

GEOCHEMICAL, GEOLOGICAL AND GEOPHYSICAL REPORT
on the
SHUKSAN PROPERTY
Atlin Mining Division
NTS 104 N/11,12

October 1983

A.G. Troup, P.Eng.
C. Wong, B.Sc.

CLAIMS WORKED

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Anniversary Date</u>
KAREN 6	20	1369	July 28
SHUKSAN 2	20	1360	July 28
JULIA 4	12	1384	July 29

Location: 59°33' N, 133°29' W

Owner: Surprise Lake Exploration Limited Partnership

Operator: Standard Gold Mines Ltd.

Consultant: A.G.Troup, P.Eng., Archean Engineering Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,511

GEOCHEMICAL, GEOLOGICAL AND GEOPHYSICAL REPORTon theSHUKSAN PROPERTYAtlin Mining DivisionNTS 104 N/11,12SUMMARY

The Shuksan property is a significant new gold discovery located 15 kilometres east of Atlin in northwestern British Columbia. During the 1983 field season a programme consisting of VLF-EM and fluxgate magnetometer surveys, geologic mapping, soil sampling, bulk and chip sampling and trenching was carried out over the property. Trenching exposed a gold-bearing quartz stockwork hosted in carbonatized ultramafic. Assays of the quartz veins returned values ranging up to 9.635 oz./ton gold. The potential for finding a large tonnage deposit is very good.

Additional exploration of the property is recommended to be undertaken in two stages. Phase 1 entails further surface exploration and consists of geologic mapping and prospecting, VLF-EM survey, deep soil sampling, bulk and rock chip sampling and trenching. The Phase 2 programme is dependent upon the results of Phase 1 and entails diamond drilling areas defined by trenching.

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SHUKSAN PROPERTY
Atlin Mining Division

1. INTRODUCTION

The Shuksan property is a lode gold prospect located in the heart of the historic Atlin placer gold camp in northwestern British Columbia (Fig.1). The property was staked in July, 1981 by the Surprise Lake Syndicate on the advice of Consulting Geologist, William T. Irvine after Yukon Revenue Mines Ltd. reported a large low-grade gold discovery in the area. The claims are held under option by Standard Gold Mines Ltd. of Vancouver, B.C.

In 1983 follow-up work consisting of trenching, soil sampling, rock chip and bulk sampling, geologic mapping, VLF-EM and fluxgate magnetometer surveys were carried out over the property. A four-man crew working out of the town of Atlin, completed this work during the period May 23 to September 26, 1983. The programme was supervised by Mark Management project geologist C. Wong under the guidance of A.G. Troup, P. Eng., of Archean Engineering Ltd.

1.1 LOCATION AND ACCESS

The Shuksan gold property located approximately 15 kilometres east of Atlin, covers an area of 105 square kilometres over the valleys of Birch, Otter, Spruce and Dominion Creeks. The claims are centred at latitude 59°33' and longitude 133°29' on NTS map sheets 104 N/11 and 12 (Fig.2).

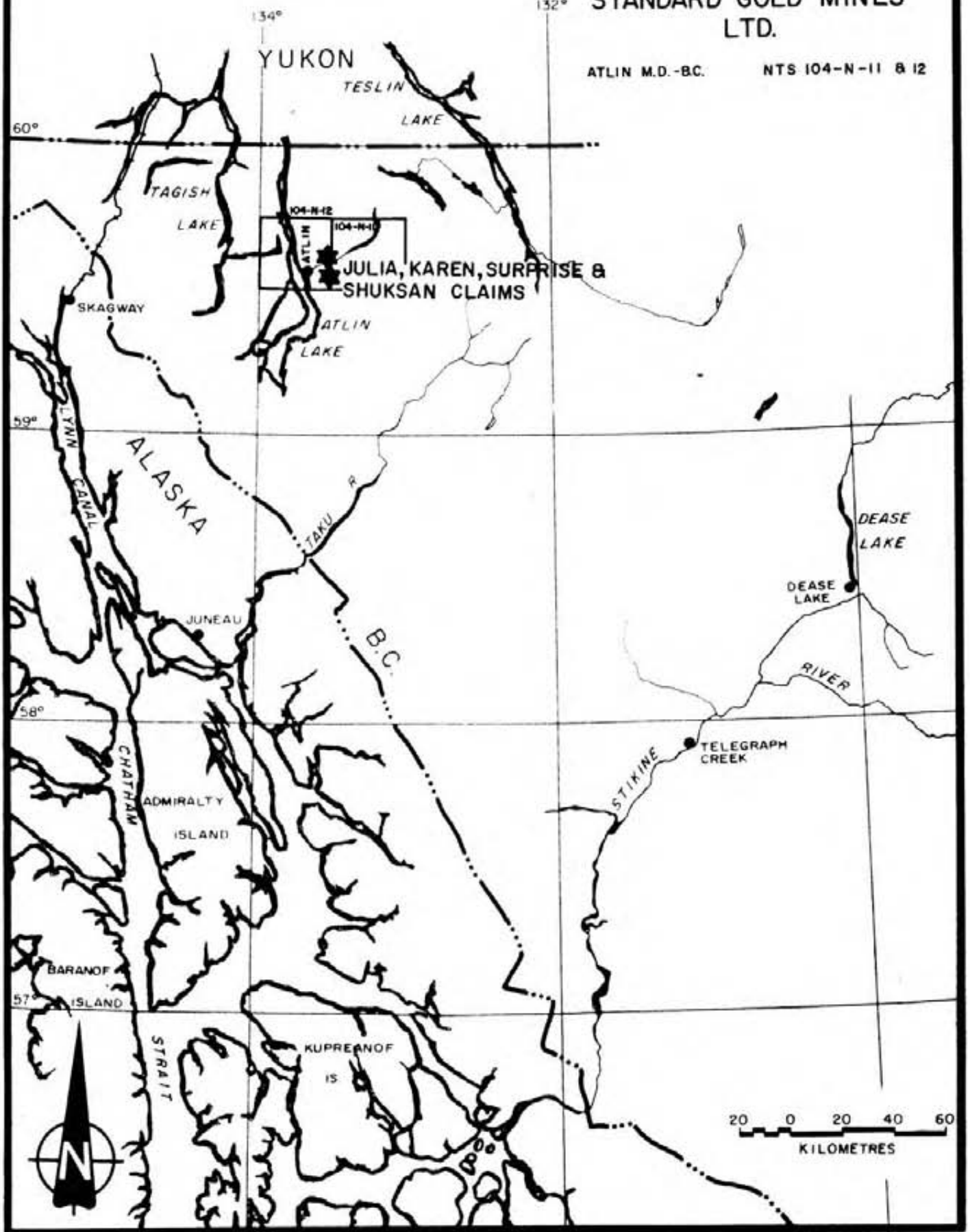
Atlin may be reached by car from Jakes Corner on the Alaska Highway (Mile 865), a distance of about 98 kilometres, along Highway 7. The distance from Jakes Corner to the major northern city of Whitehorse is 84 kilometres along the Alaska Highway, which is paved over this entire length. Whitehorse is served with several flights a day from other major centres in Canada and Alaska.

FIGURE 1

LOCATION MAP STANDARD GOLD MINES LTD.

ATLIN M.D.-BC.

NTS 104-N-11 & 12



Excellent access to the claims is provided by a gravel road that connects Atlin and Surprise Lake. There is a choice of four routes, depending on which portion of the property requires access. Access to the Julia claim group is provided by a good gravel road that services placer operations along Birch Creek. Access to the northeast corner of the property is provided by a good gravel road that services placer operations along Otter and Wright Creeks. The Spruce Mtn. area is reached by a four-wheel drive road that leaves the Surprise Lake road just east of the outfall of Surprise Lake. The four-wheel drive road follows the south trending ridge located between Snake and Otter Creeks before heading west near the headwaters of Snake Creek. The road ends in a series of bulldozer trenches at an elevation of 5,000 feet on the east flank of Spruce Mountain. Access to the central portion of the property is provided by a good gravel road that services placer mining operations along Spruce Creek. The southern portion of the property is reached by a rough four-wheel drive road that leaves the main Spruce Creek road at the old Noland Mine near the confluence of Dominion and Spruce Creeks. This road follows the west side of Dominion Creek and crosses it near an old cabin at an elevation of 4,050 feet. Beyond here the road becomes extremely rough and winds its way south before ending near the southeast corner of the Shuksan 2 mineral claim at an elevation of 4,700 feet.

1.2 PHYSIOGRAPHY, VEGETATION AND CLIMATE

The Atlin area is located just east of the Coast Mountains on the Teslin Plateau. The town of Atlin lies on the east shore of Atlin Lake, the largest natural lake in British Columbia, at an elevation of 2,200 feet. The topography is moderately rugged with slopes of up to 30° rising from the Pine Creek valley floor at an elevation of 3,000 feet to mountains well over 6,000 feet. The immediate area of the property consists of short steep hills and wide, U-shaped valleys striking northeast and northwest. Glaciers occupied the Spruce Creek valley in Pleistocene time and deposited up to 300 feet of

glaciofluvial till during their retreat. Meltwater channels are prominent on Spruce Creek just above its confluence with Dominion Creek and near its confluence with Little Spruce Creek. Till cover is thin or non-existent above the valley floor, giving way to felsenmeer and outcrop at higher elevations.

The tree line is at approximately 4,500 feet on north facing slopes and 5,000 feet on south facing slopes. Below 4,500 feet, the valleys are forested with lodgepole pine, black spruce, aspen and dwarf birch. Mountain alder and willow grow near streams with stunted buckbrush covering the hills above tree line.

Atlin enjoys a pleasant summer climate with temperatures averaging 20°C and little precipitation. Winter temperatures average -15°C in January with moderate snowfall. Total annual precipitation has been measured at 279.4 millimetres of moisture. "Winter" conditions can be expected from October to April.

1.3 CLAIM INFORMATION

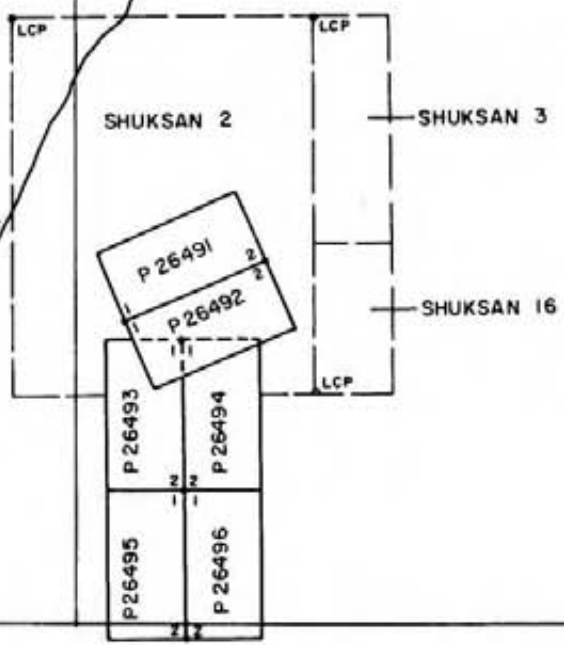
The property is located in the Atlin Mining Division and consists of 29 modified grid claims totalling 423 units and six placer leases (Fig. 3). The claims are owned by the Surprise Lake Exploration Limited Partnership (also known as the Surprise Lake Syndicate) and currently held under option by Standard Gold Mines Ltd. of Vancouver, B.C. Claim information is listed in Table 1.

133° 30'



SPRUCE
CREEK

DOMINION CK.



59° 30'

STANDARD GOLD MINES LTD.	
PLACER LEASES	
ATLIN MINING DIVISION B.C.	
LOCATION MAP	
0 1 2 3 km	
SCALE 1:50,000	
BY: C.W./r.w.r. DATE: OCT. 25, 1983	NTS: 104-N-11, 12 FIGURE 3

TABLE 1
CLAIM STATUS

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Anniversary Date</u>
JULIA 4	12	1384	July 29
JULIA 5	6	1976	August 2
JULIA 6	15	1977	August 2
JULIA 7	18	1978	August 2
KAREN 3	16	1366	July 28
KAREN 4	15	1367	July 28
KAREN 5	10	1368	July 28
KAREN 6	20	1369	July 28
KAREN 7	20	1370	July 28
KAREN 8	6	1371	July 28
KAREN 9	6	1372	July 28
SURPRISE 1	20	1756	October 22
SHUKSAN 1	12	1359	July 28
SHUKSAN 2	20	1360	July 28
SHUKSAN 3	3	1361	July 28
SHUKSAN 4	12		September 2
SHUKSAN 5	16		September 2
SHUKSAN 6	20		September 2
SHUKSAN 7	16		September 2
SHUKSAN 8	20		September 2
SHUKSAN 9	20		September 2
SHUKSAN 10	20		September 2
SHUKSAN 11	18		September 2
SHUKSAN 12	20		September 2
SHUKSAN 13	20		September 2
SHUKSAN 15	20		September 2
SHUKSAN 16	2		September 2
SHUKSAN 17	10		September 2
SHUKSAN 19	20		September 20

PLACER LEASES

<u>TAG NO.</u>	<u>LEASE NO.</u>	<u>ANNIVERSARY</u>	<u>APPLICATION DATE</u>
P26491			September 2
P26492			September 2
P26493			September 2
P26494			September 2
P26495			September 2
P26496			September 2

1.4 HISTORY

Gold was first discovered in the Atlin area in 1897 by Fritz Miller while en route to Dawson. The first workings were on Pine Creek and by the end of 1898, more than 3,000 people were camped in the Atlin area. Only 8 creeks - Spruce, Pine, Birch, Boulder, Ruby, Otter, Wright and McKee - have been important producers in the Atlin camp. Gold production from these creeks in the period 1898 to 1946 is listed in Table 2. By far the most important producer was Spruce Creek with a reported total of well over 260,000 ounces of placer gold through 1946. Almost all the gold was recovered from a Tertiary channel which appeared as a claybound orange-red gravel about three metres thick overlying bedrock. The channel was worked more or less progressively upstream from west to east for a distance of five and a half kilometres. The eastern limit of the worked channel is located at the old Noland Mine at the confluence of Spruce and Dominion Creeks. By 1957, the workings had been advanced underground a further 1,266 metres upstream. Gravels worked underground are reported to have averaged 0.65 ounces of gold to the cubic yard.

Gold-bearing quartz veins were first discovered in the Atlin area in 1899 and by 1905 most of the known showings had been discovered. Although the original showings have been repeatedly worked and re-examined there is no record of regional exploration for lode mineralization since 1905. In 1981, Yukon Revenue Mines Ltd. acquired and re-examined the old Lakeview property. Work done by Yukon Revenue showed low-grade gold values over an extensive but delicate stockwork of carbonatized and silicified andesite adjacent to a serpentinite intrusive.

The discovery by Yukon Revenue Mines Ltd. and the similarity of geology in the vicinity of major placer gold producing streams prompted the Surprise Lake Syndicate to stake the Shuksan property.

TABLE 2 (from Holland, 1950)

Gold Recovery from Productive Creeks, Atlin Area, 1898-1946.

<u>Stream Name</u>	<u>Ounces of Gold Produced</u>
Spruce Creek	262,603
Pine Creek	138,144
Boulder Creek	67,811
Ruby Creek	55,272
McKee Creek	46,953
Otter Creek	20,113
Wright Creek	14,729
Birch Creek	12,898
All Others (21 creeks)	15,624

1.5 WORK DONE BY STANDARD GOLD MINES LTD. IN 1983

The following field work was completed on the Shuksan property by Standard Gold Mines Ltd. during the period May 23 to September 26, 1983:

- 1) VLF-EM survey over the Noland grid.
- 2) Fluxgate Magnetometer survey over the Noland grid.
- 3) Trenched a VLF-EM conductor and soil geochemistry anomalies on the Shuksan 2 mineral claim.
- 4) Rock chip sampled all trenches and bulk sampled all veins and siliceous zones.
- 5) Soil sampled Trench 3.
- 6) Detailed geologic mapping at a scale of 1:2,000 over the trenched area on the Shuksan 2 mineral claim.

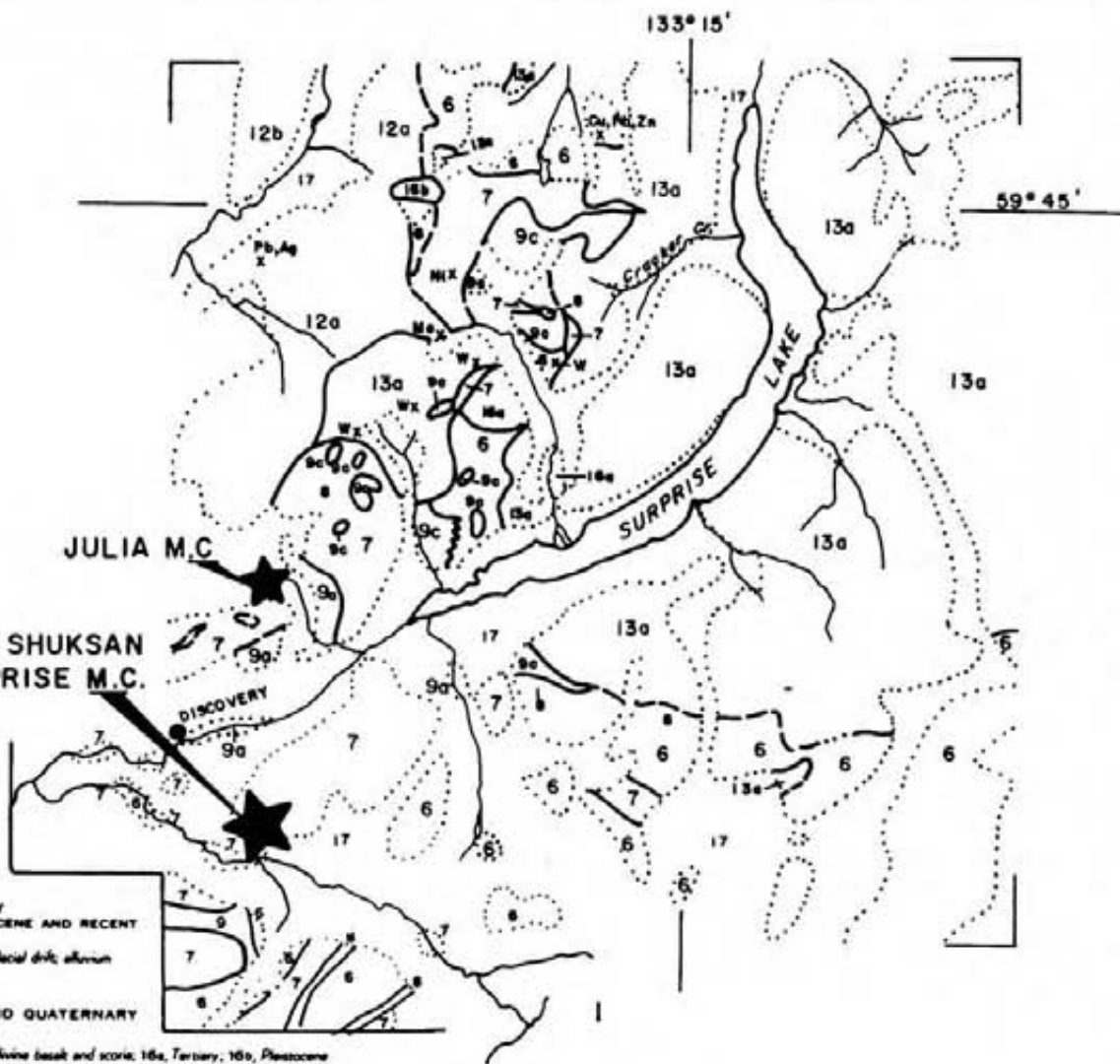
2. GEOLOGY

2.1 REGIONAL GEOLOGY

Geologic mapping of this area was undertaken in 1951-55 by J.D. Aitken of the Geological Survey of Canada (GSC) and compiled as Map 1082A (Figure 4). In 1966-68, J.W.H. Monger, also of the GSC, selectively mapped the Atlin area and published his findings in GSC Paper 74-47.

The Atlin region is located in a eugeosynclinal area composed of three distinct northwest striking tectonic belts; the St. Elias and Insular Belt, Coast and Cascades Belt and Intermontane Belt. The rocks of the area belong to the Atlin Terrane, which represents an independent tectonic entity of the oceanic sequence of the Intermontane Belt in the Canadian Cordillera. The Atlin Terrane consists of upper Paleozoic age radiolarian cherts, pelites, carbonates, volcanics and ultramafics. These rocks are intruded by Mesozoic granite, alaskite and quartz monzonite. The youngest rocks of the Atlin Terrane are composed of Tertiary and Quaternary volcanics. Till deposited by receding Pleistocene glaciers extensively covers the valleys.

The Atlin Terrane is bounded on the northeast by a northwest striking vertical fault and on the southwest by a northwest striking reverse fault. Structurally, the terrane is characterized by compressional deformation which is similar in style and trend to the southwest bounding faults (Monger, 1975). Minor fold axes generally strike northwest or trend southwest.



LEGEND

- | | | | |
|----------|-----------|--|---|
| CENOZOIC | 17 | QUATERNARY
PLEISTOCENE AND RECENT
Glacial drift, alluvium | |
| | 16 | TERTIARY AND QUATERNARY
Olivine basalt and scoria; 16a, Tertiary; 16b, Pleistocene | |
| | 15 | TERTIARY (?)
15a, quartz monzonite; 15b, granophyre; 15c, gabbro and diorite | |
| | 14 | CRETACEOUS OR TERTIARY
SLOKO GROUP
Andesite, basalt, albite trachyte, albite rhyolite, dacite, and related pyroclastic rocks, conglomerate, sandstone | |
| | 13 | CRETACEOUS
13a, alaskite; 13b, quartz monzonite | |
| | 12 | JURASSIC (May be in part older and younger)
COAST INTRUSIONS
Undifferentiated granitic rocks; 12a, Black Mountain body; 12b, Fourth of July Creek body; 12c, pink granite; 12d, Mount McMaster body; 12e, diorite; 12f, alkaline granite | |
| | 11 | JURASSIC
LABERGE GROUP
Volcanic gneiss, siltstone, mudstone, shale, conglomerate, minor concretionary sandy limestone | |
| | 10 | TRIASSIC (?)
Gneiss, chert, argillite, conglomerate, silt, slate, greenstone, impure limestone, soap | |
| | PALEOZOIC | 9 | PENNSYLVANIAN AND PERMIAN
ATLIN INTRUSIONS
Pondose, meta-diorite and meta-gabbro; 9a, serpenite; 9b, carbonized serpenite; 9c, talc-bearing (steatized) ultramafic rocks |
| | | 6 7 8 | CACHE CREEK GROUP
6, Chert, argillite, chert-pebble conglomerate and chert breccia; derived quartzite and schist; minor 7 and 8
7, Greenstone and volcanic gneiss; derived amphibolite, minor 6 and 8
8, Limestone and limestone breccia |

x MINERAL OCCURENCE

STANDARD GOLD MINES LTD.
 JULIA, KAREN, SHUKSAN & SURPRISE M.C.
 ATLIN M.D.—B.C. NTS 104-N-11,12

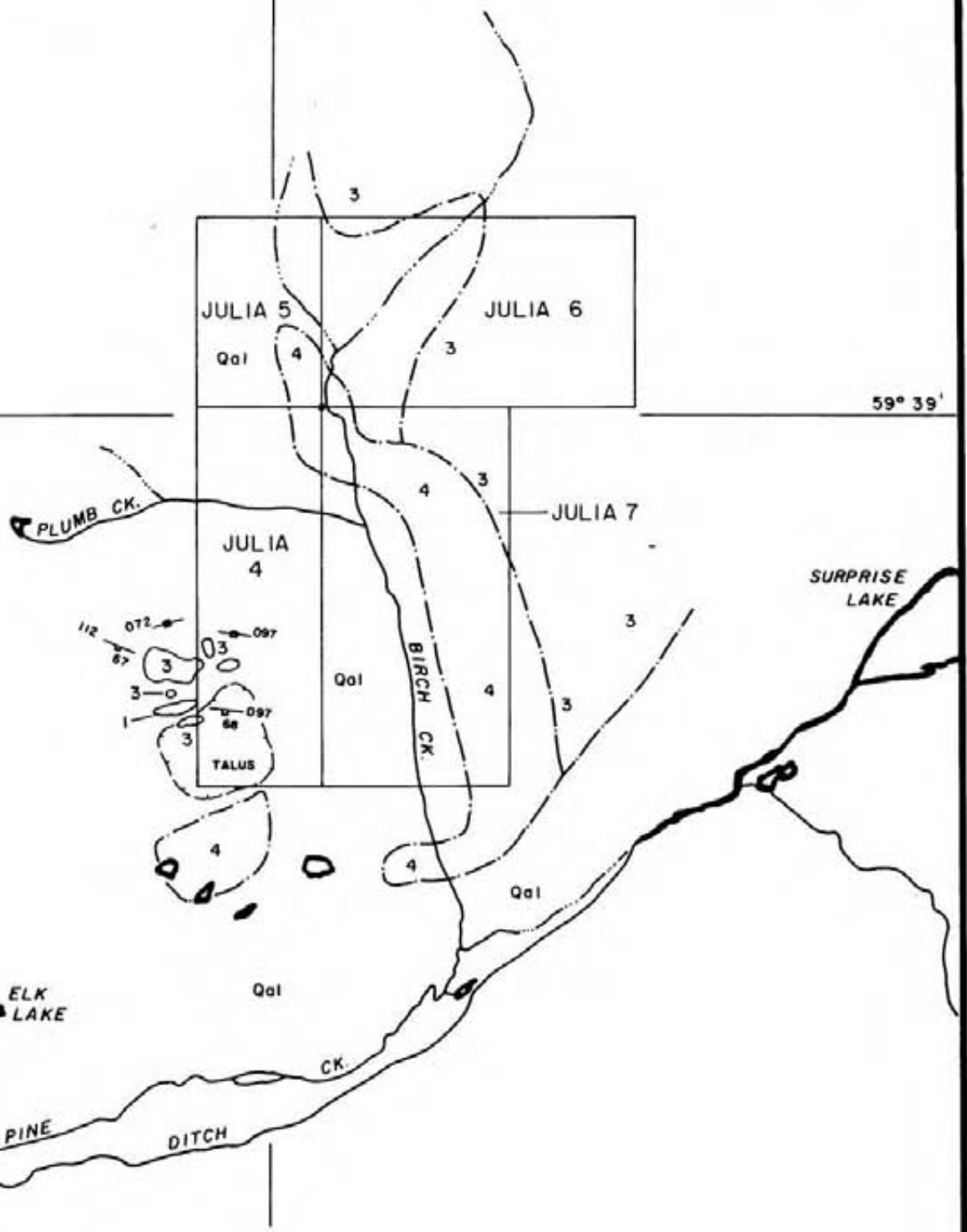
GENERAL GEOLOGY MAP
 SCALE 1:253,440 (1"=4 Miles)

DATE: Feb., 1983 C.W./r.w.r.
 AFTER 93C MAP 108EA FIGURE 4



133° 30'

59° 39'



LEGEND:

QUATERNARY

Qal GLACIAL DRIFT, ALLUVIUM

**PENNSYLVANIAN & PERMIAN
ATLIN INTRUSIONS**

4 ULTRABASIC &/or ULTRAMAFIC
CACHE CREEK GROUP

3 ANDESITE

1 LIMESTONE

SYMBOLS:

OUTCROP

CONTACT, approx.

**FRACTURE
(strike & dip)**

120
35

STANDARD GOLD MINES LTD.

JULIA CLAIMS

ATLIN MINING DIVISION B.C.

GEOLOGICAL MAP



SCALE 1 : 50,000

BY: C.W./r.w.r.
DATE: OCT. 19, 1983

NTS: 104-N-11, 12
FIGURE 5

2.2 PROPERTY GEOLOGY

Outcrop exposure accounts for 30% of the surface area on the property. Felsenmeer is present in areas of no outcrop and is assumed to be close to outcrop. Till covers the valleys below 4,300 feet elevation.

Reconnaissance mapping of the Julia claim group agrees closely with the GSC mapping (Figure 5). The Shuksan property is underlain by Cache Creek Group metasediments and volcanics intruded by Pennsylvanian and Permian talcose ultramafics (Figure 6).

The Cache Creek Group rocks are of Pennsylvanian and Permian age and consist of limestone, chert and andesite. Monger (1975) classifies the limestone and chert as forming part of the Kedahda Formation and the andesite as part of the Nakina Formation. The andesite is typically drab grey-green in colour, siliceous, sometimes weakly carbonatized and contains 1% primary pyrite. The carbonatized ultramafic and carbonatized andesite are often difficult to distinguish apart because of their indistinct contact. The fetid limestone is ash grey in colour and contains fossil fragments believed to be crinoids. The dark grey to black coloured chert is a useful marker bed. Bedded chert is noted in only one location on the property. A cherty or graphitic argillite is commonly interlayered with the chert.

The Pennsylvanian and Permian ultramafics are part of the Atlin Intrusions and consist of serpentinite, carbonatized serpentinite and gabbroic dykes. Serpentinite is by far the most common ultramafic present. Usually it is dark green to dull waxy green in colour, talcose, weathered and carbonatized and quartz-veined near its contact with the chert. The quartz veins occasionally contain minor disseminated pyrite and mariposite. The carbonatized ultramafic is characterized by rusty orange-brown weathering and occurs as a recessive unit. It is rarely seen in outcrop although

areas where numerous frost heaved carbonatized ultramafic chips are found are believed to be close to outcrop. The gabbroic dykes occur on Spruce Creek in the vicinity of the Noland Mine. The dykes are composed of medium-grained pyroxene in a plagioclase groundmass. A younger(?) 20 metre wide quartz-feldspar porphyry dyke oriented sub-parallel to Spruce Creek also occurs near the Noland Mine.

Stratigraphically, from top to bottom, the units are as follows: andesite, carbonatized andesite, chert interlayered with argillite, carbonatized ultramafic, ultramafic and limestone. Locally pods of limestone are seen to lie stratigraphically above the ultramafic and below the chert. This incongruity is explained by the rafting up of limestone pods by the ultramafic as it intruded upwards through the limestone. In terms of age, the ultramafic is youngest. The true thickness of each unit is uncertain. The lower contact of the limestone is not mapped, making a determination of its thickness impossible. The chert horizon varies dramatically in thickness; anywhere from a metre to tens of metres thick. Due to erosion, the thickness of the andesite is indeterminable although it is believed to exist only as a thin capping.

The intrusive nature of the ultramafic suggests that sills and dykes of it pinch and swell in thickness. The gabbroic dykes extend into the andesite and measure up to five metres in width.

Intense fracturing of the limestone near the southern boundary of the Shuksan 2 claim indicates an east-west striking shear. Hidden faults may occur parallel to or underlie Spruce, Dominion and Rant Creeks. Folds as indicated by the mapped chert horizon are of the open type. Fold axial traces, southwest of Spruce Mountain, plunge to the northeast and southwest towards the Noland Mine. Two phases of minor folding are evident on the Shuksan 2 mineral claim. The primary antiform trends southwest and the secondary very low amplitude synform trends north-northwest (Figure 9).

2.3 ECONOMIC GEOLOGY

The Atlin area has enjoyed a history of productive placer mining and to a lesser extent, lode gold mining. Of special interest is the Noland Mine located at the confluence of Spruce and Dominion Creeks on the Karen 6 mineral claim, the Surprise lode showing on the Surprise 1 claim and the newly discovered lode gold showing on the Shuksan 2 claim.

The Noland Mine was an underground operation worked until 1957 when static gold prices (\$35 Cdn. per ounce) made further underground mining unattractive. During the period 1950 to 1957, a reported total of 41,000 ounces were produced from the underground workings. Many ounces of gold still remain and there are current plans to re-open the mine. Gravels mined from the gold-bearing Tertiary channel gave values as high as \$133 per cubic yard (gold valued at \$31 Cdn. per ounce) although average values were 1/7 this amount. The gold occurs as smooth grains and nuggets, suggesting transport from a distant source. It is hypothesized that the new lode gold showing on the Shuksan 2 claim may be one of the sources of gold found in the Noland Mine. Peculiarly, the highest grade gravel is in a short 300 feet stretch of the Tertiary channel where 200 feet of apparent left-lateral offset occurs (See Figures 10 and 11). Coincidentally, this high-grade stretch of gravel is along strike of the gabbroic dykes mapped along Spruce Creek. The present-day Spruce Creek channel also shows this offset near the gabbroic dykes. This suggests the possibility that the dykes acted as mineralized solution guides and are related to gold mineralization.

The Surprise showing is located on the northeast shoulder of Spruce Mtn. at an elevation of approximately 4,500 feet. The showing consists of a quartz vein emplaced in andesite measuring up to six metres in width and striking 170/70 W. Exploration with an adit prior to 1925 uncovered minor amounts of argentiferous galena, pyrite,

chalcopyrite and siderite. Resampling of this showing in 1982 returned values of 0.042 ounces of gold per ton and 1.20 ounces of silver per ton. A series of 1980 bulldozer trenches located south of the Surprise showing exposes a quartz stockwork containing pyrite and pervasive malachite in a carbonatized ultramafic host. Chip samples collected from the trenches assay as high as 0.018 ounces of gold per ton. The geology in the trenches appears very favourable. The presence of a weakly mineralized quartz stockwork in the carbonatized ultramafic indicates that gold mineralization may exist elsewhere on the property at this stratigraphic level.

The newly discovered lode gold showing on the Shuksan 2 claim is located near a carbonatized ultramafic-chert contact. In August 1983, backhoe trenching of a coincident soil anomaly and strong EM conductor over the contact, exposed twelve sub-parallel gold-bearing quartz veins striking northwest and dipping steeply to the southwest, measuring between 4 and 90 centimetres in width in Trenches 3, 6, and 7 (Figures 7, and 8a through 8k). Many of the veins pinch and swell in width along strike, are intensely fractured and appear rust coloured. The veins occur in a carbonatized ultramafic host and appear to be bounded on the northwest by a northeast striking graphitic argillite shear zone. Visible gold occurs in many of the veins, locally in spectacular concentrations. Large 15 kilogram bulk samples taken from the quartz veins returned values ranging up to 9.635 ounces of gold per ton. Trenching completed to date indicates the discovery zone to have dimensions of 36 metres width and 18 metres strike length.

The eastern limit of mineralization in the discovery zone has been defined by Trenches 7 and 11. The associated EM conductor extends at least 475 metres beyond the western limit of trenching, suggesting that the discovery zone may extend a considerable distance to the west. The zone is open to the south.

Trenching of an area containing high gold values in soils, 365 metres to the northeast of the discovery zone, exposed a narrow three centimetre wide quartz vein that assayed 0.262 oz./ton. Carbonatized ultramafic wall rock chip samples taken from Trench 1 assayed as high as 0.130 oz./ton. A VLF-EM conductor also occurs adjacent to this zone. Further trenching of this zone is required to properly assess it.

The implications of the new discovery are significant in that similar gold mineralization may exist elsewhere on the property at the important ultramafic-chert contact in areas where few signs of mineralization are evident on the surface.

3. GEOCHEMISTRY

3.1 GRAB SAMPLING

3.1.1 SAMPLING AND SAMPLE TREATMENT

A total of 75 grab samples were collected for assay from various rock types, quartz veins, rust-stained boulders and mariposite stained carbonatized rock. Typically the samples consisted of two or three fist-sized representative specimens although areas of mineralization and great interest were systematically chip sampled. Sample sites were indicated by orange flagging and the samples placed in labelled plastic bags. The samples were shipped to Chemex Labs. Ltd. in North Vancouver where they were crushed to minus 100 mesh and fire assayed for gold.

3.1.2 PRESENTATION AND DISCUSSION OF RESULTS

Table 3 gives a brief description of the grab samples together with the assay results and sample numbers. Sample locations and assay results are shown in Figure 12. The results show gold assays to range from trace to 0.042 ounces per ton. Many of the quartz veins and boulders gave low assay values. The low values might be explained by the fact that many of the samples were obtained from veins occurring in sills and dykes of ultramafic where a minimal amount of hydrothermal activity occurred. Gold values may be higher in veins near the plug of the ultramafic where hydrothermal fluids easily percolated up along fractures and shrinkage cracks. The best values are associated with the mariposite stained carbonatized ultramafic stockwork and from the Surprise quartz vein.

TABLE 3

Rock Sample Descriptions and Results
(L indicates 'less than')

<u>Assay Tag No.</u>	<u>Sample</u>	<u>Assay Value Au oz./t</u>	<u>Description</u>
38301	SH 109	0.006	Quartz-calcite veinlets in chloritic andesite
38302	SH 200	0.008	Carbonatized andesite with minor pyrite
38303	SH 201-C	0.008	Chert
38304	SH 201-M	L0.003	Mariposite stained andesite
38305	SH 201-Q	0.004	Quartz vein with argillite fragments
38306	SH 202	L0.003	Carbonatized ultramafic with quartz veinlets
38307	SH 203	L0.003	Carbonatized ultramafic with quartz veinlets and mariposite staining
38308	SH 204	0.014	Rusty quartz veinlets in carbonatized andesite
38309	SH 301	L0.003	Quartz boulders at the andesite-ultramafic contact
38310	SH 302	L0.003	Carbonatized andesite with quartz veinlets
38311	SH 303	0.003	Quartz vein with minor chalcopyrite
38312	SH 304	0.003	Andesite with disseminated pyrite
38313	SH 305	0.003	Quartz vein at the andesite-ultramafic contact
38314	SH 306-Q	L0.003	Quartz vein in mariposite stained carbonatized andesite
38315	SH 307	L0.003	Quartz veinlets in andesite
38316	SH 306-M	0.003	Mariposite stained carbonatized andesite

TABLE 3 Continued

<u>Assay Tag No.</u>	<u>Sample</u>	<u>Assay Value Au oz/t</u>	<u>Description</u>
38317	SH 308	L0.003	Quartz vein with argillite fragments
38318	SH 309	0.003	Quartz vein in carbonatized andesite
38319	SH 310	L0.003	Quartz veinlets at the andesite-ultramafic contact
38320	SH 311-Q	L0.003	Rust-stained quartz veinlets
38321	SH 311-M	L0.003	Mariposite stained carbonatized ultramafic
38322	SH 312	L0.003	Quartz vein with mariposite stained carbonatized ultramafic
38323	SH 314	0.003	Silicified pyroxenite
38324	SH 205	L0.003	Chip sample across a sheared quartz vein
38325	SH 206	0.042 Ag 1.20 oz./t	Surprise showing, chip sample across a quartz vein containing minor galena
38326	SH 207	L0.003	Talcose ultramafic with disseminated pyrite
38327	SH 316	L0.003	Carbonatized ultramafic with mariposite
38328	SH 110	L0.003	Carbonatized andesite with quartz veinlets
38329	SH 111	L0.003	Carbonatized andesite
38330	SP 001	0.010	Carbonatized ultramafic from trench
38331	SP 002	L0.003	Silicified carbonatized ultramafic from trench
38332	SP 003	L0.003	Carbonatized ultramafic with mariposite
38333	SP 004	0.004	Carbonatized ultramafic with mariposite

TABLE 3 Continued

<u>Assay Tag No.</u>	<u>Sample</u>	<u>Assay Value Au oz./t</u>	<u>Description</u>
38334	SP 005	0.003	Carbonatized ultramafic gouge from trench
38335	SP 007	0.004	Silicified carbonatized serpentine with mariposite from trench
38336	SP 008	0.018	Carbonatized ultramafic with mariposite from trench
38337	SP 006	0.004	Quartz veinlets with mariposite stained carbonatized ultramafic
38338	SP 010	0.003	Carbonatized ultramafic from trench
38339	SH 126	L0.003	Calcareous andesite with oxidized pyrite
38340	SH 120	L0.003	Andesite with quartz and pyrite
38341	SH 124	L0.003	Carbonatized andesite with quartz veinlets
38342	SH 125	L0.003	Calcareous andesite
38343	SH 122	L0.003 Cu 1600 ppm	Bedded chert with disseminated chalcopyrite
38344	SH 127	L0.003	Limy, rust-stained andesite with pyrite
38345	SH 128	L0.003	Carbonatized ultramafic
38346	SH 129	L0.003	Chlorite schist
38347	12W8N Shuksan Grid	L0.003	Carbonatized ultramafic with mariposite and quartz
38348	SH 317	L0.003	Quartz boulder
38349	SH 318	L0.003	Quartz with chert
38350	SH 319	L0.003	Quartz with carbonatized ultramafic
38397	SH 104	L0.003	Black chert with quartz veinlets
38398	SH 105	L0.003	Quartz vein in andesite

TABLE 3 Continued

<u>Assay Tag No.</u>	<u>Sample</u>	<u>Assay Value Au oz./t</u>	<u>Description</u>
38399	SH 106	L0.003	Quartz vein with chalcopyrite and malachite staining
38400	SH 107	L0.003	Chert with disseminated pyrite
47084	SH 320	L0.003	Carbonatized ultramafic with quartz veinlets
47085	SH 321	L0.003	Carbonatized ultramafic with quartz and mariposite
47086	SH 322	L0.003	Rusty quartz
47087	SH 323	L0.003	Quartz with mariposite
47088	SH 324	L0.003	Carbonatized ultramafic
47089	SH 325	L0.003	Andesite with quartz veinlets
47090	SH 009	L0.003	Chert
47091	SH 010	L0.003	Carbonatized ultramafic with quartz and mariposite
47092	SH 208	L0.003	Carbonatized ultramafic with quartz and mariposite
47093	SH 211	L0.003	Rust-stained quartz boulder
47094	SH 212	L0.003	Talcose serpentinite
47095	SH 213	0.042	Rust-stained quartz boulder lying on carbonatized serpentinite
47096	SH 214	L0.003	Silicified chert
47097	SH 215	0.004	Chert with quartz veinlets
47098	SH 216	L0.003	Green chert with quartz veinlets
47099	SH 217	0.005	Carbonatized serpentinite with quartz stringers
47100	SH 218	L0.003	Carbonatized serpentinite with quartz and mariposite

TABLE 3 Continued

<u>Assay Tag No.</u>	<u>Sample</u>	<u>Assay Value Au oz./t</u>	<u>Description</u>
54931	LD 011	L0.003	Limy andesite
54932	LD 012	L0.003	Quartz stringer in andesite
54933	LD 013	L0.003	Gabbro dyke
54934	S001	L0.003	Quartz-feldspar porphyry dyke

3.2 BULK AND ROCK CHIP SAMPLING

3.2.1 SAMPLING AND SAMPLE TREATMENT

A total of 36 bulk samples and 268 rock chip samples were collected for assay from eleven trenches. The bulk samples consisted of large 15 kilogram samples of vein quartz. Wallrock chip samples were collected at select intervals and did not include vein material. All samples were placed in labelled plastic bags and shipped to Chemex Labs. Ltd. in North Vancouver for analysis.

In the laboratory, the bulk samples were crushed to minus 1/8 inch and split using a riffle splitter. A 400 gram sub-sample was taken from one of the two split samples, pulverized to minus 100 mesh and fire assayed for gold. Chip samples were similarly pulverized to minus 100 mesh and fire assayed for gold.

Selected high grade bulk and wallrock chip samples were also analysed for 24 elements using the ICP-AES analytical technique.

3.2.2 PRESENTATION AND DISCUSSION OF RESULTS

Sample locations, assay results and trench geology are shown in Figures 8a - 8k. Bulk sample assays range from 0.003 to 9.635 oz./ton with many of the bulk samples assaying over one oz./ton. The majority of the bulk samples are from Trenches 3, 6 and 7. Significantly, some wallrock chip samples assay as high as 0.25 oz./ton, indicating that mineralization also occurs over rust-stained carbonatized areas.

The ICP-AES analyses indicate that Fe and Cu may be used as effective pathfinder elements for gold mineralization.

3.3 SOIL SAMPLING

3.3.1 SAMPLING AND SAMPLE TREATMENT

Soil sampling was carried out over selected areas of carbonatized ultramafic in 1982 and in Trench 3 in 1983 to test for the

presence of gold over carbonatized areas. Samples were collected at 25 metre intervals along portions of the upper and lower carbonatized ultramafic contact and at one metre intervals in Trench 3. A total of 260 'B' horizon and talus-fine samples were collected with the aid of a mattock. All samples were placed in labelled kraft envelopes and shipped to Chemex Labs Ltd. in North Vancouver for analysis.

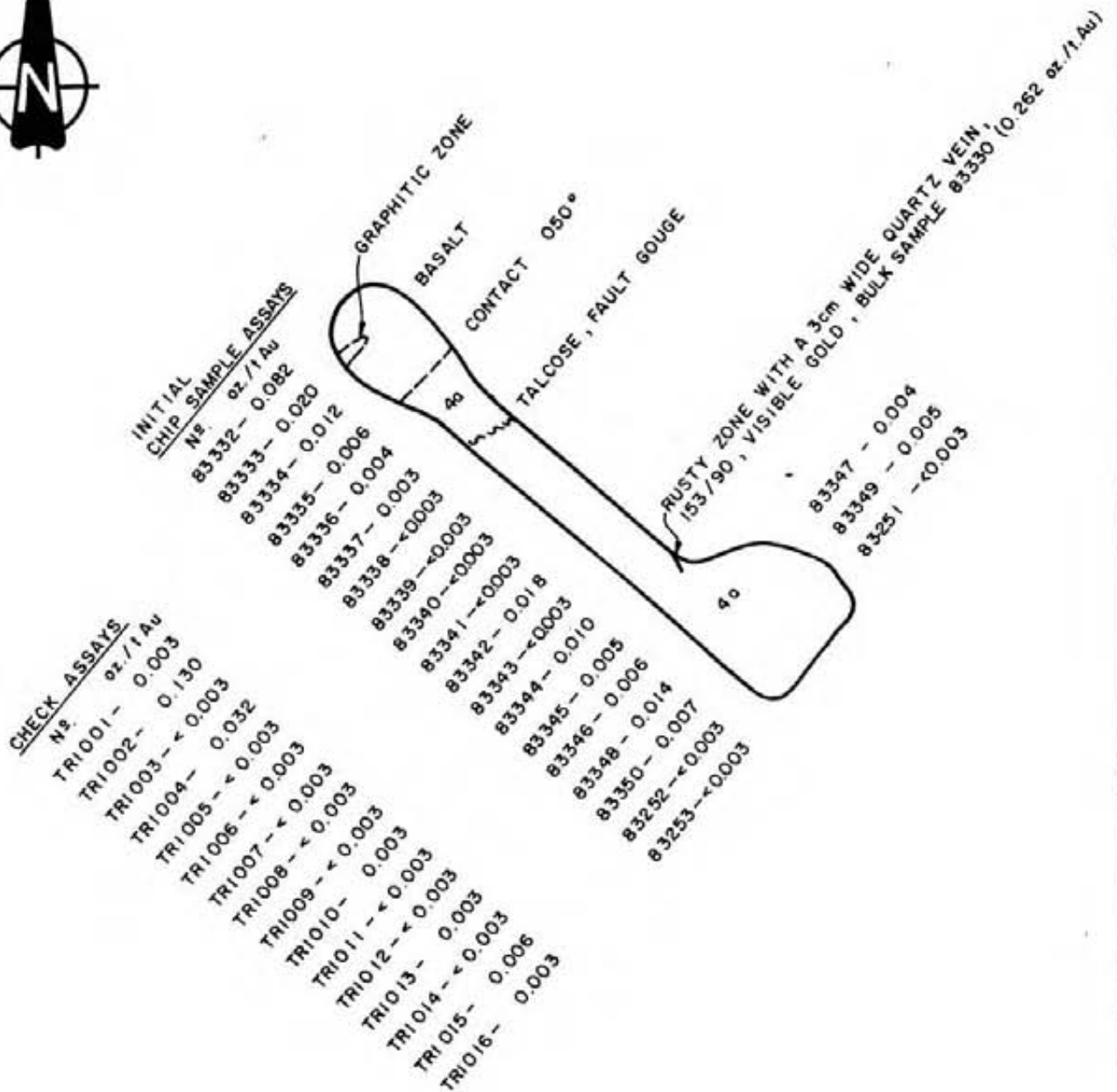
In the laboratory, samples were oven-dried at approximately 60°C and sieved to minus 80 mesh. The coarse fraction was discarded and the minus 80 fraction analysed for gold by atomic absorption. Selected anomalous soil samples from Trench 3 were also analysed for 24 elements using the ICP-AES analytical technique.

3.3.2 PRESENTATION AND DISCUSSION OF RESULTS

The majority of the values obtained in the laboratory were below the detection limit of 10 ppb, therefore statistical methods could not be used to determine meaningful threshold and anomalous levels. Previous experience has shown that gold values of 20 ppb or greater may be considered important and possibly anomalous.

The soil sample results are plotted on Figures 8c, 13 and 14. The results show 51 of the 260 samples to contain detectible gold concentrations with values ranging from 20 ppb to 500 ppb. Considering the thickness of clay-rich overburden (1 to 2 metres) and the particulate and relatively insoluble nature of gold, it is significant that 20 percent of the values are anomalous. Many of the anomalous soil samples occur over the area of trenching, especially in trench 3 where visible gold-bearing quartz veins are known to occur in carbonatized ultramafic.

Again, the ICP-AES analyses indicate that Fe and Cu are useful pathfinder elements for gold mineralization.



LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC B/or
ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

--- CONTACT
 ~~~ SHEAR  
 — QUARTZ VEIN  
 130/45 FRACTURE  
 (strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

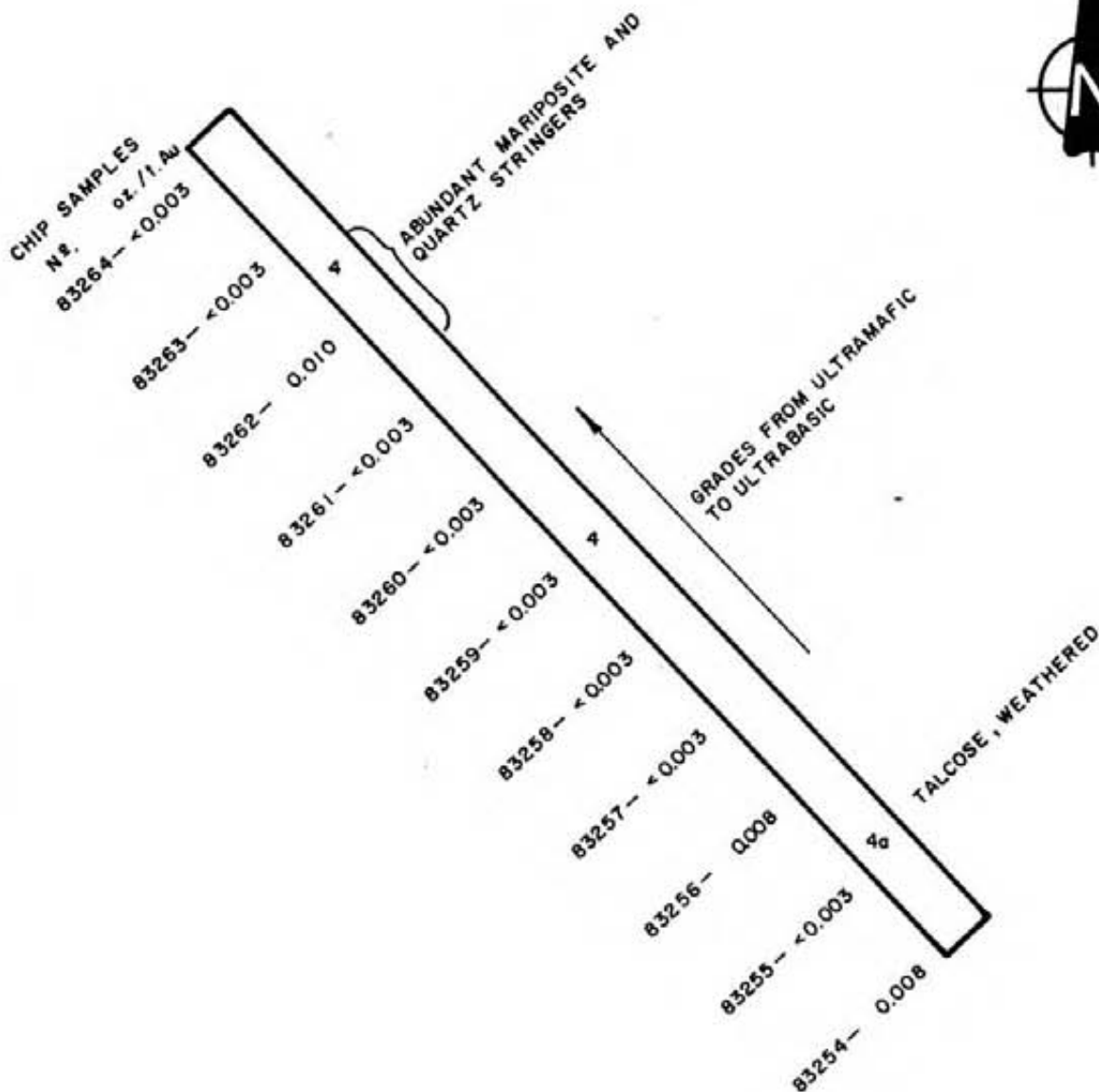
TRENCH I

0 5 10m

SCALE 1:200

BY: C.W./r.w.r.  
DATE: OCT. 21, 1983

NTS: 104-N-11, 12  
FIGURE 8a



**LEGEND:**

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

**4** ULTRABASIC &/or  
ULTRAMAFIC

**4a** CARBONATIZED 4

CACHE CREEK GROUP

**2** CHERT

**2a** ARGILLITE, often GRAPHITIC

**1** LIMESTONE

--- CONTACT

~~~~ SHEAR

— QUARTZ VEIN

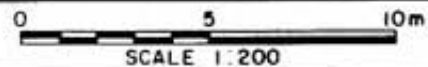
150/45 FRACTURE
(strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

TRENCH 2



BY: C.W./r.w.
DATE: OCT. 25, 1983

NTS: 104-N-11, 12
FIGURE 8b

SOIL SAMPLES
P.P.B. Au

TR001 - <10
TR002 - <10
TR003 - 10
TR004 - 110
TR005 - 40
TR006 - 50
TR007 - 40
TR008 - 10
TR009 - 20
TR010 - <10
TR011 - 10
TR012 - <10
TR013 - <10
TR014 - 100
TR015 - 70
TR016 - <10
TR017 - <10
TR018 - 30
TR019 - <10
TR020 - <10
TR021 - <10
TR022 - <10
TR023 - <10
TR024 - 10
TR025 - <10
TR026 - 10
TR027 - 60
TR028 - 30
TR029 - 20
TR030 - 20
TR031 - <10
TR032 - <10
TR033 - 180
TR034 - <10
TR035 - 10
TR036 - 90
TR037 - <10
TR038 - <10
TR039 - <10
TR040 - <10
TR041 - 20
TR042 - 40
TR043 - 500
TR044 - <10
TR045 - <10

BULK SAMPLE ASSAYS

oz./t. Au

95218 - 0.003
95217 - 0.003

95216 - 0.003
95215 - 0.005

54969 - 2.787
54970 - 2.363
83331 - 1.338

95214 - 0.268

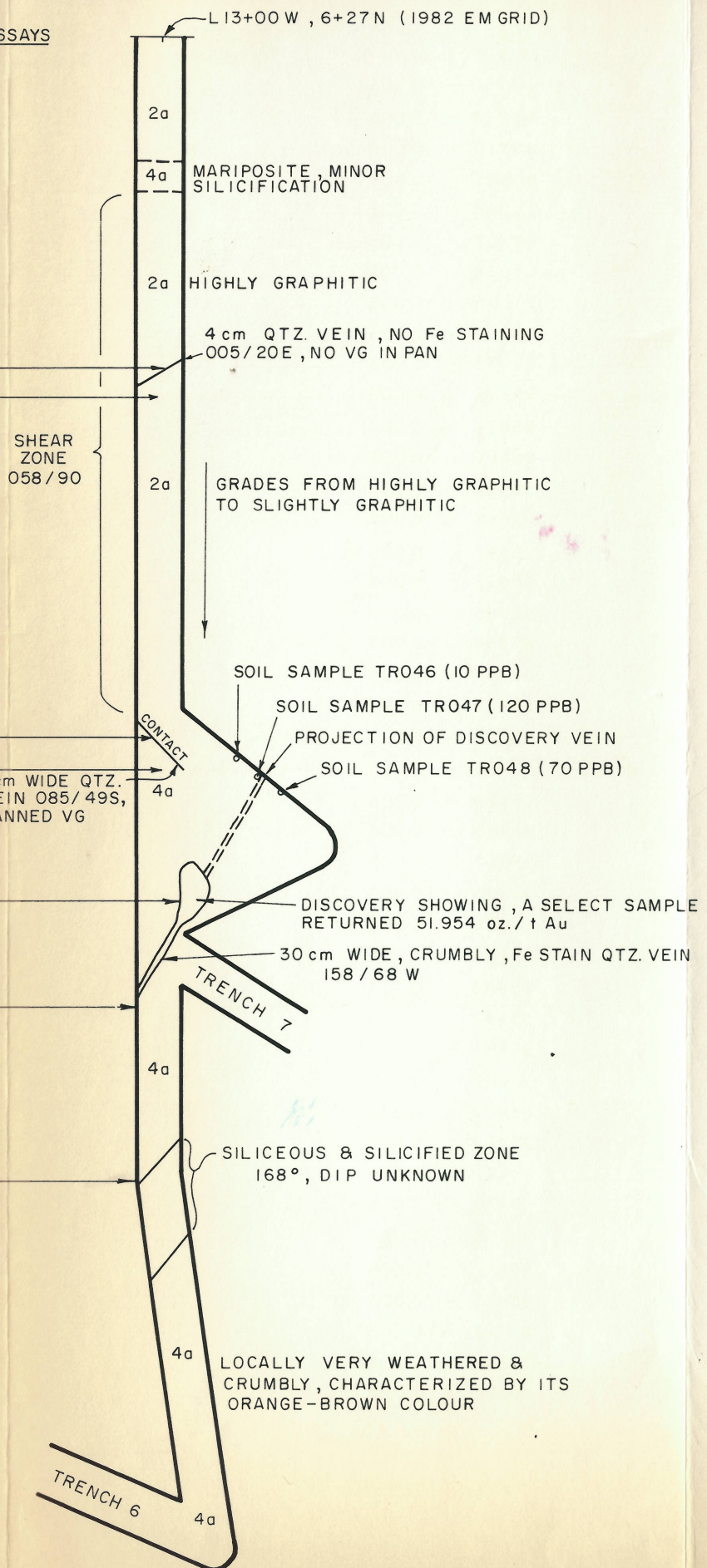
95213 - 0.005

CHECK ASSAYS
oz./t Au

95212 - 0.003
95211 - 0.005
95210 - 0.005
95209 - 0.005
95208 - 0.003
95207 - 0.003
95206 - 0.003
95205 - <0.003
95204 - 0.003
95203 - 0.003
95202 - 0.003
95201 - <0.003
95500 - <0.003
95499 - 0.003
95498 - 0.005
95497 - 0.005
95496 - 0.003
95495 - 0.003
95494 - <0.003
95493 - <0.003
95492 - 0.003
95491 - 0.005
95490 - 0.005
95489 - 0.003
95488 - 0.003
95487 - 0.003
95486 - 0.006
95485 - 0.003
95484 - 0.005
95483 - 0.003
95482 - 0.003
95481 - 0.005
95480 - 0.026
95479 - 0.032
95478 - 0.005
95477 - 0.005
95476 - 0.003
95475 - 0.003
95474 - 0.003
95473 - 0.003
95472 - <0.003
95219 - 0.005
95471 - 0.003
95470 - 0.003
95469 - 0.003

INITIAL CHIP SAMPLE ASSAYS
oz./t Au

83276 - <0.003
83275 - <0.003
83274 - <0.003
83273 - <0.003
83272 - <0.003
83271 - 0.003
83270 - <0.003
83269 - 0.003
83268 - <0.003
83267 - <0.003
83266 - <0.003
83265 - <0.003



- LEGEND:
- PENNSYLVANIAN & PERMIAN
 - ATLIN INTRUSIONS
 - 4 ULTRABASIC &/or ULTRAMAFIC
 - 4a CARBONATIZED 4
 - CACHE CREEK GROUP
 - 2 CHERT
 - 2a ARGILLITE, often GRAPHITIC
 - 1 LIMESTONE

- - - CONTACT
- ~~~~~ SHEAR
- QUARTZ VEIN
- > FRACTURE (strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

TRENCH 3

0 5 10m

SCALE 1:200

BY: C.W./r.w.r. DATE: OCT. 19, 1983

NTS: 104-N-11, 12 FIGURE 8c



CHIP SAMPLES

№. oz./1 Au

- 54991 - 0.003
- 54992 - <0.003
- 54993 - 0.005
- 54994 - <0.003
- 54995 - <0.003
- 54996 - <0.003
- 54997 - <0.003
- 54998 - 0.003
- 54999 - <0.003
- 55000 - <0.003
- 83301 - <0.003
- 83302 - <0.003
- 83303 - <0.003
- 83304 - <0.003
- 83305 - <0.003
- 83306 - <0.003
- 83307 - <0.003
- 83308 - <0.003
- 83309 - <0.003
- 83310 - <0.003
- 83311 - <0.003
- 83312 - <0.003
- 83313 - <0.003
- 83314 - <0.003
- 83315 - 0.003
- 83316 - 0.003
- 83317 - <0.003

INTENSELY ALTERED AND SHEARED ULTRABASIC,
 ABUNDANT Fe-STAINING & BLUE-GREY CLAY, MINOR
 SERPENTINE ALONG MAJOR SHEAR DIRECTION OF
 138/585, HIGHLY TALCOSE

4a

LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC &/or
ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

--- CONTACT

~ ~ ~ SHEAR

— QUARTZ VEIN

150 40
— FRACTURE
(strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 M.C.

ATLIN MINING DIVISION B.C.

TRENCH 4

0 5 10m

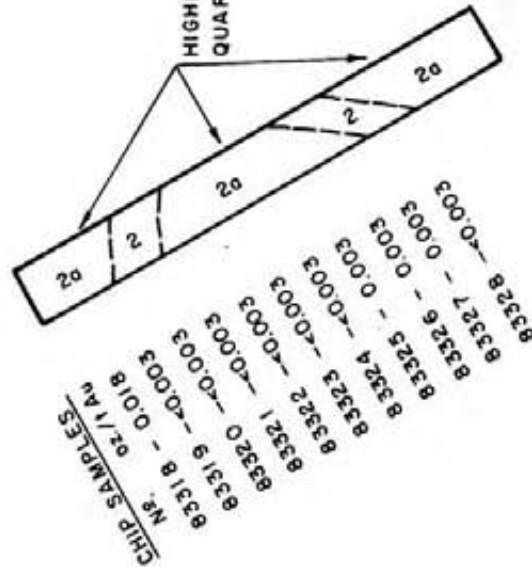
SCALE 1:200

BY: C.W./r.w.r.
DATE: OCT. 21, 1983

NTS: 104-N-11, 12
FIGURE 8d



HIGHLY GRAPHITIC, LOCALLY CONTAINS QUARTZ VEINLETS.



LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC &/or
ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

--- CONTACT

~ ~ ~ SHEAR

— QUARTZ VEIN

130
40
/ FRACTURE
(strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 M.C.

ATLIN MINING DIVISION B.C.

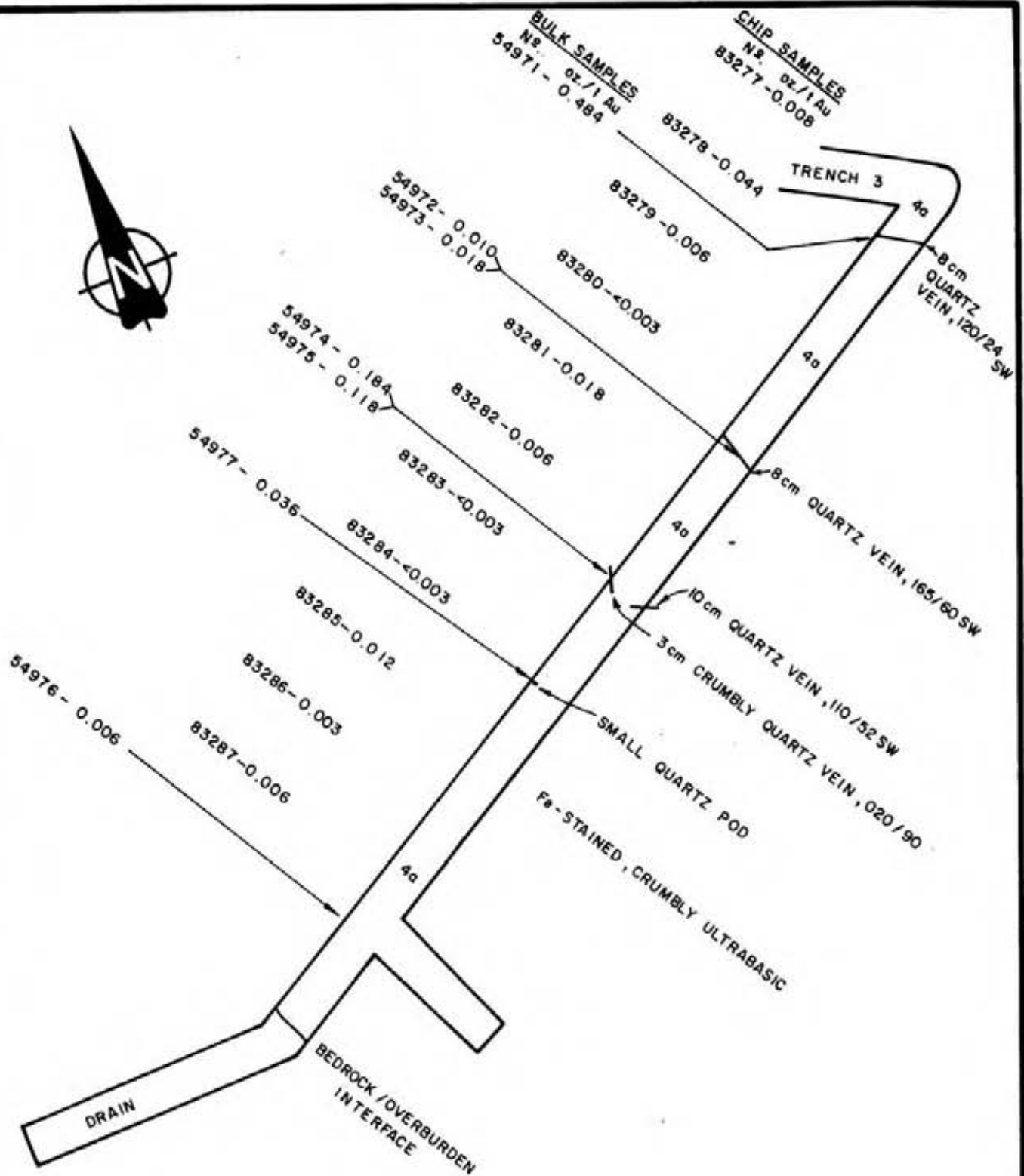
TRENCH 5

0 5 10m

SCALE 1:200

BY: C.W./r.w.
DATE: OCT. 21, 1983

NTS: 104-N-11, 12
FIGURE 8e



LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC &/or
 ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

--- CONTACT

~ ~ ~ SHEAR

— QUARTZ VEIN

130 40
 — FRACTURE
 (strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

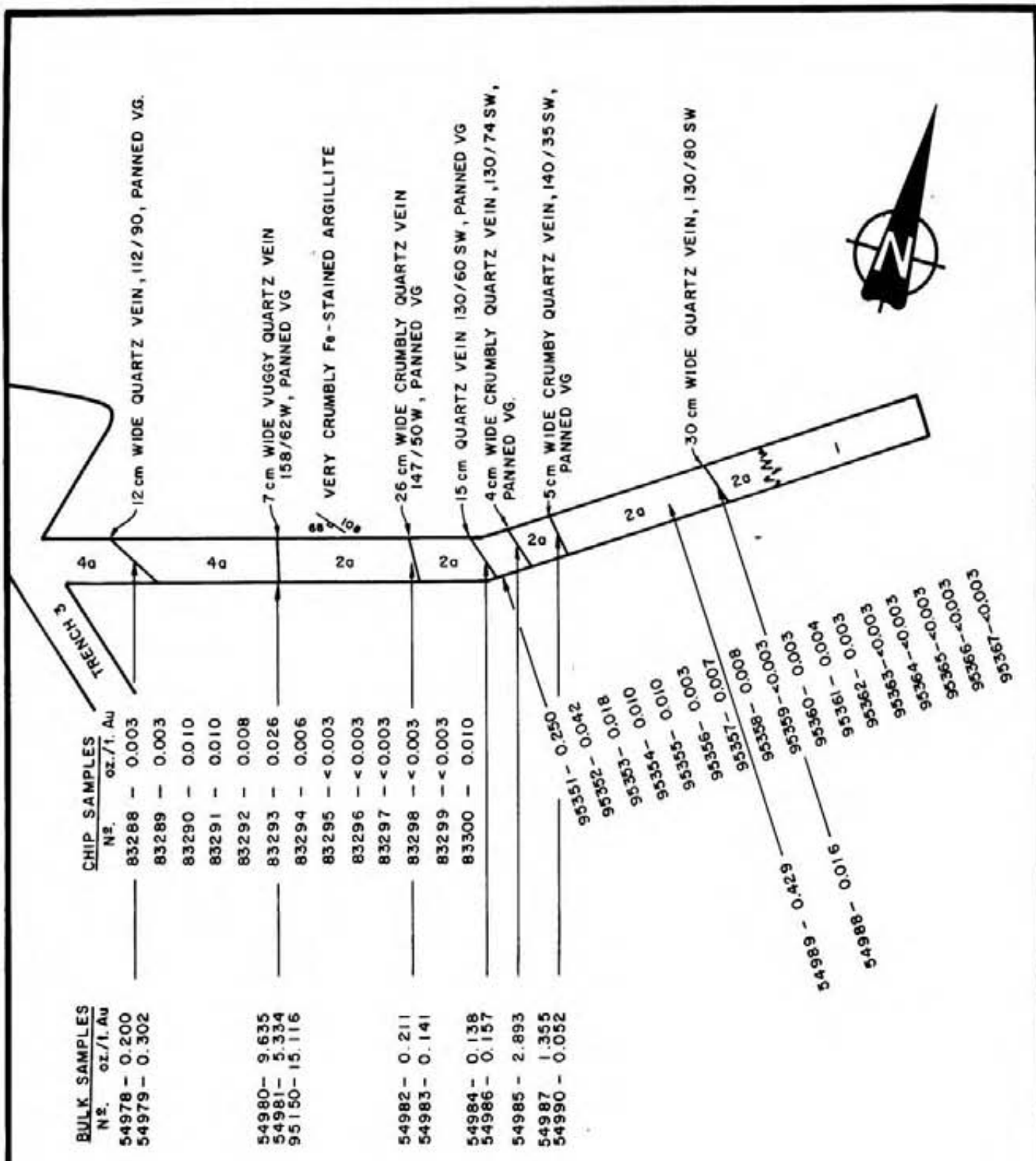
TRENCH 6

0 5 10m

SCALE 1:200

BY: C.W./r.w.c.
 DATE: OCT. 21, 1983

NTS: 104-N-11, 12
 FIGURE 8f



LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC &/or ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

- CONTACT
- ~ ~ ~ SHEAR
- / — QUARTZ VEIN
- 130 — / — FRACTURE (strike & dip)

| | |
|---------------------------------|-------------------|
| STANDARD GOLD MINES LTD. | |
| SHUKSAN 2 M.C. | |
| ATLIN MINING DIVISION B.C. | |
| TRENCH 7 | |
| <p>SCALE 1:200</p> | |
| BY: C.W./r.w.r. | NTS: 104-N-11, 12 |
| DATE: OCT. 21, 1983 | FIGURE 8g |



CHIP SAMPLES
No. oz./t Au
95368 - <0.003

95369 - 0.003

95370 - 0.004



GRAPHITIC ARGILLITE WITH
MINOR CHERT

LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

4 ULTRABASIC &/or
ULTRAMAFIC

4a CARBONATIZED 4

CACHE CREEK GROUP

2 CHERT

2a ARGILLITE, often GRAPHITIC

1 LIMESTONE

--- CONTACT

~~~~~ SHEAR

— QUARTZ VEIN

130 40  
FRACTURE  
(strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

TRENCH 8

0 5 10m

SCALE 1:200

BY: C.W./r.w.r.  
DATE: OCT. 21, 1983

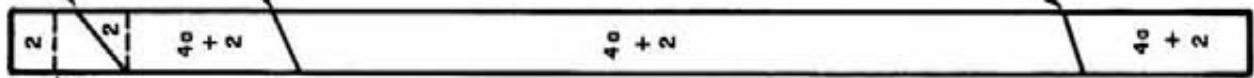
NTS: 104-N-11, 12  
FIGURE 8h

CHIP SAMPLES

| NR.   | oz./t Au |
|-------|----------|
| 95387 | < 0.003  |
| 95386 | 0.003    |
| 95385 | < 0.003  |
| 95384 | 0.018    |
| 95383 | 0.006    |
| 95382 | 0.003    |
| 95381 | < 0.003  |
| 95380 | < 0.003  |
| 95379 | < 0.003  |
| 95378 | < 0.003  |
| 95377 | < 0.003  |
| 95376 | < 0.003  |
| 95375 | < 0.003  |
| 95374 | < 0.003  |
| 95373 | < 0.003  |
| 95372 | < 0.003  |
| 95371 | < 0.003  |

BULK SAMPLES

| NR.   | oz./t Au |
|-------|----------|
| 95390 | 0.005    |
| 95391 | 0.046    |
| 95389 | < 0.003  |
| 95388 | 0.020    |



LEGEND:

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

**4** ULTRABASIC &/or  
ULTRAMAFIC

**4a** CARBONATIZED 4

CACHE CREEK GROUP

**2** CHERT

**2a** ARGILLITE, often GRAPHITIC

**1** LIMESTONE

--- CONTACT  
 SHEAR  
 QUARTZ VEIN  
 FRACTURE  
 (strike & dip)

STANDARD GOLD MINES LTD.

SHUKSAN 2 MC.

ATLIN MINING DIVISION B.C.

TRENCH 9

0 5 10m

SCALE 1:200

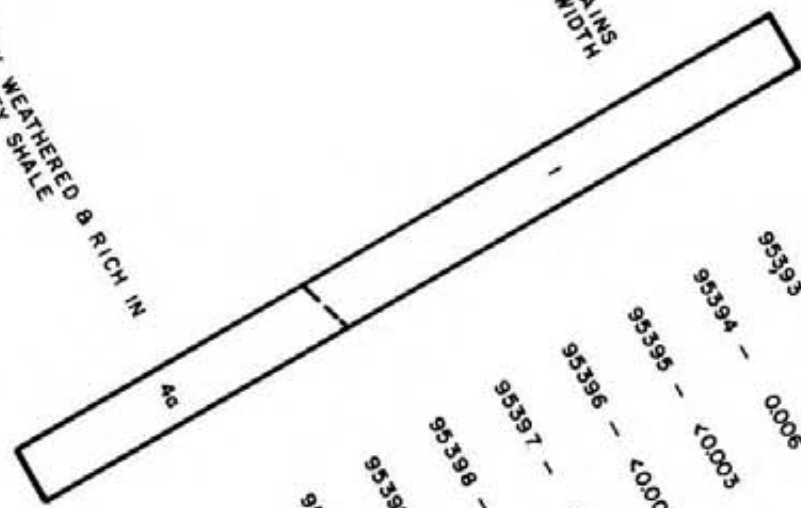
BY: C.W./r.w.r.  
DATE: OCT. 25, 1983

NTS: 104-N-11, 12  
FIGURE 81



LOCALLY BRECCIATED & CONTAINS  
CALCITE VEINLETS <math>< 5\text{mm}</math> IN WIDTH  
MINOR Fe STAINING.

HIGHLY WEATHERED & RICH IN  
BLUE GREY SHALE



CHIP SAMPLES  
No. g.t./t. Au

- 95392 - 0.008
- 95393 - 0.006
- 95394 - 0.003
- 95395 - 0.003
- 95396 - 0.003
- 95397 - 0.007
- 95398 - 0.003
- 95399 - 0.003
- 95400 - 0.014
- 95101 - 0.014
- 95102 - 0.003

**LEGEND:**

PENNSYLVANIAN & PERMIAN

ATLIN INTRUSIONS

**4** ULTRABASIC &/or  
ULTRAMAFIC

**4a** CARBONATIZED 4

CACHE CREEK GROUP

**2** CHERT

**2a** ARGILLITE, often GRAPHITIC

**1** LIMESTONE

- CONTACT
- ~ ~ ~ SHEAR
- / — QUARTZ VEIN
- 150 / 40 FRACTURE  
(strike & dip)

|                                      |                                |
|--------------------------------------|--------------------------------|
| STANDARD GOLD MINES LTD.             |                                |
| SHUKSAN 2 M.C.                       |                                |
| ATLIN MINING DIVISION B.C.           |                                |
| TRENCH 10                            |                                |
|                                      |                                |
| SCALE 1:200                          |                                |
| BY: C.W./r.w.c.<br>DATE: OCT.25,1983 | NTS: 104-N-11, 12<br>FIGURE 8j |

CHIP SAMPLES  
 No. oz. / t. Au  
 00007 - < 0.003  
 00006 - < 0.003  
 00005 - < 0.003  
 00004 - 0.003  
 00003 - < 0.003  
 00002 - 0.003  
 00001 - 0.003  
 95149 - 0.005  
 95148 - 0.006

BULK SAMPLES  
 No. oz. / t. Au  
 95104 - 0.846

INTENSELY WEATHERED AND ALTERED TO CLAY  
 MINOR ARGILLITE, MINOR MARIPOSITE,  
 ABUNDANT Fe STAINING.

QUARTZ LENSE ON NORTH WALL OF TRENCH  
 UNABLE TO TRACE IT ON TO SOUTH WALL

CRUMBLY 7 cm WIDE QUARTZ VEIN ENVELOPED  
 BY 20 cm OF BLUE-GREY CLAY, 011/90

COMPLEXLY SHEARED & INTERLAYERED

INDEFINITE CHERT-ARGILLITE CONTACT

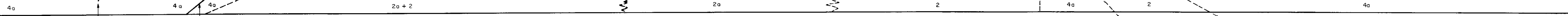
LOCALLY GRAPHITIC

INDEFINITE CHERT-ARGILLITE CONTACT

DARK GREY TO BLACK IN COLOUR, OFTEN Fe-STAINED  
 MINOR INCLUSIONS OF ARGILLITE

BLACK CHERT

HIGHLY WEATHERED & ALTERED TO Fe-STAINED  
 CLAY & SOIL, MINOR MARIPOSITE & SIDERITE



95103 - 0.010

95141 - 0.003

95140 - < 0.003

95139 - < 0.003

95138 - < 0.003

95137 - < 0.003

95136 - < 0.003

95135 - < 0.003

95134 - < 0.003

95133 - < 0.003

95132 - < 0.003

95131 - < 0.003

95130 - 0.012

95129 - < 0.003

95128 - < 0.003

95127 - < 0.003

95126 - 0.008

95125 - < 0.003

95124 - < 0.003

95123 - < 0.003

95122 - 0.003

95121 - < 0.003

95120 - < 0.003

95119 - < 0.003

95118 - < 0.003

95117 - < 0.003

95116 - 0.010

95115 - < 0.003

95114 - < 0.003

95113 - < 0.003

95112 - 0.006

95111 - < 0.003

95110 - 0.012

95109 - < 0.003

95108 - 0.012

95107 - 0.024

95106 - 0.012

95105 - 0.184

LEGEND:

- PENNSYLVANIAN & PERMIAN  
 ATLIN INTRUSIONS  
 4 ULTRABASIC &/or  
 ULTRAMAFIC  
 4a CARBONATIZED 4  
 CACHE CREEK GROUP  
 2 CHERT  
 2a ARGILLITE, often GRAPHITIC  
 1 LIMESTONE

- CONTACT  
 wavy SHEAR  
 --- QUARTZ VEIN  
 45 FRACTURE  
 (strike & dip)

11,511

STANDARD GOLD MINES LTD.  
 SHUKSAN 2 MC.  
 ATLIN MINING DIVISION B.C.  
 TRENCH 11

0 5 10m  
 SCALE 1:200

BY: C.W./r.w.r. NTS: 104-N-11, 12  
 DATE: OCT. 19, 1983 FIGURE 8k

#### 4. GEOPHYSICS

##### 4.1 FLUXGATE MAGNETOMETER SURVEY

###### 4.1.1 INSTRUMENT AND SURVEY TECHNIQUES

In 1982, an orientation fluxgate magnetometer survey was conducted along the Spruce Creek access road in the vicinity of the Noland Mine and over a portion of the Shuksan 2 mineral claim in an attempt to outline subsurface ultramafic dykes and bodies. A more detailed survey was conducted over the Noland grid in 1983 to define the ultramafic dykes (Figure 12). A base station was established and readings were taken at 15-30 minute intervals with a Scintrex MF-1 fluxgate magnetometer. Base station magnetometer readings, taken in the morning and throughout the day, were used to correct for diurnal variation.

A total of 20.8 line kilometres were surveyed using a Scintrex MF-2 fluxgate magnetometer. A control station was established and readings were checked each day so that the day to day variation could be corrected. Readings were taken in a northerly direction at 20 metre intervals along lines spaced 100 metres apart in the Noland grid survey. The time of day was recorded at each station and later used to correct the field readings.

###### 4.1.2 PRESENTATION AND DISCUSSION OF RESULTS

Results of the survey are plotted as profiles and shown in Figures 15 and 16. Readings are in milligammas and have been corrected for diurnal and day to day variations.

The orientation magnetometer survey results show a range of values from 7700 to 9200 milligammas, with most values in the 8500 to 8900 milligamma range. The profiles show broad fluctuations and a noise level on the order of 100 milligammas. The local fluctuations



in magnetic susceptibility may be due to boulders of ultramafic in overburden. Results from the Noland grid survey are inconclusive and show a wide range of values between 7300 and 10,000 milligammas. An east-west trending magnetic high starting at grid co-ordinate L 0+00E, 5+20N and ending near L 8+00E, 7+40N is believed to be buried cable related to operations at the old Noland Mine. Further magnetometer survey work over the Noland Mine area is not recommended due to the amount of scattered and partially buried pipe, cable and wire.

#### 4.2 VLF-EM SURVEY

##### 4.2.1 INSTRUMENT AND SURVEY TECHNIQUES

Reconnaissance VLF-EM surveys were conducted over the Spruce Mtn. and Shuksan grids in 1982 and a detailed survey was carried out over the Noland grid in 1983 using a Geonics EM-16 instrument. A total of 37.2 line kilometres were surveyed with readings taken at 25 metre intervals along east-west and northwest-southeast lines in the reconnaissance survey and at 20 metre intervals along northeast-southwest lines spaced 100 metres apart in the Noland grid survey. The reconnaissance survey used the submarine transmitting station in Hawaii (Station NPM, 23.4 kHz), with in-phase and quadrature readings taken in a northwesterly direction ( $315^{\circ}$ ) to ensure that east and south dips were indicated as negative readings by the instrument. Similarly, the Noland grid survey used the submarine transmitting station in Seattle, Washington (Station NLK, 24.8 kHz), with in-phase and quadrature readings taken in a westerly direction ( $253^{\circ}$ ) to ensure that east dips were indicated as negative readings by the instrument. The in-phase readings were later reduced by use of the Fraser Filtering Technique (Fraser, 1969) and contoured.

#### 4.2.2 PRESENTATION AND DISCUSSION OF RESULTS

Results of the survey are shown in Figures 17, 18 and 19. In-phase and filtered in-phase readings are shown, with the filtered in-phase readings contoured at 10% contour intervals.

Results over the Spruce Mtn. grid show two sets of sub-parallel conductors striking northeast and northwest. The strongest conductor has a maximum Fraser Filter value of +39 and a northeast strike length of at least 300 metres. Two other conductors with moderate Fraser Filter values of +20 exceed this strike length by 500 metres. Significantly, a northeast striking conductor with values up to +21 located at L25+00N, 26+00E occurs adjacent to anomalous soil samples. The samples assayed as high as 140 ppb gold and were collected from the carbonatized serpentinite-andesite contact. In summary, the VLF-EM results are inconclusive and will require more extensive and detailed surveying to give further indications of mineralized structures.

The survey results over the Shuksan grid show a multitude of conductors striking between 045° and 120°. The strongest conductor has a maximum Fraser Filter value of +86 and a minimum strike length of 600 metres. Other conductors are of comparable length but have values ranging between +35 and +57. Conductors located in the southeast corner of the grid are believed to be due to shears and terrain effects. Many of the conductors occur over carbonatized ultramafic. Trenching of the strongest conductor exposed gold-bearing quartz veins oriented perpendicular to the strike of the EM conductor. This suggests that the conductor is a shear and that the quartz veins occur in tension gashes perpendicular to the shear. Gold mineralization appears to stop where the EM conductor stops. Further mineralization might exist to the southwest along the extension of this EM conductor.

Conductors on the Noland grid strike north-south and northwest-southeast. The stronger conductors range between 400 and 800 metres in length and have maximum Fraser Filter values of +50. The conductors may be outlining hidden fractures and dykes although the geologic mapping and magnetometer survey results do not correlate with the VLF-EM survey results. Further VLF-EM survey work over the Noland grid is not recommended.

## 5. CONCLUSIONS

The results of the 1983 programme indicate that the Shuksan property is a highly significant new lode gold discovery in the Atlin placer gold camp. An excellent potential exists for the discovery of a large tonnage stratabound deposit. Mineralization, controlled by fractures and shears, occurs in the carbonatized ultramafic near its contact with the chert and is thought to be epithermal in origin. Other important findings of the programme are summarized as follows:

- 1) Detailed geologic mapping of the property shows Cache Creek Group rocks to be intruded by ultramafics of the Atlin Intrusions. Carbonate alteration of the ultramafic is extensive and characterized by rusty orange-brown weathering and the presence of ankerite and mariposite.
- 2) Grab samples of quartz veins and carbonatized ultramafic assay up to 0.042 ounces of gold per ton. Gold background values are highest in the carbonatized ultramafic, suggesting that it is the host for the mineralization.
- 3) Soil samples collected from the carbonatized ultramafic reveal scattered high gold values over and adjacent to several of the VLF-EM conductors. This suggests that the conductors represent fractures or shears related to mineralization.
- 4) VLF-EM survey results show several northeast and northwest striking conductors to occur near soil samples anomalous in gold and near gold-bearing quartz veins.
- 5) The magnetometer survey is inconclusive and does not appear to be a useful exploration tool.

- 6) Trenching of a coincident soil anomaly and EM conductor over a carbonatized ultramafic-chert contact exposed a gold-bearing quartz stockwork in a carbonatized ultramafic host. Bulk samples of the quartz veins returned assays as high as 9.635 oz./ton. Chip samples taken from the trenches also returned values up to 0.25 oz./ton suggesting extensive disseminated mineralization may yet be discovered.

## 6. RECOMMENDATIONS

Additional exploration of the property is warranted. This work includes reconnaissance geologic mapping and prospecting, grab sampling, reconnaissance VLF-EM surveys, deep soil sampling, seismic mapping, trenching and diamond drilling.

### PHASE 1

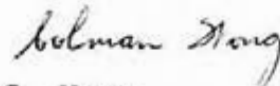
- 1) Reconnaissance geologic mapping and prospecting is to be carried out over the entire property to define the all-important carbonatized ultramafic-chert contact.
- 2) Grab or chip samples are to be taken from mineralized float and outcrop during the reconnaissance mapping and prospecting programme. Samples are to be analysed for gold (oz./ton), iron (%) and copper (ppm).
- 3) Deep soil sampling and a VLF-EM survey are to be carried out over all suspected carbonatized ultramafic-chert contacts in an effort to detect mineralized shears and fractures. Soil samples should similarly be analysed for gold, iron and copper.
- 4) A seismic survey should be carried out over the broad valley immediately southwest of the 1983 trenching programme. The depth to bedrock and the depth to the carbonatized ultramafic is to be determined.

- 5) Trenching to the southwest of the 1983 programme is to be carried out only if the overburden is determined by the seismic survey to be sufficiently thin and well drained. Trenching of the anomalous soil samples to the northeast is also warranted. Trenches should be laid out near the carbonatized ultramafic-chert contact and orientated in a general northeast-southwest direction. All trenches are to be bulk and chip sampled and assayed for gold, iron and copper.

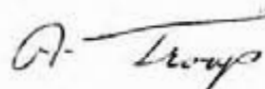
## PHASE 2

Diamond drilling is contingent upon the results of the Phase 1 trenching programme. Quartz veins exposed by trenching should be drilled and intersected at depth. Drill sites should be spotted such that they will intersect the veins at vertical depths of 100 and 200 feet.

Respectfully submitted,



C. Wong



A.G. Troup

REFERENCES

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- Veerman, H., 1981, Spruce Creek - Dominion Creek Placer Gold Leases: Engineer's Report.



COSTS STATEMENT  
 STANDARD GOLD MINES LTD.  
 SHUKSAN PROPERTY  
 GEOCHEMICAL, GEOLOGICAL, AND GEOPHYSICAL SURVEYS  
23 May - 26 September 1983

GENERAL COSTS

FOOD AND ACCOMMODATION

6 Pers, 23 May - 26 Sep, 207 man days @ \$18.12 \$ 3,751.00

SUPPLIES

4,168.62

RENTALS

|                                               |                 |          |
|-----------------------------------------------|-----------------|----------|
| Ezekiel Camp Equip., 207 man days @ \$6       | \$1,242.00      |          |
| Mark 4wd Bronco, 30May-26Sep, 46 days @ \$43  | 1,978.00        |          |
| 8359km @ \$0.16                               | 1,337.44        |          |
| Tilden 4wd PU, 3Aug-1Sep, 30 days @ \$73.02   | 2,190.68        |          |
| U-Tow Trailer, 23May-26Sep, 126 days @ \$9.35 | <u>1,177.75</u> | 7,925.87 |

FUEL

1,164.44

MAINTENANCE

1,534.40

SHIPPING AND POSTAGE

724.72

FIXED WING

CP Air, 6 vcr-whs rtn @ \$241.30 1,447.80

TELEPHONE SERVICE

240.00

FIELD PREPARATION

945.00

CONSULTANT FEES

Archean Engineering 2,933.34

REPORT PREPARATION

5,698.00

TOTAL GENERAL COSTS

\$30,533.19  
 =====

GEOCHEMISTRY SURVEY COSTSSALARIES AND WAGES

|                               |             |
|-------------------------------|-------------|
| 5 Pers, 53 man days @ \$78.75 | \$ 4,173.75 |
|-------------------------------|-------------|

|                       |        |
|-----------------------|--------|
| <u>BENEFITS @ 20%</u> | 834.75 |
|-----------------------|--------|

CONTRACT TRENCHING - Archie Wiggins Backhoe Services, 3 - 15 Aug

|                            |            |          |
|----------------------------|------------|----------|
| 59.5 hrs trenching @ \$110 | \$6,545.00 |          |
| 2.0 hrs loader @ \$60      | 120.00     |          |
| 7.75 hrs travel @ \$12     | 93.00      |          |
| 15 gal fuel                | 30.00      | 6,788.00 |

ASSAYS AND ANALYSES - Chemex Labs

|                                      |            |          |
|--------------------------------------|------------|----------|
| 329 Rock Assays for AU @ \$11.27     | \$3,708.75 |          |
| 48 Soil Analyses for AU @ \$5.60     | 268.80     |          |
| 25 ICP 24-element re-analyses @ \$13 | 325.00     |          |
| Sample Shipments                     | 395.55     | 4,698.10 |

GENERAL COSTS

|                      |          |
|----------------------|----------|
| 53/172 X \$30,533.19 | 9,408.48 |
|----------------------|----------|

|                                        |                    |
|----------------------------------------|--------------------|
| <u>TOTAL GEOCHEMISTRY SURVEY COSTS</u> | <u>\$25,903.08</u> |
|                                        | =====              |

GEOLOGY SURVEY COSTSSALARIES AND WAGES

|                               |             |
|-------------------------------|-------------|
| 5 Pers, 60 man days @ \$78.75 | \$ 4,725.00 |
|-------------------------------|-------------|

|                       |        |
|-----------------------|--------|
| <u>BENEFITS @ 20%</u> | 945.00 |
|-----------------------|--------|

GENERAL COSTS

|                      |           |
|----------------------|-----------|
| 60/172 X \$30,533.19 | 10,651.11 |
|----------------------|-----------|

|                                   |                    |
|-----------------------------------|--------------------|
| <u>TOTAL GEOLOGY SURVEY COSTS</u> | <u>\$16,321.11</u> |
|                                   | =====              |

GEOPHYSICS SURVEY COSTSSALARIES AND WAGES

5 Pers, 59 man days @ \$78.75 \$ 4,646.25

BENEFITS @ 20% 929.25

RENTALS

|                                       |               |        |
|---------------------------------------|---------------|--------|
| Dora EM-16, 7 - 21 Jun, 7 days @ \$27 | \$ 189.00     |        |
| Goliath MF-1, 7 days @ \$8            | 56.00         |        |
| Gallant MF-2, 7 days @ \$24           | <u>168.00</u> | 413.00 |

GENERAL COSTS

59/172 X 30,533.19 10,473.59

TOTAL GEOPHYSICS SURVEY COSTS \$16,462.09  
=====

COSTS APPORTIONED  
TO CLAIMS

| <u>CLAIM</u>  | <u>GEOLOGY</u>       | <u>GEOCHEMISTRY</u>  | <u>GEOPHYSICS</u>    | <u>TOTAL</u>         |
|---------------|----------------------|----------------------|----------------------|----------------------|
| KAREN 6       | \$ 6,277.35          | \$12,951.54          | \$16,462.09          | \$35,690.98          |
| SHUKSAN 2     | 6,277.35             | 12,951.54            |                      | 19,228.89            |
| JULIA 4       | <u>3,766.41</u>      |                      |                      | <u>3,766.41</u>      |
| <b>TOTALS</b> | \$16,321.11<br>===== | \$25,903.08<br>===== | \$16,462.09<br>===== | \$58,686.28<br>===== |

STATEMENT OF QUALIFICATIONSA. TROUP, P.ENG.ACADEMIC

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

PRACTICAL

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

STATEMENT OF QUALIFICATIONSCOLMAN WONGACADEMIC

|      |               |                                |
|------|---------------|--------------------------------|
| 1981 | B.Sc. Geology | University of British Columbia |
|------|---------------|--------------------------------|

PRACTICAL

|                   |                                                        |                                                                                         |
|-------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1981 -<br>Present | Mark Management Ltd.<br>Vancouver, B.C.                | Project Geologist involved in all aspects of mineral exploration in B.C. and the Yukon. |
| 1980<br>(summer)  | Hudson Bay Expl. and Dev. Co. Ltd.,<br>Vancouver, B.C. | Prospecting and detailed mapping in Central and West-central B.C.                       |
| 1979<br>(summer)  | Hudson Bay Expl. and Dev. Co. Ltd.,<br>Vancouver, B.C. | Regional geochemical survey and prospecting in South-central and South-eastern B.C.     |
| 1978<br>(summer)  | Hudson Bay Expl. and Dev. Co. Ltd.<br>Vancouver, B.C.  | Property work in West-central Yukon and MacMillan Pass, Yukon.                          |



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CERT. # : A8312913-001-A  
INV. # : 18312913  
DATE : 25-JUL-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP & COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|
| 54931              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54932              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54933              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54934              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54946              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 54947              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54948              | 207       | 0.028      | -- | -- | -- | -- | -- |
| 54949              | 207       | 0.018      | -- | -- | -- | -- | -- |
| 54950              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54951              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54952              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54953              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54954              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 54955              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54956              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54957              | 207       | 0.079      | -- | -- | -- | -- | -- |
| 54958              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54959              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54960              | 207       | 0.020      | -- | -- | -- | -- | -- |
| 54961              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 54962              | 207       | 0.220      | -- | -- | -- | -- | -- |
| 54963              | 207       | 0.005      | -- | -- | -- | -- | -- |

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V6B 1N2

CERT. # : A8313836-001-A  
INVCE # : I8313836  
DATE : 31-AUG-83  
P.O. # : NONE  
SHUKSAN

ATTN: ART TROUP, CC: COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|----|
| 54969              | 207       | 2.787      | -- | -- | -- | -- | -- | -- |
| 54970              | 207       | 2.363      | -- | -- | -- | -- | -- | -- |
| 54971              | 207       | 0.484      | -- | -- | -- | -- | -- | -- |
| 54972              | 207       | 0.010      | -- | -- | -- | -- | -- | -- |
| 54973              | 207       | 0.018      | -- | -- | -- | -- | -- | -- |
| 54974              | 207       | 0.184      | -- | -- | -- | -- | -- | -- |
| 54975              | 207       | 0.118      | -- | -- | -- | -- | -- | -- |
| 54976              | 207       | 0.006      | -- | -- | -- | -- | -- | -- |
| 54977              | 207       | 0.036      | -- | -- | -- | -- | -- | -- |
| 54978              | 207       | 0.200      | -- | -- | -- | -- | -- | -- |
| 54979              | 207       | 0.302      | -- | -- | -- | -- | -- | -- |
| 54980              | 207       | 9.635      | -- | -- | -- | -- | -- | -- |
| 54981              | 207       | 5.334      | -- | -- | -- | -- | -- | -- |
| 54982              | 207       | 0.211      | -- | -- | -- | -- | -- | -- |
| 54983              | 207       | 0.141      | -- | -- | -- | -- | -- | -- |
| 54984              | 207       | 0.138      | -- | -- | -- | -- | -- | -- |
| 54985              | 207       | 2.893      | -- | -- | -- | -- | -- | -- |
| 54986              | 207       | 0.157      | -- | -- | -- | -- | -- | -- |
| 54987              | 207       | 1.355      | -- | -- | -- | -- | -- | -- |
| 54988              | 207       | 0.016      | -- | -- | -- | -- | -- | -- |
| 54989              | 207       | 0.429      | -- | -- | -- | -- | -- | -- |
| 54990              | 207       | 0.052      | -- | -- | -- | -- | -- | -- |
| 54991              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 54992              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 54993              | 207       | 0.005      | -- | -- | -- | -- | -- | -- |
| 54994              | 207       | 0.005      | -- | -- | -- | -- | -- | -- |
| 54995              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 54996              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 54997              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 54998              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 54999              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 55000              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83251              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83252              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83253              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83265              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83266              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83267              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83268              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83269              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |

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CANADIAN TESTING  
ASSOCIATION



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VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8313836-002-A  
INVOICE # : I8313836  
DATE : 31-AUG-83  
P.O. # : NONE  
SHUKSAN

ATTN: ART TROUP, CC: COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|----|
| 83270              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83271              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 83272              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83273              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83274              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83275              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83276              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83301              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83302              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83303              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83304              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83305              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83306              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83307              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83308              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83309              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83310              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83311              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83312              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83313              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83314              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83315              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83316              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 83317              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83318              | 207       | 0.018      | -- | -- | -- | -- | -- | -- |
| 83319              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83320              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83321              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83322              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83323              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83324              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83325              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 83326              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 83327              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 83328              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 83329              | 207       | 51.954     | -- | -- | -- | -- | -- | -- |
| 83330              | 207       | 0.262      | -- | -- | -- | -- | -- | -- |
| 83331              | 207       | 1.338      | -- | -- | -- | -- | -- | -- |
| 83332              | 207       | 0.082      | -- | -- | -- | -- | -- | -- |
| 83333              | 207       | 0.020      | -- | -- | -- | -- | -- | -- |

.....  
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# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ASSAY

TO : STANDARD GOLD MINES LIMITED  
  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8313836-003-A  
INVOICE # : I8313836  
DATE : 31-AUG-83  
P.O. # : NONE  
SHUKSAN

ATTN: ART TROUP, CC: COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|
| 83334              | 207       | 0.012      | -- | -- | -- | -- | -- |
| 83335              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83336              | 207       | 0.004      | -- | -- | -- | -- | -- |
| 83337              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 83338              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83339              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83340              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83341              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83342              | 207       | 0.018      | -- | -- | -- | -- | -- |
| 83343              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83344              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 83345              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 83346              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83347              | 207       | 0.004      | -- | -- | -- | -- | -- |
| 83348              | 207       | 0.014      | -- | -- | -- | -- | -- |
| 83349              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 83350              | 207       | 0.007      | -- | -- | -- | -- | -- |

.....  
Registered Assayer, Province of British Columbia



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

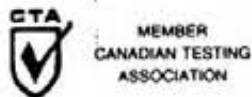
TC : STANDARD GOLD MINES LIMITED  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314134-001-A  
INVOICE # : 18314134  
DATE : 6-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|
| 00001              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 00002              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 00003              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 00004              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 00005              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 00006              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 00007              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83254              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 83255              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83256              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 83257              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83258              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83259              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83260              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83261              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83262              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 83263              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83264              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83277              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 83278              | 207       | 0.044      | -- | -- | -- | -- | -- |
| 83279              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83280              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83281              | 207       | 0.018      | -- | -- | -- | -- | -- |
| 83282              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83283              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83284              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83285              | 207       | 0.012      | -- | -- | -- | -- | -- |
| 83286              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 83287              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83288              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 83289              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 83290              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 83291              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 83292              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 83293              | 207       | 0.026      | -- | -- | -- | -- | -- |
| 83294              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 83295              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83296              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83297              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83298              | 207       | <0.003     | -- | -- | -- | -- | -- |

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# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

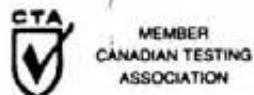
TO : STANDARD GOLD MINES LIMITED  
  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314134-002-A  
INVOICE # : 18314134  
DATE : 6-SEP-83  
P.C. # : NCNE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|
| 83299              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 83300              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 95101 TR10 - 014   | 207       | 0.014      | -- | -- | -- | -- | -- |
| 95102 - 011        | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95103              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 95104              | 207       | 0.846      | -- | -- | -- | -- | -- |
| 95105 TR11 - 001   | 207       | 0.184      | -- | -- | -- | -- | -- |
| 95106              | 207       | 0.012      | -- | -- | -- | -- | -- |
| 95107              | 207       | 0.024      | -- | -- | -- | -- | -- |
| 95108              | 207       | 0.012      | -- | -- | -- | -- | -- |
| 95109              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95110              | 207       | 0.012      | -- | -- | -- | -- | -- |
| 95111              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95112              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 95113              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95114              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95115              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95116              | 207       | 0.010      | -- | -- | -- | -- | -- |
| 95117              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95118              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95119              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95120              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95121              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95122              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95123              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95124              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95125              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95126              | 207       | 0.008      | -- | -- | -- | -- | -- |
| 95127              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95128              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95129              | 207       | <0.003     | -- | -- | -- | -- | -- |

Registered Assayer, Province of British Columbia





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : STANDARD GOLD MINES LIMITED  
  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8214135-001-A  
INVOICE # : 18314135  
DATE : 6-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|----|
| 95130              | 207       | 0.012      | -- | -- | -- | -- | -- | -- |
| 95131              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95132              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95133              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95134              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95135              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95136              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95137              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95138              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95139              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95140              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95141              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95142              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95143              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95144              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95145              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95146              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95147              | 207       | 0.120      | -- | -- | -- | -- | -- | -- |
| 95148              | 207       | 0.006      | -- | -- | -- | -- | -- | -- |
| 95149 TR11-045     | 207       | 0.005      | -- | -- | -- | -- | -- | -- |
| 95150 TR7-017      | 207       | 15.116     | -- | -- | -- | -- | -- | -- |
| 95351 TR7-017      | 207       | 0.250      | -- | -- | -- | -- | -- | -- |
| 95352              | 207       | 0.042      | -- | -- | -- | -- | -- | -- |
| 95353              | 207       | 0.018      | -- | -- | -- | -- | -- | -- |
| 95354              | 207       | 0.010      | -- | -- | -- | -- | -- | -- |
| 95355              | 207       | 0.010      | -- | -- | -- | -- | -- | -- |
| 95356              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95357              | 207       | 0.007      | -- | -- | -- | -- | -- | -- |
| 95358              | 207       | 0.008      | -- | -- | -- | -- | -- | -- |
| 95359              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95360              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95361              | 207       | 0.004      | -- | -- | -- | -- | -- | -- |
| 95362              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95363              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95364              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95365              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95366              | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95367 TR7-030      | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95368 TR8-001      | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95369              | 207       | 0.003      | -- | -- | -- | -- | -- | -- |

Registered Assayer, Province of British Columbia





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ASSAY

TO : STANDARD GOLD MINES LIMITED

STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314135-002-A  
INVOICE # : I8314135  
DATE : 6-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description               | Prep code | Au FA oz/T |    |    |    |    |    |    |
|----------------------------------|-----------|------------|----|----|----|----|----|----|
| 95370 TR8-003                    | 207       | 0.004      | -- | -- | -- | -- | -- | -- |
| 95371 TR9-001                    | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95372                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95373                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95374                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95375                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95376                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95377                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95378                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95379                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95380                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95381                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95382                            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95383                            | 207       | 0.006      | -- | -- | -- | -- | -- | -- |
| 95384                            | 207       | 0.018      | -- | -- | -- | -- | -- | -- |
| 95385                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95386                            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95387 TR9-017                    | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 97K-001 95388 TR 9- (G. Prod(B)) | 207       | 0.020      | -- | -- | -- | -- | -- | -- |
| 97K-002 95389                    | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 97K-003 95390                    | 207       | 0.005      | -- | -- | -- | -- | -- | -- |
| 97K-004 95391                    | 207       | 0.046      | -- | -- | -- | -- | -- | -- |
| 95392 TR10-001                   | 207       | 0.004      | -- | -- | -- | -- | -- | -- |
| 95393                            | 207       | 0.008      | -- | -- | -- | -- | -- | -- |
| 95394                            | 207       | 0.006      | -- | -- | -- | -- | -- | -- |
| 95395                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95396                            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| 95397                            | 207       | 0.007      | -- | -- | -- | -- | -- | -- |
| 95398                            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95399                            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| 95400 TR10-002                   | 207       | <0.003     | -- | -- | -- | -- | -- | -- |

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212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : STANDARD GOLD MINES LIMITED  
  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314574-001-A  
INVOICE # : I8314574  
DATE : 16-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|----|
| TRI-001            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| TRI-002            | 207       | 0.130      | -- | -- | -- | -- | -- | -- |
| TRI-003            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-004            | 207       | 0.032      | -- | -- | -- | -- | -- | -- |
| TRI-005            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-006            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-007            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-008            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-009            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-010            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| TRI-011            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-012            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-013            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| TRI-014            | 207       | <0.003     | -- | -- | -- | -- | -- | -- |
| TRI-015            | 207       | 0.006      | -- | -- | -- | -- | -- | -- |
| TRI-016            | 207       | 0.003      | -- | -- | -- | -- | -- | -- |
| QTZ-GO-001         | 207       | <0.003     | -- | -- | -- | -- | -- | -- |

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Registered Assayer, Province of British Columbia



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : STANDARD GOLD MINES LIMITED

STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314575-001-A  
INVOICE # : 18314575  
DATE : 21-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | AU-AA ppb |    |    |    |    |    |
|--------------------|-----------|-----------|----|----|----|----|----|
| TR001              | 201       | <10       | -- | -- | -- | -- | -- |
| TR002              | 201       | <10       | -- | -- | -- | -- | -- |
| TR003              | 201       | 10        | -- | -- | -- | -- | -- |
| TR004              | 201       | 110       | -- | -- | -- | -- | -- |
| TR005              | 201       | 40        | -- | -- | -- | -- | -- |
| TR006              | 201       | 50        | -- | -- | -- | -- | -- |
| TR007              | 201       | 40        | -- | -- | -- | -- | -- |
| TR008              | 201       | 10        | -- | -- | -- | -- | -- |
| TR009              | 201       | 20        | -- | -- | -- | -- | -- |
| TR010              | 201       | <10       | -- | -- | -- | -- | -- |
| TR011              | 201       | 10        | -- | -- | -- | -- | -- |
| TR012              | 201       | <10       | -- | -- | -- | -- | -- |
| TR013              | 201       | <10       | -- | -- | -- | -- | -- |
| TR014              | 201       | 100       | -- | -- | -- | -- | -- |
| TR015              | 201       | 70        | -- | -- | -- | -- | -- |
| TR016              | 201       | <10       | -- | -- | -- | -- | -- |
| TR017              | 201       | <10       | -- | -- | -- | -- | -- |
| TR018              | 201       | 30        | -- | -- | -- | -- | -- |
| TR019              | 201       | <10       | -- | -- | -- | -- | -- |
| TR020              | 201       | <10       | -- | -- | -- | -- | -- |
| TR021              | 201       | <10       | -- | -- | -- | -- | -- |
| TR022              | 201       | <10       | -- | -- | -- | -- | -- |
| TR023              | 201       | <10       | -- | -- | -- | -- | -- |
| TR024              | 201       | 10        | -- | -- | -- | -- | -- |
| TR025              | 201       | <10       | -- | -- | -- | -- | -- |
| TR026              | 201       | 10        | -- | -- | -- | -- | -- |
| TR027              | 201       | 60        | -- | -- | -- | -- | -- |
| TR028              | 201       | 30        | -- | -- | -- | -- | -- |
| TR029              | 201       | 20        | -- | -- | -- | -- | -- |
| TR030              | 201       | 20        | -- | -- | -- | -- | -- |
| TR031              | 201       | <10       | -- | -- | -- | -- | -- |
| TR032              | 201       | <10       | -- | -- | -- | -- | -- |
| TR033              | 201       | 180       | -- | -- | -- | -- | -- |
| TR034              | 201       | <10       | -- | -- | -- | -- | -- |
| TR035              | 201       | 10        | -- | -- | -- | -- | -- |
| TR036              | 201       | 90        | -- | -- | -- | -- | -- |
| TR037              | 201       | <10       | -- | -- | -- | -- | -- |
| TR038              | 201       | <10       | -- | -- | -- | -- | -- |
| TR039              | 201       | <10       | -- | -- | -- | -- | -- |
| TR040              | 201       | <10       | -- | -- | -- | -- | -- |

Certified by *Hart Bichler*





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TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : STANDARD GOLD MINES LIMITED  
  
STE. 1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314575-002-A  
INVOICE # : I8314575  
DATE : 21-SEP-83  
P.O. # : NONE  
SHUKSAN

ATTN: ART TROUP AND COLMAN WONG

| Sample description | Prep code | AU-AA ppb |    |    |    |    |    |
|--------------------|-----------|-----------|----|----|----|----|----|
| TR041              | 201       | 20        | -- | -- | -- | -- | -- |
| TR042              | 201       | 40        | -- | -- | -- | -- | -- |
| TR043              | 201       | 500       | -- | -- | -- | -- | -- |
| TR044              | 201       | <10       | -- | -- | -- | -- | -- |
| TR045              | 201       | <10       | -- | -- | -- | -- | -- |
| TR046              | 201       | 10        | -- | -- | -- | -- | -- |
| TR047              | 201       | 120       | -- | -- | -- | -- | -- |
| TR048              | 201       | 70        | -- | -- | -- | -- | -- |



Certified by *Hart Buchler*





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GEOCHEMISTS

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CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1500-675 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : A8314795-001-A  
INVOICE # : I8314795  
DATE : 23-SEP-83  
P.C. # : NONE  
SHUKSAN

ATTN: ART TROUP & COLMAN WONG

| Sample description | Prep code | Au FA oz/T |    |    |    |    |    |
|--------------------|-----------|------------|----|----|----|----|----|
| 95201              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95202              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95203              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95204              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95205              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95206              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95207              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95208              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95209              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95210              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95211              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95212              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95213              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95214              | 207       | 0.268      | -- | -- | -- | -- | -- |
| 95215              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95216              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95217              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95218              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95219              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95469              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95470              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95471              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95472              | 207       | <0.003     | -- | -- | -- | -- | -- |
| 95473              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95474              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95475              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95476              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95477              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95478              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95479              | 207       | 0.032      | -- | -- | -- | -- | -- |
| 95480              | 207       | 0.026      | -- | -- | -- | -- | -- |
| 95481              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95482              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95483              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95484              | 207       | 0.005      | -- | -- | -- | -- | -- |
| 95485              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95486              | 207       | 0.006      | -- | -- | -- | -- | -- |
| 95487              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95488              | 207       | 0.003      | -- | -- | -- | -- | -- |
| 95489              | 207       | 0.003      | -- | -- | -- | -- | -- |



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TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : STANDARD GOLD MINES LIMITED

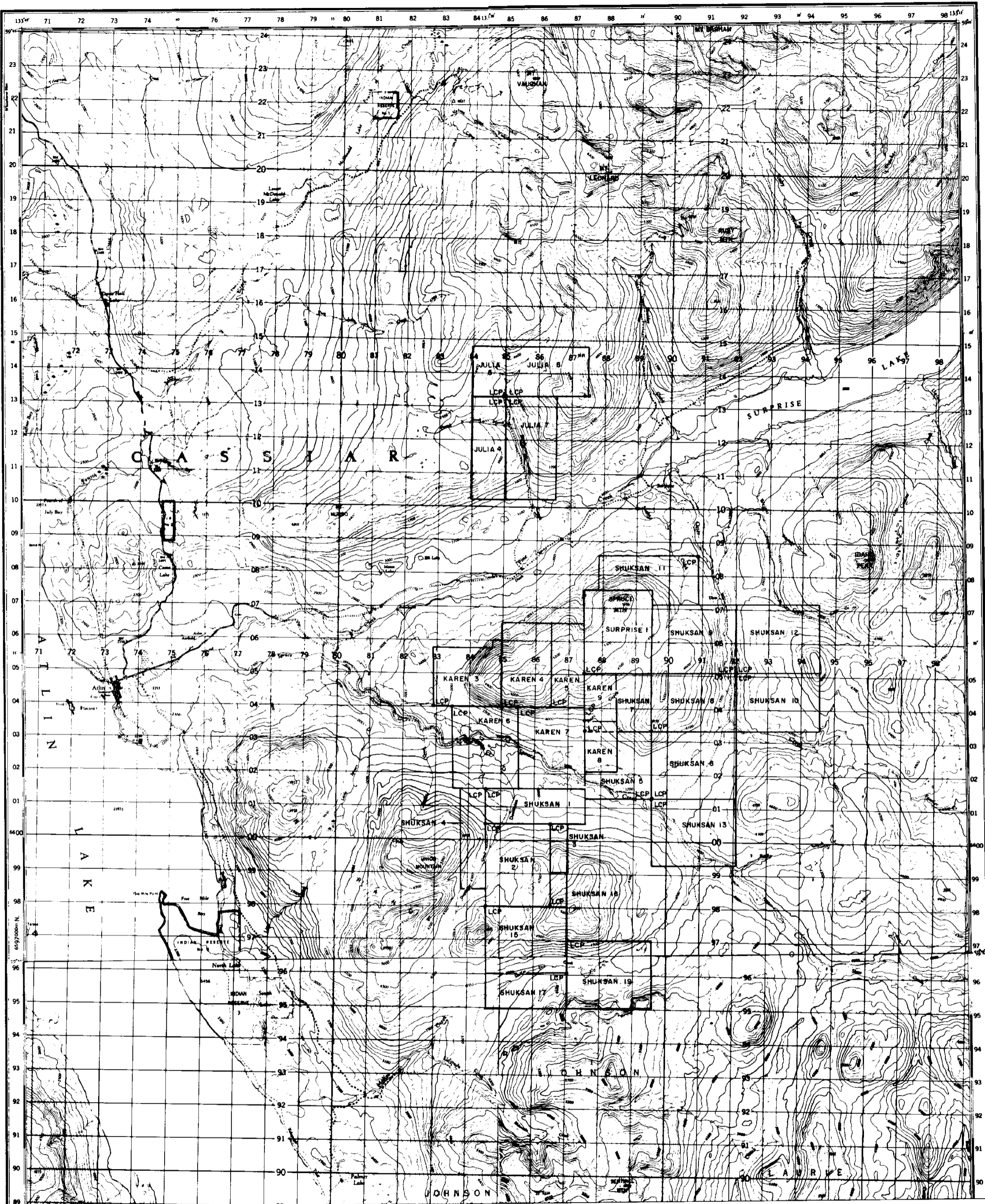
1500 - 675 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6B 1N2

CERT. # : AB316010-001-A  
INVOICE # : 1E316010  
DATE : 7-NOV-83  
P.O. # : NONE  
SHUKSAN

ATTN: ART TROUP & COLMAN WONG

| Sample description | Mo PPM (ICP) | W PPM (ICP) | Zn PPM (ICP) | P PPM (ICP) | Pb PPM (ICP) | Bi PPM (ICP) | Cd PPM (ICP) | Co PPM (ICP) | Ni PPM (ICP) | Ba PPM (ICP) | Fe % (ICP) | Mn PPM (ICP) | Cr PPM (ICP) | Mg % (ICP) | V PPM (ICP) | Al % (ICP) | Be PPM (ICP) | Ca % (ICP) | Cu PPM (ICP) | As PPM AAS | Ti % (ICP) | Sr PPM (ICP) | Na % (ICP) | K % (ICP) |
|--------------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|------------|-------------|------------|--------------|------------|--------------|------------|------------|--------------|------------|-----------|
| 54969              | 1            | <10         | 24           | 180         | 33           | <2           | <0.5         | 14           | 107          | 140          | 2.09       | 295          | 110          | 0.34       | 28          | 1.09       | <0.5         | 0.35       | 137          | 4.0        | 0.023      | 41           | 0.06       | 0.09      |
| 54971              | 1            | <10         | 23           | 330         | 13           | <2           | <0.5         | 20           | 38           | 355          | 3.24       | 675          | 55           | 0.37       | 47          | 2.07       | <0.5         | 0.28       | 235          | 0.8        | 0.094      | 43           | 0.78       | 0.24      |
| 54974              | 2            | <10         | 19           | 260         | 6            | <2           | <0.5         | 15           | 55           | 210          | 2.44       | 310          | 91           | 0.36       | 30          | 1.13       | <0.5         | 0.06       | 161          | <0.2       | 0.052      | 21           | 0.38       | 0.14      |
| 54979              | 3            | 15          | 30           | 1090        | 43           | <2           | <0.5         | 22           | 47           | 230          | 4.23       | 940          | 79           | 0.23       | 109         | 4.18       | <0.5         | 3.60       | 260          | 1.8        | 0.397      | 31           | 0.08       | 0.29      |
| 54980              | 16           | <10         | 46           | 660         | 57           | <2           | <0.5         | 39           | 98           | 495          | 16.50      | 330          | 160          | 0.40       | 75          | 2.54       | <0.5         | 0.18       | 435          | 13.8       | 0.159      | 39           | 0.69       | 0.52      |
| 54985              | <1           | <10         | 74           | 1410        | 9            | <2           | <0.5         | 28           | 111          | 435          | 5.28       | 1360         | 215          | 0.64       | 90          | 5.74       | <0.5         | 3.11       | 255          | 5.0        | 0.309      | 60           | 1.00       | 0.75      |
| 54986              | <1           | <10         | 57           | 420         | 6            | <2           | <0.5         | 19           | 104          | 135          | 3.82       | 840          | 425          | 3.00       | 103         | 4.31       | <0.5         | 13.70      | 37           | <0.2       | 0.151      | 106          | 0.10       | 0.26      |
| 54987              | 2            | <10         | 27           | 655         | 5            | <2           | <0.5         | 19           | 90           | 290          | 4.06       | 685          | 120          | 0.38       | 42          | 2.62       | <0.5         | 0.58       | 240          | 2.4        | 0.104      | 69           | 1.32       | 0.34      |
| 54989              | 4            | <10         | 62           | 865         | 12           | <2           | 0.5          | 17           | 74           | 5570         | 7.34       | 5960         | 52           | 0.62       | 71          | 3.72       | <0.5         | 19.00      | 157          | 1.6        | 0.133      | 70           | 0.69       | 1.73      |
| 83330              | 2            | <10         | 18           | 170         | 3            | <2           | <0.5         | 5            | 60           | 320          | 1.67       | 480          | 85           | 0.84       | 19          | 0.70       | <0.5         | 0.98       | 32           | 1.2        | 0.014      | 50           | 0.20       | 0.17      |
| 95104              | 7            | <10         | 82           | 220         | 20           | <2           | <0.5         | 58           | 565          | 165          | 21.20      | 935          | 250          | 0.27       | 63          | 0.44       | <0.5         | 0.25       | 1220         | 3.2        | 0.006      | 16           | 0.05       | <0.01     |
| 95105              | <1           | <10         | 89           | 180         | 7            | <2           | <0.5         | 91           | 1820         | 205          | 5.47       | 850          | 870          | 5.29       | 42          | 1.08       | <0.5         | 3.29       | 196          | 0.4        | 0.034      | 102          | 0.12       | 0.07      |
| 95147              | <1           | <10         | 153          | 550         | 3            | 2            | <0.5         | 78           | 1240         | 170          | 9.45       | 1180         | 1610         | 2.00       | 94          | 2.85       | <0.5         | 6.33       | 535          | <0.2       | 0.049      | 44           | 0.08       | 0.10      |
| 95351              | <1           | <10         | 166          | 1990        | 4            | <2           | <0.5         | 46           | 176          | 700          | 7.00       | 1200         | 350          | 3.84       | 151         | 8.46       | <0.5         | 3.64       | 103          | 0.6        | 0.639      | 91           | 1.71       | 1.42      |
| TRI-002            | <1           | <10         | 169          | 2860        | 19           | <2           | <0.5         | 70           | 635          | 550          | 8.21       | 1360         | 485          | 7.25       | 155         | 6.68       | 1.0          | 3.32       | 41           | <0.2       | 0.982      | 280          | 1.07       | 1.37      |
| TR004              | <1           | <10         | 76           | 985         | 11           | <2           | <0.5         | 27           | 182          | 920          | 3.48       | 785          | 315          | 2.53       | 106         | 6.07       | <0.5         | 5.25       | 49           | <0.2       | 0.439      | 197          | 2.06       | 1.79      |
| TR006              | <1           | <10         | 99           | 1090        | 9            | <2           | <0.5         | 29           | 188          | 930          | 3.81       | 835          | 305          | 2.15       | 123         | 6.26       | <0.5         | 4.36       | 68           | <0.2       | 0.385      | 188          | 2.00       | 1.75      |
| TR014              | <1           | <10         | 101          | 1160        | 12           | <2           | <0.5         | 32           | 210          | 1020         | 4.02       | 1020         | 340          | 1.95       | 129         | 6.56       | <0.5         | 3.78       | 68           | <0.2       | 0.424      | 205          | 2.11       | 1.85      |
| TR015              | <1           | <10         | 151          | 1370        | 10           | <2           | <0.5         | 33           | 215          | 1070         | 4.38       | 1110         | 370          | 2.12       | 128         | 6.91       | <0.5         | 1.83       | 49           | <0.2       | 0.424      | 186          | 2.12       | 1.88      |
| TR027              | <1           | <10         | 153          | 1040        | 11           | <2           | <0.5         | 67           | 655          | 795          | 5.71       | 1820         | 680          | 2.67       | 126         | 5.84       | <0.5         | 4.00       | 93           | <0.2       | 0.332      | 205          | 1.46       | 1.55      |
| TR033              | <1           | <10         | 135          | 1130        | 20           | <2           | <0.5         | 48           | 205          | 1260         | 6.17       | 1600         | 330          | 2.13       | 166         | 6.88       | 0.5          | 1.55       | 117          | <0.2       | 0.580      | 169          | 1.95       | 1.96      |
| TR036              | <1           | <10         | 135          | 1330        | 8            | <2           | <0.5         | 46           | 275          | 990          | 5.35       | 1300         | 455          | 2.29       | 139         | 6.88       | <0.5         | 2.41       | 111          | <0.2       | 0.420      | 177          | 1.74       | 1.81      |
| TR043              | <1           | <10         | 225          | 1390        | 6            | <2           | <0.5         | 106          | 810          | 815          | 10.20      | 4030         | 920          | 1.52       | 203         | 6.55       | 0.5          | 1.08       | 188          | <0.2       | 0.209      | 64           | 0.39       | 2.14      |
| TR047              | <1           | <10         | 170          | 1220        | 9            | <2           | <0.5         | 59           | 660          | 1280         | 5.32       | 1470         | 655          | 2.35       | 140         | 4.82       | <0.5         | 3.36       | 86           | <0.2       | 0.150      | 485          | 0.40       | 1.52      |
| TR048              | <1           | <10         | 191          | 1280        | 13           | <2           | <0.5         | 70           | 600          | 800          | 7.71       | 1870         | 765          | 2.91       | 192         | 6.71       | <0.5         | 2.77       | 169          | <0.2       | 0.355      | 189          | 1.01       | 1.56      |

Certified by *AP Shaps*



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

**STANDARD GOLD MINES LTD.**

JULIA, KAREN, SHUKSAN & SURPRISE M.C.

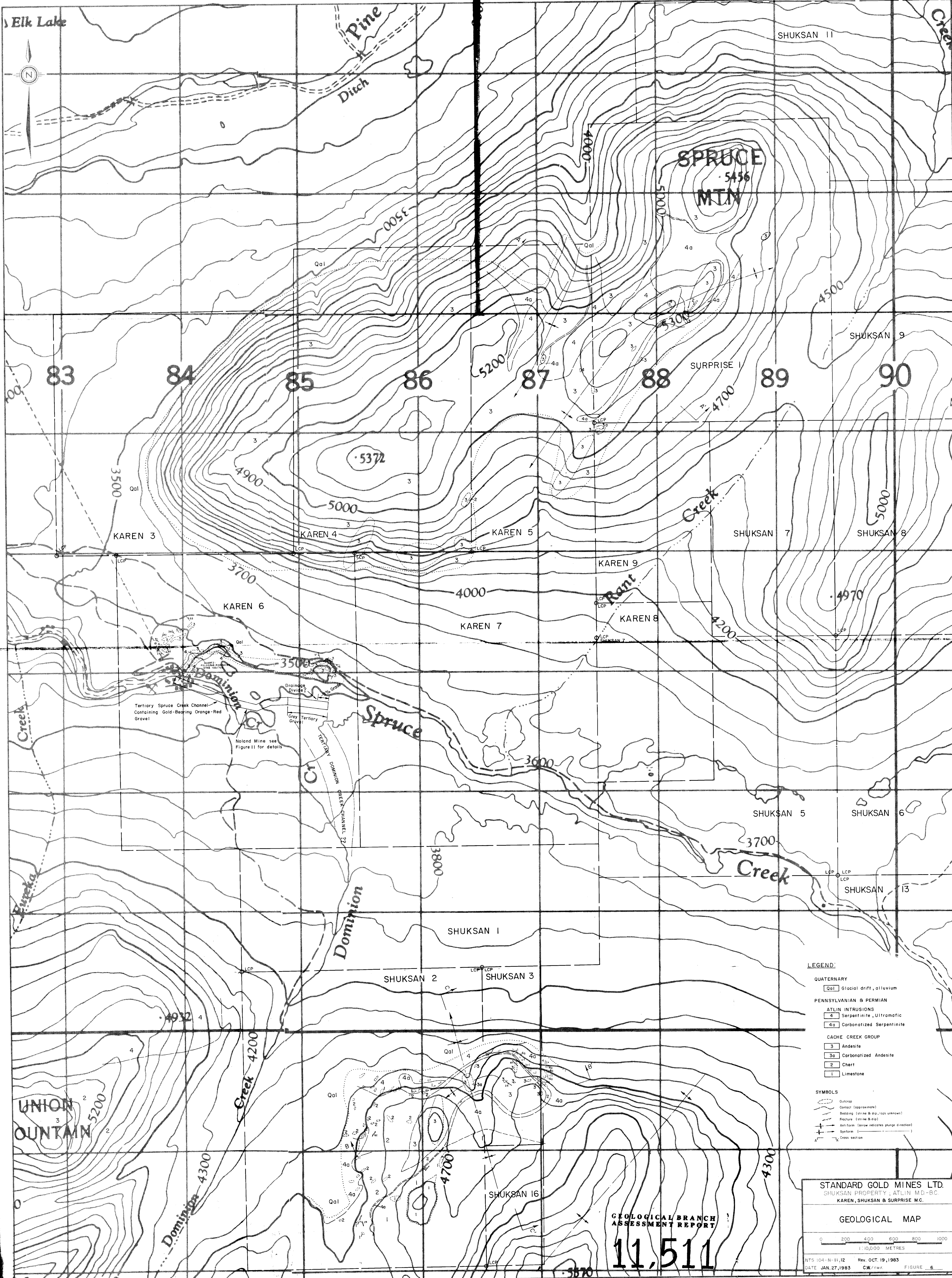
ATLIN MINING DIVISION B.C.

**CLAIM MAP**

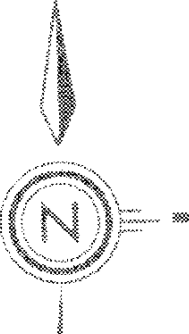


BY: C.W./r.w.r.

NTS 104-N-11 & 12  
DATE: OCT. 18, 1983  
FIGURE 2



Elk Lake



SHUKSAN 11

SPRUCE  
5456  
MTN

83

84

85

86

87

88

89

90

KAREN 3

KAREN 4

KAREN 5

KAREN 9

KAREN 6

KAREN 7

KAREN 8

SHUKSAN 7

SHUKSAN 8

Tertiary Spruce Creek Channel  
Containing Gold-Bearing Orange-Red  
Gravel

Noland Mine see  
Figure 11 for details

Spruce  
Creek

SHUKSAN 5

SHUKSAN 6

Creek

SHUKSAN 13

SHUKSAN 1

SHUKSAN 2

SHUKSAN 3

UNION  
MOUNTAIN

SHUKSAN 16

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,511

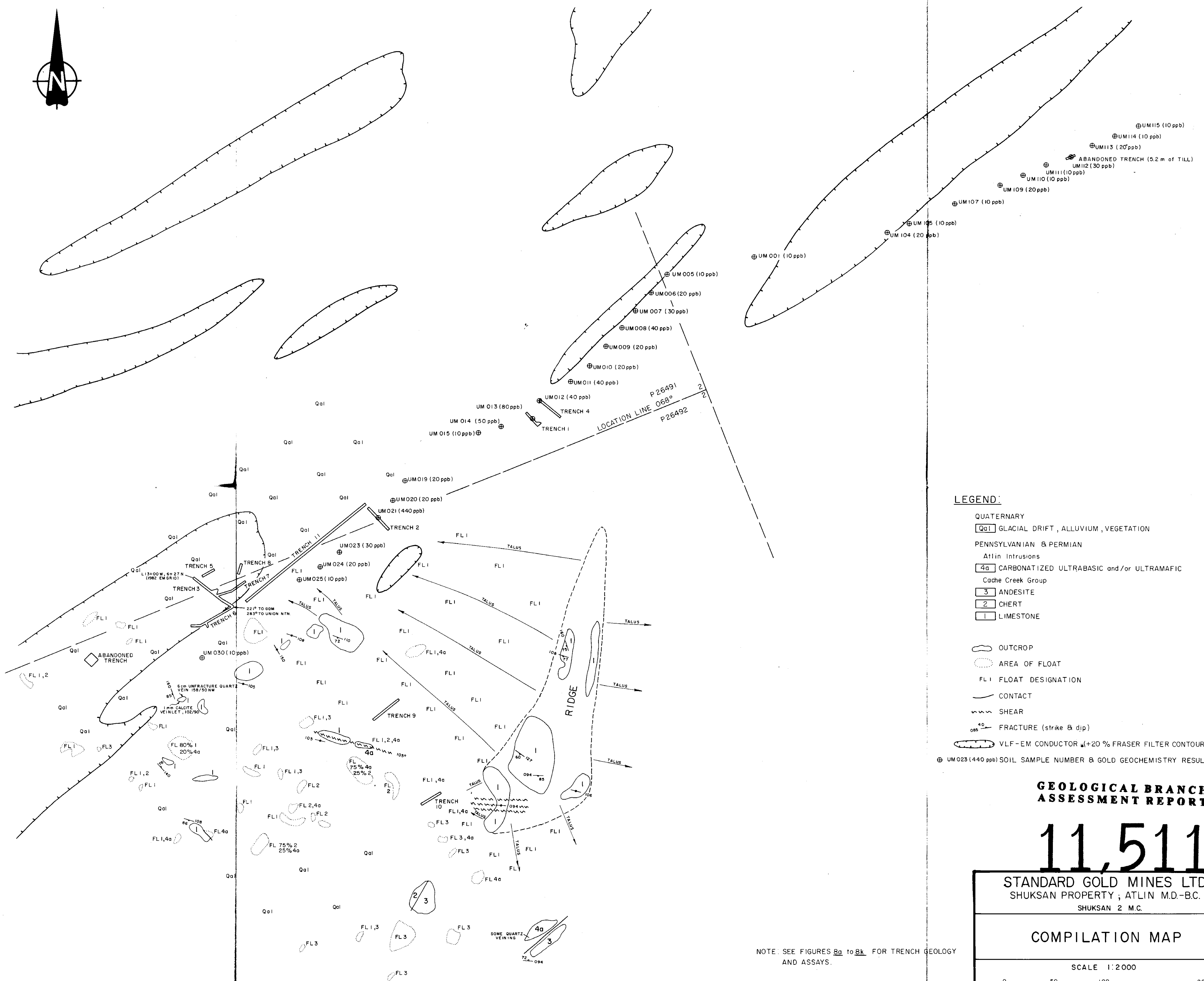
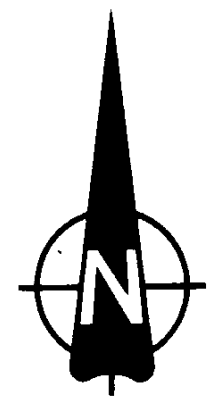
- LEGEND:**
- QUATERNARY**
- Qal Glacial drift, alluvium
- PENNSYLVANIAN & PERMIAN**
- ATLIN INTRUSIONS**
- 4 Serpentine, Ultramafic
  - 4a Carbonatized Serpentine
- CACHE CREEK GROUP**
- 3 Andesite
  - 3a Carbonatized Andesite
  - 2 Chert
  - 1 Limestone
- SYMBOLS**
- Outcrop
  - Contact (approximate)
  - Bedding (strike & dip, rocks unknown)
  - Fracture (strike & dip)
  - Salt form (arrow indicates plunge & direction)
  - Surface
  - Cross section

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY, ATLIN M.D.-B.C.  
KAREN, SHUKSAN & SURPRISE M.C.

**GEOLOGICAL MAP**

0 200 400 600 800 1000  
1:10,000 METRES

NTS 104-N-11,12 Rev. OCT. 19, 1983  
DATE JAN 27, 1983 CW/rwr. FIGURE 6



- LEGEND:**
- QUATERNARY
    - Qa1 GLACIAL DRIFT, ALLUVIUM, VEGETATION
  - PENNSYLVANIAN & PERMIAN
    - A1lin Intrusions
  - CACHE CREEK GROUP
    - 4a CARBONATIZED ULTRABASIC and/or ULTRAMAFIC
    - 3 ANDESITE
    - 2 CHERT
    - 1 LIMESTONE
  - OUTCROP
  - AREA OF FLOAT
  - FL 1 FLOAT DESIGNATION
  - CONTACT
  - SHEAR
  - FRACTURE (strike & dip)
  - VLF-EM CONDUCTOR (+20% FRASER FILTER CONTOUR)
  - UM 023 (440 ppb) SOIL SAMPLE NUMBER & GOLD GEOCHEMISTRY RESULTS

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY; ATLIN M.D.-B.C.  
SHUKSAN 2 M.C.

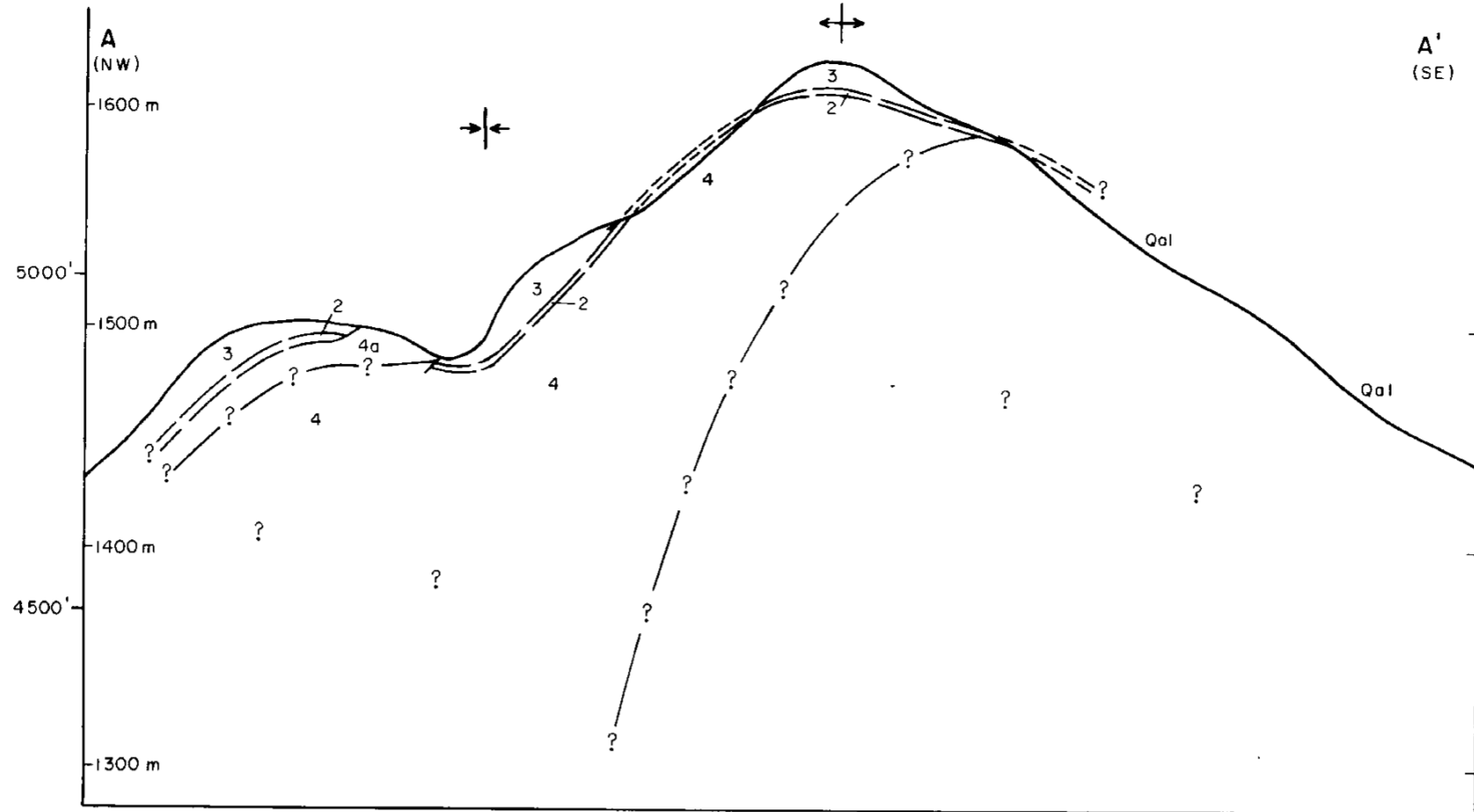
**COMPILATION MAP**

SCALE 1:2000

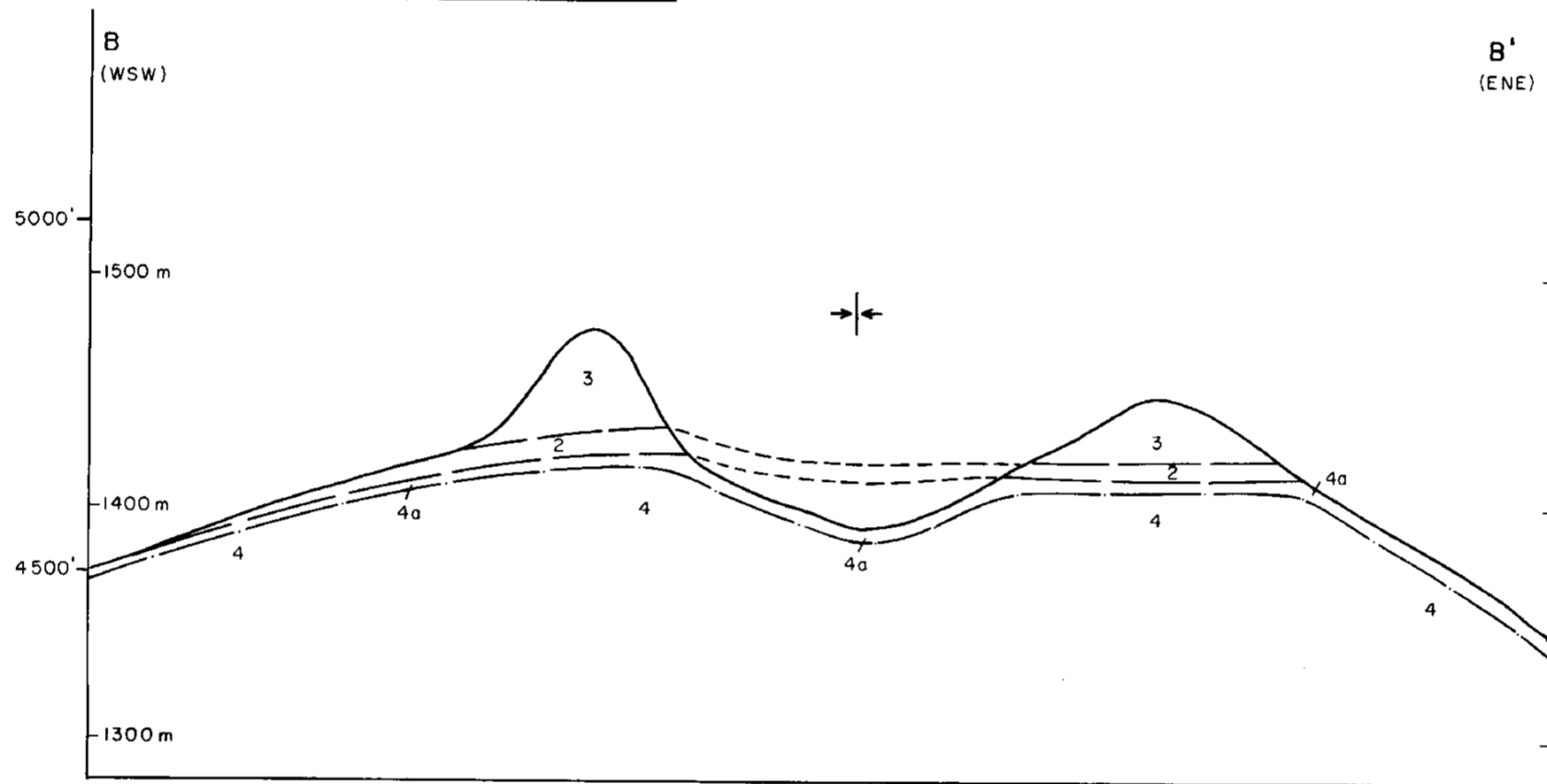
0 50 100 200 m

NTS 104-N-11, 12  
DATE OCT. 25, 1983 C.W./r.w. FIGURE 7

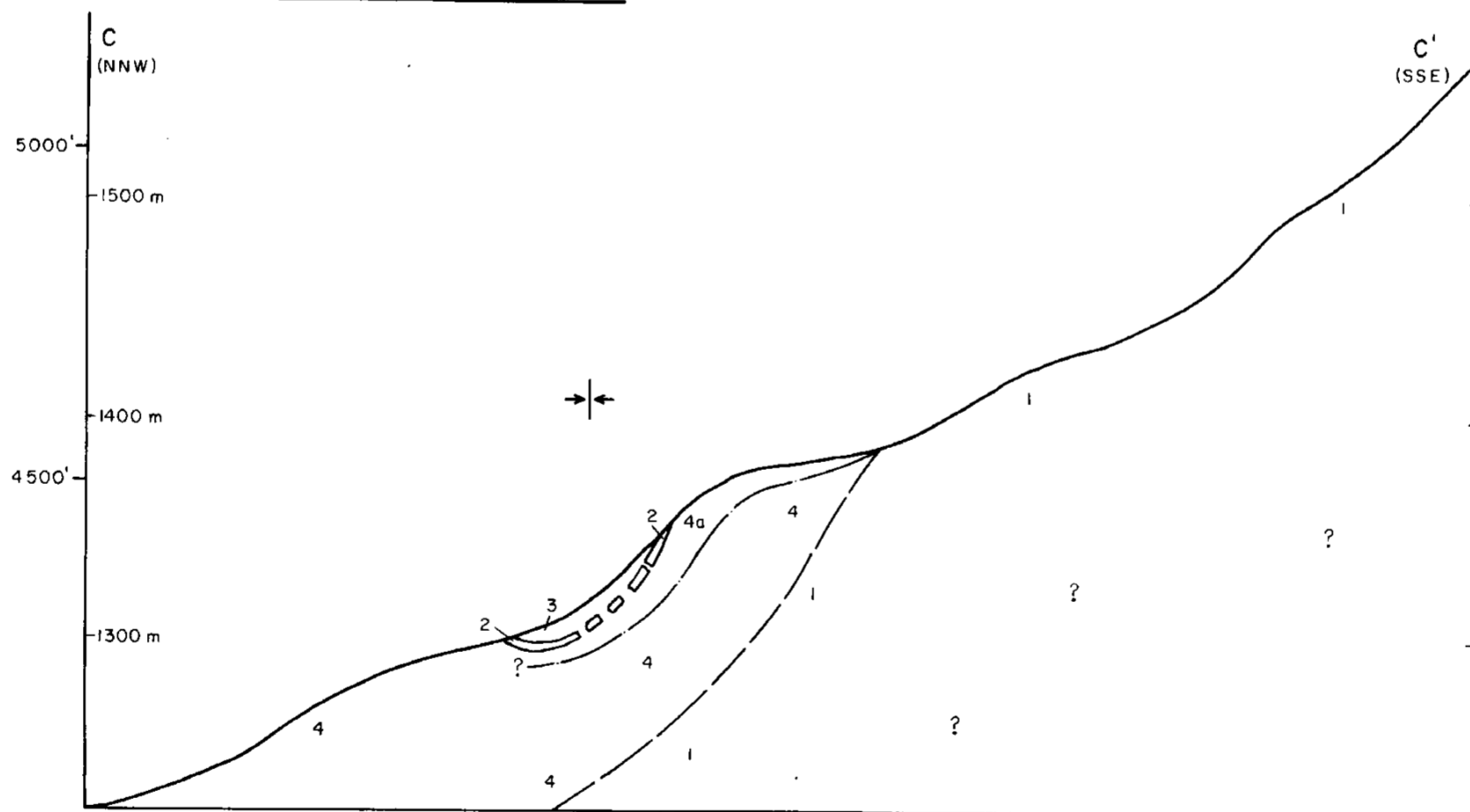
**CROSS-SECTION A-A'**



**CROSS-SECTION B-B'**



**CROSS-SECTION C-C'**



**LEGEND:**

**QUATERNARY**

Qal Glacial drift, alluvium

**PENNSYLVANIAN & PERMIAN**

**Atlin Intrusions**

4 Serpentinite, ultramafic  
4a Carbonatized serpentinite

**Cache Creek Group**

3 Andesite  
3a Carbonatized andesite  
2 Chert  
1 Limestone

--- Contact (approximate), (gradational)

↑↓ Antiform

↓↑ Synform

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY ATLIN M.D.-B.C.

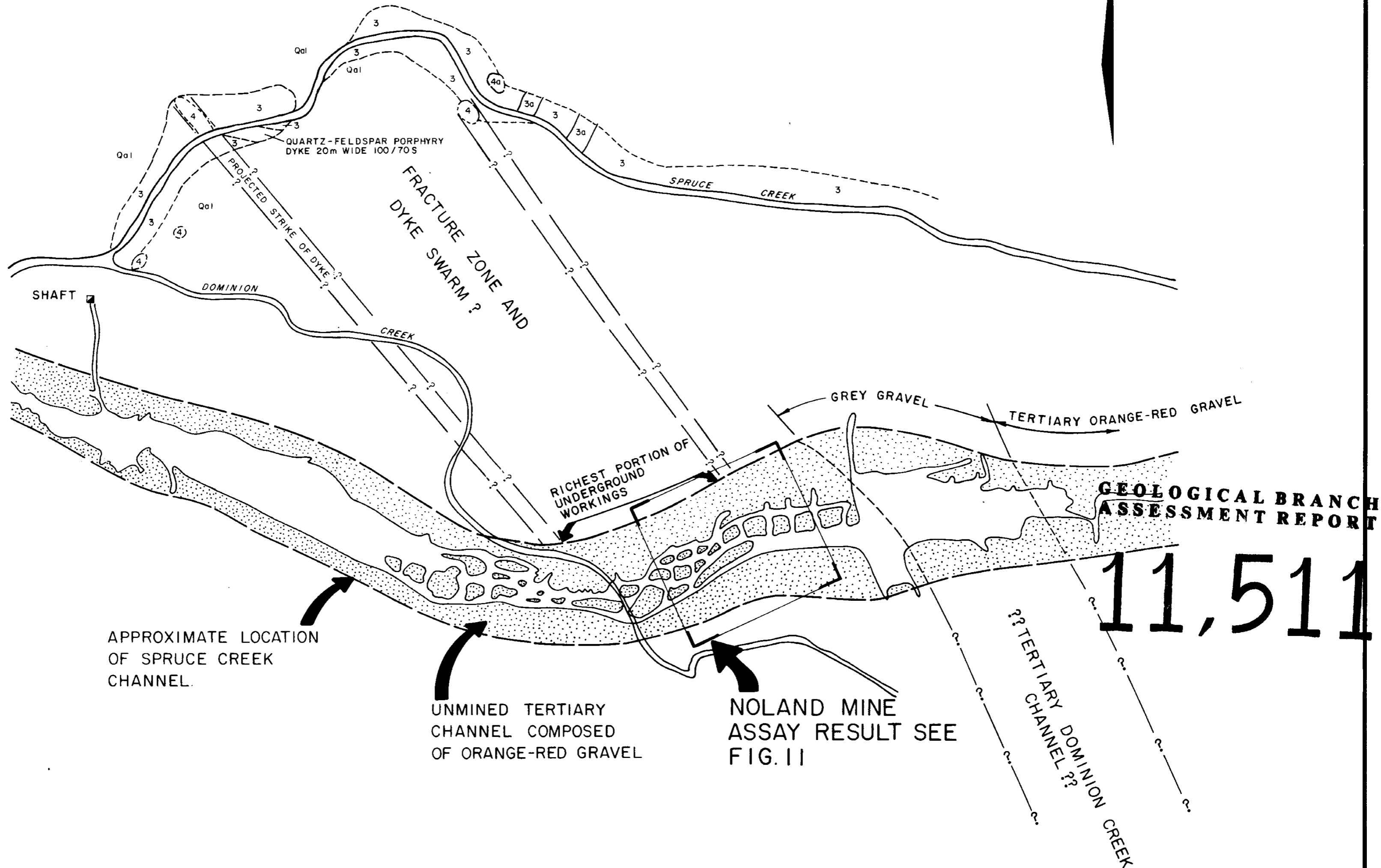
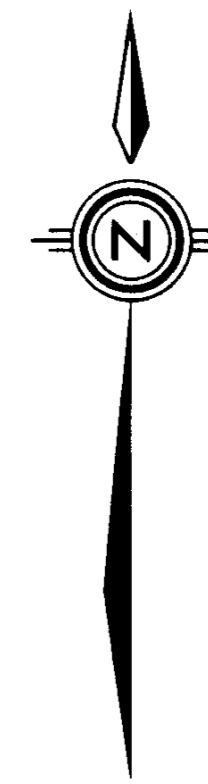
**CROSS SECTIONS**

Vertical scale 1 cm = 100 feet  
Horizontal scale 1 cm = 100 metres  
Vertical exaggeration = 3.3 x

NTS 104-N-11 B12

DATE: JAN. 30, 1983 C.W./r.w.r.

FIGURE 9



**LEGEND:**

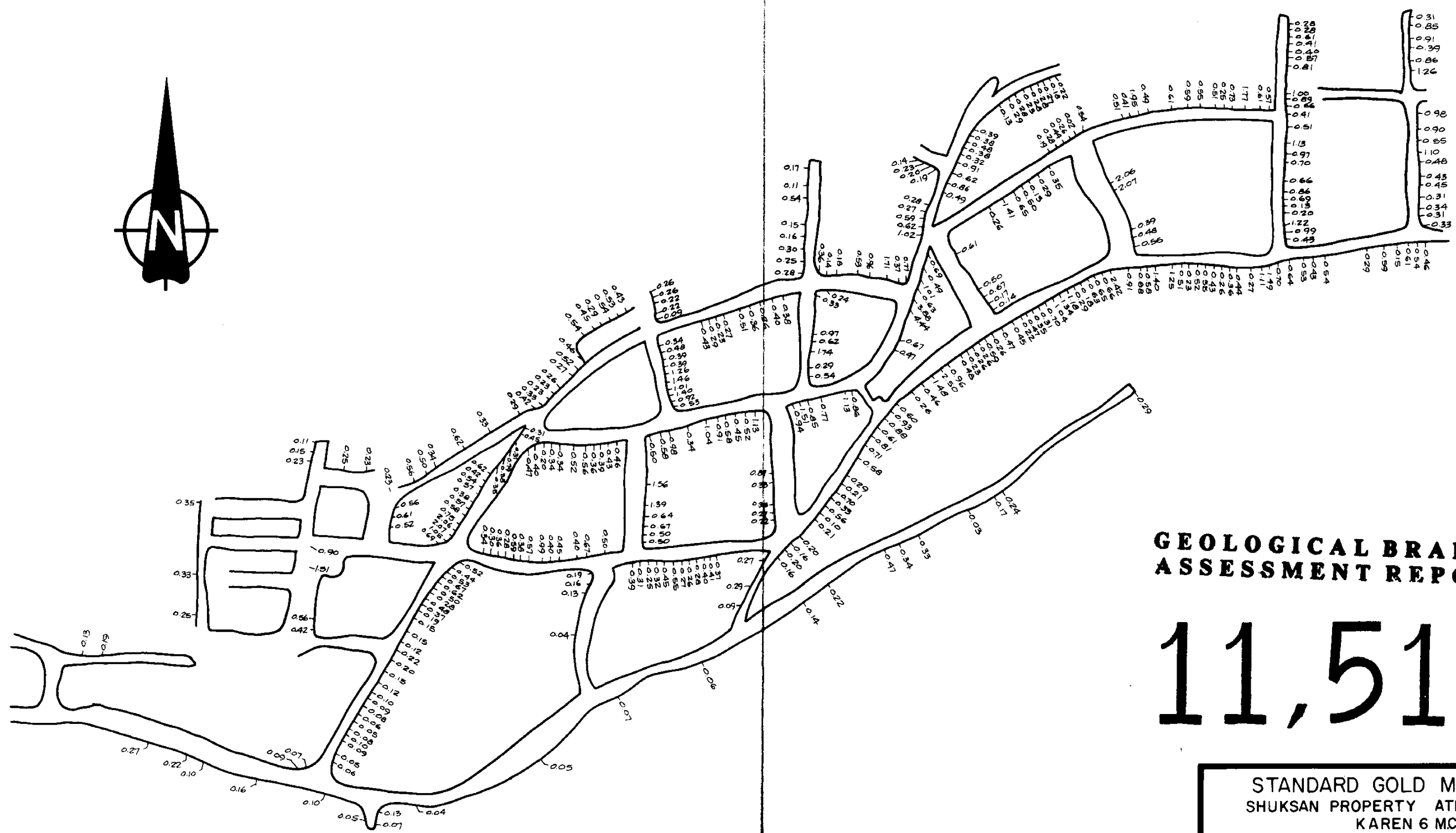
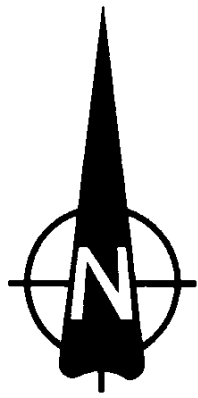
- Qal Glacial drift, alluvium
- 4 Serpentinite, gabbroic dyke
- 3 Andesite
- 3a Carbonatized andesite

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY ATLIN M.D.-B.C.  
KAREN 6 MC.

LOCATION OF:  
UNDERGROUND WORKINGS IN  
THE NOLAND MINE

0 100 200 300m  
1:3 600

NTS 104-N-11 & 12 REV. OCT. 20, 1983  
DATE: JAN. 30, 1983 C.W./r.w.r FIGURE 10



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY ATLIN M.D. - B.C.  
KAREN 6 MC.

ASSAY PLAN OF THE  
NOLAND MINE

SCALE 1:730

NTS. 104-N-11, 12

DATE: Feb./1983

C.W./r.w.r.

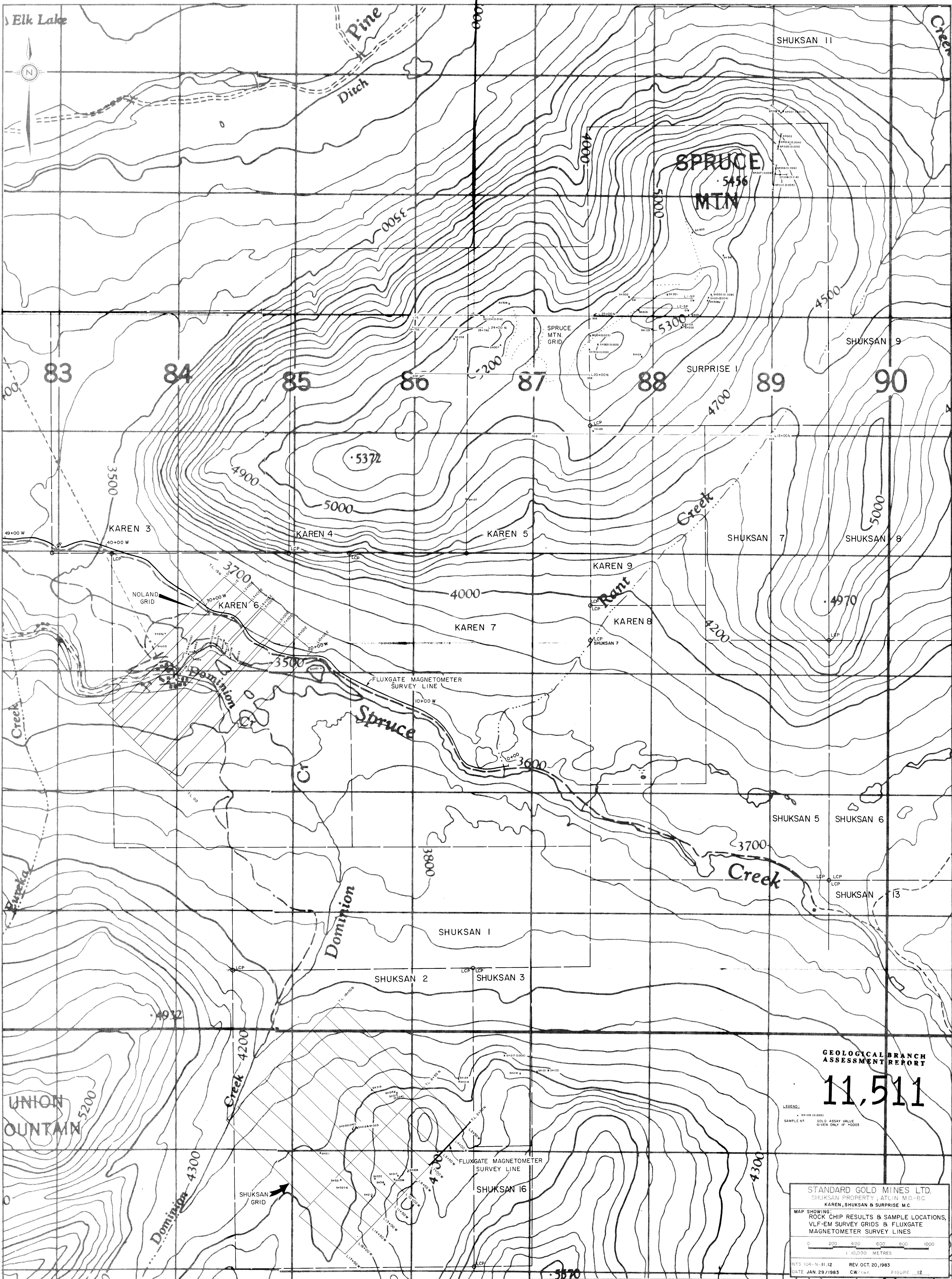
FIGURE 11

LEGEND:

Values are ounces of GOLD /cubic yard of GRAVEL

NOTE: From VEERMAN, 1981





SHUKSAN 11

**SPRUCE  
MTN**  
5456

SHUKSAN 9

SURPRISE 1

90

83

84

85

86

87

88

89

KAREN 3

KAREN 4

KAREN 5

SHUKSAN 7

SHUKSAN 8

KAREN 9

KAREN 6

KAREN 7

KAREN 8

SHUKSAN 5

SHUKSAN 6

SHUKSAN 1

SHUKSAN 2

SHUKSAN 3

SHUKSAN 13

**UNION  
MOUNTAIN**  
5200

SHUKSAN 16

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

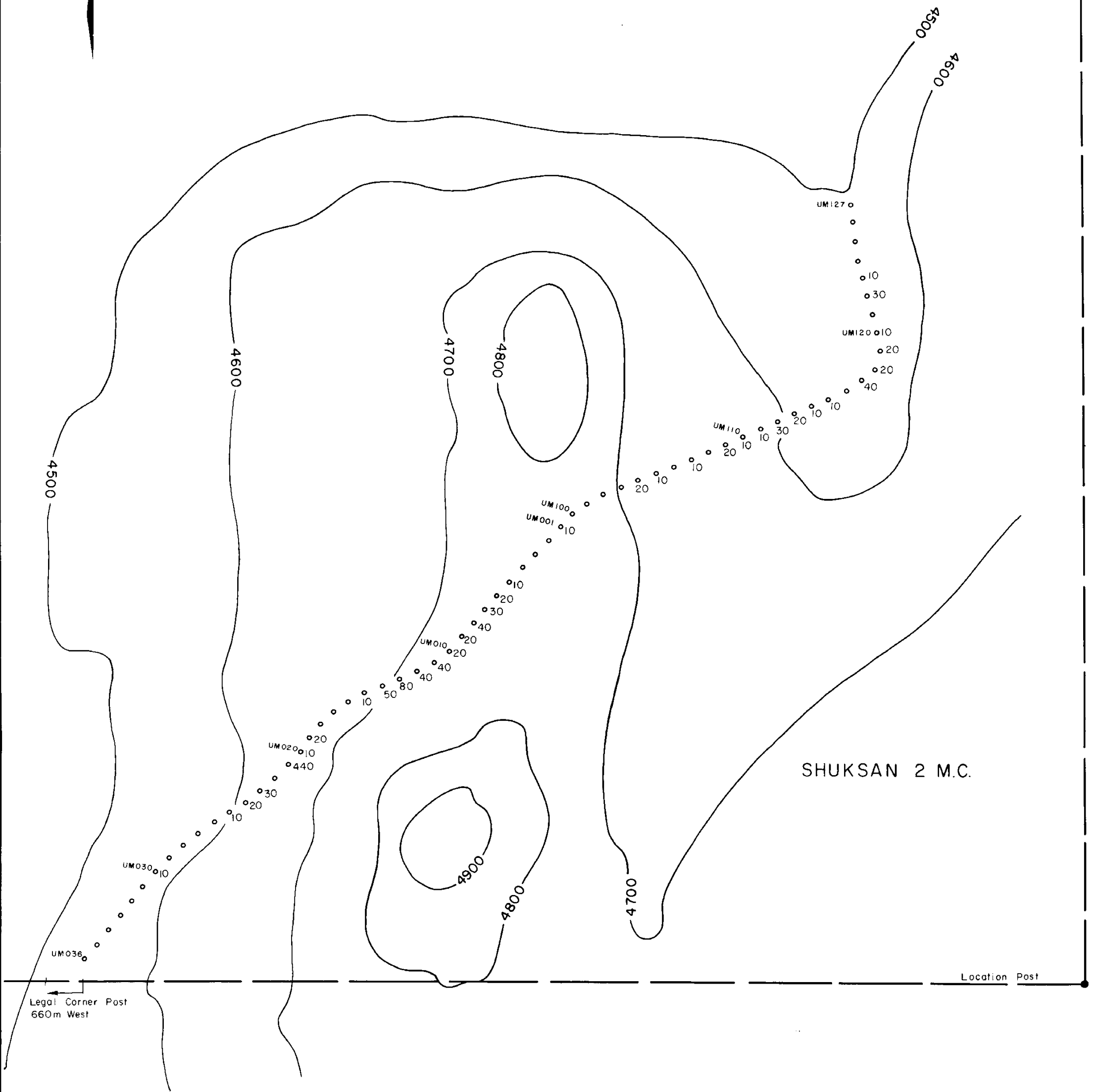
**11,511**

LEGEND:  
\* SH109 (0.0001)  
SAMPLE NO. GOLD ASSAY VALUE  
GIVEN ONLY IF >0.003

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY, ATLIN, B.C.  
KAREN, SHUKSAN & SURPRISE M.C.  
MAP SHOWING:  
ROCK CHIP RESULTS & SAMPLE LOCATIONS,  
VLF-EM SURVEY GRIDS & FLUXGATE  
MAGNETOMETER SURVEY LINES

0 200 400 600 800 1000  
1:10,000 METRES  
NTS 104-N-11,12 REV OCT. 20, 1983  
DATE JAN. 29, 1983 C.W./f.w.t. FIGURE 12





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

**LEGEND:**

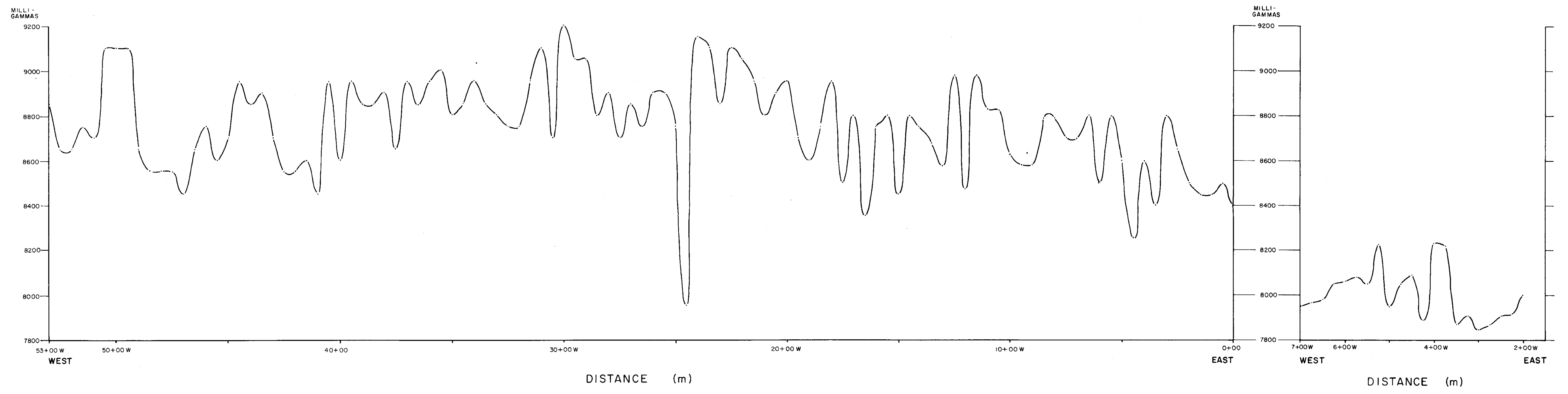
- o Soil sample location
  - UM 036 Sample number
  - 10 Gold value in ppb.
- Gold values that recorded <10ppb are not plotted.  
All samples were analyzed.

|                                                                                         |                                  |
|-----------------------------------------------------------------------------------------|----------------------------------|
| <b>STANDARD GOLD MINES LTD.</b><br>SHUKSAN PROPERTY ; ATLIN M.D.-B.C.<br>SHUKSAN 2 M.C. |                                  |
| <b>SOIL GEOCHEMISTRY</b><br><b>(GOLD)</b>                                               |                                  |
| <p>1:5000 METRES</p>                                                                    |                                  |
| NTS 104-N-11<br>DATE: NOV. 14/82                                                        | AT./r.w.r.      FIGURE <u>14</u> |

# 11,511

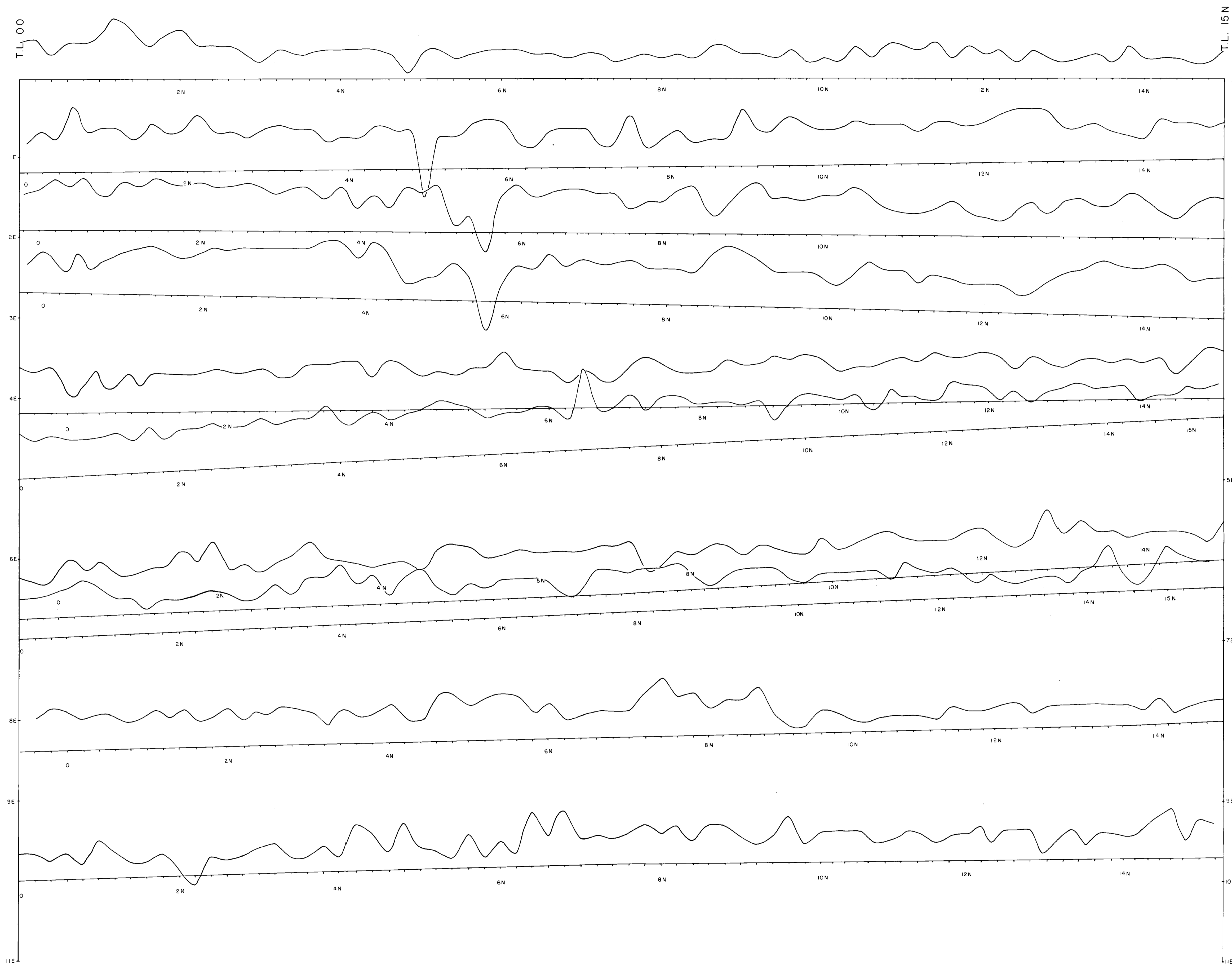
SHUKSAN GRID  
T.L. 3+50 N

## SPRUCE CREEK ROAD - FLUXGATE MAGNETOMETER SURVEY LINE

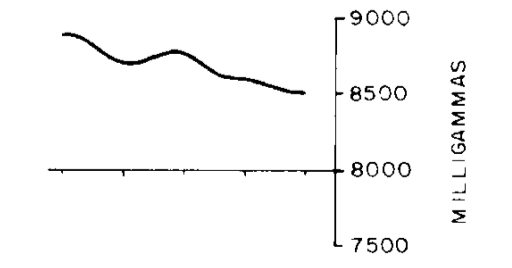


INSTRUMENT: Fluxgate MF-2 Magnetometer

|                                                                |
|----------------------------------------------------------------|
| STANDARD GOLD MINES LTD.<br>SHUKSAN PROPERTY ; ATLIN M.D.-B.C. |
| MAGNETOMETER PROFILES                                          |
| 200 0 200 400 600 800<br>1:10 000 METRES                       |
| NTS 104-N-11812<br>DATE: JAN.30/1983 C.W./r.wr. FIGURE 15      |



**LEGEND:**



INSTRUMENT: SCINTREX MF-2 FLUXGATE MAGNETOMETER

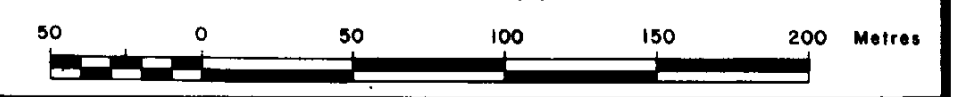
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

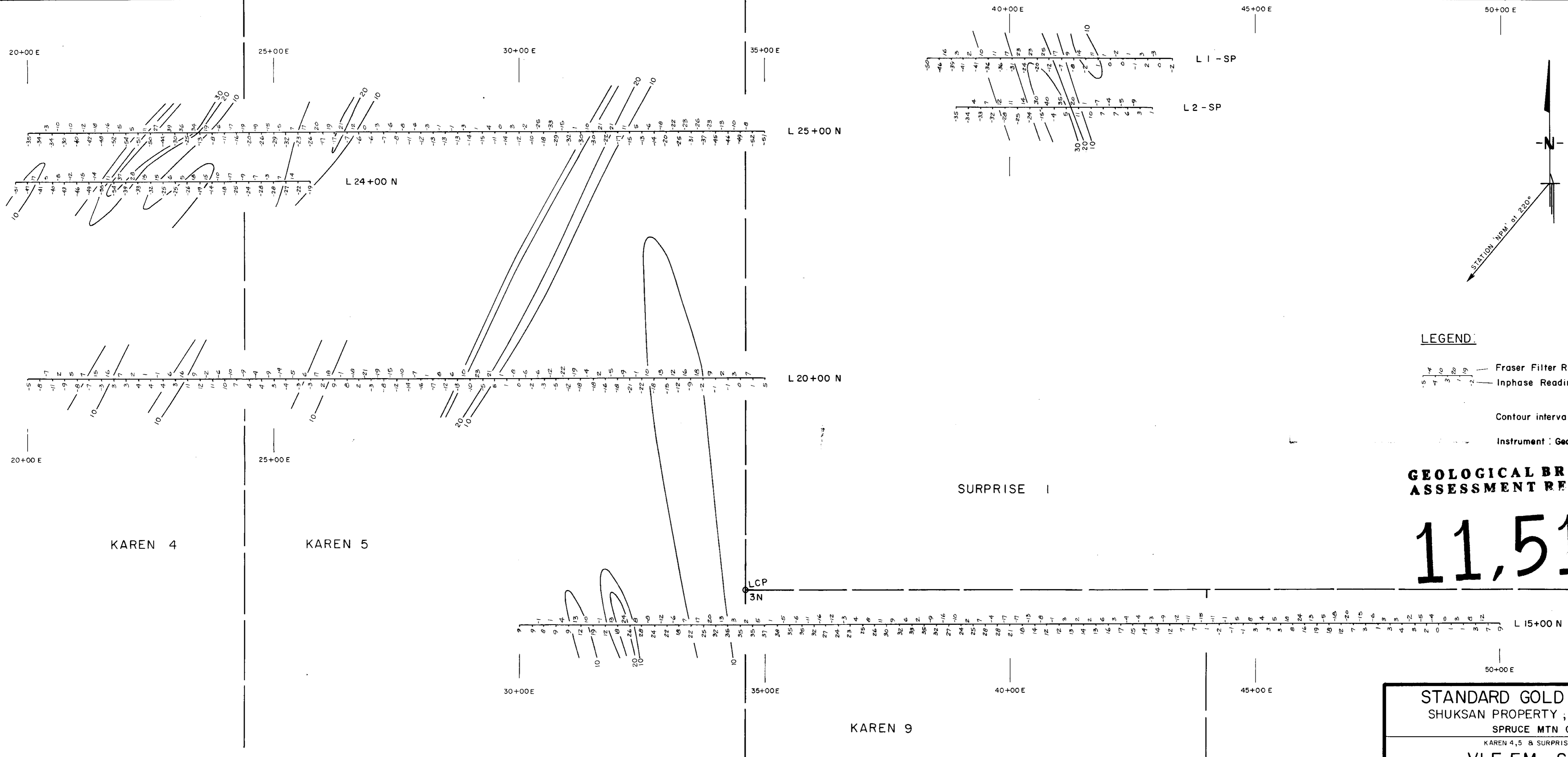
STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY ; ATLIN M.D.-BC.  
KAREN 6 M.C. ; NOLAND GRID

**MAGNETOMETER PROFILES**

SCALE 1:2500



NTS 104-N-11,12  
DATE OCT. 24, 1983 CW./r.w.r. FIGURE 16



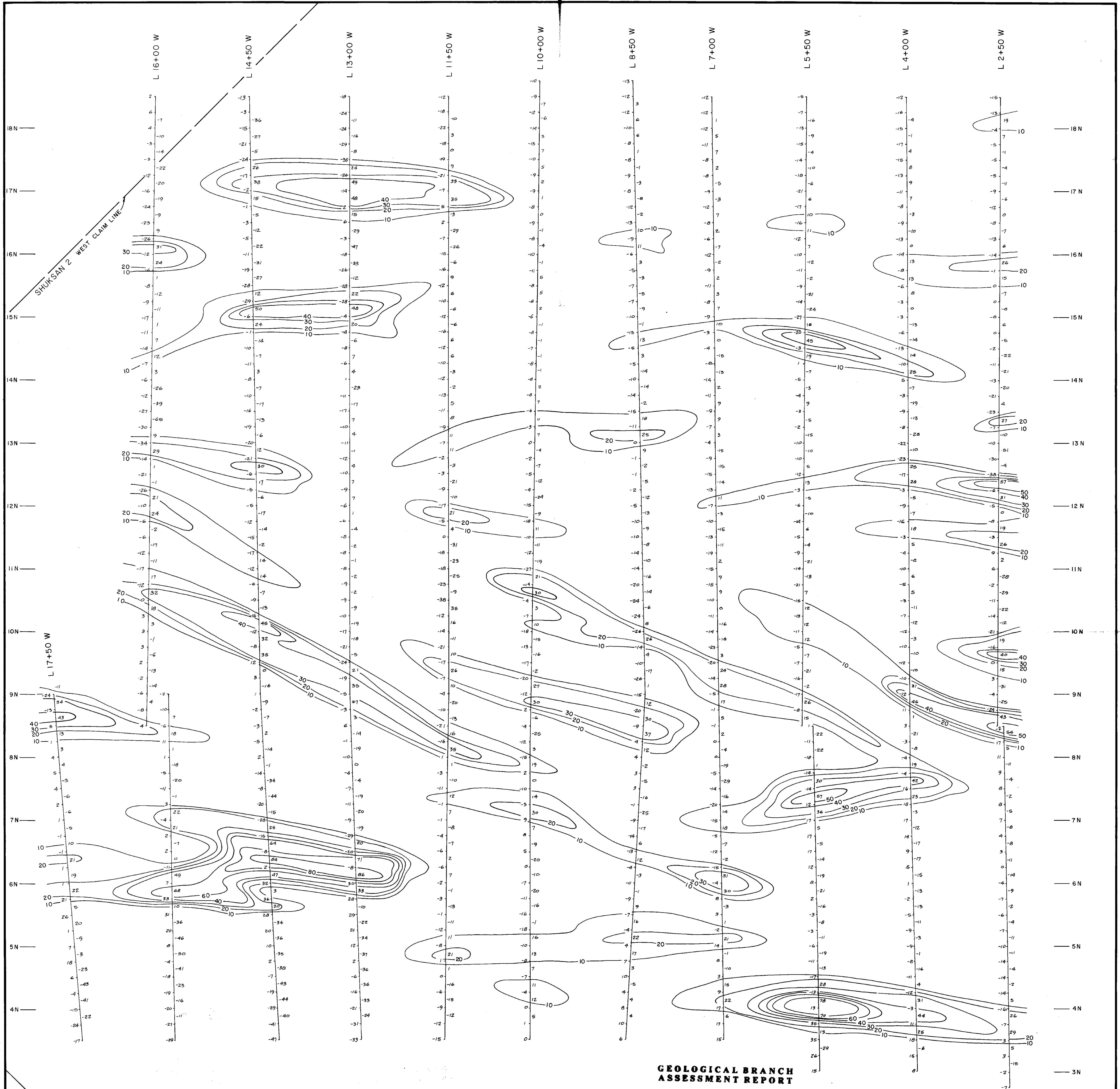
**LEGEND:**

- Fraser Filter Result (%)
- Inphase Reading
- Contour interval 10, 20 & 30 %
- Instrument : Geonics EM-15

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

|                                                                                                                         |  |
|-------------------------------------------------------------------------------------------------------------------------|--|
| <b>STANDARD GOLD MINES LTD.</b><br>SHUKSAN PROPERTY ; ATLIN M.D.-B.C.<br>SPRUCE MTN GRID<br>KAREN 4,5 & SURPRISE 1 M.C. |  |
| <b>VLF-EM SURVEY</b><br>CONTOURS OF FRASER FILTER RESULTS (%)                                                           |  |
| <p>1:5000 METRES</p>                                                                                                    |  |
| NTS 104-N-11812<br>DATE: JAN. 31 /1983      C.W./r.w.r.      FIGURE 17                                                  |  |



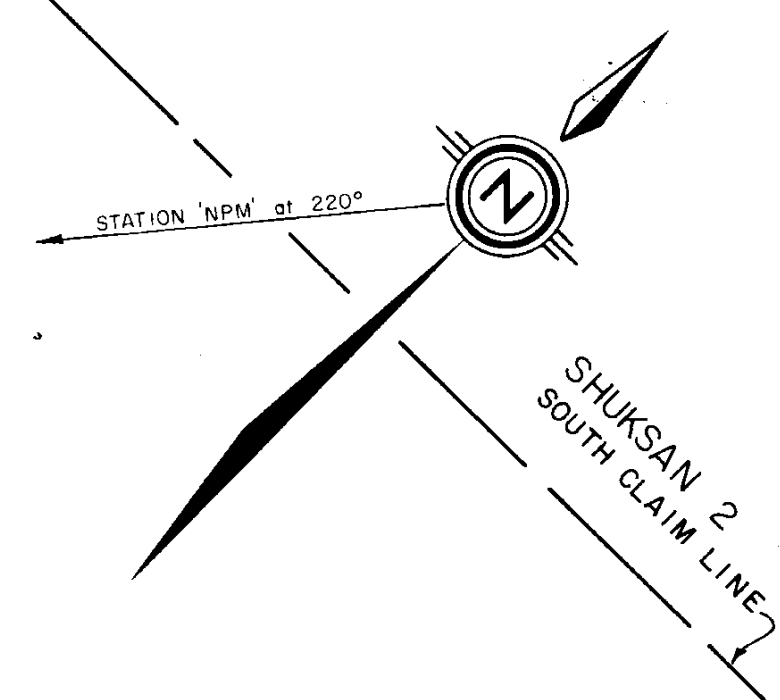
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

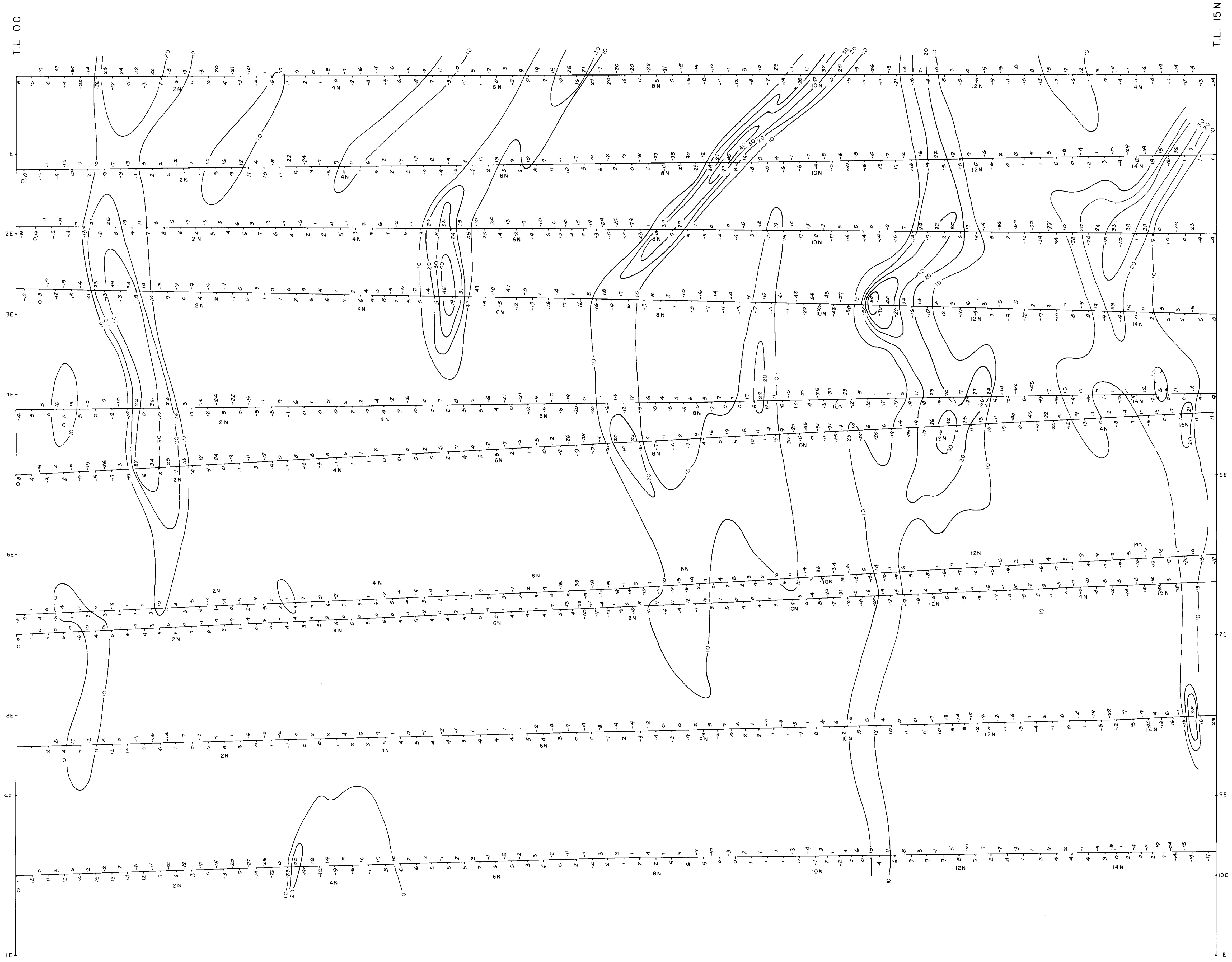
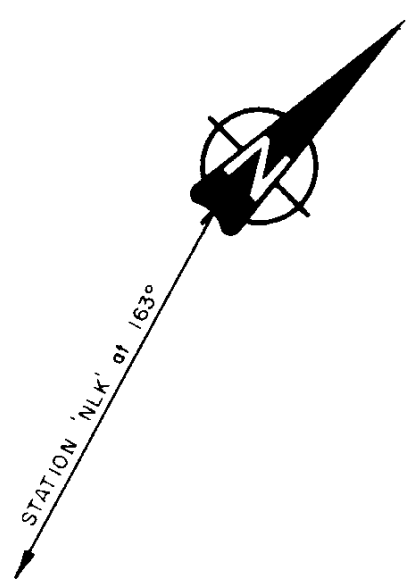
**11,511**

LEGEND:  
In-phase reading  $\pm 10$  Fraser filter result (%)  
 $\pm 5$

Contoured at 10% intervals  
Instrument: Geonics EM-16

|                                                                               |  |
|-------------------------------------------------------------------------------|--|
| STANDARD GOLD MINES LTD.<br>SHUKSAN PROPERTY; ATLIN M.D.-B.C.<br>SHUKSAN GRID |  |
| VLF-EM SURVEY<br>CONTOURS OF FRASER FILTER RESULTS (%)                        |  |
| 0 100 200 300<br>1:2 500 METRES                                               |  |
| NTS 104-N-11<br>DATE: JAN. 30/1983 AT./rwr. FIGURE 18                         |  |





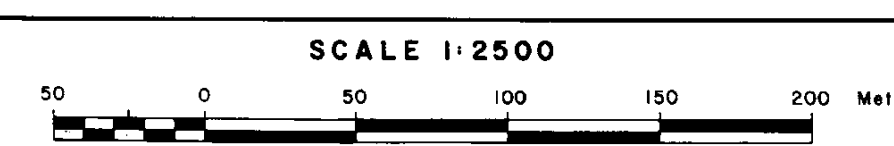
L0+00  
L1+00E  
L2+00E  
L3+00E  
L4+00E  
L5+00E  
L6+00E  
L7+00E  
L8+00E  
L9+00E  
L10+00E

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,511**

STANDARD GOLD MINES LTD.  
SHUKSAN PROPERTY; ATLIN M.D.-BC.  
KAREN 6 M.C.; NOLAND GRID

VLF-EM SURVEY  
CONTOURS OF FRASER FILTER RESULTS (%)



NTS 104-N-11,12  
DATE OCT. 24, 1983 CW./r.w.r. FIGURE 19

**LEGEND:**  
FRASER FILTER RESULT (%)  
INPHASE READINGS  
CONTOUR INTERVAL = 10,20,30,40 & 50 %  
INSTRUMENT: GEONICS EM-16