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**RECEIVED**  
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 Gold Commissioner's Office  
 VANCOUVER, B.C.

**SHAKE PROJECT**  
**REPORT ON**  
**GEOLOGICAL AND GEOCHEMICAL PROGRAMS**  
**ON THE SHAKE 1-4 CLAIMS**  
**LIARD MINING DIVISION**

NTS 104 G/13E  
 LATITUDE: 57°49' N    LONGITUDE: 132°2' W

**OWNER:**

**Continental Gold Corporation**  
 1020 - 800 West Pender Street  
 Vancouver, B.C.  
 V6C 2V6

**Operator:**

**Candela Resources Ltd.**  
 c/o Prime Explorations  
 11th Floor, P.O. Box 10  
 808 West Hastings Street  
 Vancouver, B.C.  
 V6E 2R1

**Author:**

**David St. Clair Dunn, F.G.A.C.**  
**Hi-Tec Resource Management Ltd.**  
 1500-609 Granville Street  
 Vancouver, B.C.  
 V7Y 1G5

September 6, 1990

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**20,414**

**20414**

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 91.10.25

ASSESSMENT REPORT 20414

MINING DIVISION: Liard

PROPERTY: Shake  
LOCATION: LAT 57 49 00 LONG 131 36 00  
UTM 09 6411055 345548  
NTS 104G13E

CLAIM(S): Shake 1-4  
OPERATOR(S): Candela Res.  
AUTHOR(S): Dunn, D.St.C.  
REPORT YEAR: 1990, 45 Pages

COMMODITIES

SEARCHED FOR: Gold, Copper

KEYWORDS: Triassic, Stuhini Group, Andesites, Augite porphyry, Siltstones  
Greywackes, Argillites, Pyrite

WORK

DONE: Geological, Geochemical  
GEOL 600.0 ha  
Map(s) - 1; Scale(s) - 1:5000  
HMIN 14 sample(s) ;AU,AG,CU,PB,ZN,MO  
ROCK 35 sample(s) ;AU,AG,AS,CU,PB,ZN  
SILT 14 sample(s) ;ME  
SOIL 180 sample(s) ;AU,AG,CU,PB,ZN,AS  
Map(s) - 1; Scale(s) - 1:5000

RELATED

REPORTS: 19127

## 1.0 SUMMARY

A program of stream sediment sampling, soil sampling, lithochemical sampling, and geological mapping was carried out by a four person crew from the 22nd of June to the 9th of August 1990 on the Shake 1-4 claims. The targets of this program were vein, structure related, and disseminated gold mineralization.

The Shake 1-4 claims cover a sequence of volcanic and sedimentary rocks of the Upper Triassic Stuhini Group. This bedded sequence has been intruded by a differentiated Upper Triassic to Lower Jurassic syenitic intrusive, the center of which is located on the southern flank of Rugged Mtn. The stratigraphically lower section of the Stuhini Group on the property is largely composed of mafic volcanic flows and pyroclastics, possibly coeval with the syenite intrusion. The syenite stock is hosted in these volcanics. The upper section of the Stuhini Group is composed of laminated siltstone, greywacke, argillite and minor limestone. This section is undeformed and unmineralized where observed. The bulk of the 1990 program was concentrated on a gossanous area of volcanics northwest of the syenite on the west flank of Rugged Mountain. Detailed stream sediment sampling indicated this is the only area of the property with anomalous gold values.

Following Equity Engineering's recommendations (Caulfield, 1990, personal communication) contour soil lines were run at 1100, 1300 and 1500 metre elevations between "Contact Cr." and "North Cr." This sampling covers the source of the anomalous stream sediments reported by Equity and confirmed and localized by the

work carried out this year. Seven of 159 soil samples were greater than 100 ppb Au. The sites of these samples were examined and chip samples were taken, either by trenching to bedrock above the sample site or sampling rock exposure, where available. The highest value returned in rock was 55 ppb Au. One hundred metre long soil sample lines with 10 metre sample interval were run 30 and 55 metres in elevation above the most anomalous area on line 1570. These soils returned three anomalous values of 165, 770 and 1010 ppb Au. The first two samples were on line 1600 and appear to be downslope dispersion from the site of the latter sample on line 1625. This sample was taken on the contact between a orthoclase porphyry syenite dyke and oxidized, fractured siltstone. This area was trenched and chip samples were taken. The highest value returned was 215 ppb Au over 1.0 metres.

The sites of Equity's 1989 anomalous rock samples were examined and resampled. Only one significant sample was returned, 440 ppb Au over 1.0 metre. This sample included the "5 to 20 centimeter wide vein" which assayed 0.422 ounce per ton gold in a grab sample. (Caulfield, 1989)

Prospecting located a number of areas with malachite staining and minor chalcopyrite mineralization. The highest value returned for copper was 0.12%.

In general, gold mineralization is spatially related to syenite dykes in the volcanic-sedimentary host. The most anomalous samples are all in the bedded sequence within 50 metres of a syenite contact. The bedded rocks are highly fractured with 1-2% disseminated pyrite, minor chalcopyrite and calcite coating fracture surfaces. The calcite coating can swell to stringers

up to 5.0 cm wide with base metals and locally high gold values.

## 2.0 CONCLUSIONS

The Shake 1-4 claims cover a weak copper porphyry system associated with a Triassic to Jurassic syenite stock. Sporadic low gold values are associated with the porphyry system. There are no areas with gold values of economic interest in the area of Shake 1 where the bulk of the 1990 work was carried out. Detailed stream sediment sampling would indicate that there is little potential for economically interesting gold mineralization on the remainder of the property.

## 3.0 RECOMMENDATIONS

No further work is recommended on this property at this time.

Respectfully submitted,

  
David St. Clair Dunn, F.G.A.C.

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### MAPS

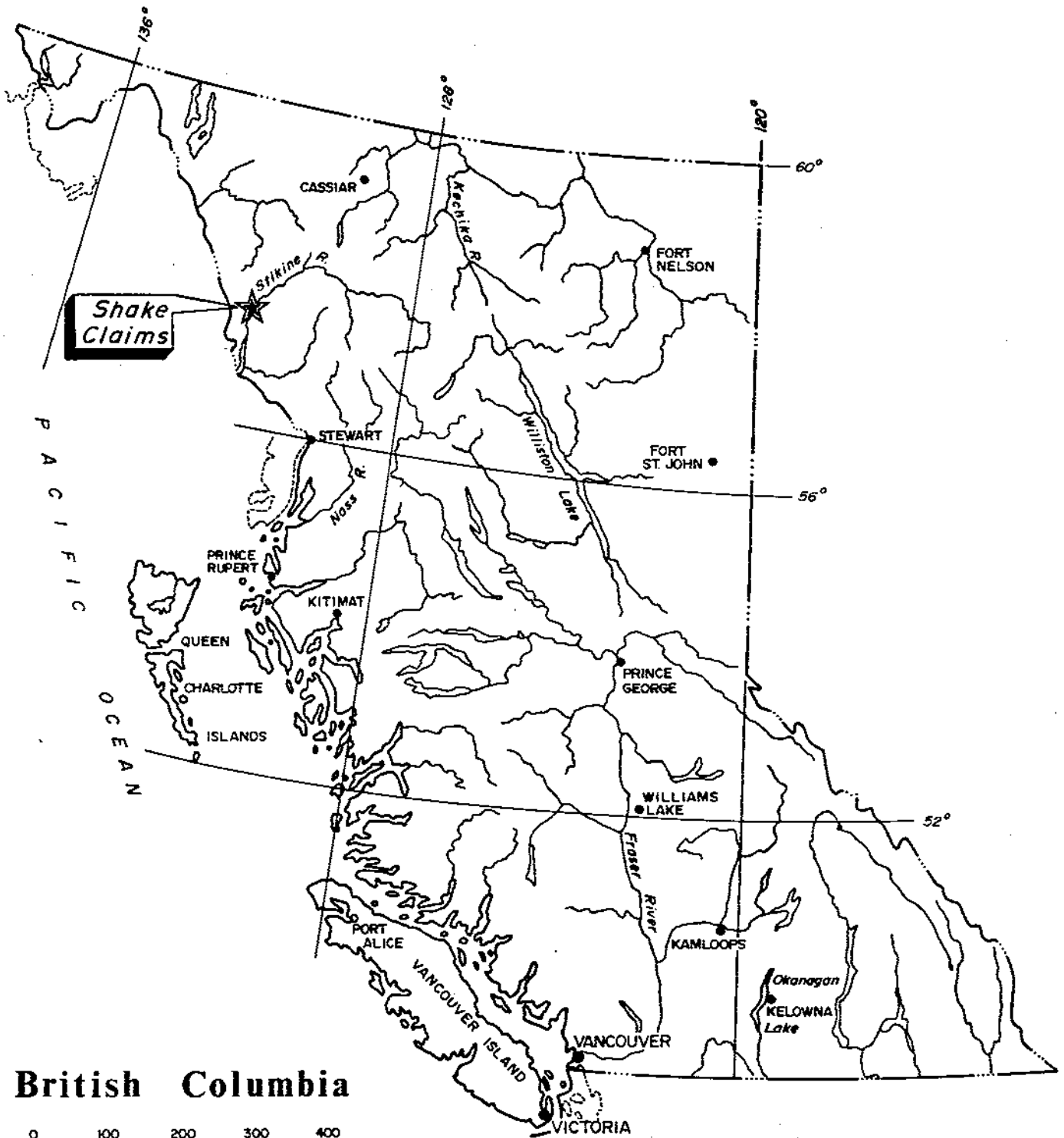
MAP 1:	GEOLOGY MAP	IN POCKET
MAP 2:	SAMPLE LOCATION MAP	IN POCKET

#### 4.0 INTRODUCTION

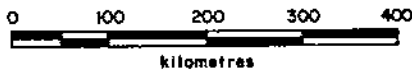
The Shake 1-4 claims, located in northwestern B.C., cover a large gossan in Stuhini Group volcanics and sediments associated with a syenite intrusion. The project area has been extensively prospected in the past for vein-related gold mineralization and copper porphyry mineralization. The emphasis of this program was to outline any other significant gold mineralization on the property. Stream sediment sampling, lithochemical sampling, contour soil sampling, and geological mapping were carried out. Fourteen heavy mineral separates, 14 silt samples, 180 soil samples and 35 rock samples were taken. Three square kilometres were geologically mapped at a scale of 1:5000. The work program as described was conducted for Candela Resources Ltd., which holds an option on the Shake 1-4 claims from their owner, Continental Gold Corp. (Forster, 1988).


#### 4.1 LOCATION AND ACCESS

The Shake 1-4 claims are located approximately 28 kilometers southwest of Telegraph Creek on Rugged Mountain, in northwest British Columbia (See Fig. 1). Access to the property was gained via helicopter from Telegraph Creek. An overgrown cat track built in the 1960's follows Shakes Creek and crosses east to west approximately 0.5 km south of the Shake claims southern boundary. This track has been cleared to 3 km from the Shake 4 eastern boundary.



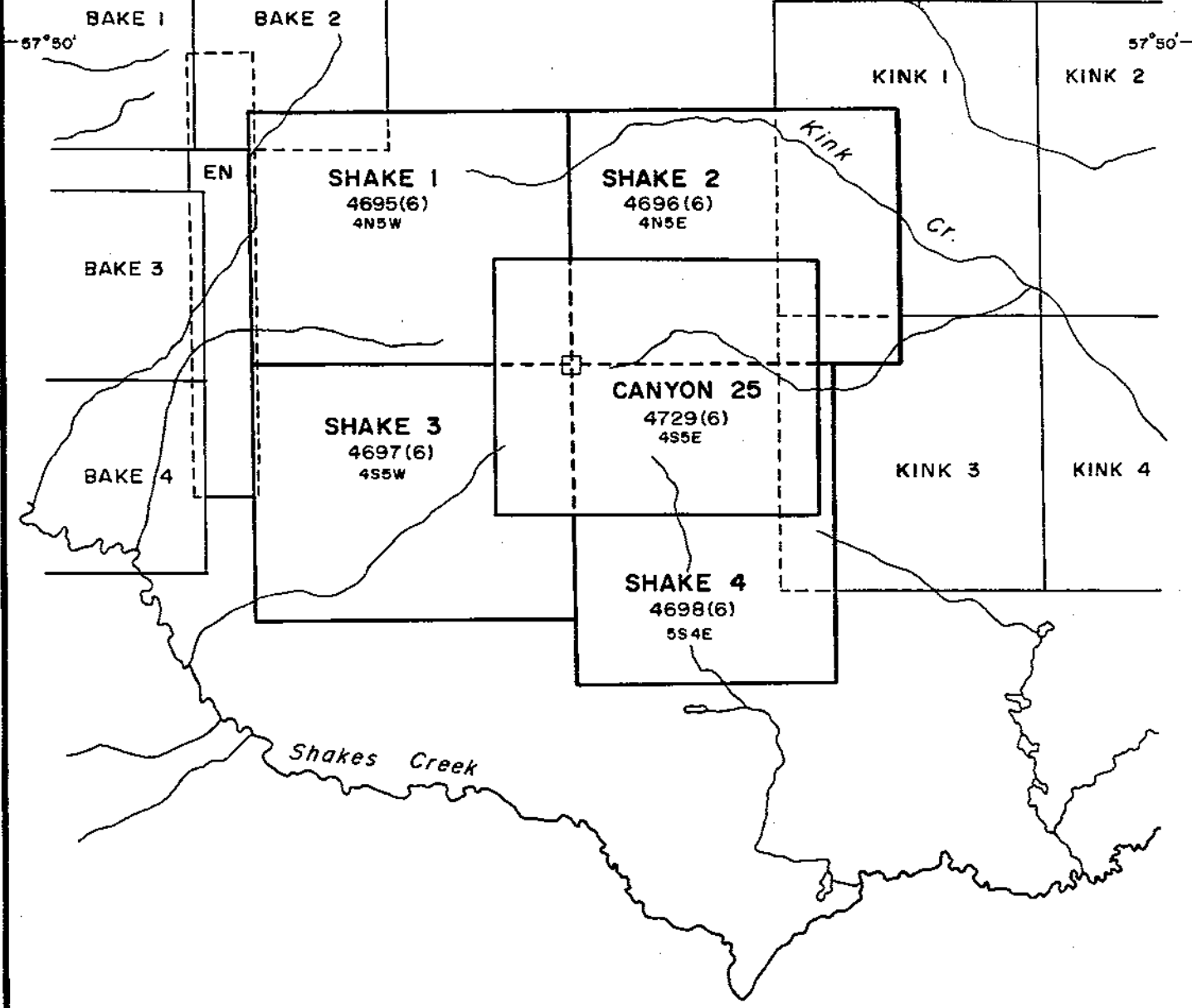
**British Columbia**



<b>CANDELA RESOURCES LTD.</b>			
<b>SHAKE 1-4 CLAIMS</b>			
LIARD M.D., B.C.			
<i>Location Map</i>			
 <b>M-TEC</b> RESOURCE MANAGEMENT LTD.	SCALE: as shown	N.T.S.: 1:64 G/13E	FIGURE No: 1
	OWN. BY:	DATE: SEPT/90	
	CHKD. BY:	PROJECT No: 90 BC011	FILE No:



131° 35'



131° 35'

**CANDELA RESOURCES LTD.**  
**SHAKE 1-4 CLAIMS**  
 LIARD, M.D., B.C.

*Claim Location Map*



H-TEC RESOURCE MANAGEMENT LTD.

SCALE: 1: 50,000	N.T.S.: 104G/13E	FIGURE No: <b>2</b>
OWN. BY: w.g.i.	DATE: SEPT/90	
CHKD. BY:	PROJECT No: 90BC011	FILE No:

#### 4.2 TOPOGRAPHY, VEGETATION, AND CLIMATE

The Shake claims are located on Rugged Mountain and, as the name implies, topography is rugged with elevations ranging from 635 metres to 1823 metres. Approximately 80% of the claims are above treeline and are either outcrop, talus, or alpine vegetation. A dense growth of slide alder, bracken, and devil's club cover the lower parts of the property. Minor patches of permanent snow are present on the north slope of Rugged Mountain.

The property is in the Coast Mountain rain shadow and has a mild, relatively dry climate. Exploration can be carried out from May until October.

#### 4.3 EXPLORATION HISTORY

The area of the Shake claims has received considerable detailed prospecting beginning in the 1860's when placer gold was discovered on the Stikine River between Telegraph Creek and Glenora. At that time roads were constructed up the Chutine and Barrington River to support large placer mining operations. There can be no doubt that a gossan as prominent and accessible as the one on Rugged Mountain was examined in detail at that time. More prospecting was carried out in the area in the 1890's, 1920's, 1930's and 1940's. Copper porphyry exploration in the 1950's and 1960's led to the staking of 97 two post claims. No written records of this work are available.

The present claims were staked in 1988 by Continental Gold Corp. Continental did not carry out any exploration work that year. In 1989 Equity Engineering Ltd. carried out reconnaissance exploration on the Shake claims for Candela Resources Ltd. Geological mapping, prospecting, and stream sediment sampling were completed. One rock grab sample contained 0.422 oz/t Au from a 5-20 cm quartz-calcite vein. In general, stream sediment sampling and rock sampling outlined an area anomalous in gold on the Shake 1 claim between "Contact Creek" and "North Creek".

#### 4.4 CLAIM STATUS

The Shake 1-4 claims are registered in the name of Continental Gold Corp. The claims are under option to Candela Resources Ltd. Claim information is summarized below.

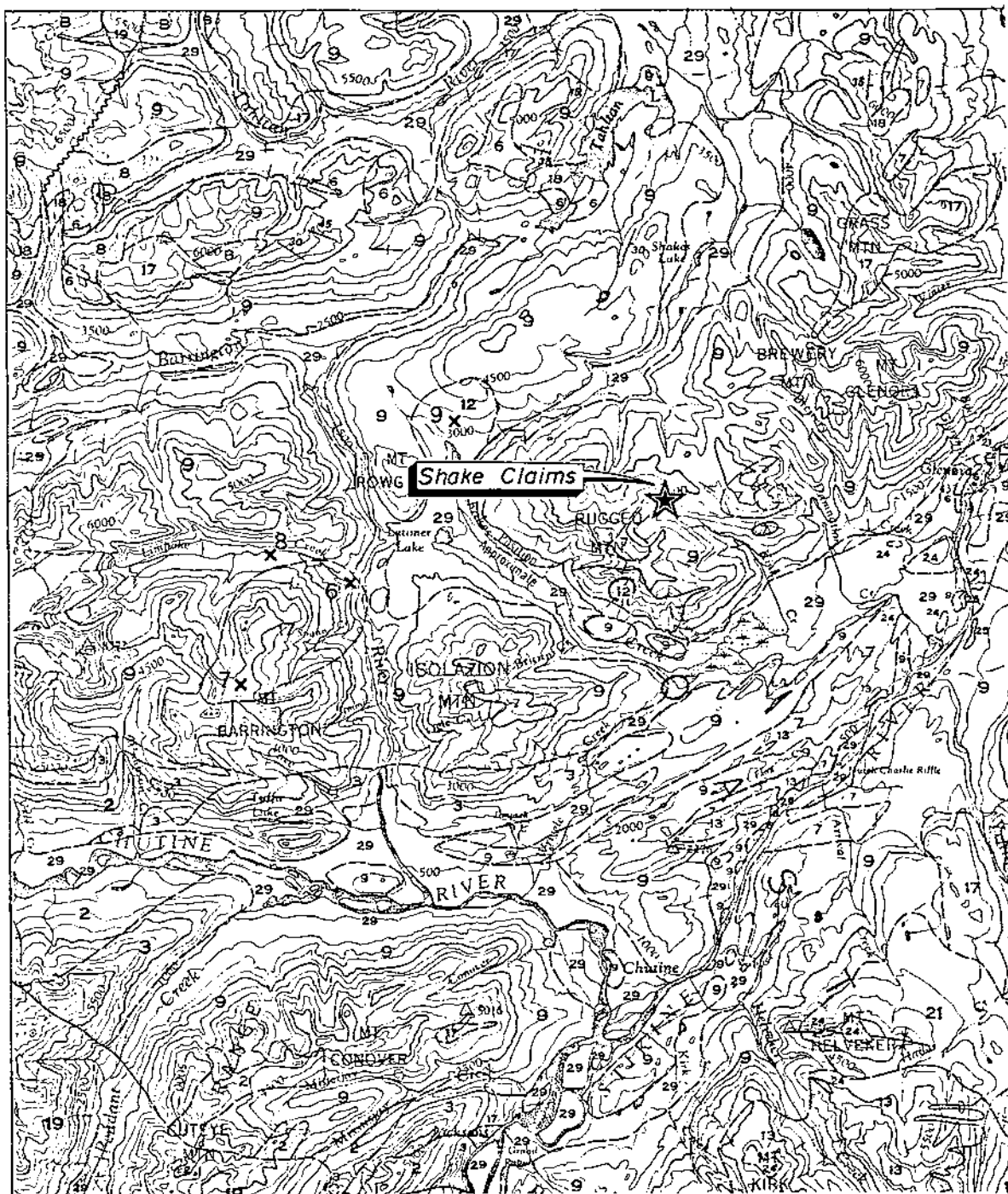
<u>Claim name</u>	<u>Record</u>	<u>No.of units</u>	<u>Rec.date</u>	<u>Exp.date</u>
		(Pending acceptance of this report)		
Shake 1	4695	20	06/27/88	06/27/91
Shake 2	4696	20	06/27/88	06/27/91
Shake 3	4697	20	06/27/88	06/27/91
Shake 4	4698	20	06/27/88	06/27/91

Within the Shake claim block is another previously staked claim, the Canyon 25. This claim consists of 20 units and is owned by parties other than Continental or Candela (See Fig 2).

132° 00'  
58° 00'

45'

30'



(SEE FOLLOWING PAGE FOR LEGEND)



CANDELA RESOURCES LTD.  
SHAKE 1-4 CLAIMS  
LIARD M.D., B.C.

*Regional Geology*



M-TEC  
RESOURCE MANAGEMENT LTD.

SCALE:  
1:250,000

N.T.S.:  
1046/13E

FIGURE No:

DWN. BY:

DATE:

3

CHKD. BY:

PROJECT No:

FILE No:

908CO11

# LEGEND

CENOZOIC

**QUATERNARY**

**PLEISTOCENE AND RECENT**

- 29 Fluvial gravel, sand, silt; glacial outwash, till, alpine moraine and colluvium
- 28 Hot-spring deposit, tufa, aragonite
- 27 Olivine basalt, related pyroclastic rocks and loose tephra; younger than some of 29

**TERTIARY AND QUATERNARY**

**UPPER TERTIARY AND PLEISTOCENE**

- 26 Rhyolite and dacite flows, lava domes, pyroclastic rocks and related sub-volcanic intrusions; minor basalt
- 25 Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

**CRETACEOUS AND TERTIARY**

**UPPER CRETACEOUS AND LOWER TERTIARY**

**SLOKO GROUP**

- 24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments

- 22, 23 22. Biotite leucogranite, subvolcanic stocks, dykes and sills
- 23. Porphyritic biotite andesite, lava domes, flows and (?) sills

**SUSTUT GROUP**

- 21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal
- 20 Feelite, quartz-feldspar porphyry, pyritiferous feelite, orbicular rhyolite; in part equivalent to 22
- 19 Medium- to coarse-grained, pink biotite-hornblende quartz monzonite

**JURASSIC AND/OR CRETACEOUS**

**POST-UPPER TRIASSIC PRE-TERTIARY**

- 18 Hornblende diorite
- 17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

**JURASSIC**

**MIDDLE (?) AND UPPER JURASSIC**

**BOWSER GROUP**

- 16 Chert-pebble conglomerate, grit, greywacke, subgreywacke, siltstone and shale; may include some 13

**MIDDLE JURASSIC**

- 15 Basalt, pillow lava, tuff-breccia, derived volcanoclastic rocks and related subvolcanic intrusions

**LOWER AND MIDDLE JURASSIC**

- 14 Shale, minor siltstone, siliceous and calcareous siltstone, greywacke and ironstone

**LOWER JURASSIC**

- 13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcanoclastic rocks

**TRIASSIC AND JURASSIC**

**POST-UPPER TRIASSIC PRE-LOWER JURASSIC**

- 12 Syenite, orthoclase porphyry, monzonite, pyroxenite

**HICKMAN BATHOLITH**

- 10, 11 10. Hornblende granodiorite, minor hornblende-quartz diorite 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite

**TRIASSIC**

**UPPER TRIASSIC**

- 9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)
- 8 Augite-andesite flows, pyroclastic rocks, derived volcanoclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate
- 7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone
- 6 Limestone, fetid argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 7 and 8
- 5 Greywacke, siltstone, shale; minor conglomerate, tuff and volcanic sandstone

**MIDDLE TRIASSIC**

- 4 Shale, concretionary black shale; minor calcareous shale and siltstone

PALEOZOIC

**PERMIAN**

**MIDDLE AND UPPER PERMIAN**

- 3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

**PERMIAN AND OLDER**

- 2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

**MISSISSIPPIAN**

- 1 Limestone, ornithol limestone, ferruginous limestone; maroon tuff, chert and phyllite

- B Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

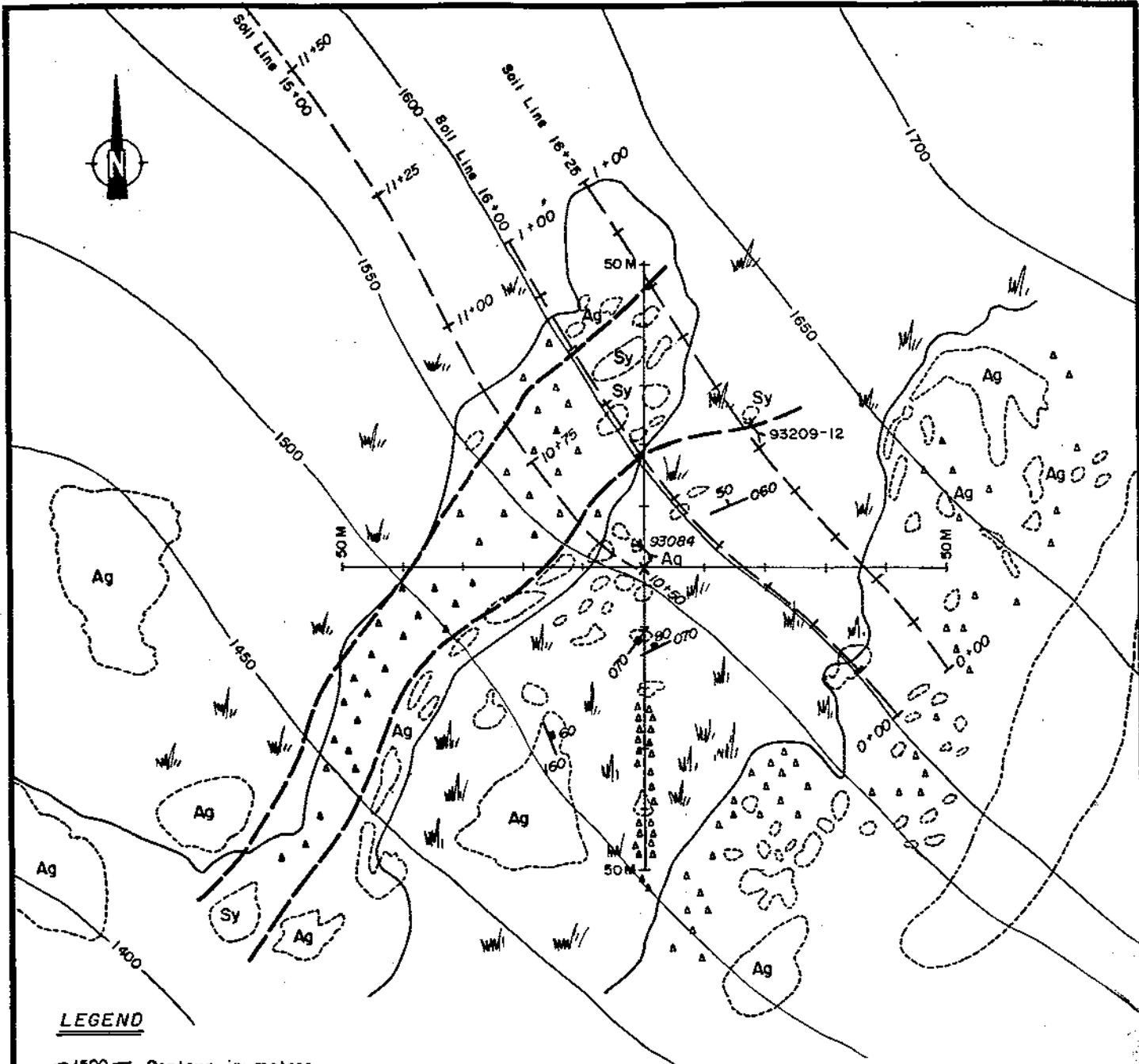
- A Ultramafic rocks; peridotite, dunite, serpentinite; age unknown, probably pre-Lower Jurassic

- Geological boundary (defined and approximate, assumed) .....
- Bodding (horizontal, inclined, vertical, overturned) .....
- Anticline .....
- Syncline .....
- Fault (defined and approximate, assumed) .....
- Thrust fault, teeth on hanging-wall side (defined and approximate, assumed) .....
- Fossil locality .....
- Mineral property .....
- Glacier .....

**INDEX TO MINERAL PROPERTIES**

1. Lizard Copper	5. Bam	9. MH	13. Ann, Su
2. Galore Creek	6. Gordon	10. SIK	14. SF
3. QC, QCA	7. Limpoka	11. JW	15. Goat
4. Naba	8. Poke	12. Copper Canyon	16. Mary

MESOZOIC

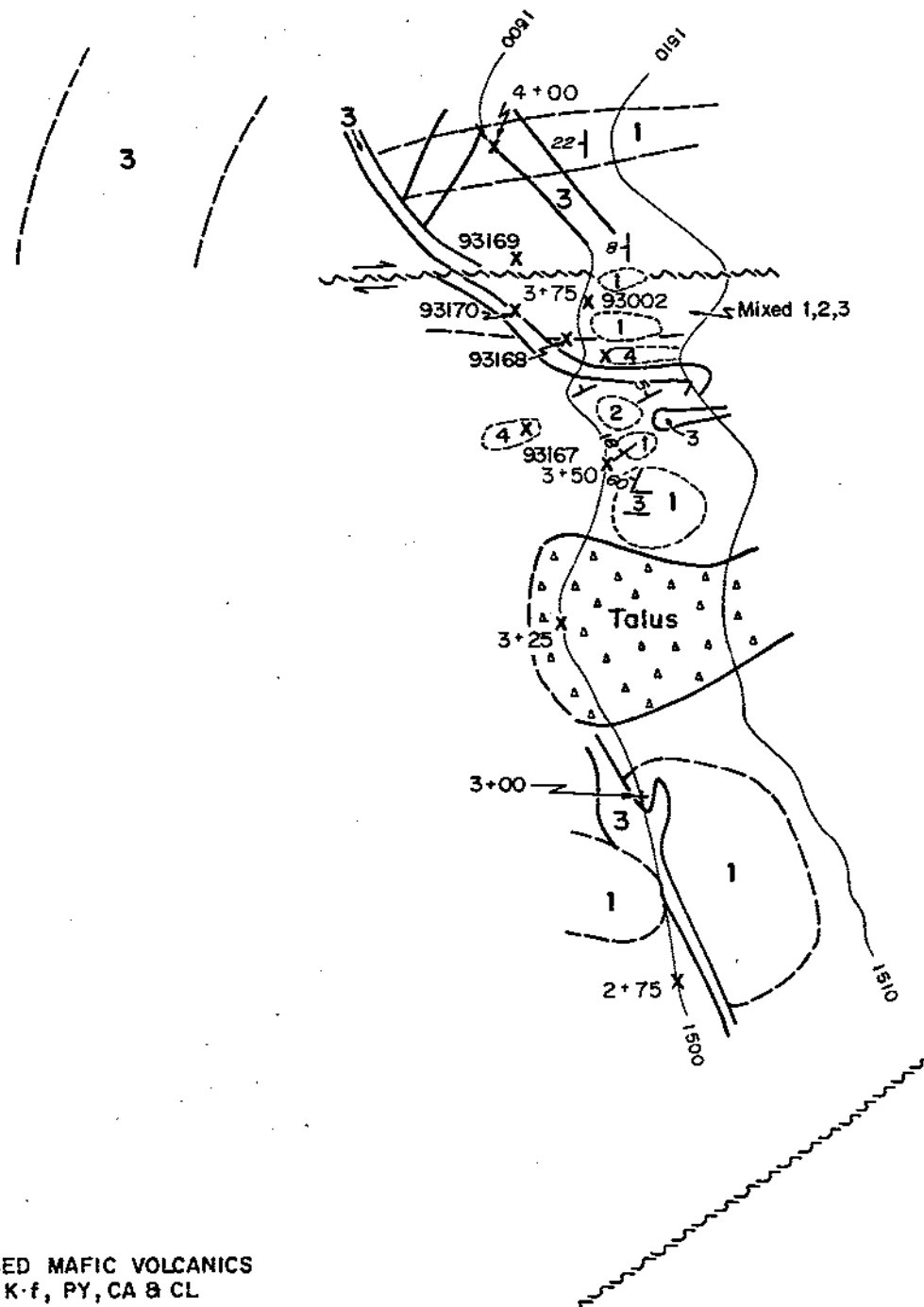


**LEGEND**

- 1500 Contour in metres
- Trench
- Outcrop
- Talus
- Grass
- Boundary between Talus and Vegetation
- Sy Syenite
- Ag Argillite (minor siltstone and mudstone included)
- Geological contact
- Bedding
- Common joint pattern
- X Soil sample / trench AK 10+50 at 1550 M

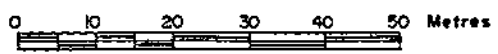


<b>CANDELA RESOURCES LTD.</b>						
<b>SHAKE CLAIMS</b>						
Figure Covers An Area On Line 15+00 from 9+00 to 11+50						
 MTEC RESOURCE MANAGEMENT LTD.	SCALE:	1 : 1000	M.T.S.:	104G/13	4	
	DWN. BY:		DATE:	Sept. 1990		
	CHKD. BY:		PROJECT No.:	90BC011	FILE No.:	



**LEGEND**

- 1 HORNFELSED MAFIC VOLCANICS  
W/MINOR K-f, PY, CA & CL
- 2 CONTACT ROCK (SAME AS ABOVE BUT  
WITH MORE K-f)
- 3 ORTHOCLASE PORPHYRY SYENITE
- 4 OXIDIZED ZONE W/ 2% PY AND MINOR CPY



<b>CANDELA RESOURCES LTD.</b>		
<b>SHAKE CLAIMS</b>		
Figure Covers An Area On Line 15+00. from 2+75 to 4+00		
	SCALE: 1 : 1000	N.T.S.: 104 G/13
	DWN. BY:	DATE: Sept. 1990
	CHKD. BY:	PROJECT No: 90 BC 011
	FIGURE No: <b>5</b>	

## 5.0 GEOLOGY

### 5.1 REGIONAL GEOLOGY

The Shake Project area is on the eastern flank of the main belt of the Coast Plutonic Complex and on the western margin of the Intermontane Belt within the Stikine Arch. The Stikine Arch consists of Permian to Middle Triassic oceanic sediments unconformably overlain by rocks equivalent to Upper Triassic Stuhini Group island arc volcanics and sediments. These volcanics and sediments have been intruded by syenitic stocks and by quartz diorite and granodiorite plutons of the Coast Plutonic Complex (Souther, 1971). Souther's mapping of map sheet 104G, where the Shake claims are located, show the Coast Range Intrusions as being post Lower Triassic age.

### 5.1 PROPERTY GEOLOGY AND MINERALIZATION

The Shake property is underlain by volcanic and sedimentary rocks of the Upper Triassic Stuhini Group. These rocks have been intruded by a differentiated syenitic intrusive. The centre of this intrusion is located on the southern flank of Rugged Mountain. (See Map 1 and Fig 3).

Volcanic members of the Stuhini Group consist of dark green, mafic volcanoclastics and minor augite porphyry flows.



Overlying the volcanic rocks is a mixed sedimentary package of laminated siltstone, greywacke, argillite, and thin discontinuous limestone horizons. This package contains 1-5% diagenetic pyrite and is largely undeformed with bedding striking east-west with moderate northerly dips.

Detailed mapping at a scale of 1:1,000 was carried out in two areas of high soil geochemistry on the west side of Rugged Mountain (See Fig. 4&5). This mapping outlined a series of pink orthoclase porphyry syenite dykes cutting argillite and mafic volcanics. The bedded rocks exhibit erratic propylitic alteration with up to 2% pyrite. Minor argillic alteration is present within a few metres of the syenite dykes. The sedimentary - volcanic package is highly fractured with fracture density increasing as the syenite dykes are approached. Fractures occur approximately every 2.0 cm in proximity to the dykes with no preferred orientation. Calcite flooding coating fractures and minor chalcopyrite mineralization also occur in proximity to the syenite dykes. The highest gold value returned was in a soil sample taken on a contact between a syenite dyke and the sediments (1010 ppb Au). This area was trenched and sampled. Four 1.0 metre chip samples were taken, two parallel to the contact and two across it. One of the samples taken parallel to the contact returned a value of 215 ppb Au. Other values were negligible for precious metals.

## 6.0 GEOCHEMISTRY

Fourteen paired heavy mineral and silt samples were taken on most secondary drainages on the property.

Sampling methodology is described in Appendix B. Not enough samples were taken to allow for a statistical treatment of data. Anomalous levels were set for silt samples and heavy mineral samples at 30 ppb Au and 100 ppb Au, respectively, based on previous work in the area and discussions with other professionals familiar with the area. Three heavy mineral samples and two silt samples were anomalous in Au, all taken from south flowing drainages into "Contact Creek". Three contour soil lines were run at 1100m, 1300m, and 1500m elevations between "Contact Creek" and "North Creek". Soil samples were taken at approximately 20 cm depth in the "B" horizon (where available) and of talus fines, where no "B" horizon could be found. Sample interval was 25 metres. Anomalous level was set at 100 ppb Au based on economic considerations. Two 100 metre soil lines with 10 metre sample intervals were run 30 metres and 55 metres above a section of line 1500 which returned 10 sub-anomalous gold values in soils centered on one value of 190 ppb Au. Three samples from these short lines returned anomalous gold values:

S	1600	0+50N	165 ppb Au
S	1600	0+60N	770 ppb Au
S	1625	0+50N	1010 ppb Au

The first two samples were taken in deep talus directly down slope from the third sample and probably reflect down slope dispersion. The third sample was taken in poorly developed reddish brown "B" horizon. The sample was taken 5-8 cm in depth at the contact of an orthoclase porphyry syenite dyke and an oxidized siltstone. The siltstone is highly fractured with fracture surface coated with 0.5 mm to 1.0 mm of calcite. Minor pyrite was present in the siltstone.

## STATEMENT OF COSTS

CANDELA RESOURCES LTD.  
 JOB 90EC011  
 SHAKE PROJECT

Salaries

Dave Dunn, Geologist, 6.00 days @ \$400/day	\$ 2,400.00	
D. Bahrey, Assistant Geologist, 5.00 days @ \$300/day	1,500.00	
G. Mowatt, Technician I, 7.00 days @ \$300/day	2,100.00	
A. Kriberg, Technician II, 6.00 days @ \$250/day	<u>1,500.00</u>	\$ 7,500.00

Project Expense

Project Preparation		2,202.49
Mobilization/Demobilization		2,051.09
Domicile 24.00 man days @ \$75/day		1,800.00
Geochemistry and Laboratory Service		
35 Rock/Core sample analyzed for AU/AG/CU/PB/ZN/MO/AS @\$18.59/sample	650.75	
14 Heavy Mineral samples analyzed for AU/AG/CU/PB/ZN/MO @\$14.00/sample	196.00	
14 Silt samples analyzed for AU and 30 element by ICP @\$14.75/sample	206.50	
180 Soil samples analyzed for AU/AG/CU/PB/AS @\$16.34/sample	<u>3,031.50</u>	4,084.75
Helicopter Support		
500D Helicopter 8.60 hours @\$671.46/hour		5,774.55
Field Supplies		531.81
Chain Saw Rental .40 month @ \$250/month		100.00
Fixed Wing Support		228.62
Radio Rental .40 month @ \$250/month		100.00
Walkie Talkie		
3 units @ \$5/day/unit 10/days		105.00
Expediting (Vancouver, Smithers)		362.48
Vehicle Rental and expenses		176.92
Government filing (Not including filing fees)		350.00
Accounting, Communications, and Freight		831.56
Report Preparation, drafting and compilation		4,300.00
15% Management Fees		<u>4,574.89</u>

TOTAL COSTS

*Dave Dunn* \$ 35,074.11

**8.0 BIBLIOGRAPHY**

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on the Rush 1 - 4 Claims.

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Souther, J.G. (1959): Chutine Map Area, Cassiar District, British Columbia; Geological Survey of Canada, Preliminary Map 7-1959.

Souther, J.G. (1971): Telegraph Creek Map Area, British Columbia; Geological Survey of Canada Paper 71- 44.

9.0 STATEMENT OF QUALIFICATIONS

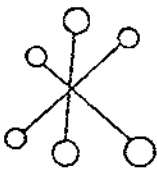
I, David St. Clair Dunn, with a business address of #1500-609 Granville Street, Vancouver, B.C. do hereby certify that:

1. I am a consulting geologist registered with the Geological Association of Canada (Fellow #4943).
2. I am an Affiliate member of the Association of Exploration Geochemists.
3. I hold a B.Sc. degree (1980) in geology from the University of British Columbia.
4. I have been practising my profession as a prospector and geologist for over 20 years.
5. I personally supervised the work on Candela Resources Ltd. Shake claims.
6. I do not hold any equity interest in the Shake claims or Candela Resources Ltd.
7. I consent to the use of this report in a Prospectus or Statement of Material Facts for the purpose of a private or public financing.

*David Dunn*

APPENDIX A

SAMPLE RESULTS



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 6, 1990

## CERTIFICATE OF ANALYSIS ETR 90-219

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 1 ROCK sample received June 26, 1990  
----- PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 2

ET#	Description	AG (ppm)	CU (ppm)	PB (ppm)	ZN (ppm)	MO (ppm)	AS (ppm)
219	1 104088	.4	45	25	80	51	18

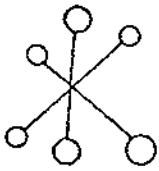
*Jutta Jealouse*  
-----  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: D. DUNN @ 235-3290  
T. BITTLE PRIME EX. 687-2309

cc. VIRGINIA KURAN  
HI-TEC

SC90/HI-TEC 011





**ECO-TECH LABORATORIES LTD.**

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 6, 1990

CERTIFICATE OF ANALYSIS ETK 90-219  
=====

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

A S S A Y S

ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 1 ROCK sample received June 26, 1990  
-----  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 2

ET#	Description	AU (g/t)	AU (oz/t)
219 - 1	104088	.05	.001

*Jutta Jealouse*  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: D. DUNN @ 235-3290  
T. BITTLE PRIME EX. 687-2309

cc. VIRGINIA KURAN  
HI-TEC

ECO-TECH LABORATORIES LTD.

PRIME EXPLORATIONS - ETK 90-223

10041 EAST TRANS CANADA HWY.  
KAMLOOPS, B.C. V2C 2J3  
PHONE - 604-573-5700  
FAX - 604-573-4557

P.O. BOX 10, 10TH FLOOR  
808 W. HASTINGS ST  
VANCOUVER, B.C.  
V6C 2X4

JULY 4, 1990

ATTENTION: TERRY BIITTE

VALUES IN PPM UNLESS OTHERWISE REPORTED

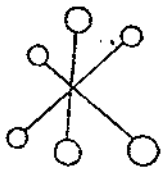
PROJECT: 90-BC-011 SHAKE  
14 SILL SAMPLES RECEIVED JUNE 26, 1990

ETL	DESCRIPTION	MM (ppb)	AG AL(%)	AS	B	BA	BI CA(%)	CD	CO	CR	CU FE(%)	K(%)	LA MG(%)	NH	MO NA(%)	XI	P	PB	SB	SN	SP TI(%)	U	V	W	ZN	
223 - 1	104087	45	.9 2.79	35	42	80	45 4.89	41	58	29	332 7.66	.42	30 2.99	2016	4 .11	21 5180	24	5	420	991	.40	410	636	110	10	152
223 - 2	104090	75	1.0 2.99	30	42	60	45 2.12	41	60	49	635 7.38	.11	10 2.55	1747	6 .05	22 1910	32	5	420	239	.22	410	417	110	7	123
223 - 3	109092	5	.4 1.01	15	42	90	45 3.64	41	36	14	204 5.67	.31	20 1.69	1231	1 .18	10 4210	12	45	420	687	.27	410	463	110	6	91
223 - 4	104094	20	.6 3.10	20	42	65	45 2.39	41	50	54	316 6.34	.21	10 2.20	1708	41 .06	29 1740	22	5	420	322	.24	410	359	110	8	133
223 - 5	104096	15	.4 2.94	20	42	70	45 1.34	41	31	42	101 5.66	.06	10 1.58	1416	41 .07	31 1360	14	5	420	188	.30	410	391	110	7	145
223 - 6	104098	15	.4 2.73	15	42	65	45 2.14	41	28	36	92 4.93	.08	10 1.46	1073	41 .06	25 1550	12	45	420	178	.41	410	331	110	6	106
223 - 7	104100	25	.6 3.00	20	42	95	45 2.19	41	47	35	142 6.30	.06	410 2.08	1609	41 .06	40 1440	16	5	420	438	.35	410	417	110	8	123
223 - 8	104192	10	.4 1.52	20	42	20	45 4.55	41	38	14	117 6.84	.22	30 1.74	1147	41 .06	11 7410	10	45	420	469	.32	410	603	110	8	99
223 - 9	104194	25	.4 2.05	20	42	30	45 2.43	41	35	32	243 5.34	.06	410 1.71	1113	1 .05	14 1070	12	45	420	74	.14	410	327	110	4	99
223 - 10	104196	15	.4 2.29	10	42	45	45 2.39	41	29	40	202 5.06	.07	410 1.63	1155	41 .06	20 1378	10	45	420	192	.21	410	328	110	5	115
223 - 11	104198	30	.2 2.43	15	42	40	45 1.11	41	25	41	87 4.52	.04	410 1.53	952	1 .06	24 1460	10	5	420	113	.27	410	309	110	6	93
223 - 12	104200	10	.2 2.16	10	42	50	45 1.37	41	29	35	68 5.86	.05	410 1.10	1102	41 .06	28 1360	10	45	420	122	.31	410	419	110	5	92
223 - 13	104302	10	.2 2.21	15	42	50	45 1.83	41	21	49	81 4.06	.06	410 1.16	1162	41 .07	30 1320	10	45	420	167	.25	410	256	110	8	120
223 - 14	104304	20	.2 2.42	15	42	50	45 1.65	41	30	51	79 5.69	.05	410 1.75	930	41 .06	36 1540	10	45	420	258	.33	410	398	110	6	93

NOTE: C = LESS THAN

FAZ: D. DUNN P 235-3290  
TERRY BIITTE, PRIME EXPLORATIONS  
CC: D. DUNN C/O TRANS NORTH AIR  
TELEGRAPH CREEK, B.C.  
SC90/HI-1EC-011

*Jutta Palouse*  
ECO-TECH LABORATORIES LTD.  
JUTTA PALOUSE  
B.C. CERTIFIED ASSAYER



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 6, 1990

## CERTIFICATE OF ANALYSIS ETK 90-226

PRIME EXPLORATIONS LTD.  
P.O. BOX 10, 10TH FLOOR  
808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: TERRY BITTLE

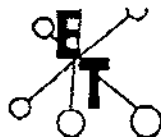
SAMPLE IDENTIFICATION: 14 HEAVY MINERAL samples received June 26, 1990  
----- PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 2

ET#	Description	AU (ppb)	AG (ppm)	CU (ppm)	PB (ppm)	ZN (ppm)	MO (ppm)
226 - 1	104086	15	.2	195	7	65	6
226 - 2	104089	285	.9	391	11	132	9
226 - 3	104091	10	.1	151	6	64	7
226 - 4	104093	50	.8	784	19	72	10
226 - 5	104095	5	<.1	47	6	78	7
226 - 6	104097	75	<.1	79	5	77	7
226 - 7	104099	5	<.1	69	5	89	8
226 - 8	104191	145	<.1	66	5	42	9
226 - 9	104193	505	.7	251	7	69	15
226 - 10	104195	20	<.1	164	3	68	6
226 - 11	104197	10	<.1	65	4	78	8
226 - 12	104199	25	<.1	26	7	72	7
226 - 13	104301	150	<.1	37	4	66	6
226 - 14	104303	30	<.1	47	3	87	8

NOTE: < = less than

-----  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: D. DUNN @ 235-3290  
TERRY BITTLE - PRIME EXPLORATIONS  
CC: D. DUNN C/O TRANS NORTH AIR  
TELEGRAPH CREEK, B.C.  
SC90/HI-TEC-011



**ECO-TECH LABORATORIES LTD.**

ASSAYING • ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-3700 Fax 573-4557

JULY 16, 1990

**CERTIFICATE OF ANALYSIS ETK 90-267**

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4  
ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 3 ROCK samples received July 9, 1990  
-----  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.:4

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Mn (ppm)
267 - 1	93001	5	.3	664	38	41	21	41
267 - 2	93002	35	1.1	>1000	27	38	34	55
267 - 3	93003	10	<.1	514	17	82	17	84

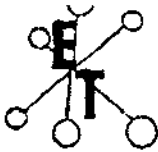
NOTE: ( = less than  
> = greater than

*Jutta Jealous*  
-----  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: T. BITTLE @ 687-2309  
D. DUNN @ 235-3290  
V. KURAN @ 685-6806

cc. V. KURAN HI-TEC

SC90/HIGH TEC



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-5700 Fax 873-4657

JULY 17, 1990

## CERTIFICATE OF ANALYSIS ETK 90-269

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4  
ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 24 ROCK samples received July 9, 1990  
-----  
PROJECT: 90-BC-010 RUSH  
SHIPMENT NO.: 4

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)
269 - 1	104136	5	.2	74	4	34	162	10
269 - 2	104137	5	<.1	48	3	121	578	11
269 - 3	104138	10	<.1	68	7	42	191	11
269 - 4	104139	10	.2	148	8	134	>1000	8
269 - 5	104140	10	<.1	30	9	114	240	3
269 - 6	104141	5	<.1	19	14	42	693	3
269 - 7	104142	5	<.1	15	9	33	918	12
269 - 8	104324	5	<.1	42	6	11	50	7
269 - 9	104328	5	<.1	3	5	3	22	7
269 - 10	104329	5	<.1	167	7	63	7	13
269 - 11	104334	10	2.2	>1000	22	100	7	2
269 - 12	104337	10	<.1	41	54	13	22	8
269 - 13	104338	5	<.1	39	6	42	20	8
269 - 14	104339	15	<.1	66	14	59	5	4
269 - 15	104340	5	<.1	67	11	81	5	13
269 - 16	104341	160	<.1	52	14	56	4	5
269 - 17	104413	5	.4	186	15	100	2	47
269 - 18	104415	5	.2	65	14	32	7	8
269 - 19	104410	10	.2	199	6	61	10	238
269 - 20	104411	180	2.8	287	10	39	27	449
269 - 21	104412	60	1.7	313	14	158	20	33
269 - 22	104414	10	<.1	249	5	85	4	12
269 - 23	104416	15	.8	98	57	338	15	68
269 - 24	104418	10	.2	>1000	8	395	6	19

NOTE: < = less than

*Jutta Jealouse*  
-----  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: T. BITTLE @ 687-2309  
D. DUNN @ 235-3290  
V. KURAN @ 685-6806

cc. V. KURAN HI-TEC  
SC90/HIGH TEC



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 873-8700 Fax 873-4557

JULY 17, 1990

## CERTIFICATE OF ANALYSIS ETK 90-269

PRIME EXPLORATIONS LTD.

10TH FLOOR, 808 W. HASTINGS STREET

VANCOUVER, B.C.

V6C 2X4

ATTENTION: TERRY BITTLE

A S S A Y S

SAMPLE IDENTIFICATION: 24 ROCK samples received July 9, 1990

PROJECT: 90-BC-010 RUSH

SHIPMENT NO.: 4

ET#	Description	MO (%)	CU (%)
269 - 4	104139	.24	
269 - 11	104334		.15
269 - 24	104418		.86

NOTE: < = less than

*Jutta Jealouse*  
ECO-TECH LABORATORIES LTD.

JUTTA JEALOUSE

B.C. Certified Assayer

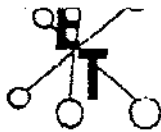
FAX: T. BITTLE @ 687-2309

D. DUNN @ 235-3290

V. KURAN @ 685-6806

cc. V. KURAN HI-TEC

SC90/HIGH TEC010



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 Easl Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-5700 Fax 573-4557

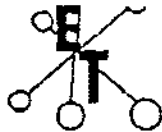
JULY 13, 1990

## CERTIFICATE OF ANALYSIS ETK 90-270

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4  
ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 106 SOIL samples received July 9, 1990  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 4

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)
270 -	1 N 1300 0 + 00	70	.3	428	24	21
270 -	2 N 1300 0 + 25	20	.4	371	22	12
270 -	3 N 1300 0 + 50	30	.2	301	27	<1
270 -	4 N 1300 0 + 75	35	.6	261	28	17
270 -	5 N 1300 1 + 00	25	.1	291	18	7
270 -	6 N 1300 1 + 25	55	.3	529	15	15
270 -	7 N 1300 1 + 75	70	2.2	2720	13	13
270 -	8 N 1300 2 + 00	30	.2	425	9	14
270 -	9 N 1300 2 + 25	60	.3	311	10	11
270 -	10 N 1300 2 + 50	175	1.6	400	28	40
270 -	11 N 1300 2 + 75	90	.9	535	19	23
270 -	12 N 1300 3 + 00	30	.6	470	9	10
270 -	13 N 1300 3 + 25	30	.3	497	13	9
270 -	14 N 1300 3 + 50	35	.4	211	17	18
270 -	15 N 1300 3 + 75	40	.2	183	19	17
270 -	16 N 1300 4 + 00	60	.3	299	17	11
270 -	17 N 1300 4 + 25	70	.9	874	21	18
270 -	18 N 1300 4 + 50	70	.7	429	20	15
270 -	19 N 1300 4 + 75	125	.9	1270	19	23
270 -	20 N 1300 5 + 00	75	.7	642	18	18
270 -	21 N 1300 5 + 25	50	.6	334	12	11
270 -	22 N 1300 5 + 50	90	1.0	530	15	11
270 -	23 N 1300 5 + 75	30	.4	268	18	20
270 -	24 N 1300 6 + 00	15	.2	180	14	12
270 -	25 N 1300 6 + 25	35	.4	179	16	17
270 -	26 N 1300 6 + 50	15	.2	142	13	13
270 -	27 N 1300 6 + 75	30	.3	218	15	12
270 -	28 N 1300 7 + 00	45	.4	236	14	16
270 -	29 N 1300 7 + 25	60	.2	145	18	9
270 -	30 N 1300 7 + 50	20	.3	283	15	5
270 -	31 N 1300 7 + 75	20	.3	128	16	13



# ECO-TECH LABORATORIES LTD.

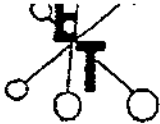
ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 873-5700 Fax 873-4557

## PRIME EXPLORATIONS LTD.

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)
270 -	32 N 1300 8 + 00	30	.2	168	13	13
270 -	33 N 1300 8 + 25	25	.1	199	15	12
270 -	34 N 1300 8 + 50	80	.8	412	16	19
270 -	35 N 1300 8 + 75	70	.7	482	15	28
270 -	36 N 1300 9 + 00	35	.6	434	17	14
270 -	37 N 1300 9 + 25	5	.2	169	14	8
270 -	38 N 1300 9 + 50	40	.3	244	18	13
270 -	39 N 1300 9 + 75	40	.4	367	17	38
270 -	40 N 1300 10 + 00	60	.3	549	9	13
270 -	41 N 1300 10 + 25	60	<.1	285	7	3
270 -	42 N 1300 10 + 50	190 *	.2	486	13	15
270 -	43 N 1300 10 + 75	30	.2	485	14	14
270 -	44 N 1300 11 + 00	40	1.0	370	20	16
270 -	45 N 1300 11 + 25	40	.2	489	16	16
270 -	46 N 1300 11 + 50	40	.4	494	26	16
270 -	47 N 1300 11 + 75	35	.1	179	14	15
270 -	48 N 1300 12 + 00	55	.5	932	57	34
270 -	49 S 15 0 + 25N	5	.1	59	8	14
270 -	50 S 15 0 + 50N	15	.9	1300	117	31
270 -	51 S 15 0 + 75N	95	.3	400	19	30
270 -	52 S 15 1 + 00N	30	1.1	2235	87	62
270 -	53 S 15 1 + 25N	30	1.4	2595	32	35
270 -	54 S 15 1 + 50N	40	.3	839	37	21
270 -	55 S 15 1 + 75N	70	.5	793	44	52
270 -	56 S 15 2 + 00N	10	.4	746	15	6
270 -	57 S 15 2 + 25N	35	.6	1817	32	38
270 -	58 S 15 2 + 50N	40	1.2	1369	20	28
270 -	59 S 15 2 + 75N	50	.8	590	21	7
270 -	60 S 15 3 + 00N	300	1.3	1524	18	51
270 -	61 S 15 3 + 25N	85	1.0	1758	27	16
270 -	62 S 15 3 + 50N	50	.4	713	22	15
270 -	63 S 15 3 + 75N	95	.6	862	21	21
270 -	64 S 15 4 + 25N	25	.4	1764	17	25
270 -	65 S 15 4 + 50N	70	.3	747	20	33
270 -	66 S 15 4 + 75N	25	<.1	428	16	7
270 -	67 S 15 5 + 00N	15	<.1	427	6	7
270 -	68 S 15 5 + 25N	25	.1	560	24	10
270 -	69 S 15 5 + 50N	55	.6	757	44	20
270 -	70 S 15 5 + 75N	35	1.1	2525	26	30
270 -	71 S 15 6 + 00N	20	.5	1138	17	16
270 -	72 S 15 6 + 25N	15	2.1	1816	19	35
270 -	73 S 15 6 + 50N	45	.5	722	21	29
270 -	74 S 15 6 + 75N	50	.6	2109	13	26
270 -	75 S 15 7 + 00N	45	.5	493	23	20
270 -	76 S 15 7 + 25N	40	.4	357	49	24





# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2G 2J3 (804) 573-5700 Fax 573-4867

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)
270 - 77	S 15 7 + 50N	10	.8	730	21	31
270 - 78	S 15 7 + 75N	10	.2	519	16	17
270 - 79	S 15 8 + 25N	230	.6	272	12	86
270 - 80	S 15 8 + 50N	5	.3	292	11	9
270 - 81	S 15 8 + 75N	85	.2	288	17	17
270 - 82	S 15 9 + 00N	30	.1	145	10	17
270 - 83	S 15 10 + 50N	15	.4	276	10	30
270 - 84	S 15 10 + 75N	190	.1	154	43	64
270 - 85	S 15 11 + 00N	5	.3	120	12	26
270 - 86	S 15 11 + 25N	10	.3	119	9	30
270 - 87	S 15 11 + 50N	<5	.4	121	12	30
270 - 88	S 15 11 + 75N	<5	.4	112	10	4
270 - 89	S 15 12 + 00N	<5	.3	155	21	14
270 - 90	S 15 12 + 25N	<5	.6	137	12	12
270 - 91	S 15 12 + 50N	<5	.3	96	4	6
270 - 92	S 15 12 + 75N	<5	.1	129	12	18
270 - 93	S 15 13 + 00N	5	.2	133	8	8
270 - 94	S 15 13 + 25N	<5	.1	110	10	6
270 - 95	S 15 14 + 50N	30	.1	192	9	20
270 - 96	S 15 14 + 75N	10	.2	199	12	36
270 - 97	S 15 15 + 00N	5	.3	389	14	44
270 - 98	S 15 15 + 25N	10	.1	159	11	6
270 - 99	S 15 15 + 50N	10	.1	201	11	18
270 - 100	S 15 15 + 75N	<5	.2	178	12	6
270 - 101	S 15 16 + 25N	30	.2	365	10	10
270 - 102	S 15 16 + 50N	5	.2	217	13	4
270 - 103	S 15 16 + 75N	10	.6	428	16	4
270 - 104	S 15 17 + 00N	15	.3	445	10	20
270 - 105	S 15 17 + 25N	280	4.2	3619	1258	58
270 - 106	S 15 17 + 75N	20	.1	804	13	10

NOTE: > = GREATER THAN  
 < = LESS THAN  
 \* = - 42 MESH

FAX: T. BITTLE @ 687-2309  
 D. DUNN @ 235-3290  
 V. KURAN @ 685-6806

cc. V. KURAN HI-TEC

*Jutta Jealouse*  
 ECO-TECH LABORATORIES LTD.  
 JUTTA JEALOUSE  
 B.C. Certified Assayer



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-6700 Fax 573-4667

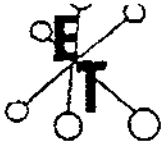
JULY 13, 1990

## CERTIFICATE OF ANALYSIS ETK 90-271

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4  
ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 53 SOIL samples received July 9, 1990  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 4

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)
271 -	1 S11 0 +00 N	85	.2	215	21	17
271 -	2 S11 0 +25 N	30	<.1	242	16	15
271 -	3 S11 0 +50 N	45	<.1	315	10	21
271 -	4 S11 0 +75 N	50	<.1	345	23	16
271 -	5 S11 1 +00 N	45	<.1	410	18	14
271 -	6 S11 1 +25 N	60	<.1	542	13	17
271 -	7 S11 1 +50 N	10	<.1	349	11	12
271 -	8 S11 1 +75 N	25	.2	478	10	10
271 -	9 S11 2 +00 N	30	.2	408	15	8
271 -	10 S11 2 +25 N	20	<.1	421	17	10
271 -	11 S11 2 +50 N	90	.5	671	18	11
271 -	12 S11 2 +75 N	30	<.1	478	15	9
271 -	13 S11 3 +00 N	80	.3	479	21	8
271 -	14 S11 3 +25 N	20	<.1	362	15	13
271 -	15 S11 3 +50 N	55	.6	976	17	16
271 -	16 S11 3 +75 N	50	<.1	497	16	19
271 -	17 S11 4 +00 N	30	.2	817	22	22
271 -	18 S11 4 +25 N	35	.4	708	16	20
271 -	19 S11 4 +50 N	25	<.1	604	14	17
271 -	20 S11 4 +75 N	20	<.1	480	16	16
271 -	21 S11 5 +50 N	90	<.1	437	25	28
271 -	22 S11 5 +75 N	30	.2	462	20	17
271 -	23 S11 6 +00 N	20	<.1	475	16	13
271 -	24 S11 6 +25 N	10	<.1	372	12	10
271 -	25 S11 6 +50 N	10	<.1	585	15	11
271 -	26 S11 6 +75 N	30	<.1	999	17	12
271 -	27 S11 7 +00 N	35	<.1	844	16	10
271 -	28 S11 7 +25 N	10	<.1	196	12	9
271 -	29 S11 7 +50 N	20	<.1	220	13	11
271 -	30 S11 7 +75 N	15	.2	166	9	8



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## PRIME EXPLORATIONS LTD.

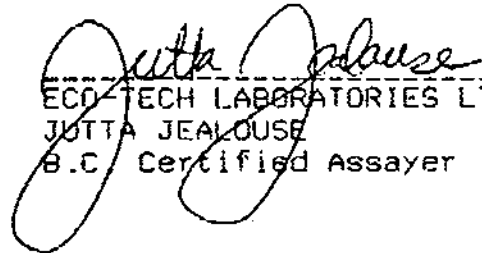
ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)
271 - 31	S11 8 +00 N	20	<.1	137	12	9
271 - 32	S11 8 +25 N	70	<.1	152	14	8
271 - 33	S11 8 +50 N	30	<.1	166	12	9
271 - 34	S11 8 +75 N	15	<.1	131	11	8
271 - 35	S11 9 +00 N	25 *	<.1	132	9	7
271 - 36	S11 9 +25 N	15	<.1	154	11	6
271 - 37	S11 9 +50 N	10	<.1	277	9	8
271 - 38	S11 9 +75 N	15	.2	84	15	7
271 - 39	S11 10 +00 N	65	<.1	158	13	12
271 - 40	S11 10 +25 N	5	<.1	169	25	11
271 - 41	S11 10 +50 N	15	<.1	141	15	8
271 - 42	S11 10 +75 N	10	<.1	222	12	7
271 - 43	S11 11 +00 N	5	<.1	89	17	6
271 - 44	S11 11 +25 N	10	<.1	126	18	7
271 - 45	S11 11 +50 N	10	<.1	131	14	8
271 - 46	S11 11 +75 N	10	<.1	100	11	7
271 - 47	S11 12 +00 N	5	<.1	101	15	8
271 - 48	S11 12 +25 N	15	<.1	255	10	10
271 - 49	S11 12 +50 N	25	<.1	109	13	9
271 - 50	S11 12 +75 N	15	<.1	167	14	10
271 - 51	S11 13 +00 N	20	<.1	272	7	20
271 - 52	S11 13 +25 N	70	<.1	647	12	16
271 - 53	S11 13 +50 N	40	<.1	498	11	14

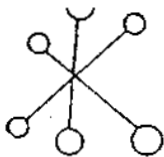
NOTE: < = less than  
\* = - 42 Mesh

FAX: T. BITTLE @ 687-2309  
D. DUNN @ 235-3290  
V. KURAN @ 685-6806

cc. V. KURAN HI-TEC

SC90/HIGH TEC

  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 23, 1990

## CERTIFICATE OF ANALYSIS ETK 90-307

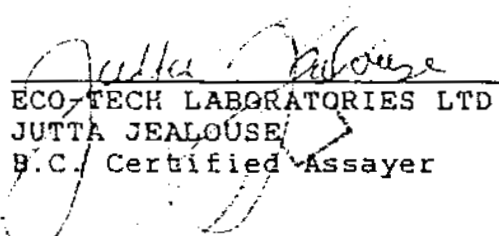
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PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: TERRY BITTLE

SAMPLE IDENTIFICATION: 6 ROCK samples received July 16, 1990  
-----  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 5

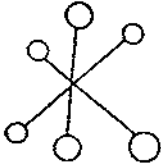
ET#	Description	AU (ppb)	AG (ppm)	CU (ppm)	PB (ppm)	ZN (ppm)
307 -	1 104419	440	1.7	102	16	47
307 -	2 104420	70	.5	216	13	33
307 -	3 104421	20	.2	186	12	45
307 -	4 104422	50	.1	124	11	29
307 -	5 104423	45	.1	112	14	39
307 -	6 104424	35	.2	76	13	51

  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: D. DUNN @ 235-3290  
T. BITTLE PRIME EX. 687-2309

cc. VIRGINIA KURAN  
HI-TEC

SC90/HI-TEC 011



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10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 23, 1990

## CERTIFICATE OF ANALYSIS ET# 90-319

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: JIM FOSTER

SAMPLE IDENTIFICATION: 5 ROCK samples received July 16, 1990  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 5

ET#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
319 - 1	104345	60	13.0	40	500	29
319 - 2	104346	15	<0.1	78	107	8
319 - 3	104347	20	<0.1	52	56	22
319 - 4	104348	30	.2	41	787	10
319 - 5	104349	10	<0.1	40	100	9

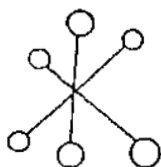
NOTE: < = less than

*Jutta Sealouse*  
ECO-TECH LABORATORIES LTD.  
JUTTA SEALOUSE  
B.C. Certified Assayer

FAX: J. FOSTER @ 687-2309

CC: V. KURAN, HI-TEC

SC90/HIGH TEC



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 1, 1990

## CERTIFICATE OF ANALYSIS STK 90-360

PRIME EXPLORATIONS LTD.  
P.O. BOX 10, 10TH FLOOR  
808 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: JIM FOSTER

SAMPLE IDENTIFICATION: 21 SOIL samples received JULY 25, 1990  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 6

ET#	Description	AU (ppb)	AG (ppm)	CU (ppm)	PB (ppm)	ZN (ppm)
360 - 1	S 1600 0 + 10 N	65 *	<.1	519	14	152
360 - 2	S 1600 0 + 20 N	80	1.1	2900	29	100
360 - 3	S 1600 0 + 30 N	35	<.1	281	16	140
360 - 4	S 1600 0 + 40 N	95	.3	412	17	132
360 - 5	S 1600 0 + 50 N	165 *	.2	289	35	79
360 - 6	S 1600 0 + 60 N	770 *	.4	39	43	299
360 - 7	S 1600 0 + 70 N	20	.2	122	15	144
360 - 8	S 1600 0 + 80 N	15	<.1	153	19	187
360 - 9	S 1600 0 + 90 N	40	.4	162	14	127
360 - 10	S 1600 1 + 00	10	.2	157	13	123
360 - 11	S16 + 25 0 + 00	<5	<.1	288	19	358
360 - 12	S16 + 25 0 + 10 N	15	<.1	202	16	158
360 - 13	S16 + 25 0 + 20 N	<5	<.1	129	15	143
360 - 14	S16 + 25 0 + 30 N	5	<.1	149	18	137
360 - 15	S16 + 25 0 + 40 N	<5	<.1	188	19	111
360 - 16	S16 + 25 0 + 50 N	1010	1.0	324	52	183
360 - 17	S16 + 25 0 + 60 N	<5	<.1	140	15	112
360 - 18	S16 + 25 0 + 70 N	<5	<.1	148	18	116
360 - 19	S16 + 25 0 + 80 N	<5	<.1	216	13	56
360 - 20	S16 + 25 0 + 90 N	<5	<.1	151	17	131
360 - 21	S16 + 25 1 + 00 N	<5	<.1	167	16	79

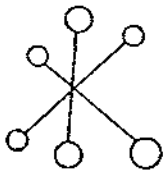
NOTE: \* = +40 MESH

ECO-TECH LABORATORIES LTD.  
LITA JEALOUSE  
B.C. Certified Assayer

BY: J. FOSTER 1 387 2309

BY: M. RUPAN 01-190

BY: RING 01-011



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 1, 1990

## CERTIFICATE OF ANALYSIS ETK 90-361

PRIME EXPLORATIONS LTD.  
P.O. BOX 10, 10TH FLOOR  
808 WEST HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: JIM FOSTER

SAMPLE IDENTIFICATION: 16 ROCK samples received JULY 25, 1990  
-----  
PROJECT: 90-BC-011 SHAKE  
SHIPMENT NO.: 6

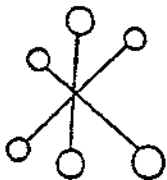
ET#	Description	AU (ppb)	AG (ppm)	CU (ppm)	PR (ppm)	ZN (ppm)
361 - 1	93084	5	<.1	115	6	17
361 - 2	93085	5	<.1	138	7	70
361 - 3	93086	5	<.1	93	8	54
361 - 4	93087	40	7	548	13	64
361 - 5	93088	5	.5	336	19	75
361 - 6	93089	5	<.1	112	9	64
361 - 7	93090	5	<.1	316	10	91
361 - 8	93091	10	<.1	287	14	79
361 - 9	93092	5	<.1	203	11	64
361 - 10	93093	20	<.1	297	8	69
361 - 11	93094	55	.2	56	12	35
361 - 12	93095	5	<.1	444	19	79
361 - 13	93096	5	<.1	427	14	92
361 - 14	93164	10	<.1	73	9	50
361 - 15	93165	5	.2	180	14	32
361 - 16	93166	5	<.1	67	10	37

*Jutta Jealouse*  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: J. FOSTER 1-607-2309

cc: V. KURAN HI-TEC

SC90/HIGH TEC-011



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 31, 1990

## CERTIFICATE OF ANALYSIS ETK 90-481

=====

PRIME EXPLORATIONS LTD.  
10TH FLOOR, 808 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6C 2X4

ATTENTION: JIM FOSTER

SAMPLE IDENTIFICATION: 4 ROCK samples received AUGUST 23, 1990  
----- PROJECT: 90-BC-011 SHAKE

ET#	Description	AU (ppb)	AG (ppm)	CU (ppm)	PB (ppm)	ZN (ppm)
481 -	1 93209	35	.3	95	6	113
481 -	2 93210	215	.1	142	3	88
481 -	3 93211	90	.1	55	14	67
481 -	4 93212	20	.1	40	10	62

**COPIE**

*Jutta Jealouse*  
ECO-TECH LABORATORIES LTD.

JUTTA JEALOUSE  
B.C. Certified Assayer

FAX: JIM FOSTER  
1-687-7309

SC90/HI-TEC-011



APPENDIX B

SAMPLING METHODOLOGY

## SAMPLING METHODOLOGY

### A. STREAM SEDIMENTS

#### *Silt Samples*

Approximately 0.5 kg of silt was collected from the active stream channel, placed in a standard gusseted kraft bag and shipped to Eco-Tech Laboratories in Kamloops. These samples were then dried and sieved to -80 mesh. A ten gram split of the sample was analyzed for gold by fire assay with atomic absorption finish. A one gram split of the remainder of the sample was analyzed for 30 elements using Aqua Regia extraction and ICP.

#### *Pan Concentrate samples*

A sample of between 5 gm and 30 gm was panned in the field from two pans of -1.4 cm gravel and one pan of moss. The panned material was placed in 6 mil plastic bags and shipped to Eco-Tech Laboratories Ltd. in Kamloops. A one gram split of this material was analyzed for silver, lead, copper and zinc using wet extraction and atomic absorption. The remainder of the sample was analyzed for gold using fire assay and atomic absorption finish.

### B. LITHOGEOCHEMICAL SAMPLING

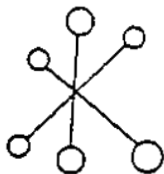
Approximately 2 kg of rock was collected and placed in 6 mil plastic bags and shipped to Eco-Tech Laboratories in Kamloops. This material was crushed and pulverized to -140 mesh and a 1 assay ton split taken. The split was analyzed for gold using fire assay and atomic absorption finish. Another 10 gm split was analyzed for copper, lead, zinc and silver using wet extraction and atomic absorption finish.

### C. SOIL SAMPLES

Approximately 0.5 kg of "B" horizon soil, where available, or talus fines where not, was placed in standard gusseted kraft bag and shipped to Echo Tech Laboratories in Kamloops. This material was dried and sieved to -80 mesh. A 14 gram sample was analyzed for gold using fire assay and atomic absorption finished. Another one gram split was analyzed for 30 elements using Aqua Regia extraction and ICP.

APPENDIX C

ANALYTICAL PROCEDURES



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

## GEOCHEMICAL LABORATORY METHODS

### SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh nylon sieves.
2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. Heavy Mineral Separation: Samples are screened to -20 mesh, washed and separated in Tetrabromothane. (SG 2.96)

### METHODS OF ANALYSIS

All methods have either certified or in-house standards carried through entire procedure to ensure validity of results.

1. Multi-Element Cd, Cr, Co, Cu, Fe (acid soluble), Pb, Mn, Ni, Ag, Zn, Mo

#### Digestion

Hot aqua-regia

#### Finish

Atomic Absorption, background correction applied where appropriate

#### A) Multi-Element ICP

#### Digestion

Hot aqua-regia

#### Finish

ICP

#### 2. Antimony

#### Digestion

Hot aqua regia

#### Finish

Hydride generation - A.A.S.

#### 3. Arsenic

#### Digestion

Hot aqua regia

#### Finish

Hydride generation - A.A.S.

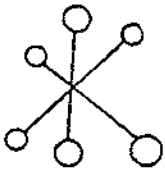
#### 4. Barium

#### Digestion

Lithium Metaborate Fusion

#### Finish

I.C.P.



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## 13. Tin

### Digestion

Ammonium Iodide Fusion

### Finish

Hydride generation - A.A.S.

## 14. Tungsten

### Digestion

Potassium Bisulphate Fusion

### Finish

Colorimetric or I.C.P.

## 15. Gold

### Digestion

Fire Assay Preconcentration  
followed by Aqua Regia

### Finish

Atomic Absorption

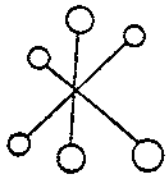
## 16. Platinum, Palladium, Rhodium

### Digestion

Fire Assay Preconcentration  
followed by Aqua Regia

### Finish

Graphite Furnace - A.A.S.



# ECO-TECH LABORATORIES LTD.

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## 5. Beryllium

### Digestion

Hot aqua regia

### Finish

Atomic Absorption

## 6. Bismuth

### Digestion

Hot aqua regia

### Finish

Atomic Absorption

## 7. Chromium

### Digestion

Sodium Peroxide Fusion

### Finish

Atomic Absorption

## 8. Fluorine

### Digestion

Lithium Metaborate Fusion

### Finish

Ion Selective Electrode

## 9. Mercury

### Digestion

Hot aqua regia

### Finish

Cold vapor generation -  
A.A.S.

## 10. Phosphorus

### Digestion

Lithium Metaborate Fusion

### Finish

I.C.P. finish

## 11. Selenium

### Digestion

Hot aqua regia

### Finish

Hydride generation - A.A.S.

## 12. Tellurium

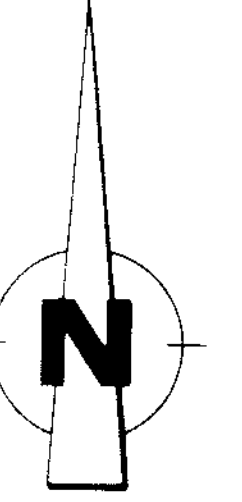
### Digestion

Hot aqua regia  
Potassium Bisulphate Fusion

### Finish

Hydride generation - A.A.S.  
Colorimetric or I.C.P.





**SYMBOLS**

- water course
- contour (100m interval)
- Geological contact, (defined, assumed)
- Bedding
- Mineral occurrence (mineralogy, attitude, width-cm)
- Jointed; / Vertical
- Fault/shear zone

**GEOLOGY** (Legend after Souther, 1971)

- Intrusive Units**
- Upper Triassic to Lower Jurassic
  - I2a Syenite
  - I2b Orthoclase porphyry
  - I2c Pyroxenite border phase
- Volcanic and Sedimentary Units**
- Upper Triassic
  - Ba Mafic volcanics, andesite flows
  - Bb Minor greywacke siltstone
  - Bc Polymictic conglomerate
  - 7 Interbedded siltstone, greywacke, chert, argillite, minor limestone
- Mineralization**
- |                 |                       |
|-----------------|-----------------------|
| Ar Arsenopyrite | Kf Potassium Feldspar |
| Bi Biotite      | Ma Malachite          |
| Ca Calcite      | Mg Magnetite          |
| Cl Chlorite     | Mo Molybdenite        |
| Cp Chalcopyrite | Py Pyrite             |
| Ga Galena       | Qz Quartz             |
| Ka Kaolinite    | Li Limonite           |



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,414**

<b>CANDELA RESOURCES LTD.</b>		
SHAKE 1-4 CLAIMS		
L14RD M.D., B.C.		
<b>GEOLOGY</b>		
SCALE: 1:5000	N.T.S.: 104 G/13	MAP No: 1
DWN. BY:	DATE: Sept 1990	FILE No:
CHKD. BY:	PROJECT No: 90 BC 011	

