

GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
SILVER DREAM GROUP OF MINERAL CLAIMS

SKEENA MINING DIVISION
BRITISH COLUMBIA

N.T.S. 103 P/11W, 12E
LATITUDE $55^{\circ}41.2'N$; LONGITUDE $129^{\circ}32.6'W$

PREPARED FOR

Owner/Operator: DOLLY VARDEN MINERALS INC.

BY:
GEOLOGICAL BRANCH
ASSESSMENT REPORT
BARRY D. DEVLIN
OCTOBER 16, 1986

15,371

FILMED

TABLE OF CONTENTS

	<u>PAGE</u>
TABLE OF CONTENTS	1
LIST OF TABLES	2
LIST OF FIGURES	3
SUMMARY	4
INTRODUCTION	6
HISTORY OF EXPLORATION AND DEVELOPMENT	10
REGIONAL GEOLOGY	11
PROPERTY GEOLOGY	15
Lithology	15
Structure	17
Mineralization	18
EXPLORATION AND GEOCHEMISTRY	21
CONCLUSIONS	26
RECOMMENDATIONS	29
ITEMIZED COST STATEMENT	30
STATEMENT OF QUALIFICATIONS	31
REFERENCES	32
APPENDIX I - ANALYTICAL PROCEDURES	33
APPENDIX II - GEOCHEMICAL ANALYSES	34

LIST OF TABLES

	<u>PAGE</u>
TABLE 1 Silver Dream Claim Group	7
TABLE 2 Rock Units of the Dolly Varden Mining Camp (from Devlin and Godwin, 1986).	15
TABLE 3 Soil Geochemistry Statistical Data	24

LIST OF FIGURES

		<u>PAGE</u>
Figure 1	Location map.	8
Figure 2	Claim map.	9
Figure 3	Geology and major mineral occurrences in the Kitsault Valley (from Dawson and Alldrick, 1986).	14
Figure 4	Geological cross-section, Kitsault Valley (from Dawson and Alldrick, 1986).	15
Figure 5a	Property geology and sample location map (North Sheet)	in pocket
Figure 5b	Property geology and sample location map (South Sheet).	in pocket
Figure 6a	Gold soil geochemistry	in pocket
Figure 6b	Silver soil geochemistry	in pocket
Figure 6c	Copper soil geochemistry	in pocket

SUMMARY

During August, 1986, a field program of geological mapping and geochemical exploration was carried out by Dolly Varden Minerals Inc. on the 94 unit Silver Dream claim group, near Alice Arm, British Columbia. A total of 57 rock chip samples, 31 stream sediment samples and 102 soil samples were collected and geochemically analyzed for gold, silver, copper, lead, zinc, arsenic and barium. The objective of this program was to determine if either silver-lead-zinc-barite stratiform, volcanogenic mineralization or gold-silver-copper epithermal vein mineralization found in the Dolly Varden mining camp exists on the Silver Dream claim group.

Geological mapping showed that the Silver Dream claim group is underlain by the same rock units that host known mineral occurrences in the Dolly Varden mining camp. In addition, geochemical exploration defined one area that is probably underlain by stratiform, volcanogenic silver-lead-zinc-barite mineralization and two areas which host gold-silver-copper epithermal vein occurrences. A geochemical soil survey, covering one of the gold-silver-copper vein occurrences, defined a northwesterly trending anomalous gold zone that measured 800 meters long and 200 meters wide. This northwesterly trend parallels major faults that transect the Silver Dream group map-area. A separate east-west trend was also recognized for silver soil geochemical values.

Results from this exploration program indicate that mineralization found in the Dolly Varden mining camp extends onto the Silver Dream claim group. Follow-up prospecting of geochemical anomalies is recommended on the property.

INTRODUCTION

The Silver Dream claim group, owned by Dolly Varden Minerals Inc., Toronto, straddles the Kitsault River 21 kilometers upstream from the community of Alice Arm, approximately 840 kilometers north of Vancouver (Fig. 1). Topography on the property is steep, ranging in elevation from 180 meters in the south to 1200 meters on both the east and west claim boundaries. Present access to the area is by helicopter either from Stewart, 43 kilometers to the north; or Prince Rupert, 156 kilometers to the south. A gravel road from Alice Arm could be used for access to the claims provided minor repairs were carried out. Road access from the mainland to Alice Arm is not possible, however, there is a road to the town of Kitsault on the other side of the Alice Arm inlet; from which a 2 mile barge or ferry trip would be required to reach the town of Alice Arm.

The Silver Dream claim group consists of 7 mineral claims totaling 94 units (Fig. 2). The claims are located within the Skeena Mining Division and are listed in Table 1.

TABLE 1

Silver Dream Claim Group

Claim Name	Record No.	No. of Units	No. of Acres	Record Date
Silver Dream 1	5313(4)	20	1235.60	Apr. 11, 1986
Silver Dream 2	5314(4)	8	494.24	Apr. 11, 1986
Silver Dream 3	5315(4)	12	741.36	Apr. 11, 1986
Barite Snow 1	5316(4)	12	741.36	Apr. 11, 1986
Barite Snow 2	5317(4)	12	741.36	Apr. 11, 1986
Southern Gold	5480(8)	20	1235.60	Aug. 12, 1986
Southern Gold 2	5519(9)	<u>10</u>	<u>617.80</u>	Sept. 3, 1986
TOTAL UNITS & ACRES		94	5807.32	

From August 9 to August 29, 1986, an exploration program was carried out on the Silver Dream claim group by a four-man field crew contracted to Dolly Varden Minerals Inc., Toronto. Fieldwork included 1:5,000 scale geological mapping along with rock chip, stream sediment and soil geochemical sampling. The aim of this program was to evaluate the precious and base-metal potential of these mineral claims.

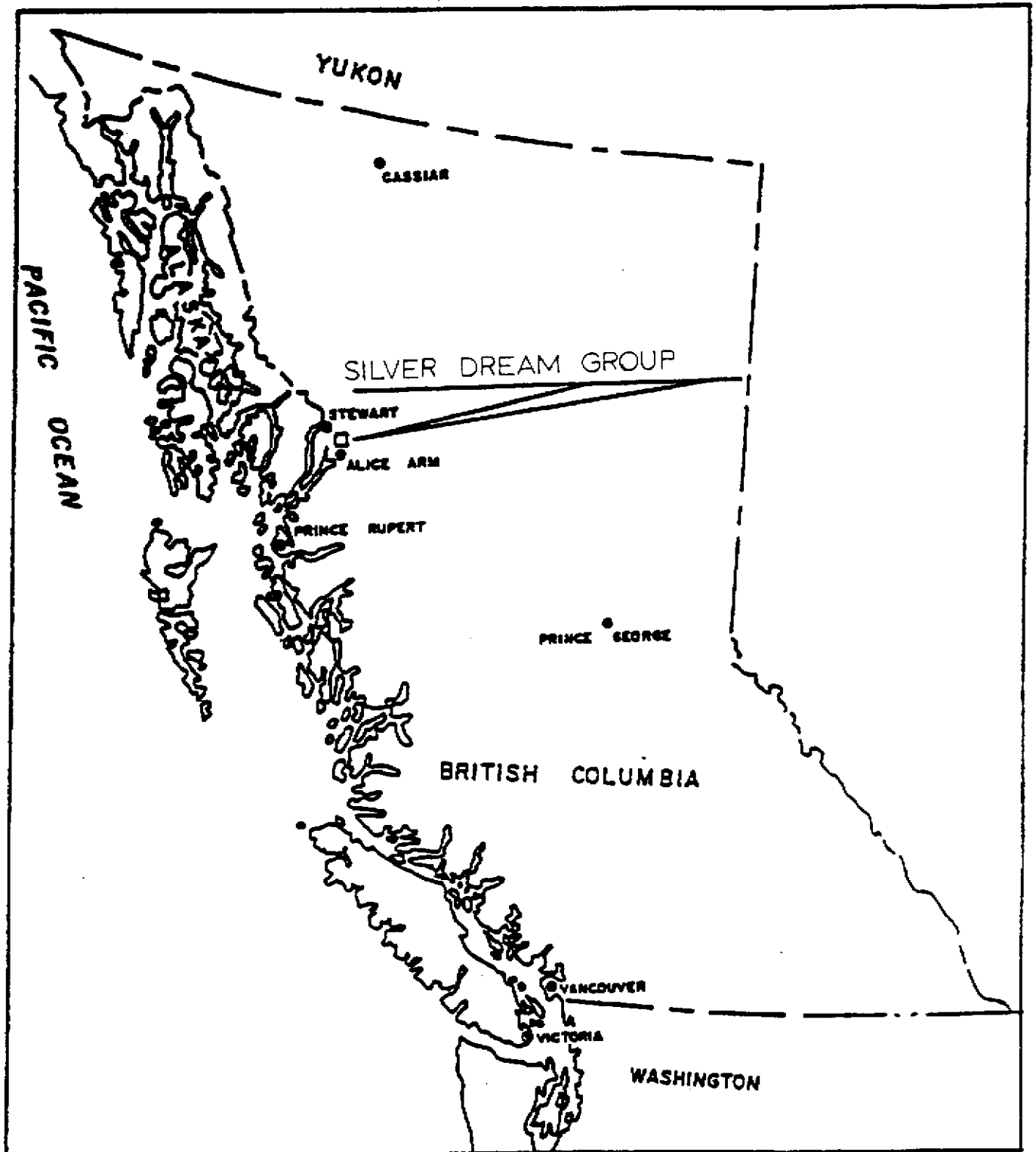
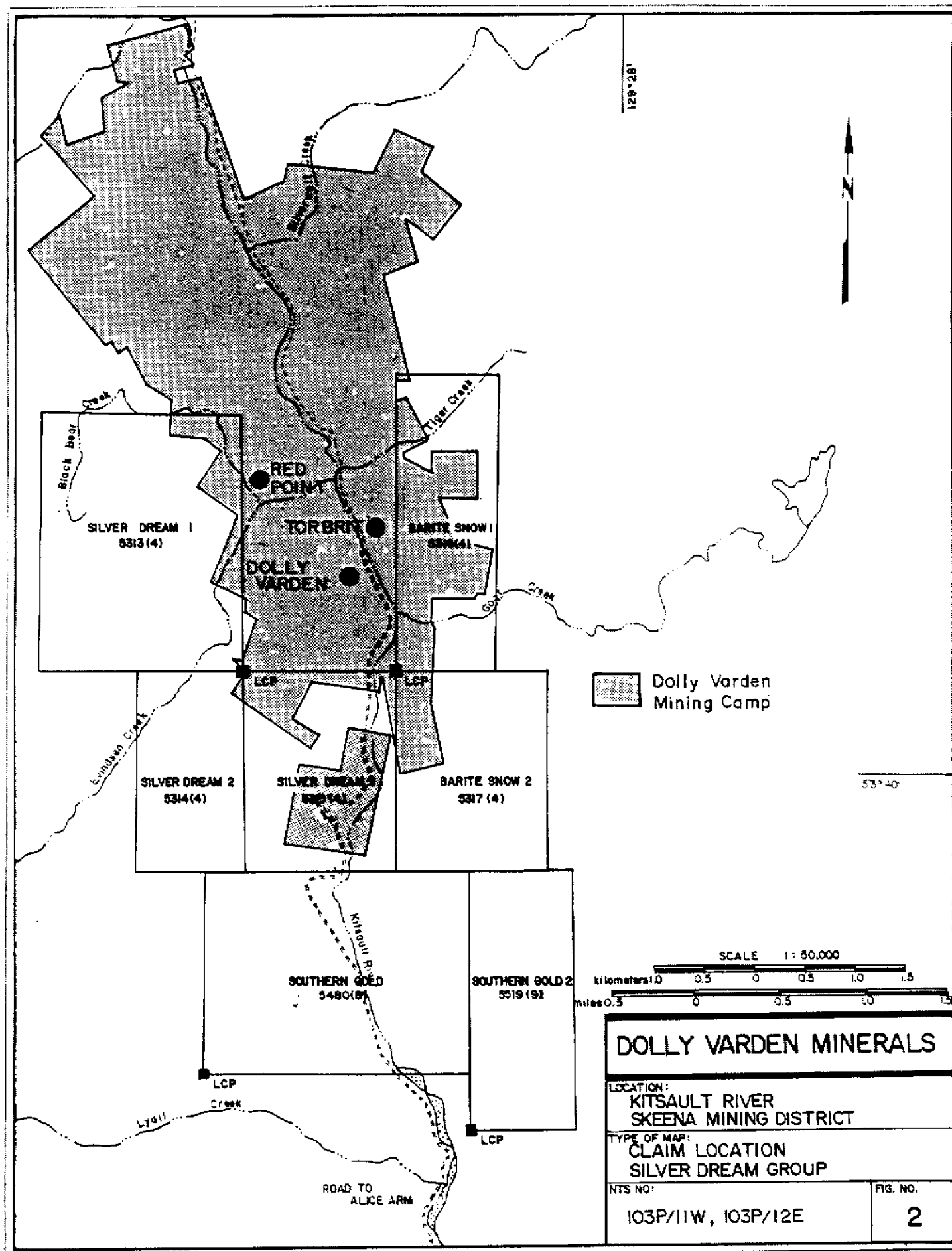


Figure 1. Location Map.



HISTORY OF EXPLORATION AND DEVELOPMENT

Exploration and development has been carried out in the Kitsault River valley since the first claims were staked in the early 1900's. Most of the production took place from the silver-base metal Dolly Varden and Torbrit mines of the Dolly Varden mining camp, which is bordered on the south, east and west by claims of the Silver Dream claim group (Fig. 2). Production, which took place from 1919 to 1921 at the Dolly Varden mine and between 1949 and 1959 at the Torbrit mine, totaled 1,285,818 tons of ore that averaged 480 grams silver per tonne and 0.40 percent lead.

Exploration work consisting of diamond drilling, trenching, underground development, as well as geological, geochemical and geophysical surveys, was also carried out on numerous other silver-base metal occurrences within the Dolly Varden mining camp. In addition, gold-silver-copper showings of the Dolly Varden Gold Belt, located in the upper part of the Kitsault valley, were explored intermittently from 1913 to 1978. The majority of the showings in this area were explored by trenches and short adits, with the exception of a 700 foot long adit driven on the Red Point showing (Fig. 2).

REGIONAL GEOLOGY

The Dolly Varden mining camp lies at the western margin of the Intermontane Belt (Fig. 3). Rocks underlying the camp are correlative with the Lower to Middle Jurassic Hazelton Group, which is a thick and widespread assemblage of basaltic to rhyolitic volcanic flow rocks, their tuffaceous equivalents, and sedimentary rocks.

Regional geology of the Kitsault River area was previously described by McConnell (1913), Turnbull (1916), Hanson (1921), Black (1951), Carter (1970) and Mitchell (1973). Despite all of this earlier mapping, the geology of the area was not completely understood and therefore was remapped by Dawson and Alldrick (1986). This mapping showed that the Kitsault River valley is underlain by six volcanic-sedimentary rock units and three intrusive rock units (Figs. 3 and 4). Unit 1 is the lowermost sequence exposed in the area and consists of interbedded, finely laminated black siltstone, argillite and minor wacke. The base of this unit is not exposed in the Kitsault River valley, but it is at least 3900 feet thick. Overlying unit 1 are mixed mafic volcanic and epiclastic rocks of unit 2. This unit consists of augite, feldspar, and olivine porphyritic basalt flows, pyroclastics and derived conglomerates. It ranges from 500 to 2300 feet in thickness. Unit 3 is a sedimentary and minor volcanic sequence of siltstone, sandstone, wacke, grit, pebble to cobble conglomerate, and volcanic breccia. This unit varies in thickness from 1300 feet to 6600 feet and the basal contact is gradational. Andesitic pyroclastic rocks together with either flows or

subvolcanic sills of similar composition comprise unit 4. This unit ranges from 1600 feet to 6600 feet in thickness and hosts the majority of the gold and silver occurrences in the Kitsault River area. Unit 4 grades upward into unit 5 which consists of a marine assemblage of alternating green and maroon volcanic breccias and conglomerates, with lesser dacite flows and pyroclastics, and minor black siltstones and limestones. The thickness of this unit varies from less than 300 feet to a maximum of 5000 feet thick. Unit 6, the uppermost sequence exposed in the area, is a marine assemblage of sedimentary rocks consisting of black siltstone, shale, wacke, with lesser amounts of sandstone, limestone and intraformational conglomerate.

All rock units of the Hazelton Group in the Kitsault River area have been intruded by various intrusive rock units. Quartz monzonite to granodiorite of the Early to Middle Eocene Coast Range batholith (unit 7) is exposed in the southwest corner of the map-area. Early to Middle Eocene Ajax intrusions (unit 8), now called Alice Arm intrusions because of their proximity to Alice Arm, occur as small stocks of quartz feldspar porphyritic quartz monzonite and biotite quartz monzonite. Other intrusive rocks include numerous Tertiary microdiorite, granodiorite and lamprophyre dykes (unit 9) which have been observed to crosscut all rock units in the Kitsault River area.

Volcanic and sedimentary beds in the map-area are folded into three parallel regional scale folds (Figs. 3 and 4). These folds, which are all doubly plunging, include the Varden Glacier anticline, Kitsault River syncline and the Mount McGuire anticline. Two major sets of faults also

transect the area, with earlier faults trending northwest and younger faults trending northeast. Many of the Tertiary dykes intrude the later northeast trending faults. An extensive hydrothermal alteration zone hosting the precious metal occurrences of the Dolly Varden Gold Belt is subparallel to the earlier northwest fault trend (Fig. 3). This alteration zone measures nearly 9 miles in length and is characterized by sericitization, silicification and pyritization. The Hazelton Group rocks in the Kitsault River area have been subjected to greenschist facies metamorphism.

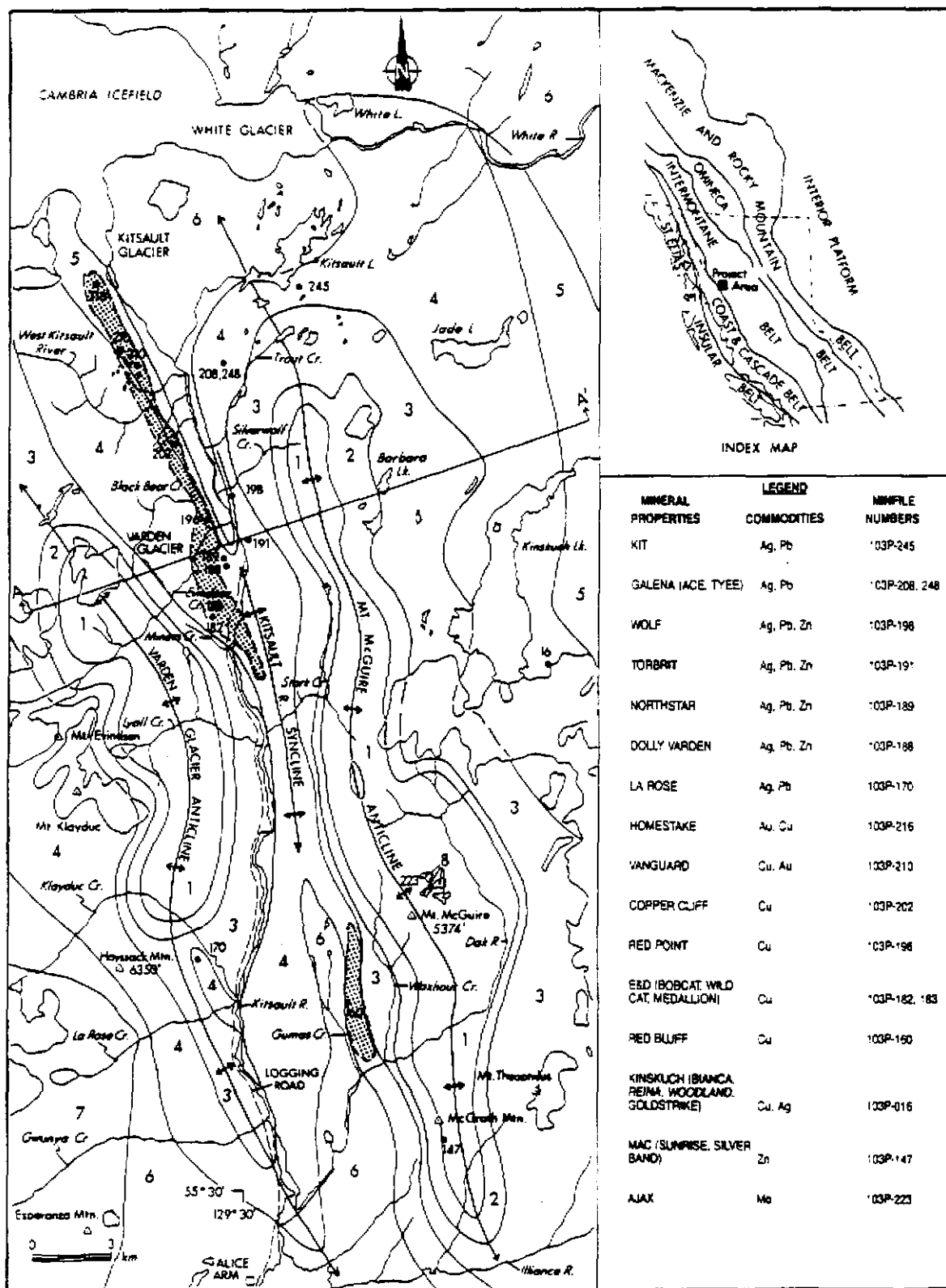


Figure 3. Geology and major mineral occurrences in the Kitsault Valley (from Dawson and Alldrick, 1986). For legend, see Fig. 4.

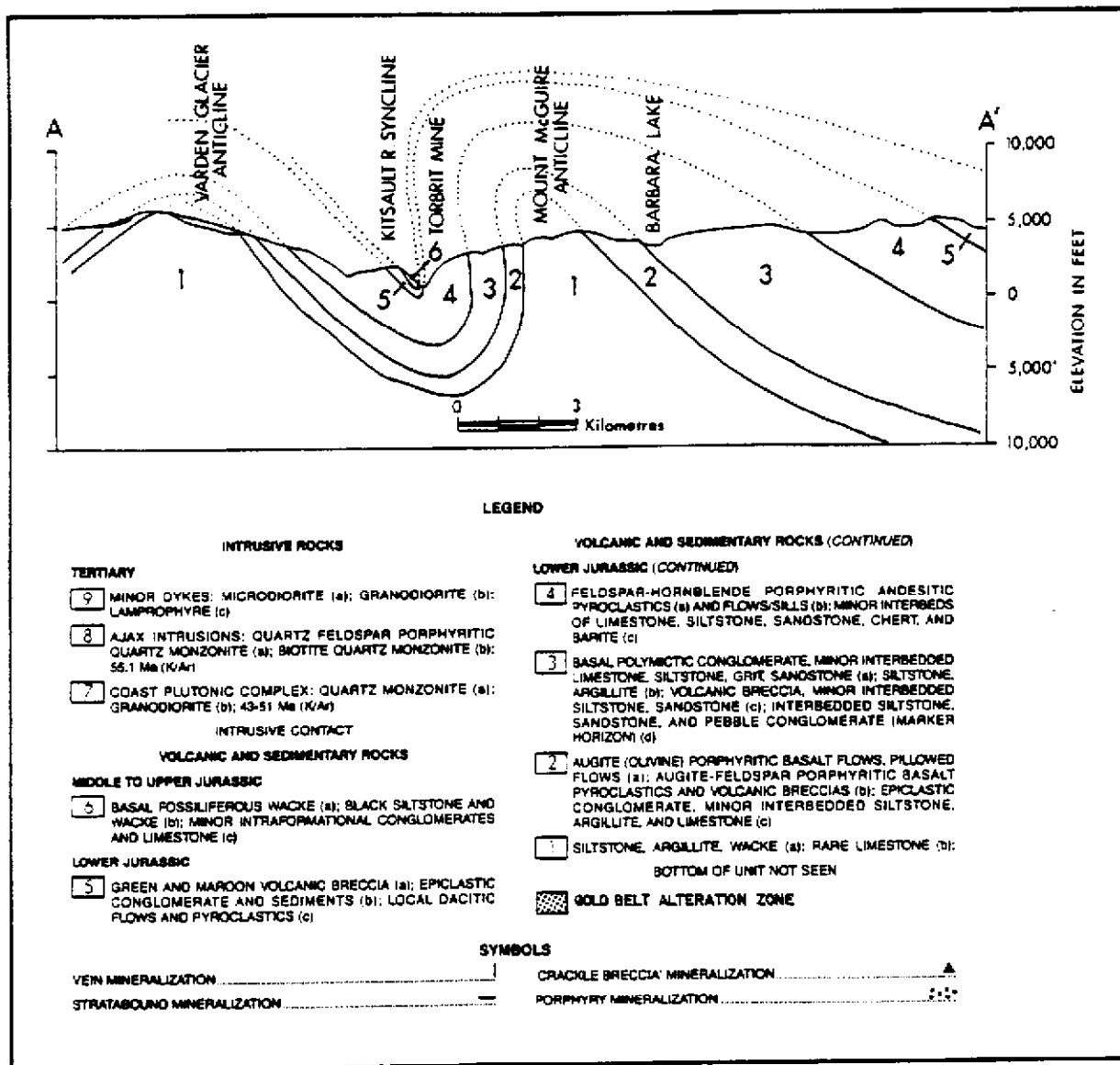


Figure 4. Geological cross-section, Kitsault Valley (from Dawson and Alldrick, 1986). For location, see Fig. 3.

PROPERTY GEOLOGY

Lithology

Geology of the Dolly Varden mining camp was previously described by Devlin and Godwin (1986). The rock units established in this study were adopted for use during the present mapping program and are shown in Table 2. Only 9 of the 16 rock units described by Devlin and Godwin (1986), however, were recognized in the Silver Dream claim group map-area (Figs. 5a and 5b). These include units 1a, 3, 5, 7, 8a, 8b, 8c, 9c and 10. All rock units, excluding the numerous Tertiary dykes (unit 10), occur within the Lower to Middle Jurassic Hazelton Group.

TABLE 2

Rock Units of the
Dolly Varden Mining Camp
(from Devlin and Godwin, 1986)

<u>Rock Unit</u>	<u>Lithology</u>
10	Basalt, andesite and lamprophyre dykes
9c	Black siltstone and shale
9b	Calcareous and fossiliferous wacke
9a	Maroon siltstone
8c	Silicified and pyritized porphyritic andesite
8b	Sericitized and pyritized porphyritic andesite
8a	Feldspar + hornblende porphyritic andesite
7	Light green andesite ash tuff
6b	Dark green andesite tuff
6a	Dark grey andesite lapilli tuff
5	Maroon andesite tuff
4	Light grey andesite ash tuff
3	Stratiform silver-lead-zinc-barite ore horizon
2	Green andesite shard tuff
1b	Maroon andesite crystal tuff
1a	Green + maroon andesite tuff.

Tuffaceous rocks (unit 1a), exposed in the southeast corner of the map-area (Fig. 5b), appear to be the oldest

rocks on the property. Unit 1a consists of massive, green and minor maroon colored, andesite tuff and lapilli tuff. Lenses or individual flows of porphyritic andesite are observed locally in unit 1a. In the north-central part of the map-area (Fig. 5a), the only occurrence of unit 3 was identified. This unit is considered to be a stratiform and volcanogenic silver-lead-zinc-barite ore horizon (Devlin and Godwin, 1986). At this locality, the stratiform mineralized horizon is characterized by quartz with locally massive pyrite mineralization. Although not directly observed in the Silver Dream claim group map-area, the stratiform ore horizon (unit 3) is generally found to be conformably overlain by a maroon tuff unit (unit 5). Unit 5, mapped in the northwestern part of the map-area (Fig. 5a), consists of maroon colored, locally well bedded, lapilli and feldspar crystal tuff of andesitic composition. Brick red colored ash layers are locally abundant and interbedded with this unit. Overlying the maroon tuff unit is a light green colored andesite ash tuff with a minor epiclastic component (unit 7). This unit is only observed to outcrop in the northwestern portion of the map-area (Fig. 5a).

All of the aforementioned rock units are intruded by either stocks or subvolcanic sills (unit 8a) referred to as Gold Belt intrusives. When fresh, unit 8a intrusions are porphyritic with plagioclase and minor hornblende phenocrysts, and either an andesitic or dioritic appearance. Gold Belt intrusives are closely associated with both a zone of sericitization and pyritization (unit 8b) and a zone of silicification and pyritization (unit 8c). These alteration zones are characteristically strongly altered feldspar

porphyritic andesite.

Sedimentary rocks (unit 9c) are exposed in the southwest and northeast parts of the map-area (Figs. 5a and 5b). They appear to overlie all the volcanic rock units and consist of black siltstone and shale with local interbeds of sandstone, conglomerate and minor wacke. The sedimentary rocks are generally well bedded and display disharmonic fold features at outcrop and larger scales. Fossils collected from calcareous wacke beds indicate a Lower Jurassic, Toarcian age.

Basalt, andesite and lamprophyre dykes (unit 10) intrude all rocks of the Hazelton Group exposed in the map-area. A whole rock K-Ar date of 22.3 ± 0.8 Ma for one of the basaltic dykes indicates emplacement during Tertiary, Miocene time.

Structure

Sedimentary and volcanoclastic beds exposed in the Silver Dream group map-area are folded into an anticlinal structure with a shallow northwesterly plunge (Fig. 5a). Thus, tuffaceous rocks of unit 5 in the northwest part of the map-area lie in the core of the anticline and the sedimentary strata of unit 9c, outcropping to the southwest and northeast, represent each limb of the anticline.

Numerous, nearly vertical, block faults, striking primarily in two directions, occur throughout the map-area. Timing of the faulting events is defined by relative displacements of units and earlier faults by younger faults. The earliest set of faults trends northwest and downdips blocks to the west. The later set of faults trends north-northeast and also downdrops the blocks to the west. The Tertiary dykes (unit 10) are subparallel to these later

north-northeast faults.

Mineralization

Mineral occurrences in the Dolly Varden mining camp have been described by most workers as silver-rich quartz-barite veins (Hanson, 1921; Black, 1951; Campbell, 1959; Mitchell, 1973) or precious metal-copper quartz veins associated with the Gold Belt alteration zone (Hanson, 1921; Black, 1951; Carter, 1970; Mitchell, 1973). The two types of mineralization were recognized in the study by Devlin and Godwin (1986), however, the silver-rich quartz-barite veins were interpreted to be stratiform, volcanogenic silver-lead-zinc-barite deposits.

Stratiform mineral deposits containing significant silver but low gold values are hosted by andesitic tuffaceous rocks of the Hazelton Group. Mineralization typically occurs as layers of quartz, barite, jasper, galena and sphalerite with lesser amounts of pyrite and sparse chalcopyrite. Examples of this deposit type include the formerly producing Dolly Varden and Torbrit mines, located northeast of the Silver Dream group map-area (Figs. 2, 3 and 5a).

Gold showings within the Gold Belt of the Dolly Varden mining camp are hydrothermal vein occurrences which are also hosted by Hazelton Group volcanic rocks. These veins carry significant gold, silver and copper values occurring within an area characterized by a very prominent gossan which is related to the hydrothermally altered feldspar porphyritic andesite (unit 8a). The veins or vein systems strike northwest with steep northeasterly dips and range in width from a few centimeters to tens of meters. Vein mineralogy is represented by pyrite and locally abundant chalcopyrite

within a silicified and chloritized gangue. Typical mineralized zones are stockworks or vein fillings exhibiting open space fracture filling textures. The best example of this type of mineral occurrence is the Red Point showing of the Dolly Varden mining camp, situated near the north end of the Silver Dream group map-area (Figs. 2, 3 and 5a). Sericitization, silicification and minor chloritization are the main expressions of wall rock alteration associated with the gold-silver-copper veins.

Mineralization in the Dolly Varden mining camp, which is also recognized on the Silver Dream claim group, is typical of a hydrothermal system developed in a Lower Jurassic island arc setting that produced both exhalative and epithermal mineral deposits. Stratiform silver-lead-zinc-barite mineralization probably formed as submarine exhalative deposits associated with andesitic volcanism during the earlier stages of arc development. Evidence for a volcanogenic origin is the conformity of layered mineralization with stratigraphy, lateral and vertical mineral zonation patterns, consistent hangingwall versus footwall contact relationships and fragments of stratiform ore within tuffaceous volcanic rocks of the hangingwall (Devlin and Godwin, 1986).

Submarine deposition of stratiform mineralization was followed by intrusion of the Gold Belt porphyritic rocks. The intrusion of these rocks eventually resulted in emergence of the volcanic pile along with subsequent shallow submarine and possibly subaerial pyroclastic eruptions. After crystallization and brittle fracturing along northwest structures, the hydrothermal circulation localized in the

fractures and precipitated the vein gold-silver-copper mineralization. Strong structural control, open space fracture filling textures and the discordant nature of the mineralization, suggest it is of epithermal origin.

EXPLORATION AND GEOCHEMISTRY

A total of 57 rock chip samples, 31 stream sediment samples and 102 soil samples were collected and sent to Min-En Laboratories Ltd., North Vancouver, for geochemical analysis. All samples were analyzed for gold, silver, copper, lead and zinc. In addition, rock chip samples were analyzed for arsenic and stream sediment samples were analyzed for both arsenic and barium. Analytical procedures are described in Appendix I and geochemical analyses are listed in Appendix II.

Rock chip samples were taken from numerous mineralized outcrops exposed throughout the Silver Dream group map-area (Figs. 5a and 5b). The most significant precious-base metal values were obtained from samples located in the north-central part of the map-area, approximately 400 meters east of the Silver Dream 1 claim boundary ^(NORTH Mc PHEE CLAIM) (Fig. 5a). At this locality, mineralization occurs in a 23 meter long and 3 meter wide vein that strikes north-northwest and dips steeply to the northeast. The vein consists primarily of quartz and pyrite with lesser amounts of galena and sphalerite hosted in a sericitized andesite. The best geochemical values from rock chip samples at this showing include sample BD104 which ran 162.0ppm silver and 1160ppm zinc over a 3.0 meter width and sample BD103 grading 18.0ppm silver across 2.0 meters. Another occurrence, located 1350 meters to the south, yielded similar values from a northwest trending, vertically dipping shear zone which crosscuts unaltered andesite. Sample VK100, taken from this shear zone, ran 20.8ppm silver and 1690ppm

lead over 2.0 meters.

In the northwestern part of the map-area, near Racehorse Lake, one rock chip sample yielded an anomalous concentration of both gold and copper (Fig. 5a). This sample, TC015, was taken from a northwest trending, steeply northeast dipping shear zone that crosscuts black siltstone. Geochemical values of 315ppb gold and 660ppm copper over a width of 0.5 meters were obtained for this sample. The best gold value on the property, however, was obtained from a float boulder discovered near the south end of the Silver Dream 2 claim (Fig. 5b). This boulder consisted entirely of quartz with abundant pyrite mineralization and yielded a value of 510ppb for gold.

Three areas were determined to be anomalous based upon geochemical values obtained from stream sediment samples. The most significant values resulted from creeks draining the Gold Belt alteration zone at the north end of the map-area (Fig. 5a). The highest precious and base metal geochemical values were obtained from two samples on the same creek which included sample TC005 running 35ppb gold, 2.6ppm silver, 68ppm lead and 84ppm arsenic, and sample TC003 with values of 2.9ppm silver and 490ppm zinc. This area was not followed up and the source of these anomalous values is not known. Approximately 1000 meters to the southwest, anomalous stream sediment samples were obtained from two separate creeks draining the same rocks of the Gold Belt alteration zone. Anomalous geochemical values include 35ppb gold for sample JB003, and 20ppb gold and 2550 barium for sample JB008. Another area, near the western edge of the property, was determined to be anomalous for copper values only (Fig. 5b).

Stream sediment samples were taken from two separate tributaries on each side of Evindsen Creek and the anomalous copper values possibly reflect mineralization related to a northwest trending fault zone that crosses Evindsen Creek. Geochemical values include 110ppm copper for sample JB016 on the south side and 104ppm copper for sample JB014 taken from the north side of Evindsen Creek.

A geochemical soil survey carried out in the central part of the Silver Dream claim group indicated anomalous concentrations of gold, silver and copper. For this survey, a soil grid was established using a baseline extending 1100 meters south from Evindsen Creek, near the position of the legal corner post of the Silver Dream 1, Silver Dream 2 and Silver Dream 3 claims (Figs. 5b, 6a, 6b and 6c). Sample tie-lines were run east and west from the baseline, with samples of B-horizon soils taken at 100 meter spacings. Soil samples were collected from an area approximately 1400 meters long and 1100 meters wide.

A statistical evaluation of the geochemical data was carried out and threshold anomalous values determined by employing the familiar geostatistical method of adding two standard deviations to the mean (Table 3). Each element was then contoured on geochemical maps using contour intervals equal to the mean and mean plus one and two standard deviations (Figs. 6a, 6b and 6c). Geochemical values for lead and zinc, however, were not considered to be significant and neither interpretation nor contouring of these results was carried out.

TABLE 3

Soil Geochemistry
Statistical Data
(Number of samples = 102)

	Gold (ppb)	Silver (ppm)	Copper (ppm)
Mean	10	1.3	29
Standard Deviation	10	0.9	26
Threshold (Mean plus 2 Standard Deviations)	30	3.1	81

Gold geochemical values range from 3ppb to 60ppb with five samples exceeding 30ppb, the threshold anomalous value. Evaluation of the gold data pinpointed three anomalous areas (anomalies 1, 2 and 3) which are distributed throughout the soil survey area (Fig. 6a). The most significant anomalous zone (anomaly 1), located in the northeast corner of the soil survey area, has a northwesterly strike and measures 800 meters long and 200 meters wide. Anomalies 2 and 3, situated in the southwest part of the soil survey area, do not display any prominent trends.

Distribution of silver geochemical values are less regular than gold values but distinct patterns are still recognizable. Silver values range from 0.4ppm to 5.0ppm and five samples exceed the 3.1ppm threshold limit. This data showed that the three areas anomalous for gold are also anomalous for silver (Fig. 6b). In addition, silver anomalies 2 and 3 link up to define an east-west striking anomalous zone measuring 900 meters long and 200 meters wide.

Copper geochemical values are generally more regular in distribution than silver and anomalous zones for copper tend to be much broader (Fig. 6c). The values range from 5ppm to

120ppm with six samples exceeding the 81ppm threshold value considered anomalous for soil. Only gold and silver anomalies 1 and 2 coincided with two of the zones determined to be anomalous for copper.

Evaluation of the soil geochemistry indicated that the distribution of anomalous values are not entirely random and start to follow regular patterns. The most significant of these is the northwest trending zone (anomaly 1) located in the northeast part of the soil survey area. This zone is highly anomalous for both gold and copper with moderately anomalous values for silver. Anomaly 1 is underlain by sericitized and pyritized porphyritic andesite and mineralization in the area is probably similar to that found in the Gold Belt alteration zone to the north (Figs. 5a and 5b). Anomaly 2, in the southwest corner of the soil survey area, is anomalous for silver and copper but only moderately anomalous values were obtained for gold. This area is underlain by black siltstones and conglomerates which are transected by a major northwest trending fault (Fig. 5b). Mineralization that produced the anomalous geochemical values is probably related to this fault structure. Anomaly 2 was also detected by stream sediment samples anomalous for copper which were taken from this area. The smallest of the three anomalous zones, anomaly 3, is anomalous for gold and silver only. This area is underlain by unaltered feldspar porphyritic andesite and the anomalous geochemical values are probably related to a northeast trending fault that transects the area (Fig. 5b).

CONCLUSIONS

The oldest rocks on the property were formed during the Lower Jurassic Hazelton period by submarine eruption of predominantly tuffaceous rocks. Submarine volcanism was accompanied by deposition of stratiform, volcanogenic silver-lead-zinc-barite mineralization (Devlin and Godwin, 1986). Stratiform deposits, similar to those of the Dolly Varden mining camp, include both the Kuroko deposits of Japan and the Westmin deposits on Vancouver Island, British Columbia. Deposition of these deposits was followed by intrusion of the Gold Belt porphyritic rocks and the subsequent precipitation of epithermal vein gold-silver-copper mineralization along fractures that developed within the intrusive body. Examples of other epithermal precious and base metal deposits hosted by Lower Jurassic volcanic rocks of the Canadian Cordillera include the Silbak-Premier property in the Stewart mining camp and the Lawyers property in the Toadoggone River area. Sedimentary strata was later deposited upon the volcanic rocks and the area was then regionally folded into upright folds with axes plunging gently northwest. The area was subsequently cut by steeply dipping, northwest trending faults which were cut by later northeast trending, steeply dipping faults.

The purpose of geological mapping and geochemical sampling on the Silver Dream claim group during 1986 was to describe the geological setting and determine if any new mineralized showings exist on the property. In particular,

exploration focused on the discovery of either Gold Belt gold-silver-copper epithermal vein occurrences or stratiform, volcanogenic silver-lead-zinc-barite deposits, similar to those of the former Dolly Varden and Torbrit mines.

Prospecting on the Silver Dream claim group indicated that one area has potential for stratiform, volcanogenic silver-lead-zinc-barite mineralization, whereas two other areas were discovered that host gold-silver-copper vein mineralization. Showings discovered on the eastside of Evindsen Creek, near the eastern boundary of the Silver Dream 1 claim, display significant silver, lead, zinc and low gold values for three rock chip samples. Proximity to the only stratiform horizon in the area, high silver, lead and zinc values, and stratigraphic position relative to the overlying maroon tuff unit, suggests that they are stratiform, volcanogenic occurrences, similar to the Dolly Varden and Torbrit deposits. Near Racehorse Lake, in the northwest corner of the map-area, stream sediment and rock chip samples with anomalous gold, silver and copper values indicate that Gold Belt epithermal vein occurrences are present in this area. Another area, with possibilities existing for Gold Belt vein occurrences, was discovered near the middle of the map-area on the east side of Evindsen Creek. Stream sediment and soil samples with anomalous gold, silver and copper values, together with a gold mineralized float boulder, suggests that another Gold Belt hydrothermal system is present in this area.

In conclusion, a possibility exists for continuation of the stratiform, volcanogenic mineralized horizon onto the Silver Dream claim group. Evidence supporting this conclusion

is the presence of silver-base metal showings in the area, and their known stratigraphic relationship to the overlying maroon tuff unit, which is one of the most prominent rock units found on the claims. Gold Belt precious metal-copper occurrences were also discovered in the Silver Dream group map-area and recognition of northwest trending structures is the most important consideration in the exploration for these occurrences.

RECOMMENDATIONS

An exploration program involving follow-up prospecting of geochemical anomalies is recommended for the Silver Dream claim group. The objective of this program will be to locate showings of either silver-lead-zinc stratiform, volcanogenic mineralization or gold-silver-copper epithermal vein mineralization.

In the soil survey area, surface prospecting a VLFEM16 survey and possible trenching of geochemical anomalies, is recommended to determine if they are representative of subsurface mineralization. In addition, the soil grid should be extended to the south to determine if the open-ended geochemical anomalies in this area can be extended in this direction. An attempt should also be made to trace the gold mineralized float boulder, discovered south of the soil survey area, to its source.

On a regional scale, geological mapping and prospecting along the maroon tuff contact could result in the discovery of additional stratiform, volcanogenic mineralized showings. Air photo interpretation should also be carried out to delineate major northwest trending structures which could be related to gold mineralized vein occurrences.

ITEMIZED COST STATEMENT

WAGES

NAME	NATURE OF WORK	DATES WORKED	DAYS	RATE	TOTAL
B. Devlin	Field Work	Aug.9-Aug.29	21	\$120.00	\$2520.00
	Report Writing	Oct.14-Oct.16	3	\$120.00	\$ 360.00
V. Koyanagi	Field Work	Aug.9-Aug.29	21	\$110.00	\$2310.00
J. Brooke	FieldWork	Aug.9-Aug.29	21	\$ 75.00	\$1575.00
T. Chapman	Field Work	Aug.9-Aug.19	21	\$ 70.00	\$1470.00

TOTAL WAGES \$8234.00

FOOD AND ACCOMMODATION 84 man days @ \$30.00/day \$2520.00

EQUIPMENT PURCHASE AND RENTAL \$2000.00

TRANSPORTATION

Air fares - Vancouver to Stewart(return) 4 x \$815.00 \$3260.00

Helicopter - 10 hrs @ \$517/hr (includes fuel) \$5170.00

TOTAL TRANSPORTATION \$8430.00

ANALYSES

102 soil samples analyzed for Au,Ag,Cu,Pb,Zn \$1020.00
@ \$10.00/sample

57 rock samples analyzed for Au,Ag,Cu,Pb,Zn,As. \$ 969.00
@ \$17.00/sample

31 stream sediment samples analyzed for \$ 542.50
Au,Ag,Cu,Pb,Zn,As,Ba. @ \$17.50/sample

TOTAL ANALYSES \$2531.50

SHIPPING AND EXPEDITING \$ 500.00

REPORT PREPARATION - Typing, drafting, reproduction \$1000.00

TOTAL COSTS \$25,216.50

CERTIFICATE OF QUALIFICATION

I, Barry D. Devlin, residing at 6205 Portland Street, Burnaby, British Columbia, do hereby certify that:-

1. I am a consulting geologist.
2. I am a graduate of The University of British Columbia in Honours Geological Sciences with the degree of B.Sc. in 1981, and I am presently completing a Master of Science degree in Geological Sciences at The University of British Columbia.
3. I have been practising my profession since graduation.
4. I have not received, nor do I expect to receive any interest, directly or indirectly, in the properties held by Dolly Varden Minerals Inc.
5. This report is based upon personally working on the Silver Dream claim group during August of 1986.

Barry D. Devlin

REFERENCES

- Black, J.M., 1951, Geology and Mineral Occurrences of the Upper Kitsault Valley, B.C. Ministry of Energy, Mines & Petroleum Resources, Annual Report, 1951, pp. A76-A83.
- Carter, N.C., 1970, Red Point, Copper Cliff, Dan Patch, Surprise, B.C. Ministry of Energy, Mines & Petroleum Resources, GEM, 1970, pp. 81-86.
- Dawson, G.L. & Alldrick, D.J., 1986, Geology and Mineral Deposits of the Kitsault Valley (103 P/11,12), B.C. Ministry of Energy, Mines & Petroleum Resources, Geological Fieldwork, 1985, Paper 1986-1, pp. 219-224.
- Devlin, B.D. & Godwin, C.I., 1986, Geology of the Dolly Varden Camp, Alice Arm Area (103 P/11,12). Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1985, Paper 1986-1, pp. 327-330.
- Hanson, G., 1921, Upper Kitsault Valley, British Columbia, Geological Survey of Canada, Summary Report, Part A, pp. 7-21.
- McConnell, R.G., 1913, Portland Canal District, Geological Survey of Canada, Memoir 32.
- Mitchell, M.A., 1973, Geology of Dolly Varden Mines, unpublished company report.
- Turnbull, J.M., 1916, Alice Arm District, B.C. Ministry of Energy, Mines & Petroleum Resources, Annual Report, 1916, pp. 53-84.

APPENDIX I

ANALYTICAL PROCEDURES

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK.

PROCEDURES FOR, Cu, Mo, Cd, Pb, Mn, Ni, Ag, Zn.

Samples are processed by Min-En Laboratories Ltd. at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers.

Copper, lead, zinc, silver, cadmium, cobalt, nickel and manganese are analysed using the CH_2H_2 -Air flame combination but the molybdenum determination is carried out by C_2H_2 - N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pretreated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Acqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.005 ppm (5ppb).

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bawicks
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

FIRE GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Fire Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assay preconcentrated.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

APPENDIX II
GEOCHEMICAL ANALYSES

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

E: (604) 980-5814 OR (604) 988-4524

TELEX: 04-35282

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-B6

Attention: B. DEVLIN/B. PEARSON

File: 6-576/P1

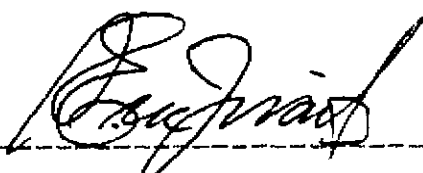
Date: AUGUST 11/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU-FIRE PPB
BD 063	10	17	22	1.1	9	2
BD 064	15	17	20	1.5	122	78
BD 065	1025	53	21	16.1	109	166
BD 066	68	59	107	3.2	127	200
BD 067	3000	58	67	7.7	79	7
BD 068	5100	261	1760	36.2	83	14
BD 069	32	10	17	0.4	5	1
JB 004	16	124	115	2.1	65	3
JB 005	126	34	114	2.0	12	3
VKD 072	65	39	340	3.2	190	34
VKD 073	74	27	86	2.7	170	50
VKD 074	24	27	875	2.3	180	5
VKD 075	8	28	20	1.8	120	30
TC 001	17	187	730	2.8	22	1
TC 002	7	6	22	0.4	6	2
TC 003	NO SAMPLE					
TC 004	36	10	77	0.3	12	6
TC 006	15	23	30	1.1	145	4
TC 007	12	92	94	2.0	220	5
TC 008	76	39	21	3.7	147	62
TC 009	86	27	45	2.9	80	118
TC 010	35	18	25	1.3	57	7
TC 011	46	23	39	1.7	128	3
TC 012	188	32	40	4.1	370	123
TC 013	15	14	14	0.6	103	12
TC 014	378	19	18	2.7	180	120
TC 015	660	53	49	8.2	2340	315
RPDC 001	640	67	84	6.6	290	164
RPDC 011	3950	36	105	11.8	76	800
RPDC 007	12900	104	143	20.0	126	1000

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

TE: (604) 980-5814 OR (604) 988-4524

TELEX: 04-35282

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-576/P2

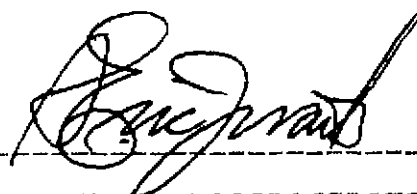
Date: AUGUST 12/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU PPB	BA PPM	
500N 500E				2.2	16	10		
500N 600E				1.0	5	5		
500N 700E				1.8	28	15		
JB 001	38	14	205	0.9	20	5	1320	40M
JB 002	44	18	178	0.9	26	10	1100	40M
JB 003	51	20	74	0.9	11	35	1700	
JB 006	25	27	173	1.0	18	5	1850	
JB 007	60	18	75	0.9	12	5	1940	
JB 008	30	40	152	0.9	10	20	2550	
JB 009	58	18	70	0.8	11	15	2200	
JB 010	32	24	72	1.3	7	5	800	20M
TC 003	71	49	490	2.9	42	10	1370	20M
TC 005	75	68	375	2.6	84	35	1860	
TC 016	74	22	92	1.1	17	5	2300	40M

Certified by



MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

Tel: (604) 980-5814 OR (604) 988-4524

TELEX: 04-35287

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-601/P1

Date: AUGUST 13/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU-FIRE PPB
BD 070	475	29	185	2.3	1	4
BD 071	26	27	26	4.2	154	143
BD 072	340	225	4450	4.7	25	9
BD 073	735	96	270	16.0	11	5
BD 074	183	68	1150	2.4	18	10
BD 075	5550	4200	5500	320.0	37	171
BD 076	510	132	117	12.7	1	22
BD 077	1000	1600	162	55.0	17	990
BD 078	25000	235	280	156.0	14	360
BD 079	5100	143	530	41.0	32	650
BD 080	57	25	35	2.1	51	180
BD 081	24	29	31	2.2	34	185
BD 082	29	24	28	1.0	27	58
BD 083	58	22	12	1.3	17	25
BD 084	13	355	39	4.0	42	69
BD 085	21	26	63	1.2	4	10
BD 087	28	58	106	1.7	147	8
VK 076	375	106	64	6.5	138	14
VK 077	2400	92	240	12.4	340	15
VK 078	3150	970	1200	97.0	750	73
VK 079	6400	930	610	88.0	560	88
VK 080	5450	1160	1550	85.0	1000	65
VK 081	190	23	31	1.9	126	28
VK 082	44	27	45	1.4	26	15
VK 083	25	22	72	3.6	17	16
VK 084	68	36	37	3.2	190	54
VK 085	29	64	10	7.5	460	193
VK 086	16	20	21	1.0	220	10
VK 087	42	76	107	2.4	103	60
VK 088	37	54	54	1.7	120	5

Certified by _____

41

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

T: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UN

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-601/P4

Date: AUGUST 14/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU PPB	BA PPM	
JB 011	68	23	83	1.2	22	10	1900	
JB 012	25	29	118	0.8	20	5	1650	40ME9
BD 086	89	30	98	1.2	25	15	1070	

Certified by



MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

Tel: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of ASSAY

Company: DOLLY VARDEN MINERALS

Project: DV B6

Attention: B. DEVLIN/B. PEARSON

File: 6-676

Date: AUGUST 27/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU-FIRE PPB
VK 100	52	1690	600	20.8	6
VK 101	36	650	640	12.0	20
VK 102	32	175	118	2.8	9
VK 103	27	65	120	1.7	3
VK 104	33	89	104	2.4	5
VK 105	44	94	172	2.2	10
VK 106	28	81	130	1.4	23
VK 107	17	53	56	1.5	3
VK 108	20	345	208	1.4	5
VK 109	16	95	207	1.6	2
VK 110	22	37	24	2.6	5
VK 111	11	36	21	1.9	4
VK 112	23	44	72	1.6	2
VK 113	48	58	117	1.3	48
VK 114	21	45	31	1.2	7
VK 115	50	540	175	2.5	4
BD 100	20	47	94	2.8	18
BD 101	14	43	51	2.6	132
BD 102	19	115	141	6.0	8
BD 103	20	675	700	18.0	125
BD 104	26	680	1160	162.0	66
BD 106R	33	49	250	2.0	4

Certified by _____

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

Z: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-B6

Attention: B. DEVLIN/B. PEARSON

File: 6-676/F1

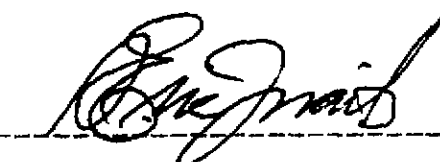
Date: SEPT. 2/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU PPM	
200S 100E	40	21	42	0.8	5	40MESH
200S 200E	60	96	41	1.2	5	
200S 300E	41	31	33	1.1	5	
200S 400E	18	10	14	0.9	10	
200S 500E	34	26	42	1.6	5	
300S 000	16	10	20	2.6	5	20MESH
300S 100W	6	12	12	1.3	35	
300S 200W	17	28	34	0.7	5	20MESH
300S 300W	14	40	33	1.2	5	
300S 400W	10	10	23	1.4	5	20MESH
300S 490W	54	30	51	2.0	15	20MESH
500S 000	20	73	24	1.2	5	
500S 100W	16	9	28	0.6	5	
500S 200W	17	14	26	0.7	10	
500S 300W	20	32	36	1.6	5	
500S 400W	8	18	59	0.6	10	20MESH
500S 500W	12	16	79	0.7	5	
500S 600W	24	14	34	0.8	5	
600S 000	6	22	8	0.7	10	
600S 100W	30	12	32	0.8	5	
600S 200W	7	20	6	0.6	15	20MESH
600S 300W	8	22	11	0.6	10	
600S 400W	26	8	94	0.7	5	
600S 500W	18	25	30	0.7	5	
600S 600W	18	8	40	0.6	5	
600S 700W	90	14	52	1.2	5	20MESH
700S 000	10	22	13	0.6	10	
700S 100W	14	9	16	0.8	5	
700S 200W	6	5	8	0.6	5	
700S 300W	10	10	18	0.7	5	

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

2: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 M

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-676/P2

Date: SEPT. 2/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU PPB	
700S 400W	10	16	35	0.8	5	
700S 500W	14	14	26	0.8	5	20MESH
800S 000	22	24	50	0.8	10	
800S 100W	12	12	20	0.4	10	20MESH
800S 200W	14	7	50	1.6	5	20MESH
800S 300W	6	6	12	0.5	5	
800S 400W	14	6	22	0.4	5	20MESH
900S 000	20	18	25	0.9	60	
900S 100W	30	30	50	1.4	10	
900S 200W	20	14	30	0.6	5	
900S 300W	5	4	12	0.6	5	20MESH
900S 400W	7	8	18	0.6	10	
900S 500W	48	23	38	0.9	5	20MESH
900S 600W	26	26	37	1.2	15	
900S 700W	52	25	54	1.0	5	
900S 800W	110	26	56	2.5	15	
900S 900W	112	29	64	1.4	10	
JB 013	26	20	68	1.0	5	20MESH
JB 014	104	29	124	1.8	5	
000S 150W	12	18	10	0.6	5	
000S 100W	6	6	8	0.4	3	
000S 000	32	25	28	1.4	5	20MESH
100S 250W	15	18	29	1.8	5	20MESH
100S 200W	18	20	33	1.3	5	
100S 100W	29	12	28	0.6	5	
200S 350W	21	32	29	1.0	10	20MESH
200S 300W	5	8	6	0.5	5	20MESH
200S 200W	19	21	30	1.2	5	
200S 100W	16	18	54	1.4	10	
TC 017	20	22	74	1.5	5	

Certified by



MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

Tel: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-676/P3

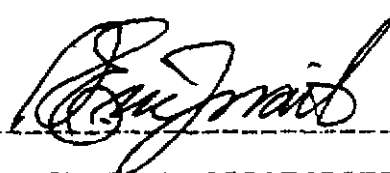
Date: SEPT. 2/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU PFB	
TC 018	16	18	80	0.8	5	20MESH
400S 550W	15	16	41	0.5	10	
400S 500W	16	14	16	1.0	25	20MESH
400S 400W	19	20	49	0.7	10	
400S 300W	14	38	74	0.9	5	
400S 200W	16	30	24	1.0	5	
400S 100W	8	18	16	0.5	10	
400S 000	23	20	78	1.2	5	
400S 100E	20	10	10	0.4	40	
400S 200E	24	60	47	0.5	10	
400S 300E	51	69	25	1.2	5	
400S 400E	18	27	33	0.9	5	
400S 500E	20	10	46	0.5	10	
800S 500W	41	19	80	1.4	5	
800S 600W	72	28	98	2.2	5	
800S 700W	45	19	40	2.0	5	20MESH
800S 800W	36	30	66	2.1	5	
800S 900W	70	24	86	1.0	10	
1000S 000	28	16	58	1.4	5	
1000S 100W	46	17	182	2.6	5	20MESH
1000S 200W	20	12	22	1.0	15	20MESH
1000S 300W	9	22	16	0.8	5	
1000S 400W	12	17	25	0.9	5	
1000S 500W	36	14	20	1.0	10	
1000S 600W	60	28	47	1.4	5	
1000S 700W	54	18	30	1.1	5	
1000S 800W	82	30	77	2.0	5	
1000S 900W	118	29	78	1.6	10	
1100S 000	28	14	52	2.9	10	20MESH
1100S 100W	21	19	51	1.3	10	

Certified by



MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

Tel: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-676/P4

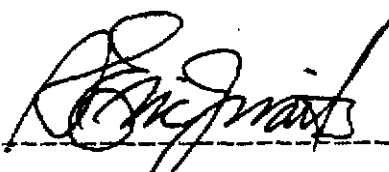
Date: SEPT. 2/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AG PPM	
1100S 200W	10	11	24	3.5	15	
1100S 300W	20	9	18	2.8	5	
1100S 400W	12	25	40	2.9	5	
1100S 500W	16	53	32	1.8	10	20MESH
1100S 600W	54	24	58	4.8	10	
1100S 700W	120	15	51	3.6	25	
1100S 800W	102	20	70	5.0	15	
1100S 900W	92	20	50	4.7	25	
600S 100E	14	4	16	1.6	10	
600S 200E	44	68	34	1.8	25	
600S 300E	90	58	110	2.2	20	
800S 100E	20	18	59	2.0	5	
800S 200E	8	14	12	0.6	5	
800S 300E	54	90	68	1.4	30	
800S 400E	60	40	29	1.2	60	
800S 500E	24	46	40	1.2	5	
BD 105	25	36	165	1.3	15	

Certified by



MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

TEL: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

File: 6-736

Project: DV 86

Date: SEPT 8/86

Attention: B. DEVLIN/B. PEARSON

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU-FIRE PPB	
JB 015X	88	31	195	1.1		3	
JB 016X	110	36	139	0.9		4	
JB 017X	106	46	167	1.2		8	
JB 018X	91	35	168	1.2		4	40MES
JB 019X	26	18	125	1.0		3	20MES
JB 020X	50	49	132	1.4		1	
JB 021X	40	43	156	0.6		28	40MES
1100S 0+50E				0.8	23	75	20MES

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

TEL: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-736

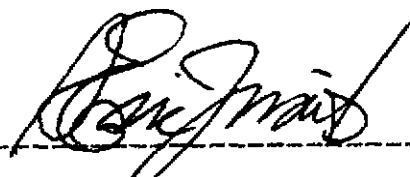
Date: SEPT 8/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU-FIRE PPB
BD 107R	18	58	61	3.5	510
BD 108R	57	2650	2350	11.2	7
BD 109R	87	252	4200	6.5	28
BD 110R	68	1560	16000	35.0	58
BD 111R	116	680	14000	15.8	13
BD 112R	94	220	4350	12.1	90
BD 113R	510	315	1800	18.4	80
BD 114R	34	36	87	0.9	15
BD 115R	195	105	132	7.5	43
BD 116R	52	82	160	4.0	156
BD 117R	139	38	36	1.8	83
BD 118R	315	59	490	3.0	47
BD 119R	32	37	114	0.8	8

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

E: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of ASSAY

Company: DOLLY VARDEN MINERALS

Project: DV-86

Attention: B. DEVLIN/B. PEARSON

File: 6-736

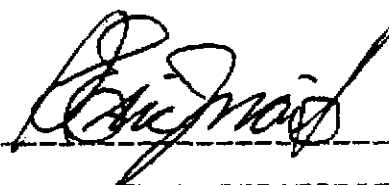
Date: SEPT 8/86

Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
BD 107R	.58	0.017

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

E: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 U

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS
Project: DV-B6
Attention: B. DEVLIN/B. PEARSON

File: 6-735
Date: SEPT 8/86
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU-FIRE PPB
VK 116	13	32	18	1.4	6
VK 117	15	24	30	1.8	13
VK 118	57	102	46	2.0	29

Certified by



MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

TEL: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 1

Certificate of GEOCHEM

Company: DOLLY VARDEN MINERALS

Project: DV 86

Attention: B. DEVLIN/B. PEARSON

File: 6-735

Date: SEPT 11/86

Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU-FIRE PPB
TC 018	88	18	112	1.1	31	20
TC 019	75	23	105	0.5	25	12
TC 020 40MESH	32	19	98	1.0	28	14
TC 021	89	24	130	0.6	26	16
TC 022	46	26	99	0.6	41	33

Certified by _____

2

MIN-EN LABORATORIES LTD.

LEGEND

INTRUSIVE ROCKS

MIOCENE

10 Basalt, andesite and diorite dykes.

SEDIMENTARY ROCKS

LOWER TO MIDDLE JURASSIC

95 Black siltstone and shale.

96 Calcareous and fossiliferous wacke.

97 Maroon siltstone.

VOLCANIC ROCKS

LOWER TO MIDDLE JURASSIC

80 "Gold Belt" Intrusive

81 Silicified and pyritized porphyritic andesite.

82 Sericitized and pyritized porphyritic andesite.

83 Feldspar + hornblende porphyritic andesite.

Hangingwall - Pyroclastic Rocks

7 Light green andesite ash tuff.

6 Dark green andesite tuff.

5 Dark grey andesite lapilli tuff.

4 Maroon andesite tuff.

3 Light grey andesite ash tuff.

Stratiform Mineralized Horizon

30 Laminated sulphates, oxides and sulphides.

31 Massive carbonates, sulphates and sulphides.

32 Massive sulphides and quartz.

Footwall Pyroclastic Rocks

2 Green andesite shard tuff.

1 Maroon andesite crystal tuff.

0 Green + maroon andesite tuff.

SYMBOLS

Bedding

Foliation

Jointing

Vein

Contact (defined, approximate and assumed)

Fault (defined, approximate; sense of movement indicated)

AXIAL TRACE (anticline, syncline; direction of plunge indicated)

Outcrop

Fossil Locality

Rivers and Creeks

Road

* Adit (accessible, inaccessible)

QZ Quartz

CA Carbonate

BA Barite

JA Jasper

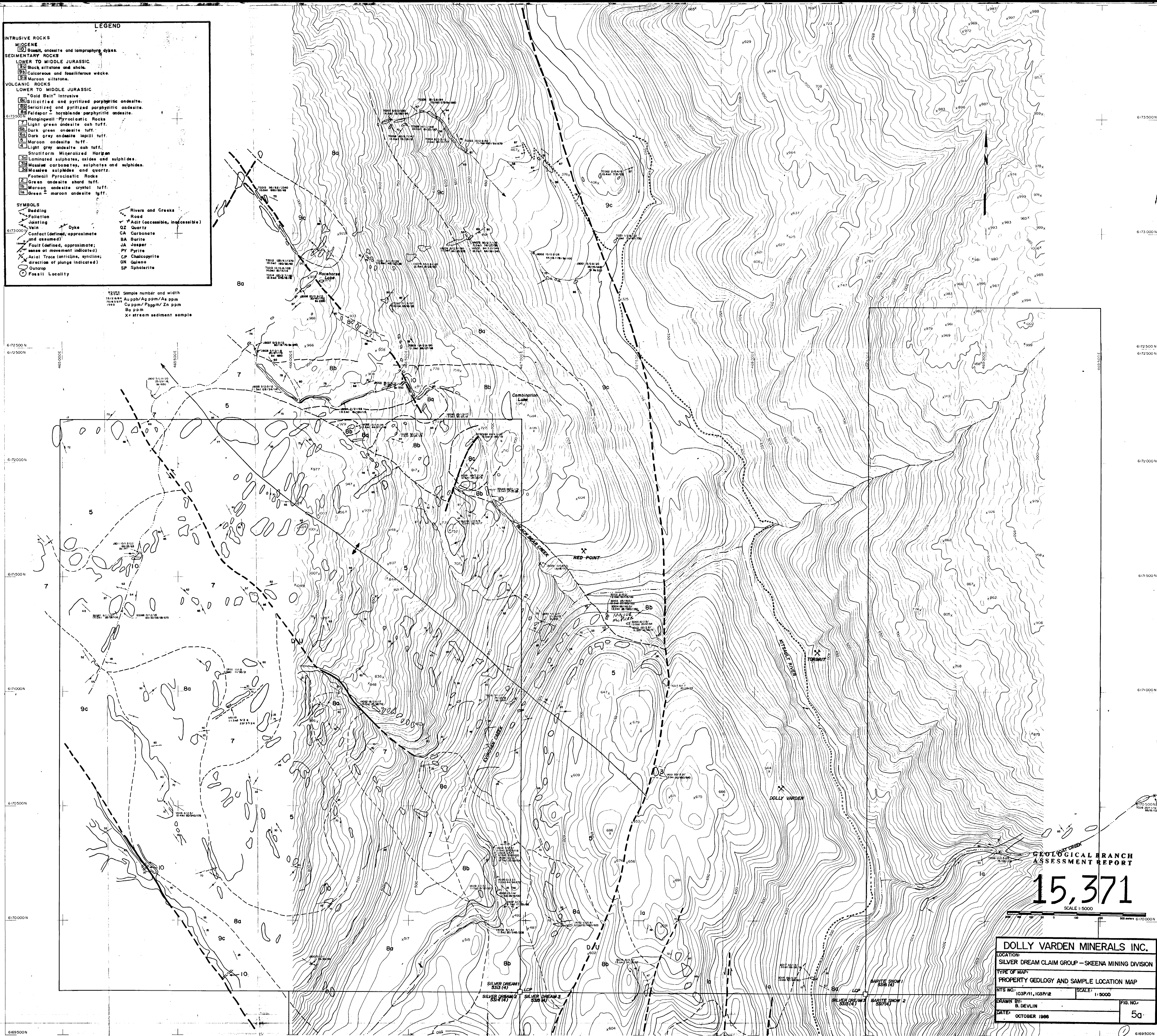
Py Pyrite

CP Chalcopyrite

GN Galena

SP Sphalerite

13353 Sample number and width
15/2.44m
Au ppm/Ag ppm/As ppm
Cu ppm/Pb ppm/Zn ppm
Ba ppm
X: stream sediment sample

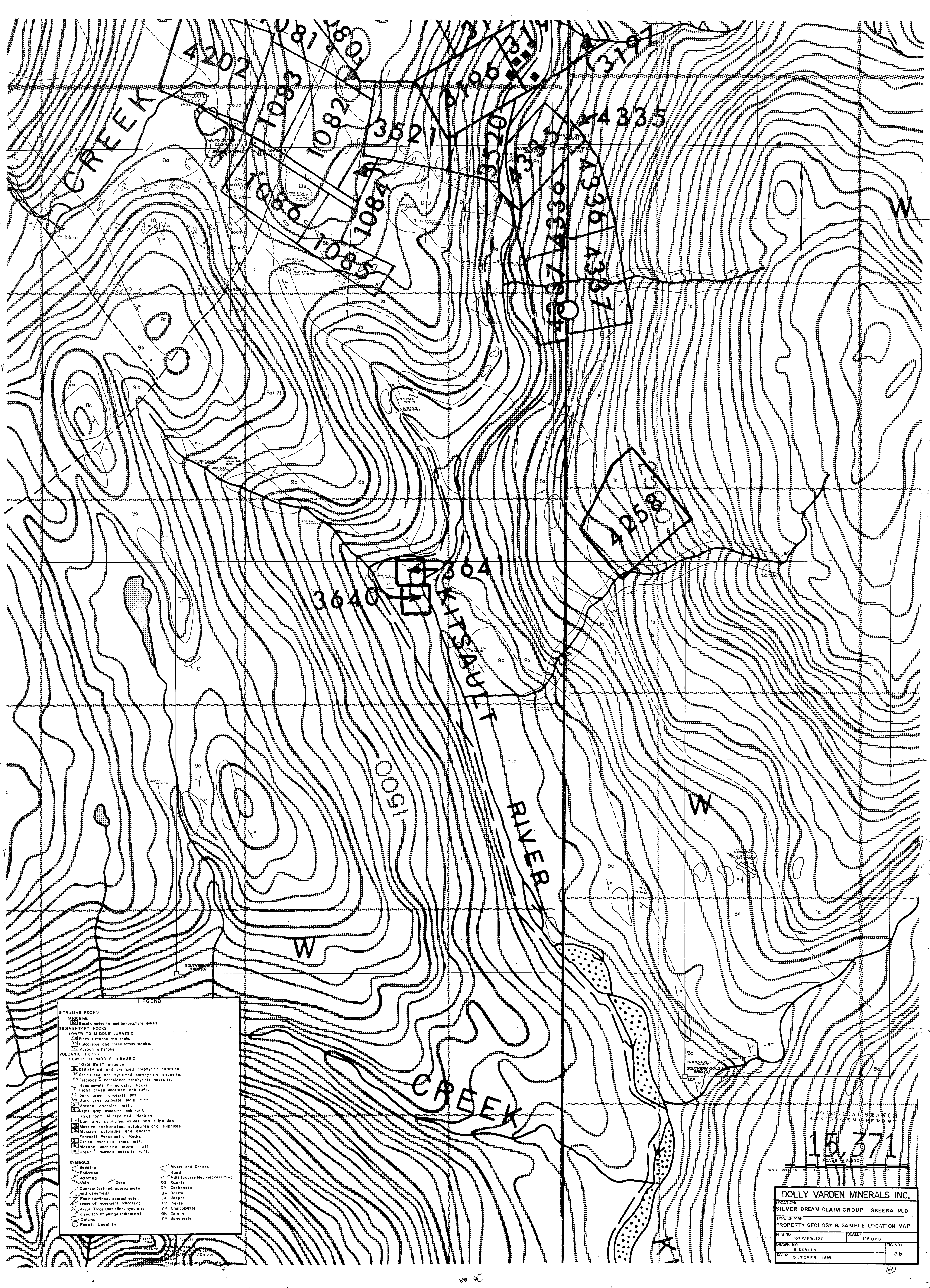


GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,371

SCALE 1:5000

DOLLY VARDEN MINERALS INC.	
LOCATION: SILVER DREAM CLAIM GROUP - SKEENA MINING DIVISION	
TYPE OF MAP: PROPERTY GEOLOGY AND SAMPLE LOCATION MAP	
NTS NO.: 03P/11, 103P/12	SCALE: 1:5000
DRAWN BY: B. DEVLIN	FIG. NO.: 5a
DATE: OCTOBER 1986	



LEGEND

INTRUSIVE ROCKS

MIOCENE

(U) Basalt, andesite and lamprophyre dykes.

SEDIMENTARY ROCKS

LOWER TO MIDDLE JURASSIC

(S) Black siltstone and shale.

(C) Calcareous and fossiliferous wacks.

(M) Maroon siltstone.

VOLCANIC ROCKS

LOWER TO MIDDLE JURASSIC

(S) "Gold Belt" intrusive.

(S) Sericitized and pyritized porphyritic andesite.

(S) Feldspar - hornblende porphyritic andesite.

(H) Hangingwall Pyroclastic Rocks.

(L) Light green andesite ash tuff.

(D) Dark green andesite tuff.

(D) Dark grey andesite lapilli tuff.

(M) Maroon andesite tuff.

(L) Light grey andesite ash tuff.

(S) Stratiform Mineralized Horizon.

(L) Laminated sulphates, oxides and sulphides.

(S) Massive carbonates, sulphates and sulphides.

(S) Massive sulphides and quartz.

(F) Footwall Pyroclastic Rocks.

(G) Green andesite shard tuff.

(M) Maroon andesite crystal tuff.

(G) Green - maroon andesite tuff.

SYMBOLS

Bedding

Foliation

Jointing

Dike

Contact (defined, approximate and assumed)

Fault (defined, approximate; sense of movement indicated)

Axial Trace (anticline, syncline; direction of plunge indicated)

Outcrop

Fossil Locality

Rivers and Creeks

Road

Adit (accessible, inaccessible)

Quartz

Carbonate

Barite

Jasper

Pyrite

Chalcopryite

Galena

Sphalerite

15,371

DOLLY VARDEN MINERALS INC.

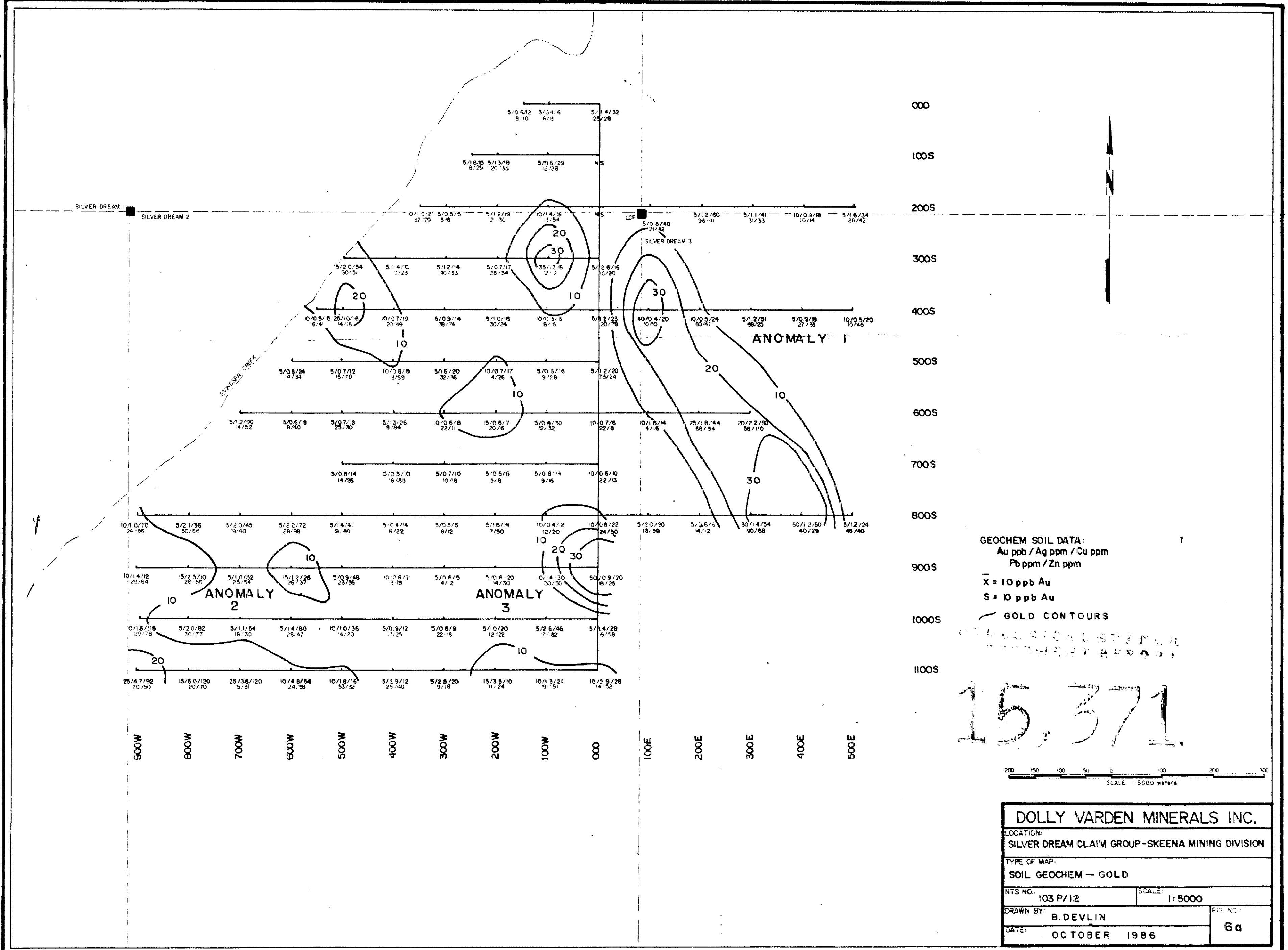
LOCATION:
SILVER DREAM CLAIM GROUP - SKEENA M.D.

TYPE OF MAP:
PROPERTY GEOLOGY & SAMPLE LOCATION MAP

NTS NO.: 10SP/H.W.12E **SCALE:** 1"=5,000' **FIG. NO.:** 5b

DRAWN BY: B. CEVLIN

DATE: OCTOBER, 1986



GEOCHEM SOIL DATA:
Au ppb / Ag ppm / Cu ppm
Pb ppm / Zn ppm
X = 10 ppb Au
S = 10 ppb Au
GOLD CONTOURS

15,371

DOLLY VARDEN MINERALS INC.	
LOCATION: SILVER DREAM CLAIM GROUP-SKEENA MINING DIVISION	
TYPE OF MAP: SOIL GEOCHEM - GOLD	
NTS NO.: 103 P/12	SCALE: 1:5000
DRAWN BY: B. DEVLIN	FIG. NO.: 6a
DATE: OCTOBER 1986	

