

LOG NO:	OCT 21 1992	RD.
ACTION:		
FILE NO:		

GEOLOGY, GEOPHYSICS & GEOCHEMISTRY REPORT

THE LUMBY PROPERTY

CLAIMS: OK
HAZ 5

MINING DIVISION: VERNON

N.T.S.: 82L 7W

LATITUDE: 50° 18' 30" North

LONGITUDE: 118° 58' 30" West

OWNER: Zicton Gold Limited

OPERATOR: Zicton Gold Limited

CONSULTANT: Allen Geological Engineering Ltd.

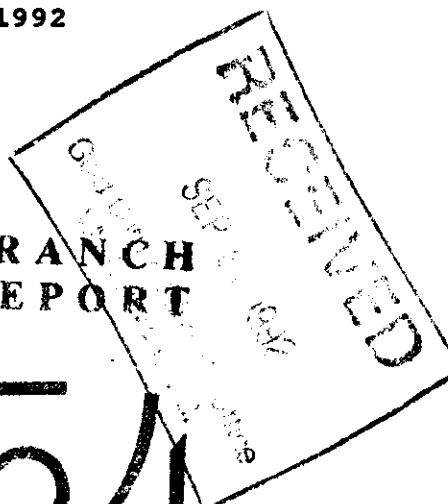
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Alfred R. Allen,
M.A.Sc., B.A.Sc., P.Eng.

DATE: July 31, 1992

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,554



CONTENTS

TITLE PAGE

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 LOCATION AND ACCESS	1
3.0 PROPERTY	1
4.0 PHYSIOGRAPHY	2
5.0 PREVIOUS WORK	
5.1 Lumby Area	2
5.2 OK, HAZ 5 Claims	3
6.0 THEORY	4
7.0 GEOLOGY	5
8.0 OBJECTIVES & METHODOLOGY	
8.1 Geology	7
8.2 VLF-EM Geophysics	8
8.3 Soil Geochemistry	9
9.0 RESULTS	
9.1 Geology	11
9.2 VLF-EM Geophysics	12
9.3 Soil Geochemistry	14
10.0 DISCUSSION	14
11.0 RECOMMENDATIONS	16
REFERENCES	
COST STATEMENTS. OK CLAIM	
HAZ 5 CLAIM	
CERTIFICATES	
CONSENT LETTER	

MAPS

	<u>Page</u>
1. Location. Zicton Gold Properties	1-2
2. OK, HAZ 5 Mineral Claims and Adjoining Quinto Claims	2-3
3. Topography and Mineral Claims	2-3
4. Regional Geology	4-5
5. Local Geology & Geophysical Anomalies	4-5
6. OK-HAZ 5 Deafies Creek Grid & Adjacent Area Geology. Stripping & Drill Hole Sites	Map Holder
7. OK-HAZ 5 Deafies Creek Grid Line 0+00 Profiles Geology, VLF-EM Geophysics, Soil Geochemistry	Map Holder
8. OK-HAZ 5 Deafies Creek Grid VLF-EM Geophysics Raw Data In Phase & Quadrature Components Seattle Tx.	Map Holder
9. OK-HAZ 5 Deafies Creek Grid VLF-EM Geophysics Contoured Data Fraser-Filtered In Phase Component Seattle Tx.	Map Holder
10. OK-HAZ 5 Deafies Creek Grid VLF-EM Geophysics Raw Data In Phase & Quadrature Components Annapolis Tx.	Map Holder
11. OK-HAZ 5 Deafies Creek Grid VLF-EM Geophysics Contoured Data Fraser-Filtered In Phase Component Annapolis Tx.	Map Holder

APPENDICES

- I. Laboratory Geochemistry Report. Rock Samples
- II. VLF-EM Raw & Fraser-Filtered Data
- III. Geochemical Sampling Cards
- IV. Laboratory Geochemistry Report. Soil Samples

1.0 INTRODUCTION

The Deafies Creek area of the OK and HAZ 5 claims was selected for geological and prospecting since shallow precious and base metal mineralization has previously been discovered by stripping and surface rock sampling. Furthermore, a broad east-west AEM conductive zone has been detected on the adjacent Quinto property to the east and it is reasonable to assume that the conductor extends west onto the Zicton property. At the nearby Quinto Mine, such conductors are associated with east-west shears and precious and base metal mineralization. It is hoped that the 1992 geological mapping, VLF-EM geophysics and soil geochemistry can aid in locating sites for future trenching and drilling programs.

2.0 LOCATION AND ACCESS

The town of Lumby is located in the northern Okanagan region of South-Central British Columbia about 25 kilometres east of Vernon. The OK and HAZ 5 claims form a two-claim contiguous block of claims located 8.5 kilometres north of Lumby in the headwaters area of Deafies Creek. These two contiguous claims are located within Vernon Mining Division and, along with the BS-3 and HOL 1-4 claims east of Lumby, comprise the seven current claims of Zicton Gold Limited. Refer to Map 1.

The claims are accessed by two paved all-weather roads, one between Lumby and Shuswap Falls, and the other through Trinity Valley. Closer to the property, access is by all-weather gravel roads, including the Deafies Creek Road and a network of old and recent logging roads. Access and drainage patterns have recently been affected by current logging activities and, in June 1992, the roads were frequented by a fleet of three logging trucks (it wasn't possible to borrow a truck radio from the logging company to monitor the position of logging trucks). The property lies roughly between Kilometre 2 and Kilometre 5 on the east-west Deafies Creek Road and enjoys reasonable access by automobile. Improved access (through "washouts", etc.) can be afforded by truck, preferably with four-wheel drive vehicle. Future expansions of roads and human activity southeast of the claims and south of Deafies Creek may improve access to the claims.

3.0 PROPERTY

Zicton Gold Limited owns and operates the Lumby Property's northwest and southeast claim blocks, shown in Map 2. The northwest claim block, for which this assessment report is written, is comprised of the following contiguous claims, all of which are in good standing:



Map No. 1		
ZICTON GOLD LIMITED		
LOCATION MAP		
ALLEN GEOLOGICAL ENGINEERING LTD.		
per <i>Douglas R. Halliwell</i>		
Douglas R. Halliwell, P. Geo.		
Drawn by A.R.A.	Date 31/7/92	Scale 1" = 136 Mi.

Claim	Record(Tenure)Nos.	No. of Units	Due Date
OK	2016(259255)	20 (5Nx4W)	Sep. 20/92
HAZ 5	1845(259221)	10 (5Sx2W)	July 11/92

Total		30 units	

4.0 PHYSIOGRAPHY

The village of Lumby is located 8.5 kilometres to the south in White Valley, at the southwest base of Saddle Mountain at an elevation of 500 metres above sea level. Saddle Mountain peaks at 945 metres elevation three kilometres northeast of Lumby.

The OK and HAZ 5 claim area is drained by the east to southeast flowing Deafies Creek. The topography includes a rounded 1158 metre summit located in the central eastern area of the OK claim and a 1219 metre ridge on the northwest corner of the claim. Deafies Creek flows east across the southern area of the OK and HAZ 5 claims at elevations between 1067 metres (in the southwest) and 762 metres (in the southeast). Refer to Map 3.

The two claims exclude any cultivated land and, prior to logging activities, were completely covered in mixed forest, mostly coniferous forest. There is a network of roads, buildings and human activity to the southeast of the claims south of Deafies Creek.

5.0 PREVIOUS WORK

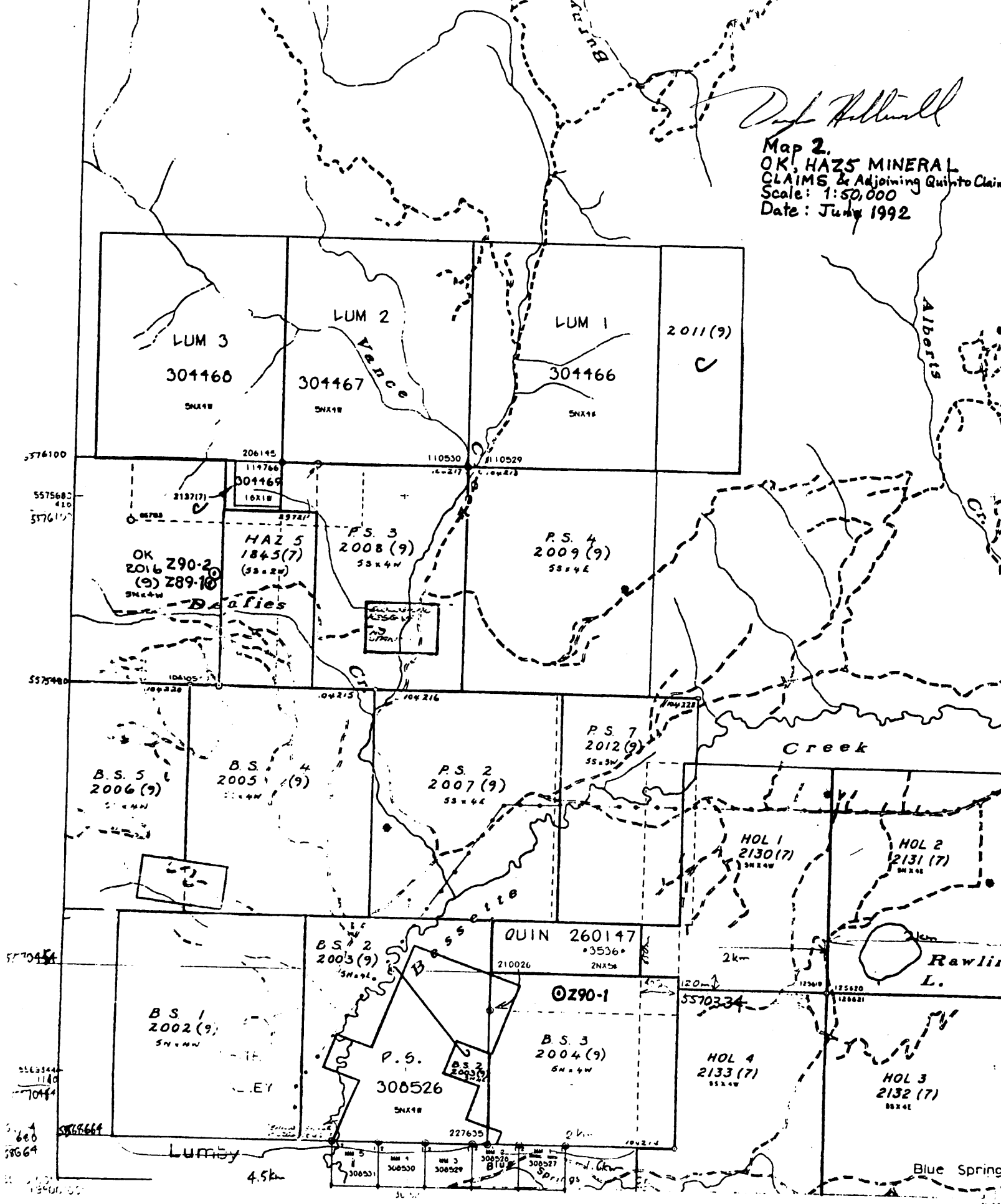
5.1 Lumby Area

Gold and silver mineralized veins were first discovered on Saddle Mountain in the early 1900's by a Lumby school teacher (i.e. Teachers Zone). From 1960 to 1970, good grade silver, lead, zinc and copper ore was mined by open pit and shipped to the Trail Smelter. In 1971, F.K. Explorations Ltd. sold their 50 ton per day mill to Alberta Gypsum and conducted an exploration project designed to outline ore reserves.

Between 1974 and 1979, a 50 to 150 ton per day mill was built and operated by Coast Interior Ventures (N.P.L.). The Chaput logging family of Lumby operated the mill between 1979 and 1981. Production from 1975 to 1981 was estimated at between 30,000 and 40,000 tons. Concentrate was treated by Cominco at Trail. In 1980, the mill was increased to a capacity of 150 tons per day.

Prof. Kettwell

Map 2.
OK, HAZ5 MINERAL
CLAIMS & Adjoining Quinto Claim
Scale: 1:50,000
Date: July 1992



576100
5575680
5376100
5575480
5770454
5563444
1140
70464
57664
58664
13901.00

LUM 3
304468
SNX48

LUM 2
304467
SNX48

LUM 1
304466
SNX46

206145
114766
110530
110529

OK 2016
(9) 289-10
SNX48

HAZ 5
1845(7)
(55x20)

P.S. 3
2008(9)
55x4W

P.S. 4
2009(9)
55x4E

2137(7)
10X18
23741

206145
114766
110530
110529

B.S. 5
2006(9)
SNX48

B.S. 4
2005(9)
SNX48

P.S. 2
2007(9)
55x4E

P.S. 7
2012(9)
55x3W

104215
104216
104217

B.S. 1
2002(9)
SNX48

B.S. 2
2003(9)
SNX48

QUIN 260147
3536
2X45

210026

290-1

B.S. 3
2004(9)
SNX48

P.S.
308526
SNX48

B.S. 2
2003(9)
SNX48

HOL 1
2130(7)
SNX48

HOL 2
2131(7)
SNX48

HOL 4
2133(7)
SNX48

HOL 3
2132(7)
SNX48

227635

Lumby
4.5km

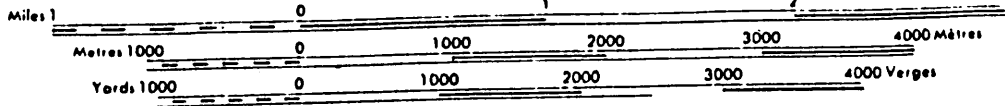
2km

Rawlin L.

Blue Spring

308501
308500
308529
308520
308527
308528

Bull Run

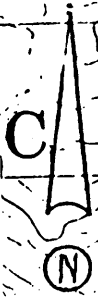


No. 3

ZICTON GOLD LIMITED
TOPOGRAPHY AND
MINERAL CLAIMS

ALLEN GEOLOGICAL ENGINEERING LTD.
per *Douglas R. Halliwell*
Douglas R. Halliwell, P. Geo.

Drawn by A.R.A.	Date 31/7/92	Scale 1:50,000
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Regional geochemical surveys carried out by the British Columbia Geological Survey and the Geological Survey of Canada in the late 1970's and 1980's reveal that stream sediments in the Vance Creek area yield regionally anomalous base and precious metal values, notably for Cu and Au. Three tightly clustered stream sediments from the Vance Creek area receive a rating of 3 to 6 on the 1:600,000 scale Cu-Pb-Zn-Ag Base Metal Anomaly Map. Two of these stream sediments also receive a 3 to 6 rating on the 1:600,000 scale Au-Sb-As-Ag Precious Metal Anomaly Map.

The property was acquired by Quinto Mining Corporation in 1983. Quinto has since staked additional mineral claims, conducted surface exploration, and carried out underground exploration and development over an enlarged area. The objective is to renew precious metals production in addition to commence mining of the industrial mineral, graphite. The mine vein system was discovered to contain excellent silver, lead, zinc and copper mineralization.

Airborne magnetic and electromagnetic surveys on the Quinto property were extended over the northwest corner of the BS-3 claim in Zicton Gold's southeast claim block, where anomalous zones were detected. The HOL 1-4 claims were staked in 1976 and were conveyed to Zicton Gold on August 6, 1987. The BS-3 claim was acquired in 1987 by Zicton Gold, in that year, receiving the following work: grid construction, geology, magnetic surveying and VLF-EM surveying.

5.2 OK, HAZ 5 Claims

Zicton Gold Limited claims include the BS-3, HOL 1-4; located on the east boundary; and the OK, HAZ 5; located four kilometres to the northwest of the Quinto property.

The HAZ 5 claim was staked by Sid Johnson on June 28-July 2, 1984 and recorded in Vernon on July 11, 1984. It was conveyed to Zedco Petroleum Ltd. on July 11, 1984.

The OK claim was staked by John Hilton on September 14-16, 1985 and recorded in Vernon September 20, 1985. It was conveyed to Zedco Petroleum Ltd. on September 21, 1987.

The OK and HAZ 5 claims have since been conveyed to Zicton Gold Limited.

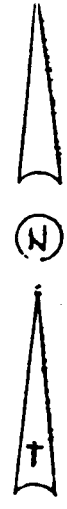
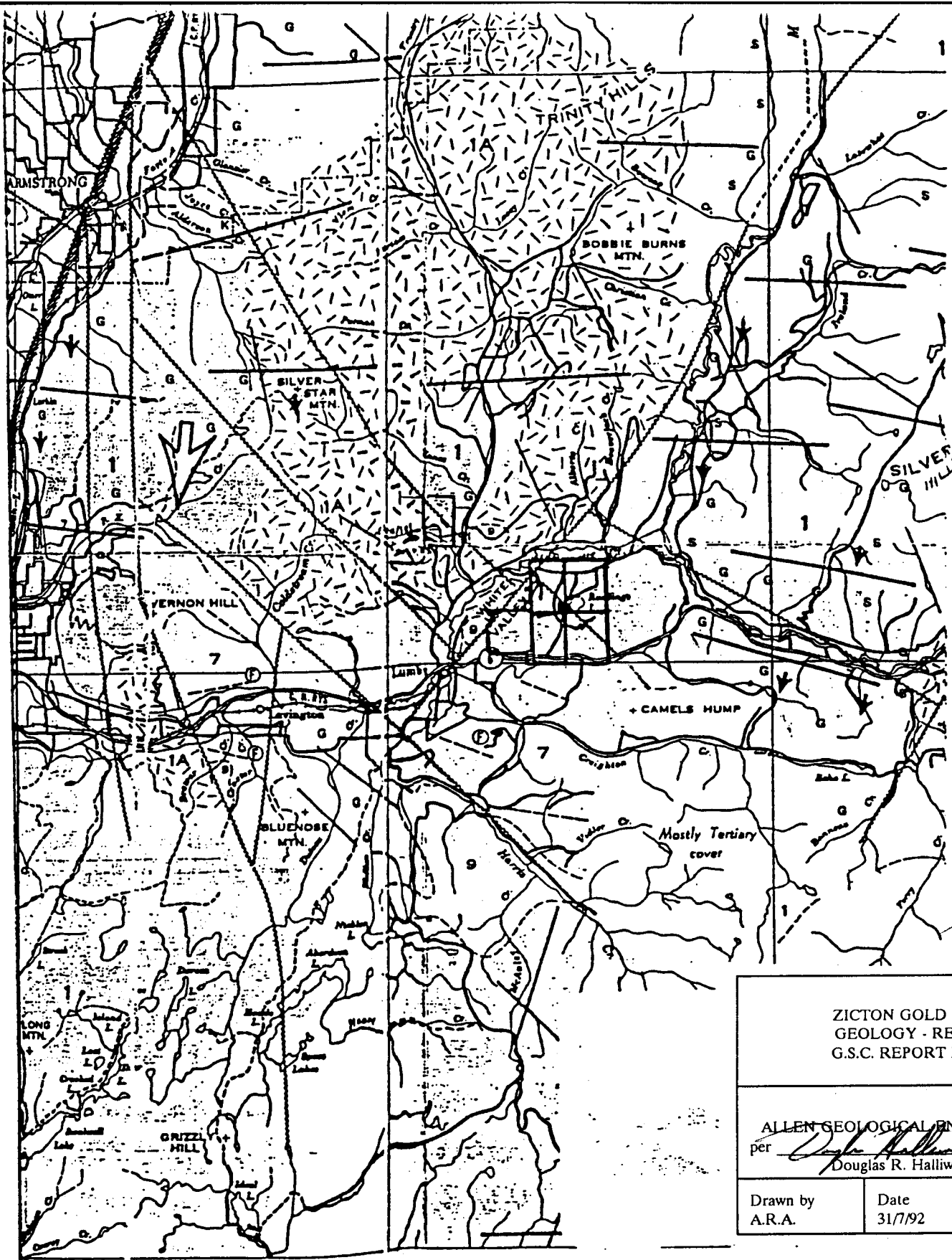
Previous claim owners had conducted exploratory work adjacent to the east boundary of the OK claim. A shear zone was investigated by stripping and an outcrop of vein quartz measuring three metres by one metre was sampled. The shear zone includes iron oxidized gouge and can be traced along strike for 20 to 25 metres. In 1989, trenching exposed a mineralized zone and Diamond Drill Hole Z89-1 drill-intersected quartz veinlets with pyrite and associated

disseminated sulphides within black argillites and (to a lesser extent) grey tuffs. In 1990, Diamond Drill Hole Z90-2 was collared just five metres higher in elevation, just downhill from the trench, and 49 metres from Hole Z89-1 at a bearing of N75°E from it. The angle hole (i.e. -65°) had a bearing of N5°E and a hole length of 61.6 metres. Hole Z90-2 intersected only traces of precious metal mineralization and traces of sulphides (pyrite, pyrrhotite, chalcopyrite) within quartz stringers and (black and grey) argillite. NQ core recovery was estimated at 90% overall.

Exploration during the 1991 field season consisted of geological mapping and prospecting throughout the claims, especially in the vicinity of the drilling and stripping. The metasediments (e.g. argillite) strike east-southeast and have shallow northeast and southwest dips, depending upon the location relative to the east-northeast trending and plunging synclinal (synclinal?) axis which traverses the claim block. Graphitic, siliceous, calcareous argillite was observed along the north-central OK claim boundary adjacent to the present-day LUM 3 claim. The lower shallow "trench" (actually, more of a stripping) in the east-central OK claim trends 075°-255° over a distance of 25 to 30 metres, subparallelising a wavy, undulating, 040° striking, subvertically-dipping contact between argillite and granodiorite marked by shearing and quartz veining. Here, the quartz veins are gossanous, weakly calcareous, and bear trace, fracture-related pyrite and chalcopyrite; these contain up to 89 ppm Cu, 12 ppm Pb and 102 ppm Zn. The wallrock argillite is gossanous, calcareous, sheared, occasionally brecciated and weakly magnetic (presence of pyrrhotite). It contains fracture-related sulphides (<2-3% pyrite, <1-2% chalcopyrite, <1% pyrrhotite, trace bornite, trace covellite, trace malachite and possible trace native copper); this argillite returns values of up to 35 ppb Au, 853 ppm Cu, 30 ppm Pb, 164 ppm Zn and >15% Fe.

6.0 THEORY

Extensive field programs on the Quinto property to the southeast have determined that some of the sizeable, shallow precious metal deposits are located within large sheared (+/- graphitic) zones. Mineralization appears to be more likely to be detected by VLF-electromagnetic surveys than magnetic ones. The possible spatial correlation of positive geological and VLF-electromagnetic results in areas of shallow overburden would be useful in exposing new mineralization on surface and in designing future stripping, trenching and drilling programs. Supporting data could also be obtained by soil sampling after a small orientation soil sampling survey is carried out over areas of known mineralization to determine optimum soil sampling horizons, size of material to be



No. 4		
ZICTON GOLD LIMITED GEOLOGY - REGIONAL G.S.C. REPORT MEM. 296		
ALLEN GEOLOGICAL ENGINEERING LTD. per <i>Douglas R. Halliwell</i> Douglas R. Halliwell, P. Geo.		
Drawn by A.R.A.	Date 31/7/92	Scale 1" - 4 mi.

111 120

45

Vernon map-area, British Columbia, showing also distribution of Shuswap

Scale : One Inch to Four Miles = $\frac{1}{253,440}$

QUATERNARY
PLEISTOCENE AND RECENT **LEGEND**

CENOZOIC

21

Glacial, lacustrine, and fluvial gravel, sand, silt, and clay

TERTIARY
OLIGOCENE OR MIOCENE
KAMLOOPS GROUP

20

Basaltic lava and flow breccia; minor rhyolitic lava and breccia; local sandstone, shale, conglomerate, coal

CRETACEOUS OR TERTIARY

19

Pink to red syenite and quartz syenite; pink and white mottled granite

JURASSIC AND/OR CRETACEOUS
COAST INTRUSIONS

18

Granite, granodiorite and allied rocks

MESOZOIC

TRIASSIC
UPPER TRIASSIC
NICOLA GROUP

17

Andesite; minor basalt; some limestone and conglomerate

(?) LOWER AND/OR UPPER TRIASSIC
SLOCAN GROUP

16

Slate, quartzite, limestone; phyllite, mica schist; may be in part equivalent to 17

PALÆOZOIC

CARBONIFEROUS (?) AND PERMIAN
CACHE CREEK GROUP (13-15)

15

DIVISION C: mainly limestone; minor argillite, quartzite, and andesite lava, breccia, and tuff

14

DIVISION B: mainly andesite lava and tuff; minor argillite, quartzite and limestone

13

DIVISION A: mainly argillite

IPROTEROZOIC AND/OR PALÆOZOIC

WINDERMERE (?) OR EARLY PALÆOZOIC

12

Argillite, phyllite, schist, quartzite, limestone, conglomerate

WINDERMERE (?) OR CAMBRIAN

11

BADSHOT FORMATION: limestone and marble; minor argillite

WINDERMERE OR (?) CAMBRIAN
HAMILL SERIES

10

Quartzite, staurolite schist, argillite, phyllite; minor limestone

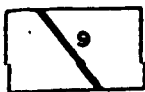
WINDERMERE OR EARLIER

9

OLD DAVE INTRUSIONS: serpentized, ultramafic dykes

PROTE

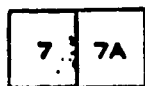
WINDERMERE OR EARLIER



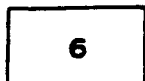
OLD DAVE INTRUSIONS: serpentized, ultramafic dykes

SHUSWAP TERRANE

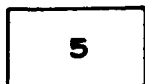
ARCHÆAN OR LATER



MOUNT IDA GROUP (1-7)
EAGLE BAY FORMATION: chlorite and sericite schist, slate, limestone, quartzite; minor conglomerate
7A. Predominantly limestone



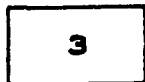
SICAMOUS FORMATION: flaggy limestone, sericite schist, graphite schist



MARA FORMATION: argillite, slate, sericite and chlorite schist, limestone



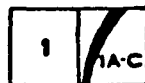
TSALKOM FORMATION: green andesite and agglomerate, chlorite schist, slate



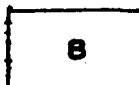
SILVER CREEK FORMATION: slate, sericite schist, garnetiferous quartz-mica schist



CHASE FORMATION: quartzite, calcareous quartzite, garnetiferous quartz-mica schist



MONASHEE GROUP
1. Granitoid gneiss, augen gneiss, mica-sillimanite-garnet schist; quartzite, marble, hornblende gneiss, slate phyllite
1A. Limestone
1B. Quartzite
1C. Hornblende gneiss



CHAPPERON GROUP
Argillite, chlorite schist, mica schist; quartzite, limestone.
May be equivalent to Mount Ida group, in part

- Bedding (inclined, vertical, horizontal).....
- Foliation (inclined, vertical, horizontal).....
- Lineation (plunging and horizontal).....

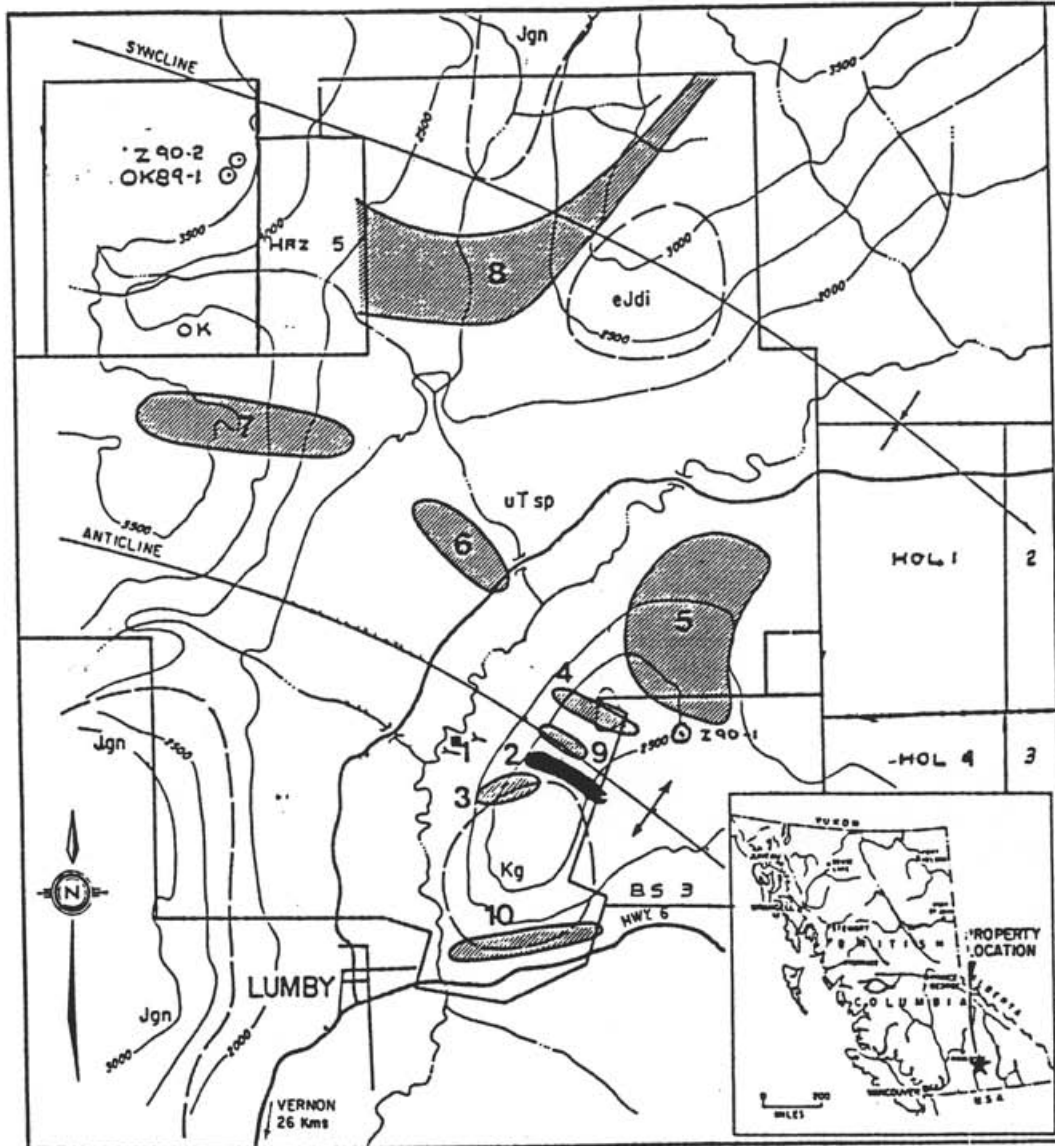
BEDDING AND FOLIATION WITH LINEATION

- | | Bedding | Foliation |
|---|---------|-----------|
| Inclined (with plunging lineation)..... | | |
| Inclined (with two plunging lineations)..... | | |
| Inclined (with horizontal lineation)..... | | |
| Vertical (with horizontal lineation)..... | | |
| Inclined (with horizontal and plunging lineations)..... | | |
| Horizontal (with one horizontal lineation)..... | | |
| Horizontal (with two horizontal lineations)..... | | |
| Inclined (lineation directly down dip)..... | | |
| Fault (approximate, assumed)..... | | |
| Anticline (upright, overturned)..... | | |
| Syncline (upright, overturned)..... | | |
| Fossil locality..... | | |
| Mining property..... | | |
| Mineral occurrence..... | | |

Geology by H.M.A. Rice, 1945, 1946, and by A.G. Jones, 1947-1951

To accompany G.S.C. Memoir 296 by A.G. Jones

Cartography by the Geological Survey of Canada, 1959



LEGEND

■ ADITS, MILL

● TARGET ZONE

- 1 MINE ZONE; Ag, Pb, Zn, Cu, Au VEINS
- 2 PLATEAU ZONE; Au VEINS, PROPOSED MINING
- 3 CONTACT ZONE; Ag-Au VEIN, Au SOIL ANOMALY
- 4 CLIFF ZONE; Au VEINS, Au SOIL, GROUND/AIRBORNE VLF/EM ANOMALY
- 5 SADDLE NORTH ZONE; AIRBORNE EM ANOMALY
- 6 COOPER'S ZONE; 10-30 m WIDE QUARTZ/SULPHIDE VEIN
- 7 DEAFIES ZONE; AIRBORNE VLF ANOMALY
- 8 VANCE ZONE; AIRBORNE EM ANOMALY
- 9 SADDLE ZONE; Au SOIL, GROUND EM ANOMALY, Au FLOAT
- 10 TEACHERS ZONE; Zn, As, Ag, Au VEINS, Au SOIL, AIRBORNE VLF ANOM

GEOLOGY

Kg	GRANODIORITE
Jgn	GRANITE, QUARTZ MONZONITE
eJdi	DIORITE
uTsp	VOLCANICS AND SEDIMENTS

No. 5

ZICTON GOLD LIMITED
GEOLOGY
GEOPHYSICAL ANOMALIES
D.D. HOLES Z90-1

ALLEN GEOLOGICAL ENGINEERING LTD.
per *Douglas R. Halliwell*
Douglas R. Halliwell, P.Geo.

Drawn by A.R.A.	Date 31/7/92	Scale 1:50,000
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KILOMETRES 0 1 2 3 4 KILOMETRES

sampled, and elemental associations.

Budgetary restrictions limited exploration work during the June 1992 program to grid construction, geological mapping, VLF-EM geophysics and soil geochemical sampling within the newly created 5.0 line-kilometre 1992 Deafies Creek Grid. The grid is located in the vicinity of the previous drilling and stripping in the east-central OK claim and west-central HAZ 5 claim near their common claim boundary. This is within a portion of the broad (i.e. one kilometre wide) east-west belt of known precious and base metal mineralization and the suspected western strike-extension of an east-west airborne VLF-electromagnetic anomalous zone (i.e. Vance Zone) which covers much of the central portion of the claim block.

7.0 GEOLOGY

The regional geology is shown in Map 4 and the accompanying geological legend. The local geology, conductive zones and mineralized zones appear in Map 5.

Outcrops are minimal. None of the land is under cultivation. Mapping by the Geological Survey of Canada has, however, provided considerable geological detail over the area and is available in G.S.C. Open File 637 (Okulitch, 1987) and G.S.C. Memoir 296 (Jones, 1959).

The stratigraphy as per Jones (1959) is summarized as follows:

Shuswap Terrane (Mt. Ida Group).

Monashee Group (Archean or Later). Granitoid and augen gneiss, mica-sillimanite-garnet schist, quartzite, marble, slate, phyllite, limestone.

Sicamous Formation (Archean or Later). Limestone, sericite schist, graphitic schist.

Eagle Bay Formation (Archean or Later). Chlorite schist, sericite schist, slate, limestone, quartzite. Minor conglomerate.

Cache Creek Group (Carboniferous? & Permian). Limestone. Minor argillite, quartzite, andesite lava, breccia and tuff.

Nicola Group (Upper Triassic). Andesite, limestone, conglomerate. Minor basalt.

Coast Intrusions (Jurassic and/or Cretaceous). Granite, granodiorite, allied rocks.

Kamloops Group (Oligocene or Miocene). Basaltic lava, breccia,

sandstone, shale, coal.

Faults in the Lumby area include four major north-striking faults, three northwest-striking ones, and one northeast one. One major anticline and one major syncline strike northwesterly across the Lumby area.

A diorite stock is partially exposed 1.6 kilometres north of Lumby. A granitic intrusive is located adjacent to the southwest corner of the BS-3 claim. Another granitic exposure occurs in the Harris Creek drainage area twelve kilometres south of Lumby. Each of the intrusives is adjacent to or penetrated by fault zones.

A mineralized shear zone in the north-central area of the OK claim strikes at 255° and is close to vertical. A large exposure of quartz is located at the east end of the shear zone. From this outcrop, the shear has been exposed by stripping and trenching for 26 metres westerly. Twenty-three to 24 metres of this shear quartz and massive sulphides have been exposed and sampled. This showing is composed of fine to coarse cubic pyrite, chalcopyrite, limonite, arsenopyrite and sphalerite. There is also a 0.3 metre zone of fragmented white quartz and pyrite, remarkably similar to those located in the Quinto Mine workings.

The most recent regional geological mapping of the Thompson-Shuswap- Okanagan area by Okulitch et al (1987) utilized surficial geological mapping by Fulton (1975), Neville (1981) and Nasmith (1962).

The Shuswap Complex Monashee Group (Jones, 1959) is no longer a geological unit in the G.S.C. Open File by Okulitch et al (1987).

The Carboniferous to Permian Thompson Assemblage has been distinguished by Monger (1975) from the Cache Creek Group (Jones, 1959) on lithologic and faunal grounds, and limestone pods of this unit (Unit CPTAc) are shown to underlie the area south of Highway 6 east of Lumby.

The Upper Triassic Slocan Assemblage rocks unconformably overlie the Thompson Assemblage rocks at Lavington (eight kilometres west of Lumby), in a fault-bounded block, to testify to a Permo-Triassic episode of uplift and deformation. The Sicamous Formation, found in the vicinity of Shuswap Lake (type locality) and shown to underlie most of the OK and HAZ 5 claims, consists of unfossiliferous graphitic and phyllitic limestone (uT_RSc), calcareous and argillaceous phyllite, sericitic schist, shale and tuff (uT_RSp); c = carbonate, p = pelite, cp = carbonate lens in pelite. Structures in this unit are developed at all scales. Bedding and subparallel foliation are ubiquitous. Fine laminar compositional layering and attenuated isoclinal folds are common. Late and latest structures present in the Sicamous Formation are,

for the most part, the same as in adjacent units. An east-southeast trending synclinal axis traverses the northeast corner of the OK and HAZ 5 claims, subparalleling the Silver Star Anticlinal Axis to the north in the vicinity of Vance Creek. Most of the pelitic and other sediments in the OK and HAZ 5 claims lie on the southwest limb of the syncline or synclinorium. The Silver Star Anticline trends east-southeast, plunging gently in that direction (Okulitch et al, 1987).

Early Jurassic diorite and Jurassic granite is exposed two kilometres east of the HAZ 5 claim, but no intrusives are shown within the OK and HAZ 5 claims (Okulitch et al, 1987).

No Tertiary Kamloops Group volcanic caprocks are known to occur within the OK and HAZ 5 claims (Okulitch et al, 1987).

No mineral occurrences are known to occur within the OK and HAZ 5 claims, but anomalously high Ag and Cu stream sediment values are shown in the Vance Creek and Deafies Creek areas (Okulitch et al, 1987).

8.0 OBJECTIVES & METHODOLOGY

8.1 Geology

The objective of the geological surveying of the Deafies Creek Grid and adjacent areas is to locate additional outcrops and possible mineralization within this high priority area along strike of known Deafies Creek mineralization in the vicinity of the two drill holes and the trenched/ stripped area along strike of the Quinto Vance airborne electromagnetic anomaly. Any mineralization encountered in areas of shallow overburden, with or without spatially-coincident VLF-EM conductors and/or soil geochemistry anomalies, would warrant future stripping, trenching and diamond drilling programs. Analyses of mineralized and, to a lesser extent, barren rock samples for precious and base metals is warranted; much care being used to perform the gold analyses after suitable sample preparation on a large enough representative sample.

Composite sampling of outcrops on the Deafies Creek Grid and adjacent areas was carried out and the outcrops, subcrops or (rarely) float were sampled. Two or three fist-sized rocks weighing less than 10 pounds comprised samples that were collected. Lithology, colour, texture, structure, structural attitudes, mineralogy, alteration and mineralization were noted.

A total of 5.0 line-kilometres of grid geology at a scale of 1:2500 was carried out along the north-south crosslines and the east-west Base Line of the newly-created 1992 Deafies Creek Grid. Additional

1:20,000 scale geological mapping was carried out elsewhere on the OK and HAZ 5 claims.

Samples were sent to Chemex Labs in North Vancouver for sample preparation and precious and base metal analyses. The sample preparation method involved crushing the sample to better than 60% -10 mesh followed by sample splitting and carbon steel plate pulverization of a 400 gram sample to better than 90% -150 mesh. Use of a large 400 gram sample weight allowed for nugget or free gold effects and was essentially the same as the 1991 sample preparation. The analyses for gold was performed with a 10 gram sample, nitric acid- aqua regia digestion, fire assay with an atomic absorption finish and a lower detection limit of 5 ppb Au (all, as in 1991). Analyses for cobalt, copper, iron, lead, manganese, molybdenum, nickel, silver and zinc were performed (as in 1991) by induced coupling plasma (ICP) - Chemex' package "ICP-9" - following aqua regia digestion. Results were expressed in ppb, ppm and % (Fe only). The shipment of rocks was hand-delivered to Chemex on June 30, 1992. Instructions were given at that time to discard coarse rejects after 30 days and pulps after 90 days.

Outcrop, subcrop and float locations; sample numbers; structural attitudes and geochemical results were plotted on a 1:2500 scale geology map (Map 6) and on the Line 0+00 geological-geophysical-geochemical 1:2500 scale profile (Map 7).

8.2 VLF-EM Geophysics

The objective of the VLF-electromagnetic surveying is to follow east-west shear zones associated with precious and base metal mineralization from the (Quinto airborne electromagnetic) Vance Zone west onto the OK and HAZ 5 claims. The narrow Au-Ag-base metal exploration target demands a tight 60 metre (line-spacing) by 15 metre (station-spacing) grid. The possibilities of variations in strike directions of major east-west conductors and of cross-structures demand the use of both Seattle and Annapolis remote transmitters.

A total of 3.0 line-kilometres of two-station EM-16 surveying was carried out in June 1992 on the newly-created Deafies Creek Grid in the OK and HAZ 5 claims along north-south crosslines spaced 60 metres apart and at a station-spacing of 15 metres. The remote fixed transmitters at Seattle, Washington and Annapolis, Maryland were both used. These survey parameters are identical to those employed at the Saddle Mountain and Rawlings Lake Grids in 1987, 1991 and 1992. The coverage involves the central five of the seven 600 metre long lines, Lines 0+60W through 2+40E (inclusive) between 3+00N and 3+00S.

A very experienced geophysical operator, Mr. Ted Larose, carried out the VLF-EM surveying. Mr. Larose had previously carried out

and/or supervised the 1987 geophysical surveying of the Saddle Mountain Grid on the BS-3 claim.

The instrument was rented from the manufacturer/ distributor, Geonics Limited of Mississauga, Ontario. With the exception of the scheduled maintenance on Tuesdays (Annapolis) and Thursdays (Seattle), the signals from the remote fixed transmitters proved to be very strong and reliable throughout duration of the survey. Since Seattle is cardinal southwest from the grid, its signal couples well with both north-south and east-west conductors. It is sensitive to conductors oriented in the northeast and southwest quadrants (i.e. crossfaults) as well as the predominant mineralization-related (?) conductive shear zones oriented in the northwest and southeast quadrants. Since portions of the major conductors trend east-southeast/ west-northwest, better coupling can sometimes be afforded by use of the Annapolis remote fixed transmitter located at 110° azimuth to the grid.

The raw in phase and quadrature data was plotted on 1:2500 scale maps for both Seattle (Map 8) and Annapolis (Map 10). Line 0+00 passing through Diamond Drill Hole Z90-2 and the lower trench (stripping) had its VLF-EM raw data collated with geology and soil geochemical results; these appear on Map 7 of this report.

The in phase data was Fraser-filtered following data entry, using Lotus 1-2-3 software and simple mathematical formulae (as was done in 1991). The Fraser-filtered in phase data was contoured at +20 intervals (the auxiliary +10 contour was also used). The 1:2500 scale Fraser-filtered in phase component data maps for Seattle and Annapolis also accompany this report (Maps 9 and 11, respectively). Conductor axes were superposed on Maps 8 through 11, inclusive.

This survey represents the first-ever ground electromagnetic geophysical survey carried out on the OK and HAZ 5 claims.

8.3 Soil Geochemistry

In June 1992, 21 routine horizon B soil samples were collected along Line 0+00 at 15 metre intervals between 1+50N and 1+50S on the Deafies Creek Grid on the OK claim side of the OK- HAZ 5 claim boundary. One field duplicate was also collected at 1+50S to test precision, for a total of 22 routine and quality control samples.

Existing 1:250,000 and other scale surficial geology maps reveal that the sampling area contains mineral soil, basal till, drift and bedrock. It does not contain far-travelled alluvial and glaciofluvial deposits.

Orientation soil survey parameters had to be modified in the field.

Horizon A soils were not available in the 1992 survey area and this orientation survey was limited to horizon B soils only. Due to severe budget limitations, it was not possible to examine the effects of different size fractions (the standard -80 mesh fraction material was used for all samples). The exploration target and model (Chaput/Quinto Deposit) involves complex elemental associations (Au-Ag-Cu-Pb-Zn-Mo-Fe) and it is not well known which elements will be the best exploration pathfinder elements. Owing to the different mobilities of these elements, it is likely that a combination of two or more elements will prove to be the most useful. Thanks to the relative low cost of current ICP multi-element analyses, this multi-element survey parameter was not compromised.

Mineral-rich horizon B soils with relatively few exotic, far-travelled pebbles and cobbles were readily and ubiquitously available at depths of less than 60 centimetres, permitting manual sampling by spaded shovel.

Sampling was carried out on the tight 15 metre station-spacing to permit detection of narrow alteration haloes known to accompany small gold-silver vein deposits by more than one sample site. The wider 25 to 50 metre sample station-spacing used by Quinto and other companies frequently yields enigmatic single-point anomalies which are difficult to interpret and use as supporting evidence to geology and geophysics for the purpose of follow-up trenching and drilling.

Sample and sample site descriptions were made on geochemical sampling cards designed by the author and the data was entered into a Microsoft Works database as per the cards. Sample number, sample location, sample date, sample status (routine versus quality control), overburden thickness, physiography, forest cover, drainage, slope, soil horizon, sample depth, sample colour and stain, sample composition, contamination and comments comprise the field component of the database. Geochemical results from Chemex Labs comprise the lab component of the database. Both components are in a common database file and can be cross-referenced and queried.

Abnormally dry 1992 Okanagan weather conditions resulted in almost completely dry soil samples and it was not necessary to dry sample in the field. Following overnight drying at Chemex Labs in North Vancouver, the soil samples were sieved to -80 mesh and 10 gram samples were analyzed for Au by fire assay with an atomic absorption finish (lower detection limit of 5 ppb Au). Following aqua regia digestion, soil samples were analyzed for Al, Sb, As, Ba, Be, Bi, Cd, Ca, Cr, Co, Cu, Ga, Fe, La, Pb, Mg, Mn, Hg, Mo, Ni, P, K, Sc, Ag, Na, Sr, Tl, Ti, W, U, V and Zn by ICP analyses (Chemex' "ICP-32 package"). The shipment of soils was hand-delivered on June 30, 1992. Instructions were given at that time to discard coarse rejects after 30 days and pulps after 90 days.

Sample sites and geochemical results are plotted on Map 7, along with geological and geophysical data from Line 0+00 on the Deafies Creek Grid.

9.0 RESULTS

9.1 Geology

Geological mapping of the newly created Deafies Creek Grid and adjacent areas within the OK and HAZ 5 claims was carried out in the vicinity of the existing two trenches and two drill holes, as well as along strike of this known mineralization within the western strike extension of Quinto Mining's Vance (VLF-Electromagnetic Anomaly) Zone. A total of five rock samples were collected and sent to Chemex Labs in North Vancouver for sample preparation and analyses for base and precious metals. Results appear in Map 6.

The OK and HAZ 5 claims are underlain by Upper Triassic Slocan Group, Sicamous Formation (meta)pelite or "argillite" (uT_rSp); prior to Okulitch et al (1987), these rocks were assigned to the Cache Creek Group argillite. Andesite flows and tuff are known to occur, principally in the HAZ 5 claim. These are intruded by granitic to granodioritic rocks, notably in the OK claim in the west and in the north half of the Deafies Creek Grid. These are cut by east-west trending quartz veins and shear zones, best exposed in the strippings in the east-central OK claim near Drill Holes Z89-1 and Z90-2 almost due north of Kilometre 3 on the Deafies Creek Road. The stripping just north of Drill Hole Z90-2, with base and precious metal mineralization in an east-west quartz vein subparallelising the sheared argillite-granodiorite contact, is the origin (Base Line 0+00) of the Deafies Creek Grid. Cross-cutting relationships between the volcano-sedimentary sequence and the later acid intrusives can be seen along and near the power line in the western OK claim, near and "under" gravel roads.

Sicamous Formation metapelite (argillite) outcrops along the Deafies Creek Road between the power line and Kilometre 3, and south along the power line road. The argillite is black with ochre staining along limonitized fractures. It is fine-grained to very fine-grained and aphanitic in texture. The unit exhibits strong pervasive carbonatization; limonitization, hematization and bleaching (sericitization?, kaolinitization?). The limonite may be after primary pyrite. No mineralization is visible, generally, but Samples A-92-5 and A-92-6 contain 10 to 35 ppb Au, 1.5 ppm Ag, 42 to 97 ppm Cu, 3.28% to 3.71% Fe, 2 to 13 ppm Mo, 10 to 12 ppm Pb, and 96 to 311 ppm Zn. All values are somewhat elevated. Refer to Map 6.

The argillite is typically laminated (striking 286° to 317°, dipping 25° northeast to 25° southwest). The northeast dips come from the south limb of the east-west trending syncline whose axis is south of and subparallel to the Silver Star Anticline. The southwest dips are likely from the south limb of the next anticline to the south. The wavy, undulating, subvertically-dipping contact between argillite and granodiorite near Base Line 0+00 averages 040o and is subparallel to the orientation of the quartz veins and shear zone.

Granodiorite of unknown age, not shown on maps of Okulitch et al (1987), is exposed in the northern and eastern portions of the Deafies Creek Grid (Line 0+60W between 2+25N and 2+55N, Line 2+40E at 1+05S). This intrusive has 10% dark minerals (mostly biotite), is medium- to coarse-grained, has a phaneritic texture and is massive in structure. It is weakly to moderately calcareous and, with the exception of hematization and limonitization along fractures, is fairly fresh. The unit is barren of mineralization. Three samples collected from this unit (Samples D-92-16, -17; A-92-7) contain less than 5 ppb Au, up to 0.5 ppm Ag, up to 101 ppm Cu, up to 6.13% Fe, up to 5 ppm Mo, up to 10 ppm Pb and up to 92 ppm Zn. Sample D-92-17 on Line 0+60W at 2+55N is more altered (kaolinitization, hematization), non-calcareous, finer-grained (andesitic subvolcanic?), lower in dark mineral content (5% only) and contains the maximum silver, copper, iron, lead and zinc values of the three samples. Refer again to Map 6.

The spatial correlation between the granodiorite-argillite contact in the vicinity of Base Line 0+00, VLF-EM conductors and iron-potassium soil geochemistry anomalies is dealt with in Section 10 (Discussion). Refer to Map 7.

9.2 VLF-EM Geophysics

VLF-EM profiling of Line 0+00 on the Deafies Creek Grid (Map 7) shows that, if the Annapolis station datum line were shifted (translated) from 0 to +20%, there would be several cross-overs of the in-phase component (several Fraser-filter contour anomalies do exist). Fraser-filter anomalies "peak" at 1+73S (+18), 1+28S (+20), 0+53S (+38), 0+82N (+20) and 1+42N (+33). The Seattle station data yields similar results with Fraser-filter anomaly "peaks" at 2+33S (+5), 0+68S (+36), 1+72N (+35) and 2+17N (+48). A subtle conductor at Base Line 0+00 is noticeable on both Annapolis and Seattle transmitters and may be the VLF-EM response to the shear zone and quartz vein exposed in the stripping.

The 3.0 line-kilometre survey (Maps 8-11) of the central five lines of the seven crossline Deafies Creek Grid (e.g. Lines 0+60W, 0+00, 0+60E, 1+20E and 1+80E) successfully detects four east-west trending conductors, Conductors A through D. These are tabled

below:

Conductor	N-S Loc.	E-W Loc.	Magnitude	Type	Zone
A*	0+10S - 1+25S	0+90W - 2+10E	< +67	Shear- Sulphide	Vance Ck.
B	1+00N - 0+50S	0+30W - 2+10E	< +48	Shear	Vance Ck.
C*	2+00N - 1+20N	0+90W - 2+10E	< +38	Sulphide	Vance Ck.
D	2+75N - 2+00N	0+30E - 2+10E	< +50	Shear	Vance Ck.

• Conductors are "open" to the west and east. Minimum 300 metre strike length.

The magnitudes of east-west trending Deafies Creek conductors are moderately strong and include both shear zone and sulphide type conductors. From the symmetry and "half-widths" of VLF-EM profiles and Fraser-filter contours, the conductors are subvertical and have depths of 30 metres or less. Overburden is very thin and conductors are likely significant shear zone and sulphide bedrock conductors.

The conductors shift location slightly depending on the coupling and the remote fixed transmitter station. The conductors may bifurcate at some locations, and the conductors give the impression of being a network or stockwork of generally east-west oriented conductors.

Conductors A and C are "open" to both the east and west, at present. Extensions of the Deafies Creek Grid in both directions are required to determine their strike length (and possible, tonnage potential).

Conductor A, the best conductor, lies south of Diamond Drill Hole Z90-2. The hole was drilled on a northerly bearing (it actually had a final bearing of N5°E) to test the down-dip extension of the surface mineralization in the stripping near Base Line 0+00. This mineralization may be peripheral to a larger zone of mineralization located to the south. Using the collar of Hole Z90-2, another hole drilled with a southerly bearing might intersect mineralization narrowly missed by this drill hole.

The database suggests that Seattle transmitter yields **stronger** conductors while Annapolis transmitter yields **more** conductors. The

transmitters couple differently with conductors depending upon their orientation. The extra time and cost of using both transmitters appear to be well invested.

9.3 Soil Geochemistry

Twenty-one routine and one quality control samples collected at 15 metre intervals along Line 0+00 on the Deafies Creek Grid yield an eight station (120 metre wide) iron-potassium-copper-zinc anomaly between 0+60N and 0+45S (Samples 921007 through 921014, inclusive). Gold and silver values are at or below the lower detection limits of 5 ppb Au and 0.2 ppm Ag throughout the survey. Lead, arsenic and molybdenum values remain subdued even within the iron-potassium-copper-zinc anomaly to levels of 10 ppm Pb, 36 ppm As and 4 ppm Mo.

Querying the database, it is observed that copper values in excess of 150 ppm are observed on Line 0+00 between 0+60N and 0+60S in soils overlying both granodiorite and argillite. This thin veneer of brown B horizon soils sampled at depths between 20 and 30 centimetres is comprised of 20% to 30% coarse material, 60% to 80% fines and 0% to 10% organics. These contain less than 5 ppb Au, up to 0.2 ppm Ag, up to 36 ppm As, 162 to 172 ppm Cu, 5.35% to 5.44% Fe, 0.40% to 0.46% K, 1 to 3 ppm Mo, 4 to 6 ppm Pb and 156 to 170 ppm Zn.

Zinc values in excess of 200 ppm are observed on Line 0+00 between 1+50N and 0+60S in soils overlying both granodiorite and argillite. This thin veneer of brown B horizon soils sampled at depths between 20 and 30 centimetres is comprised of 20% to 30% coarse material, 60% to 70% fines and 10% organics. These contain less than 5 ppb Au, up to 0.2 ppm Ag, 10 to 32 ppm As, 46 to 118 ppm Cu, 3.02% to 4.67% Fe, 0.20% to 0.40% K, 1 to 4 ppm Mo, 4 to 10 ppm Pb and 218 to 318 ppm Zn.

No control reference sample exists to test accuracy in this small 22 sample survey. Samples 921020 and 921021 are field duplicates taken on Line 0+00 at 1+50N to test precision. Twenty-nine of 31 elements are in fairly good agreement; differences do exist for phosphorus (1190 ppm, 1300 ppm) and lead (10 ppm, 4 ppm), raising some concern about the precision of these induced coupling plasma lead analyses.

10.0 DISCUSSION

Previous geological mapping surveys have confirmed the existence of base and precious metal quartz vein- and shear- related mineralization with an east-west trend. Mineralization is related to gossans, carbonate-veinlets, silicification and fracture-related

pyrite, pyrrhotite, chalcopyrite and other sulphides within quartz veins and sheared (+/- graphitic) argillite.

Previous stripping, trenching and diamond drilling was not guided by systematic grid surveys. The discovery was largely the result of good luck. The 1992 geological, geophysical and geochemical grid surveys on the newly-created Deafies Creek Grid have improved understanding of the exploration potential of the Deafies Creek area, and guide future trenching and diamond drilling.

The geological surveying on the Grid proved to be disappointing; few outcrops and no new mineralization could be detected. Argillite outcrops sampled further west along the Deafies Creek and power line roads yield moderately elevated base and precious values.

Four moderately strong east-west trending VLF-EM geophysical conductors are present in the area of the sheared contact between argillite and granodiorite. Conductors are subvertically-dipping and relatively shallow bedrock shear and sulphide type conductors. Conductor A, the best VLF-EM conductor on the grid is south of the stripping near Base Line 0+00 and Diamond Drill Hole Z90-2. The mineralized quartz vein exposed in the stripping near Base Line 0+00 was the target for the 1990 drill hole. It appears that the hole maybe should have been drilled on a southerly bearing rather than a northerly one and that the exposed mineralized quartz vein may be peripheral to a larger zone of mineralization to the south that was missed by the drill. Refer to Maps 8 and 9 (Seattle transmitter, raw and Fraser-filtered data), and Maps 10 and 11 (Annapolis transmitter, raw and Fraser-filtered data).

Map 7 reveals that an iron-potassium-copper-zinc soil geochemical anomaly exists on Line 0+00 between 0+60N and 0+60S (in the vicinity of the sheared argillite-granodiorite contact), while gold, silver, lead, arsenic and molybdenum values remain subdued. The anomaly is an eight-point (120 metre wide) anomaly, and could have been detected as a multi-point anomaly at a 25 metre (or even 50 metre) station-spacing. The orientation soil geochemical survey reveals that A horizon soils are not an available sample media, but mineral-rich B horizon soils are readily sampled by manual (shovel) techniques. The most valuable elements are gold, silver (both negative information, in this case), copper, lead, zinc, arsenic, molybdenum, iron and potassium. Potassium values are sensitive to proximity to gold mineralization (Kerrich, 1989). A 25 metre sampling interval along crosslines is a compromise between 50 metres (too "loose" sampling interval used by Quinto) and 15 metres (too "tight" sampling interval used in the 1992 Zicton orientation soil sampling surveys); it is probably the most cost-effective sampling interval for this area.

11.0 RECOMMENDATIONS

The author recommends western and eastern extensions of the Deafies Creek Grid with the same east-west baseline passing through the previous trenched area, a 60 metre line-spacing and a 15 metre station-spacing. VLF-EM Conductors A and C are both "open" both to the west and east, and require delineation. The 15 metre station-spacing is necessary for outcrop and conductor location control. The necessary western and eastern extensions should occur in stages and should "tie off" all sheared (+/- mineralized) contacts, moderate to strong VLF-EM conductors and B horizon soil anomalies.

Geological mapping (at a scale of 1:2500), magnetometer surveying (to aid in mapping the volcano-sedimentary and intrusive magnetic lithofacies and, possibly, detect magnetite destruction to limonite within shear zones), VLF-electromagnetic surveying (to detect shear zones and sulphide mineralization), and soil sampling are recommended.

A 25 metre soil sample station-spacing appears adequate to detect multi-point, multi-element anomalies, and more cost-effective than the "tighter" 15 metre spacing. This should be carried out in selected areas with sheared geologic contacts and/or VLF-EM conductors.

Stripping, trenching and (eventual) diamond drilling would follow favourable results on the Grid. Stripping and trenching to enlargen existing trenches would be warranted as early as the next field season.

Submitted by:

ALLEN GEOLOGICAL ENGINEERING LTD.

Per 
Douglas R. Halliwell, M.Sc.A., P.Geo.


Alfred R. Allen, M.A.Sc., P.Eng.

July 31, 1992.

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COST STATEMENT

ZICTON GOLD LIMITED

June 1992

OK & HAZ 5 Claims

ALLOCATION OF ALLOWABLE EXPENDITURES TO DK CLAIM.

D.R. Halliwell
June 29/92

BIOLOGY/PROSPECTING	A.R.Allen	0.5d.x\$400/d.x1.07	= \$214.00
Grid > Recce	P.Allen	0.5d.x\$175/d.x1.07	= \$93.63
	D.Halliwell	0.75d.x\$275/d.x1.07	= \$220.69
	Field Assts.	0.5d.x\$175/d.x1.07	= \$93.63
	Field Supplies	PlasticBags,Hammer,Etc.=	\$26.97
	Maps	Topos,Photos,ClaimMaps =	\$27.38
	Analyses	4rx.x\$20.26/rk.x1.13 =	\$91.58
	TOTAL		= \$767.88
GRID CONSTRUCTION	A.R.Allen	0.0d.x\$400/d.x1.07	= \$0.00
	P.Allen	0.0d.x\$175/d.x1.07	= \$0.00
	D.Halliwell	0.5d.x\$275/d.x1.07	= \$147.13
	Field Assts.	0.75d.x\$175/d.x1.07	= \$140.44
	Field Supplies	FlagTape,Wireflags,Etc.=	\$41.22
	TOTAL		= \$328.79
VLF-EM GEOPHYS.SURVEY	VLF-EM Rental	0.25x3wks.x\$275/wk.x1.07	\$220.68
Seattle & Annapolis Tx	D.R.Halliwell	0.0d.x\$275/d.x1.07	= \$0.00
Field Measurement +	Field Asst.	1.5d.x\$175/d.x1.07	= \$280.88
Data Entry	Field Supplies	None	= \$0.00
	Freight	AirCanada.Concord-Van. =	\$35.19
	TOTAL		= \$536.75
ORIENTATION SOIL	D.R.Halliwell	0.0d.x\$275/d.x1.07	= \$0.00
GEOCHEMICAL SURVEY	Field Assts.	0.5d.x\$175/d.x1.07	= \$93.63
8 Horizon Soils	Field Supplies	Bags,Shovel,Etc. =	\$22.88
	Analyses	22soilx\$18.24/soilx1.13=	\$453.42
	TOTAL		= \$569.93
TRAVEL EXPENSES	Vehicle	0.25x\$1000	= \$250.00
Vancouver-Lumby	Motel	0.25x\$1525.00	= \$381.25
	Meals	0.25x\$1710	= \$427.50
Incl.Assessment Work	A.R.Allen	0.5d.x\$400/d.x1.07	= \$214.00
Recording	P.Allen	0.5d.x\$175/d.x1.07	= \$93.63
	D.Halliwell	0.625d.x\$275/d.x1.07	= \$183.90
	Field Assts.	2p.x0.5d.x\$175/d.x1.07 =	\$187.25
	TOTAL		= \$1,737.53
REPORTING	A.R.Allen	0.5d.x\$400/d.x1.07	= \$214.00
	Admin.(P.Allen)	0.5d.x\$250/d.x1.07	= \$133.75
Incl. Preparation,	D.R.Halliwell	1.0d.x\$275/d.x1.07	= \$294.25
Administrative Work	Prep(A.R.Allen)	0.25d.x\$400/d.x1.07	= \$107.00
	Prep(Halliwell)	0.5d.x\$275/d.x1.07	= \$147.13
	Draftsman	1.0d.x\$175/d.x1.07	= \$187.25
	Office Supplies	DraftingPens,Film,Etc. =	\$54.93
	Secretarial	Final Report Assembly =	\$40.00
	Telephone	Victoria,Mississauga,Et=	\$24.24
	Photocopies	Report Copies, Etc. =	\$5.00
	Reproductions	Map Copies, Etc. =	\$37.50
	Office Rental	Pender Executive Centre=	\$100.00
	TOTAL		= \$1,345.05

GRAND TOTAL			= \$5,285.93
P.A.C. ACCOUNT	Max. 30% of GRAND TOTAL or REMAINING P.A.C. ACCT.		= \$0.00
GRAND TOTAL + P.A.C. ACCOUNT			= \$5,285.93

ALLOCATION OF ALLOWABLE EXPENDITURES TO HAZ 5 CLAIM.

D.R. Halliwell
June 29/92

GEOLOGY/PROSPECTING		A.R.Allen	0.5d.x\$400/d.x1.07	=	\$214.00
Grid > Recce		P.Allen	0.5d.x\$175/d.x1.07	=	\$93.63
		D.Halliwell	0.5d.x\$275/d.x1.07	=	\$147.13
		Field Assts.	0.25d.x\$175/d.x1.07	=	\$46.81
		Field Supplies	PlasticBags,Hammer,Etc.=		\$13.48
		Maps	Topos,Photos,ClaimMaps =		\$27.38
		Analyses	1rk.x\$20.26/rk.x1.13 =		\$22.89
		TOTAL		=	\$565.32
GRID CONSTRUCTION		A.R.Allen	0.0d.x\$400/d.x1.07	=	\$0.00
		P.Allen	0.0d.x\$175/d.x1.07	=	\$0.00
		D.Halliwell	0.0d.x\$275/d.x1.07	=	\$0.00
		Field Assts.	0.5d.x\$175/d.x1.07	=	\$93.63
		Field Supplies	FlagTape,Wireflags,Etc.=		\$20.61
		TOTAL		=	\$114.24
VLF-EM GEOPHYS.SURVEY		VLF-EM Rental	0.125x3wk.x\$275/wkx1.07=		\$110.34
Seattle & Annapolis Tx		D.R.Halliwell	0.0d.x\$275/d.x1.07	=	\$0.00
Field Measurement +		Field Asst.	0.5d.x\$175/d.x1.07	=	\$93.63
Data Entry		Field Supplies	None	=	\$0.00
		Freight	AirCanada.Concord-Van. =		\$17.59
		TOTAL		=	\$221.56
ORIENTATION SOIL		D.R.Halliwell	0.0d.x\$275/d.x1.07	=	\$0.00
GEOCHEMICAL SURVEY		Field Assts.	0.0d.x\$175/d.x1.07	=	\$0.00
3 Horizon Soils		Field Supplies	Bags,Shovel,Etc. =		\$0.00
		Analyses	0soilsx\$18.24/soilx1.13=		\$0.00
		TOTAL		=	\$0.00
TRAVEL EXPENSES		Vehicle	0.125x\$1000	=	\$125.00
Vancouver-Lumby		Motel	0.125x\$1525.00	=	\$190.63
		Meals	0.125x\$1710	=	\$213.75
Inci.Assessment Work		A.R.Allen	0.25d.x\$400/d.x1.07	=	\$107.00
Recording		P.Allen	0.25d.x\$175/d.x1.07	=	\$46.81
		D.Halliwell	0.375d.x\$275/d.x1.07	=	\$110.34
		Field Assts.	2p.x0.25d.x\$175/d.x1.07=		\$93.63
		TOTAL		=	\$887.16
REPORTING		A.R.Allen	0.25d.x\$400/d.x1.07	=	\$107.00
		Admin.(P.Allen)	0.25d.x\$250/d.x1.07	=	\$66.88
Inci. Preparation,		D.R.Halliwell	0.5d.x\$275/d.x1.07	=	\$147.13
Administrative Work		Prep(A.R.Allen)	0.125d.x\$400/d.x1.07	=	\$53.50
		Prep(Halliwell)	0.25d.x\$275/d.x1.07	=	\$73.56
		Draftsman	0.5d.x\$175/d.x1.07	=	\$93.63
		Office Supplies	DraftingFens,Film,Etc. =		\$54.93
		Secretarial	Final Report Assembly =		\$40.00
		Telephone	Victoria,Mississauga,Et=		\$24.24
		Photocopies	Report Copies, Etc. =		\$5.00
		Reproductions	Map Copies, Etc. =		\$18.75
		Office Rental	Pender Executive Centre=		\$100.00
		TOTAL		=	\$784.62

GRAND TOTAL					= \$2,572.90
P.A.C. ACCOUNT					Max. 30% of GRAND TOTAL or REMAINING P.A.C. ACCT. = \$0.00
GRAND TOTAL + P.A.C. ACCOUNT					= \$2,572.90

MAN-DAYS OF APPLIED ASSESSMENT WORK

D.R. Halliwell
June 29/92

Activity	DK Claim	HAZ 5 Claim	Total
=====	=====	=====	=====
Geology/Prospecting	2.25	1.75	4
Grid Construction	1.25	0.5	1.75
VLF-EM Geophysics/DataEntry	1.5	0.5	2
Soil Geochemistry/DataEntry	0.5	0	0.5
Travel	1.625	1.375	3
Reporting/Drafting/Prep.Work	3.25	1.875	5.125
=====			
TOTAL	10.375	6	16.375

FIELD PERSONNEL (Zicton Properties)

Name	Dates
====	=====
Alfred Allen	June 17-24
Paul Allen	June 17-24
Douglas Halliwell	June 16-30
Ted Larose	June 16-29
Ramon Penacoba	June 16-29

CERTIFICATE

1155 Lillooet Road
North Vancouver, B.C.
V7J 3H7.

July 31, 1992

I, Douglas R. Halliwell, certify that:

I am a graduate of McGill University and hold the following degrees therefrom:

B.Sc., Geological Sciences, 1976.
M.Sc.A., Mineral Exploration, 1980.

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Fellow of the Geological Association of Canada.

I am a Member of the Canadian Institute of Mining and Metallurgy and the Association of Exploration Geochemists.

I have practiced my profession since graduation.

I hold no interest in the property or securities of Zicton Gold Limited or affiliates thereof, nor do I expect to receive any, directly or indirectly.

The report on the Lumby Property, Vernon Mining Division, B.C. is based on examination of the property by the writer on June 16, 1992 - June 30, 1992 and familiarity with the property since March 1991.



Douglas R. Halliwell, M.Sc.A., B.Sc., P.Geo., F.G.A.C.

CERTIFICATE

525 Clyde Avenue
West Vancouver, B.C.

July 31, 1992.

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia and hold the following degrees therefrom:

B.A.Sc., Geological Engineering, 1939.
M.A.Sc., Geological Engineering, 1941.

I am a Life Member of the Association of Professional Engineers of the Province of British Columbia.

I have practiced my profession since graduation.

I hold no interest in the property or securities of Zicton Gold Limited or affiliates thereof, nor do I expect to receive any, directly or indirectly.

The report on the Lumby Property, Vernon Mining Division, B.C. is based on examination of the property by the writer on June 17, 1992 - June 24, 1992 and on familiarity with the property since 1984.



Alfred R. Allen, M.A.Sc., B.A.Sc., P.Eng.

CONSENT LETTER

July 1992

The British Columbia Securities Commission
Vancouver, B.C.

Dear Sirs:

Re: Zicton Gold Limited

I hereby consent to the use of my report of July 31, 1992 on the Lumby Property, Vernon Mining Division, B.C. in any prospectus or statement of material facts or other material to be filed with the British Columbia Securities Commission, or the Vancouver Stock Exchange, by Zicton Gold Limited.

Yours truly,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per:

 P. Eng.
Alfred R. Allen

Zictonrfr/Allen

Appendix I

Laboratory Geochemistry Report. Rock Samples



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: ALLEN GEOLOGICAL ENGINEERING LIMITED

827 W. PENDER ST.
 VANCOUVER, BC
 V6C 3G8

Project: ZICTON GOLD
 Comments: CC: DOUGLAS HALLIWELL

Page Number : 1
 Total Pages : 1
 Certificate Date: 09-JUL-92
 Invoice No. : 19216931
 P.O. Number :
 Account : MD

CERTIFICATE OF ANALYSIS A9216931

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm	Au FA oz/T			
A-92-01	275 274	< 5	< 0.5	< 1	11	0.58	60	1	24	4	4	-----			
A-92-02	275 274	< 5	0.5	4	13	2.07	555	< 1	4	4	54	-----			
A-92-03	275 274	< 5	0.5	3	17	2.80	500	2	8	4	54	-----			
A-92-04	275 274	15	0.5	3	20	2.71	405	2	10	2	56	-----			
A-92-05	275 274	35	1.5	8	97	3.71	415	13	40	12	314	-----			
A-92-06	275 274	10	1.5	3	42	3.20	210	2	9	10	96	-----			
A-92-07	275 274	< 5	< 0.5	7	6	3.07	1210	< 1	9	< 2	80	-----			
D-92-01	275 274	15	1.0	5	100	5.22	825	< 1	41	10	120	-----			
D-92-02	275 274	< 5	< 0.5	6	67	3.95	1040	< 1	36	10	94	-----			
D-92-03	275 274	< 5	0.5	5	51	4.02	675	< 1	10	10	60	-----			
D-92-04	275 274	< 5	0.5	20	140	3.09	410	8	67	4	82	-----			
D-92-05	275 274	< 5	< 0.5	12	28	5.23	1350	< 1	15	2	92	-----			
D-92-06	275 274	< 5	< 0.5	4	36	2.87	945	< 1	9	8	40	-----			
D-92-07	275 274	< 5	< 0.5	5	33	3.05	725	< 1	9	4	42	-----			
D-92-08	275 274	95	1.0	1	82	5.93	350	< 1	15	64	80	-----			
D-92-09	275 274	< 5	< 0.5	11	97	5.29	950	< 1	44	4	76	-----			
D-92-10	275 274	4670	3.0	45	12	11.30	2590	< 1	14	26	42	-----			
D-92-11	275 274	>10000	0.0	35	11	14.00	190	< 1	11	66	20	0.410			
D-92-12	275 274	>10000	92.5	9	77	>15.00	335	1	10	>10000	>10000	0.310			
D-92-13	275 274	90	2.0	6	9	4.07	745	< 1	12	202	478	-----			
D-92-14	275 274	< 5	< 0.5	11	79	6.09	980	< 1	96	4	84	-----			
D-92-15	275 274	< 5	0.5	9	43	3.44	715	< 1	10	12	62	-----			
D-92-16	275 274	< 5	< 0.5	23	63	5.51	1290	< 1	22	2	92	-----			
D-92-17	275 274	< 5	0.5	20	101	6.13	1075	< 1	13	10	72	-----			
R-92-01	275 274	< 5	< 0.5	19	89	5.00	1025	< 1	67	4	84	-----			
R-92-02	275 274	< 5	0.5	8	19	2.86	835	< 1	9	8	40	-----			
R-92-03	275 274	< 5	0.5	7	55	3.27	635	< 1	12	10	34	-----			
R-92-04	275 274	< 5	0.5	20	99	3.44	560	< 1	30	4	86	-----			

CERTIFICATION: *V. H. J. Ma*

Appendix II

VLF-EM Raw & Fraser-Filtered Data

LINE 0+60W
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx.

Geonics EM-16 Operator: T. Larose
 ANNAPOLIS Tx Date: June 28/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-300	Main Road	14	2	36	13
-285	2ndGrowth. Up	22	6	46	6
-270		24	4	49	5
-255	Timber.Deadfall	25	4	52	3
-240	Deadfall	27	2	54	6
-225		27	1	55	13
-210	N Edge Timber	28	0	60	15
-195	2ndGrowth	32	-4	68	11
-180		36	-6	75	6
-165		39	-6	79	4
-150		40	-5	81	6
-135	Cat Road	41	-4	83	7
-120	2ndGrowth	42	-2	87	5
-105		45	0	90	3
-90	Thick 2ndGrowth	45	-4	92	-6
-75		47	0	93	-11
-60	Road	46	1	86	-9
-45	2ndGrowth	40	0	82	15
-30	Old road	42	-2	77	40
-15	DDH 10m E	35	-10	97	8
0	Old stripping	62	-4	117	-27
15	2ndGrowth	55	-4	105	-20
30		50	-4	90	3
45		40	1	85	8
60	Timberline	45	0	93	-6
75	Timber Deadfall	48	0	93	-19
90		45	0	87	-22
105	Deadfall	42	2	74	-1
120		32	4	65	19
135	Timber.45drgUp	33	3	73	7
150	Timber	40	9	84	-23
165		44	8	80	-33
180		36	-1	61	-19
195	Talus 45drg	25	0	47	-5
210		22	2	42	0
225	Bedrock	20	4	42	-2
240	Timber.Steep	22	7	42	-4
255	Bedrock.Steep	20	10	40	-4
270	Flat Timber	20	3	38	
285	E Slope	18	4	36	
300	Flat	18	4		

LINE 0+00
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx.

Geonics EM-16 Operator: T. Larose
 ANNAPOLIS Tx Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-315	Open Bush	18	2	38	10
-300	Upslope	20	2	43	9
-285	Shallow Slope	23	2	48	7
-270		25	2	52	3
-255		27	0	55	1
-240		28	-2	55	5
-225		27	-4	56	11
-210	Upslope	29	-4	60	13
-195	Bush	31	-6	67	16
-180	Road At 1+73S	36	-6	73	18
-165	Thick Bush	37	-8	83	-13
-150		46	-6	91	-18
-135		45	-5	70	20
-120		25	-9	73	9
-105		48	-5	90	-10
-90		42	0	82	0
-75		40	0	80	22
-60	Road (S Edge)	40	-3	82	38
-45		42	-6	102	-12
-30		60	-8	120	-45
-15	DDH At 0+22S.	60	-6	90	-7
0	Stripping	30	12	75	1
15	Upslope	45	4	83	-20
30	2ndGrowth	38	4	76	-31
45		38	4	63	-26
60	Open	25	4	45	-1
75	2ndGrowth	20	4	37	20
90		17	2	44	15
105		27	4	57	4
120	Timberline	30	4	59	14
135	Timber.Upslope.	29	4	61	33
150	Deadfall	32	-6	73	23
165		41	-8	94	-7
180	Timber	53	-7	96	-2
195		43	-8	87	-2
210		44	-6	94	-31
225	Deadfall	50	-4	85	-30
240	Timber	35	-4	63	-12
255		28	3	55	-12
270	SE Slope	27	6	51	
285		24	4	43	
300		19	2		

LINE 0+60E
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx.

Geonics EM-16 Operator: T. Larose
 ANNAPOLIS Tx Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.-7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
300	Downslope	16	-4	34	-1
285	Timber	18	-2	33	25
270		15	0	33	50
255		18	-5	58	31
240		40	-10	83	-5
225		43	-14	89	-14
210		46	-15	78	1
195		32	-16	75	-7
180	Flat	43	-8	79	-22
165		36	-5	68	-25
150	Timberline	32	-4	57	-23
135	Flat	25	-4	43	-10
120		18	-6	34	-7
105	StartDownToRoad	16	-2	33	-8
90	SlopeDownToRd.	17	6	27	10
75		10	4	25	37
60	Old Road	15	8	37	48
45		22	8	62	20
30	SteepSlopeToRd.	40	4	85	-2
15	Road 2m. S	45	6	82	-11
0	Downslope.	37	4	83	-23
-15	Thick Bush	46	10	71	22
-30		25	0	60	45
-45	Road	35	-9	93	-4
-60		58	12	105	-23
-75	Road	47	-4	89	-7
-90		42	0	82	0
-105		40	-4	82	-2
-120	Bush	42	-4	82	-6
-135		40	-6	80	-9
-150		40	-6	76	-11
-165		36	-10	71	-17
-180	Road at 1+725	35	-6	65	-15
-195	Bush	30	-9	54	-2
-210	CatRoadToShow.	24	-3	50	1
-225	Open Bush	26	-4	52	-2
-240	Downslope	26	0	51	-3
-255		25	-3	50	-7
-270		25	0	48	
-285		23	1	43	
-300		20	2		

LINE 1+20E
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx.

Geonics EM-16 Operator: T. Larose
 ANNAPOLIS Tx Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-300	Rd.SteepBankToS	22	1	42	8
-285	2ndGrowth	20	-4	44	9
-270	Bush.Upslope.	24	-3	50	0
-255	Possible o/c.	26	-3	53	2
-240	Bush.Upslope	27	-6	50	18
-225	Flat	23	-6	55	21
-210		32	8	68	14
-195	StartUpslope	36	-10	76	9
-180	Upslope 40drg	40	-10	82	4
-165	Steep Slope	42	-7	85	5
-150	Old road	43	-6	86	13
-135	Steep Slope	43	-3	90	20
-120	45drg Slope	47	0	99	24
-105		52	-5	110	10
-90	2nd Growth	58	-10	123	-23
-75	45drg Slope	65	-12	120	-43
-60	Flat	55	-10	100	-27
-45	StartUpslope	45	-8	77	14
-30	Old road	32	2	73	-6
-15	Steep Slope	41	8	91	-65
0	Old Road	50	-8	67	-53
15	Steep Slope	17	-4	26	-5
30	Road at 0+25N	9	4	14	20
45	2nd Growth	5	5	21	15
60	Shallow Slope	16	8	34	5
75	FlatteningOut	18	2	36	2
90		18	-1	39	6
105	Open Bush	21	-4	38	16
120		17	-2	45	16
135		28	-7	54	23
150		26	-10	61	18
165	Timberline	35	-11	77	-15
180	Flat Timber	42	16	79	-22
195	Timber	37	-14	62	4
210	Deadfall	25	-16	57	-10
225	Timber	32	-12	66	-50
240	Upslope	34	4	47	-36
255		13	-2	16	10
270		3	1	11	
285		8	2	26	
300		18	4		

LINE 1+80E
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx.

Seonics EM-16 Operator: T. Larose
 ANNAPOLIS Tx Date: June 28/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.-7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
300	GentleSlope	14	0	32	-8
295	Flat Timber	18	2	31	-16
270	Flat	13	0	24	-17
255		11	0	15	-6
240		4	0	7	11
225	Timberline.Flat	3	0	9	10
210	2ndGrowth.Flat	6	-2	13	19
195	Downslope	12	0	19	56
180	GentleSlope	7	0	37	48
165	Flat. 2ndGrowth	30	-10	75	-3
150		45	-11	85	-19
135		40	-7	72	-13
120		32	-6	66	-19
105	SlopingToRd.	34	-3	59	-19
90		25	-2	47	-14
75		22	-2	40	-16
60		18	-4	33	-19
45		15	3	24	0
30		9	4	14	28
15	Old road	5	2	24	36
0	Thick bush	19	6	42	27
-15		23	4	60	1
-30	Old road	37	10	69	-5
-45		32	5	61	31
-60		29	3	64	67
-75		35	-2	92	66
-90	SteepSlope	57	-5	131	23
-105	Old road	74	6	158	-33
-120	SteepSlope	84	-4	154	-54
-135	Open bush	70	-4	125	-40
-150	Old road	55	-3	100	-15
-165	Downslope	45	-3	85	5
-180		40	-8	85	-4
-195		45	-6	90	-26
-210		45	-8	81	-30
-225		36	0	64	-18
-240		28	-12	51	-5
-255		23	-8	46	1
-270		23	-8	46	
-285		23	-4	47	
-300	Main road	24	-6		

LINE 0+60W
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx

Geonics EM-16 Operator: T. Larose
 SEATTLE TX Date: June 28/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-300	Refer to	-5	2	-17	-7
-285	Annapolis Tx	-12	-2	-26	3
-270	Terrain Notes	-14	-4	-24	-3
-255		-10	0	-23	-6
-240		-13	0	-27	-1
-225		-14	0	-29	0
-210		-15	0	-28	-5
-195		-13	0	-29	-6
-180		-16	2	-33	-4
-165		-17	3	-35	-6
-150		-18	3	-37	-9
-135		-19	4	-41	-3
-120		-22	4	-46	6
-105		-24	-5	-44	2
-90		-20	4	-40	-4
-75		-20	4	-42	-2
-60		-22	2	-44	1
-45		-22	3	-44	-4
-30		-22	2	-43	-9
-15		-21	3	-48	1
0		-27	2	-52	8
15		-25	0	-47	-1
30		-22	2	-44	-13
45		-22	3	-48	-19
60		-26	2	-57	-17
75		-31	5	-67	-5
90		-36	4	-74	3
105		-38	2	-72	-15
120		-34	0	-71	-27
135		-37	-4	-87	1
150		-50	-9	-98	35
165		-48	-6	-86	38
180		-38	-2	-63	18
195		-25	-2	-48	4
210		-23	0	-45	0
225		-22	-4	-44	1
240		-22	7	-45	8
255		-23	-10	-43	13
270		-20	-6	-37	
285		-17	-6	-30	

LINE 0+00
 DEAFIES CREEK BRID. EM-16 SURVEY.
 Facing remote Tx

Geonics EM-16
 SEATTLE TX

Operator: T. Larose
 Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-315	Refer to	-12	3	-23	-3
-300	Annapolis Tx	-11	2	-25	-1
-285	Terrain Notes	-14	2	-26	-1
-270		-12	2	-26	-3
-255		-14	0	-27	-1
-240		-13	2	-29	5
-225		-16	0	-28	-4
-210		-12	4	-24	-18
-195		-12	5	-32	-9
-180		-20	2	-42	-5
-165		-22	3	-41	-16
-150		-19	3	-47	-9
-135		-28	0	-57	5
-120		-29	4	-56	3
-105		-27	4	-52	4
-90		-25	4	-53	25
-75		-28	4	-48	36
-60		-20	2	-28	14
-45		-8	6	-12	-23
-30		-4	14	-14	-41
-15		-10	14	-35	-22
0		-25	-2	-55	-1
15		-30	-2	-57	-2
30		-27	0	-56	-13
45		-29	2	-59	-28
60		-30	2	-69	-28
75		-39	2	-87	-20
90		-48	2	-97	-17
105		-49	4	-107	-8
120		-58	4	-114	-17
135		-56	8	-115	-27
150		-59	6	-131	9
165		-72	6	-142	35
180		-70	6	-122	5
195		-52	8	-107	7
210		-55	5	-117	48
225		-62	2	-100	32
240		-38	0	-69	-6
255		-31	-6	-68	-9
270		-37	-12	-75	
285		-38	-16	-77	
300		-39	-14		

LINE 0+60E
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx

Geonics EM-16 Operator: T. Larose
 SEATTLE TX Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.-7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
300	Refer to	-38	-4	-75	12
285	Annapolis Tx	-37	-4	-72	1
270	Terrain Notes	-35	4	-63	-23
255		-28	-1	-71	-19
240		-43	-10	-86	1
225		-43	13	-90	7
210		-47	10	-85	0
195		-38	10	-83	4
180		-45	13	-85	13
165		-40	12	-79	18
150		-39	10	-72	19
135		-33	7	-61	9
120		-28	8	-53	0
105		-25	6	-52	-3
90		-27	1	-53	-1
75		-26	-2	-55	-6
60		-29	-5	-54	-9
45		-25	0	-61	9
30		-36	-2	-63	25
15		-27	4	-52	26
0		-25	1	-38	3
-15		-13	0	-26	-24
-30		-13	4	-35	-16
-45		-22	2	-50	4
-60		-28	9	-51	7
-75		-23	4	-46	2
-90		-23	2	-44	-2
-105		-21	6	-44	3
-120		-23	4	-46	8
-135		-23	2	-41	1
-150		-18	2	-38	0
-165		-20	4	-40	4
-180		-20	0	-38	3
-195		-18	2	-36	2
-210		-18	4	-35	0
-225		-17	3	-34	1
-240		-17	2	-35	6
-255		-18	0	-33	7
-270		-15	2	-29	
-285		-14	0	-26	
-300		-12	2		

LINE 1+20E
 DEAFIES CREEK GRID. EM-16 SURVEY.
 Facing remote Tx

Geonics EM-16
 SEATTLE TX

Operator: T. Larose
 Date: June 27/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.+7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
-300	Refer to	-20	0	-46	7
-285	Annapolis Tx	-26	0	-46	6
-270	Terrain Notes	-20	0	-39	-3
-255		-19	1	-40	-4
-240		-21	0	-42	-10
-225		-21	2	-44	-10
-210		-23	1	-52	-1
-195		-29	2	-54	-2
-180		-25	0	-53	-3
-165		-28	0	-56	-1
-150		-28	1	-56	-11
-135		-28	0	-57	-21
-120		-29	0	-67	-15
-105		-38	2	-78	9
-90		-40	5	-82	35
-75		-42	10	-69	15
-60		-27	14	-47	-12
-45		-20	10	-54	5
-30		-34	6	-59	13
-15		-25	0	-49	7
0		-24	-2	-46	8
15		-22	-4	-42	4
30		-20	-3	-38	-2
45		-18	-2	-38	0
60		-20	-2	-40	3
75		-20	1	-38	-3
90		-18	2	-37	-7
105		-19	4	-41	-4
120		-22	4	-44	0
135		-22	6	-45	11
150		-23	4	-44	13
165		-21	10	-34	0
180		-13	16	-31	-15
195		-18	11	-34	-39
210		-16	8	-46	-17
225		-30	4	-73	40
240		-43	-1	-63	30
255		-20	-2	-33	-14
270		-13	-4	-33	
285		-20	-6	-47	
300		-27	-7		

LINE 1+80E
 DEAFIES CREEK GRID, EM-16 SURVEY.
 Facing remote Tx

Geonics EM-16 Operator: T. Larose
 SEATTLE TX Date: June 28/92

Station	Terrain	InPhase	Quad.	Fraser-Filtering Sum(Stat.-7.5)	Diff.(Alt.Ent.)=Result
=====	=====	=====	=====	=====	=====
300	Refer to	-28	-2	-59	-9
285	Annapolis Tx	-31	-2	-60	-13
270	Terrain Notes	-29	-2	-68	-4
255		-39	0	-73	9
240		-34	-2	-72	28
225		-38	-4	-64	35
210		-26	-1	-44	15
195		-18	-2	-29	-8
180		-11	-4	-29	-8
165		-18	0	-37	2
150		-19	2	-37	3
135		-18	5	-35	0
120		-17	2	-34	-4
105		-17	4	-35	-5
90		-18	2	-38	-5
75		-20	1	-40	-3
60		-20	0	-43	2
45		-23	0	-43	-8
30		-20	0	-41	-14
15		-21	0	-51	3
0		-30	0	-55	14
-15		-25	3	-48	19
-30		-23	2	-41	1
-45		-18	0	-30	-43
-60		-12	2	-40	-42
-75		-28	4	-73	8
-90		-45	4	-82	26
-105		-37	5	-65	12
-120		-28	4	-56	6
-135		-28	3	-53	2
-150		-25	0	-50	-5
-165		-25	2	-51	-6
-180		-26	4	-55	3
-195		-29	4	-57	13
-210		-28	2	-52	12
-225		-24	4	-44	2
-240		-20	4	-40	-7
-255		-20	1	-42	-13
-270		-22	0	-47	
-285		-25	-2	-55	
-300		-30	-2		

Appendix III

Geochemical Sampling Cards

GEOCHEMICAL SAMPLING CARDS (For Soil, Lake, Stream & Biogeochem Samples)

For 80-Field Sampling Cards

Fields 1 - 3 : Project Number

E.G. "1 2 3"
 A C R = Athabasca Cree River

"T D M" = Thelon Dubawnt Mackenzie

Field 4 - 9 : Sample Number

4, 5 = Year e.g. "81" = 1981
6 = Sampler e.g. "0" = John Doe, "1" = Jim Smith
7, 8, 9 = Sample Number e.g. "001" = 1st sample, etc.

Location:

Fields 10 - 11 : U.T.M. Zone (lake, stream) or Grid (soil, biogeochem)

e.g. lake "10 11"
 1 3 (all of Dubawnt (Mackenzie) Area is in Zone 13)

e.g. soil " A A" Grid A

Field 12 - 17 U.T.M. Easting (lake, stream) or E-W Grid Location
(soil, biogeochem)

e.g. lake "12 13 14 15 16 17" (Easting in metres E)
 4 4 1 5 0 0

e.g. soil " 2 5 + 5 0 E ") E-W Grid Location in metres E or W

e.g. soil " 1 0 2 0 0 W ")

Fields 18 - 24 : U.T.M. Northing (lake, stream) or N-S Grid Location
(soil, biogeochem)

e.g. lake "18 19 20 21 22 23 24" (Northing in metres N)
 6 4 2 7 5 0 0

e.g. soil " 0 1 0 + 0 0 N ") (N-S Grid Location in metres

e.g. soil " 1 5 0 + 7 5 S ") N or S)

Field 25 : Sample Type

- e.g. "A" = soil
"B" = lake
"C" = stream
"D" = biogeochem (tree)
"E" = frost boil centres

Fields 26 - 29 : Rock Type or Most Probable Rock Type

Use Franklin Slashing Code (Retain first letter and eliminate letters from right to left in the following order: A, E, I, O, U, W, H, Y, DOUBLE LETTERS, T, N, S, R, L, D, C, M, F, G, P, K, B, V, X, J, Q, Z.)

- e.g. " 26 27 28 29 " = SANDSTONE
S N D S
- " C G L M " = CONGLOMERATE
- " A R G T " = ARGILLITE
- " G N S S " = GNEISS
- " G R N T " = GRANITE
- NOTE: LETTER "O" = ∅

Field 30 : Approximate Thickness of Overburden

- e.g. "0" = THIN (<3m)
"1" = MEDIUM (3 - 10m)
"2" = THICK (>10m)

Field 31 : Forest Cover

- e.g. "0" = NO TREES
"1" = OPEN CROWN FOREST
"2" = CLOSED CROWN FOREST

Field 32 : Physiography

- e.g. "0" = PLAIN
"1" = MUSKOG, SWAMPLAND
"2" = PENEPLANE, PLATEAU

"3" = HILLY, UNDULATING

"4" = MOUNTAINOUS, YOUTHFUL (PRECIPITOUS)

Fields 33 - 35 : Depth - Lakes (m.); Soil, Stream (cm.).

e.g. lake 33 34 . 35
" 1 0 . 5 "

e.g. soil " 0 6 . 1 "

Fields 36 - 38 : Area or Width - Lake Area (km²); Stream Width (m.).

e.g. lake 36 37 . 38
0 1 . 5

e.g. stream 0 0 . 3

Field 39 : Drainage or Flow Rate

e.g. soils "0" = POOR: "1" = MODERATE: "2" = GOOD

e.g. biogeochem

e.g. lakes "0" = INFILLING: "1" = PARTLY OPEN (inlet or outlet);
"2" = OPEN (inlet (s) and outlet (s)).

e.g. streams (flow rate)

"0" = ZERO: "1" = SLOW; "2" = MODERATE; "3" = FAST
"4" = TORRENTIAL

Field 40 : Colour (of sediment or soil sample)

e.g. "0" = BLACK
"1" = GREY
"2" = BROWN
"3" = TAN
"4" = PINK
"5" = RED
"6" = YELLOW
"7" = GREEN

etc.

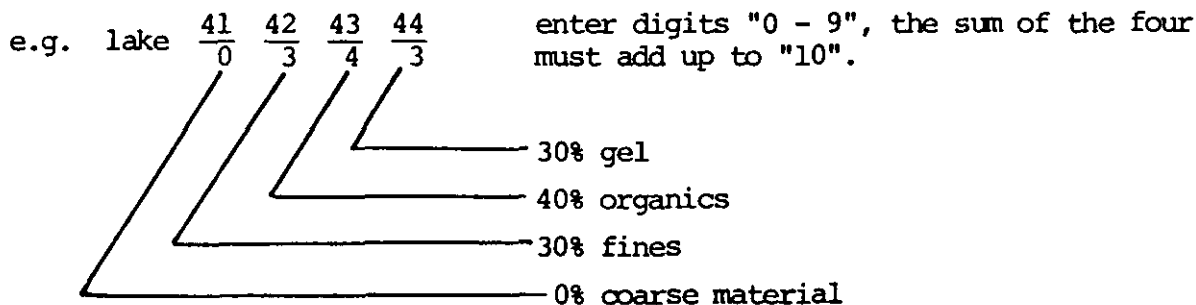
Fields 41 - 44 : Composition or Texture (for soils and sediments)

41 COARSE MATERIAL (sand, gravel, etc.)

42 FINES (clay, silt)

43 ORGANICS

44 GEL (gyttja - lakes only)



Field 45 : Precipitate or Stain (sediment samples only)

e.g. "0" = NONE

"1" = RED, BROWN (Fe³⁺ stain, etc.)

"2" = YELLOW (Fe²⁺ stain, etc.)

"3" = BLACK (Mn stain)

"4" = WHITE

"5" = GREEN

"6" = BLUE

"7" = PINK

Fields 46 - 48 : Slope or Drainage Direction (azimuth in degrees, rounded to nearest 10⁰)

e.g. "090", "230"

Fields 49 - 50 : Slope (in degrees, rounded to nearest 10⁰)

e.g. "30", "10", "00"

Field 51 : Method of Geochemical Dispersion

e.g. "0" = UNKNOWN

"1" = HYDROMORPHIC (related to drainage slopes, spring lines, swamps)

"2" = MECHANICAL (related to boulder fields or other geomorphological deposits)

Fields 52 - 57 : Free Space (for Additional Information)

Fields 58 - 61 : Intermediate Station Location

e.g. "+50W"
"+25N"

Fields 62 - 65 : Intermediate Station Radioactivity

e.g. "0075" = 75 c/s
"0150" = 150 c/s

Field 66 : Stream Class (stream samples only)

e.g. "0" = SPRING
"1" = PRIMARY (smallest stream; nearest source)
"2" = SECONDARY
"3" = TERTIARY
"4" = QUATERNARY (largest stream or river; nearest mouth)

Field 67 : Size of Suspended Matter (water samples only).

e.g. "0" = LIGHT
"1" = HEAVY

Field 68 : Water Colour (water samples only)

e.g. "0" = COLOURLESS, CLEAR
"1" = BROWN, CLEAR
"2" = WHITE, CLOUDY
"3" = BROWN, CLOUDY

Field 69 : Soil Horizon or Tree Type (soil or biogeochem only)

e.g. soil "B" = B HORIZON "A" = ARCTIC BROWN A1 HORIZON
"0" = LH (HUMUS) HORIZON "G" = GLEI HORIZON
"1" = AH (ORGANIC-RICH) HORIZON "R" = REDUCED HORIZON
"2" = AE (LEACHED) HORIZON

e.g. tree "A" = PINE
"B" = SPRUCE
"C" = BALSAM
"D" = FIR
"E" = POPLAR
etc.

Fields 70 - 73 : Radioactivity (soils only)

e.g. $\frac{70}{0} \frac{71}{2} \frac{72}{5} \frac{73}{0} = 250$ cps (Total Count, Fast Count over open hole)

Field 74 - 77 : Date Collected

DAY MONTH
e.g. " $\frac{74}{1} \frac{75}{5} \frac{76}{0} \frac{77}{6}$ " = June 15

Field 78 : Master Code (lake, stream samples only)

e.g. "0" = NO WATER COLLECTED
"1" = WATER COLLECTED

Field 79 : Contamination

e.g. "0" = NONE
"1" = POSSIBLE
"2" = PROBABLE
"3" = DEFINITE

Field 80 : Sample Status

e.g. "0" = REGULAR SAMPLE
"1" = REFERENCE CONTROL SAMPLE
"2" = BLIND DUPLICATE SAMPLE
(etc.)

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	PROJSAMP.	NO.	SRDEASTCD.	NORTHCD.	TYROCK	QBFOPHSD	AREADRC	DCGFB	GORSEPP	DRAISL	ODIBLINT.	SINT.	RADISTS	SIWAHOMO.	JAYMACOSS
1	ZSM	920000	SM	F	0+00S	A GRNT	1 1 3 20	3 1 7 2 0 1 0 10 1						B 6 23 0 1	
2	ZSM	920001	SM	D	0+00S	A PLLT	2 1 3 15	2 2 7 1 0 0 270 15 1						B 6 23 0 0	
3	ZSM	920002	SM	D	0+15S	A PLLT	1 2 2 25	2 3 4 3 0 0 250 10 1						B 6 23 0 0	
4	ZSM	920003	SM	D	0+30S	A PLLT	1 2 2 25	2 3 5 2 0 0 250 10 1						B 6 23 0 0	
5	ZSM	920004	SM	D	0+45S	A GRNT	1 2 2 30	3 3 5 2 0 1 270 5 1						B 6 23 0 0	
6	ZSM	920005	SM	D	0+60S	A GRNT	1 2 3 30	3 2 6 2 0 0 0 20 1						B 6 23 0 0	
7	ZSM	920006	SM	D	0+90S	A GRNT	1 1 3 30	3 3 5 2 0 0 0 15 1						B 6 23 0 0	
8	ZSM	920007	SM	D	1+05S	A PLLT	0 0 2 15	2 2 5 2 0 0 225 15 1						B 6 23 0 0	
9	ZSM	920008	SM	D	1+20S	A PLLT	1 1 2 12	2 4 5 1 0 0 180 15 1						B 6 23 1 0	
10	ZSM	920009	SM	D	1+35S	A GRNT	1 2 3	2 4 5 1 0 0 180 20 1						B 6 23 0 0	
11	ZSM	920010	SM	D	1+50S	A GRNT	1 2 3 20	2 3 5 2 0 0 180 25 1						B 6 23 0 0	
12	ZSM	920011	SM	D	1+65S	A GRNT	2 1 3 15	2 3 5 2 0 0 180 25 1						B 6 23 0 0	
13	ZSM	920012	SM	D	1+80S	A GRNT	1 1 3 15	2 4 4 2 0 0 180 20 1						B 6 23 0 0	
14	ZSM	920013	SM	D	1+95S	A GRNT	1 0 3 20	2 4 4 2 0 0 150 10 1						B 6 23 0 0	
15	ZSM	920014	SM	D	2+10S	A GRNT	2 0 3 20	2 5 4 1 0 0 180 15 1						B 6 23 0 0	
16	ZSM	920015	SM	D	2+25S	A GRNT	2 1 3 15	2 3 5 2 0 0 180 20 1						B 6 23 0 0	
17	ZSM	920016	SM	D	2+40S	A LMST	0 1 3 15	2 4 4 2 0 0 180 20 1						B 6 23 0 0	
18	ZSM	920017	SM	D	2+55S	A LMST	0 1 3 20	2 4 4 2 0 0 180 30 1						B 6 23 0 0	
19	ZSM	920018	SM	D	2+70S	A LMST	1 1 3 20	2 4 4 2 0 0 180 25 1						B 6 23 0 0	
20	ZSM	920019	SM	D	2+85S	A GRNT	2 2 3	2 4 4 2 0 0 180 20 1						B 6 23 0 0	
21	ZSM	920020	SM	D	3+00S	A GRNT	1 1 3 25	2 3 6 1 0 0 180 25 1						B 6 23 0 0	
22	ZSM	920021	SM	D	3+15S	A GRNT	1 2 3 25	2 3 6 1 0 0 180 20 1						B 6 23 0 0	
23	ZSM	920022	SM	D	3+30S	A PLLT	1 2 3 30	2 3 5 2 0 0 180 15 1						B 6 23 0 0	
24	ZSM	920023	SM	D	3+45S	A PLLT	2 2 2 30	2 3 5 2 0 0 180 15 1						B 6 23 0 0	
25	ZSM	920024	SM	D	3+60S	A PLLT	2 2 2 20	2 2 6 2 0 0 180 15 1						B 6 23 0 0	
26	ZSM	920025	SM	D	3+75S	A PLLT	2 1 2 20	2 4 4 3 0 0 180 20 1						B 6 23 0 0	
27	ZSM	920026	SM	D	3+90S	A PLLT	2 1 2 15	3 3 5 2 0 0 180 25 1						B 6 23 0 0	
28	ZSM	920027	SM	D	4+05S	A PLLT	2 1 2 25	2 3 5 2 0 0 180 20 1						B 6 23 0 0	
29	ZSM	920028	SM	D	4+20S	A PLLT	2 1 2 30	2 4 4 2 0 0 180 20 1						B 6 23 0 0	
30	ZSM	920029	SM	D	4+35S	A PLLT	2 1 2 30	2 3 4 3 0 0 180 15 1						B 6 23 0 0	
31	ZSM	920030	SM	D	4+50S	A PLLT	2 1 2 25	2 3 4 3 0 0 180 10 1						B 6 23 0 0	
32	ZSM	920031	SM	D	4+65S	A PLLT	2 1 2 15	3 4 4 2 0 1 180 10 1						B 6 23 0 0	
33	ZSM	920032	SM	D	4+80S	A PLLT	2 1 2 35	2 3 4 3 0 0 180 15 1						B 6 23 0 0	
34	ZSM	920033	SM	D	4+95S	A PLLT	2 1 2 30	2 4 5 1 0 0 180 10 1						B 6 23 0 0	
35	ZSM	920034	SM	D	5+10S	A PLLT	2 1 2 30	2 3 5 2 0 0 180 20 1						B 6 23 0 0	
36	ZSM	920035	SM	D	5+25S	A PLLT	2 1 2 25	2 3 5 2 0 0 180 20 1						B 6 23 0 0	
37	ZSM	920036	SM	D	5+40S	A PLLT	2 0 3 30	2 3 4 3 0 0 180 25 1						B 6 23 0 0	
38	ZSM	920037	SM	D	5+55S	A PLLT	2 0 3 30	2 3 5 2 0 0 180 30 1						B 6 23 0 0	
39	ZSM	920038	SM	D	5+70S	A PLLT	2 0 3 30	2 4 4 2 0 0 180 25 1						B 6 23 0 0	
40	ZSM	920039	SM	D	5+85S	A PLLT	2 0 3 40	2 3 5 2 0 0 180 30 1						B 6 23 0 0	
41	ZSM	920040	SM	D	6+00S	A PLLT	2 0 3 30	2 3 4 3 0 0 180 30 1						B 6 23 0 0	
42	ZSM	920041	SM	D	0+75S	A GRNT	0 2 3 25	3 4 5 1 0 1 45 15 1						B 6 25 0 2	
43	ZSM	920042	SM	D	0+75S	A GRNT	0 2 3 25	3 4 5 1 0 1 45 15 1						B 6 25 0 2	
44	ZSM	920043	SM	F	0+00S	A GRNT	2 1 3 20	3 1 7 2 0 1 0 10 1						B 6 25 0 1	
45	ZDC	921000	DC	0+00E	1+50S	A ARGT	0 1 3 25	2 2 7 1 0 0 180 10 1						B 27 6 0 0	
46	ZDC	921001	DC	0+00E	1+35S	A ARGT	0 1 3 20	2 2 7 1 0 0 180 10 1						B 27 6 0 0	
47	ZDC	921002	DC	0+00E	1+20S	A ARGT	0 1 3 25	2 1 7 2 0 0 180 8 1						B 27 6 0 0	
48	ZDC	921003	DC	0+00E	1+05S	A ARGT	0 1 3 25	2 2 7 1 0 0 185 22 1						B 27 6 0 0	
49	ZDC	921004	DC	0+00E	0+90S	A ARGT	0 1 3 25	1 3 6 1 0 0 180 10 1						B 27 6 0 0	
50	ZDC	921005	DC	0+00E	0+75S	A ARGT	0 1 3 30	2 4 5 1 0 0 180 20 1						B 27 6 0 0	
51	ZDC	921006	DC	0+00E	0+60S	A ARGT	0 1 3 25	2 2 7 1 0 0 180 22 1						B 27 6 1 0	
52	ZDC	921007	DC	0+00E	0+45S	A ARGT	0 1 3 30	2 3 6 1 0 0 180 25 1						B 27 6 1 0	
53	ZDC	921008	DC	0+00E	0+30S	A ARGT	0 0 3 60	2 3 6 1 0 0 180 0 1						B 27 6 0 0	

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	PROJSAMP.NO.	GRDEASTCO.	NORTHCD.	TYROCK	DBFOPHSD	AREADRC	CGGF	GORGE	PPDRAIS	LODIBL	LINT.SINT.	RADIST	SIWAHOMO.	DAYMACDSS
54	ZDC 921009	DC 0+00E	0+15S	A ARST	0 0 3 30	2 3 6	1 0 0	180 14	1			B 27 6	0 0	
55	ZDC 921010	DC 0+00E	0+00N	A ARST	0 1 3 30	2 3 7	0 0 0	180 12	1			B 27 6	1 0	
56	ZDC 921011	DC 0+00E	0+15N	A GRDR	0 1 3 30	2 2 7	1 0 0	170 8	1			B 27 6	0 0	
57	ZDC 921012	DC 0+00E	0+30N	A GRDR	0 1 3 20	2 3 6	1 0 0	160 20	1			B 27 6	0 0	
58	ZDC 921013	DC 0+00E	0+45N	A GRDR	0 1 3 25	2 2 7	1 0 0	180 12	1			B 27 6	0 0	
59	ZDC 921014	DC 0+00E	0+60N	A GRDR	0 0 3 40	2 2 8	0 0 0	170 15	1			B 27 6	0 0	
60	ZDC 921015	DC 0+00E	0+75N	A GRDR	0 1 3 30	2 2 7	1 0 0	180 12	1			B 27 6	0 0	
61	ZDC 921016	DC 0+00E	0+90N	A GRDR	0 1 3 30	2 2 7	1 0 0	170 16	1			B 27 6	0 0	
62	ZDC 921017	DC 0+00E	1+05N	A GRDR	0 1 3 30	2 2 7	1 0 0	150 15	1			B 27 6	0 0	
63	ZDC 921018	DC 0+00E	1+20N	A GRDR	0 2 3 30	2 2 7	1 0 0	170 20	1			B 27 6	0 0	
64	ZDC 921019	DC 0+00E	1+35N	A GRDR	0 2 3 25	2 2 7	1 0 0	175 25	0			B 27 6	0 0	
65	ZDC 921020	DC 0+00E	1+50N	A GRDR	0 2 3 30	2 2 7	1 0 0	150 16	0			B 27 6	0 2	
66	ZDC 921021	DC 0+00E	1+50N	A GRDR	0 2 3 30	2 2 7	1 0 0	150 16	0			B 27 6	0 2	

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

COMMENTS

- 1 Control Reference Sample.
- 2
- 3
- 4 Cobbles of meta-andesite tuff, granodiorite.
- 5 Broken shovel.
- 6 Missing station 0+75S.
- 7
- 8 Near outcrop.
- 9 Road.
- 10 Near outcrop.
- 11
- 12
- 13
- 14 Road.
- 15 Road.
- 16 In bushes.
- 17
- 18 Near outcrop, Sample D-92-7.
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- 31
- 32 Road.
- 33 Blacker, moist, soft.
- 34 Blacker, moist, soft.
- 35 Blacker, moist, soft.
- 36
- 37 Biotite flakes.
- 38
- 39 Moist, soft.
- 40
- 41 Clearing above road. Biotite flakes. END.
- 42 Outcrop under fallen tree. Field Duplicate.
- 43 Outcrop under fallen tree. Field Duplicate.
- 44 Biotite Flakes. Control Reference.
- 45
- 46
- 47
- 48
- 49
- 50
- 51 Near drill hole.
- 52 Near drill hole.
- 53

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

COMMENTS

54
55 Near stripping.
56
57
58
59 Moist sample on slope.
60
61
62
63 Tree line for old growth.
64
65 Field duplicate.
66 Field duplicate.

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppbAu	ppmAg	%Al	ppmAs	ppmBa	ppmBe	ppmBi
1	<5	<0.2	3.25	22	190	<0.5	<2
2	<5	<0.2	2.96	24	230	<0.5	<2
3	<5	<0.2	3.48	24	310	<0.5	<2
4	<5	<0.2	3.84	29	330	<0.5	<2
5	<5	<0.2	2.84	24	270	<0.5	<2
6	<5	0.2	3.18	24	300	<0.5	<2
7	<5	<0.2	3.45	26	270	<0.5	<2
8	<5	<0.2	4.13	48	360	<0.5	<2
9	<5	<0.2	3.73	38	260	<0.5	<2
10	15	<0.2	3.62	46	280	<0.5	<2
11	<5	<0.2	3.38	52	240	<0.5	<2
12	<5	<0.2	2.97	38	220	<0.5	<2
13	<5	0.4	3.11	42	180	<0.5	2
14	10	0.4	2.95	54	190	<0.5	<2
15	15	0.4	2.08	110	120	<0.5	<2
16	5	0.2	1.66	106	180	<0.5	<2
17	140	1.4	2.27	470	190	<0.5	<2
18	990	1.2	2.42	644	150	<0.5	<2
19	395	0.6	2.17	426	180	<0.5	<2
20	95	0.4	2.08	336	200	<0.5	<2
21	55	0.6	2.22	142	140	0.5	<2
22	15	0.6	2.39	36	80	<0.5	<2
23	10	0.6	2.02	48	150	<0.5	<2
24	35	0.4	1.76	42	200	<0.5	<2
25	20	0.2	1.93	30	140	0.5	<2
26	70	0.4	2.14	32	190	<0.5	<2
27	115	0.8	2.53	36	190	0.5	<2
28	140	0.8	1.91	34	200	<0.5	<2
29	135	0.2	2.18	42	190	<0.5	<2
30	75	<0.2	1.66	40	180	0.5	<2
31	55	<0.2	1.61	18	200	<0.5	2
32	460	0.2	2.06	18	140	<0.5	<2
33	75	0.2	1.63	20	150	<0.5	<2
34	95	0.2	1.75	56	180	<0.5	<2
35	245	0.2	1.91	100	160	<0.5	<2
36	705	0.2	2.4	136	190	<0.5	<2
37	400	0.4	2.75	116	190	<0.5	<2
38	190	0.4	2.31	80	170	<0.5	<2
39	495	0.8	1.93	64	140	<0.5	<2
40	240	1	2.25	80	160	<0.5	<2
41	275	1	1.88	102	160	<0.5	<2
42	45	<0.2	3.75	28	160	<0.5	<2
43	10	0.2	3.77	24	170	<0.5	<2
44	<5	<0.2	2.87	26	180	<0.5	<2
45	<5	<0.2	2.39	24	160	<0.5	<2
46	<5	<0.2	2.96	12	250	<0.5	<2
47	<5	0.4	2.86	16	140	<0.5	<2
48	<5	<0.2	2.54	14	170	<0.5	<2
49	5	<0.2	2.02	18	90	<0.5	<2
50	<5	<0.2	2.89	18	220	<0.5	<2
51	<5	<0.2	3.11	10	220	<0.5	<2
52	<5	0.2	2.74	18	90	<0.5	<2
53	<5	<0.2	2.45	20	70	<0.5	<2

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppbAu	ppmAg	%Al	ppmAs	ppmBa	ppmBe	ppmBi
54	<5	0.2	3.08	18	150	<0.5	<2
55	<5	<0.2	3.27	24	190	<0.5	<2
56	<5	0.2	2.91	36	130	<0.5	<2
57	<5	0.2	3.05	16	230	<0.5	<2
58	<5	<0.2	2.99	28	170	<0.5	<2
59	<5	<0.2	2.32	36	70	<0.5	<2
60	<5	<0.2	2.45	14	320	<0.5	<2
61	<5	<0.2	1.68	16	90	<0.5	<2
62	<5	<0.2	2.14	12	140	<0.5	<2
63	<5	<0.2	2.4	10	240	<0.5	<2
64	<5	<0.2	2.82	10	180	<0.5	<2
65	<5	<0.2	2.33	22	150	<0.5	<2
66	<5	<0.2	2.39	32	160	<0.5	<2

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	%Ca	ppmCd	ppmCo	ppmCr	ppmCu	%Fe	ppmGa
1	0.33	<0.5	13	53	52	3.64	10
2	0.43	<0.5	22	116	107	5.05	10
3	0.5	<0.5	22	117	95	4.92	10
4	0.58	<0.5	27	127	111	5.5	10
5	0.29	<0.5	16	72	59	3.56	10
6	0.62	<0.5	18	68	61	3.85	10
7	0.39	<0.5	22	115	97	4.29	10
8	0.67	<0.5	42	186	162	5.95	10
9	0.57	<0.5	30	166	151	5.51	10
10	0.49	<0.5	30	151	137	5.64	10
11	0.6	<0.5	25	122	122	5.24	10
12	0.58	<0.5	23	86	104	4.58	10
13	0.49	<0.5	20	81	108	4.55	10
14	0.61	<0.5	20	79	108	4.42	10
15	0.84	<0.5	21	42	104	4.99	10
16	1.09	<0.5	16	18	101	3.53	10
17	0.61	<0.5	28	17	149	5.66	10
18	0.7	<0.5	41	22	177	7.27	10
19	0.85	<0.5	33	23	127	5.03	10
20	0.89	<0.5	25	33	127	4.42	10
21	0.7	<0.5	22	64	128	4.88	10
22	0.77	<0.5	24	81	137	6.57	10
23	0.86	<0.5	22	43	122	5.19	10
24	1.33	<0.5	17	33	92	3.85	10
25	0.99	<0.5	17	49	117	4.52	10
26	1.09	<0.5	20	48	126	4.62	10
27	0.75	8.5	21	52	170	5.24	10
28	0.99	4	19	33	128	4.75	10
29	0.87	<0.5	22	71	105	5.23	10
30	0.99	<0.5	28	51	116	5.14	10
31	1.07	<0.5	19	39	105	4.29	10
32	0.55	<0.5	15	39	114	5.03	10
33	1.57	<0.5	18	36	127	4.63	10
34	0.85	<0.5	20	35	111	4.27	10
35	0.99	<0.5	22	49	125	5.12	10
36	0.8	<0.5	25	115	105	5.63	10
37	0.8	<0.5	28	167	129	6.28	10
38	0.91	<0.5	26	120	145	5.66	10
39	1.25	1	22	72	280	5.2	10
40	1.21	0.5	26	106	225	6.21	10
41	1.17	3	26	77	321	5.79	10
42	0.43	<0.5	20	77	82	4.9	10
43	0.43	<0.5	19	75	80	4.83	10
44	0.35	<0.5	16	55	47	3.63	10
45	0.34	<0.5	15	28	68	3.82	10
46	0.36	<0.5	14	29	46	3.64	10
47	0.34	<0.5	13	30	102	4.03	10
48	0.27	<0.5	14	31	52	3.61	10
49	0.34	<0.5	13	35	101	3.96	10
50	0.43	<0.5	15	27	77	3.78	10
51	0.33	<0.5	17	28	61	3.75	10
52	0.5	<0.5	19	41	165	5.44	10
53	0.56	<0.5	18	38	162	5.37	10

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	%Ca	ppmCd	ppmCo	ppmCr	ppmCu	%Fe	ppmBa
54	0.53	<0.5	18	37	147	4.95	10
55	0.48	<0.5	19	35	141	4.78	10
56	0.44	<0.5	21	37	165	5.38	10
57	0.52	<0.5	21	32	113	4.42	10
58	0.59	<0.5	21	35	150	5.07	10
59	0.59	<0.5	20	38	172	5.35	10
60	0.44	<0.5	17	28	56	3.35	10
61	0.28	<0.5	12	34	75	3.53	10
62	0.27	<0.5	14	28	71	3.81	10
63	0.26	<0.5	14	24	34	3.02	10
64	0.3	<0.5	16	30	85	3.9	10
65	0.27	<0.5	18	27	118	4.67	10
66	0.28	<0.5	18	27	110	4.61	10

ZICTON GOLD 1992 ORIENTATION SDIL SURVEY.

	ppmHg	%K	ppmLa	%Mg	ppmMn	ppmMo	%Na
1	<1	0.15	10	1.02	545	1	0.02
2	4	0.61	10	1.66	890	1	0.01
3	<1	0.59	<10	1.71	990	<1	0.01
4	<1	0.69	<10	2.28	1095	<1	<0.01
5	<1	0.44	<10	1.24	635	1	0.02
6	<1	0.26	10	1.11	1135	1	0.02
7	<1	0.37	<10	1.67	810	1	0.01
8	<1	0.49	10	2.76	1830	<1	0.01
9	2	0.67	10	2.27	1155	<1	0.01
10	1	0.7	10	2.29	1245	<1	<0.01
11	<1	0.71	10	1.98	1350	<1	0.01
12	1	0.5	10	1.53	1485	1	0.01
13	<1	0.4	10	1.44	1220	<1	0.01
14	1	0.5	10	1.47	1210	1	0.01
15	<1	0.26	10	1	1290	<1	0.01
16	<1	0.2	10	0.51	1395	1	0.01
17	<1	0.7	20	0.52	1925	1	0.01
18	<1	0.15	20	0.73	2380	<1	0.01
19	<1	0.26	10	0.63	1945	1	0.01
20	<1	0.28	10	0.62	1505	2	0.01
21	<1	0.22	10	1.1	1260	1	0.01
22	<1	0.12	10	1.77	1205	<1	<0.01
23	<1	0.18	10	1.03	1210	1	0.01
24	<1	0.24	10	0.81	1330	1	0.01
25	<1	0.18	10	1.14	1180	1	<0.01
26	<1	0.24	10	1.05	1300	1	0.01
27	<1	0.26	20	1.02	1470	<1	0.01
28	<1	0.27	30	0.69	1305	1	0.01
29	<1	0.43	10	1.27	1030	1	0.01
30	<1	0.32	10	0.92	1035	2	0.01
31	<1	0.25	10	0.8	885	2	0.01
32	<1	0.37	20	0.93	760	1	0.01
33	1	0.26	10	0.83	820	2	0.01
34	<1	0.23	10	0.72	1005	1	0.01
35	<1	0.34	10	1.04	1050	1	0.01
36	<1	0.43	<10	1.43	1240	1	0.01
37	<1	0.46	<10	1.8	1340	<1	0.01
38	<1	0.33	<10	1.37	1270	1	0.01
39	1	0.27	10	1	1085	7	0.01
40	<1	0.3	10	1.36	1235	6	<0.01
41	<1	0.31	10	1	1305	11	0.01
42	<1	0.25	10	1.41	630	<1	0.01
43	1	0.24	10	1.39	630	<1	0.01
44	<1	0.17	10	1.06	555	1	0.01
45	<1	0.3	10	0.87	505	1	0.01
46	<1	0.27	<10	0.8	575	1	0.01
47	2	0.37	10	0.9	335	<1	0.02
48	1	0.26	10	0.89	365	1	0.01
49	3	0.28	10	0.94	390	2	<0.01
50	<1	0.28	10	0.95	655	<1	0.02
51	2	0.23	<10	0.96	525	1	0.02
52	<1	0.46	10	1.52	550	2	0.01
53	1	0.4	10	1.51	625	2	<0.01

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppmHg	%K	ppmLa	%Mg	ppmMn	ppmMo	%Na
54	<1	0.41	10	1.39	570	1	0.01
55	<1	0.45	10	1.34	575	1	0.02
56	<1	0.45	10	1.51	650	1	0.01
57	<1	0.4	10	1.12	705	1	0.02
58	<1	0.49	10	1.26	650	1	0.01
59	2	0.42	10	1.43	665	3	0.01
60	<1	0.27	<10	0.81	765	1	0.02
61	<1	0.29	10	0.9	370	2	<0.01
62	1	0.29	<10	0.93	460	2	0.01
63	<1	0.24	<10	0.73	575	2	0.01
64	<1	0.33	10	0.95	455	1	0.01
65	<1	0.2	10	0.82	410	3	0.01
66	<1	0.21	10	0.8	460	4	0.01

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppmNi	ppmP	ppmPb	ppmSb	ppmSc	ppmSr	ZTi
1	34	1020	10 <2		7	44	0.13
2	62	820	10	6	13	50	0.14
3	55	870	8	2	11	50	0.16
4	53	2190 <2		6	12	60	0.16
5	39	1360	8 <2		8	53	0.11
6	38	2710	32	4	8	81	0.1
7	52	1260	14 <2		13	45	0.14
8	71	780	18	4	21	52	0.12
9	73	760	10	2	17	43	0.15
10	63	890	8	2	18	41	0.14
11	54	1210	16	4	14	60	0.14
12	47	970	26	4	10	61	0.12
13	48	1000	44	4	10	63	0.12
14	44	1050	34 <2		10	64	0.11
15	31	1490	28	4	6	80	0.05
16	28	1220	16	2	3	154	0.03
17	33	1600	56	2	4	98	0.05
18	48	2230	80	6	4	111	0.04
19	35	1690	40	6	4	133	0.05
20	44	1460	54	4	4	101	0.05
21	67	1200	38	4	5	82	0.04
22	53	1390	60	6	5	98	0.02
23	38	1550	30	2	4	130	0.03
24	53	1680	32	2	3	188	0.03
25	37	1560	24	2	4	129	0.02
26	42	1560	32	2	5	128	0.04
27	46	1530	94	2	6	95	0.04
28	32	1710	82	4	4	150	0.03
29	48	1540	34	4	8	125	0.05
30	55	1740	18	2	5	163	0.03
31	40	1460	12	2	4	177	0.03
32	35	1290	8	4	5	79	0.05
33	49	1560	20	4	4	157	0.03
34	43	1510	16	2	4	151	0.04
35	45	1630	14	4	5	113	0.05
36	75	1280	16	4	9	98	0.07
37	89	1030	26	4	12	80	0.08
38	79	1180	12	2	9	85	0.06
39	60	1320	22	2	6	118	0.04
40	78	1210	26	6	9	117	0.05
41	61	1530	26	4	7	134	0.05
42	47	1040	16	2	9	52	0.15
43	45	1070	12	2	9	52	0.15
44	34	800	14	2	7	44	0.13
45	31	550	6	2	5	43	0.11
46	40	1390	8	4	5	56	0.11
47	36	500	6 <2		7	44	0.12
48	33	460	8	2	5	35	0.12
49	33	570	6	2	6	39	0.1
50	31	870	2 <2		6	57	0.11
51	37	650	4 <2		6	52	0.12
52	33	570	6	4	10	58	0.15
53	34	1010	6	4	10	60	0.12

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppmNi	ppmP	ppmPb	ppmSb	ppmSc	ppmSr	%Ti
54	35	650	10	4	9	66	0.15
55	38	810	4	4	9	61	0.15
56	37	710	4	4	9	49	0.14
57	39	960	10	4	7	67	0.13
58	42	980	4	4	8	67	0.13
59	35	1210	6	2	9	52	0.11
60	41	2120	8	2	4	66	0.09
61	28	500 <2		2	5	29	0.09
62	32	700	4	2	5	37	0.09
63	31	1130	8 <2		4	46	0.09
64	34	680	8	4	7	49	0.12
65	47	1190	10 <2		5	41	0.08
66	47	1300	4	2	5	44	0.08

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppmTl	ppmU	ppmV	ppmW	ppmZn
1	<10	<10	72	10	92
2	<10	<10	129	10	128
3	<10	<10	121	10	114
4	<10	<10	131	20	128
5	<10	<10	80	10	132
6	<10	<10	77	10	194
7	<10	<10	124	10	108
8	<10	<10	213	20	128
9	<10	<10	168	20	104
10	<10	<10	172	20	124
11	<10	<10	138	10	132
12	<10	<10	100	10	142
13	<10	<10	96	10	134
14	<10	<10	94	10	134
15	<10	<10	58	10	104
16	<10	<10	26	10	86
17	<10	<10	28	10	156
18	<10	<10	43	10	136
19	<10	<10	39	10	118
20	<10	<10	44	10	174
21	<10	<10	47	10	130
22	<10	<10	65	20	122
23	<10	<10	43	10	106
24	<10	<10	33	10	122
25	<10	<10	50	10	96
26	<10	<10	51	10	154
27	<10	<10	56	10	388
28	<10	<10	37	10	276
29	<10	<10	76	10	142
30	<10	<10	31	10	106
31	<10	<10	42	10	108
32	<10	<10	49	10	96
33	<10	<10	42	10	142
34	<10	<10	41	10	150
35	<10	<10	57	10	136
36	<10	<10	83	10	126
37	<10	<10	108	10	142
38	<10	<10	89	10	132
39	<10	<10	57	10	138
40	<10	<10	90	10	150
41	<10	<10	68	10	180
42	<10	<10	92	10	142
43	<10	<10	92	10	142
44	<10	<10	73	10	94
45	<10	<10	62 <10		150
46	<10	<10	55	10	220
47	<10	<10	61	10	142
48	<10	<10	62 <10		152
49	<10	<10	70 <10		146
50	<10	<10	67	10	180
51	<10	<10	69	10	218
52	<10	<10	100	10	156
53	<10	<10	95	10	168

ZICTON GOLD 1992 ORIENTATION SOIL SURVEY.

	ppmTl	ppmU	ppmV	ppmW	ppmZn
54	<10	<10	91	10	170
55	<10	<10	89	10	178
56	<10	<10	99	10	170
57	<10	<10	80	<10	220
58	<10	<10	86	10	198
59	<10	<10	97	10	170
60	<10	<10	54	<10	318
61	<10	<10	63	<10	128
62	<10	<10	63	<10	142
63	<10	<10	51	<10	252
64	<10	<10	70	<10	146
65	<10	<10	59	<10	242
66	<10	<10	60	<10	248

Appendix IV

Laboratory Geochemistry Report. Soil Samples



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: ALLEN GEOLOGICAL ENGINEERING LIMITED

827 W. PENDER ST.
 VANCOUVER, BC
 V6C 3G8

Page Number : 1-A
 Total Pages : 2
 Certificate Date: 07-JUL-92
 Invoice No. : 19216930
 P.O. Number :
 Account : MD

Project : ZICTON GOLD
 Comments : CC: DOUGLAS HALLIWELL

ZSM = Zicton Saddle Mountain
 ZDC = Zicton Deafies Creek

CERTIFICATE OF ANALYSIS A9216930

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
KLM-920000	201 202	< 5	< 0.2	3.25	22	190	< 0.5	< 2	0.33	< 0.5	13	53	52	3.64	10	< 1	0.15	10	1.02	545
KLM-920001	201 202	< 5	< 0.2	2.96	24	230	< 0.5	< 2	0.43	< 0.5	22	116	107	5.05	10	4	0.61	10	1.66	890
KLM-920002	201 202	< 5	< 0.2	3.48	24	310	< 0.5	< 2	0.50	< 0.5	22	117	95	4.92	10	< 1	0.59	< 10	1.71	990
KLM-920003	201 202	< 5	< 0.2	3.84	28	330	< 0.5	< 2	0.58	< 0.5	27	127	111	5.50	10	< 1	0.69	< 10	2.28	1095
KLM-920004	201 202	< 5	< 0.2	2.84	24	270	< 0.5	< 2	0.38	< 0.5	16	72	89	3.56	10	< 1	0.44	< 10	1.24	638
KLM-920005	201 202	< 5	0.2	3.18	24	300	< 0.5	< 2	0.62	< 0.5	18	68	61	3.85	10	< 1	0.26	10	1.11	1185
KLM-920006	201 202	< 5	0.2	3.45	26	270	< 0.5	< 2	0.39	< 0.5	22	115	97	4.29	10	< 1	0.37	< 10	1.67	810
KLM-920007	201 202	< 5	< 0.2	4.13	48	360	< 0.5	< 2	0.67	< 0.5	42	186	162	5.95	10	< 1	0.49	10	2.78	1830
KLM-920008	201 202	< 5	< 0.2	3.73	38	260	< 0.5	< 2	0.57	< 0.5	30	166	151	5.51	10	2	0.67	10	2.27	1155
KLM-920009	201 202	15	0.2	3.62	46	280	< 0.5	< 2	0.49	< 0.5	30	151	137	5.64	10	1	0.70	10	2.29	1245
KLM-920010	201 202	< 5	< 0.2	3.38	52	240	< 0.5	< 2	0.60	< 0.5	26	122	122	5.24	10	< 1	0.71	10	1.98	1350
KLM-920011	201 202	< 5	< 0.2	2.97	38	220	< 0.5	< 2	0.58	< 0.5	23	86	104	4.58	10	1	0.50	10	1.53	1485
KLM-920012	201 202	< 5	0.4	3.11	42	180	< 0.5	2	0.49	< 0.5	20	81	108	4.55	10	< 1	0.40	10	1.44	1220
KLM-920013	201 202	10	0.4	2.95	54	190	< 0.5	< 2	0.61	< 0.5	20	79	108	4.42	10	1	0.50	10	1.47	1210
KLM-920014	201 202	15	0.4	2.08	110	120	< 0.5	< 2	0.84	< 0.5	21	42	104	4.99	10	< 1	0.26	10	1.00	1290
KLM-920015	201 202	5	0.2	1.66	106	180	< 0.5	< 2	1.09	< 0.5	16	18	101	3.53	10	< 1	0.20	10	0.51	1395
KLM-920016	201 202	140	1.4	2.27	470	190	< 0.5	< 2	0.61	< 0.5	28	17	149	5.66	10	< 1	0.17	20	0.52	1925
KLM-920017	201 202	990	1.2	2.42	644	150	< 0.5	< 2	0.70	< 0.5	41	22	177	7.27	10	< 1	0.15	20	0.73	2380
KLM-920018	201 202	395	0.6	2.17	426	180	< 0.5	< 2	0.85	< 0.5	33	23	127	5.03	10	< 1	0.26	10	0.63	1945
KLM-920019	201 202	95	0.4	2.08	336	200	< 0.5	< 2	0.89	< 0.5	28	33	127	4.42	10	< 1	0.28	10	0.82	1808
KLM-920020	201 202	85	0.6	2.22	142	140	0.5	< 2	0.70	< 0.5	22	64	128	4.88	10	< 1	0.22	10	1.10	1260
KLM-920021	201 202	15	0.6	2.39	36	80	< 0.5	< 2	0.77	< 0.5	24	81	137	6.57	10	< 1	0.12	10	1.77	1205
KLM-920022	201 202	10	0.6	2.02	48	150	< 0.5	< 2	0.86	< 0.5	22	43	122	5.19	10	< 1	0.18	10	1.03	1210
KLM-920023	201 202	35	0.4	1.76	42	200	< 0.5	< 2	1.33	< 0.5	17	33	92	3.85	10	< 1	0.24	10	0.81	1330
KLM-920024	201 202	20	0.2	1.93	30	140	0.5	< 2	0.99	< 0.5	17	49	117	4.52	10	< 1	0.18	10	1.14	1180
KLM-920025	201 202	70	0.4	2.14	32	190	< 0.5	< 2	1.09	< 0.5	20	48	126	4.62	10	< 1	0.24	10	1.05	1300
KLM-920026	201 202	115	0.8	2.53	36	190	0.5	< 2	0.76	8.5	21	52	170	5.24	10	< 1	0.26	20	1.02	1470
KLM-920027	201 202	140	0.8	1.91	34	200	< 0.5	< 2	0.99	4.0	19	33	128	4.75	10	< 1	0.27	30	0.69	1305
KLM-920028	201 202	135	0.2	2.18	42	190	< 0.5	< 2	0.87	< 0.5	22	71	105	5.23	10	< 1	0.43	10	1.27	1030
KLM-920029	201 202	75	0.2	1.66	40	180	0.5	< 2	0.99	< 0.5	28	51	116	5.14	10	< 1	0.32	10	0.92	1035
KLM-920030	201 202	55	0.2	1.61	18	200	< 0.5	2	1.07	< 0.5	19	39	105	4.29	10	< 1	0.25	10	0.80	885
KLM-920031	201 202	460	0.2	2.06	18	140	< 0.5	< 2	0.55	< 0.5	18	39	114	8.03	10	< 1	0.37	20	0.93	760
KLM-920032	201 202	75	0.2	1.63	20	150	< 0.5	< 2	1.57	< 0.5	18	36	127	4.63	10	1	0.26	10	0.83	820
KLM-920033	201 202	95	0.2	1.75	56	180	< 0.5	< 2	0.85	< 0.5	20	35	111	4.27	10	< 1	0.23	10	0.72	1005
KLM-920034	201 202	245	0.2	1.91	100	160	< 0.5	< 2	0.99	< 0.5	22	49	125	5.12	10	< 1	0.34	10	1.04	1050
KLM-920035	201 202	705	0.2	2.40	138	190	< 0.5	< 2	0.80	< 0.5	25	115	105	5.63	10	< 1	0.43	< 10	1.43	1240
KLM-920036	201 202	400	0.4	2.75	116	190	< 0.5	< 2	0.80	< 0.5	28	167	129	6.28	10	< 1	0.46	< 10	1.80	1340
KLM-920037	201 202	190	0.4	2.31	80	170	< 0.5	< 2	0.91	< 0.5	26	120	145	5.66	10	< 1	0.33	< 10	1.37	1270
KLM-920038	201 202	495	0.8	1.93	64	140	< 0.5	< 2	1.25	1.0	22	72	280	5.20	10	1	0.27	10	1.00	1085
KLM-920039	201 202	240	1.0	2.25	80	160	< 0.5	< 2	1.21	0.5	26	106	225	6.21	10	< 1	0.30	10	1.36	1235

CERTIFICATION:

John D. Ma



Chemex Labs Ltd.

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To: ALLEN GEOLOGICAL ENGINEERING LIMITED

827 W. PENDER ST.
 VANCOUVER, BC
 V6C 3G8

Page Number :1-8
 Total Pages :2
 Certificate Date: 07-JUL-92
 Invoice No. : 19216930
 P.O. Number :
 Account : MD

Project : ZICTON GOLD
 Comments : CC: DOUGLAS HALLIWELL

CERTIFICATE OF ANALYSIS A9216930

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LAM-920000	201	202	1	0.02	34	1020	10	< 2	7	44	0.13	< 10	< 10	72	10	92
LAM-920001	201	202	1	0.01	62	820	10	6	13	50	0.14	< 10	< 10	129	10	128
LAM-920002	201	202	< 1	0.01	55	870	8	2	11	50	0.16	< 10	< 10	121	10	114
LAM-920003	201	202	< 1	< 0.01	53	2190	< 2	6	12	60	0.16	< 10	< 10	131	20	128
LAM-920004	201	202	1	0.02	39	1360	8	< 2	8	53	0.11	< 10	< 10	80	10	132
LAM-920005	201	202	1	0.02	38	2710	32	4	8	81	0.10	< 10	< 10	77	10	194
LAM-920006	201	202	1	0.01	82	1260	14	2	13	45	0.14	< 10	< 10	124	10	108
LAM-920007	201	202	< 1	0.01	71	780	18	0	21	52	0.12	< 10	< 10	213	20	128
LAM-920008	201	202	< 1	0.01	79	760	10	2	17	43	0.15	< 10	< 10	168	20	104
LAM-920009	201	202	< 1	< 0.01	63	890	8	2	18	41	0.14	< 10	< 10	172	20	124
LAM-920010	201	202	< 1	0.01	54	1210	16	4	14	60	0.14	< 10	< 10	138	10	132
LAM-920011	201	202	1	0.01	47	970	26	4	10	61	0.12	< 10	< 10	100	10	142
LAM-920012	201	202	< 1	0.01	48	1000	44	4	10	63	0.12	< 10	< 10	96	10	134
LAM-920013	201	202	1	0.01	44	1050	34	< 2	10	64	0.11	< 10	< 10	94	10	134
LAM-920014	201	202	< 1	0.01	31	1490	28	4	6	80	0.05	< 10	< 10	58	10	104
LAM-920015	201	202	1	0.01	28	1220	16	2	3	154	0.03	< 10	< 10	26	10	86
LAM-920016	201	202	1	0.01	33	1600	56	2	4	98	0.05	< 10	< 10	28	10	156
LAM-920017	201	202	< 1	0.01	48	2230	80	6	4	111	0.04	< 10	< 10	43	10	136
LAM-920018	201	202	1	0.01	35	1690	40	6	4	133	0.05	< 10	< 10	39	10	118
LAM-920019	201	202	2	0.01	44	1460	54	4	4	101	0.05	< 10	< 10	44	10	174
LAM-920020	201	202	1	0.01	67	1200	38	4	5	82	0.04	< 10	< 10	49	10	130
LAM-920021	201	202	< 1	< 0.01	53	1390	60	6	5	98	0.02	< 10	< 10	65	20	122
LAM-920022	201	202	1	0.01	38	1550	30	2	4	130	0.03	< 10	< 10	43	10	106
LAM-920023	201	202	1	0.01	33	1680	32	2	3	188	0.03	< 10	< 10	33	10	122
LAM-920024	201	202	1	< 0.01	37	1560	24	2	4	129	0.02	< 10	< 10	50	10	96
LAM-920025	201	202	1	0.01	42	1560	32	2	5	128	0.04	< 10	< 10	51	10	154
LAM-920026	201	202	< 1	0.01	46	1530	94	2	6	95	0.04	< 10	< 10	56	10	388
LAM-920027	201	202	1	0.01	32	1710	82	4	4	150	0.03	< 10	< 10	37	10	276
LAM-920028	201	202	1	0.01	48	1540	34	4	8	125	0.05	< 10	< 10	76	10	142
LAM-920029	201	202	2	0.01	55	1740	18	2	5	163	0.03	< 10	< 10	51	10	106
LAM-920030	201	202	2	0.01	40	1460	12	2	4	177	0.03	< 10	< 10	42	10	108
LAM-920031	201	202	1	0.01	35	1290	8	4	5	79	0.05	< 10	< 10	49	10	96
LAM-920032	201	202	2	0.01	49	1560	20	4	4	157	0.03	< 10	< 10	42	10	142
LAM-920033	201	202	1	0.01	43	1510	16	2	4	151	0.04	< 10	< 10	41	10	150
LAM-920034	201	202	1	0.01	45	1630	14	4	5	113	0.05	< 10	< 10	57	10	136
LAM-920035	201	202	1	0.01	75	1280	16	4	9	98	0.07	< 10	< 10	83	10	126
LAM-920036	201	202	< 1	0.01	89	1030	26	4	12	80	0.08	< 10	< 10	108	10	142
LAM-920037	201	202	1	0.01	79	1180	12	2	9	85	0.06	< 10	< 10	89	10	132
LAM-920038	201	202	7	0.01	60	1320	22	2	6	118	0.04	< 10	< 10	57	10	138
LAM-920039	201	202	6	< 0.01	78	1210	26	6	9	117	0.05	< 10	< 10	90	10	150

CERTIFICATION: *Phai J Ma*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 604-984-0221

To: ALLEN GEOLOGICAL ENGINEERING LIMITED

827 W. PENDER ST.
VANCOUVER, BC
V6C 3G8

Project: ZICTON GOLD
Comments: CC: DOUGLAS HALLIWELL

Page Number :2-A
Total Pages :2
Certificate Date: 07-JUL-82
Invoice No. :19216930
P.O. Number :
Account :MD

CERTIFICATE OF ANALYSIS A9216930

SAMPLE	PREP CODE		An ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
			FA+AA																		
LMS-920040	201	202	275	1.0	1.88	102	160	< 0.5	2	1.17	3.0	26	77	321	5.79	10	< 1	0.31	10	1.00	1305
LMS-920041	201	202	45	< 0.2	3.75	20	160	< 0.5	< 2	0.43	< 0.5	20	77	82	4.90	10	< 1	0.25	10	1.41	630
LMS-920042	201	202	10	0.2	3.77	24	170	< 0.5	< 2	0.43	< 0.5	19	75	80	4.83	10	1	0.24	10	1.39	630
LMS-920043	201	202	< 5	< 0.2	2.87	26	180	< 0.5	< 2	0.35	< 0.5	16	55	47	3.63	10	< 1	0.17	10	1.06	555
KDC-921000	201	202	< 5	< 0.2	2.39	24	160	< 0.5	2	0.34	< 0.5	15	28	68	3.82	10	< 1	0.30	10	0.87	505
KDC-921001	201	202	< 5	< 0.2	2.96	12	250	< 0.5	< 2	0.36	< 0.5	14	29	46	3.64	10	< 1	0.27	< 10	0.80	575
KDC-921002	201	202	< 5	0.4	2.86	16	140	< 0.5	< 2	0.34	< 0.5	13	30	102	4.03	10	2	0.37	10	0.90	335
KDC-921003	201	202	< 5	< 0.2	2.54	14	170	< 0.5	2	0.27	< 0.5	14	31	52	3.61	10	1	0.26	10	0.89	365
KDC-921004	201	202	5	< 0.2	2.02	18	90	< 0.5	< 2	0.34	< 0.5	13	35	101	3.96	10	3	0.28	10	0.94	390
KDC-921005	201	202	< 5	< 0.2	2.89	18	220	< 0.5	< 2	0.43	< 0.5	15	27	77	3.78	10	< 1	0.28	10	0.95	655
KDC-921006	201	202	< 5	< 0.2	3.11	10	220	< 0.5	< 2	0.33	< 0.5	17	28	61	3.75	10	2	0.23	< 10	0.96	525
KDC-921007	201	202	< 5	0.2	2.74	18	90	< 0.5	< 2	0.50	< 0.5	19	41	165	5.44	10	< 1	0.46	10	1.52	550
KDC-921008	201	202	< 5	< 0.2	2.45	20	70	< 0.5	< 2	0.56	< 0.5	18	38	162	5.37	10	1	0.40	10	1.51	625
KDC-921009	201	202	5	0.2	3.08	18	150	< 0.5	< 2	0.53	< 0.5	18	37	147	4.95	10	< 1	0.41	10	1.39	570
KDC-921010	201	202	< 5	< 0.2	3.27	24	190	< 0.5	< 2	0.48	< 0.5	19	35	141	4.78	10	< 1	0.45	10	1.34	575
KDC-921011	201	202	< 5	0.2	2.91	36	130	< 0.5	< 2	0.44	< 0.5	21	37	165	5.38	10	< 1	0.45	10	1.51	650
KDC-921012	201	202	< 5	0.2	3.05	16	230	< 0.5	< 2	0.52	< 0.5	21	32	113	4.42	10	< 1	0.40	10	1.12	705
KDC-921013	201	202	< 5	< 0.2	2.89	28	170	< 0.5	< 2	0.59	< 0.5	21	35	150	5.07	10	< 1	0.49	10	1.26	650
KDC-921014	201	202	< 5	< 0.2	2.32	36	70	< 0.5	< 2	0.59	< 0.5	20	38	172	5.35	10	2	0.42	10	1.43	665
KDC-921015	201	202	5	< 0.2	2.45	14	320	< 0.5	< 2	0.44	< 0.5	17	28	56	3.35	10	< 1	0.27	< 10	0.81	765
KDC-921016	201	202	< 5	< 0.2	1.68	16	90	< 0.5	< 2	0.28	< 0.5	12	34	75	3.53	10	< 1	0.29	10	0.90	370
KDC-921017	201	202	< 5	< 0.2	2.14	12	140	< 0.5	< 2	0.27	< 0.5	14	28	71	3.81	10	1	0.29	< 10	0.93	460
KDC-921018	201	202	< 5	< 0.2	2.40	10	240	< 0.5	< 2	0.26	< 0.5	14	24	34	3.02	10	< 1	0.24	< 10	0.73	575
KDC-921019	201	202	< 5	< 0.2	2.82	10	180	< 0.5	< 2	0.30	< 0.5	16	30	85	3.90	10	< 1	0.33	10	0.95	455
KDC-921020	201	202	< 5	< 0.2	2.33	22	150	< 0.5	< 2	0.27	< 0.5	18	27	118	4.67	10	< 1	0.20	10	0.82	410
KDC-921021	201	202	< 5	< 0.2	2.39	32	160	< 0.5	< 2	0.28	< 0.5	18	27	110	4.61	10	< 1	0.21	10	0.80	460

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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 PHONE: 604-984-0221

To: ALLEN GEOLOGICAL ENGINEERING LIMITED

827 W. PENDER ST.
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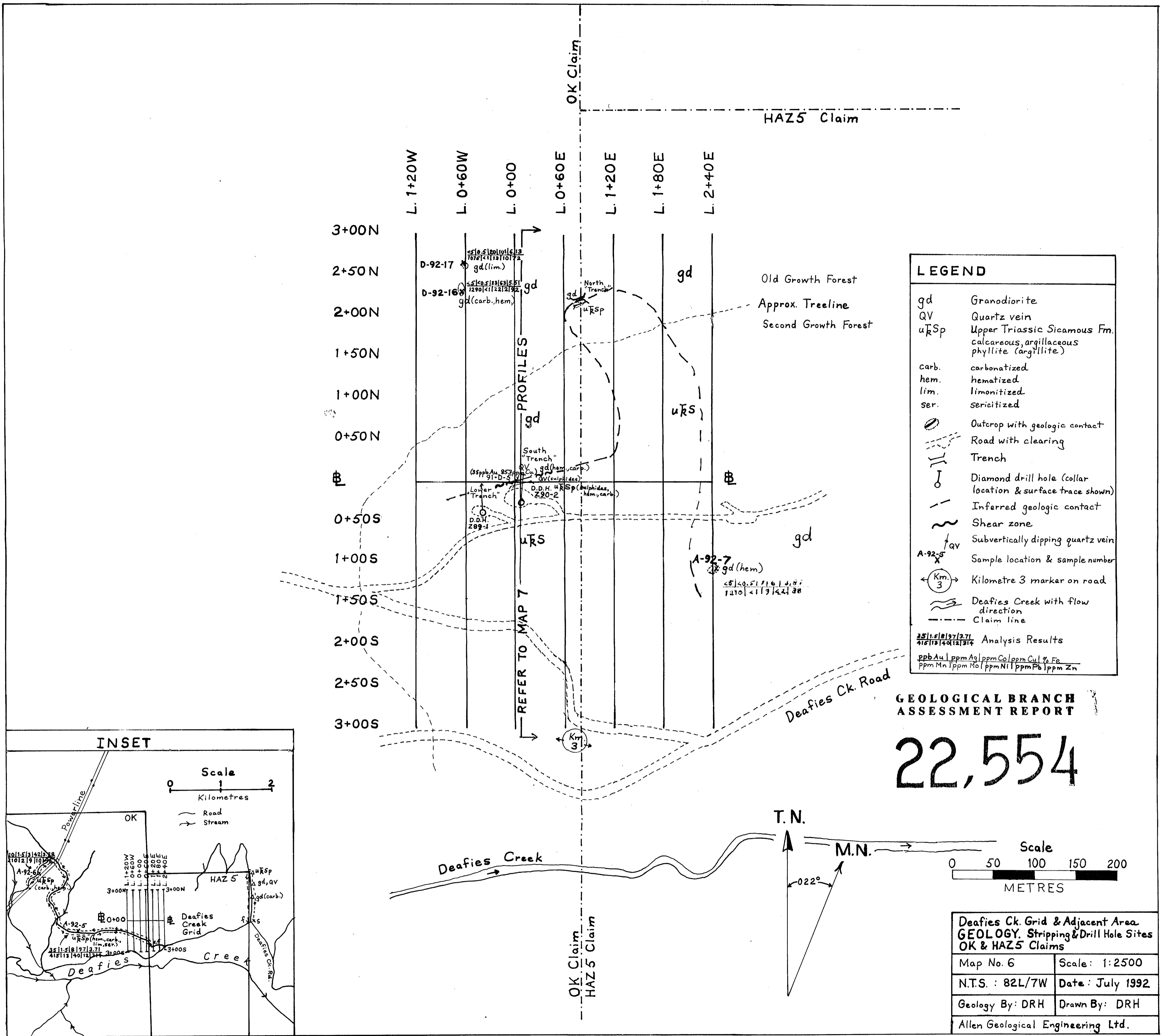
Page Number :2-B
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Project : ZICTON GOLD
 Comments: CC: DOUGLAS HALLIWELL

CERTIFICATE OF ANALYSIS A9216930

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LSM-920040	201	202	11	0.01	61	1530	26	4	7	134	0.05	< 10	< 10	68	10	180
LSM-920041	201	202	< 1	0.01	47	1040	16	2	9	52	0.15	< 10	< 10	92	10	142
LSM-920042	201	202	< 1	0.01	45	1070	12	2	9	52	0.15	< 10	< 10	92	10	142
LSM-920043	201	202	1	0.01	34	800	14	2	7	44	0.13	< 10	< 10	73	10	94
KDC-921000	201	202	1	0.01	31	550	6	2	5	43	0.11	< 10	< 10	62	< 10	150
KDC-921001	201	202	1	0.01	40	1390	8	4	5	56	0.11	< 10	< 10	55	10	220
KDC-921002	201	202	< 1	0.02	36	500	6	< 2	7	44	0.12	< 10	< 10	61	10	142
KDC-921003	201	202	1	0.01	33	460	8	2	5	35	0.12	< 10	< 10	62	< 10	152
KDC-921004	201	202	2	< 0.01	33	570	6	2	6	39	0.10	< 10	< 10	70	< 10	146
KDC-921005	201	202	< 1	0.02	31	870	2	< 2	6	57	0.11	< 10	< 10	67	10	180
KDC-921006	201	202	1	0.02	37	650	4	< 2	6	52	0.12	< 10	< 10	69	10	218
KDC-921007	201	202	2	0.01	33	570	6	4	10	58	0.15	< 10	< 10	100	10	156
KDC-921008	201	202	2	< 0.01	34	1010	6	4	10	60	0.12	< 10	< 10	95	10	168
KDC-921009	201	202	1	0.01	35	650	10	4	9	66	0.15	< 10	< 10	91	10	170
KDC-921010	201	202	1	0.02	38	810	4	4	9	61	0.15	< 10	< 10	89	10	178
KDC-921011	201	202	1	0.01	37	710	4	4	9	49	0.14	< 10	< 10	99	10	170
KDC-921012	201	202	1	0.02	39	960	10	4	7	67	0.13	< 10	< 10	80	< 10	220
KDC-921013	201	202	1	0.01	42	980	4	4	8	67	0.13	< 10	< 10	86	10	198
KDC-921014	201	202	3	0.01	35	1210	6	2	9	52	0.11	< 10	< 10	97	10	170
KDC-921015	201	202	1	0.02	41	2120	8	2	4	66	0.09	< 10	< 10	54	< 10	318
KDC-921016	201	202	2	< 0.01	28	500	< 2	2	5	29	0.09	< 10	< 10	63	< 10	128
KDC-921017	201	202	2	0.01	32	700	4	2	5	37	0.09	< 10	< 10	63	< 10	142
KDC-921018	201	202	2	0.01	31	1130	8	< 2	4	46	0.09	< 10	< 10	51	< 10	252
KDC-921019	201	202	1	0.01	34	680	8	4	7	49	0.12	< 10	< 10	70	< 10	146
KDC-921020	201	202	3	0.01	47	1190	10	< 2	5	41	0.08	< 10	< 10	59	< 10	242
KDC-921021	201	202	4	0.01	47	1300	4	2	5	44	0.08	< 10	< 10	60	< 10	248

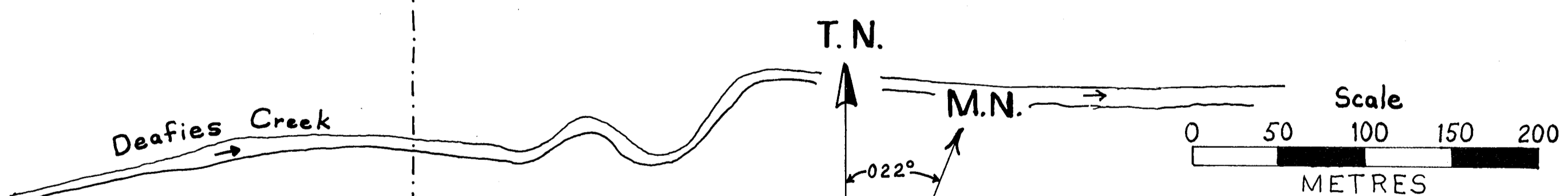
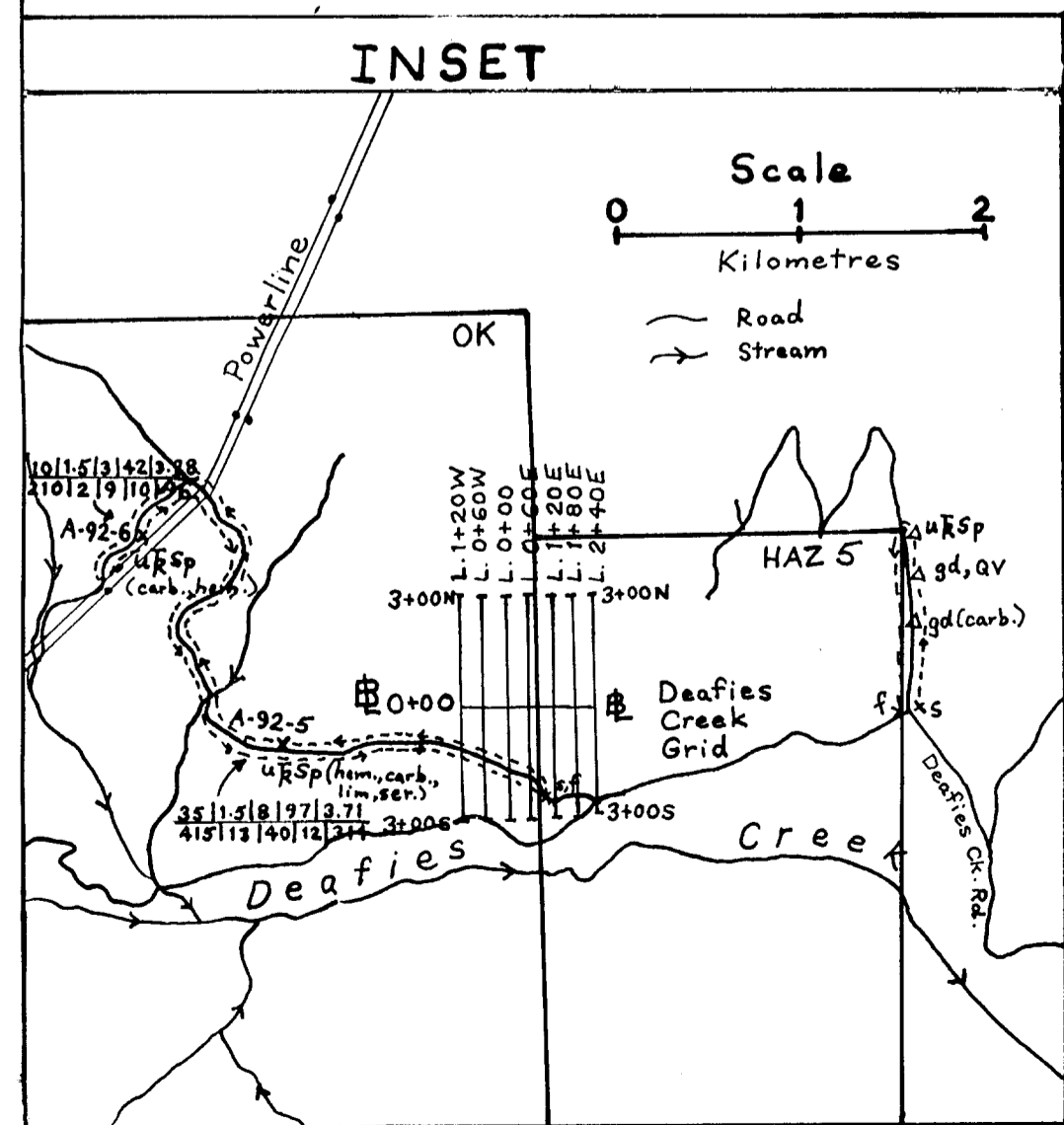
CERTIFICATION: *Whai DMA*



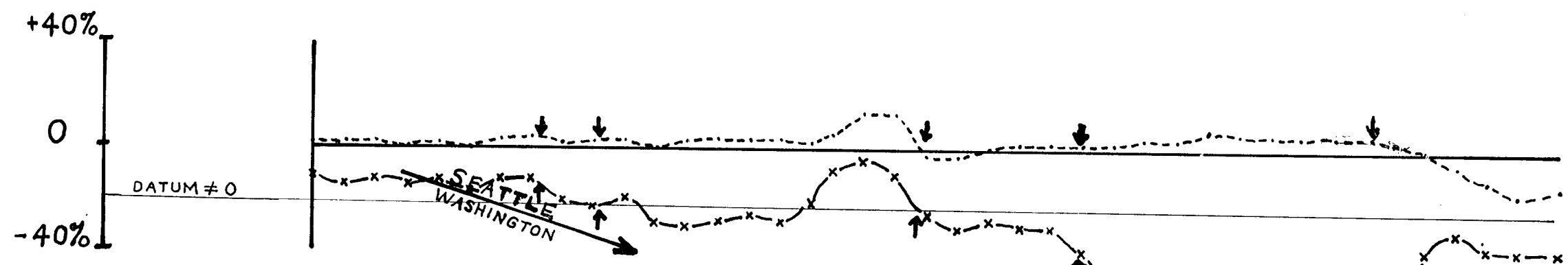
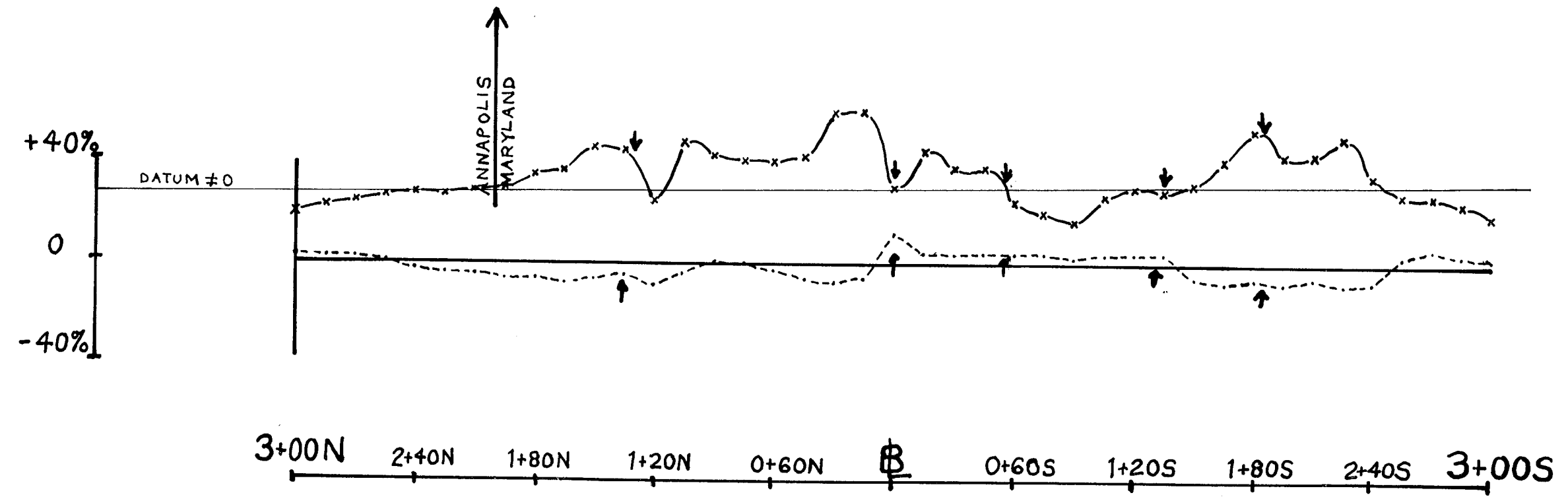
LEGEND											
gd	Granodiorite										
QV	Quartz vein										
uRS	Upper Triassic Sicamous Fm. calcareous, argillaceous phyllite (argillite)										
carb.	carbonatized										
hem.	hematized										
lim.	limonitized										
ser.	sericitized										
	Outcrop with geologic contact										
	Road with clearing										
	Trench										
	Diamond drill hole (collar location & surface trace shown)										
	Inferred geologic contact										
	Shear zone										
	Subvertically dipping quartz vein										
	Sample location & sample number										
	Kilometre 3 marker on road										
	Deafies Creek with flow direction										
	Claim line										
<table border="1"> <tr> <td>ppb Au</td><td>ppm Ag</td><td>ppm Co</td><td>ppm Cu</td><td>% Fe</td> </tr> <tr> <td>ppm Mn</td><td>ppm Mo</td><td>ppm Ni</td><td>ppm Pb</td><td>ppm Zn</td> </tr> </table>		ppb Au	ppm Ag	ppm Co	ppm Cu	% Fe	ppm Mn	ppm Mo	ppm Ni	ppm Pb	ppm Zn
ppb Au	ppm Ag	ppm Co	ppm Cu	% Fe							
ppm Mn	ppm Mo	ppm Ni	ppm Pb	ppm Zn							
<table border="1"> <tr> <td>25115181971371</td><td>Analysis Results</td> </tr> <tr> <td>415113140121314</td><td></td> </tr> </table>		25115181971371	Analysis Results	415113140121314							
25115181971371	Analysis Results										
415113140121314											

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,554



Deafies Ck. Grid & Adjacent Area GEOLOGY, Stripping & Drill Hole Sites OK & HAZ5 Claims	
Map No. 6	Scale: 1:2500
N.T.S. : 82L/7W	Date: July 1992
Geology By: DRH	Drawn By: DRH
Allen Geological Engineering Ltd.	

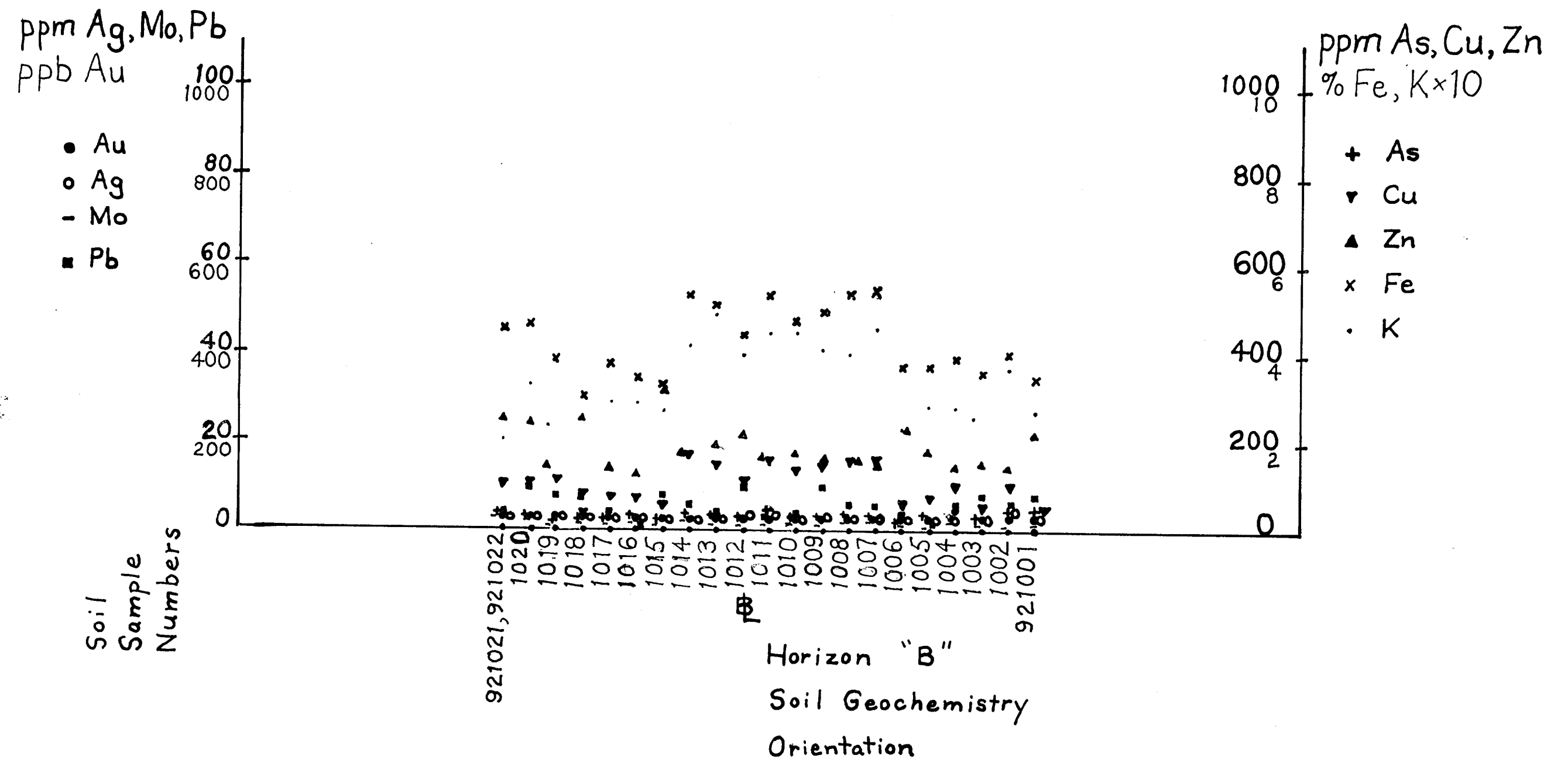


LEGEND

x-x-x In Phase Component
 - - - Quadrature Component
 ↓ Conductor Axis Location

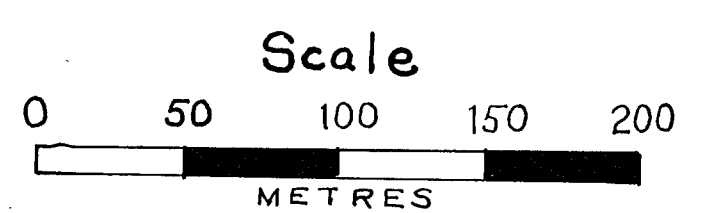
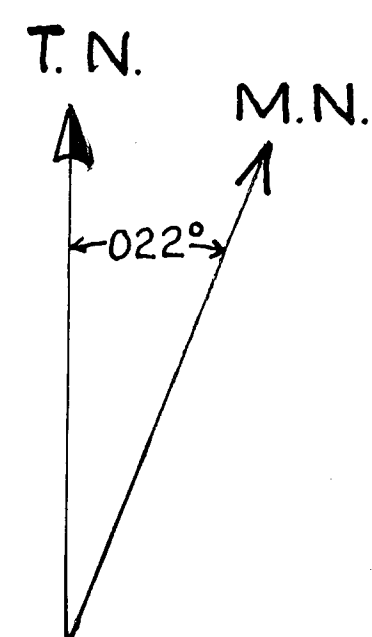
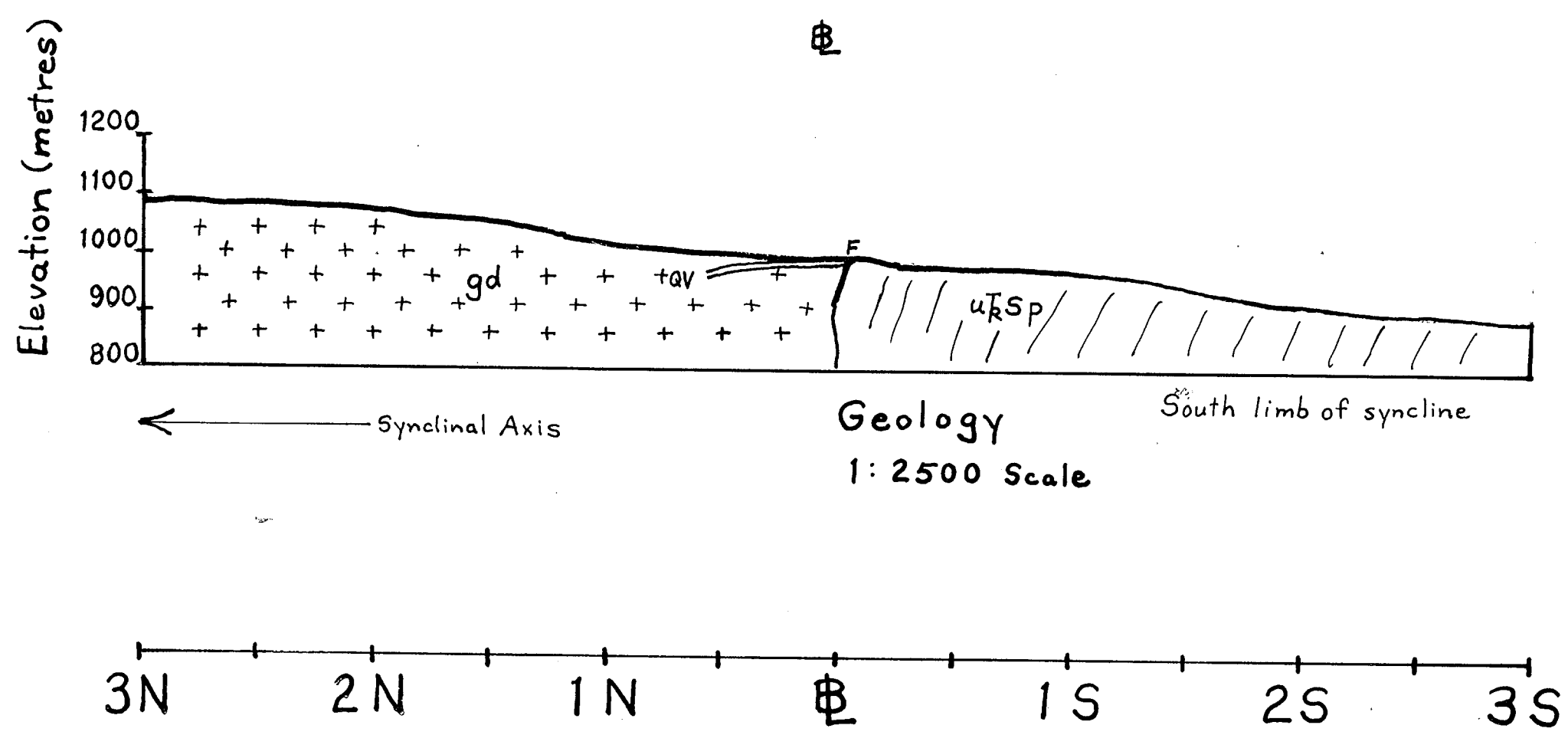
Geonics EM-16
 VLF-EM Geophysics
 Seattle & Annapolis Transmitters

TRUE NORTH

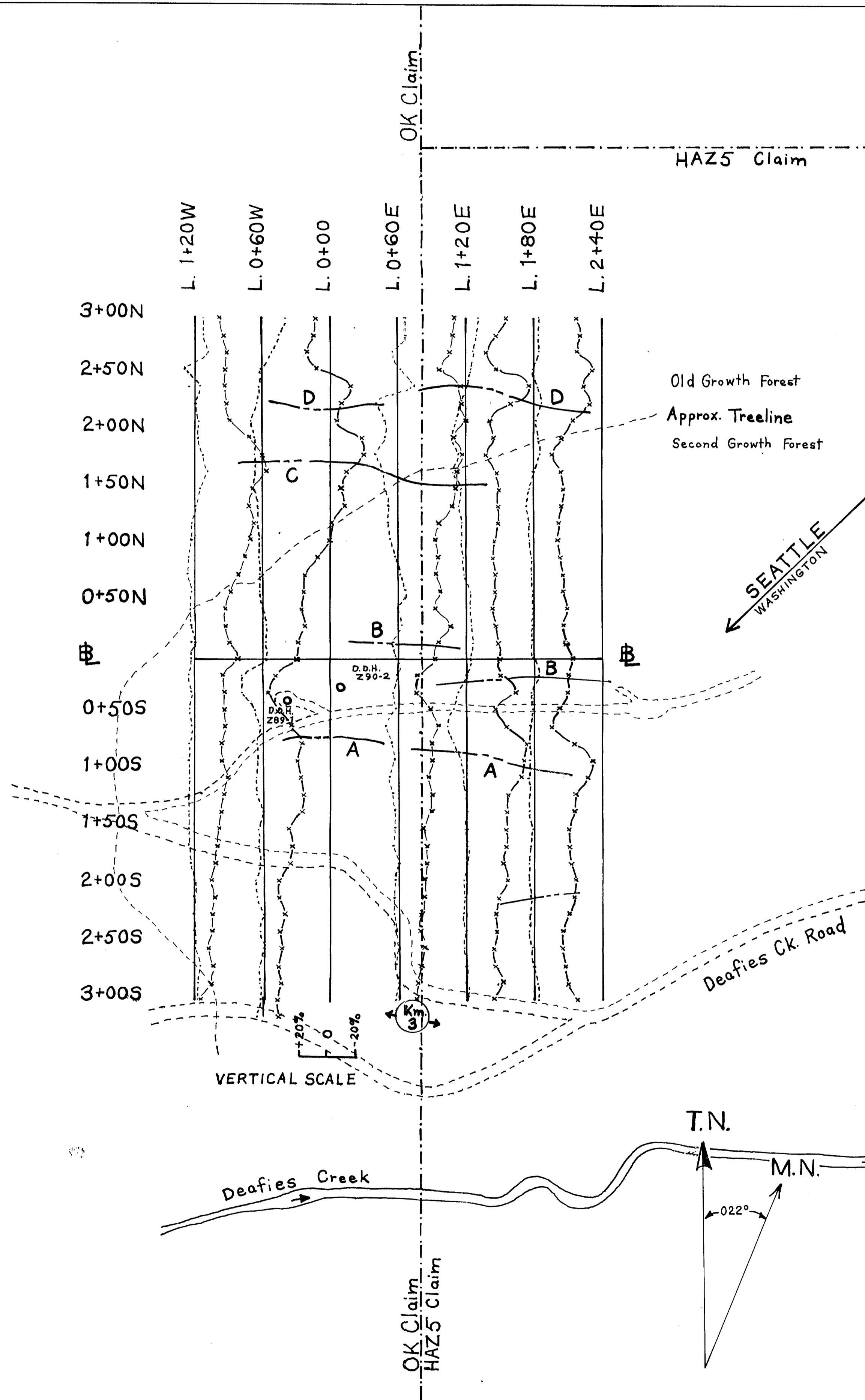


GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,554



Deafies Creek Grid	
LINE 0+00 PROFILES	
OK & HAZ 5 CIs. Geology/VLF-EM/Soil Geochem	
Map No. 7	Scale: 1:2500
N.T.S.: 82L/7W	Date: July 1992
Geology by: DH	Drawn By: DRH
Geophysics by: TL	
Allen Geological Engineering Ltd.	

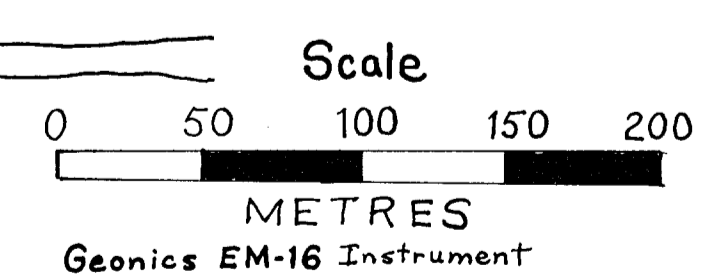


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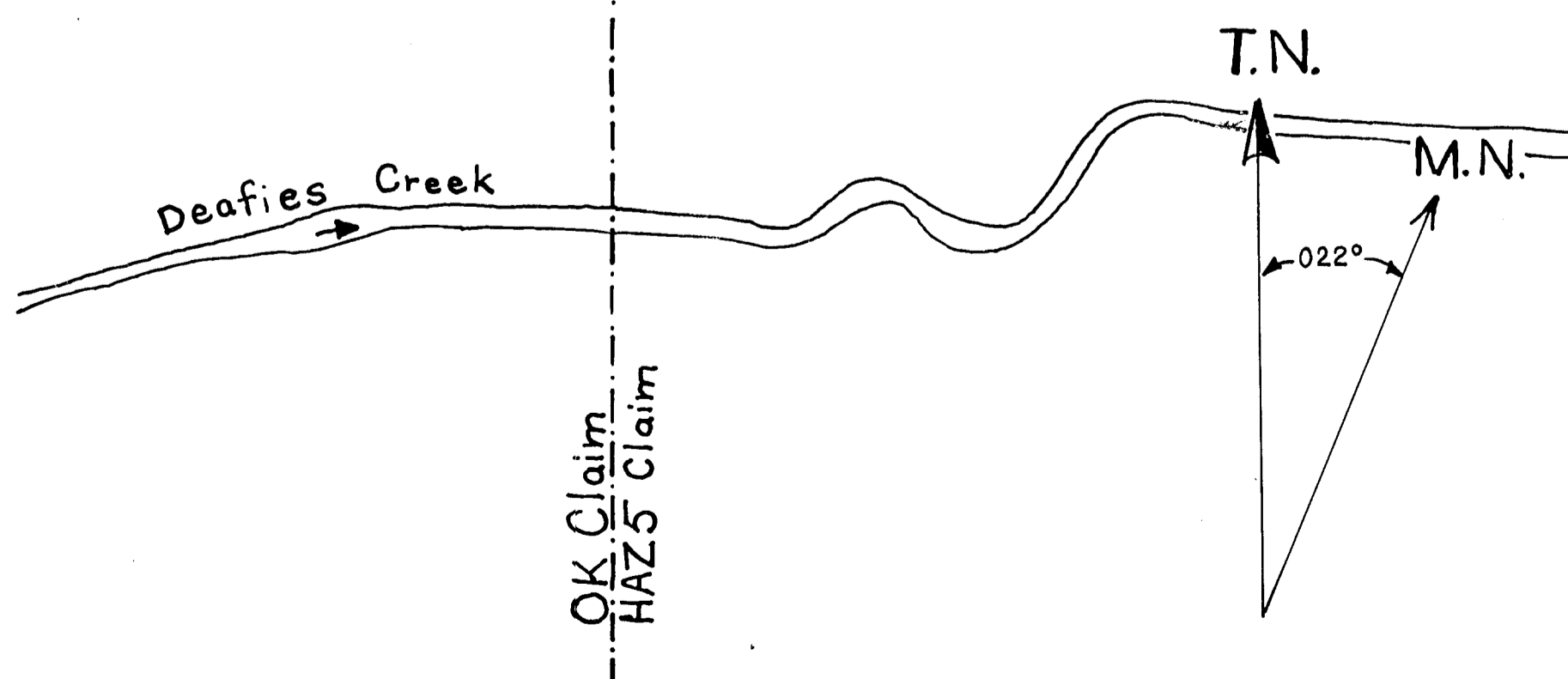
22,554

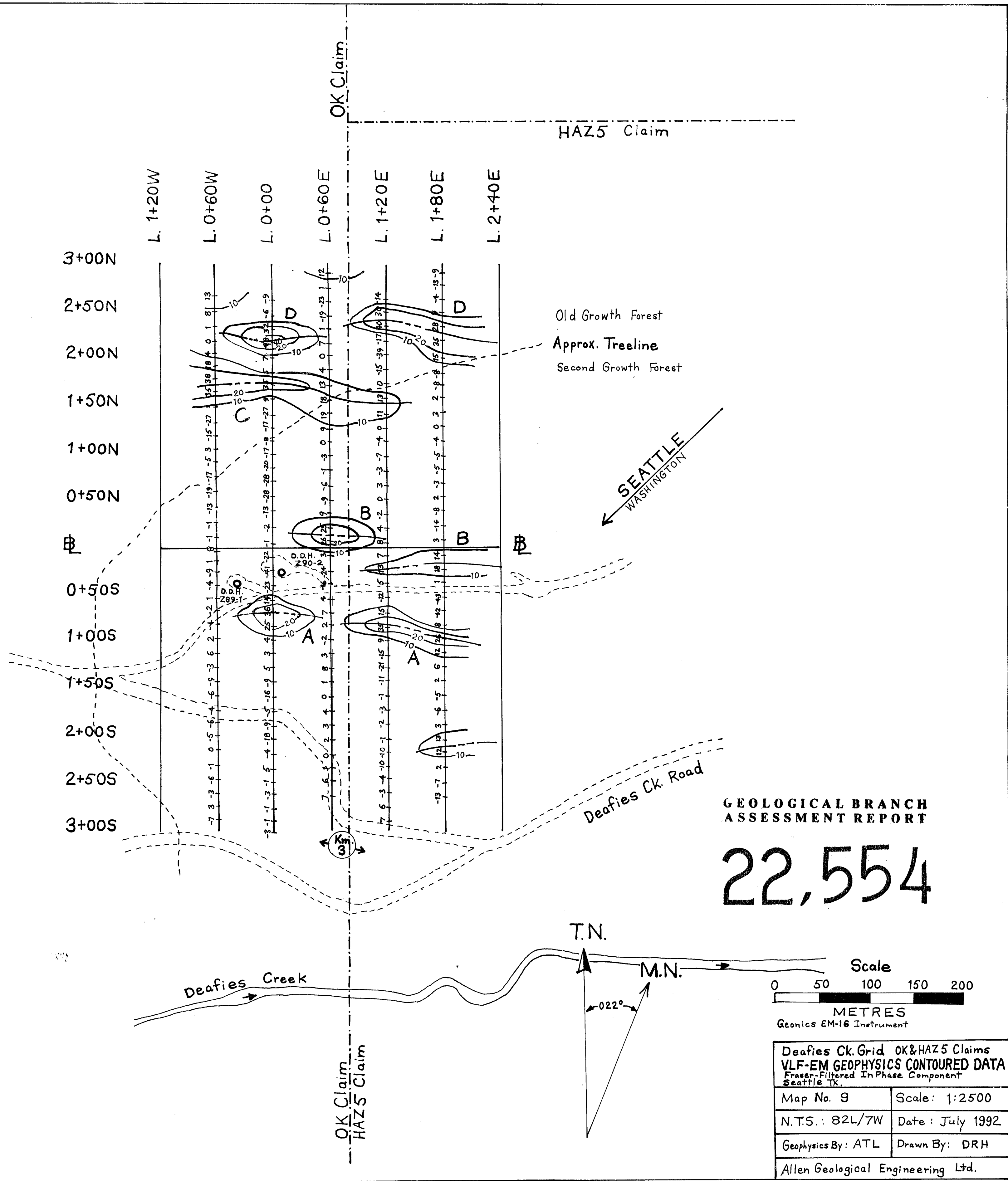
LEGEND

- x-x- In Phase Component
- Quadrature Component
- Conductor Axis



Deafies Ck. Grid OK & HAZ5 Claims VLF-EM GEOPHYSICS RAW DATA In Phase & Quadrature Components Seattle, TX.	
Map No. 8	Scale: 1:2500
N.T.S.: 82L/7W	Date: July 1992
Geophysics By: ATL	Drawn By: DRH
Allen Geological Engineering Ltd.	





HAZ5 Claim

L. 1+20W
L. 0+60W
L. 0+00
L. 0+60E
L. 1+20E
L. 1+80E
L. 2+40E

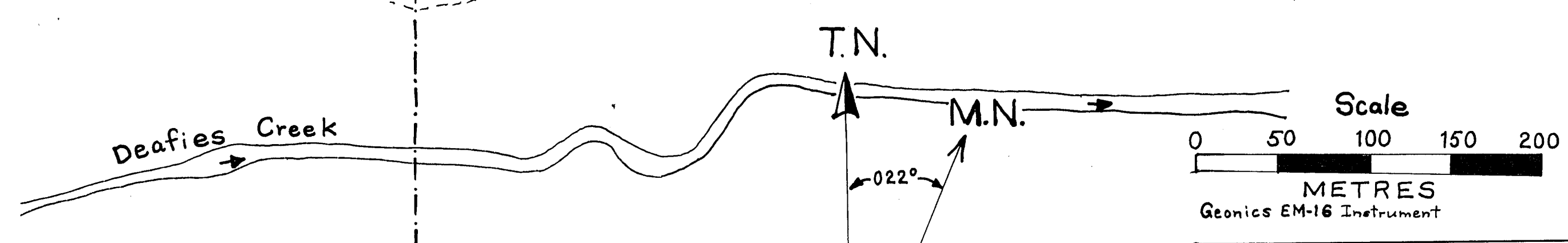
3+00N
2+50N
2+00N
1+50N
1+00N
0+50N
0+50S
1+00S
1+50S
2+00S
2+50S
3+00S

Old Growth Forest
Approx. Treeline
Second Growth Forest

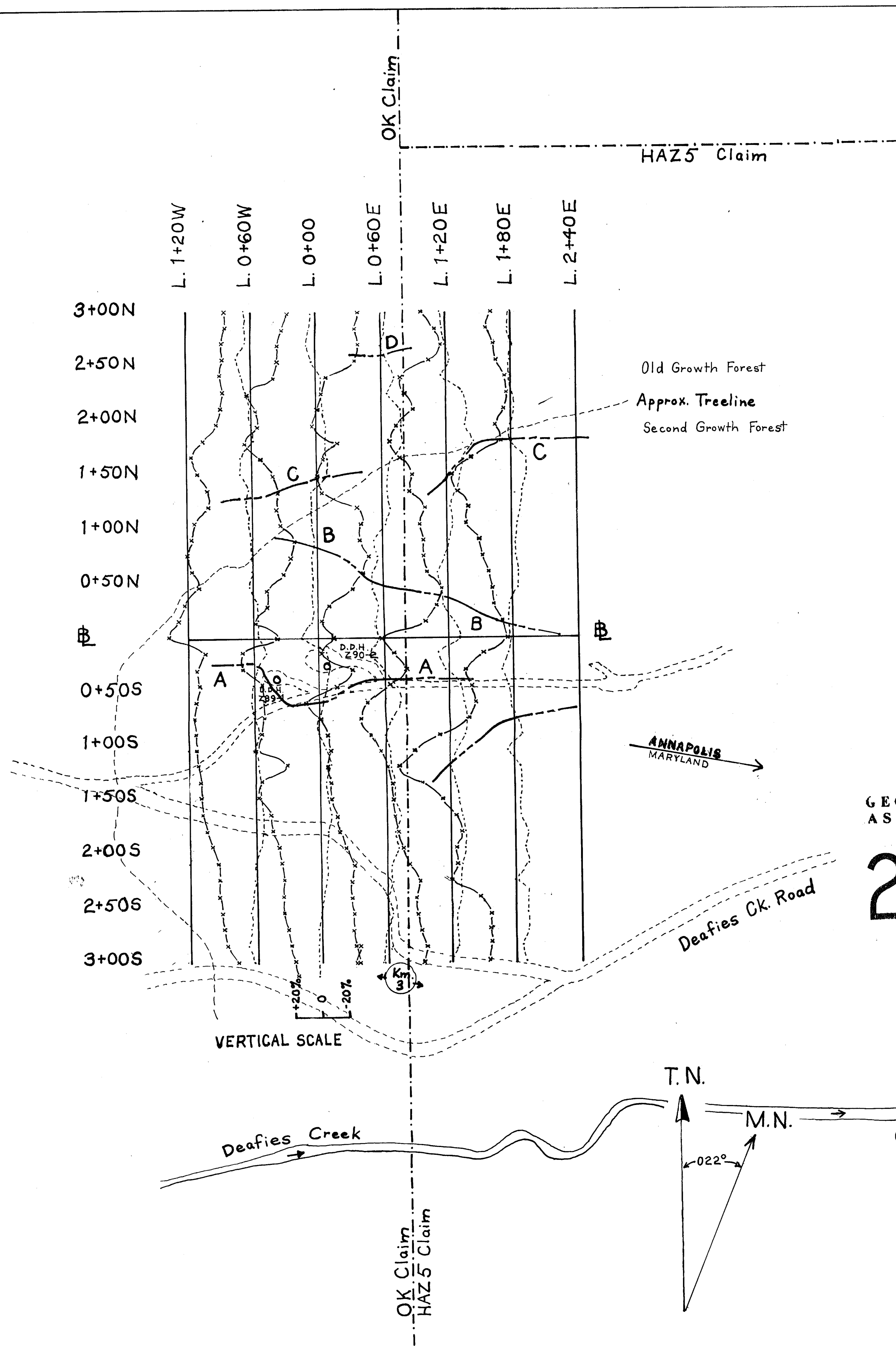
SEATTLE
WASHINGTON

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,554



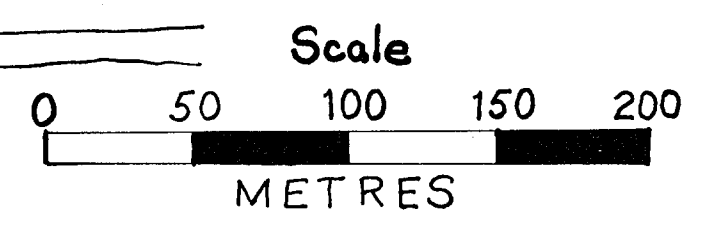
Deafies Ck. Grid OK & HAZ5 Claims VLF-EM GEOPHYSICS CONTOURED DATA Fraser-Filtered In Phase Component Seattle TX.	
Map No. 9	Scale: 1:2500
N.T.S.: 82L/7W	Date: July 1992
Geophysics By: ATL	Drawn By: DRH
Allen Geological Engineering Ltd.	



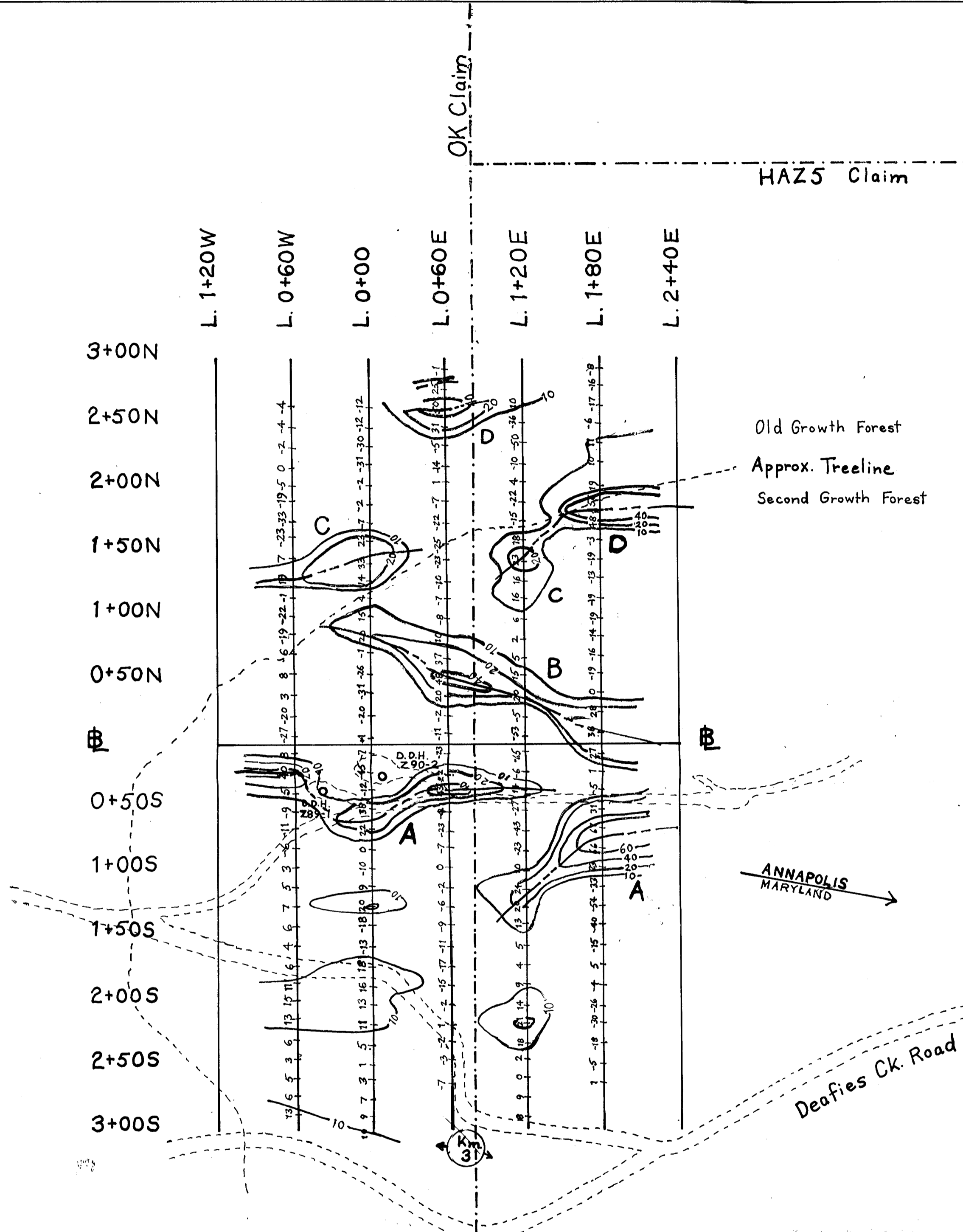
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,554

- LEGEND**
- x-x- In Phase Component
 - Quadrature Component
 - Conductor Axis

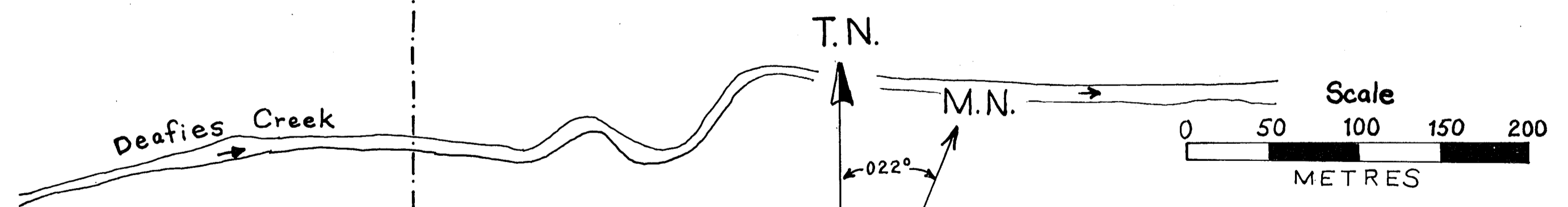


Deafies Ck. Grid OK & HAZ 5 Claims	
VLF-EM GEOPHYSICS RAW DATA	
In Phase & Quadrature Components	
Annapolis Tx.	
Map No. 10	Scale: 1:2500
N.T.S.: 82L/7W	Date: July 1992
Geophysics By: ATL	Drawn By: DRH
Allen Geological Engineering Ltd.	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,554



Deafies Ck. Grid OK & HAZ5 Claims	
VLF-EM GEOPHYSICS CONTOURED DATA	
Fraser-Filtered InPhase Component	
Annapolis Tx.	
Map No. 11	Scale: 1:2500
N.T.S.: 82L/7W	Date: July 1992
Geophysics By: ATL	Drawn By: DRH
Allen Geological Engineering Ltd.	