SOLOMON DEVELOPMENT LTD.

Report on 93L/2E

Geology and Additional Geochemical

Samplingon the WL 1 - 46, 53 - 70, 111 - 124,

JAN 1-8, 10, 19-34 and GROG 1-18 Mineral Claims

and the GOOF 1 and 2, and MISC 1 Fraction Claims

Parrott Lakes, near Houston, Omineca M.D.

54°126° SW

by

F.J.L. Guardia, P.Eng.

Date of Fieldwork: September 20 - 29, 1972

Date of Report: January 8, 1973

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SOLOMON DEVELOPMENT LTD.

Report on

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54°126° SW

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4190 MAP

by

F.J.L. Guardia, P.Eng.

Date of Fieldwork: September 20 - 29, 1972

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ALRAE ENGINEERING LTD.
VANCOUVER, B.C.
ENGINEERS & GEOLOGISTS

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INTRODUCTION

The Parrott Lakes property of Solomon Development Ltd. lies 14 miles south of Houston, B.C. in the Omineca Mining Division. Currently 124 claims are held under an agreement with Edmund Burke, recorded owner of the claims.

The claim block covers an area partially underlain by Mesozoic volcanic and sedimentary rocks in the vicinity of the Sam Goosly deposit outlined by Kennco Explorations and the producing Owen Lake mine of Bradina.

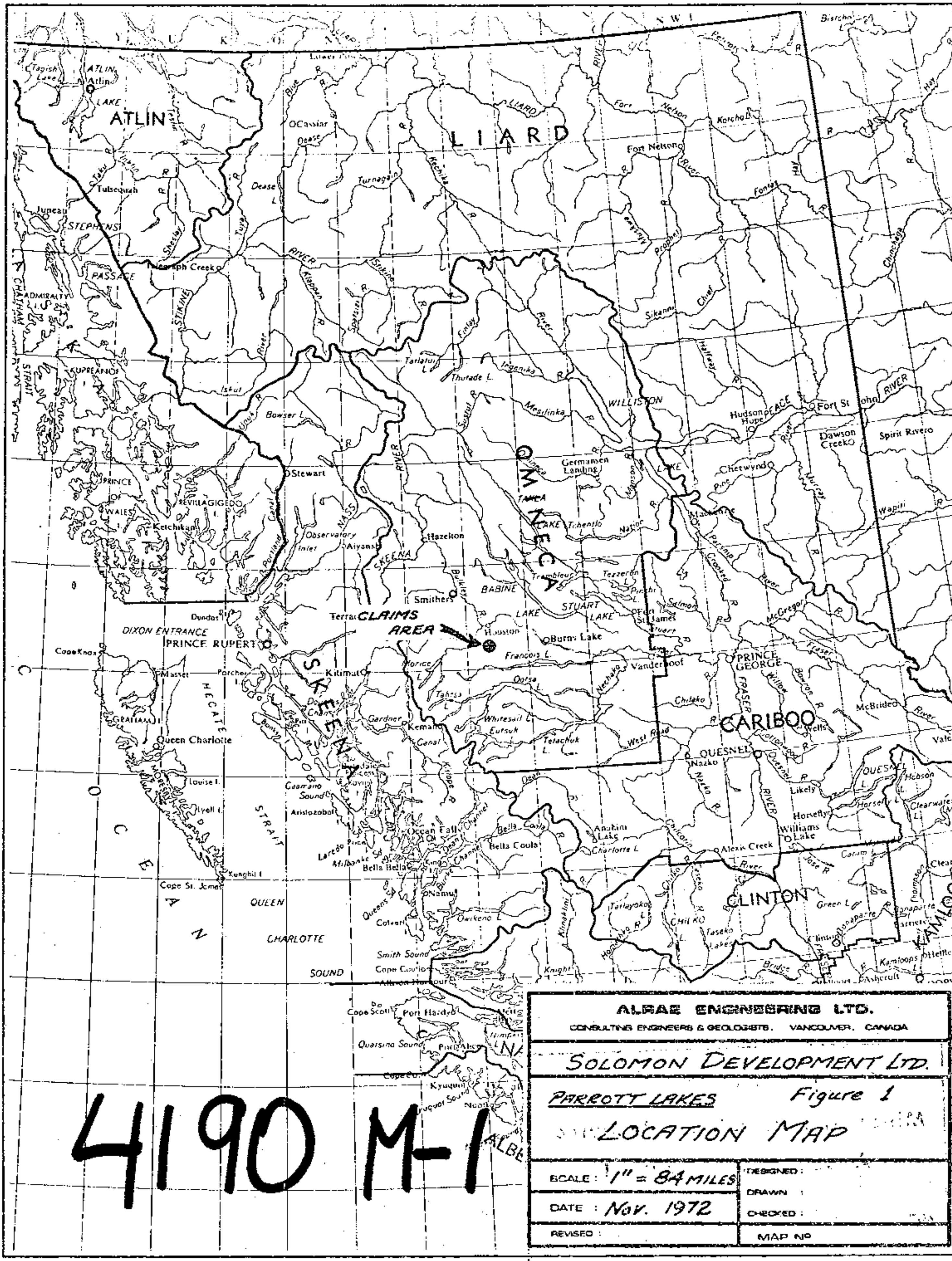
Exploration work on the property in the period 1969-1972 has included geochemical sampling, percussion drilling and an extensive IP survey. Despite a general lack of visible mineralization on the property the geochemical work has outlined a marked zinc anomaly in soils which to date has not been adequately explained.

In the period September 20 - 29, Alrae Engineering Ltd. acting on the instructions of Solomon Development Ltd. undertook additional geochemical sampling in the neighbourhood of the partially outlined zinc anomaly. In addition, a new look was taken at the geology of the claims with a view to finding additional outcrop and structural detail.

The purpose of this report is to outline the results of work undertaken in September, 1972 which is to be presented for assessment credits on the claims and to summarize all previous work undertaken on the property. Costs of the additional work conducted by Alrae appear as Appendix 2. Portions of the petrographic report by Dr. D. Cooke is presented as Appendix 1 and the costs of the work are presented as an assessment credit.

LOCATION AND ACCESS

The claims are centred on a point having latitude 54° 11' and longitude 126° 39', and a distance of 14 miles south of Houston, B.C. The Owen Lake deposit of



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Department of
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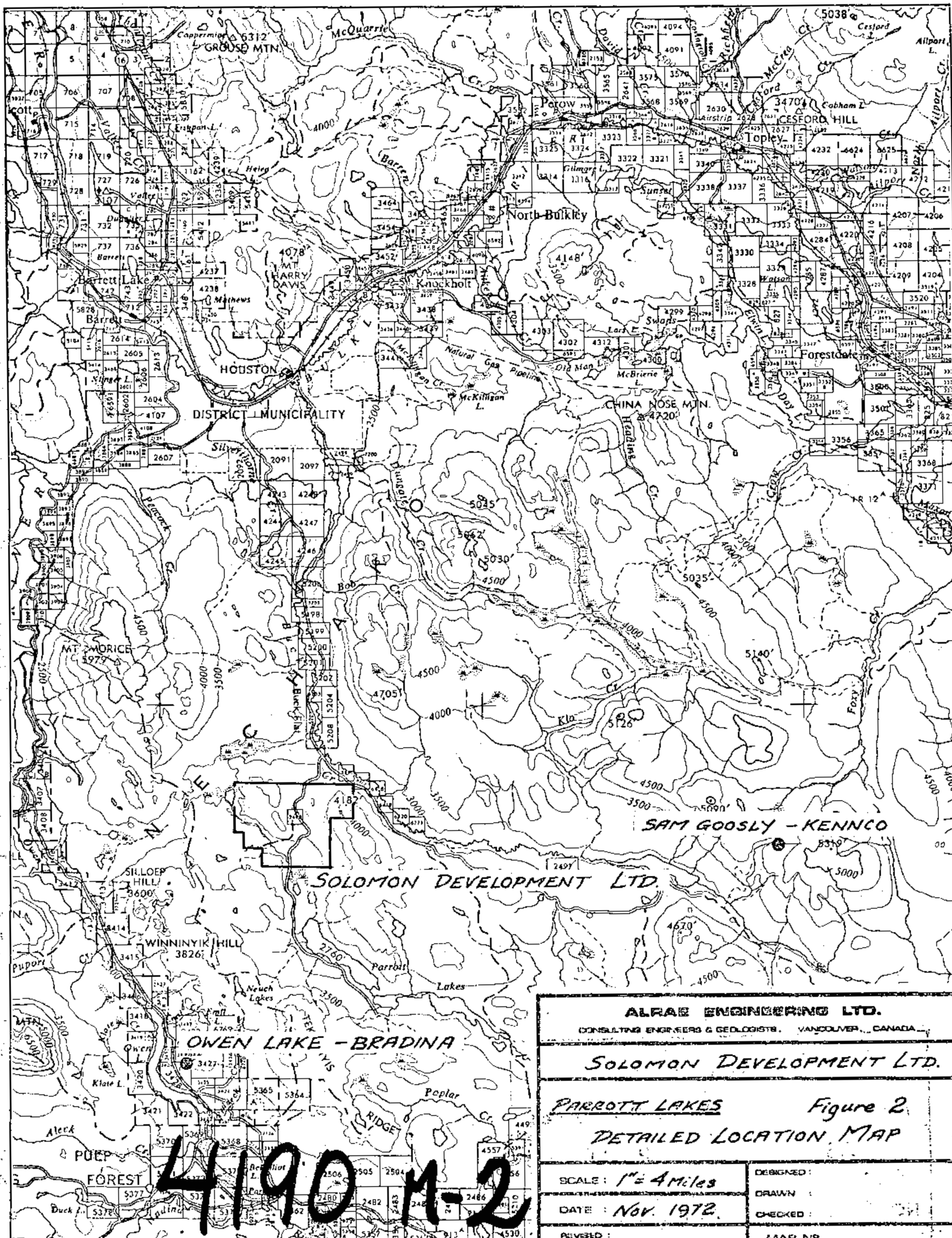
ASSESSMENT REPORT
NO. 4190 MAP #1

1-M OPIH



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ASSESSMENT REPORT

NO. 4190 MAP #2

4190 M-2

Bradina lies 6 miles to the southwest and the Sam Goosly deposit of Kennco lies 14 miles to the east.

Access to the claims is by the Buck Creek Road, which leaves the highway 2 miles west of Houston. A fair gravel road leaves the Buck Creek Road some 15 miles out of Houston and runs through the central part of the claims and thence west and south of Parrott Lakes. Two-wheel drive access is possible throughout most of the year.

PHYSIOGRAPHY

The property lies in a well-dissected region of the Nechako Plateau, which forms a part of the great Interior Plateau of British Columbia. The area constitutes part of the divide between the Skeena and Fraser river systems.

Elevations range from 2800 ft. A.S.L. at the most northerly part of the Parrott Lakes to 4100 ft. in the northeast corner of the claims. Generally relief is gentle over much of the central portion of the claims, however, steep slopes are encountered in the eastern and western parts of the group where Tertiary volcanics and resistant horizons within Mesozoic rocks form a capping to the generally softer rocks of the Mesozoic.

Precipitation is moderate in this area and supports a forest cover of spruce, pine, balsam and poplar. Open poplar groves and locally extensive open grassland often occupy the southerly facing slopes. Two regions in the western portions of the claims have been logged and apparently more logging is imminent in the area.

The principal drainage of the claims area is southerly into the Parrott Lakes. Parrott Creek and tributaries carry sufficient flow for camp and drilling purposes. An excellent campsite on Parrott Creek has been used in previous exploration.

CLAIMS

A total of 121 full size claims and three fractions are held in the Parrott Lakes property by Solomon Development Ltd. under agreement with Edmund Burke.

The claims, recorded in the Omineca Mining Division, are listed below:

Name of Claim	Record Number	Expiry Date
WL 1 - 6	72038 - 72043	May 26, 1974
WL 7 - 8	72044 - 72045	May 26, 1973
WL 9	72046	May 26, 1974
WL 10	72047	May 26, 1973
WL 11	72048	May 26, 1974
WL 12 - 32	72049 - 72069	May 26, 1973
WL 33 - 35	72070 - 72072	May 26, 1974
WL 36	72073	May 26, 1973
WL 37 - 46	72074 - 72083	May 26, 1973
WL 53	72084	May 26, 1973
WL 54	72085	May 26, 1973
WL 55	72086	May 26, 1974
WL 56 - 58	72087 - 72089	May 26, 1974
WL 59 - 70	72090 - 72101	May 26, 1973
MISC #1 Frac.	72102	May 26, 1974
WL 111 - 124	74509 - 74522	June 23, 1973
JAN 1 - 8	72103 - 72110	May 26, 1973
JAN 10	72112	May 26, 1973
JAN 19	72115	May 26, 1973
JAN 20 - 24	72116 - 72120	May 26, 1974
JAN 25 - 34	72121 - 72130	May 26, 1973
GOOF #1 & #2 Frac.	91308 - 91309	Aug. 12, 1973
GROG 1 - 18	91310 - 91327	Aug. 12, 1973

PREVIOUS WORK

The claims were located in 1969 by Angus MacDonald and in that year Orequest Exploration Syndicate conducted a program of soil sampling on lines cut north-south at 500 to 1800 ft. spacing. In 1970 Orequest did additional soil sampling, a magnetometer survey and a test IP survey. In the same year a number of percussion holes were drilled in the vicinity of a zinc anomaly in soils. In 1971 an entirely new geochemical survey was conducted on east-west lines 800 ft. apart in the central portions of the claims. This survey indicated that the strongest part of the zinc anomaly occurred to the southeast of the area previously drilled.

In December 1971 the claims were optioned to Mr. Edmund Burke and in 1972 Solomon Development, under agreement with Mr. Burke, continued exploration. The 1972 program of Solomon Development was executed by Montgomery-Wolfe and Associates Ltd. and consisted of geological mapping and an IP survey. A completely new grid was cut with lines once again north-south with 500 ft. to 1000 ft. spacing between lines.

The latest work on the property was by Alrae Engineering on behalf of Solomon Development in September, and consisted of additional geochemical sampling on east-west lines intermediate to those of the 1971 work in the vicinity of the main zinc anomaly. In addition a new look was taken at the geology of part of the claims.

GEOLOGY

Regional Geology

The most detailed and recent account of the geology of the area is the report by B.N. Church in the 1970 Report of the B.C. Department of Mines and Petroleum Resources. In this report the geology of the area surrounding the Owen Lake property of Bradina and Kennco's Sam Goosly deposit is outlined. It shows the oldest rocks to be of early Mesozoic age which are exposed through numerous windows eroded in an extensive cap of volcanic rocks ranging from Late Mesozoic to Tertiary. The overall thickness of the volcanic cap rocks is estimated at 4300 ft.

A number of igneous intrusive bodies, ranging in composition from granitic to gabbro-syenomonzonite, are found in the area and Church believes them to have genetic relationships to the volcanic cap rock assemblages.

The principal mineralization in the area consists of two deposits, 21 miles apart, with widely differing style of mineralization. The Owen Lake Mine of Bradina consists of numerous veins of pyrite, sphalerite, galena, chalcopyrite and minor tennantite that fill fissures in a microdiorite stock. The Sam Goosly deposit, however, consists of a large zone of disseminated sulphides and lenticular massive sulphide bodies within predominantly tuffaceous sediments and pyroclastic deposits of Early Mesozoic age. The principal disseminated sulphides are pyrite, chalcopyrite and tetrahedrite while the massive replacement sulphides are pyrite, chalcopyrite and pyrrhotite. The mineralization occurs adjacent to a syenomonzonite stock which Church suggests provided a source of mineralization.

The Solomon Development property at Parrott Lakes is shown to be underlain by Early Mesozoic lavas, pyroclastics and sediments, that are exposed through windows in the volcanic cap rocks which range from basaltic andesite to andesitic dacite. Previously the nearest intrusive body recognized was one of syenomonzonite-alkalic gabbro, which is exposed at the southwest end of the northerly of the larger Parrott Lakes, some 6 miles south of the claims. However, a previously unrecognized intrusive on the property is mentioned below.

In general, the geology resembles that at the Sam Goosly property and presumably exploration to date has been guided by this similarity.

Sam Goosly Deposit

The Sam Goosly deposit, which lies 14 miles east of the Parrott Lakes property, has been described in some detail in the July, 1972 CIM Bulletin in an article by C.S. Ney, J.M. Anderson and A. Pateleyev.

Copper-Silver mineralization occurs in a westerly dipping sequence of Hazelton rocks (the Early Mesozoic rocks of Church) which occur in a window in Tertiary volcanic flows. To the west the Hazelton is intruded by a quartz-monzonite stock which is sparsely mineralized by copper-molybdenum, and to the east a stock of gabbro-monzonite (syenomonzonite of Church) intrudes Hazelton rocks and appears closely related genetically to the Goosly Lake Volcanics of the Tertiary cap rocks. The gabbro-monzonite is generally lacking in mineralization.

The Hazelton rocks have been divided by Kennco geologists into a lower conglomeratic unit, an intermediate pyroclastic unit, and an upper mainly sedimentary unit. It is in the intermediate pyroclastic group that the copper-silver mineralization occurs. The pyroclastic unit is composed of dust, ash and lapilli tuffs. The dust tuff accounts for much of the unit and may occur as massive beds tens of feet thick with uniform grain size and a lack of distinct bedding. Lenticular beds of lapilli tuff intercalated with dust tuff have been subjected to the more extensive mineralization.

Typically well mineralized rock is a breccia of light fragments in a matrix of chlorite and sulphides. The sulphides are pyrite, chalcopyrite, pyrrhotite and minor tetrahedrite and sphalerite. Pyrite-sericite alteration is very widespread in the Hazelton rocks and is frequently accompanied by tourmaline, gypsum, scorzalite and fluorine. Silicification is generally found close to the copper-silver mineralization.

The Kennco geologists conclude that mineralization is most likely directly related to the same volcanic processes that gave rise to the host rocks, and that the bulk of the metals were emplaced at the time of deposition. Subsequent modification by diagenesis, contact metamorphism and metasomatism they accept as having modified the deposit, giving rise to cross-cutting relations and a general lack of banding in the sulphides.

Claims Geology

a) Lithologies

The geology of the northern part of the Solomon Development property was mapped by the writer in September, 1972. The results of this survey are shown on the Geology Map (fig.3). The survey resulted in a rather different interpretation of the geology to that of previous reports.

In the course of the survey a number of rock samples were collected for reference. Nine of the samples were thin sectioned and sent to David L.Cooke,Ph.D.,P.Eng., for microscopic study. His findings have been invaluable in interpretation of the geology and his individual reports on each of the samples sectioned appear as Appendix 1 to this report.

The Hazelton strata underlie much of the central part of the claim group. Outcrops are very restricted and most of those found represent only a very limited part of the sequence. The principal rock types outcropping are crystal and lithic tuffs, but two widely separated outcrops of basalt may be part of the sequence or dykes equivalent in age to the overlying Tertiary volcanics. The tuffaceous rocks are almost invariably deep red in colour due to hematite distributed through matrix and fragments. The hematite has been derived from alteration of magnetite (e.g. Sample #15, Appendix 1) which probably was an original constituent of the rock. The deep red colouration of soils overlying these rocks has been referred to in the past as an extensive gossan. The general composition of the tuffs appears to be dacitic. Textures are very variable from a dense chocolate brown cherty rock in which only rare fragments may be detected to a rock composed almost entirely of felspar crystal fragments or one composed essentially of lithic fragments with only minor discrete crystal material. Outcrops located in the south central part of the map (Sample 25 on Fig.3) are massive polymictic sub-angular conglomerates with clasts from 1mm to 6 cm composed largely of purple, maroon and green volcanic and cherty debris with occasional crystal fragments in the matrix. One outcrop on the road in the north of the claims (Sample 23, Fig.3) is a light coloured tuffaceous rock with occasional scattered pebbles and conglomeratic bands in which bedding surfaces may display carbonaceous plant fragments.

The indicated environment of deposition is one of explosive volcanic activity in which volcanic debris and material derived by erosion were laid down in alternation and admixed in a shallow marine environment with occasional volcanic flows.

Plant fragments suggest islands or a near shore environment. However, the greater part of the sequence is not seen in outcrop.

Minute but pervasive carbonate veining was noted by Dr. Cooke in one sample and by the writer in several outcrops of the tuffaceous rocks. Under the microscope tiny sericite flakes were noted throughout Sample 15.

Two very small rotted and altered outcrops on the old base line east of the road have been identified under the microscope as syenite porphyry (Samples 1 & 2, Appendix 1 and Fig.3) indicating the presence of a small, previously undetected intrusive stock on the claims. The interpretive boundary of this stock on the map is suggested by a small topographic feature. Moderate hydrothermal alteration has resulted in the development of sericite and kaolinite and is accompanied by carbonate filling numerous fractures and replacing mafic constituents. Pyrite was noted in trace amounts in thin section as was a small amount of brown biotite considered to be of hydrothermal origin by Dr. Cooke.

A large area in the west of the claims is underlain by extensively outcropping and remarkably uniform series of rhyolite flows (Dr. Cooke describes Sample 26 as a granophyre but notes the composition matches that of an extrusive rhyolite). The rock is usually pale grey to pink in colour, aphanitic and occasionally displays a poorly developed flow texture.

The rhyolite flows are mentioned by Church as being a part of the Early Mesozoic strata of his map area. At one point in the extreme southwest corner of Fig. 3 the writer noted similar rhyolite either intruded into tuffaceous sediments as dykes or as small flows intercalated with the sediments. Air photographs suggest a very low westerly dip to the massive rhyolites which would place the intercalated flows or dykes in the sediments immediately at the base of the main mass.

In the eastern part of the claims area Church has mapped two Tertiary volcanic formations: The Eocene Goosly Lake Volcanics and the overlying Buck Creek Volcanics. The Goosly Lake Volcanics are described as being mainly biotite-pyroxene-plagioclase trachyandesite lavas while the Buck Creek volcanics of this area are mapped as aphanitic andesite and dacite. On Fig. 3 accompanying this report a tentative boundary between the two volcanic formations is drawn on limited field observations and topography.

b) Structure

Only very limited structural data was gleaned in the course of mapping due partly to paucity of outcrop and to lack of distinct stratification in the sedimentary rocks.

Air photographs show a distinct north-northwesterly linear trend to ridges and creeks in the central part of the claim group and the area around the large bend in the road. One such ridge is marked on the map by the string of outcrops adjacent to the location of Sample 16 (Fig.3). One rather doubtful measurement of stratification in the Hazelton rocks is on an outcrop on the road, which indicated a northeasterly strike with vertical dip. A more reliable measurement was made on a 3" cherty bed in lithic tuff in the southwest corner of the map, where a dip of 15° to the west was noted.

Two measurements of clear flow-banding were made in the massive rhyolites on the west side of the claims and both showed moderate to steep easterly dips. However, on air photographs the entire rhyolite mass is seen to have a very shallow westerly dip, which is substantiated by the bedding measurement in the sediments of the southwest corner mentioned above. It is concluded that the Hazelton rocks, at least in the western part of the claims, dip gently west to west-southwest and, as the well outcropping rhyolites are not repeated to the east, it is suggested that no reversal of dip occurs prior to the capping of Tertiary Volcanics as one progresses easterly.

Within the massive rhyolites local strong zones of subparallel fractures are seen. In some instances these are very consistent in direction, while in others they may vary wildly from one part of an outcrop to the other. Spacing between fractures may vary from a few millimetres to several centimetres and on two occasions the fractures were seen to cut across flow texture. These are thought to relate to the cooling history of the flow rather than to tectonic dislocation.

A fault possibly occurs on the east fringe of the mapped area where a deeply incised gully is parallel to a linear outcrop of porphyritic latite which is at a similar topographic level to aphanitic andesites on the north side of the creek. Such a fault would lie with an east-west strike.

GEOCHEMISTRY

The most meaningful of several geochemical surveys previously conducted on the property was done by D.R. Cochrane, P.Eng., on behalf of Orequest Exploration Syndicate in 1971. The grid was set out with east-west lines, 800 ft. apart and sample interval of 100 ft. The grid occupied the central part of the claims and left much of the property untested. However, the survey succeeded in establishing an area with soils distinctly anomalous in zinc content. The zinc anomaly was open to the east and south.

In order to further delineate the zinc anomaly Alrae Engineering put in additional east-west lines in September, 1972. The lines were at 400 - 800 ft. intervals and were intended to supplement the east-west lines of the 1971 Cochrane Survey. The 184 new samples were analyzed for zinc, silver and copper. In addition pulps for 164 of the Cochrane samples were obtained and were run for silver and re-run for zinc. The Sam Goosly deposit was primarily located by geochemical studies of silver in soils, however, none of the 1971 samples had been checked for silver.

The 1972 analyses were conducted by Fraser Laboratories Ltd. of North Vancouver. Samples were dried and seived and to the -80 fraction was added 4 ml. of hot perchloric acid and 2 ml. nitric acid. Samples were then allowed to digest and then diluted with demineralized water to 25 ml. prior to analysis on the Techtron AA-5 Atomic Absorbtion unit.

The distribution of zinc, copper and silver values in soils for the 1972 samples and those parts of the 1971 grid adjacent to the 1972 work are shown on Figures 4 to 6. No statistical treatment has been applied to the data due to irregularities of line and sample spacing and to the survey being conducted on an area previously established as anomalous. However, partially based on the previous data, the lower limits of anomalous values are arbitrarily set at 600 ppm zinc, 60 ppm copper and 2.0 ppm silver. Zinc values in two localities reach 0.5% in soil.

It is clear that soils containing anomalous values in zinc are widespread in the area around the large bend in the road on the map. Higher silver and copper values are scattered and although occasionally coincident with high zinc samples generally lie peripheral to the zinc zones.

Petrographic sample 15, taken from outcrop within the main zinc zone, immediately east of the main bend in the road, was assayed and returned a value of 0.08% zinc. No zinc minerals were identified in section.

It is interesting to note, at this stage, the assays reported to have been obtained in percussion holes drilled in the neighbourhood of the road, north of the farm turn-off; a zone apparently somewhat anomalous in zinc (the data is rather nebulous as the writer has not had access to accurate drill location plots relative to the 1969 or 1971 geochemical work). Results on samples selcted for assay were reported as follows:

Hole	Total Depth	Over-burden	Section	Cu ppm	Zn ppm	Pb ppm	Ag ppm
1	180'	30'	30'- 40'	100	610	112	1.0
			90'- 100'	10	345	126	1.0
			140'- 150'	8	225	45	1.0
2	200'	0'	0'- 10'	635	1350	230	6.5
			90'- 100'	24	260	26	0.5
			190'- 200'	31	250	20	1.0
3	160'	0'	0'- 10'	16	255	15	13.0
			100'-110'	20	207	20	4.0
			150'-160'	23	700	15	1.5

It is known that holes 1 and 2 occur on the road and that hole 3 occurs some 800 ft. west of hole 2 in a farm-yard. Contrary to previous reports the writer believes all three holes were drilled in tuffaceous sediments of the Hazelton Group. Holes 1 and

2 show high zinc in the upper 10 ft. of bedrock while Hole 3 shows zinc increasing with depth. If one correlates the 0' - 10' section of Hole 2 with the 150'-160' section of Hole 3 a shallow westerly dip would be indicated which is consistent with geological data found further west on the claim group.

CONCLUSIONS

The search for Sam Goosly type mineralization on the Parrott Lakes Property has been conducted since 1969. Some of the exploration work has been haphazard and poorly documented and all has suffered from inadequate geological data. An attempt to rectify the lack of geological information was made in September 1972 but more can yet be found and will prove invaluable in re-interpretation of existing data and in future exploration.

Unlike the soils associated with the Sam Goosly deposit, those at Parrott Lakes do not show distinctly anomalous values for silver and copper in soils. However, a strong and widespread zone of anomalous zinc values has been found at Parrott Lakes that still requires further investigation. The zone is underlain and closely associated with maroon tuffaceous sediments of the early Mesozoic Hazelton Group. A value of 770 ppm zinc has been found in a rock sample taken from within the anomalous zone while percussion holes drilled away from the main zone have yielded up to 1300 ppm in bedrock. Values of up to5900 ppm have been found in nearby soils.

From very limited structural data and air-photo interpretation it is concluded that the Hazelton rocks maintain a very shallow westerly dip across the property. It is further concluded that one or more of the tuffaceous beds within the sequence contains anomalous quantities of zinc which at outcrop give rise to anomalous zinc concentrations in the soils. No zinc mineralization has been seen in outcrop, nor indeed any sulphide mineralization, but a network of hairline carbonate-filled fractures associated with some sericite alteration has been noted in outcrop within the anomalous soils zone.

One soil sample of 5000 ppm zinc and 3.1 ppm silver was noted to be very rich in carbonates during digestion for analysis.

The possibility of a strata-bound deposit in which zinc is a prominent constituent is present on this property: a possibility that should be further investigated.

Respectfully submitted,

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
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Francis Guardia

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APPENDIX 1

Petrographic Reports on

Parrott Lakes Samples

by

D.L. Cooke, Ph.D., P.Eng.,

November 6, 1972

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PETROGRAPHIC REPORT

NUMBER: #1   LOCALITY: Parrott Lakes, B.C.   DATE: November 2, 1972

NAME AND CLASSIFICATION: FELDSPAR PORPHYRY (SYENITE PORPHYRY)

MEGASCOPIC DESCRIPTION: Numerous limonite-stained fractures and a few carbonate veinlets cross cut this massive grey rock.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	55	An_{5-10}. Stubby, twinned plagioclase phenocrysts range in length from 1 - 3 mm. More equigranular plagioclase grains constitute the major portion of the groundmass. These are moderately altered to kaolinite and sericite.
2. Kaolinite	20	Fine grained kaolinite alteration products are very abundant, both within the phenocrysts and the groundmass constituents.
3. Sericite	8	Sericite occurs as a secondary mineral after plagioclase.
4. Quartz	7	Equigranular quartz grains are confined to the groundmass, where they occur in association with plagioclase.
5. Carbonate/Semi Opaque	5	Semi opaque material, mixed with carbonate, fills seams and fractures and also occur as discrete grains in the body of the specimen.
6. Apatite	3	A host of euhedral apatite prisms and anhedral grains are prominently displayed.
7. Magnetite	1	Subhedral disseminations of magnetite permeate the specimen. These are partially altered to secondary oxides.
8. Hematite	1	The secondary hematite alteration occurs mainly as rims on magnetite.

TEXTURE: The texture is distinctly porphyritic, with plagioclase phenocrysts set in a groundmass of medium grained plagioclase, quartz and kaolinite. This texture is partially obscured by alteration products such as kaolinite, sericite and "limonitic" semi opaques.

CONCLUSION: The secondary fractures are filled by kaolinite, carbonate and quartz.

A shallow intrusive origin is inferred from the texture. Mineralogically the specimen lies between a syenite and granite in composition. Moderate hydrothermal alteration has resulted in the development of sericite, kaolinite, etc.

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PETROGRAPHIC REPORT

NUMBER: #2 LOCALITY: Parrott Lakes, B.C. DATE: November 6, 1972

NAME AND CLASSIFICATION: SYENITE PORPHYRY

MEGASCOPIC DESCRIPTION: This buff coloured feldspathic rock appears porphyritic and reticulated by iron-stained fractures.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	55	1 - 4 mm. laths of plagioclase (of albite composition An_{5-10}) form a closely packed array. These are moderately altered to sericite and carbonate.
2. Carbonate and Semi Opaque	25	Abundant carbonate occurs as pseudomorphs after 2 - 4 mm. biotite and hornblende crystals and as fillings in fractures. The fillings contain brown semi opaque encrustations.
3. Alkali Feldspar	8	Minute grains of alkali feldspar occur together with quartz in the interstitial places between plagioclase crystals.
4. Quartz	6	Equigranular quartz is confined to the interstitial matrix.
5. Sericite	6	Secondary sericite flakes are abundant within plagioclase tablets
6. Biotite	2	Patches of brown biotite are associated with the altered ferromagnesian minerals. This appears to be hydrothermal in origin.
7. Magnetite	2	Disseminations of magnetite occur in accessory quantities.
8. Leucoxene	1	Dusty leucoxene forms a portion of altered ferromagnesian minerals.
9. Apatite	Tr.	Apatite grains are subhedral and equidimentional.
10. Pyrite	Tr.	A trace of pyrite occurs as disseminations.
11. Hematite	Tr.	The margins of magnetite show some insipient alteration to hematite.

TEXTURE: The texture is subporphyritic to equigranular. The groundmass or matrix material forms less than 25%, while plagioclase laths occupy more than two thirds of the section. Crusty growths of brown semi opaque material are formed on the terminations of carbonate introduced into fractures, etc.

CONCLUSION:

This sample is intrusive and similar to #1, but it exhibits a less pronounced porphyritic texture. Compositionally it lies close to the granite-syenite boundary. It is classed with the syenites because of the low quartz content. The secondary sericite, biotite and carbonate are evidence of hydrothermal alteration. A shallow to sub-volcanic origin is likely.

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PETROGRAPHIC REPORT

NUMBER: #3 **LOCALITY:** Parrott Lakes, B.C. **DATE:** November 1, 1972

NAME AND CLASSIFICATION: BASALTIC ANDESITE FLOW BRECCIA

MEGASCOPIC DESCRIPTION: Although the specimen appears fragmental, it is uniformly fine grained and dark brown in colour.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	55	An_{45-55}. Well zoned plagioclase phenocrysts, tablets and fragments exhibit pronounced zoning. Plagioclase microlites form a large portion of the groundmass.
2. Glass	25	Brown glass is interstitial to the plagioclase microlites of the groundmass.
3. Pyroxene	10	Subrounded grains and fragments of augite pyroxene are a common constituent.
4. Carbonate	4	Irregular seams and patches of carbonate are restricted in abundance.
5. Magnetite	4	Magnetite grains are uniformly distributed. Some of these grains are altered to hematite.
6. Hematite	2	Hematite is secondary after magnetite.
7. Zeolite	Tr.	An isotropic zeolite fills the occasional amygdule which occurs within the matrix.
8. Chlorite	Tr.	Minor amounts of chlorite are associated with the zeolite fillings.

TEXTURE: Subrounded fragments of basaltic andesite together with angular fragments of feldspar and pyroxene are cemented by material of similar texture and composition. The porphyritic texture is readily apparent in the fluidal groundmass of plagioclase microlites. Tiny amygdules are filled by zeolite and chlorite or by carbonate

CONCLUSION:

This flow has a composition between andesite and basalt.

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Canada

PETROGRAPHIC REPORT

NUMBER: #4 LOCALITY: Parrott Lakes, B.C. DATE: November 1, 1972

NAME AND CLASSIFICATION: ANDESITE

MEGASCOPIC DESCRIPTION: The hand specimen is a brown aphanitic rock which contains a few light flecks, 1 mm. in length.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	65	An_{30-35}. Subrounded and "embayed" plagioclase microphenocrysts range up to 1 mm. in size. These are twinned and unaltered, but filled with inclusions of groundmass. Tiny microlites permeate the groundmass.
2. Chlorite	15	Minute chlorite grains occur throughout the groundmass, These are derived from alteration of glass.
3. Glass	10	Light brown isotropic glass is evident in association with chlorite, and as fillings within sub-microscopic amygdules and fractures.
4. Hematite	8	Abundant amounts of hematite have coloured the groundmass a red brown colour.
5. Pyroxene	1	A few equant grains of augite pyroxene also form microphenocrysts.
6. Magnetite	1	Magnetite grains are small ubiquitous disseminations.

TEXTURE: A weak microporphyritic texture is in evidence. The aphanitic groundmass of plagioclase needles, together with chlorite and altered glass forms a flow pattern about the plagioclase microphenocrysts.

CONCLUSION:
The specimen is an unaltered, fine grained andesite flow. It is probably a narrow flow which cooled quickly after extrusion, resulting in the development of a very fine grained texture.

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PETROGRAPHIC REPORT

NUMBER: #9 LOCALITY: Parrott Lakes, B.C. DATE: November 6, 1972

NAME AND CLASSIFICATION: VESICULAR BASALTIC ANDESITE

MEGASCOPIC DESCRIPTION: The specimen is dark and aphanitic, except for the presence of 2 - 5 mm. clusters of a grey feldspar.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	35	Phenocrysts of plagioclase exhibit twinning and strong zoning; An_{40-55}. They range in size from 2 - 5 mm. Plagioclase tablets of slightly lower An content occur in the groundmass.
2. Glass	25	Brown glass forms most of the interstitial matrix. It is mixed with serpentine and iron oxide.
3. Serpentine	20	Pale yellow green serpentine lines the almost circular 2 - 4 mm. vesicles which are present. Some also occur in the groundmass, and may be secondary after glass and/or olivine.
4. Pyroxene	10	Small tabular grains of pigeonite pyroxene are scattered throughout. They are 1 - 2 mm. in size.
5. Magnetite	5	Fine grained magnetite is uniformly distributed.
6. Hematite	5	Red-brown hematite occurs with serpentine (encrustations) within vesicles, along fractures, and occasionally in the groundmass.
7. Apatite	Tr.	Small apatite crystals are accessory.
8. Carbonate	Tr.	The occasional vesicle contains encrustations of carbonate in association with serpentine fillings.

TEXTURE: Plagioclase phenocrysts (2 - 5 mm.) occur in a matted, fine grained groundmass of plagioclase and subsidiary amounts of pyroxene. Glassy material occur between the plagioclase blades of the groundmass. Vesicles are lined by encrustations of serpentine and/or by a yellow brown semi opaque mineral, rarely by carbonate.

CONCLUSION:

This is a volcanic flow of andesite composition.

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16331 Bell Road,
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PETROGRAPHIC REPORT

NUMBER: #12 LOCALITY: Parrott Lakes, B.C. DATE: November 6, 1972

NAME AND CLASSIFICATION: LATITE

MEGASCOPIC DESCRIPTION: This is a light grey to buff coloured, fine grained rock which contains 1-3 mm. whitish feldspar phenocrysts.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	35	An_{20-30}. The plagioclase occurs in two habits: first as 1 - 3 mm. zoned phenocrysts, and secondly as microlites in the groundmass.
2. Alkali Feldspar	35	Orthoclase occurs interstitially and as exsolved (?) patches within and bordering plagioclase phenocrysts.
3. Pyroxene	12	Augite crystals appear as short equidimensional grains. Some of these are altered to fibrous uralitic amphibole.
4. Amphibole	8	Fibrous amphibole is secondary after pyroxene.
5. Hematite	7	Red brown hematite forms rims on the pyroxene crystals, and also occurs as fine grained disseminations.
6. Magnetite	3	Abundant disseminations of magnetite are evenly scattered throughout the groundmass.
7. Apatite	Tr.	Needles of apatite are associated with the coarser magnetite grains.
8. Leucoxene	Tr.	Leucoxene granules occur occasionally in the groundmass.
9. Quartz.	Tr.	Minor amounts of quartz are to be found in the matrix.

TEXTURE: The plagioclase microlites form a well-defined flow texture. Plagioclase phenocrysts and pyroxene grains are also aligned in a subparallel pattern.

CONCLUSION:

The section represents a latite flow. Resorption of pyroxene is evident. Alteration is of a deuteric nature, and is of minor extent.

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PETROGRAPHIC REPORT

NUMBER: #14 **LOCALITY:** Parrott Lakes, B.C. **DATE:** November 1, 1972

NAME AND CLASSIFICATION: BASALT

MEGASCOPIC DESCRIPTION: The brown aphanitic appearance is interrupted only by 1 - 3 mm. dark crystalline material.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Plagioclase	75	An_{50-55}. The plagioclase crystals occur as zoned 1 - 3 mm. long phenocrysts, as well as microlites throughout the groundmass.
2. Serpentine	15	Yellowish serpentine forms pseudomorphs after olivine microphenocrysts and groundmass grains.
3. Glass	5	Interstitial positions are filled by glassy, near isotropic, material.
4. Magnetite	3	Small euhedral magnetite phenocrysts are disseminated throughout the groundmass.
5. Pyroxene	2	Stubby pyroxene grains (augite) remain intact.
6. Apatite	Tr.	Apatite is present as tiny euhedral tablets.

TEXTURE: A microporphyritic texture is apparent. Microphenocrysts of plagioclase, altered olivine, and pyroxene occur within a "fluidal" groundmass of plagioclase microlites, altered olivine grains, and interstitial glass.

CONCLUSION:
The section has a characteristic volcanic flow texture. The labradorite composition of the plagioclase and the presence of olivine puts it in the basalt class.

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PETROGRAPHIC REPORT

NUMBER: #15 **LOCALITY:** Parrott Lakes, B.C. **DATE:** November 6, 1972

NAME AND CLASSIFICATION: LITHIC TUFF

MEGASCOPIC DESCRIPTION: The hand specimen is red brown in colour, and it seems to be an aphanitic fragmental unit.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Alkali Feldspar and Plagioclase	25	Anhedral fragments of alkali feldspar (sanidine) and sodic plagioclase are less abundant than the numerous minute feldspar crystals which occur in fragments of rock.
2. Carbonate	25	Carbonate forms a reticulate network, resulting from intense fracturing of the parent material.
3. Quartz	20	Very fine grained quartz accompanies the feldspar in various rock fragments.
4. Hematite	15	A dense dust of red brown hematite permeates the section. This is derived from magnetite alteration.
5. Semi Opaque	5	An unidentified yellowish brown semi opaque material occurs with the secondary carbonate in fractures.
6. Sericite	5	Tiny sericite flakes occur throughout.
7. Glass	3	The occasional glass shard is recognizable by its brown colour and isotropic property.
8. Magnetite	2	Extremely fine grained magnetite is disseminated throughout.
9. Apatite	Tr.	Apatite needles of various sizes occur within the rock fragments.
10. Leucoxene	Tr.	Granular leucoxene is associated with the iron oxides.

TEXTURE: The fragmental nature is amply demonstrated in thin section. Besides a few fragments of feldspar, the specimen consists of very fine grained and chilled extrusive rock fragments. These are impregnated with magnetite and red brown hematite dust. Fractures cross cut some fragments but follow the boundaries of others. Carbonate fills most of these fractures.

CONCLUSION:

The specimen is a tuffaceous and lithic fragmental volcanic rock. Fracturing and introduction of carbonate followed consolidation.

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PETROGRAPHIC REPORT

NUMBER: #26 LOCALITY: Parrott Lakes, B.C. DATE: November 2, 1972

NAME AND CLASSIFICATION: GRANOPHYRE

MEGASCOPIC DESCRIPTION: The sample is aphanitic and buff to pink in colour.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Alkali Feldspar	70	Alkali feldspar (untwinned) forms small equant grains packed closely together. Their margins and the interstitial groundmass contain a fine micrographic mixture of feldspar and quartz.
2. Quartz	15	Medium to fine grained quartz occurs intergrown with feldspar borders and with that which constitutes the interstitial matrix.
3. Carbonate	8	Equigranular carbonate grains are scattered about indiscriminately.
4. Kaolinite	5	Fine kaolinite is found within partially altered feldspar grains and in the matrix.
5. Biotite	1	The occasional brown biotite microphenocryst occurs throughout the section.
6. Magnetite	1	Minute magnetite tubes are uniformly disseminated in this specimen.
7. Hematite	Tr.	Some of the magnetite is altered to hematite.
8. Apatite	Tr.	Stubby apatite crystals occur in clusters within the matrix.

TEXTURE: An insipient micrographic texture is developed. Equant feldspar grains show feathery margins which are intergrown with fine grained quartz. Patches of medium grained quartz are also present. Interstitial positions are filled by a fine grained quartz-feldspar and kaolin mixture.

CONCLUSION:

The section has the composition and texture of a granophyre. It is probably from a dike which occurs in an extrusive to subvolcanic environment. An extrusive rhyolite flow would be about the same in composition. Minor kaolinization of the feldspar is evidence of some hydrothermal action.

APPENDIX 2

PARROTT LAKES - COSTS OF GEOCHEMICAL AND GEOLOGICAL SURVEY - SEPTEMBER, 1972

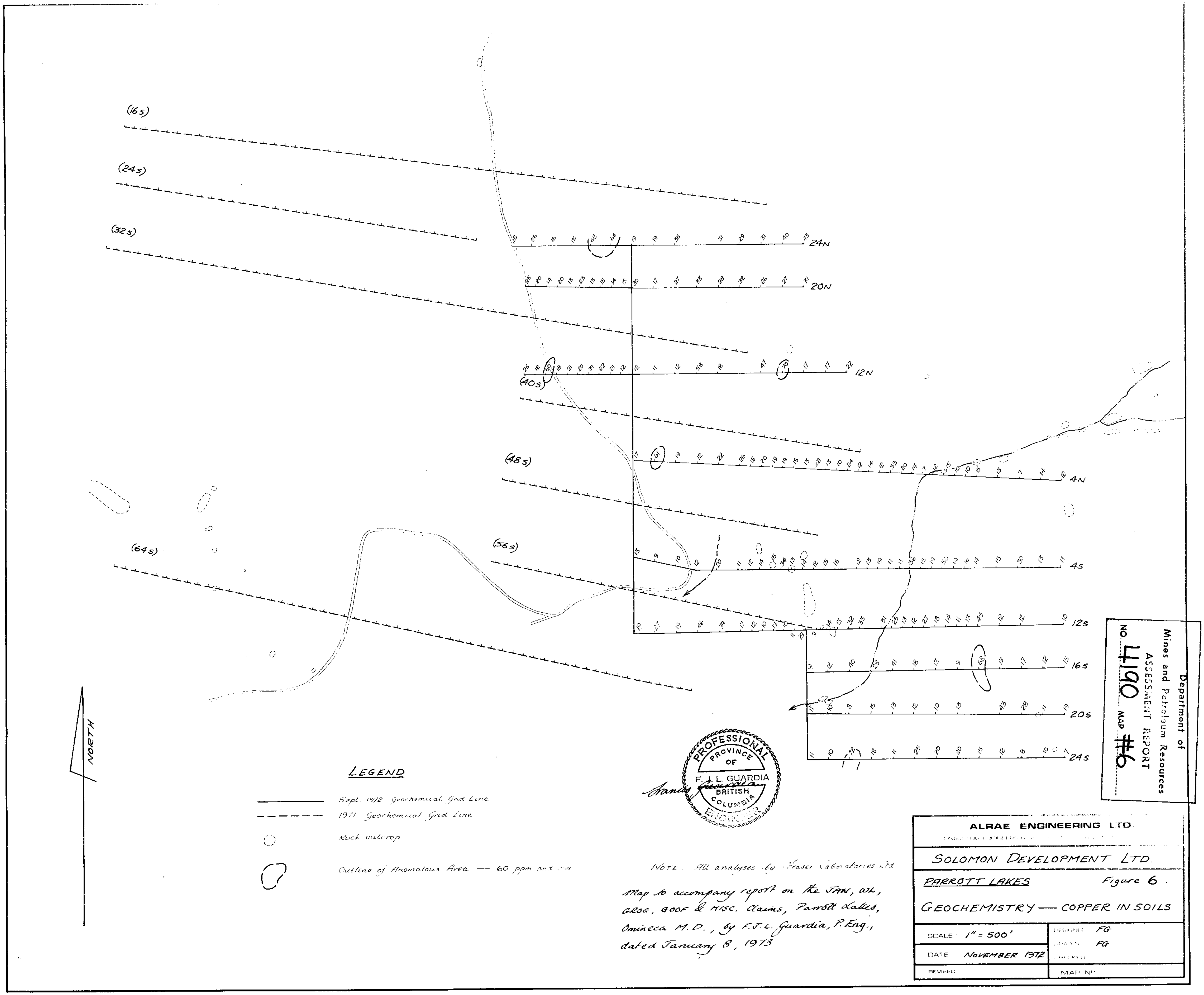
PERSONNEL		
R.G. Jury - Mobilization	$ 275.00	
F. Guardia - September 18 - 29	1,106.85	
A. Wall - September 18 - 29	543.09	
		$ 1,924.94
REPORT PREPARATION AND MAPS		1,442.00
RENTALS		
Truck	$ 300.00	
Field Camp	50.00	350.00
SUPPLIES		
Camp groceries	$ 259.15	
Field equipment	92.28	351.43
ASSAYS AND PETROGRAPHIC REPORTS		929.83
	TOTAL:	$ 4,998.20

Declared before me at the City of Vancouver, in the Province of British Columbia, this 5 day of Feb. 1973, A.D.

Francis Guardia

Gill Siemens

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia.
Sub-mining Recorder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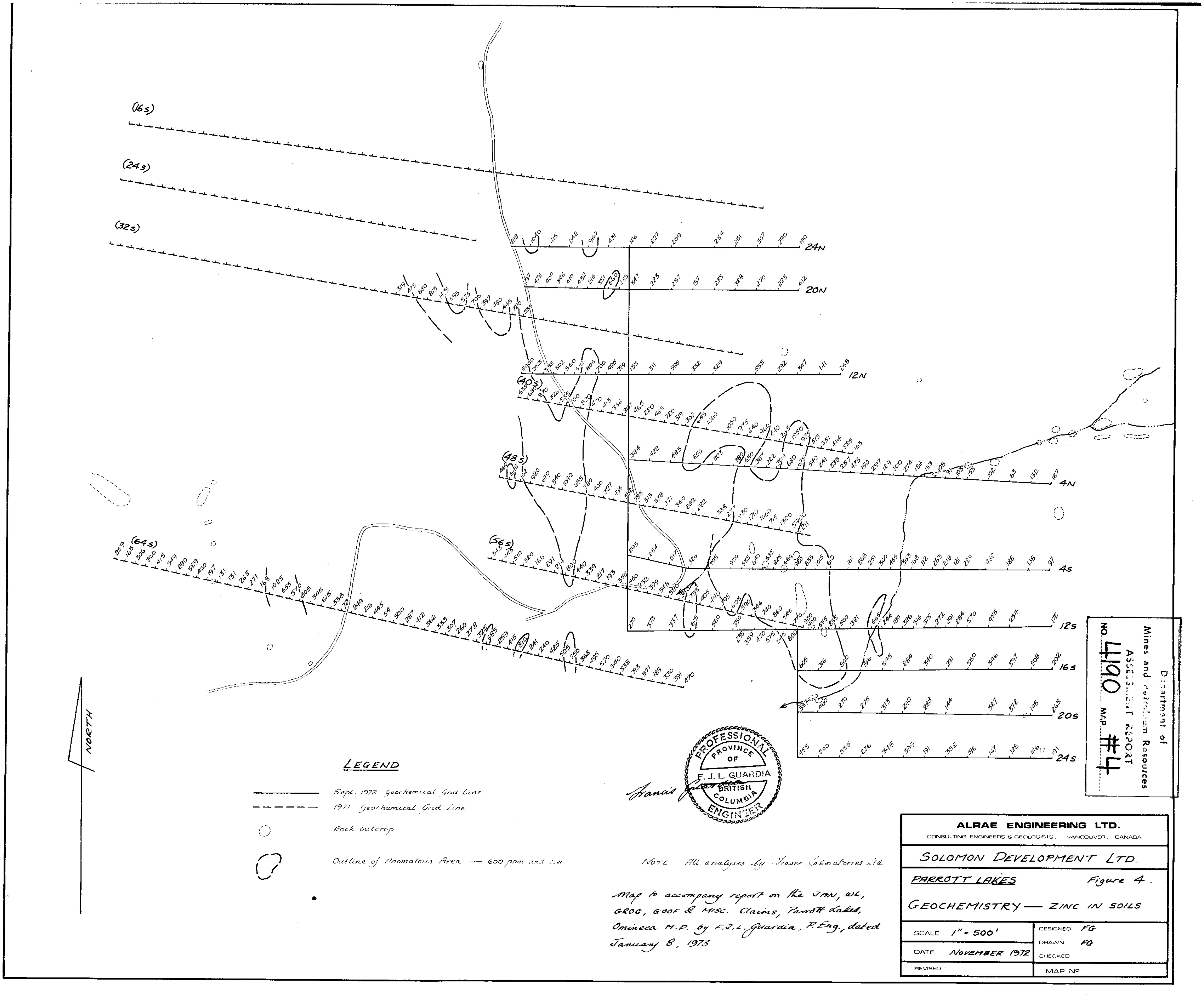
4s
12s
16s
20s
24s
NORTH
LEGEND
Sept. 1972 Geochemical Grid Line
1971 Geochemical Grid Line
Rock outcrop
Outline of Anomalous Area — 60 ppm and over
NOTE. All analyses by Fraser Laboratories Ltd.
Map to accompany report on the JAN, WL, GROG, GOOF & MISC. claims, Parrott Lakes, Omineca M.D., by F.J.L. Guardia, P.Eng., dated January 8, 1973
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. J. L. GUARDIA
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4190 MAP #6
ALRAE ENGINEERING LTD.
SOLOMON DEVELOPMENT LTD.
PARROTT LAKES
Figure 6
GEOCHEMISTRY — COPPER IN SOILS
SCALE 1" = 500'
DATE NOVEMBER 1972
DESIGNED FG
DRAWN FG
CHECKED
REVISED
MAP No.



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12N
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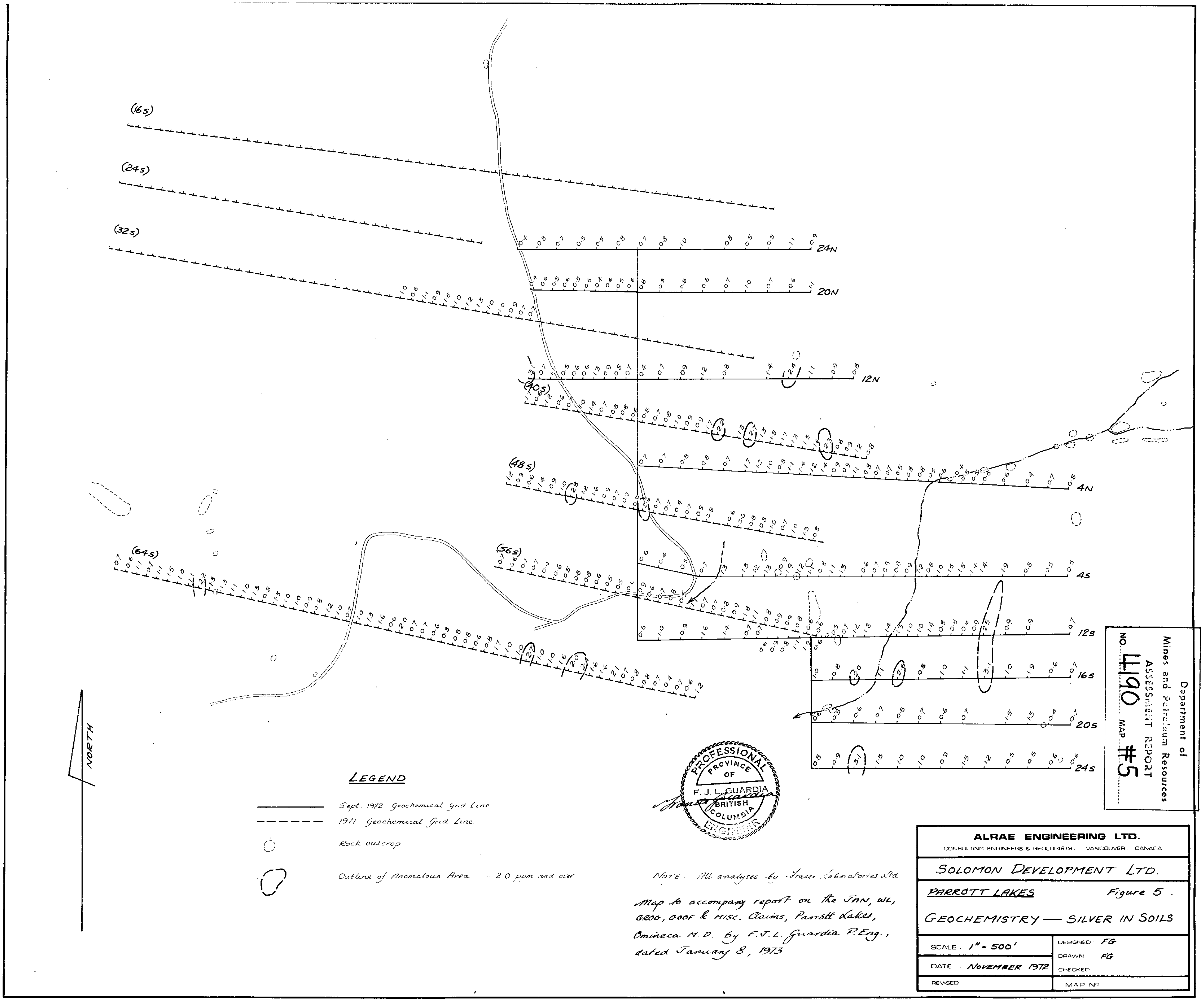
4s
12s
16s
20s
24s
NORTH
LEGEND
Sept. 1972 Geochemical Grid Line
1971 Geochemical Grid Line
Rock outcrop
Outline of Anomalous Area — 600 ppm and over
NOTE: All analyses by Fraser Laboratories Ltd.
Map to accompany report on the JAN, WL, GROG, GOOF & MISC. Claims, Parrott Lakes, Omineca M.D. by F.J.L. Guardia, P.Eng., dated January 8, 1973
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. J. L. GUARDIA
Francis Guardia
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO 4190 MAP #4
ALRAE ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS VANCOUVER, CANADA
SOLOMON DEVELOPMENT LTD.
PARROTT LAKES
Figure 4.
GEOCHEMISTRY — ZINC IN SOILS
SCALE: 1" = 500'
DATE: NOVEMBER 1972
DESIGNED FG
DRAWN FG
CHECKED
REVISED
MAP No



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24N
20N
12N
4N
4s
12s
16s
20s
24s
NORTH
LEGEND
Sept 1972 Geochemical Grid Line
1971 Geochemical Grid Line
Rock outcrop
Outline of Anomalous Area — 2.0 ppm and over
NOTE: All analyses by Fraser Laboratories Ltd
Map to accompany report on the JAN, WL, GROG, GOOF & MISC. Claims, Parrott Lakes, Omineca M.D. by F.J.L. Guardia P.Eng., dated January 8, 1973
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NO. 4190 MAP #5
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PARROTT LAKES
Figure 5.
GEOCHEMISTRY — SILVER IN SOILS
SCALE: 1" = 500'
DATE: NOVEMBER 1972
DESIGNED: FG
DRAWN: FG
CHECKED
REVISED:
MAP No


APPROX CLAIM OUTLINE
OUTLINE OF AREA EXAMINED IN SEPT '72
AREA OF DEEP OVERBURDEN
APPROX CLAIM OUTLINE
PARROT CREEK
LEGEND
HAZELTON GROUP
interpreted contact
interpreted fault
Department of Mines and Petroleum Resources ASSESSMENT REPORT
NO. 4190 MAP #3
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
4190 M-3
ALRAE ENGINEERING LTD.
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PARROTT LAKES
FIGURE 3
GEOLOGY MAP
SCALE 1" = 1000'
DATE NOVEMBER 1972