BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1996/1997
REPORT #:	PAP 96-36
NAME:	DAVID RIDLEY

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PROSPECTORS PROGRAM
MEMPR

REPORT ON PROSPECTING ACTIVITIES

carried out under the auspices of the

BRITISH COLUMBIA PROSPECTOR'S ASSISTANCE PROGRAM

REFERENCE NUMBER 96\97 P79

BY

DAVID W. RIDLEY

EAGLE CREEK, BC

VOK 1LO

in

CLINTON MINING DIVISION

NTS 92P\15

JANUARY, 1997

SUMMARY

The following report describes prospecting activities carried out in the Canim Lake region, approximately 50 kilometers northeast of 100 Mile House, BC. The area lies within the Quesnel Trough and is underlain by Triassic-Jurassic Nicola Group volcanics and related sediments which, in the west are cut by the Takomkane batholith and to the east by numerous small stocks of Cretaceous age. The Cretaceous intrusives also cut portions of the older batholith as at the former Boss Mountain molybdenum Mine.

The area was subjected to abundant volcanic activity during the Tertiary resulting in thick accumulations, particularly south and west of Canim Lake. Eocene-Oligocene Skull Hill sub-aerial flows and related breccia and tuff beds form extensive exposures on the higher slopes around Canim Lake. Miocene and younger plateau basalts of the Chilcotin Group cover most of the ground south and west toward 100 Mile House and the Fraser plateau. The area has been extensively glaciated although overburden is generally thinner on the steeper slopes and ridgetops. Elsewhere it can be very deep especially in the valley bottoms.

Four separate mineral properties, ranging from high level epithermal gold to porphyry copper-gold and skarn targets, were prospected during this grant application.

Two properties, **SG 1** and **STRAW**, will be allowed to lapse as no further work is required. Although no further work is anticipated for the **STRAW** claims at this time further work may be appropriate in the next couple of years after the proposed logging has been done. The area remains interesting but there is currently so little outcrop that prospecting is severely hampered (i.e. makes it hard to define a specific target area)

Unfortunately further work on the **SKULL** property will require a much larger budget than is available and is such a long-shot that finding financing could be very difficult. The **PAPOOSE** property is currently being examined by Homestake Canada with a view to possibly optioning the claims. A decision is due shortly.

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Dave Ridley Reference Number 96/97 P79

LOCATION/COMMODITIES

Project Area (as listed in Part A) Straw MINFILE No. if applicable

Location of Project Area NTS 92P/15 Lat Long

Description of Location and Access see report

Main Commodities Searched For copper - gold

Known Mineral Occurrences in Project Area see report

WORK PERFORMED

1. Conventional Prospecting (area) 20 metric units
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples) rocks - 9
4. Geophysical (type and line km)
5. Physical Work (type and amount) Hand trenching 6 sq. meters
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities copper Claim Name Straw

Location (show on map) Lat Long Elevation

Best assay/sample type 2890 ppm Cu, 30 ppb Au : rock chip across 40cms shear zone (Straw 96 DRZ)

Description of mineralization, host rocks, anomalies see report

Supporting data must be submitted with this TECHNICAL REPORT

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

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- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Dave Ridley Reference Number 96/97 P79

LOCATION/COMMODITIES

Project Area (as listed in Part A) S.G.1 MINFILE No. if applicable

Location of Project Area NTS 92P/15 Lat Long

Description of Location and Access see report

Main Commodities Searched For gold

Known Mineral Occurrences in Project Area see report

WORK PERFORMED

1. Conventional Prospecting (area) 1 square kilometer
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples) 9 rock chip samples
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities none found Claim Name

Location (show on map) Lat Long Elevation

Best assay/sample type

Description of mineralization, host rocks, anomalies see report

Supporting data must be submitted with this TECHNICAL REPORT

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

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- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Dave Ridley Reference Number 96/97 P79

LOCATION/COMMODITIES

Project Area (as listed in Part A) Skull 1-4 MINFILE No. if applicable NA

Location of Project Area NTS 92P/15 Lat _____ Long _____

Description of Location and Access see report

Main Commodities Searched For gold in Tertiary epithermal setting

Known Mineral Occurrences in Project Area see report

WORK PERFORMED

1. Conventional Prospecting (area) approx. 16 sq. kilometers
2. Geological Mapping (hectares/scale) _____
3. Geochemical (type and no. of samples) 8 rock chips
4. Geophysical (type and line km) _____
5. Physical Work (type and amount) hand trenching 6 trenches = 20 sq. meters
6,. Drilling (no,. holes, size, depth in m, total m) _____
7. Other (specify) _____

SIGNIFICANT RESULTS

Commodities none found Claim Name _____

Location (show on map) Lat _____ Long _____ Elevation _____

Best assay/sample type _____

Description of mineralization, host rocks, anomalies see report

Supporting data must be submitted with this TECHNICAL REPORT

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Dave Ridley Reference Number 96/97 P79

LOCATION/COMMODITIES

Project Area (as listed in Part A) Papoose MINFILE No. if applicable

Location of Project Area NTS 92P/15 Lat Long

Description of Location and Access see report

Main Commodities Searched For gold, copper, arsenic

Known Mineral Occurrences in Project Area see report

WORK PERFORMED

1. Conventional Prospecting (area) 1 square kilometer
2. Geological Mapping (hectares/scale) ±20 hectares : 1:2500 scale
3. Geochemical (type and no. of samples) 33 rock chips ; 38 soils
4. Geophysical (type and line km)
5. Physical Work (type and amount) hand trenching ; 4 trenches = 15 sq. meters
6. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities Gold, (arsenic-copper-antimony) Claim Name Papoose 2

Location (show on map) Lat Long Elevation

Best assay/sample type 12.42 g/t gold, 973 ppm copper, 1.5% arsenic in soil sample above Cate showing.

Description of mineralization, host rocks, anomalies see report.

Supporting data must be submitted with this TECHNICAL REPORT

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C **1996 PROSPECTING REPORT on the SKULL 1-4 CLAIMS**

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1996 PROSPECTING

ON THE

STRAW 1-20 two-post mineral claims

CLINTON MINING DIVISION

NTS 92P\15

by

D.W. RIDLEY (owner-operator)

General Delivery

Eagle Creek, BC

VOK 1LO

DECEMBER, 1996

WORK APPROVAL NUMBER; KAM-96-0300491172

SUMMARY

The **STRAW** property is situated approximately 55 kilometers northeast of 100 Mile House BC, and is accessible via paved and gravel logging roads. The claims straddle the contact between upper Triassic Nicola Group volcanics to the east and intrusives of the Takomkane batholith to the west. The property lies near the south end of a large air magnetometer high, roughly outlined by the 3500 relative gamma contour line (FIG. 3). This may indicate a more mafic border phase of the batholith or the emplacement of a younger, more basic intrusion within it.

The ground around the present **STRAW** claims has been held by various companies and individuals since the early 1960's. The most extensive work was in the early 1970's when Utah Mines conducted a detailed grassroots exploration survey and outlined four proposed drill holes, although apparently the claims were abandoned and the drilling was not done. Limited soil sampling and prospecting was carried out in 1990 by Princeton Mining as part of their work program on the nearby CLAY property. This work failed to produce the desired results and the ground was allowed to lapse. In 1993 the present property was located after reviewing the past work programs and was subsequently optioned to Pioneer Metals who conducted a limited soil and prospecting program. The claims were dropped and returned to the ownership of the author in 1994. A prospecting grant was applied for and accepted in 1996 and the results of this program form the basis of this report.

Past work has focused on porphyry copper style mineralization, mainly near the batholith-volcanic contact northwest of Roger lake where syenitic dykes contain minor copper mineralization cutting weakly propylitic altered Nicola volcanics. These showings do not have the appearance of being close to a major porphyry system and it may be concluded that if one exists in this area it is surely buried by a great thickness of non-economic rock. The main focus of this year's work program was to the east prospecting for peripheral skarn or QR-type propylitic gold mineralization. The results of the 1996 work program were generally quite disappointing and do not provide any encouragement for additional work in the near future. The area remains very interesting however and additional prospecting should be carried out as new roads and logging clear-cuts are made. The biggest problem in discovering showings here is the general lack of rock exposure which is normally greatly enhanced following logging activities.

LOCATION AND ACCESS

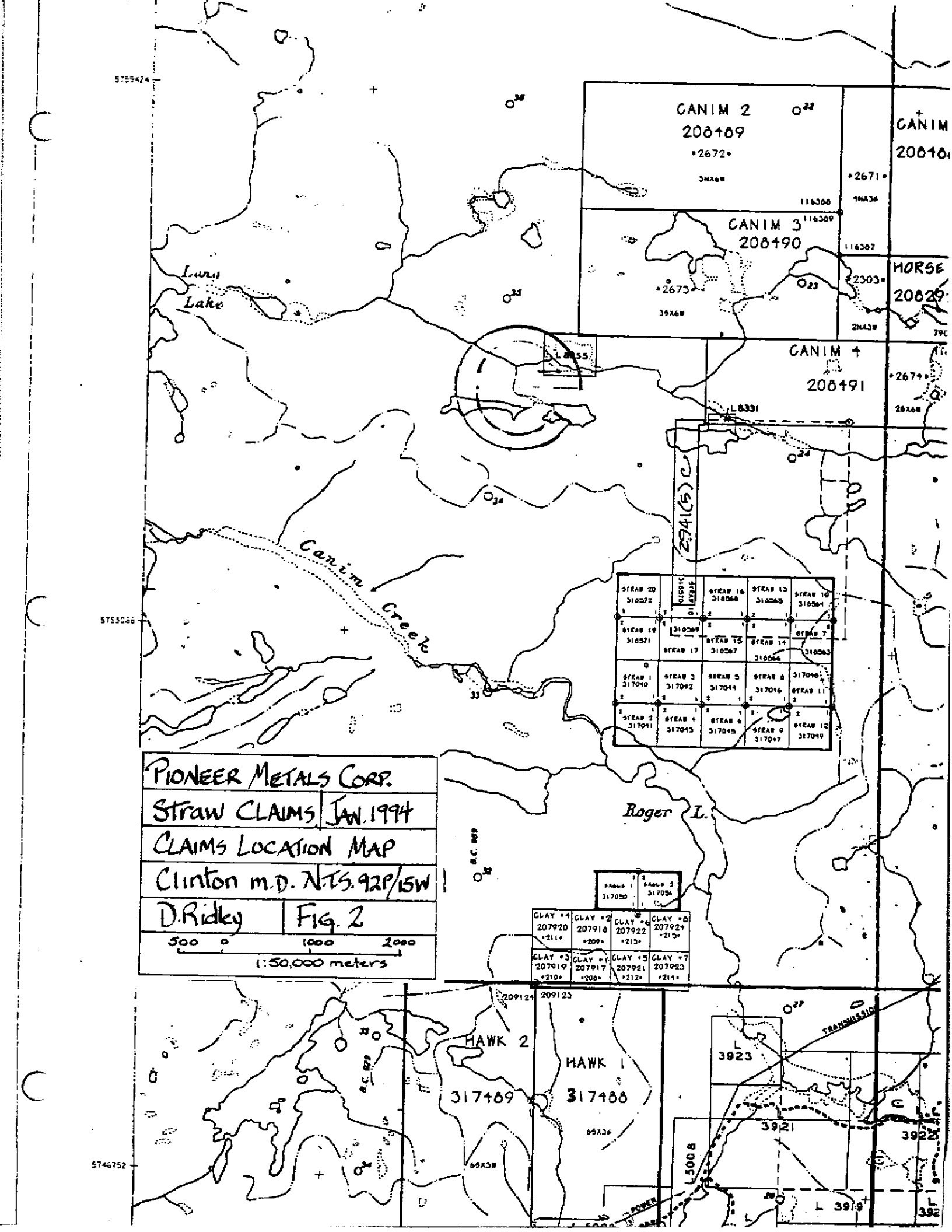
The **STRAW** property is located approximately 55 kilometers northeast of 100 Mile House BC and is easily reached by paved and gravel logging roads. Access from highway 97 is via the Canim Lake road to Eagle creek bridge than by the 6000 forest road to its junction with the Lang lake forest access road which is traveled north and west for nine kilometers to a southerly trending arterial which passes Judy lake and on to Roger lake at the end of the road. A hydro transmission line is situated approximately five kilometers south of the center of the claims.

The claims lie between the Interior Wet Belt and the Interior Dry Belt bioclimatic zone. They are situated in the western portion of the Quesnel Highlands physiographic region. Topography ranges between 2600-3400 feet. The steepest slopes lie above Roger lake where a series of low rocky bluffs form the most extensive exposure on the property. Elsewhere the ground is generally flat with several small hilltops and ridge crests poking above the swampy plateau above 3200 feet elevation.

The property is densely forested except for the northeast corner where recent logging provides vehicular access and outcrop exposure is much greater. The forested portion is a mixture of thick juvenile stands of cedar-spruce-pine-balsam. Park-like stands of lodgepole pine are interspersed by numerous swamps consisting of willow, alder and open water which make running compass lines difficult.

CLAIM STATUS

The **STRAW** property consists of twenty two-post mineral claims situated in Clinton Mining Division. The STRAW 1-6, 8-9, and 11-12 (record numbers 317040-317049) were staked in April 1993. The STRAW 7, 10, 13-20 (record numbers 318563-318570, 318572, and 318579) were located in June 1993. In May of 1993 an option was signed with Pioneer Metals who conducted a limited prospecting program on the claims and dropped the option the following year. The author applied for a prospecting grant in May 1996 to conduct further grassroots exploration on the property. The claims are currently in good standing until April 1997. A portion of the claims may be retained and this work is sufficient to cover work assessment requirements if so desired.


CANIM 2
208489
CANIM 3
208490
CANIM 4
208491
CANIM
HORSE
Lars Lake
Carim Creek
Roger L.
HAWK 2
317489
HAWK 1
317488
3923
3921
3919
L 8331
L 8855
L 5008
294(S)
PIONEER METALS CORP.
STRAW CLAIMS | JAN. 1994
CLAIMS LOCATION MAP
Clinton m.D. N.T.S. 92P/15W
D. Ridley | Fig. 2
500 0 1000 2000
1:50,000 meters

PROPERTY HISTORY

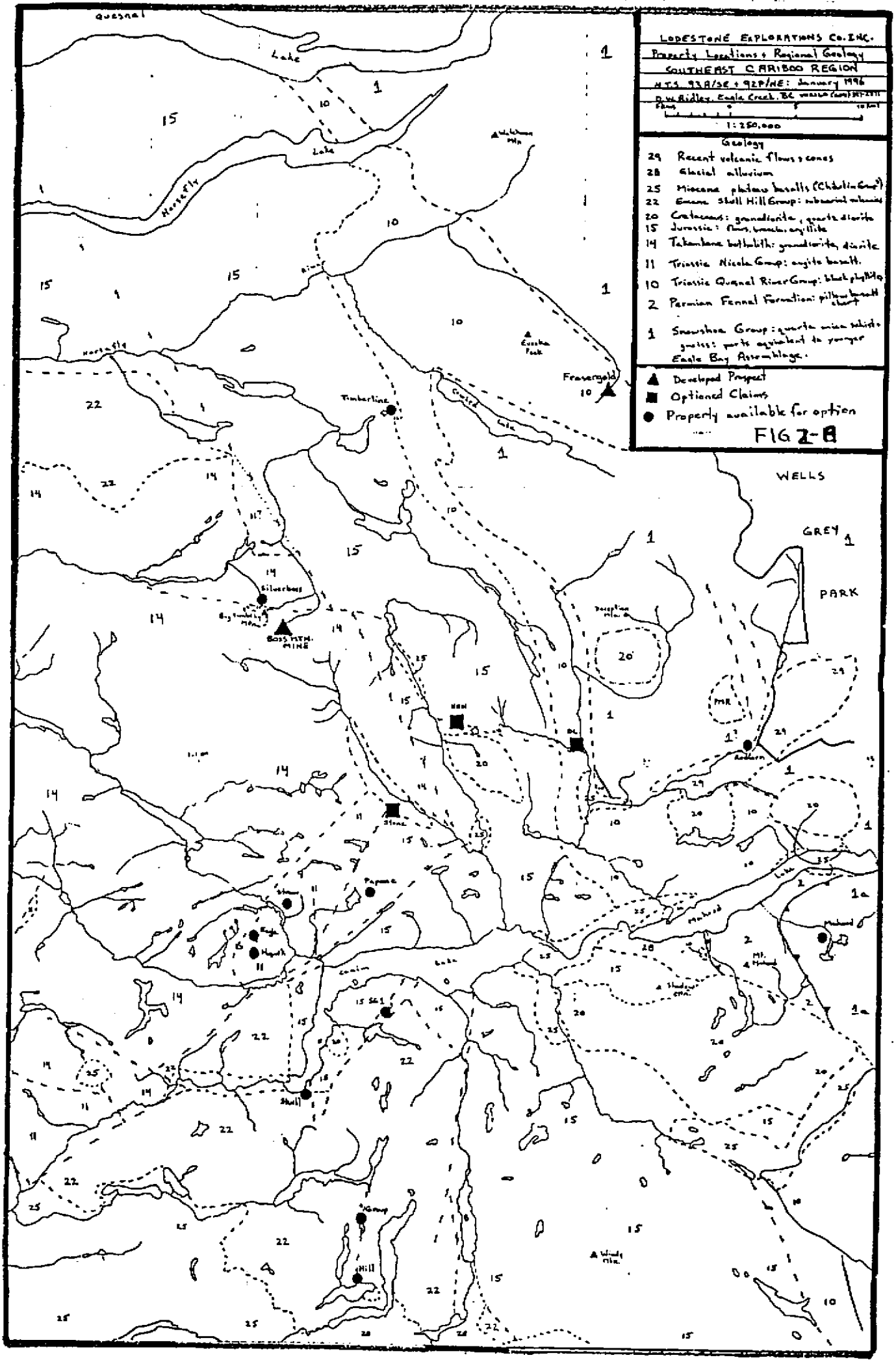
The general area of the **STRAW** claims has been held by various mining companies and individuals since the early 1960's. The most comprehensive work program was conducted in 1972 by Utah Mines who focused on copper-bearing porphyry potential of the Takomkane-Nicola contact. The geology and mineralization encountered during this work program is well presented in a report by F.R. Gatchalian (1972) who concluded, "Alteration, brecciation and some copper mineralization is evident at the intrusive-Nicola contact. The copper mineralization on the property is widespread, erratic and low grade." A small drill program was recommended although it seems the claims lapsed shortly afterwards, possibly due the shift in the provincial government which saw an exodus of mining capital.

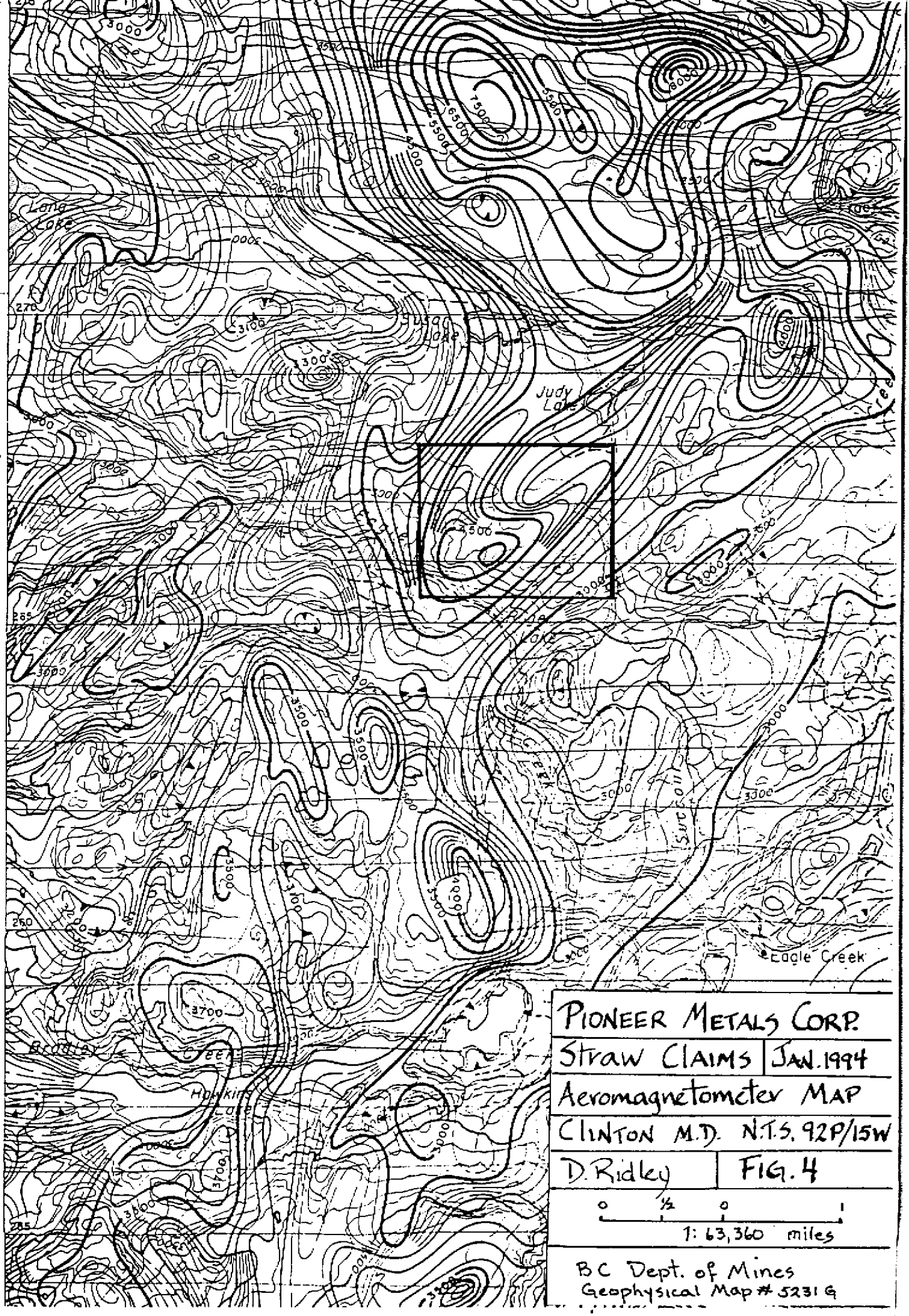
Aragon Explorations Ltd. held much of the ground east of and contiguous to the Utah property. This area is further removed from the Takomkane-Nicola contact and is underlain mainly with volcanic rocks which are locally intruded by dykes, small stocks and plugs of the Takomkane intrusive suite. A report by V. Cukor (1973) states "Epidote and chlorite are widespread secondary minerals often accompanied by biotite and sometimes sericite. Potassium feldspar, calcite, and gypsum often appear as fracture fillings. These latest are often related to visible copper mineralization. Rock is generally highly sheared and fractured, in some locations brecciated. The most common sulphide minerals found so far pyrite and pyrrhotite, accompanied by chalcopyrite and\or bornite, are found as disseminations, blebs and small irregular patches." Although this work was encouraging the claims were also allowed to lapse with no further work recorded.

Noranda Exploration Co. optioned the Clay claims in 1984 and expanded the land position to include much of the present **STRAW** ground although their work was restricted to the Clay showings only. In 1990 Princeton Mining Corp. optioned the Clay property and soil sampled and prospected portions of the present **STRAW** ground. This work revealed copper and sporadic gold soil anomalies in propylitically altered volcanics between the main road and a small lake (Bishop, S.T.,1990). They did not continue with the Clay option and by 1993 the Clay property was reduced to the original eight two-post mineral claims.

The author staked the present **STRAW** property in 1993 after reviewing past work and compiling the data. This resulted in optioning the property to Pioneer Metals who conducted an initial prospecting program targeted on the compiled results of past operators. No new significant showings were found and Pioneer dropped the option in 1994.

In the spring of 1996 application was made and received for funding under the Prospectors Assistance Program. The **STRAW** was one of four properties designated for work under the program. The following report descibes the 1996 work program.


LODESTONE EXPLORATIONS CO. INC.
Property Locations + Regional Geology
SOUTHEAST CARIBOO REGION
NTS 93A/SE + 92P/NE: January 1996
D.W. Ridley, Eagle Creek, BC
1:250,000
Geology
29 Recent volcanic flows + cones
28 Glacial alluvium
25 Miocene plateau basalts (Chilcotin Group)
22 Eocene Skull Hill Group: subaerial volcanics
20 Cretaceous: granodiorite, quartz diorite
15 Jurassic: flows, breccias, argillite
14 Takomkane batholith: granodiorite, diorite
11 Triassic Nicola Group: augite basalt
10 Triassic Quesnel River Group: black phyllite
2 Permian Fennel Formation: pillow basalt, chert
1 Snowshoe Group: quartz mica schists + gneiss; parts equivalent to younger Eagle Bay Assemblage.
Developed Prospect
Optioned Claims
Property available for option
FIG 2-B
Quesnel
Lake
Horsefly
Timberline
Frasergold
Eureka Peak
Silverboss
Boss Mtn. Mine
WELLS
GREY
PARK
Skull
Hill
Mt. Polley
Mt. Milligan
Mt. Hundred
Mt. Windy
Mt. Timothy



PIONEER METALS CORP.

STRAW CLAIMS | JAN. 1994

AEROMAGNETOMETER MAP

CLINTON M.D. N.T.S. 92P/15W

D. RIDLEY | FIG. 4

0 ½ 0 1

1: 63,360 miles

B.C. Dept. of Mines
Geophysical Map # 5231 G

REGIONAL GEOLOGY

The **STRAW** property lies within the Quesnel Trough, a subdivision of the Intermontane belt, which is composed of Triassic to Jurassic volcanic, volcaniclastic, and sedimentary rocks of island arc affinity which are intruded by various plutons ranging in age from Triassic to Cretaceous.

The oldest rocks in the region comprise augite andesite-basaltic flows, breccias and agglomerate, tuff, argillite, phyllite, greywacke, and black to grey limestone of the Triassic Nicola Group which is intruded by the upper Triassic-Jurassic Takomkane batholith. The Takomkane batholith is a composite granodiorite intrusion with hornblende-biotite quartz diorite and granodiorite, hornblende diorite, monzonite, gabbro, and hornblendite. Phases may be syenodiorite-diorite or quartz monzonite in composition and locally K-feldspar porphyritic, and quartz-rich (Blann, 1993).

A large magnetic high shown on FIG. 4, beginning near Roger lake in the south, extending north beyond Island lake and roughly outlined by the 3500 relative gamma contour line, was found to be underlain by magnetite-rich, locally porphyritic, hornblendite, pyroxenite, gabbro and diorite. It is not clear whether this represents a border phase of Takomkane batholith or a younger, more mafic intrusion along its eastern margin.

Jurassic rocks comprise andesitic arenite, siltstone, grit, breccia and tuff, local granite-bearing conglomerate, greywacke, minor argillite and flows. These rocks are in fault contact with all other rocks in the area (Campbell, Tipper, 1971). Jurassic and older rocks are intruded by several satellite stocks and smaller bodies consisting of biotite-quartz monzonite and granodiorite of Cretaceous age. Three small stocks on the east side of Canim lake, believed to be Cretaceous in age are syenite, synodiorite and diorite-gabbro in composition. Low grade porphyry copper style mineralization is found associated with the central stock near Howard lake.

South of Canim and Hawkins lakes dacite, trachyte, basalt, andesite, rhyolite, and related breccias of the Eocene to Oligocene Skull Hill formation form the higher hills. Miocene and\or Pliocene plateau lava, olivine basalt, basaltic andesite, and related ash and breccia beds of the Chilcotin Group are found in the lower lying valleys and form extensive exposures on the Fraser Plateau immediately west of the property.

1996 WORK PROGRAM

The 1996 work program consisted of detailed prospecting in areas of known mineral occurrences or soil geochemistry anomalies outlined in past work. The proposed work program was cut back due a lack of positive results after the first week of prospecting. It was decided that no further work of significance could be accomplished and that the moneys would be better spend on the three other properties included in the original proposal. Drainage is virtually non-existent even though a good size area is covered by swamps. This rendered seep sampling in-effective. There were no new showings uncovered during stripping of moss from outcrops and the known showings were found to be of limited extent and low grade.

PROSPECTING AND ROCK SAMPLING

Outcrop on the **STRAW** property is best exposed in a series of low cliffs rising above the northeast end of Roger lake and on several hill and ridgetops in the generally flat-lying central and northern portions. On many of the hill and ridgetops a thin mantle of moss with little or no soil masks the underlying bedrock. Stripping can be useful in determining rock types and the extent of mineralized structures. In the more heavily overburdened areas float is often of a generally uniform composition and may be presumed to be rubble and\or subcrop accumulating from surface weathering of underlying bedrock. This may aid in geological mapping.

Prospecting traverses were run over areas of known mineralization or alteration and shallow hand-trenching was conducted at some of the showings. A total of nine rock samples were taken from the eastern portion of the property. None were taken from the western side as no new mineralization or alteration was found here. Rock sample locations are plotted on FIG. 5 and analysis results and sample description sheets are included in the appendix.

Shallow hand-trenching at one of the old "Beer" showings produced the highest geochemical value of this work program. This sample consisted of epidote-pink calcite-chlorite-quartz altered chlorite schist with 1-2% disseminated pyrite-chalcopyrite-bornite. The rock is strongly foliated, trending 030\80W, and appears to be a small shear zone. A chip sample across 40 cms. returned 2840 ppm copper, 2 ppm silver, and 30 ppb gold (STRAW96 DR2). Hand-trenching was successful in determining the width of the zone but not the strike length although it doesn't appear to continue for any appreciable distance. A narrow quartz vein, 30 meters southwest of L13N:7+75E, trending 350\70E, carrying minor euhedral pyrite crystals returned 103 ppb gold (STRAW96 DR4). The vein appears to be of the gash variety and of very limited extent.

Several minor copper showings were examined and a significant amount of moss stripping was carried out along the ridge between the main access road and Gosling lake (FIG. 5). This did not uncover any better mineralization and analytical results were disappointing. Although the property is largely underlain by a good geological environment and is extensively propylitically altered, mineral showings are sporadic, lack continuity, and are of generally non-economic grades.

The lack of arsenic anomalies in any of the previous sampling indicates that the probability of finding a QR-type ore body is greatly reduced. This is due the fact that although arsenic is not necessarily related to the gold ore, it does form a prominent soil anomaly peripheral to the main QR showings. It is possible that the geothermal gradient in the **STRAW** area may have been too hot or too cold for the formation of these type of ore bodies.

The general lack of typical skarn minerals (garnet, diopside, etc.) again indicates a lesser probability of locating these type of ore bodies on the property. The Nicola volcanics are typically enriched in copper and the junctions of small shears, fractures and joints generally contain visible copper mineralization, however none was found to be of significant size or metal content. This may explain the bulk of the copper soil anomalies delineated in the earlier work.

CONCLUSIONS AND RECOMMENDATIONS

Based on a compilation of past data and the results of the 1996 work program it can be concluded that;

- the **STRAW** property is underlain by Triassic-Jurassic Nicola volcanics which are intruded by the coeval Takomkane batholith.
- several minor copper showings are found on the property.
- the area is generally more or less propylitic altered particularly in the east.
- the general lack of skarn minerals indicate little probability of discovering this type of mineral occurrence on the property.
- the lack of arsenic or significant gold values indicate little probability of discovering a QR-type body on the property.
- while the western portion of the property has some potential for alkalic porphyry type mineralization it is believed that such mineralization, if it exists would be buried very deep and therefore be non-economic for the foreseeable future.

Further work on the **STRAW** property is not recommended at this time, however, the area should be examined in a couple of years as logging may uncover something of interest.

BIBLIOGRAPHY

BISHOP S.T.; 1990; Geological Report on the Robby claim Group; Ass. Rpt. #14798.

CAMPBELL R.B., Tipper H.W.; 1972; Geology of the Bonaparte Lake Area; GSC Memoir 363.

CUKOR V.; 1973; Report on the Canim Lake Property for Aragon Explorations Ltd.; Ass. Rpt. #4265, 3547.

GALE R.E.;1988; Report on the Hawkins Lake Copper-Gold Prospect; Private Report for Sheba Copper Mines Ltd.

GATCHALIAN F.R.; 1972; Geological, Geochemical and Geophysical Report on the July 1-32 claims; Ass. Rpt. #4496.

GSC GEOPHYSICS PAPER 5231; Canim Lake, 92P\15; Aeromagnetic Survey; 1968; MAP # 5231G.

RIDLEY D.W., DUN D.; 1994; Prospecting and Geochemical Report on the STRAW Group; Ass. Rpt. # 23279.

ROCK SAMPLE SHEET

Sampler D+C Ridley
Date Sept-Oct/96

Property Straw

NTS 92P/15

SAMPLE NO.	Sample Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS				
		Rock Type	Alteration	Mineralization						
Straw 96 DR1	G	augite porphyry	epidote chlorite pinkcalcite	trace cpy	≈ 25m upslope + westerly from swamp showing: subcrop rubble: can't get attitudes.					
Straw 96 DR2	40cm	altered chlorite schist	epidote pinkcalcite chlorite quartz	1-2% disem. cpy-bornite-py	@ 93DR19 sample site: mineralized section exposed in floor of trench: trends 030/80W (strong foliation: probably a shear zone.					
Straw 96 DR3	1m	fault zone	chlorite quartz pinkcalcite	trace pyrite	East of Gosling Lake ≈80m SE of L14N:8E. strongly foliated augite porphyry basalt 062/60NW					
Straw 96 DR4	35cm	quartz vein	limonite	minor euhedral pyrite	≈ 30m SW of L13N:7+75E: probable subcrop trending 350/70E: poorly exposed requires trenching to uncover wallrx.					
STRAW 96 CR1	3m.	GREEN SCHIST	EPIDOTE MAGNETITE	—	-35m. ON 060° FROM L12N: 575E. - 140°/78°S					
STRAW 96 CR2	2m.	GREEN SCHIST	EPIDOTE MAGNETITE		@ STN. L13N: 625E - SAME TREND					
STRAW 96 CR3	3m.	"	EPIDOTE PINK CALCITE		- 28m ON 240° FROM L14N. 75E - SAME TREND					
STRAW 96 CR4	GAB	"	BLEBS OF EPIDOTE + CALCITE		- 47m ON 240° FROM CR3 - SAME TREND					
STRAW 96 CR5	1.75m.	CHLORITE SCHIST	EPIDOTE CALCITE	TRACE PYRITE	± 30 SOUTH OF DR1 · EX ARE SHEARED 060°/90 // ROCK IS MAGNETIC + HORNFELSED					

C CHIP C GRAB FLOAT

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Lodestone Explorations Co. Inc. PROJECT P.A.G. File # 96-5706

General Delivery, Eagle Creek BC V0K 1L0 Submitted by: Dave Ridley

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
SG96-CR1	2	27	7	50	<.3	14	8	246	1.82	5	<5	<2	<2	18	<.2	<2	<2	35	1.05	.061	5	19	.26	37	.20	<3	1.00	.09	.08	4	2
SG96-CR2	2	220	10	30	.5	16	24	241	3.25	7	<5	<2	<2	27	<.2	<2	<2	44	1.64	.089	4	5	.28	15	.20	30	1.49	.10	.08	<2	8
SG96-CR3	8	297	14	139	.5	27	28	410	4.62	7	5	<2	<2	19	1.4	<2	<2	130	2.36	.089	7	13	.66	27	.18	20	1.81	.07	.10	<2	9
SG96-CR4	2	22	6	79	<.3	8	10	413	3.58	<2	<5	<2	<2	11	.3	<2	<2	55	5.19	.054	6	8	.56	13	.18	7	3.30	.04	.05	<2	13
SG96-DR1	3	54	7	21	<.3	9	14	186	3.02	4	<5	<2	<2	23	<.2	<2	<2	55	1.72	.112	3	4	.34	20	.29	7	1.47	.09	.09	<2	3
SG96-DR2	3	54	3	38	<.3	8	8	402	1.70	9	<5	<2	<2	30	<.2	<2	<2	95	1.97	.093	4	11	.30	37	.27	19	1.51	.08	.09	<2	4
SG96-DR3	2	40	5	23	<.3	13	9	228	2.52	4	<5	<2	<2	15	<.2	<2	<2	68	.95	.070	4	14	.24	35	.27	8	.81	.08	.08	2	4
SG96-DR4	5	24	6	26	<.3	17	8	214	1.93	15	8	<2	<2	27	<.2	3	<2	48	1.36	.061	6	10	.17	29	.19	14	1.41	.14	.09	<2	<2
SG96-DR5	1	22	4	18	<.3	6	7	358	2.43	3	5	<2	<2	19	<.2	2	<2	40	2.05	.065	5	14	.41	19	.20	11	1.92	.08	.10	2	<2
RE SG96-DR5	2	22	6	19	<.3	6	8	370	2.61	<2	<5	<2	<2	20	<.2	<2	<2	42	2.21	.069	5	12	.43	20	.21	12	2.00	.08	.11	2	<2
ST96-CR1	2	137	6	110	<.3	10	25	1128	5.35	<2	<5	<2	<2	146	<.2	<2	<2	191	3.08	.176	2	9	1.61	124	.32	<3	2.06	.12	.76	<2	2
ST96-CR2	<1	194	5	157	<.3	10	27	1208	5.73	2	<5	<2	<2	90	<.2	<2	<2	187	2.34	.166	2	21	1.71	171	.32	<3	2.01	.08	.92	<2	10
ST96-CR3	<1	147	5	50	<.3	8	20	910	4.93	<2	7	<2	<2	80	<.2	<2	<2	161	1.91	.185	4	15	1.57	95	.33	<3	2.06	.07	1.08	<2	14
ST96-CR4	<1	101	6	38	<.3	6	15	871	3.45	<2	<5	<2	<2	118	<.2	<2	<2	107	2.10	.167	3	9	1.01	69	.28	3	1.50	.06	.45	2	15
ST96-CR5	<1	19	5	24	<.3	16	18	648	5.56	2	8	<2	<2	131	<.2	<2	<2	177	5.27	.195	3	19	.99	53	.21	5	1.28	.06	.20	<2	<2
STRAW96-DR1	<1	311	<3	26	<.3	6	9	872	1.89	4	<5	<2	<2	239	<.2	<2	<2	65	8.41	.208	2	6	.59	22	.18	3	1.34	.03	.24	<2	2
STRAW96-DR2	2	2840	3	25	2.0	11	14	522	3.28	<2	7	<2	<2	77	<.2	<2	<2	153	1.60	.194	2	22	1.14	81	.27	4	1.49	.07	.64	2	30
STRAW96-DR3	1	110	<3	44	<.3	32	20	725	4.02	<2	<5	<2	<2	96	<.2	<2	2	123	3.55	.145	2	78	1.83	213	.30	<3	2.23	.08	.95	<2	5
STRAW96-DR4	2	33	<3	2	<.3	6	9	30	1.32	3	<5	<2	<2	4	<.2	<2	<2	5	.04	.004	<1	18	.02	35	<.01	<3	.05	<.01	.04	2	103
STANDARD C2/AU-R	19	58	41	129	6.6	68	35	1160	4.24	45	23	7	33	49	19.7	16	16	67	.50	.108	37	60	.99	185	.07	26	2.05	.06	.15	10	486

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU** ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 31 1996 **DATE REPORT MAILED:** Nov 13/96 **SIGNED BY.** D. Toye ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

1996 PROSPECTING

ON THE

SLEEPING GIANT PROPERTY
(S.G.1 mineral claim)
Clinton Mining Division
NTS 92P\15W

by

D.W. RIDLEY (owner-operator)

DECEMBER 1996

WORK APPROVAL NUMBER: KAM-96-0300490-170

SUMMARY

The **Sleeping Giant** property is situated approximately 50 kilometers northeast of 100 Mile House, and is readily accessible via paved and gravel public and logging roads. The property lies within the Quesnel Trough, a belt of mixed sedimentary and volcanic rocks of Triassic-Jurassic age which have been intruded by numerous plutons of Triassic to Cretaceous age.

The property has seen a good deal of exploration work in the past directed to porphyry potential of three small Cretaceous stocks in the Howard lake area, east of Canim lake. This work included at least 26 drill holes in various targets, however, most of the work centered on the Central zone. This zone represents a "failed" porphyry system in that the highest copper grades encountered on surface were about 0.15% and those encountered in shallow drilling were even less spectacular. Therefore it seems fair to assume that the chance of finding an economic porphyry style ore body on the property is very low.

The **Christmas** property of Homestake Canada, situated north of Canim lake, covers the remnants of a partially un-roofed stock, likely of Cretaceous age, which has hornfelsed the overlying tuffs and sediments. Gold values up to 6290 ppb occur sporadically in the hornfels with the higher values associated with greater sulphide content (pyrite-pyrrhotite).

A large oval I.P. chargeability high occurs on the slopes immediately west of the Central zone on the **S.G.** property. The I.P. anomaly was never tested for gold content and this was the target for the 1996 work program. Two days were spent examining the general area of the anomaly and one day was spent collecting nine rock samples. None of the samples returned anomalous gold or other values and the claims will be allowed to lapse.

LOCATION AND ACCESS

The property is located in south-central BC in the central portion of the Quesnel Trough. It is easily reached by paved and gravel roads lying about 45 kilometers northeast of 100 Mile House in the Canim lake district. The main access route is well maintained and passable all year whereas the final few kilometers up the Howard lake road are not usually plowed in winter but otherwise is in good repair. A very popular forestry campsite is located at Howard lake and camp-spots are scarce on the long weekends. Several lakes and ponds provide an abundant supply of water for exploration purposes. A BC Hydro transmission line and telephone lines follow the Canim South road about one kilometer west of the property boundary.

The property is fairly flat with relief restricted to several low hills rising above the generally gently sloping terrain. The higher hills are underlain by Tertiary volcanics of the Skull Hill group. Portions of the property were logged in 1993 but otherwise the ground is covered with a dense forest of mature douglas fir, pine, spruce and cedar. Logging from several decades ago produced a dense forest of juvenille growth making it difficult to run lines and move though although most of the area is fairly open.

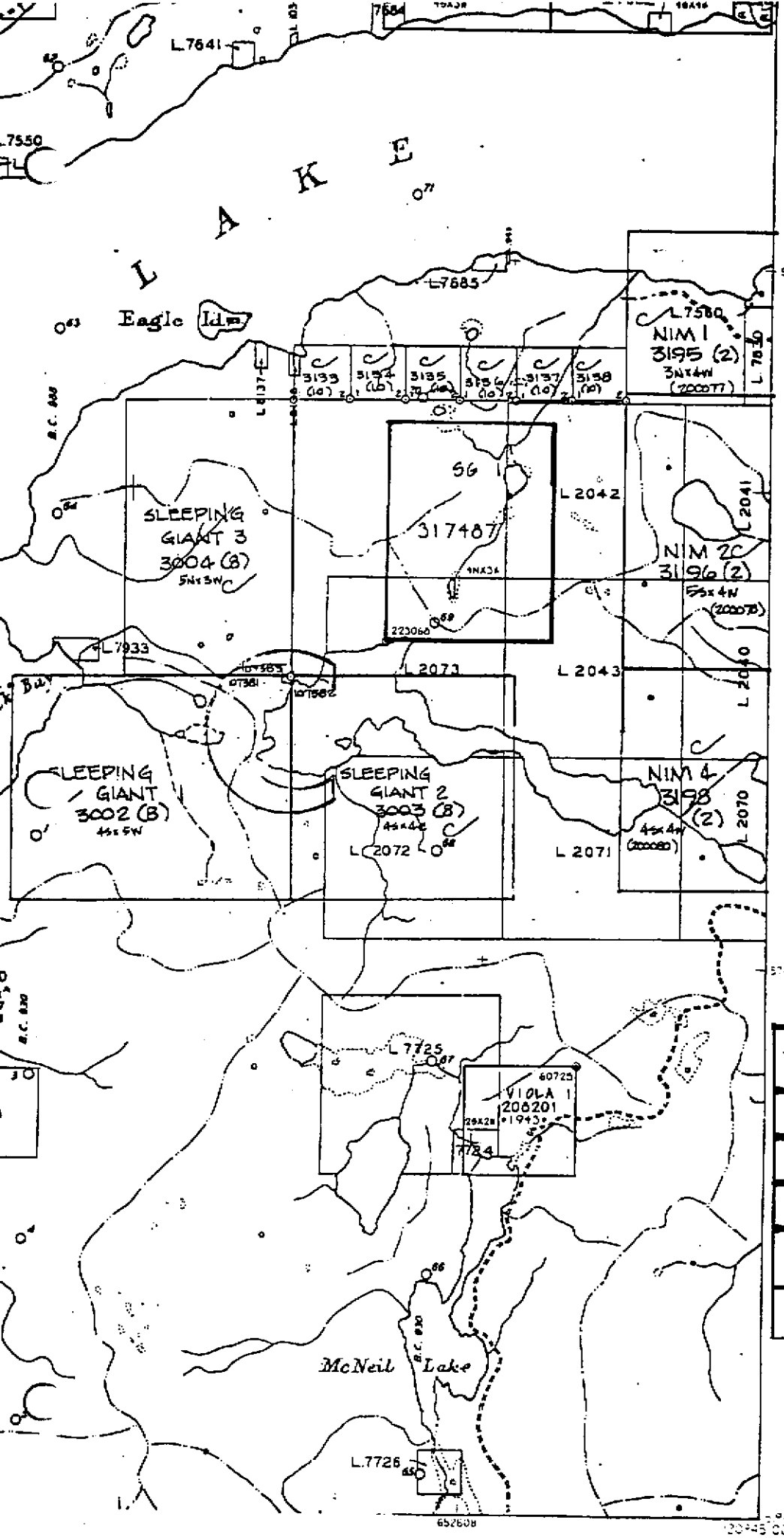
CLAIM STATUS

The **Sleeping Giant** property consists of twelve modified grid units situated in Clinton Mining Division. The claim was staked in May 1993 and is held 100% by Dave Ridley, Eagle Creek, BC, VOK 1LO. The current claim is in good standing until May 3, 1997. No further work is contemplated at this time and the claim will be allowed to lapse.

PROPERTY HISTORY

The first documented exploration activity in the vicinity was in 1968 when Cominco Ltd. found low grade copper mineralization associated with the Canim stock and staked the **KIM** property. Soil and silt sampling failed to provide encouragement and the claims were allowed to lapse.

In 1972 Dome Petroleum staked a large land position consisting of 250 two-post mineral claims, the **RM** group (MINFILE 92P-128). A substantial exploration program



CONDITIONAL AREAS

SUBJECT TO CONDITIONS RESERVE

SECTION 19 RECREATION AREAS

I POST CLAIM AREAS

AREAS SUBJECT TO URANIUM / THORIUM REGULATIONS

MINERAL TENURE

MINERAL CLAIM	
MINERAL LEASE	
INDUSTRIAL MINERAL CLAIM	
CLAIM NAME	EXAMPL
TITLE NUMBER	3456
OLD TITLE NUMBER	
TAG NUMBER	10000
LEGAL POST	
WITNESS POST	
FORFEITED TENURE	C
VERIFIED	
SURVEYED	
REVERTED C.G. MINERAL CLAIM	REV CG OR PC
CROWN GRANTED	C G
OPEN FOR STAKING	O.F.

PIONEER METALS CORP.

SLEEPING GIANT CLAIMS | JAN. 199

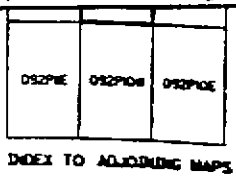
CLINTON M.D. N.T.S. 92P/15W

CLAIMS LOCATION MAP

D. RIDLEY | FIG. 2

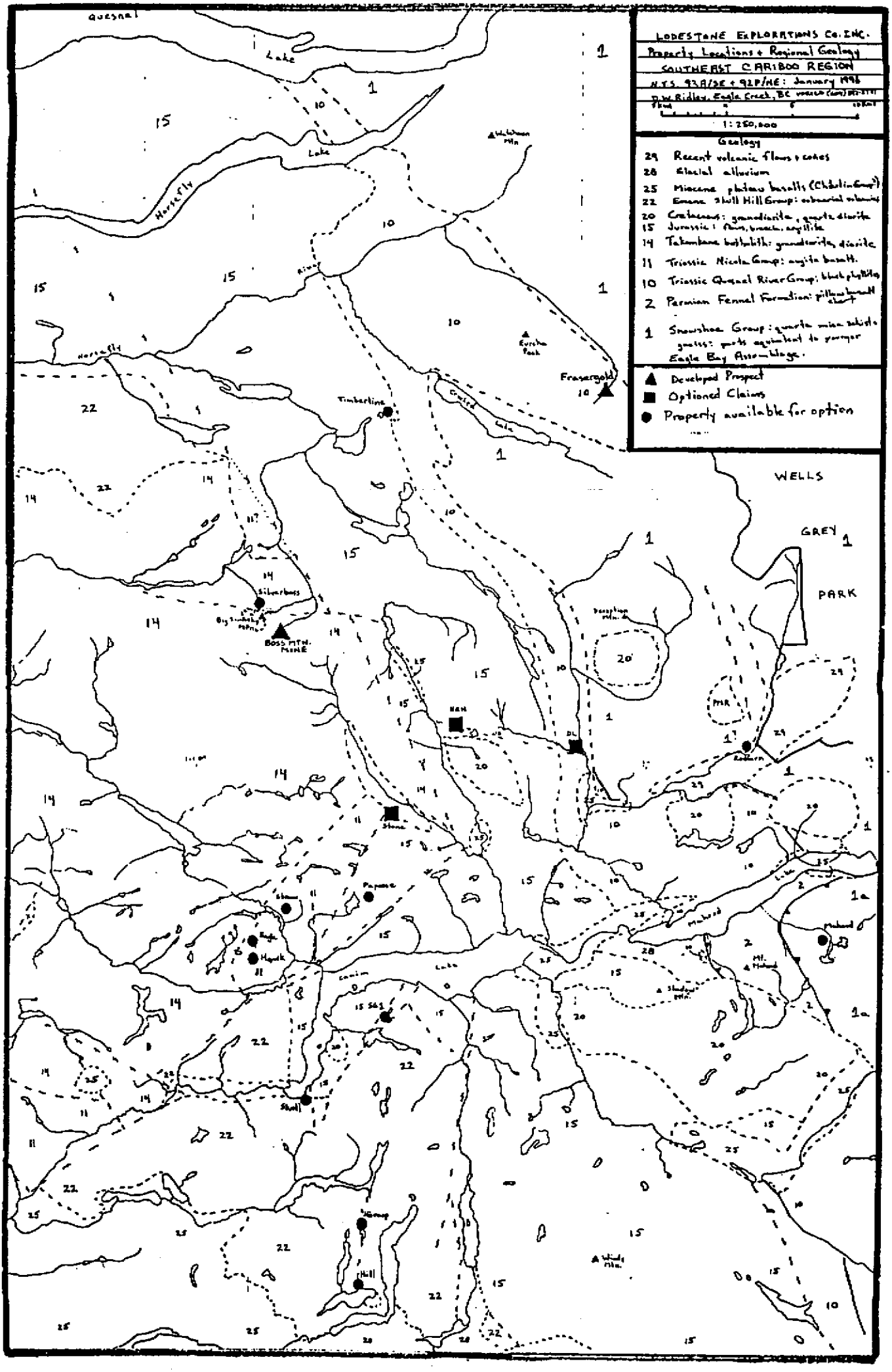
100 0 100 200

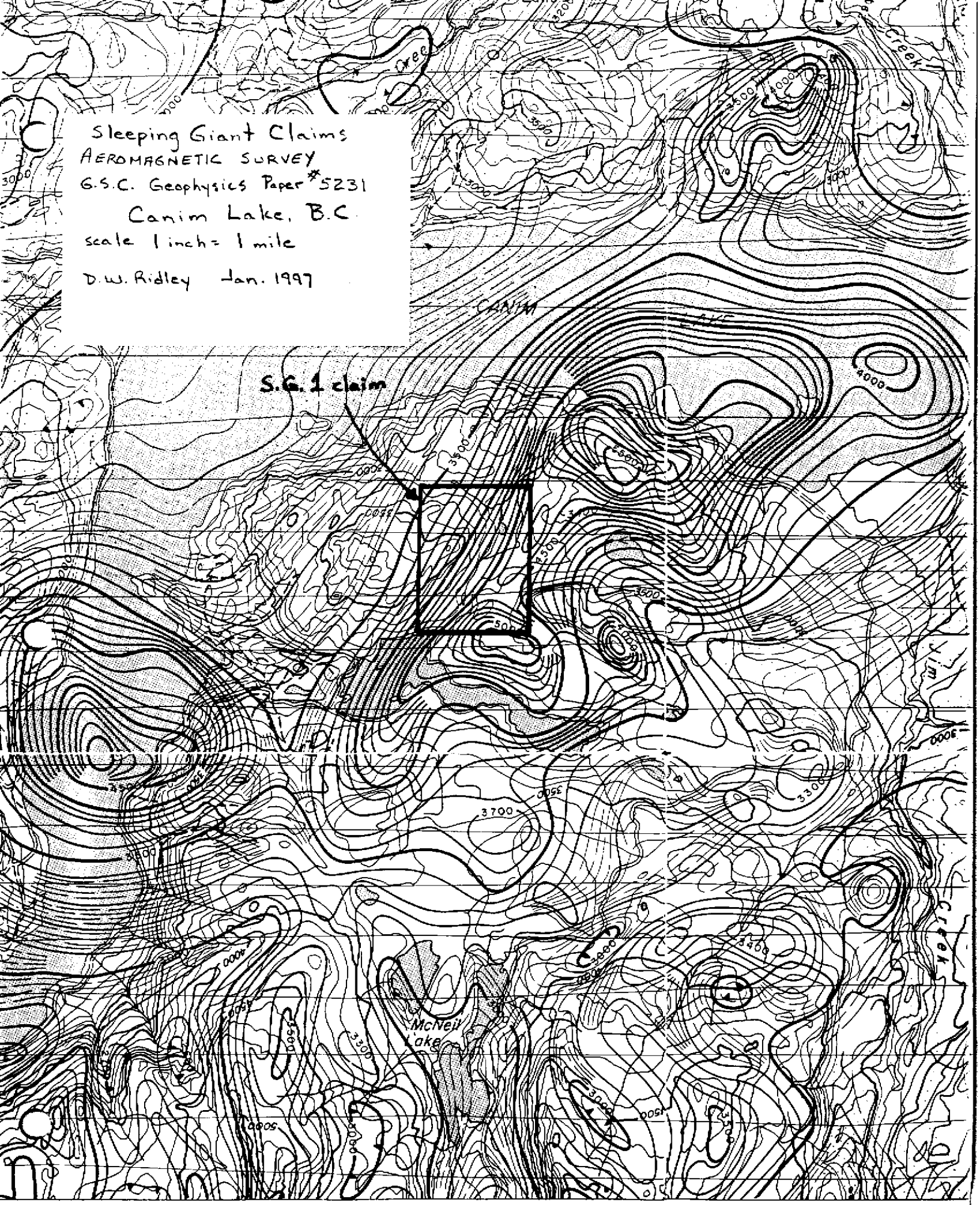
1:50,000 metres



INDEX TO ADJOINING MAPS

092P15W


LODESTONE EXPLORATIONS CO. INC.
Property Locations + Regional Geology
SOUTHEAST CARIBOO REGION
N.T.S. 93A/SE + 92P/NE : January 1996
D.W. Ridley, Eagle Creek, B.C.
1:250,000
Geology
29 Recent volcanic flows + cones
28 Glacial alluvium
25 Miocene plateau basalts (Chilcotin Group)
22 Eocene Skull Hill Group: subaerial volcanics
20 Cretaceous: granodiorite, quartz diorite
15 Jurassic: Ashcroft, Cache Creek, Nicola Group: argillite, basalt
14 Takomkane batholith: granodiorite, diorite
11 Triassic Nicola Group: augite basalt
10 Triassic Quesnel River Group: black phyllite
2 Permian Fennel Formation: pillow basalt, chert
1 Snowshoe Group: quartz mica schists, gneiss; parts equivalent to younger Eagle Bay Assemblage.
Developed Prospect
Optioned Claims
Property available for option
Quesnel
Lake
Horsefly
Timberline
Frasergold
Silverboss
Boss Mtn. Mine
WELLS
GREY
PARK
Skull
Hawk
Pepsi
Hill
Ridley
Eureka Peak
Cariboo Mtn.
Mt. Polley



50'

Joins Map 522NG, Deka Lake

consisting of geological mapping, soil, silt and rock sampling, ground magnetometer, bulldozer trenching, and IP surveys were carried out between 1972-1974. Several anomalous zones were outlined and eighteen percussion drill holes were completed totaling 4010 feet to test two areas of interest. Overall the drill results were poor and the claims were allowed to lapse without testing the other areas of interest.

Cominco re-staked a portion of their old **KIM** ground in 1976 and drilled ten percussion holes in several untested IP anomalies west of Howard lake. Although no significant mineralization was encountered in this work the claims were held until 1983.

In 1985 the **CANIM 1** claim was staked by D. Ridley covering a portion of the Canim stock. Quartz-filled fractures were found to contain up to 2% copper and 1420 ppb gold in a syenitic portion of the stock (MINFILE 92P-158). Prospecting revealed gold values to +500 ppb in widely spaced fractures.

In 1989 the **Sleeping Giant** property, consisting of eighty-three metric units and six two-post mineral claims, was staked by D. Ridley and A. Harvey. A work program in 1990 was the subject of a Prospectors Assistance Grant awarded to D. Ridley. The work consisted of rock and soil sampling of two grids of which one centered on the IP anomaly west of the Central zone. Minor copper anomalies were found associated with the eastern edge of the IP anomaly and the claims were allowed to lapse due lack of financing.

The present property was staked in May of 1993 and optioned to Pioneer Metals Corp. who drilled three short diamond drill holes into the eastern edge of the IP anomaly. This work did not encounter any significant mineralization or alteration and Pioneer dropped its option in 1994.

In the spring of 1996 application was made and accepted to include this property in a regional prospecting program under the Prospectors Assistance Program. The IP anomaly was the main focus of this work program with gold-bearing hornfels being the prime target. No gold was found to associated with the hornfels zone where tested and the claims will be allowed to lapse.

REGIONAL GEOLOGY

see page this report

1996 WORK PROGRAM

The 1996 work program consisted of two days examining the area of the IP anomaly and one day collecting nine rock samples providing a good cross-section of the underlying hornfels zone. Gold values in the hornfels, similar to the **Christmas** property of Homestake Canada Ltd were the prime target.

PROSPECTING AND ROCK SAMPLING

The geology of the property has been amply mapped in the past (see bibliography). In general, Cretaceous (?) stocks, related to the Raft and Baldy batholiths, consisting of biotite-quartz monzonite, granodiorite, and locally diorite to syenodiorite intrude lower Jurassic volcanics and related sediments along the eastern shore of Canim lake and to the northeast. Many of these stocks appear to be related to major fault structures. Two stocks outcrop along the Howard lake fault which is also believed to be an important control to the mineralization found in this area. The Howard stock, consisting of augite diorite surrounding an intrusive breccia body and containing low grade copper mineralization was the focal point of previous work.

Much of the IP anomaly on the lower slopes is covered by overburden and soil sampling in 1990 did not indicate any gold anomalies. The higher slope nearer the western edge of the IP anomaly has abundant rock exposure and the hornfels zone is easily examined in detail. It consists of a succession of volcanic tuff, greywacke, minor flows, chert and argillite all of which are biotite hornfelsed and contain 1-5% pyrite-pyrrhotite. Carbonate stockwork-style veining is ubiquitous with this zone. The sampling was conducted across about 30 meters of the hornfels zone in an area that provided the greatest variety and most sulphide content that could be found. Sample locations are plotted on FIG. 5A, sample analysis certificates and description sheets are found in the appendix. Sample prefix for this property is **SG96.**

The highest geochemical values were around 200 ppm copper and gold was just above the detection limit. It seems fair to conclude that the property has had enough work to date and no further work is recommended.

CONCLUSIONS AND RECOMMENDATIONS

Based on a compilation of past data and this work program it can be concluded that;

- the Howard stock contains a "failed" copper porphyry system in that although the geological environment and alteration assemblage is positive for the formation of such bodies, the copper grades are non-economic.
- the hornfels zone underlying the last un-tested IP anomaly failed to return significant gold in rock sampling.

No further work is recommended for the **SLEEPING GIANT** property.

BIBLIOGRAPHY

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CAMPBELL, R.B., TIPPER, H.W.; 1971; Geology of the Bonaparte Lake area ; GSC Memoir 363.

FOX, P.E.; 1973; Geochemical and Geophysical Report on the RM claims; Ass. Rpt. #4259.

LLOYD, J.; 1973; Report on a Time Domain Induced Polarization Survey on the RM claim group; Ass. Rpt. #4366.

REBAGLIATI, C.M.; 1974; Report on the Canim Lake Copper Prospect; Percussion Drilling; Private report to Dome Petroleum; 1974.

RIDLEY, D.W.; DUNN. D.; 1993; Drilling Report on the Sleeping Giant property; Ass. Rpt. # 23280.

RIDLEY, D.W.; 1986; Prospecting Report on the Canim claims; Ass. Rpt. #14924.

RIDLEY D.W.; 1990; Geochemical and Prospecting Report on the Sleeping Giant Group; Ass. Rpt. #20452.

ROCK SAMPLE SHEET

Sampler D+C Ridley
Date Oct. 22/96

Property S.G. 1

NTS 92P/15

SAMPLE NO.	Sample Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS
		Rock Type	Alteration	Mineralization		
SG 96 DR-1	1m	volcanic seds	hornfels limonite	up to 3% pyrite-pyrrhotite	above skid road on last rise before top of hill south ≈ 10m from gully a/c trend 020/50W	
SG 96 DR-2	2m	"	" carbonate stockwork	trace pyrite	≈ 20 m East of DR1: rx trend 035/80W well sheared outcrop	
SG 96 DR-3	2m	well bedded tuff	limonite hornfels	3-4% py-po local zones to 15% py-po	≈ 12m East of DR2: just above skid trail.	
SG 96 DR 4	2m	felsic tuff	"	3-5% py-po	10m E & 7m S of DR3.	
SG 96 DR5	1m	tuff + chert	"	up to 5% py-po	≈ 12 m SW of CR4: on skid trail lowest sample in succession. (remainder is buried in talus + overburden).	
SG 96 CR1	5m	CHERTY SED	HORNFELS CARBONATE	1% PYRITE	30m ON 284° FROM SG DR1 TREND 054° STRUCTURE CUT BY E/W FRACTURES	
SG 96 CR2	30cm	CHERTY SED	HORNFELS CHLORITE	2% PYRITE	-15m ON 228° FROM DR3 - SIMILAR TREND & FRACTURE AS CR1	
SG 96 CR3	30cm	CHERTY SED	HORNFELS	2% PYRITE	10m ON 096° FROM CR2 - WELL-GOSSANED W/ SAME TREND AS ABOVE	
SG 96 CR4	30cm	CHERTY SED	HORNFELS	2% PYRITE	- ON 096° - 10m. FROM CR3 ON SKID Rd. - SAME TREND	

C-CHIP G-GRAB F-FLOAT

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Lodestone Explorations Co. Inc. PROJECT P.A.G. File # 96-5706

General Delivery, Eagle Creek BC V0K 1L0 Submitted by: Dave Ridley

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
SG96-CR1	2	27	7	50	<.3	14	8	246	1.82	5	<5	<2	<2	18	<.2	<2	<2	35	1.05	.061	5	19	.26	37	.20	<3	1.00	.09	.08	4	2
SG96-CR2	2	220	10	30	.5	16	24	241	3.25	7	<5	<2	<2	27	<.2	<2	<2	44	1.64	.089	4	5	.28	15	.20	30	1.49	.10	.08	<2	8
SG96-CR3	8	297	14	139	.5	27	28	410	4.62	7	5	<2	<2	19	1.4	<2	<2	130	2.36	.089	7	13	.66	27	.18	20	1.81	.07	.10	<2	9
SG96-CR4	2	22	6	79	<.3	8	10	413	3.58	<2	<5	<2	<2	11	.3	<2	<2	55	5.19	.054	6	8	.56	13	.18	7	3.30	.04	.05	<2	13
SG96-DR1	3	54	7	21	<.3	9	14	186	3.02	4	<5	<2	<2	23	<.2	<2	<2	55	1.72	.112	3	4	.34	20	.29	7	1.47	.09	.09	<2	3
SG96-DR2	3	54	3	38	<.3	8	8	402	1.70	9	<5	<2	<2	30	<.2	<2	<2	95	1.97	.093	4	11	.30	37	.27	19	1.51	.08	.09	<2	4
SG96-DR3	2	40	5	23	<.3	13	9	228	2.52	4	<5	<2	<2	15	<.2	<2	<2	68	.95	.070	4	14	.24	35	.27	8	.81	.08	.08	2	4
SG96-DR4	5	24	6	26	<.3	17	8	214	1.93	15	8	<2	<2	27	<.2	3	<2	48	1.36	.061	6	10	.17	29	.19	14	1.41	.14	.09	<2	<2
SG96-DR5	1	22	4	18	<.3	6	7	358	2.43	3	5	<2	<2	19	<.2	2	<2	40	2.05	.065	5	14	.41	19	.20	11	1.92	.08	.10	2	<2
RE SG96-DR5	2	22	6	19	<.3	6	8	370	2.61	<2	<5	<2	<2	20	<.2	<2	<2	42	2.21	.069	5	12	.43	20	.21	12	2.00	.08	.11	2	<2
ST96-CR1	2	137	6	110	<.3	10	25	1128	5.35	<2	<5	<2	<2	146	<.2	<2	<2	191	3.08	.176	2	9	1.61	124	.32	<3	2.06	.12	.76	<2	2
ST96-CR2	<1	194	5	157	<.3	10	27	1208	5.73	2	<5	<2	<2	90	<.2	<2	<2	187	2.34	.166	2	21	1.71	171	.32	<3	2.01	.08	.92	<2	10
ST96-CR3	<1	147	5	50	<.3	8	20	910	4.93	<2	7	<2	<2	80	<.2	<2	<2	161	1.91	.185	4	15	1.57	95	.33	<3	2.06	.07	1.08	<2	14
ST96-CR4	<1	101	6	38	<.3	6	15	871	3.45	<2	<5	<2	<2	118	<.2	<2	<2	107	2.10	.167	3	9	1.01	69	.28	3	1.50	.06	.45	2	15
ST96-CR5	<1	19	5	24	<.3	16	18	648	5.56	2	8	<2	<2	131	<.2	<2	<2	177	5.27	.195	3	19	.99	53	.21	5	1.28	.06	.20	<2	<2
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STRAW96-DR3	1	110	<3	44	<.3	32	20	725	4.02	<2	<5	<2	<2	96	<.2	<2	2	123	3.55	.145	2	78	1.83	213	.30	<3	2.23	.08	.95	<2	5
STRAW96-DR4	2	33	<3	2	<.3	6	9	30	1.32	3	<5	<2	<2	4	<.2	<2	<2	5	.04	.004	<1	18	.02	35	<.01	<3	.05	<.01	.04	2	103
STANDARD C2/AU-R	19	58	41	129	6.6	68	35	1160	4.24	45	23	7	33	49	19.7	16	16	67	.50	.108	37	60	.99	185	.07	26	2.05	.06	.15	10	486

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU** ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 31 1996 DATE REPORT MAILED: Nov 13/96 SIGNED BY. D. Toye ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

1996 PROSPECTING

ON THE

SKULL 1-4 MINERAL CLAIMS

CLINTON MINING DIVISION

NTS 92P\15W

BY

D.W. RIDLEY (owner-operator)

DECEMBER 1996

WORK APPROVAL NUMBER; KAM-96-0300492-171

SUMMARY

The **SKULL** property is located approximately 45 kilometers northeast of 100 Mile House BC, on the south shore of Canim lake. The property covers both private and crown land although most of the showings are situated on private land and so permission should be obtained prior to examining the outcrops. The **SKULL** showings were discovered in the late fall of 1994 following logging on the private property. In 1995 my wife, Catherine, included this property in part of her Prospectors Assistance Grant (95\96 P101).

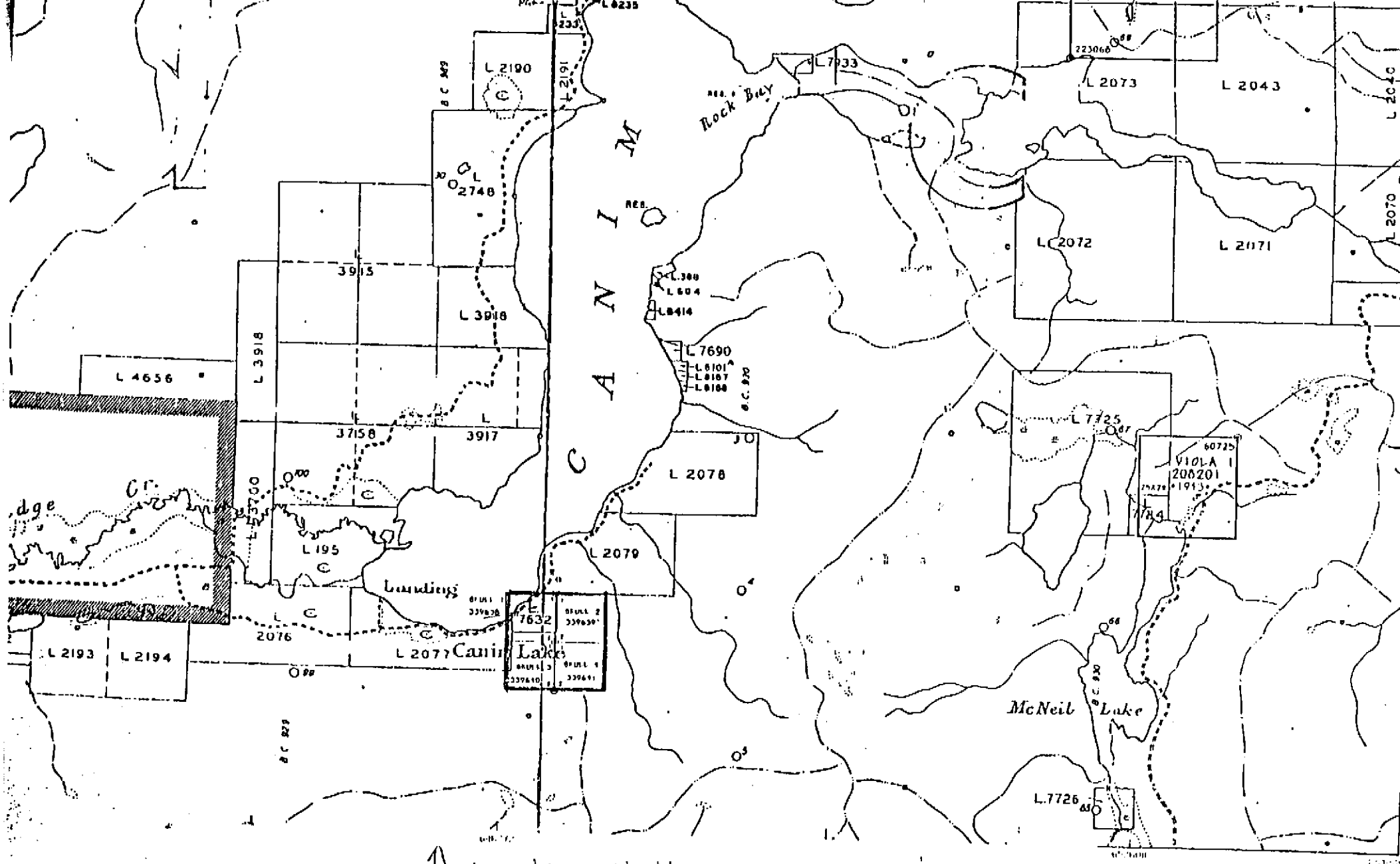
The **SKULL** property is underlain by a thick succession of mafic to intermediate flows, breccias, and tuffs of the Eocene to Oligocene Skull Hill Group which rises over 2500 feet above Canim lake. A Tertiary volcanic center may be present beneath the lake at the mouth of Bridge creek. This is due the roughly circular nature of the topography near the junction of north-south and east-west regional-scale faulting.

The property covers showings of argillic altered basaltic breccia which locally contains stockwork-style veinlets of coarsely-crystalline calcite and a narrow vein of dark-grey chalcedonic quartz which were found to contain anomalous gold values ranging from 200-560 ppb. Subsequent analysis of this zone and others encountered during this program failed to produce any anomalous gold values. The argillic alteration can be traced about 700 meters westerly along the hillside forming a clearly discernible bed ranging from 2 to +4 meters in width and dipping at about 45 degrees south into the slope. No gold values were obtained from eight rock samples taken at various points across the zone. The showings exhibit good epithermal features indicative of the upper-most, high level, portion of a Tertiary epithermal system. No evidence was found of epithermal activity above the known showings which indicates that these represent the "paleo-surface" and the top of the system. Therefore it is possible that more substantial mineralization could well lie at depth. Diamond drilling is the only sure way to test this property further as there is a great depth of talus and glacial overburden on the lower slopes where the target would be located.

The target would be relatively small, high-grade gold veins similar to the Blackdome mine, west of Clinton, BC.

LOCATION AND ACCESS

The **SKULL** property is located approximately 45 kilometers northeast of 100 Mile House, BC, and is situated on the southeast shore of Canim lake. The showings are located on private land about 400 feet above the lake level and are accessed by


L 2190
L 7933
L 2073
L 2043
Rock Bay
L 2748
3915
L 3918
L 4656
L 7690
L 2072
L 2071
L 7725
VIOLA 1
L 2078
L 195
L 2079
Landing
L 7632
L 2076
L 2193
L 2194
L 2077
Canim Lake
McNeil Lake
L 7726
Location Skull 1-4
N
1:50,000 scale
NTS 92P/15W
Clinton M.D.

recent logging skid-trails through the private property. Permission should be obtained from the land-owners prior to viewing the showings. A paved year-round road as well as telephone and hydro transmission lines are found along the lakeshore.

Topography is quite steep ranging from 2500 feet at lake level to over 4000 feet on Bald Mt. at the southeast edge of the property. The private property had been logged which led to increased rock exposure along the lower slopes. The present showings would not be visible without this logging activity due the enormous amount of till and colluvial material covering most of the steep slopes. The rest of the property is densely forested with douglas fir, pine, and lesser cedar, spruce, poplar, and birch.

CLAIM STATUS

The **SKULL** property consists of four two-post mineral claims situated in Clinton Mining Division and are held by D.W. Ridley of General Delivery, Eagle Creek, BC, VOK 1LO. The claims were staked following discovery of highly altered basaltic breccia float by Darin Black of Canim lake. Subsequent prospecting by the author led to discovery of the outcrop showings. Pertinent claim data is listed below;

Claim Name	Record No.	Date Staked	**Expiry Date**
Skull 1	339638	Sept. 2, 1995	Sept. 2, 1998
Skull 2	339639	Sept. 2, 1995	Sept. 2, 1998
Skull 3	339640	Sept. 2, 1995	Sept. 2, 1998
Skull 4	339641	Sept. 2, 1995	Sept. 2, 1998

PROPERTY HISTORY

The **SKULL** claims were located to cover argillic-altered basaltic breccia outcrops that locally contain calcite and chalcedonic quartz veinlets which were found to carry anomalous gold values. A Prospectors Assistance Grant awarded to Catherine Ridley in 1995 has been the only work carried out on the property prior to this program. The 1995 work uncovered a zone ranging from 2 to over 4 meters in width which can be traced intermittently for 700 meters along the hillside to the west of the main showing. Sampling at this time indicated no significant gold anomalies along strike away from the main showings. Limited prospecting away from this zone failed to find additional mineralization or alteration. During the spring of 1996 application was made and

approved to include the **SKULL** property in a regional prospecting program under the Prospectors Assistance Grant program of the BC government. This is the subject of this report which has been used for assessment work credit on the claims.

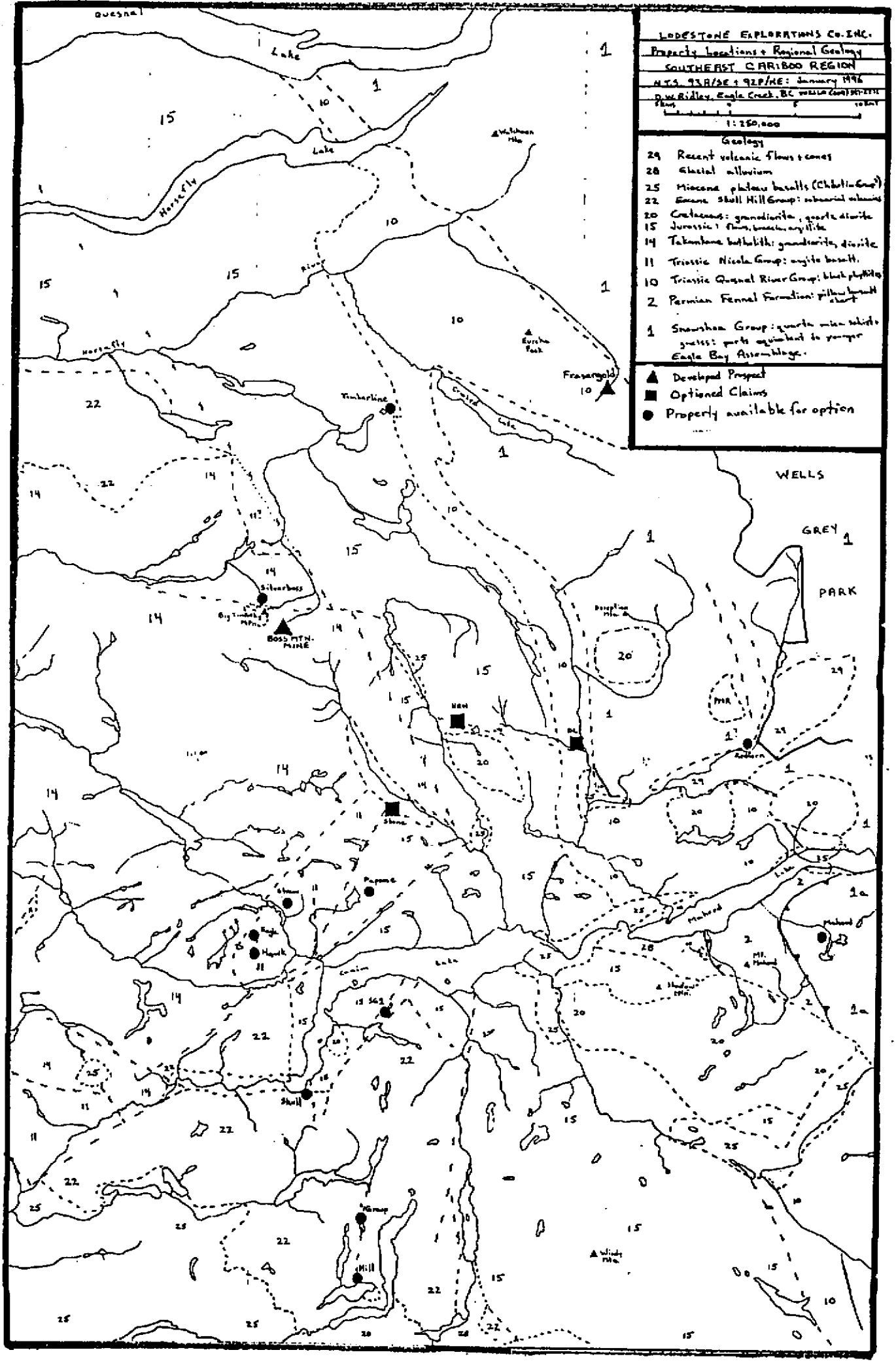
REGIONAL GEOLOGY

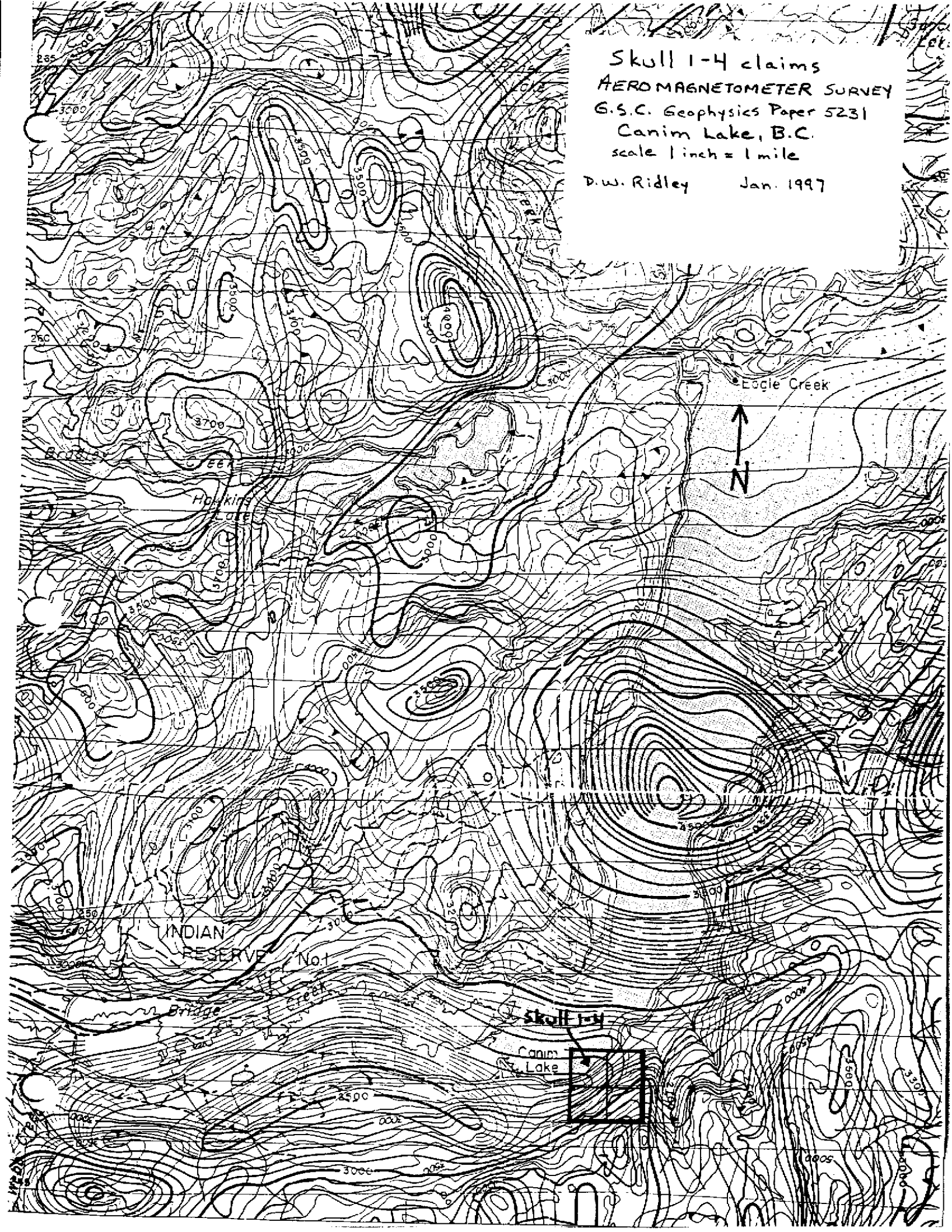
The **SKULL** property lies within the Quesnel Trough, a subdivision of the Intermontane belt, which is composed of Triassic-Jurassic volcanic, volcaniclastics, and sedimentary rocks which are variably intruded by plutons ranging from Triassic-Cretaceous and partially covered by younger Tertiary volcanics and sediments.

The property is underlain by rocks of the Eocene-Oligocene Skull Hill Group consisting of dacite, trachyte, basalt, andesite, rhyolite, and related breccias and tuffs. Locally individual beds may contain abundant vesicle-fillings of chalcedony and\or zeolites of primary origin. An ancient "quarry" is located on the hill north of Canim Lake Indian Reserve and provided material for arrow-heads, tools, and decoration. Although the area hasn't been examined by the author, it appears, from a distance, to be more or less altered. This zone appears fairly large and could be easily sampled.

A fault-bounded wedge of Jurassic volcaniclastic sediments occurs just east of the property. The Jurassic rocks are cut by the Howard lake fault, a major northeast trending structure which hosts the "failed porphyry" mineralization on the Sleeping Giant property approximately nine kilometers northerly. Another north trending fault, much of it lying beneath Canim lake, converges with the Howard lake fault above and south of the **SKULL** property. An east-west trending fault structure is assumed to occupy the Bridge creek valley west of Canim lake. Although no direct evidence was found to support this the strong lineament of the valley, steepness and height of surrounding hills, and the air magnetometer survey all point to possible east-west faulting in this area.

Miocene to Pliocene plateau lava, olivine basalt, basaltic andesite, and related ash and breccia beds of the Chilcotin Group form extensive exposures immediately west of the property. The area was extensively glaciated and Bridge creek was a major drainage for the area as seen by the eskers and gravel deposits on the main road west of Canim lake.


LODESTONE EXPLORATIONS CO. INC.
Property Locations + Regional Geology
SOUTHEAST CARIBOO REGION
N.T.S. 93A/SE + 92P/NE: January 1996
D.W. Ridley, Eagle Creek, BC
1:250,000
Geology
29 Recent volcanic flows + cones
28 Glacial alluvium
25 Miocene plateau basalts (Chilcotin Group)
22 Eocene Skull Hill Group: subaerial volcanics
20 Cretaceous: granodiorite, quartz diorite
15 Jurassic? flows, breccias, argillite
14 Takomkane batholith: granodiorite, diorite
11 Triassic Nicola Group: argillite basalt
10 Triassic Quesnel River Group: black phyllite
2 Permian Fennel Formation: pillow basalt
1 Snowshoe Group: quartz mica schists, gneiss; parts equivalent to younger Eagle Bay Assemblage.
Developed Prospect
Optioned Claims
Property available for option
Quesnel Lake
Horsefly River
Frasergold
Timberline
Silverboss
BOSS MTN. MINE
WELLS GREY PARK
Pigeon
Eagle
Hawk
Skull
Mt. Holland
Hill
Windy Mtn.


Skull 1-4 claims
AERO MAGNETOMETER SURVEY
G.S.C. Geophysics Paper 5231
Canim Lake, B.C.
scale 1 inch = 1 mile
D.W. Ridley Jan. 1997
Eagle Creek
N
Hawkins Lake
INDIAN RESERVE No.1
Bridge
Creek
skull 1-4
Canim Lake

1996 WORK PROGRAM

The 1996 work program was carried out intermittently between July and the end of October and focused on determining the extent of the altered zone and detailed prospecting of the claim area and the surrounding ground. A total of fifteen prospecting days were spent on this program with four days for hand-trenching the altered zone and the remainder prospecting above the zone. A. McNutt, geologist for Rio Algom Ltd., examined and sampled the altered zone in late August, 1996. Rio's target was a large, low-grade, bulk tonnage gold deposit and subsequent sampling failed to indicate any gold mineralization associated with the altered zone. Discussions with him led to the present model for the property. A total of nine rock samples were submitted from the altered zone whereas no samples were taken during the prospecting because no mineralization or alteration was encountered.

1996 PROSPECTING AND ROCK SAMPLING

Outcrop is generally well-exposed on the higher slopes above Canim lake although recent logging of private land on the lower slopes have exposed a large amount of otherwise buried outcrops. Initial work in 1995 revealed an extensive, linear zone of argillic-altered basaltic breccia with local coarsely-crystalline calcite and dark-grey chalcedonic quartz stockworks. The sampling carried out at this time indicated up to 568 ppb gold across 50 cms. of chalcedonic quartz veining and 270 ppb gold across two meters of calcite and minor chalcedonic quartz stringers at the main zone. The altered zone was traced sporadically in outcrops for about 700 meters westward along the hillside. No other stockwork veining was seen even though the argillic alteration remains quite strong and fairly consistent over the length of the exposures. The zone is best exposed where the recent logging has occurred. It is safe to assume that the zone would not be visible without the logging. This is illustrated by the lack of exposures on crown land between the two parcels which were logged. The zone would naturally weather recessively given the extreme clay alteration and generally broken nature of the altered zone. It is believed that these features will greatly impede the discovery of similar material on ground that has not been logged.

During late-July 1996 several hand trenches were dug across the altered zone to better expose it for sampling. In late August 1996, A. McNutt, geologist for Rio Algom, examined and sampled the main zone and several of the trenches. No gold or epithermal "pathfinder" elements were detected in these samples and Rio lost interest. It was concluded that "While there may be potential for epithermal gold mineralization, what we observed suggests only low potential for a bulk mineable deposit of a size

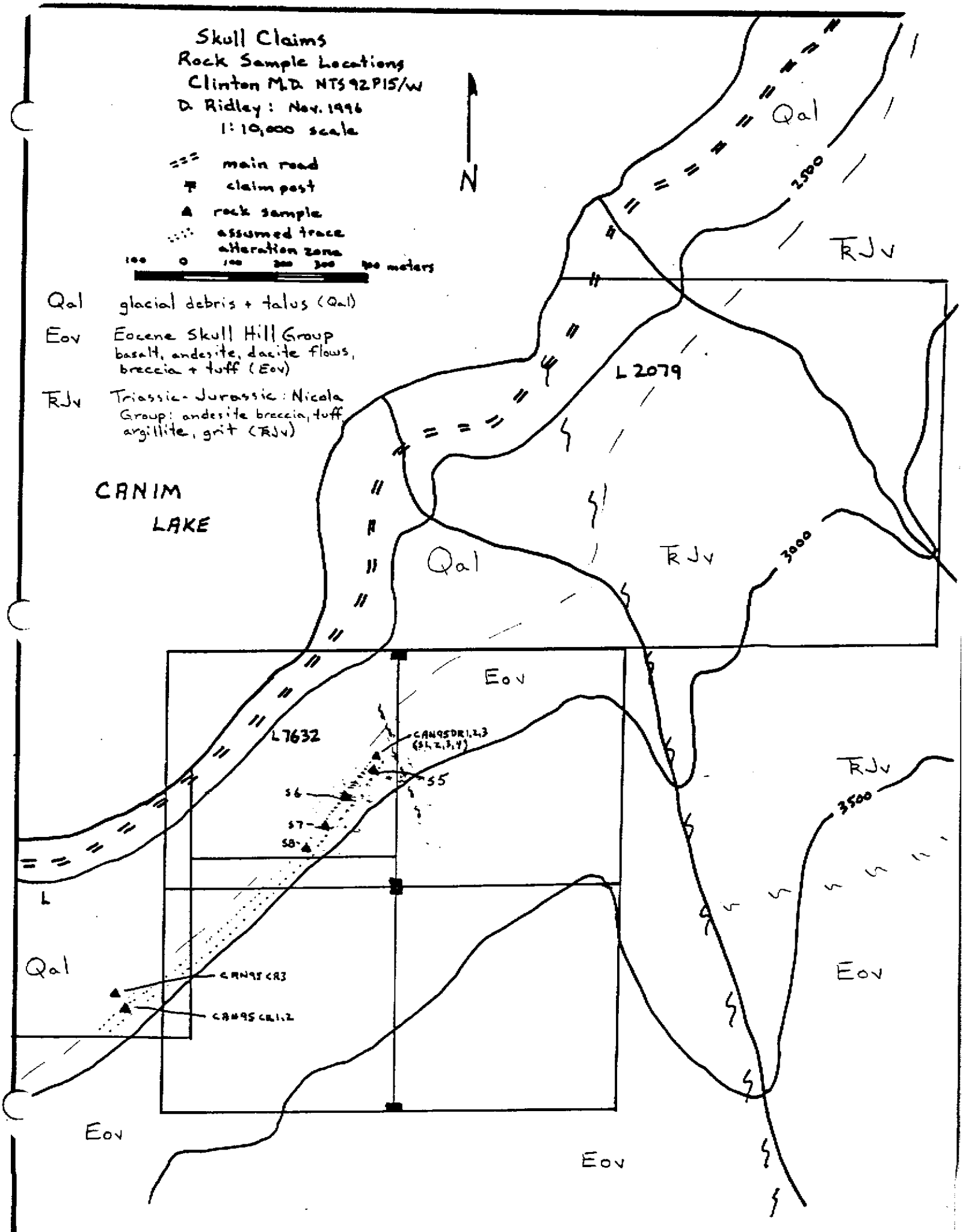
which would interest Rio Algom." (personal communication, Sept. 23, 1996). It is not known why these samples returned such disappointing values even though similar material was sampled. This is further complicated by the fact that the two batches of samples were sent to different labs. Unfortunately no other samples were obtained prior to an early snowfall and the end of the prospecting season. The main zone appears to represent the upper-most, cooler portions of an epithermal system. The basaltic breccia unit formed a favorable path for hydrothermal solutions which were contained by more resistant, dense, black basalt flows.

Several prospecting traverses were conducted peripheral to the main alteration zone in an attempt to delineate controlling structures and\or discover additional mineralized or altered zones. Outcrops examined were mainly a monotonous assemblage of basaltic breccia, lahar, and flows with related tuff and minor mudstone beds. No other significant alteration or mineralization was found above the known zone. Locally vesicular basalt flows contain fillings of chalcedony and various zeolites(?). These were not found to be associated with any mineralization or epithermal-style alteration and are believed to be of primary origin, formed while the magma was cooling. Some of the beds contain abundant hematite resulting in bright red outcrops while most are dark brown to black weathering. The beds generally strike along the hillside and dip moderately to steeply into the hill. The outcrops are generally monolithic suggesting proximity to a volcanic vent. It is possible that such a vent occurs beneath Canim lake near the outlet of Bridge creek. This is due the relatively circular nature of the topography near the junction of late, possibly Tertiary, east-west and north-south regional-scale faulting.

There is a large amount of "pretty-looking" rock in the vicinity and there may be some potential for lapidary material. In addition, semi-precious gem material such as agate or opal may be found in this environment. The Skull Hill Group covers a large area and only a small portion has been examined to date. Prospecting during this work program indicates that chalcedony-bearing vesicles and rarer volcanic bombs are fairly widespread throughout the Skull Hill volcanics. This may represent another target for prospecting in the area.

CONCLUSIONS AND RECOMMENDATIONS

Based on a compilation of past data and the results of the 1996 work program it can be concluded that the **SKULL** property has some potential to host epithermal gold mineralization at depth. A bed of basaltic breccia has been preferentially altered by hydrothermal solutions to form extensive clay (argillic)alteration. Stockwork-style veinlets of coarsely-crystalline calcite and lesser fine-grained, dark to light grey, vuggy, chalcedonic quartz are found at the eastern end of the altered zone which can be traced intermittently for 700 meters westward along the hillside. Minor gold values


Skull Claims
Rock Sample Locations
Clinton M.D. NTS 92P15/W
D. Ridley: Nov. 1996
1:10,000 scale
main road
claim post
rock sample
assumed trace alteration zone
100 0 100 200 300 400 meters
N
Qal glacial debris + talus (Qal)
Eov Eocene Skull Hill Group basalt, andesite, dacite flows, breccia + tuff (Eov)
TRJv Triassic-Jurassic: Nicola Group: andesite breccia, tuff, argillite, grit (TRJv)
CANIM LAKE
Qal
TRJv
2500
L 2079
3000
Eov
L 7632
CAN95DR1,2,3 (S1,2,3,4)
S5
S6
S7
S8
3500
L
CAN95CR3
CAN95CR1,2
Eov
Eov
Eov

were found associated with the veining although subsequent analysis failed to show any gold values. The altered zone appears to be 2-4 meters thick and contained within an upper and lower dense basaltic flow which probably directed fluid movement along the more porous breccia unit. There could be significant potential for finding deposits of semi-precious gem material or good lapidary rock elsewhere in the Skull Hill volcanics.

Further work on the **SKULL** property should be in the form of detailed geological mapping, machine trenching, and diamond drilling. Geophysical surveys may aid in mapping, delineating the altered zone, and possibly locate its source. The great thickness of glacial debris which is covered by talus prevents conventional prospecting on the lower slopes. As this would be the target area for epithermal gold-type mineralization it is probable that diamond drilling would be the only sure means of testing the property further. Since this work would be conducted on private property it would be necessary to have the approval and support of the local land-owners.

DISCUSSION

The Skull Hill Group appears to have significant potential to host epithermal gold-type targets. The **Megabucks** property, in the Horsefly district to the north, is hosted by Eocene Skull Hill volcanics at the margin of the Takomkane batholith (Panteleyev, A. et al; 1996; Bulletin 97). The **Silverboss** property, on Big Timothy Mountain, between Horsefly and Canim lake, contains many mineralogical similarities to the **Megabucks** showings. While the **Silverboss** showings are hosted in batholith rocks the summit is capped by Tertiary cones and flows and several late, basaltic dykes carry minor copper mineralization (Ridley DW.; 1996). In addition, the batholith rocks have been intruded by later hornblende-feldspar porphyry bodies which are somewhat similar to those at the **Megabucks** property. These porphyry bodies may represent the source of the Tertiary volcanics and so the age of the **Silverboss** showings could well be Tertiary also.

Therefore the Skull Hill rocks around the periphery and within the Takomkane batholith should be subjected to detailed prospecting. In addition, faults cutting the Tertiary rocks should be examined and sampled where applicable.

BIBLIOGRAPHY

CAMPBELL, RB, TIPPER, HW; 1971; Geology of the Bonaparte Lake Map Area; GSC Memoir 363.

PANTELEYEV, A, et al; 1996; Geology and Mineral deposits of the Quesnel River-Horsefly Map Area; Central Quesnel Trough, BC; Bulletin 97.

RIDLEY, C.; 1995: Prospecting Report to the BC Prospectors Assistance Program; 95\96 P101.

RIDLEY, DW, 1996; Prospecting Report on the Silverboss Group; Ass. Rpt. # 23677.

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RIO ALGOM EXPLORATION INC.

900 - 409 GRANVILLE ST.
VANCOUVER, BC
V6C 1T2

Project : 7100
Comments:

Page Number : 1-A
Total Pages : 1
Certificate Date: 15-SEP-96
Invoice No. : I9630966
P.O. Number :
Account : GZ

CERTIFICATE OF ANALYSIS A9630966

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
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S2 448205H	205	226	< 5	< 0.2	1.50	< 2	150	0.5	2	1.38	< 0.5	13	31	7	3.67	< 10	< 1	0.28	30	1.88	510
S3 448206H	205	226	< 5	< 0.2	1.27	< 2	140	0.5	< 2	1.22	< 0.5	11	35	6	3.16	< 10	< 1	0.30	20	2.02	480
S4 448207H	205	226	< 5	< 0.2	0.13	2	10	1.0	< 2	1.38	< 0.5	4	368	4	0.74	< 10	< 1	0.03	< 10	0.05	260
S5 448208H	205	226	< 5	< 0.2	1.35	< 2	70	0.5	< 2	0.94	< 0.5	20	106	22	3.71	< 10	< 1	0.13	30	0.70	935
S6 448209H	205	226	< 5	< 0.2	1.57	< 2	90	0.5	< 2	1.04	< 0.5	21	96	21	4.52	< 10	< 1	0.12	30	1.03	980
S7 448210H	205	226	< 5	< 0.2	1.28	< 2	70	0.5	< 2	0.88	< 0.5	15	101	22	3.11	< 10	< 1	0.15	30	0.59	600
S8 448211H	205	226	< 5	< 0.2	0.78	< 2	70	0.5	< 2	1.78	< 0.5	20	64	25	4.12	< 10	< 1	0.12	30	0.69	990
G1 448212H	205	226	< 5	0.2	0.39	12	140	0.5	< 2	5.47	< 0.5	9	26	5	3.21	< 10	< 1	0.10	< 10	1.98	860
H1 448213H	205	226	< 5	< 0.2	0.97	54	240	0.5	< 2	0.17	< 0.5	2	37	4	2.38	< 10	< 1	0.28	50	0.06	255
H2 448214H	205	226	< 5	< 0.2	0.68	26	690	0.5	< 2	0.24	< 0.5	2	26	2	2.37	< 10	< 1	0.20	50	0.07	455
H3 448215H	205	226	< 5	< 0.2	0.88	10	60	0.5	< 2	0.45	< 0.5	3	12	1	2.89	< 10	< 1	0.16	40	0.20	610

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RIO ALGOM EXPLORATION INC.

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Project : 7100
Comments:

Page Number :1-B
Total Pages :1
Certificate Date: 15-SEP-96
Invoice No. :19630966
P.O. Number :
Account :GZ

CERTIFICATE OF ANALYSIS A9630966

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
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S3 448206H	205	226	1	0.12	7	1760	2	< 2	6	200	0.16	< 10	< 10	130	< 10	80
S4 448207H	205	226	1	0.01	10	130	2	< 2	1	23	< 0.01	< 10	< 10	15	< 10	8
S5 448208H	205	226	< 1	0.07	31	1850	6	2	13	110	0.01	< 10	< 10	117	< 10	66
S6 448209H	205	226	< 1	0.08	36	2340	8	< 2	14	144	0.03	< 10	< 10	118	< 10	78
S7 448210H	205	226	< 1	0.05	27	2040	4	< 2	13	96	0.01	< 10	< 10	113	< 10	36
S8 448211H	205	226	< 1	0.03	28	1880	4	< 2	12	111	< 0.01	< 10	< 10	79	< 10	68
G1 448212H	205	226	1	< 0.01	5	1770	12	2	5	423	< 0.01	< 10	< 10	50	< 10	58
RL 448213H	205	226	6	< 0.01	2	710	20	< 2	< 1	44	< 0.01	< 10	< 10	5	< 10	90
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H3 448215H	205	226	1	< 0.01	< 1	710	16	< 2	< 1	34	< 0.01	< 10	< 10	1	< 10	72

CERTIFICATION:

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

PAPOOSE 1&2 mineral claims

CLINTON MINING DIVISION

NTS 92P\15W

BY

D.W. RIDLEY (owner-operator)

General Delivery

Eagle Creek, BC

V0K 1L0

JANUARY 1997

WORK APPROVAL NUMBER KAM-96-0300389-168

SUMMARY

The **PAPOOSE** property is situated approximately 58 kilometers northeast of 100 Mile House, BC. The claims are underlain by mafic to intermediate-felsic volcanics, volcaniclastic sediments, and volcanic breccias and related tuffs which are intruded by diorite, gabbro, and feldspar porphyry bodies of Triassic to Cretaceous(?) age.

The area of the **PAPOOSE** property was held for a number of years by Imperial Metals Corp. who performed extensive soil sampling surveys prior to optioning the ground to Eastfield Resources Ltd. who conducted detailed silt sampling, geological mapping, geophysical surveys and some caterpillar trenching. Imperial performed IP surveys prior to allowing the ground to lapse. The present property was staked in 1993 after a review of past data. Logging had progressed in a portion of the claims which contained some interesting geochemical values. Prospecting of these areas led to the discovery of several mineralized and altered zones which contained highly anomalous arsenic, copper, and gold values. The **Cate** showing shows the most promise in light of the 1996 work program.

Mineralization consists of gold, arsenic, and\or copper values in quartz-carbonate vein breccias, hornfelsed shear zones, and a narrow, sulphide-rich shear zone (manto?) that contains up to 2.18 oz\ton gold at the **Cate** showing. The **Cate** showing consists of pyrite-pyrrhotite-arsenopyrite, and lesser chalcopyrite within a broader zone of quartz-ankerite alteration which appears to be associated with a feldspar porphyry dyke trending 030'. The dyke can be traced northwards across the lake where anomalous gold, arsenic, and copper values appear to be roughly associated with it. To the south the dyke was traced onto the Christmas property of Homestake Canada Ltd. The **Cate** showing is on apparent strike with Homestake's **Lisa** showing, some 1.5 kilometers south. The **Lisa** showing consists of subcrop rubble which is quartz-ankerite altered, pyrite-arsenopyrite bearing and returned up to 3510 ppb gold. Outcrop in the vicinity is said to strike 030' and dips moderately to the west.

Homestake Canada was contacted in mid-November, 1996, about the apparent relationship between the **Cate** and **Lisa** showings. They offered to analyze my rock and soil samples from the 1996 work program with the possibility of optioning the **PAPOOSE** property if results prove significant. To date I'm still awaiting the sample results which will be appended when they arrive.

The 1996 work program was conducted sporadically between July 15 to November 3, 1996 and resulted in the collection and subsequent analysis of 33 rock and 38 soil samples. This program required nineteen prospecting days.

LOCATION AND ACCESS

The **PAPOOSE** property is located approximately 58 kilometers northeast of 100 Mile House, BC, and is easily reached by paved and gravel roads. Access from highway 97 is via the Canim Lake road to Eagle Creek bridge thence the Hendrix Lake road northerly about five kilometers to the junction with the Lang Lake forest access road. This road is followed for about one kilometer to a small arterial which leads to the **Cate** showing. The LCP for the **PAPOOSE 1** lies above the Succour Lake campsite while that for the **Papoose 2** is in a clear-cut south of Catherine lake. Several logging arterials provide access to the center and peripheries of the claim. The center of the property is within two kilometers of a hydro transmission line.

The claims are adjacent to the west side of the Interior Dry belt bioclimatic zone and are situated in the Quesnel Highlands physiographic region. Topography on the property is relatively flat with elevations ranging from 3300-3600 feet. Several lakes and small ponds provide ample water for exploration purposes.

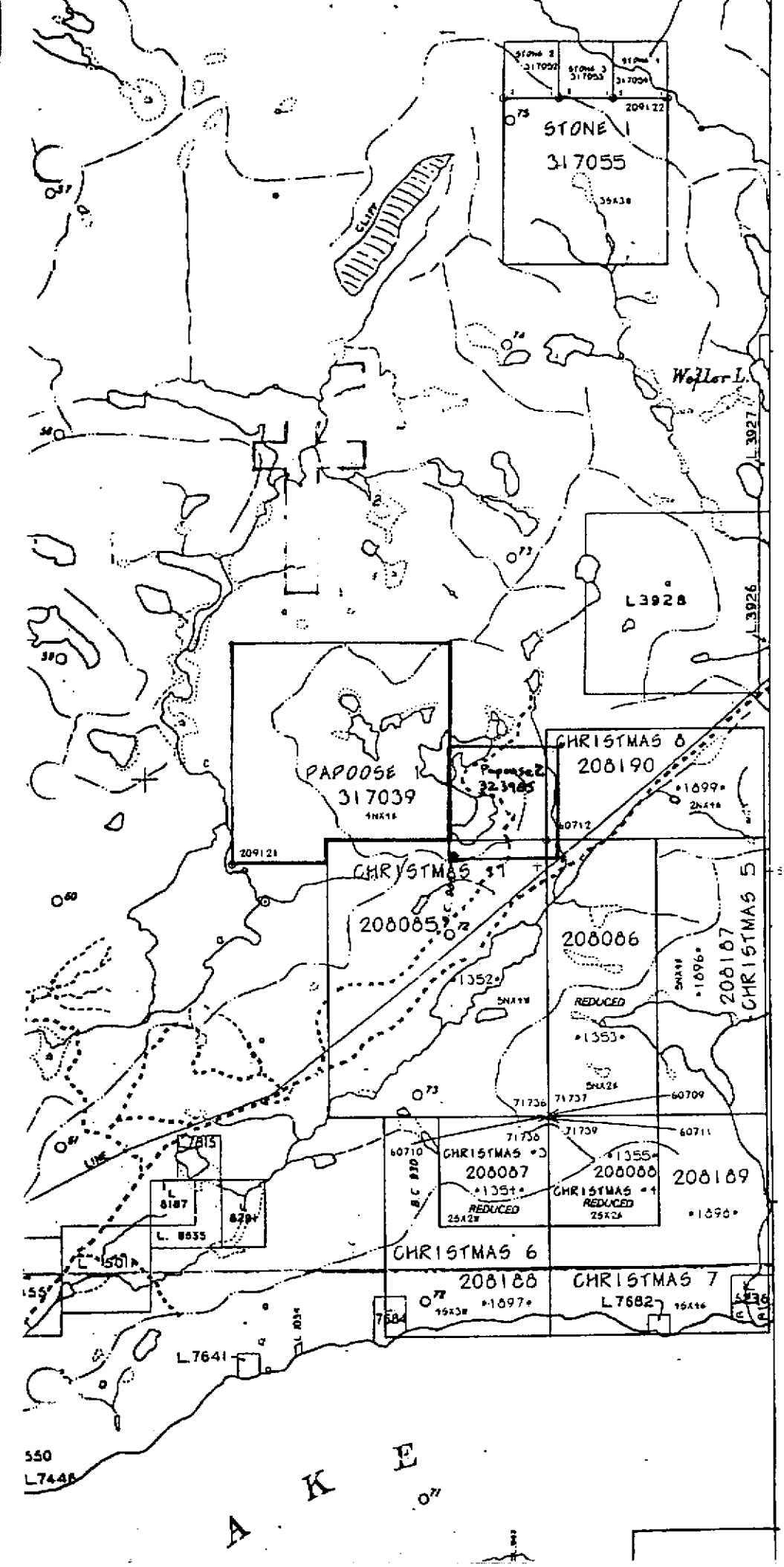
Most of the property is covered by a dense second-growth forest consisting of pine, douglas fir, spruce, balsam, poplar and birch with local willow, alder, and swamp birch thickets. Three recent logging clear-cuts in the southeast, central, and northeast portions of the property provide access and greater outcrop exposure than the forested areas. In addition, most of the known showings are clustered within them.

CLAIM STATUS

The **PAPOOSE** property consists of twenty units staked by the modified grid system and situated in Clinton Mining Division. They are held 100% by D.W. Ridley of General Delivery, Eagle Creek, BC, VOK 1LO. Pertinent claim data is listed below;

CLAIM NAME	RECORD NO.	DATE STAKED	**EXPIRY DATE**
Papoose 1	**3177039**	**Apr. 5, 1993**	**Apr. 5, 1998**
Papoose 2	**323985**	**Mar. 8, 1994**	**Mar. 8, 1998**

***** PENDING ASSESSMENT REPORT approval*****



PROVINCE OF
BRITISH COLUMBIA

MINISTRY OF
ENERGY, MINES AND
PETROLEUM RESOURCE

MINERAL TITLES REFERE

MAP 092P15W

U.T.M. ZONE 10

LAST MAP UPDATE: 1993 AUG 05

ORIGINAL PRODUCED AT 1:31680

METRES
500 0 500 1000 1500 2C

ADMINISTRATIVE AREAS

MINING DIVISIONS: CARIBOO, CLINTO

LAND DISTRICTS:

PIONEER METALS CORP.	
PAPOOSE Claims	DEC. 1993
Claims Location Map	
Clinton M.D. NTS. 92P/15W	
D. Ridley	FIG. 2

500 0 500 1000 2000
1:50,000 meters

CONDITIONAL AREAS

SUBJECT TO CONDITIONS RESERVE

SECTION 19 RECREATION AREAS

I POST CLAIM AREAS

AREAS SUBJECT TO
URANIUM / THORIUM

PROPERTY HISTORY

The only previous claim to cover the current **PAPOOSE** property were the Senicar claims staked by Imperial Metals Corporation in late-1983 following reconnaissance soil sampling which returned highly anomalous arsenic, and sporadic copper and gold values. A small grid was sampled and limited geological mapping was conducted in 1984. Further recon-scale sampling and mapping was conducted in 1985 and 1986. Results from these preliminary surveys, along with indications of favourable results being obtained on nearby properties were sufficient evidence to justify a more thorough examination of the property in 1987. Two additional claims were added to the land package because of favourable results returned during this work program. In June, 1988, an Induced Polarization survey was followed by machine trenching of the more accessible targets.

The **Christmas** property of E&B Explorations (Homestake Canada?) adjoins the **PAPOOSE** property to the south. Gold values to 6290 ppb, with the majority in the 210-500 ppb range, were obtained during rock sampling of sulphide-bearing hornfels zones in green andesites, tuffs, and sediments of Jurassic age adjacent to a partially un-roofed quartz diorite stock of Cretaceous age. A large hornfels aureole extends outward 1-2 kilometers from the intrusive. Sulphide content (pyrite-pyrrhotite) is generally less than 1-2% with local zones of 2-10% which host the higher gold values. Subsequent work identified several anomalous gold values in soil samples and the hornfels zones showed a good Induced Polarization response. Prospecting uncovered the **Lisa** showing which is on apparent strike with the **Cate** showing on the **PAPOOSE** property. Although several drill targets were located no further work has been recorded for the **Christmas** claims, however, an extra five years work credit was applied to the claims in 1994.

The **PAPOOSE 1&2** claims were staked by the author in 1993 and 1994 following a review of data from past operators. An option was signed with Pioneer Metals Corp. who initiated a prospecting survey of anomalous zones delineated by past operators, especially those within recent logging clear-cuts. This work identified several small, low grade arsenic-copper-gold occurrences as well as discovering the **Cate** showing. Pioneer dropped its option in 1995 and the property reverted to D.W. Ridley. The property was included in a regional prospecting proposal submitted to the Ministry of Mines for application to funding under the Prospectors Assistance Program. The application was accepted and work began June 15, 1996. This work program forms the basis of this report.

REGIONAL GEOLOGY

The **PAPOOSE** property lies in the Quesnel Trough, a subdivision of the Intermontane tectonic belt, which is composed of Triassic to Jurassic volcanic, volcaniclastic, and sedimentary rocks which are intruded by various plutons ranging in age from Triassic to Cretaceous.

The oldest rocks in the region comprise augite andesite-basaltic flows, breccias and agglomerate, tuff, argillite, phyllite, greywacke, and black to grey limestone of the Triassic Nicola Group which is intruded by the upper-Triassic-Jurassic Takomkane batholith. The Takomkane batholith is a composite granodorite intrusion with hornblende-biotite quartz diorite and granodiorite, hornblende diorite, monzonite, gabbro, and hornblendite. Phases may be syenodiorite-diorite or quartz monzonite in composition and locally K-feldspar porphyritic, and quartz-rich (Blann; 1993).

A large magnetic high, northwest of the **PAPOOSE** property is visible on GSC Geophysics Paper 5231. Much of this area is underlain by magnetite-rich hornblendite, pyroxenite, gabbro and diorite. It is not clear whether this represents a border phase of Takomkane batholith or the emplacement of a younger, more mafic intrusion within it.

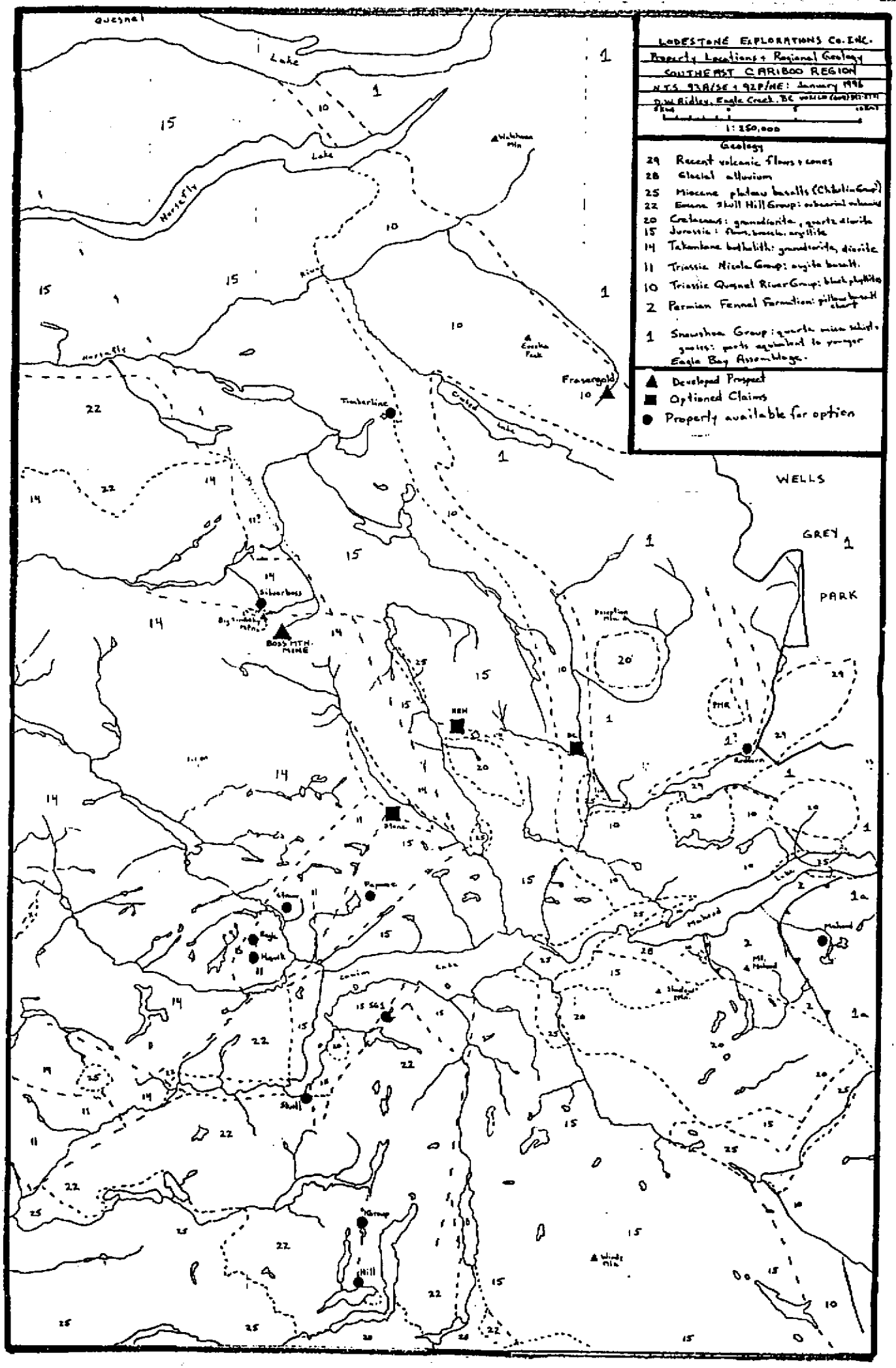
The **PAPOOSE** property is underlain by andesitic arenite, siltstone, grit, breccia and tuff, greywacke, minor argillite and flows of Jurassic age. these rocks are in apparent fault contact with all other rocks in the area. Jurassic and older rocks are intruded Takomkane batholith as well as several small satellite stocks consisting of biotite-quartz monzonite and granodiorite of Cretaceous age.

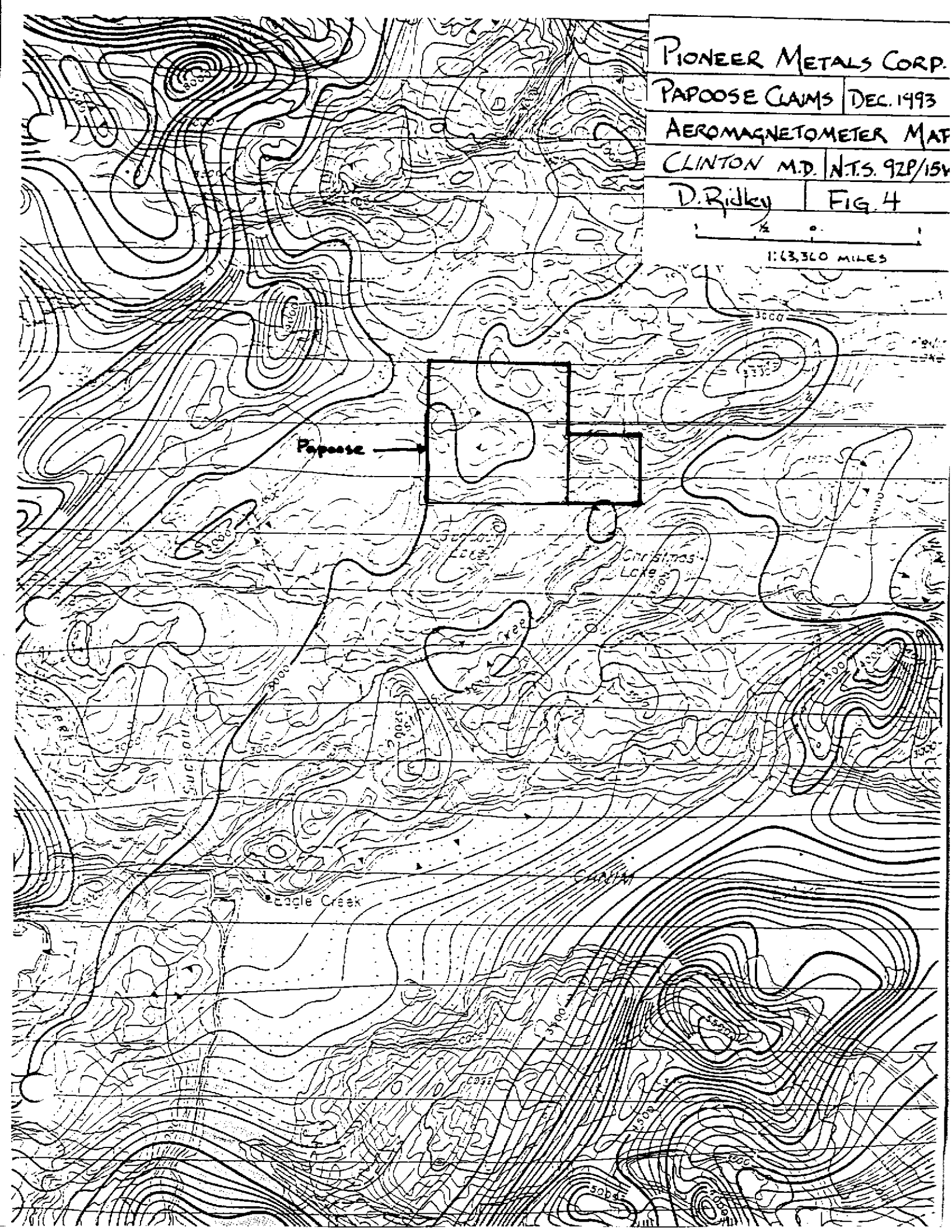
South of Canim lake, dacite, trachyte, basalt, andesite, rhyolite, and related breccias of the Eocene to Oligocene Skull Hill Group form the higher hills. Miocene and\or Pliocene plateau lava, olivine basalt, basaltic andesite, and related ash and breccia beds of the Chilcotin Group are found in the lower lying areas and form extensive exposures on the Fraser Plateau immediately west of the property.

The region has been extensively glaciated resulting in a relatively subdued topography, several lakes and swamps, and a generally thin mantle of overburden. The last ice movement appears to be generally towards the southeast, likely flowing into Canim lake. Extensive gravel deposits along the lower valleys indicate that the basic drainage pattern seen today has been in effect at least as long as the last major glaciation perhaps 8,000 years ago.

1996 WORK PROGRAM

The 1996 work program consisted of detailed prospecting, soil and rock sampling of the area surrounding the **Cate** showing. This work was targeted at determining whether the mineralization at the **Cate** showing continued northwards across the lake. Examination of the **Lisa** showing resulted in discovering similarities between the two showings and development of a new target on the **PAPOOSE** claims. Subsequent work lead to the present exploration model for the property. In late November I contacted Homestake Canada about the **Cate-**


LODESTONE EXPLORATIONS Co. INC.
Property Locations + Regional Geology
SOUTHEAST CARIBOO REGION
N.T.S. 93A/SE + 92P/NE: January 1996
Dow Ridley, Eagle Creek, BC
1: 250,000
Geology
29 Recent volcanic flows + cones
28 Glacial alluvium
25 Miocene plateau basalts (Chilcotin Group)
22 Eocene Skull Hill Group: subaerial volcanics
20 Cretaceous: granodiorite, quartz diorite
15 Jurassic: flows, tuffs, argillite
14 Takomkane batholith: granodiorite, diorite
11 Triassic Nicola Group: augite basalt
10 Triassic Quesnel River Group: black phyllite
2 Permian Fennel Formation: pillow basalt, chert
1 Snowshoe Group: quartz mica schist + gneiss; parts equivalent to younger Eagle Bay Assemblage.
Developed Prospect
Optioned Claims
Property available for option
Quesnel
Lake
Horsefly
River
Timberline
Frasergold
Silverboss
Boss Mtn. Mine
WELLS
GREY
PARK
Skull
Hill
Eagle
Hawk
Pigeon
Mt. Polley
Wells
Barkerville


PIONEER METALS CORP.
PAPOOSE CLAIMS | DEC. 1993
AEROMAGNETOMETER MAP
CLINTON M.D. | N.T.S. 92P/15W
D. Ridley | FIG. 4
1:63,360 MILES
Papoose
Christmas Lake
Eagle Creek

Lisa connection who offered to analyze my samples with a view to possibly optioning the property. The samples were shipped to Homestake in December, 1996 and I am currently awaiting the results and a decision from them.

GEOLOGY AND ROCK SAMPLING

Outcrop on the **PAPOOSE** property is best exposed in areas of recent logging clear-cuts, otherwise, hilltops and slopes provide relatively good exposures covered by a thin mantle of overburden. On many of the ridgetops a thick mantle of moss and lichens with little or no soil, mask the underlying bedrock. Past operators had identified two main anomalous zones. These areas are near the approximate center of the **Papoose 1** claim and in the southeast adjoining Homestake's **Christmas** property. Recent logging activities in these areas resulted in much more extensive outcrop exposures than were available to previous workers and several low grade gold occurrences were discovered including the **Cate** showing. The 1996 work program concentrated on the area of the **Cate** showing due the previously mentioned **Cate-Lisa** connection. Outcrop is estimated to be about 30% in the area of the grid with more extensive exposures on the steeper hills, particularly the southeast faces.

The **PAPOOSE** property is underlain by Triassic-Jurassic mafic to intermediate volcanics, volcaniclastic breccias and sediments, that have been intruded by diorite, gabbro, and feldspar porphyry dykes and plugs of Triassic-Cretaceous (?) age. Mineralization consists of gold, arsenic, and\or copper in quartz-carbonate vein breccias, hornfelsed shear zones, and a narrow, sulphide-rich , shear-hosted vein which contains up to 2.18 ounce\ton gold (**Cate** showing). Rock sampling during the 1996 work program returned generally disappointing results although this may be more a reflection of outcrop density rather than the lack of significant mineralization in the area. The rock sampling was successful in discovering two additional zones of interest on the grid and although the values may be low the showings are poorly exposed and therefore are of unknown extent. It is possible that these zones may be peripheral to more substantial mineralization. It is interesting to note that these occurrences are on either side of a highly anomalous soil sample which occurs in an area of little outcrop exposure. This soil sample returned values of 5.16 gram\ton gold, 1.6% arsenic, and 664 ppm zinc (PAP L7N;18+50E).

Detailed prospecting and rock sampling was carried out on a small grid situated between two lakes and extending an older grid from previous operators to the east. All outcrops in the area were examined and rock samples were taken where applicable. Rock sample locations, geological observations, and a compilation of past data are plotted on **FIG. 6.**

A zone of intense quartz-ankerite alteration, trending 155\90, and exposed for six meters along the shoreline of Catherine lake returned no anomalous values where sampled **(PAP96 DR1-4).** However, a highly anomalous soil sample, situated about 50 meters northwest, is on apparent strike with the alteration zone **(PAP L7N;17E).** A second zone of ankeritic alteration, trending 194\90, found along the lakeshore returned 186 ppb gold, 1395 ppm copper, and 1907 ppm arsenic across one meter of poorly exposed outcrop **(PAP96 DR6).** This zone lies immediately east of, and has a common attitude with, the feldspar porphyry dyke east of the **Cate** showing. A sample from the ankerite altered feldspar porphyry dyke approximately 30 meters northerly returned anomalous copper and correlates well to past sampling in the **Cate** vicinity **(PAP96 DR12).** Quartz-carbonate subcrop rubble with trace pyrite-chalcopyrite, lying about twenty meters eastward, returned 50 ppb gold, 294 ppm copper, and 562 ppm arsenic **(PAP96 DR7).** All the rocks in this area are more or less highly fractured and broken which results in regressive weathering and a lack of good exposures. The strongest fractures trend north-northeasterly, roughly paralleling the feldspar porphyry dyke, and dip vertically or steeply to the west. These are cut by later easterly trending fractures which dip vertically to moderately northward. Local variations occur which are likely indicative of faulting and possibly "stopeing" by underlying intrusions.

Hand-trenching was conducted on a zone of quartz veining with high pyrite content near **L8N;19+86E**. The zone remains poorly exposed and requires blasting or machine trenching to fully uncover it for sampling. A chip sample across 50 cms. in the floor of the trench, consisting of a 15 cms. wide quartz vein enclosed in highly chlorite-altered mafic volcanic, returned 165 ppb gold, 304 ppm copper, and 1910 ppm arsenic **(PAP96 DR17).** The vein trends 140\50SW and lies approximately 150 meters northwest of the highly anomalous soil sample at **L7N;18+50E.** The vein structure could not be traced beyond the confines of the hand trench due a great depth of colluvial material from the hillside above. A grab sample of material dug out of the trench returned 168 ppb gold, 1283 ppm copper, and 2662 ppm arsenic **(PAP96 DR18).** Several samples were taken in the area and no further anomalous values were found. The outcrops consist of mafic volcanics, in places brecciated, and are more or less chlorite-carbonate-quartz-pyrite altered. Epidote is mainly restricted to the diorite bodies which commonly are cut by epidote-quartz stringers and blobs of epidote which preferentially replace breccia clasts.

A small shear zone, trending 010\90, at **BL20E;4+20N**, consisting of quartz-carbonate stringers in highly chloritic mafic volcanic containing 1-2% disseminated pyrite returned anomalous values of 699 ppm copper across an exposed width of 40 cms **(PAP96 DR14).** This zone is poorly exposed and requires machine trenching to fully expose it. An outcrop of augite porphyry breccia with heavy chlorite-carbonate-quartz alteration and no visible sulphides occurs ten meters southeast. A sample across 1.5 meters returned no discernible anomalous values **(PAP96 DR15).** This outcrop trends 360\70W and is cut by strong fractures at 105\75N. A small outcrop consisting of dark green diorite which is cut by an epidote stockwork occurs thirty meters east of the **DR14** shear zone. This diorite may be part of other similar bodies mapped in scattered exposures roughly following the baseline and likely represents a dyke. Many of the mineralized outcrops are situated near, and appear to emanate from, the postulated trace of the dyke.

SOIL GEOCHEMISTRY

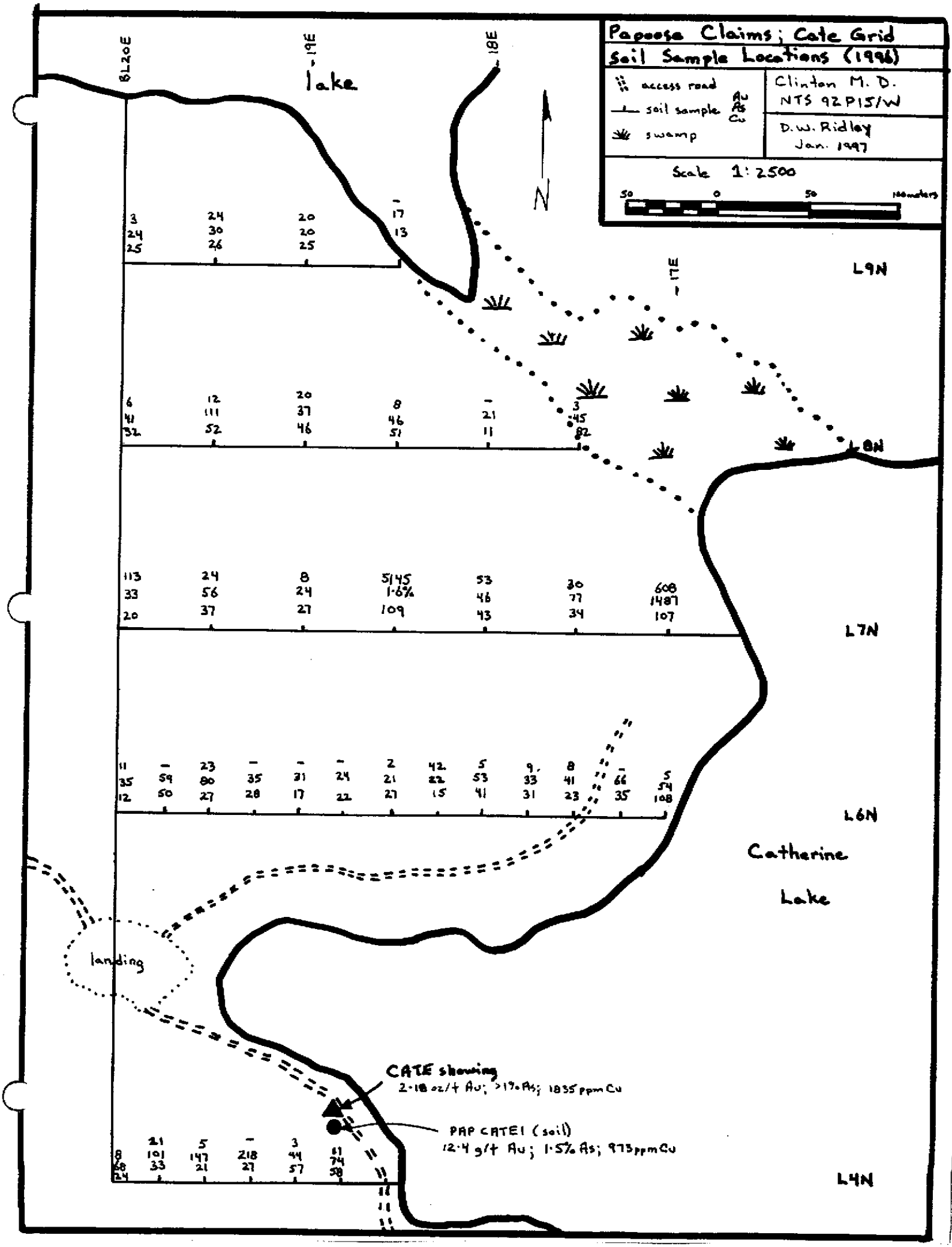
A small soil sampling program was initiated on the **Papoose** claims to extend past sampling over an area of favourable geology. A north-south baseline was established in the landing west of Catherine lake, and lines were run east-west at 100 meter intervals for 500 meters north to another lake and 100 meters south to the claim boundary. Soil sampling was carried out to the east only at 50 meter intervals. Lines **4N** and **6N** were sampled at 25 meter intervals due their proximity to the **Cate** showing. Samples were dug utilizing a soil auger which was supplemented by digging with a mattock in areas covered by thick talus accumulations. In general soil development is good and the "BF" horizon was collected for analytical purposes. This horizon was generally bright orange-red in colour and is less than thirty centimeters below the surface. A total of 38 soil samples were collected and submitted for geochemical analysis. One sample was taken of soil lying directly on top of the **Cate** showing in order to have some idea of its geochemical signature **(PAP CATE1)** and another was taken from a previous soil hole on the old TR grid for the sake of continuity **(PAP L7N;18+50TR).** The latter sample did not contain results similar to the previous sampling in 1987 although it is possible that the old hole was not found.

A grab sample of soil lying directly on the **Cate** showing returned the highest geochemical results of this program **(PAP CATE1).** This material was bright red-orange in colour, situated within 30 centimeters of surface and returned 12.42 gram\ton gold, 2.1 ppm silver, 973 ppm copper, 1.5% arsenic, 124 ppm cobalt, 129 ppm nickel, and 16% iron. The high values here were expected and illustrate the general effectiveness of geochemical soil sampling in the area.

A strong, unexpected anomaly found at **L7N;18+50E** returned 5.16 gram\ton gold, 4.6 ppm silver, 109 ppm copper, 97 ppm lead, 664 ppm zinc, 1.6% arsenic, and 38 ppm antimony. The sample was taken in an area of little outcrop and no geology is available to explain the anomaly although it appears to lie on the southern flank of an Induced Polarization chargeability high depicted in previous work **(Ass. Rpt. #17590).** Sampling density in this area is in-sufficient to determine true trends although low gold values appear to occur throughout the grid. Detailed soil sampling and hand trenching are required to determine the true significance of this zone.

A second strong anomaly occurs at **L7N; 17+00E** and returned values of 608 ppb gold, 107 ppm copper, and 1487 ppm arsenic. This sample is situated near an outcrop of feldspar porphyry which contains minor pyrite and epidote and returned non-anomalous values in rock sampling **(PAP96 DR27).** This soil anomaly lies approximately 60 meters north-northwest of, and on apparent strike with, a zone of quartz-ankerite alteration at least 12 meters wide which returned non-anomalous values where sampled along the lakeshore **(PAP96 DR1-4).**

Several other soil samples produced anomalous gold values, however, they were not associated with either copper or arsenic and are generally lowly-anomalous. Several samples


Papoose Claims; Cate Grid
Soil Sample Locations (1996)
access road
soil sample
swamp
Au
As
Cu
Clinton M. D.
NTS 92P15/W
D.W. Ridley
Jan. 1997
Scale 1:2500
50 0 50 100 meters
N
BL20E
19E
18E
17E
lake
L9N
L8N
L7N
L6N
L4N
Catherine
Lake
landing
CATE showing
2-18 oz/t Au; >1% As; 1835 ppm Cu
PAP CATE1 (soil)
12.4 g/t Au; 1.5% As; 973 ppm Cu

on **L4N** are anomalous in arsenic but the southern trace of the **Cate** structure was not located. Additional soil sampling is required to the south to determine the significance, if any, of these anomalies.

CONCLUSIONS

Based on the 1996 work program and a compilation of data from past operators it can be concluded that the **Papoose** property has good potential to host a "propylitic gold" type deposit similar to the **QR** mine near Likely BC. This is due the following points;

- Existence of mafic to felsic breccias and tuffs with subordinate argillite and finely laminated, carbonate-rich argillaceous sediments which are intruded by feldspar, diorite to gabbro, and hornblende porphyry plugs and dykes. This may represent a Jurassic volcanic center.
- Geochemical association of gold-arsenic-antimony, with or without copper in many of the exposures, as well as, widespread quartz-ankerite and propylitic alteration (chlorite-carbonate-quartz-pyrite and minor epidote).
- Sulphide-rich fracture fillings, veins, and shear zones which are anomalous in copper, arsenic, gold, with sporadic antimony, zinc, and cadmium. These zones may be peripheral to more substantial mineralization.
- Existence of soil samples which are highly anomalous in arsenic, gold, and copper, with lesser zinc, molybdenum, antimony, and cadmium.

RECOMMENDATIONS

Further work is definitely warranted for the **Cate** area of the **Papoose** claims and should be directed at the high soil anomalies found during this work program. Detailed geological mapping, hand trenching, rock and soil sampling, VLF-EM16 and magnetometer surveys should be carried out in the next phase of exploration. Machine trenching and\or diamond drilling would be carried out if the initial phase was favourable.

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ROCK SAMPLE SHEET

Sampler D. Ridley
Date June - July 1996 Property Papoose NTS 92P/15

SAMPLE NO.	Sample Width	DESCRIPTION: Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	ASSAYS
PAP96 DR1	1m	mafic volcanic	carb-chlorite	trace pyrite	poorly exposed outcrop along lake north of Cate showing: trend appears to be 155/90	
PAP96 DR2	1.5m	"	" calcite veins to 2cms	minor pyrite	grab from outcrop + float ≈ 5m S of DR1: a little more pyrite than at DR1	
PAP96 DR3	G	"	intense propylitic	pyrite to 1% trace cpy	grab from angular float + subcrop: 5m S of DR2; alteration much more intense than previous two.	
PAP96 DR4	1.6m	feldspar porphyry	carbonate chlorite	trace pyrite	≈ 5m South of DR3: end of outcrop.	
PAP96 DR5	G	mafic volcanic	hornfels	up to 3% pyrite on fracture surfaces	SW of DR4; grab from poorly exposed subcrop.	
PAP96 DR6	1m	ankerite shear	calcite ankerite ± quartz	1-2% pyrite minor cpy	on lakeshore ≈ 30m S of L6N: 17+75E; grab from outcrop + subcrop rubble; poorly exposed: shear trends 194/90	
PAP96 DR7	F	quartz	calcite	trace py-cpy	≈ 20m on 230° to DR6: beside lake: angular float possible subcrop: highly fractured + limonite stained	
PAP96 DR8	F	augite porphyry	chlorite	up to 2% py	≈ 20m South of L6N: 17E: along lake: possible subcrop: on North side of diorite dyke	
PAP96 DR9	2m	shear zone	limonite hornfels	up to 1% py	≈ 25m South of L7N: 17+75E: North side of feldspar porphyry dyke??	
PAP96 DR10	2m	tuff + augite porphyry	minor calcite veins	minor pyrite	on skid road N side of lake on approximate strike to Cate showing: major fractures 024/80W: augite porphyry dykes? to 3cms wide trend 105/90:	
PAP 96 DR11	G	altered feldspar porphyry	ankerite quartz chlorite	minor pyrite siderite? veinlets	poorly exposed subcrop: ≈15m to L6N: 17+75E: similar to carb altered zone immediately east of Cate showing on opposite side of lake:	
PAP96 DR12	1m	"	"	minor pyrite trace chalcopyrite	5m Easterly from DR11: small zone appears to trend 105/70N: zone ≈ 20cms wide.	
PAP96 DR13	F	breccia	silicified qtz stockwork	pyrite to 7%	South side access road ≈ 20m East BL20E: 5N	
PAP96 DR14	40cm	shear zone	carb veinlets heavy chlorite	2-3% pyrite	BL20E: 4+20N: subcrop: poorly exposed	
PAP 96 DR15	1.5m	augite porphyry breccia	heavy chlorite-carbonate	no visible sulphides	L4N: 19+98E: bedding?? 360/70W: strong fractures @ 105/75N	

C-CHIP G-GRAB F-FLOAT

ROCK SAMPLE SHEET

Sampler D. Ridley
Date July 1996
Property Papoose
NTS 92P/15

SAMPLE NO.	Sample Width	DESCRIPTION: Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	ASSAYS
PAP 96 DR16	F	quartz breccia	quartz clay?	trace pyrite	≈ 20 m N of L4N: 18+75E; float train trend 020°; following west side of feldspar porphyry dyke @ Cate showing	
PAP 96 DR17	50cm	quartz vein	limonite chlorite carbonate	up to 15% pyrite	5 m South of L8N: 19+80E: poorly exposed outcrop; vein trends 320/50SW	
PAP 96 DR18	G	altered mafic volcanic?	chlorite limonite pyrite	" " trace cpy - malachite	3m West of DR17; subcrop rubble from hand trench. requires machine trenching or blasting to fully expose zone. includes mineralized quartz vein from DR17 (only 15cm wide)	
PAP 96 DR19	G	"	"	massive pyrite blobs to 2cm diameter + mantles to ½ cm wide.	@ DR18; pyrite-rich wallrx from in hand trench @ DR18	
PAP96 DR20	F	volcanic breccia	hornfels silica diopside qtz-carb stkwk	1-3% pyrite	very angular probable subcrop. beside lake: exposed by recent blowdown:	
PAP96 DR21	50cm	qtz-carb stockwork	qtz-carb chlorite	minor py-cpy malachite	≈ 20 m S of L7N: 17+25E; wallrx within up to 2% py; poorly exposed subcrop??	
PAP 96 DR 22	1m	mafic tuff	qtz-carb stockwork chlorite	minor py	hanging wall side (West) of feldspar porphyry dyke above Catherine Lake: ≈15m West of PAP96 DR9.	
PAP96 DR 23	2m	intermed. tuff + breccia	minor qtz veining moderate chlorite	nil to trace 5% py trace cpy	top of ridge immediately above PAP94CR6: ≈ 10m N of L7N: 17+50E: quartz veining appears to be contained within E-W fractures	
PAP 96 DR 24	1m	altered breccia	ankerite siderite quartz	nil to trace py	3m S of DR23: rock well silicified & carbonatized	
PAP 96 DR 25	40 cm	shear zone	limonite ankerite	minor pyrite	≈ 20 m West of Cate showing along access road.	
PAP 96 DR 26	F	felsic tuff	carb veinlets	" "	beside lake ≈ 7m South of L7N: probable subcrop	
PAP 96 DR 27	F	feldspar porphyry	limonite	½ cm cubes of py v.f.g py.	≈ 5 m west of L7N: 17E: rubble probable subcrop	
PAP 96 DR 28	50cm	feldspar porphyry diorite	quartz epidote chlorite	trace cpy-malachite	≈ 12 m South of L7N: 21+35E: strongest fractures @ 088/60S	
PAP 96 DR 29	G	intermed tuff breccia	qtz-carb stkwk chlorite	minor pyrite	@ TL grid L7N: 18+75E: random grab of outcrop + subcrop in vicinity of A	
PAP96 DR30	F	"	"	trace f.gr. pyrite	@ TL grid L7N: 18+50E:	

C-CHIP G-GRAB F-FLOAT

ROCK SAMPLE SHEET

Sampler D. Ridley
Date Oct. 1996
Property Papoose
NTS 92P/15

SAMPLE NO.	Sample Width	DESCRIPTION: Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	ASSAYS
PAP94 DR31	G	andesite porphyry	epidote carbonate	up to 1% f.gr. py	7m East of DR30: feldspars altered to epidote; subcrop rubble: requires machine trenching to fully expose zone	
PAP94 DR32	G	intermed tuff breccia	limonite weak chlorite carbonate	1-3% disem. py	≈ 12 m East of BL20E: 8+75N; subcrop rubble: 1.5m sample width	
PAP94 DR33	G	"	chlorite carbonate quartz stkwk	minor py	≈ 8m South of TR L7N: 19+00E: weak soil anamoly (As) in early work: just inside forest: easy machine access.	

C-CHIP G-GRAB F-FLOAT

INTERNATIONAL PLASMA LABORATORY LTD.

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CERTIFICATE OF ANALYSIS
iPL 96L1301

Client: Homestake Canada Inc
Project: 90621 71 Rock

iPL: 96L1301

Out: Dec 24, 1996
In: Dec 18, 1996

[130116:06:40:69122496]

Section 1 of 2
Certified BC Assayer: David Chiu

Sample Name		Au ppb	Au g/mt	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %
PAP 96 DR 1	R	5	--	<	78	20	54	81	6	<	8	<	<	1.5	33	66	41	<	206	147	698	7	53	5	12	0.08	2.70	2.65	4.45
PAP 96 DR 2	R	<	--	<	77	10	78	46	<	<	6	<	<	0.4	28	31	43	<	74	184	964	5	62	4	17	0.09	3.19	2.46	5.33
PAP 96 DR 3	R	3	--	<	115	6	30	56	7	<	5	<	<	0.6	20	74	6	<	238	163	1292	3	111	3	19	0.03	3.71	8.67	4.61
PAP 96 DR 4	R	2	--	<	49	7	66	42	<	<	4	<	<	<	26	36	36	<	115	159	1014	4	33	4	13	0.08	3.04	1.91	5.37
PAP 96 DR 5	R	<	--	<	64	7	76	12	<	<	5	<	<	<	20	18	31	<	54	108	591	3	82	5	9	0.16	2.19	1.59	4.16
PAP 96 DR 6	R	186	--	<	1395	3	18	1907	<	<	6	<	<	0.2	97	42	34	<	38	23	7683	2	84	3	8	0.01	0.60	8.07	6.25
PAP 96 DR 7	R	50	--	0.1	294	<	10	562	<	<	4	<	<	0.1	23	12	148	<	18	9	2631	11	388	1	12	0.01	0.19	27%	0.90
PAP 96 DR 8	R	<	--	<	125	5	35	86	<	<	4	<	<	0.4	27	82	50	<	176	58	650	2	57	2	3	0.07	1.87	2.66	2.58
PAP 96 DR 9	R	3	--	<	62	6	49	70	<	<	3	<	<	<	27	12	45	<	35	115	874	2	70	7	7	0.15	3.26	2.39	4.62
PAP 96 DR 10	R	<	--	<	53	3	71	39	<	<	4	<	<	<	24	18	24	<	56	130	1082	2	29	8	8	0.17	2.63	2.03	4.61
PAP 96 DR 11	R	5	--	<	235	3	18	28	<	<	3	<	<	0.1	10	23	86	<	38	72	1368	6	162	6	5	0.02	1.33	4.38	3.07
PAP 96 DR 12	R	6	--	0.5	652	3	23	37	<	<	3	<	<	0.6	10	31	84	<	35	76	1292	5	135	4	4	0.01	1.46	3.53	2.68
PAP 96 DR 13	R	11	--	<	68	4	28	21	<	<	10	<	<	<	19	18	32	<	30	92	841	3	243	3	9	0.05	1.57	13%	3.11
PAP 96 DR 14	R	5	--	0.2	699	<	24	92	<	<	4	<	<	0.8	7	27	73	<	27	38	812	3	46	3	6	0.01	1.49	5.70	2.88
PAP 96 DR 15	R	2	--	0.1	104	<	47	19	6	<	4	<	<	<	33	85	44	<	308	210	1047	4	36	5	11	0.15	3.33	1.85	5.49
PAP 96 DR 16	R	2	--	<	41	19	93	42	<	<	6	<	<	1.7	28	16	13	5	46	142	755	6	15	13	13	0.20	3.65	2.89	3.88
PAP 96 DR 17	R	165	--	1.2	304	16	44	1910	<	<	5	<	<	<	17	10	33	<	59	82	613	3	18	5	6	0.05	1.49	0.58	8.20
PAP 96 DR 18	R	168	--	4.6	1283	12	61	2662	<	<	10	<	<	<	27	10	14	<	83	95	742	3	15	4	5	0.03	1.65	0.64	12%
PAP 96 DR 19	R	19	--	2.7	700	7	62	146	<	<	6	<	<	<	22	9	7	6	71	179	1127	3	17	4	9	0.04	3.58	0.59	9.64
PAP 96 DR 20	R	10	--	0.1	226	9	107	116	5	<	6	<	<	<	27	60	38	<	159	133	665	3	51	3	8	0.10	2.50	1.49	4.37
PAP 96 DR 21	R	4	--	6.4	272	8	71	79	<	<	5	<	<	0.2	18	21	64	<	70	77	895	3	38	4	5	0.05	2.09	1.76	3.79
PAP 96 DR 22	R	2	--	0.2	87	7	61	43	<	<	4	<	<	<	22	8	43	<	25	130	877	2	56	5	8	0.11	2.83	2.15	4.10
PAP 96 DR 23	R	3	--	0.1	70	4	37	96	<	<	3	<	<	<	10	14	71	<	27	116	1042	2	97	2	8	0.01	2.51	4.23	4.12
PAP 96 DR 24	R	<	--	<	48	17	17	86	8	<	4	<	<	0.3	14	61	26	<	239	78	2431	2	262	2	19	0.01	2.10	6.47	3.99
PAP 96 DR 25	R	<	--	<	44	7	33	39	5	<	3	<	<	<	39	31	18	<	96	50	566	2	72	4	6	0.13	1.20	1.48	3.26
PAP 96 DR 26	R	<	--	<	110	5	38	18	<	<	3	<	<	0.3	15	9	30	<	26	74	2262	2	47	4	6	0.08	1.91	7.93	3.33
PAP 96 DR 27	R	<	--	<	142	6	120	19	5	<	3	<	<	<	26	84	35	<	192	154	807	6	69	5	6	0.12	2.28	2.52	4.21
PAP 96 DR 28	R	5	--	0.2	93	11	100	109	5	<	2	<	<	0.6	30	39	32	<	219	109	1157	2	29	4	10	0.06	2.22	1.41	3.96
PAP 96 DR 29	R	<	--	0.1	35	4	54	21	<	<	2	<	<	<	20	10	32	<	28	104	734	<	33	6	6	0.10	2.38	1.37	3.92
PAP 96 DR 30	R	4	--	<	26	14	184	97	<	<	7	<	<	1.8	22	15	42	<	23	133	863	6	21	4	13	0.04	3.08	1.11	5.64
PAP 96 DR 31	R	<	--	<	115	12	112	39	8	<	5	<	<	1.1	35	64	21	<	111	130	789	4	36	4	7	0.06	2.40	2.29	4.20
PAP 96 DR 32	R	9	--	<	43	7	50	20	<	<	5	<	<	<	26	11	16	<	22	134	799	2	14	8	11	0.15	2.61	0.98	5.03
PAP 96 DR 33	R	<	--	0.1	80	6	81	37	<	<	5	<	<	0.1	25	16	21	<	34	208	1274	9	113	7	10	0.12	3.12	4.35	5.13
PAP CATE 1	R	20m	12.42	2.1	973	30	68	1.5%	<	<	10	<	<	<	124	129	117	<	72	185	904	7	31	11	11	0.03	3.52	0.49	16%
PAP L4N 18+75E	R	11	--	0.2	58	10	128	74	<	<	1	<	<	0.8	17	27	131	<	34	61	574	4	18	2	2	0.07	1.43	0.30	2.72
PAP L4N 19+00E	R	3	--	0.1	57	14	136	44	<	<	3	<	<	0.1	18	36	140	<	46	87	554	7	25	3	4	0.07	2.36	0.36	3.28
PAP L4N 19+25E	R	<	--	0.2	27	10	99	218	<	<	1	<	<	0.4	11	15	118	<	17	47	1146	4	16	2	2	0.07	1.21	0.21	1.80
PAP L4N 19+50E	R	5	--	0.2	21	9	212	147	<	<	2	<	<	0.8	15	25	147	<	33	53	732	6	19	4	3	0.09	2.15	0.24	2.35
PAP L4N 19+75E	R	21	--	0.1	33	7	100	101	<	<	2	<	<	0.5	13	30	118	<	37	57	515	6	19	3	3	0.09	1.63	0.28	2.17
Min Limit		2	0.07	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01
Max Report		9999	1000.00	99.9	20000	20000	20000	9999	9999	9999	999	9	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00		9.99	9.99
Method		FAAA	FAGrav	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	P	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP		ICP	ICP

---No Test Ins-Insufficient Sample S-Soil R-Rock CoCore L-Silt P-Pulp U-Undefined m-Estimate/1000 %-Estimate % Max-No Estimate

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Project: 90621 71 Rock

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Out: Dec 24, 1996
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Certified BC Assayer: David Chiu

Sample Name		Mg %	K %	Na %	P %
PAP 96 DR 1	R	2.81	0.17	0.04	0.07
PAP 96 DR 2	R	2.66	0.11	0.05	0.11
PAP 96 DR 3	R	3.92	0.06	0.02	0.06
PAP 96 DR 4	R	2.32	0.10	0.05	0.08
PAP 96 DR 5	R	1.17	0.16	0.13	0.07
PAP 96 DR 6	R	1.68	0.14	0.02	0.05
PAP 96 DR 7	R	0.35	0.02	0.02	0.01
PAP 96 DR 8	R	1.51	0.10	0.07	0.09
PAP 96 DR 9	R	1.45	0.09	0.23	0.04
PAP 96 DR 10	R	1.43	0.04	0.09	0.07
PAP 96 DR 11	R	0.87	0.32	0.04	0.24
PAP 96 DR 12	R	0.71	0.35	0.02	0.20
PAP 96 DR 13	R	0.78	0.12	0.06	0.05
PAP 96 DR 14	R	0.64	0.27	0.02	0.10
PAP 96 DR 15	R	2.23	0.09	0.03	0.10
PAP 96 DR 16	R	0.66	0.02	0.02	0.03
PAP 96 DR 17	R	0.45	0.14	0.04	0.05
PAP 96 DR 18	R	0.38	0.02	0.02	0.07
PAP 96 DR 19	R	0.87	0.06	0.02	0.16
PAP 96 DR 20	R	0.98	0.08	0.12	0.10
PAP 96 DR 21	R	0.76	0.19	0.07	0.06
PAP 96 DR 22	R	0.89	0.11	0.18	0.08
PAP 96 DR 23	R	1.09	0.20	0.03	0.04
PAP 96 DR 24	R	1.46	0.14	0.02	0.08
PAP 96 DR 25	R	0.67	0.02	0.04	0.07
PAP 96 DR 26	R	0.82	0.07	0.10	0.06
PAP 96 DR 27	R	1.34	0.09	0.06	0.16
PAP 96 DR 28	R	1.06	0.11	0.05	0.06
PAP 96 DR 29	R	0.95	0.10	0.11	0.04
PAP 96 DR 30	R	1.43	0.07	0.06	0.03
PAP 96 DR 31	R	1.80	0.03	0.03	0.08
PAP 96 DR 32	R	1.43	0.04	0.06	0.04
PAP 96 DR 33	R	1.33	0.06	0.03	0.23
PAP CATE 1	R	0.69	0.01	0.01	0.23
PAP L4N 18+75E	R	0.31	0.06	0.02	0.13
PAP L4N 19+00E	R	0.51	0.07	0.02	0.09
PAP L4N 19+25E	R	0.16	0.04	0.02	0.08
PAP L4N 19+50E	R	0.24	0.08	0.02	0.23
PAP L4N 19+75E	R	0.35	0.09	0.02	0.13
Min Limit		0.01	0.01	0.01	0.01
Max Report		9.99	9.99	5.00	5.00
Method		ICP	ICP	ICP	ICP

--=No Test Ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt D=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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Out: Dec 24, 1996
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[130116:06:41:69122496]

Section 1 of 2
Certified BC Assayer: David Chiu

Sample Name		Au ppb	Au g/mt	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %
PAP L4N 20+00E BL	R	8	--	0.1	24	9	81	68	<	<	2	<	<	<	12	23	58	<	23	59	290	3	12	2	2	0.09	1.45	0.21	2.04
PAP L6N 17+00E	R	5	--	0.1	108	10	144	54	<	<	3	<	<	0.1	22	45	143	<	57	83	320	7	60	5	3	0.09	1.94	0.95	3.12
PAP L6N 17+25E	R	<	--	<	35	9	159	66	<	<	2	<	<	1.4	17	37	246	<	40	64	397	6	71	5	4	0.08	2.24	0.94	2.77
PAP L6N 17+50E	R	8	--	0.2	23	11	132	41	<	<	2	<	<	0.7	11	22	215	<	26	46	1535	4	29	1	2	0.07	1.24	0.37	1.77
PAP L6N 17+75E	R	9	--	0.1	31	13	102	33	<	<	2	<	<	0.5	13	23	153	<	32	56	557	6	26	2	3	0.08	1.56	0.38	2.19
PAP L6N 18+00E	R	5	--	0.2	41	21	171	53	<	<	6	<	<	2.5	24	42	155	7	44	83	625	10	28	5	5	0.10	1.95	0.44	2.66
PAP L6N 18+25E	R	42	--	<	15	15	107	22	<	<	3	<	<	1.3	14	21	134	<	28	52	523	8	24	3	4	0.08	1.12	0.27	1.51
PAP L6N 18+50E	R	2	--	<	27	11	118	21	<	<	3	<	<	1.1	17	31	112	<	38	62	465	8	26	4	4	0.11	1.61	0.36	2.12
PAP L6N 18+75E	R	<	--	0.1	22	10	117	24	<	<	2	<	<	0.9	15	28	118	<	33	56	634	6	24	3	3	0.10	1.59	0.35	2.00
PAP L6N 19+00E	R	<	--	0.3	17	10	179	31	<	<	2	<	<	1.0	14	36	155	<	34	53	693	6	19	3	3	0.09	1.83	0.28	2.10
PAP L6N 19+25E	R	<	--	<	28	11	116	35	<	<	2	<	<	0.6	15	43	105	<	55	64	563	5	23	2	3	0.09	1.67	0.40	2.19
PAP L6N 19+50E	R	23	--	<	27	9	161	80	<	<	1	<	<	0.7	15	43	169	<	49	58	441	6	22	3	3	0.09	1.86	0.29	2.25
PAP L6N 19+75E	R	<	--	0.3	50	12	220	59	<	<	2	<	<	0.7	17	65	105	5	61	67	421	7	24	7	3	0.11	2.52	0.41	2.84
PAP L6N 20+00E BL	R	11	--	<	12	11	122	35	<	<	1	<	<	0.2	10	20	111	<	26	47	473	6	16	3	2	0.09	1.44	0.25	1.75
PAP L7N 17+00E	R	608	--	<	107	17	152	1487	<	<	3	<	<	0.1	28	48	131	<	49	88	947	7	29	4	4	0.09	2.44	0.31	3.82
PAP L7N 17+50E	R	30	--	<	34	9	114	77	<	<	2	<	<	0.3	17	25	156	<	32	65	552	7	23	4	3	0.10	2.19	0.36	2.59
PAP L7N 18+00E	R	53	--	<	43	10	85	46	<	<	2	<	<	0.3	17	35	134	<	48	82	323	11	33	3	4	0.14	2.08	0.35	2.80
PAP L7N 18+50E	R	5145	5.16	4.6	109	97	664	1.6%	38	<	3	<	<	2.4	14	23	248	<	33	52	348	7	30	11	4	0.07	2.99	0.25	6.28
PAP L7N 18+50E TR	R	33	--	0.1	27	13	153	64	6	<	1	<	<	0.5	15	42	148	<	42	54	592	6	23	4	3	0.09	1.98	0.27	2.35
PAP L7N 19+00E	R	8	--	0.3	27	9	79	24	<	<	1	<	<	0.3	9	18	88	<	21	43	563	5	14	2	2	0.07	1.03	0.20	1.56
PAP L7N 19+50E	R	24	--	0.2	37	13	82	56	<	<	6	<	<	1.5	19	33	94	<	43	68	315	10	20	4	4	0.10	1.46	0.27	2.11
PAP L7N 20+00E BL	R	113	--	<	20	12	87	33	<	<	3	<	<	1.0	12	20	94	<	28	48	495	7	14	2	3	0.08	1.07	0.21	1.56
PAP L8N 17+50E	R	3	--	0.2	82	11	64	45	<	<	4	<	<	0.1	25	48	143	<	67	109	404	20	33	8	9	0.14	2.55	0.64	3.21
PAP L8N 18+00E	R	<	--	<	11	3	29	21	<	<	2	<	<	0.1	8	7	32	<	9	43	225	3	10	2	1	0.07	1.02	0.11	1.29
PAP L8N 18+50E	R	8	--	<	51	12	93	46	<	<	2	<	<	0.4	23	104	112	<	96	84	371	10	30	6	5	0.14	2.40	0.38	2.93
PAP L8N 19+00E	R	20	--	0.2	46	11	137	37	<	<	3	<	<	0.4	20	36	158	<	36	73	464	7	46	3	4	0.11	2.52	0.44	2.95
PAP L8N 19+50E	R	12	--	0.1	52	11	158	111	<	<	3	<	<	<	22	58	226	<	53	93	550	7	36	4	4	0.11	2.63	0.37	3.46
PAP L8N 20+00E BL	R	6	--	0.2	32	11	124	41	<	<	2	<	<	0.3	15	21	100	<	26	65	518	5	15	3	2	0.09	1.81	0.22	2.52
PAP L9N 18+50E	R	<	--	0.1	13	10	48	17	<	<	2	<	<	<	10	18	72	<	25	64	159	5	21	3	2	0.08	1.49	0.26	1.93
PAP L9N 19+00E	R	20	--	<	25	9	90	20	<	<	1	<	<	0.5	14	32	119	<	37	72	250	6	21	3	3	0.09	1.80	0.26	2.50
PAP L9N 19+50E	R	24	--	<	26	6	89	30	<	<	2	<	<	0.5	14	24	127	<	39	70	428	7	20	3	3	0.10	1.64	0.24	2.52
PAP L9N 20+00E BL	R	3	--	0.2	25	9	78	24	<	<	1	<	<	0.3	13	28	128	<	36	63	376	8	16	3	3	0.08	1.59	0.23	2.13
Min Limit		2	0.07	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01
Max Report		9999	1000.00	99.9	20000	20000	20000	9999	9999	9999	999	99	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	1.00	9.99	9.99
Method		FAAA	FAGrav	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test, ins=Insufficient Sample, S=Soil, R=Rock, C=Core, L=Silt, P=Pulp, U=Unleached, m=Estimate(1000), %=Estimate %, M=Manville Estimate

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Phone (604) 879-7878
Fax (604) 879-7898

CERTIFICATE OF ANALYSIS
iPL 96L1301

Client: Homestake Canada Inc
Project: 90621 71 Rock

iPL: 96L1301

Out: Dec 24, 1996
In: Dec 18, 1996

[130116:06:41:69122496]

Certified BC Assayer: David Chiu

Sample Name		Mg %	K %	Na %	P %
PAP L4N 20+00E BL	R	0.26	0.05	0.02	0.08
PAP L6N 17+00E	R	0.41	0.05	0.03	0.05
PAP L6N 17+25E	R	0.31	0.06	0.03	0.07
PAP L6N 17+50E	R	0.30	0.07	0.02	0.13
PAP L6N 17+75E	R	0.44	0.11	0.03	0.10
PAP L6N 18+00E	R	0.58	0.14	0.03	0.15
PAP L6N 18+25E	R	0.22	0.09	0.03	0.09
PAP L6N 18+50E	R	0.45	0.13	0.03	0.09
PAP L6N 18+75E	R	0.39	0.11	0.03	0.08
PAP L6N 19+00E	R	0.39	0.08	0.03	0.18
PAP L6N 19+25E	R	0.62	0.08	0.02	0.08
PAP L6N 19+50E	R	0.58	0.07	0.02	0.15
PAP L6N 19+75E	R	0.59	0.09	0.02	0.17
PAP L6N 20+00E BL	R	0.28	0.07	0.02	0.17
PAP L7N 17+00E	R	0.74	0.05	0.03	0.16
PAP L7N 17+50E	R	0.46	0.08	0.03	0.05
PAP L7N 18+00E	R	0.65	0.08	0.03	0.05
PAP L7N 18+50E	R	0.37	0.09	0.03	0.20
PAP L7N 18+50E TR	R	0.48	0.07	0.03	0.13
PAP L7N 19+00E	R	0.25	0.05	0.03	0.07
PAP L7N 19+50E	R	0.44	0.12	0.03	0.05
PAP L7N 20+00E BL	R	0.27	0.06	0.02	0.07
PAP L8N 17+50E	R	0.83	0.07	0.03	0.02
PAP L8N 18+00E	R	0.07	0.03	0.03	0.07
PAP L8N 18+50E	R	1.17	0.11	0.03	0.08
PAP L8N 19+00E	R	0.56	0.08	0.03	0.12
PAP L8N 19+50E	R	0.64	0.10	0.03	0.27
PAP L8N 20+00E BL	R	0.27	0.04	0.03	0.10
PAP L9N 18+50E	R	0.27	0.03	0.02	0.03
PAP L9N 19+00E	R	0.45	0.07	0.02	0.10
PAP L9N 19+50E	R	0.38	0.10	0.02	0.16
PAP L9N 20+00E BL	R	0.43	0.08	0.02	0.08
Min Limit		0.01	0.01	0.01	0.01
Max Repo		9.99	9.99	5.00	5.00
Method		ICP	ICP	ICP	ICP

PAPOOSE CLAIMS; CATE GRID

Geology and 1996 Rock Sample Locations

50 0 50 100 meters

scale 1:2500

Geology

- 3 mafic volcanic: bx + breccia
- 2 argillaceous sediments (hornfelsed)
- 1 intermediate tuff + breccia
- f.p. feldspar porphyry
- d diorite
- stwk stockwork
- py pyrite ; cpy chalcopyrite
- fault
- attitude bedding
- carbonate alteration
- attitude fractures
- attitude foliation or shear zone
- outcrop
- x float or suberop
- access road

F16.

Compilation Map

A.R. # 16199, 17590, 23269, 23925

- I.P. chargeability high 10 m.s.
- I.P. chargeability low contour
- magnetometer high
- magnetometer low
- 1987 soil sample 87 As
- 1996 soil sample 608 Au, 1487 As, 107 Cu

lake

Catherine Lake

andesitic volcanic breccia with qtz-carb stwk: py, cpy, asPy

PAP93DR29

PAP93 DR2 4:2:22

PAP93 DR 3 4:63:289

PAP93 DR 4 280, 3783, 489

1988 Treaching

86 As

27 Au 239 As

72 Au

87 As

PAP93CR1 20:45:77

PAP93CR2 10:45:104

PAP93DR8 45, 40, 31

PAP93DR9 220, 2586, 75

PAP94DR11 45, 15, 83

PAP93DR10 45, 30, 49

landing

PAP93DR6 45, 15, 652

PAP93DR7 45:5, 48

PAP96DR13

PAP96DR14

PAP96DR15

PAP93DR5 <45, 15, 38

epidote stockwork

PAP96DR16

PAP96DR17 qtz veins py

PAP96DR18 py, cpy, asPy

PAP96DR19 py, cpy, asPy

PAP96DR32 py

TR Grid LON: 19mE

624 As

165 As

PAP96DR30 tr py

92 As

875 As

PAP96DR31 epidote, py carb stwk

91 As

PAP96DR33 py, carb qtz stwk

PAP96DR29

PAP96DR28 tr cpy, mal

PAP93DR14 asPy, Py, cpy

PAP93CR 3, 4, 5 60, 128, 1728 10: 305, 258 30: 20, 47

360; >1%: 1031 25: 1690: 270

diorite sills to 10cm thick

5145 1.6% 109

PAP96DR24 anh, py

PAP96DR22

PAP96DR9

PAP96DR23 tr cpy, 1-3% py qtz-carb stwk

PAP96DR26

PAP96DR21 qtz-carb stwk cpy, py, mal

PAP96DR1

PAP96DR2

PAP96DR3

PAP96DR4

PAP94CR5: 20, 300, 622

PAP94CR6: 55, 610, 1414

PAP96DR27

PAP94DR4 <5:10:128

PAP96DR11

PAP94CR3+4: 40, <5, 7 5, 45, 86

PAP96DR5

diorite

PAP94CR2: <5: 5: 21

PAP96DR8

PAP96DR20 bx: py

PAP96DR7

PAP94DR3 <5:10:132

PAP96DR12

PAP96DR6

PAP93CR29 10: 70: 88

PAP93CR28 5, 495, 835

PAP96DR10

PAP93CR27 5, 45, 116

PAP94 DR1+2 5, 25, 12.5 (1872 Pb) 5, 15, 101

PAP96DR25 shear

PAP CATE 1 (soil) 12.4 g/t Au: 1.5% As: 973 Cu

CATE SHOWING 2.18 oz/t Au; >1% As; 1835 ppm Cu (PAP93 DR 30)

PAP93CR26: 995: 8985: 210

PAP93CR25 5, 45, 187

PAP96DR16

PAP93CR23 5: <5: 73

PAP93CR22: 24 5, 45, 69 5, 50, 39

PAP93CR32 5, 45, 48

PAP93CR31 5, 45, 742

PAP93CR24 113 33 20

PAP93CR33 23 86 27

PAP96DR34 <5: 10: 107

PAP96DR35 <5: 10: 107

PAP96DR36 <5: 10: 107

PAP96DR37 <5: 10: 107

PAP96DR38 <5: 10: 107

PAP96DR39 <5: 10: 107

PAP96DR40 <5: 10: 107

PAP96DR41 <5: 10: 107

PAP96DR42 <5: 10: 107

PAP96DR43 <5: 10: 107

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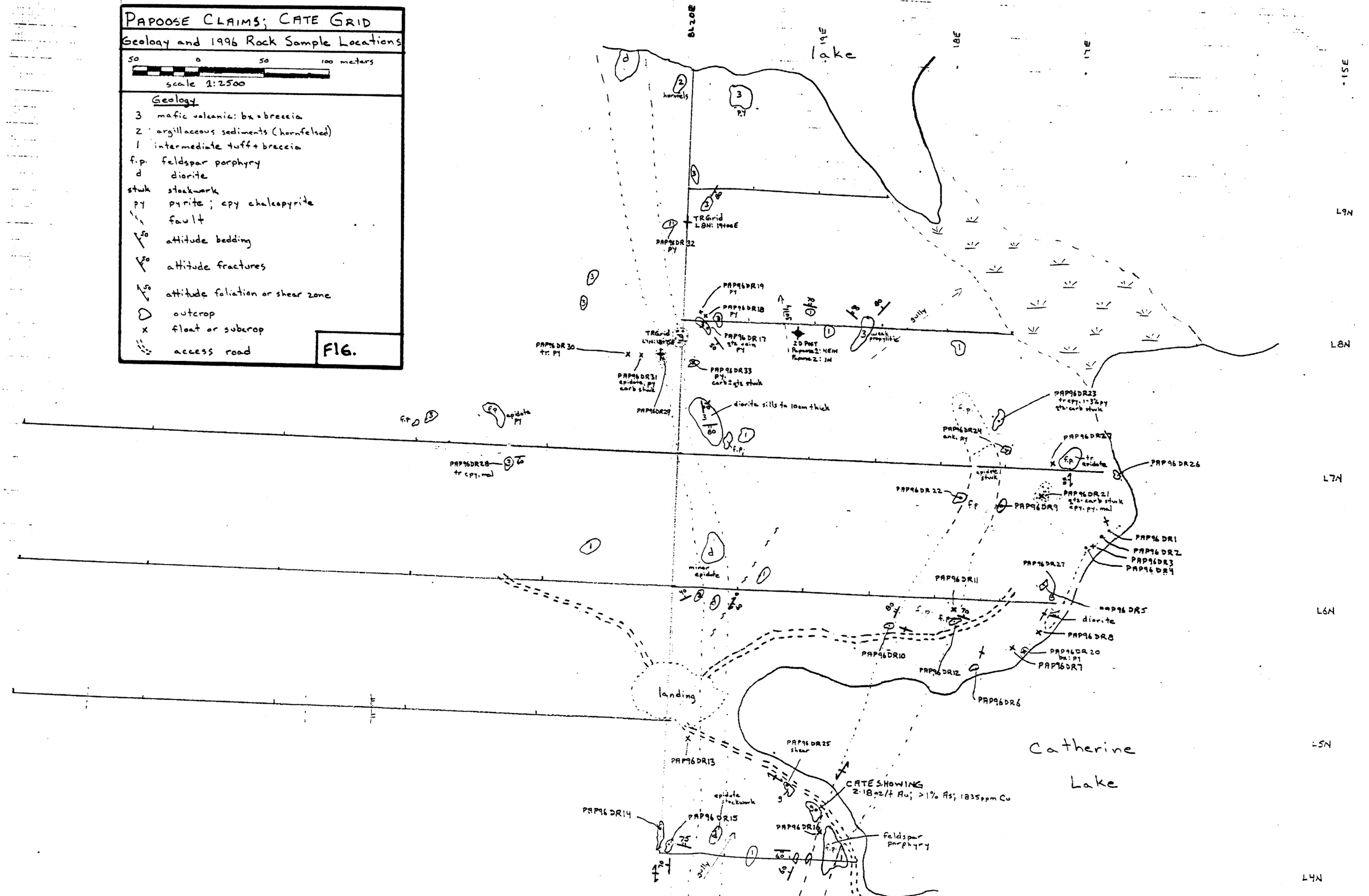
F16.



Jurassic andesite + sediments

Howard Lake fault

Pat L.

syenite minor cpy-mal

intrusive breccia

augite diorite

Miocene plateau basalt

area of 1996 rock sampling SG96DRI-5 CRI-4

DH#2 1993

DH 3 1993

SG1 L.C.P.

hornfels zone (approx)

3500'

Howard Lake

N

PIONEER METALS CORP.	FIG. 5
SLEEPING GIANT CLAIMS	JAN. 1994
COMPILATION : 1996 Rock Sampling	
CLINTON M.D. N.T.S 92P/10W	

100 0 100 500 900
1:8000 meters

- O 1974 DRILL HOLES
- ● 1993 DRILL HOLES
- 5 I.P. CHARGEABILITY (5 milliseconds contour)
- ..... COPPER IN SOILS (< 75 ppm)
- – – – ROAD
- area of 1996 rock chip sampling

PIONEER METALS CORP.	
STRAW CLAIMS	DEC. 1996
CLINTON M.D. N.T.S. 92P/15W	
ROCK SAMPLING MAP	
C.J. Ridley	FIG.

100 0 100 200
1:6,000 metres

8+00W

3300

BL0+00W
20N

1E 2E 3E 4E 5E 6E 7E 8E 9E

L19N
10E

N

STRAW CLAIM
LINE

ROAD

3500

3200

3100

3000

3400

straw 96 DR2

BEER showing
2499 ppm Cu; 12 ppb Au
shear zone

L15N
8E

straw 96 DR1

straw 96 CR4

straw 96 CR3

straw 96 CR2

straw 96 CR5

straw 96 DR3

straw 96 DR4

straw 96 CR1

qtz.

Gosling Lake showing
8690 ppm Cu; 185 Au
hornfelsed shear zone

Gosling Lake

BL0+00W
7N

DR5