681041

GEOLOGICAL AND GEOCHEMICAL REPORT

- on the -

TOSH B CLAIM GROUP

Clinton and Lillooet Mining Division

British Columbia

- for -

BARRIER REEF RESOURCES LTD.

904 - 675 West Hastings Street

Vancouver, B. C.

V6B 1N2

Prepared By:

Kerr, Dawson and Associates Ltd.

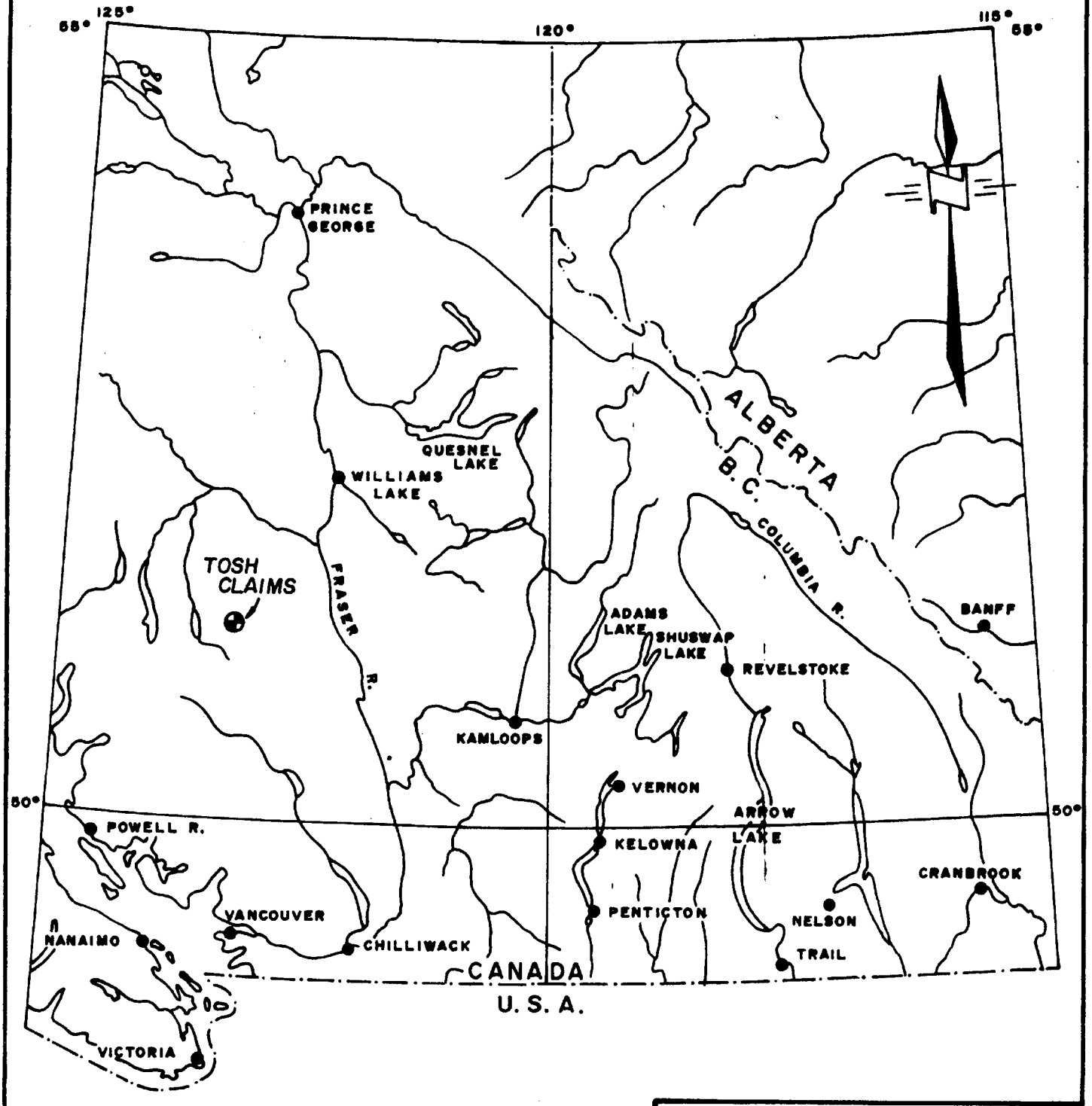
206 - 310 Nicola Street

Kamloops, B. C.

V2C 2P5

J. M. Dawson, P. Eng.

January 6, 1983



BARRIER REEF RESOURCES LTD.

LOCATION MAP

TOSH CLAIM GROUP

CLINTON & LILLOOET
MINING DIVISIONS, B.C.

Date: Jan. 1981.	Scale: 1" = 64 Miles
Dwn by: W.G.	Dwg no. 231 D-1

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Introduction

This report describes the latest phase in a continuing exploration programme on the Tosh 'B' claim group.

Reconnaissance exploration programmes in 1980 and 1981 outlined two areas of potential significance for gold-silver mineralization.

In 1982 these areas were gridded and detailed sampling, prospecting and geological mapping programmes were performed.

The results are appended on maps accompanying this report.

Summary and Conclusions

(1). The Tosh 'B' claim group consists of 5 contiguous, metric claims aggregating 80 units, located in moderate to steep terrain in the Taseko Lakes district of southwestern British Columbia. Access is currently by helicopter from Goldbridge.

(2). Early exploration work for gold was carried out on the north part of the present property by Chevron in the mid 1970's. Regional geochemical prospecting by Barrier Reef Resources in 1979 resulted in the staking of Tosh claims in early 1980. Prospecting and geological and geochemical surveys were performed in 1980 and 1981 and resulted in two areas of anomalous gold and gold-silver values.

(3). The claim group is underlian by clastic sediments of the Relay Mountain and Taylor Creek groups cut by a number of narrow feldspar porphyry dikes. A small stock or sill of diorite or gabbro intrudes the sediments near the southwest corner of the property. A number of strong, northwest-trending faults cut through the property. Several prominent gossans are related to these zones of faulting and dike emplacement.

(4). Previous sampling and prospecting outlined two main zones of anomalous values. Float of narrow mineralized quartz veins was found withing these zones, however the possibility of more widespread disseminated or stockwork-type mineralization was indicated.

(5). The current work indicated that although narrow high grade veins exist, they are too narrow to be of interest in themselves. No evidence of low grade stockwork type or disseminated precious metal mineralization was found. No further work is recommended on this property.

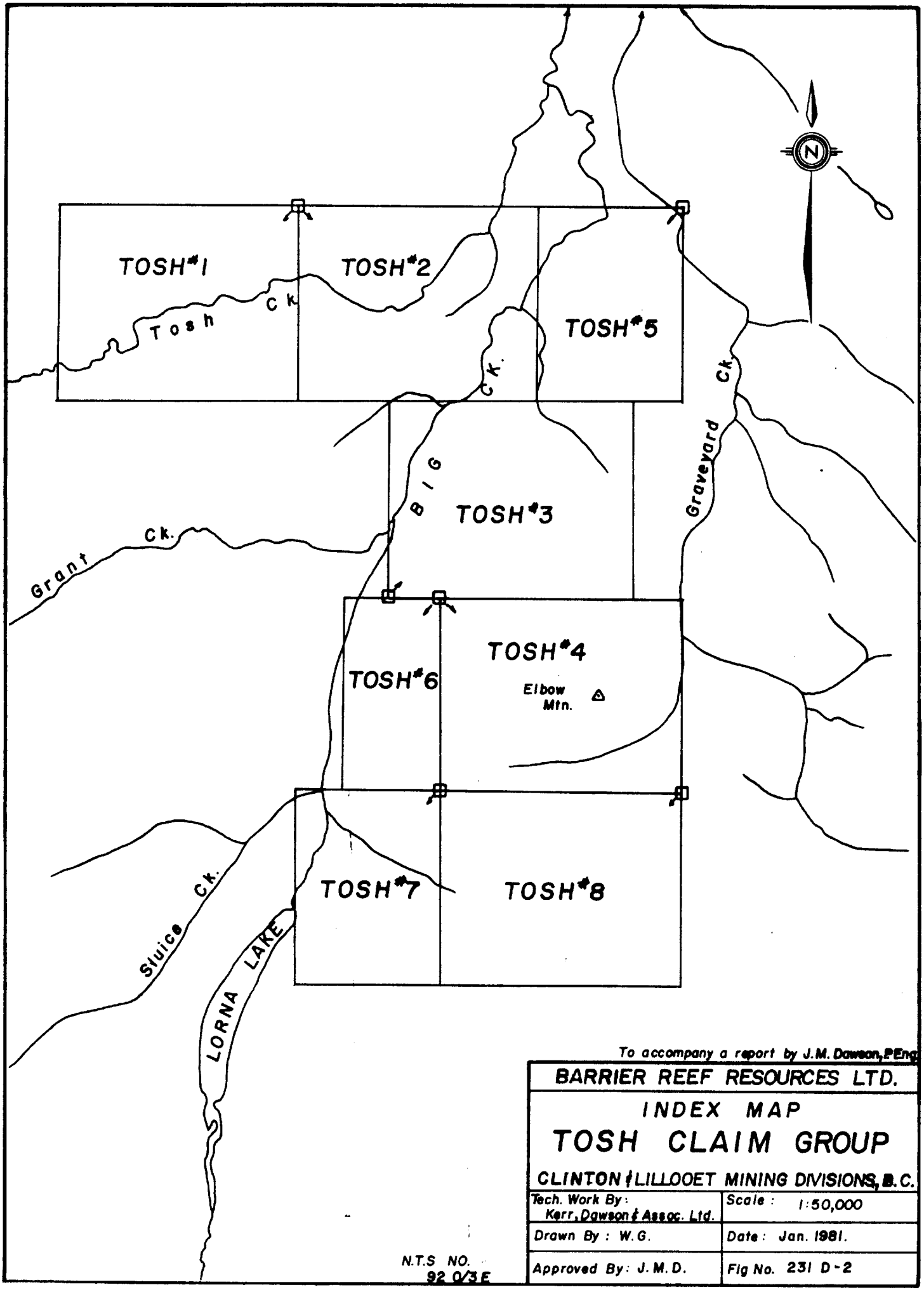
Property

The Tosh 'B' claim group consists of 5 contiguous metric claims aggregating 80 units as follows:

Claim Name	Record No.	Tag No.	Expiry Date
Tosh #3	652	58339	April 21/84
Tosh #4	653	58340	April 21/84
Tosh #6	877	22772	Oct. 2/83
Tosh #7	878	22773	Oct. 2/83
Tosh #8	1560	22774	Oct. 2/83

Disposition of these claims is shown on figure 231D-2

The registered owner of these claims is Barrier Reef Resources Ltd.



To accompany a report by J.M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

INDEX MAP
TOSH CLAIM GROUP

CLINTON & LILLOOET MINING DIVISIONS, B.C.

Tech. Work By: Kerr, Dawson & Assoc. Ltd.	Scale: 1:50,000
Drawn By: W.G.	Date: Jan. 1981.
Approved By: J.M.D.	Fig No. 231 D-2

N.T.S NO. 92 O/3 E

Location and Access

The property is located in southwestern British Columbia approximately 100 km. west-northwest of Lillooet. Approximate geographic center of the claims is at 51°09' north latitude and 123°09' west longitude.

Access is presently by helicopter from either Lillooet or Goldbridge, however the Relay Creek road extends to within 10 km of the east side of the claim block.

Physiography and Vegetation

The property is an elongate, north-south block of claims covering most of the ridge between Big Creek valley on the west and Graveyard-Tyaughton Creek on the east. Approximately one quarter of the block lies in relatively flat terrain in Big Creek valley. The remainder of the property covers steep to precipitous upland areas with relief in the area of 2500 feet. Elevations of ridgetops varies from 7500 to 9000 feet a.s.l. with creek bottoms as low as 6200 feet a.s.l.

The bulk of the property consists of barren to grassy alpine country. The western quarter of the block lies in Big Creek valley and is lightly forrested with jackpine and minor spruce and fir.

History

The earliest recorded work on this ground was done by Chevron Standard Ltd. in 1976-1977. Part of the Chevron ground is now covered by Tosh #3. This company carried out prospecting, geological mapping and geochemical soil and rock chip sampling for arsenic and gold.

In 1979 Barrier Reef Resources Ltd. Carried out regional geochemical prospecting and staked the Tosh #1-#4 claims in April, 1980.

In 1980, prospecting and reconnaissance geological mapping was performed and contour soil sampling done over most areas of the property. Four additional claims were staked to the south of the original block.

In 1981, detailed work was confined to the south part of the property where the strongest geochemical values were found to occur.

In 1982 detailed grids were established over two areas of anomalous gold and gold-silver in soils and mineralized float (see figure 241D-5). Soil samples were collected over both grid areas at 25 meter intervals on lines spaced 50 and 100 meters apart. Prospecting and mapping was performed and the results plotted on 1:1000 scale basemaps (see figures 231D-12 to 231D-15).

Geology and Mineralization

The Tosh 'A' grid area is underlain primarily by Mesozoic clastic sediments intruded by dikes and sills of feldspar porphyry (Bendor type?). A small plug of dioritic rock and possibly associated andesitic volcanics intrude these sediments near the southeast portion of the grid area.

The oldest rocks present are part of the mid Jurassic to lower Cretaceous Relay Mountain Group (unit 1). Representatives of this group on the property consist of green to gray, fine grained sandstone, siltstone, shale, graywacke and conglomerates. These rocks comprise much of the area south of L-1+50^{N}. South of the west-northwesterly trending gully, the Relay rocks are often quite limonitic due to the relatively high content of iron sulphides. Near the southern edge of the grid these rocks were found to contain several narrow north-northwesterly trending intensely limonitic zones.

These zones which seldom exceed 2-3 meters in width and which "pinch out" quite rapidly often contain up to 10% disseminated pyrite. One such pyritic zone also contained minor amounts of disseminated galena, sphalerite and arsenopyrite. Rock chip samples from these zones did not return any significant gold values. Fossil ammonites and pelecypods are locally abundant in portions of the sedimentary sequence in the southern part of the grid area.

Found primarily in the area north of L-0+50^{N} is a sequence of dark gray to black shales and siltstones. These rocks are part of the Taylor Creek Group of Lower Cretaceous age (unit2). Narrow white calcite veinlets are locally common but these are generally barren. Fine grained pyrite is found disseminated throughout these rocks in very small amounts. Several small breccia zones ($\leq$10 cm) in the shales were found to contain infillings of crystalline calcite and quartz along with minor pyrite.

Intruding the Relay and Taylor Creek assemblages are a number of narrow feldspar and feldspar-hornblende porphyry dikes and sills (unit 3). These rocks commonly referred to as "Bendor" porphyries are generally buff to pale gray-green, fine grained rocks containing up to 25% subhedral Feldspar phenocrysts in a fine grained feldspathic matrix. A prominant feldspar porphyry dyke east of L-1+50^{N} has several, narrow closely associated buff colored platy members. These platy rocks are separated by only a few meters of coarse clastic sediments. Some or all of the platy horizons above the feldspar porphyry dike may be rhyolitic ash or tuff beds.

Found southeast of the grid area are one or more small plugs of medium to fine grained diorite. Talus emanating from this area also contained an abundance of green to purplish vesicular and amygdaloidal andesites and andesite porphyries.

Float consisting of crystalline quartz containing disseminated tetrahedrite, galena and sphalerite was found in several widely scattered areas in the grid and surrounding area. The source of these occurrences was not found and is undoubtedly very small.

Geochemistry

Previous soil, rock and silt sampling outlined two main areas of interest: the 'A' anomaly located in the central part of Tosh #7 claim and the 'B' anomaly located near the eastern boundary of Tosh #3 claim (see figure 231D-5).

The 'A' anomaly covers a fairly large area of anomalous silver values with scattered high to very high golds. 'B' anomaly covers a smaller area of anomalous gold values in silts and soils.

Both these areas were gridded and soil samples collected at 25 meter intervals on lines spaced 50 meters apart. Sample stations were marked by pickets with the appropriate grid co-ordinates. After collection samples were stored and shipped in waterproof, kraft envelopes.

All soil and rock chip samples were analysed for gold and silver in the Vancouver laboratories of Acme Analytical Ltd. For gold laboratory methodology involved fire assay extraction with analysis by atomic absorption. For silver, extraction was accomplished by hot, dilute aqua regia with analysis by atomic absorption.

A total of 98 soil samples were collected from the 'B' grid (see figure 231D-15). Results show several weak scattered gold-silver anomalous areas but values are much lower than those originally obtained. This area is largely overburden-covered and anomalous values are interpreted to be related to small areas of weak gold mineralization associated with narrow limonitic shear zones.

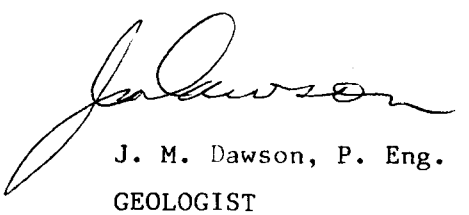
On the 'A' anomaly (see figures 231D-13 and 231D-15) a total of 134 soil samples were collected. Earlier sampling had returned one very high gold value and widespread moderately anomalous silver values. The current sampling did not repeat the high gold, and silver values, though anomalous, were not as intense as previous sampling had suggested. Intensive prospecting located some narrow epithermal veins but no evidence of disseminated or stockwork-type mineralization.

Economic Potential

In both areas, gold and gold silver mineralization is inferred to be related to isolated, narrow high grade veins, generally less than 10 cm wide, and narrow limonitic shear zones in sediments and volcanics. No evidence of a stockwork or disseminated type mineralization was found. No further work is recommended on the claims.

respectfully submitted

KERR, DAWSON AND ASSOCIATES LTD.



J. M. Dawson, P. Eng.
GEOLOGIST

Kamloops, B. C.
January 6, 1983

APPENDIX A

Description of Rock Geochemical Samples

Sample No.	Description	Assay Gold (ppb)
TA-1R	rock chips of green-gray, fine grained feldspar porphyry sill	35
TA-2R	sample of float consisting of finely crystalline quartz with tetrahedrite	8400
TA-3R	sample of buff feldspar porphyry dike	5
TA-4R	sample of rhyolite ash horizon	5

TOSH 1

TOSH 2

TOSH 3

TOSH 4

TOSH 5

TOSH 6

TOSH 7

TOSH 8

TOSH "A" GRID

TOSH "B" GRID

ELBOW MOUNTAIN (8,000'+)

Tosh Creek

Grant Creek

Big Creek

Graveyard Creek

N

LEGEND

7000 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)

CREEK , SWAMPY AREA

LAKE

CLAIM BOUNDARY, LEGAL CORNER POST (L.C.P.)

45 LOCATION OF SOIL OR SILT SAMPLE WITH VALUES FOR ANTIMONY, ARSENIC AND COPPER IN PARTS PER MILLION (PPM.) GOLD VALUES STATED IN PARTS PER BILLION (PPB).

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J. M. DAWSON

inches 0 1 2 — centimetres 0 1 2 3 4 5

This reference scale bar was measured on the original image. It will scale at the same ratio as the image, therefore it can be used as a reference for the original size.

BRITISH COLUMBIA GEOLOGICAL SURVEY

BARRIER REEF RESOURCES LTD.

TASEKO PROJECT

GOLD IN SOILS AND SILTS

TOSH CLAIM GROUP

CLINTON AND LILLOOET MINING DIVISIONS, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:10,000 0 100 200 meters 400
DRAWN BY: W. G.	DATE: JAN. 1981
APPROVED BY: J.M. DAWSON, P. ENG.	FIG. NO. 231 D-5

GEOCHEMICAL CATEGORIES

	COPPER (PPM)	GOLD (PPB)	ARSENIC (PPM)	ANTIMONY (PPM)
BACKROUND	< 74	< 17	< 92	< 3
◔ POSSIBLY ANOMALOUS	75 - 122	18 - 57	93 - 215	4 - 6
◑ PROBABLY ANOMALOUS	123 - 170	58 - 97	216 - 337	7 - 9
● DEFINITELY ANOMALOUS	> 170	> 97	> 337	> 9

To accompany a report by J.M. Dawson, P. Eng.

L-4+00 N

L-3+50 N

L-3+00 N

L-2+50 N

L-2+00 N

L-1+50 N

L-1+00 N

L-0+50 N

L-0

L-3+00 W

L-2+00 W

L-1+00 W

B/L

6500

7000

7500

Talus

Talus and Suboutcrop

gray siltstone with interbedded conglomerate

Shale, sandstone & pebble conglomerate talus.

Grey to purplish green sandstone, pebble conglomerate and fine grained fractured shale.

Greeg-brown feldspar porphyry dike & platy ash rich shales.

Gray shale, highly fractured containing fine calcite stringers. Disseminated f.g. pyrite.

Light green sandstone.

Highly fractured shale & sandstone.

Shales with minor pyrite.

× crystalline quartz float with minor galena, sphalerite & pyrite.

Fine grained, buff, limonitic feldspar porphyry dike.

Purplish-gray sandstone & fine grained conglomerate.

Shale with minor conglomerate & sandstone.

Pebble conglomerate and sandstone talus.

grey-gray fine grained sediments.

Talus of sediments and minor volcanic rocks.

Sandstone talus with occasional ammonite fossils.

Talus with abundance of vesicular and amygdaloidal andesitic volcanics & dioritic intrusive rock. Chloritic alteration common. Source area on cliffs to south.

TA-2R X
Float sample of crystalline quartz with disseminated tetrahedrite.

Scattered float of limonitic sediments containing disseminated galena & sphalerite.

Highly pyritic zone in shales.

narrow zone of highly oxidized sediments containing disseminated pyrite, galena and sphalerite.

Highly oxidized and locally silicified sediments. 4-5 meters wide. Contains 10-20% pyrite locally.

Extensive cliff outcrops

Andesitic volcanics more common.

Fine grained argillic sediments & interbedded conglomerate. Lignite staining common.

Pale green-gray fine grained feldspar porphyry sill cutting argillic sediments

TA-1R

Extremely steep terrain Sediments & volcanics

TA-4R

TA-3R

LEGEND

- 6500 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- CREEK
- 3 — LOCATION OF GEOCHEMICAL SOIL SAMPLE WITH GOLD VALUE IN PARTS PER BILLION (PPB).
- X — ROCK SAMPLE LOCATION

GEOCHEMICAL CATEGORIES

GOLD		SILVER
0 - 15	NEGATIVE	0 - 0.6
16 - 41	POSSIBLY ANOMALOUS	0.7 - 1.4
42 - 67	PROBABLY ANOMALOUS	1.5 - 2.2
>67	DEFINITELY ANOMALOUS	>2.2

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. M. DAWSON

BENDOR PORPHYRIES
3 — BUFF TO PALE GREEN, FINE GRAINED FELDSPAR ± HORNBLENDE PORPHYRY DIKES AND SILLS. INCLUDES PLATY RHYOLITIC ASH OR TUFF BEDS.

TAYLOR CREEK GROUP
2 — DARK GRAY SHALE, GREEN GRAY SILTSTONE AND SANDSTONE. MINOR CONGLOMERATE BEDS.

RELAY MOUNTAIN GROUP
1 — SILTSTONE, SANDSTONE, SHALE, GRAYWACKE AND CONGLOMERATE, LIMONITE STAINING COMMON. SMALL LENSES OF PYRITIC SEDIMENTS.

- OUTCROP AREA
- 50° — BEDDING ATTITUDE
- GEOLOGIC CONTACT

inches 0 1 2 / centimetres 0 1 2 3 4 5
BRITISH COLUMBIA GEOLOGICAL SURVEY
This reference scale bar has been added to the original drawing. It was origin at the same rate as the image, therefore it can be used as a reference for the original size.

To accompany a report by J.M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

TASEKO PROJECT

GEOLOGICAL PLAN "A" GRID

TOSH CLAIM GROUP

LILLOOET MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:1,000 0 5 10 20 meters 40
DRAWN BY: W.G.	DATE: DEC. 1982.
APPROVED BY: J.M. DAWSON, P. ENG.	FIG. NO. 231 D-12

N

L-4+00 N

L-3+50 N

L-3+00 N

L-2+50 N

L-2+00 N

L-1+50 N

L-1+00 N

L-0+50 N

L-0

TA-4R X

TA-3R X

TA-2R X

TA-1R X

6500

7000

7500

L-3+00 W

L-2+00 W

L-1+00 W

B/L

LEGEND

- 6500 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- CREEK
- 5 — LOCATION OF GEOCHEMICAL SOIL SAMPLE WITH GOLD VALUE IN PARTS PER BILLION (PPB).
- X — ROCK SAMPLE LOCATION

GEOCHEMICAL CATEGORIES

GOLD		SILVER
0 - 15	NEGATIVE	0 - 0.6
16 - 41	POSSIBLY ANOMALOUS	0.7 - 1.4
42 - 67	PROBABLY ANOMALOUS	1.5 - 2.2
> 67	DEFINITELY ANOMALOUS	> 2.2

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. M. DAWSON

inches 0 1 2
centimetres 0 1 2 3 4 5

BRITISH COLUMBIA GEOLOGICAL SURVEY

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To accompany a report by J. M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

TASEKO PROJECT

GOLD IN SOILS - "A" GRID

TOSH CLAIM GROUP

LILLOOET MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:1,000 0 5 10 20meters 40
DRAWN BY: W.G.	DATE: DEC. 1982.
APPROVED BY: J.M. DAWSON, P. ENG.	FIG. NO. 231 D-13

N

L-4+00 N

L-3+50 N

L-3+00 N

L-2+50 N

L-2+00 N

L-1+50 N

L-1+00 N

L-0+50 N

L-0

L-3+00W

L-2+00W

L-1+00W

B/L

6500

7000

7500

TA-4R X

TA-3R X

TA-2R X

X TA-1R

LEGEND

6500 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)

CREEK

5 — LOCATION OF GEOCHEMICAL SOIL SAMPLE WITH GOLD VALUE IN PARTS PER BILLION (PPB).

X — ROCK SAMPLE LOCATION

GEOCHEMICAL CATEGORIES

GOLD		SILVER
0 - 15	NEGATIVE	0 - 0.6
16 - 41	POSSIBLY ANOMALOUS	0.7 - 1.4
42 - 67	PROBABLY ANOMALOUS	1.5 - 2.2
>67	DEFINITELY ANOMALOUS	>2.2

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inches 0 1 2 — centimetres 0 1 2 3 4 5

BRITISH COLUMBIA GEOLOGICAL SURVEY

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To accompany a report by J.M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

TASEKO PROJECT

SILVER IN SOILS - "A" GRID

TOSH CLAIM GROUP

LILLOOET MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:1,000 0 5 10 20meters 40
DRAWN BY: W.G.	DATE: DEC. 1982.
APPROVED BY: J.M. DAWSON, P. ENG.	FIG. NO. 231 D-14

6500

6400

L-3+50 W

L-0+00

L-2+50 E

Abundant outcrops of fine grained sediments.

Talus and small outcrops of fine grained impure arenaceous sediments.

Talus and subcrop of fossiliferous sandstone and siltstone.

Float of fossiliferous sediments - abundant outcrops to the south.

2+00 N

1+00 N

B/L

1+50 S

N

LEGEND

7000 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)

CREEK

10 — LOCATION OF GEOCHEMICAL SOIL SAMPLE WITH VALUE IN PARTS PER BILLION (PPB).

GEOCHEMICAL CATEGORIES

	GOLD		SILVER
	0 - 9	NEGATIVE	0 - 0.3
◔	10 - 19	POSSIBLY ANOMALOUS	0.4 - 0.5
◑	20 - 29	PROBABLY ANOMALOUS	0.6 - 0.7
●	>29	DEFINITELY ANOMALOUS	>0.7

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J.M. DAWSON

inches 0 1 2 — centimetres 0 1 2 3 4 5

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To accompany a report by J.M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

TASEKO PROJECT

GOLD IN SOILS "B" GRID
SILVER

TOSH CLAIM GROUP

LILLOOET MINING DIVISION, B.C.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:1,000 (0 5 10 20 meters 40)
DRAWN BY: W.G.	DATE: DEC. 1982.
APPROVED BY: J.M. DAWSON, P. ENG.	FIG. NO. 231 D - 15