1. Regional Geology

The claims occur within a 35 to 40 kilometre wide belt underlain by metamorphosed Precambrian and unmetamorphosed to weakly metamorphosed Cambrian to Middle Paleozoic, predominantly platformal facies sedimentary strata (Gabrielse, 1962). This belt is bounded to the north and east by the Burnt Rose and Northern Rocky Mountain Trench strike-slip fault systems and to the south and west by the Kechika Fault (Figure 3). These are major dextral transcurrent fault systems on which hundreds of kilometres of movement have been estimated to have occurred (Gabrielse, 1985).

Immediately southwest of the Burnt Rose Fault, a broad open antiform with a northwest trending axis exposes Precambrian rocks correlative with the Ingenika Group (formerly Good Hope Group) and thick-bedded quartzites and micaceous quartzites of lower Cambrian age that belong to the lower member of the Atan Group (Figure 3). Along the southwestern limb of the antiform, the quartzites are in contact with a thick southwest-dipping section of phyllites, thin-bedded marbles and massive blocky weathering dolostones of probable Middle and Upper Cambrian and Ordovician age that are assigned to the Kechika Group (Gabrielse, 1962, 1963). Chlorite, sericite, sericite-graphite and calcareous phyllites are all present within this succession.

A fault bounded panel containing green tuffs and cherty tuffs overlain by buff cherty dolostones, fossiliferous grey limestones, sandy dolostones and pink and black quartzites, is present within the Kechika Group phyllites. Limestones within the fault panel contain beds rich in rugosan corals, favosites-type corals, bryozoans and brachiopod fragments. This sequence is probably of Middle Paleozoic age (Silurian) and can be correlated with the Sandpile Group (Gabrielse, 1963). The cherts, tuffs and limestones in the fault panel outline an overturned antiform. The alkaline rocks are present in the tuff-chert-carbonate-sandstone thrust panel and in a small klippe northeast of the north end of the belt.



LEGEND:

INTRUSIVE ROCKS
CRETACEOUS

Kqm Mainly biotite-quartz monzonite & granodiorite

? SILURIAN

A Alkaline intrusive and extrusives:
Syenite, trachyte, carbonate etc.

SEDIMENTARY SEQUENCE

LOWER & MIDDLE MISSISSIPPIAN

ImM Limestone, chert, siltstone

UPPER DEVONIAN & LOWER MISSISSIPPIAN

DM Argillite, siliceous argillite & chert

MIDDLE SILURIAN

Ss Sandpile Group: Dolomite, cherty dolomite,
sandstone, quartzite, cherty & limy tuff

EOk Kechika Group: Limestone, calcareous phyllite,
argillite, sandy limestone; some greenstone and
chlorite phyllite

LOWER CAMBRIAN

I-E Atan Group: Upper unit of limestone, dolomite,
sandy dolomite, minor slate and shale;
Lower unit of quartzite, pebble conglomerate,
siltstone, slate

PROTEROZOIC AND LOWER PALEOZOIC (?)

P-Egn Calcareous phyllite, phyllite, micaceous quartzite,
schist, limestone, greenstone

PROTEROZOIC

P-E1 Ingenika Group: (formerly Good Hope Group) limestone;
buff and grey shale, sandstone; phyllite, red and
green slate, chlorite and muscovite schist

— REGIONAL STRIKE-SLIP FAULTS

~~~~ FAULTS

— THRUST FAULTS

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,895**

FORMOSA RESOURCES CORPORATION

KECHIKA PROJECT

LIARD MINING DIVISION, B.C.  
NTS: 94 L

REGIONAL GEOLOGY  
EASTERN CASSIAR MOUNTAINS



Date: DEC, 1990

Figure: 3

Modified from Gabrielse, 1962 and 1985

## 2.2. Property Geology

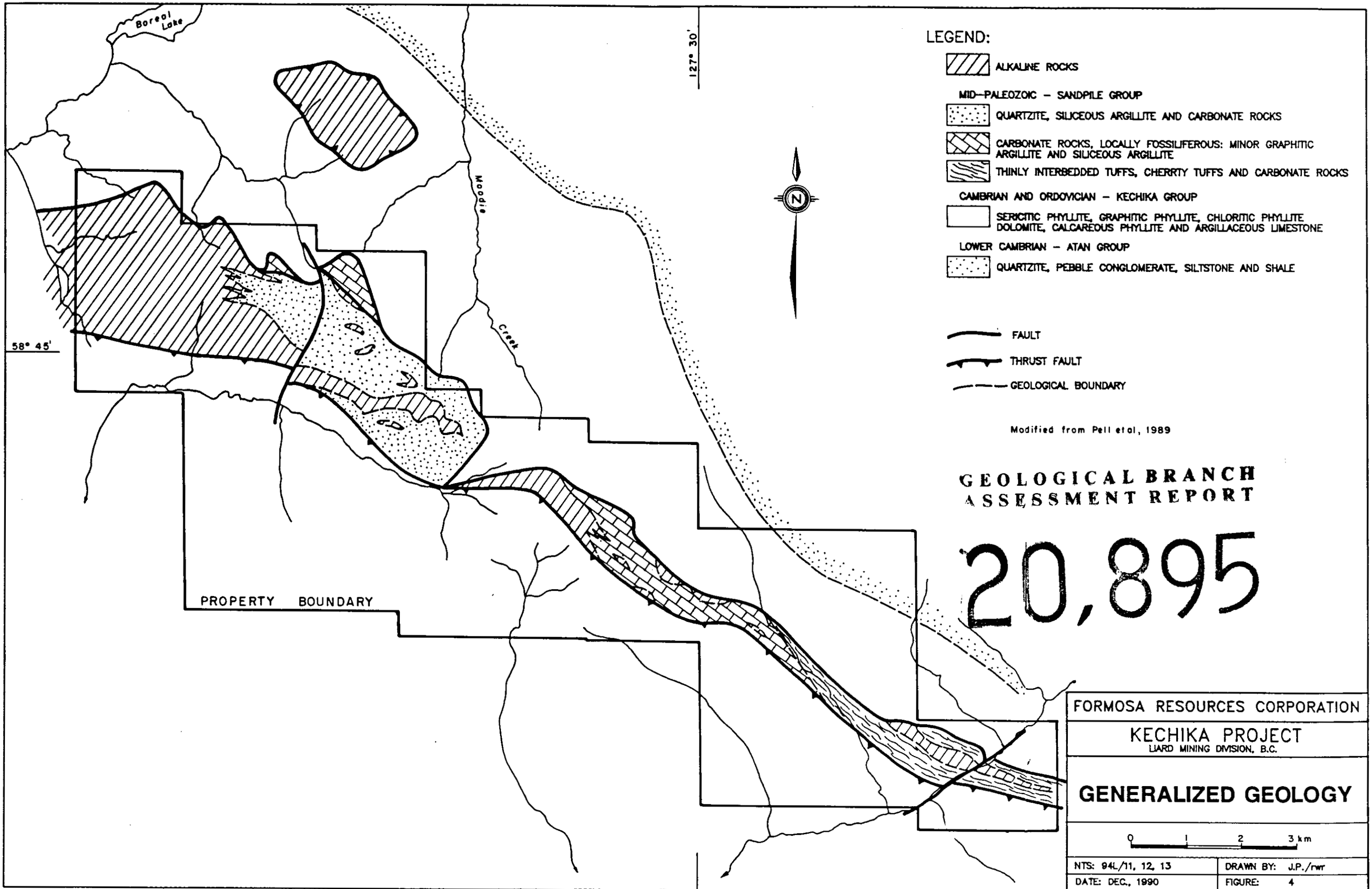
### 2.2.1 Stratigraphy

The Kechika property is underlain by a sequence of alkaline igneous rocks hosted by middle Paleozoic carbonates, sandstones and tuffs correlative with the Sandpile Group. These rocks are exposed in a fault slice, with lower Paleozoic phyllites of the Kechika Group present on either side of the bounding faults (Figure 4).

The Cambro-Ordovician Kechika Group consists predominantly of phyllites, calcareous phyllites and marbles. The phyllites and calcareous phyllites are mainly silver and grey to pinkish-buff weathering, extremely fissile and have one to two centimetre thick buff to light grey marble interlayers. Locally, buff to grey marbles and phyllitic marbles predominate. Some layers of light green weathering, chloritic phyllite and grey weathering graphitic phyllite are also present in the sequence. One to two metre thick orange to rusty weathering dolostone beds are also locally present. On the RAR and REE claims, the Kechika Group is in fault contact with younger rocks.

Rocks correlative with the Ordovician and Silurian Sandpile Group are present within the fault bounded slice on the property (Figure 5). At the south end of the property, on the RAR 1, 4 and 6 claims, thinly laminated white and green tuff and cherty tuffs, which locally contain 1 to 3 centimetre thick sericitic marble interbeds, crop out. Near the top of the exposed portion of this section, which is in excess of 200 metres thick, white to grey crystalline limestone beds become increasingly abundant; the highest part of this section consists of massive, grey weathering carbonates.

In the central portion of the property, on the RAR 5 and 7 claims, orange to buff to grey, predominantly thick-bedded dolostones with chert nodules, thin chert layers and rare intraformational conglomerate beds are exposed above the northeast bounding fault. The tuff package at the south end of the property projects beneath this dolostone package (Pell et al., 1990). The thick-bedded dolostones, which constitute 160-200 metres of section, are overlain by 50-90 metres of thin- to medium-bedded, buff to grey weathering dolostones, sandy dolostones and subordinate, thin white micaceous quartzites. Grey fossiliferous limestones overlie the dolostones; they contain abundant colonial corals (some favosites), crinoid fragments, bryozoans, rugosan corals and some shell fragments. Some horizons are characterized by dark grey and white laminations, possibly of algal origin. Grey argillaceous limestones or thick-bedded buff weathering



Modified from Pell et al, 1989

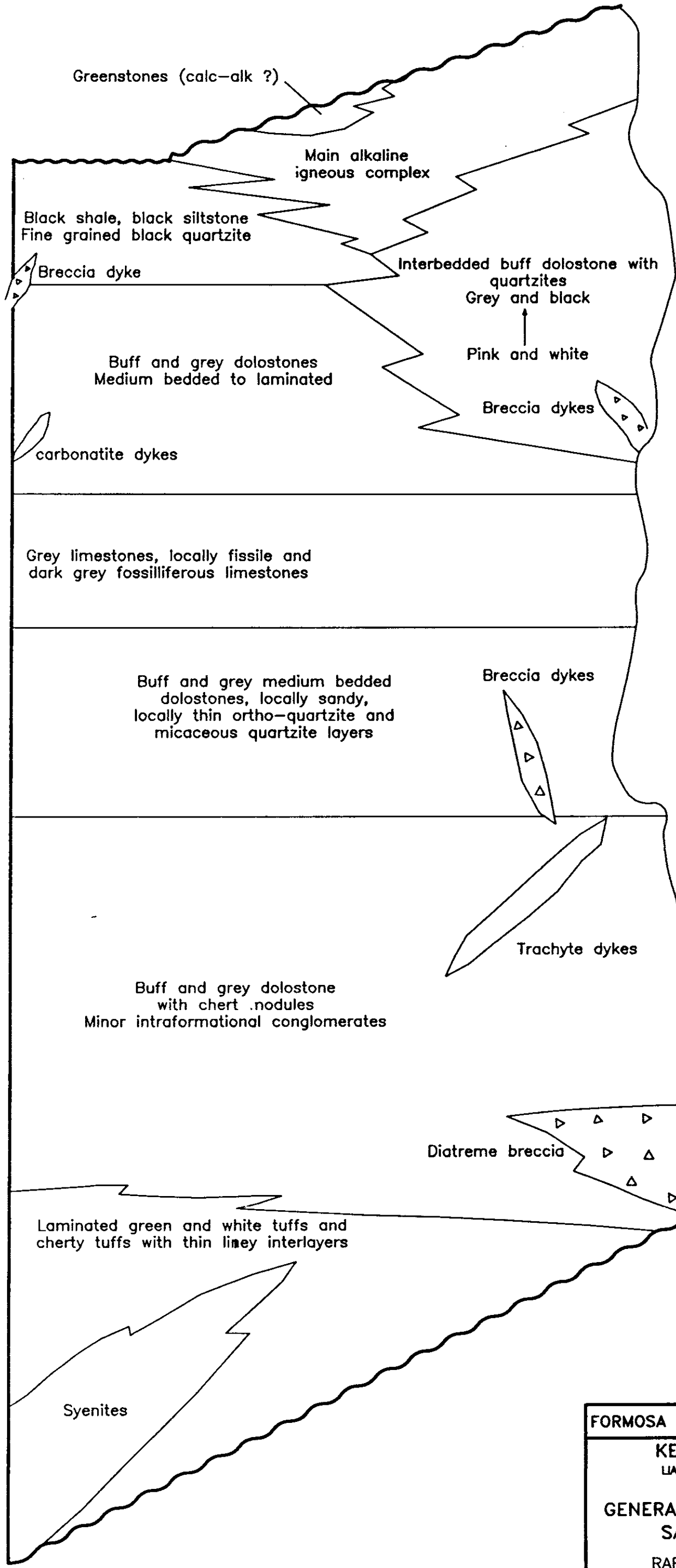
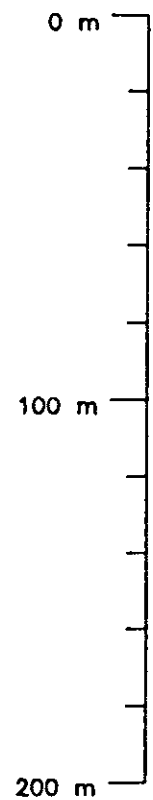
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,895**

|                                                |                    |
|------------------------------------------------|--------------------|
| FORMOSA RESOURCES CORPORATION                  |                    |
| KECHIKA PROJECT<br>LIARD MINING DIVISION, B.C. |                    |
| <b>GENERALIZED GEOLOGY</b>                     |                    |
| 0 1 2 3 km                                     |                    |
| NTS: 94L/11, 12, 13                            | DRAWN BY: J.P./rwr |
| DATE: DEC., 1990                               | FIGURE: 4          |

20,895

APPROXIMATE  
HORIZONTAL  
SCALE



FORMOSA RESOURCES CORPORATION

KECHIKA PROJECT  
LIARD MINING DIVISION, B.C.  
NTS: 94 L

GENERALIZED STRATIGRAPHY,  
SANDPILE GROUP  
RAR AND REE CLAIMS

dolostones with thin fossiliferous layers overlie the main macrofossil-rich zone and are in turn overlain by grey and buff medium-bedded to laminated dolostones. Black siltstones, argillites and black quartzose siltstones overlie the dolostones and are locally interbedded with the carbonates and with phyllitic rocks of probable igneous (tuffaceous) protolith. The total carbonate package exposed in this area is approximately 400 metres thick (Figure 5).

At the north end of the property, on the REE 2 and 8 claims, the grey fossiliferous limestone horizon is overlain by interbedded buff dolostones and white and pink quartzites. Up-section, the quartzites change from white and pink to grey and black in colour and become slightly more abundant.

### 2.2.2 Structure

The Ordovician to Silurian Sandpile Group on the property outlines a large northwest-plunging antiform and are in fault contact to the northeast and southwest with Cambro-Ordovician Kechika Group rocks. The northeast bounding fault (Figure 4) is shallowly dipping to the southwest and apparently has had normal movement along it, as younger strata are present in the hanging-wall package; however, geometry, minor drag folds near the fault, and the presence of the hanging-wall anticline imply that at one time there probably was thrust motion along this fault. The southwest bounding fault is moderately to steeply southwest dipping and also appears to be a thrust as it places older rocks over younger rocks. Transverse faults are present in a few locations; they are north to northeast striking and offset stratigraphy (Figure 4).

### 2.2.3 Alkaline Rocks

Alkaline igneous rocks occur in four main areas of the property (Figure 4) and in a klippe to the northeast of the property. In the south, on the RAR 4 & 6 claims, dark green, intrusive mafic syenites (malignites), displaying good igneous textures, predominate. These syenites contain some irregular leucocratic zones and are brecciated along their margins. Peripheral to the main intrusive body, numerous small sills, dykes and metasomatic alteration zones are present. Veins or segregations containing coarse calcite and dark purple fluorite +/- biotite +/- epidote are also locally present.

A complex diatreme containing a number of breccia phases, related tuffs and breccia dykes crops out near the centre of the belt of alkaline igneous rocks, on the RAR 5 block

(Figure 4). These rocks weather greenish silver to rusty orange and are weakly to extremely well foliated. The main diatreme is exposed in a creek at about 1560 metres elevation. Dykes and tuffs are present on the slopes and ridges to the north and west of the diatreme, on the RAR 5 and 7 claims, at elevations of up to 2230 metres. The diatreme breccia pipe contains xenoliths up to seven cm diameter of numerous sedimentary and igneous rock types and rare chrome spinel xenocrysts, in a pale green, carbonate-rich tuffisitic matrix. Quartzite and carbonate rock fragments dominate the xenolith population; some autoliths, rare syenite fragments and some black argillite clasts were also noted. The breccia matrix consists of carbonate minerals, potassium feldspars, minor muscovite and locally, chrome micas. The diatreme, which is proximal to the northeast bounding fault, is weakly to strongly deformed and locally cut by fine-grained, orange-brown weathering carbonatite dykes (dolomite or ankerite rich) and carbonate-sulphide veins, some containing minor amounts of galena and molybdenite.

A large area in the central part of the property immediately northwest of the diatreme is underlain by igneous rocks, including the main mineralized zone (RAR 7 Grid, 2237 Ridge Zone). It consists of a complex, southwest dipping homoclinal sequence of moderately to strongly deformed (sheared) igneous rocks that have previously been discussed in detail (Pell et al., 1990). In simple terms, the sequence consists of pale green, locally carbonate-rich fine and crystal tuffs; buff, blocky trachytic tuff breccias; and white to buff weathering quartz-feldspar-carbonate-sericite rocks of probable tuffaceous origin. Mafic syenites and carbonatite dykes intrude these rocks. This accumulation of alkaline tuffs likely indicate deposition at or near a vent.

At the north end of the property, on the REE 1, 2 and 8 claims, a second thick sequence of alkaline igneous rocks is exposed and was the focus of most of the 1990 work (Figure 6). It consists of a complex sequence of extrusive igneous rocks. Pale green to orange to buff weathering fine tuffs, lapilli tuffs and coarse agglomerates are the most common lithologies present. These rocks appear to have a very similar matrix and vary predominantly in the size and abundance of fragments. Coarse agglomerate layers locally contained rounded, ellipsoidal fragments with a long axis of 30 to 40 centimetres. In some areas, fine tuffs and lapilli tuffs are interbedded with dark grey siltstones. These rocks are weakly to intensely deformed; where deformation is intense, the strong foliation nearly obliterates original textures and a chlorite-sericite schist is the result. Buff and grey aplite layers (trachytes and possibly, trachytic tuffs) white weathering quartz-feldspar-carbonate-sericite rocks (deformed trachytes), silvery lapilli tuffs and sericite schists (felsic to trachytic) are interbedded with

the light green tuffs and agglomerates. These more felsic lithologies appear to grade into one another and, locally, into the more chloritic extrusives to which they are subordinate. A third major lithology present at the north end of the property is a dark green, chlorite-rich schist that locally contains biotite. Where observed, this lithology was strongly foliated and protolith hard to define; rare preserved textures and field relationships suggest that these chlorite schists were originally mafic fine tuffs, possibly an extrusive equivalent of the mafic syenites that occur at the south end of the property. Some sedimentary interlayers, buff dolostones and black siliceous siltstones occur within this igneous package. Although lithologies present in this area are superficially similar to many of those in the central part of the area (RAR 7 zone), no high grade mineralization has yet been discovered. It appears that the rocks at the north end of the property accumulated at a second vent area.

To the northeast of the property, alkaline rocks are exposed in a klippe (Figures 3, 4). Dark green mafic syenites are present at the base of the exposed sequence and are structurally overlain by feldspar porphyritic, biotite and/or sericite-rich, fine grained syenites.

#### 2.2.4 Mineralization

Yttrium mineralization occurs within the white weathering feldspar-quartz-carbonate-sericite mylonites, in some carbonatites and, to a lesser extent, in some syenites and trachytic dykes. In general, heavy rare earths are associated with the yttrium mineralization. Samples containing up to 8900 ppm yttrium (1.13%  $Y_2O_3$ ) have been collected (Leighton and Culbert, 1989) from the central part of the property (RAR 7 zone). Light rare earths are most strongly concentrated in carbonatites and to a lesser extent in the feldspar-quartz-carbonate-sericite mylonites; however, rocks enriched in light rare earth generally do not show similar enrichment in heavy rare earths and yttrium.

Yttrium enrichment in the white weathering feldspar-quartz-carbonate-sericite mylonites appears to be related to phosphate rich areas. Locally, phosphate minerals can comprise in excess of 25% of the rock. In such lithologies, a number of phosphate minerals may be intergrown, with apatite the most common species. Monazite (containing cerium, neodymium, lanthanum, calcium, thorium), xenotime (yttrium phosphate, with minor dysprosium, gadolinium and calcium) and a yttrium-thorium-calcium-dysprosium-gadolinium-bearing phosphate have been identified by scanning electron microscopy (Pell, Culbert and Fox, 1989).



Minor amounts of an iron-thorium-yttrium-calcium silicate mineral have also been noted.

No areas of high grade yttrium mineralization have been located within the volcanic sequence at the north end of the property (on the REE 1,2,3, & 4 claims). Although quartz-feldspar-carbonate-sericite rocks are present in this area, they do not appear to contain the phosphatic zones that are associated with mineralization.

### 3. GEOPHYSICAL SURVEY

Geophysical work on the Kechika property in 1989 consisted of detailed and reconnaissance radiometric surveys using SPP2 total county scintillometers as an indirect means of outlining areas with potential yttrium and/or rare earth mineralization. Previous work had demonstrated that, in some cases, there is a correlation between high background radiation levels and the presence of rare earth enriched zones. Subsequently it was shown that this was due to anomalous thorium and that uranium did not contribute significantly to the effect. Due to early onset of snow in 1989, this survey was not completed. During the 1990 season the remainder of the area of interest was mapped.

The detailed radiometric survey (Figure 9) conducted over known areas of high-grade yttrium mineralization on the RAR 7 claim has outlined a main zone, the RAR 7-2237 Ridge zone, about 200 x 25 to 50 metres in size, that contains numerous smaller radiometric anomalies. The zone is on a ridge crest predominantly underlain by outcrop and felsenmere of white weathering feldspar-quartz-carbonate-sericite (+/- apatite) rocks. Carbonatite dykes are locally present. Anomalous areas were empirically defined as ones that had a radiometric response of 600 c.p.s. or greater; background readings in the area were generally 150 to 300 c.p.s. The 600 c.p.s. contours were outlined on the ground with orange spray paint to facilitate mapping and the highest reading within the zone noted. Spot highs ranged from 650 to 3700 c.p.s. Anomalies varied from a few centimetres in size to areas of 3.5 x 13 metres and 1 to 2 x 30 metres (Figure 7). In many cases the shape of the anomalous zone was modified by overburden covered areas or by displaced boulders. Assaying in 1989 and 1990 indicated that the relationship between radioactivity and yttrium was not straightforward; areas with anomalous radioactive response were not always strongly enriched in yttrium.

#### 4. TRENCHING PROGRAM

A hand trenching program begun in 1989 was expanded during the 1990 field season. Explosives proved effective in accomplishing this task. The main purpose of this work was to obtain representative samples for metallurgical tests. It was also possible to expose bedrock in areas covered by overburden. Some of the recently excavated trenches, which cut through clay rich soil, are likely "sealed" and should hopefully leave small ponds which can be used to supply drill water in the future.

The approximate location of the four main pits (Trenches 90-1 to 90-4) dug in 1990 is shown on Figure 8. These excavations are each about 2 X 3 metres in area and 2 metres deep.

#### 5. CONCLUSIONS

Surface work carried out on the Kechika property during 1989 and 1990 has demonstrated that the property contains potentially economic concentrations of yttrium and rare earth elements. The main showing, referred to as the RAR 7 Ridge Zone, will have to be drilled before any reliable grade/tonnage estimate can be made.

Plans exist to extend the Rocky Mountain Trench road system northward. Such a road would clearly affect the economic viability of the Kechika project.

**8. STATEMENT OF QUALIFICATIONS**

I, Jennifer A. Pell, of 3011 Quadra Street, Victoria, British Columbia, do hereby certify that:

1. I was in the field in the Kechika area from August until late September, 1989 and personally was involved with the exploration on the RAR and REE claims.
2. I am a graduate of the University of Ottawa with a Bachelor of Science Honours degree in Geology, 1979.
3. I am a graduate of the University of Calgary with a Doctorate of Philosophy degree in Geology, 1984.
4. I am a Fellow of the Geological Association of Canada.
5. I was employed as an Assistant Professor in the Department of Geology, University of Windsor, teaching Economic Geology, Mineralogy, Structural Geology and Historical Geology from July, 1985 to July, 1986 and as a sessional lecturer at University of British Columbia, teaching Introductory Geology from January to April of 1987.
6. I have been engaged in mineral exploration, geologic mapping and geological research in British Columbia, the Northwest Territories, Manitoba and Ontario since 1977.
7. This report is true and factual, to the best of my knowledge. It is based on my work and work done directly under my supervision as well as on a study of available literature.
8. I have not received, nor do I expect to receive, any interest, direct or indirect, in the Kechika property, in the Formosa-Golden Rule joint venture or in the securities of either Golden Rule Resources Ltd. or Formosa Resources Corporation.

December, 1990  
Victoria, B.C.

---

Jennifer Pell, Ph.D., F.G.A.C.

## 6. REFERENCES

- Fox, M. (1986) Geological and geochemical report on RAR 1-5 mineral claims; B.C.M.E.M.P.R. Assessment Report 15220.
- Fox, M. (1987) Geological and geochemical report, RAR 1-9, REE 1-8 and REO 1 & 2 mineral claims; B.C.M.E.M.P.R. Assessment Report 16420.
- Gabrielse, H. (1962) Geology, Kechika British Columbia; G.S.C. Map 42-1962.
- Gabrielse, H. (1963) Gabrielse, H. (1963) McDame map-area, Ca British Columbia; G.S.C., Memoir 319, 138p.
- Gabrielse, H. (1985) Major dextral transcurrent displacements along the Northern Rocky Mountain Trench and related lineaments in north-central British Columbia; Geological Society of America Bulletin V. 96, pp. 1-14.
- Leighton, D.G. and Culbert, R.R. (1989) Geological report on the Kechika property, including RAR 1-9, REE 1-8 and REO 1-2 claims; B.C.M.E.M.P.R. Assessment Report.
- Pell, J. (in prep.) The geology, geochemistry and economic potential of carbonatites, nepheline syenites, kimberlites and related rocks in British Columbia; B.C.M.E.M.P.R. Paper.
- Pell, J., Culbert, R.R. and Fox, M. (1989) The Kechika yttrium and rare earth prospect; in Geological Fieldwork, 1988, B.C.M.E.M.P.R. Paper 1989-1, pp. 417-421.
- Pell, J., Leighton, D.G. and Culbert, R.R. (1990). Geological, Geophysical and Trenching Report on the Kechika North Group, Kechika South Group and RAR 2,3, REE 3 to 6 and REO 1,2 claims. Assessment Report for Golden Rule Resources Limited.
- Roskill Information Services (1988). The Economics of Rare Earths; 7th edition, London.
- Spooner, Jane, Grace, Kenneth A. and Robjohns, Nicola (1990). The Economics of the Rare Earth Elements. Presented at the 92nd Annual General Meeting of The Canadian Institute of Mining and Metallurgy, Ottawa, May 7, 1990.

## 7. STATEMENT OF COSTS

## Wages and Professional Fees:

|                              |                      |              |          |
|------------------------------|----------------------|--------------|----------|
| D.G. Leighton                | Sept. 7-12 @ \$300/d | \$ 1,800     |          |
| Ray Morris                   | Sept. 3-15 @ \$175/d | 2,275        |          |
| J.A. Pell                    | Sept. 3-15 @ \$250/d | 3,250        |          |
| Benefits including insurance |                      | <u>1,831</u> | \$ 9,156 |

## Disbursements:

|                                  |               |                  |
|----------------------------------|---------------|------------------|
| Assays and geochemical           | \$ 421        |                  |
| Freight                          | 850           |                  |
| Spectrometer Rental              | 250           |                  |
| Drafting/Report Preparation      | 6,500         |                  |
| Explosives                       | 2,024         |                  |
| Camp & Field supplies            | 2,940         |                  |
| Groceries                        | 1,700         |                  |
| Truck Rental                     | 700           |                  |
| Fixed Wing charter               | 4,590         |                  |
| Helicopter charter               | <u>14,798</u> | <u>34,773</u>    |
| SUB-TOTAL                        |               | 43,929           |
| Contract/Engineering Charge(10%) |               | <u>4,393</u>     |
| PROJECT TOTAL                    |               | <u>\$ 48,322</u> |

## WORK DISTRIBUTION

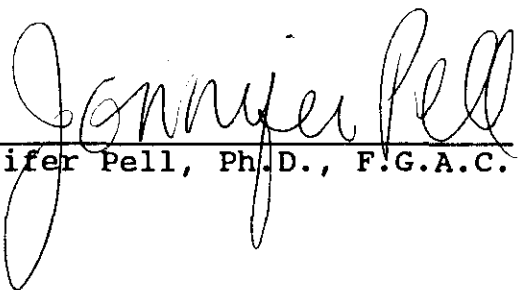
|                         |           |
|-------------------------|-----------|
| REE Group 55% of 48,322 | \$ 26,577 |
| RAR Group 45% of 48,322 | \$ 21,744 |

**8. STATEMENT OF QUALIFICATIONS**

I, Jennifer A. Pell, of 3011 Quadra Street, Victoria, British Columbia, do hereby certify that:

1. I was in the field in the Kechika area from August until late September, 1989 and personally was involved with the exploration on the RAR and REE claims.
2. I am a graduate of the University of Ottawa with a Bachelor of Science Honours degree in Geology, 1979.
3. I am a graduate of the University of Calgary with a Doctorate of Philosophy degree in Geology, 1984.
4. I am a Fellow of the Geological Association of Canada.
5. I was employed as an Assistant Professor in the Department of Geology, University of Windsor, teaching Economic Geology, Mineralogy, Structural Geology and Historical Geology from July, 1985 to July, 1986 and as a sessional lecturer at University of British Columbia, teaching Introductory Geology from January to April of 1987.
6. I have been engaged in mineral exploration, geologic mapping and geological research in British Columbia, the Northwest Territories, Manitoba and Ontario since 1977.
7. This report is true and factual, to the best of my knowledge. It is based on my work and work done directly under my supervision as well as on a study of available literature.
8. I have not received, nor do I expect to receive, any interest, direct or indirect, in the Kechika property, in the Formosa-Golden Rule joint venture or in the securities of either Golden Rule Resources Ltd. or Formosa Resources Corporation.

December, 1990  
Victoria, B.C.

  
Jennifer Pell, Ph.D., F.G.A.C.

**APPENDIX I**  
**ASSAYS/GEOCHEMISTRY**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V9N-02146.0 ( COMPLETE )

REFERENCE INFO:

CLIENT: BOUNDARY DRILLING LTD.  
 PROJECT: 108 KICHKA

SUBMITTED BY: J. PELL  
 DATE PRINTED: 9-OCT 90

| ORDER | ELEMENT       | NUMBER OF ANALYSES | LOWER DETECTION LIMIT | EXTRACTION     | METHOD               |
|-------|---------------|--------------------|-----------------------|----------------|----------------------|
| 1     | Au Gold       | 17                 | 5 PPB                 | Not applicable | Inst. Neutron Activ. |
| 2     | Ir Iridium    | 17                 | 100 PPB               | Not applicable | Inst. Neutron Activ. |
| 3     | Ag Silver     | 17                 | 5 PPM                 | Not applicable | Inst. Neutron Activ. |
| 4     | Zn Zinc       | 17                 | 200 PPM               | Not applicable | Inst. Neutron Activ. |
| 5     | Mo Molybdenum | 17                 | 2 PPM                 | Not applicable | Inst. Neutron Activ. |
| 6     | Ni Nickel     | 17                 | 50 PPM                | Not applicable | Inst. Neutron Activ. |
| 7     | Co Cobalt     | 17                 | 10 PPM                | Not applicable | Inst. Neutron Activ. |
| 8     | Cd Cadmium    | 17                 | 10 PPM                | Not applicable | Inst. Neutron Activ. |
| 9     | As Arsenic    | 17                 | 1 PPM                 | Not applicable | Inst. Neutron Activ. |
| 10    | Sb Antimony   | 17                 | 0.2 PPM               | Not applicable | Inst. Neutron Activ. |
| 11    | Fe Iron       | 17                 | 0.5 PCT               | Not applicable | Inst. Neutron Activ. |
| 12    | Se Selenium   | 17                 | 10 PPM                | Not applicable | Inst. Neutron Activ. |
| 13    | Te Tellurium  | 17                 | 20 PPM                | Not applicable | Inst. Neutron Activ. |
| 14    | Ba Barium     | 17                 | 100 PPM               | Not applicable | Inst. Neutron Activ. |
| 15    | Cr Chromium   | 17                 | 50 PPM                | Not applicable | Inst. Neutron Activ. |
| 16    | Sn Tin        | 17                 | 200 PPM               | Not applicable | Inst. Neutron Activ. |
| 17    | W Tungsten    | 17                 | 2 PPM                 | Not applicable | Inst. Neutron Activ. |
| 18    | Cs Cesium     | 17                 | 1 PPM                 | Not applicable | Inst. Neutron Activ. |
| 19    | La Lanthanum  | 17                 | 5 PPM                 | Not applicable | Inst. Neutron Activ. |
| 20    | Ce Cerium     | 17                 | 10 PPM                | Not applicable | Inst. Neutron Activ. |
| 21    | Sm Samarium   | 17                 | 0.1 PPM               | Not applicable | Inst. Neutron Activ. |
| 22    | Eu Europium   | 17                 | 2 PPM                 | Not applicable | Inst. Neutron Activ. |
| 23    | Tb Terbium    | 17                 | 1 PPM                 | Not applicable | Inst. Neutron Activ. |
| 24    | Yb Ytterbium  | 17                 | 5 PPM                 | Not applicable | Inst. Neutron Activ. |
| 25    | Lu Lutetium   | 17                 | 0.5 PPM               | Not applicable | Inst. Neutron Activ. |
| 26    | Sc Scandium   | 17                 | 0.5 PPM               | Not applicable | Inst. Neutron Activ. |
| 27    | Hf Hafnium    | 17                 | 2 PPM                 | Not applicable | Inst. Neutron Activ. |
| 28    | Ta Tantalum   | 17                 | 1 PPM                 | Not applicable | Inst. Neutron Activ. |
| 29    | Th Thorium    | 17                 | 0.5 PPM               | Not applicable | Inst. Neutron Activ. |
| 30    | U Uranium     | 17                 | 0.5 PPM               | Not applicable | Inst. Neutron Activ. |
| 31    | Na Sodium     | 17                 | 0.05 PCT              | Not applicable | Inst. Neutron Activ. |
| 32    | Br Bromine    | 17                 | 1 PPM                 | Not applicable | Inst. Neutron Activ. |
| 33    | Rb Rubidium   | 17                 | 10 PPM                | Not applicable | Inst. Neutron Activ. |
| 34    | Zr Zirconium  | 17                 | 500 PPM               | Not applicable | Inst. Neutron Activ. |
| 35    | Y Yttrium     | 17                 | 1 PPM                 |                | X-Ray Fluorescence   |



Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
V7P 2R5  
(604) 985-0681 Telex 04-352667



# Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V911-112146.11 ( COMPLETE )

REFERENCE INFO:

CLIENT: BOUNDARY DRILLING LTD.  
PROJECT: 108 KETCHIKA

SUBMITTED BY: J. PELL  
DATE PRINTED: 9-OCT-90

| SAMPLE TYPES       | NUMBER | SIZE FRACTIONS | NUMBER | SAMPLE PREPARATIONS   | NUMBER |
|--------------------|--------|----------------|--------|-----------------------|--------|
| R ROCK OR BFD ROCK | 13     | 2 -150         | 17     | CRUSH, PULVERIZF -150 | 13     |
| P PREPARED PULP    | 4      |                |        | PULVERIZING           | 4      |

REPORT COPIES TO: MR. DOUG LEIGHTON  
MS. JENNIFER PELL

INVOICE TO: MR. DOUG LEIGHTON

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 9 OCT-90

REPORT: V90-02146.H

PROJECT: 108 KECHIKA

PAGE 1A

| SAMPLE NUMBER | ELEMENT UNITS | Au PPB | Ir PPB | Ag PPM | Zn PPM | Mo PPM | Ni PPM | Co PPM | Cd PPM | As PPM | Sb PPM | Fe PCT | Se PPM |
|---------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| R2 RE87-100R  |               | <5     | <100   | <5     | <200   | <2     | <50    | <10    | <10    | 15     | 1.2    | 1.4    | <10    |
| R2 RE90-16    | } North End   | <5     | <100   | <5     | <200   | <2     | <50    | <10    | <10    | 3      | 0.5    | 0.9    | <10    |
| R2 RE90-18    |               | <5     | <100   | <5     | <200   | <2     | <50    | 20     | <10    | 8      | 0.5    | 1.7    | <10    |
| R2 RE90-21    |               | <5     | <100   | <5     | <200   | <2     | <50    | <10    | <10    | 4      | 0.4    | 1.0    | <10    |
| R2 RE90-300A  |               | <5     | <100   | <5     | <200   | <2     | <50    | 33     | <10    | 8      | 1.4    | 4.4    | <10    |
| R2 RE90-300B  | } RRAR7 Grid  | <5     | <100   | <5     | <200   | 3      | <50    | 12     | <10    | 18     | 0.8    | 7.4    | <10    |
| R2 RE90-301   |               | <5     | <100   | <5     | <200   | <2     | <50    | 42     | <10    | 16     | 2.4    | 5.2    | <10    |
| R2 RE90-302A  |               | <5     | <100   | <5     | <200   | 3      | 180    | 52     | <10    | 11     | 1.3    | 5.3    | <10    |
| R2 RE90-302B  |               | <5     | <100   | <5     | <200   | <2     | 160    | 52     | <10    | 11     | 1.5    | 4.3    | <10    |
| R2 RE90-302C  |               | 7      | <100   | <5     | <200   | 5      | 170    | 47     | <10    | 28     | 1.5    | >10.0  | <10    |
| R2 RE90-306   | } North End   | <5     | <100   | <5     | <200   | <2     | <50    | <10    | <10    | <1     | <0.2   | 3.6    | <10    |
| R2 RE90-312   |               | <5     | <100   | <5     | <200   | 4      | <50    | <10    | <10    | 3      | 0.4    | 1.7    | <10    |
| R2 RE90-321   |               | <5     | <100   | <5     | <200   | <2     | <50    | <10    | <10    | 30     | 0.8    | 4.1    | <10    |
| P2 VU11       | } N/A         | 10     | <100   | <5     | <200   | 7      | <50    | <10    | <10    | 35     | 1.0    | 1.2    | <10    |
| P2 VU12       |               | 8      | <100   | <5     | <200   | 6      | <50    | <10    | <10    | 20     | 0.7    | 0.8    | <10    |
| P2 VU13       |               | 18     | <100   | <5     | <200   | 7      | <50    | <10    | <10    | 55     | 1.1    | 1.6    | <10    |
| P2 VU14       |               | 13     | <100   | <5     | <200   | 6      | 50     | <10    | <10    | 46     | 1.5    | 1.7    | <10    |

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 9-OCT-90

REPORT: V90-02146.0

PROJECT: 108 KECHIKA

PAGE 11

| SAMPLE NUMBER | ELEMENT UNITS | Te PPM | Ba PPM | Cr PPM | Sn PPM | W PPM | Cs PPM | La PPM | Ce PPM | Sm PPM | Eu PPM | Tb PPM | Yb PPM |
|---------------|---------------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| R2 RF89-1000  |               | <20    | 3600   | 130    | <200   | 3     | <1     | 100    | 210    | 44.7   | 5      | 3      | <5     |
| R2 RE90-16    |               | <20    | <100   | <50    | <200   | 5     | 3      | 240    | 470    | 32.8   | <2     | 3      | <5     |
| R2 RF90-18    |               | <20    | 4000   | 78     | <200   | <2    | <1     | 27     | 74     | 7.7    | <2     | 1      | <5     |
| R2 RE90-21    |               | <20    | 900    | 76     | <200   | <2    | 2      | 160    | 380    | 29.8   | <2     | 3      | <5     |
| R2 RE90-300A  |               | <20    | 1300   | 120    | <200   | 13    | <1     | 24     | 55     | 13.0   | 4      | 6      | 9      |
| R2 RE90-300B  |               | <20    | 810    | 150    | <200   | 4     | <1     | 230    | 470    | 43.8   | 7      | 5      | <5     |
| R2 RE90-301   |               | <20    | 850    | 200    | <200   | 13    | <1     | 42     | 80     | 60.3   | 16     | 31     | 23     |
| R2 RE90-302A  |               | <20    | 1100   | 650    | <200   | 12    | <1     | 36     | 68     | 8.4    | <2     | 2      | <5     |
| R2 RE90-302B  |               | <20    | 190    | 890    | <200   | 14    | 2      | 42     | 87     | 9.4    | 2      | 3      | 6      |
| R2 RE90-302C  |               | <20    | 1700   | 290    | <200   | 6     | <1     | 20     | 39     | 6.7    | <2     | 3      | <5     |
| R2 RE90-306   |               | <20    | 2300   | <50    | <200   | 7     | 4      | 140    | 250    | 8.3    | <2     | 1      | <5     |
| R2 RE90-312   |               | <20    | 3000   | <50    | <200   | 3     | 2      | 200    | 380    | 14.0   | <2     | 2      | 6      |
| R2 RE90-321   |               | <20    | 120    | 120    | <200   | 2     | 2      | 170    | 320    | 13.0   | <2     | 2      | 6      |
| P2 V011       |               | <20    | 420    | 1300   | <200   | <2    | 6      | 110    | 49     | 8.0    | <2     | 2      | 7      |
| P2 V012       |               | <20    | 240    | 670    | <200   | <2    | 2      | 140    | 64     | 11.0   | <2     | 3      | 12     |
| P2 V013       |               | <20    | <100   | 1300   | <200   | <2    | 5      | 29     | <10    | 2.1    | <2     | <1     | <5     |
| P2 V014       |               | <20    | 530    | 2100   | <200   | <2    | 11     | 84     | 37     | 5.9    | <2     | 1      | 6      |

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 9-OCT-90

REPORT: V90-02146.0

PROJECT: 108 KECHIKA

PAGE 10

| SAMPLE NUMBER | ELEMENT UNITS | Lu PPM | Sc PPM | Hf PPM | Ta PPM | Ti PPM | U PPM | Na PCT | Br PPM | Rb PPM | Zr PPM | Y PPM |
|---------------|---------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|-------|
| R2 RE89-1000  |               | <0.5   | 1.2    | 2      | <1     | 213.0  | 1.1   | 0.10   | <1     | 170    | <500   | 63    |
| R2 RE90-16    |               | <0.5   | 0.8    | 11     | 13     | 43.0   | 10.0  | 0.06   | <1     | 130    | <500   | 64    |
| R2 RE90-18    |               | <0.5   | 23.0   | 4      | 5      | 8.0    | 1.6   | 0.18   | <1     | 79     | <500   | 34    |
| R2 RE90-21    |               | <0.5   | 1.8    | 20     | 20     | 36.0   | 5.4   | 1.70   | <1     | 130    | 1100   | 88    |
| R2 RE90-300A  |               | 1.7    | 13.0   | 4      | 4      | 128.0  | 2.9   | 0.11   | <1     | 250    | <500   | 246   |
| R2 RE90-300B  |               | 0.8    | 4.8    | <2     | 2      | 214.0  | 3.1   | 0.07   | <1     | 38     | <500   | 115   |
| R2 RE90-301   |               | 3.7    | 10.0   | 4      | 4      | 472.0  | 8.2   | 0.14   | <1     | 220    | <500   | 1072  |
| R2 RE90-302A  |               | <0.5   | 18.0   | 6      | 4      | 23.0   | 2.1   | 1.80   | <1     | 66     | <500   | 57    |
| R2 RE90-302B  |               | 0.6    | 23.0   | 7      | 5      | 56.2   | 3.5   | 1.80   | <1     | 110    | <500   | 106   |
| R2 RE90-302C  |               | <0.5   | 7.8    | <2     | 2      | 33.0   | 1.5   | 0.38   | <1     | 30     | <500   | 63    |
| R2 RE90-306   |               | <0.5   | 1.5    | 7      | 13     | 60.7   | 5.6   | 0.49   | <1     | 220    | <500   | 18    |
| R2 RE90-312   |               | <0.5   | 1.4    | 21     | 23     | 47.0   | 14.0  | 0.22   | <1     | 200    | 590    | 67    |
| R2 RE90-321   |               | <0.5   | 2.3    | 13     | 9      | 16.0   | 12.0  | 0.07   | <1     | 150    | 510    | 99    |
| P2 VUT1       |               | <0.5   | 8.0    | 2      | <1     | 3.2    | 33.0  | 0.27   | <1     | 58     | <500   | 271   |
| P2 VUT2       |               | <0.5   | 6.6    | 2      | <1     | 3.3    | 43.0  | 0.35   | <1     | 13     | <500   | 209   |
| P2 VUT3       |               | <0.5   | 3.8    | <2     | <1     | 2.0    | 13.0  | 0.10   | <1     | 38     | <500   | 47    |
| P2 VUT4       |               | <0.5   | 10.0   | <2     | <1     | 3.3    | 27.0  | 0.20   | <1     | 83     | <500   | 126   |

LEGEND:

- KECHIKA ALKALINE IGNEOUS COMPLEX**
- A14 FELDSPAR PORPHYRYIC METASVENITE
  - A13 HETEROLITHIC DIATREME BRECCIA
  - A12 LIGHT TO MEDIUM GREEN WEATHERING GREENSTONE; LOCALLY CONTAINS ASBESTIFORM VEINLETS; A12a - DARK GREEN TO BLACK, STRONGLY FOLIATED, SERPENTINE-RICH SHEARED GREENSTONE.
  - A11 LIGHT GREEN WEATHERING BRECCIA; CONTAINS LARGE SUBROUNDED CLASTS OF A COARSE GRAINED BIOTITE RICH ROCK.
  - A10 ORANGE BROWN WEATHERING CARBONATITE DYKES; LOCALLY FRAGMENTAL.
  - A9 SILVER-GREEN TO RUSTY WEATHERING BRECCIA DYKES; LOCALLY PORPHYRYIC AND VESICULAR
  - A8 FELDSPAR PORPHYRYIC, BUFF TO LIGHT GREY APLITE (TRACHYTE).
  - A7 BUFF, BLOCKY WEATHERING, MULTILITHIC BRECCIA; SUBANGULAR CLASTS, APLITIC MATRIX; A7a - RUSTY WEATHERING, MULTILITHIC BRECCIA; SUBROUNDED CLASTS, CARBONATE RICH MATRIX; FLUORITE AND PYRITE COMMON ACCESSORY MINERALS IN BOTH PHASES.
  - A6 DARK GREEN WEATHERING MAFIC SYENITE (MALIGNITE); LOCALLY CHLORITE RICH.
  - A5 MOTTLED POTASSIUM FELDSPAR-QUARTZ-CARBONATE-SERICITE PHYLITES AND QUARTZ-CARBONATE-SERITE-APATITE ROCKS
  - A4 BUFF TO GREY, BLOCKY WEATHERING APLITE (TRACHYTIC).
  - A3 BUFF TO LIGHT BROWN WEATHERING MULTILITHIC BRECCIA, GRADED BEDS AND OTHER "SEDIMENTARY" STRUCTURES LOCALLY PRESENT IN FINER GRAINED LAYERS, BRECCIA MATRIX LOCALLY CALCAREOUS (TUFF BRECCIA CONGLOMERATE).
  - A2 LIGHT GREEN TO LIGHT ORANGE WEATHERING, MASSIVE TO WEAKLY FOLIATED TUFF (?); LOCALLY CALCAREOUS; CONTAINS RARE CHROME SPINELS; MAY BE IN PART EQUIVALENT TO A9.
  - A1 SILVER TO PALE GREEN PHYLITES, GREASY LUSTER; WEAKLY RADIOACTIVE.

- SEDIMENTARY AND METASEDIMENTARY SEQUENCE**  
MID-PALEOZOIC (ORDOVICIAN-SILURIAN)
- SANDPILE GROUP**
- OSsq BLACK AND GREY QUARTZITE, SILICEOUS ARGILLITE, DOLOMITE
  - OSsa GRAPHIC ARGILLITE, SILICEOUS ARGILLITE
  - OSsc DOLOMITES AND LIMESTONES, LOCALLY FOSSILIFEROUS
  - OSav THINLY INTERBEDDED TUFFS, CHERTY TUFFS AND LIMESTONE

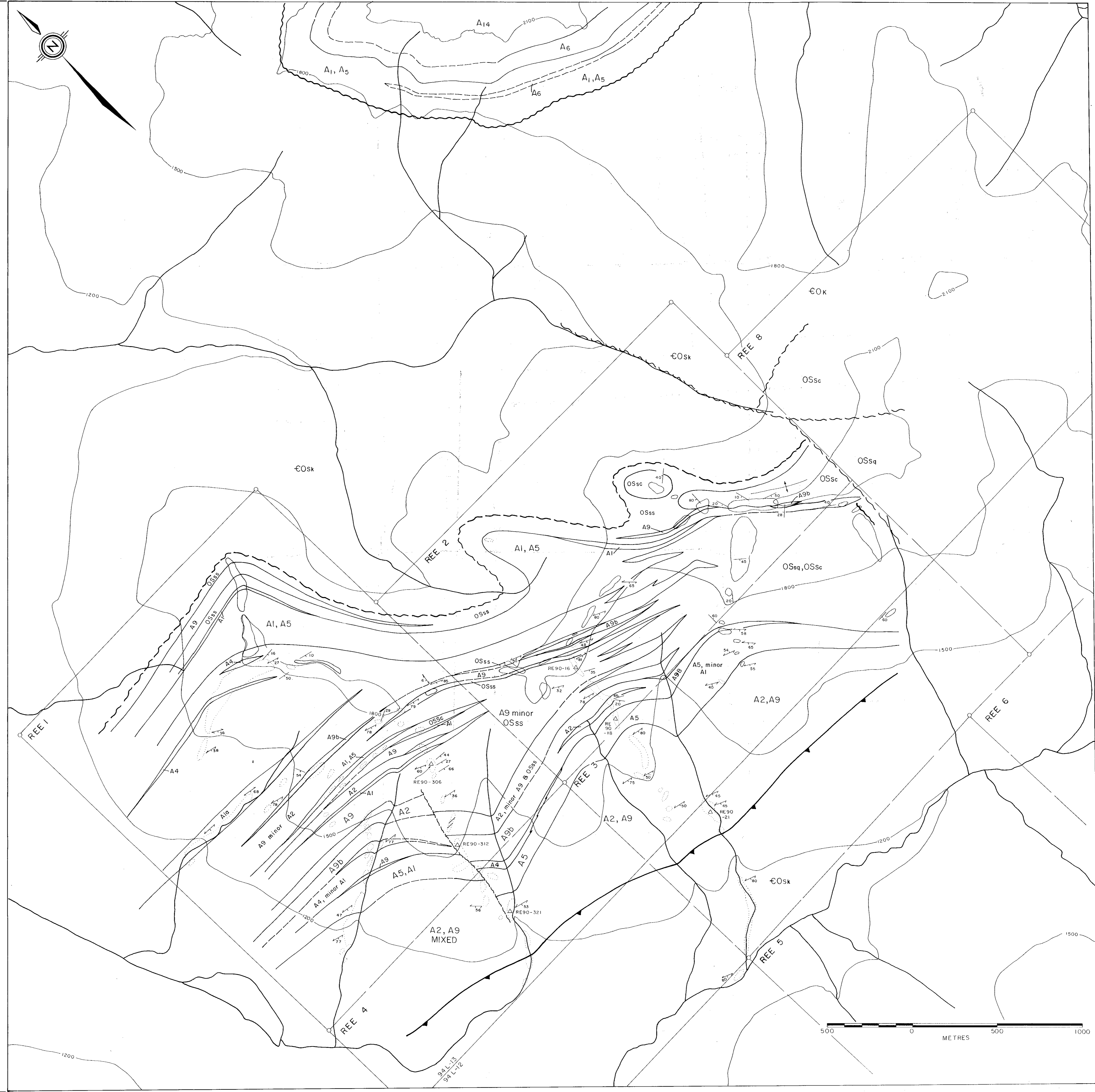
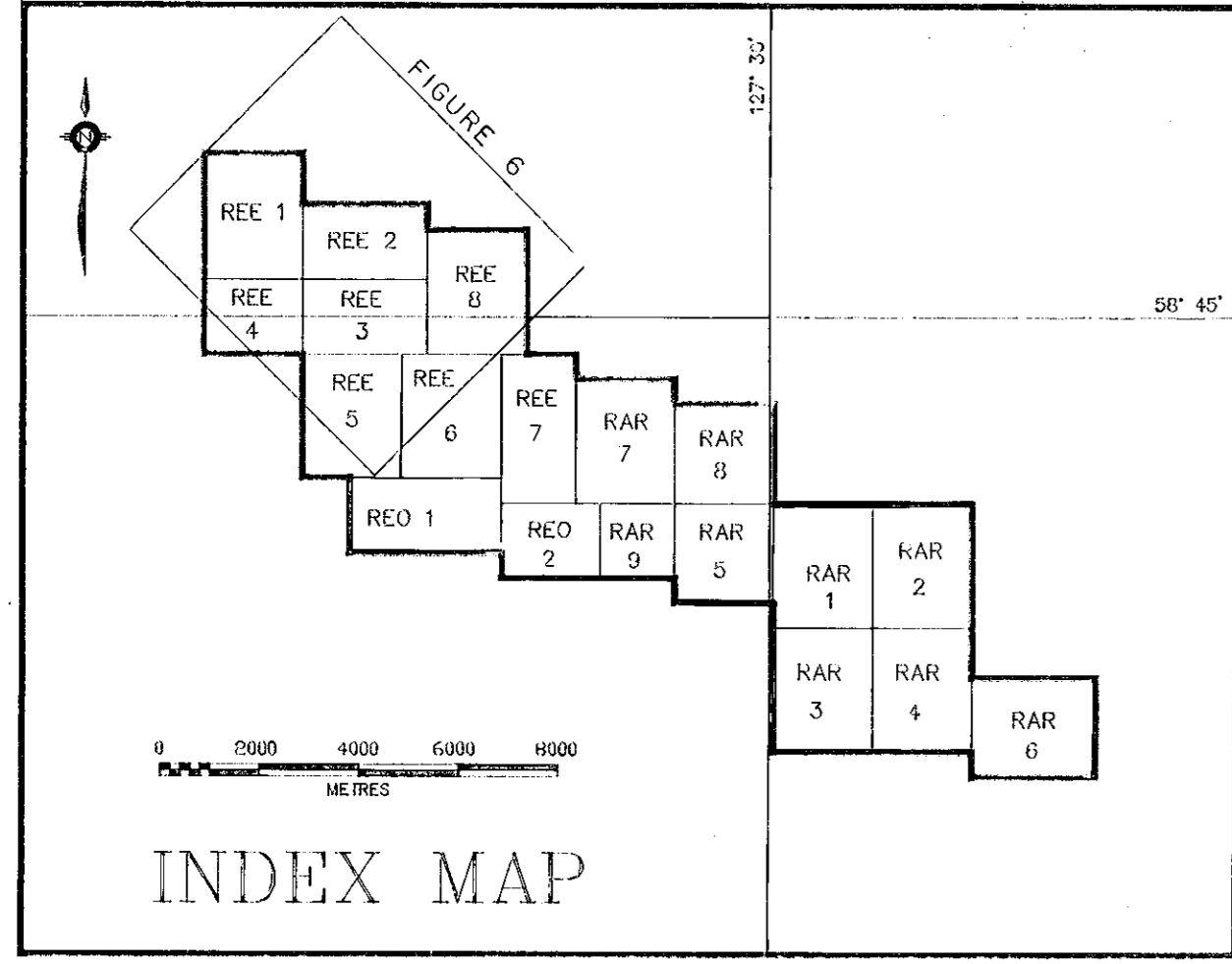
- CAMBRIAN AND ORDOVICIAN**  
KECHIKA GROUP
- EOk SERICITIC PHYLITE, GRAPHIC PHYLITE, CHLORITIC PHYLITE, DOLOMITE, CALCAREOUS PHYLITE AND ARGILLACEOUS LIMESTONE

- LOWER CAMBRIAN**  
ATAN GROUP
- Kqz QUARTZITE

**SYMBOLS**

- Geologic contact, approximate, assumed
- Fault, approximate, assumed
- Bedding
- Schistosity
- Schistosity and bedding, parallel
- Contour, metres
- Claim post
- Sample location
- Outcrop, 1988 mapping
- Outcrop, 1990 mapping

**20,895**  
**ELOGICAL BRANCH**  
**ASSESSMENT REPORT**

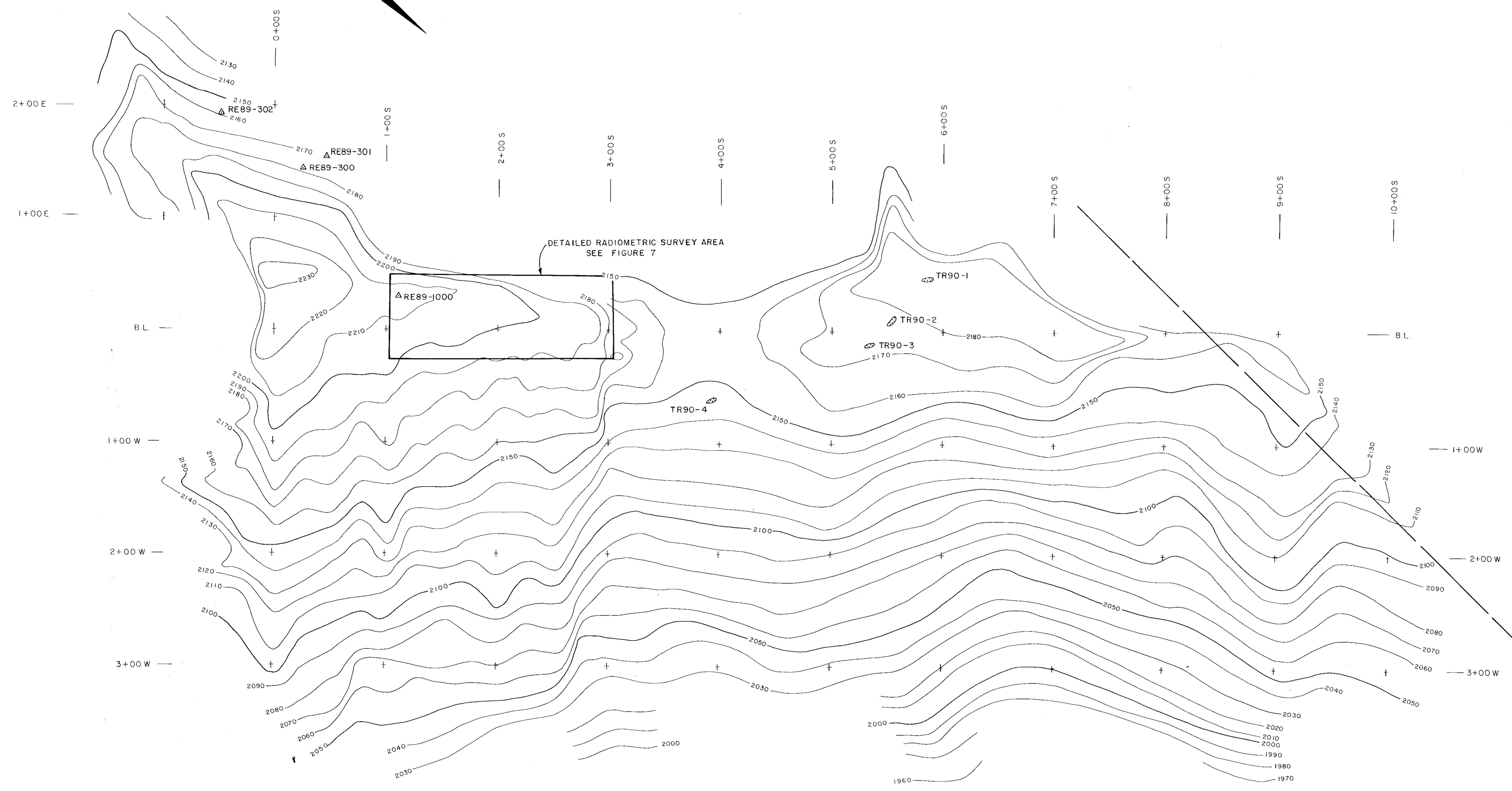
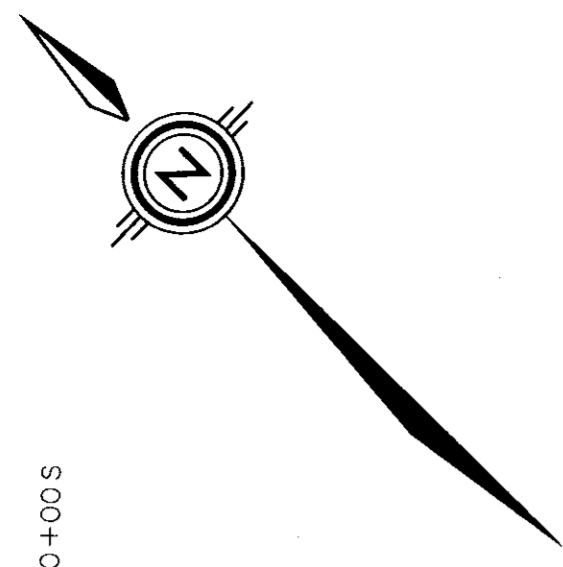


FORMOSA RESOURCES CORPORATION

KECHIKA PROPERTY  
NORTH CENTRAL BRITISH COLUMBIA

PROPERTY GEOLOGY  
NORTH END  
REE 1,2,3,4,6 & 8 CLAIMS

SCALE 1:10 000 DATE: DEC, 90  
BY: J.P. & R.R.C. FIGURE No. 6



**LEGEND:**  
 ▲ SAMPLE LOCATION  
 ○ TRENCH SITE

FOR GEOLOGY SEE PELL et al 1990

**20,895**  
 GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

|                                                              |           |
|--------------------------------------------------------------|-----------|
| FORMOSA RESOURCES CORPORATION                                |           |
| KECHIKA PROJECT<br><small>LARD MINING DIVISION, B.C.</small> |           |
| RAR 7 GRID AREA<br>LOCATION OF 1990 TRENCHES<br>AND SAMPLES  |           |
| 0 50 100 200 m<br>SCALE 1:2,000                              |           |
| NTS: 94L/11, 12, 13                                          | DRAWN BY: |
| DATE: DEC, 1990                                              | FIGURE: 8 |



25 W

L 1+00S

L 1+25S

L 1+50S

L 1+75S

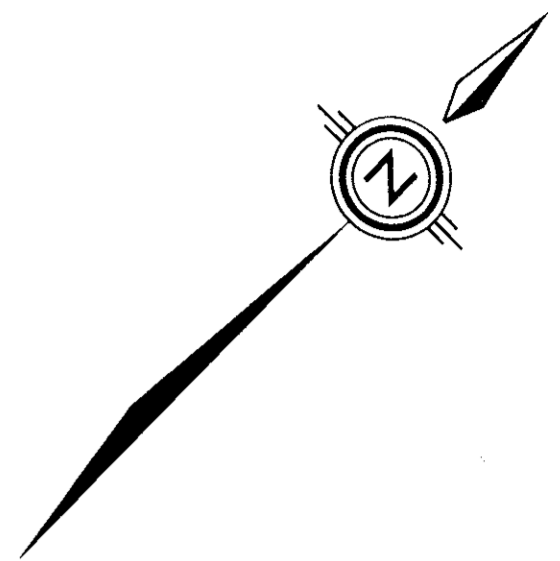
L 2+00S

L 2+25S

L 2+50S

L 2+75S

L 3+00S



25 W

50 E

50 E

50 E

50 E

MOSSY WITH FROST HEAVED FELSENMEER

COARSE BLOCKY FELSENMEER

CARBONATITE

COARSE BLOCKY FELSENMEER

CARBONATE FELSENMEER

FELSENMEER

CARBONATE FELSENMEER

COARSE BLOCKY FELSENMEER

FELSENMEER

COARSE BLOCKY FELSENMEER

FELSENMEER

COARSE BLOCKY FELSENMEER

FELSENMEER

FELSENMEER

COARSE BLOCKY FELSENMEER

FELSENMEER

COARSE BLOCKY FELSENMEER

FELSENMEER

FELSENMEER

FELSENMEER

COARSE BLOCKY FELSENMEER

GRASSY

COARSE BLOCKY FELSENMEER

GRASSY

FELSENMEER

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GRASSY

GEOLOGICAL BRANCH ASSESSMENT REPORT

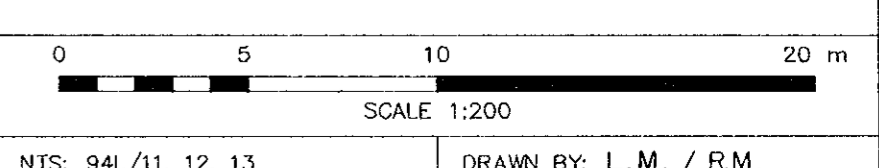
20,895

LEGEND

- OUTCROP BOUNDARY
- RADIOMETRIC SPOT HIGH (c/s)
- RADIOMETRIC CONTOUR (600 c/s)
- CHIP SAMPLE INTERVAL
- M = MOSSY
- FB = FROST BOIL

FORMOSA RESOURCES CORPORATION  
KECHIKA PROJECT  
LEAD MINING DIVISION, B.C.

RAR 7 (2237) RIDGE ZONE  
RADIOMETRIC SURVEY



NTS: 94/11, 12, 13  
DATE: OCTOBER, 1989; DEC., 1990

DRAWN BY: L.M. / R.M.  
FIGURE: 7

UNMAPPED

UNMAPPED

AREA MAPPED IN 1990

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)

1988 GRID  
120-220-80 (M)  
LOCATION OF 1988 SAMPLE 3714  
(8900 84M VI)