

Motase Lake 90.10.23

LOG NO: 11-28	RD.
ACTION:	
FILE NO:	

GEOLOGICAL MAPPING AND  
 GEOCHEMICAL SAMPLING REPORT  
 on the  
 MOT 1 Claim  
 Latitude 55°05' North  
 Longitude 127°05' West  
 NTS 94-D/03  
 Omineca Mining Division  
 British Columbia

**SUB-RECORDER  
 RECEIVED**  
 NOV 21 1990  
 M.R. #..... \$.....  
 VANCOUVER, B.C.

October 23, 1990

on behalf of  
 LEeward CAPITAL CORP.  
 Calgary, Alberta

by  
 C. H. Aussant, P.Geol.  
 TAIGA CONSULTANTS LTD.  
 #400, 534 - 17th Avenue S.W.  
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20,505  
 GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

BC-90-1

### ABSTRACT

The Motase Lake property, located 152 km north of Smithers, British Columbia, encompasses an area underlain by Bowser sedimentary rocks and Hazelton volcanics which are intruded by dykes and sills belonging to Bulkley intrusives. Occurrences of precious and base metals mineralization appear genetically related to this series of intrusives.

Since the original discovery in 1945, the property has undergone geological mapping, geochemical sampling, prospecting, and diamond drilling by Amoco Petroleum, Noranda, and Prolific Resources. The best drill intersection to date was 0.33 oz/ton gold and 0.9 oz/ton silver assayed over a true width of 6 m (20 feet). A notable intersection in the most recent drilling (1988) was 5 m (17 feet) grading 0.26 oz/ton gold and 0.52 oz/ton silver. Additionally, significant values for molybdenum, copper, tungsten, lead, and zinc were obtained.

The mineralization as noted to date appears to fit into the class of 'mesothermal' veins which occur within or adjacent to Bulkley intrusives. This type of deposit is found elsewhere in British Columbia, most notably at Eskay Creek. Reserves from such deposits can range up to several million tons grading 0.25 oz/ton gold or better. Given the exploration success to date, the Motase Lake property appears to have excellent potential for the discovery of a moderate-tonnage high-grade gold deposit.

In September 1990, a one-day exploration program, directed at investigating the 'Goudridge' Zone was undertaken. Sampling of this area revealed the presence of significant gold mineralization in a quartz vein system.

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## INTRODUCTION

Taiga Consultants Ltd. was contracted by Leeward Capital Corp. to undertake an exploration program of geological mapping and lithogeochemical sampling along the 'Goudridge' Zone on the Motase Lake property in north-central British Columbia.

### Location and Access

The property (Figure 1) is located on N.T.S. map-sheet 94-D/03 in the Omineca Mining Division centering on 55°05' North latitude and 127°05' West longitude, 110 km north-northeast of Hazelton and 152 km north of Smithers.

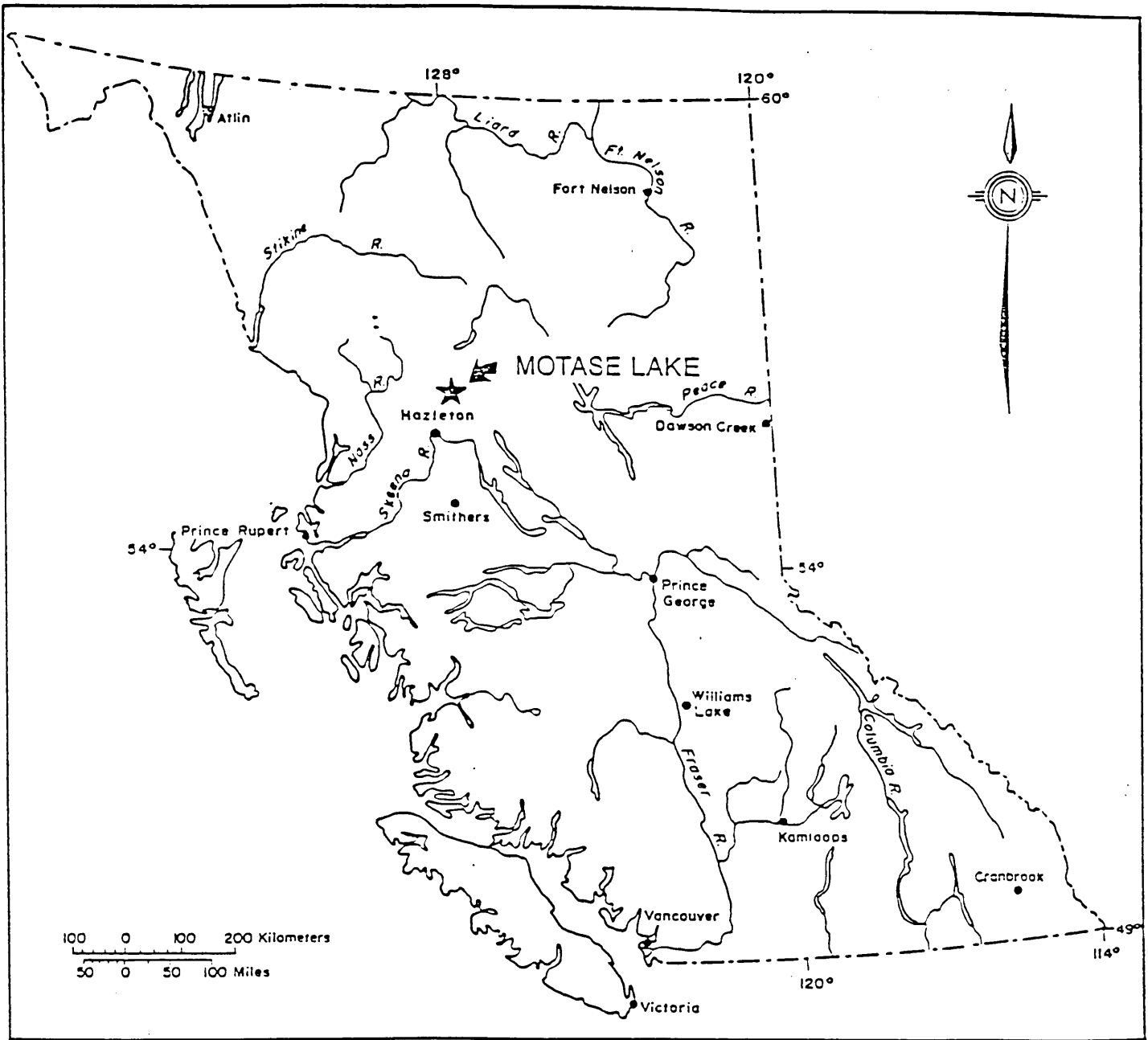
Access to the area is by helicopter from Smithers or by fixed-wing aircraft to the Bear Lake airstrip and then via helicopter to the property. Motase Lake, 4.5 km east of the property, is suitable for float-equipped aircraft. The Omineca Resource Road is located approximately 180 km to the east; logging roads originating in New Hazelton come within 50 km. The area is located 20 km east of B.C. Railway tracks in the Driftwood River valley.

### Claim Status

The **MOT 1** claim (Record Number 9242) is a 20-unit modified-grid claim optioned from Skeena Resources Limited. The anniversary date for the claim is February 15, 1991. Figure 2 illustrates the location. Assessment requirements are \$200/unit/year plus an assessment filing fee of \$5 per \$100 of work filed.

### Physiography

Topography on the property is rugged with a maximum relief in the area of 1000 m, ranging from approximately 1000 m in the valleys to 2000 m on the peaks. The claims are located above treeline between 1500 and 2000 m ASL. Local



REGIONAL LOCATION MAP  
MOTASE LAKE PROPERTY  
Omineca Mining Division, British Columbia

FIGURE 1

MOT Claims  
Motase Lake Area  
Omineca Mining Division  
British Columbia  
NTS 94-D/3

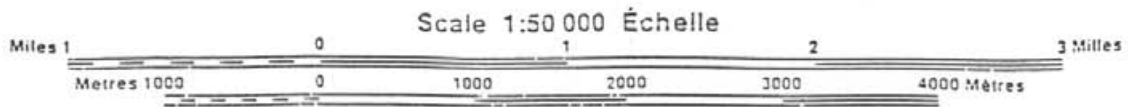
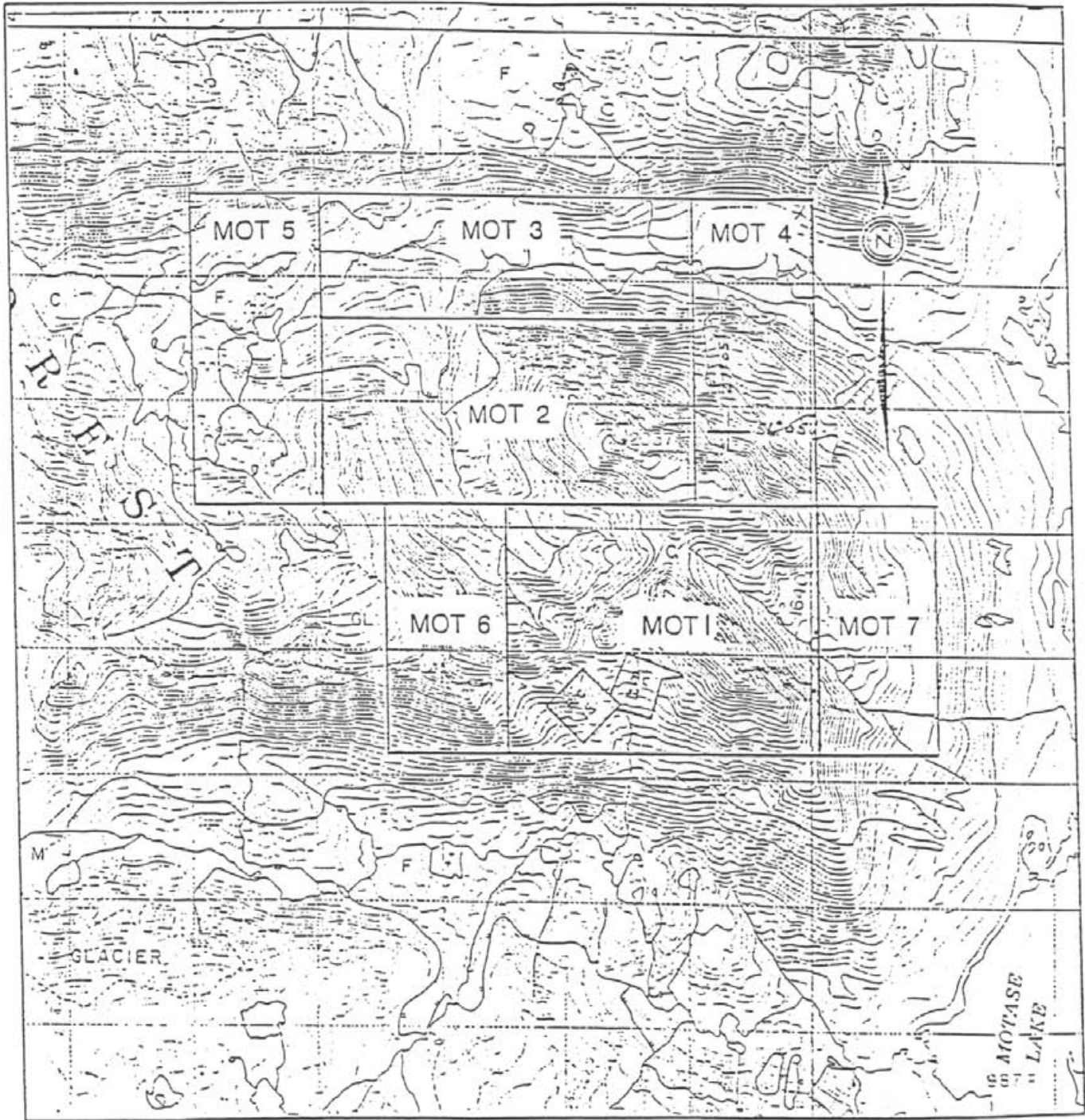


FIGURE 2

relief on the northeast-facing slopes is extremely rugged, whereas the south-facing slopes and the broad U-shaped valley have more subdued relief. The 'Huestis' Zone is located in an area of low relief at the base of a southeast facing cirque.

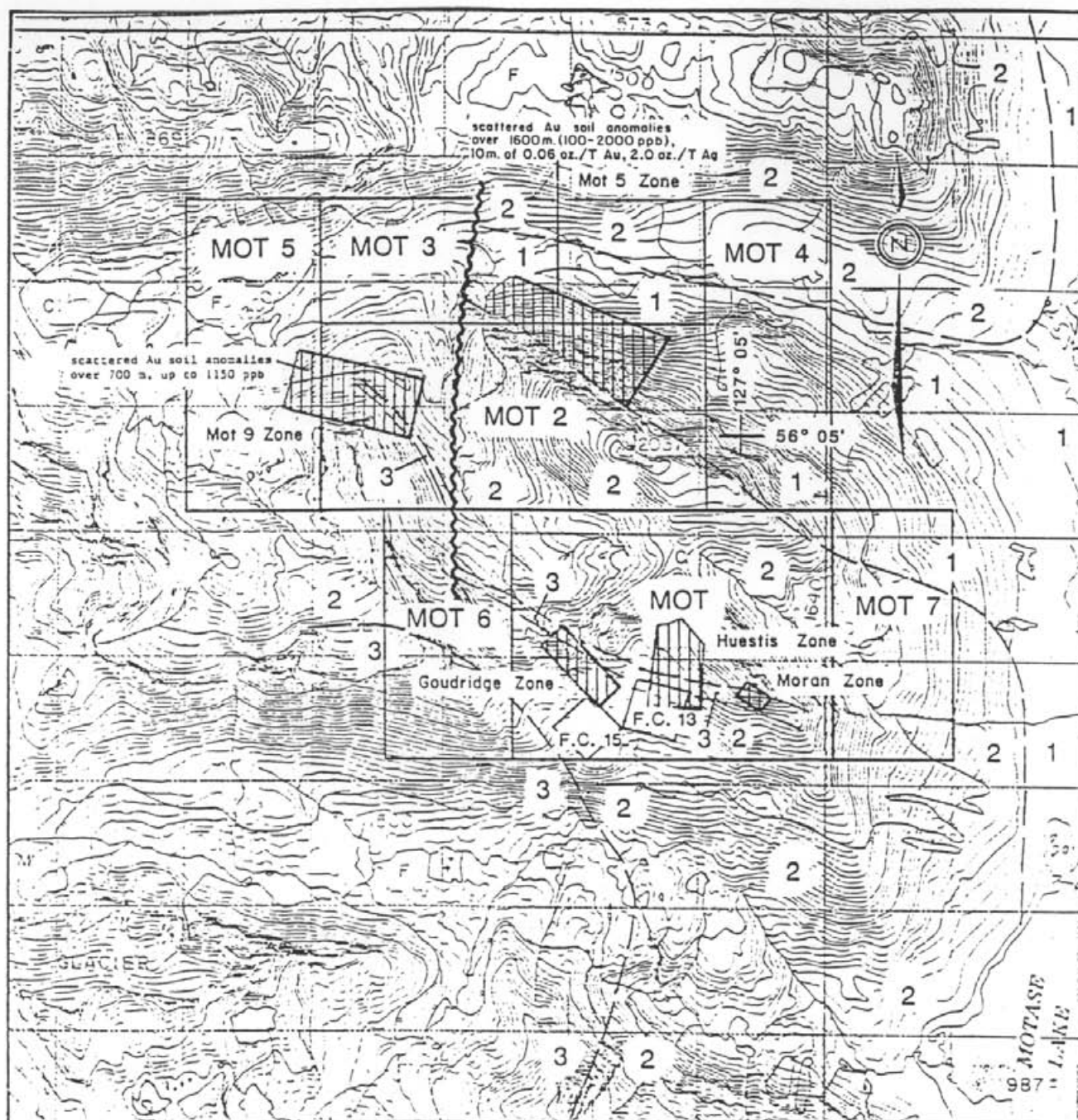
### GEOLOGY

The Motase Lake property is located along the eastern edge of the Middle Jurassic to Upper Cretaceous Bowser Group basin of clastic sediments. Underlying these sediments are Lower Jurassic Hazelton Group volcanics. This latter assemblage is in turn intruded by feldspar porphyry dykes and sills which are variably altered and mineralized. These 'granitic' rocks are related to the Cretaceous to Tertiary Bulkley intrusives which exist as small batholiths and stocks in the district.

Within the claims area, Hazelton volcanics and Bowser sediments have been intruded by two phases of Bulkley granitoids (Figure 3). The older of these is an altered granodiorite feldspar porphyry sill ranging from 50 to 80 m thick. This sill underlies the central and northwestern parts of the property.

The younger monzonite dykes and sills intrude all older units. These units along with the older intrusives become thicker and more persistent toward a small batholith located in the central part of the property.

Precious and base metals mineralization appears spatially related to the Bulkley intrusives, occurring in Hazelton volcanics, or in Bowser sediments adjacent to Bulkley dykes or sills, or in the intrusives themselves.



## GEOLOGICAL LEGEND

- 3 FELDSPAR PORPHYRY
- 2 ARGILLITE
- 1 ANDESITIC TUFFS, FLOWS

- CONTACT
- ~ FAULT



- AREA OF SHOWINGS OR GEOCHEMICAL ANOMALIES

0 1 2 km

SCALE 1:50,000

PROPERTY AND GEOLOGY MAP  
MOTASE LAKE PROPERTY

FIGURE 3



### EXPLORATION HISTORY

The earliest mention of exploration in the Motase Lake area is by C.S. Lord (1949). In 1945, he reported on work conducted by Yukon Northwest Explorations Limited. This exploration consisted of prospecting, geological mapping, and sampling on the 35-claim "Motase Group". Two occurrences were located, consisting of bornite and chalcocite with minor associated galena, pyrite, chalcopyrite, and possibly tetrahedrite. These minerals occur in minute fractures and as disseminations adjacent to fractures in andesitic volcanics. A selected sample of this material yielded 0.005 oz/ton gold, 12 to 76 oz/ton silver, and 14%-98% copper. Average values reported by the operator were about 1 oz/ton silver and 1% copper.

In 1948, the area was staked and prospected by H.H. Huestis (one of the founders of Bethlehem Copper Corporation) who held ground in this district until 1982 when the property was inherited by Cominco from Bethlehem. During this period, three gold showings were identified on the property; namely the 'Huestis', 'Goudridge', and 'Moran'.

Huestis Mining, in partnership with Noranda, undertook a diamond drilling program in 1962 to evaluate the base metal potential of this prospect. Noranda described the Huestis Zone as being 100 x 5 feet with an average tenor of 0.36 oz/ton gold (Norpex Limited, 1962).

The Huestis Zone is hosted by quartz veins, altered sediments, and feldspar porphyries. Noranda encountered anomalous gold values over an apparent width of 46.5 feet (14.17 m) in their DDH-1 with one section yielding 0.32 oz/ton gold over 30 feet (9.1 m). Two additional drill intersections in the immediate area include 0.6 oz/ton gold over 1.5 m (DDH 2A) and 1.20 oz/ton gold over 0.76 m (DDH 2). Surface rock sampling by Cominco in 1983 yielded a true width of 2 m of 0.27 oz/ton gold and 2.53 oz/ton silver within a quartz vein from an outcrop a few metres above drill holes 2 and 2A (Pauwels & Wiley, 1983) (Figure 4).

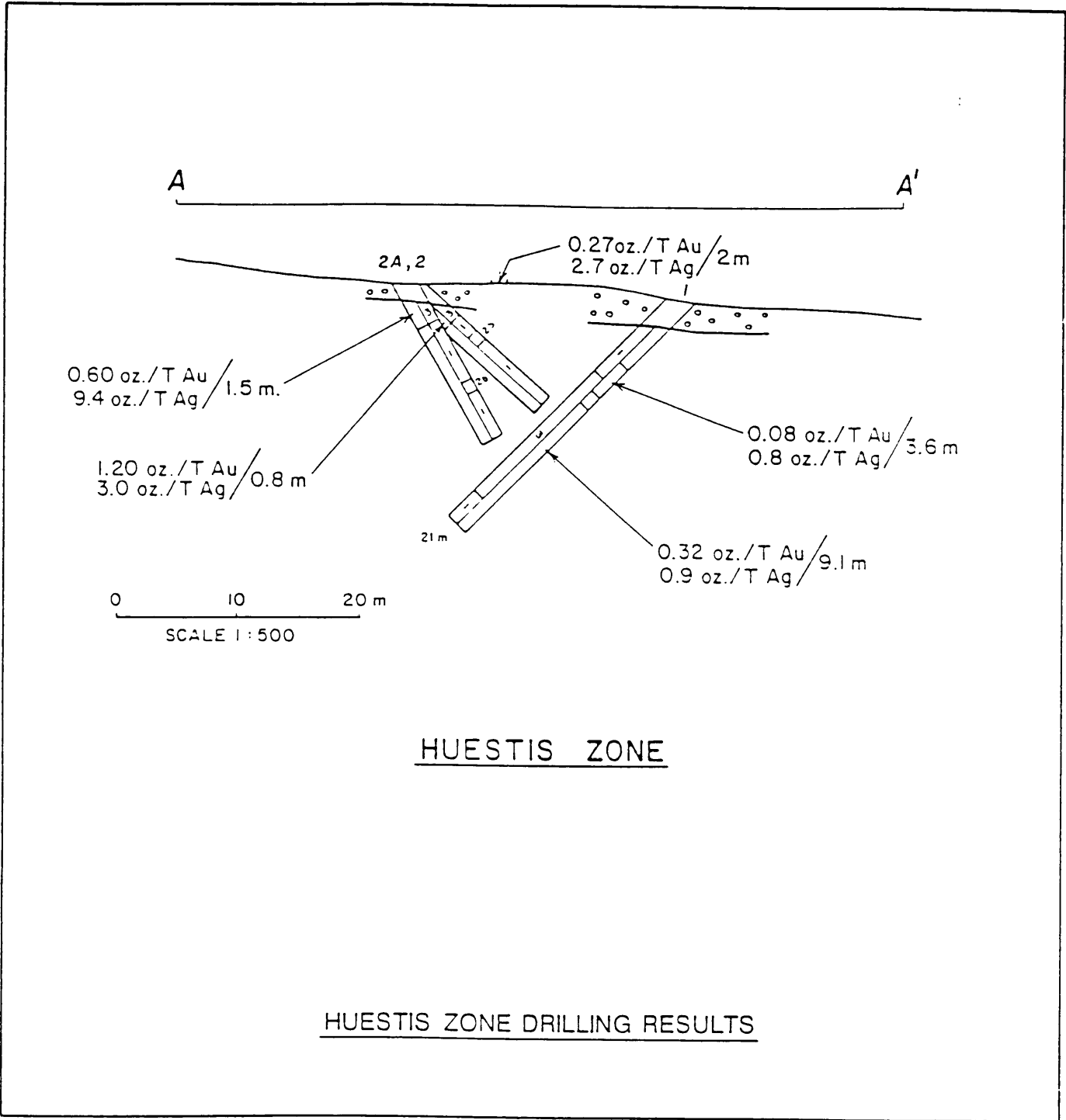


FIGURE 4

The Goudridge Zone was reported by Cominco to consist of quartz with an alteration envelope at a feldspar porphyry/sediment contact. A 3 m chip sample from the zone yielded 0.346 oz/ton gold, 0.47 oz/ton silver, and low base metals values. Sampling was limited by the extreme ruggedness of the terrain (Pauwels, 1983).

The Moran Zone of quartz veins and gouge material yielded low and sporadic gold values. The best chip sample was 0.77 oz/ton gold over 0.1 metre taken from a quartz vein.

Check sampling by Cominco of Noranda's drill core is stated by them to have duplicated the earlier results.

Most of the FC claims were allowed to lapse, except for the FC 13 and FC 15, which were purchased by Prolific Petroleum in 1986 from Cominco.

In 1981, Amoco Canada located the MOT claims to surround the Bethlehem/Cominco claims. An exploration program consisting of soil and lithochemical sampling, detailed geological mapping, and 916 m of diamond drilling at four locations was completed. Soil survey results indicated anomalies of Mo/Cu/Au/Ag/WO<sub>3</sub> in the area, and a strong gold anomaly extending over 2.5 x 0.75 km (including the Huestis Zone). Unfortunately, their drilling was completed 250 to 500 m east of the Huestis Zone, and did not test for gold mineralization. Exploration was oriented towards porphyry molybdenum/copper/tungsten targets and no serious attempt was made to follow up the precious metals values. Within the present day MOT and MOT 2 claims, Amoco defined six areas with gold-in-soil anomalies, all of which are listed on Table 1. The claims were allowed to lapse in 1985.

In 1973, Canadian Superior Exploration Limited undertook geological mapping, prospecting, and stream geochemical sampling in an area immediately north of the Amoco MOT claim area. They encountered weak molybdenum, copper, and gold values (from nil to 0.012 oz/ton) in float boulders of hornfelsed sediments. No gold analyses were conducted on silt samples. The following year, Ducanex Resources Limited undertook trenching, geological mapping, and soil

geochemical sampling for Canadian Superior in the same claim area. They state that molybdenum values are always intimately associated with quartz veining. Molybdenum soil values up to 1000 ppm were also reported. No gold analyses were completed on the soil samples. Chip sampling of hornfelsed areas yielded only trace gold.

Amoco also conducted geochemical sampling immediately north of their MOT claim on the Horn claims (Melnyk, 1981). They focused on molybdenum exploration and so undertook very few gold analyses. A 450 x 200 m gold anomaly with values varying from 100 to 480 ppb was outlined as a result of their work.

In 1986, the MOT and MOT 2 claims were staked by B.H. Kahlert, who conducted limited rock sampling. The best reported values were from a 1.5 m quartz vein which assayed 11.0 g/t (0.32 oz/ton) gold and 64 g/t (1.87 oz/ton) silver.

In 1987, Prolific Resources Ltd. undertook a program of prospecting, geological mapping, geochemical sampling, and 3300 feet of diamond drilling. The Huestis, Goudridge, and Moran zones were relocated and sampled. Geochemical sampling confirmed previously reported values. In addition, the 'Solomon', 'North', and 'Charles' occurrences were discovered and sampled, which yielded highly anomalous gold values from quartz vein systems.

A total of ten new diamond drill holes were completed on the Huestis showing. There were four significant intersections obtained from this program, which are listed in Table 2.

An interpretation of these drilling results indicated that the Huestis showing is in fact a southwest plunging breccia pipe of variable geometry.

In both 1988 and 1989 brief prospecting and/or geological programs were conducted on the MOT 1 claims. The results of these programs were to establish the presence of visible high grade gold in a stockwork east of the Huestis showing and to quantify base metal values in core drilled on the Huestis zone.

**TABLE 1 - Gold-in-Soil Geochemical Anomalies**

	<u>Amoco Anomaly No.</u>	<u>Au values</u>	<u>Size of Anomaly</u>	<u>Current Claim</u>
continuous zone 1980x500 m over 200 ppb	1 (Moran)	400 to 4850 ppb	630x270 m	MOT
	2 (Moran)	400 to 3400 ppb	360x270 m	MOT
	3 (Goudridge)	400 to 7300 ppb	500x180 m	MOT
	4	400 to 4200 ppb	180x 50 m	MOT
	5	up to 2000 ppb	700x100 m	MOT 2
	6	up to 1300 ppb up to 1150 ppb one = 2450 ppb	1600x100 m 800x500 m	MOT 2

**TABLE 2 - Huestis Drill Results**

<u>DDH No.</u>	<u>Width</u>	<u>Au oz/ton</u>
87-1	3.0' (1.0 m)	0.26
87-3	10.1' (3.1 m)	0.24
87-4	3.9' (1.2 m)	0.26
87-10	17.0' (5.0 m)	0.26

**EXPLORATION TARGETS**

The exploration targets sought on the Motase Lake property are fracture-controlled mesothermal gold/silver veins or vein stockwork systems. Poly-metallic mineral assemblages within these systems are known to contain economic grade gold mineralization over mineable widths. Such structurally controlled precious metals deposits elsewhere in the Canadian Cordillera range from thousands to millions of tons, grading from 0.1 to 1.0 oz/ton gold and 1 to 20 oz/ton silver. Examples of this general class of deposit found in British Columbia include the 'Reg' deposit in the Iskut River area as well as the 'Snip' and 'Eskay Creek' deposits.

The preferred exploration environment is in Upper Paleozoic to Upper Jurassic eugeosynclinal sediments and volcanics. Most often, mesothermal gold/silver deposits occur in the Omineca and Intermontaine Belts and are localized in fissures and shear zones adjacent to major faults.

Thus, there exists reasonable potential for the discovery of a moderate-tonnage high-grade epithermal gold deposit in the Motase Lake area. This is amply demonstrated by the high-grade gold values previously intersected.

Specific attention will be given to those gold geochemical anomalies previously detected along the Hazelton/Bowser contact. By analogy to the Eskay deposit, which occurs at this stratigraphic horizon, these anomalies take on increased significance. Little previous exploration has been concentrated on this part of the property. However, the presence of both soil and silt gold and copper geochemical anomalies and highly altered and silicified volcanics in these areas are encouraging.

#### 1990 EXPLORATION PROGRAM

The 1990 exploration program consisted of a one-day visit (September 29) by a geologist and a prospector. Geological mapping and lithochemical sampling were directed at the mineralized vein system in the Goudridge Zone.

Fourteen samples were obtained and sent to TerraMin Research Labs Ltd. in Calgary, Alberta for gold and silver analyses. Sample locations are shown on Map 1. Rock sample descriptions, analytical results, and laboratory procedures are presented in the Appendix.

The Goudridge Zone was re-located and systematically chip sampled as part of the current exploration program. The zone is up to 8 m wide, consisting of a number of parallel quartz veins occurring on a major topographic linear. Previous exploration programs yielded 0.346 oz/ton Au and 0.47 oz/ton Ag over

3 m (Cominco, 1983), and 2.00 oz/ton Au and 2.10 oz/ton Ag over 1 m (Prolific, 1988).

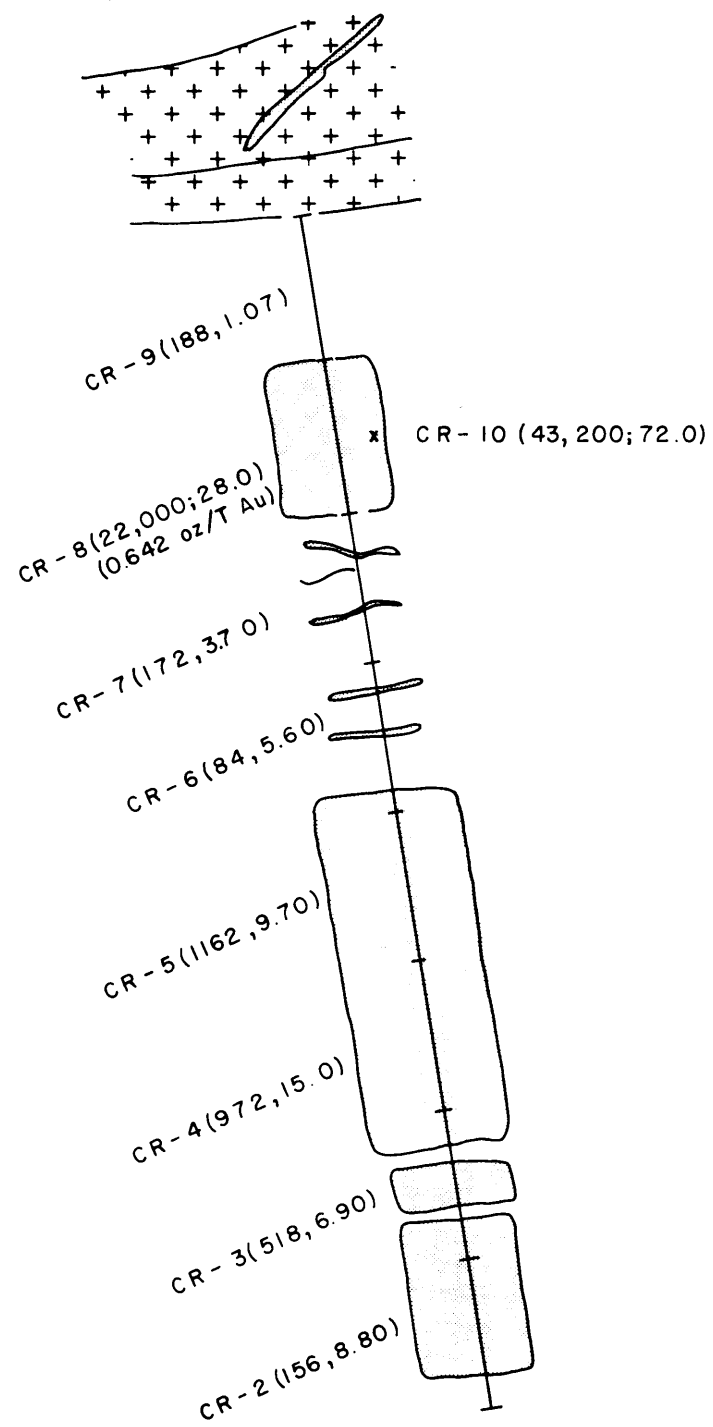
At the location sampled during the current program (Figure 5), the zone strikes 260° dipping 50°S, and contains two quartz-rich sections 3.8 m and 1.0 m wide. The sampling yielded 0.026 oz/ton Au over 3.0 m and 0.642 oz/ton Au over 1 m.

Additional investigation and sampling of the zone was hindered by snow cover and the extreme ruggedness of the terrain.




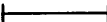
Geological mapping was completed along the ridge to the northeast of the Goudridge Zone. A number of isolated quartz veins up to 2 m wide were located. Two preferred orientations for this veining were noted: 250°-260°/40°-50°S and 20°-35°/65°-80°E. Samples collected yielded up to 0.124 oz/ton Au and 3.71 oz/ton Ag over 0.8 m.



Unlike the gold mineralization encountered in drilling of the Huestis Zone in 1987, the style of mineralization in the Goudridge Zone is located in a quartz vein system rather than in a breccia pipe. Whether the density and width of the veins making up the vein system are sufficiently frequent to comprise a deposit of economic significance is an open question. Ultimately, only a comprehensive diamond drill program on this zone will determine the answer.

In addition, ten base metal mineralized core samples from the 1987 diamond drilling were analyzed for Bi, Sb, and Te to determine whether skarn-type mineralization was present. The results were negative.



LEGEND

-  Quartz
-  Argillite
-  Diorite
-  CR - 8 ( 22,000; 28.0)  
Sample No. ( Au ppb, Ag ppm)

SKEENA/LEEWARD	
<h1>Channel Sample Plan</h1>	
DATE October, 1990	NTS 94 D / 3
PROJECT BC-90-1	MAPPED/ DRAWN BY C.A. / M.A.P
SCALE 1:50	
 TAIGA CONSULTANTS LTD.	Fig.



### SUMMARY AND RECOMMENDATIONS

The 1990 property exploration consisted of a brief evaluation of the Goudridge Zone which consists of a number of parallel quartz veins occurring on a major topographic linear. Sampling of this area revealed the presence of significant gold mineralization and confirmed the results from previous surveys.

In addition, 10 base metal mineralized core samples from the 1987 diamond drilling were analyzed for Bi, Sb, and Te to determine whether skarn-type mineralization was present. The results were negative.

Based on the results from this survey, further evaluation of the Goudridge Zone appears warranted. This should consist of additional prospecting, litho-geochemical sampling, and geological mapping of the zone followed by an initial diamond drilling program.

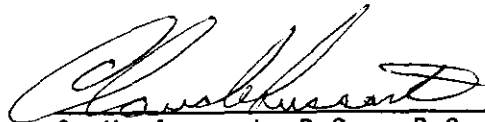
**CERTIFICATE**

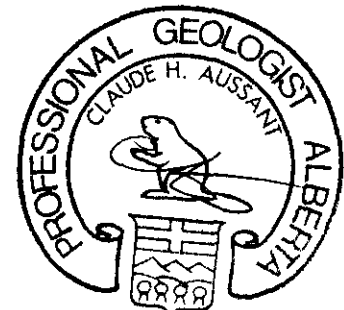
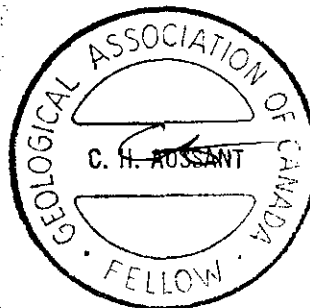
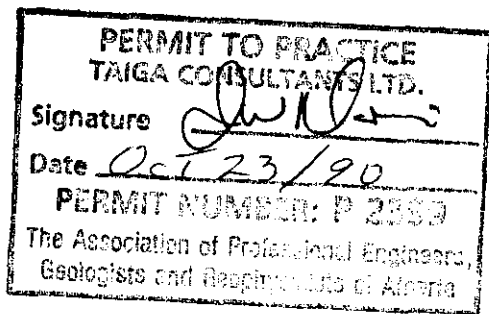
I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 - 17th Avenue S.W., Calgary, Alberta.
2. I am a graduate of the University of Calgary, B.Sc. Geology (1976), and I have practised my profession continuously since graduation.
3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
4. I am the author of the report entitled "Geological Mapping and Geochemical Sampling Report on the MOT 1 Claim, Omineca Mining Division, British Columbia", dated October 23, 1990. I personally supervised the exploration work (completed September 29, 1990) upon which this report is based.

DATED at Calgary, Alberta, this 23rd day of October, A.D. 1990.

Respectfully submitted,

  
 C. H. Aussant, B.Sc., P.Geol., F.GAC



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**A P P E N D I X**

Summary of Personnel  
Summary of Expenditures  
Rock Sample Descriptions  
Certificates of Analysis  
Analytical Techniques



SUMMARY OF PERSONNEL

<u>Name / Address</u>	<u>Position</u>	<u>Field Time</u>	<u>Man Days</u>
C. H. Aussant, P.Geol. Calgary, Alberta	Project Geologist	Sep. 29, 1990	1.0
J. M. Hislop Calgary, Alberta	Prospector	Sep. 29, 1990	1.0
		TOTAL	<u>2.0</u>

SUMMARY OF EXPENDITURES

<u>Pre-Field</u> logistics, assembly of personnel & gear (pro rata)		150.00
<u>Field Personnel</u> Project Geologist	1 day @ \$400/day	400.00
Prospector	1 day @ \$210/day	210.00
<u>Travel Expenses</u>	mob & demob (pro rata)	140.00
<u>Camp Support</u> Camp and accommodation (including helicopter pilot)	2.5 man days @ \$55/day	137.50
one-ton van rental	1 day @ \$65/day	65.00
FM radio-telephone	1 day @ \$10/day	10.00
Chainsaw	1 day @ \$ 8/day	8.00
<u>Aircraft Support</u> Helicopter		675.00
Fixed-Wing	(pro rata)	170.25
<u>Miscellaneous</u> disposable supplies, communications, fuel maps & reproductions, expediting & freight (pro rata)		90.00
<u>Geochemical Analyses</u> Rock samples	14 (Au, Ag, Cu, Pb, Zn)	207.20
Core samples	10 (Bi, Sb, Te)	120.00
<u>Post-Field</u> data compilation, report writing, drafting, word processing		<u>596.00</u>
	TOTAL	<u>\$2,978.95</u>

ROCK SAMPLE DESCRIPTIONS

<u>Sample</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>Description</u>
CR-2	156	8.80	1.0 m chip, southern 0.2 m dark grey argillite, remainder of sample mottled white and grey quartz, fractured, rusty weathered, minor pyrite (0.005 oz/ton Au)
CR-3	518	6.90	1.0 m chip, mainly mottled quartz with occasional dark grey argillite bands (0.015 oz/ton Au)
CR-4	972	15.0	1.0 m chip, mottled quartz, rusty weathered, fractured, pockets of 10% pyrite (0.028 oz/ton Au)
CR-5	1,162	9.70	1.0 m chip, grey-white mottled quartz, occasional pyrite bands (0.034 oz/ton Au)
CR-6	84	5.60	1.0 m chip, 80% cooked argillite (with quartz inclusions), 20% quartz, minor pyrite (0.002 oz/ton Au)
CR-7	172	3.70	1.0 m chip, argillite with occ quartz stringers, minor chalcopyrite, occasional pyrite stringers, sections with 3% disseminated pyrite (0.005 oz/ton Au)
CR-8	22,000	28.0	1.0 m chip, 100% quartz, rusty weathered, minor galena, fractured, sections with 5% pyrite, vuggy in areas (0.642 oz/ton Au, 0.82 oz/ton Ag)
CR-9	188	1.07	1.0 m chip, argillite, rusty, cooked (0.005 oz/ton Au)
CR-10	43,200	72.0	grab, quartz vein material at CR-8 sample site, with disseminated pyrite and 3-5% galena, vuggy (1.26 oz/ton Au, 2.1 oz/ton Ag)
CR-11	4,260	127.1	0.8 m chip, 80 cm wide quartz vein in medium-grained diorite, minor galena and pyrite, strike 255° dip 40°S, contains pockets of massive pyrite (0.124 oz/ton Au, 3.71 oz/ton Ag)
CR-12	454	21.0	1.0 m chip (0.013 oz/ton Au, 0.61 oz/ton Ag)
CR-13	580	29.0	1.4 m chip (0.017 oz/ton Au, 0.85 oz/ton Ag) both from a 2.4 m quartz vein in coarse-grained diorite containing quartz stringers with minor pyrite, quartz vein rusty weathered with pockets of massive pyrite, occasional vugs, strike 20°-35° dip 80°-65°E

HR-10	3,520	260.0	grab, quartz vein in medium-grained diorite, quartz contains stringers and clots of massive pyrite, probably 20-30 cm wide, dipping $-40^{\circ}\text{S}$ (0.103 oz/ton Au, 7.58 oz/ton Ag)
HR-11	36	4.1	1.0 m chip, 1.0 m wide quartz vein, probably a continuation of the vein at HR-10; outcrops a couple of places along the ridge between HR-10 and HR-11, contains bands of massive pyrite, trace chalcopryrite, strike $260^{\circ}$ dip $50^{\circ}\text{S}$



TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Claude Aussant

Date: October 15, 1990

Job No: 90-252

Project: BC-90-1

P.O. No:

14 Rock

Signed: \_\_\_\_\_  \_\_\_\_\_

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-252

Project: BC-90-1

Sample No Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
CR- 2		156	8.80	380	12	25
CR- 3	0.015	518	6.90	250	47	34
CR- 4	0.028	972	15.0	400	89	53
CR- 5	0.034	1162	9.70	130	360	43
CR- 6		84	5.60	380	13	73
CR- 7		172	3.70	540	114	144
CR- 8	0.642	22000	28.0	290	2600	310
CR- 9		188	1.07	270	10	92
CR- 10	1.26	43200	72.0	300	5200	1290
CR- 11	0.124	4260	127.1	55	1290	48
CR- 12	0.013	454	21.00	82	290	102
CR- 13	0.017	580	29.00	49	330	112
HR- 10	0.103	3520	260.0	91	4900	62
HR- 11		36	4.10	97	53	134

1 m. chips  
 Cambridge  
 Zone.

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Rupert Allan

Date: March 27, 1990

Job No: 90-058

Project: POF-BC-1

P.O. No:

10 Pulp

Signed: YRAH

Job#: 90-058

Project: PDF-BC-1

Sample Number	Bi ppm	Sb ppm	Te ppm
37501	1	2	< .1
37502	3	4	0.1
37503	2	2	< .1
37504	4	5	0.1
37505	56	22	0.2
37506	11	5	0.2
37507	71	8	3.0
37508	8	2	0.1
37509	2	1	0.1
37510	13	2	0.1



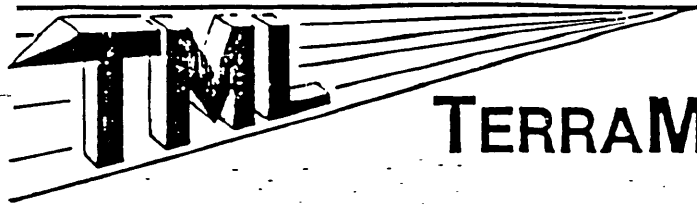
# TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7  
(403) 276-8668

## SAMPLE PREPARATION

Soil and sediment samples are dried and sieved through 80 mesh nylon screen (maximum particle size 200 microns).

Rock or drill core samples are crushed to approximately 1/8" in a jaw crusher, riffled to obtain a representative sample, and pulverized to 100 mesh (180 micron particle size).

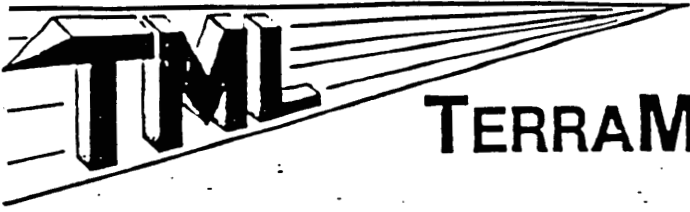


# TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7  
(403) 276-8668

## FIRE ASSAY/AA METHOD FOR GOLD AND SILVER PLATINUM AND PALLADIUM

Approximately 1 assay ton of prepared sample is fused with a litharge flux charge to obtain a lead button. The button is cupelled down to a precious metal prill which is then dissolved in aqua regia. The resulting solution is analysed by atomic absorption spectrophotometry to determine the precious metals.



# TERRAMIN RESEARCH LABS LTD.

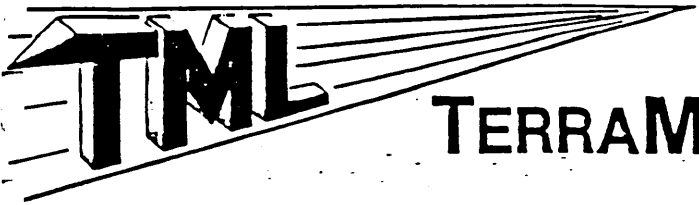
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7  
(403) 276-8668

## ANALYTICAL METHODS FOR BASE METALS

Cd, Cr, Co, Cu, Fe (soluble), Pb, Mn (soluble), Mo, Ni, Ag, Zn

A portion of the prepared sample is digested in hot nitric/perchloric acid mixture, or hot aqua regia (nitric/hydrochloric acids).

Elements are determined by atomic absorption spectrophotometry.



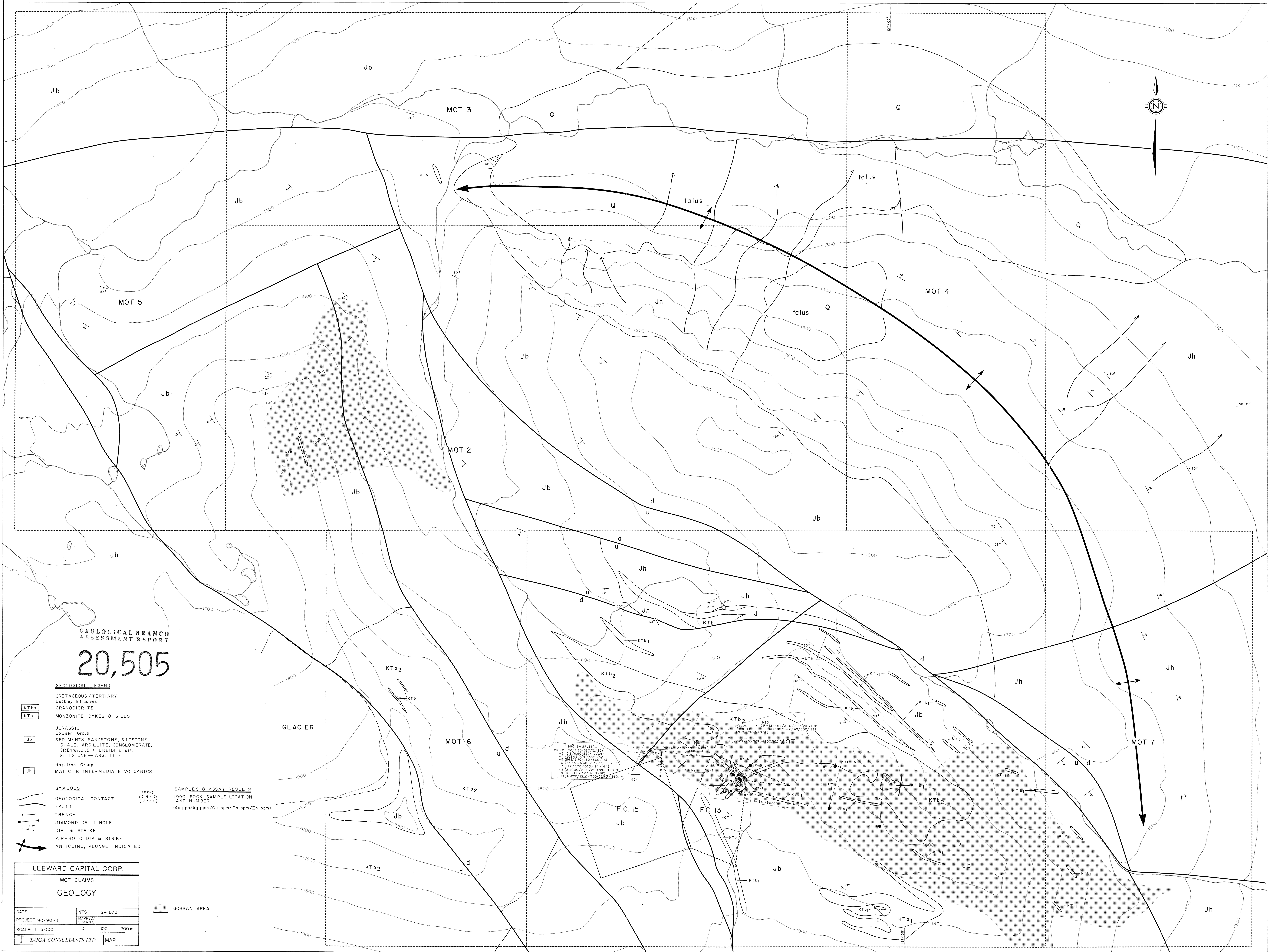
# TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7  
(403) 276-8668

## ANALYTICAL METHOD FOR ARSENIC AND ANTIMONY

A portion of the prepared sample is digested in acid at low temperature. As and Sb are determined with a vapour generation accessory with atomic absorption.





GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,505

GEOLOGICAL LEGEND

- CRETACEOUS / TERTIARY  
Buckley intrusives
- GRANDIORITE
- MONZONITE DYKES & SILLS
- JURASSIC  
Bowser Group
- SEDIMENTS, SANDSTONE, SILTSTONE,  
SHALE, ARGILLITE, CONGLOMERATE,  
GREYWACKE > TURBIDITE sst,  
SILTSTONE - ARGILLITE
- Hazleton Group
- MAFIC TO INTERMEDIATE VOLCANICS

- SYMBOLS**
- GEOLOGICAL CONTACT
  - FAULT
  - TRENCH
  - DIAMOND DRILL HOLE
  - DIP & STRIKE
  - AIRPHOTO DIP & STRIKE
  - ANTICLINE, PLUNGE INDICATED

**SAMPLES & ASSAY RESULTS**  
1990 ROCK SAMPLE LOCATION  
AND NUMBER  
(Au ppb/Ag ppm/Cu ppm/Pb ppm/Zn ppm)

CR-2	CR-3	CR-4	CR-5	CR-6	CR-7	CR-8	CR-9	CR-10	CR-11	CR-12	CR-13	CR-14	CR-15	CR-16	CR-17	CR-18	CR-19	CR-20
1990/01/01	1990/01/02	1990/01/03	1990/01/04	1990/01/05	1990/01/06	1990/01/07	1990/01/08	1990/01/09	1990/01/10	1990/01/11	1990/01/12	1990/01/13	1990/01/14	1990/01/15	1990/01/16	1990/01/17	1990/01/18	1990/01/19

LEEWARD CAPITAL CORP.	
MOT CLAIMS	
GEOLOGY	
DATE	NTS 94 D/3
PROJECT BC-90-1	REVISIONS DRAWN BY
SCALE 1:5000	0 100 200 m
TAIGA CONSULTANTS LTD	MAP

GOSSAN AREA