Report on the

Geology and Geochemistry

of the

Tyax Mineral Claim

Lat. 50°56' N Long. 122°47' W

NTS 92-J-15W

Lillooet Mining Division, B.C.

for

X-Calibre Resources Ltd.,

by

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Oct. 21, 1983

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1.0 Summary and Conclusions

The Tyax mineral claim has potential for the following deposits;

1) Vein Gold Model - These deposits are related to feldspar porphyry intrusives along shear structures in cherty sediments or chert-volcanic contacts within the Fergusson Group. The Tyax property lies along a regional gold mineralization trend at a major subdivision of Fergusson Group sediments and volcanics. Vein gold prospects lying along this trend include the Andaurex property on Truax Mtn., Minto, Congress, Dauntless and Peerless showings. The Au-Ag-Pb-Zn mineralized structure on the Peerless property trends at 225°Az, approximately 125 metres east of the Tyax property. Further exploration is recommended along the possible extension of the Peerless structure onto the Tyax claim.

2) Stratiform Volcanogenic Gold Model - An exhalative gold model within cherty, tuffaceous and carbonate facies sediments in proximity to volcanic vent areas should not be overlooked. The volcanic environment exhibits many features conducive to exploration for synvolcanic gold deposition at the sea floor;

a) Agglomerate occurrences on the property suggesting proximity to a vent area.

b) Development of pyritic chert horizons representing sulphide facies of the exhalative event. Exploration for carbonate rich horizons would suggest areas of hydrothermal alteration and subsequent potential for gold deposition.

c) Ultramafic affinities in the area, intense alteration zones and occurrences of feldspar porphyry possibly related to the Fergusson Group volcanics.

Base metal concentrations within this volcanic environment hold exploration potential as well.

A weak gold anomaly has been delineated from a rock geochemical programme in altered chert and volcanic rocks. An 080°Az trending zinc anomaly occurs in a volcanic member of the Fergusson Group encompassing the Peerless showing. Exploration is recommended along the trend of this rock geochemical anomaly.

2.0 Introduction

A programme of geological mapping and rock geochemical sampling was undertaken on the Tyax Claim Group from June 15 to 18, 1983 for X-Calibre Resources Ltd., Gold Bridge, B. C.

A ground control survey by chain and compass for total of 12 line km was completed on north-south lines at 200 metre intervals with stations flagged at 50 m intervals. No cutting of the bush was undertaken for this survey.

Geological mapping at a scale of 1:2500 was completed over the total 2 km area of the property by traverses down the lines.

Rock geochemical samples were collected from outcrops found by the geological mapping programme. A total of seventeen samples were collected and sent to Nuclear Activation Services Ltd., Hamilton, Ontario on July 5/83 for analysis of Au, As, Sb, W, Ag, Pb, and Zn content. Results are suspect for gold due to an analytical problem at the laboratory.

3.0 Location and Access

The Tyax Claim Group is located in the Bridge River Mining Camp at Lat. 50°56'N, Long. 122°47'W in NTS Map Area 92-J-15-W (Figure 1). The claims lie immediately to the southwest of Tyaughton Lake and north of Gun Creek. The property is accessible by road approximately 6 km northwest along the Tyaughton Lake Road which branches off from the main Bridge River Road approximately 10 km northeast of Gold Bridge, B. C.

The Tyaughton Lake Road intersects the property in the vicinity of Ten Mile Corner. A series of logging roads are found on the northern half of the claims and a road leading west to the Gun Creek trail crosses the southern half of the property.

4.0 Current Claim Status

The following claim is held in good standing by X-Calibre Resources Ltd., Gold Bridge, B. C.;

Table I Claim Status

Claim	No. of Units	Record No.	Anniversary Date
Tyax	8	2295	February 4, 1984

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TYAX-CLAIM

LOCATION

SCALE | NTS | FIGURE No.

5.0 Exploration History

Prior to X-Calibre's claim to the ground, a claim was held on the present Tyax property by Mrs. Florence Westbrook of Gold Bridge, B. C. as the "Flo" Claim staked Sept. 1, 1964.

Immediately to the east, lies the Golden Sidewalk Claim Group held by Warstar Resources Ltd., Vancouver, B. C. on the Peerless Pb-Zn-Ag-Au prospect. Prior to this, Thunder Creek Mines Ltd., Lillooet, B. C. held this ground in 1974-75 and Peerless Gold Mines Ltd. in 1937.

An incline shaft, a 17 foot upper adit, a lower adit with 339.5 feet of workings and a series of trenches were developed on the Peerless showing prior to 1937 as reported by the Ministry of Mines Annual Report, 1937. Assays have been reported to 0.30 oz/ton Ag, and 10.4% Zn.

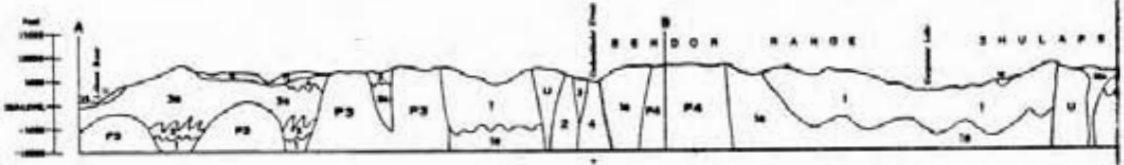
6.0 Physiography

The property is situated in a valley trending from Gun Lake to Tyaughton Lake. Elevations range from 2800 ft. ASL in the south to 3700 ft. ASL in the north.

The area is completely forested with an area logged at the northern extremity of the claims.

Sparse outcroppings occur on knolls within the claim area with the majority of the ground covered by recent alluvial deposits, a recent dacitic ash fall and Pleistocene glacial till and boulder clay.

GEOLOGICAL SURVEY OF CANADA



Diagrammatic cross-section along A-B-C

LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

14 Unconsolidated alluvial and glacial deposits

TERTIARY
MIOCENE (?)

13 Basalt and rhyolite flows

12 Rhyolite and dacite breccia, tuff and flows; 12a, Basement Porphyry (intrusive equivalent of 13?)

P4a Microlitic granodiorite and syenodiorite

LOWER TERTIARY

11 Andesite flows and breccias; basalt and minor dacite

10 Shale, siltstone, sandstone, arkose and conglomerate

MESOZOIC

CRETACEOUS
UPPER CRETACEOUS

P4 BURNT PLUTON (55-6 70 m. y.): granodiorite

KINGVALE GROUP

9 Arkose, greywacke, shale and minor conglomerate

LOWER CRETACEOUS
TAYLOR CREEK GROUP

8 Chert-pebble conglomerate, black banded limy shale, green tuff, volcanic breccia, andesite and basalt

JACKASS MOUNTAIN GROUP

7 Undifferentiated; 7a, interbedded carbonaceous argillite and greywacke, minor conglomerate and coal; 7b, greywacke, pebble conglomerate, argillite and gritty sandstone; 7c, argillite, conglomerate and greywacke; 7d, massive greenish greywacke, argillite, gritty sandstone and pebble conglomerate

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
RELAY MOUNTAIN GROUP

6 Argillite, greywacke and pebble conglomerate

JURASSIC
LOWER JURASSIC

5 Argillite and shale, minor sandstone, limestone and pebble conglomerate

TRIASSIC
UPPER TRIASSIC

U Ultramafic rocks

4 HURLET FORMATION: Thin-bedded limy argillite, phyllite, limestone, tuff, conglomerate, agglomerate, andesite, and minor chert

3 PEMBER FORMATION: Greywacke derived from andesitic lavas and pyroclastic rocks; 3a, andesite breccia, tuff and flows, greywacke, minor rhyolite breccia and flows, shale, argillite, limestone and conglomerate

2 NOEL FORMATION: Thin-bedded argillite, chert, conglomerate and greywacke

MIDDLE TRIASSIC AND (?) OLDER
BRIDGE RIVER GROUP (FERGUSON GROUP)

1 Chert, argillite, phyllite and greywacke; minor limestone, andesite; 1a, metamorphosed rock of map-unit 1; mainly biotite schist

METAMORPHIC AND PLUTONIC ROCKS
(Mainly of unknown age)

S Metasedimentary rocks, mainly micaceous quartzite, biotite-hornblende schist, and minor schists bearing garnet, staurolite and possibly sillimanite

A Granoblastic gneiss, migmatitic complexes, minor amphibolite and biotite schist

P6 Granite

P5 Quartz monzonite

P4 Granodiorite; 4a, microlitic granodiorite and syenodiorite

P3 Quartz diorite

P2 Diorite; 2a, Bralorne intrusions: Anglo diorite, gabbro, minor soda granite and quartz diorite

P1 Gabbro

U Ultramafic rocks: serpentinite, peridotite, dunite

Map-unit .....

Mineral symbols .....

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BRIDGE RIVER AREA

GEOLOGY

SCALE	NTS	FIGURE No.
500,000	92 J	2

7.0 General Geology of the Bridge River Map Area

The geology and mineral deposit descriptions of the Bridge River Area are reported by McCann (1922), Cairnes (1937, 1943), Roddick and Hutchison (1973), Woodsworth (1977) and various government and assessment publications. Figure 2 shows the general geology of the Bridge River Area.

The northeastern margin of the Coast Crystalline Belt trends northwesterly through the area. The northeastern flank of this belt of plutonic rock is represented by granodiorite to quartz diorite of the Late Cretaceous Bendor Batholith which intrudes the southwestern flank of a paralleling antiform. The antiform has a maximum width of 45 km and plunges gently northwest.

With the exception of some exposures of schist and gneiss, this antiformal structure consists of a package of complexly deformed Triassic volcanics and clastics, metamorphosed to a lower greenschist facies.

The most widespread formation which is exposed in the core of the antiform is the Middle Triassic Bridge River or Fergusson Group of chert, argillite and greenstone. Conformably overlying these rocks is the Upper Triassic Cadwallader Group consisting of the basal Noel Formation clastics, the middle Pioneer Formation volcanics and the upper Hurley Formation calcareous sedimentary rocks.

In the Cadwallader Creek Valley, northwest to Eldorado Creek and southeast to Anderson Lake is a belt of plutonic rocks collectively

mapped as the Bralorne Intrusions. These intrusives occur along a belt of folded and faulted Cadwallader Group rocks and serpentine of the President Intrusives, forming the Cadwallader Structural Complex. The Bralorne Intrusives are extraordinarily complex and variable in composition from gabbro, augite diorite, hornblende diorite, "greenstone diorite", quartz diorite and soda granite to albitite. The phases of soda granite are of particular economic significance as they are related to the gold deposits of the Bralorne-Pioneer Mining District. Here, gold mineralization averaging 0.52 ounces/ton in ribboned quartz veins have produced some four million ounces of gold throughout its production since 1932.

8.0 Property Geology

8.1 Introduction

The property consists of a folded and faulted sequence of Middle Triassic Fergusson Group volcanics, pyroclastics and sediments (Units 1-6) which are metamorphosed to lower greenschist facies and intruded by an ultramafic intrusive (Unit Um).

Exposures are restricted to the northern end of the property with the southern end covered by Pleistocene deposits of glacial till and boulder clay and recent alluvial sand and gravel. (Map I).

Walker (1933) maps a regional division of Fergusson Group volcanics and sediments which passes through the Tyax property. It is postulated that this contact has a spatial relationship to gold deposits of the Congress type, including the Minto, Andaurex, Dauntless and Peerless prospects.

8.2 Lithology

8.2.1 Pillow Lava (Unit 1)

Lavas of probable andesitic composition exhibit pillow structures indicating deposition in a submarine volcanic environment. At L 6+00W STN 7+00S variolites (not commonly seen) were observed in a pillow structure. In most outcrop areas, lava flows are interbedded with tuffs (Unit 1a). The thickness of the flows could not be determined due to the sporadic exposures and lack of good contacts.

Pillow lavas weather rusty brown with ellipsoidal

resistant structures apparent on rounded outcrops. Fresh rock is green coloured and fine grained. Quartz and quartz ankerite micro-veins and veins are common in these rocks.

8.2.2 Undifferentiated Lava and Tuff (Unit 2)

Brown weathering, fine grained green rocks (greenstone) with no obvious features are assigned to this unit.

8.2.3 Pyroclastics (Units 3, 4 and 5)

Pyroclastics are differentiated on fragmental size as agglomerate (Unit 3), lapilli tuff (Unit 4) and ash flow tuff (Unit 5). The matrix is generally aphanitic to fine grained, gray to green in colour and disseminated pyrite is ubiquitous. Clasts are angular and mainly consist of lithic fragments as bombs, lapilli or ash.

8.2.4 Interbedded Chert and Argillite (Unit 6)

Dark green, fine grained argillite with aphanitic gray chert beds from 1 to 10 cm in thickness are exposed at L 8+00W STN 4+00S. Southwest of this outcrop, the unit is altered to pink and buff colours, due to albitization. Proximity to a contact with intrusive rocks may explain the albitic alteration in the country rocks.

8.2.5 Ultramafic Intrusive (Unit Um)

Two exposures of ultramafic rocks are observed on knolls to the west of L 2+00W STN 12+00S. These fine grained rocks weather orange to reddish colour and are buff to salmon pink on fresh

surfaces. The predominant alteration associated with the ultramafic is albitite. Mariposite and annabergite commonly occur within the wallrock alteration.

8.3 Structure

The package of volcanics and pyroclastics are folded into a syncline trending at 170°. Attitudes on bedded tuffaceous rocks and pillow lava tops lead to this interpretation. The nose of the fold may be at the northern extremity of the property. A paralleling fault brings the package of sedimentary rocks in contact with the volcanics on the northwestern side of the property.

No contact relationships were observed with the ultramafic intrusive.

Air photo interpretation suggests two possible lineaments representing the ultramafic-albitite - Fergusson Group contact at 80 - 110°Az.

8.4 Mineralization

The Peerless Pb-Zn-Au-Ag prospect occurs 125 metres east of the Tyax property. A mineralized shear trending at 215 - 225°Az/50°NW occurs at the contact of greenstone and cherty tuff. This contact persists to the southwest onto the Tyax property as shown by the massive outcrop of pillow lava and tuff at Ten Mile Corner and a small outcrop of silicified tuff at L 2+00W 9+00S. The intervening area is drift covered and the possible southwest extension of the Peerless is represented by a topographic low (draw).

Nickel mineralization was encountered in the albitite altered wallrock of the ultramafic intrusive at L 2+00W STN 12+00S. Mariposite-annabergite occurs as disseminations of less than 1% on fractures. The mineralization is sporadic over the northwestern area of the outcrop. Sample 003 is a collection of grab samples in areas of mariposite-annabergite mineralization containing 1200 ppm Ni.

9.0 Property Geochemistry

9.1 Introduction

Atotal of seventeen chip samples were collected from most outcrops visited during the course of geological mapping. Approximately one kilogram of sample material was collected at each outcrop or over an outcrop area at equal intervals over the rock mass, across the stratigraphy where recognizable.

9.2 Methods of Geochemical Analysis

The rock geochemical samples were shipped to Nuclear Activation Services, Hamilton, Ontario for analysis of Au, As, Sb, and W by neutron activation analysis. Ag, Pb and Zn were analyzed by a direct current plasma emission spectrophotometric technique. All samples were ground to -200 mesh.

Appendix I describes the advantages of the neutron activation analytical technique.

However, the samples were reportedly contaminated in the laboratory during the first analyses and subsequent analyses appear

to be systematically low. The samples were shipped to another laboratory for verification of the gold results but were lost in transit.

9.3 Results

Map II illustrates the sample results at their locations at a scale of 1:2500. Appendix II tabulates the analytical results received from the laboratory.

Appendix III contains histograms of rock geochemical results for Au, Ag, As, Sb, W, Pb, and Zn. Anomalous values are determined by examination of the distribution of results in the histogram. All the elements form log normal or normal distributions. The threshold value of anomalous geochemistry is chosen where the results skew to the right. (Table II)

Table II Geochemical Anomalies

Element	Background Value	Threshold Value	
	Mean	Cumulative % of Population	Geochemical Value
Au	*0.9 ppb	75%	1 ppb
Ag	0.3 ppm	Not Anomalous	
As	20 ppm	82%	60 ppm
Sb	1.4 ppm	82%	3 ppm
W	1.7 ppm	65%	3 ppm
Pb	12 ppm	76%	16 ppm
Zn	74 ppm	76%	90 ppm

* Skew value of 62 ppb eliminated in calculating mean.

9.4 Interpretation

Two zones of interest occur on the property. A weak gold anomaly occurs in the northwest portion of the property within interbedded tuff and volcanics and altered chert/argillite. However, the gold results are suspected to be subject to analytical error.

An 080^{o}Az trending zinc geochemical anomaly occurs in volcanics of the Fergusson Group. Although these results represent average crustal abundance for zinc in mafic rocks, the association of this anomaly with the Peerless Au-Ag-Pb-Zn prospect should not be overlooked.

The ultramafic-albitite complex to the south is anomalous in arsenic, antimony, tungsten and nickel. The occurrence of this ultramafic intrusive may have some genetic influence to gold deposition on the property.

10.0 Recommendations

A two month programme of geological mapping, prospecting, trenching and grid geophysics/geochemistry is recommended on the Tyax mineral claim to bring the property to a stage of diamond drilling. (Table III)

Table III Estimated Exploration Costs

Objectives

1) Establish a grid with lines at 100 metre intervals and stations every 50 metres. Conduct VLF-EM and magnetometer surveys to delineate the trend of the volcanics from the Peerless into overburden covered ground at the southern end of the property. Conductors

within the volcanics should be verified with more detailed surveying.

Due to the questionable rock geochemical results, further rock geochemical sampling should be undertaken and analyzed for gold content. Soil or biochemical sampling should be undertaken at grid stations. Analysis for Au, As, Sb, W, Pb and Zn is recommended.

2) Propecting and detailed geological mapping along the possible extension of the Peerless prospect and in areas of anomalous gold and zinc geochemistry is recommended.

3) Anomalies discovered by prospecting, geophysics and/or geochemistry should be investigated by trenching.

Labour - Geologist 60 days X $200/day	$12,000
- Line cutters 30 days X 2 men X $100/day	6,000
- Geochemical Sampler 20 days X $100/day	2,000
- Geophysical Surveyor 20 days X $100/day	2,000
- Prospector/trencher 30 days X $150/day	4,500
Food - 190 man days X $15/man day	2,850
Accomodation - 190 man days X $20/man day	3,800
Geological & Field Supplies	3,000
Geophysical Eqpt. Rental (VLF, mag)	2,000
Transportation - 4X4 2 mos. X 1800/mo.	3,600
Bulldozer Rental	1,000
Geochemical Analyses - 50 rock assays/geochem X $25/sample	1,250
- 400 soil or biogeochem X $25/sample	10,000

(Table III cont.)

Report Preparation		$ 2,000
Administrative Expense		3,000
	Subtotal	59,000
	Plus 15% Contingency	8,850
	Total	$67,850

References

Cairnes, C. E., Geology and Mineral Deposits of Bridge River Mining Camp, British Columbia, G.S.C. Memoir 213, (1937)

Cairnes, C. E., Geology and Mineral Deposits of Tyaughton Lake Map Area, B. C., G.S.C. Paper 43-15, (1943)

McCann, W. S., Geology and Mineral Deposits of the Bridge River Map Area, B. C., G.S.C. Memoir 130, (1922)

Minister of Mines Annual Report (B. C.), (1937), p F11-12

Roddick, J. A. & Hutchison, W. W., Pemberton (East Half) Map Area, B. C., G.S.C. Paper 73-17, (1973)

Walker, J. F., Lillooet Map Area, B. C., G.S.C. Summ. Report (1933) Part A, p 69A-75A

Woodsworth, G. J., Geology, Pemberton (92J) Map Area, G.S.C.O.F. 482, (1977)

Appendix I

Methods

of

Geochemical

Analysis

Instrumental Neutron Activation Analysis

This INAA technique is applicable to any biogeochemical type material such as plants, pine needles, the humic forest cover or in fact any biological material. Samples of approximately 20-50 grams of material are collected, screened (-30 mesh), dried and macerated. Eight grams of this material is briquetted in a press at 30,00 PSI to form a 40 mm briquette about 6 mm thick (figure 1). Briquettes are then batch irradiated under thermal or epithermal neutron fluxes depending on the elements besides gold that are to be determined. The samples are allowed to decay from four days to one week where, they are counted singly using a combination of hyperpure germanium detector linked to a multichannel analyzer-computer system (figure 2). Detection limits may vary with the type of material being analyzed but will usually be in the 0.1 to 1 ng/g range. Briquettes are quite simply made and have been prepared in the field by one exploration company.

The advantages of the technique are many, including being multielement where many common gold pathfinder elements (As, Sb, W and Cr) may be analyzed simultaneously. The technique avoids dry or wet ashing of the sample and therefore possible ashing losses or contamination of the sample. The method is very cost effective and rapid, and finally the sensitivity for gold is still unrivalled by any of the previously mentioned analytical techniques.

As every method has its drawbacks, this technique is no exception. Some materials may have large quantities of certain elements which can cause an effective increase in the detection limits. An example of this is the bromine content of some pine needles. In general though this has not proved to be a problem for 99.9% of the samples submitted for analysis don't have any interferring elements. In performing humic biogeochemical surveys the amount

Appendix II

Geochemical

Results

SAMPLE	CO PPM	NI PPM	CU PPM	ZN PPM	AS PPM
5001	--	--	--	130	140
5002	--	--	--	110	5
5003	--	1200	12.0	31.0	69
5004	--	--	--	56.0	2
5005	--	--	--	64.0	2
5006	--	--	--	71.0	3
5007	--	--	--	37.0	7
5008	--	--	--	54.0	3
5010	--	--	--	28.0	67
5011	--	--	--	56.0	<1
5012	--	--	--	29.0	3
5013	--	--	--	38.0	2
5014	--	--	--	50.0	2
5015	--	--	--	66.0	1
5016	--	--	--	240	19
5017	--	--	--	78.0	13
5018	--	--	--	53.0	5
5019	--	--	--	--	20
5020	--	--	--	--	2
5021	--	--	--	--	55
5022	--	--	--	--	10
5023	--	--	--	--	15
5024	--	--	--	--	2
5025	--	--	--	--	11
5026	--	--	--	--	8
5027	--	--	--	--	5
5028	--	--	--	--	2
5029	--	--	--	--	1
5030	--	--	--	--	1
5031	--	--	--	--	1
5032	--	--	--	--	1
5033	--	--	--	--	11
5034	--	--	--	--	8
5035	9	--	45.0	--	3
5036	15	--	37.0	--	3
5037	14	--	62.0	--	10
5038	31	--	120	--	24
5039	22	--	72.0	--	120
5040	13	--	36.0	--	7
5041	18	--	46.0	--	1300
5042	7	--	39.0	--	41
5043	6	--	180	--	3200
5044	15	--	37.0	--	20
5045	14	--	39.0	--	25
5046	27	--	50.0	--	140
5047	16	--	47.0	--	12
5048	34	--	73.0	--	68
5049	24	--	41.0	--	3
5050	21	--	48.0	--	3
5051	13	--	48.0	--	27
5052	13	--	140	--	5
5053	16	--	53.0	--	3

NUCLEAR ACTIVATION SERVICES 10-AUG-8[illegible] REPORT 1797 REF. FILE [illegible]

SAMPLE	AG PPM	SB PPM	W PPM	AU PPB	[illegible]
5001	0.5	5.9	3	62	20
5002	<0.5	0.5	1	<1	10
5003	<0.5	0.2	3	<1	22
5004	0.5	0.2	1	<1	12
5005	0.5	0.6	<1	<1	14
5006	0.5	0.3	1	<1	16
5007	<0.5	0.2	1	<1	10
5008	<0.5	0.5	1	<1	8
5010	<0.5	5.4	3	<1	4
5011	0.5	<0.2	2	<1	12
5012	<0.5	1.4	<1	<1	12
5013	<0.5	0.8	3	<1	8
5014	<0.5	<0.2	1	<1	8
5015	0.5	0.4	1	3	18
5016	0.5	1.4	3	<1	12
5017	<0.5	0.8	3	2	12
5018	<0.5	0.7	<1	3	8
5019	--	1.2	<1	<1	--
5020	--	1.0	2	<1	--
5021	--	4.4	<1	<1	--
5022	--	0.9	1	<1	--
5023	--	1.0	2	<1	--
5024	--	0.4	3	<1	--
5025	--	2.1	<1	<1	--
5026	--	0.6	3	<1	--
5027	--	2.4	1	<1	--
5028	--	0.4	4	<1	--
5029	--	0.2	1	<1	--
5030	--	0.2	1	7	--
5031	--	0.2	2	<1	--
5032	--	<0.2	3	2	--
5033	--	1.4	<1	2	--
5034	--	0.5	3	<1	--
5035	<0.5	0.1	2	1	--
5036	<0.5	0.2	<1	7	--
5037	<0.5	0.2	2	12	--
5038	0.5	0.2	2	12	--
5039	0.5	13.0	<1	12	--
5040	1.0	2.7	8	4	--
5041	4.0	25.0	<1	390	--
5042	3.5	1.3	5	11	--
5043	54.0	200	9	6400	--
5044	1.0	2.1	2	23	--
5045	0.5	0.7	<1	5	--
5046	1.5	0.2	3	21	--
5047	<0.5	1.0	1	6	--
5048	0.5	2.1	4	13	--
5049	0.5	0.4	<1	5	--
5050	<0.5	0.3	1	7	--
5051	<0.5	2.1	1	43	--
5052	<0.5	1.7	2	17	--
5053	<0.5	1.1	<1	20	--

Appendix III

Histograms

Au, Ag. As. Sb, W, Pb, Zn

```
DESCRIBE C1 -C5
   C1 Ag      N =   17      MEAN =      0.30706      ST. DEV. =      0.147
   C2 Sb      N =   17      MEAN =       1.0888      ST. DEV. =       1.97
   C3 W       N =   17      MEAN =       1.6765      ST. DEV. =       1.06
   C4 Au      N =   17      MEAN =       4.5000      ST. DEV. =       14.8
   C5 Pb      N =   17      MEAN =       12.118      ST. DEV. =       4.87
--
NAME C1 'AG'
--
NAME  C2 'SB'
--
NAME C3'W'
--
NAME C4'AU'
--
NAME C5 'PB'
--
HISTOGRAM C1
  AG

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
      0.20          11      ***********
      0.25           0
      0.30           0
      0.35           0
      0.40           0                          Not Anomalous
      0.45           0
      0.50           6      ******

--
HISTOGRAM C2
  SB

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
         0.         6      ******
         1.         8      ********
         2.         0
         3.         1      *          ---------- 3 ppm
         4.         0
         5.         1      *
         6.         0
         7.         1      *

--
HISTOGRAM C3
  W

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
```



```
      0.4          3      ***
      0.8          0
      1.2          7      *******
      1.6          0
      2.0          1      *
      2.4          0
      2.8          0
      3.2          3      ***          ---------- 3 ppm
```

```
HISTOGRAM C4
  AU

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
        0.          16     ****************
       10.           0
       20.           0
       30.           0
       40.           0
       50.           0
       60.           1     *
--
HISTOGRAM C5
  P3

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
        4.           1     *
        5.           0
        6.           1     *
        7.           0
        8.           3     ***
        9.           0
       10.           2     **
       11.           0
       12.           4     ****
       13.           0
       14.           2     **
       15.           0
       16.           1     *
       17.           0
       18.           1     *
       19.           0
       20.           1     *
       21.           0
       22.           1     *
--
DESCRIBE C1 -C2
   ZN          N =   17     MEAN =       74.176     ST. DEV. =       50.9

   AS          N =   17     MEAN =       20.059     ST. DEV  =       37.9
--
HISTOGRAM C1
  ZN

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
       20.           1     *
       40.           3     ***
       60.           7     *******
       80.           2     **
      100.           1     *
      120.           1     *
      140.           1     *
HISTOGRAM C2
      160.           0
      180.           0
      200.           0
      220.           0
      240.           1     *
--
  AS

   MIDDLE OF    NUMBER OF
   INTERVAL     OBSERVATIONS
        0.          12     ************
       20.           2     **
       40.           0
       60.           2     **
       80.           0
      100.           0
      120.           0
      140.           1     *
```

16 ppm

90 ppm

60 ppm

* Recalculated by eliminating value of 62 ppb
Anomalous at greater than 1 ppb

Appendix IV

Itemized

Cost

Statement

Itemized Cost Statement

of

Tyax Mineral Claim

Geologist 8 days field & office @ $200/day	$ 1,600
Labor 2 men x 4 days @ $120/day	960
Project Manager 8 days @ $150/day	1,200
Truck rental 4 days @ $40/day	160
Accomodation 2 men x 4 days @ $40/day	320
Freight, Office overhead, Typing & Secretarial	500
Analysis 17 samples @ $20/sample	340
Drafting & Reproduction	200
	$ 5,280

Appendix V

Certificate

of

Qualification

Appendix V

Certificate of Qualification

I, Richard J. Mazur, hereby certify that;

1. I am a registered professional geologist residing at 586 Portsmouth Avenue, Kingston, Ontario.

2. I am a graduate of the University of Toronto, having been granted an Honours Bachelor of Science Degree in Geology in 1975.

3. I have primarily been employed in the mineral exploration industry since 1975.

4. I have been a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta continuously since 1980 to the present as a Professional Geologist.

5. I have no interest in the Tyax Claim Group or X-Calibre Resources Ltd., nor have I been promised any interest. The only remuneration I expect for work leading to this report is the amount of my professional fee for performing such work.

6. I agree to keep all information documented in this report confidential.

7. I hereby grant X-Calibre Resources Ltd. permission to use this report for its corporate purposes.

Dated this [illegible] day of October, 1983 at Kingston, Ontario.

Richard J. Mazur

P. Geol.

MAZUR RESOURCE CONSULTANTS

STN. 0+00 S | 1+00 S | 2+00 S | 3+00 S | 4+00 S | 5+00 S | 6+00 S | 7+00 S | 8+00 S | 9+00 S | 10+00 S | 11+00 S | 12+00 S | 13+00 S | 14+00 S | 15+00 S | 16+00 S | 17+00 S | 18+00 S | 19+00 S | 20+00 S

MAGNETIC NORTH 28°

L. 0+00 — LCP No. 80729 — REF POST 1S — REF POST 2S — REF POST 3S — CORNER POST 4S

L. 2+00 W

L. 4+00 W

L. 6+00 W

L. 8+00 W

L. 10+00 W — POST 2W — REF POST 2W 1S — REF POST 2W 2S — REF POST 2W 3S — CORNER POST 2W 4S

REF POST 1W 4S

PEERLESS ADIT — Ga, Sp, Au, Ag — 160 / 50 — (1a) 001

OLD WORKINGS

TREND OF PEERLESS SHOWING @ 325° Az / 50° NW

TYAUGHTON LAKE RD

LOGGING ROAD

150 / 50 — 002

005 — (3) — 125 — 007 — 006 X (2)

004 — (3)

(5) 008 X SILICIFIED

75 / 170

10 MILE CORNER

(Um) FLO CLAIM SEPT 1, 1964 — X Mp, An — 003 — 009

(Qm) 010

GUN CREEK RANCH RD

MINOR QUARTZ - ANKERITE VEINS — 65 / 055 — (1a) 011

62 / 125 — X (3) — (4) X — 075 / 47 — (Qm) 013 — 012 X

014 (4)

(1a) 015 — 155 — (5)

016 (1)

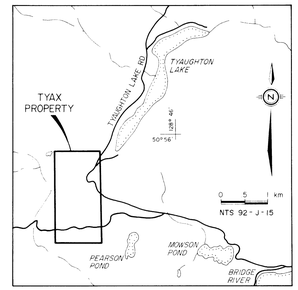
AREA OF NO OUTCROP

017 (6)

090 — (6) — 105 / 65 — 018

005 — 55

PEARSON CREEK



LOCATION MAP

LEGEND

MIDDLE TRIASSIC FERGUSSON GROUP

(6) INTERBEDDED CHERT AND ARGILLITE
(5) ASH FLOW TUFF
(4) LAPILLI TUFF
(3) AGGLOMERATE
(2) UNDIFFERENTIATED LAVA AND TUFF
(1) PILLOW LAVA (1a WITH INTERBEDDED TUFF)

PLUTONIC ROCKS

(Um) ULTRA MAFIC INTRUSIVE

MINERALS

Mp MARIPOSITE
Ga GALENA
Sp SPHALERITE
An ANNABERGITE
Au GOLD
Ag SILVER

ALTERATION

ALBITE (BUFF TO PINK, MINOR SILICIFICATION)

- CLAIM POST
- CLAIM BOUNDARY
- CHAIN AND COMPASS LINE AND STATION
- ROAD
- TRAIL
- STREAM
- 003 ROCK GEOCHEMICAL SAMPLE LOCATION AND NUMBER
- OUTCROP, OUTCROP AREA, SUBCROP, BOULDER(S)
- ADIT
- TRENCH
- 090 STRIKE AND DIP OF BEDDING (INCLINED, VERTICAL, HORIZONTAL)
- 090 FOLIATION (INCLINED, VERTICAL)
- SHEAR
- FAULT
- FOLD AXIS (ANTICLINE, SYNCLINE)
- AIR PHOTO LINEAMENT
- CONTACT (KNOWN, ASSUMED)
- (X) MINERAL OCCURRENCE

MAP I

GEOLOGICAL BRANCH ASSESSMENT REPORT

11,902

0 25 50 75 100 metres

X-CALIBRE RESOURCES LTD.

TYAX MINERAL CLAIM

GEOLOGY

N.T.S.	GEOLOGY BY:	SCALE:
92 - J - 15	R.J. MAZUR	1:2500

STN 0+00 S | 1+00 S | 2+00 S | 3+00 S | 4+00 S | 5+00 S | 6+00 S | 7+00 S | 8+00 S | 9+00 S | 10+00 S | 11+00 S | 12+00 S | 13+00 S | 14+00 S | 15+00 S | 16+00 S | 17+00 S | 18+00 S | 19+00 S | 20+00 S

MAGNETIC NORTH 23°

L. 0+00 — LCP No. 80729 — REF POST 1S — REF POST 2S — REF POST 3S — CORNER POST 4S

L. 2+00 W

L. 4+00 W

L. 6+00 W

L. 8+00 W

L. 10+00 W — POST 2W — REF POST 2W 1S — REF POST 2W 2S — REF POST 2W 3S — CORNER POST 2W 4S

REF POST 1W 4S

PEERLESS (Au, Ag, Pb, Zn)

TYAUGHTON LAKE RD

GUN CREEK RANCH RD

10 MILE CORNER

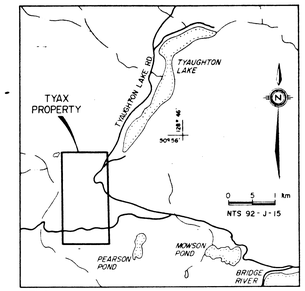
ZINC ANOMALY

GOLD ANOMALY

As, Sb, W, Ni ANOMALY

AREA OF NO OUTCROP

PEARSON CREEK



LOCATION MAP

LEGEND

- CLAIM POST
- CLAIM BOUNDARY
- CHAIN AND COMPASS LINE AND STATION
- ROAD
- TRAIL
- STREAM
- OUTCROP, OUTCROP AREA, SUBCROP, BOULDER(S)
- ADIT
- ROCK GEOCHEMICAL SAMPLE LOCATION AND RESULTS — Au(ppb), Ag(ppm), Sb(ppm), W(ppm), Pb(ppm), Zn(ppm), Cu(ppm), Ni(ppm)

ANOMALIES

- GOLD - > 1 ppb
- ARSENIC - > 60 ppm
- ANTIMONY - > 3 ppm
- TUNGSTEN - 3 ppm
- LEAD - > 15 ppm
- ZINC - > 90 ppm

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,902

MAP II

X-CALIBRE RESOURCES LTD.

TYAX MINERAL CLAIM

ROCK GEOCHEMISTRY

Au, Ag, As, Sb, W, Pb, Zn, Cu, Ni

N.T.S.	GEOLOGY BY:	SCALE:
92 - J - 15	R.J. MAZUR	1:2500