35 pp

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GEOLOGICAL REPORT

ON

BRAE 1 CLAIM, PEACHLAND, B.C.

49°47'00"N; 119°49'20"W: NTS 82E/13W

SPRING LAKE, 6 Km WNW of PEACHLAND

Osoyoos Mining Div., British Columbia

BY

N.C.Lenard, P. Geol., P. Eng.
Consulting Geologist, Westbank, B.C.

Field Work Done: Oct. 1,14,24,Nov.1,7,8,
24, 1986;
Oct. 8,9,13,14, 1987.

Owner: N.C.Lenard January 6, 1988

PROFESSIONAL GEOLOGIST INDEPENDENT N. C. LENARD

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA N. C. LENARD

Ex. Date Dec. 31, 1988

-FRONTISPIECE-

Fig.1 Index Map
to Accompany Brae 1 Report
By N.C.Lenard,P.Eng.

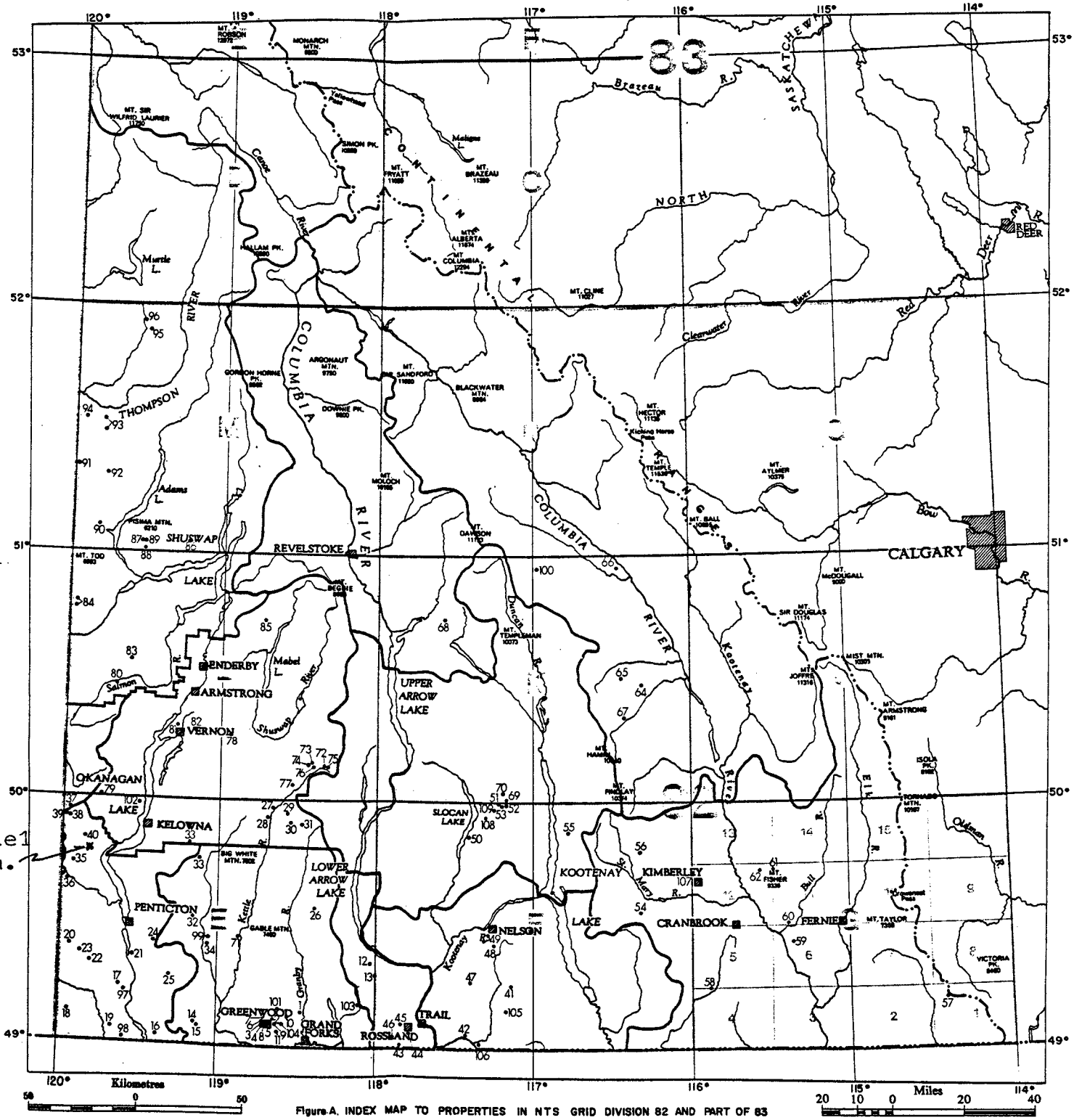

Figure A. INDEX MAP TO PROPERTIES IN NTS GRID DIVISION 82 AND PART OF 83

-CONTENTS-

GEOLOGICAL REPORT ON BRAE 1 CLAIM

Osoyoos Min. Div., British Columbia

INTRODUCTION:

This report covers reconnaissance geological mapping of outcrops and float on the 20-unit Brae 1 Claim done to locate gold-bearing skarn or vein deposits. Mapping done in 1965 on the claim area and in 1961 on the region, indicated Triassic Nicola Beds on Brae 1 Claim, which host auriferous skarns and veins on the adjoining OKA group claims and at the open pit Mascot Gold Mine at Hedley (Append.Fig.11a).

Work was done intermittently by the writer in the field from Oct. 1, 1986 through Oct. 14, 1987. Mapping was by belt chain and compass tied to logging and district roads and topographic features.

The following conclusions are based on the work described above.

SUMMARY & CONCLUSIONS:

1. The BRAE 1 property is a single 20-unit mineral claim held in the name of N.C. Lenard.
2. The property, situated 6 Km WNW of Peachland, British Columbia, is accessible by the Brenda Mines main road.
3. Work summarized in this report consisted of moderate to detailed scale geological mapping; and, of bulldozer stripping of an old quartz vein showing in the southwest sector of the claim.
4. The property is underlain by Cretaceous granodiorite; a raft or roof-pendant of meta-sediments (inferred Triassic Nicola Beds) in the northwest quadrant; and mapped Tertiary age "Trepanier" rhyolite along the north border of the claim. Outcrops and float of hornfelsed calc-silicate, skarn, marble, limestone and diorite occur for about 600m (2,000 feet) in the northwest sector, extending east from OKA 5 claim as predicted by Robinson (1965a).

Thus, a Hedley-type sequence exists on Brae 1 claim, continuing east from the OKA property where these beds are reported to be gold-bearing in skarn and veins.

5. The wide, pyritized and brecciated quartz vein with meagre gold-silver enrichment in the southwest corner of Brae 1 has no obvious economic potential where presently exposed. But, it may have elsewhere along its trend, given favorable channelways for gold-bearing media to form raking ore shoots.

6. The primary exploration targets at present are:
   (a) Calc-silicate, marble and skarn zones in the belt of Hedley-type metasediments cut by diorite intrusives in the northwest sector of the claim, and possibly recurring in the northeast corner where one occurrence of pyritic quartzite occurs near a granodiorite contact.
   (b) The sheared granodiorite buried contact with Triassic strata as mapped on the road showing sample site R54. Anomalous gold values in this pyritic, silicified structure warrants further exploration for gold in the shear system and nearby Nicola beds.
   (c) The wide, strongly pyritized quartz vein in altered granodiorite in the southwest part of the claim for ore-shoot vein gold deposits.
   (d) Altered and silicified diorites in the north part of Brae 1 at sample sites R1-14 and R45-49 for Hedley-type vein gold deposits.

GENERAL DESCRIPTIONS:

Location & Access:

Brae 1 claim lies about 500m east of the Brenda Mines main road, about 6 Km WNW of Peachland, Osoyoos Mining Division, British Columbia. Smallish Spring Lake is in the centre of the claim. Easy access is afforded by fair to good logging roads off the Brenda Mine road, which connects to Peachland at Highway 97.

Topography, Climate & Exposures:

The property covers a broad, rolling parklike area east of Peachland Creek, well-timbered, with one south-flowing stream along its east border.

Generally the site is snow-free for about 7-8 months a year. Elevations range from about 3,000-3,300 ft. (900-1,000m).

Climate is semi-desert in part, with a good snowpack at higher elevations by springtime.

Variable depths of glacial overburden blanket the claim, with sparse bedrock exposures limited to ridges and roadcuts.

Property & Ownership:

The property consists of the 20-unit (4Ex5N) Brae 1 claim, staked Sept. 20, 1986 to adjoin the unsurveyed east edges of OKA 4 and 5 claims.

Claim	Units	Record No.	Tag No.	Record Date	Owner
Brae 1	20	2519	245494	Oct.15,1986	N.C.Lenard

BACKGROUND:

No record exists of previous development work on the claim area, except for old prospect pits seen by the writer: one at the large quartz vein outcrop in the southwest corner near 1N post; and three near the fenceline traverse in the north sector, which explored rusty, pyritic andesite, gabbro, and granodiorite at different sites (Map 4).

This area was intensively prospected for porphyry copper-molybdenum deposits during the 1960's after the Brenda Mine discovery. And, small base metal showings in the area stimulated more recent exploration in the area for massive sulphide deposits without success.

The large, adjoining OKA property, owned by Fairfield Minerals Ltd. of Vancouver, British Columbia has been explored for gold in skarns and veins for two years, and that firm recently stated that a major drill program is planned on a 3-mile long gold geochemical feature to locate gold deposits.

It described the setting as an analog of the Mascot Gold Mine located thirty miles southerly near Hedley (App.Fig.11a).

REGIONAL GEOLOGY & PREVIOUS WORK:

The regional geology of the Brae 1 Claim is shown on Geological Survey of Canada Map 538-A (Cairnes, 1939) and Map 15-1961 (Little, 1961). Both authors show the bedrock of Brae 1 to be granitic intrusives designated 'Okanagan' by Cairnes, and 'Nelson Plutonics" by Little with estimated Jurassic-Cretaceous age. Both also show a sedimentary-volcanic belt of upper Triassic (Nicola) beds extending easterly across the north margin of the claim. Cairnes inferred that they contacted the intrusives normally, while Little interpreted their contact as a major regional fault projecting east across Okanagan Lake up Mission Creek Valley.

Robinson (1965a), in a later survey of the property site, agreed with the view of Cairnes and correlated the Triassic section with the Hedley sequence of near-shore, basin-edge sediments and volcanics.

GENERAL GEOLOGY:

Poorly exposed bedrock units mapped on and bordering the claim area are as follows:

TERTIARY	Andesite (uncertain correlation)
	Trepanier Rhyolite & Arkose (Kettle River Fm.)
CRETACEOUS(?)	Granitic Rocks (Nelson Plutons) -granite, granodiorite, diorite, quartz monzonite, monzonite, syenite.
TRIASSIC(?)	U. Triassic Nicola Group - greenstone, tuff, quartzite, limestone, argillite and schist.

LOCAL GEOLOGY:

1. Granitic Rocks:

Cretaceous(?) granitic rocks underlie the bulk of

Brae 1 claim, although outcrops are very sparse. They contact a raft or pendant of Triassic metasediments in the nortwest sector of the claim. Cairnes (1937) associated these 'Okanagan Intrusives' with precious and base metal mineral deposits throughout the Okanagan region.

Foliated, greenish-hued granodiorite predominates on the property, trending northerly in pattern. It is medium-grained, hornblendic, and in the southwest corner of the claim is variably talcose and limey. Less common in the terrain is medium-grained, biotite-hornblende granite described by Robinson (1965a) but not observed in outcrops sampled by the writer.

2. Minor Intrusives:

(a) Diorite: Intermediate to basic diorite-gabbro outcrops in the northwest sector of Brae 1 as an inferred plug trending northwesterly toward post 5N (Map 4). It appears to inlie the granodiorite and outcrops again 200m west as a dyke on the west flank of the granodiorite, but their relations are unclear.

(b) Quartz Diorite: Brecciated, pyritic and bleached quartz diorite (R35) outcrops 50m south of a topographic high in northwest Brae 1, which may be an intrusive plug. Since the sample site is only 25m west of the R14 diorite outcrop, which is about 125m west of the granodiorite contact, the inferred plug may comprise both diorites as at Hedley's Banbury Mine (Ray '87). Quartz diorite float occurs 160m downslope, west of R14 outcrop at R32, where it is fresher and has epidote and calcite-healed fractures, but no pyrite.

3. Extrusives:

(a) Tuff: Float fragments and blocks of similar rhyolitic crystal tuff occur in the northwest area of Brae 1 (R36, 38f, 44, Fig.5). This is inferred to be downslope from outcropping Tertiary Trepanier Rhyolite mapped by Church(1980) as contacting Permian Cache Creek rocks on its south boundary near the northeast corner of Brae 1. This contact is about 800-1000m northeast of the subject float tuff samples.

(b) Andesite: A possible small dyke or flow of andesite outcrops east of the inferred quartz diorite plug, topographic high in the northwest sector of the claim, within 100m of the granodiorite outcrops R40-R43. The andesite is hydrothermally bleached and pyritized near its contact with diorite outcrops R13 and R14. An outcrop of dark, argillaceous limestone (R10) appears to inlie the andesite. Both may be Permian (Cache Creek) age or the carbonate may be Triassic Nicola strata. Since the andesite is not porphyritic, it may be a flow rather than a dyke or plug. Alternately, the andesite may be post-Kettle River Tertiary age.

4. Sedimentary Rocks:

Late Triassic, Nicola sequence beds have been mapped on the northern part of the property in previous surveys (Cairnes 1937; Little 1961; Robinson 1965). On Brae 1 and adjoining OKA claims they have been variably altered to calc-silicate hornfelses, skarns, and marbles.

This sedimentary package is a pendant in surrounding Cretaceous(?) granitics, resembling the Hedley sequence 30 miles southerly where skarns host the Mascot gold mine(Fig.5,8,11).

A limestone-rich band like Hedley's Sunnyside formation is present on the east edge of the OKA property. From the subject survey it continues easterly across Brae 1 for a mapped 650m (2,133 feet) in outcrop and float, much obscured by glacial drift. This band was mapped by Robinson with a width of 400-1000 feet (122-305m). Of this, he described 30% to be light grey marblized limestone in the upper part of the unit, resembling the gold-rich skarned lime unit at Hedley.

Robinson correlated the sedimentary beds on what are now the OKA 4 and 5 claims with the Upper Triassic Hedley sequence devised by Bostock in 1940. This was recently revised (Ray etal, 1987) into an upper, mainly volcanic, and lower, lime-rich sequence, which recognizes basin-edge shoreline tectonic control of sedimentation and intrusives at Hedley's Mascot mine area.

Table 1:

UPPER TRIASSIC (NICOLA) STRATIGRAPHY, SOUTHERN B.C.

Preto, etal 1977 (after Bostock 1940) (Hedley)	Robinson, 1965 (Peachland)	Ray, etal, 1987 (Hedley)
HENRY, F.M. Black Argillitic, Tuff Impure Limestone		Whistle Crek. Sequence Tuff, VolcanicBreccia, Siltstone. Copperfield Conglomerate.
HEDLEY SEQUENCE	'HEDLEY SEQUENCE'	HEDLEY SEQUENCE
HEDLEY, F.M. Limestone, Quartzite, Chert Quartzite, Argillite, Conglomerate, Breccia, Tuff	Upper Quartzite Mem. Limestone Mem. Lower Quartzite Mem.	Siltstone, Argillite minor Limestone & Conglomerate.
SUNNYSIDE, F.M.-Limestone	Black Limestone Zone	Limestone.
REDTOP, F.M.- Limestone, Cherty Quartzite, Tuff Siliceous Argillite, Breccia		

ALTERED SEDIMENTARIES:

Exposed on the northern part of Brae 1 are numerous calc-silicate hornfelses (from contact-metamorphonsed argillaceous-siliceous limestones); and local skarns (andradite, tremolite, pyrite) from metasomatized purer carbonates.

Scarcity of outcrops tends to obscure field relations of these altered beds: marble occurs in only two of the collected rock samples, both float, R31 and R34. The latter is close to outcrops of diorite and quartz diorite.

LOCAL STRUCTURE:

Robinson in 1965 mapped the skarned sedimentary package adjoining the west side of Brae 1 claim to broadly arc from a northerly strike to an easterly strike with northerly dip trending onto present Brae 1 ground at an inferred width of 300m (1,000 feet) and negligible outcrop evidence. This structural swing appears to conform with the north edge of the easterly trending granitic pluton.

A sheared, altered granodiorite outcrop in a road cut (R54) on this trend is pyritized and silicified, yielding 45 ppb gold in rock geochemical analysis of a grab sample. Stripping is needed to properly map this structure, which occurs as a 3m-wide outcrop in the middle of a 28.5m stretch of fresh float along the east-west road, and trends across it at 134° azimuth: a southeast strike like that of the inferred diorite body to the north (R45-50) and, like the southwest side of Spring Lake 450m southeast.

The above shear zone lies in a pronounced draw that cuts east-west across Brae 1 north of Spring Lake and west onto the OKA property. A major east-west fault, inferred and mapped by Church (1980), lies about 300m north of this surface low. A regional fault, mapped by Little (1961), trends east-west about 250m south of Spring Lake, extending east across Okanagan Lake and up Mission Creek. Bedrock cut by these breaks on Brae 1 was mapped as Permian Cache Creek strata by Church, and Upper Triassic Nicola beds by Little. The east-west draw, then, may reflect a major shear zone with some potential for gold deposits, given anomalous gold values in the outcropping sheared granodiorite along its trend axis.

If basin-edge tectonics were active here as at Hedley, then the dioritic intrusives on the north sector of Brae 1 arose from basement fractures as dykes, plugs and possible sills throghout the district, trending with that of the basement fault system. Such diorites are reported to be present on the adjoining OKA property associated with auriferous skarns and veins.

WORK RESULTS & ANALYSIS:

This reconnaissance geologic mapping of bedrock exposures and fresh float established continuation of an auriferous sequence of partially hornsfelsed and skarned argillites, quartzites and limestones east from the OKA property onto Brae 1 claim for about 600m (2,000 feet).

Close analogy of this geologic setting to the Mascot gold mine and to the eastern sector of the OKA property warrants fuller exploration mapping of this limey Triassic sequence cut by Hedley-type diorites to locate geochemical gold aromalies for stripping and drilling. Hedley-type vein prospects may occur:

(a) in the granodiorite shear zone in the east-west draw north of Spring Lake, and,

(b) in the silicified basic diorite and its aureole (R45-50) and in the quartz diorite-basic diorite complex about 300m west of it.

Much more surface mapping of rock float and scarce outcrops is needed to outline the trend, width, stratigraphy and alteration patterns of the Upper Triassic beds to locate gold-enriched skarn zone equivalents of Hedley.

The marble section up to 122m wide occuring on adjoining OKA 4 and 5 claims (Robinson, 1965b) may continue onto Brae 1. Partial confirmation of this is marble clasts in samples R31 and R34 on Brae 1. This zone is possibly equivalent to the Sunnyside Limestone, a reef facies unit at Hedley, which in part hosts gold ore shoots there in skarn within 80m (262 feet) of its outer edge: the 'Marble Line'.

Stripping and study of the stockwork-like large quartz vein north of the legal corner post established a larger-than-expected width and the trend of a strong vein with anomalous but low gold-silver values that warrants follow-up prospecting for other similar veins and for ore shoots.

The occurrence of angular, altered and pyritized quartzite float near bleached granodiorite in the northeast corner of Brae 1 (R55 sample) may represent a patch or possibly

larger outlying pendant of Upper Triassic beds in that sector warranting exploration for gold-bearing skarns or veins. The quartzite resembles those seen further west on the claim.

RECOMMENDATIONS:

A three-phase gold exploration plan is proposed for Brae 1 as follows:

1. Geological Survey

Develop the exploration base by mapping geology of the Upper Triassic beds and all intrusives in the north half of the claim for structural controls, facies, bed orientation, alteration and skarn/vein development. Do prospect reconnaissance of rock exposures especially in the vicinity of -

(a) the sheared granodiorite north of Spring Lake;
(b) the linear borders of Spring Lake and that nearby southeast for anomalous alteration and gossans;
(c) the height of land upslope from the stripped quartz vein near claim post 1N;
(d) and, around the altered granodiorite and quartzite samples R55 and 56 in the northeast corner of Brae 1, where skarns may occur.

2. Geochemical Survey

(a) Geochemically analyze for gold all calc-silicate-skarn samples on hand and those collected in this new program.
(b) Collect reconnaissance A and B zone soil samples from existing and new traverses over the trends of altered Triassic Nicola beds, and analyze for As, Ag, Sb and Cu as leads to gold enrichment; analyze soils for gold where high anomalies occur; strip and blast those for rock gold assays.
(c) Collect stream sediment samples every 250m along the stream that bounds the east border

of Brae 1, and analyze for gold, W, As, Sb and base metals.

(d) Collect water samples from ponds along the east-west draw north of Spring Lake and analyze for anomalous values in As, Sb, Ag and total heavy metals as leads to gold in the underlying inferred major fault zone.

3. Geophysical Survey

Perform reconnaissance VLF-EM and Magnetometer surveys on meridianal lines in the north half of the property for mapping geologic contacts and conductors related to skarn or vein-type metallic deposits; and, in the southwest part of Brae 1 to seek extensions to the large quartz vein there and to find others in that vicinity.

****

-CERTIFICATION-

I, Neall Curtis Lenard, of the settlement of Westbank in the Province of British Columbia do hereby certify:

1. that I am a consulting geologist with an office mailing address of Box 863, Westbank, British Columbia, VOH 2AO.
2. that I graduated from the University of British Columbia with a Bachelor of Arts Degree in 1949 (Honors Geology),
3. that I have practised my profession continuously for thirty-eight years,
4. that I am the sole owner of the subject Brae 1 mineral claim,
5. that the statements made in this report are based on personal examination of the claim from October 1, 1986 to October 16, 1987, and, on a study of published and unpublished reports on the property area,
6. that I am a member of the Associations of Professional Engineers of British Columbia and Alberta,
7. that no legal survey has been conducted over the subject mining properties and, therefore, in accordance with the mining laws of the appropriate jurisdiction in which such properties are situate, the existence of and the area of such properties could be in doubt.

DATED AT: The Settlement of Westbank, in the Province of British Columbia, this 6th day of January, 1988.

N. C. Lenard

Neall Curtis Lenard, P.Eng.,P.Geol.

PROFESSIONAL GEOLOGIST ALBERTA N. C. LENARD

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA N. C. LENARD

Ex. Date Dec. 31, 1988

-EXPENDITURES-

PERSONAL:	
N.C.Lenard, P.Geol: 7 net days @ $400.00	$2,800.00
TRANSPORTATION:	
4 WD: 11 days @ $35.00	385.00
Gas:	60.00
FIELD SUPPLIES: Topoline	10.00
PHYSICAL WORK:	
D4 Cat Stripping	250.00
EXPRESS:	18.90
ASSAYS:	40.25
REPORT PREPARATION:	
Drafting: 5 hr. @ $15.00	75.00
N.C.Lenard, P.Geol.: 1 day @ $400.00	400.00
Office, reproduction costs	65.00
TOTAL DISBURSEMENTS	$4,104.15

I certify that the above statement is an accurate account of expenditures made for the geological survey of Brae 1 claim conducted over a period of 11 days from October 1, 1986 through October 13, 1987, inclusive.

N. C. Lenard

N.C.LENARD, P.GEOL., P. ENG.

Ex. Date Dec. 31, 1988

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Fig.2: Regional Geology (Okulitch,A.)
To accompany
Report on Geology of Brae 1 Claim

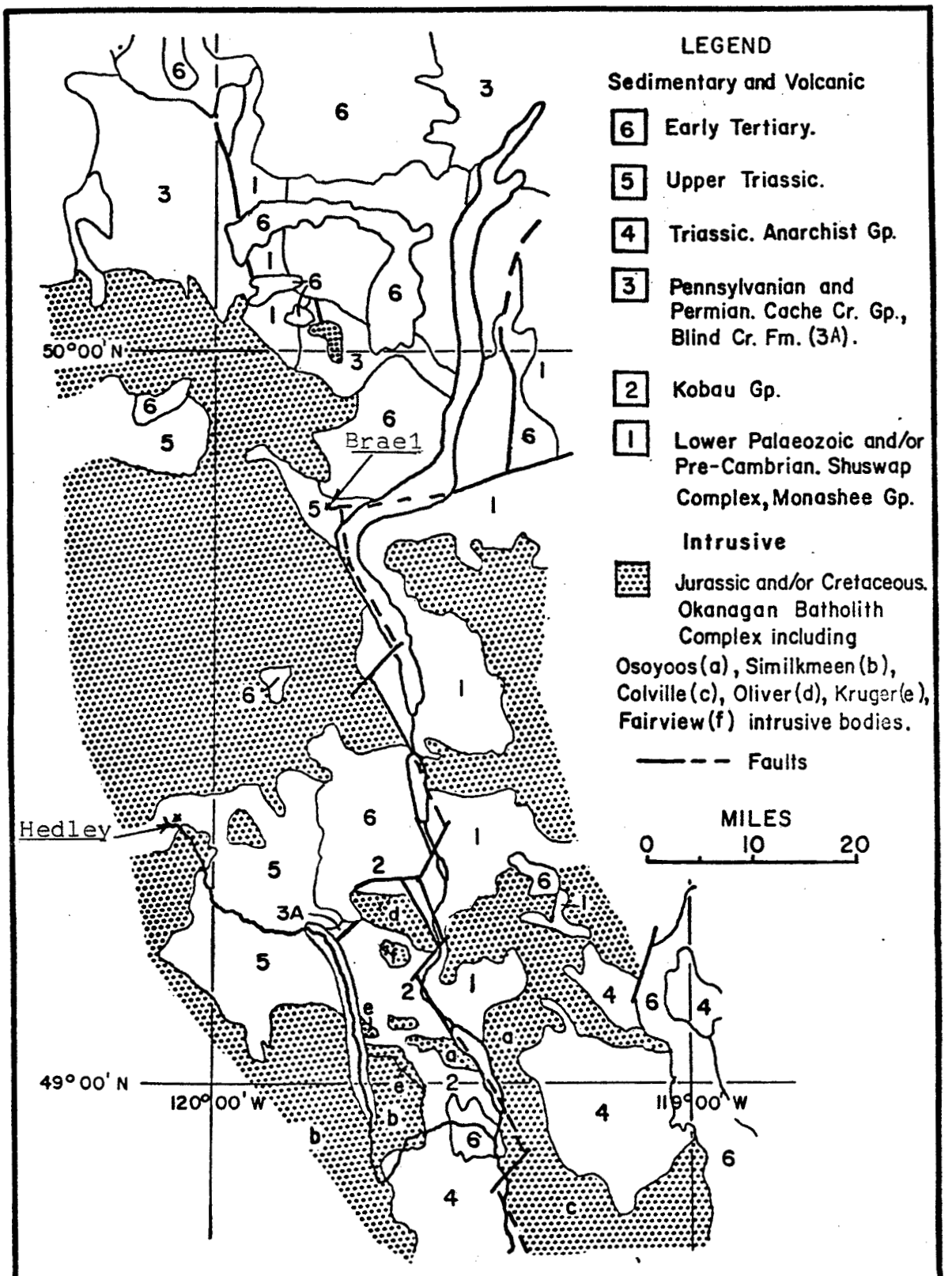


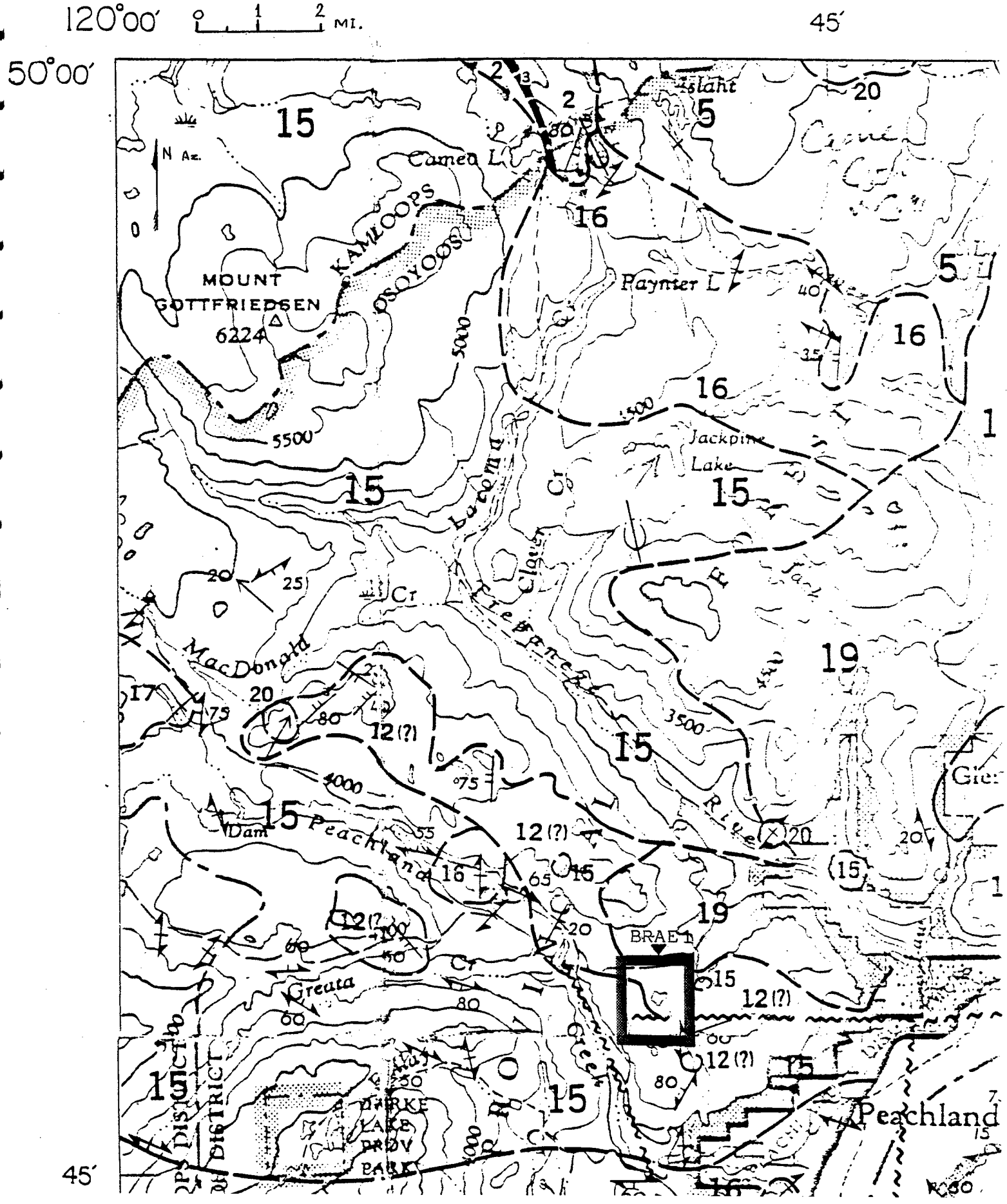
FIGURE 1-3

GENERAL GEOLOGY OF THE SOUTHERN OKANAGAN.

Fig.3: Regional Geology (GSC Map 15-1961 H.W.Little)

re Brae1 Geological Report
N.C.Lenard,P.Eng.

19: Tertiary Volc.&Sediment
16: Cret.Valhalla Granitics
15: Cret.Nelson Granitics
12: U.Triassic Nicola Grp.



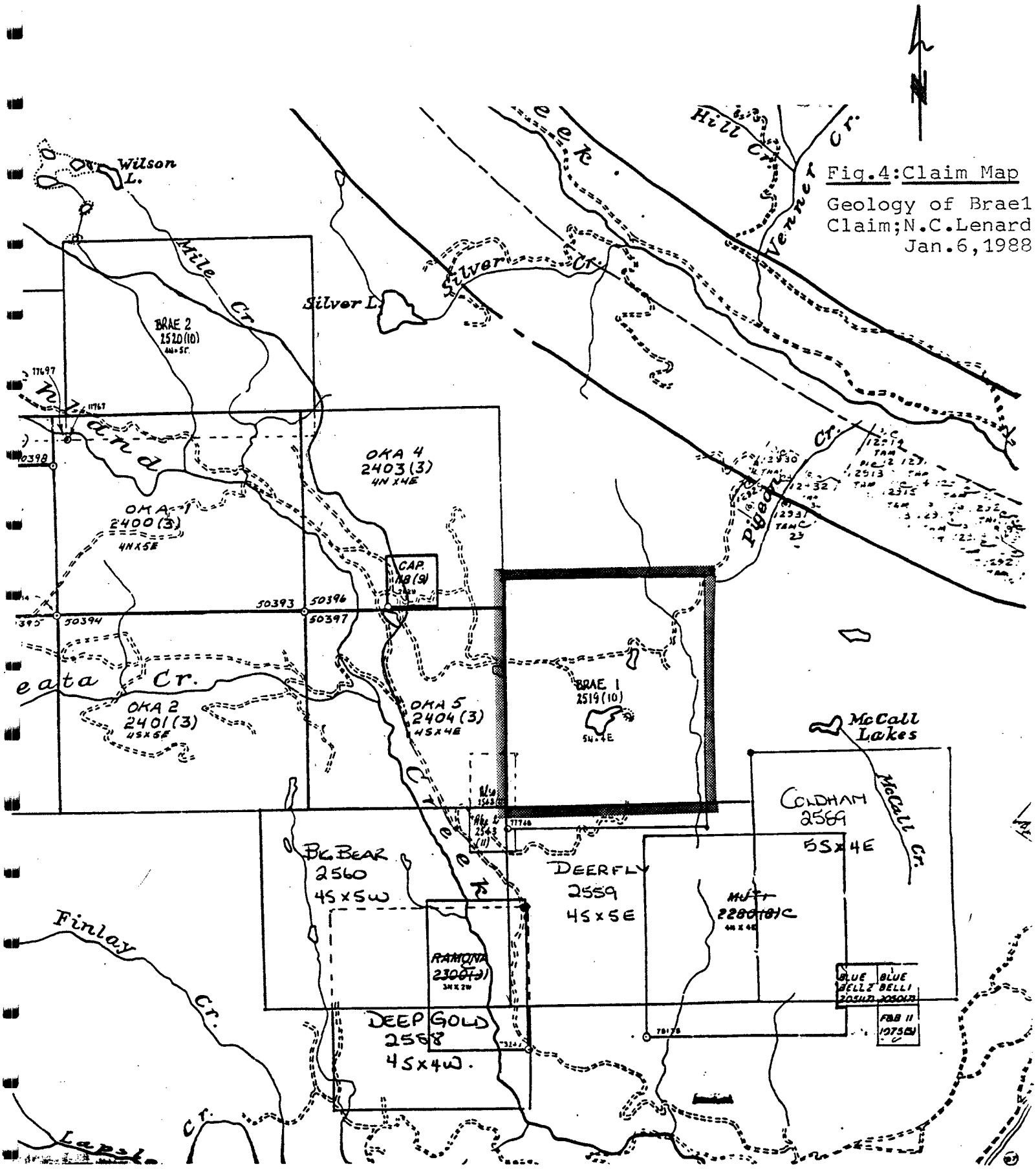


Fig.4:Claim Map

Geology of Brae1 Claim;N.C.Lenard Jan.6,1988

Fig.6: Outcrop Sampling re Quartz Vein
S Brae1 Claim

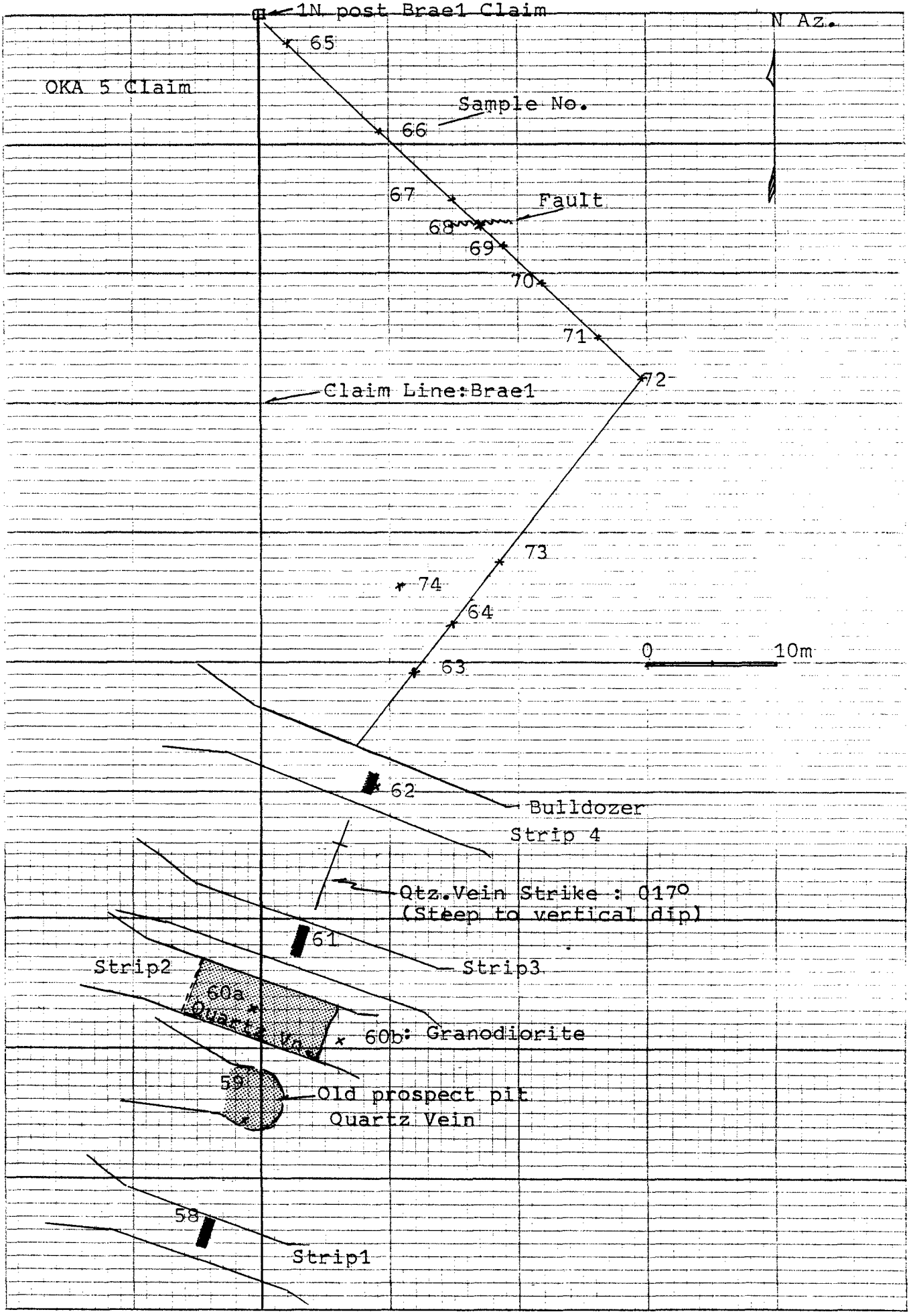


Fig. 7

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

Brae 1

REPORT: 126-6342 | PROJECT: NONE GIVEN | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 BRAE1-86 SPRING1		45

Report Sample No. 54

Fig. 7

Brac 1 SW

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 426-5196

PROJECT: NONE GIVEN PAGE 1

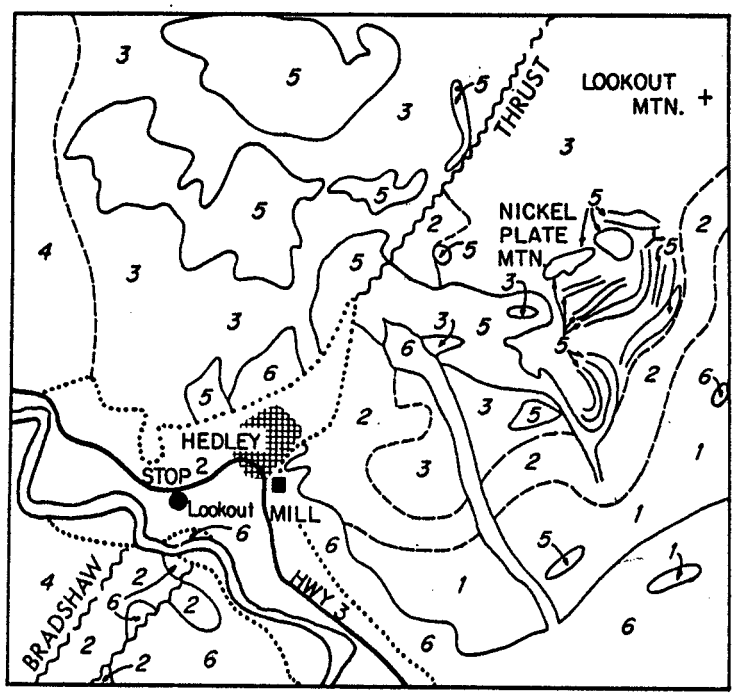
SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT
R2 #1		0.015	1.09

Report Sample No. 59
grab sample.

Registered Assayer, Province of British Columbia

Fig.8:

Report on Brae1 Claim
by N.C.Lenard,P.Eng.



JURASSIC OR YOUNGER

6 GRANODIORITE

5 DIORITE, GABBRO

UPPER TRIASSIC

4 HENRY FM. - BLACK ARGILLITE, TUFF, IMPURE LIMESTONE.

3 HEDLEY FM. - LIMESTONE, QUARTZITE, CHERTY QUARTZITE, ARGILLITE, CONGLOMERATE, BRECCIA, TUFF.

2 SUNNYSIDE FM. - LIMESTONE.

1 REDTOP FM. - LIMESTONE, CHERTY QUARTZITE, SILICEOUS ARGILLITE, TUFF, SOME BRECCIA.

FIG. 1:1. GEOLOGY IN THE VICINITY OF HEDLEY (AFTER BOSTOCK, 1940)

stones, wackes and minor impersistent grit and chert pebble conglomerate horizons, as well as massive to conglomeratic reefal limestone beds that locally exceed 75 metres in thickness. One limestone-rich unit, the "Sunnyside limestone", is traceable discontinuously for several kilometres along strike between Hedley township and the Nickel Plate mine (Camsell, 1910; Bostock, 1930, 1940a). The siltstones and thick, massive limestone beds east of Ashnola Hill* (Figure 2-10-1) represent a southern extension of the shallow marine facies of the Hedley sequence.

The Hedley sequence passes stratigraphically upwards into the 700 to 1200-metre-thick Whistle Creek sequence (Figures 2-10-2 and 2-10-3). This forms a generally westerly dipping, west-facing succession that mainly underlies the western portion of the district although small, downfaulted outliers of the sequence are present east of Hedley township and in the vicinity of Lookout Mountain (Figure 2-10-1). It contains tuffaceous siltstones and rare argillites in its lower portion, but higher in the succession is characterized by bedded to massive ash and lapilli tuffs with minor volcanic breccia.

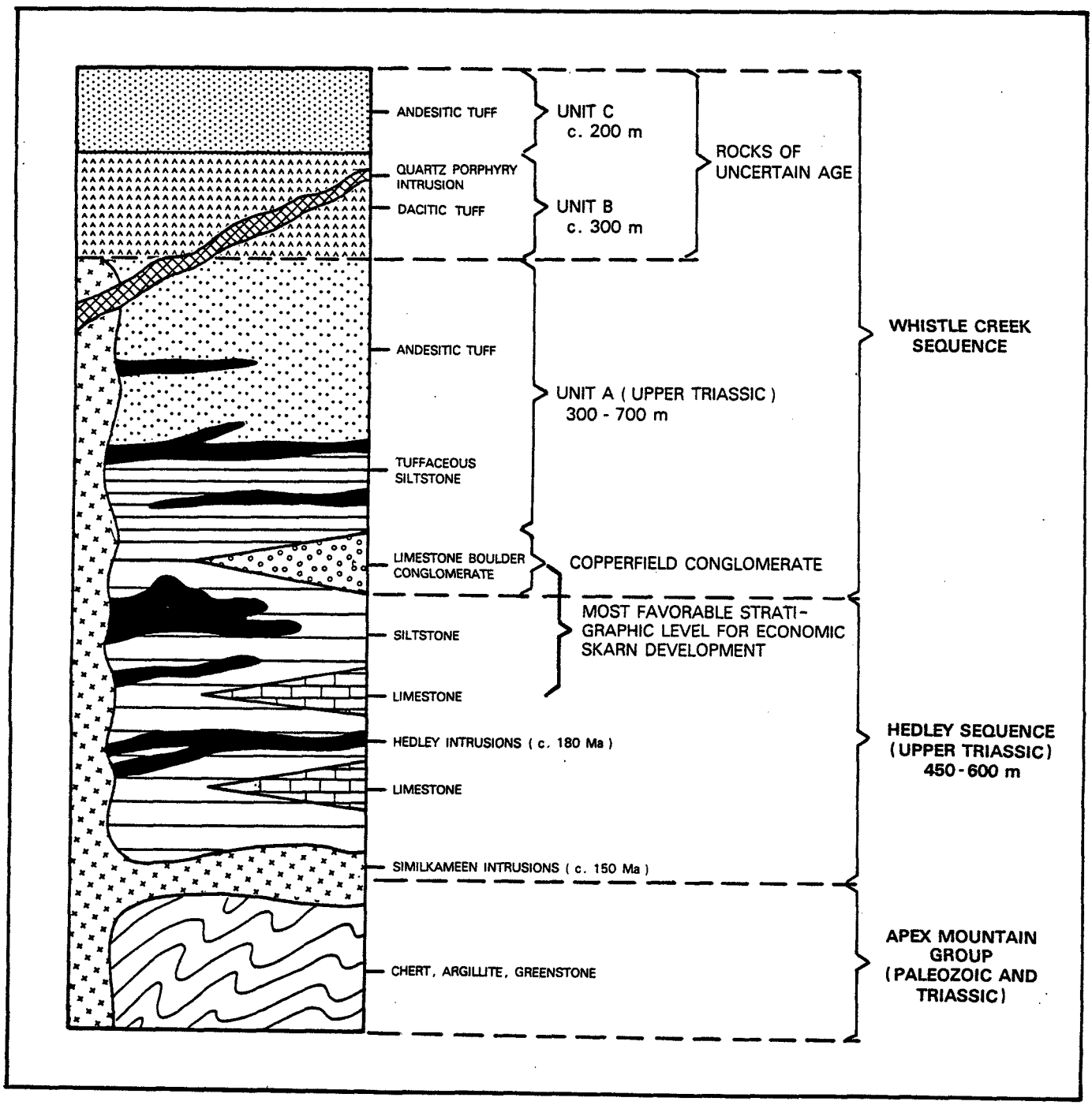


Figure 2-10-2. Schematic section illustrating the stratigraphy of the Hedley area.

* Ashnola Hill is an unofficial name given to the hill surmounted by the British Columbia Telephone Company microwave tower.

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	See Fig. 5: Location	NW SECTOR OF Brae 1 CLM. Description
	float (flt.)	
1	DIORITE	Medium-dark grey, intermediate to basic, brecciated, part pyritic; part bleached, feldspar alteration, very rusty.
2	META-DIORITE	Light-medium grey, slightly calcareous, brecciated, healed by pyrite films, crusts; part bleached; part micritic, silicified.
3	META-DIORITE	Light-medium grey, medium grey brecciated, mottled by cream feldspar alteration, secondary calcite and pyrite crusts, part very fine grained.
4	META-DIORITE (flt.)	Light grey, brecciated, non-calcareous, very rusty, minor limy coatings, very fine grained, white streak; possible fault zone breccia.
5	QUARTZITE (flt.)	Fine grained-coarse grained, brecciated, strongly hematized.
6	QUARTZITE (flt.)	Light-medium grey, greenish cast, argillaceous, fine grained-medium grained Quartz, very brecciated; limy and rusty coatings.
7	GOSSAN	White, honeycomb, siliceous matrix, light brown LIMONITE saturation.
8a	CALC-SILICATE (flt.)	Medium grey, fine grained-medium grained, calcareous-limey, brecciated rusty weathering: pyrite-lined fractures.
8b	LIMESTONE (flt.)	Medium grey, micritic dense, grades to CALC-SILICATE.
8c	META-QUARTZITE (flt.)	Medium grey, fine grained-coarse grained, brecciated, rusty; limey hairline fractures.
9	ANDESITE	Greenish grey to maroon, disseminated pyrite, brecciated, rusty weathering.
10	LIMESTONE	Dark grey-black, very fine grained, brecciated, argillaceous, pyritic; calcite-healed fractures.

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
11	ANDESITE	Medium grey, brecciated, with quartz-healed fractures; disseminated pyrite.
12	META-QUARTZITE	Highly brecciated, very fine grained-coarse grained, very rusty, bleached to near white, silicified and porous.
13	DIORITE	Medium dark grey, intermediate, fine grained, disseminated pyrite, brecciated, grades to very fine grained, altered; very rusty weathering.
14	META-DIORITE/ ANDESITE	White to pink bleached, possibly MICRO-DIORITE, very rusty, brecciated.
15	QUARTZITE	White, bleached, very fine grained-medium grained; assumed fault breccia, very rusty; like R12.
16	LIMESTONE	Dark grey, micrite-medium grained very argillaceous, brecciated, pyritic, contorted bedding; white quartz and calcite veinlets.
17	LIMESTONE	Medium dark grey, micrite-very fine grained, fractured, pyritic, calcite-veined.
18	CALC-SILICATE (flt.)	Medium grey, greenish, mottled; fine-coarse grained, brecciated, healed by pyrite and calcite veinlets.
19	CALC-SILICATE	Medium dark grey, mottled, fine grained-coarse grained, intermediate, very pyritic, fractured, calcite veins.
20	CALC-SILICATE	As above, part pyritic; calcite veinlets.
21	CALC-SILICATE	Medium dark grey, fine-coarse grained; mottled, calcite-veined, rusty fractures.
22	CALC-SILICATE	Medium grey, greenish, miciritic, brecciated, pyritic, calcareous-limey, calcite-veined.
23	QUARTZITE	White, silt grade to very fine grained, limey coatings, sparse pyrite cubes, brecciated.

Appendix

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
24	ARGILLITE (flt.)	Black, thin brittle bedding, siliceous, disseminated pyrite.
25	ARGILLITE	Black, brecciated, micrite, calcareous, pyritic, much calcite and pyrite veining.
26	LIMESTONE Silicated (flt.)	Hornfelsed in part; medium grey micrite, greenish, brecciated, very calcitic.
27 a	QUARTZITE-LIMESTONE (much flt.)	Light-medium grey, lime-cemented conglomerate, hard, dense, brecciated, pyritic; calcite crusts.
27 b	DIORITE (flt.)	Medium grey, felted texture, brecciated, pyritic, calcite films (skarn?).
28	CHERT (flt.)	Light grey-buff, scarce rusty, much disseminated pyrite; lime-encrusted.
29	CALC-SILICATE (flt.)	Light-medium grey and brown mottled cherty texture, micrite-coarse grained calcareous, disseminated pyrite.
30	LIMESTONE-ARGILLITE TO CALC-SILICATE (flt.)	Black, grey, breccia, micritic to fine grained, very calcitic, slightly rusty.
31	LIMESTONE, MARBLE (flt.) ('clastic breccia')	Medium dark grey, breccia, micritic, siliceous, rusty pyritic, marbley calcite veining, part fine grained-medium grained MARBLED.
32	QUARTZ DIORITE (flt.)	Light grey, medium grained, fresh; epidote and calcite veined.
33	CALC-SILICATE (flt.)	Rusty soil and float: medium grey, calcareous, mottled, much disseminated pyrite.
34	CALC-SILICATE (flt.)	Medium grey, mottled breccia, pyritic micrite, greenish in part; some inclusions of MARBLE, medium grey, fine-medium grained; minor calcite veins.

Appendix

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
35	CALC-SILICATE (flt.)	Mottled, medium grey, brown, very fine-coarse grained, calcareous-limey.
36	TUFF(Sheared 1m dyke)	Light grey-pink, 040° Az., 80° west dip: possible float block; part spherulitic (Rhyolitic, crystal) feldspar; quartz, biotite.
37	LIMESTONE (flt.)	Olive, micrite, very rusty, vuggy, brecciated.
38 a	GRANODIORITE	Fine grained-medium grained, pyritic, rusty.
b	LIMESTONE (flt.)	Buff, light grey, greenish, micrite-very fine grained, fractured, rusty, pyritic.
c	QUARTZ DIORITE (flt.)	Part hornfelsed, rusty; greenish, argillaceous, calcareous; light-medium grey, limey, calcite-healed fractures, pyritic.
d	QUARTZ DIORITE Prospect Pit	Medium grained-coarse grained, biotite, very pyritic, rusty, silicified, bleached.
e	ARGILLITE	Black-dark grey, fractured, calcite-healed, part pyritic.
f	TUFF, Rhyolitic (flt.)	Light buff, fresh, crystal: quartz, minor biotite; sanidine.
39	GRANODIORITE	Light grey, fresh, fine-medium grained.
40	GRANODIORITE	Light grey, greenish, fresh, fine grained, chlorite films on fracture planes.
41	GRANODIORITE (flt.)	As above, with bleached limey silicified chlorite matrix, brecciated, rusty.
42	GRANODIORITE	Fresh light grey, slightly greenish, minor chloritic specks, fractured, slightly rusty.
43	GRANODIORITE	As above; epidote films on breccia faces
44	TUFF, Rhyolitic (flt.)	Light-cream grey, a few large angular blocks, chalky crystal tuff: quartz, biotite, sanidine.
45 to	DIORITE QUARTZ DIORITE	Intermediate to basic, medium grained biotite pyritized, part bleached, brecciated, rusty; rare quartz veinlets. Rock geochem analysis: 30 ppb GOLD.

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
46	DIORITE	Basic, dark grey, coarse grained, pyritic, rusty, a few quartz veinlets to 4cm width, with sparse pyrite cubes; spotty Limey inclusions.
47 a	DIORITE talus	Intermediate-basic, medium dark grey, greenish cast, part brecciated, pyritic, limey phases.
47 b	LIMESTONE	Medium dark green, micritic to very fine grained, abundant disseminated pyrite, brecciated, rusty weathering. Rock geochem: < 5ppb GOLD, rock geochem.
47 c	SKARN, DIORITE	Green diorite with encrusted coarse grained cream and green silicates: 'Tremolite' 'Wollastonite': < 5ppb Gold, rock geochem.
48	DIORITE	Medium dark grey, intermediate-basic, fine grained, calcareous, pyritic, rusty; part brecciated and silicified with very thin quartz veinlets.
49	DIORITE	Medium dark-dark grey, very fine-fine grained, intermediate-basic, biotitic, pyritic, rusty on breccia planes; calcite veinlets.
50	DIOR-GABBRO	Dark grey, medium -coarse grained, very rusty fracture planes; biotitic.
51	GRANODIORITE	Light fleshy grey, medium grained fresh, biotitic, slightly rusty fracture planes.
52 a	GRANODIORITE	Light grey, medium grained, fresh minor pyrite, rusty weathering.
b	QUARTZITE -SKARN	Olive to medium dark green, disseminated pyrite, rusty.
c	QUARTZITE -SKARN	Light grey-light brown, limey, SKARNED: very fine grained brown garnet patches and small nodular pyrite disseminations. Rock geochem analysis: 5 ppb GOLD.

Appendix

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
53	DIORITE/GRANODIORITE talus	Medium dark grey, fine grained, disseminated pyrite; brecciated with secondary plagioclase and quartz-healed fractures; contacting Granodiorite.
54	GRANODIORITE (flt.) (Spring Lk. Rd.)	Green, part bleached whitish, rusty, brecciated, variably sheared, silicified with pyritic quartz veinlets to 3mm; outcrops for 3m in centre of 28.5m stretch of float along road; shearing strike 134°Az. Rock analysis, grab, outcrop: 45 ppb GOLD.
LOCATION: NE SECTOR BRAE 1		
55	QUARTZITE (flt.)	Greenish dark grey, pyritic, rusty; fine grained ribboned by medium-coarse grained, rusty; slightly calcareous.
56	GRANODIORITE	Medium grey, fine grained, very pyritic, brecciated, part bleached; talcose, calcareous.
57	GRANODIORITE	Greenish, fresh, medium-coarse grained, calcareous, local epidote veinlets, hornblendic.
LOCATION: SW SECTOR BRAE 1		(Newly stripped Quartz Vein, site of old prospect pit, circa 1956.)
58	GRANODIORITE (Strip 1)	Greenish grey, very talcose to TALC, calcitic, slightly faulted and rusty.
59	QUARTZ VEIN (380mN Brae 1 L.C. Post)	In prospect pit: QUARTZ, white-grey, fractured, numerous pyrite nests; inclusions of talcose, calcareous QUARTZ DIORITE, foliated wallrock, silicified, patchy rust.
60 a	QUARTZ VEIN (10.7m width exposed, covered downhill side) (Strip 2)	White to glassy, part greenish; talcose inclusions, disseminated cubic pyrite, variably brecciated, part very rusty; generally well leached; in part networked by talcose Quartz Diorite.

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

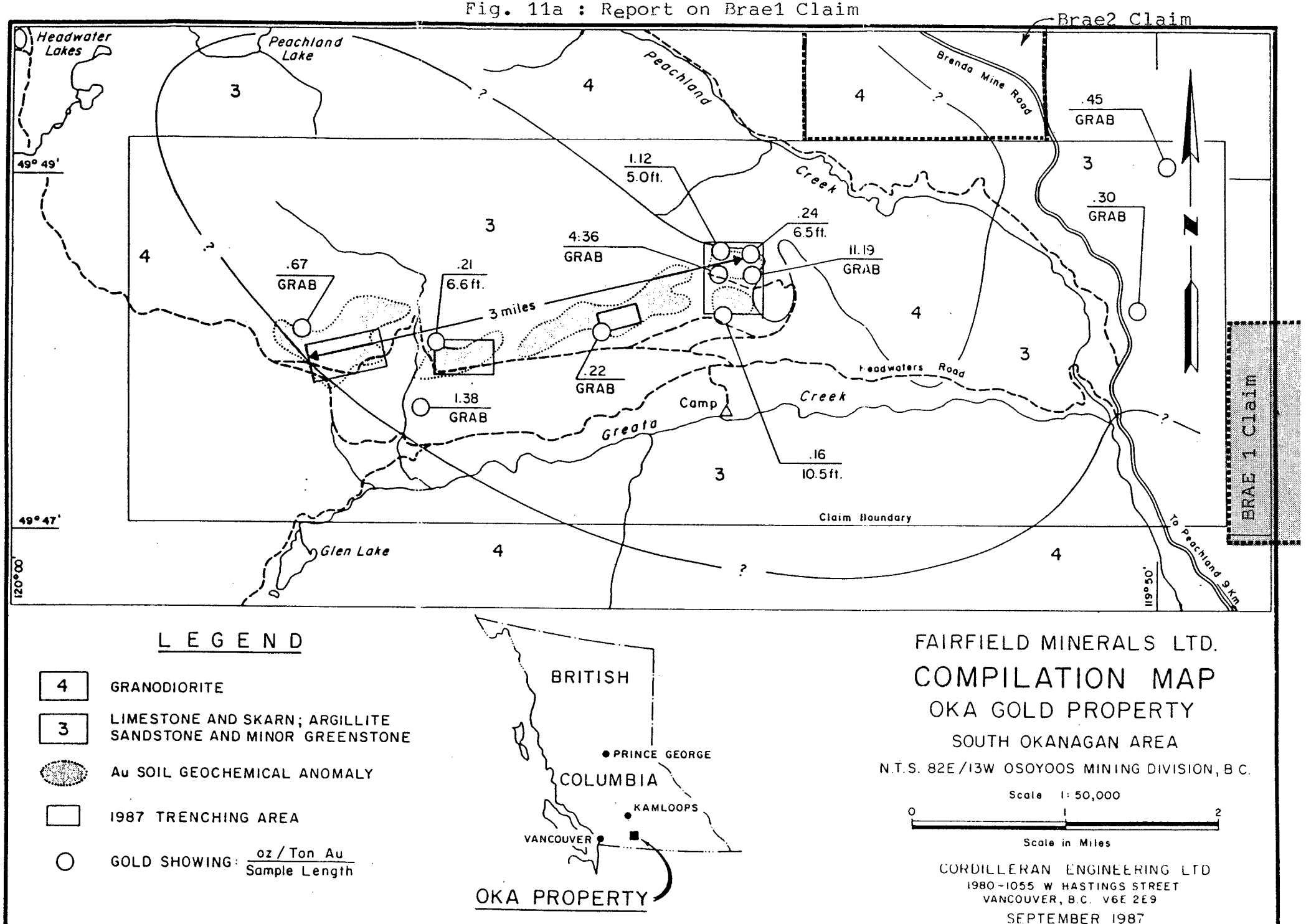
Rock Sample No.	Location	Description
60 b	GRANODIORITE	Wallrock, uphill east side of R60A: talcose rusty, disseminated pyrite; intermediate.
61	TALC-QUARTZ STOCKWORK:STRIP 3	Quartz veinlets white, part rusty, brecciated, minor disseminated pyrite nests, in TALC, medium dark green, very pyritic, local Epidote films.
62	QUARTZ:Strip 4	Quartz vein, white, 15cm wide, 017° strike, vertical, disseminated pyrite, faulted, rusty films, trace MALACHITE films; part greenish from talcy inclusions; wallrocks: TALC to talcosed remnant Granodiorite wallrock, which becomes very calcite and hematite-filmed toward vein contact; total strip width: 13.8m.
63	GRANODIORITE (flt.)	Patchy Epidote films; cut by veinlets of buff 'Alaskite' or Quartz Porphyry to 2.5cm width.
NOTE: 64-75, GRANODIORITE		
64		Light grey, altered; soft: mildly talcosed and calcareous to limey.
65		Green, talcosed, spotty lean epidote films, slightly rusty, calcareous to limey.
66		As R65 with minor disseminated cubic pyrite.
67		As above, with much disseminated Epidote.
68		As above, no Epidote; faulted, sheared, in part converted to lensing TALC, medium dark green-grey, rusty.
69		As above, brecciated, faulted, talcose, disseminated patchy Epidote, spotty rust from minor disseminated Pyrite.
70		As above, greenish grey, calcareous, talcose, scattered Epidote, Pyrite.
71		As above

Appendix

PETROLOGY OF SURFACE ROCK SAMPLES, BRAE 1 CLAIM

Rock Sample No.	Location	Description
72		As above, faulted, brecciated, minor Pyrite; barren, brecciated, white QUARTZ veinlets to 3 cm.
73		As above, limey, talcose, silicified Pyritic, no Epidote.
74		As above, part sheared.
75		Talcose, no Epidote, unfaulted, minor disseminated Pyrite (4S 4E OKA 5).

Fig. 11a : Report on Brae1 Claim



LEGEND

- 4 — GRANODIORITE
- 3 — LIMESTONE AND SKARN; ARGILLITE SANDSTONE AND MINOR GREENSTONE
- Au SOIL GEOCHEMICAL ANOMALY
- 1987 TRENCHING AREA
- GOLD SHOWING: oz / Ton Au / Sample Length

FAIRFIELD MINERALS LTD.

COMPILATION MAP

OKA GOLD PROPERTY

SOUTH OKANAGAN AREA

N.T.S. 82E/13W OSOYOOS MINING DIVISION, B.C.

Scale 1: 50,000

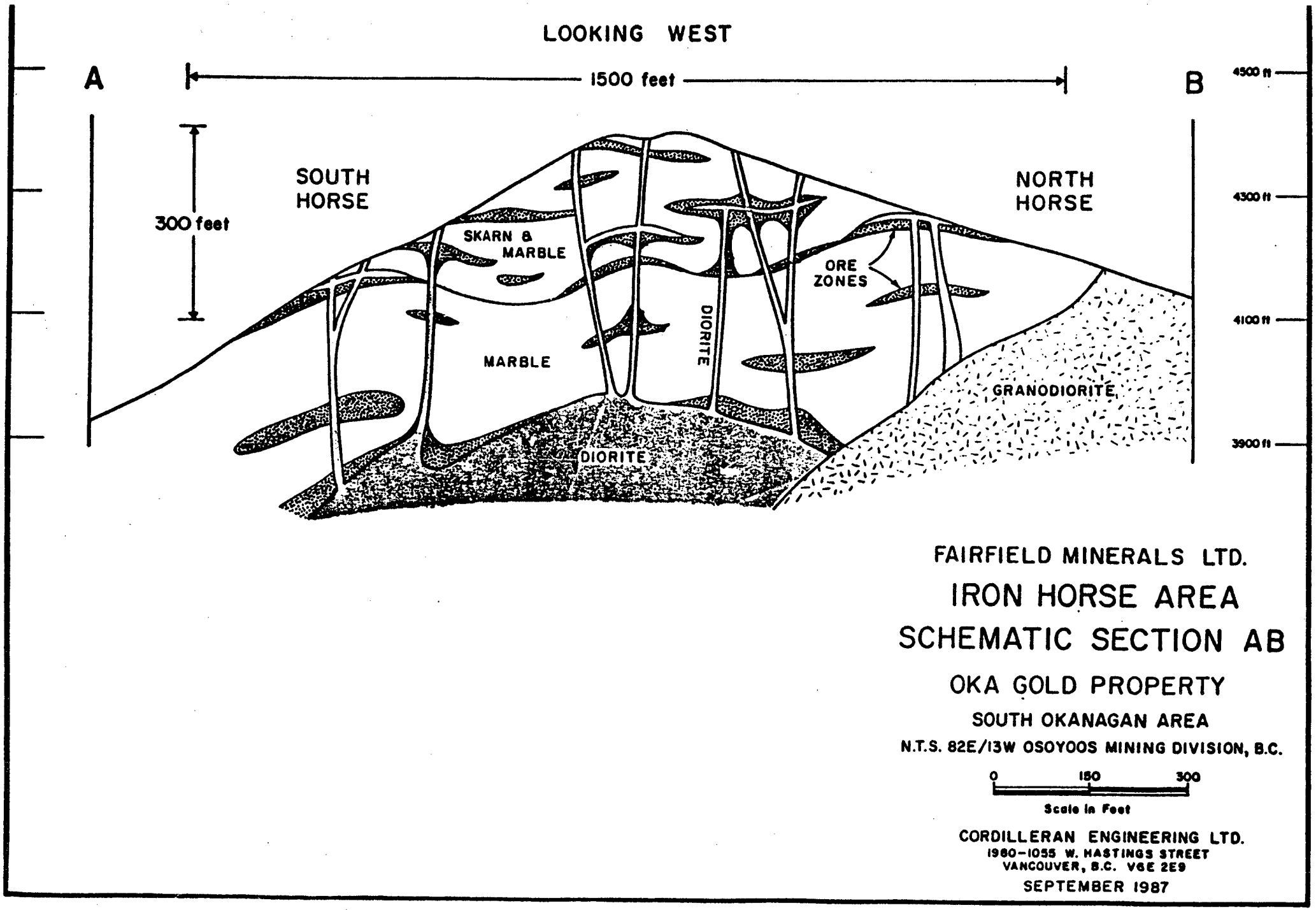
0 1 2

Scale in Miles

CORDILLERAN ENGINEERING LTD
1980-1055 W HASTINGS STREET
VANCOUVER, B.C. V6E 2E9

SEPTEMBER 1987

Fig.11b: Report on Brae1 Claim
N.C.Lenard,P.Eng.



5N

5N4E

OKA 4
Clm.

3300ft

2800ft : 884m

2900

3100

3200

3200 ft : 975m

3100 : 945m

3300 : 990m

3200ft

3000ft : 915m

2700 : 823m

U. QUARTZITE

TRIASSIC
LIMESTONE
UNIT
(Robinson '65)

LOWER QUARTZITE
(Robinson)

U. TRIASSIC NICOLA BEDS

CRET. GRANODIORITE

Spring Lake

N AZ.

Scale: 1:5000

0 100m

OKA 5
Claim

QUARTZ VEIN
see fig.6
58-74

L 4484

BRAE I
LCP

4E

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
N. C. LENARD
Ex. Date Dec. 31, 1988

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,921

Geological Report on Brae 1 Claim, Osooyoos Min.Div., B.C.
By N.C.Lenard, P.Geol., P.Eng. Jan.8, 1988
Fig.5
Geology, Topo
Geology in part after Robinson, M.C., 1965

LEGEND

A Andesite
Ar Argillite
D Diorite
GD Granodiorite
QD Quartz Diorite
L Limestone
Sk Skarn
CS Calc-silicate hornfels
QT Quartzite
T Tuff

x Outcrop sample
x Float sample
Fault
road
Claim post
Slough, marsh