

CREAM SILVER MINES LTD.

GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE
BUTTLE LAKE PROPERTY
ALBERNI MINING DIVISION
NTS 92F/12E, 5E

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BY
LINDA DANDY, B.Sc., F.G.A.C.

JANUARY 1988

CLAIMS WORKED:

CREAM 1-18
BEAR 2, 6, 8, 21-26
X1-X20
F1-F28
D1-D4, D6-D18

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,005

LOCATION: 49°30'N LATITUDE - 125°33'W LONGITUDE
OPERATOR: CREAM SILVER MINES LTD.
OWNER: CREAM SILVER MINES LTD.
CONSULTANT: ARCHEAN ENGINEERING LTD.
PROJECT GEOLOGIST: LINDA DANDY, B.Sc., MARK MANAGEMENT LTD.

FILMED

PART 1 OF 3

**CREAM SILVER MINES LTD.
GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE BUTTLE LAKE PROPERTY
ALBERNI MINING DIVISION**

SUMMARY

Cream Silver Mines Ltd. Buttle Lake property consists of 99 mineral claims in current good standing in the Alberni Mining Division of Vancouver Island, British Columbia. The mineral claims adjoin those of Westmin Resources Ltd. near the south end of Buttle Lake and access into the area is by road from Campbell River. The southern Cream Silver claims are most easily accessed by helicopter.

The initial mineral claims of the current Cream Silver property were located in 1964. Exploratory work to 1972 has included geological, geochemical and geophysical surveys over much of the property area and three diamond drill holes totalling 2,649 feet on one of the northern claims. Exploration work since 1973 has been prohibited, until March of this year, by an effective moratorium on work on mineral claims in Provincial Parks.

The Westmin Resources Ltd. property, immediately north of the Cream Silver claims, includes four known volcanogenic massive sulfide deposits of which two, the Lynx and Myra mines, have been in production for 20 years. Recent development of the H-W deposit (15.2 million tons grading 0.07 oz/ton gold, 1.1 oz/ton silver, 2.2% copper, 0.3% lead, and 5.3% zinc) has resulted in an increase in daily milling capacity to 4,000 tons. The Westmin deposits are hosted by four rhyolitic horizons within the lower and middle sections of the Myra Formation of the Paleozoic Sicker Group.

Available data pertaining to earlier work on the Cream Silver property suggests that the same volcanic stratigraphy as that hosting the Westmin deposits exists in the northern part of the claims area. In addition, massive sulfide float with values in gold, silver, copper, lead and zinc has been identified near the headwaters of Price Creek in the southeastern part of the property. A number of narrow vein type deposits with locally good gold and silver grades are known in the southern claims area.

In 1987, work done by Cream Silver Mines Ltd. included geological mapping at a scale of 1:2,500, and rock chip, soil and heavy mineral concentrate sampling. Geophysical surveys were conducted over the northern portion of the property by P.E. Walcott and Associates and will be included in a separate report.

The Cream Silver property is considered to be highly prospective for the discovery of Westmin type massive sulfide deposits. A thorough programme of exploration is warranted which is recommended to include preliminary diamond drilling, and additional ground geophysical, geological and geochemical surveys.

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CREAM SILVER MINES LTD.
GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE BUTTLE LAKE PROPERTY

1. INTRODUCTION

The Buttle Lake Property is a precious and base metal prospect located in the Strathcona Recreation Area on central Vancouver Island, British Columbia (Figure 1). The claims were staked in the late 1960's and are adjacent to those of Westmin Resources Ltd.

The claims have been held in moratorium for the last 17 years since they were located within Strathcona Provincial Park within which mineral exploration was disallowed. In March 1987, the moratorium was lifted and the status of the area was reduced from Class A Park to Recreational status, which reopened the area to mineral exploration.

From 1964 to 1970, the company carried out exploration consisting of various geophysical surveys, geochemical surveys, geological mapping, trenching, sampling and limited diamond drilling. In 1971, Westmin Resources Ltd. optioned the claim group and conducted exploration consisting of an Induced Polarization survey and diamond drilling along the common boundary (ie. the north part of the claims at Thelwood Creek), geological mapping and prospecting of the claim group.

In 1987, a cut line grid was put in on the northern portion of the property. This grid was surveyed using Induced Polarization and Controlled Source Audio-Frequency Magneto-Tellurics (CSAMT) depending on the depth penetration required along each line. The geophysical surveys will be contained in a separate report to be submitted by P. E. Walcott and Associates of Vancouver, B.C. Where snow cover allowed, the property was mapped at a scale of 1:2,500. Rock chip, soil and heavy mineral sampling was carried out over areas of interesting geology.

1.1 LOCATION AND ACCESS

The property lies between Thelwood and Price Creeks, from 2 to 10 kilometres south of Buttle Lake in central Vancouver Island, British Columbia. The claims cover an area of approximately 25 km² which represents most of the drainage basins of Price, Thelwood, and Drinkwater Creeks. These creeks all drain westward or northward into Buttle Lake. Most of the property consists of steep sided mountain slopes with gently rolling plateau-like summits. Relief is on the order of 1700 metres (5600 feet). The geographic centre of the claim group is at 125°33' West Longitude and 49°30' North Latitude on NTS Mapsheets 92F/12E, 5E.

Access into the Buttle Lake area is by a 90 kilometre (55 mile) paved road linking the Westmin Resources' mine and mill complex with Campbell River and the Island Highway (B.C. No. 9). The lower Price Creek area, in the northern portion of the property, is partially accessible by way of old logging roads and a little used trail; this trail terminates at Cream Lake. The claims adjoining those of Westmin are located along the Thelwood Creek valley and are accessed by a gravelled road which runs from the south end of Buttle Lake to Jim Mitchell Lake. Preferably, access can be gained by helicopter from Campbell River, a distance of approximately 65 kilometres, to the centre of the claim group, or by fixed wing aircraft to Bedwell Lake, 1.5 kilometres west of the claims. From there they are reached by a foot trail which climbs approximately 300 metres to the centre of the claims.

The northeast corner, on which the most recent program was completed, is accessed from the south end of Buttle Lake by an old logging road for approximately 3 kilometres, and then by foot trail for a distance of 1.5 kilometres.

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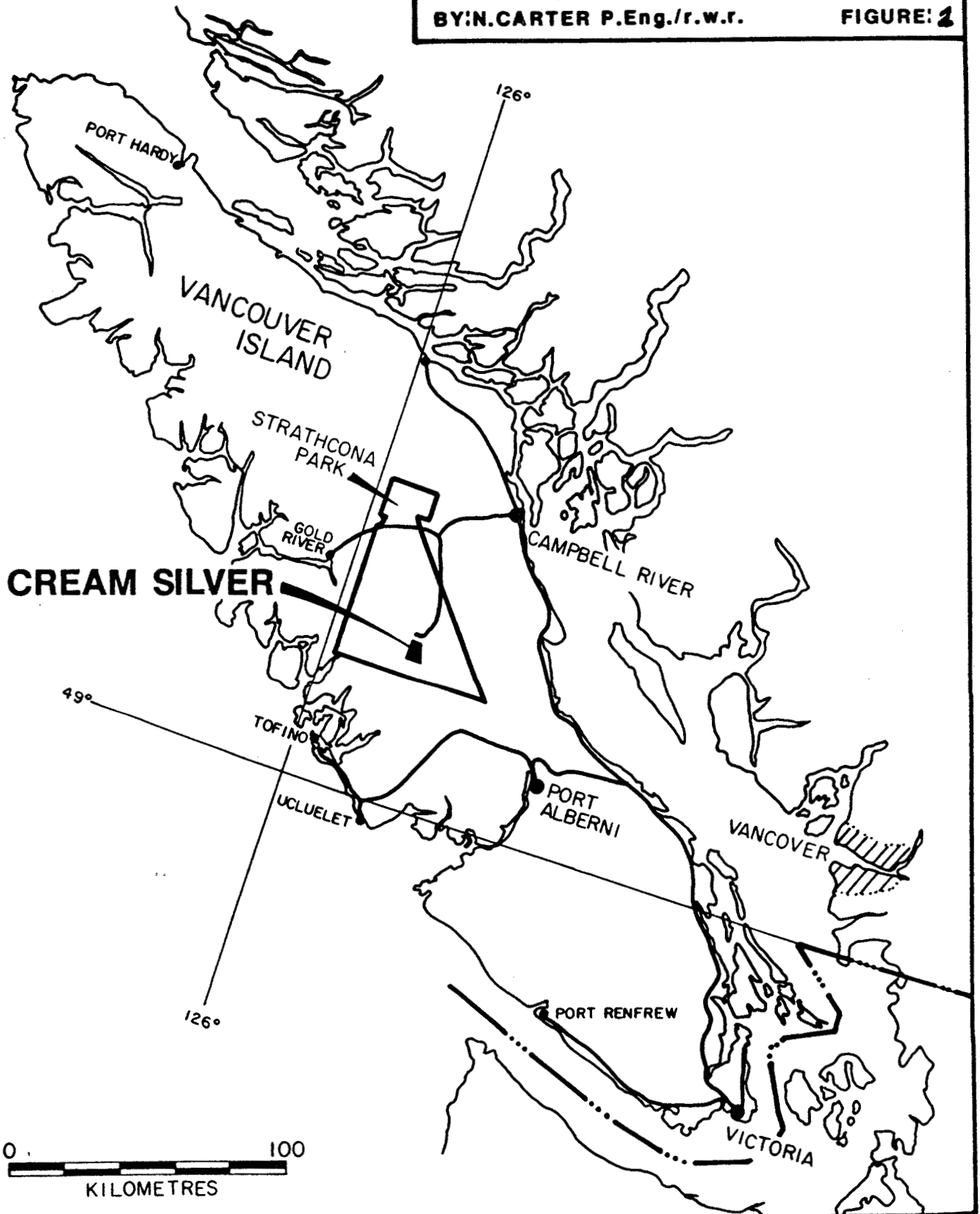
BUTLE LAKE PROPERTY
ALBERNI M.D.-B.C. NTS:92-F-5&12

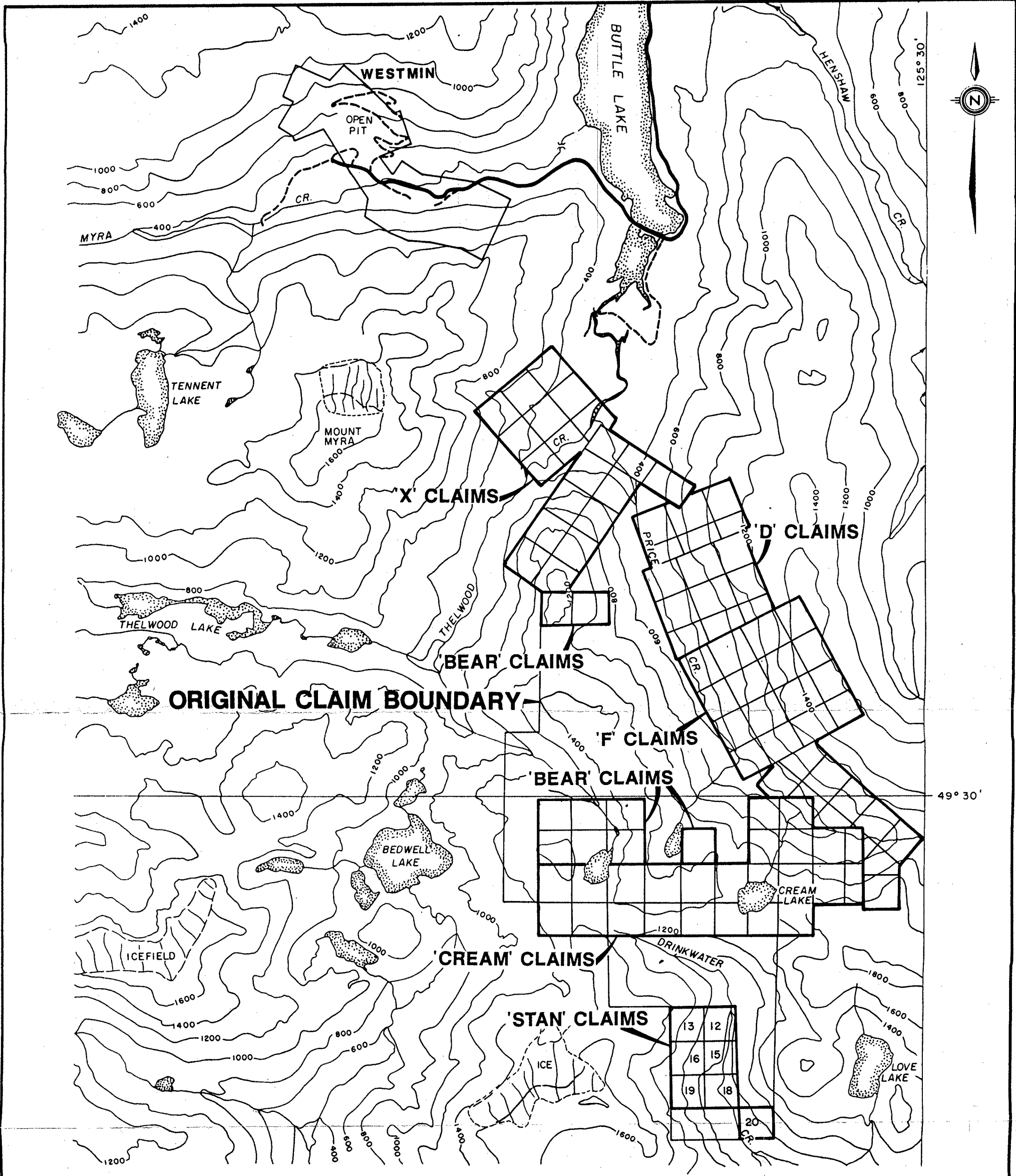
LOCATION MAP

DATE:FEB.,1986

BY:N.CARTER P.Eng./r.w.r.

FIGURE: 2





CREAM SILVER MINES LTD.	
BUTTLE LAKE PROPERTY	
ALBERNI M.D.-B.C. NTS:92-F-5&12	
CLAIM MAP	
DATE: NOV., 1987	FIGURE: 2
BY: L.D./rwr	

1.2 PHYSIOGRAPHY, VEGETATION AND CLIMATE

Topography in the area is rugged, with elevations varying from 450 to 1525 metres above sea level. The higher portion of the claims consists of rock outcrops or rubble. The lower part of the claims is covered by dense forest. In this section, outcrop is limited to creeks or areas of sudden change in slope. Slide areas are common along the western tributaries of Price Creek, covering large sections of the main valley with boulders and rock rubble. These sections are nearly impassible due to the thick growth of alders and brush.

The Cream Silver property includes an alpine area in the southern part of the claims holdings where elevations range from 1220 to 1525 metres (4000 to 5000 feet). Bedrock, felsenmeer and talus is abundant. Below 1220 metres (4000 feet) elevation, and particularly in the lower reaches of Price and Thelwood Creeks, dense forest cover of cedar, hemlock and fir and locally thick underbrush predominates.

The area has typical Coastal climate and higher areas are snow free 3 to 4 months of the year. At Buttle Lake, summer temperatures may reach into the low 30°C range, while winter lows seldom remain below zero for more than a few weeks.

1.3 CLAIM INFORMATION

Cream Silver's Buttle Lake Property is situated in the Alberni Mining Division, and consists of 99 full and fractional two post mineral claims adjacent to those held by Westmin Resources Ltd. Figure 2 shows the approximate boundaries of the claims. Claim information is listed in TABLE I.

TABLE I
CLAIM STATUS

CLAIM NAME	RECORD NO.	ANNIVERSARY DATE
CREAM 1- 2	11497-98	JULY 22
CREAM 3-12	9418-27	JULY 22
CREAM 13-14	10394-95	SEPTEMBER 23
CREAM 15-18	11574-77	OCTOBER 12
CREAM 1E-2E	11499-500	JULY 27
CREAM 3E-6E	11570-73	OCTOBER 12
BEAR 2	10353	SEPTEMBER 23
BEAR 6	10357	SEPTEMBER 23
BEAR 8	10359	SEPTEMBER 23
BEAR 21-26	10372-77	SEPTEMBER 23
X 1 - X20	15577-96	SEPTEMBER 17
F 1 - F16	15882-97	NOVEMBER 25
F17 - F28	16846-57	MAY 22
D 1 - D4	16271-74	JANUARY 27
D 6 - D18	16276-88	JANUARY 27

1.4 HISTORY

Gold and silver bearing quartz veins in the vicinity of Cream Lake were first investigated in the 1930's. Mr. F.A. Lang located 12 claims in the area in 1964 and these and other claims staked in subsequent years came under the ownership of Cream Silver Mines Ltd. in 1966.

Exploratory work by Cream Silver Mines to 1970 included airborne and ground geophysics, soil geochemistry and detailed geological mapping, trenching and sampling of several precious and base metal structures in the alpine area west of Cream Lake. Three short holes were also diamond drilled. Soil geochemical surveys were conducted east and west of Price Creek in 1969 and 1970.

Western Mines Ltd. (now Westmin Resources Ltd.) entered into an agreement in 1971 to carry out further exploration on Cream Silver's 180 claims covering an area from Drinkwater Creek on the south to the junction of Price and Thelwood Creeks on the north. Geological mapping was undertaken over much of the claims area in 1971 and 1972

and additional soil geochemical surveys were completed in the lower Price Creek area. An Induced Polarization survey, carried out over an anomalous zinc in soils zone near the confluence of Price and Thelwood Creeks in the northern claims, indicated targets which were tested by three diamond drill holes totalling 807 metres (2,649 feet) in 1972 and 1973.

The British Columbia Government enacted legislation in early 1973 prohibiting the issuance of Park Use Permits for the purpose of carrying out exploration work on mineral claims in all classes of Provincial Parks. An Order-in-Council issued by the Government in April of 1974, and retroactive to March 1, 1973, placed a moratorium on assessment work requirements for claims in Provincial Parks until such time as "a Park Use Permit is issued or renewed or the mineral claims are otherwise disposed of." A recent (1986) Supreme Court of Canada decision overturned the B.C. Government's moratorium and has again allowed for the exploration and development of mineral claims in Parks.

1.5 WORK DONE BY CREAM SILVER MINES LTD. IN 1987

The following field work was completed on the Buttle Lake property by Cream Silver Mines Ltd. during the period May 4 to July 30, 1987:

- 1) Detailed geological mapping at a scale of 1:2,500 was carried out over most of the property.
- 2) Soil, rock chip and heavy mineral concentrate samples were taken over areas of favourable geology.
- 3) A grid totalling 32 line kilometres, with a base line of 4 kilometres was cut and chained.
- 4) Contract geophysical work was done by P. E. Walcott and Associates of Vancouver, B.C., and will be included as a separate report.

2. GEOLOGY

2.1 REGIONAL GEOLOGY

Vancouver Island makes up the southern part of the Insular Belt, the westernmost tectonic subdivision of the Canadian Cordillera. The southern Insular Belt is dominated by Paleozoic and Mesozoic volcanic-plutonic complexes overlain along the east coast of Vancouver Island by clastic sedimentary rocks of Cretaceous age.

Oldest rocks underlying Vancouver Island include the Paleozoic Sicker Group which is exposed in two principal uplifts in the central and southern parts of the Island - the area between Port Alberni and Duncan and the Buttle Lake area. Sicker Group comprises a 2135 to 3050 metre (7,000 to 10,000 foot) thickness of mafic to felsic volcanic rocks, intrusive equivalents and lesser sedimentary rocks which has been subdivided by Muller (1980) into three principal formations. These include the basal Nitinat Formation of pre-Devonian age which is exposed only in the Port Alberni-Duncan area and which consists of basaltic flows and flow breccias. Myra Formation of similar age overlies the Nitinat Formation and includes 915 to 1830 metres (3,000 to 6,000 feet) of intermediate to felsic volcanoclastic and lesser sedimentary rocks. Pennsylvanian to Permian limestones of the Buttle Lake Formation form the upper unit of the Sicker Group.

Much of the Sicker Group exposed in the Buttle Lake uplift is Myra Formation volcanic and lesser sedimentary rocks. Buttle Lake Formation limestones overly the Myra Formation and are exposed on the flanks of the structural uplift (Figure 3). The Sicker Group in the Buttle Lake area is overlain unconformably by late Triassic Karmutsen Formation basalts and is intruded by granitic rocks of the Island Intrusions.

The Myra Formation in this area has an apparent thickness of 1830 metres (6,000 feet). The lower and middle sections of the Formation host the Westmin massive sulfide deposits which have been well

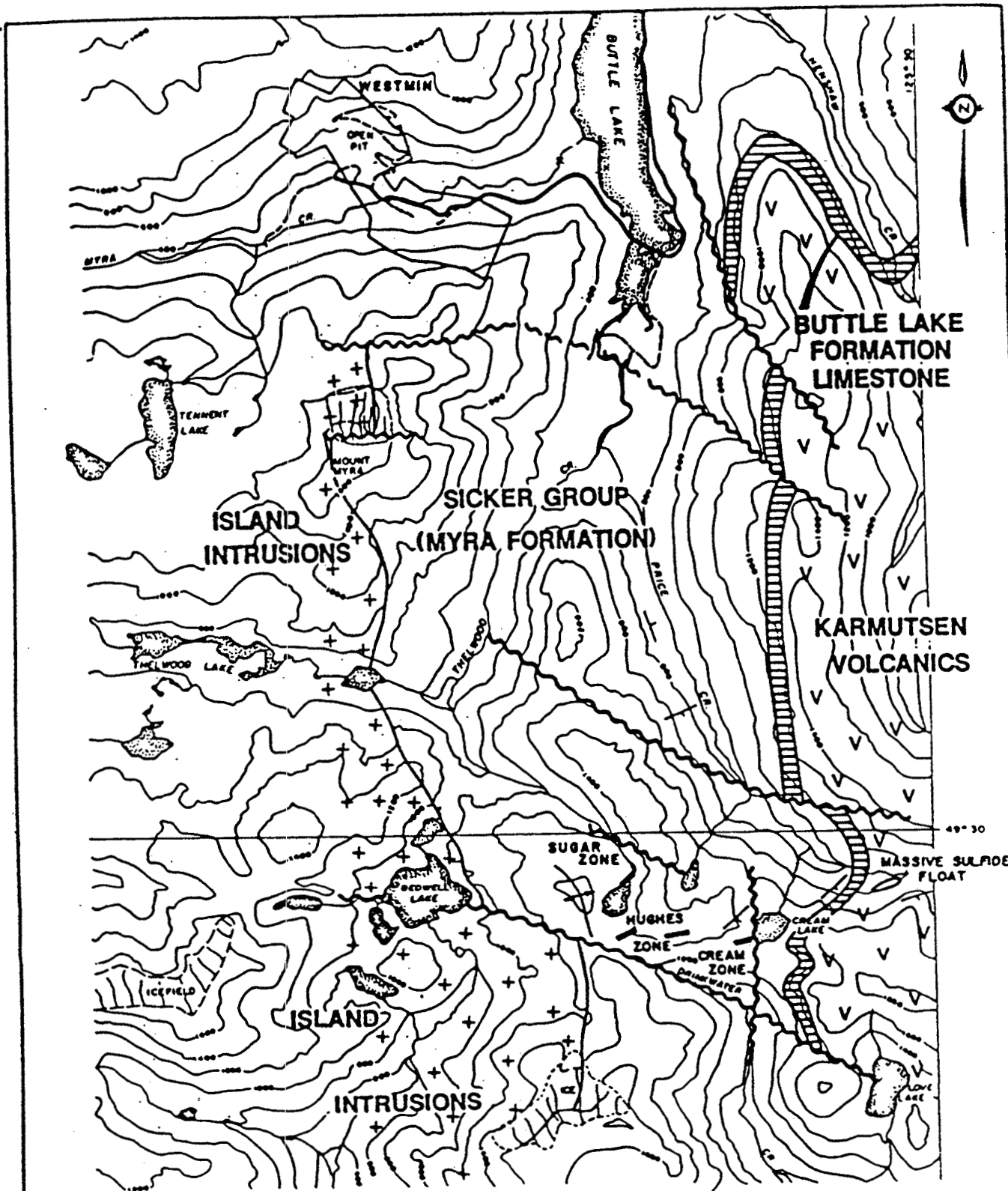
documented by Walker (1983a, b).

Sicker Group rocks of Vancouver Island host precious and base metal-bearing vein and fissure-filling deposits in the China Creek area east of Port Alberni and in the southern part of the Cream Silver property south of Buttle Lake. Polymetallic, volcanogenic massive sulfide deposits, examples of which include the Westmin deposits and the Mt. Sicker and Lara prospects near Duncan, represent the most significant mineral deposit type hosted by Sicker Group rocks, and more specifically the Myra Formation.

Production over the past 20 years from the Westmin Lynx and Myra Mines totals 5.7 million tons grading 0.06 oz/ton gold, 3.2 oz/ton silver, 1.5% copper, 1.1% lead and 7.6% zinc. Proven reserves at the Lynx, Myra and the partially developed Price zone are 0.75 million tons of similar grade, but most of the property reserves are contained in the H-W deposit from which production commenced in late 1985.

The H-W orebody, discovered in late 1979, is considered to be the most significant mineral discovery in the Canadian Cordillera in the last decade. Current reserves are 15.2 million tons grading 0.07 oz/ton gold, 1.1 oz/ton silver, 2.2% copper, 0.3% lead and 5.3% zinc. Production from this deposit has resulted in the expansion of daily milling capacity to 4,000 tons.

The Lynx, Myra, Price and H-W deposits are hosted by the lower and middle units of the Myra Formation, referred to by Walker (1983a, b) as the Mine Sequence. This is a 450 metre (1,500 foot) thick succession, underlain by andesitic volcanics and overlain by a distinctive sharp banded tuff unit. The Mine Sequence includes volcanoclastics, volcanic flows and lesser chemical sedimentary rocks and while lithologic units are discontinuous laterally, they have a distinct northwest trend. Mafic volcanic rocks predominate, but massive sulfide deposits are hosted by rhyolitic unit at the bottom, middle and top of the sequence.



CREAM SILVER MINES LTD.	
BUTLE LAKE PROPERTY	
ALBERNI M.D.-B.C. NTS:92-F-6612	
PRINCIPAL GEOLOGICAL FEATURES	
DATE:	FIGURE:3
BY:M.	

The lowest rhyolitic unit hosts the H-W deposit and is predominantly clastic, ranging in thickness from several metres to more than 215 metres (700 feet). This is overlain by several hundred metres of andesitic flows, clastic rocks and chert. Sulfide fragments have been noted in this interval which is overlain by the middle rhyolite unit hosting the Lynx, Myra and Price deposits. This rhyolite unit has a known strike length of 5800 metres (19,000 feet) and attains a thickness of up to several hundred metres. Overlying this unit is a distinctive purple and green andesitic to basaltic sequence of flows and tuffs which also contains sulfide clasts and which has proven to be a useful stratigraphic marker horizon. Above this is the upper rhyolitic unit which hosts massive sulfides at the Lynx open pit and in a new zone 915 metres (3,000 feet) to the northwest.

Most rocks of the Mine Sequence have been intensely deformed and converted to chlorite and sericite schists particularly in proximity to mineralized zones. North and east trending faults are numerous and displace most rock units.

The Lynx, Myra and Price ore bodies are near the crest of a recumbent, northwest-trending anticline developed in the middle rhyolitic unit. These three deposits are in fact parts of one zone in which the Lynx and Myra mines are separated by erosion along Myra Creek valley. The Price is the southeast continuation of the Myra deposit which has been displaced by faulting 610 metres (2,000 feet) laterally and 305 metres (1,000 feet) vertically with the Price block up.

The Lynx, Myra and Price deposits consist of fine grained massive to banded sulfides which occur as lenses in which the principal minerals are pyrite, sphalerite, chalcopyrite, galena and barite. The H-W orebody, 245 metres (800 feet) stratigraphically lower and near the base of the lower rhyolitic unit, is a flat-lying lens-like body with thicknesses in its core of more than 30 metres. Massive sulfides average 65 weight percent pyrite as opposed to the Lynx-Myra-Price zones which average 15 weight percent. The H-W is laterally zoned from a cupriferous pyrite core to zinc, copper, lead-silver and

barite rich margins. Gold is uniformly distributed throughout the zone. Pyrite stringer zones underly the H-W and Lynx deposits.

2.2 PROPERTY GEOLOGY

Principal geological units of the Cream Silver property are shown on Figure 3. The claims cover the southern part of the Buttle Lake structural uplift in which Sicker Group rocks are bounded on the east and west by Karmutsen basic volcanics and Island granitic intrusions respectively.

Sicker Group rocks on the claims include felsic and intermediate flows, tuffs and agglomerates which are overlain by Buttle Lake limestones, lesser cherts and argillites in the eastern claims area. These are in turn overlain unconformably by Karmutsen basic volcanics. Granitic to dioritic dykes, related to the Island Intrusions, are numerous, particularly in the southern claims. Basic dykes are also present.

In the northern part of the claims area, between Price and Thelwood Creeks, Scott (1972a) refers to a 600 to 1400 metre (2,000 to 4,500 feet) succession which includes a basal 60 metre (200 feet) thick porphyritic rhyolite flow unit overlain by 300 metres (1,000 feet) of dacite lapilli tuff which is separated from a coarser clastic dacite by 90 metres (300 feet) of cherty bedded tuff. Up to 250 metres (800 feet) of crinoidal limestone of the Buttle Lake Formation overlies the coarse clastic dacite sequence east of Price Lake and Cream Lake. Both Wilbur (1971) and Scott (1972) refer to the basal part of the Karmutsen Formation (which overlies the Buttle Lake Formation unconformably) as being comprised of a 30 metres (100 feet) thickness of argillite and rhyolite, grading upward to typical pillow basalt with rhyolitic interbeds.

Detailed mapping carried out in 1987 outlined units of Sicker Group andesites and rhyolites, Buttle Lake Formation limestone, chert and argillite, and minor pillow basalts of the Karmutsen Formation.

Numerous dioritic and less abundant mafic dykes were found cross-cutting the Sicker Group volcanic rocks. Snow cover in the southern portion of the claim block (where elevations are higher) made geologic interpretations difficult as only about 50% of the outcrops were exposed. In the northern claims, where the most significant geophysical anomalies were outlined, little rock exposure was present and most outcrops were obscured by dense undergrowth.

2.3 STRUCTURAL GEOLOGY

Stratification within the Myra Formation is predominantly northeast with moderate dips to the southeast. Graded bedding in some of the tuff units indicates the sequence is right way up (Scott, 1972). Moderately east plunging fold structures were noted in the upper Price Creek area by Wilbur (1971a). The dominant structural features of the claims area are west-northwest faults along which lateral displacements of a few thousand feet are evident. Vertical displacements are imperfectly known, but south sides of faults represent uplifted blocks.

Faulting and folding complicates stratigraphic relationships, but assuming that Scott's (1972) cherty bedded tuff unit is equivalent to Walker's (1983) sharp banded tuff unit which directly overlies the Mine Sequence hosting the Westmin deposits, then the same stratigraphic section should be present on the Cream Silver claims, particularly in the area of lower Price Creek. Three vertical holes were drilled to depths of between 717 and 1052 feet by Western Mines Ltd. in 1972 and 1973 in the Thelwood Creek valley a short distance south of the outlet of Price Creek. These holes, drilled to test a zinc soil geochemical anomaly and an IP target, intersected a mixed sequence of rhyolite-dacite tuffs and breccias, rhyolite porphyry, and purple and green volcanoclastics. The latter are known to overlie the Lynx-Myra-Price rhyolite sequence at Westmin and in the Thelwood Creek area they may represent the southwest limb of the anticlinal structure extending southeasterly from the nearby Price zone.

Limited rock exposure due to dense vegetation and snow cover does not allow for a complete structural analysis at this time. Numerous bedding, dyking and fracture orientations were taken in the field and have been plotted on a stereonet of allow for better interpretation (see Appendix A).

In the field very little bedding was observed as most outcrops tended to be massive volcanics. The bedding orientations tend to centre around 065/35E (striking 065° and dipping 35° to the east). This trend was found throughout the property indicating the possibility of uniform bedding with very little minor folding.

Numerous fractures orientations were recorded from all rock types encountered. Although fracture directions are quite variable, three more prominent orientations have been observed at 035/10E, 115/65N and 060/65N.

Dykes, veins and contacts appear to have random orientations, indicating multiple events of deposition. One consistent feature of small dykes and veins is left lateral offsets along minor cross-cutting fractures. These offsets could be indicative of regional fault offsets.

2.4 ECONOMIC GEOLOGY

Several styles of mineralization have been mapped in place and in float within the boundaries of the Cream Silver claims. Initial work on the property was directed to vein and fissure-filling deposits containing gold and silver values in the alpine area west of Cream Lake. Several zones were identified and all are related to east-northeast striking, steeply north dipping shear zones reflected by prominent lineaments. Sphalerite, galena, pyrite, pyrrhotite and arsenopyrite are the dominant sulfide minerals and these are contained in quartz, carbonate and siderite veins and fault gouge. Better silver grades are associated with tetrahedrite, pyrargyrite

and owyheeite (Holcapek, 1985) and gold values are directly related to arsenopyrite content (Selmser, 1967). The mineralized structures pinch and swell over strike lengths of between 250 and 1200 feet and range in width from inches to 3 feet. Wallrock alteration adjacent to the mineralized structures may extend outward for distances of up to 20 feet and low gold and silver values have been reported from some of these alteration haloes. Gold and silver values are erratically distributed (Philp, 1968) and best values are in near surface oxidized zones.

Diamond drilling by Western Mines Ltd. in the Thelwood Creek valley indicated weak pyrite mineralization and isolated seams of chalcopyrite.

Significant mineralized float has been reported from an area south of the headwaters of Price Creek and 500 metres west of Price Lake. Pieces of float ranging in size from 1 cm to 75 cm (Wilbur, 1971) are found in the talus below a 200 metre cliff exposing the basal part of the Karmutsen Formation. Three varieties are present, including very fine grained chalcopyrite, pyrite and sphalerite in argillite, pyrite in a quartz-calcite breccia and fine grained sphalerite on dark grey rhyolite. Holcapek (1970, 1985) also reports 3 foot bands of massive pyrite and pyrrhotite in place in the cirque area around Price Lake and Wilbur (1971) noted pyrite, pyrrhotite and chalcopyrite in float in terminal moraines in the same general area.

3. GEOCHEMISTRY

3.1 ROCK CHIP SAMPLING

3.1.1 SAMPLING AND SAMPLE TREATMENT

A total of 11 grab samples were collected for assay from various rock types, quartz veins and mineralized float. Typically, the samples consisted of two or three fist-sized representative specimens, although, some areas of mineralization were systematically chip sampled. Sample sites were marked with blue flagging and the samples placed in labelled plastic bags. The samples were shipped to Chemex Labs Ltd. in North Vancouver where they were crushed to minus 35 mesh and fire assayed for gold and analysed for 32 additional elements by the ICP technique.

3.1.2 DISCUSSION OF RESULTS

TABLE II gives a brief location of the grab samples together with the assay results and sample numbers. Sample locations are plotted on geology maps (Figures 4 to 8). Assay results can be found in Appendix B.

The limited number of samples taken over the claims prevented the use of statistical methods to assess the results. Disappointing gold values were obtained, but silver and base metal values had near economic grades in some samples. Additional sampling is required to fully comprehend the significance of these results.

TABLE II

ROCK SAMPLE LOCATIONS AND RESULTS

SAMPLE	AU OZ/T	AG PPM	CU PPM	ZN PPM	PB PPM	CLAIM
LD01	L0.002	L0.2	94	12	2	X-9
LD02	L0.002	L0.2	11	17	8	X-2
BEAR 1	L0.002	L0.2	29	38	L2	BEAR 26
BEAR 2	L0.002	L0.2	8	6	10	BEAR 26
SHAKER 1	L0.002	L0.2	91	16	8	CREAM 10
CREAM 1	0.002	8.6	2160	331	6	CREAM 15
CREAM 2	L0.002	0.4	120	16	2	CREAM 4
CREAM 3	0.033	50.2	59	1275	1190	CREAM 4
PRICE 1	L0.002	0.4	84	11	12	CREAM 4E
PRICE 2	L0.002	L0.2	43	10	2	CREAM 6E
PRICE 3	0.014	60.0	3130	7480	2450	CREAM 6E

Note: L = less than

3.2 SOIL SAMPLING

3.2.1 SAMPLING AND SAMPLE TREATMENT

Soil samples were taken at 50 metre intervals along Thelwood Creek road across the length of the claims. A soil sample was taken from the Bear claim at the edge of an outcrop of rusty volcanic rocks. A total of 57 soil samples were taken. In all cases, the samples were collected from the 'B' horizon with the aid of a mattock. All samples were placed in labelled kraft envelopes and shipped to Chemex Labs Ltd. in North Vancouver for analysis.

In the laboratory, the samples were oven-dried at approximately 60°C and sifted through a minus 80 mesh sieve. The coarse fraction was discarded and the minus 80 fraction was analysed for gold plus 32 additional elements using the ICP technique.

3.2.2 DISCUSSION OF RESULTS

Sample locations can be found on Geology Maps Figure 4 to 8, and analysis of samples can be found in Appendix C. The limited number of samples taken over the claims prevented the use of statistical methods to assess the results. All samples gave disappointing precious and base metal results, indicating that soil sampling is not an effective exploration tool on the northern portion of the claims. In this area, the mineralized targets are thought to be at such a depth as to have no surface trace in the soils.

3.3 HEAVY MINERAL CONCENTRATE SAMPLING

3.3.1 SAMPLING AND SAMPLE PREPARATION

A total of 9 heavy mineral concentrate samples were collected along Price and Thelwood Creeks. The samples were obtained by initially sieving 25 to 50 kilograms of gravel through a 10 mesh screen. The coarse fraction was discarded and the remaining fine fraction panned down to yield a sample weighing approximately 0.5 kilograms. The samples were placed into labelled plastic sample bags and sent to Chemex Labs Ltd. in North Vancouver for analysis.

In the laboratory, the samples were further concentrated by heavy liquid separation (specific gravity of greater than 2.95) and magnetic mineral separation. The non-magnetic fraction was crushed to minus 100 mesh and analysed for gold by atomic absorption and 32 additional elements by the ICP technique.

3.3.2 DISCUSSION OF RESULTS

Sample locations are shown on the geology maps (Figures 4 to 8). Geochemistry results for the samples are included in Appendix D. The limited number of samples taken over the claims prevented the use of statistical methods to assess the results. All the samples contained disappointing values in precious and base metals.

4. CONCLUSIONS

Available data suggest that the volcanic stratigraphy which host the Westmin Resources ore deposits underlies the northern part of the Cream Silver claims area. This is based on lithologies intersected in three diamond drill holes in the Thelwood Creek valley, on the presence of a distinctive tuff unit which resembles a similar unit immediately overlying the mineralized horizons at Westmin, and the presence of mineralized float in an area with nearby unexplained copper and zinc geochemical anomalies in the lower Price Creek area. The origin and geological setting of this mineralization is not known.

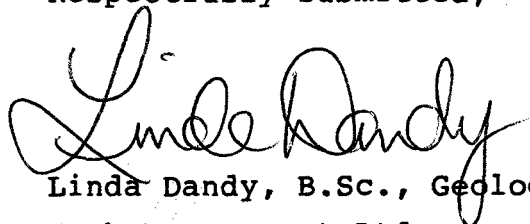
Vein type mineralization west of Cream Lake includes some interesting gold and silver values, but these targets are considered secondary to the massive sulfide potential of the property.

In summary, the 1987 field work outlined the following conclusions:

- 1) The property is underlain by volcanic rocks of the Sicker Group, limestones and cherts of the Buttle Lake Formation, and minor basalts of the Karmutsen Formation. Numerous granitic to dioritic dykes of the Island Intrusions commonly cut the volcanic Sicker Group rocks.
- 2) Numerous dykes and veins were encountered with variable orientations. Bedding directions appear to be centred around 065/35E, and the majority of the fractures are 030/10E, 115/65N and 060/65N. Small scale left lateral offsets indicate that on a regional scale the rocks may also be faulted left laterally.
- 3) Rock chip samples were collected for assay from various rock types, quartz veins and mineralized float. More samples are needed to determine the significance of the results obtained.

- 4) Soil samples were taken from the northern portion of the property. All samples returned disappointing precious and base metal results, indicating that soil sampling may not be a good exploration tool in this area.
- 5) Heavy mineral concentrate samples were collected from Price and Thelwood Creeks. All samples returned disappointing precious and base metal values.
- 6) Geophysical surveys carried out on the northern portion of the property outlined several significant anomalies which warrant follow-up work. These anomalies will be located and described in a separate report to be written by P.E. Walcott and Associates (Geophysical Contractors).

Respectfully submitted,


Linda Dandy, B.Sc., Geology,
Mark Management Ltd.

COSTS STATEMENT**CREAM SILVER MINES LTD.****BUTTLE LAKE
TO 11 AUGUST 1987****GENERAL COSTS**

FOOD & ACCOMMODATION:		
4 persons, 75 man-days @ \$55.36/day		\$ 4,151.83
FUEL:		247.84
SUPPLIES & SUNDRY:		605.49
HELICOPTER:		
Van. Island 206B, 5-22 July 26.7 Hrs. @ \$561.25/hr		14,985.41
FERRY:		197.50
TELEPHONE SERVICE:		206.37
SHIPMENTS:		36.07
CONSULTANT FEES:		
Archean Engineering Ltd.	\$3,900.00	
Adder Expl. & Dev. Ltd.	328.00	
	<hr/>	4,228.00
RENTALS:		
Gabriel 4WD Blazer 9-15 May		
7 days @ \$50/day	\$600.00	
Gallant, 4WD Blazer 11-31 July		
21 days @ \$50/day	450.00	
Ezekiel's Field Equipment		
75 man-days @ \$6/day	450.00	
	<hr/>	1,850.00
MAINTENANCE:		92.12
TOTAL GENERAL COSTS		<hr/> \$26,600.63

STAKING

ALIONIS:		\$9,450.00
HELICOPTER:		
Okanagan Hel. 18-20 Mar. 9.9 Hrs @ \$556.55		5,509.84
TOTAL STAKING COSTS		<hr/> \$14,959.84

WATER (ENVIRONMENT) TESTS

SALARIES & WAGES:		
2 Pers., 4 man-days @ \$133.33/day		\$ 533.34
BENEFITS: @ 20%		106.66
CONSULTANT FEES:		
Hatfield		2,985.00
GENERAL COSTS APPORTIONED:		
4/75 X \$26,600.63		1,418.70
TOTAL WATER TESTS COSTS		<hr/> \$5,043.70

GEOPHYSICAL SURVEY COSTS

P.E. WALCOTT:		
I.P., CSAMT, MAG, & VLF-EM		\$96,657.43
ALIONIS:		
Line & Survey Assistance		35,237.37
TOTAL GEOPHYSICAL SURVEY COSTS		<hr/> \$131,894.80

GEOLOGICAL MAPPING COSTS

SALARIES & WAGES:	
4 Pers., 64 man-days @ \$142.47/day	\$ 9,117.84
BENEFITS: @ 20%	1,023.57
DELTA AERIAL SURVEYS:	
1:2500 Base Map	3,920.00
GENERAL COSTS APPORTIONED	
64/75 X \$26,600.63	22,699.20
TOTAL GEOLOGICAL MAPPING COSTS	<u>\$36,760.61</u>

GEOCHEMICAL SURVEY COSTS

SALARIES & WAGES:		
3 Pers., 7 man-days @ \$124.17/day	\$	869.21
BENEFITS: @ 20%		173.85
ASSAYS & ANALYSES-CHEMEX LABS:		
56 Soils for Au & 32 elem ICP @ \$16	\$896.00	
7 HMC for 31 elem ICP @ \$28.50	199.50	
		<u>1,095.50</u>
GENERAL COSTS APPORTIONED		
7/75 X \$26,600.63		2,482.73
TOTAL GEOCHEMICAL SURVEY COSTS		<u>\$ 4,621.29</u>

COST SUMMARY

STAKING	\$ 14,959.84
WATER TESTS	5,043.70
GEOPHYSICAL SURVEY	131,894.80
GEOLOGICAL MAPPING	36,760.61
GEOCHEMICAL SURVEYS	4,621.29
TOTAL COSTS:	<u><u>\$193,280.24</u></u>

REFERENCES

- BACON, W.R., (1975): A Report on Western Mines Limited Property, Buttle Lake Area, British Columbia; Engineer's Report.
- CARTER, N.C., (1986): Geological Report on the Cream, Bear, X, F, D, and Stan Mineral Claims, Buttle Lake Area, Vancouver Island, British Columbia, Engineer's Report.
- GONZALEZ, R.A., (1987): Geological and Geochemical Report on the Stan Mineral Claims, Alberni Mining Division, B.C.; Assessment Report.
- HINGS, D.L., (1966): Klyceptor Geophysical Survey, Cream and Bear Claims, Bedwell Lake Area, B.C., Assessment Report 826.
- HOLCAPEK, F., (1985): Summary Report on the Cream Silver Mines Property, Buttle Lake, Vancouver Island, British Columbia, Private Report for Cream Silver Mines Ltd.
- KONINGS, M., (1986): Geoterrex Geophysical Contractors, Airborne Geophysical Survey on the Cream, Bear, X, F, and D Claims, Vancouver Island, British Columbia.
- MULLER, J.E., (1980): The Paleozoic Sicker Group of Vancouver Island, British Columbia, Geological Survey of Canada Paper 79-30.
- PHILP, R.H.D., (1968): Report on the Cream Lake Property, Vancouver Island, British Columbia, Assessment Report 1884.
- SCOTT, G.M., (1972a): Report on Geological Mapping of the B.E.H. Claim Group, Assessment Report 3910.
- SCOTT, G.M., (1972b): Report on Geological Mapping of Part of the Eagle Group of Claims, Assessment Report 3911.
- SCOTT, G.M., (1972c): Report on Geological Mapping of Part of the Stan (Supplementary) Claim Group, Assessment Report 3912.
- SELMSER, C.B., (1967a): Geological Report-Cream and Bear Groups, Buttle Lake Area, B.C., Assessment Report 1563.
- SELMSER, C.B., (1967b): Geophysical Report - Ground Magnetic and Electromagnetic Surveys, Cream and Bear Claims, Alberni Mining Division, B.C., Assessment Report 1564.
- WALKER, R.R., (1983a): Westmin Resources' Massive Sulfide Deposits in: GAC, MAC, CGU Field Trip Guidebook - Mineral Deposits of Vancouver Island by J. Fleming, R. Walker, and P. Wilton.

- WALKER, R.R., (1983b): Ore Deposits at the Myra Falls Minesite, Western Miner, May 1983.
- WILBUR, D.G., (1971a): Report on Geological Mapping of the Cross and Price Claims - Upper Price Creek, Assessment Report 3241.
- WILBUR, D.G., (1971b): Report on Geological Mapping of the Northwest Part of the Stan Claim Group, Assessment Report 3242.
- WILBUR, D.G., (1971c): Report on Geochemical Survey of Part of the B.E.H. Claim Group, Assessment Report 3243.

STATEMENT OF QUALIFICATIONS

A. TROUP, P.ENG.

ACADEMIC

1967	B.Sc. Geology	McMaster University, Ontario
1969	M.Sc. Geochemistry	McMaster University, Ontario

PRACTICAL

1981 -	3605 Creery Ave. West Vancouver, B.C.	Consulting Geologist with Archean Engineering Ltd.
1977 - 1980	Geological Survey of Malaysia	Project Manager on a CIDA supported mineral explor- ation survey over peninsular Malaysia.
1969 - 1977	Rio Tinto Canadian Exploration Ltd. Vancouver, B.C.	Geologist involved in all aspects of mineral explor- ation in B.C., the Yukon and N.W.T.
1968	McMaster University Dept. of Geology Hamilton, Ontario	M.Sc. thesis work. Reconnaissance mapping and geochemical study, Lake Shubenicadia area, Nova Scotia.
1967 (summer)	Canex Aerial Exploration Ltd. Toronto, Ontario	Geologist in charge of detailed mapping and reconnaissance geochemical programme in Gaspé, Quebec.
1966	McMaster University Dept. of Geology	Detailed and reconnaissance mapping in Northern Ontario.
1965 (summer)	International Nickel Co. of Canada Thompson, Manitoba	Detailed mapping in the Thompson area, Manitoba.
1964 (summer)	Geological Survey of Canada Ottawa, Ontario	Regional geochemical survey in the Keno Hill area, Yukon

STATEMENT OF QUALIFICATIONS**LINDA DANDY, B.Sc.****ACADEMIC**

- 1981 B.Sc. Geology University of British Columbia
1987 F.G.A.C. Fellowship - Geological Association
of Canada

PRACTICAL

- 1981 - Present Geologist with Mark Management Ltd.,
Hughes-Lang Group,
Vancouver, B.C.
- 1986 Project Geologist - 12,000 foot diamond drill
programme in northwestern B.C.
- 1985 Project Geologist - geological mapping,
geochemical and geophysical surveys and backhoe
trenching programmes in northwestern and
southeastern B.C., the Yukon, and northeastern
Washington
- 1984 Project Geologist - mapping, geophysical and
geochemical surveys backhoe trenching and diamond
drilling programmes in northwestern B.C.
- 1983 Geologist involved in geological mapping
(1:50,000, 1:10,000, and 1:1,000), geophysical and
geochemical surveys in northern and central B.C.
and the Yukon
- 1982 Geologist involved in geochemical and geophysical
surveys in central B.C.
- 1981 Geologist involved in detailed mapping,
geochemical and geophysical surveys in central
B.C.

APPENDIX A
STEREONET PLOTS

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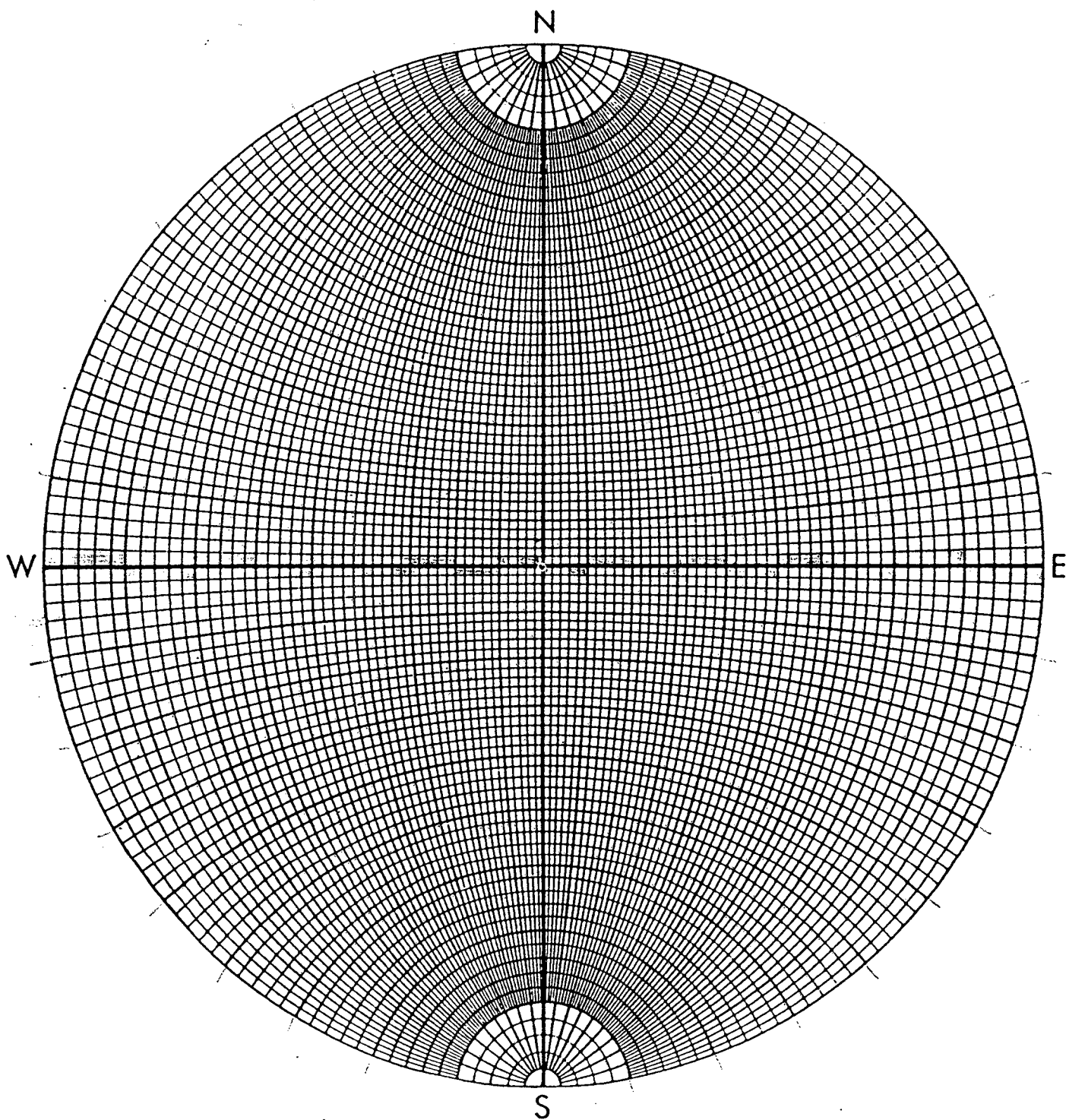
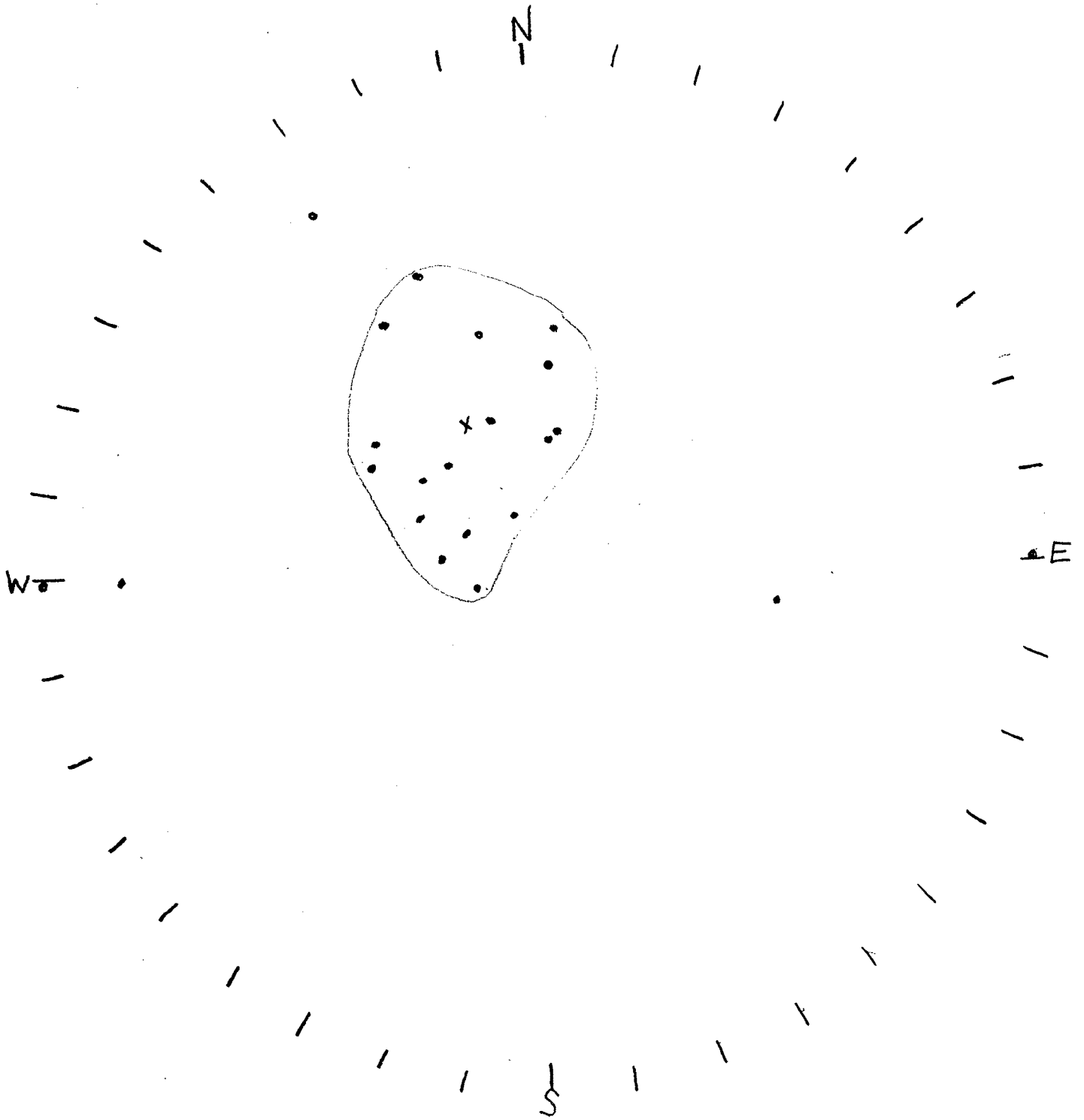


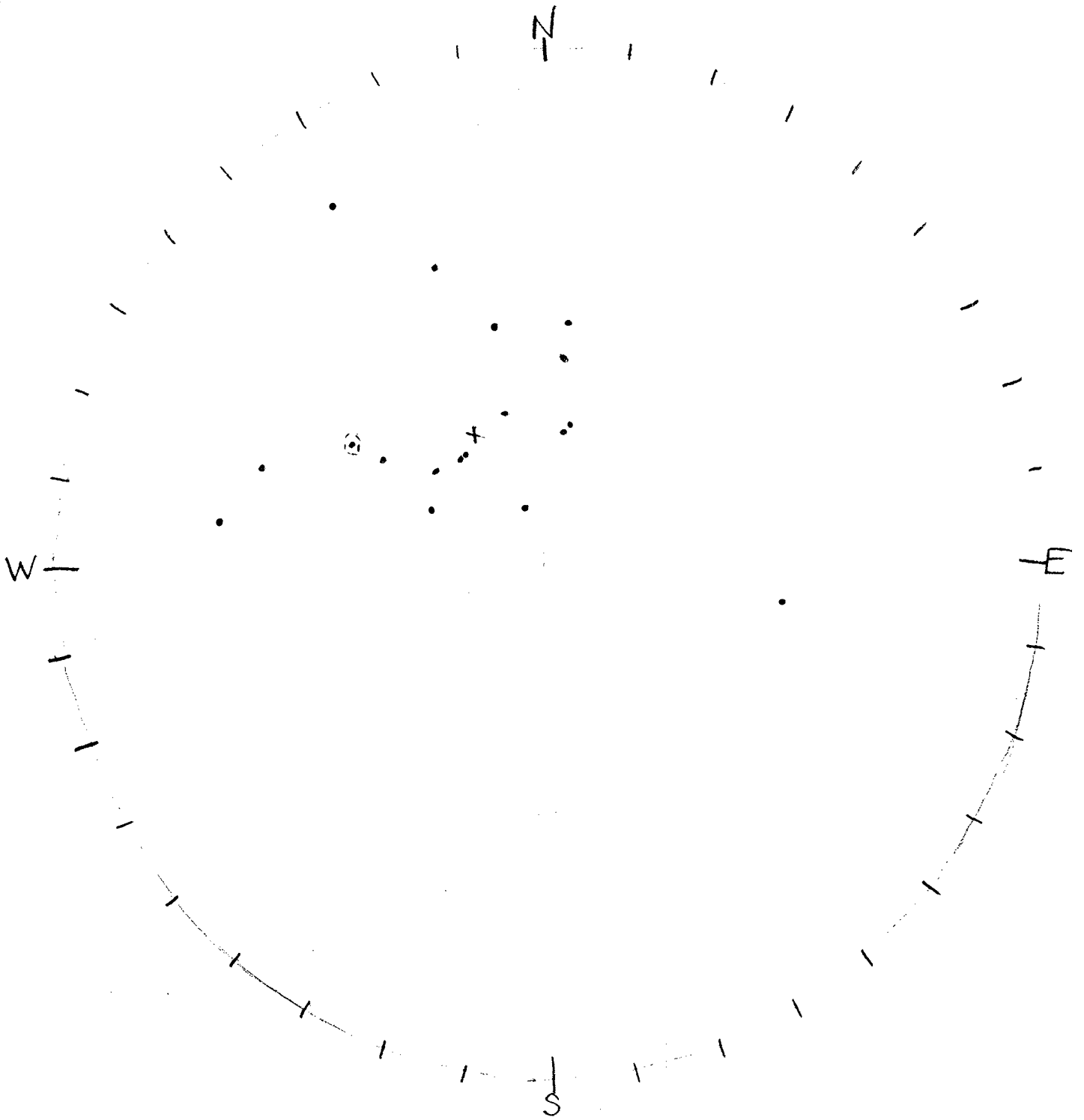
Fig. 11-3. The stereonet (Wulff net) drawn with 2-degree intervals.

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(CHERT BANDS)



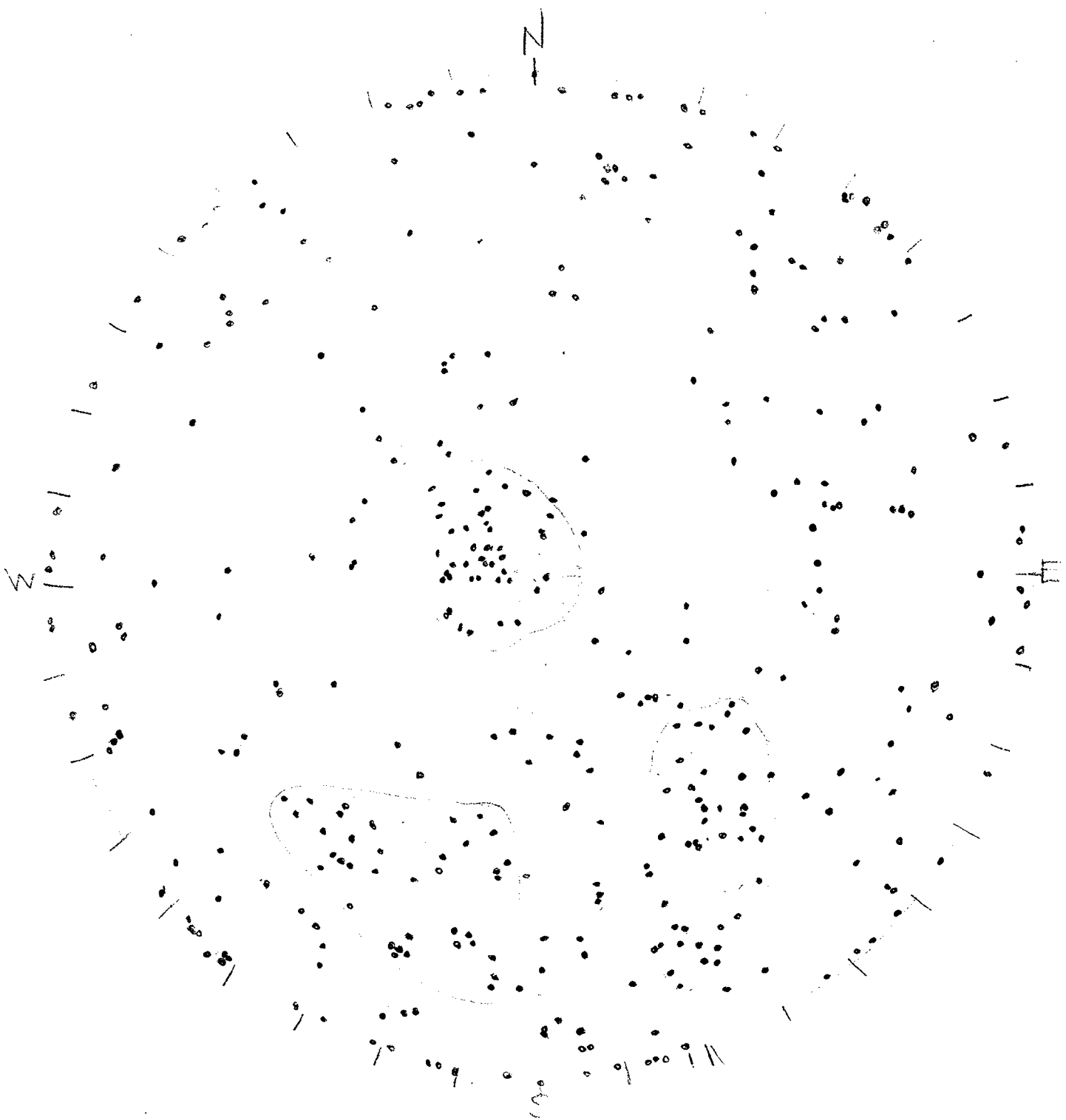
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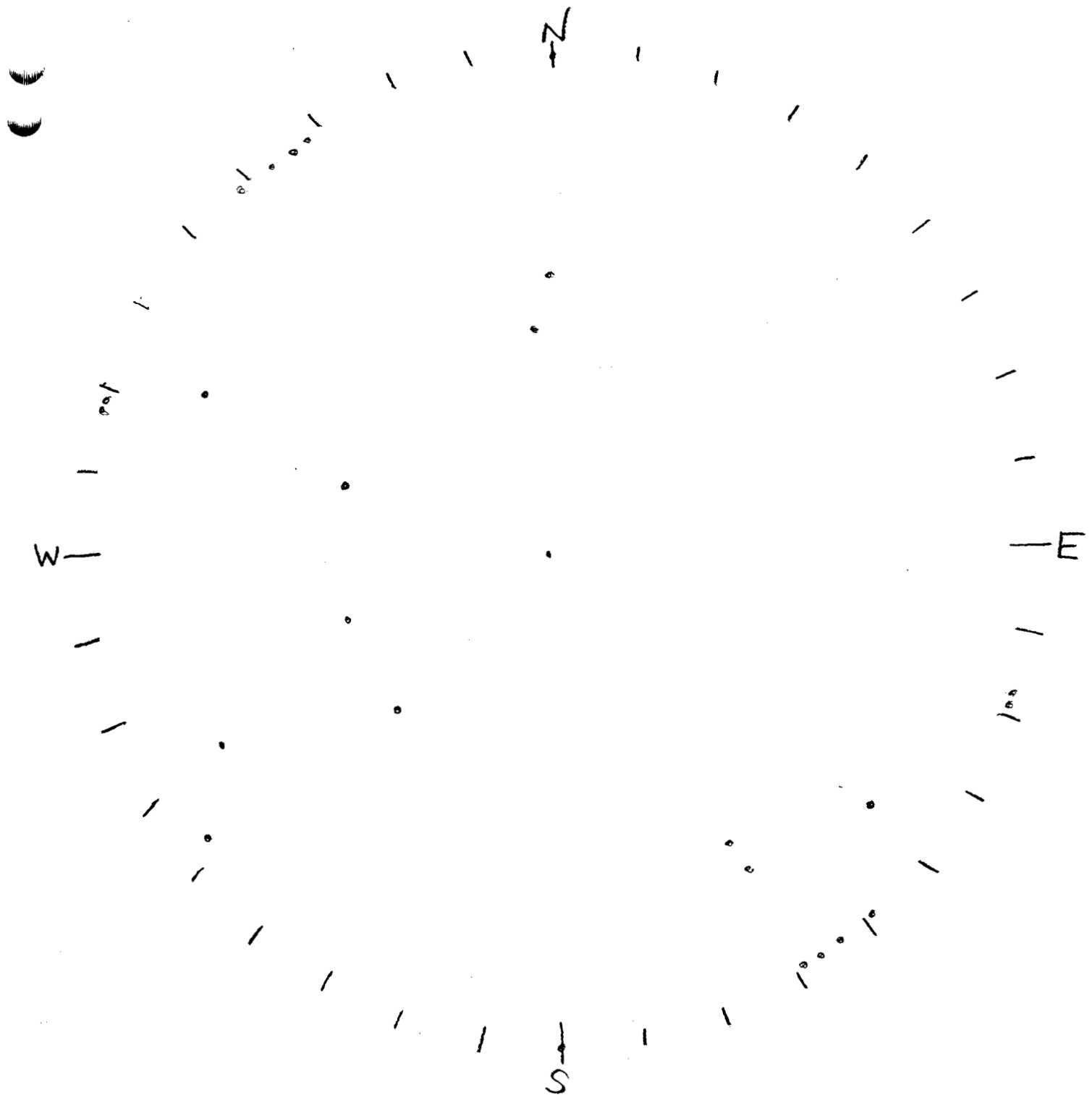


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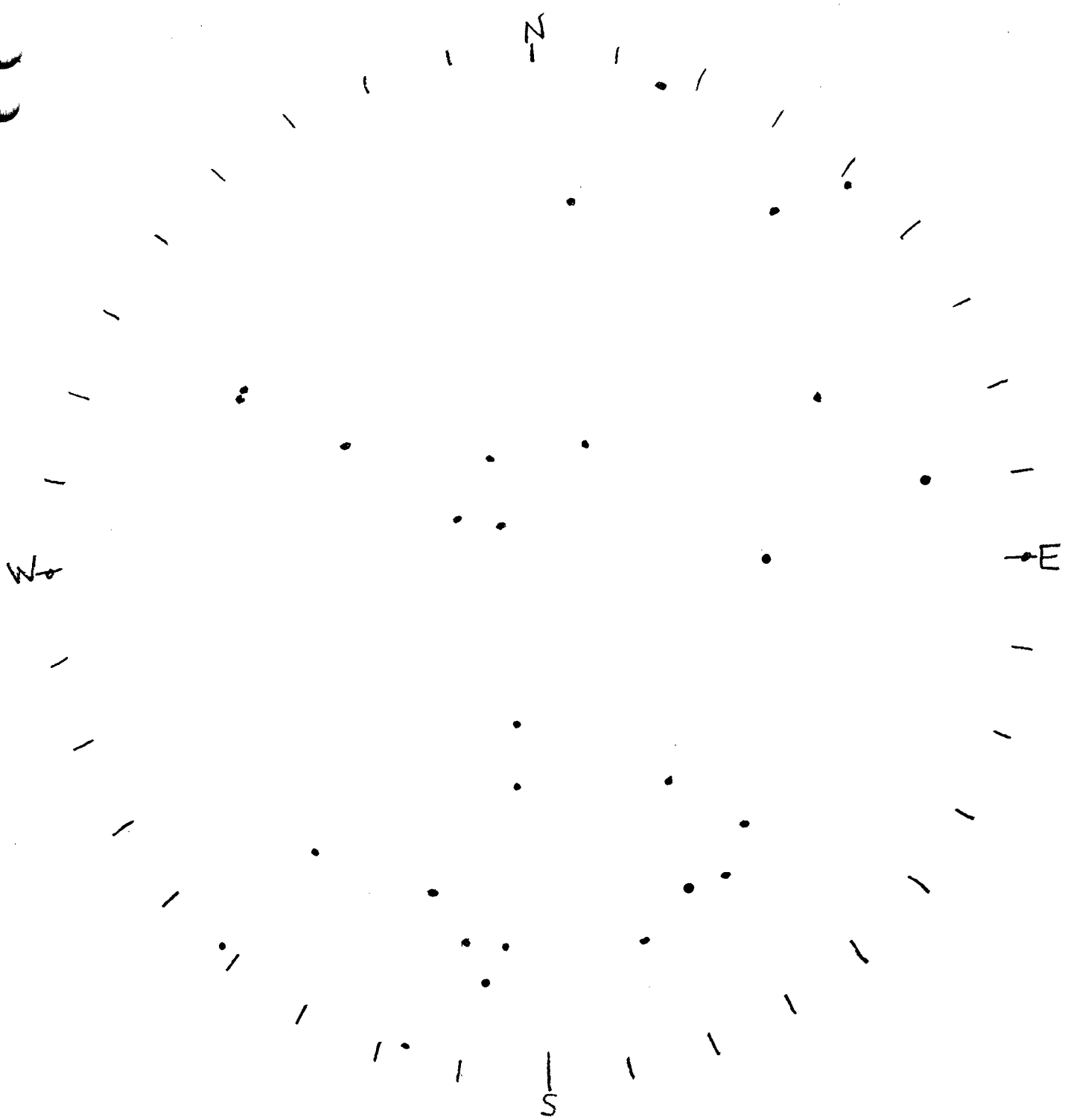
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CONTACTS - POLES TO



APPENDIX B
RESULTS FROM ROCK SAMPLE ANALYSES



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
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MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
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Project : CEM/BTL

Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No : 1-A
Tot. : 1
Date : 18-AUG-87
Invoice # : I-8719655
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719655

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Al %	Ag ppm	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
LDO1	207 238	< 0.002	1.15	< 0.2	5	< 10	< 0.5	< 2	1.10	< 0.5	11	18	94	2.00	< 10	< 1	< 0.01	< 10	0.35	212
LDO2	207 238	< 0.002	1.19	< 0.2	< 5	30	< 0.5	2	0.90	< 0.5	6	18	11	2.32	10	< 1	0.12	10	0.48	410
BEAR 1	207 238	< 0.002	1.49	< 0.2	< 5	60	0.5	< 2	0.89	< 0.5	7	13	29	2.62	10	< 1	0.13	10	0.59	661
BEAR 2	207 238	< 0.002	0.50	< 0.2	< 5	30	< 0.5	< 2	0.36	< 0.5	< 1	16	8	1.10	< 10	< 1	0.07	< 10	0.09	157
SHAKER 1	207 238	< 0.002	0.71	< 0.2	< 5	< 10	< 0.5	2	0.37	0.5	5	21	91	1.75	< 10	< 1	0.01	< 10	0.38	203
CREAM 1	207 238	0.002	1.63	8.6	35	60	< 0.5	< 2	0.20	2.5	16	11	2160	4.63	< 10	1	0.37	< 10	0.61	466
CREAM 2	207 238	< 0.002	1.27	0.4	< 5	< 10	< 0.5	< 2	1.56	0.5	2	16	120	1.83	10	< 1	0.01	< 10	0.09	218
CREAM 3	207 238	0.033	0.85	50.2	6850	50	< 0.5	< 2	0.68	10.5	3	9	59	2.06	< 10	1	0.47	< 10	0.12	476
SOUTH 1	207 238	0.002	1.39	2.2	55	10	< 0.5	2	1.74	0.5	370	16	1425	12.60	10	< 1	0.05	< 10	0.69	544
SOUTH 2	207 238	0.020	0.92	3.4	1035	80	< 0.5	< 2	0.19	4.0	4	9	48	2.71	< 10	1	0.44	< 10	0.13	144
SOUTH 3	207 238	0.044	1.07	25.0	185	60	< 0.5	2	0.04	0.5	5	6	141	5.00	< 10	< 1	0.58	< 10	0.05	45
SOUTH 4	207 238	< 0.002	1.87	0.8	35	140	< 0.5	< 2	0.80	< 0.5	5	14	47	2.30	10	< 1	0.41	< 10	0.55	383
SOUTH 5	207 238	< 0.002	1.94	0.4	35	220	0.5	< 2	2.05	< 0.5	10	32	38	2.68	10	< 1	0.42	10	0.68	251
SOUTH 6	207 238	< 0.002	0.67	< 0.2	25	170	0.5	< 2	0.59	1.0	76	21	53	5.20	< 10	1	0.05	< 10	0.16	143
PRICE 1	207 238	< 0.002	1.72	0.4	10	80	0.5	< 2	0.16	< 0.5	30	9	84	4.84	< 10	< 1	0.35	< 10	0.24	121
PRICE 2	207 238	< 0.002	2.13	< 0.2	10	140	0.5	< 2	0.12	< 0.5	38	18	43	1.79	< 10	< 1	0.51	10	0.29	73
PRICE 3	207 238	0.014	0.04	60.0	510	40	1.5	2	3.66	64.5	20	7	3130	>15.00	20	< 1	0.01	< 10	0.24	339

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

CERTIFICATION :

[Signature]



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
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MARK MANAGEMENT LIMITED

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Project : CEM/BTL

Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No : 1-B
Tot. # : 1
Date : 18-AUG-87
Invoice # : I-8719655
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719655

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LD01	207	238	< 1	< 0.01	12	< 10	2	< 5	< 10	89	0.13	< 10	< 10	15	< 5	12
LD02	207	238	1	0.10	7	280	8	< 5	< 10	27	0.11	10	< 10	33	< 5	17
BEAR 1	207	238	< 1	0.13	6	380	< 2	< 5	< 10	41	0.14	< 10	< 10	46	< 5	38
BEAR 2	207	238	1	0.01	6	20	10	< 5	< 10	38	0.02	< 10	< 10	7	< 5	6
SHAKER 1	207	238	< 1	< 0.01	13	20	8	< 5	< 10	24	0.08	< 10	< 10	37	< 5	16
CREAM 1	207	238	< 1	0.01	6	30	6	< 5	10	3	0.12	< 10	< 10	85	< 5	331
CREAM 2	207	238	< 1	< 0.01	7	110	2	< 5	< 10	144	0.09	< 10	< 10	76	< 5	16
CREAM 3	207	238	< 1	0.01	4	170	1190	30	< 10	15	< 0.01	< 10	< 10	7	< 5	1275
SOUTH 1	207	238	< 1	0.05	24	260	10	< 5	< 10	58	0.12	< 10	< 10	56	< 5	37
SOUTH 2	207	238	4	0.02	5	140	114	< 5	< 10	14	< 0.01	10	< 10	5	< 5	728
SOUTH 3	207	238	17	0.01	6	140	50	< 5	< 10	7	< 0.01	< 10	< 10	3	< 5	96
SOUTH 4	207	238	< 1	0.18	5	330	2	< 5	< 10	43	0.10	< 10	< 10	35	< 5	34
SOUTH 5	207	238	3	0.12	21	6700	16	< 5	10	44	0.05	< 10	< 10	63	< 5	41
SOUTH 6	207	238	3	< 0.01	8	380	26	< 5	< 10	87	0.14	< 10	< 10	76	< 5	41
PRICE 1	207	238	5	0.13	15	210	12	< 5	< 10	43	< 0.01	< 10	< 10	51	< 5	11
PRICE 2	207	238	< 1	0.19	13	330	2	< 5	< 10	58	< 0.01	< 10	< 10	56	< 5	10
PRICE 3	207	238	< 1	< 0.01	1	< 10	2450	10	360	30	< 0.01	< 10	20	6	< 5	7480

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

CERTIFICATION :

PCJ

APPENDIX C
RESULTS FROM SOIL SAMPLE ANALYSES



Chemex Labs Ltd.

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 212 BROOKSBANK AVE., NORTH VANCOUVER,
 BRITISH COLUMBIA, CANADA V7J-2C1
 PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A871759

To: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
 VANCOUVER, B.C.
 V6C 2W2

Page No. : 1-A
 Tot. Pages: 2
 Date : 22-MAY-87
 Invoice #: I-8714759
 P.O. #: NONE

Project : BUTTLE/CEM
 Comments: ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	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
IR 0+00	203 238	< 5	2.66	< 0.2	< 5	70	< 0.5	< 2	0.70	2.5	10	60	32	3.57	< 10	< 1	0.07	10	0.63	467
IR 0+50	203 238	< 5	3.37	< 0.2	< 5	60	< 0.5	< 2	0.68	2.0	9	64	41	4.11	< 10	< 1	0.08	10	0.91	614
IR 1+00	203 238	< 5	3.72	< 0.2	< 5	70	< 0.5	< 2	0.95	1.5	9	63	66	3.88	< 10	< 1	0.10	10	0.85	637
IR 1+50	203 238	< 5	2.93	< 0.2	< 5	60	< 0.5	< 2	0.74	< 0.5	9	69	36	3.00	< 10	< 1	0.06	10	0.37	390
IR 2+00	203 238	< 5	4.13	< 0.2	< 5	90	< 0.5	< 2	0.68	0.5	9	81	48	4.58	< 10	< 1	0.10	10	0.82	513
IR 2+50	203 238	< 5	3.12	< 0.2	< 5	80	< 0.5	< 2	0.63	0.5	8	78	33	4.27	< 10	< 1	0.10	10	0.43	330
IR 3+00	203 238	< 5	4.16	< 0.2	< 5	100	< 0.5	< 2	0.76	0.5	20	71	93	5.11	< 10	< 1	0.12	10	1.09	633
IR 3+50	203 238	< 5	3.62	< 0.2	< 5	70	< 0.5	< 2	0.60	0.5	8	67	37	4.47	< 10	< 1	0.08	10	0.73	469
IR 6+50	203 238	< 5	4.91	< 0.2	< 5	80	< 0.5	< 2	0.73	0.5	19	58	39	5.27	< 10	< 1	0.11	10	1.13	705
IR 7+00	203 238	< 5	3.76	< 0.2	< 5	80	< 0.5	< 2	0.70	< 0.5	8	72	29	4.15	< 10	< 1	0.10	10	0.70	582
IR 7+50	203 238	< 5	3.33	< 0.2	< 5	70	< 0.5	< 2	0.80	0.5	8	79	28	4.08	< 10	< 1	0.07	10	0.77	518
IR 8+00	203 238	< 5	3.33	< 0.2	< 5	80	< 0.5	< 2	0.85	0.5	8	89	38	3.96	< 10	< 1	0.09	10	0.75	593
IR 8+50	203 238	< 5	2.97	< 0.2	< 5	60	< 0.5	< 2	0.75	0.5	9	70	34	4.04	< 10	< 1	0.04	10	0.50	534
IR 9+00	203 238	< 5	3.41	< 0.2	< 5	70	< 0.5	< 2	0.70	0.5	8	73	44	4.24	< 10	< 1	0.07	10	0.80	571
IR 9+50	203 238	< 5	2.98	< 0.2	< 5	30	< 0.5	< 2	0.68	0.5	7	80	25	4.56	< 10	< 1	0.04	10	0.50	332
IR 10+00	203 238	< 5	4.08	< 0.2	< 5	40	< 0.5	< 2	0.61	1.0	7	77	34	5.61	< 10	< 1	0.06	10	0.45	282
IR 10+50	203 238	< 5	2.19	< 0.2	< 5	30	< 0.5	< 2	1.03	< 0.5	5	99	12	2.96	< 10	< 1	0.05	10	0.32	404
IR 11+00	203 238	< 5	3.81	< 0.2	< 5	60	< 0.5	< 2	0.70	0.5	22	65	47	6.08	< 10	< 1	0.07	10	1.09	550
IR 11+50	203 238	< 5	3.21	< 0.2	< 5	90	< 0.5	< 2	0.70	0.5	18	90	35	4.79	< 10	< 1	0.08	10	0.87	604
IR 12+00	203 238	< 5	3.73	< 0.2	< 5	110	< 0.5	< 2	0.78	0.5	23	68	41	4.46	< 10	< 1	0.07	10	0.57	1165
IR 12+50	203 238	10	2.56	< 0.2	< 5	50	< 0.5	< 2	0.62	0.5	9	87	27	4.17	< 10	< 1	0.06	10	0.65	355
IR 13+00	203 238	< 5	3.45	< 0.2	< 5	40	< 0.5	< 2	0.56	0.5	9	68	79	4.47	< 10	< 1	0.06	10	0.58	501
IR 13+50	203 238	< 5	4.14	< 0.2	< 5	40	< 0.5	< 2	1.74	0.5	25	256	107	4.07	< 10	< 1	0.03	10	1.18	1240
IR 14+00	203 238	< 5	4.48	< 0.2	< 5	80	< 0.5	< 2	0.68	0.5	7	81	72	4.97	< 10	< 1	0.08	10	0.77	466
IR 14+50	203 238	< 5	3.25	< 0.2	< 5	80	< 0.5	< 2	0.92	< 0.5	18	100	51	4.59	< 10	< 1	0.09	10	0.83	534
IR 15+00	203 238	< 5	3.38	< 0.2	10	220	< 0.5	< 2	1.38	< 0.5	20	55	65	3.95	< 10	< 1	0.17	10	1.02	1285
IR 15+50	203 238	< 5	3.12	< 0.2	20	160	< 0.5	< 2	1.73	< 0.5	10	86	65	3.67	< 10	< 1	0.12	10	1.13	987
IR 16+00	203 238	< 5	3.76	< 0.2	< 5	100	< 0.5	< 2	1.27	0.5	27	130	93	4.60	< 10	< 1	0.10	10	2.05	896
IR 16+50	203 238	10	3.19	< 0.2	< 5	70	< 0.5	< 2	1.39	< 0.5	24	133	58	3.86	< 10	< 1	0.09	10	1.59	945
IR 17+00	203 238	< 5	3.51	< 0.2	< 5	50	< 0.5	< 2	1.66	0.5	26	110	56	4.14	< 10	< 1	0.03	< 10	2.19	1760
IR 17+50	203 238	< 5	2.81	< 0.2	< 5	60	< 0.5	< 2	0.72	0.5	13	101	40	4.63	< 10	< 1	0.07	10	0.81	535
IR 18+00	203 238	< 5	3.79	< 0.2	< 5	130	< 0.5	< 2	0.74	< 0.5	15	65	56	4.62	< 10	< 1	0.09	10	0.73	535
IR 18+50	203 238	< 5	3.06	< 0.2	10	50	< 0.5	< 2	0.69	< 0.5	5	86	48	5.41	< 10	< 1	0.07	10	0.48	498
IR 19+00	203 238	25	3.47	< 0.2	< 5	70	< 0.5	< 2	1.61	0.5	25	46	135	5.01	< 10	< 1	0.17	10	1.56	879
IR 19+50	203 238	< 5	3.93	< 0.2	< 5	70	< 0.5	< 2	0.82	< 0.5	37	77	92	5.02	< 10	< 1	0.07	10	0.46	1105
IR 20+00	203 238	10	4.65	< 0.2	25	100	< 0.5	< 2	1.29	< 0.5	28	50	107	5.54	< 10	< 1	0.10	10	1.03	921
IR 20+50	203 238	10	4.16	< 0.2	15	90	< 0.5	< 2	1.62	< 0.5	28	81	132	4.45	< 10	< 1	0.09	10	1.84	1655
IR 21+00	203 238	< 5	2.82	< 0.2	< 5	80	< 0.5	< 2	1.55	< 0.5	16	94	21	3.17	< 10	< 1	0.12	10	1.10	604
IR 21+50	203 238	10	2.79	< 0.2	10	210	< 0.5	< 2	1.27	< 0.5	27	63	118	3.68	< 10	< 1	0.10	10	0.76	9670
IR 22+00	203 238	< 5	3.28	< 0.2	< 5	130	< 0.5	< 2	1.17	< 0.5	18	82	73	3.98	< 10	< 1	0.14	10	1.08	811

CERTIFICATION :

B. [Signature]



Chemex Labs Ltd.

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CERTIFICATE OF ANALYSIS A8714759

To: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
 VANCOUVER, B.C.
 V6C 2W2

Page No. : 1-B
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 Date : 22-MAY-87
 Invoice #: I-8714759
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Project : BUTTLE/CEM

Comments: ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm				
IR 0+00	203 238	< 1	0.03	7	750	16	< 5	< 10	65	0.21	< 10	< 10	99	< 5	56				
IR 0+50	203 238	< 1	0.03	12	1030	12	< 5	< 10	64	0.23	< 10	< 10	102	< 5	72				
IR 1+00	203 238	< 1	0.04	13	700	8	< 5	< 10	91	0.24	< 10	< 10	108	< 5	80				
IR 1+50	203 238	< 1	0.04	5	690	< 2	< 5	< 10	76	0.18	< 10	< 10	95	< 5	48				
IR 2+00	203 238	< 1	0.04	15	230	< 2	< 5	< 10	65	0.26	< 10	< 10	164	< 5	52				
IR 2+50	203 238	< 1	0.06	9	160	< 2	< 5	< 10	66	0.27	< 10	< 10	147	< 5	38				
IR 3+00	203 238	< 1	0.04	14	220	< 2	< 5	< 10	70	0.30	< 10	< 10	220	< 5	70				
IR 3+50	203 238	< 1	0.03	8	280	< 2	< 5	< 10	58	0.28	< 10	< 10	125	< 5	56				
IR 6+50	203 238	< 1	0.04	14	760	< 2	< 5	< 10	76	0.31	< 10	< 10	136	< 5	92				
IR 7+00	203 238	< 1	0.05	6	770	8	< 5	< 10	72	0.29	< 10	< 10	114	< 5	86				
IR 7+50	203 238	< 1	0.03	9	490	< 2	< 5	< 10	78	0.28	< 10	< 10	124	< 5	76				
IR 8+00	203 238	< 1	0.04	11	1060	< 2	< 5	< 10	78	0.28	< 10	< 10	116	< 5	88				
IR 8+50	203 238	< 1	0.03	10	550	4	< 5	< 10	74	0.25	< 10	< 10	132	< 5	66				
IR 9+00	203 238	< 1	0.03	13	690	< 2	< 5	< 10	65	0.28	< 10	< 10	128	< 5	100				
IR 9+50	203 238	< 1	0.03	7	560	< 2	< 5	< 10	61	0.31	< 10	< 10	156	< 5	38				
IR 10+00	203 238	< 1	0.03	6	760	< 2	< 5	< 10	59	0.32	< 10	< 10	148	< 5	56				
IR 10+50	203 238	< 1	0.03	6	310	< 2	< 5	< 10	94	0.27	< 10	< 10	135	< 5	30				
IR 11+00	203 238	< 1	0.02	14	230	< 2	< 5	< 10	66	0.36	< 10	< 10	201	< 5	78				
IR 11+50	203 238	< 1	0.02	21	380	< 2	< 5	< 10	67	0.29	< 10	< 10	153	< 5	102				
IR 12+00	203 238	< 1	0.02	14	480	4	< 5	< 10	57	0.22	< 10	< 10	129	< 5	124				
IR 12+50	203 238	< 1	0.04	8	340	< 2	< 5	< 10	58	0.27	< 10	< 10	129	< 5	56				
IR 13+00	203 238	< 1	0.03	9	640	4	< 5	< 10	57	0.25	< 10	< 10	125	< 5	68				
IR 13+50	203 238	< 1	0.03	37	600	2	< 5	< 10	123	0.24	< 10	< 10	149	< 5	46				
IR 14+00	203 238	< 1	0.03	13	750	2	< 5	< 10	59	0.30	< 10	< 10	142	< 5	86				
IR 14+50	203 238	< 1	0.03	15	360	< 2	< 5	< 10	87	0.29	< 10	< 10	146	< 5	84				
IR 15+00	203 238	< 1	0.03	5	790	< 2	< 5	< 10	115	0.21	< 10	< 10	103	< 5	86				
IR 15+50	203 238	< 1	0.04	14	590	< 2	< 5	< 10	92	0.22	< 10	< 10	104	< 5	88				
IR 16+00	203 238	< 1	0.03	49	390	< 2	< 5	< 10	107	0.24	< 10	< 10	126	< 5	72				
IR 16+50	203 238	< 1	0.03	30	410	< 2	< 5	< 10	110	0.26	< 10	< 10	122	< 5	66				
IR 17+00	203 238	< 1	0.04	31	280	2	< 5	< 10	112	0.30	< 10	< 10	106	< 5	84				
IR 17+50	203 238	< 1	0.04	11	530	< 2	< 5	< 10	70	0.30	< 10	< 10	124	< 5	74				
IR 18+00	203 238	< 1	0.02	13	600	< 2	< 5	< 10	85	0.21	< 10	< 10	94	< 5	100				
IR 18+50	203 238	< 1	0.03	8	900	< 2	< 5	< 10	65	0.39	< 10	< 10	168	< 5	60				
IR 19+00	203 238	< 1	0.06	9	520	8	< 5	10	94	0.25	< 10	< 10	96	< 5	92				
IR 19+50	203 238	< 1	0.03	11	530	12	< 5	< 10	75	0.25	< 10	< 10	132	< 5	108				
IR 20+00	203 238	< 1	0.02	15	640	6	< 5	10	92	0.23	< 10	< 10	125	< 5	138				
IR 20+50	203 238	< 1	0.02	17	660	4	< 5	20	114	0.22	< 10	< 10	102	< 5	96				
IR 21+00	203 238	< 1	0.03	17	410	4	< 5	< 10	137	0.28	< 10	< 10	108	< 5	74				
IR 21+50	203 238	< 1	0.03	10	2160	22	< 5	10	97	0.17	< 10	< 10	92	< 5	130				
IR 22+00	203 238	< 1	0.06	12	670	12	< 5	10	80	0.26	< 10	< 10	109	< 5	80				

CERTIFICATION :

B. Troup



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CERTIFICATE OF ANALYSIS A871759

TO: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
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 V6C 2W2

Page No. : 2-A
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 Date : 22-MAY-87
 Invoice # : I-8714759
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Project : BUTTLE/CEM

Comments: ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	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
IR 22+50	203 238	< 5	5.26	< 0.2	25	120	< 0.5	< 2	1.66	0.5	47	299	114	5.26	< 10	< 1	0.36	10	2.18	1155
IR 23+00	203 238	< 5	2.97	< 0.2	< 5	1530	< 0.5	< 2	2.17	0.5	17	42	67	4.62	< 10	< 1	0.09	10	1.06	874
IR 23+50	203 238	< 5	2.18	< 0.2	< 5	340	< 0.5	< 2	1.59	< 0.5	10	92	76	2.86	< 10	< 1	0.13	10	0.59	681
IR 24+00	203 238	< 5	2.93	< 0.2	5	190	< 0.5	< 2	1.83	0.5	19	69	78	4.42	< 10	< 1	0.16	10	1.03	874
IR 24+50	203 238	20	3.69	< 0.2	255	160	< 0.5	< 2	1.38	< 0.5	17	73	84	5.01	< 10	< 1	0.06	10	0.49	821
IR 25+00	203 238	< 5	3.13	< 0.2	40	80	< 0.5	< 2	1.04	0.5	14	77	23	5.96	< 10	< 1	0.08	10	0.58	371
IR 25+50	203 238	40	3.65	< 0.2	135	320	< 0.5	< 2	1.45	< 0.5	20	60	63	4.19	< 10	< 1	0.11	10	0.80	1615
IR 26+00	203 238	5	2.52	0.2	160	220	< 0.5	< 2	1.01	1.0	47	72	235	7.13	< 10	< 1	0.22	20	0.73	2010
IR 26+50	203 238	35	4.89	0.2	55	210	< 0.5	< 2	0.68	0.5	28	54	76	5.76	< 10	< 1	0.09	10	0.56	684
IR 27+00	203 238	< 5	4.28	< 0.2	60	370	< 0.5	< 2	0.47	< 0.5	29	39	52	5.41	< 10	< 1	0.09	10	0.39	1255
IR 27+50	203 238	5	7.97	0.2	70	310	< 0.5	< 2	0.39	1.0	30	66	143	6.48	< 10	< 1	0.10	10	0.43	399
IR 28+00	203 238	5	5.27	0.2	10	80	< 0.5	< 2	0.80	0.5	24	45	98	7.16	< 10	< 1	0.05	10	1.11	567
IR 28+50	203 238	< 5	10.00	0.2	35	40	< 0.5	< 2	0.22	< 0.5	10	68	97	4.09	< 10	< 1	0.01	10	0.27	166
IR 29+00	203 238	< 5	5.31	< 0.2	< 5	50	< 0.5	< 2	0.82	0.5	24	41	100	4.67	< 10	< 1	0.04	10	1.33	614
IR 29+50	203 238	< 5	2.88	< 0.2	< 5	90	< 0.5	< 2	0.42	0.5	9	49	20	4.10	< 10	< 1	0.05	10	0.53	301
IR 30+00	203 238	< 5	5.92	< 0.2	< 5	30	0.5	< 2	0.54	1.0	15	59	68	7.72	< 10	< 1	0.03	10	0.77	361

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CERTIFICATE OF ANALYSIS A8714759

TO: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

Page No. : 2-B
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Project : BUTTLE/CEM

Comments: ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm					
IR 22+50	203 238	< 1	0.01	62	1280	6	< 5	20	35	0.22	< 10	< 10	155	< 5	150					
IR 23+00	203 238	< 1	0.04	4	930	6	< 5	10	154	0.35	< 10	< 10	57	< 5	116					
IR 23+50	203 238	< 1	0.03	5	600	10	< 5	10	85	0.23	< 10	< 10	55	< 5	90					
IR 24+00	203 238	< 1	0.05	9	700	14	< 5	10	86	0.29	< 10	< 10	101	< 5	90					
IR 24+50	203 238	< 1	0.04	9	580	16	< 5	< 10	74	0.30	< 10	< 10	124	< 5	136					
IR 25+00	203 238	2	0.06	7	370	12	< 5	< 10	80	0.47	< 10	< 10	241	< 5	58					
IR 25+50	203 238	1	0.03	14	710	14	5	10	62	0.23	< 10	< 10	96	< 5	154					
IR 26+00	203 238	7	0.02	72	570	32	10	< 10	20	0.14	< 10	< 10	75	< 5	184					
IR 26+50	203 238	< 1	0.02	10	1260	8	< 5	< 10	48	0.25	< 10	< 10	127	< 5	222					
IR 27+00	203 238	< 1	0.02	5	2130	14	< 5	10	27	0.14	< 10	< 10	64	< 5	168					
IR 27+50	203 238	< 1	0.02	27	620	32	< 5	10	35	0.26	< 10	< 10	129	< 5	478					
IR 28+00	203 238	< 1	0.02	22	1350	22	< 5	10	54	0.35	< 10	< 10	179	< 5	192					
IR 28+50	203 238	< 1	< 0.01	6	1380	4	< 5	40	10	0.13	< 10	< 10	64	< 5	60					
IR 29+00	203 238	< 1	0.02	21	530	26	< 5	30	42	0.22	< 10	< 10	118	< 5	108					
IR 29+50	203 238	< 1	0.02	9	180	26	< 5	< 10	43	0.15	< 10	< 10	114	< 5	102					
IR 30+00	203 238	< 1	0.01	17	2300	2	< 5	< 10	18	0.45	< 10	< 10	235	< 5	86					

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MARK MANAGEMENT LIMITED

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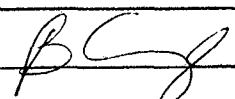
Project : CEM/BTL

Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No. : 1-A
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Date : 20-AUG-87
Invoice # : I-8719656
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719656

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Al %	Ag ppm	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
			FA+AA																		
STAN 4 BEAR PICK-UP	201	238	< 5	3.10	< 0.2	15	100	0.5	2	0.43	< 0.5	10	24	49	2.63	10	< 1	0.19	10	0.94	346
	201	238	< 5	3.09	< 0.2	10	30	1.0	< 2	0.98	< 0.5	14	8	76	3.84	10	< 1	0.10	10	0.75	473

CERTIFICATION : 



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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Project : CEM/BTL

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Page No : 1-B
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Date : 20-AUG-87
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P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719656

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
STAN 4	201	238	< 1	0.02	14	1400	22	< 5	10	35	0.15	< 10	< 10	78	< 5	61
BEAR PICK-UP	201	238	< 1	0.01	7	3160	26	< 5	< 10	34	0.32	< 10	< 10	161	< 5	59

CERTIFICATION : BCg

APPENDIX D

RESULTS FROM HEAVY MINERAL CONCENTRATE ANALYSES



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

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CERTIFICATE OF ANALYSIS A871 758

To: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

Page No. : 1-A
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Project : BUTTLE/CEM

Comments: ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Au ppt FA+AA	Al %	Ag ppm	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
HMC P1	213 238	< 5	3.12	0.2	15	30	< 0.5	< 2	2.63	< 0.5	28	78	116	5.34	10	< 1	0.03	< 10	1.42	672
HMC P2	213 238	< 5	3.02	0.2	5	30	< 0.5	< 2	2.77	< 0.5	23	57	47	4.52	10	1	0.01	< 10	1.07	633
HMC T1	213 238	< 5	3.70	0.2	5	30	< 0.5	2	3.17	< 0.5	22	59	46	4.83	10	1	0.03	< 10	1.36	796
HMC T2	213 238	15	3.19	0.2	10	80	< 0.5	< 2	2.58	< 0.5	36	55	69	5.00	< 10	< 1	0.04	< 10	1.23	746
HMC T3	213 238	20	3.02	0.2	5	70	< 0.5	< 2	2.33	0.5	40	62	74	5.24	< 10	< 1	0.03	< 10	1.24	739
HMC T4	213 238	10	3.13	0.2	25	40	< 0.5	4	2.97	0.5	24	61	59	4.42	10	1	0.03	< 10	0.99	689
HMC T5	213 238	10	3.67	0.4	45	160	< 0.5	< 2	3.04	< 0.5	27	87	64	5.49	10	1	0.04	< 10	1.20	771

CERTIFICATION :

Hart Buchler



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A871758

To : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

Page No. : 1-B
Tot. Pages: 1
Date : 27-MAY-87
Invoice # : I-8714758
P.O. # : NONE

Project : BUTTLE/CEM

Comments : ATTN: ART TROUP CC: LINDA DANDY

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm					
HMC P1	213 238	< 1	0.06	37	530	4	5	< 10	93	0.62	< 10	< 10	199	5	64					
HMC P2	213 238	< 1	0.03	27	170	4	< 5	< 10	143	0.36	< 10	< 10	167	< 5	48					
HMC T1	213 238	< 1	0.03	15	470	8	5	10	240	0.45	< 10	< 10	197	< 5	48					
HMC T2	213 238	< 1	0.01	11	470	6	10	10	235	0.35	< 10	< 10	145	5	52					
HMC T3	213 238	< 1	0.02	13	450	10	5	< 10	212	0.34	< 10	< 10	141	5	58					
HMC T4	213 238	< 1	0.02	13	370	6	< 5	< 10	237	0.33	< 10	< 10	152	10	76					
HMC T5	213 238	1	0.02	26	560	28	< 5	10	281	0.34	< 10	< 10	173	< 5	84					

CERTIFICATION :

Hart B. Seelman



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

Project: CEM/BTL

Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No. : 1-A
Tot. # : 1
Date : 20-AUG-87
Invoice # : I-8719657
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719657

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	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
PRICE CREEK 1	213 238	20	2.91	< 0.2	15	70	< 0.5	< 2	2.62	< 0.5	27	73	131	4.73	< 10	< 1	0.02	< 10	1.54	623
PRICE CREEK 2	213 238	5	3.17	< 0.2	20	120	< 0.5	< 2	2.84	< 0.5	29	70	165	5.55	< 10	< 1	0.02	< 10	1.61	692
STAN 1	213 238	1900	3.95	0.8	80	820	< 0.5	< 2	4.03	< 0.5	42	104	226	6.78	20	< 1	0.07	< 10	1.12	969
STAN 2	213 238	1000	3.34	< 0.2	35	590	< 0.5	6	2.95	0.5	29	70	110	4.41	10	< 1	0.05	< 10	1.24	685
STAN 3	213 238	1150	4.39	0.8	35	130	< 0.5	< 2	4.35	0.5	26	124	120	5.24	20	< 1	0.07	< 10	1.10	980

CERTIFICATION :



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212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

Project : CEM/BTL

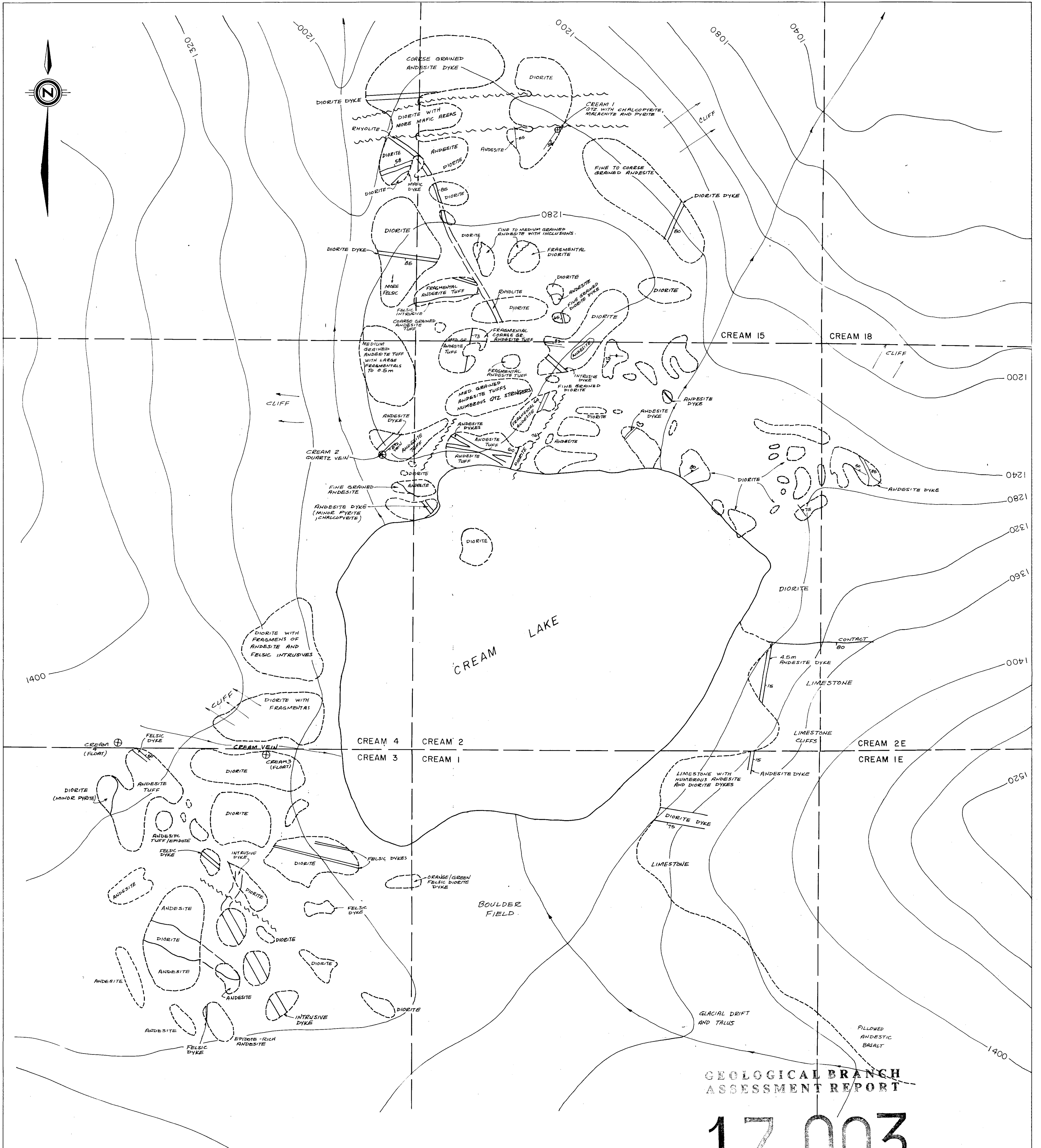
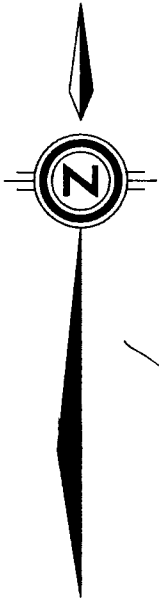
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Page No. : 1-B
Tot. : 1
Date : 20-AUG-87
Invoice # : I-8719657
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8719657

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
PRICE CREEK 1	213	238	< 1	0.13	40	450	< 2	5	10	69	0.68	< 10	< 10	187	< 5	57
PRICE CREEK 2	213	238	< 1	0.09	44	500	< 2	< 5	10	70	0.70	< 10	< 10	214	< 5	67
STAN 1	213	238	< 1	0.04	14	410	< 2	5	10	353	0.32	< 10	< 10	172	< 5	86
STAN 2	213	238	< 1	0.02	12	550	< 2	5	< 10	273	0.27	< 10	< 10	120	5	102
STAN 3	213	238	< 1	0.04	12	380	< 2	5	10	399	0.28	< 10	< 10	176	< 5	73

CERTIFICATION :



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,003

LEGEND:

- TERTIARY - ISLAND INTRUSIONS
- RHYOLITE** RHYOLITIC TO DACITE TUFF, BRECCIA, IGIMBRITE.
- DIORITE** HORNBLende QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRITIC DACITE, BRECCIA.
- UPPER TRIASSIC
- BASALT** KARMUTSEN FORMATION - PILLOW BRECCIAS AND PILLOW BASALT, MASSIVE BASALT FLOWS; MINOR TUFF VOLCANIC BRECCIA, JASPEROID TUFF, BRECCIA AND CONGLOMERATE AT BASE.
- PENNSYLVANIAN AND PERMIAN - SICKER GROUP
- LIMESTONE** BUTTLE LAKE FORMATION - LIMESTONE, GREY FETID, FOSSILIFEROUS.
- MIDDLE PENNSYLVANIAN - SICKER GROUP
- CHERT** ARGILLITE, GREYWACKE, CONGLOMERATE; MINOR LIMESTONE AND TUFF. OFTEN BEDDED WITH OLDER ANDESITES.
- ARGILLITE**
- PENNSYLVANIAN AND OLDER - SICKER GROUP
- ANDESITE** VOLCANIC BRECCIA, TUFF, ARGILLITE, GREENSTONE AND GREENSCHIST; DYKES AND SILLS OF ANDESITE - PORPHYRY.

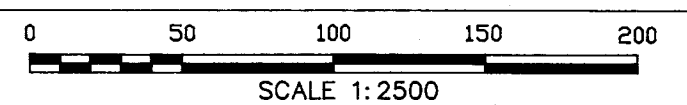
- FRACTURES
- VEINS
- DYKES
- SHEARS
- OUTCROP

PART OF 31

CREAM SILVER MINES LTD.

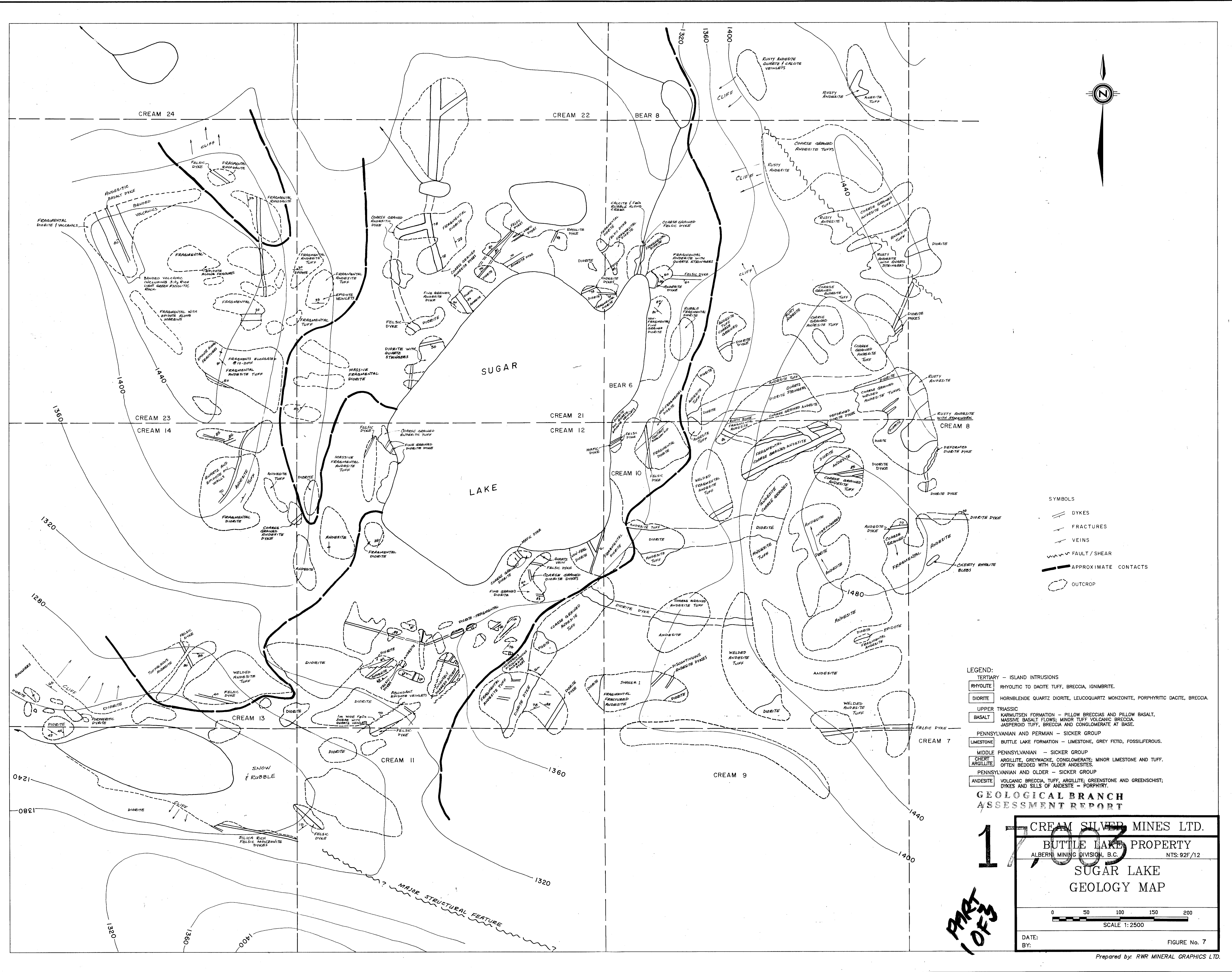
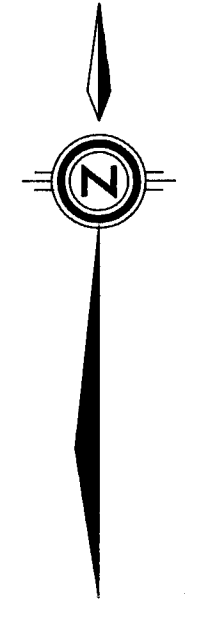
BUTTLE LAKE PROPERTY
ALBERNI MINING DIVISION, B.C. NTS: 92F/12

CREAM LAKE
GEOLOGY MAP



DATE:
BY:

FIGURE No. 5



- SYMBOLS
- DYKES
 - FRACTURES
 - VEINS
 - FAULT / SHEAR
 - APPROXIMATE CONTACTS
 - OUTCROP

- LEGEND:
- TERTIARY - ISLAND INTRUSIONS
 - RHYOLITE - RHYOLITIC TO DACITE TUFF, BRECCIA, IGNIMBRITE.
 - DIORITE - HORNBLLENDE QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRITIC DACITE, BRECCIA.
 - BASALT - UPPER TRIASSIC KARMUTSEN FORMATION - PILLOW BRECCIAS AND PILLOW BASALT, MASSIVE BASALT FLOWS; MINOR TUFF VOLCANIC BRECCIA, JASPEROID TUFF, BRECCIA AND CONGLOMERATE AT BASE.
 - PENNSYLVANIAN AND PERMIAN - SICKER GROUP
 - LIMESTONE - BUTTE LAKE FORMATION - LIMESTONE, GREY FETID, FOSSILIFEROUS.
 - MIDDLE PENNSYLVANIAN - SICKER GROUP
 - CHERT / ARGILLITE - ARGILLITE, GREYWACKE, CONGLOMERATE; MINOR LIMESTONE AND TUFF, OFTEN BEDDED WITH OLDER ANDESITES.
 - PENNSYLVANIAN AND OLDER - SICKER GROUP
 - ANDESITE - VOLCANIC BRECCIA, TUFF, ARGILLITE, GREENSTONE AND GREENSCHIST; DYKES AND SILLS OF ANDESITE - PORPHYRY.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17,003

CREAM SILVER MINES LTD.
BUTTE LAKE PROPERTY
 ALBERN MINING DIVISION, B.C. NTS-92F/12

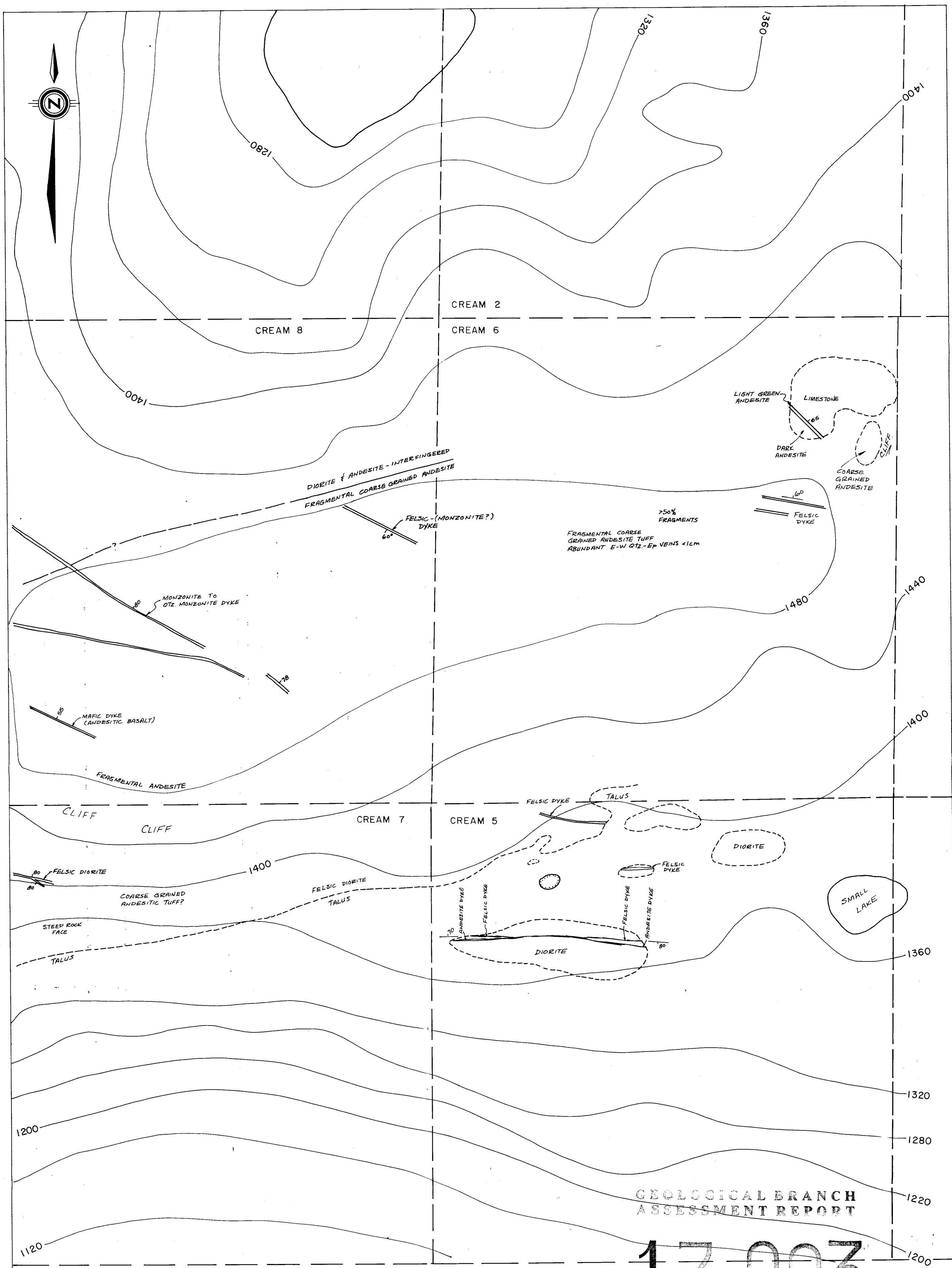
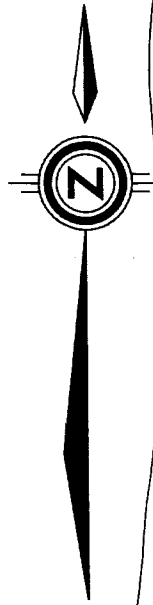
**SUGAR LAKE
GEOLOGY MAP**

0 50 100 150 200
SCALE 1:2500

DATE: _____ FIGURE No. 7
 BY: _____

Prepared by: RWR MINERAL GRAPHICS LTD.

PART OF 3



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,003

- LEGEND:
- TERTIARY - ISLAND INTRUSIONS
 - RHYOLITE** RHYOLITIC TO DACITE TUFF, BRECCIA, IGNIMBRITE.
 - DIORITE** HORNBLLENDE QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRITIC DACITE, BRECCIA.
 - UPPER TRIASSIC
 - BASALT** KARLUTSEN FORMATION - PILLOW BRECCIAS AND PILLOW BASALT, MASSIVE BASALT FLOWS; MINOR TUFF VOLCANIC BRECCIA, JASPEROID TUFF, BRECCIA AND CONGLOMERATE AT BASE.
 - PENNSYLVANIAN AND PERMIAN - SICKER GROUP
 - LIMESTONE** BUTTLE LAKE FORMATION - LIMESTONE, GREY FETID, FOSSILIFEROUS.
 - MIDDLE PENNSYLVANIAN - SICKER GROUP
 - CHERT** ARGILLITE, GREYWACKE, CONGLOMERATE; MINOR LIMESTONE AND TUFF. OFTEN BEDDED WITH OLDER ANDESITES.
 - ARGILLITE**
 - PENNSYLVANIAN AND OLDER - SICKER GROUP
 - ANDESITE** VOLCANIC BRECCIA, TUFF, ARGILLITE, GREENSTONE AND GREENSCHIST; DYKES AND SILLS OF ANDESITE - PORPHYRY.

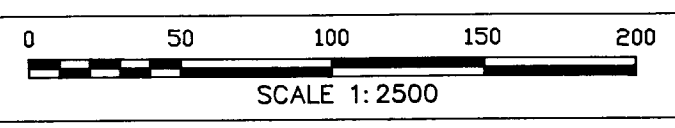
- SYMBOLS
- DYKES
 - FRACTURES
 - VEINS
 - OUTCROP

PART OF 3

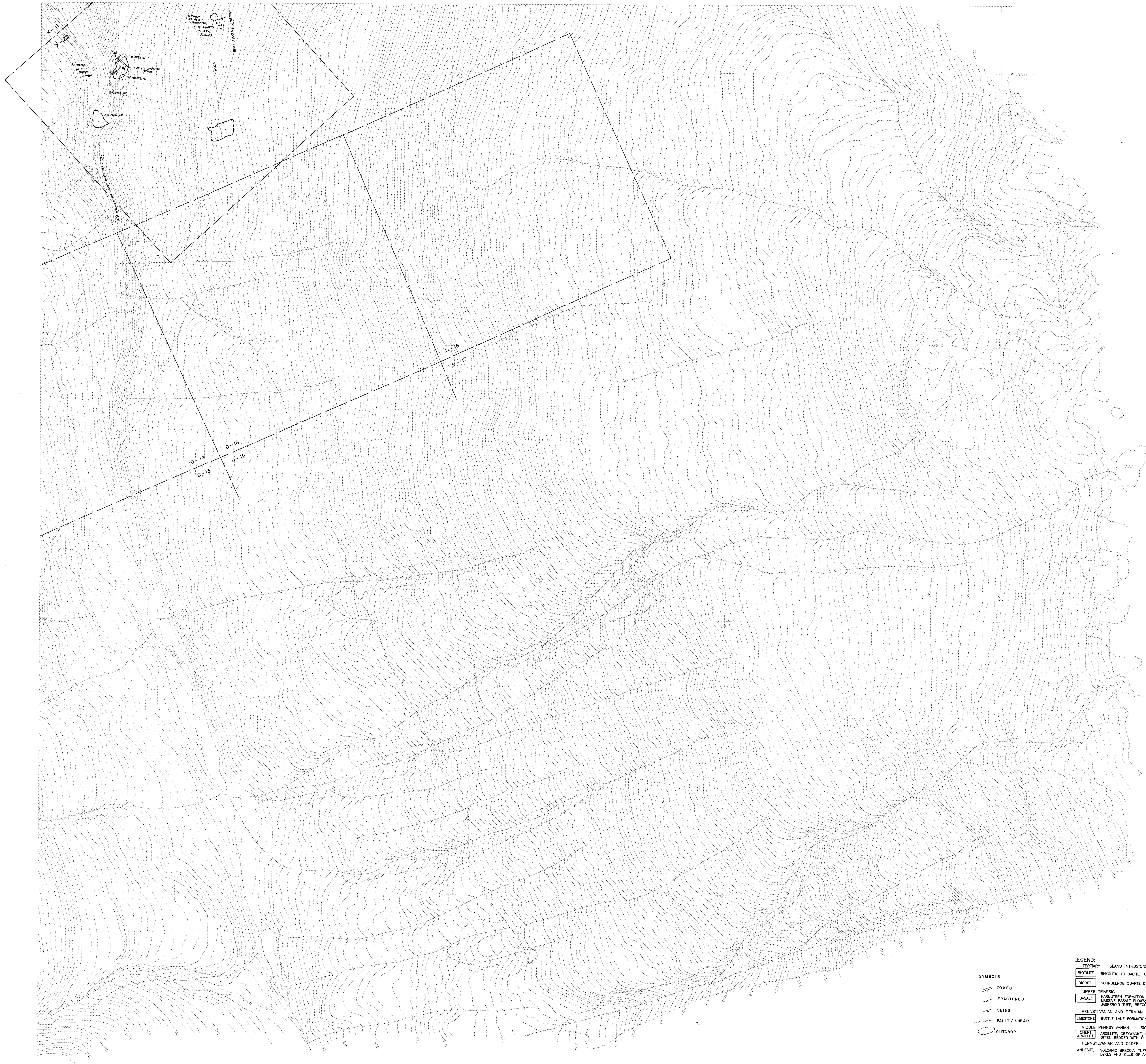
CREAM SILVER MINES LTD.

BUTTLE LAKE PROPERTY
ALBERNI MINING DIVISION, B.C. NTS:92F/12

ANDREW LAKE
GEOLOGY MAP



DATE: _____
BY: _____ FIGURE No. _____



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,003

LEGEND:	
TERTIARY - ISLAND INTRUSIONS	
BRIDGE	HYDROTIC TO DACITE TUFF, BRECCIA, IGNEBRITE.
DIOIRITE	HORNBLende QUARTZ DIOIRITE, LEUCOQUARTZ MONZONITE, PORPHYRIC DACITE, BRECCIA.
UPPER TRASSIC	
MAKATSIEN FORMATION	- PILLOW BRECCIAS AND PILLOW BASALT.
MAKATSIEN BASALT	MAKATSIEN BASALT, FELSIC MINOR TUFF VOLCANIC BRECCIA.
ASPIROD TUFF	BRECCIA AND CONGLOMERATE AT BASE.
PENNSYLVANIAN AND PERMIAN - SICKER GROUP	
LIMESTONE	BUTTE LAKE FORMATION - LIMESTONE, GREY PETRO. FOSSILIFEROUS.
MIDDLE PENNSYLVANIAN - SICKER GROUP	
ARGILLITE	ARGILLITE, GREYWACKE, CONGLOMERATE, MINOR LIMESTONE AND TUFF.
ARGILLITE	OFTEN BEDDED WITH OLDER ANDESITES.
PENNSYLVANIAN AND OLDER - SICKER GROUP	
ANDESITE	VOLCANIC BRECCIA, TUFF, ARGILLITE, GREENSTONE AND GREENSCHIST; DYKES AND SILLS OF ANDESITE - PORPHYRY.

- SYMBOLS
- DYKES
 - FRACTURES
 - VEINS
 - FAULT / SHEAR
 - OUTCROP

PART 1 OF 3

GEOLOGY MAP
FIGURE 4

CREAM SILVER MINES LTD.
BUTTE LAKE

FIGURE 4
SCALE - 1 : 2 500
CONTOUR INTERVAL - 5m
GRID - UTM
PROJECT NO. - 8714
SHEET NO. - 4
DATE - APRIL, 1987



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,003

PART 1 OF 3

- LEGEND:
- TERTIARY - ISLAND INTRUSIONS
 - RYHOLITE - RHYOLITIC TO DACITE TUFF, BRECCIA, IGNEBRITE.
 - DIORITE - HORNBLENDE QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRITIC DACITE, BRECCIA.
 - UPPER TRASSIC - KAMBERNEN FORMATION - YELLOW BRECCIA AND YELLOW BASALT, MASSIVE BASALT FLOWS, WINDY TUFF VOLCANIC BRECCIA, JASPERS TUFF, BRECCIA AND CONGLOMERATE AT BASE.
 - PENNSYLVANIAN AND PERMIAN - SICKER GROUP
 - LIMESTONE - BUTTE LAKE FORMATION - LIMESTONE, GREY PETIO, FOSSILIFEROUS.
 - MIDDLE PENNSYLVANIAN - SICKER GROUP
 - CHERT - ARGILLITE, OREWACK, CONGLOMERATE, MINOR LIMESTONE AND TUFF.
 - ARGILLITE - OPEN BEDDING WITH SLUGS AND CRINOID.
 - PENNSYLVANIAN AND OLDER - SICKER GROUP
 - ANDESITE - VOLCANIC BRECCIA TUFF, ARGILLITE, OREWACK AND GREENSCHIST, DYES AND BELLS OF ANDESITE - PORPHYRY.

- SYMBOLS
- A - ROCK SAMPLE LOCATION
 - DYKES
 - FRACTURES
 - VEINS
 - FAULT / SHEAR
 - OUTCROP

NOTE: RHYOLITE IS ALMOST ALWAYS FOUND IN THE BULLEYS (OR DEGREES) AND IS ALWAYS MUCH MORE INTENSIBLY FRACTURED THAN SURROUNDING ANDESITE.

GEOLOGY MAP

FIGURE 4

	CREAM SILVER MINES LTD.	SCALE - 1 : 2 500
	BUTTE LAKE	CONTOUR INTERVAL - 5m
		GRID - UTM
		PROJECT NO. - 8714
		SHEET NO. 3
		DATE - APRIL, 1987



17.003

- LEGEND:
- TERTIARY - ISLAND INTRUSIONS
 - RYHOLITE - RHYOLITIC TO DACITE TUFF, BRECCIA, IGNEUMBRE.
 - DIORITE - HORNBLENDE QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRIC DIORITE, MONZONITE.
 - UPPER TRIASSIC - KAMMUTSEN FORMATION - FLOW BRECCIAS AND FLOW BASALT, MASSIVE BASALT FLOWS, MAJOR TUFF, VOLCANIC BRECCIA, JASPERED TUFF, BRECCIA AND CONGLOMERATE AT BASE.
 - BASALT - BUTTLE LAKE FORMATION - Limestone, grey felds, fossiliferous.
 - PENNSYLVANIAN AND PERMIAN - SICKER GROUP
 - MIDDLE PENNSYLVANIAN - SICKER GROUP
 - ANGELITE - ANGELITE, GREENSLATE, CONGLOMERATE, MAJOR LIMESTONE AND TUFF, OFTEN BEDDED WITH OLDER ANDESITE.
 - PENNSYLVANIAN AND OLDER - SICKER GROUP
 - ANDESITE - VOLCANIC BRECCIA, TUFF, ANGELITE, GREENSTONE AND GREENSLATE, DYKES AND SILLS OF ANDESITE - PORPHYRY.

SYMBOLS

OUTCROP

PART 1 OF 3

GEOLOGY MAP

CREAM SILVER MINES LTD.
BUTTLE LAKE

FIGURE 4
SCALE - 1:2 500
CONTOUR INTERVAL - 5m.
GRID - UTM
PROJECT NO. - 8714
SHEET NO. - 2
DATE - APRIL, 1987



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,003

PART 10F3

- LEGEND:**
- TECTONIC - ISLAND INTRUSIONS
 - RYHOLITE - RHYOLITE TO DACITE TUFF, BRECCIA, IGNEERITE.
 - DIORITE - HORNBLENDE QUARTZ DIORITE, LEUCOQUARTZ MONZONITE, PORPHYRIC DACITE, BRECCIA.
 - UPPER TRASSIC - KAMUPTEN FORMATION - FLOW BRECCIAS AND FLOW BASALT, MASSIVE BASALT FLOWS, MINOR TUFF VOLCANIC BRECCIA, JASPEROID TUFF, BRECCIA AND CONGLOMERATE AT BASE.
 - PENNSYLVANIAN AND PERMAN - SICKER GROUP
 - LIESTONE - BUTTE LAKE FORMATION - LIMESTONE, GREY PETO, FOSSILIFEROUS.
 - MIDDLE PENNSYLVANIAN - SICKER GROUP
 - CHERT - ARGILLITE, GREYWACKE, CONGLOMERATE, MINOR LIMESTONE AND TUFF, OFTEN MIXED WITH SLUGS AND SICKERS.
 - PENNSYLVANIAN AND OLDER - SICKER GROUP
 - ANDSITTE - VOLCANIC BRECCIA, TUFF, ARGILLITE, GREENSTONE AND GREENSCHIST, DYKES AND SLIPS OF ANDSITTE - KOPPELITE.

- SYMBOLS**
- ▲ ROCK SAMPLE LOCATION
 - SOIL SAMPLE LOCATION
 - DYKES
 - FRACTURES
 - VEINS
 - FAULT / SHEAR
 - OUTCROP

GEOLOGY MAP

CREAM SILVER MINES LTD.
BUTTE LAKE

FIGURE 4
SCALE - 1 : 2 500
CONTOUR INTERVAL - 5m
GRID - UTM
PROJECT NO. - 8714
SHEET NO. - 1
DATE - APRIL, 1987