830147

GEOLOGICAL REPORT

ON THE

PEREGRINE AND FALCON A MINERAL CLAIMS

Omineca Mining Division
British Columbia

FOR

351214 ALBERTA LTD.

BY

N.C. CARTER, PH.D. P.ENG.

June 9,1987

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

TABLE OF CONTENTS

	Page
SUMMARY	1
INTRODUCTION	2
LOCATION AND ACCESS	2
MINERAL PROPERTY	3
PHYSICAL FEATURES	3
HISTORY	4
REGIONAL GEOLOGICAL SETTING AND MINERALIZATION	6
PROPERTY GEOLOGY,MINERALIZATION and GEOCHEMISTRY	9
CONCLUSIONS AND RECOMMENDATIONS	11
COST ESTIMATE	13
REFERENCES	14
CERTIFICATE	15

List of Figures

	Following Page
FIGURE 1 - Location	1
FIGURE 2 - Location - Peregrine, Falcon A	2
FIGURE 3 - Peregrine and Falcon A Mineral Claims	3
FIGURE 4 - Peregrine, Falcon A Claims - 1986 Sample Locations	10

SUMMARY

351214 Alberta Ltd. has entered into an agreement for the purpose of exploring the Peregrine and Falcon A mineral claims situated in the Toodoggone River area of north-central British Columbia.

The mineral claims are underlain by early Jurassic volcanic rocks which host a number of significant epithermal gold-silver deposits in the Toodoggone district. Limited work to date indicates the property has potential for hosting similar type deposits.

Prospecting in 1986 disclosed the presence of two zones with anomalous gold and silver values on the Falcon A claim. One of these zones is characterized by significant lead-zinc mineralization over an apparent strike length of at least 150 metres. Values from grab samples range as high as 3.9% lead and 16.2% zinc.

Additional exploratory work is warranted and a two-phase program is recommended. Phase I, estimated to cost $70,000, would include geochemical and geological surveys of the entire property area and blasting and hand trenching of the zones identified to date on the Falcon A claim. Phase II work is recommended to include diamond drilling at an estimated cost of $130,000.

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

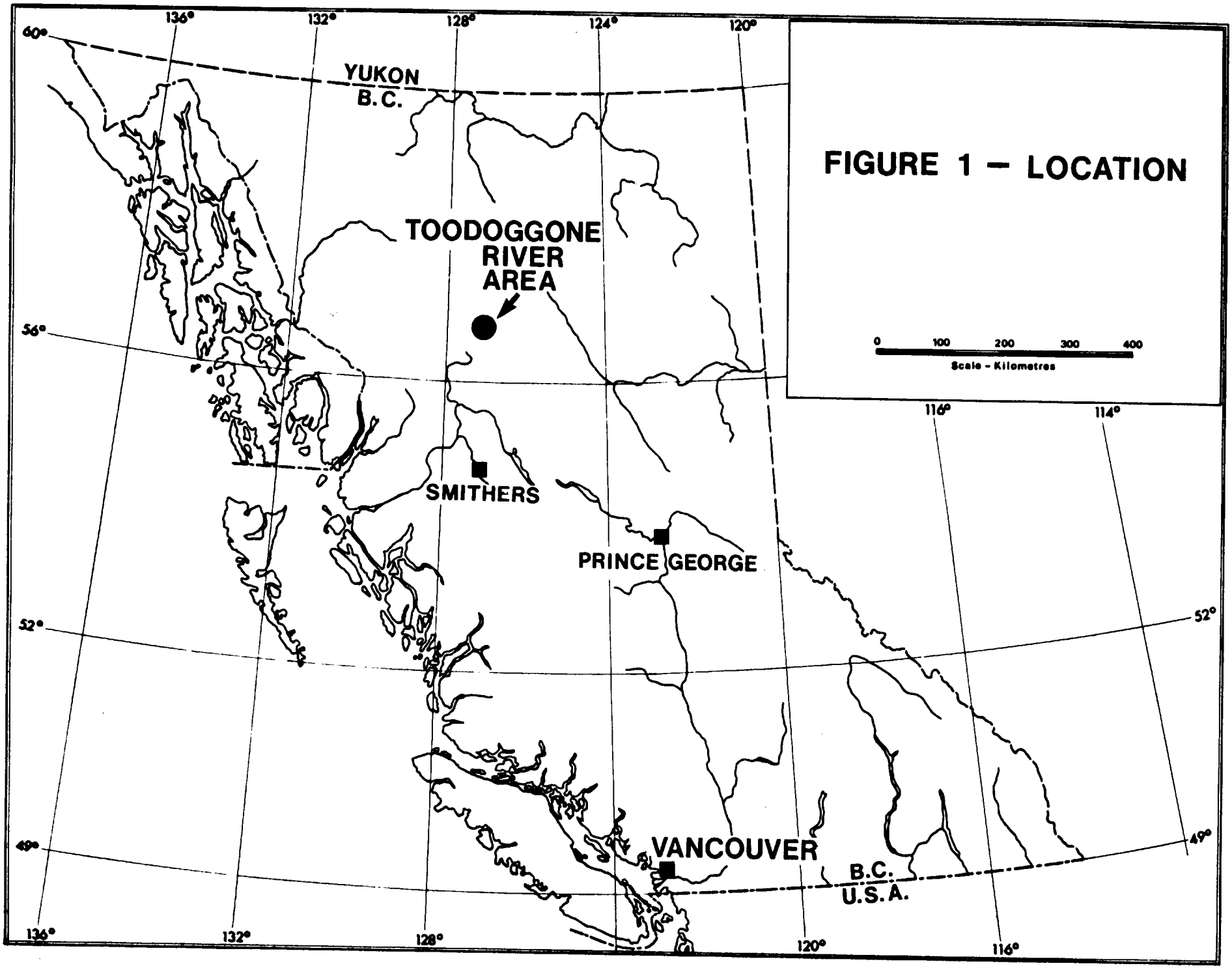


FIGURE 1 – LOCATION
YUKON
B.C.
TOODOGGONE
RIVER
AREA
SMITHERS
PRINCE GEORGE
VANCOUVER
B.C.
U.S.A.
0 100 200 300 400
Scale - Kilometres
60°
56°
52°
49°
136°
132°
128°
124°
120°
116°
114°

INTRODUCTION

351214 Alberta Ltd. has entered into an agreement with Multinational Mining Inc. for the purpose of conducting additional exploratory work on the Peregrine and Falcon A mineral claims situated in the Toodoggone River area of north-central British Columbia.

This report, prepared at the request of 351214 Alberta Ltd., is based on several personal examinations of the property between July and September,1986, and on a review of results of work completed on the claims in 1985 and 1986. Further, the writer has an extensive knowledge of the Toodoggone area, derived over the past 16 years by way of numerous property examinations and supervision of several exploration programs.

Public and private reports pertaining to the Peregrine and Falcon A claims and their regional setting, used in the preparation of this report, are listed in the References section.

LOCATION AND ACCESS

The Peregrine and Falcon A mineral claims are situated 300 km north of Smithers (Figure 1) in the Toodoggone River area of north-central British Columbia.

The claims cover a 5 by 2.5 km area east of McClair Creek 7 km north of its confluence with Toodoggone River (Figure 2). The geographic centre of the claims is at latitude 54°27'North and longitude 127°06'West in NTS map-area 94E/6E.

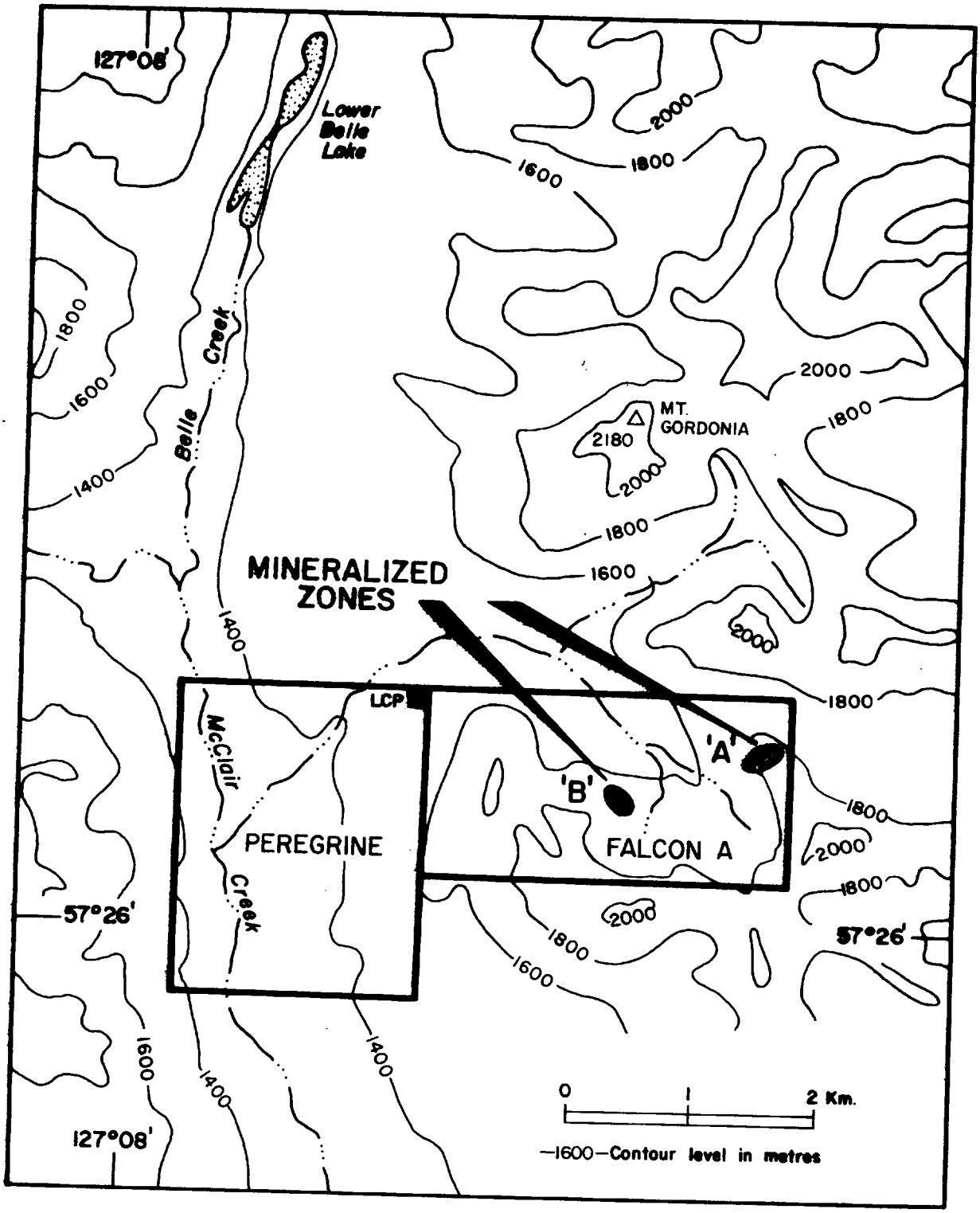


FIGURE 3 — PEREGINE AND FALCON A MINERAL CLAIMS

Access into the Toodoggone River area is by air into the 1600 metre long Sturdee gravel airstrip (Figure 2). The Peregrine and Falcon A mineral claims are most easily reached by a 30 km helicopter flight from the airstrip.

Construction is currently underway on extending the Omineca Resource Road into the area from its present terminus at Moose Valley, 70 km southeast of the Sturdee airstrip.

MINERAL PROPERTY

The property consists of two Modified Grid mineral claims which together comprise 38 units in the Omineca Mining Division. The claims, originally located in March of 1985 under winter conditions, were abandoned and relocated in August of the same year. The common Legal Corner Post for both claims was located in 1986 and claim boundaries are approximately as shown on Figure 3.

Details of the claim are as follows:

Claim Name	Units	Record Number	Expiry Date
Peregrine	20	7311	September 17,1989
Falcon A	18	7312	" "

PHYSICAL FEATURES

The Toodoggone River area is east of the Spatsizi Plateau, an open, gently rolling upland surface dissected by wide valleys. The Toodoggone area proper features more rugged relief, broken by broad alluvium-filled valleys. Steep-walled cirques are common

on north-facing slopes while southerly slopes are generally more gentle and rounded.

The Peregrine claim generally covers the open McClair Creek valley (Figure 3), and elevations within the claim range from 1280 metres along McClair Creek to 1600 metres along the east boundary. McClair Creek occupies a 30 to 60 metre deep canyon in places and is flanked on the east by gravel benches and relatively moderate slopes. Topography rises abruptly to the west.

The Falcon A claim covers more rugged topography including a steep north-facing cirque and a prominent spur ridge in the central and eastern parts of the claim respectively. Elevations exceed 2000 metres along the south boundary of the claim.

The area adjacent to McClair Creek is open tundra with locally dense buckbrush and willows. Alpine spruce, fir and balsam fringe the base of slopes extending to about 1600 metres elevation, above which is typical open alpine country.

Bedrock is well exposed along McClair Creek, tributary drainages and on steeper slopes. Abundant felsenmmer in alpine areas is believed to be close to bedrock.

HISTORY

The Toodoggone area was initially explored for placer gold in the mid-1920's when a Charles McClair reportedly recovered $17,500 in gold. An Edmonton syndicate conducted further work near the junction of McClair Creek and Toodoggone River in 1932.

A public company, Two Brothers Valley Gold Mines Ltd., was formed in 1934 and a 30-man camp was entirely serviced by air from Takla Lake. Considerable test work, including drilling, was carried out in late 1934 with values of $0.50 to several dollars per cubic yard reported from gravels along both McClair Creek and Toodoggone River.

The lode potential of the region was also first investigated in the 1930's, principally by Consolidated Mining and Smelting, who explored lead-zinc mineralization near the north end of Thutade Lake and south of Baker mine.

Intermittent exploration work continued in the region until the mid-1960's when it was investigated by a number of companies for porphyry copper-molybdenum potential. Gold-silver mineralization was recognized at the Chappelle (Baker mine) property by Kennco Explorations (Western) Ltd. in 1969, and this property was explored by trenching, limited drilling and 200 metres of underground crosscutting and drifting by Conwest Exploration in 1973. The property was acquired by DuPont of Canada Exploration Ltd. in 1974 and extensive underground work over the next five years led to a production decision in 1980. The construction of an airstrip in the Sturdee River valley enabled air transport of all equipment necessary to sustain a 90 tonnes per day mining and milling operation for three years.

Numerous other gold-silver discoveries were made in the area in the late 1970's and early 1980's, including the Lawyers deposit

which was discovered by Kennco in 1973 and optioned by Serem Ltd. in 1979. A decision to place this property into production has been recently announced by the successor company, Cheni Canada Inc.

The Toodoggone area has been the scene of intense exploration activity during the past five years, with numerous companies exploring over 4,000 mineral claim units.

Exploratory work on the Peregrine-Falcon A claims in 1985 included the collection of 7 stream sediments, 16 panned concentrates, 9 rock samples and 122 soil samples at 50 metre intervals along the 1600 and 1700 metre elevation contours in the northern part of the Falcon A claim. Follow-up prospecting in 1986 succeeded in defining two areas warranting additional work.

REGIONAL GEOLOGICAL SETTING AND MINERALIZATION

The Toodoggone River area is situated near the eastern margin of the Intermontane tectonic belt. Oldest rocks in the area are late Paleozoic limestones and cherts in the vicinity of Baker mine and south of Finlay River which are in fault contact with late Triassic Takla Group volcanic rocks.

A distinctive lithologic volcanic assemblage of early Jurassic age was informally named "Toodoggone volcanics" by the writer (Carter,1972). These are a subaerial pyroclastic assemblage of predominantly andesitic composition (Panteleyev,1983) which unconformably overlie, or are in fault contact with older rocks. Toodoggone volcanic rocks are contained in a 100 by 25 km

northwest-trending belt extending from east of Thutade Lake in the south to Stikine River in the north.

Several major stratigraphic subdivisions of Toodoggone volcanics have been identified (Panteleyev,1982; Diakow,1983; Diakow et al,1985). These include a basal, predominantly andesitic flow and minor tuff unit, a middle unit of principally ashfall pyroclastics and flow rocks, and an upper distinctive 'grey dacite' ash flow unit. Radiometric ages indicate Toodoggone volcanic rocks were deposited over a 20 million year span beginning in the earliest Jurassic (Panteleyev,1983).

Toodoggone volcanics and older layered rocks are cut by Omineca granitic rocks of early Jurassic age and by subvolcanic intrusions related to Toodoggone volcanism.

Clastic sedimentary rocks of the Cretaceous-Tertiary Sustut Group overlie older layered rocks near the Stikine River and form the southwestern exposed margin of the Toodoggone volcanic belt.

Several styles of economic mineralization have been identified in the Toodoggone area (Schroeter,1981; Schroeter et al,1987) of which the most important are epithermal precious and base metals deposits related to volcanic processes associated with the eruption of the Toodoggone volcanic rocks. These deposits occur as fissure veins, quartz stockworks, breccia zones and areas of silicification in which the principal ore minerals are fine-grained argentite, electrum, native gold and silver with lesser chalcopyrite, galena and sphalerite. Alteration mineral

suites are typical of epithermal deposits with internal silicification, clay minerals and locally alunite, grading outward to sricite and clay minerals, chlorite, epidote and pyrite.

Baker mine is a fissure vein system developed in late Triassic Takla Group basic volcanic rocks, but mineralized quartz veins are spatially related to dykes believed to be feeders for nearby Toodoggone volcanic rocks. The quartz vein mined by DuPont between 1980 and 1983, with a 200 metre strike length and a width of 3 metres, had an indicated 90,000 tonnes (to a depth of 40 metres) grading 31 grams/tonne (0.90 oz/ton) gold and 617 grams/tonne (18 oz/ton) silver. Recovered grades for gold and silver were about half that anticipated due to greater than expected dilution during mining. Recent work on the property by Multinational Mining Inc. has succeeded in partially defining a new zone with grades comparable to those mined by DuPont.

The Lawyers deposit has gold-silver mineralization in banded chalcedony-quartz stockwork veins and breccia zones developed in Toodoggone volcanic rocks. Three potential ore zones have been defined to date, containing an aggregate 1.1 million tonnes grading 7.27 grams/tonne (o.21 oz/ton) gold and 254 grams/tonne (7.11 oz/ton) silver.

Numerous other epithermal gold-silver deposits in the area are hosted by lower and middle units of the Toodoggone

volcanic sequence. These include the Sha, Saunders, Moosehorn, Mets, Metsantan, Al,JD and Golden Lion prospects. Most of these are along or adjacent to regional northwest-striking fault zones.

Soil, rock and stream sediment gecchemistry have proven to be useful tools in the search for epithermal precious metals deposits in the area. Gold and silver give diagnostic geochemical signatures but analyses for copper, lead, zinc and arsenic are also useful.

PROPERTY GEOLOGY, MINERALIZATION AND GEOCHEMISTRY

The Peregrine and Falcon A mineral claims are underlain principally by early Jurassic Tocdoggone and/or Hazelton Group volcanic rocks which are intruded by Omineca granitic rocks. A regional fault extends along McClair Creek in the western part of the Peregrine claim.

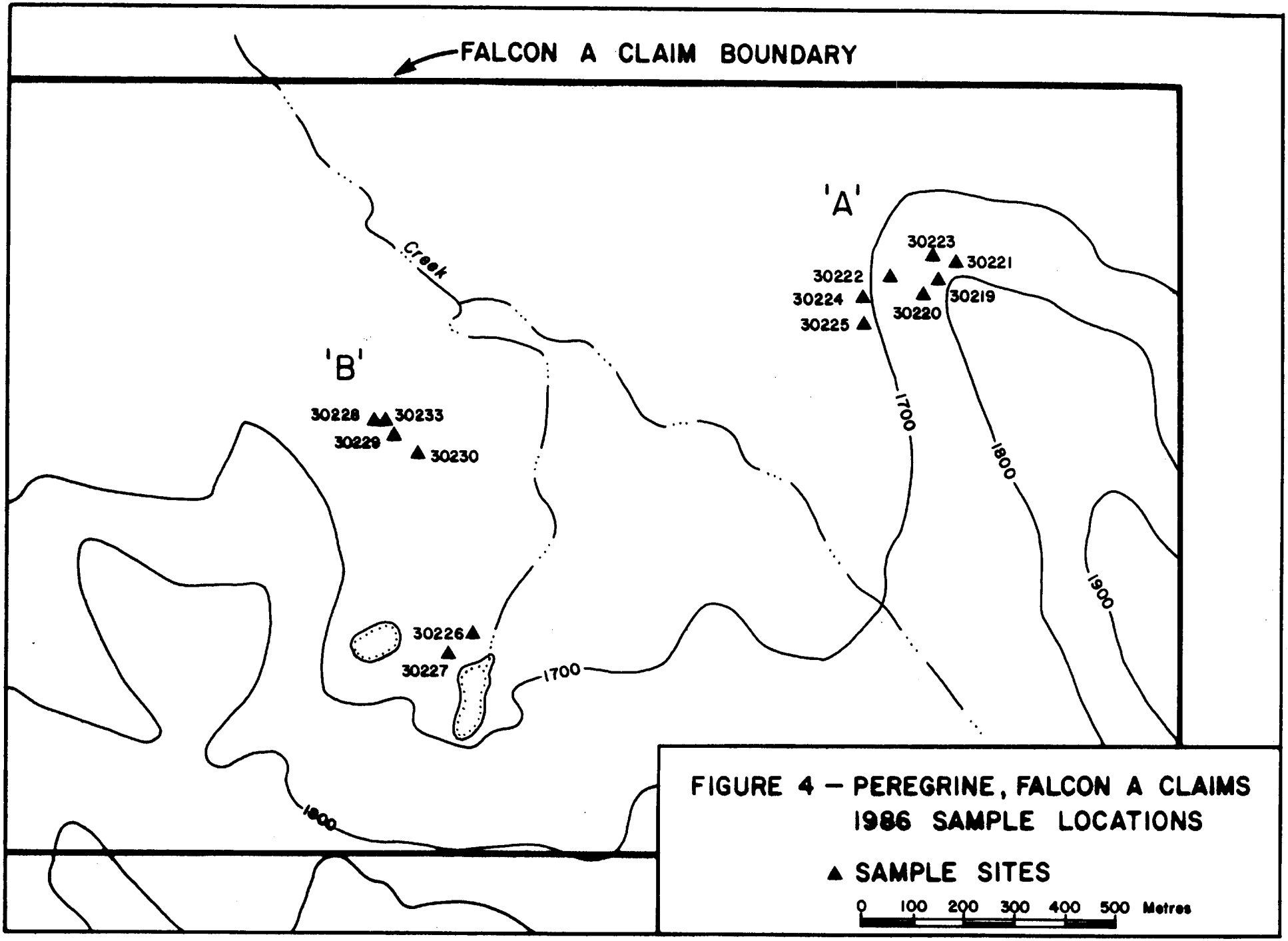
Early Jurassic Toodoggone volcanics or time equivalent Hazelton Group rocks in the claims area are andesite porphyry flows and volcaniclastics which strike northwesterly and dip gently south. Omineca granitic rocks intrude layered rocks in the prominent cirque headwall on the Falcon A claim (Diakow et al) and on the west side of McClair Creek on the Peregrine claim where they are intensely sheared and contain quartz-sericite-pyrite veins (Sutherland,1981). Soil sampling over ground immediately south of the Peregrine claim (Fox,1982) indicated linear zones with anomalous gold and silver values.

Two contour soil sample lines on the Falcon A claim in 1985 indicated two areas for follow-up prospecting and rock sampling in 1986. The first of these (Area 'A' on Figures 3 and 4) is a prominent gossan area on the north end of a spur ridge below which two soil samples yielded values of 85 and 150 ppb gold. Rock samples collected over a 200 by 300 metre area contained finely disseminated pyrite, local quartz veining and some malachite staining. Geochemical values, listed below, ranged as high as 305 ppb gold. 4.1 ppm silver, 8400 ppm copper, 305 ppm lead and 940 ppm zinc.

Sample No.	Copper(ppm)	Lead(ppm)	Zinc(ppm)	Silver(ppm)	Gold(ppb)
30219	112	26	68	2.2	16
30220	1500	25	24	3.2	305
30221	285	305	940	2.4	8
30222	15	36	36	1.2	4
30223	19	61	400	1.0	7
30224	8400	46	440	4.1	10
30225	47	100	170	2.8	16

Area 'B' in the cirque and tarn lake area in the central part of the Falcon A claim (Figures 3 and 4) includes float and bedrock containing significant quantities of lead and zinc. Four samples averaged 973 ppm copper (0.10%), 26150 ppm lead (2.62%), 45575 ppm zinc(4.6%), 8.2 ppm silver and 30 ppb gold.

Sample No.	Copper(ppm)	Lead(ppm)	Zinc(ppm)	Silver(ppm)	Gold(ppb)
30226	49	53	57	0.7	2
30227	70	250	465	1.3	11
30228	710	22000	9700	6.2	14
30229	1360	17800	4800	7.0	7
30230	1120	25800	5800	7.3	27
30233	700	39000	162000	12.0	70


FALCON A CLAIM BOUNDARY
Creek
'A'
30223
30221
30222
30219
30224
30220
30225
'B'
30228
30233
30229
30230
30226
30227
1700
1800
1900
1700
1800
FIGURE 4 – PEREGRINE, FALCON A CLAIMS
1986 SAMPLE LOCATIONS
▲ SAMPLE SITES
0 100 200 300 400 500 Metres

Galena and sphalerite occur in silicified volcanic rocks as stringers in fractures trending southeast and dipping steeply south and as disseminations in vuggy quartz. The zone is poorly exposed but mineralized float samples have been located over a 150 metre distance along the apparent strike of the zone.

Lead-zinc mineralization on the Energex JD and Moose claims, a few kilometres west of the Peregrine claim contain interesting silver and gold values. Quartz-carbonate veins and silicified zones marginal to faults on the JD claims contain galena, sphalerite and chalcopyrite plu significant gold values over appreciable widths. The lead-zinc mineralization noted on the Falcon A claim appears to represent a similar geological environment.

CONCLUSIONS AND RECOMMENDATIONS

Work to date on the property has included only limited geochemical sampling and prospecting on the Falcon A claim. This work has identified two areas of base and precious metals mineralization warranting further investigation. No work has been undertaken on the Peregrine claim; available information suggests the geological setting is favourable and previous work on adjacent ground has identified geochemically anomalous gold and silver values in soils.

The two known zones on the Falcon A claim (Areas 'A' and 'B') should be subjected to detailed prospecting, rock sampling, blasting and hand trenching as part of a recommended Phase I program.

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

The remainder of the Falcon A claim north of the cirque should be systematically soil sampled at 100 metre intervals and detailed prospecting and rock sampling should be undertaken over the ridge area west of the cirque.

It is recommended that soil sampling along 100 metre spaced east-west lines be undertaken over the Peregrine claim with care taken to avoid organic material in lower, swampy areas and gravel benches east of McClair Creek because of extensive overburden thicknesses and possible contamination by weak concentrations of placer gold.

Stream sediment samples should be collected from major and tributary drainages within the claims area. Soil, rock and stream sediment samples should be analyzed for gold, silver, copper, lead and zinc.

Geological mapping of the entire claims area is recommended as a major component of Phase I work, with particular attention directed to definition of the contact between granitic rocks and the volcanic sequence.

Following Phase I work and definition of target areas, a preliminary diamond drilling program should be considered for Area 'B' and possibly Area 'A' on the Falcon A claim.

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

COST ESTIMATE

Phase I

Geological mapping	$4000.00
Topographic map preparation	$2950.00
Hand trenching, blasting	$10000.00
Prospecting	$2500.00
Sample collection and analyses	$12000.00
Travel, freight	$7000.00
Camp and support costs	$5000.00
Helicopter support - 20 hours	$12000.00
Supervision, engineering, reporting	$7500.00
Contingencies	$7050.00
	$70000.00

Phase II

Diamond drilling - 500 metres @ $165/metre (all-inclusive)	$82500.00
Sample analyses	$3500.00
Helicopter support	$5000.00
Travel, freight	$7000.00
Engineering, supervision, reporting	$10000.00
Contingencies	$22000.00
	$130000.00

Total - Phases I and II	$200000.00

N.C. Carter, Ph.D. P.Eng.

REFERENCES

Bell, Malcolm(1985): Assessment Report-Prospecting and Geochemical Survey on the Peregrine and Falcon A Mineral Claims, Toodoggone River Area,B.C. -private report for Multinational Resources Inc.

Carter,N.C.(1972): Toodoggone River Area; B.C. Dept. of Mines and Petroleum Resources, Geology,Exploration and Mining 1971,pp. 63-70

Diakow,L.J.(1984): Geology between Toodoggone and Chukachida Rivers(94E),BCMEMPR Geological Fieldwork 1983,Paper 1984-1,pp 139-145

Diakow,L.J.,Panteleyev,A. and Schroeter,T.G.(1985): Geology of the Toodoggone River Area NTS 94E, BCMEMPR Preliminary Map 61

Fox,Michael(1982): Geology, Geochemical and Geophysical Report, Belle 1 and 2 Mineral Claims,Omineca M.D., BCMEMPR Assessment Report 10347

Panteleyev,A.(1983): Stratigraphic Position of Toodoggone Volcanics, BCMEMPR Geological Fieldwork,1982,Paper 1983-1, pp. 136-138

Schroeter,T.G.(1981): Toodoggone River,BCMEMPR Geological Fieldwork 1981, Paper 1981-1,pp. 124-131

Schroeter,T.,Carter,N. and Birkeland,A.(1987): A Jurassic Epithermal Gold Area, Northern Miner Magazine Vol.2,No.3,pp.74-81

CERTIFICATE

I, NICHOLAS C. CARTER of Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist registered with the Association of Professional Engineers of British Columbia since 1966.

2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S. (1962) and the University of British Columbia with Ph.D. (1974).

3. I have practised my profession in eastern and western Canada and in parts of the United States over the past 25 years.

4. This report is based on personal examinations of the Peregrine and Falcon A mineral claims in 1986, and on published and unpublished reports pertaining to previous work on the property and its regional setting.

5. I have no interest, direct or indirect, in the Peregrine and Falcon A mineral claims, or in 351214 Alberta Ltd.

6. Permission is hereby granted to 351214 Alberta Ltd. to use this report in support of any documentation to be submitted to the Alberta Securities Commission or the Alberta Stock Exchange.

N.C. Carter, Ph.D. P.Eng.

Victoria,B.C.
June 9,1987