

GEOLOGICAL AND GEOCHEMICAL REPORT

- on the -

ALLIES CLAIM

Kamloops Mining Division, British Columbia

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

- for -

**13,445**

LARAMIDE RESOURCE LTD.

904 - 675 WEST HASTINGS STREET

VANCOUVER, B. C. V6B 1N2

Covering: Allies (20 units)  
Work Performed: August 1, 1984 - January 14, 1985  
Location: (1) 25 kilometres NW of Kamloops, B. C.  
(2) NTS Map No. 92 I/15 E  
(3)  $50^{\circ} 52'N$ ,  $120^{\circ} 34'W$ .

Prepared by:

KERR, DAWSON AND ASSOCIATES LTD.

206 - 310 NICOLA STREET

KAMLOOPS, B. C. V2C 2P5

D. A. LEISHMAN, B. Sc.

J. M. DAWSON, P. Eng.

January 14, 1985

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SUMMARY

The Allies property consists of one 20 unit metric claim located in relatively moderate terrain approximately 25 kilometres northwest of the city of Kamloops, B. C. The claim covers a showing originally discovered in the early 1900's and has undergone extensive exploration (including underground drifting) in the late 1920's and early 1930's. Further attempts were made in the 1970's. The objective of these searches was to locate the bedrock source of high grade gold mineralization in large boulders of quartz feldspar porphyry. Both programmes failed. In the spring of 1984, Laramide Resources Ltd. embarked upon a systematic programme of exploration of the claim group. The second phase of this programme is described herein. It includes building of road access, trenching and sampling, geological mapping and geochemical surveys. Trenching by Laramide uncovered possible bedrock of mineralized porphyry that assayed .298 ounces gold per ton. However due to adverse climatic conditions and technical problems with trenching, the 1984 programme was curtailed in early November. Widespread values of anomalous gold in bedrock plus high grade gold values in float boulders make this property an exceptional exploration target.

INTRODUCTION:

This report describes the second phase of an exploration programme carried out on the Allies property during 1984. This phase of exploration consisted of construction of road access, trenching, geological mapping and sampling, and geochemical soil and drainage sampling.

PROPERTY:

The Allies property consists of one 20 unit metric claim.

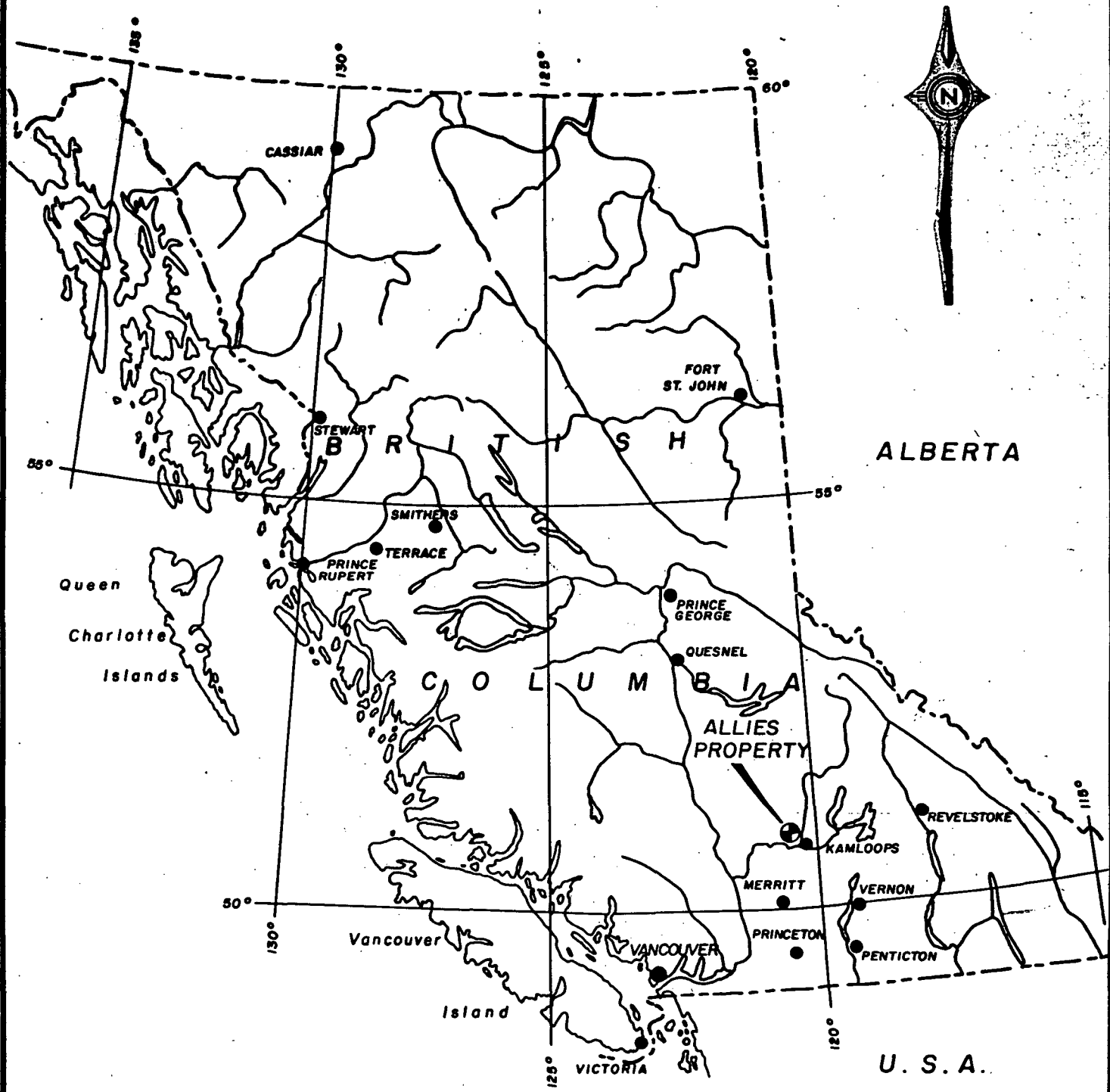
<u>Claim Name</u>	<u>Record No.</u>	<u>Tag No.</u>	<u>Expiry Date</u>
Allies	3617	68481	June 23, 1987

The registered owner of this claim is Laramide Resources Ltd.

LOCATION AND ACCESS:

The property is located in south central British Columbia about 25 kilometres northwest of the city of Kamloops at the southern edge of the Bonaparte plateau. The approximate geographic center of the claim is at 50° 52' north latitude and 120° 34' west longitude.

The claim is accessible from Kamloops as follows: take the Bachelor Hills turnoff from North Kamloops and proceed via good gravel road for about 15 kilometres to McQueen Lake; from here a poor quality dirt road leads westerly for about 10 kilometres via Pass Lake and Watching Creek to Cannell Creek. A poor quality jeep road leads up Cannell Creek for about 3 kilometres to the main showing on the property.



**LARAMIDE RESOURCES LTD.**

**LOCATION MAP**

**ALLIES PROPERTY**

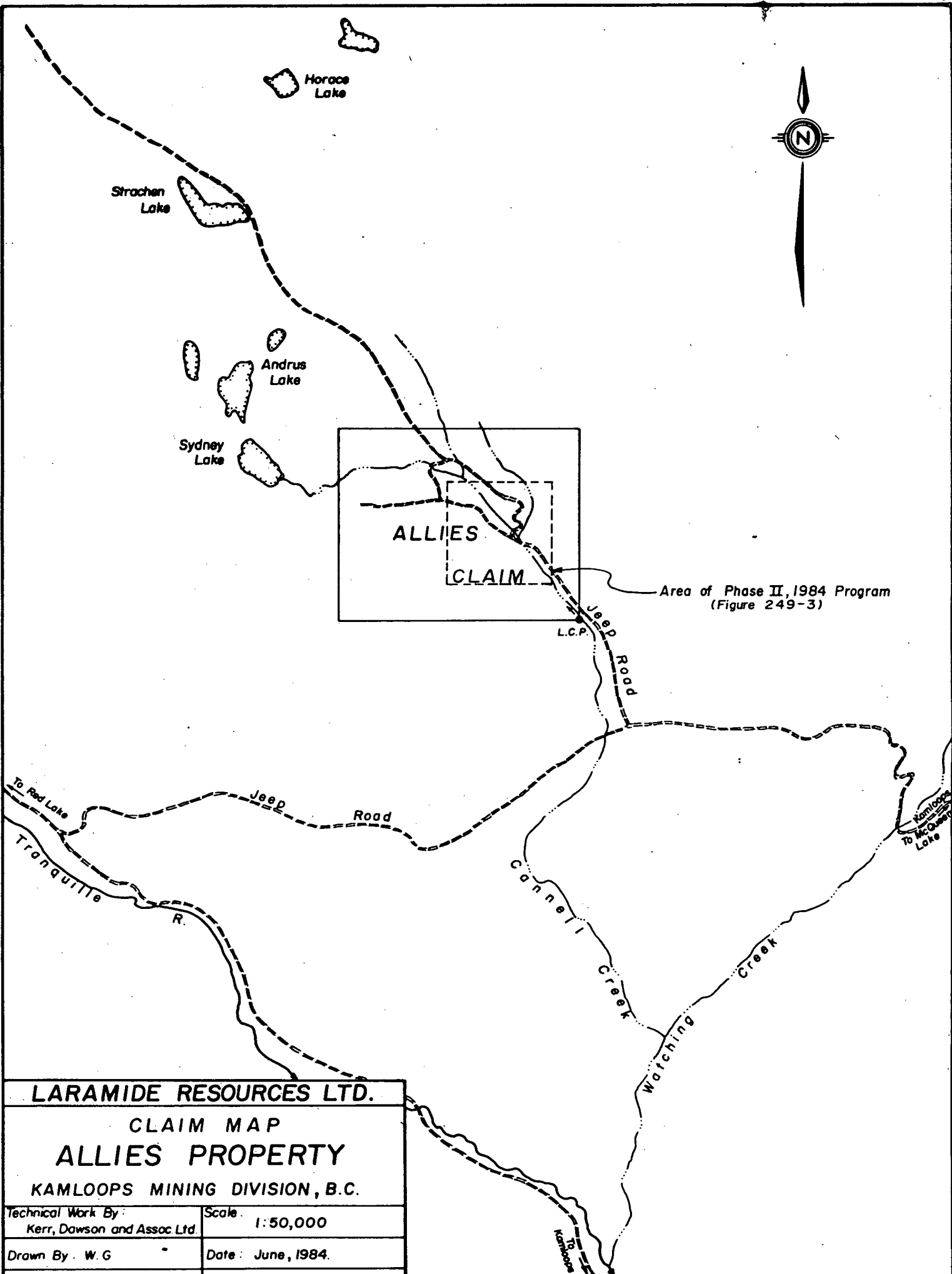
**KAMLOOPS MINING DIVISION  
BRITISH COLUMBIA**

Technical Work by:  
Kerr, Dawson & Assoc. Ltd.

Date : June, 1984.

Scale : 1cm. = 87 km.

Dwg No. 249-1



<b>LARAMIDE RESOURCES LTD.</b>	
CLAIM MAP	
<b>ALLIES PROPERTY</b>	
KAMLOOPS MINING DIVISION, B.C.	
Technical Work By: Kerr, Dawson and Assoc Ltd.	Scale: 1:50,000
Drawn By: W.G.	Date: June, 1984.
Approved By: J.M. Dawson, P.Eng.	Fig. No. 249-2

To accompany a report by J. M. Dawson, P.Eng. & D. A. Leishman, B.Sc.

PHYSIOGRAPHY AND VEGETATION:

The claim lies just at the southern edge of the Bonaparte Plateau. A gently rolling upland area with elevations in the 4,800 to 5,000 foot range is bisected by the northwest-trending valley of Cannell Creek. Elevations in this valley vary from about 3,900 feet a.s.l. at the southeast corner of the property to near 4,800 feet a.s.l. at the north and west claim boundaries.

The property is heavily wooded by mature spruce, fir and pine in the valley of Cannell Creek. Upland areas and southerly-facing slopes are generally more open and predominately forested by lodgepole pine with occasional meadows.

HISTORY:

This property is first mentioned in the 1924 Annual Report of the B.C. Minister of Mines. Presumably it had been discovered a few years before this by prospectors working up Tranquille River and Watching Creek looking for the source of placer gold found in those creeks. Samples of material grading as high as 1.42 oz Au per ton were obtained from quartz stringers in a number of large blocks of silicified feldspar porphyry thought at first to be outcrops.

Over the next few years a considerable amount of prospecting and trenching had not established dimensions of the showing or even if the discovery material was in place.

In 1933-34 an extensive programme of underground exploration was carried out in an attempt to find and delineate the source of the gold-bearing porphyry. At least 3 shafts and 5 adits totalling approximately 800 lineal feet were driven at several locations and although several occurrences of similar porphyry intrusions were located in place the source of the high grade float at the discovery or No. 1 shaft was not found.



The property lay dormant until 1968 when minor trenching was done near some of the original workings.

In 1972-73, the property was controlled by Bon-Val Mines Ltd. and magnetic and VLF electromagnetic surveys as well as geochemical soil sampling was carried out. Bon-Val Mines was reorganized as Yamoto Industries Ltd.

In 1976, an extensive programme of geochemical soil sampling was undertaken with some 800 samples being analysed for gold and copper. Results showed only a few isolated gold highs, undoubtedly because of the heavy overburden.

In 1978, three diamond drill holes totalling 162.5 meters were bored near the No. 1 Shaft. Logs reported barren "serpentine" in all holes with no porphyry or quartz veins encountered.

In 1984, title to the property was awarded to Laramide Resources Ltd. in a dispute over previous assessment work.

In the spring of 1984 a detailed exploration programme was commenced on the subject property. This work consisted of grid lay-out, prospecting and detailed geological mapping:

REGIONAL GEOLOGY:

Regionally the property lies within the Intermontane Belt of central British Columbia. In the area of the Allies claim group the oldest units are the Triassic Nicola Volcanics which are bounded on the west (and unconformably overlain) by the Kamloops Group (Tertiary). A still younger "Plateau Basalt" of Tertiary age overlies much of the above in the higher elevations north of Kamloops Lake.

On the Allies property a window of Nicola Volcanics is exposed beneath a cover of this "Plateau Basalt". Intruding these volcanics are dykes of quartz feldspar porphyry of Cretaceous(?) age. On the Allies claim mineralized quartz veins carrying anomalous values in gold are associated with these dykes. It is for this reason an exploration programme was initiated by Laramide Resources Ltd.

1984 PROGRAMME - PHASE II:

INTRODUCTION:

This phase of the 1984 programme began by the construction and upgrading of access roads within the claim area. Roads were constructed so as to facilitate access to all areas of the older workings and to expose as much bedrock as possible. A D-6 cat with ripper was used for this work.

Upon completion of this work all fresh exposures of quartz feldspar porphyry and their host units were mapped and sampled. A reconnaissance soil survey was also completed along the road system, silt and pan samples were taken along Cannell Creek and other drainages. Representative samples of mineralized float were also collected downstream and downslope of the No. 1 Shaft.

Upon completion of the above, a track-mounted backhoe capable of digging a pit to 7 metres was brought onto the property. It was planned to use this machine to uncover bedrock near the No. 1 Shaft. However technical problems and climatic conditions prevented the completion of this work.

Detailed plans, sketches and descriptions of the work completed is included in the following sections.

GEOCHEMICAL SURVEY:

SAMPLING METHOD:

Soil samples were taken at 25 metre intervals along all the road cuts with sample depth ranging from 0.3 to 5.0 metres (from the surface). A total of 177 "soil" samples were taken with sample sites flagged and labelled. The reasons for taking samples at such depth was due to poor soil development and a thick veneer of glacial overburden (boulders, till and clay) covering the survey area.

Stream sediment samples were taken along the two major drainages on Figure 249-3 with a sample interval of 25 metres. It was virtually impossible to collect a true "silt" sized sample. Most stream samples consisted of fine to coarse sand. A total of 50 stream samples were taken with sample sites numbered and flagged.

Seven pan samples were also taken, 5 from Cannell Creek and 2 from a westerly drainage. Locations and values obtained are plotted on Figure 249-3.

In conjunction with the above a group of 20 samples (AL 01 - AL 020) of quartz feldspar porphyry were collected from the stream bed south and east of the No. 1 Shaft, (Figure 249-4). These samples of float ranged in size from 10 centimetres to several metres. The amount of quartz veining varied from nil to 50%. Sulphide mineralization was also variable. These samples were of at least 2 kilograms weight.

All soil and stream samples were collected in waterproof kraft envelopes and upon completion of the survey they together with the rock samples were taken to Kamloops Research and Assay Laboratory Ltd. and analysed for gold (and silver where appropriate).

LABORATORY METHOD:

The soil, stream and pan samples were dried and sieved (-80 mesh stainless steel). A 20 gram sample was then taken and fire assayed. A measured quantity of silver was added to collect the gold in a bead. The bead was cleaned and then digested in solution with the solution read by atomic absorption. Results were then calibrated to parts per billion and tabulated.

All rock samples (AL 01 - AL 020) were fire assayed with results given in ounce/ton of gold.

PRESENTATION OF RESULTS:

All soil samples locations are plotted on Figure 249-3 with samples yielding greater than 5 parts per billion gold labelled individually. No statistical analysis was completed on the soil results due to the inhomogeneity of the sample medium and the irregular distribution and density of sample sites.

Silt samples were plotted in a similar way with sample values greater than 5 parts per billion noted. The sample population (50) was considered too small for a meaningful statistical analysis.

Panned sample locations and results (in ppb gold) are also plotted on Figure 249-3.

Sample sites of porphyry float (AL 01 - AL 020) are plotted on Figure 249-4. Individual results are tabulated in Appendix I.

DISCUSSION OF RESULTS:

Soils:

A total of 23 samples returned values greater than 5 and up to 1130 parts per billion gold in the soils. (Figure 249-3).

The 3 higher values returned all were found near the area of the Southwest Adit (350, 520, 1130 parts per billion respectively). Several anomalous(?) values were also found near the central part of the map area (base line 2+00S). Other values greater than 5 parts per billion had a relatively erratic distribution. Surprisingly there were really no values of significance found near the area of No. 1 Shaft.

Because of the erratic distribution of sample results, it appears "soil" sampling might not be a totally reliable indicator of mineralized bedrock.

Stream Sediments:

Values of up to 1270 parts per billion gold were found in the stream samples. A total of 10 samples (all in Cannell Creek) returned values greater than 50 parts per billion gold. Despite the tight sample spacing (25 metres) it is clearly seen on Figure 249-3 that gold distribution in stream sediments is variable and erratic. The highest value, 1270 ppb gold is found near O+25S; O+50E on Cannell Creek, 130 metres south of the No. 1 Shaft. However the sample immediately to the north returned only 20 ppb gold while the sample to the south a value of 110 ppb gold was obtained. Other high values were found near 2+25S in the stream (995 ppb gold) while on either side of this particular sample values of only 5 ppb gold were obtained. Other interesting results were found just east of the No. 1 Shaft and near L5+00S adjacent to some recent trenching (Figure 249-3).

Panned Concentrates:

Panned samples returned values from less than 5 ppb to 3755 ppb gold. Three samples returned values greater than 1000 ppb gold. Significantly, the highest value obtained was taken just southeast of the No. 1 Shaft. An intermittent drainage from the area of the Southwest Adit returned low values (samples CWSL-2, CWSL-4). The values described for pans are panned concentrates and were not weight normalized. Flecks of "free gold" were seen in two of the panned concentrates examined under a binocular microscope.

Mineralized Float:

Assay results of the samples of float ranged from less than .001 ounces gold per ton to .446 ounces gold per ton with silver values never exceeding .44 ounces per ton. These samples combined with 2 taken previously by J. M. Dawson averaged .10 ounces gold per ton. Sample material was both veined and massive with sulphide content ranging from trace to several percent. Four of these samples (AL 11, 14, 15, 17) were found to contain coarse gold (Appendix I).

GEOLOGICAL SURVEY:

INTRODUCTION:

Upon completion of the road building and trenching, all exposures were mapped and sampled where considered appropriate.

Five areas on Figure 249-3 were extensively trenched and sampled. These were the No. 1 Shaft, the No. 2 and No. 3 Adits, the Southwest Adit and the exposure west of Cannell Creek near line 5+00S.

All data was plotted on Figure 249-3 and 249-4. Also detailed sketches of various exposures were made (Figures 249-5 through Figure 249-7). The geology on Figure 249-3 is transferred from J. M. Dawson's geological report. It is revised where necessary. Seen on Figure 249-3 are numerous areas noted as subcrop. Invariably this indicates areas where numerous fragments of what appears to be the basal section of the plateau basalt (Unit 1b) with volcanics (Unit 3) are found. Extensive and deep trenching would be necessary to prove or disprove their proximity to true bedrock. There were never any fragments of porphyry associated with these subcrops.

NO. 1 SHAFT:

Work completed near the No. 1 Shaft is plotted on Figure 249-4 (1:400 scale). This work was completed in two phases. During the first phase a D-6 cat was used to dig two trenches, one trending N75°E from Sample No. 85853 to Sample No. 85852 and a second trending N20°W from the centre of the first trench (Figure 249-4).

This second trench reached a depth of close to 3.0 metres where subcrop(?) of the basal section of the basalt/greenstone was encountered.



Here a very highly oxidized and silicified breccia was sampled but insignificant values in gold were encountered.

The first trench although not as deep as the second cut highly altered and oxidized clay and overburden. Large fragments of quartz feldspar porphyry were encountered at the bottom of this trench. One 3 metre chip sample (suspected outcrop) returned a value of 650 ppb gold. Two other samples of float (85853, 85858) returned 840 and 25 ppb gold respectively.

A fourth grab sample (85857) of quartz feldspar porphyry (float) with veining taken from an older trench 30 metres west of the base line returned a rather spectacular value of .324 ounces gold per ton.

A backhoe was brought onto the property to deepen the above trenches to bedrock. The trench containing sample 85851 was deepened and a depth of 6 to 7 metres was reached at the north end. Two samples were taken (DAL 022 and DAL 023) at the south end of the trench. A large fragment of quartz feldspar porphyry (DAL 023) was taken at about a 3 metre depth. This fragment was heavily veined with several percent pyrite and minor chalcopyrite. Low but significant values of gold and silver were obtained (.048 and .05 ounces respectively). A second sample of porphyry (DAL 022) taken at the bottom of the trench of probable bedrock (.298 and .44 ounces respectively).

Unfortunately problems with the backhoe did not allow for the extension of this trench or testing of other target areas. A D-8 cat rented from Weyerhaeuser was then brought in to deepen the area south of samples DAL 022 and DAL 023. Unfortunately due to extreme wet clay conditions encountered, it was not possible to expose bedrock. One sample (DAL 021) of a porphyry boulder was sent for assay but returned insignificant values. Trenching with the D-8 cat was terminated due to the possibility of getting stuck in the clay.

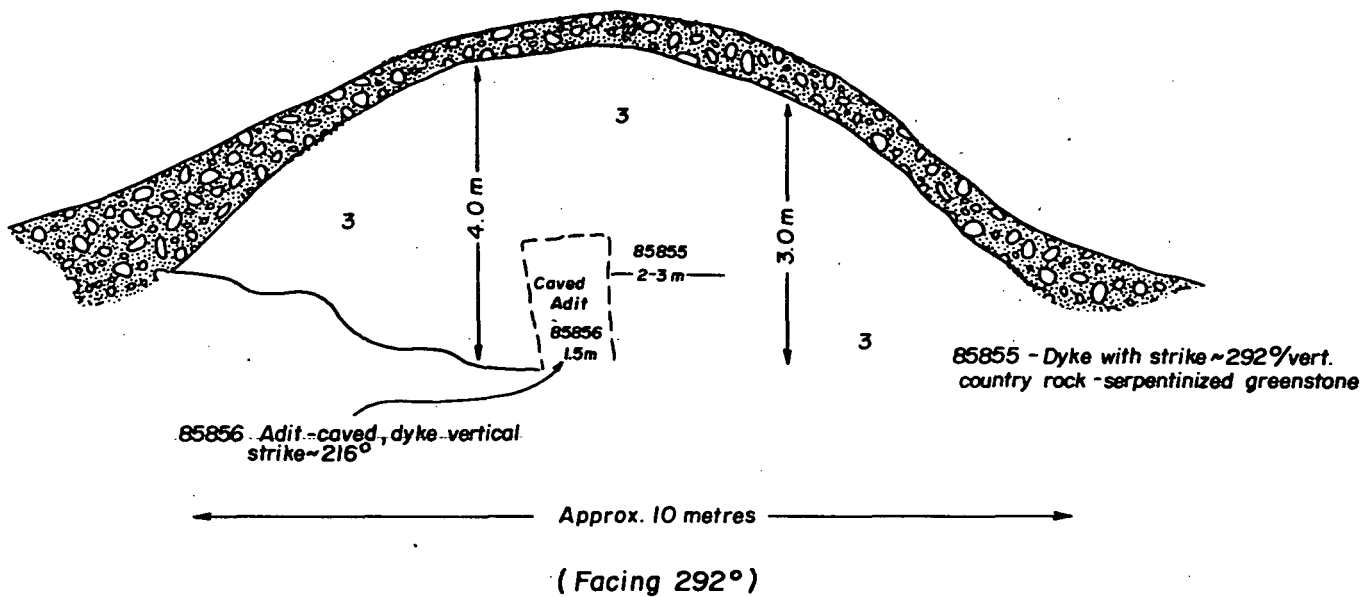
NO. 2 ADIT:

The area surrounding the No. 2 Adit was exposed (Figure 249-3). A very highly altered massive serpentized greenstone was exposed over a width of 20 metres at  $90^{\circ}$  to the Adit. This greenstone was soft and friable and was easily trenched. Two possible outcrops of quartz feldspar porphyry were exposed. The northernmost exposure appeared to be in a shear contact with the enclosing greenstones. However altered greenstones slumping onto the feldspar porphyry prevented a proper examination of this contact. One grab sample (No. 85869) returned only 10 ppb gold. The direction of this shear contact appears to be approximately  $266^{\circ}$ .





A second exposure of feldspar porphyry lies 15 metres to the southeast of the above. Large blocks of porphyry form a small knob. No veining was seen in these porphyry blocks. It is possible these blocks of porphyry are not "in situ" but mined waste from the original exploration adit.

NO. 3 ADIT:

The area of the No. 3 Adit was exposed by trenching (Figures 249-3, 249-5). Two samples were taken of the dyke material. There was very little veining with no sulphides. The porphyry dyke appears to be in shear contact with the enclosing, very altered serpentized greenstones. Figure 249-6 was sketched facing  $292^{\circ}$ . A true strike of the dyke appears to be approximately  $290^{\circ}$ . Neither of the 2 samples taken returned significant values in gold (Sample No. 85855, 85856).



**LEGEND**

-  Overburden
-  Basalt
-  Feldspar porphyry
-  Volcanic greenstone

To accompany a report by D.A. Leishman, B.Sc.

**LARAMIDE RESOURCES LTD.**

**ADIT NO. 3**

**ALLIES PROPERTY**

Kamloops Mining Division, B. C.

Technical Work By: Kerr, Dawson and Assoc. Ltd.	Scale:
Drawn By: W.G.	Date: Jan., 1985.
Approved By: D.A.L.	Fig. No. 249-5

SOUTHWEST ADIT:

The area around the southwest adit was extensively trenched. Two old adits were exposed and are shown on Figures 249-6 and 249-6a. Both the quartz feldspar porphyry dykes and the enclosing volcanics in this area have undergone a significant amount of shearing and disruption. Consequently a true attitude of the dyke rocks was not obtained. A significant amount of faulting of the overlying basalt was observed by J. M. Dawson to the south of this area.

In Figure 249-6 three samples of dyke material were taken near an old adit. Anomalous values of gold were obtained from 145 to 760 ppb. An overlying unit (basal section of basalt) returned an insignificant value in gold.

A second area (Figure 249-6a) was sampled extensively. Here the dyke material and enclosing volcanics were extensively sheared and fractured. Significant amounts of malachite were also seen in these shears though most of the malachite was seen in or adjacent to the dyke rocks.

Significant values (1050 and 745 ppb) of gold were obtained from samples 85865 and 85866 in a shear zone just above the old adit. Significant veining with minor sulphides (pyrite) with some malachite was observed in these samples. Although this shear extended to the northeast and contained highly visible malachite, gold values were non-existent (Sample No. 85870). More massive (less sheared) feldspar porphyry dyke rocks returned significantly lower values in gold (Sample Nos. 85867, 85869, 85872).

Although no ore grade material was found in this area the anomalous gold values are significant. Copper mineralization (malachite) seems to be confined to the dyke units and areas immediately adjacent. The shearing has resulted in a secondary distribution of the copper mineralization.

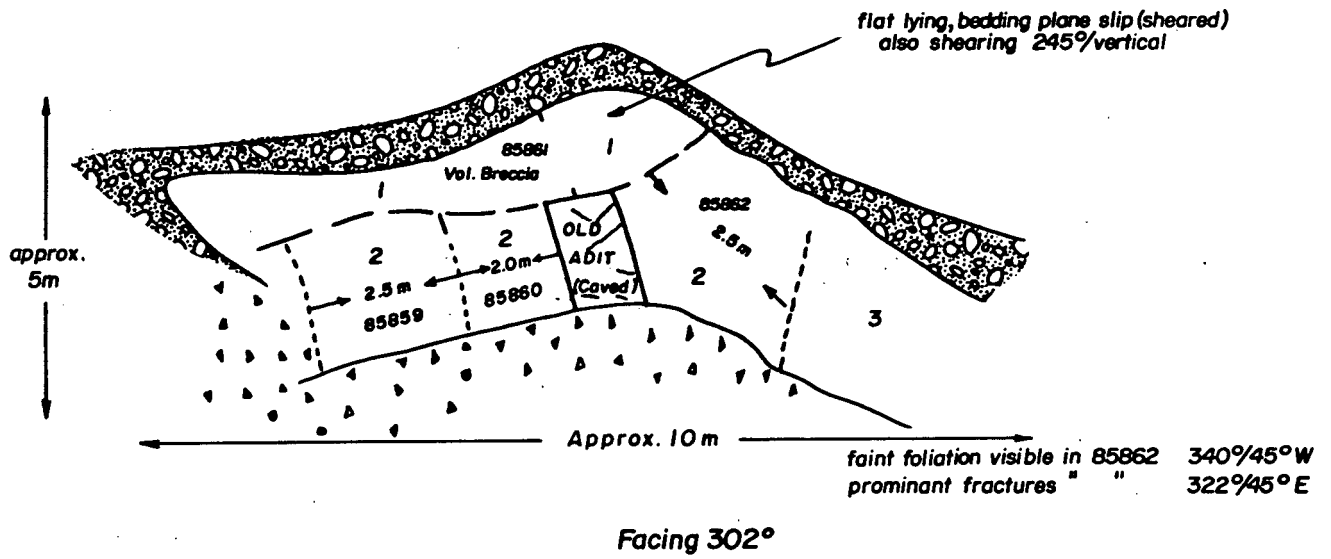
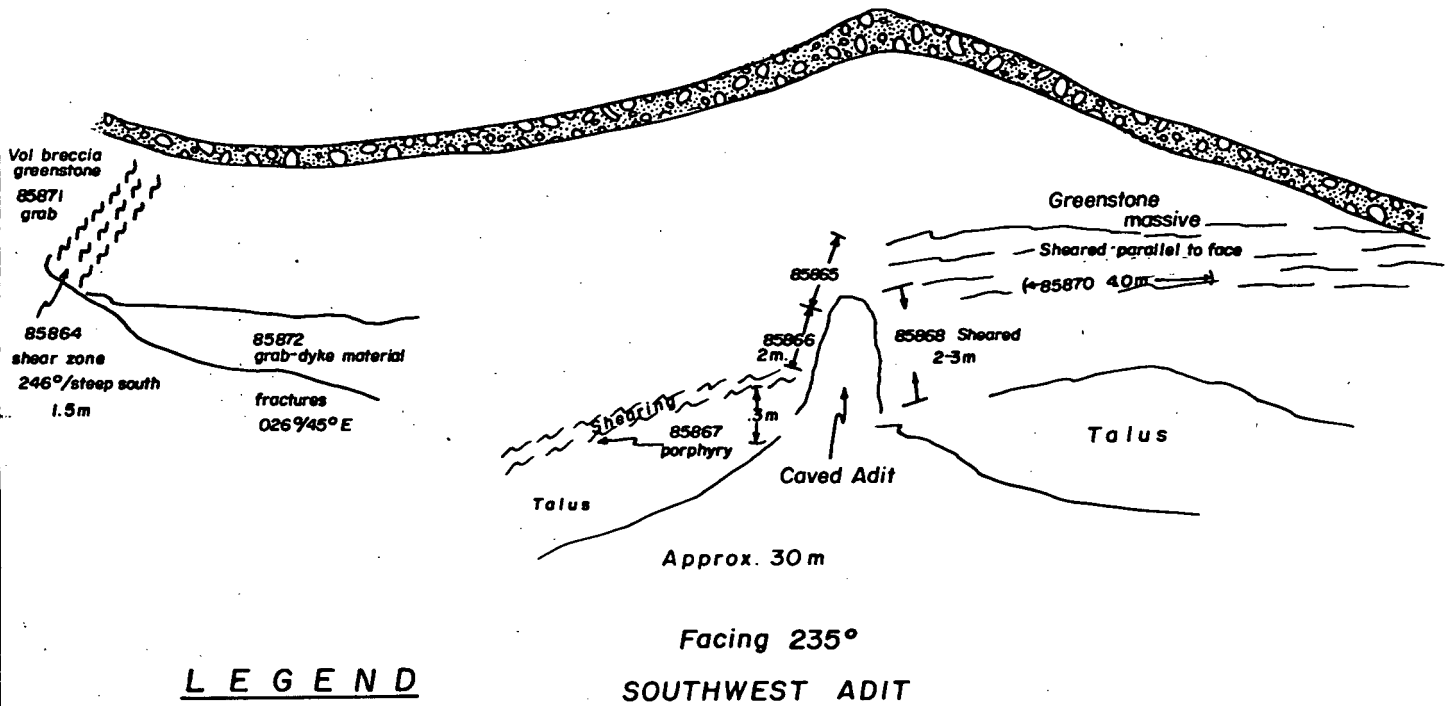


Fig. No. 249-6



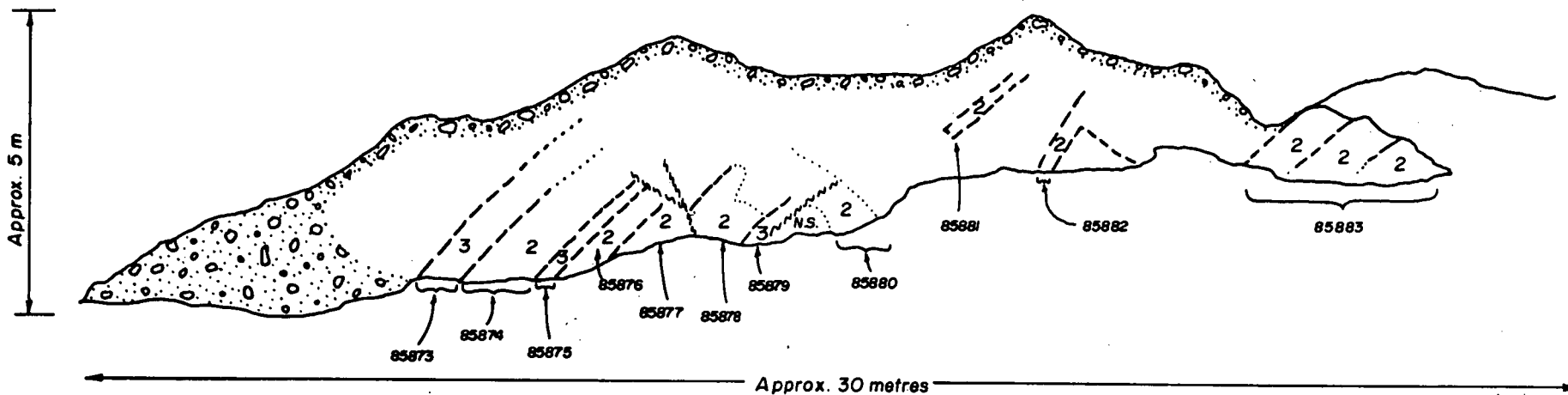
**LEGEND**

- Overburden
- Basalt
- Feldspar porphyry
- Volcanic greenstone
- Shearing
- Talus

To accompany a report by D.A. Leishman, B.Sc.





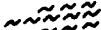
<b>LARAMIDE RESOURCES LTD.</b>	
<b>SOUTHWEST ADIT</b>	
<b>ALLIES PROPERTY</b>	
Kamloops Mining Division, B. C.	
Technical Work By: Kerr, Dawson and Assoc. Ltd.	Scale:
Drawn By: W. G.	Date: Jan., 1985.
Approved By: D.A.L.	Fig. No. 249-6, 6A

Fig. No. 249-6A



Facing ~249° (sketch from road)

**LEGEND**

-  Overburden
-  Basalt
-  Feldspar porphyry
-  Volcanic greenstone
-  Shearing

SAMPLE NO.	GOLD (ppb)
85873	< 5
74	125
75	< 5
76	30
77	1032
78	120
79	< 5
80	210
81	185
82	35
83	145

<b>LARAMIDE RESOURCES LTD.</b> <b>QUARTZ-FELDSPAR DYKES</b> <b>ALLIES PROPERTY</b> Kamloops Mining Division, B. C.	
Technical Work By: Kerr, Dawson and Assoc. Ltd.	Scale:
Drawn By: W. G.	Date: Jan., 1985.
Approved By: D.A.L.	Fig. No. 249-7

To accompany a report by D.A. Leishman, B.Sc.

QUARTZ FELDSPAR DYKES (Cannell Creek, L5+00S)

Numerous narrow (true width less than 1 metre) quartz feldspar porphyry dykes were exposed in an area just west of Cannell Creek, (Figure 249-7). These dykes trend approximately  $300^{\circ}$  and have a steep to moderate dip to the south. There also appears to be a minor displacement and dragging of the dykes along  $030^{\circ}$  shear zones. Quartz veining with minor disseminated pyrite are found within the dykes. The quartz veins trend approximately  $030^{\circ}$  and dip to the northwest.

A total of 11 samples (85873 to 85883) were taken of porphyry dyke rock and the enclosing volcanic greenstone. Gold values obtained in units of the porphyry varied from 30 to 1032 ppb. The host volcanics returned non-significant gold values.

Though gold values in the porphyry dykes did not approach ore grades, they were significantly anomalous. The significance of this is the area of anomalous gold values in quartz feldspar porphyry has been increased.

CONCLUSIONS:

Mapping of the exposed outcrops of feldspar porphyry indicates these dyke rocks have a strike direction of approximately  $290^{\circ}$  as opposed to a previously indicated direction of north  $20^{\circ}$  east. Anomalous values in gold (to 1 ppm) are found within outcropping veined quartz feldspar porphyry dykes in at least two widely separated localities on the Allies claim, (Southwest Adit and Cannell Creek, 5+00S). In addition, ore grade mineralization was located as float (and possibly outcrop) in the immediate area of the No. 1 Shaft. It appears that the bedrock source of the "high grade" mineralization will likely be located 50 to 75 metres west of the No. 1 Shaft.

Respectfully submitted,

KERR, DAWSON AND ASSOCIATES LTD.,

*Douglas A. Leishman*

Douglas A. Leishman, B. Sc.  
Geologist.

Kamloops, B. C.

January 14, 1985.



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- Dawson, J. M.                         Geological Report on the Allies Claim,  
Kamloops Mining Division, B. C.,  
Laramide Resources Ltd., Vancouver, B.C.  
Assessment Report.
- Monger, J. W. H.                      Bedrock Geology of the Ashcroft  
(92/I) Map Area, O.F. 980,  
G.S.C. 1984.

APPENDIX I

GEOCHEMICAL AND ASSAY RESULTS

**KAMLOOPS  
RESEARCH & ASSAY  
LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 LAVAL CRESCENT — KAMLOOPS, B.C.  
V2C 5P5  
PHONE: (604) 372-2784 — TELEX: 048-8320

**GEOCHEMICAL LAB REPORT**

Kerr, Dawson & Associates Ltd.  
Suite 206 Nicola Place  
310 Nicola Avenue  
Kamloops, B.C.

DATE September 27, 1984

ANALYST \_\_\_\_\_

FILE NO. V2C 2P5

PROJECT 249

FILE NO. G-1187

DAL NO.	IDENTIFICATION	ppb Au		Kral #	Identification	ppb Au	
1	85851	L5	ROCK	31	DAL025	L5	
2	85852	650	"	32	DAL026	L5	
3	85853	840	"	33	DAL027	L5	
4	85854	L5	"	34	DAL028	L5	
5	85855	L5	"	35	DAL029	L5	
6	85856	L5	"	36	DAL030	5	
7	DAL001	L5	SOILS	37	DAL031	L5	
8	DAL002	L5		38	DAL032	L5	
9	DAL003	L5		39	DAL033	L5	
10	DAL004	L5		40	DAL034	L5	
11	DAL005	L5		41	DAL035	L5	
12	DAL006	L5		42	DAL036	L5	
13	DAL007	L5		43	DAL037	L5	
14	DAL008	L5		44	DAL038	L5	
15	DAL009	L5		45	DAL039	20	
16	DAL010	L5		46	DAL040	L5	
17	DAL011	L5		47	DAL041	L5	
18	DAL012	L5		48	DAL042	L5	
19	DAL013	L5		49	DAL043	L5	
20	DAL014	L5		50	DAL044*	50	
21	DAL015	L5		51	DAL045	L5	
22	DAL016	L5		52	DAL046	5	
23	DAL017	5		53	DAL047	5	
24	DAL018	L5		54	DAL048	L5	
25	DAL019	L5		55	DAL049	50	
26	DAL020	L5		56	DAL050	L5	
27	DAL021	L5		57	DAL051	L5	
28	DAL022	L5		58	DAL052	L5	
29	DAL023	L5		59	DAL053	5	
30	DAL024	180		60	DAL054	5	

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**GEOCHEMICAL LAB REPORT**

FILE NO. G-1187

PAGE 2

KRAL NO.	IDENTIFICATION	ppb Au			KRAL NO.	IDENTIFICATION	ppb Au		
61	DAL055	5			91	DAL085	5		
62	DAL056	L5			92	DAL086*	L5		
63	DAL057	L5			93	DAL087	L5		
64	DAL058	10			94	DAL088	L5		
65	DAL059	L5			95	DAL089	L5		
66	DAL060	5			96	DAL090	10		
67	DAL061	L5			97	DAL091	L5		
68	DAL062	L5			98	DAL092	10		
69	DAL063	L5			99	DAL093	L5		
70	DAL064	L5			100	DAL094	L5		
71	DAL065	L5			101	DAL095	5		
72	DAL066	L5			102	DAL096	L5		
73	DAL067	L5			103	DAL097	5		
74	DAL068	L5			104	DAL098	5		
75	DAL069	L5			105	DAL099	5		
76	DAL070	L5			106	DAL100	10		
77	DAL071	L5			107	DAL101	L5		
78	DAL072	L5			108	DAL102	L5		
79	DAL073	L5			109	DAL103	L5		
80	DAL074	L5			110	DAL104	L5		
81	DAL075	L5			111	DAL105	L5		
82	DAL076	L5			112	DAL106	L5		
83	DAL077	L5			113	DAL107	L5		
84	DAL078	L5			114	DAL108	L5		
85	DAL079	L5			115	DAL109	L5		
86	DAL080	L5			116	DAL110	25		
87	DAL081	40			117	DAL111	L5		
88	DAL082	5			118	DAL112	L5		
89	DAL083	L5			119	DAL113	L5		
90	DAL084	5			120	DAL114	L5		

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**GEOCHEMICAL LAB REPORT**

FILE NO. G-1187

PAGE 3

KRAL NO.	IDENTIFICATION	ppb Au			KRAL NO.	IDENTIFICATION	ppb Au		
121	DAL 115	L5			151	DAL 145	5		
122	DAL 116	L5			152	DAL 146	L5		
123	DAL 117	L5			153	DAL 147	L5		
124	DAL 118	L5			154	DAL 148	5		
125	DAL 119	L5			155	DAL 149	L5		
126	DAL 120	L5			156	DAL 150	5		
127	DAL 121	L5			157	DAL 151	L5		
128	DAL 122	L5			158	DAL 152	L5		
129	DAL 123	240			159	DAL 153	L5		
130	DAL 124	100			160	DAL 154	L5		
131	DAL 125	235			161	DAL 155	L5		
132	DAL 126	20			162	DAL 156	L5		
133	DAL 127	10			163	DAL 157	L5		
134	DAL 128	5			164	DAL 158	L5		
135	DAL 129	30			165	DAL 159	L5		
136	DAL 130	5			166	DAL 160	L5		
137	DAL 131	L5			167	DAL 161	290		
138	DAL 132*	L5			168	DAL 162	5		
139	DAL 133	L5			169	DAL 163	L5		
140	DAL 134	1130			170	DAL 164	10		
141	DAL 135	10			171	DAL 165	L5		
142	DAL 136	5			172	DAL 166*	L5		
143	DAL 137	L5			173	DAL 167	240		
144	DAL 138	350			174	DAL 168	L5		
145	DAL 139	L5			175	DAL 169	5		
146	DAL 140	L5			176	DAL 170	L5		
147	DAL 141	L5			177	DAL 171	L5		
148	DAL 142	L5			178	DAL 172	L5		
149	DAL 143	5			179	DAL 173	L5		
150	DAL 144	L5			180	DAL 174	95		



**KAMLOOPS  
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B.C. CERTIFIED ASSAYERS

912 LAVAL CRESCENT — KAMLOOPS, B.C.  
V2C 5P5  
PHONE: (604) 372-2784 — TELEX: 048-8320

**GEOCHEMICAL LAB REPORT**

Kerr, Dawson & Associates Ltd.  
Suite 206 Nicola Place  
310 Nicola Avenue  
Kamloops, B.C. V2C 2P5

DATE October 1, 1984

PROJECT 249

ANALYST \_\_\_\_\_

FILE NO. \_\_\_\_\_

FILE NO. G-1193

*STREAM SEDIMENTS*

LAB NO.	IDENTIFICATION	ppb Au		Kral No.	Identification	ppb Au	
1	DAL 178	65		31	DAL 208	20	
2	179	L5		32	209	40	
3	180	270		33	210	320	
4	181	10		34	211	70	
5	182	L5		35	212	110	
6	183	L5		36	213	20	
7	184	L5		37	214	5	
8	185	L5		38	215	5	
9	186	L5		39	216	5	
10	DAL 187	30		40	DAL 217	5	
11	188	5		41	218	10	
12	189	10		42	219	L5	
13	190	L5		43	220	L5	
14	191	L5		44	221	L5	
15	192	20		45	222	L5	
16	193	20		46	223	L5	
17	194	5		47	224	L5	
18	195	L5		48	225	L5	
19	196	995		49	226	L5	
20	DAL 197	L5		50	DAL 227	45	
21	198	25					
22	199	160					
23	200	L5					
24	201	10					
25	202	55					
26	203	5					
27	204	10					
28	205	20					
29	206	110					
30	DAL 207	1270					

L means "Less than"

Au Method: -80 Mesh  
Fire Assay  
Atomic Absorption









Member  
Canadian Testing  
Association

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## CERTIFICATE OF ASSAY

B.C. LICENSED ASSAYERS  
GEOCHEMICAL ANALYSTS  
METALLURGISTS

TO Kerr, Dawson and Associates Ltd.,

Suite 206 Nicola Place, 310 Nicola Street,

Kamloops, B.C. : V2C 2P5

Certificate No. K-6720

Date October 22, 1984

**I hereby certify** that the following are the results of assays made by us upon the herein described \_\_\_\_\_ samples

Kral No.	Marked	Au	Ag						
		ounces/ton	ounces/ton						
1	AL 01	.032	.35						
2	02	.001	.32						
3	03	L.001	L.01						
4	04	L.001	L.01						
5	05	.084	.09						
6	06	.008	.09						
7	07	L.001	L.01						
8	08	.001	L.01						
9	09	.138	.11						
10	AL 10	.094	.14						
11	11	*.181	.44						
12	12	.014	.05						
13	13	.060	.17						
14	14	*.446	.29						
15	15	*.059	.26						
16	16	.124	.11						
17	17	*.155	.26						
18	18	.024	L.01						
19	19	.004	.09						
20	AL 20	L.001	L.01						

Samples marked \* have been screened and found to contain coarse gold. See second page

NOTE:  
Rejects retained three weeks.  
Pulps retained three months  
unless otherwise arranged.

Registered Assayer, Province of British Columbia



# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

**B.C. LICENSED ASSAYERS  
GEOCHEMICAL ANALYSTS  
METALLURGISTS**

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.

V2C 5P5

PHONE: (604) 372-2784 — TELEX: 048-8320

## CERTIFICATE OF ASSAY

TO Kerr, Dawson and Associates Ltd.,

Certificate No. K-6720

Date \_\_\_\_\_

**I hereby certify** that the following are the results of assays made by us upon the herein described \_\_\_\_\_ samples

Kral No.	Marked	Percent	Au	Combined Au				
		Weight	ounces/ton	ounces/ton				
17911	-100 mesh +100 mesh	99.99 .01	.17 218.75	.181				
17914	-100 mesh +100 mesh	99.98 .02	.444 13.125	.446				
17915	-100 mesh +100 mesh	99.99 .01	.052 58.69	.059				
17917	-100 mesh +100 mesh	99.99 .01	.144 142.63	.155				
	L means "less than"							

**NOTE:**  
Rejects retained three weeks.  
Pulps retained three months  
unless otherwise arranged.

Registered Assayer, Province of British Columbia



# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

**B.C. LICENSED ASSAYERS  
GEOCHEMICAL ANALYSTS  
METALLURGISTS**

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.  
V2C 5P5  
PHONE: (604) 372-2784 — TELEX: 048-8320

## CERTIFICATE OF ASSAY

TO Kerr, Dawson and Associates Ltd.,  
Suite 206 Nicola Place,  
310 Nicola Street, Kamloops, B.C. V2C 2P5

Certificate No. K-6766

Date November 8, 1984

Project #249

**I hereby certify** that the following are the results of assays made by us upon the herein described \_\_\_\_\_ samples

Kral No.	Marked	Au	Ag						
		ounces/ton	ounces/ton						
1	DAL 021	L.001	.01						
2	DAL 022	.298	.44						
3	DAL 023	.048	.05						

**NOTE:**  
Rejects retained three weeks.  
Pulps retained three months  
unless otherwise arranged.

Registered Assayer, Province of British Columbia



# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

B.C. LICENSED ASSAYERS  
GEOCHEMICAL ANALYSTS  
METALLURGISTS

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.  
V2C 5P5

PHONE: (604) 372-2784 — TELEX: 048-8320

## CERTIFICATE OF ASSAY

TO Kerr, Dawson & Associates Ltd.  
Suite 206 Nicola Place, 310 Nicola Avenue  
Kamloops, B.C. V2C 2P5

ATTENTION: MR. D. LEISCHMAN

Certificate No. G-1191

Date October 1, 1984

**I hereby certify** that the following are the results of assays made by us upon the herein described \_\_\_\_\_ samples

Kral No.	Marked	Au						
	85857	ounces/ton  .324						

NOTE:  
Rejects retained three weeks.  
Pulps retained three months  
unless otherwise arranged.

Registered Assayer, Province of British Columbia

APPENDIX II

ROCK SAMPLE DESCRIPTIONS

ROCK SAMPLE DESCRIPTIONS

<u>Sample No.</u>	<u>Description</u>
85851	Subcrop - basal section basalt, breccia with very silicified fragments, predominantly pale beige cherts - oxidized.
85852	3 metre chip sample - outcrop(?), quartz feldspar porphyry with quartz veins to 5 centimetre width and pink feldspar veinlets. Stockworks type veining 1-2% disseminated pyrite in host and veins plus knots of chalcopyrite to .5 centimetre diameter (0.5-1% chalcopyrite).
85853	Probably float, grab sample, as above.
85854	Subcrop - basal section basalt, totally oxidized 1 metre chip sample.
85855	Quartz feldspar porphyry dyke, sharp contact with enclosing greenstones(?), fractured $290^{\circ}/V$ , no sulphides or significant veining, chip 2.3 metres.
85856	Quartz feldspar porphyry, as above, collapsed adit - chip over 1.5 metres.
85857	Quartz feldspar porphyry - wall of old trench(?), probably not in situ, grab sample.
85858	Highly oxidized volcanic breccia, basal section basalt, grab from wall of trench in situ(?).
85859	Quartz feldspar porphyry, totally fractured with feldspar altering to clay giving bleached appearance. 1-2% quartz veins with trace only pyrite, chip 2.5 metres.
85860	Similar to above though highly oxidized on surface, 2.0 metres.
85861	Breccia - totally oxidized, basalt and greenstone fragments (to 0.5 metres), flat shearing parallel to strata, also shearing $245^{\circ}/V$ , 1 metre face sample.
85862	Quartz feldspar porphyry - as 85859 and 85860, totally oxidized along surface and within fractures, 2.5 metre chip, fractures $322^{\circ}/45^{\circ}$ West with trace pyrite, faint foliation $340^{\circ}/45^{\circ}$ West dip.

- 85863 Thin flat lying sequence of quartzite/dolomite/  
volcanic tuff(?), trace disseminated pyrite.
- 85864 Shear zone - greenstone, silicified with chlorite  
alteration,  $246^{\circ}$ /steep south dip, minor carbonate  
veining, 1.5 metre chip.
- 85865 Shear zone - greenstone(?),  $146^{\circ}$ /steep west dip,  
5% carbonate veining,  $180^{\circ}/60^{\circ}$  west with quartz  
malachite stain, no fresh sulphides, oxidized.
- 85866 Similar to above, with quartz veins to 10 centimetre  
width, disseminated pyrite with trace chalcopyrite,  
faint foliation, bedding(?), parallel to veining  
as above, 2 metre face sample.
- 85867 Quartz feldspar porphyry, trace chalcopyrite and  
malachite, only .3 metre exposed at base outcrop.
- 85868 Sheared greenstone - as above, 2-3 metre face sample.
- 85869 Quartz feldspar porphyry - massive, silicified,  
coarse grained, minor carbonate veining, no sulphides,  
contact (?) shearing  $266^{\circ}$ /steep north dip.
- 85870 Greenstone(?), highly sheared and oxidized chip sample  
along strike (4 metres), no sulphides (pyrite or  
chalcopyrite), shearing  $115^{\circ}/V$ .
- 85871 Greenstone(?), flat lying, trace chalcopyrite,  
grab sample.
- 85872 Feldspar porphyry - fracture  $026^{\circ}/45^{\circ}$  east, grab sample,  
no strike direction.
- 85873 Greenstone(?) wall rock, silicified in contact with  
dyke jointing  $002^{\circ}/45^{\circ}$  West, contact with dyke  $302^{\circ}$ /steep  
northeast, 1 metre.
- 85874 Quartz feldspar porphyry dyke  $297^{\circ}/V$ , 1.5 metre.
- 85875 Volcanic wall rock - 1.0 metre sample, strong jointing  
 $016^{\circ}/50^{\circ}$  west, 3-4/metre, chilled contact with dyke.
- 85876 Quartz feldspar porphyry -  $297^{\circ}/V$ , 0.7 metre wide,  
shearing  $032^{\circ}$ /steep west to vertical, quartz veining  
sub parallel to shearing.



- 85877 Quartz feldspar porphyry - totally fractured and oxidized, chip 0.7 metre, strong shearing  $055^{\circ}/V$ .
- 85878 Quartz feldspar porphyry - chip 1.0 metre,  $304^{\circ}/V$ ,  $321^{\circ}/V$  contacts with shearing.
- 85879 Greenstone(?) - strong jointing  $305^{\circ}/V$ , 1.0 metre chip.
- 85880 Quartz feldspar porphyry - as 85878 - along strike shearing  $030^{\circ}/70^{\circ}$  northeast - strong, face sample.
- 85881 Quartz feldspar porphyry - strike  $312^{\circ}/V$  strong jointing  $222^{\circ}/70^{\circ}$  northwest.
- 85882 Quartz feldspar porphyry -  $316^{\circ}/V$  shearing  $226^{\circ}/60-80^{\circ}$  northwest.
- 85883 Quartz feldspar porphyry - veining  $236^{\circ}/30-40^{\circ}$  NW fracture  $316^{\circ}/V$  - with vein material strong jointing  $219^{\circ}/60-70^{\circ}$  NW.

APPENDIX III

PERSONNEL

PERSONNEL

J. M. Dawson, P. Eng.	Geologist	August 1, 22, 27, September 9, 10, October 9, 30, 31, December 18, 19, 1984.	10 days
D. A. Leishman, B. Sc.	Geologist	September 13, 14, 15, 16, 17, 18, 19, 20, 21, October 12, 14, November 1, 2, 3, 4, December 12, 13, 14, 1984, January 8, 9, 11, 14, 1985.	21 ½ days
W. Gruenwald, B. Sc.	Geologist	August 25, October 18, (½ day), 1984, January 14, 1985.	2½ days
R. Henderson	Technician	August 17-30, September 10-12, 1984.	17 days
W. Dawson	Technician	August 17-31, September 3-7, 1984.	20 days
B. Cross	Technician	September 8-13, 1984.	6 days

APPENDIX IV

PROGRAMME COSTS

PROGRAMME COSTS

LABOUR:

J. M. Dawson, P. Eng. 10 days @ \$350/day	\$ 3,500.00	
W. Gruenwald, B. Sc. 2½ days @ \$275/day	687.50	
D. A. Leishman, B. Sc. 21½ days @ \$300/day	6,450.00	
R. Henderson 17 days @ \$200/day	3,400.00	
W. Dawson 20 days @ \$200/day	4,000.00	
B. Cross 6 days @ \$200/day	<u>1,200.00</u>	
		\$ 19,237.50

EXPENSES & DISBURSEMENTS:

(a) Contract bulldozer work (Sept.)	8,473.75	
(b) Truck rental	2,930.00	
(c) Assays and geochemical analyses	2,241.25	
(d) Room and Board	1,468.30	
(e) Chain saw rental	1,051.61	
(f) Miscellaneous field equipment	266.95	
(g) Drafting	482.75	
(h) Telephone, xerox, secretarial, blueprints, courier	324.90	
(i) Contract bulldozer and excavator work (Oct.-Nov.)	<u>4,654.88</u>	
		<u>21,894.39</u>

TOTAL PROGRAMME COSTS:

\$ 41,131.89

APPENDIX V

WRITERS' CERTIFICATES

# JAMES M. DAWSON, P. ENG.

Geological Engineer

#206 - 310 NICOLA STREET • KAMLOOPS, B.C. V2C 2P5 • TELEPHONE (604) 374-0544

## C E R T I F I C A T E

I, JAMES M. DAWSON, of Kamloops, British Columbia, Do Hereby Certify That:

- (1) I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite 206 - 310 Nicola Street, Kamloops, B. C.
- (2) I am a graduate of the Memorial University of Newfoundland, B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a Member of the Association of Professional Engineers of British Columbia. I have practised my profession for 22 years.
- (3) I am the co-author of this report which is based on an exploration programme carried out on the subject property under my direct supervision.

KERR, DAWSON AND ASSOCIATES LTD.,



*James M. Dawson*  
James M. Dawson, P. Eng.  
Geologist.

Kamloops, B. C.

January 14, 1985.

**KERR, DAWSON AND ASSOCIATES LTD.**  
Consulting Geologists and Engineers

No. 206 - 310 NICOLA STREET • KAMLOOPS, B.C. V2C 2P5 • TELEPHONE (604) 374-0544

C E R T I F I C A T E

I, DOUGLAS A. LEISHMAN, of Kamloops, British Columbia, Do Hereby

Certify That:

- (1) I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite 206 - 310 Nicola Street, Kamloops, B. C.
- (2) I am a graduate of the Northern Alberta Institute of Technology, Exploration Technology (Minerals Option), 1971, Edmonton, Alberta.
- (3) I am a graduate of the Imperial College of Science and Technology, Royal School of Mines, London, England, B. Sc. (Hons.) Mining Geology, 1981. I have been actively involved in mineral exploration since 1971.
- (4) I am the co-author of this report which is based on an exploration programme carried out by myself.

KERR, DAWSON AND ASSOCIATES LTD.,

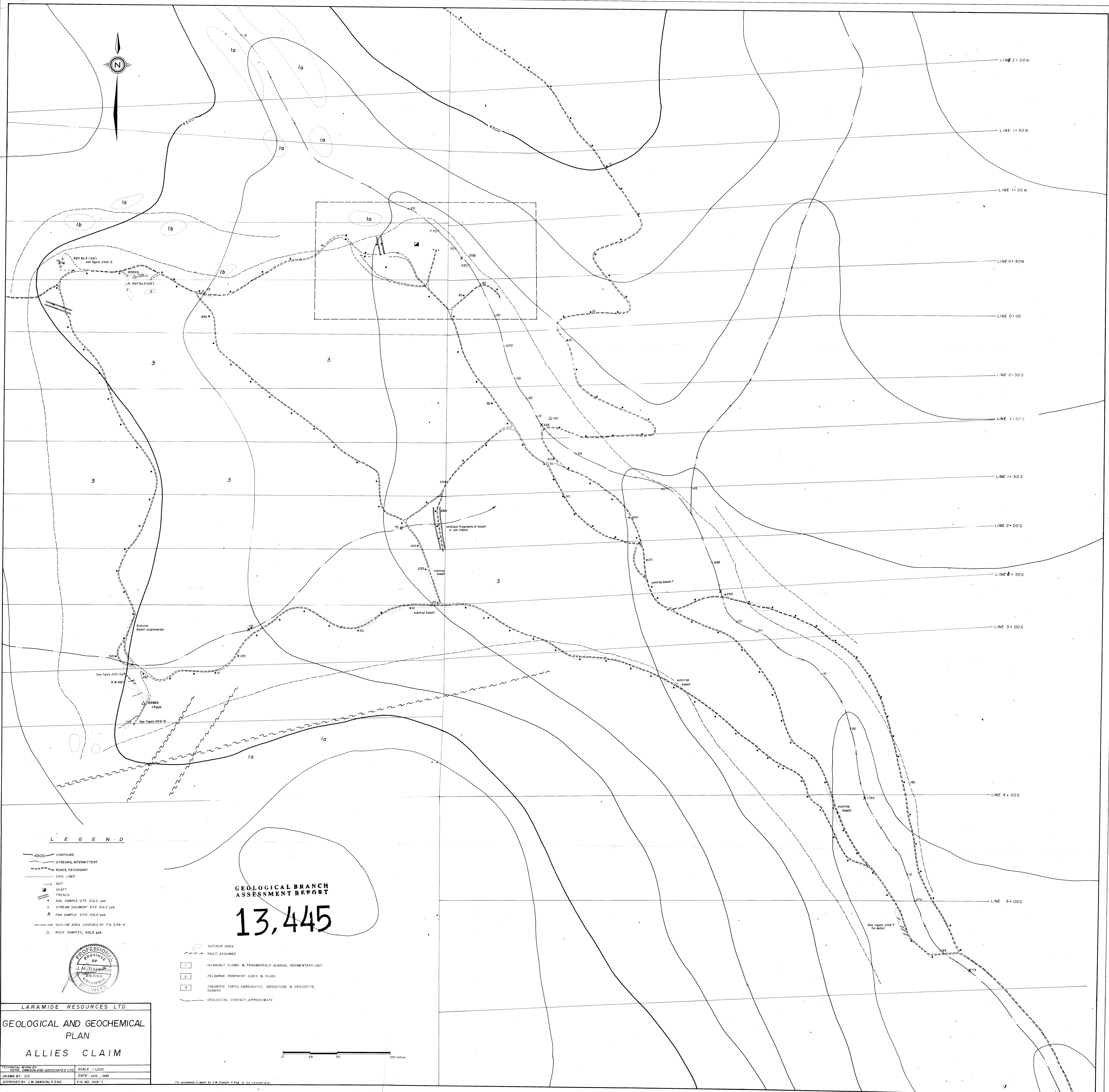
*Douglas A. Leishman*

Douglas A. Leishman, B. Sc. (Hons.)  
Geologist.

Kamloops, B. C.

January 14, 1985.





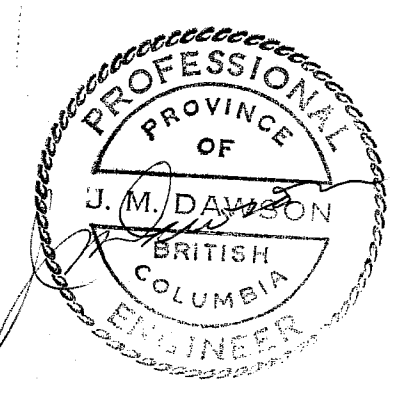
LEGEND

- 4500 CONTOURS
- STREAMS, INTERMITTENT
- ROADS, SECONDARY
- GRID LINES
- ADT
- SHAFT
- TRENCH
- SOL SAMPLE SITE GOLD ppm
- STREAM SEDIMENT SITE GOLD ppm
- PAN SAMPLE SITE GOLD ppm
- OUTLINE AREA COVERED BY FIG 249-4
- ROCK SAMPLES, GOLD ppm

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

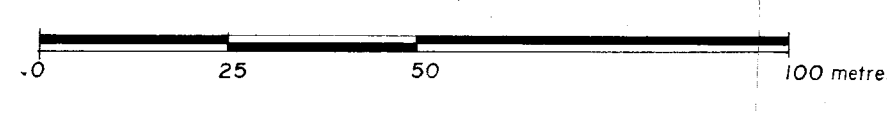
13,445

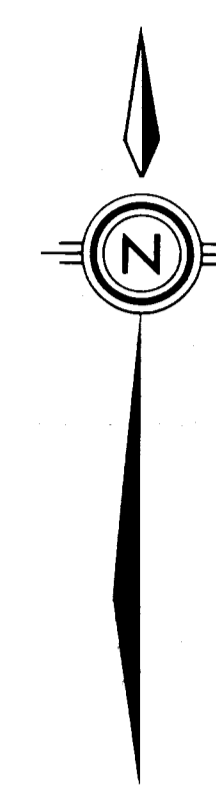
- OUTCROP AREA
- FAULT, ASSUMED
- 1 BASALT FLOWS & FRAGMENTALS IN BASAL SEDIMENTARY UNIT
- 2 FELDSPAR PORPHYRY DINES & PLUGS
- 3 CHLORITIC TUFFS, CARBONATED GREENSTONE & PERIDOTITE, GLENDU
- GEOLOGICAL CONTACT, APPROXIMATE



LARAMIDE RESOURCES LTD.  
 GEOLOGICAL AND GEOCHEMICAL  
 PLAN  
 ALLIES CLAIM

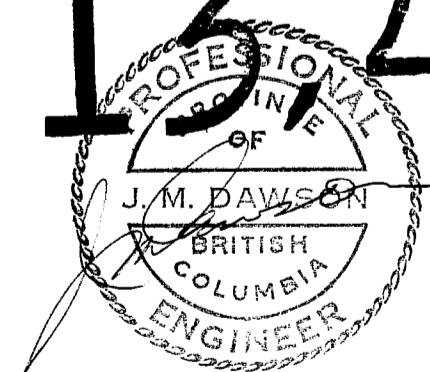
TECHNICAL WORK BY: J.M. DAWSON & ASSOCIATES LTD. SCALE: 1:1,000  
 DRAWN BY: D.C. DATE: JAN., 1985  
 APPROVED BY: J.M. DAWSON, P.ENG. FIG. NO. 249-3





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,445**



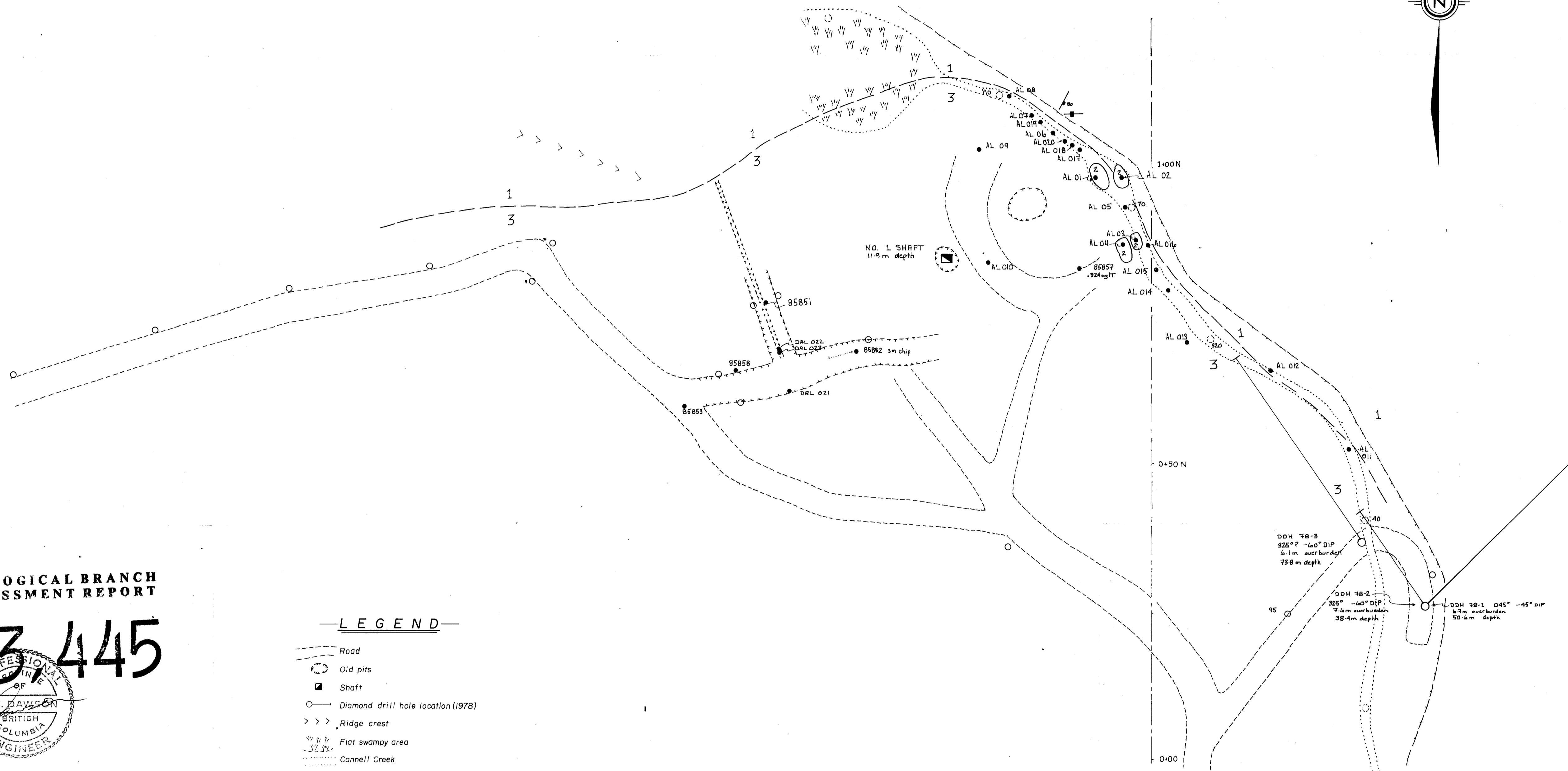
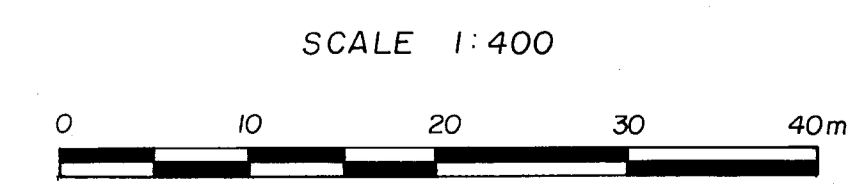
LARAMIDE RESOURCES LTD.

**DETAILED SURFACE PLAN  
NO. 1 SHAFT AREA  
ALLIES CLAIM**

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	DATE: OCT., 1984. (REVISED NOV. 1984.)
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	FIG. NO. 249-4

- LEGEND —**
- Road
  - Old pits
  - Shaft
  - Diamond drill hole location (1978)
  - Ridge crest
  - Flat swampy area
  - Cannell Creek
  - Edge of steep rise
  - Trench, Backhoe trench
  - Soil samples with ppb Au >5
  - Stream " " " "
  - Rock sample location and no.
  - Porphyry boulders
  - Basalt
  - Feldspar porphyry dykes
  - Volcanic greenstone
  - Geologic contact
  - Joint attitude



To accompany a report by D.A. Leishman, B.Sc.