092J/15

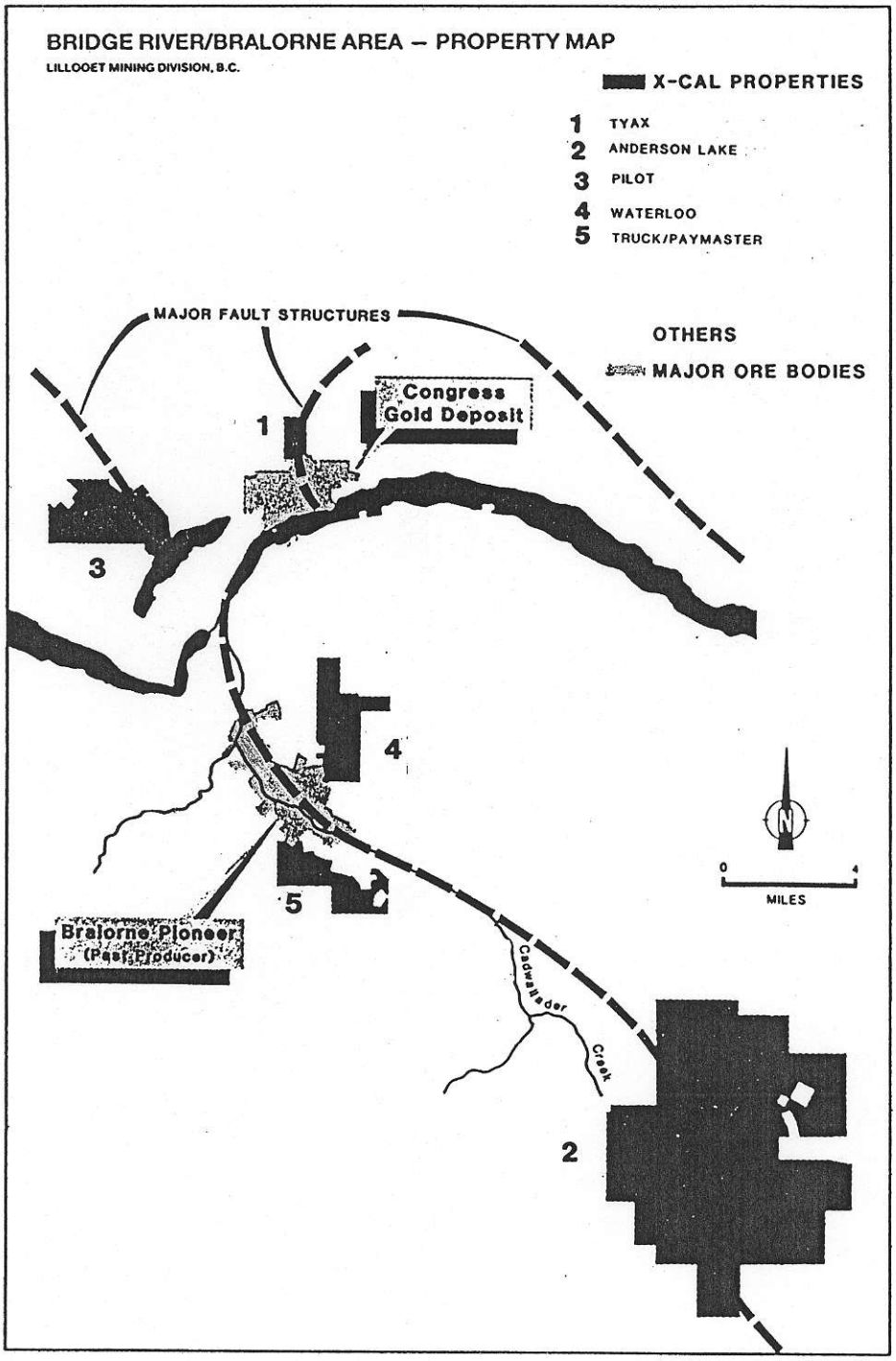
820815

BRALORNE PROPERTIES

BRITISH COLUMBIA

JUNE, 1990

X-CAL RESOURCES LTD.


BRIDGE RIVER/BRALORNE AREA – PROPERTY MAP
LILLOOET MINING DIVISION, B.C.
X-CAL PROPERTIES
1 TYAX
2 ANDERSON LAKE
3 PILOT
4 WATERLOO
5 TRUCK/PAYMASTER
MAJOR FAULT STRUCTURES
OTHERS
MAJOR ORE BODIES
Congress Gold Deposit
Bralorne Pioneer (Past Producer)
Cadwallader Creek
N
0
4
MILES

TYAX PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 92J/15, 8km northeast of Goldbridge, B.C. and road access to property
Acreage:	480 acres in 8 units
Interest:	X-Cal 100% interest
Work Commitment:	Government: $1,600/year

PROPERTY HISTORY

The area of the Tyax property was initially examined in the 1930's during the height of activity in the nearby Bralorne gold camp. Several trenches and pits were dug in altered serpentinite. A vein of lead-zinc-gold mineralization containing a reported 7.5% zinc and 0.268 oz/t gold over 1m was explored by a small adit near the east boundary of the claims.

The present Tyax property was staked by X-Cal in 1982. Geological mapping, rock and soil sampling indicated that nearly the entire package of rocks underlying the claims was structurally deformed and had been subjected to quartz-carbonate alteration. Soil samples in areas of minor overburden cover contained highly anomalous gold, arsenic and zinc concentrations, but in areas of topographic depression - probably coincident with through-going structures - the soil did not reflect underlying geology.

X-Cal undertook a sampling, backhoe trenching, and percussion drilling program in 1985. Soil anomalies in the "KNOLL" area outlined a quartz-carbonate altered ultramafic unit containing values of gold up to 1260ppb. One to three metre wide sections contained up to 1650ppb gold in rock chip samples. Concurrently, the known lead-zinc-gold horizon on the adjoining property was traced into the Tyax claims.

Additional trenching in the KNOLL area in 1987 intersected the altered serpentinite and two mineralized sections which assayed 0.17 oz/t and 1.19 oz/t gold over one and two metres, respectively.

Late in 1987, Canada Tungsten optioned the Tyax property and undertook a winter drilling and trenching program, spurred by the need to spend flow through funds. By December, 1987, Canada Tungsten had drilled fifteen holes totalling 1,736m, exclusively in the KNOLL area and completed 1,475m of trenching. Eleven of the fifteen holes intersected gold concentrations in excess of 0.01 oz/t. The best hole intersected a 16.9m interval of altered serpentinite containing concentrations up to 0.216 oz/t gold over 1 metre. Subsequent work by X-Cal has shown these holes to be oriented on a structure oblique to what is generally thought to be the main mineralized zone.

Trench sampling by Canada Tungsten showed a widespread area of lower grade gold mineralization associated with subsidiary structures. A total of forty individual 1-metre chip samples contained gold concentrations from 0.01 to 1.196 oz/t. One trench uncovered a previously unknown 10-metre wide zone of intense alteration in mafic volcanics.

Canada Tungsten's consulting geologist recommended that the exploration program be continued, however, the property was returned to X-Cal in the spring of 1988.

PROPERTY GEOLOGY

The Tyax claims are underlain by highly deformed sediments and volcanics of the mid-Jurassic Bridge River group. These are intruded by and in fault contact with serpentinite which has been altered to a quartz-carbonate-mariposite listwanite assemblage.

The Tyax property adjoins the Congress claims to the south, and the Golden Sidewalk claims to the east, both of which hold significant gold mineralization. In particular, work on the Congress

TYAX PROPERTY

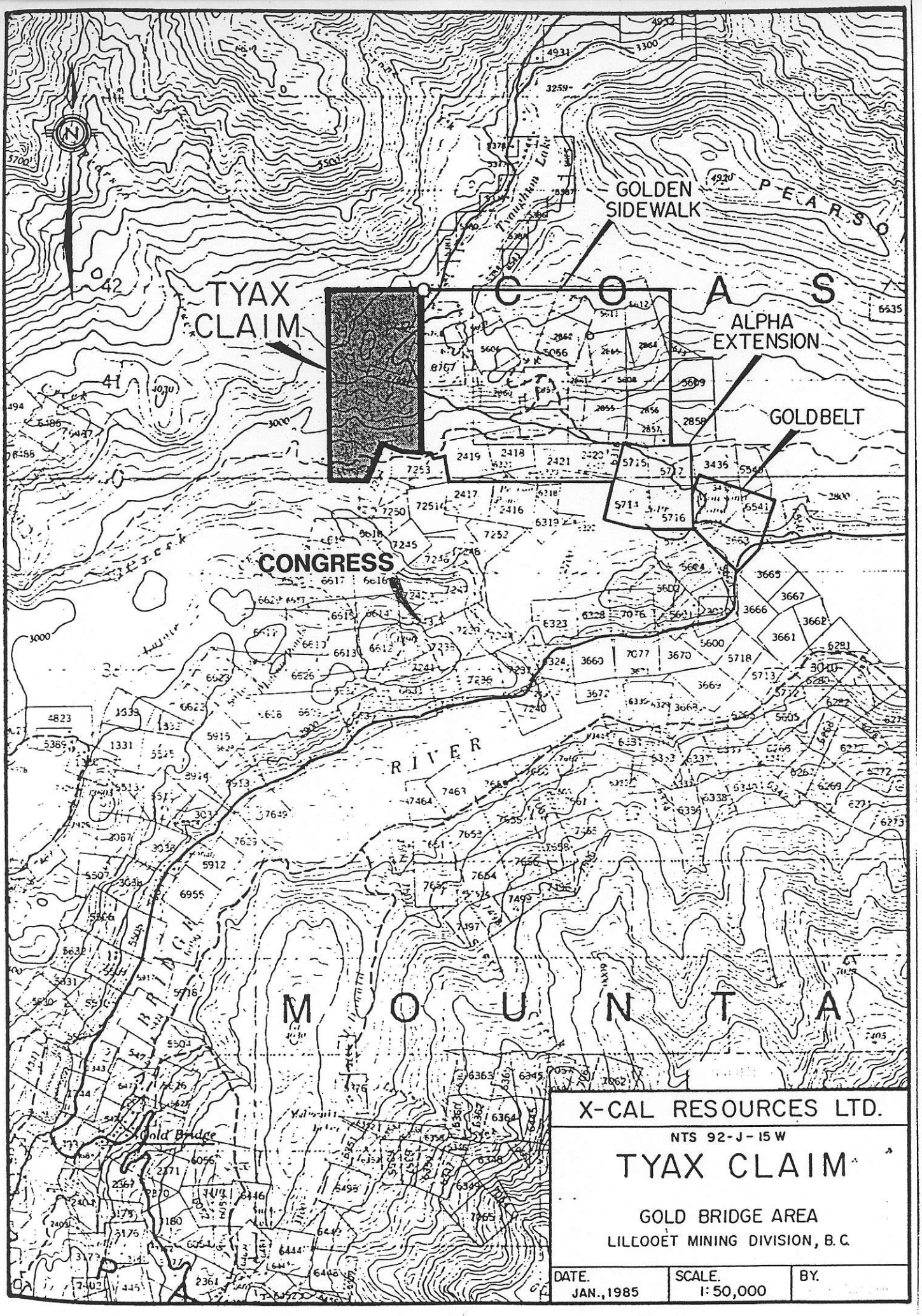
property has discovered geological reserves of 700,000 tons grading 0.30 oz/t gold in five zones.

Regional geological mapping has shown that the Cadwallader Break, or a splay off this fault, strikes through the Congress and Tyax ground. In addition, structures which host gold mineralization on the nearby Minto and Olympic claims also trend onto the Tyax property. This structural loci has fractured and altered all formations on the Tyax.

Mineralization found on the Tyax property consists of quartz-carbonate-sulphide veins and pods which invariably occur within zones of intensely altered serpentinite or mafic volcanic. Gold occurs with sulphides within a quartz-carbonate matrix. Rock samples from trenches placed over highly altered serpentinite and basalt contain gold concentrations above .01 oz/t over tens of metres.

RECOMMEND PROGRAM

A well controlled and detailed induced polarization, magnetic and VLF-EM survey should be completed to complement the existing data. Soil geochemistry in areas not previously covered would assist in evaluating the newly discovered alteration zones. Drilling would follow the interpretation of the data.


GOLDEN SIDEWALK
TYAX CLAIM
ALPHA EXTENSION
GOLDBELT
CONGRESS
Tyaughton Lake
Gold Bridge
RIVER
M O U N T A
X-CAL RESOURCES LTD.
NTS 92-J-15 W
TYAX CLAIM
GOLD BRIDGE AREA
LILLOOET MINING DIVISION, B.C.
DATE. JAN., 1985
SCALE. 1:50,000
BY.

ANDERSON LAKE PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 92J/9+10, 20km southeast of the Bralorne-Pioneer Mine, B.C., and 10km northwest of the town of D'Arcy
Acreage:	19,000 acres in 310 units
Interest:	X-Cal 100% interest
Work Commitment:	Government: $62,000/year

PROPERTY HISTORY

The Bridge River gold camp was discovered in 1896. Mining from the Bralorne and Pioneer Mines centred on Cadwallader Creek produced 7.95 million tons averaging a phenomenal 0.522 oz/t over the mine life. A total of 4.2 million ounces of gold was won from these two mines. Gold was contained within ribbon quartz veins usually less than 2m in width which formed ore shoots of 250m in length. The veins were developed to a depth of 1,875m and were still well mineralized.

The area of the Anderson Lake claims was considered to be an extension of the Cadwallader Creek fault and was prospected extensively during the 1930's. Three prospects were developed by underground exploration: the Anderson Lake Mine, located on Gold Creek near the east boundary of the claim group; the Gold Hill adit on the West Fork of McGillvray Creek; the Diorite showing on McGillvray Creek.

The Anderson Lake Mine developed a 4m wide quartz vein from 6 adit levels. Concentrations of 0.78 oz/t gold over 8.6 feet were reported. Mining proceeded sporadically until 1928, however, only 688 ounces of gold were apparently produced from 10,110 tons.

The Gold Hill workings consist of two adits driven into large quartz veins separated by about 200m. Assays up to 0.12 oz/t gold were reported.

Little information on the Diorite showing is available.

Regional mapping of the Pemberton sheet by Woodsworth in 1977 clearly indicated that the Cadwallader fault complex and the ore-related Bralorne intrusives extend southeast from the Bralorne camp to Anderson Lake. Subsequently, Silver Standard Mines undertook a heavy mineral stream sediment survey in the McGillvray Creek area. Anomalies up to 900ppb gold were found, but never followed up.

Dr. Franc Joubin confirmed the significance of the GSC mapping to X-Cal Resources in 1983. X-Cal staked the present Anderson Lake property and undertook a regional mapping and heavy mineral sampling program. Their mapping supported the theory that the Cadwallader Structural Complex with accompanying ribbon quartz veins, serpentinites and Bralorne intrusives passes through the property. In particular, a north-south elongated body of Bralorne augite diorite measuring 10km in length and 2.5km wide was mapped near the centre of the property. It is this phase of the intrusive complex which is spatially associated with the high grade ore in the Bralorne Camp. Heavy mineral sampling produced twenty anomalies ranging from 122ppb to 26,700ppb gold with associated pathfinder elements. Many of these anomalies originated from creeks near the interpreted Cadwallader Shear Zone.

These anomalies were confirmed by Placer Development and Noranda during detailed property examinations. In particular, Placer located one creek known as the SOUTH FORK which was consistently highly anomalous with gold concentrations ranging between 400 - 2700ppb and reeommended a follow-up program. Placer did not undertake this program.

The property was optioned to Hudson Bay Exploration and Development Company in 1985. Hudbay undertook a repeat of the X-Cal sampling and again confirmed the anomalies in heavy minerals with values up to 34,000ppb gold. Mapping also confirmed the complex geological assemblage found at Bralorne to pass through the Anderson Lake claims. In addition, visible gold in

ANDERSON LAKE PROPERTY

panned concentrates, and abundant quartz float was found. Unfortunately, the sampling and analytical method employed by Hudbay was not suitable for locating consistent and interpretable gold anomalies, especially when coarse-grain gold is common. Nevertheless, the area outlined previously by Placer was highly anomalous. Hudbay also obtained rock samples from the Bralorne Mine hoping to develop a lithogeochemical method of locating ore. Again, the partial extraction analytical method did not produce usable data.

Soil sampling in the SOUTH FORK area, and a VLF-EM survey generated both gold anomalies and strong conductors. No follow-up was done. Hudbay terminated the option.

Canada Tungsten and X-Cal worked on the project in 1986 and 1987. X-Cal pushed a road into the SOUTH FORK of McGillvray Creek and undertook additional soil sampling near the Hudbay soil anomaly. Six diamond drill holes totalling 950m were placed in a 2-metre wide quartz vein. Minor mineralization was found. One hole tested a shear zone with numerous feldspar porphyry dykes. This hole showed quartz stringers with minor amounts of chalcopyrite and molybdenite. The last wildcat hole tested the VLF-EM anomaly which trends parallel to the SOUTH FORK of McGillvray Creek, above the zone of heavy mineral anomalies. This hole intersected narrow fault zones and zones of sulphide-bearing quartz stringers. Significantly, these stringers occur in the vicinity of albitite dykes, a known ore indicator at the Bralorne camp. The best assay result was 620ppb gold over 60cm.

Geological mapping by Canada Tungsten in the SOUTH FORK area found highly altered ultramafic and diorite intrusive rocks of the Bralorne Intrusive group. A swarm of granitic dykes were also found in the same area and were hypothesized to be shallower equivalents of the soda granites found at the Bralorne Mine.

A small soil sampling program at the headwaters of SOUTH FORK produced gold anomalies up to 1800ppb, with several values in excess of 100ppb gold. Although the consulting geologist recommended further work, the option was not picked up in 1987.

The property was worked by Teck Corporation in 1989. Geological mapping, rock and soil sampling, and limited VLF-EM surveys were undertaken in three principal areas. Many quartz veins and stringers associated with albitite dykes were located near the headwaters of SOUTH FORK. A soil grid was placed over the area with lines at nominal 100m spacings and stations at 25m. This spacing, coupled with variable overburden thickness, and a target size known to average 2m in width and 250m in length would invariably produce discontinuous soil gold anomalies. This discontinuous nature of gold responses, even though values up to 200ppb were found, proved to be troublesome to Teck. Samples of outcropping vein material and float contained gold up to 12.09g/t over narrow widths. The float samples were not located in outcrop. Teck concluded that the property contained the same geological environment as Bralorne, but declined to drill in the target areas. The property was returned to X-Cal in 1990.

The original claim block has been reduced from 28,000 acres to approximately 19,000 acres.

PROPERTY GEOLOGY

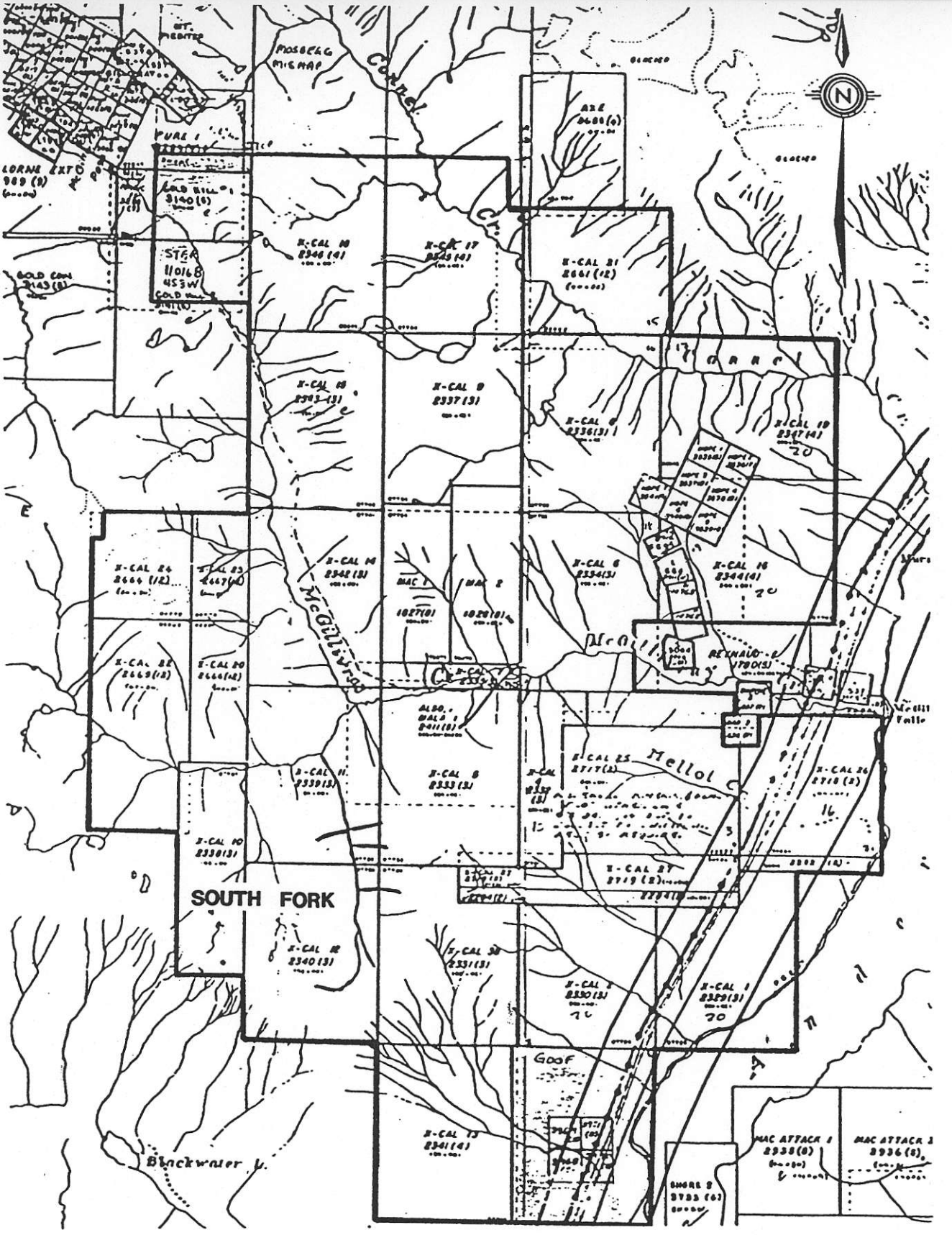
The Anderson Lake property encompasses most, if not all, of the geological units found in the Bralorne gold camp to the north. The Cadwallader Shear Zone and Ferguson overthrust fault transect sedimentary/volcanic rocks of the pre-Permian Bridge River Group of greenstone/sediments and the Triassic Cadwallader Group of argillites, siltstones, and volcanics. Altered serpentinite zones mark the faults which have controlled the emplacement of bodies of Bralorne diorite.

Various areas of the property contain albitite dykes and low sulphide quartz veins in the vicinity of the Bralorne diorite and a soda granite.

RECOMMENDED PROGRAM

All geochemical data on the Anderson Lake claims should be compiled onto one map. Portions known to have questionable sampling or analytical problems should be outlined. Areas which have not been subject to well-controlled sediment sampling should be highlighted prior to field work. These areas must be resampled using both a controlled heavy mineral technique and a fine-fraction portion of the stream sediment in order to complete the geochemical coverage on the property.

An airborne magnetic survey would outline the dioritic and serpentinite bodies on the property and would assist in geological mapping of structures. The SOUTH FORK grid area should be extended to cover the entire headwaters of the anomalous creek with soil samples obtained at a density more in keeping with target size. Trenching and drilling of resulting anomalies would follow.



1 0 1 2 3

Kilometers

ORIGINAL CLAIM BLOCK	
Anderson Lake Property	
CLAIM MAP	
N.T.S.- 92 J/9W,10E	SCALE - 1:80000
DATA - J.P.	DATE - NOV. 1989

PILOT PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 92J/15, 5km northwest of Goldbridge, B.C. road access to all parts of the property
Acreage:	3,000 acres in 56 units and 22 crown granted claims
Interest:	X-Cal 100% interest
Work Commitment:	Government: $15,600/year

PROPERTY HISTORY

Exploration in the area of the claims began in 1917. In 1934, Pilot Gold Mines Ltd. developed 1,500m of underground workings on a series of quartz veins within a large north trending shear zone. Assays up to 0.30 oz/t gold were reported.

Two significant occurrences adjoin the Pilot claims. The GEM gold-cobalt-uranium occurrence contains massive arsenopyrite, lollingite, uraninite and gold within an altered granodiorite. Drilling and underground workings developed reserves of 27,700t of 0.634 oz/t gold and 2.045% cobalt. The Jewel prospect hosts mineralized quartz veins in serpentinite which contain up to 2 oz/t gold in grab samples.

X-Cal gradually assembled the land position as crown granted claims came due. They undertook a program of geological mapping, prospecting and rock sampling during 1983 which concentrated on the large "PILOT SHEAR ZONE" mapped in underground workings. Their work resulted in the discovery of mineralization grading 0.324 oz/t gold and 1.66 oz/t silver over 90cm within a highly sheared and altered diorite. Sporadic trenching showed that this shear was mineralized for at least 275m in the immediate vicinity of the mine workings. This shear has been traced by government mapping for more than 5km through the property and may host the Jewel mineral occurrence. The shear zone is up to 75m in width in several exposures.

Of significance was the discovery of a soda granite phase of the intrusive and an associated quartz-epidote veinlet swarm. This environment is similar to that found to host gold mineralization at the Bralorne Mine, south of the property.

Further work by X-Cal in 1985 examined the underground development of the Pilot Mine and traced the large mineralized shear zone to the northwest across the property for a distance of 3.5km. Ultramafic rocks were discovered near the shear, which completed the geological sequence found at the Bralorne Mine. Additional mineralization which contained 0.219 oz/t gold and 17.21 oz/t silver was found near the altered granodiorite. X-Cal opened the western portion of the property with road access and drilled two wildcat holes on soil geochemical anomalies. Sections of the holes graded up to 1000ppb gold. No other work has been done.

PROPERTY GEOLOGY

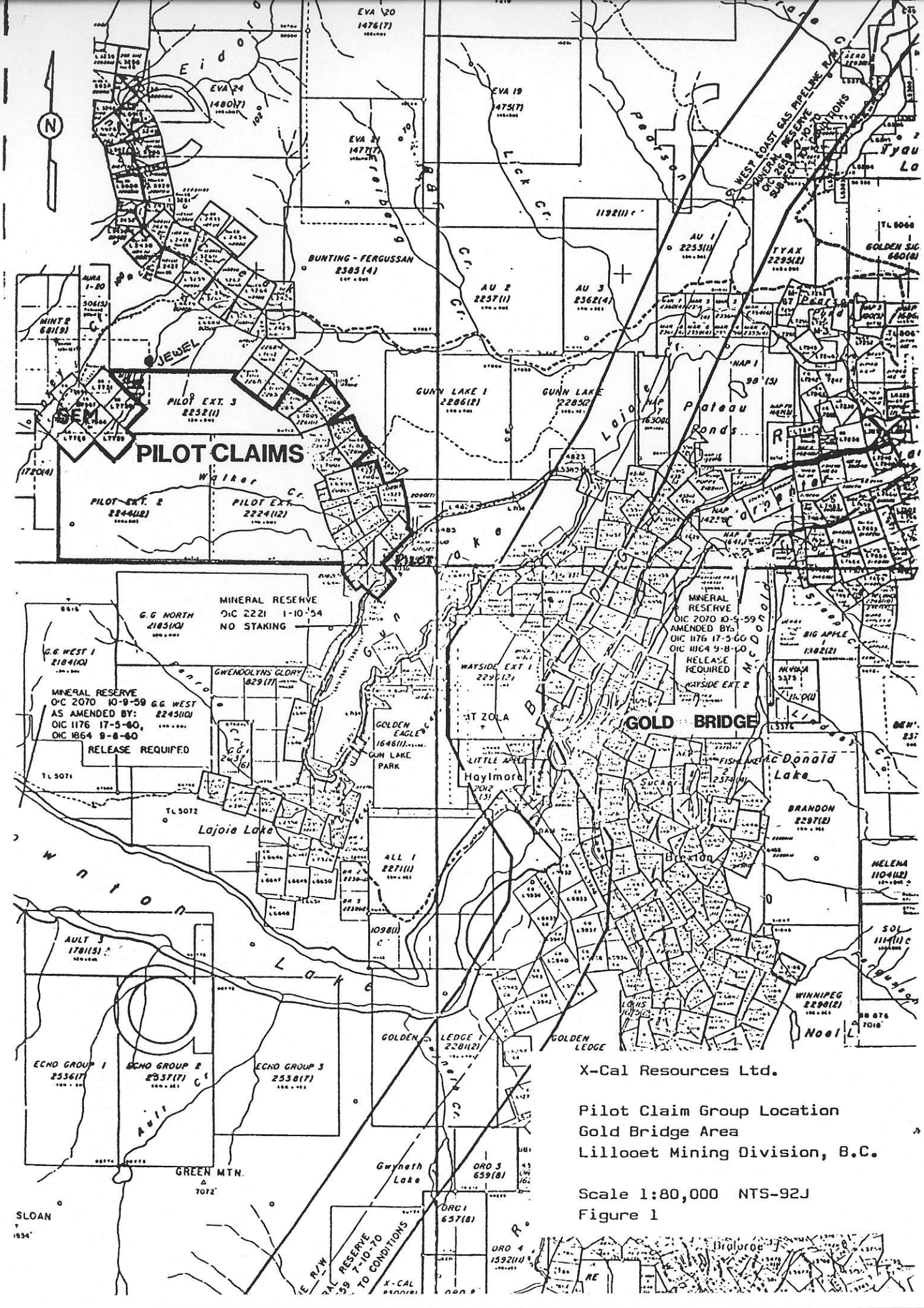
The majority of the Pilot property is underlain by Cretaceous age Bendor quartz diorite which intrudes pre-Permian Bridge River tuffs, cherts and argillites. The diorite is intensively sheared in a northerly direction. Bralorne intrusives exhibit a composition from sodic granite to granodiorite. Wedges of ultramafic intrusives are associated with major shearing.

At least one massive shear zone trends at 140° - 160° az across the property. Quartz and quartz-ankerite veins are commonly associated with this shear zone. The Bridge River sediments are in fault contact with the Bendor diorite and exhibit intense shearing near that contact.

Arsenopyrite, pyrite, and chalcopyrite accompany gold mineralization in quartz-ankerite veins. At the Pilot Mine, a sericite altered shear zone in quartz diorite hosts a sheeted quartz vein system containing sulphides and gold.

RECOMMENDED PROGRAM

The Pilot Mine should be reopened, mapped and sampled. A detailed soil geochemical program with VLF-EM and induced polarization is recommended to evaluate the property as a whole. Trenching and drilling of anomalies would follow data compilation.



X-Cal Resources Ltd.

Pilot Claim Group Location
Gold Bridge Area
Lillooet Mining Division, B.C.

Scale 1:80,000 NTS-92J
Figure 1

WATERLOO PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 92J/15, adjoins the east side of the Bralorne Mine, B.C.
Acreage:	3,000 acres in 63 units
Interest:	X-Cal 100% interest
Work Commitment:	Government: $12,600/year

PROPERTY HISTORY

The ground was originally staked by F. Joubin and partners in 1934 on two epithermal-style veins. Little information regarding this early work is available. The ground was restaked in the 1960's, and a cat road was built to showings on the north end of the claim block. The road was rehabilitated in 1980, but little exploration was done. Newmont undertook a mapping and sampling program on an adjoining claim in 1984.

X-Cal completed a five-day program in 1985 which included reconnaissance rock sampling and the blasting and sampling of two showings. Zone 1 consisted of a 1.3m shear zone in greenstones which contains three veins of sphalerite and arsenopyrite. Realgar and stibnite in a calcite breccia occurs along strike. Grab samples from the zone contained gold values ranging from 0.12 to 1.76 oz/t. A chip sample contained 0.12 oz/t gold over 1.3m. Other grab samples contained 1.76 oz/t gold and a chip sample 3m along strike from the first contained 0.442 oz/t gold over 40cm.

Zone 2 consisted of a massive stibnite vein approximately 400m south of Zone 1. The vein forms the hanging wall of a breccia zone in grey chalcedonic quartz and sulphides. Blasting exposed 7m of vein. No gold was associated with the massive stibnite. Arsenic was in excess of 1000ppm in grab samples. Reconnaissance rock sampling produced six other samples containing anomalous gold and pathfinder elements.

X-Cal concluded that two distinct mineral systems occur on the Waterloo claims: northwesterly trending veins and shears carry arsenopyrite and sphalerite mineralization with high gold values; a later system of northeasterly trending shears and quartz/calcite breccia carry stibnite and realgar only.

Other showings adjoin the Waterloo claims and may trend onto the property.

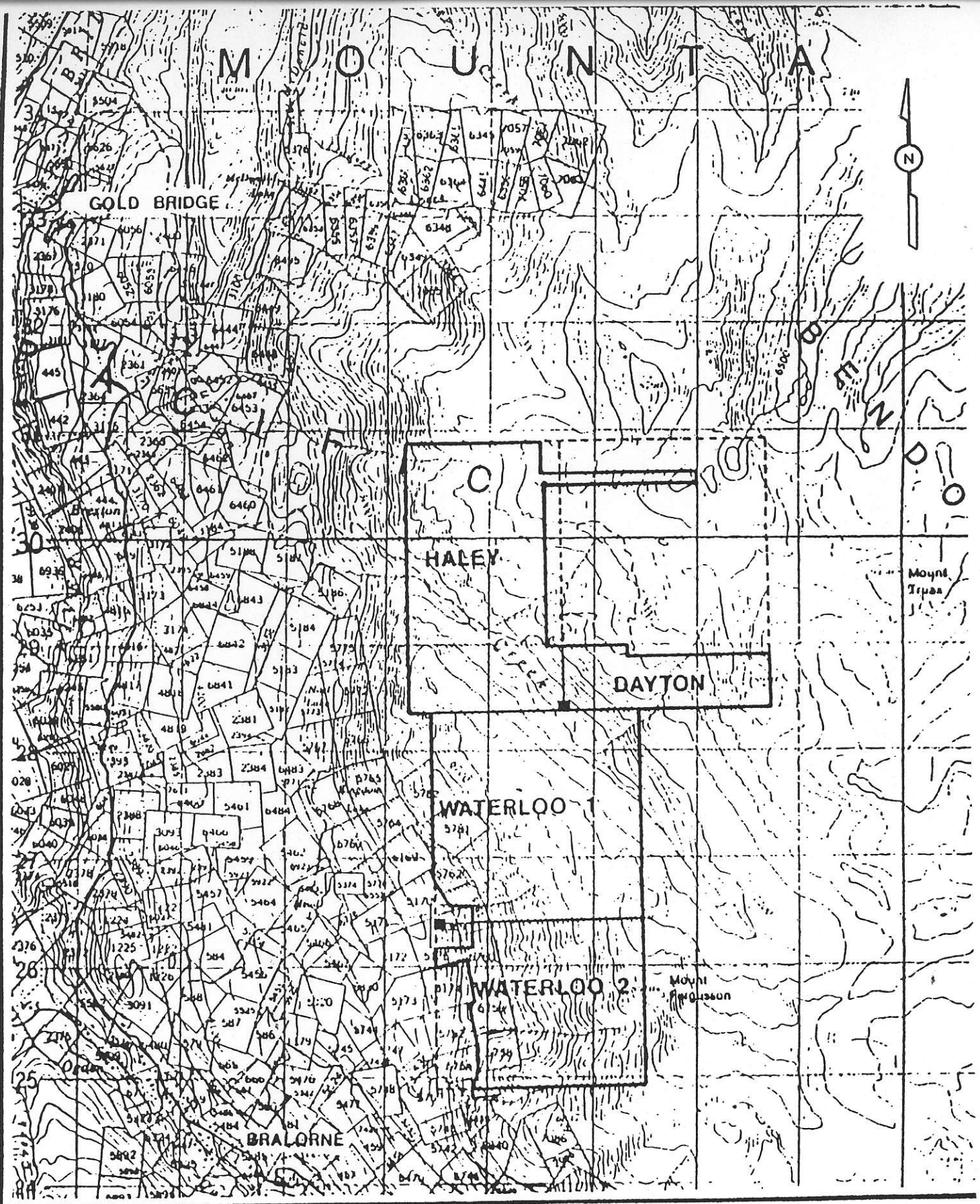
PROPERTY GEOLOGY

The geology underlying the property is poorly known. The majority of the ground is underlain by cherts, argillites, and greenstones of the pre-Permian Bridge River Group. These are in fault contact with the Bendor granodiorite which oecurs on the west side of the property.

All units are locally pyritic and form a distinctive gossan.

RECOMMENDED PROGRAM

The Waterloo property should be prospected and sampled thoroughly. Both soil and talus samples should be taken in a systematic manner across the property. The rusty Bridge River sediments may host an epithermal deposit similar to those found in Nevada.



1000 0 1000 2000 m

Scale

X-Cal Resources Ltd.
Waterloo Claims - Location Map
Lillooet Mining Division
Scale 1:50,000
Location 92J/15
Figure 2
Dated November 1985

TRUCK / PAYMASTER PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 92J/10, 1km south of, and adjoining the Pioneer Mine, Bralorne, B.C.
Acreage:	2,000 acres in 40 units
Interest:	X-Cal 100% interest
Work Commitment:	Government: $8,000/year

PROPERTY HISTORY

The area of the present TRUCK/PAYMASTER claims was first examined in 1930 when quartz veins associated with an albitite dyke were found on the south side of Cadwallader Creek near the Pioneer gold mine. A short adit was driven on a gold showing but no records have been found regarding the results of this work. This showing is now crown granted and occurs on the northern edge of the Paymaster claim.

A structural study on the Pioneer veins and Cadwallader Break was done by the Pioneer Mine geologist in 1961. In this study, the geologist produced evidence to suggest that the Pioneer mineralization may continue south of the Cadwallader Break in the vicinity of the Paymaster claim. This hypothesis was considered to be at least feasible by Dr. Franc Joubin.

The claims were located by X-Cal in 1983, and briefly examined by their geologist. The presence of favourable serpentinite bodies, the Bralorne diorite, and albitite dykes were observed.

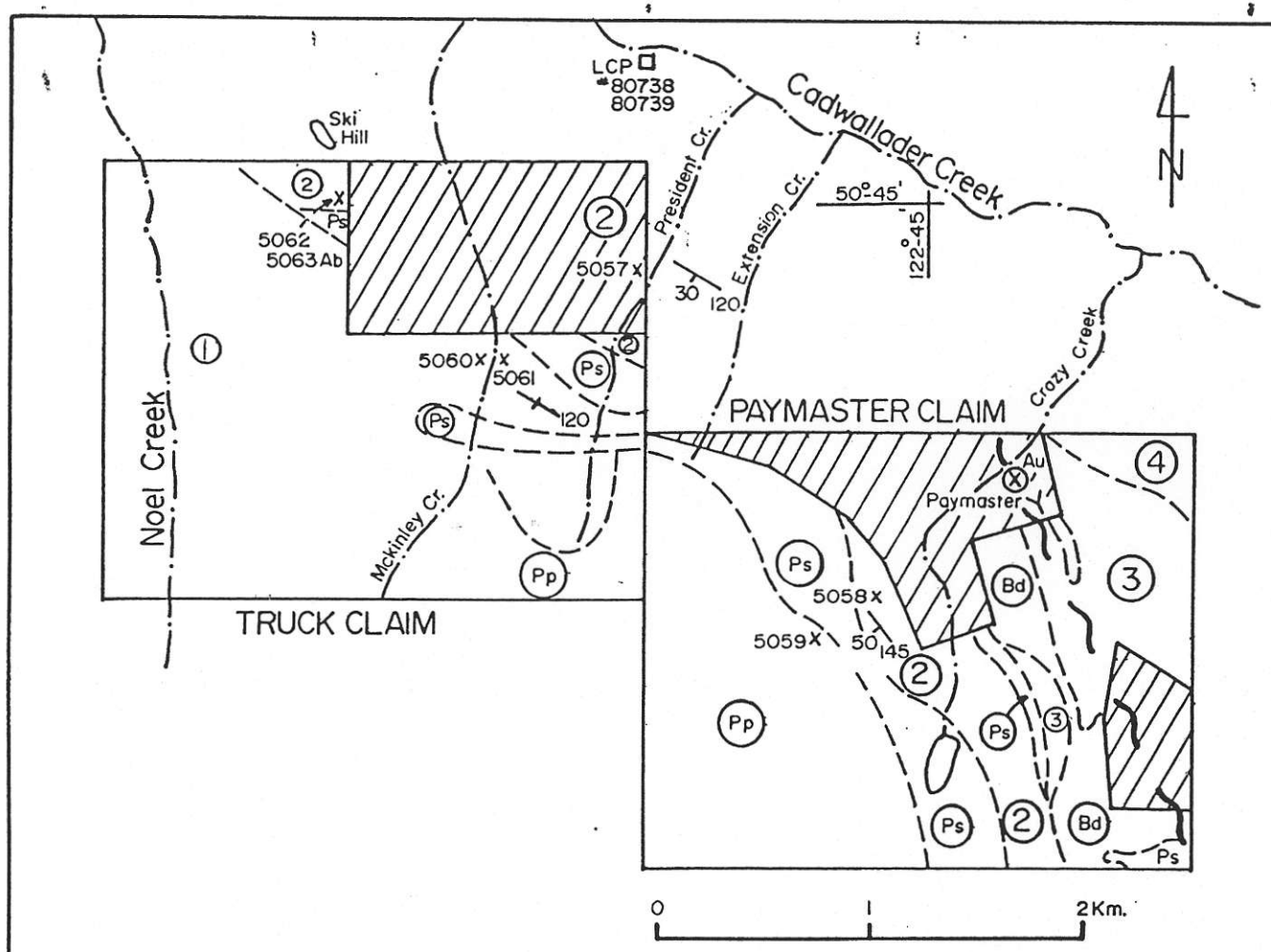
Hudson Bay Exploration and Development Company undertook a small exploration program in 1985 which consisted of geological mapping and widely spaced contour soil sampling. Unfortunately, the analytical method used was not suitable for detrital coarse gold; first order anomalous values could not be repeated in follow-up sampling.

PROPERTY GEOLOGY

The claims are underlain in part by highly sheared serpentinized ultramafic rock emplaced within major fault zones. These ultramafics are bounded by Bralorne diorite and albitite on the east, and periodotite to the west. The Truck claim is bounded on the west by Bridge River Group sediments which have been silicified and form steep cliffs.

RECOMMENDED PROGRAM

A detailed stream sediment sampling program on all drainages within the claims should be undertaken with special emphasis placed on areas of structural complexity. The geochemical soil anomaly located by Hudbay, which is on strike with the Paymaster showing, should be resampled. A wildcat drill hole should be placed into the area of albitite dyke.



LEGEND

Upper Triassic Cadwallader Group

④ Hurley Formation
- calcareous argillites and tuffaceous sediments

③ Pioneer Formation
- andesitic volcanics

② Noel Formation
- argillite and tuffaceous sediments

Middle Triassic Fergusson Group

① Chert and Argillite

Intrusive Rocks

Pp Peridotite } President Intrusives
Ps Serpentine }

Bd Bralorne Diorite
(Ab) Albitite

(Geology after Cairnes, 1937)

Crown Granted Area (status unknown)
Location Approximate

x Outcrop

Geological Contact

Fault

Adit

⊗ Au Mineral Occurrence

Table of Rock Geochemical Results

sample No.	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	W (ppm)	Cu (ppm)	Zn (ppm)
5057	15	.9	2	.3	1	24	29
5058	15	.7	< 2	< .2	1	40	67
5059	15	1.3	< 2	< .2	1	124	31
5060	< 5	7	< 2	< .2	1	26	67
5061	10	1.0	2	< .2	1	20	62
5062	42	.8	< 2	< .2	1	24	74
5063	15	.8	3	3.8	1	15	33

X-CALIBRE RESOURCES LTD.

Truck and Paymaster

Geology and Geochemistry

SCALE	NTS	DATE	FIGURE
1:31,680	92-J-10	23-8-83	3