

LOG NO: <i>April 29/91</i>	RD.
ACTION: <i>Date received back from amendment</i>	
FILE NO:	

LOG NO: <i>12-21</i>	RD.
ACTION:	
FILE NO:	

**DATA COMPILATION REPORT FOR
 1985, 1986 AND 1988 EXPLORATION PROGRAMS
 AND
 GEOLOGICAL, GEOLCHEMICAL REPORT
 ON THE GORDONIA, GULCH, JOANNA III
 AND JOANNA IV CLAIM GROUP
 TOODOGGONE RIVER AREA, BRITISH COLUMBIA**

Location
 NTS 94^{1/2} E/6

OMINECA MINING DIVISION, B.C.

Latitude: 57° 26'N
 Longitude: 127° 65'W

FOR:

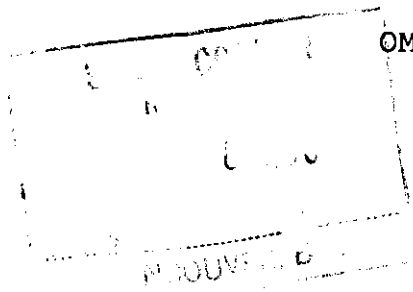
CONSOLIDATED HARLIN RESOURCES LTD.
 SUITE 1260 - 625 Howe Street
 Vancouver, B.C.
 V6C 2T6

BY

J. Dahrouge, B.Sc., G.I.T.

HI-TEC RESOURCE MANAGEMENT LTD.
 1500 - 609 Granville Street
 Vancouver, B.C.
 V7Y 1G5

November 6, 1990



**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

20,671

1.0 SUMMARY

Pursuant to a request by the directors of Consolidated Harlin Resources Ltd. an examination of the Joanna property was conducted from September 13, 1990 to September 22, 1990 by Hi-Tec Resource Management Ltd. The project was directed at exploring for a large tonnage low grade copper-gold porphyry deposit.

The Consolidated Harlin Resources property consists of the Gordonia, Gulch, Joanna III and Joanna IV modified grid mineral claims, which comprise 80 units. These claims are situated in the Toodoggone River Area, which is approximately 340km north of Smithers, B.C. Approximate geographical coordinates are latitude 57° 26' north and longitude 127° 05' west on NTS map sheet 94E/6.

The southern portion of the Joanna property is underlain by a thick sequence of fine to medium grained tuffaceous andesites. These rocks stratigraphically underlie a thick sequence of Jurassic Toodoggone rocks that include the Lower volcanic division, Middle volcanic division and the Upper volcanic-sedimentary division. The Toodoggone rocks outcrop in the northern most section of the Joanna IV claim and adjacent Gordonia claim.

The results of the 1990 exploration program on the subject property indicate that gold, silver and copper mineralization is generally confined to quartz veins and zones of silicification. The zones are located within north and northwest trending fault structures that have been outlined by the recent geologic mapping program. A copper - gold soil anomaly was delineated on the southern boundary of the Joanna IV claim. This

anomaly appears to overlies an alluvial wash derived from a large gossanous ridge located to the south of the Joanna III and IV claim boundary. This gossan should be explored for its potential to host a low grade copper and gold deposit.

Several mineralized veins and silicified zones located within explored areas of the property in northwest trending fault structures have possible economic significance and warrant further work. A multi-stage program including trenching of mineralized zones is recommended. Contingent upon favourable results, an exploratory diamond drilling program should be conducted to define the limits and economic significance of the structures.

iii
TABLE OF CONTENTS

	<u>Page</u>
1.0 SUMMARY	i
2.0 INTRODUCTION	1
2.1 LOCATION AND ACCESS	2
2.2 OPERATIONS AND COMMUNICATIONS	2
2.3 PHYSIOGRAPHY AND TOPOGRAPHY	2
2.4 CLAIM STATUS AND OWNERSHIP	3
3.0 REGIONAL HISTORY	4
4.0 REGIONAL GEOLOGY AND MINERALIZATION	5
5.0 PROPERTY HISTORY	9
6.0 PROPERTY GEOLOGY	12
6.1 Stratigraphy	12
6.1 Alteration	14
6.2 Mineralization, Structure and Veining	14
7.0 GEOCHEMISTRY	16
8.0 CONCLUSIONS AND RECOMMENDATIONS	17
9.0 REFERENCES	20

LIST OF APPENDICES

- Appendix I: Statement of Qualifications
- Appendix II: Rock Sample Descriptions
- Appendix III: Geochemical Preparation and Analytical Procedures
- Appendix IV: Consolidated Analytical Data for Bulk Stream, Pan Concentrate, Rock and Soil Samples for the Joanna I and II (Gordonia and Gulch) and the Joanna III and IV Claims collected previous to 1990
- Appendix V: 1990 Analytical Data for Rock and Soil Samples
- Appendix VI: Statement of Costs



LIST OF FIGURES

	After Page
Figure 1: General Location Map	2
Figure 2: Claim Map	3
Figure 3: Regional Geology Map	5
Figure 3a: Toodoggone River Area, Diagrammatic Composite Stratigraphic Section	5
Figure 4: Regional Epithermal Model	8
Figure 5: Geology	(In Pocket)
Figure 6: 1990 Geochemistry and Sample Location Map	(In Pocket)
Figure 7: Compilation Sample Location Map of 1985, 1986, 1988, 1990	(In Pocket)
Figure 8: Compilation Map Gold Geochemistry 1985, 1986, 1988, 1990	(In Pocket)
Figure 9: Compilation Map Copper Geochem- istry; 1985, 1986, 1988, 1990	(In Pocket)
Figure 10: Compilation Map Silver Geochem- istry; 1985, 1986, 1988, 1990	(In Pocket)

2.0 INTRODUCTION

Pursuant to a request by the directors of Consolidated Harlin Resources Ltd. an examination of the Joanna property was conducted from September 13, 1990 to September 22, 1990 by Hi-Tec Resource Management Ltd. The project was directed at exploring for a large tonnage low grade copper - gold porphyry deposit and to achieve the following objectives:

- 1) Restake the open ground to the north of the Joanna III and IV; formerly staked as Joanna I and II
- 2) Extend the soil grid to the southern boundary of the Joanna IV claim to follow-up anomalous gold-copper soil geochemistry
- 3) Carry out a program of intense prospecting throughout the Joanna IV claim, paying special attention to the north end of the claim in order to trace known copper - gold mineralization onto the adjoining ground
- 4) Carry out a program of detailed geologic mapping within the area prospected.

A four man crew composed of two geologists and two geological technicians conducted the work. A total of 154 soil samples and 106 rock, chip and grab samples were collected from the Joanna property. An area of approximately 16km² was mapped at a scale of 1:5000.

2.1 LOCATION AND ACCESS

The Joanna III and IV claims and the recently staked Gordonia and Gulch claims are situated in the Toodoggone River Area, which is approximately 340km north of Smithers, B.C. Approximate geographical coordinates are latitude 57° 26' north and longitude 127° 05' west on NTS map sheet 94E/6 (Figure 1).

Property access is either by fixed wing aircraft from Smithers or by the Omineca Mining Access Road to the Sturdee Airstrip. Helicopter flying time to the property is approximately 20 minutes from the Sturdee Airstrip.

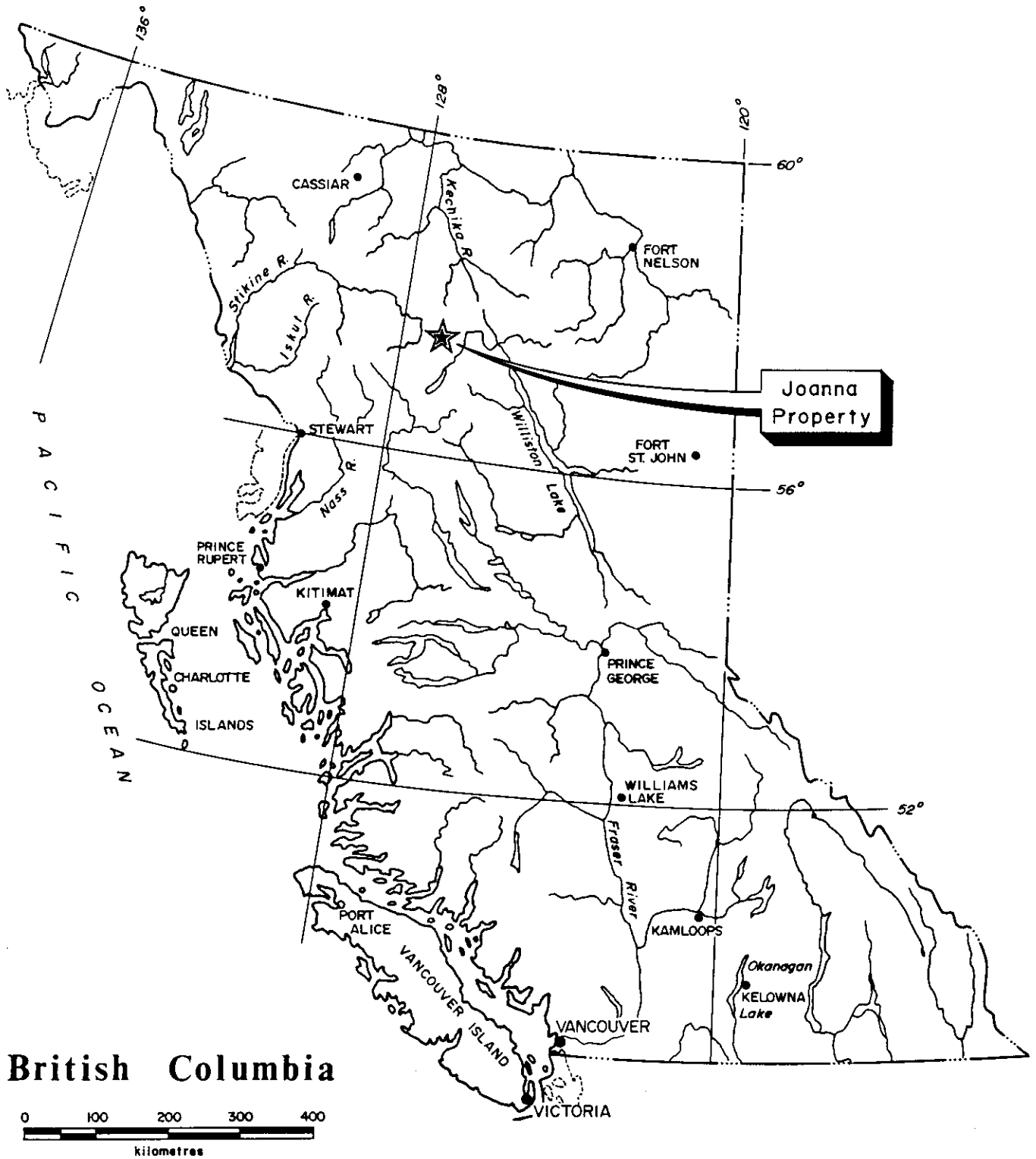
2.2 OPERATIONS AND COMMUNICATIONS

Field work was carried out during the month of September, 1990. A Northern Mountain Helicopters Ltd. Bell Jet Ranger helicopter based at Johanson Lake, British Columbia was used to transport the crew and equipment from Sturdee airstrip to the base camp. The camp was located on the southern slopes of Mount Gordonia. The field crew examined the property with the aid of helicopter support. Regular communications were maintained with the office in Vancouver, through radio communications with Jaycox Expediting of Smithers, British Columbia.

2.3 PHYSIOGRAPHY AND TOPOGRAPHY

Local topographic relief is moderate to very steep with elevations ranging from 1350 meters along Belle Creek to 2180 meters on the summit of Mount Gordonia. The





British Columbia



CONSOLIDATED HARLIN RESOURCES LTD.			
JOANNA PROPERTY			
OMINECA M.D., B.C.			
<i>General Location Map</i>			
	SCALE:	N.T.S.:	FIGURE No.:
	as shown	94E/6	1
	DWN. BY:	DATE:	
		OCT. 1990	
CHKD. BY:	PROJECT No.:	FILE No.:	
	90BC048		

western claims are, for the most part, of low relief and covered by scrub brush, swamps and lakes. The eastern claims rise from this low level valley to form two east-west trending ridges that are moderate to extremely steep. The ridges and valleys are dominated by sub-alpine and alpine vegetation and/or exposed rock and scree material; while, the highest portions of the property support only moss and lichen.

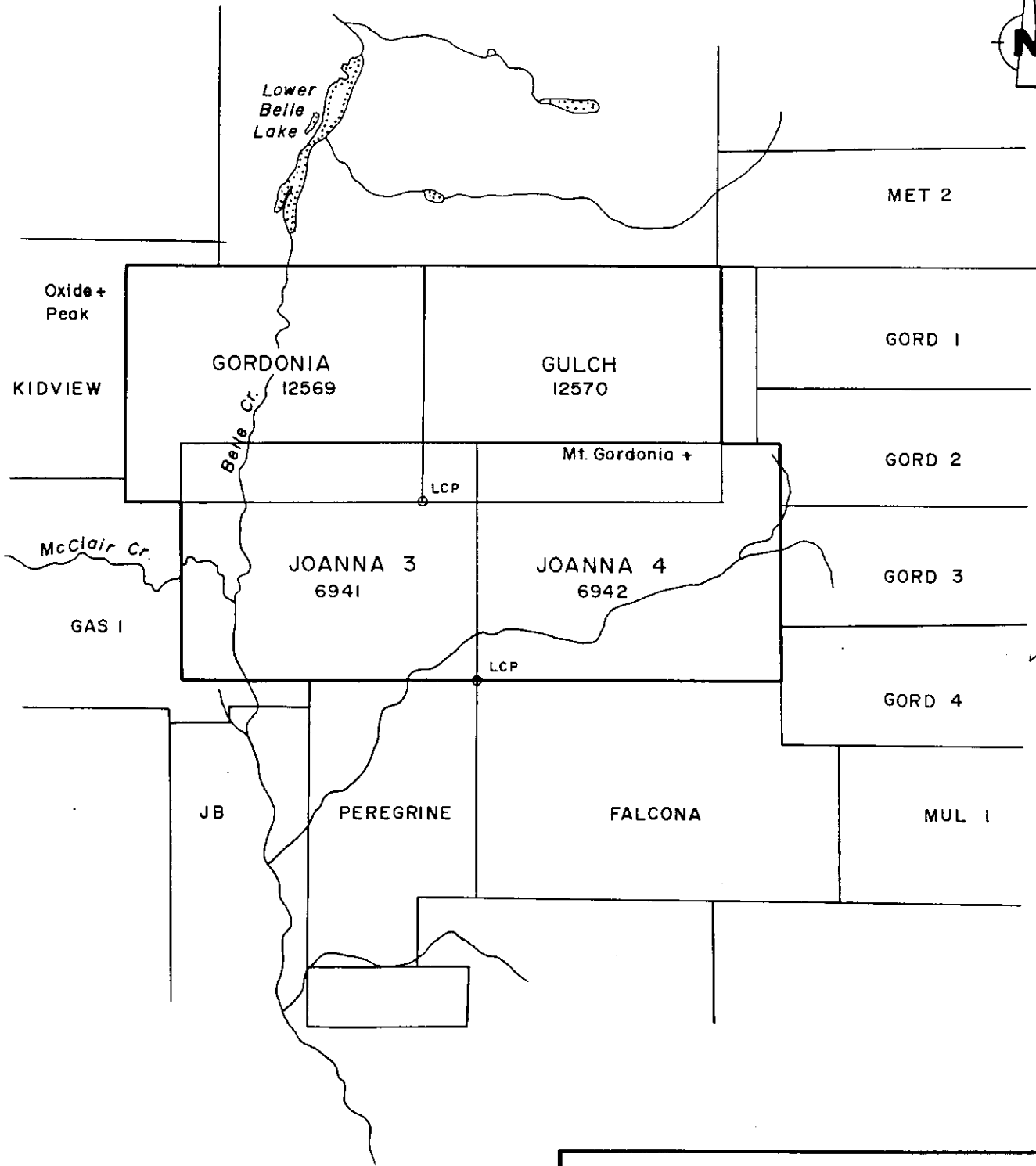
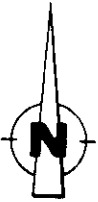
The area exhibits typical glaciated physiography, including a north trending U-shaped valley on the eastern margin of the claim block. Mount Gordonia is surrounded by three paleo-cirque basins which have shaped it into a horn.

2.4 CLAIM STATUS AND OWNERSHIP

The property consists of the Gordonia, Gulch, Joanna III and Joanna IV modified grid mineral claims, which comprise 80 units (Figure 2). The claims are within the Omineca Mining division. Title to the Joanna claims is held 100% by International Damascus Resources Ltd, while Consolidated Harlin Resources Ltd. have an option to earn 50% of the claims. The Gardonia and Gulch claims are owned 100% by Consolidated Harlin Resources Ltd.

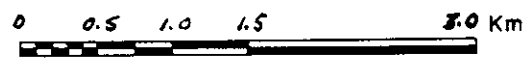
Pertinent claim data is as follows:

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>RECORD DATE</u>
Gordonia	12569	20	September 17, 1990
Gulch	12570	20	September 17, 1990
Joanna III	6941	20	March 25, 1985
Joanna IV	6942	20	March 25, 1985



CONSOLIDATED HARLIN RESOURCES LTD.
JOANNA PROPERTY
 OMINECA M.D., B.C.

Claim Location Map



M-TEC
 RESOURCE MANAGEMENT LTD.

SCALE: 1:50,000	N.T.S.: 94E/6	FIGURE No: 2
OWN. BY:	DATE: OCT. 1990	
CHKD. BY:	PROJECT No: 90BC048	FILE No:

3.0 REGIONAL HISTORY

Mining exploration in the Toodoggone River area dates back to the early 1930's, when placer mining was done on McClair Creek and the Toodoggone River and lead-zinc showings at the head of Thutade Lake were staked. Several high-grade gold showings were reportedly discovered in the 1930's but apparently these were not followed up.

The Toodoggone River area remained largely unexplored until the late 1960's, when several companies actively searched for low grade, high tonnage copper-molybdenum porphyry deposits. As a result of that period of intensive exploration, a number of significant precious metal deposits have been discovered. These include the Baker Mine orebody, the Lawyers and Al deposits.

The Baker Mine was the Toodoggone's first lode gold-silver producer. It was operated by DuPont of Canada Exploration Ltd. from 1980 to 1983. The Baker Mine's "A" Vein produced 34,000 oz gold and 673,000 oz silver. The "B" Vein is currently being actively explored, and has possible ore reserves of 50,000 tonnes (Schroeter and Lefebure, 1987).

The Lawyers property is owned by Cheni Gold Mines Inc. Surface and underground drilling has defined reserves of 1,937,000 million tons grading 0.196 oz/ton gold and 7.10 oz/ton silver. Production commenced in March of 1989.

The Al property is owned by Energex Minerals Ltd., which completed a \$1.6 million exploration program on the property which resulted in the discovery of additional zones of precious metal mineralization.

Current proven-probable reserves are 262,000 tons grading 0.25 oz/ton gold. A 6 tpd pilot mill has produced approximately 350 oz of gold (Schroeter and Lefebure, 1987).

Work by Skylark Resources Ltd. has resulted in the discovery of several high grade gold showings. The gold zones occur at a fault contact of the Takla and Toodoggone volcanics (Grond and Sorbara, 1988). High gold values occur in quartz carbonate veins and include values of up to 8.45 oz/ton Au (Stockwatch May, 1988).

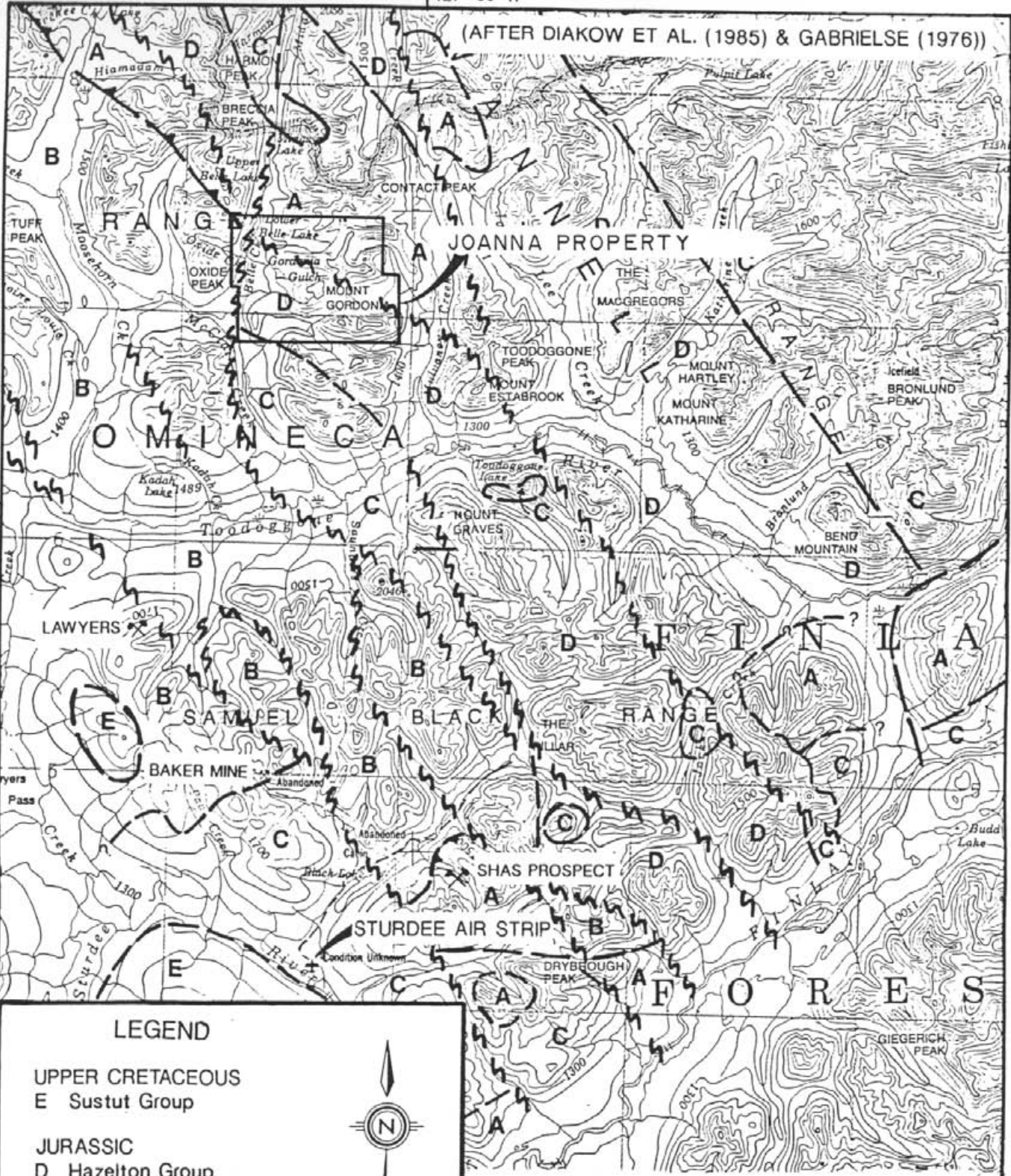
More than thirty companies, including many major mining companies, are now actively exploring or holding ground in the Toodoggone River area. The economics of exploration and production have been improved by the 1988 completion of the Omineca road to the Sturdee airstrip.

4.0 REGIONAL GEOLOGY AND MINERALIZATION

The regional geology of the Toodoggone River area (Figures 3 and 3a) has been described in detail by T.G. Schroeter (1981) as follows:

" The Toodoggone River area lies within the eastern margin of the Intermontane Belt. The oldest rocks exposed are wedges of crystalline limestone more than 150 meters thick that have been correlated with the Asitka Group of Permian Age. The next oldest rocks consist of andesitic flows and pyroclastic rocks including augite-tremolite andesite porphyries and crystal and lapilli tuffs that belong to the Takla Group of Late Triassic age. The Omineca intrusions of Jurassic and Cretaceous age (potassium-argon age of 186 to 200 Ma obtained by the Geological Survey of Canada) range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz feldspar porphyry dykes may be feeders to the Toodoggone rocks which unconformably overlie the Takla

(AFTER DIAKOW ET AL. (1985) & GABRIELSE (1976))



LEGEND

UPPER CRETACEOUS
E Sustut Group

JURASSIC
D Hazelton Group
C Omineca Intrusives
B Toodoggone Volcanics

TRIASSIC
A Takla Group

Major Faults
Major Thrust Fault
Geologic Contact Road

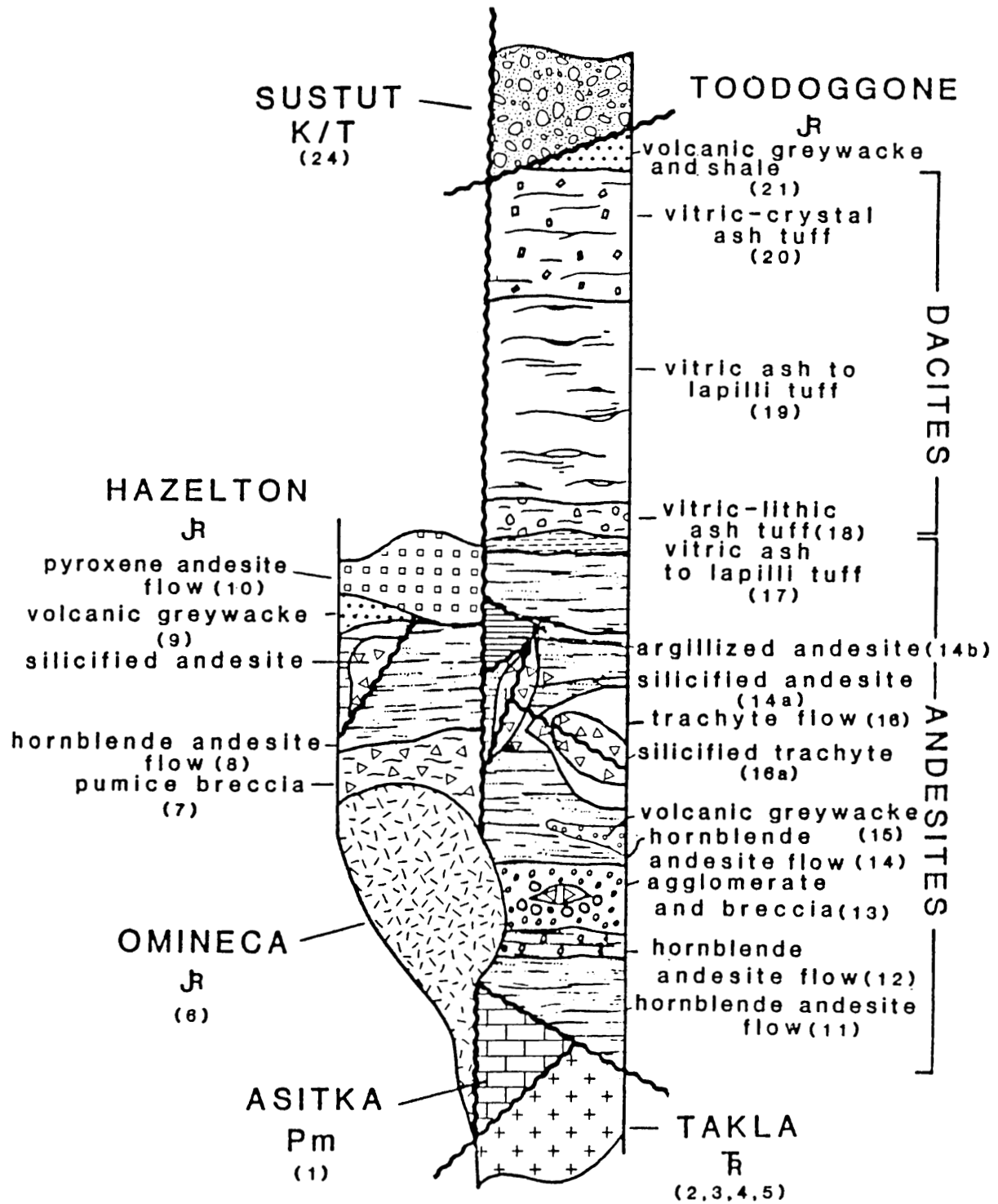
CONSOLIDATED HARLIN RESOURCES LTD.

JOANNA PROPERTY
OMINECA M.D., B.C.

Regional Geology



SCALE: 1:250,000	N.T.S. 94E/6	FIGURE No: 3
DWN BY:	DATE: OCT. 1990	FILE No:
CHKD BY:	PROJECT No: 90BC048	



CONSOLIDATED HARLIN RESOURCES LTD.

JOANNA PROPERTY
OMINECA M.D., B.C.

*Toodoggone River Area
Diagrammatic Composite
Stratigraphic Section*

From FORSTER, D.B. 1984 Geology,
Petrology and Precious Metal Mineralization,
TOODOGGONE RIVER AREA, B.C.;
University of British Columbia, M.Sc. Thesis.



HI-TEC
RESOURCE MANAGEMENT LTD

SCALE:	N.T.S.	FIGURE No:
DWN. BY:	94E/6	3a
CHKD. BY:	DATE: OCT. 1990	
	PROJECT No: 90BC048	FILE No:

Group. The 'Toodoggone' volcanic rocks (named informally by Carter, 1971) are complexly intercalated volcanic and volcanic-sedimentary rocks of Early and Middle Jurassic age, 500 meters or more in thickness, along the west flank of a northwesterly trending belt of 'basement' rocks at least 90 kilometers in length by 15 kilometers in width (Geological Survey of Canada, Open File 306, replaced by Open Files 483 and 606). A potassium-argon age of 186 ± 6 Ma was obtained by Carter (1971) for a hornblende separate from a sample collected from a volcanic sequence 14 kilometers southeast of Drybrough Peak. Four principal subdivisions of 'Toodoggone' rocks have been recognized:

1) Lower volcanic division - dominantly pyroclastic assemblage including purple agglomerate and grey to grey to purple dacitic tuffs.

2) Middle volcanic division - an acidic assemblage including rhyolites, dacites, 'orange' crystal to lithic tuffs, and quartz feldspar porphyries; includes welded tuff. The 'orange' color of the tuffs resulted from oxidation of the fine-grained matrix while the rock was still hot. A coeval period of explosive volcanism included the formation of 'laharic' units and intrusion of syenomonzonite bodies and dykes. This event was accompanied by explosive brecciation along the zones of weakness, predominantly large-scale faults and attendant splays, followed by silicification and deposition of precious and base metals to varying degrees in the breccias. Rounded fragments of Omineca intrusive rocks are rare components in Toodoggone tuffs.

3) Upper volcanic-intrusive division - grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.

4) Upper volcanic-sedimentary division - lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

Many Toodoggone rocks have a matrix clouded with fine hematite dust implying a subaerial origin, however, some varieties may have accumulated in shallow water. The host rock for mineralization (division 2) is an orange to chocolate brown-coloured crystal tuff with varying minor amounts of lithic and vitric ash. Broken crystals of plagioclase and quartz are set in a fine-grained 'hematized' matrix of quartz and feldspar. The exact chemical composition(s) and rock name(s) await chemical analyses. Carter (1971) determined the

composition of a suite of rocks collected from the Toodoggone area to range from latites to dacites (less than 30 weight per cent quartz); fused beads gave refractive indices between 1.505 and 1.535. Apatite may be a common accessory mineral.

To the west, Upper Cretaceous to Tertiary pebble conglomerates and sandstones of the Lower Tango Creek Formation of the Sustut Group (Eisbacher, 1971) unconformably overlies both Takla Group volcanic rocks and Toodoggone volcanic rocks.

The structural setting was probably the most significant factor in allowing mineralizing solutions and vapor to migrate through the thick volcanic pile in the Toodoggone area. The entire area has been subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. It is postulated that a northwesterly trending line of volcanic centers along a gold-silver-rich 'province' marks major structural breaks, some extending for 60 kilometers or more (for example, McClair Creek system, Lawyers system). Prominent gossans are often associated with structural zones but many contain only pyrite; sulfides occur as disseminations and fracture fillings in Toodoggone and Takla Group rocks. Thrusting of Asitka Group limestones over Takla Group rocks probably occurred during Middle Jurassic time.

Today Toodoggone rocks display broad open folds with dips less than 25 degrees. The Sustut Group sedimentary rocks have relatively flat dips and do not appear to have any major structural disruptions.

The Toodoggone area is host to many polymetallic mineral prospects and four main types are recognized:

1) 'Porphyry' copper+/-molybdenum+/-silver+/-gold - mainly associated with Omineca Intrusions. Chalcopyrite and pyrite, with or without molybdenite, occur in fractures, as disseminations, or in quartz veins within both intrusive and the host volcanic rocks (mainly Takla Group andesitic rocks). Secondary chalcocite and covellite may form layers up to 30 meters thick. In these 'porphyries', silver may exceed 3.1 grams per tonne (0.1 ounce per ton) and gold 0.47 gram per ton (0.015 ounce per ton) and therefore be economically significant [for example, Riga (MI 94E-3,4,5), Fin (MI 94E-16), Pillar (MI 94E-8), Rat (MI 94E-25), Mex (MI 94E-57), Kermess (94E-21)].

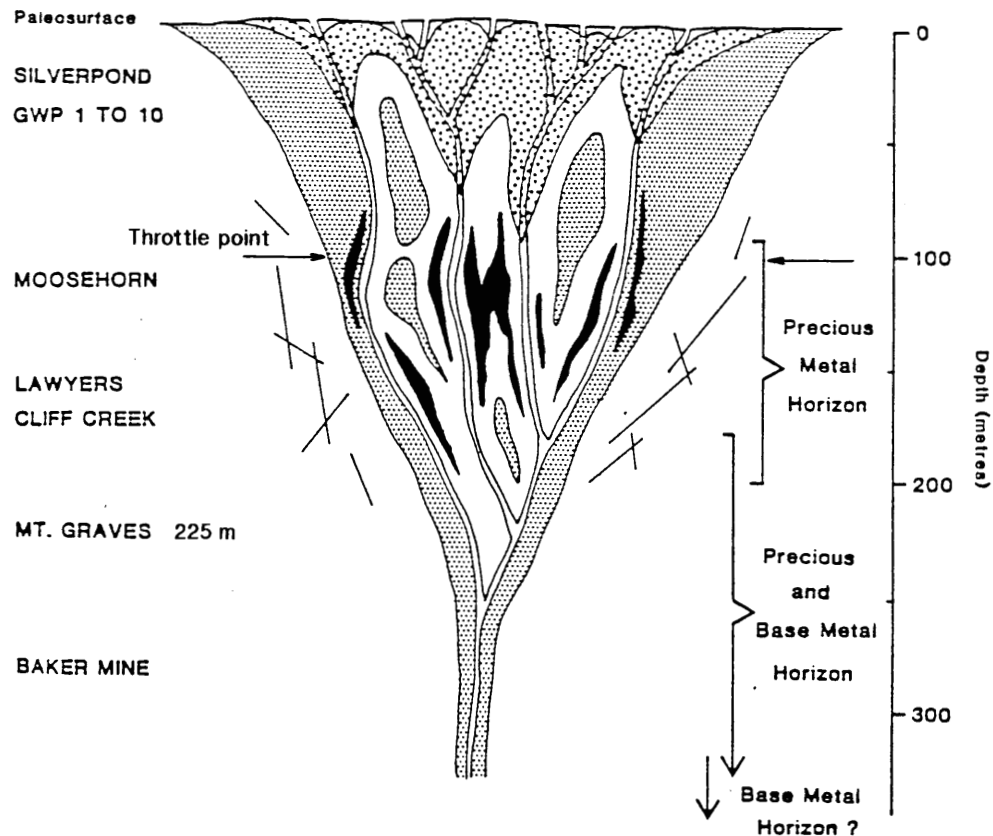
2) Skarn - contact of limestone and host rock resulting in formation of small bodies of magnetite, galena, and sphalerite [for example, Castle Mountain (MI 94E-27) and several other minor showings west of Duncan Lake].

3) Precious and base metal epithermal - gold+/-silver+/-copper+/-lead+/-zinc (figure 4)

a) Fissure-vein type - the most important economic type. It is associated with predominantly silicified zones (quartz veins and/or older volcanic 'centers') related to repeated, extensive block faulting and possible tensional fractures formed during late doming. Large and small-scale faulting were integral processes in the sequential development of calderas formed by progressive emplacement and subsequent collapse of different phases of composite magmas (batholiths). So far, no distinct superimposed complex zones have been identified as isolated calderas in the Toadogone area. Many calderas have a moat structure around their periphery, which is infilled by lacustrine sedimentary and pyroclastic rocks, mainly volcanic ash, deposited precontemporaneously in the moat. Local fanglomerate deposits form adjacent to the steeper walls away from tributary streams. In the Toadogone area, recurrent faulting during crater building would guide intrusions and the soft lacustrine sedimentary rocks may have an impermeable barrier to mineralizing solutions.

Principal ore minerals include fine-grained argentite, electrum, native gold, and native silver with minor amounts of chalcopyrite, galena, and sphalerite. Rare constituents include bornite, polybasite, stromeyerite, and secondary chalcocite and covellite. Gangue minerals include, in order of decreasing abundance: amethystine to white quartz, chalcedony, calcite, hematite, manganese oxide, and rare barite and fluorite. Deposits occur in the form of vein fillings, stockworks, irregular branching fissures, and large, recurrently brecciated fault zones. Common textures include comb structures, symmetrical banding, crustifications, and drusy cavities - all typical features of epithermal deposits formed at shallow depths and at low temperatures. Alteration is commonly restricted to vein systems [Chappelle (MI 94E--26), Lawyers (MI 94E-17), Metsantan Lake (MI 94E-35), McClair, Cliff Creek, Shas (MI 94E-50), Saunders (MI 94E-37)].

b) Hydrothermally altered and mineralized type - associated with major fault zones and possibly after subsidence of volcanic centers followed by a doming of caldera cores. Pyrite is the most common sulfide



HYDROTHERMAL ALTERATION ASSEMBLAGES

- INTERMEDIATE TO ADVANCED ARGILLIC**
 kaolinite, montmorillonite, illite, dickite, alunite, fluorite

- SILICIC (INCLUDES SINTER)**
 amethystine, chalcedonic, jasperoidal and milky quartz, barite, hematite, manganese oxide

- POTASSIC**
 adularia, orthoclase, biotite, calcite, sericite

- PROPYLITIC**
 epidote, chlorite, sericite, carbonate, pyrite

- ZEOLITIC**
 laumontite, natrolite, calcite

FROM FORSTER, D.B. (1984) GEOLOGY, PETROLOGY & PRECIOUS METAL MINERALIZATION TOODOGGONE RIVER AREA; Univ. of B.C., M.Sc. Thesis.

CONSOLIDATED HARLIN RESOURCES LTD

JOANNA PROPERTY

OMINECA M.D., B.C.

Regional Epithermal Model



HI-TEC
RESOURCE MANAGEMENT LTD

SCALE:	N.T.S.: 94E/6	FIGURE No:
DWN. BY:	DATE: OCT. 1990	4
CHKD. BY:	PROJECT No: 90BC048	FILE No:

present with minor amounts of galena and sphalerite and rare molybdenum and scheelite. This type is probably somewhat older or contemporaneous with fissure-type mineralization. Cauldron zones are strongly leached and sulfotatically altered to varying degrees to clay minerals and silica; some areas contain alunite (for example, Alberts Hump). Epidote is a common alteration mineral in both hydrothermal and fracture zones [for example, Kodah, Alberts Hump, Saunders (MI 94E-17), Chappelle (MI94E-26), Oxide].

c) Alteration generally associated with the precious and base metal epithermal deposits is as follows:

- i) Epidotization and silicification in the vicinity of quartz veins
- ii) Limonite in fractures
- iii) Extensive pyritization
- iv) Anhydrite as veinlets and fractures up to 70 meters or more long
- v) Hematization near surface, and
- vi) Carbonitization at depth.

4) Stratabound (?) - galena+/-sphalerite+/-chalcopryrite occur in or adjacent to limestone with interbedded chert in Takla Group (?) volcanic agglomerates and tuffs. This type of deposit, which may have been deposited on the flank of a volcano adjacent to a limestone reef, usually has associated low-grade silver values [for example, Firesteel (MI94E-2), Attycelley (MI 94E-22)]."

5.0 PROPERTY HISTORY

JOANNA I AND II (GORDONIA AND GULCH)

The Joanna I and II mineral claims were originally staked in 1985. These claims were located to cover Hazelton and Takla Group volcanic rocks "which were known to host precious metal mineralization in the district" (Carter, 1985).

In August of 1985 a program of "preliminary exploration work ... delineated geochemically anomalous areas of interest using grid soil and stream silt geochemistry" (Bell, 1986). A 1986 exploration program was designed

"to explore the southern continuation of the gold and silver anomalies delineated in 1985" (Steel and Sorbara, 1986). The 1986 program delineated several geochemically anomalous areas. A program of limited prospecting was also conducted at this time. Numerous quartz veinlets were located in cirque basins on the west side of Mount Gordonia, these veinlets assayed up to 1700 ppb gold (Figures 7, 8, and 9, 10).

JOANNA III AND IV

The Joanna III and IV mineral claims were originally staked in 1985. These claims were located to cover Jurassic Toodoggone volcanic rocks within the Toodoggone gold belt. "Preliminary work in 1985 on the Joanna III and IV claims consisted of contour soil, stream silt, panned concentrate and rock geochemistry and delineated anomalous areas of interest" (Bell, 1986). Soil sampling delineated three areas of anomalous gold - silver - copper on the property (Figures 7, 8 and 9, 10).

In 1986 Western Geophysical Aero Data Ltd. conducted a program of airborne magnetometer and VLF-electromagnetometer surveying over the Joanna III and IV claims. An east - west trending magnetic low, coincidental with an east - west valley, was delineated on the Joanna IV claim. This was postulated to be a major fault structure. A magnetic high, located 600 meters north of Joanna III was interpreted to be an intrusive plug. Several other magnetic highs, all smaller in scale are located within the Joanna III claim, these are interpreted to be "offshoot stocks or dykes from the large intrusive to the north" (Pezzot and White, 1986).

Further work conducted in 1986 included "a program of soil and silt geochemistry, rock sampling, mapping and prospecting" (Steel and Sorbara, 1986) that would extend known soil anomalies. The program outlined a gold soil anomaly of approximately 300 m x 300 m in size. The anomaly was located in the southeast corner of the soil grid. A second soil anomaly was delineated in the northwest corner of the grid. The program identified three main types of mineralization: 1) Orange rich gossans and silicified zones, often with malachite, galena and pyrite on the south ridge 2) specular hematite (up to 100% in outcrop) on the south ridge 3) several quartz stringers with malachite on the north ridge.

Two programs of ground geophysics were carried out in the same year. A magnetometer survey delineated a large magnetic high that was centered about 0+00 and 2+00E. A small magnetic high was identified at 1+00S and 10+00E. A VLF-EM survey located several conductors that all possessed a northwest trend.

In 1988 a program of limited geological mapping, prospecting, rock and soil sampling was conducted on the Joanna property. The program "defined strong precious and base metal rock and soil anomalies in association with some quartz veining. Gold values up to 0.228 oz/ton ... were recorded" (Figures 7, 8 and 9, 10) (Adamec, 1988).



6.0 PROPERTY GEOLOGY

6.1 Stratigraphy

The oldest rock unit observed on the Joanna III and IV claims are the Late Triassic Takla Group volcanics (Figures 5 and 6). The southern (west trending) ridge and southern slopes of Mount Gordonia are underlain by thick sequences of alternating fine to medium grained tuffaceous andesitic units. These form massive, poorly layered and compositionally similar exposures; bedding is rarely identifiable in outcrop. The rocks vary in composition from andesitic flows to andesitic porphyries. Due to the gradational changes in these two rock types no distinct contacts are observed.

Color variations within these Takla Group volcanics are rare. The unit is dominantly light to medium green and changes only with alteration intensity. A 'rusty' pyritized outcrop which is deeply weathered and orange - yellow in color was observed in the east central section of the Joanna IV claim.

The upper contact of the Takla Group volcanics and Toodoggone volcanics is occasionally distinct, but more often gradational. This contact can be observed in several outcrops on the southern slopes of the northern west trending ridge (Joanna IV claim). The northern most section of the Joanna IV claim and adjacent Gordonia claim is underlain by Jurassic Toodoggone rocks which have been divided into the Lower volcanic division, Middle volcanic division and the Upper volcanic-sedimentary division.

In contact with the Takla Group is the Lower Volcanic division which can readily be observed in outcrop.

This unit is dominated by an assemblage which includes a redish purple agglomerate that is highly siliceous and resistant to weathering. This unit often forms ridge crests and varies in thickness from 20 to 50 meters. Stratigraphically overlying this member, is an oxidized redish grey to grey bedded tuff of dacitic to andesitic composition. This tuffaceous member varies in thickness from a few meters to 20 meters. Bedding planes and contacts have a predominantly east - west orientation.

A distinct contact between the Lower volcanic division and the Middle volcanic division can be observed on the apex of the northern east-west trending ridge. The unit to the north is dominated by an orange rhyolite or orange, fine grained, crystal to lithic tuff. Due to the abundance of overburden and talus on the northern side of the ridge, unit thickness was difficult to determine.

Gordonia Gulch is, for the most part, a surface representation of a transcurrent east - west trending fault. This fault brings into contact the Upper volcanic-sedimentary division to the north with the Middle volcanic division to the south. The Upper volcanic-sedimentary division is dominated by fine grained argillites and greywackes postulated by T.G. Schroeter (1981) to be lacustrine in nature. The fault contact is distinct and abrupt.

A quartz monzonite intrusive outcrops in several localities on the south side of the west trending ridge on the Joanna IV claim. The outcrops are generally less than 10m² in area and all appear to have a fault related emplacement. The intrusive is phaneritic, porphyritic medium to coarse grained, with feldspar

phenocrysts often large and well formed. Quartz, orthoclase and plagioclase occur in similar proportions with dark minerals (hornblende and biotite).

Several rhyolite and diorite dykes were observed in the southern half of the property.

6.2 Alteration

Propylitic alteration is widespread throughout the area mapped, predominately affecting the andesite flows and tuffs. Zones of propylitic alteration are characterized by chloritization of plagioclase, hornblende and biotite phenocrysts. A strong increase in epidote and/or carbonate, pyrite and magnetite was observed in the groundmass.

Other alteration types were rare and, when observed, were noted to be of very weak intensity.

6.3 Mineralization, Structure and Veining

The ridges west and south of Mount Gordonia are crossed by numerous north and northwest trending, steeply dipping faults. The faults, local shears and fractures often displace the lithology on the property. These structural features are an important factor in the migration of mineralized solutions through the volcanic rocks in the area. Quartz veins and zones of silicification are commonly associated with these fault zones. The veins are commonly mineralized, with elevated gold, silver and copper values (Figures 5 and 6).

Quartz veins present on the ridges west of Mount Gordonia summit are up to 50 cm in width and generally strike north - dipping steeply east and west. These veins possess strike lengths of less than 10 meters and are often widely spaced (>15m). They are dominantly hosted in the less competent rock units, such as those of the Lower volcanic division Toodoggone rocks.

A northwest trending 'fault zone' is located within a zone of intensely propylitically altered andesitic volcanics and was observed to host a mineralized quartz vein. This zone is situated at the head of the valley on the eastern central part of Joanna IV. The zone is gossanous (bright yellow - orange) and varies in thickness from 1 to 6 meters. The 'JD Zone' is visible on a steeply inclined rock surface where it appears to pinch out near the top of the outcrop, and thus cannot be traced upward. It does however, possess a surface exposure of 15 to 20 meters. It must be noted that the JD Zone appears to expand with depth. Near the top of the outcrop it is less than 1 meter in width, while near the bottom, before being covered by talus it is up to 6 meters in width. Two chip samples taken across the zone, JD-032 and JD-033 returned highly anomalous gold values. Sample JD-032, a 50 cm chip sample returned 7.22 g/mt gold (0.21 oz/ton). The sample included a 15 cm quartz vein. No sulfides other than pyrite were noted. A second sample, JD-033 taken over 1 meter returned 1.49 g/mt gold.

Sample DMH-003 returned values of 4.33 g/mt gold (0.130 oz/ton). The sample was taken from a 20 cm quartz vein that is reportedly 250m along strike from sample #440 (1988). Sample #440 (1988) also returned elevated gold values (0.126 oz/ton) across a width of 1 meter. The zone has been named the 'Gold Zone'.



7.0 GEOCHEMISTRY

The 1990 program included the collection of 154 soil samples from 4 new grid soil lines and the extension of several others (Figure 6). A total of 106 rocks were collected from the property. All samples were submitted to International Plasma Laboratories in Vancouver, B.C. All samples were fire assayed for gold, with 31 element I.C.P. Analytical procedures are reported in Appendix III and analytical data are reported in Appendix V. A description of rock samples can be found in Appendix II.

The soil samples were collected from an east - west grid. Lines are spaced 100 m apart with a sample spacing of 25 m. The highest soil values recorded are 95 ppb gold, 5.9 ppm silver and 185 ppm copper. Results of the 1990 soil geochemistry are discussed below:

GOLD: For gold geochemistry, 20 ppb was taken as the threshold value. Twenty one samples yielded values over 20 ppb gold; with the highest being 95 ppb. Two soil lines, 3+00S and 4+00S were emplaced so as to test the southern limits of a previously outlined anomaly. The anomaly is situated on the southeastern edge of the grid and occupies an area of approximately 300 m x 200 m. Line 4+00S has 8 samples which are considered anomalous (>20ppb Au), while line 3+00S has 7 samples which are considered anomalous. All anomalous soils are located in the western half of the grid. An extension to the previously delineated anomaly on lines 0+00, 1+00S and 2+00S was not readily observed. However, a sample taken at 3+00S 12+50E returned a value of 30 ppb gold and this may represent an

extension of the above mentioned anomaly. A new anomaly, that is centered upon line 4+00S 5+50E, may be resultant of alluvium washed from a ridge located immediately south of the Joanna III and IV legal corner post. No new anomalies were outlined in the northern portions of the Joanna III and IV grid (lines 7+50N and 9+00N).

SILVER: For silver geochemistry, 2 ppm was taken as the threshold value. 4 samples yielded values over 2 ppm silver; with the highest being 5.9 ppm. All anomalous values are located within the western portion of lines 3+00S and 4+00S. These anomalous soils are coincidental with the outlined gold anomaly centered upon these lines.

COPPER: For copper geochemistry, 100 ppm was taken as the threshold value. Eight samples possessed values over 100 ppm copper with the highest being 185 ppm. The majority of anomalous samples were collected from line 4+00S between 5+00E and 6+75E. These anomalous soils are once again coincidental with the gold anomaly outlined along this line.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The results of the 1990 exploration program on the subject property indicate that gold, silver and copper mineralization is generally confined to quartz veins and zones of silicification. The zones are located within north and northwest trending fault structures that have been outlined by the recent geologic mapping program. The veining outlined on the summit and on the west trending ridges proximal to Mount Gordonia are,

for the most part, too small to be considered of economic significance.

Soil geochemistry programs to date have outlined several areas of interest on the Gordonia, Joanna 3 and Joanna 4 claims. Two areas of interest occur in the southern most portions of the Joanna 3 and 4 claims. The first is a large gold anomaly centered upon line 1+00S at station 9+50E and the second is centered upon line 4+00S at station 5+50E. The second, a gold-copper anomaly, is believed to be the result of alluvium washing off a large 'gossanous' ridge located immediately south of the claims, this ridge may have the potential to host a large copper - gold porphyry.

Two recently identified zones the 'JD Zone' and the 'Gold Zone' possess elevated gold values. The JD Zone which varies in width from 1 meter to 6 meters returned anomalous gold values as high as 0.210 oz/ton. The Gold Zone also returned elevated gold values (0.130 oz/ton). Furthermore, the Gold Zone has been shown to possess an extrapolated strike length greater than 200 meters. The potential for high grade gold mineralization within silicified fault/shear zones is good. The presence of several targets of economic significance within explored areas of the property warrant further work in the form of a multi-stage program.

Phase 1

The first phase would involve trenching of the JD and the Gold Zones. This would include blasting and stripping of overlying rocks. Systematic mapping and sampling should be conducted over these two zones. It appears that a large soil anomaly within the claim boundaries may be caused, in part, by a large gossanous

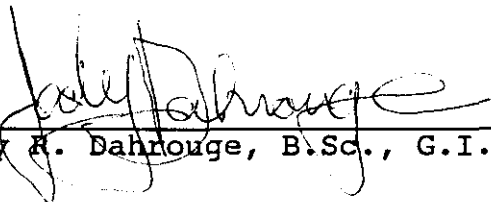
ridge located to the south of the Joanna claims. An attempt to acquire the ground immediately south of the Joanna III and IV claims should be made.

The two soil anomalies within the southern sections of the property are located in areas of unknown overburden thickness. An attempt should be made to strip and trench these targets. A limited amount of prospecting should also be conducted along the claim boundary to the south.

Phase 2

The second phase would include preliminary diamond drilling of the above targets. This phase would be contingent and based upon the results of Phase 1.

Respectfully Submitted,



Jody R. Dahrnounge, B.Sc., G.I.T.

November 6, 1990

9.0 REFERENCES

- Adamec, J.D. 1988. Geological and Geochemical Report on the Joanna III and IV Mineral Claims. For International Damascus Resources Ltd.
- Bell, M. 1986. Assessment Report; 1985 Geochemical Report on the Joanna I and II Mineral Claims. For Armor Development Corporation.
- Bell, M. 1986. Assessment Report; 1985 Geochemical Report on the Joanna III and IV Mineral Claims. For Toodoggone Syndicate.
- Carter, N.C. 1971. Toodoggone River Area; in B.C. Ministry of Energy, Mines and Petroleum Resources, G.E.M. 1971, pp. 63-70.
- Carter, N.C. 1985. Geological Report on the Joanna I and II Mineral Claims. For Armor Development Corporation.
- Cooke, D.L. 1986. Report on the Joanna III and IV Mineral Claims, Toodoggone River Area, Omineca M.D. For International Damascus Resources.
- Grond, H.C. and Sorbara, J.P. 1989. Report on the Nell Property, Toodoggone River Area; Private Report for Moondust Ventures Inc.
- Lyman, D.A. 1988. Geological and Geochemical Report on the Mount Graves Property (Graves 1 & 2 Claims) Toodoggone River Area, Omineca Mining Division. For Blue Emerald Resources Inc.
- Pezzot, E.T and White G.E., 1986. Geophysical Report on an Airborne Magnetometer Survey, Joanna III, IV Claims, Omineca Mining Division. For International Damascus Resources Ltd.
- Schroeter, T.G. 1981. Toodoggone River (94E); in Geological Fieldwork 1980, Ministry of Energy, Mines and Petroleum Resources, Paper 1981-1, p. 124-131.
- Schroeter, T.G. and Lefebure, D.V. 1987. Toodoggone River Area (94E), Geological Fieldwork 1986, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1987-1, pp. 111-121.
- Sorbara, J.P. and Arnold, R.R. 1988. Report on the Amethyst Valley and Kidview Claims (Oxide Peak Property), Toodoggone River Area; Private Report for Shayna Resources Inc.

Sorbara, J.P., Arnold, R.R., and Collins D.A. 1988. Report on The Lake I To Lake IV Claims, Toodoggone River Area; Private Report for PMA Technologies Inc.

Steel, J.S. and Sorbara, J.P. 1986. 1986 Geochemical Report on the Joanna I and II Mineral Claims. For Armor Development Corporation.

Steel, J.S. and Sorbara, J.P. 1986. 1986 Geological, Geochemical and Geophysical Report on the Joanna III and IV Mineral Claims. For International Damascus Resources Ltd.

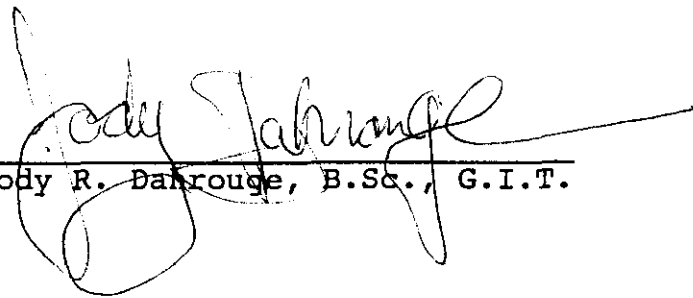
APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, JODY R. DAHROUGE, of 5513 53ave, in the Town of St. Paul, in the Province of Alberta, hereby certify:

1. THAT I am a geologist employed by Hi-Tec Resource Management Ltd., Suite 1500 - 609 Granville Street, Vancouver, B.C., V7Y 1G5, Canada.
2. THAT I obtained a Bachelor of Science degree in Geology from the University of Alberta, in the city of Edmonton, in 1988.
3. THAT I am a Registered Geologist in Training, in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1988.
4. THAT I have been practising my profession as a geologist in Alberta, British Columbia, Idaho, the Northwest Territories, and Saskatchewan since 1988.
5. THAT this report is based on work personally conducted during September, 1990 and upon examination of publicly and privately held literature.

Dated in Vancouver, British Columbia, this 6th day of November, 1990.



Jody R. Dahrouge, B.Sc., G.I.T.

APPENDIX II
ROCK SAMPLE DESCRIPTIONS

Sample No.	Width	Description
JD-001	-----	Grab sample. Andesite plagioclase porphyry, light purple - grey fresh; grey weathered. Fine grained ground-mass (aphanitic), medium grained fragments. Slight propylitic alteration. Hematite to 1.5%.
JD-002	-----	Grab sample. Andesite plagioclase porphyry; sheared; minor silicification and strong (epidote + chlorite + carbonate) propylitic alteration. Sample contains 2% pyrite, trace chalcopyrite, trace hematite, and trace manganese stain.
JD-003	-----	Grab sample. Andesite plagioclase, hornblende porphyry. Weak to moderate propylitic alteration. Sample contains 1-2% hematite as fine disseminations and trace manganese stain.
JD-004	-----	Grab sample. Rhyolite porphyry. Pink fresh, pink to orange weathered. Fine grained groundmass with fine to medium grained (Orthoclase > Plagioclase > Biotite > Hornblende) phenocrysts. Possible potassic alteration and strong propylitic alteration. No visible mineralization.
JD-005	-----	Grab sample. Agglomerate, with dominantly felsic fragments. Faulted. Maroon to purple weathered, (?) fresh. Possible argillic alteration. Abundant manganese stain, no visible mineralization.
JD-006	1 meter	Grab sample. Rhyolite, with minor porphyritic feldspars. Pink fresh. Sample contains 1% pyrite and pyrrhotite as fine disseminations.
JD-007	-----	Grab sample. Andesite Tuff. Light green fresh, grey - green weathered. Minor propylitic alteration. Sulfides (pyrite = pyrrhotite) to 1% as very fine disseminations.
JD-008	-----	Grab sample. Quartz vein. Milky. Propylitic alteration. Sulfides to 3% (chalcopyrite + bornite + sphalerite + pyrite); oxides to 3% (malachite + limonite).
JD-009	1 meter	Chip sample; perpendicular to 20 cm Quartz vein (JD-008) and including sheared Agglomerate and Tuff host. Sulfides restricted to vein.
JD-010	50 cm	Chip sample. Shear zone, silicified. Abundant milky Quartz vein material. Andesite host, green with propylitic alteration. Vein material consists dominantly of Quartz > Barite >

Carbonate > Chlorite. Chalcopyrite + pyrite to 2%; malachite to 2%.

JD-011 ----- Grab sample. Rhyolite. Pinkish - brown fresh, orange weathered. Trace hornblende, trace chlorite. Pyrrhotite to 1%, as very fine disseminations.

JD-012 40 cm Grab sample (Frostheave?). Milky Quartz vein that is at least 40cm in width. Minor propylitic alteration. Sulfides to 3% (chalcopyrite > pyrite) as fracture fill and vugs. Oxides to 3% (malachite > goethite).

JD-013 3 meters Chip sample across Andesite. Strongly fractured, sheared, partly silicified; trace propylitic alteration. Greenish brown weathered, light green fresh. Trace pyrite >> pyrrhotite, as very fine disseminations.

JD-014 ----- Grab sample. Andesite tuff. Sheared, strong propylitic alteration, trace silicification. Light green - brown weathered, light green fresh. Very fine grained. Pyrrhotite to 1% as very fine disseminations.

JD-015 2 meters Chip sample. Tuff, maroon. Sheared, highly fractured with abundant quartz and carbonate veinlets to 5mm (5% of unit total). No visible mineralization.

JD-016 1 meter Chip sample. Tuff, maroon. West side of 4m wide shear. Minor quartz veinlets (<10% of unit total). Unit is very fine grained. Trace pyrite and trace malachite.

JD-017 1 meter Chip sample. Quartz vein, minor Andesite host, propylitic alteration. West - Central side of 4m wide shear. Malachite stain to 4%; goethite to 2%, chalcopyrite and pyrite to 1%. Sulfides as fine disseminations. Sample is vuggy and strongly leached.

JD-018 1 meter Chip sample. Andesite. East - Central side of 4m wide shear. Strong propylitic alteration. Minor quartz veinlets and silicification. Sulfides to 2%; chalcopyrite > pyrrhotite.

JD-019 1 meter Chip sample. Andesite. East side of 4m wide shear. Strong propylitic alteration. Minor quartz veinlets and silicification. Sulfides to 2%; chalcopyrite > pyrrhotite.

JD-020 50 cm Chip sample, across float ? Quartz vein, lodged within recessive section of shear. Malachite to 3%; pyrite to 1%.

JD-021 25 cm Chip sample, across Quartz vein, within silicified Andesite host. Minor malachite stain; trace sulfides. Propylitic alteration.

JD-022 30 cm Chip sample, across Quartz vein, milky, within propylitic altered Andesite host. Malachite stain to 4%; chalcopyrite and pyrite to 2%; minor limonite.

JD-023 50 cm Chip sample, across Andesite, rusty weathered. Sheared, silicified, with propylitic alteration and abundant limonite.

JD-024 30 cm Chip sample, across Quartz vein, milky, discontinuous. Vein is within rusty Andesite host, propylitic alteration; abundant limonite and goethite. Trace sulfides.

JD-025 ----- Grab sample. Quartz vein, milky. Andesite host, strong propylitic alteration, sheared host. Sulfides to 2%, pyrite as very fine disseminations.

JD-026 15 cm Grab sample. Quartz veinlet within Andesite host. Host shows minor propylitic alteration, sample is leached and vuggy. Sulfides to 2%, chalcopyrite > pyrite. Abundant oxides, goethite >>> malachite.

JD-027 80 cm Chip sample across Quartz vein (25cm) and Andesite host; which is highly fractured and strongly altered (propylitic and silicified). Sulfides to 10% (pyrite >> chalcopyrite), as blebs, fracture fill and along vein walls. Limonite to 2%.

JD-028 1 meter Chip sample across Quartz vein (30cm) and minor quartz veinlets within Andesite host. Unit is highly fractured and showing strong propylitic alteration. Sulfides to 2%; pyrite >> chalcopyrite, as fine disseminations. Limonite to 4%.

JD-029 25 cm Grab sample. Quartz vein. Pyrite >> chalcopyrite to 5%. Abundant limonite.

JD-030 20 cm Grab sample. Quartz vein. Trace pyrite. Oxides to 15%; limonite >> goethite.

JD-031 25 cm Grab sample. Quartz vein. Pyrite to 10%. Limonite to 2%. Sulfides as coarse disseminations. Strong propylitic alteration.

JD-032 50 cm Chip sample. Andesite. Strong propylitic alteration. Silicified. With 15cm quartz vein (milky). Pyrite to 12% as coarse disseminations and blebs. Oxides to 10%; limonite >> goethite.

JD-033 1 meter Chip sample. Andesite. Strong propylitic alteration. Silicified. With 20cm quartz vein (milky) and veinlets. Pyrite to 9% as coarse and fine disseminations and blebs. Oxides to 10%; limonite >> goethite. Sample is leached.

JD-034 125 cm Chip sample. Andesite. Strong propylitic alteration. Silicified. With minor quartz stringers. Pyrite to 6% as fine disseminations, fracture fill and along veins. Limonite to 4%.

JD-035 100cm Chip sample. Andesite. Strong propylitic alteration. Silicified. With minor quartz stringers. Pyrite to 6% as fine disseminations, fracture fill and along veins. Limonite to 4%.

JD-036 ----- Grab sample. Andesite. Grey weathered and green fresh. Fine to medium grained. Aphanitic groundmass. Moderate propylitic alteration. Pyrite to 1% as very fine disseminations; minor limonite stain along fractures.

JD-037 70 cm Grab sample. Andesite hosted gossan; with minor quartz veinlets; silicified with very strong propylitic alteration. Sulfides to 15%, hematite >> pyrite >> chalcopyrite; oxides to 15%, limonite >> malachite.

JD-038 40 cm Grab sample. Andesite hosted gossan; with minor quartz veinlets; silicified with moderate propylitic alteration. Pyrite to 7% as coarse disseminates within zones of silicification. Oxides to 7%, limonite >> malachite.

JD-039 1 meter Grab sample. Diabase dyke; mesocratic; aphanitic; very fine grained. Unit is partly silicified. Sulfides to 1.5%, pyrite + pyrrhotite >> magnetite, as very fine disseminations.

JD-040 2 meters Grab sample. Rhyolite Breccia. Unit is sheared. Brown weathered; pink to pinkish brown fresh. Fine grained matrix. Sulfides <1%, pyrite + chalcopyrite. Oxides to 1.5%, limonite > malachite. Sulfides and oxides as fracture fill. Outcrop is 4 to 8 meters wide by 100+ meters in length.

JD-041 2 meters Grab sample. Quartz Monzonite (?). Pink - green weathered, pink - light green fresh; medium grained. Propylitic alteration in part. Sulfides to 1.5%, pyrite > chalcopyrite, as very fine disseminations. Note; outcrop mineralization is spotty.

JD-042 3 meters Grab sample. Andesite. Brown - grey weathered and green fresh. Fine grained aphanitic groundmass. Occasional plagioclase phenocrysts to 3mm, locally abundant. Hematite to 1.5% as very fine disseminations.

JD-043 2 meters Chip sample. Andesite. Rusty weathered to light green fresh. Fine grained. Strong propylitic alteration (epidote veinlets); trace silicification. Pyrite to 3.5% as coarse disseminations and fracture fill. Limonite to 3%.

JD-044 3 meters Grab sample. Andesite. Rusty weathered to light green fresh. Fine grained. Strong propylitic alteration; trace silicification. Pyrite to 5% as coarse disseminations and fracture fill. Limonite to 4%.

JD-045 1 meter Grab sample. Rhyolite. Grey - orange weathered; light grey to light orange - grey fresh. Very fine grained. Trace propylitic alteration and trace silicification. Sulfides <2%; pyrite > chalcopyrite, as very fine disseminations. Manganese and malachite stain to 1%.

JD-046 ----- Grab sample. Quartz vein. Minor propylitic alteration. Rhyolite host. Sulfides to 7%, chalcopyrite > pyrite; oxides to 2%, limonite + malachite.

JD-047 20 cm Grab sample, frost heave. Quartz vein. Very rusty weathered. Sulfides to 6%, chalcopyrite > pyrite; oxides to 6%, limonite >> malachite.

DAR-001 ----- Scree sample. 90% dark green altered propylitic altered Andesite, 10% Rhyolite with small phenocrysts of feldspar. Up to 80% hematite. Minor malachite, azurite, chalcopyrite, pyrite, arsenopyrite, hematite and quartz/carbonate. 1480m.

DAR-002 ----- Grab sample. Andesite, dark grey to purple. Propylitic alteration. Epidote crystals concentrated around feldspar crystals. 2% quartz/carbonate. <1% pyrite and fine grained hematite. 1520m.

DAR-003 ----- Grab sample. Andesite, dark grey. Silicified. Propylitic alteration. Feldspar phenocrysts to 1mm. 5% epidote. <1% pyrite, trace arsenopyrite? 1610m.

DAR-004 ----- Grab sample. Andesite, porphyritic, light brown to light red. Feldspar phenocrysts to 1mm. Unit 3 meters in width.

DAR-005 ----- Grab sample. Andesite, light green. Strong fracturing, with quartz/carbonate fracture fill. Strong propylitic alteration. Zone 30m wide by 50m long. 5% chalcopyrite, 1% pyrite, hematite. 1650 m.

DAR-006 10 meters Chip sample. As sample DAR-005. 1650m.

DAR-007 ----- Grab sample. Andesite, porphyritic. Dark brown to dark green. Very soft and fractured. <1% pyrite.

DAR-008 ----- Grab sample. Andesite, porphyritic. Siliceous, purple to green.

DAR-009 ----- Grab sample. Andesite, porphyritic. Feldspar phenocrysts to 2mm. Siliceous. <1% pyrite. Sample 1 meter from agglomerate contact.

DAR-010 ----- Grab sample. Andesite. Light red to pink. Aphanitic. Quartz filled fractures. Some propylitic alteration. <1% pyrite.

DAR-011 ----- Grab sample. Limestone with quartz/carbonate filled fractures. 5% pyrite, 1% arsenopyrite, <1% chalcopyrite.

DAR-012 ----- Grab sample. Rhyolite. Pink to light red. Siliceous. Minor propylitic alteration. <1% pyrite.

DAR-013 ----- Grab sample. Rhyolite. Pink. Minor silicification. <1% pyrite.

DAR-014 ----- Grab sample. Mafic porphyry. Pink feldspar phenocrysts to 2mm. Minor quartz. <1% magnetite, <1% pyrite, <1% arsenopyrite.

DAR-015 10 meters Grab sample. Rhyolite tuff. Siliceous. 2% pyrite, <1% arsenopyrite.

DAR-016 10 meters Grab sample. As sample DAR-015.

DAR-017 ----- Grab sample. Quartz Monzonite. Pink to red. Quartz/carbonate filled fractures. 1% pyrite, 1% arsenopyrite.

DMH-001 ----- Grab sample. Quartz Pod within Andesite host. Andesite is porphyritic with feldspar phenocrysts to 1mm. Dark green. Quartz is vuggy with 3% chalcopyrite, <2% pyrite. Malachite and azurite stain. Alteration zone is 30m wide and 50m high. 1700m.

DMH-002 ----- Grab sample. Andesite. Light green. Medium grained. Slight silicification, propylitic alteration. Some visible sulfide. Some malachite. Taken from zone 2m wide by 5m long. 1725m.

DMH-003 20 cm Grab sample. Quartz vein. Vuggy, leached. Abundant limonite, 2% chalcopyrite, <1% pyrite, malachite and azurite stain. Sample appears to be on strike from old sample #440. 1700m.

DMH-004 1 meter Chip sample. (next to DMH-003) Andesite. Dark green to black. Quartz filled fractures and quartz vugs. Propylitic alteration. 5% chalcopyrite, <2% pyrite. Malachite and azurite stain. Sample taken from hanging wall. No mineralization in footwall. 1700m.

DMH-005 ----- Talus. Andesite. Purple to blue. Fine grained. Silicified. 1% chalcopyrite, <0.5% pyrite and minor malachite stain. 1850m.

DMH-006 ----- Float sample. Andesite porphyry. Fine grained. Some phenocrysts of feldspar. Aphanitic. 10 - 15% cuprite. Quartz/carbonate. 1800m.

DMH-007 ----- Grab sample. Andesite porphyry. Fine grained. Propylitic alteration. 2% feldspar. Siliceous with small vugs of Quartz. Disseminated pyrite.

DMH-008 4 cm Float sample. Quartz vein. 3% chalcopyrite, 1% pyrite, <1% hematite. Malachite and azurite stain.

DO-101 ----- Float sample. Light grey, aphanitic, silicified andesite. Stringers and disseminations of pyrite 2-4%. Strong hematite stains. 1690m.

DO-102 ----- Grab sample. Quartz vein (345/79E). 1 to 4cm wide. In brown/purple friable volcanic tuff and volcanic porphyry - brecciated along contact with the quartz vein. Pyrite and chalcopyrite as blebs and stringers; intense malachite staining to 5%. 2080m.

- DO-103 ----- Grab sample. Grey porphyritic Trachyte with phenocrysts of feldspar, biotite and hornblende. Strong hematite and chlorite alteration. No visible sulfides. 2112m.
- DO-104 ----- Grab sample. Dark grey silicified aphanitic to fine grained andesitic volcanic. Intense hematite alteration. No visible sulfides. 2108m.
- DO-105 ----- Grab sample. Dark grey silicified andesitic volcanic. Strong hematite and epidote alteration. No visible sulfides. 2100m.
- DO-106 10 cm Chip sample. Quartz vein (340/66E) up to 9cm wide in sheared, fractured, epidotized dark grey siliceous andesitic volcanic. Orientation of fault 345deg. Pyrite and chalcopyrite as blebs and stringers <5%. Strong rusty stainings. Sample taken perpendicular to vein. 2095m.
- DO-107 ----- Grab sample. Sample taken 2m SW of DO-106. Quartz vein (300/85E) up to 10cm wide, hosted in siliceous andesitic volcanic as above. Blebs and stringers of pyrite and chalcopyrite to 2%, traces of malachite. 2095m.
- DO-108 ----- Grab sample. 20m along the vein (A-120). Milky quartz vein - continuation from DO-107. Propylitic alteration. Small blebs of pyrite and minor chalcopyrite (3%). Rusty staining. 2081m.
- DO-109 ----- Grab sample. Quartz vein (350/65-90E) up to 10 cm wide. Blebs, stringers and disseminations of pyrite, chalcopyrite and arsenopyrite(?) and stains of malachite up to 10% of sample. Quartz vein is hosted in brown-grey quartz monzonite porphyry. 2065m.
- DO-110 ----- Grab sample. Quartz monzonite porphyry showing propylitic and argillic alteration. Abundant hematite. 2065m.
- DO-111 ----- Grey porphyritic trachyte. Hematite and some chloritic alteration near the contact with the quartz monzonite porphyry. 2050m.
- DO-112 ----- Grab sample. Sheared quartz-epidote vein (335/81E) up to 30cm wide. Hosted in grey-greenish silicified fine grained Andesite. Small blebs and disseminations of pyrite (<5%); traces of malachite and strong rusty stainings. 1980m.

DO-113 ----- Grab sample. Sheared and epidotized (fault), greenish andesite with quartz and some pyrite (<1%). Hematite stainings.

DO-114 ----- Grab sample. Grey - greenish, fine grained siliceous andesite with epidote, quartz, chlorite and weak pyrite alteration (<1%). Traces of malachite. 1900m.

DO-115 ----- Grab sample. Quartz and epidote veins (045/27W) up to 10cm wide in purple, friable volcanic tuff and volcanic porphyry. Sulfides as small blebs of pyrite (<5%). Malachite stains. 1780m.

DO-116 ----- Grab sample. Light grey silicified, fine grained andesite/rhyolite. Up to 50cm wide, rusted zones with pyrite (<3%). A350/E steep. 1775m.

DO-117 ----- Grab sample. Shear zone (A325/, 2 to 3 meters wide. Green fine grained andesite. Strong propylitic alteration with brown clay (Kaoline?). 1710m.

DO-118 ----- Grab sample. Grey greenish, fine grained andesite, silicified. Strong propylitic alteration with 5- 10% pyrite. Rusty weatherings on the surface. Sample taken along the contact with a grey - pink quartz monzonite porphyry. 1835m.

DO-119 ----- Grab sample. 1m from sample DO-118. Grey - greenish fine grained andesite. Strong propylitic alteration with >5% pyrite. Rusty weathering on surface. 1835m.

DO-120 ----- Grab sample. 1m from sample DO-119. Grey-greenish, siliceous fine grained andesite. Strong propylitic alteration. Pyrite disseminated and as single crystal (5%). Rusty stains throughout. 1835m.

DO-121 ----- Grab sample. Quartz vein, 12cm wide, hosted in grey - greenish, silicified, fine grained andesite and purple silicified volcanic tuff. Orientation of the vein 335/84E; length 25m. Disseminated pyrite ,1%, strong limonite staining. 2025m.

DO-122 11 cm Grab sample. Quartz vein, as above, in silicified andesite/volcanic tuff contact. Milky quartz vein is 11cm wide with propylitic alteration, disseminated pyrite and malachite. 2025m.

DO-123 ----- Grab sample. Quartz vein, as above, with strong propylitic alteration and traces of malachite, hosted in siliceous andesite. 2025m.

DO-124 12 cm Grab sample. Quartz vein, as above, with propylitic alteration and massive malachite, disseminated pyrite, manganese stains. 2025m.

DO-125 13 cm Grab sample. Quartz vein, as above, with propylitic alteration. Pyrite and chalcopyrite as small blebs, traces of malachite. 2025m.

DO-126 10 cm Grab sample. Quartz vein, as above, with strong propylitic alteration. Traces of malachite and weak disseminated pyrite (1-2%). 2025m.

DO-127 7 cm Grab sample. Quartz vein, in silicified fine grained andesite. Strong rusty stainings. Weak mineralization, represented by pyrite and traces of malachite. 2025m.

DO-128 20 cm Grab sample. Quartz vein, in silicified, propylitic altered andesite. Small blebs of pyrite, chalcopyrite and malachite stains. Strong rusty weathering. 2025m.

DO-129 20 cm Grab sample. Quartz vein (320/79E) up to 20cm wide. Strong propylitic alteration, blebs of pyrite, minor chalcopyrite (<5%) and malachite stains. The vein is hosted in siliceous andesite along the contact with a quartz-monzonite porphyry. 2000m.

DO-130 10 cm Grab sample. Quartz vein, continuation from DO-129. Strong propylitic alteration. Weak pyrite and malachite stains. Rusty weathering throughout. 1980m.

DO-131 ----- Grab sample. Grey pinkish quartz monzonite porphyry. Strong propylitic alteration, sporadic quartz veinlets. Hematite and limonite staining. 1720m.

DO-132 5 cm Grab sample. Quartz vein (025/E) in altered siliceous andesite. Strong propylitic alteration and argillic alteration. Disseminated pyrite (1%), strong hematite and limonite stainings. 1710m.

DO-133 2-50cm Grab sample. Quartz vein (040/E) in altered grey - purple volcanic tuff. Quartz vein shows strong propylitic and argillic alteration. Mineralization is spotty and represented by blebs and crack fillings of pyrite, chalcopyrite and intense malachite/hematite stainings. 1710m.

DO-134 ----- Grab sample. Quartz monzonite
porphyry. Strong propylitic alteration with hematite,
manganese and limonite stains. Contact with silicified,
fine grained andesite. 1680m.

APPENDIX III
GEOCHEMICAL PREPARATION AND ANALYTICAL PROCEDURES

Method of ICP Multi-element Analyses

- (a) 0.50 grams of sample is digested with diluted aqua regia solution by heating in a hot water bath for 90 minutes, then cooled, bulked up to a fixed volume with demineralized water, and thoroughly mixed.

 - (b) The specific elements are determined using an Inductively Coupled Argon Plasma spectrophotometer. All elements are corrected for inter-element interference. All data are subsequently stored onto computer diskette.
- * Aqua regia leaching is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

QUALITY CONTROL

The machine is calibrated using six known standards and a blank. Another blank, which was digested with the samples, and a standard are tested before any samples to confirm the calibration. A maximum of 20 samples are analysed, and then a standard, also digested with the samples, is run. A known standard with characteristics best matching the samples is chosen and tested. Another 20 samples are analysed, with the last one being a random reweigh of one of the samples. The standard used at the beginning is rerun. This procedure is repeated for all of the samples.

Method of sample preparation for Rock or Core

- (a) Water content in sample is removed by convection in a low temperature dryer ($T < 60$ Degrees C.).
- (b) The sample is passed through a jaw crusher. Particle size after this step is not greater than -10 Mesh. A Cone crusher is used to decrease the maximum particle size down to -20 Mesh.
- (c) The entire charge is then reduced down to 250g by repeated passes through a riffle splitter. The 250g portion is then pulverized with a Ring Pulverizer until the entire population can pass through a 120 Mesh screen. The sample is then rolled to assure homogenous particle distribution.

QUALITY CONTROL

Cross contamination is minimized by constant cleaning of preparation equipment with high velocity compressed air. Blank charges are frequently run through crushers to remove trapped particles. Ring pulverizers are cleaned with a quartz sand charge.

Method of Gold analysis by Fire Assay / AAS

- (a) 20.0 to 30.0 grams of sample is mixed with a combination of fluxes in a fusion pot. The sample is then fused at high temperature to form a lead "button".
- (b) The precious metals are extracted by cupellation. Any Silver is dissolved by nitric acid and decanted. The gold bead is then dissolved in boiling concentrated aqua regia solution heated by a hot water bath.
- (c) The gold in solution is determined with an Atomic Absorption Spectrometer. The gold value, in parts per billion, is calculated by comparison with a set of known gold standards.

QUALITY CONTROL

Every fusion of 24 pots contains 22 samples, one internal standard or blank, and a random reweigh of one of the samples. Samples with anomalous gold values greater than 500 ppb are automatically checked by Fire Assay/AA methods. Samples with gold values greater than 10000 ppb are automatically checked by Fire Assay/Gravimetric methods.

Method of sample preparation for Soil or Silt

- (a) Water content in sample is removed by convection in a low temperature dryer ($T < 60$ Degrees C.).
- (b) Dried samples are passed through an 80 mesh sieve. The minus 80 mesh fraction is transferred to a new bag for subsequent analyses. The plus 80 mesh fraction is discarded unless otherwise instructed.
- (c) If an insufficient amount of sample is less than 80 Mesh, the entire sample is passed through a 35 Mesh screen. The -35 Fraction is then pulverized and used as the portion for analyses.

QUALITY CONTROL

Cross contamination is minimized by constant cleaning of preparation equipment with high velocity compressed air. Ring pulverizers are cleaned with a quartz sand charge.

APPENDIX IV

**CONSOLIDATED ANALYTICAL DATA FOR BULK STREAM, PAN
CONCENTRATE, ROCK AND SOIL SAMPLES FOR THE JOANNA 1 AND 2
(GORDONIA AND GULCH) AND THE JOANNA 3 AND 4 CLAIMS
COLLECTED PREVIOUS TO 1990**

Joanna Project

Project: 90-BC-048

Sample No.	Type	Claim	Assay Results		
			Au (ppb)	Ag (ppb)	Cu (ppb)
S020	Silt	J1&2/85	30	1.5	49
S021	Silt	J1&2/85	10	2.4	70
S022	Silt	J1&2/85	10	2.2	118
S023	Silt	J1&2/85	5	2.1	82
S025	Silt	J1&2/85	20	1.8	87
S026	Silt	J1&2/85	60	1.4	60
S200	Silt	J1&2/85	20	1.1	39
S203	Silt	J1&2/85	40	1.6	84
8+00N	5 +00E Soil	J1&2/85	10	0.9	51
8+00N	5 +50E Soil	J1&2/85	5	1.5	70
8+00N	6 +00E Soil	J1&2/85	5	0.7	17
8+00N	6 +50E Soil	J1&2/85	5	0.6	19
8+00N	7 +00E Soil	J1&2/85	5	1.3	29
8+00N	7 +50E Soil	J1&2/85	10	1.9	43
8+00N	8 +00E Soil	J1&2/85	5	1.0	32
8+00N	8 +50E Soil	J1&2/85	5	0.8	27
8+00N	9 +00E Soil	J1&2/85	5	2.0	48
8+00N	9 +50E Soil	J1&2/85	5	0.8	21
8+00N	10 +00E Soil	J1&2/85	10	1.2	33
8+00N	10 +50E Soil	J1&2/85	5	1.9	62
8+00N	11 +00E Soil	J1&2/85	5	1.0	30
8+00N	11 +50E Soil	J1&2/85	10	0.9	18
8+00N	12 +00E Soil	J1&2/85	20	0.7	16
8+00N	12 +50E Soil	J1&2/85	5	1.2	30
8+00N	13 +00E Soil	J1&2/85	55	1.5	28
8+00N	13 +50E Soil	J1&2/85	10	0.7	15
8+00N	14 +00E Soil	J1&2/85	5	1.1	11
8+00N	14 +50E Soil	J1&2/85	150	1.8	16
8+00N	15 +00E Soil	J1&2/85	70	1.5	14
8+00N	15 +50E Soil	J1&2/85	20	0.6	16
8+00N	16 +00E Soil	J1&2/85	10	1.1	10
8+00N	16 +50E Soil	J1&2/85	10	1.3	11
8+00N	17 +00E Soil	J1&2/85	65	1.2	14
8+00N	17 +50E Soil	J1&2/85	60	0.9	8
8+00N	18 +00E Soil	J1&2/85	40	4.4	34
8+00N	18 +50E Soil	J1&2/85	5	1.0	12
8+00N	19 +00E Soil	J1&2/85	5	0.8	6
8+00N	19 +50E Soil	J1&2/85	10	1.5	12
8+00N	20 +00E Soil	J1&2/85	85	1.3	9
10+00N	7 +00E Soil	J1&2/85	5	0.7	46
10+00N	7 +50E Soil	J1&2/85	10	0.5	23
10+00N	8 +00E Soil	J1&2/85	5	0.8	38
10+00N	8 +50E Soil	J1&2/85	5	1.0	25
10+00N	9 +00E Soil	J1&2/85	5	1.8	36
10+00N	9 +50E Soil	J1&2/85	15	0.8	15
10+00N	10 +00E Soil	J1&2/85	30	0.9	11
10+00N	10 +50E Soil	J1&2/85	5	1.0	24
10+00N	11 +00E Soil	J1&2/85	No Sample		

10+00N	11 +50E Soil	J1&2/85	10	1.6	22
10+00N	12 +00E Soil	J1&2/85	5	0.8	39
10+00N	12 +50E Soil	J1&2/85	5	3.4	59
10+00N	13 +00E Soil	J1&2/85	5	0.9	7
10+00N	13 +50E Soil	J1&2/85	No Sample		
10+00N	14 +00E Soil	J1&2/85	5	1.0	16
10+00N	14 +50E Soil	J1&2/85	10	1.0	25
10+00N	15 +00E Soil	J1&2/85	5	1.1	17
10+00N	15 +50E Soil	J1&2/85	15	1.2	13
10+00N	16 +00E Soil	J1&2/85	5	0.8	14
10+00N	16 +50E Soil	J1&2/85	50	1.2	16
10+00N	17 +00E Soil	J1&2/85	15	0.6	13
10+00N	17 +50E Soil	J1&2/85	5	1.0	15
10+00N	18 +00E Soil	J1&2/85	90	1.0	10
10+00N	18 +50E Soil	J1&2/85	10	0.9	14
10+00N	19 +00E Soil	J1&2/85	5	1.0	17
10+00N	19 +50E Soil	J1&2/85	85	2.2	21
10+00N	20 +00E Soil	J1&2/85	15	1.0	13
10+00N	20 +50E Soil	J1&2/85	30	1.2	12
10+00N	21 +00E Soil	J1&2/85	5	1.0	10
10+00N	21 +50E Soil	J1&2/85	70	0.6	10
10+00N	22 +00E Soil	J1&2/85	5	0.5	9
10+00N	22 +50E Soil	J1&2/85	15	1.6	10
10+00N	23 +00E Soil	J1&2/85	5	1.4	16
10+00N	23 +50E Soil	J1&2/85	5	0.8	12
12+00N	12 +00E Soil	J1&2/85	10	0.7	13
12+00N	12 +50E Soil	J1&2/85	5	2.5	47
12+00N	13 +00E Soil	J1&2/85	5	0.7	12
12+00N	13 +50E Soil	J1&2/85	5	0.8	11
12+00N	14 +00E Soil	J1&2/85	30	0.7	11
12+00N	14 +50E Soil	J1&2/85	5	0.6	12
12+00N	15 +00E Soil	J1&2/85	10	0.7	14
12+00N	15 +50E Soil	J1&2/85	5	0.6	13
12+00N	16 +00E Soil	J1&2/85	5	0.8	12
12+00N	16 +50E Soil	J1&2/85	30	0.7	16
12+00N	17 +00E Soil	J1&2/85	15	0.9	11
12+00N	17 +50E Soil	J1&2/85	10	1.4	11
12+00N	18 +00E Soil	J1&2/85	45	0.9	8
12+00N	18 +50E Soil	J1&2/85	5	1.6	16
12+00N	19 +00E Soil	J1&2/85	5	1.2	10
12+00N	19 +50E Soil	J1&2/85	10	3.0	14
12+00N	20 +00E Soil	J1&2/85	No Sample		
12+00N	20 +50E Soil	J1&2/85	5	0.9	10
12+00N	21 +00E Soil	J1&2/85	5	0.9	15
12+00N	21 +50E Soil	J1&2/85	5	1.0	9
12+00N	22 +00E Soil	J1&2/85	10	1.0	11
12+00N	22 +50E Soil	J1&2/85	5	0.8	10
12+00N	23 +00E Soil	J1&2/85	5	1.2	26
12+00N	23 +50E Soil	J1&2/85	5	0.8	21
12+00N	24 +00E Soil	J1&2/85	3	1.2	24
12+00N	24 +50E Soil	J1&2/85	10	0.7	15
12+00N	25 +00E Soil	J1&2/85	5	0.9	16
14+00N	7 +00E Soil	J1&2/85	5	1.3	29
14+00N	7 +50E Soil	J1&2/85	10	1.2	33

14+00N	8 +00E Soil	J1&2/85	5	2.3	42
14+00N	8 +50E Soil	J1&2/85	5	1.1	18
14+00N	9 +00E Soil	J1&2/85	15	1.3	36
14+00N	9 +50E Soil	J1&2/85	5	1.4	50
14+00N	10 +00E Soil	J1&2/85	5	1.2	17
14+00N	10 +50E Soil	J1&2/85	35	1.0	24
14+00N	11 +00E Soil	J1&2/85	10	2.0	30
14+00N	11 +50E Soil	J1&2/85	5	1.9	34
14+00N	12 +00E Soil	J1&2/85	5	1.1	12
14+00N	12 +50E Soil	J1&2/85	10	1.2	14
14+00N	13 +00E Soil	J1&2/85	5	1.3	14
14+00N	13 +50E Soil	J1&2/85	5	0.9	10
14+00N	14 +00E Soil	J1&2/85	10	1.0	32
14+00N	14 +50E Soil	J1&2/85	5	1.5	34
14+00N	15 +00E Soil	J1&2/85	5	0.7	8
14+00N	15 +50E Soil	J1&2/85	5	1.2	12
14+00N	16 +00E Soil	J1&2/85	10	1.2	18
14+00N	16 +50E Soil	J1&2/85	5	1.3	10
14+00N	17 +00E Soil	J1&2/85	5	0.8	7
14+00N	17 +50E Soil	J1&2/85	5	1.0	6
14+00N	18 +00E Soil	J1&2/85	10	1.5	14
14+00N	18 +50E Soil	J1&2/85	5	1.4	12
14+00N	19 +00E Soil	J1&2/85	5	1.0	10
14+00N	19 +50E Soil	J1&2/85	10	1.3	10
14+00N	20 +00E Soil	J1&2/85	No Sample		
14+00N	20 +50E Soil	J1&2/85	5	0.9	12
14+00N	21 +00E Soil	J1&2/85	5	1.0	20
14+00N	21 +50E Soil	J1&2/85	5	1.1	16
14+00N	22 +00E Soil	J1&2/85	10	1.8	34
14+00N	22 +50E Soil	J1&2/85	5	1.2	27
14+00N	23 +00E Soil	J1&2/85	5	1.0	19
14+00N	23 +50E Soil	J1&2/85	5	0.6	10
14+00N	24 +00E Soil	J1&2/85	No Sample		
14+00N	24 +50E Soil	J1&2/85	5	0.8	10
14+00N	25 +00E Soil	J1&2/85	5	0.6	10
16+00N	7 +00E Soil	J1&2/85	10	0.8	60
16+00N	7 +50E Soil	J1&2/85	5	0.9	46
16+00N	8 +00E Soil	J1&2/85	5	0.9	37
16+00N	8 +50E Soil	J1&2/85	20	0.8	28
16+00N	9 +00E Soil	J1&2/85	5	0.8	26
16+00N	9 +50E Soil	J1&2/85	5	0.7	74
16+00N	10 +00E Soil	J1&2/85	5	0.7	15
16+00N	10 +50E Soil	J1&2/85	5	0.6	10
16+00N	11 +00E Soil	J1&2/85	5	1.1	25
16+00N	11 +50E Soil	J1&2/85	10	0.6	10
16+00N	12 +00E Soil	J1&2/85			
16+00N	12 +50E Soil	J1&2/85	5	0.8	10
16+00N	13 +00E Soil	J1&2/85	70	1.2	12
16+00N	13 +50E Soil	J1&2/85	5	0.6	8
16+00N	14 +00E Soil	J1&2/85	5	1.2	30
16+00N	14 +50E Soil	J1&2/85	5	0.8	10
16+00N	15 +00E Soil	J1&2/85	5	0.8	9
16+00N	15 +50E Soil	J1&2/85	5	0.8	9
16+00N	16 +00E Soil	J1&2/85	5	0.8	8
16+00N	16 +50E Soil	J1&2/85	5	0.6	8

16+00N	17 +00E Soil	J1&2/85	5	0.5	7
16+00N	17 +50E Soil	J1&2/85	5	0.7	8
16+00N	18 +00E Soil	J1&2/85	10	0.6	6
16+00N	18 +50E Soil	J1&2/85	5	1.4	16
16+00N	19 +00E Soil	J1&2/85	5	1.2	10
16+00N	19 +50E Soil	J1&2/85	5	0.7	8
16+00N	20 +00E Soil	J1&2/85	No Sample		
16+00N	20 +50E Soil	J1&2/85	10	0.6	8
16+00N	21 +00E Soil	J1&2/85	5	1.4	12
16+00N	21 +50E Soil	J1&2/85	5	1.2	14
16+00N	22 +00E Soil	J1&2/85	5	1.0	16
16+00N	22 +50E Soil	J1&2/85	3	1.0	18
16+00N	23 +00E Soil	J1&2/85	5	1.2	17
16+00N	23 +50E Soil	J1&2/85	5	1.0	21
16+00N	24 +00E Soil	J1&2/85	5	1.1	22
16+00N	24 +50E Soil	J1&2/85	10	0.8	18
16+00N	25 +00E Soil	J1&2/85	5	1.0	24
16+00N	25 +50E Soil	J1&2/85	5	0.8	16
16+00N	26 +00E Soil	J1&2/85	10	1.0	20
18+00N	7 +50E Soil	J1&2/85	5	1.0	28
18+00N	8 +00E Soil	J1&2/85	15	0.6	26
18+00N	8 +50E Soil	J1&2/85	5	0.8	67
18+00N	9 +00E Soil	J1&2/85	5	0.8	30
18+00N	9 +50E Soil	J1&2/85	10	0.9	20
18+00N	10 +00E Soil	J1&2/85	5	0.7	20
18+00N	10 +50E Soil	J1&2/85	No Sample		
18+00N	11 +00E Soil	J1&2/85	5	0.8	10
18+00N	11 +50E Soil	J1&2/85	10	0.8	10
18+00N	12 +00E Soil	J1&2/85	5	0.7	8
18+00N	12 +50E Soil	J1&2/85	5	0.9	9
18+00N	13 +00E Soil	J1&2/85	45	0.8	8
18+00N	13 +50E Soil	J1&2/85	15	1.2	10
18+00N	14 +00E Soil	J1&2/85	15	0.8	6
18+00N	14 +50E Soil	J1&2/85	25	0.8	8
18+00N	15 +00E Soil	J1&2/85	300	0.7	10
18+00N	15 +50E Soil	J1&2/85	5	1.0	9
18+00N	16 +00E Soil	J1&2/85	5	0.5	8
18+00N	16 +50E Soil	J1&2/85	15	1.0	14
18+00N	17 +00E Soil	J1&2/85	5	0.8	8
18+00N	17 +50E Soil	J1&2/85	10	0.8	6
18+00N	18 +00E Soil	J1&2/85	5	1.2	12
18+00N	18 +50E Soil	J1&2/85	5	0.6	12
18+00N	19 +00E Soil	J1&2/85	5	1.2	18
18+00N	19 +50E Soil	J1&2/85	10	0.6	10
18+00N	20 +00E Soil	J1&2/85	No Sample		
18+00N	20 +50E Soil	J1&2/85	5	1.0	17
18+00N	21 +00E Soil	J1&2/85	5	0.8	14
18+00N	21 +50E Soil	J1&2/85	10	0.6	8
18+00N	22 +00E Soil	J1&2/85	5	1.0	17
18+00N	22 +50E Soil	J1&2/85	5	0.8	14
18+00N	23 +00E Soil	J1&2/85	10	0.6	18
18+00N	23 +50E Soil	J1&2/85	60	0.8	16
18+00N	24 +00E Soil	J1&2/85	5	0.6	10
18+00N	24 +50E Soil	J1&2/85	No Sample		
18+00N	25 +00E Soil	J1&2/85	10	0.6	12

18+00N	25 +50E Soil	J1&2/85	5	0.6	12
18+00N	26 +00E Soil	J1&2/85	5	0.6	15
18+00N	26 +50E Soil	J1&2/85	5	2.2	17
18+00N	27 +00E Soil	J1&2/85	5	0.7	12
18+00N	27 +50E Soil	J1&2/85	10	0.5	11
18+00N	28 +00E Soil	J1&2/85	5	0.8	15
18+00N	28 +50E Soil	J1&2/85	10	0.6	14
18+00N	29 +00E Soil	J1&2/85	5	1.6	32
18+00N	29 +50E Soil	J1&2/85	30	1.0	22
18+00N	30 +00E Soil	J1&2/85	40	1.4	21
18+00N	30 +50E Soil	J1&2/85	25	1.1	16
18+00N	31 +00E Soil	J1&2/85	70	1.7	102
18+00N	31 +50E Soil	J1&2/85	105	2.0	107
18+00N	32 +00E Soil	J1&2/85	70	1.5	60
18+00N	32 +50E Soil	J1&2/85	75	2.3	89
18+00N	33 +00E Soil	J1&2/85	70	1.3	52
8+00N	21 +00E Soil	J1&2/86	40	0.4	16
8+00N	21 +50E Soil	J1&2/86	50	0.5	5
8+00N	22 +00E Soil	J1&2/86	5	0.6	12
8+00N	22 +50E Soil	J1&2/86	10	0.4	4
8+00N	23 +00E Soil	J1&2/86	10	0.4	4
8+00N	23 +50E Soil	J1&2/86	5	0.4	19
6+00N	12 +00E Soil	J1&2/86	20	1.7	51
6+00N	12 +50E Soil	J1&2/86	10	0.9	12
6+00N	13 +00E Soil	J1&2/86	5	0.9	22
6+00N	13 +50E Soil	J1&2/86	25	0.6	16
6+00N	14 +00E Soil	J1&2/86	30	0.9	12
6+00N	14 +50E Soil	J1&2/86	5	1.0	11
6+00N	15 +00E Soil	J1&2/86	5	1.0	10
6+00N	15 +50E Soil	J1&2/86	5	0.5	11
6+00N	16 +00E Soil	J1&2/86	3	0.7	10
6+00N	16 +50E Soil	J1&2/86	5	0.7	9
6+00N	17 +00E Soil	J1&2/86	5	1.0	17
6+00N	17 +50E Soil	J1&2/86	20	0.9	14
6+00N	18 +00E Soil	J1&2/86	5	1.2	17
6+00N	18 +50E Soil	J1&2/86	5	0.9	12
6+00N	19 +00E Soil	J1&2/86	5	0.5	8
6+00N	19 +50E Soil	J1&2/86	10	0.5	9
6+00N	20 +00E Soil	J1&2/86	5	0.8	8
6+00N	20 +50E Soil	J1&2/86	5	0.9	10
6+00N	21 +00E Soil	J1&2/86	40	1.9	13
6+00N	21 +50E Soil	J1&2/86	10	0.4	8
6+00N	22 +00E Soil	J1&2/86	3	1.0	15
6+00N	22 +50E Soil	J1&2/86	5	1.1	30
6+00N	23 +00E Soil	J1&2/86	30	0.7	16
6+00N	23 +50E Soil	J1&2/86	5	0.7	20
6+00N	24 +00E Soil	J1&2/86	50	1.3	31
6+00N	24 +50E Soil	J1&2/86	5	0.6	41
6+00N	25 +00E Soil	J1&2/86	5	0.5	52
6+00N	25 +50E Soil	J1&2/86	3	0.7	10
6+00N	26 +00E Soil	J1&2/86	5	0.6	14
4+00N	20 +00E Soil	J1&2/86	10	0.9	20
4+00N	20 +50E Soil	J1&2/86	10	0.9	16

4+00N	21 +00E Soil	J1&2/86	5	0.7	17
4+00N	21 +50E Soil	J1&2/86	5	1.2	14
4+00N	22 +00E Soil	J1&2/86	10	0.8	9
4+00N	22 +50E Soil	J1&2/86	20	1.1	21
4+00N	23 +00E Soil	J1&2/86	5	0.8	13
4+00N	23 +50E Soil	J1&2/86	3	0.8	12
4+00N	24 +00E Soil	J1&2/86	5	0.8	11
4+00N	24 +50E Soil	J1&2/86	5	1.0	20
4+00N	25 +00E Soil	J1&2/86	5	0.9	15
4+00N	25 +50E Soil	J1&2/86	3	0.3	7
4+00N	26 +00E Soil	J1&2/86	10	1.2	26
26+00E	4 +50N Soil	J1&2/86	5	0.9	29
26+00E	5 +00N Soil	J1&2/86	5	1.6	18
26+00E	5 +50N Soil	J1&2/86	5	1.6	158
26+00E	6 +50N Soil	J1&2/86	5	1.0	7
26+00E	7 +00N Soil	J1&2/86	3	1.0	7
26+00E	7 +50N Soil	J1&2/86	10	0.9	23
27+00E	3 +50N Soil	J1&2/86	15	3.1	72
27+00E	4 +00N Soil	J1&2/86	20	5.8	91
27+00E	4 +50N Soil	J1&2/86	20	1.9	484
27+00E	5 +00N Soil	J1&2/86	5	0.8	48
27+00E	5 +50N Soil	J1&2/86	5	0.7	27
27+00E	6 +00N Soil	J1&2/86	30	1.0	40
27+00E	6 +50N Soil	J1&2/86	30	1.1	17
27+00E	7 +00N Soil	J1&2/86	55	0.6	6
28+00E	4 +50N Soil	J1&2/86	5	1.2	16
28+00E	5 +00N Soil	J1&2/86	5	0.8	45
28+00E	5 +50N Soil	J1&2/86	3	0.8	13
28+00E	6 +00N Soil	J1&2/86	10	0.9	28
28+00E	6 +50N Soil	J1&2/86	5	0.8	46
29+00E	3 +50N Soil	J1&2/86	5	0.7	51
29+00E	4 +00N Soil	J1&2/86	5	0.4	31
29+00E	4 +50N Soil	J1&2/86	20	0.7	15
29+00E	5 +00N Soil	J1&2/86	5	0.9	37
30+00E	4 +00N Soil	J1&2/86	30	0.7	71
30+00E	4 +50N Soil	J1&2/86	5	1.6	30
30+00E	5 +00N Soil	J1&2/86	5	0.8	10
30+00E	5 +50N Soil	J1&2/86	3	1.1	49
30+00E	6 +00N Soil	J1&2/86	5	0.5	8
31+00E	4 +50N Soil	J1&2/86	10	0.7	14
31+00E	5 +00N Soil	J1&2/86	5	0.6	8
31+00E	5 +50N Soil	J1&2/86	5	0.7	21
31+00E	6 +00N Soil	J1&2/86	5	0.8	10
31+00E	6 +50N Soil	J1&2/86	20	0.7	8
31+00E	7 +00N Soil	J1&2/86	5	0.6	19
32+00E	5 +00N Soil	J1&2/86	15	0.8	15
32+00E	5 +50N Soil	J1&2/86	5	0.6	17
32+00E	6 +00N Soil	J1&2/86	10	1.0	9
32+00E	6 +50N Soil	J1&2/86	5	0.6	8

32+00E	7 +00N Soil	J1&2/86	10	0.6	6
32+00E	7 +50N Soil	J1&2/86	40	0.5	12
33+00E	6 +50N Soil	J1&2/86	5	0.5	7
33+00E	7 +00N Soil	J1&2/86	5	0.6	11
33+00E	7 +50N Soil	J1&2/86	5	0.2	6
34+00E	6 +50N Soil	J1&2/86	5	0.3	8
34+00E	7 +00N Soil	J1&2/86	10	0.6	19
34+00E	7 +50N Soil	J1&2/86	15	0.5	8
34+00E	8 +00N Soil	J1&2/86	5	0.4	13
34+00E	8 +50N Soil	J1&2/86	10	0.4	15
35+00E	7 +50N Soil	J1&2/86	5	1.1	11
35+00E	8 +00N Soil	J1&2/86	5	0.3	6
35+00E	8 +50N Soil	J1&2/86	10	0.3	5
AT-86-R-02	Rock	J1&2/86	50	6.8	1239
AT-86-R-03	Rock	J1&2/86	5	0.3	6
AT-86-R-04	Rock	J1&2/86	1700	13.0	4915
AT-86-R-05	Rock	J1&2/86	640	25.2	10170
AT-86-R-06	Rock	J1&2/86	10	1.2	3829
1	Soil	J3&4/85	45	0.2	42
2	Soil	J3&4/85	30	0.4	33
3	Soil	J3&4/85	20	0.3	16
4	Soil	J3&4/85	10	1.2	44
5	Soil	J3&4/85	5	0.5	18
7	Soil	J3&4/85	15	1.0	112
8	Soil	J3&4/85	25	2.3	1752
9	Soil	J3&4/85	5	0.5	52
10	Soil	J3&4/85	10	0.8	101
11	Soil	J3&4/85	10	0.4	32
12	Soil	J3&4/85	5	1.5	125
13	Soil	J3&4/85	10	1.0	459
14	Soil	J3&4/85	5	2.3	69
15	Soil	J3&4/85	5	1.2	39
16	Soil	J3&4/85	5	0.5	24
17	Soil	J3&4/85	3	0.8	21
18	Soil	J3&4/85	5	0.8	120
19	Soil	J3&4/85	5	1.8	24
20	Soil	J3&4/85	5	0.9	45
21	Soil	J3&4/85	10	0.2	64
22	Soil	J3&4/85	5	1.1	55
23	Soil	J3&4/85	15	1.3	44
24	Soil	J3&4/85	25	0.8	20
25	Soil	J3&4/85	5	1.4	25
26	Soil	J3&4/85	5	0.8	17
29	Soil	J3&4/85	10	1.1	39
30	Soil	J3&4/85	5	1.4	9
31	Soil	J3&4/85	5	1.4	25
32	Soil	J3&4/85	25	0.9	12
33	Soil	J3&4/85	10	0.2	9
34	Soil	J3&4/85	10	0.8	13
35	Soil	J3&4/85	5	1.0	12
36	Soil	J3&4/85	5	1.4	12

37	Soil	J3&4/85	10	1.5	11
38	Soil	J3&4/85	5	1.0	12
39	Soil	J3&4/85	5	1.0	15
40	Soil	J3&4/85	5	0.4	18
41	Soil	J3&4/85	10	1.3	15
42	Soil	J3&4/85	5	1.5	17
43	Soil	J3&4/85	15	1.4	34
44	Soil	J3&4/85	5	1.1	18
45	Soil	J3&4/85	5	1.0	15
46	Soil	J3&4/85	10	1.5	12
47	Soil	J3&4/85	5	1.6	22
48	Soil	J3&4/85	45	1.9	27
49	Soil	J3&4/85	5	1.4	18
50	Soil	J3&4/85	10	1.8	23
51	Soil	J3&4/85	5	1.5	12
52	Soil	J3&4/85	5	1.8	15
53	Soil	J3&4/85	1850	24.0	271
54	Soil	J3&4/85	5	1.5	12
55	Soil	J3&4/85	15	1.9	12
56	Soil	J3&4/85	5	0.3	9
57	Soil	J3&4/85	30	1.5	12
58	Soil	J3&4/85	5	1.5	12
59	Soil	J3&4/85	10	1.0	12
60	Soil	J3&4/85	15	0.8	11
61	Soil	J3&4/85	5	0.6	14
62	Soil	J3&4/85	5	0.8	13
63	Soil	J3&4/85	5	1.0	55
65	Soil	J3&4/85	5	0.8	19
66	Soil	J3&4/85	10	1.2	21
67	Soil	J3&4/85	5	0.9	13
68	Soil	J3&4/85	5	1.0	13
69	Soil	J3&4/85	10	1.0	18
71	Soil	J3&4/85	5	1.3	19
72	Soil	J3&4/85	5	1.4	37
73	Soil	J3&4/85	10	3.8	121
74	Soil	J3&4/85	15	1.0	58
400	Soil	J3&4/85	5	1.0	18
401	Soil	J3&4/85	10	1.2	21
402	Soil	J3&4/85	5	0.9	15
403	Soil	J3&4/85	5	1.2	14
404	Soil	J3&4/85	5	0.6	16
405	Soil	J3&4/85	5	0.5	26
406	Soil	J3&4/85	10	1.3	30
407	Soil	J3&4/85	5	0.9	24
408	Soil	J3&4/85	3	0.8	20
409	Soil	J3&4/85	5	0.8	16
410	Soil	J3&4/85	3	0.9	44
411	Soil	J3&4/85	3	0.2	10
412	Soil	J3&4/85	5	0.1	10
413	Soil	J3&4/85	5	1.0	33
414	Soil	J3&4/85	15	2.1	951
415	Soil	J3&4/85	520	9.1	19157
416	Soil	J3&4/85	10	1.3	58
417	Soil	J3&4/85	15	1.6	75
418	Soil	J3&4/85	15	1.5	74

419	Soil	J3&4/85	5	1.3	51
420	Soil	J3&4/85	5	0.9	20
421	Soil	J3&4/85	3	0.9	29
422	Soil	J3&4/85	5	0.7	11
423	Soil	J3&4/85	5	0.2	15
424	Soil	J3&4/85	5	0.1	13
425	Soil	J3&4/85	10	0.3	15
426	Soil	J3&4/85	5	0.8	26
427	Soil	J3&4/85	10	0.8	338
428	Soil	J3&4/85	5	0.5	21
429	Soil	J3&4/85	5	0.8	21
430	Soil	J3&4/85	5	1.1	16
431	Soil	J3&4/85	105	0.5	10
432	Soil	J3&4/85	10	0.8	14
433	Soil	J3&4/85	10	0.9	16
434	Soil	J3&4/85	5	1.1	13
435	Soil	J3&4/85	15	0.9	21
436	Soil	J3&4/85	10	0.9	43
437	Soil	J3&4/85	5	0.3	30
438	Soil	J3&4/85	5	1.0	20
439	Soil	J3&4/85	5	1.0	35
440	Soil	J3&4/85	5	1.1	94
441	Soil	J3&4/85	5	0.9	23
442	Soil	J3&4/85	5	0.5	16
443	Soil	J3&4/85	5	0.8	21
444	Soil	J3&4/85	10	0.5	14
445	Soil	J3&4/85	5	1.2	61
446	Soil	J3&4/85	5	0.7	21
447	Soil	J3&4/85	20	1.1	59
448	Soil	J3&4/85	35	1.3	210
449	Soil	J3&4/85	5	1.2	54
450	Soil	J3&4/85	15	1.1	34
451	Soil	J3&4/85	5	1.1	21
452	Soil	J3&4/85	20	1.1	23
453	Soil	J3&4/85	5	0.9	19
454	Soil	J3&4/85	50	0.8	122
455	Soil	J3&4/85	5	0.4	22
456	Soil	J3&4/85	3	0.9	36
457	Soil	J3&4/85	5	0.7	19
458	Soil	J3&4/85	10	0.8	59
459	Soil	J3&4/85	5	1.6	36
460	Soil	J3&4/85	5	1.3	15
461	Soil	J3&4/85	5	0.9	45
462	Soil	J3&4/85	10	1.0	27
463	Soil	J3&4/85	5	1.0	22
464	Soil	J3&4/85	5	0.8	31
465	Soil	J3&4/85	3	0.7	17
466	Soil	J3&4/85	5	1.8	54
467	Soil	J3&4/85	5	1.3	14
468	Soil	J3&4/85	5	0.7	45
469	Soil	J3&4/85	5	0.3	14
470	Soil	J3&4/85	5	1.3	41
471	Soil	J3&4/85	10	0.6	20
472	Soil	J3&4/85	5	0.8	32
473	Soil	J3&4/85	5	0.7	23
474	Soil	J3&4/85	10	1.0	103

475	Soil	J3&4/85	15	1.1	165
476	Soil	J3&4/85	10	2.2	84
477	Soil	J3&4/85	20	2.3	86
478	Soil	J3&4/85	5	1.2	67
479	Soil	J3&4/85	5	1.6	78
480	Soil	J3&4/85	5	0.8	69
481	Soil	J3&4/85	30	1.1	125
482	Soil	J3&4/85	5	0.6	40
483	Soil	J3&4/85	15	1.0	145
484	Soil	J3&4/85	19	2.3	289
485	Soil	J3&4/85	5	1.9	144
486	Soil	J3&4/85	5	1.6	219
487	Soil	J3&4/85	3000	10.3	26253
600	Soil	J3&4/85	10	1.4	67
601	Soil	J3&4/85	5	1.3	45
602	Soil	J3&4/85	5	1.5	52
603	Soil	J3&4/85	5	0.6	62
604	Soil	J3&4/85	10	0.7	22
605	Soil	J3&4/85	5	0.8	14
606	Soil	J3&4/85	5	0.4	12
607	Soil	J3&4/85	5	0.8	12
608	Soil	J3&4/85	10	1.6	13
609	Soil	J3&4/85	5	0.9	15
610	Soil	J3&4/85	5	1.2	17
611	Soil	J3&4/85	5	0.6	14
612	Soil	J3&4/85	10	1.4	20
613	Soil	J3&4/85	5	0.8	21
614	Soil	J3&4/85	5	0.7	13
615	Soil	J3&4/85	5	0.6	12
616	Soil	J3&4/85	10	1.2	17
617	Soil	J3&4/85	5	1.1	22
618	Soil	J3&4/85	10	1.1	17
619	Soil	J3&4/85	5	1.2	33
620	Soil	J3&4/85	5	1.9	57
621	Soil	J3&4/85	20	1.1	27
622	Soil	J3&4/85	10	1.5	54
623	Soil	J3&4/85	5	0.9	62
624	Soil	J3&4/85	5	1.5	41
625	Soil	J3&4/85	5	1.5	41
626	Soil	J3&4/85	10	1.1	51
627	Soil	J3&4/85	5	2.0	50
628	Soil	J3&4/85	10	1.3	31
629	Soil	J3&4/85	5	1.2	30
630	Soil	J3&4/85	5	1.1	35
631	Soil	J3&4/85	10	1.6	40
632	Soil	J3&4/85	5	1.8	14
633	Soil	J3&4/85	5	1.6	26
634	Soil	J3&4/85	5	1.8	22
635	Soil	J3&4/85	10	1.5	18
636	Soil	J3&4/85	5	1.9	18
637	Soil	J3&4/85	5	0.6	22
638	Soil	J3&4/85	5	0.4	24
639	Soil	J3&4/85	10	1.4	17
640	Soil	J3&4/85	5	1.5	13
641	Soil	J3&4/85	5	1.4	11

642	Soil	J3&4/85	10	1.9	14
643	Soil	J3&4/85	5	1.5	19
644	Soil	J3&4/85	5	1.4	16
645	Soil	J3&4/85	15	1.5	11
646	Soil	J3&4/85	5	1.3	9
647	Soil	J3&4/85	10	1.4	12
648	Soil	J3&4/85	5	1.5	20
649	Soil	J3&4/85	5	1.7	14
650	Soil	J3&4/85	5	1.6	11
651	Soil	J3&4/85	10	1.3	18
652	Soil	J3&4/85	15	1.3	18
653	Soil	J3&4/85	5	1.8	19
654	Soil	J3&4/85	10	1.0	18
655	Soil	J3&4/85	5	1.3	24
656	Soil	J3&4/85	5	1.2	24
657	Soil	J3&4/85	5	0.7	18
658	Soil	J3&4/85	5	1.0	22
659	Soil	J3&4/85	20	1.4	36
660	Soil	J3&4/85	15	1.4	42
661	Soil	J3&4/85	10	1.5	31
662	Soil	J3&4/85	10	1.1	16
663	Soil	J3&4/85	25	1.0	17
664	Soil	J3&4/85	10	0.5	19
665	Soil	J3&4/85	135	1.2	19
666	Soil	J3&4/85	15	1.2	18
667	Soil	J3&4/85	30	1.1	19
668	Soil	J3&4/85	5	1.6	21
669	Soil	J3&4/85	5	1.2	23
670	Soil	J3&4/85	5	1.3	14
671	Soil	J3&4/85	15	1.1	20
672	Soil	J3&4/85	50	1.2	15
673	Soil	J3&4/85	5	1.7	23
674	Soil	J3&4/85	5	1.2	15
675	Soil	J3&4/85	35	1.3	12
676	Soil	J3&4/85	25	2.8	21
677	Soil	J3&4/85	295	1.6	19
678	Soil	J3&4/85	5	1.5	15
679	Soil	J3&4/85	10	1.7	41
JS-86-D001	Rock	J3&4/86	5	0.3	103
JS-86-D002	Rock	J3&4/86	5	0.7	49
JS-86-D003	Rock	J3&4/86	10	0.4	31
JS-86-D004	Rock	J3&4/86	5	2.4	5
JS-86-D005	Rock	J3&4/86	35	2.2	85
JS-86-D006	Rock	J3&4/86	9500	6.9	5808
JS-86-D007	Rock	J3&4/86	10	2.0	355
JS-86-D008	Rock	J3&4/86	5	0.1	38
JS-86-D009	Rock	J3&4/86	20	23.4	4353
TA-86-D001	Rock	J3&4/86	5	42.1	4093
TA-86-D002	Rock	J3&4/86	790	5.9	7773
TA-86-D003	Rock	J3&4/86	10	7.3	6543
0+00	0 +00E Soil	J3&4/86	5	0.2	15
0+00	0 +50E Soil	J3&4/86	10	0.4	13
0+00	1 +00E Soil	J3&4/86	5	0.1	11
0+00	1 +50E Soil	J3&4/86	5	0.1	8

0+00	2 +00E Soil	J3&4/86	30	0.2	18
0+00	2 +50E Soil	J3&4/86	5	0.1	9
0+00	3 +00E Soil	J3&4/86	13	0.3	10
0+00	3 +50E Soil	J3&4/86	5	0.2	17
0+00	4 +00E Soil	J3&4/86	5	0.2	13
0+00	4 +50E Soil	J3&4/86	5	0.2	15
0+00	5 +00E Soil	J3&4/86	5	0.5	14
0+00	5 +50E Soil	J3&4/86	15	0.2	17
0+00	6 +00E Soil	J3&4/86	25	0.1	11
0+00	6 +50E Soil	J3&4/86	20	0.1	16
0+00	7 +00E Soil	J3&4/86	35	1.1	12
0+00	7 +50E Soil	J3&4/86	5	0.4	11
0+00	8 +00E Soil	J3&4/86	5	0.7	21
0+00	8 +50E Soil	J3&4/86	10	1.6	28
0+00	9 +00E Soil	J3&4/86	5	0.2	28
0+00	9 +50E Soil	J3&4/86	40	0.4	16
0+00	10 +00E Soil	J3&4/86	30	0.3	26
0+00	10 +50E Soil	J3&4/86	35	0.5	11
0+00	11 +00E Soil	J3&4/86	5	0.1	10
1+00S	0 +00E Soil	J3&4/86	10	0.1	47
1+00S	0 +50E Soil	J3&4/86	5	0.4	32
1+00S	1 +00E Soil	J3&4/86	15	0.4	39
1+00S	1 +50E Soil	J3&4/86	25	0.4	24
1+00S	2 +00E Soil	J3&4/86	15	0.2	24
1+00S	2 +50E Soil	J3&4/86	5	0.2	29
1+00S	3 +00E Soil	J3&4/86	30	3.2	14
1+00S	3 +50E Soil	J3&4/86	5	0.2	14
1+00S	4 +00E Soil	J3&4/86	5	0.2	18
1+00S	4 +50E Soil	J3&4/86	35	0.3	11
1+00S	5 +00E Soil	J3&4/86	15	0.4	19
1+00S	5 +50E Soil	J3&4/86	5	0.1	15
1+00S	6 +00E Soil	J3&4/86	20	0.3	15
1+00S	6 +50E Soil	J3&4/86	25	0.6	26
1+00S	7 +00E Soil	J3&4/86	5	0.2	9
1+00S	7 +50E Soil	J3&4/86	5	0.6	9
1+00S	8 +00E Soil	J3&4/86	20	0.5	14
1+00S	8 +50E Soil	J3&4/86	150	0.3	70
1+00S	9 +00E Soil	J3&4/86	40	0.6	13
1+00S	9 +50E Soil	J3&4/86	25	0.4	14
1+00S	10 +00E Soil	J3&4/86	35	0.4	8
1+00S	10 +50E Soil	J3&4/86	5	0.5	14
1+00S	11 +00E Soil	J3&4/86	No Sample		
1+00N	0 +00E Soil	J3&4/86	5	1.2	97
1+00N	0 +50E Soil	J3&4/86	5	0.1	6
1+00N	1 +00E Soil	J3&4/86	10	0.3	15
1+00N	1 +50E Soil	J3&4/86	15	1.3	213
1+00N	2 +00E Soil	J3&4/86	5	0.4	34
1+00N	2 +50E Soil	J3&4/86	5	0.7	52
1+00N	3 +00E Soil	J3&4/86	5	0.7	15
1+00N	3 +50E Soil	J3&4/86	10	0.9	29
1+00N	4 +00E Soil	J3&4/86	5	0.4	24
1+00N	4 +50E Soil	J3&4/86	5	0.3	29
1+00N	5 +00E Soil	J3&4/86	5	0.5	15
1+00N	5 +50E Soil	J3&4/86	5	0.1	9

1+00N	6 +00E Soil	J3&4/86	10	0.3	16
1+00N	6 +50E Soil	J3&4/86	5	0.6	36
1+00N	7 +00E Soil	J3&4/86	5	0.3	16
1+00N	7 +50E Soil	J3&4/86	5	0.3	9
1+00N	8 +00E Soil	J3&4/86	5	0.4	17
1+00N	8 +50E Soil	J3&4/86	10	0.2	10
1+00N	9 +00E Soil	J3&4/86	5	0.4	10
1+00N	9 +50E Soil	J3&4/86	5	0.3	27
1+00N	10 +00E Soil	J3&4/86	5	0.8	15
1+00N	10 +50E Soil	J3&4/86	5	0.7	23
1+00N	11 +00E Soil	J3&4/86	5	0.6	18
2+00N	0 +00E Soil	J3&4/86	5	0.1	9
2+00N	0 +50E Soil	J3&4/86	5	0.1	7
2+00N	1 +00E Soil	J3&4/86	5	0.3	6
2+00N	1 +50E Soil	J3&4/86	5	0.2	3
2+00N	2 +00E Soil	J3&4/86	5	0.1	13
2+00N	2 +50E Soil	J3&4/86	10	0.4	10
2+00N	3 +00E Soil	J3&4/86	5	0.6	33
2+00N	3 +50E Soil	J3&4/86	5	0.1	35
2+00N	4 +00E Soil	J3&4/86	No Sample		
2+00N	4 +50E Soil	J3&4/86	15	0.1	9
2+00N	5 +00E Soil	J3&4/86	5	0.1	8
2+00N	5 +50E Soil	J3&4/86	5	0.1	11
2+00N	6 +00E Soil	J3&4/86	No Sample		
2+00N	6 +50E Soil	J3&4/86	5	0.7	6
2+00N	7 +00E Soil	J3&4/86	10	0.6	10
2+00N	7 +50E Soil	J3&4/86	5	0.4	6
2+00N	8 +00E Soil	J3&4/86	10	0.7	21
2+00N	8 +50E Soil	J3&4/86	15	0.3	10
2+00N	9 +00E Soil	J3&4/86	10	0.4	12
2+00N	9 +50E Soil	J3&4/86	10	0.8	15
2+00N	10 +00E Soil	J3&4/86	5	0.2	5
2+00N	10 +50E Soil	J3&4/86	5	0.2	10
2+00N	11 +00E Soil	J3&4/86	15	1.8	132
2+00N	11 +50E Soil	J3&4/86	10	0.1	42
2+00N	12 +00E Soil	J3&4/86	15	0.1	108
2+00S	0 +00E Soil	J3&4/86	10	0.5	8
2+00S	0 +50E Soil	J3&4/86	5	0.1	10
2+00S	1 +00E Soil	J3&4/86	5	1.2	15
2+00S	1 +50E Soil	J3&4/86	10	0.1	24
2+00S	2 +00E Soil	J3&4/86	5	0.3	22
2+00S	2 +50E Soil	J3&4/86	10	0.3	14
2+00S	3 +00E Soil	J3&4/86	35	1.2	39
2+00S	3 +50E Soil	J3&4/86	5	1.0	43
2+00S	4 +00E Soil	J3&4/86	5	0.2	26
2+00S	4 +50E Soil	J3&4/86	10	3.6	64
2+00S	5 +00E Soil	J3&4/86	5	0.9	124
2+00S	5 +50E Soil	J3&4/86	5	0.5	53
2+00S	6 +00E Soil	J3&4/86	5	0.5	94
2+00S	6 +50E Soil	J3&4/86	3	0.1	13
2+00S	7 +00E Soil	J3&4/86	5	0.1	40
2+00S	7 +50E Soil	J3&4/86	10	0.6	42
2+00S	8 +00E Soil	J3&4/86	15	0.3	21
2+00S	8 +50E Soil	J3&4/86	15	0.8	19

2+00S	9 +00E Soil	J3&4/86	520	0.8	10
2+00S	9 +50E Soil	J3&4/86	10	3.2	27
2+00S	10 +00E Soil	J3&4/86	No Sample		
2+00S	10 +50E Soil	J3&4/86	5	1.2	33
2+00S	11 +00E Soil	J3&4/86	5	0.1	17
2+00S	11 +50E Soil	J3&4/86	5	0.1	9
2+00S	12 +00E Soil	J3&4/86	5	0.1	11
3+00N	0 +00E Soil	J3&4/86	5	0.1	8
3+00N	0 +50E Soil	J3&4/86	5	0.1	22
3+00N	1 +00E Soil	J3&4/86	5	0.1	16
3+00N	1 +50E Soil	J3&4/86	10	0.1	10
3+00N	2 +00E Soil	J3&4/86	3	0.1	10
3+00N	2 +50E Soil	J3&4/86	3	0.1	10
3+00N	3 +00E Soil	J3&4/86	3	0.1	21
3+00N	3 +50E Soil	J3&4/86	10	0.1	11
3+00N	4 +00E Soil	J3&4/86	10	0.1	16
3+00N	4 +50E Soil	J3&4/86	5	0.1	17
3+00N	5 +00E Soil	J3&4/86	No Sample		
3+00N	5 +50E Soil	J3&4/86	5	0.1	9
3+00N	6 +00E Soil	J3&4/86	15	0.1	11
3+00N	6 +50E Soil	J3&4/86	10	0.1	11
3+00N	7 +00E Soil	J3&4/86	10	0.3	13
3+00N	7 +50E Soil	J3&4/86	5	0.1	11
3+00N	8 +00E Soil	J3&4/86	10	0.3	11
3+00N	8 +50E Soil	J3&4/86	20	0.4	100
3+00N	9 +00E Soil	J3&4/86	5	0.5	14
3+00N	9 +50E Soil	J3&4/86	15	0.4	20
3+00N	10 +00E Soil	J3&4/86	5	0.1	19
3+00N	10 +50E Soil	J3&4/86	10	0.3	21
3+00N	11 +00E Soil	J3&4/86	5	0.7	11
3+00N	11 +50E Soil	J3&4/86	5	0.4	18
3+00N	12 +00E Soil	J3&4/86	15	0.8	14
3+00N	12 +50E Soil	J3&4/86	10	0.5	28
4+00N	0 +00E Soil	J3&4/86	5	0.1	10
4+00N	0 +50E Soil	J3&4/86	5	0.3	12
4+00N	1 +00E Soil	J3&4/86	20	0.2	12
4+00N	1 +50E Soil	J3&4/86	No Sample		
4+00N	2 +00E Soil	J3&4/86	5	0.2	11
4+00N	2 +50E Soil	J3&4/86	3	0.3	59
4+00N	3 +00E Soil	J3&4/86	5	0.2	30
4+00N	3 +50E Soil	J3&4/86	5	0.1	13
4+00N	4 +00E Soil	J3&4/86	5	0.2	16
4+00N	4 +50E Soil	J3&4/86	5	0.2	13
4+00N	5 +00E Soil	J3&4/86	10	0.3	12
5+00N	0 +00E Soil	J3&4/86	5	0.3	9
5+00N	0 +50E Soil	J3&4/86	10	0.5	18
5+00N	1 +00E Soil	J3&4/86	90	0.3	16
5+00N	1 +50E Soil	J3&4/86	5	0.1	11
5+00N	2 +00E Soil	J3&4/86	10	0.4	26
5+00N	2 +50E Soil	J3&4/86	15	1.0	98
5+00N	3 +00E Soil	J3&4/86	5	0.5	100
5+00N	3 +50E Soil	J3&4/86	3	0.2	62
5+00N	4 +00E Soil	J3&4/86	5	0.3	19

5+00N	4 +50E Soil	J3&4/86	5	0.2	12
5+00N	5 +00E Soil	J3&4/86	5	0.3	11
6+00N	0 +00E Soil	J3&4/86	5	0.4	18
6+00N	0 +50E Soil	J3&4/86	20	0.9	28
6+00N	1 +00E Soil	J3&4/86	10	0.5	32
6+00N	1 +50E Soil	J3&4/86	5	0.3	19
6+00N	2 +00E Soil	J3&4/86	5	0.3	20
6+00N	2 +50E Soil	J3&4/86	5	0.4	13
6+00N	3 +00E Soil	J3&4/86	5	0.3	10
6+00N	3 +50E Soil	J3&4/86	5	0.3	13
6+00N	4 +00E Soil	J3&4/86	5	0.1	15
6+00N	4 +50E Soil	J3&4/86	5	0.5	16
6+00N	5 +00E Soil	J3&4/86	5	0.4	8
7+00N	0 +00E Soil	J3&4/86	5	0.7	14
7+00N	0 +50E Soil	J3&4/86	20	0.5	24
7+00N	1 +00E Soil	J3&4/86	5	0.1	12
7+00N	1 +50E Soil	J3&4/86	3	0.2	23
7+00N	2 +00E Soil	J3&4/86	5	0.2	19
7+00N	2 +50E Soil	J3&4/86	15	0.5	22
7+00N	3 +00E Soil	J3&4/86	5	0.1	17
7+00N	3 +50E Soil	J3&4/86	10	0.1	15
7+00N	4 +00E Soil	J3&4/86	5	0.1	9
7+00N	4 +50E Soil	J3&4/86	10	0.1	10
7+00N	5 +00E Soil	J3&4/86	10	0.3	6
ST-01	Silt	J3&4/86	35	1.0	60
ST-02	Silt	J3&4/86	10	0.6	36
ST-03	Silt	J3&4/86	5	0.6	36
ST-04	Silt	J3&4/86	10	0.9	41
ST-05	Silt	J3&4/86	5	0.9	41
ST-06	Silt	J3&4/86	10	1.2	50
ST-07	Silt	J3&4/86	20	1.3	64
ST-08	Silt	J3&4/86	10	1.2	51
ST-09	Silt	J3&4/86	15	2.2	88
ST-10	Silt	J3&4/86	10	0.9	85
ST-11	Silt	J3&4/86	5	0.6	80
ST-12	Silt	J3&4/86	10	0.6	95
ST-13	Silt	J3&4/86	30	0.5	106
ST-14	Silt	J3&4/86	15	0.8	166
ST-15	Silt	J3&4/86	5	1.1	93
ST-16	Silt	J3&4/86	5	0.9	86
ST-17	Silt	J3&4/86	10	0.5	173
ST-18	Silt	J3&4/86	3	0.3	95
ST-19	Silt	J3&4/86	5	0.3	83
ST-20	Silt	J3&4/86	10	0.5	123
ST-21	Silt	J3&4/86	10	0.7	94
D301	Silt	J3&4/86	5	0.3	30
D302	Silt	J3&4/86	5	0.3	24
D303	Silt	J3&4/86	5	0.2	58
D304	Silt	J3&4/86	5	0.3	51
D305	Silt	J3&4/86	10	0.3	76
D306	Silt	J3&4/86	15	0.2	75
D307	Silt	J3&4/86	5	0.3	64

D308	Silt	J3&4/86	5	0.3	55
D309	Silt	J3&4/86	3	0.7	39
D310	Silt	J3&4/86	5	0.6	55
D311	Silt	J3&4/86	5	0.4	73
D312	Silt	J3&4/86	5	0.6	61
D313	Silt	J3&4/86	3	0.4	50
D314	Silt	J3&4/86	5	0.3	41
D315	Silt	J3&4/86	5	0.6	44
D316	Silt	J3&4/86	10	0.4	37
D317	Silt	J3&4/86	5	0.7	43
D318	Silt	J3&4/86	5	0.5	25
D319	Silt	J3&4/86	5	0.4	29
D320	Silt	J3&4/86	10	0.1	34
D321	Silt	J3&4/86	15	0.6	37
D322	Silt	J3&4/86	10	0.3	26
D323	Silt	J3&4/86	10	0.5	22
D324	Silt	J3&4/86	10	0.5	23
D325	Silt	J3&4/86	200	0.5	58
D326	Silt	J3&4/86	5	1.1	38
D327	Silt	J3&4/86	20	1.9	28
D328	Silt	J3&4/86	125	1.5	32
D329	Silt	J3&4/86	5	0.6	25
D330	Silt	J3&4/86	65	0.1	55

4+00S	2 +00E Soil	J3&4/86	10	0.1	41
4+00S	1 +50E Soil	J3&4/86	5	0.4	34
4+00S	1 +00E Soil	J3&4/86	10	0.4	50
4+00S	0 +50E Soil	J3&4/86	5	0.5	44
4+00S	0 +00E Soil	J3&4/86	5	0.6	44
4+00S	0 +50W Soil	J3&4/86	5	0.1	14
4+00S	1 +00W Soil	J3&4/86	5	0.2	17
4+00S	1 +50W Soil	J3&4/86	5	54.1	25
4+00S	2 +00W Soil	J3&4/86	3	0.1	21

5+00S	2 +00E Soil	J3&4/86	5	0.6	50
5+00S	1 +50E Soil	J3&4/86	5	0.1	23
5+00S	1 +00E Soil	J3&4/86	10	0.3	23
5+00S	0 +50E Soil	J3&4/86	5	0.3	29
5+00S	0 +00E Soil	J3&4/86	15	0.3	25
5+00S	0 +50W Soil	J3&4/86	No Sample		
5+00S	1 +00W Soil	J3&4/86	10	0.2	23
5+00S	1 +50W Soil	J3&4/86	5	0.1	28
5+00S	2 +00W Soil	J3&4/86	5	0.9	22

(G/Tonne)

18 427	Rock	J3&4/88	0.01	0.8	20
18 428	Rock	J3&4/88	0.02	3.1	744
18 429	Rock	J3&4/88	0.01	1.3	21
18 430	Rock	J3&4/88	0.01	0.9	19
18 431	Rock	J3&4/88	0.03	1.7	21
18 432	Rock	J3&4/88	0.02	0.9	12
18 433	Rock	J3&4/88	0.03	0.8	15
18 434	Rock	J3&4/88	0.05	1.3	4
18 435	Rock	J3&4/88	0.02	0.8	18
18 436	Rock	J3&4/88	0.04	1.2	982
18 437	Rock	J3&4/88	0.05	0.8	174

18 438	Rock	J3&4/88	0.02	1.4	402
18 439	Rock	J3&4/88	0.02	0.9	59
18 440	Rock	J3&4/88	4.61	2.9	5709
18 441	Rock	J3&4/88	0.05	1.7	58
18 442	Rock	J3&4/88	0.02	0.6	30
18 443	Rock	J3&4/88	0.03	1.2	40
18 444	Rock	J3&4/88	0.02	4.3	89
18 445	Rock	J3&4/88	0.01	2.4	977
18 446	Rock	J3&4/88	0.02	1.7	249
18 447	Rock	J3&4/88	0.13	7.6	5205
18 448	Rock	J3&4/88	0.04	1.2	93
18 449	Rock	J3&4/88	0.09	1.8	26
18 450	Rock	J3&4/88	0.03	2.9	11
18 451	Rock	J3&4/88	0.19	2.1	430
18 452	Rock	J3&4/88	0.16	0.9	882
18 453	Rock	J3&4/88	0.04	0.7	33
18 454	Rock	J3&4/88	0.03	0.6	23

Au(ppb)

32 287	Soil	J3&4/88	2	0.9	25
32 288	Soil	J3&4/88	6	0.6	57
32 289	Soil	J3&4/88	8	0.5	63
32 290	Soil	J3&4/88	10	0.6	29
32 291	Soil	J3&4/88	5	0.3	28
32 292	Soil	J3&4/88	8	0.5	40
32 293	Soil	J3&4/88	7	0.7	35
32 294	Soil	J3&4/88	12	0.6	49
32 295	Soil	J3&4/88	2	0.5	45
32 296	Soil	J3&4/88	3	0.8	28
32 297	Soil	J3&4/88	2	0.3	42
32 298	Soil	J3&4/88	4	0.6	50
32 299	Soil	J3&4/88	4	0.6	45
32 300	Soil	J3&4/88	15	1.5	137
33 001	Soil	J3&4/88	5	0.4	28
33 002	Soil	J3&4/88	3	1.0	25
33 003	Soil	J3&4/88	4	1.4	28
33 004	Soil	J3&4/88	5	0.7	19
33 005	Soil	J3&4/88	2	1.1	30
33 006	Soil	J3&4/88	2	1.8	38
33 007	Soil	J3&4/88	1	0.9	19
33 008	Soil	J3&4/88	8	0.5	13
33 009	Soil	J3&4/88	6	0.6	17
33 010	Soil	J3&4/88	4	1.0	16
33 011	Soil	J3&4/88	6	0.6	17
33 012	Soil	J3&4/88	7	0.8	19
33 013	Soil	J3&4/88	2	0.8	13
33 014	Soil	J3&4/88	2	0.4	17
33 015	Soil	J3&4/88	7	0.9	18
33 016	Soil	J3&4/88	3	1.0	18
33 017	Soil	J3&4/88	5	0.7	22
33 018	Soil	J3&4/88	2	0.4	20
33 019	Soil	J3&4/88	3	0.4	15
33 020	Soil	J3&4/88	1	0.4	16
33 021	Soil	J3&4/88	1	0.7	16
33 022	Soil	J3&4/88	3	0.4	17

33 023	Soil	J3&4/88	2	0.4	18
33 024	Soil	J3&4/88	2	0.5	20
33 028	Soil	J3&4/88	1	0.4	39
33 025	Soil	J3&4/88	4	0.8	25
33 027	Soil	J3&4/88	1	0.5	43
33 028	Soil	J3&4/88	2	0.4	44
33 106	Soil	J3&4/88	3	0.5	74
33 107	Soil	J3&4/88	51	0.8	98
33 108	Soil	J3&4/88	3	0.7	43
33 109	Soil	J3&4/88	2	0.8	45
33 110	Soil	J3&4/88	2	0.7	40
33 111	Soil	J3&4/88	36	0.6	31
33 112	Soil	J3&4/88	2	0.8	25
33 113	Soil	J3&4/88	49	2.9	253
33 114	Soil	J3&4/88	1	0.4	133
33 115	Soil	J3&4/88	2	0.4	14
33 116	Soil	J3&4/88	1	0.7	38
33 117	Soil	J3&4/88	1	0.4	14
33 118	Soil	J3&4/88	1	0.6	100
33 119	Soil	J3&4/88	3	0.8	79
33 120	Soil	J3&4/88	2	0.5	13
33 121	Soil	J3&4/88	1	0.6	90
33 122	Soil	J3&4/88	1	0.4	31
33 123	Soil	J3&4/88	2	0.4	20
33 124	Soil	J3&4/88	1	0.8	28
33 125	Soil	J3&4/88	2	0.6	243
33 127	Soil	J3&4/88	1	0.5	29
33 128	Soil	J3&4/88	5	3.0	184
33 129	Soil	J3&4/88	1	0.4	32
33 130	Soil	J3&4/88	10	1.2	170
33 131	Soil	J3&4/88	2	0.7	24
33 132	Soil	J3&4/88	1	0.6	28
33 133	Soil	J3&4/88	3	0.5	17
33 134	Soil	J3&4/88	2	0.9	33
33 135	Soil	J3&4/88	1	0.8	26
33 136	Soil	J3&4/88	2	0.7	30
33 137	Soil	J3&4/88	1	0.5	26
33 138	Soil	J3&4/88	1	0.6	33
33 139	Soil	J3&4/88	1	0.4	23
33 140	Soil	J3&4/88	1	0.7	24
33 141	Soil	J3&4/88	4	0.3	25
33 142	Soil	J3&4/88	1	0.4	20
33 143	Soil	J3&4/88	5	0.4	20
33 144	Soil	J3&4/88	1	0.9	20
33 145	Soil	J3&4/88	2	0.8	20
33 146	Soil	J3&4/88	1	0.3	20
33 147	Soil	J3&4/88	3	2.3	21
33 148	Soil	J3&4/88	1	0.8	19
33 149	Soil	J3&4/88	2	0.7	32
33 150	Soil	J3&4/88	2	1.0	33
33 211	Rock	J3&4/88	2	0.6	97
33 212	Rock	J3&4/88	4	0.9	53
33 213	Rock	J3&4/88	361	3.5	9364

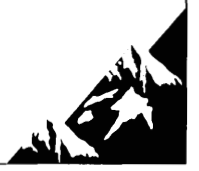
33 214	Rock	J3&4/88	67	3.1	4537
33 215	Rock	J3&4/88	421	4.6	1112
33 216	Rock	J3&4/88	103	2.0	5229
33 217	Rock	J3&4/88	159	0.7	27
33 218	Rock	J3&4/88	6900	7.6	3778
33 219	Rock	J3&4/88	455	0.9	388
33 220	Rock	J3&4/88	18	1.2	36
33 221	Rock	J3&4/88	57	1.1	3526
33 222	Rock	J3&4/88	3000	90.0	11300
33 223	Rock	J3&4/88	400	2.3	2088
33 224	Rock	J3&4/88	18	0.6	74
33 225	Rock	J3&4/88	221	3.2	2134
33 226	Rock	J3&4/88	104	8.7	5638
33 227	Rock	J3&4/88	3	0.5	94
33 228	Rock	J3&4/88	36	18.0	3693
33 229	Rock	J3&4/88	177	3.5	1681
33 230	Rock	J3&4/88	8	1.1	1214
33 231	Rock	J3&4/88	41	0.4	40
33 232	Rock	J3&4/88	3	0.9	14
33 233	Rock	J3&4/88	34	1.4	334
33 234	Rock	J3&4/88	4	0.6	60
33 251	Soil	J3&4/88	4	0.9	61
33 252	Soil	J3&4/88	2	1.2	53
33 253	Soil	J3&4/88	3	0.9	44
33 254	Soil	J3&4/88	1	0.5	72
33 255	Soil	J3&4/88	18	0.6	26
33 256	Soil	J3&4/88	5	0.4	22
33 257	Soil	J3&4/88	4	0.6	49
33 258	Soil	J3&4/88	2	0.5	37
33 259	Soil	J3&4/88	6	0.4	20
33 260	Soil	J3&4/88	2	0.6	101
33 261	Soil	J3&4/88	3	0.5	60
33 262	Soil	J3&4/88	2	0.3	92
33 263	Soil	J3&4/88	7	0.3	28
33 264	Soil	J3&4/88	4	0.5	21
33 265	Soil	J3&4/88	2	0.6	42
33 266	Soil	J3&4/88	2	0.6	14
33 267	Soil	J3&4/88	1	0.5	20
33 268	Soil	J3&4/88	3	0.4	20
33 269	Soil	J3&4/88	2	0.6	27
33 270	Soil	J3&4/88	25	0.5	17
33 271	Soil	J3&4/88	3	0.8	8
33 272	Soil	J3&4/88	4	0.8	24
33 273	Soil	J3&4/88	2	0.7	14
33 274	Soil	J3&4/88	72	1.0	11
33 275	Soil	J3&4/88	6	0.5	1717
33 276	Soil	J3&4/88	2	0.5	15
33 277	Soil	J3&4/88	1	0.4	22
33 278	Soil	J3&4/88	7	0.4	26
33 279	Soil	J3&4/88	2	0.4	24
33 280	Soil	J3&4/88	6	0.5	33
33 281	Soil	J3&4/88	1	0.3	38
33 282	Soil	J3&4/88	5	0.4	68
33 283	Soil	J3&4/88	4	0.5	34
33 284	Soil	J3&4/88	2	0.4	23

33 286	Soil	J3&4/88	2	0.7	21
33 286	Soil	J3&4/88	3	0.4	10
33 287	Soil	J3&4/88	2	0.8	8
33 288	Soil	J3&4/88	2	0.6	15
33 289	Soil	J3&4/88	6	0.4	12
33 290	Soil	J3&4/88	1	0.5	15
33 291	Soil	J3&4/88	5	0.8	7
33 292	Soil	J3&4/88	3	0.7	6
33 293	Soil	J3&4/88	2	0.4	4
33 294	Soil	J3&4/88	1	0.4	9
33 295	Soil	J3&4/88	1	0.4	5
33 296	Soil	J3&4/88	3	0.7	12
33 297	Soil	J3&4/88	1	0.8	7
33 298	Soil	J3&4/88	1	0.6	11
33 299	Soil	J3&4/88	1	0.6	18
33 300	Soil	J3&4/88	2	0.4	6
33 351	Soil	J3&4/88	1	0.8	10
33 352	Soil	J3&4/88	4	0.5	8
33 353	Soil	J3&4/88	1	0.7	6
33 354	Soil	J3&4/88	2	0.5	6
33 355	Soil	J3&4/88	1	0.8	7
33 356	Soil	J3&4/88	2	0.8	8
33 357	Soil	J3&4/88	3	0.5	5
33 358	Soil	J3&4/88	2	0.6	6
33 359	Soil	J3&4/88	1	0.7	5
33 360	Soil	J3&4/88	1	0.8	5
33 361	Soil	J3&4/88	3	0.8	16
33 362	Soil	J3&4/88	2	0.6	5
33 363	Soil	J3&4/88	2	0.7	10
33 364	Soil	J3&4/88	1	0.8	15
33 365	Soil	J3&4/88	1	0.9	18
33 366	Soil	J3&4/88	2	0.6	27
33 367	Soil	J3&4/88	4	0.4	21
33 368	Soil	J3&4/88	2	0.5	24
33 369	Soil	J3&4/88	1	0.4	25
33 370	Soil	J3&4/88	3	0.6	19
33 371	Soil	J3&4/88	2	0.7	24
33 372	Soil	J3&4/88	2	0.3	21
33 373	Soil	J3&4/88	3	0.6	20
33 374	Soil	J3&4/88	5	0.6	25
33 375	Soil	J3&4/88	4	0.5	19
33 376	Soil	J3&4/88	1	0.6	20
33 377	Soil	J3&4/88	3	0.4	12
33 378	Soil	J3&4/88	2	0.8	17
33 379	Soil	J3&4/88	6	0.6	24
33 380	Soil	J3&4/88	2	0.7	20
33 381	Soil	J3&4/88	1	0.5	24
33 382	Soil	J3&4/88	2	0.8	19
33 383	Soil	J3&4/88	3	0.9	17
33 384	Soil	J3&4/88	1	0.4	25
33 385	Soil	J3&4/88	4	0.6	23
33 386	Soil	J3&4/88	2	1.2	92
33 387	Soil	J3&4/88	1	0.4	25
33 388	Soil	J3&4/88	16	0.5	18
33 389	Soil	J3&4/88	4	0.3	15

00 000	0011	1004/00	1	0.4	10
00 001	0011	1004/00	2	0.4	17

APPENDIX V

1990 ANALYTICAL DATA FOR ROCK AND SOIL SAMPLES



Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	B1 ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
DAR - 001	Rock	75	17.6	0.64	<5	47	23	0.29	195.8	12	155	2979	>5.00	<3	0.01	4
DAR - 002	Rock	<5	0.2	2.24	6	73	<2	1.33	1.8	12	26	18	4.59	<3	0.32	16
DAR - 003	Rock	<5	0.2	2.06	11	50	<2	1.11	0.9	11	32	30	3.31	<3	0.16	11
DAR - 004	Rock	<5	0.2	1.26	6	71	<2	0.41	0.5	9	38	6	2.93	<3	0.14	10
DAR - 005	Rock	15	0.5	1.57	22	38	5	2.04	0.6	9	57	85	3.04	<3	0.27	11
DAR - 006	Rock	5	3.7	2.17	5	176	<2	2.58	8.2	11	58	8334	3.76	<3	0.30	10
DAR - 007	Rock	<5	0.2	1.78	<5	99	<2	6.20	0.6	10	17	19	3.43	<3	0.36	10
DAR - 008	Rock	<5	0.2	0.86	6	46	4	0.27	0.4	4	85	18	1.87	<3	0.19	8
DAR - 009	Rock	<5	0.4	0.76	<5	560	<2	0.31	0.1	7	82	5	1.21	<3	0.15	7
DAR - 010	Rock	<5	0.2	1.24	51	55	<2	0.80	0.5	19	33	4	4.04	<3	0.13	11
DAR - 011	Rock	30	7.3	0.49	497	33	<2	>10.00	8.1	26	9	260	>5.00	<3	0.02	4
DAR - 012	Rock	<5	0.3	1.86	93	94	<2	1.99	0.8	17	41	30	3.73	<3	0.20	11
DAR - 013	Rock	15	4.8	1.12	284	244	<2	0.62	0.7	11	55	44	2.80	<3	0.25	11
DAR - 014	Rock	<5	0.7	2.51	50	62	<2	1.61	1.2	31	35	89	>5.00	<3	0.16	13
DAR - 015	Rock	10	4.2	0.93	97	71	5	0.11	0.8	9	43	80	3.62	<3	0.33	10
DAR - 016	Rock	15	3.3	0.88	136	87	<2	0.23	0.7	8	50	37	3.28	<3	0.31	10
DAR - 017	Rock	<5	0.1	1.01	13	41	<2	3.36	0.9	14	42	2	4.11	<3	0.25	13
DMH - 001	Rock	<5	0.2	2.45	5	86	<2	3.58	1.2	10	38	4	3.50	<3	0.35	13
DMH - 002	Rock	10	1.3	1.71	37	393	3	0.82	0.5	12	29	20	3.85	<3	0.31	10
DMH - 003	Rock	4325	6.5	0.15	34	29	354	0.02	0.6	2	184	3661	3.26	<3	0.03	<2
DMH - 004	Rock	105	3.3	2.68	16	33	<2	0.47	1.7	25	56	8409	>5.00	<3	0.28	10
DMH - 005	Rock	5	0.2	2.97	12	80	<2	1.00	0.8	13	16	259	>5.00	<3	0.32	16
DMH - 006	Rock	115	29.6	1.98	6	396	<2	2.77	0.7	13	31	8495	3.43	<3	0.36	14
DMH - 007	Rock	80	1.8	1.62	103	66	3	0.90	0.6	13	32	245	3.88	<3	0.27	5
DMH - 008	Rock	745	4.3	0.77	23	75	20	0.10	0.7	12	141	5857	3.56	<3	0.13	<2
DO - 101	Rock	5	0.3	2.02	12	83	<2	1.40	0.5	14	22	32	4.38	<3	0.10	12
DO - 102	Rock	50	4.3	1.33	12	85	7	0.12	0.7	15	85	8117	3.86	<3	0.21	3
DO - 103	Rock	10	0.1	2.09	11	52	<2	3.06	0.8	26	42	17	>5.00	<3	0.14	14
DO - 104	Rock	<5	<0.1	1.61	<5	45	<2	2.13	0.6	21	12	5	>5.00	4	0.20	14
DO - 105	Rock	<5	<0.1	2.31	11	68	<2	2.54	0.7	29	8	<1	>5.00	<3	0.19	8
DO - 106	Rock	485	4.2	1.51	79	306	73	0.14	1.1	32	126	4031	>5.00	<3	0.08	7
DO - 107	Rock	15	0.4	0.86	18	1156	18	0.11	0.8	26	154	887	3.27	<3	0.05	5
DO - 108	Rock	65	1.3	2.56	66	405	6	0.10	1.1	111	146	573	>5.00	3	0.02	<2
DO - 109	Rock	1195	56.7	1.36	71	23	72	0.21	1.6	21	111	>20000	>5.00	<3	0.13	8
DO - 110	Rock	10	0.2	2.95	8	68	<2	1.69	0.7	17	29	105	>5.00	<3	0.26	15
DO - 111	Rock	<5	0.1	2.39	16	81	<2	2.98	1.0	31	45	7	>5.00	<3	0.24	14
DO - 112	Rock	3750	4.6	2.68	85	29	18	0.33	53.5	29	52	1643	>5.00	3	0.17	7
DO - 113	Rock	5	0.2	2.70	11	79	<2	4.33	0.7	19	45	43	4.71	<3	0.26	5
DO - 114	Rock	<5	0.6	3.65	8	47	<2	1.91	0.8	29	51	377	>5.00	3	0.10	10

Minimum Detection	5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection	10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
DAR - 001	0.49	2156	24	<0.01	6	0.02	115	<5	1	11	11	0.01	30	<5	>20000	<1
DAR - 002	1.09	2187	2	0.02	4	0.16	4	7	4	48	11	0.14	61	<5	302	5
DAR - 003	1.20	1584	2	0.05	2	0.15	3	6	3	60	<10	0.13	36	<5	203	7
DAR - 004	0.83	1111	2	0.07	4	0.08	2	<5	3	8	<10	0.08	47	<5	113	8
DAR - 005	0.80	1855	3	0.01	3	0.09	11	5	2	51	<10	0.05	20	<5	107	5
DAR - 006	0.97	2191	4	<0.01	4	0.17	10	7	2	134	11	0.11	29	<5	833	8
DAR - 007	1.13	2579	2	<0.01	4	0.08	3	<5	3	191	<10	<0.01	37	<5	108	2
DAR - 008	0.45	640	5	0.05	5	0.02	3	5	1	9	11	0.03	11	<5	54	23
DAR - 009	0.48	571	1	0.08	3	0.02	22	6	1	31	<10	0.07	6	<5	50	27
DAR - 010	1.57	1015	2	0.05	6	0.10	4	7	7	44	<10	0.18	130	<5	85	15
DAR - 011	5.11	>10000	36	<0.01	5	<0.01	241	6	2	264	<10	<0.01	50	<5	737	<1
DAR - 012	1.55	3222	2	<0.01	6	0.10	8	25	9	206	11	0.17	76	<5	108	17
DAR - 013	0.43	1620	3	<0.01	3	0.11	159	14	7	72	<10	0.02	61	<5	110	6
DAR - 014	2.10	1984	2	0.05	17	0.14	4	6	9	27	16	0.28	211	<5	97	13
DAR - 015	0.43	668	26	<0.01	3	0.07	788	9	8	55	10	0.13	51	<5	86	11
DAR - 016	0.44	1100	9	<0.01	5	0.07	150	8	6	37	<10	0.10	49	<5	73	9
DAR - 017	0.78	1880	2	<0.01	4	0.11	2	8	6	43	10	0.14	101	<5	108	11
DMH - 001	1.33	2660	1	<0.01	3	0.13	3	<5	2	107	<10	0.04	25	<5	209	5
DMH - 002	0.60	855	9	<0.01	3	0.12	111	18	3	57	<10	0.22	40	<5	82	10
DMH - 003	0.02	284	12	<0.01	7	0.03	49	5	<1	3	<10	<0.01	<5	<5	16	1
DMH - 004	1.25	3446	4	0.01	5	0.14	17	6	2	8	17	0.01	41	<5	255	6
DMH - 005	1.70	2551	2	0.01	3	0.17	<2	<5	4	32	13	0.17	43	<5	257	7
DMH - 006	0.89	1751	1	0.02	5	0.14	3	<5	4	89	<10	0.16	45	<5	129	11
DMH - 007	0.55	676	61	0.02	2	0.12	135	7	2	74	10	0.15	30	<5	65	6
DMH - 008	0.36	572	51	<0.01	7	0.05	656	<5	1	6	<10	0.01	12	<5	64	2
DO - 101	0.77	1663	3	0.06	3	0.20	35	5	4	128	<10	0.24	53	<5	122	13
DO - 102	0.56	1004	5	<0.01	5	0.06	70	11	1	28	<10	0.01	16	<5	80	2
DO - 103	1.79	1645	2	0.04	14	0.17	10	8	13	135	13	0.33	164	<5	249	7
DO - 104	1.74	2266	2	0.04	5	0.17	6	6	7	17	12	0.13	100	<5	227	6
DO - 105	2.12	1748	3	0.07	9	0.12	7	<5	10	53	12	0.32	210	<5	198	10
DO - 106	0.69	955	30	<0.01	9	0.05	99	15	4	24	15	0.05	75	<5	97	2
DO - 107	0.36	628	9	0.01	9	0.03	18	6	2	51	<10	0.04	40	<5	58	2
DO - 108	1.08	2194	9	<0.01	10	0.02	13	6	5	17	13	0.02	88	<5	191	<1
DO - 109	0.55	839	19	<0.01	7	0.15	154	5	2	20	17	0.01	31	<5	79	3
DO - 110	1.93	2367	2	0.02	9	0.11	<2	<5	4	15	11	0.02	58	<5	192	5
DO - 111	2.33	2173	4	0.04	18	0.18	62	17	14	30	16	0.34	205	<5	217	8
DO - 112	1.55	1492	73	<0.01	12	0.09	4021	9	5	17	20	0.11	96	<5	5827	3
DO - 113	1.83	1885	3	0.01	5	0.08	53	16	8	139	<10	0.14	99	<5	99	5
DO - 114	3.15	2750	2	0.01	30	0.12	20	10	13	125	13	0.32	145	<5	369	20

Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
DO - 115	Rock	<5	0.2	2.44	6	31	4	4.67	0.4	21	41	398	4.16	<3	0.17	9
DO - 116	Rock	60	1.0	1.04	195	87	9	0.63	2.3	7	50	31	3.05	<3	0.27	13
DO - 117	Rock	<5	0.1	2.19	7	29	<2	1.96	0.5	10	48	<1	3.05	<3	0.13	7
DO - 118	Rock	5	0.8	2.97	17	58	<2	0.60	1.2	22	18	12	>5.00	<3	0.06	10
DO - 119	Rock	<5	0.3	3.42	13	24	<2	0.90	1.0	17	17	31	>5.00	<3	0.13	8
DO - 120	Rock	<5	0.8	2.49	15	10	2	0.93	0.7	14	21	58	4.77	<3	0.04	7
DO - 121	Rock	190	2.6	0.87	13	199	78	0.05	0.6	21	169	2668	2.29	<3	0.11	3
DO - 122	Rock	120	0.5	0.79	9	71	3	0.24	0.6	4	113	857	0.99	<3	0.20	7
DO - 123	Rock	5	0.3	1.43	10	83	<2	0.52	0.7	12	83	622	2.73	<3	0.13	9
DO - 124	Rock	105	2.3	1.37	12	141	13	0.16	1.3	11	99	13981	5.00	<3	0.25	7
DO - 125	Rock	25	0.7	0.23	7	20	16	0.02	0.5	4	181	1125	0.85	<3	0.11	2
DO - 126	Rock	15	0.3	0.63	5	43	11	0.35	0.4	11	164	82	1.31	<3	0.10	6
DO - 127	Rock	310	7.5	1.42	13	98	143	0.14	0.9	20	72	4254	>5.00	<3	0.24	3
DO - 128	Rock	415	19.5	0.99	8	106	51	0.16	1.9	8	126	2675	1.44	<3	0.28	3
DO - 129	Rock	40	1.8	0.29	7	10	20	0.02	0.3	8	179	1010	1.02	<3	0.12	2
DO - 130	Rock	440	3.4	0.86	18	69	9	0.22	0.6	7	84	925	3.37	<3	0.20	7
DO - 131	Rock	<5	0.3	1.56	10	59	<2	0.78	0.5	8	37	21	1.83	<3	0.46	15
DO - 132	Rock	30	1.1	1.92	21	1315	<2	0.64	1.4	12	66	1336	3.97	<3	0.20	18
DO - 133	Rock	5400	2.9	2.44	23	390	<2	2.95	12.9	16	73	2885	4.40	<3	0.26	10
DO - 134	Rock	20	0.6	0.90	36	124	<2	0.25	7.5	5	60	49	2.29	<3	0.36	19
JD - 001	Rock	<5	0.1	1.01	8	80	<2	3.80	0.7	8	17	2	3.33	<3	0.39	15
JD - 002	Rock	10	0.1	2.36	9	113	<2	3.19	0.5	8	81	490	2.62	<3	0.20	12
JD - 003	Rock	<5	0.1	2.30	13	38	<2	2.16	0.6	11	49	3	3.47	<3	0.11	12
JD - 004	Rock	<5	0.1	2.82	6	19	<2	2.30	0.5	12	50	1	3.35	<3	0.13	9
JD - 005	Rock	5	<0.1	1.30	37	97	<2	1.55	0.7	19	31	5	4.50	<3	0.48	18
JD - 006	Rock	5	0.1	1.30	<5	83	<2	0.73	0.5	9	27	2	3.19	<3	0.17	11
JD - 007	Rock	<5	0.1	1.87	<5	64	<2	0.67	0.7	14	23	<1	4.05	<3	0.12	13
JD - 008	Rock	50	7.9	1.11	7	484	27	2.23	0.7	7	155	5159	1.57	<3	0.27	7
JD - 009	Rock	20	4.8	1.75	10	721	6	2.16	1.0	19	44	3230	4.36	<3	0.42	12
JD - 010	Rock	465	5.2	0.79	7	1018	20	0.25	25.7	10	108	1952	1.40	<3	0.23	5
JD - 011	Rock	<5	0.1	1.14	7	57	3	0.36	0.6	8	53	12	2.55	<3	0.24	12
JD - 012	Rock	5650	15.3	0.45	6	147	280	0.13	0.7	14	213	6092	1.87	<3	0.05	8
JD - 013	Rock	5	<0.1	1.82	6	71	<2	1.11	0.6	12	32	22	4.45	<3	0.17	14
JD - 014	Rock	20	<0.1	1.95	6	92	<2	3.22	0.6	13	25	5	3.51	<3	0.33	13
JD - 015	Rock	<5	<0.1	1.52	12	306	<2	>10.00	0.6	17	12	4	3.95	<3	0.47	17
JD - 016	Rock	15	1.4	0.79	6	56	3	0.46	0.6	5	86	202	2.17	<3	0.30	6
JD - 017	Rock	15	2.1	0.69	<5	40	<2	0.17	0.2	5	160	811	1.00	<3	0.17	3
JD - 018	Rock	<5	0.6	1.68	<5	75	<2	0.99	0.5	12	69	630	2.44	<3	0.29	6
JD - 019	Rock	<5	<0.1	4.03	<5	129	<2	5.20	0.7	46	124	9	>5.00	<3	0.23	8

Minimum Detection	5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection	10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
DO - 115	0.87	1881	2	<0.01	5	0.09	2	8	6	148	<10	0.20	68	<5	119	7
DO - 116	0.29	400	8	<0.01	2	0.12	161	8	3	45	<10	0.21	25	<5	147	10
DO - 117	1.04	1719	1	0.01	3	0.12	5	<5	2	131	<10	0.11	29	<5	114	4
DO - 118	2.33	2851	15	0.06	5	0.15	26	14	5	28	18	0.19	53	<5	240	14
DO - 119	2.70	3359	4	0.05	4	0.16	7	7	5	47	15	0.21	74	<5	290	9
DO - 120	1.94	2346	8	0.07	4	0.14	31	8	5	56	12	0.21	63	<5	192	7
DO - 121	0.53	503	243	<0.01	6	0.02	61	9	1	8	<10	0.02	10	<5	25	2
DO - 122	0.30	450	9	0.02	5	0.02	6	5	1	11	<10	0.04	13	<5	23	7
DO - 123	1.18	894	3	0.04	3	0.10	16	7	5	20	<10	0.22	51	<5	60	17
DO - 124	0.68	763	72	<0.01	5	0.08	25	7	2	10	12	0.05	36	<5	66	7
DO - 125	0.10	201	24	0.01	5	0.01	11	6	<1	6	<10	0.01	5	<5	6	3
DO - 126	0.47	405	22	0.05	6	0.04	6	7	3	9	<10	0.10	26	<5	12	15
DO - 127	0.63	719	69	<0.01	5	0.03	42	7	1	10	12	0.02	17	<5	60	3
DO - 128	0.38	344	25	<0.01	4	0.03	8865	<5	1	10	<10	0.02	10	<5	715	6
DO - 129	0.10	212	21	<0.01	3	0.01	54	<5	<1	1	<10	<0.01	<5	<5	15	4
DO - 130	0.24	464	34	0.04	4	0.07	451	<5	2	17	<10	0.01	19	<5	36	4
DO - 131	0.38	745	2	0.01	2	0.05	10	5	3	52	<10	0.20	16	<5	74	33
DO - 132	0.74	1861	16	<0.01	3	0.05	81	6	2	210	<10	0.12	21	<5	230	6
DO - 133	0.82	2923	5	<0.01	3	0.09	236	9	3	141	11	0.16	31	<5	911	7
DO - 134	0.18	600	8	<0.01	3	0.06	92	<5	2	23	10	0.06	14	<5	732	8
JD - 001	0.41	1570	2	0.04	2	0.16	5	<5	4	45	<10	0.11	47	<5	81	5
JD - 002	0.40	1593	2	<0.01	3	0.12	6	8	3	268	<10	0.16	37	<5	78	7
JD - 003	0.94	1444	2	0.07	3	0.16	6	8	4	234	<10	0.21	47	<5	126	8
JD - 004	0.99	1790	2	<0.01	4	0.08	2	5	4	231	<10	0.12	47	<5	128	7
JD - 005	0.77	1105	1	0.02	9	0.08	12	10	6	18	12	0.18	73	<5	106	14
JD - 006	1.01	1521	1	0.05	2	0.09	3	<5	5	10	10	0.17	47	<5	182	10
JD - 007	1.69	2516	2	0.08	2	0.15	<2	6	6	10	11	0.24	64	<5	417	10
JD - 008	0.98	931	4	0.01	7	0.06	6	8	2	58	<10	0.03	42	<5	49	4
JD - 009	1.62	1297	1	0.02	11	0.09	10	5	5	48	12	0.08	120	<5	107	9
JD - 010	0.41	555	3	0.01	4	0.03	36	6	1	31	<10	0.01	20	<5	2969	3
JD - 011	0.68	1026	1	0.08	3	0.06	5	6	3	7	10	0.15	38	<5	118	17
JD - 012	0.20	626	111	0.01	6	0.04	338	6	3	9	<10	0.01	18	<5	32	2
JD - 013	1.38	2509	3	0.07	2	0.15	<2	5	4	12	12	0.14	60	<5	328	8
JD - 014	1.21	2136	1	0.04	3	0.12	4	5	3	22	10	0.10	44	<5	213	8
JD - 015	0.68	2593	2	<0.01	6	0.06	7	5	5	105	<10	0.05	38	<5	76	5
JD - 016	0.22	584	3	0.01	5	0.03	13	<5	3	7	<10	0.08	21	<5	20	4
JD - 017	0.36	339	1	0.04	7	0.04	7	8	2	5	<10	0.04	16	<5	30	3
JD - 018	1.09	1107	3	0.01	29	0.04	8	7	3	10	<10	0.06	31	<5	99	5
JD - 019	4.02	3542	3	<0.01	139	0.09	3	5	12	37	10	0.09	129	<5	238	2
Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
JD - 020	Rock	550	1.5	0.63	<5	29	<2	0.15	0.2	3	153	1992	1.05	<3	0.20	4
JD - 021	Rock	10	10.0	0.74	5	41	21	0.10	0.4	7	197	1187	1.94	<3	0.23	7
JD - 022	Rock	15	14.0	0.35	<5	31	31	0.11	0.4	2	196	2433	0.84	<3	0.15	<2
JD - 023	Rock	10	1.0	1.93	11	80	<2	0.45	0.5	19	49	707	3.83	<3	0.34	8
JD - 024	Rock	25	0.8	0.63	6	71	6	0.14	0.4	7	146	425	1.26	<3	0.27	3
JD - 025	Rock	<5	0.2	1.33	5	48	<2	2.18	0.3	8	145	12	1.87	<3	0.31	5
JD - 026	Rock	5	2.0	0.52	<5	50	<2	0.87	0.4	2	261	10352	1.85	<3	0.13	2
JD - 027	Rock	5	1.0	2.24	16	43	<2	0.62	0.7	23	77	1327	>5.00	<3	0.23	10
JD - 028	Rock	35	1.0	2.58	14	29	7	0.71	0.6	21	76	246	4.88	<3	0.25	10
JD - 029	Rock	10	0.1	1.23	5	16	4	0.28	0.2	9	139	112	2.43	<3	0.20	2
JD - 030	Rock	745	3.4	0.76	23	13	20	0.08	0.5	15	204	859	4.94	<3	0.19	2
JD - 031	Rock	50	5.1	1.27	25	9	2	0.32	1.1	36	155	16554	>5.00	<3	0.18	3
JD - 032	Rock	7220	2.9	1.08	27	40	17	0.10	0.7	41	169	1501	>5.00	<3	0.31	<2
JD - 033	Rock	1490	1.6	1.90	16	17	6	0.25	1.0	108	55	2431	>5.00	<3	0.32	5
JD - 034	Rock	20	0.2	2.89	13	12	<2	0.47	1.0	123	46	186	>5.00	<3	0.24	9
JD - 035	Rock	10	0.1	2.78	9	20	<2	0.60	1.0	84	50	55	>5.00	<3	0.26	11
JD - 036	Rock	<5	<0.1	3.09	12	89	<2	1.14	0.7	21	25	169	>5.00	<3	0.11	14
JD - 037	Rock	105	20.2	1.29	<5	13	44	1.04	691.8	38	109	13492	3.70	<3	0.08	5
JD - 038	Rock	330	10.9	1.17	11	21	71	0.55	4.9	25	93	1793	>5.00	<3	0.20	5
JD - 039	Rock	<5	0.1	>5.00	<5	52	<2	4.15	1.3	41	131	106	>5.00	<3	0.11	3
JD - 040	Rock	<5	0.4	1.04	<5	548	<2	0.28	2.0	16	126	432	2.31	<3	0.32	13
JD - 041	Rock	<5	0.1	1.31	<5	108	<2	1.10	0.6	5	89	112	2.34	<3	0.39	14
JD - 042	Rock	<5	<0.1	1.81	14	96	<2	1.72	0.7	10	25	7	4.33	<3	0.27	16
JD - 043	Rock	25	0.3	2.62	8	16	<2	1.28	1.1	11	42	65	4.66	<3	0.11	11
JD - 044	Rock	<5	0.2	1.93	9	36	<2	0.78	0.7	11	25	8	4.55	<3	0.29	9
JD - 045	Rock	100	0.1	0.63	<5	160	3	0.78	0.5	2	80	772	0.78	<3	0.33	20
JD - 046	Rock	110	1.3	0.31	17	18	<2	0.78	0.5	8	206	16132	3.88	<3	0.03	3
JD - 047	Rock	3770	7.2	1.73	58	170	364	0.87	1.6	27	107	16351	>5.00	<3	0.06	3

Minimum Detection 5 0.1 0.01 5 2 2 0.01 0.1 1 1 1 0.01 3 0.01 2
 Maximum Detection 10000 100.0 5.00 10000 10000 10000 10.00 10000.0 10000 10000 20000 5.00 10000 10.00 10000
 Method FA/AAS ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
 -- = Not Analysed unr = Not Requested ins = Insufficient Sample



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
JD - 020	0.22	321	2	<0.01	3	0.02	9	5	1	3	<10	0.04	12	<5	30	4
JD - 021	0.24	501	6	<0.01	4	0.02	141	8	1	3	<10	0.02	11	<5	41	7
JD - 022	0.06	166	2	0.01	4	0.03	191	5	1	3	<10	0.03	11	<5	8	2
JD - 023	0.84	1015	5	0.01	6	0.09	42	5	3	6	<10	0.11	51	<5	89	8
JD - 024	0.13	403	5	0.02	3	0.04	63	6	1	3	<10	0.03	15	<5	12	6
JD - 025	0.66	924	1	0.02	5	0.03	8	8	2	17	<10	0.04	24	<5	67	4
JD - 026	0.12	577	2	<0.01	4	0.06	3	10	1	14	<10	0.01	7	<5	22	3
JD - 027	1.26	1423	11	0.04	5	0.11	2	7	2	35	11	0.13	40	<5	110	6
JD - 028	1.45	1703	74	0.04	4	0.12	17	6	2	36	11	0.07	40	<5	132	5
JD - 029	0.69	1030	3	0.01	4	0.04	<2	5	1	6	<10	0.02	16	<5	71	3
JD - 030	0.32	486	56	<0.01	5	0.03	13	9	1	6	11	0.02	15	<5	32	2
JD - 031	0.51	778	40	<0.01	8	0.10	6	7	1	31	16	0.05	23	<5	67	2
JD - 032	0.40	598	62	<0.01	6	0.05	25	8	1	3	11	0.04	22	<5	52	4
JD - 033	0.85	1241	34	<0.01	4	0.10	9	7	1	7	18	0.02	33	<5	103	7
JD - 034	1.35	2012	21	0.02	5	0.13	<2	6	2	31	17	0.04	52	<5	163	8
JD - 035	1.31	1880	15	0.04	4	0.13	<2	5	3	47	17	0.04	55	<5	145	8
JD - 036	2.22	2296	4	0.05	3	0.16	3	8	4	85	12	0.20	77	<5	178	9
JD - 037	0.28	1028	20	<0.01	3	0.11	230	<5	1	125	<10	0.06	26	<5	>20000	8
JD - 038	0.40	646	60	0.04	3	0.08	133	8	1	60	11	0.09	29	<5	653	5
JD - 039	4.54	1125	3	0.62	153	0.07	3	14	4	179	10	0.21	118	<5	114	3
JD - 040	0.43	714	3	0.04	4	0.03	7	7	2	26	15	0.05	24	<5	279	22
JD - 041	0.56	936	3	0.06	3	0.05	6	5	1	23	12	0.01	23	<5	87	14
JD - 042	1.84	1705	2	0.07	3	0.16	5	5	5	36	10	0.15	79	<5	441	7
JD - 043	1.19	1880	4	0.06	4	0.14	88	5	3	111	10	0.14	40	<5	206	7
JD - 044	0.87	1171	3	0.04	3	0.15	16	6	2	51	11	0.11	32	<5	116	9
JD - 045	0.12	612	1	0.05	3	0.03	6	<5	1	15	<10	<0.01	<5	<5	41	19
JD - 046	0.14	573	16	<0.01	5	0.07	5	5	1	19	<10	0.01	11	<5	34	2
JD - 047	0.96	1261	95	<0.01	25	0.08	313	5	4	11	15	0.03	120	<5	125	1

Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP
-- = Not Analysed	unr = Not Requested	ins = Insufficient Sample														

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
L0+00N 11+00E	Soil	5	0.6	1.14	<5	338	3	2.61	2.8	5	7	20	1.22	<3	0.05	12
L0+00N 11+25E	Soil	<5	1.2	1.19	6	123	<2	0.83	1.0	7	6	9	3.49	<3	0.19	16
L1+00N 11+00E	Soil	<5	0.5	2.17	16	34	<2	0.40	0.6	9	7	17	4.13	<3	0.05	11
L1+00N 11+25E	Soil	<5	0.6	2.12	14	27	<2	0.44	0.8	11	19	3	4.45	<3	0.10	10
L1+00N 11+50E	Soil	5	0.4	1.13	11	50	2	0.22	0.5	4	6	8	2.16	<3	0.06	8
L1+00S 10+75E	Soil	<5	0.4	1.17	<5	393	<2	1.72	1.9	8	13	15	2.84	<3	0.21	22
L1+00S 11+00E	Soil	<5	1.0	0.95	<5	438	<2	1.93	5.4	7	11	22	2.67	<3	0.24	27
L3+00S 0+00E	Soil	5	1.0	2.42	23	232	3	0.06	0.8	3	8	15	>5.00	<3	0.28	15
L3+00S 0+25E	Soil	30	0.9	1.61	13	37	3	0.05	0.3	1	6	11	1.29	<3	0.05	9
L3+00S 0+50E	Soil	5	0.8	2.19	24	90	<2	0.12	0.7	7	9	21	4.99	<3	0.11	9
L3+00S 0+75E	Soil	5	1.0	1.99	18	164	<2	0.11	0.5	3	9	8	>5.00	<3	0.12	10
L3+00S 1+00E	Soil	10	1.3	1.31	13	31	5	0.08	0.4	2	8	9	2.11	<3	0.06	8
L3+00S 1+25E	Soil	80	0.4	1.51	12	37	<2	0.05	0.1	2	5	7	1.65	<3	0.05	6
L3+00S 1+50E	Soil	5	1.0	2.15	31	210	<2	0.17	0.9	7	10	18	>5.00	<3	0.15	8
L3+00S 1+75E	Soil	35	0.6	1.65	15	65	<2	0.04	0.1	1	5	13	1.94	<3	0.05	7
L3+00S 2+00E	Soil	45	0.8	2.14	22	57	4	0.09	0.8	5	9	17	4.34	<3	0.09	10
L3+00S 2+25E	Soil	25	1.3	1.70	18	54	<2	0.05	0.4	2	4	11	2.38	<3	0.08	9
L3+00S 2+50E	Soil	5	0.9	1.83	30	116	<2	0.08	0.4	3	6	13	3.56	<3	0.11	11
L3+00S 2+75E	Soil	<5	1.1	2.19	57	206	<2	0.21	0.7	10	31	17	>5.00	<3	0.14	10
L3+00S 3+00E	Soil	50	0.9	1.51	24	183	<2	0.06	0.1	3	8	15	2.74	<3	0.09	9
L3+00S 3+25E	Soil	5	1.2	2.23	23	176	<2	0.12	0.9	8	16	42	>5.00	<3	0.13	12
L3+00S 3+50E	Soil	25	1.1	2.70	24	192	<2	0.12	0.9	8	13	35	>5.00	<3	0.11	13
L3+00S 3+75E	Soil	5	4.2	1.36	35	328	<2	0.31	1.3	4	9	28	4.54	<3	0.20	14
L3+00S 4+00E	Soil	15	1.3	2.49	25	145	<2	0.19	1.3	8	13	56	>5.00	<3	0.13	15
L3+00S 4+25E	Soil	20	0.9	2.17	18	78	<2	0.11	0.5	4	9	19	3.80	<3	0.09	10
L3+00S 4+50E	Soil	<5	2.4	2.84	15	59	<2	0.11	1.0	14	9	19	4.86	<3	0.10	9
L3+00S 4+75E	Soil	5	1.6	1.59	13	90	<2	0.12	2.3	7	8	57	3.93	<3	0.09	10
L3+00S 5+00E	Soil	<5	0.8	2.28	12	112	<2	0.46	3.6	17	17	58	4.52	<3	0.11	12
L3+00S 5+25E	Soil	5	0.6	2.93	14	145	<2	0.25	3.1	59	20	95	>5.00	<3	0.12	16
L3+00S 5+50E	Soil	5	0.8	2.26	17	167	<2	0.78	2.6	22	13	88	>5.00	<3	0.12	11
L3+00S 5+75E	Soil	5	0.9	1.95	12	239	<2	0.84	2.4	17	14	73	4.72	<3	0.10	13
L3+00S 6+00E	Soil	<5	0.3	1.57	14	148	<2	0.30	0.6	7	34	24	3.37	<3	0.09	6
L3+00S 6+25E	Soil	10	0.6	2.20	20	252	<2	0.70	3.6	20	8	132	>5.00	<3	0.10	15
L3+00S 6+50E	Soil	<5	0.7	1.84	12	245	6	0.90	1.4	9	16	41	3.13	<3	0.10	21
L3+00S 6+75E	Soil	5	0.7	2.06	12	241	<2	1.01	1.9	9	7	56	3.13	<3	0.13	16
L3+00S 7+00E	Soil	<5	0.4	2.78	15	116	<2	0.39	0.7	11	13	11	3.92	<3	0.15	12
L3+00S 7+25E	Soil	<5	0.4	1.81	10	64	<2	0.14	0.4	8	10	6	2.81	<3	0.09	8
L3+00S 7+50E	Soil	5	0.8	2.53	17	60	<2	0.18	0.7	8	14	20	4.40	<3	0.06	8
L3+00S 7+75E	Soil	<5	0.5	1.81	11	91	<2	0.19	0.3	8	15	6	2.86	<3	0.08	11

Minimum Detection	5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection	10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
L0+00N 11+00E	0.16	1946	2	<0.01	5	0.16	14	<5	1	73	<10	0.01	21	<5	104	1
L0+00N 11+25E	0.60	2525	2	<0.01	3	0.17	10	<5	2	26	<10	0.02	31	<5	126	1
L1+00N 11+00E	0.69	1222	2	<0.01	7	0.15	10	<5	2	32	<10	0.06	52	<5	118	1
L1+00N 11+25E	0.97	2010	2	0.01	6	0.30	11	<5	1	32	<10	0.05	52	<5	140	<1
L1+00N 11+50E	0.30	305	2	<0.01	5	0.07	18	<5	1	24	<10	0.03	35	<5	64	1
L1+00S 10+75E	0.48	5981	2	<0.01	4	0.19	18	<5	3	45	<10	0.02	30	<5	196	1
L1+00S 11+00E	0.39	6539	2	<0.01	3	0.18	15	<5	4	45	<10	0.02	30	<5	448	2
L3+00S 0+00E	0.50	400	9	0.02	6	0.26	28	<5	1	39	11	0.02	71	<5	88	<1
L3+00S 0+25E	0.05	72	3	<0.01	2	0.07	33	<5	<1	12	<10	0.01	33	<5	29	1
L3+00S 0+50E	0.56	466	7	<0.01	7	0.10	62	<5	2	20	11	0.04	93	<5	120	<1
L3+00S 0+75E	0.60	389	6	0.01	5	0.14	67	<5	1	19	<10	0.02	56	<5	87	<1
L3+00S 1+00E	0.10	206	5	0.01	5	0.04	25	<5	<1	14	<10	0.01	52	<5	59	<1
L3+00S 1+25E	0.08	92	10	<0.01	2	0.05	18	<5	1	12	<10	0.01	37	<5	46	1
L3+00S 1+50E	1.03	738	7	<0.01	6	0.20	19	<5	2	18	12	0.05	72	<5	150	1
L3+00S 1+75E	0.09	95	3	<0.01	2	0.13	40	<5	<1	12	<10	0.01	38	<5	48	<1
L3+00S 2+00E	0.39	408	3	<0.01	7	0.14	97	<5	1	20	<10	0.02	80	<5	114	1
L3+00S 2+25E	0.10	120	2	0.01	4	0.07	61	<5	1	15	<10	0.01	52	<5	57	1
L3+00S 2+50E	0.55	318	4	0.01	4	0.08	48	<5	1	12	<10	0.02	49	<5	76	<1
L3+00S 2+75E	1.16	658	4	0.02	33	0.17	28	<5	2	24	12	0.06	77	<5	97	1
L3+00S 3+00E	0.30	358	3	0.01	4	0.09	43	<5	<1	17	<10	0.01	38	<5	67	1
L3+00S 3+25E	0.65	670	5	<0.01	9	0.12	91	5	2	26	12	0.03	72	<5	127	1
L3+00S 3+50E	0.68	678	4	<0.01	11	0.12	77	<5	2	33	10	0.03	56	<5	170	1
L3+00S 3+75E	0.52	381	6	0.02	5	0.11	37	<5	1	48	10	0.02	46	<5	114	1
L3+00S 4+00E	0.76	626	5	<0.01	12	0.09	66	<5	2	36	10	0.03	66	<5	176	<1
L3+00S 4+25E	0.37	372	4	<0.01	6	0.09	66	<5	1	28	<10	0.02	57	<5	93	<1
L3+00S 4+50E	0.88	2136	3	<0.01	7	0.17	53	<5	2	9	10	0.01	58	<5	216	2
L3+00S 4+75E	0.29	599	4	<0.01	6	0.15	69	<5	<1	19	<10	0.01	45	<5	169	<1
L3+00S 5+00E	1.11	2228	5	<0.01	10	0.14	21	<5	2	32	<10	0.02	48	<5	341	<1
L3+00S 5+25E	1.00	5540	11	<0.01	13	0.15	43	<5	2	25	10	0.02	61	<5	411	<1
L3+00S 5+50E	1.17	2187	8	<0.01	9	0.15	22	5	3	51	12	0.04	49	<5	361	1
L3+00S 5+75E	1.00	2296	9	<0.01	7	0.15	16	<5	2	53	<10	0.03	43	<5	247	<1
L3+00S 6+00E	0.77	729	5	<0.01	9	0.08	10	<5	2	26	<10	0.02	53	<5	115	<1
L3+00S 6+25E	0.97	1831	7	<0.01	9	0.15	23	<5	3	51	<10	0.04	49	<5	435	1
L3+00S 6+50E	0.64	1023	3	<0.01	8	0.07	16	<5	2	51	<10	0.03	52	<5	104	1
L3+00S 6+75E	0.81	1019	3	<0.01	7	0.10	10	<5	3	60	<10	0.03	40	<5	221	1
L3+00S 7+00E	1.02	1290	2	<0.01	6	0.07	9	<5	3	39	<10	0.03	55	<5	155	<1
L3+00S 7+25E	0.60	827	2	<0.01	5	0.04	24	<5	2	19	<10	0.04	56	<5	89	1
L3+00S 7+50E	0.76	733	4	<0.01	11	0.10	46	<5	1	28	<10	0.03	55	<5	154	<1
L3+00S 7+75E	0.63	931	4	<0.01	6	0.07	9	<5	1	19	<10	0.02	42	<5	121	<1
Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
L3+00S 8+00E	Soil	<5	1.4	3.24	<5	552	<2	1.77	3.8	12	35	29	4.12	<3	0.08	42
L3+00S 8+25E	Soil	<5	0.7	2.30	10	176	<2	0.63	1.1	8	15	20	3.02	<3	0.09	12
L3+00S 8+50E	Soil	<5	0.6	1.49	11	33	<2	0.15	0.4	8	13	4	3.65	<3	0.08	7
L3+00S 8+75E	Soil	<5	0.7	2.37	11	267	<2	0.53	1.1	15	26	10	3.81	<3	0.10	15
L3+00S 9+00E	Soil	<5	0.7	2.03	10	117	<2	0.71	1.5	13	18	37	3.64	<3	0.12	15
L3+00S 9+25E	Soil	5	0.6	1.99	12	172	<2	0.71	1.0	10	16	15	3.19	<3	0.10	10
L3+00S 9+50E	Soil	<5	0.6	2.90	13	433	<2	0.98	1.2	8	10	22	3.21	<3	0.06	17
L3+00S 9+75E	Soil	10	0.4	1.63	11	118	<2	0.53	0.5	7	11	5	2.56	<3	0.06	7
L3+00S 10+00E	Soil	<5	0.6	2.74	14	235	<2	0.41	1.5	10	14	27	3.65	<3	0.11	14
L3+00S 10+25E	Soil	5	1.6	3.38	8	542	<2	0.60	2.6	8	11	81	2.81	<3	0.14	40
L3+00S 10+50E	Soil	5	0.8	3.53	<5	776	<2	0.86	7.5	13	15	81	3.74	<3	0.20	26
L3+00S 10+75E	Soil	<5	0.6	2.69	5	349	<2	0.23	1.8	10	10	30	3.35	<3	0.16	12
L3+00S 11+00E	Soil	<5	0.5	1.86	9	66	<2	0.26	0.7	12	15	9	3.65	<3	0.10	7
L3+00S 11+25E	Soil	<5	0.6	1.49	<5	127	<2	0.29	0.9	9	15	12	2.74	<3	0.14	8
L3+00S 11+50E	Soil	<5	0.5	1.68	8	62	<2	0.44	0.8	8	13	10	2.95	<3	0.12	7
L3+00S 12+50E	Soil	30	0.5	1.78	7	136	<2	0.38	0.7	8	11	13	3.15	<3	0.16	8
L4+00S 0+00E	Soil	<5	0.7	2.63	20	52	<2	0.32	1.0	10	18	20	>5.00	<3	0.10	11
L4+00S 0+25E	Soil	<5	0.7	1.51	15	157	5	0.04	0.4	2	7	6	2.86	<3	0.15	13
L4+00S 0+50E	Soil	40	1.6	2.05	15	43	<2	0.10	0.6	4	11	12	3.68	<3	0.08	9
L4+00S 0+75E	Soil	10	1.5	1.87	14	46	<2	0.08	0.4	3	9	12	2.74	<3	0.06	9
L4+00S 1+00E	Soil	95	0.6	1.82	13	31	<2	0.08	0.2	2	7	6	1.28	<3	0.04	7
L4+00S 1+25E	Soil	<5	0.9	2.77	27	43	<2	0.24	1.2	13	11	30	>5.00	<3	0.08	7
L4+00S 1+50E	Soil	5	0.9	2.48	21	56	<2	0.08	1.0	7	8	18	>5.00	<3	0.10	9
L4+00S 1+75E	Soil	50	0.8	1.49	16	36	<2	0.09	0.6	4	9	9	2.76	<3	0.11	8
L4+00S 2+00E	Soil	5	0.6	2.08	20	56	<2	0.09	0.5	4	6	18	4.05	<3	0.08	8
L4+00S 2+25E	Soil	5	1.1	2.52	18	62	<2	0.06	0.9	8	8	26	4.88	<3	0.09	8
L4+00S 2+50E	Soil	<5	1.9	1.58	26	246	<2	0.04	0.5	3	9	15	3.52	<3	0.16	11
L4+00S 2+75E	Soil	<5	2.2	1.64	31	224	<2	0.04	0.5	2	6	10	3.37	<3	0.13	14
L4+00S 3+00E	Soil	50	1.1	2.14	22	77	<2	0.09	0.7	4	8	20	4.19	<3	0.10	9
L4+00S 3+25E	Soil	<5	0.7	1.88	20	74	<2	0.12	0.4	4	8	10	3.27	<3	0.06	8
L4+00S 3+50E	Soil	5	5.9	1.37	25	127	<2	0.02	0.5	3	12	62	4.36	<3	0.08	9
L4+00S 3+75E	Soil	<5	1.4	1.59	17	31	<2	0.06	1.6	4	4	24	>5.00	<3	0.50	19
L4+00S 4+00E	Soil	<5	2.2	1.57	16	52	6	0.06	1.2	2	5	19	>5.00	<3	0.46	18
L4+00S 4+25E	Soil	15	1.2	1.90	19	76	<2	0.16	1.9	7	8	33	>5.00	<3	0.47	21
L4+00S 4+50E	Soil	10	1.2	1.80	17	40	<2	0.15	2.1	8	4	33	>5.00	<3	0.54	21
L4+00S 4+75E	Soil	<5	1.5	3.34	28	325	<2	0.09	2.4	7	16	52	>5.00	3	0.26	16
L4+00S 5+00E	Soil	45	1.1	2.32	16	110	4	0.10	1.1	7	13	27	4.45	<3	0.11	15
L4+00S 5+25E	Soil	10	1.0	2.61	19	71	<2	0.54	2.2	13	10	123	>5.00	<3	0.09	18
L4+00S 5+50E	Soil	30	0.7	2.21	15	57	<2	0.43	1.6	15	11	99	>5.00	<3	0.09	11
Minimum Detection		5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection		10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method		FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
L3+00S 8+00E	0.65	7424	7	<0.01	12	0.29	7	<5	2	68	<10	0.01	40	<5	201	3
L3+00S 8+25E	0.57	969	3	<0.01	9	0.10	19	<5	1	37	<10	0.02	36	<5	129	1
L3+00S 8+50E	0.53	969	2	<0.01	5	0.12	14	<5	1	18	<10	0.06	64	<5	85	1
L3+00S 8+75E	1.18	2767	3	0.01	11	0.11	12	6	3	32	<10	0.03	55	<5	146	1
L3+00S 9+00E	1.17	1674	3	<0.01	6	0.12	13	5	3	50	<10	0.05	48	<5	254	1
L3+00S 9+25E	0.85	1189	3	<0.01	7	0.11	13	<5	2	44	<10	0.03	43	<5	171	<1
L3+00S 9+50E	0.66	1150	4	<0.01	8	0.13	10	6	1	51	<10	0.02	52	<5	155	1
L3+00S 9+75E	0.47	938	2	<0.01	4	0.06	13	<5	1	35	<10	0.05	49	<5	83	<1
L3+00S 10+00E	0.86	1790	3	<0.01	7	0.13	12	<5	1	33	<10	0.02	49	<5	221	<1
L3+00S 10+25E	0.57	2543	3	<0.01	6	0.32	13	<5	2	36	<10	0.01	40	<5	201	4
L3+00S 10+50E	0.66	>10000	7	<0.01	9	0.32	14	<5	2	48	<10	0.01	53	<5	422	3
L3+00S 10+75E	0.56	4435	3	<0.01	4	0.16	14	<5	1	22	<10	0.01	43	<5	224	1
L3+00S 11+00E	0.76	1902	2	<0.01	7	0.10	21	<5	1	22	<10	0.05	48	<5	129	<1
L3+00S 11+25E	0.34	4199	2	<0.01	3	0.10	13	<5	1	24	<10	0.03	44	<5	104	<1
L3+00S 11+50E	0.58	1497	2	<0.01	3	0.08	16	<5	1	37	<10	0.07	49	<5	128	<1
L3+00S 12+50E	0.47	2358	2	<0.01	4	0.09	9	<5	<1	36	<10	0.02	45	<5	123	<1
L4+00S 0+00E	0.86	852	3	<0.01	9	0.14	23	<5	2	28	<10	0.05	78	<5	168	1
L4+00S 0+25E	0.38	204	4	0.01	2	0.08	52	<5	1	15	<10	0.01	45	<5	70	1
L4+00S 0+50E	0.29	352	4	<0.01	5	0.07	45	<5	1	19	<10	0.02	68	<5	79	<1
L4+00S 0+75E	0.27	312	4	<0.01	5	0.06	42	<5	<1	18	<10	0.02	47	<5	75	<1
L4+00S 1+00E	0.07	85	2	<0.01	1	0.04	23	<5	<1	15	<10	0.01	37	<5	34	1
L4+00S 1+25E	1.14	1334	4	<0.01	8	0.14	52	5	3	19	14	0.09	128	<5	196	1
L4+00S 1+50E	0.53	737	3	<0.01	8	0.17	80	<5	2	20	11	0.03	92	<5	147	<1
L4+00S 1+75E	0.33	490	2	<0.01	3	0.07	29	<5	1	14	<10	0.01	58	<5	79	1
L4+00S 2+00E	0.37	462	4	<0.01	5	0.10	95	<5	1	18	<10	0.02	82	<5	106	<1
L4+00S 2+25E	0.70	1071	3	<0.01	6	0.13	74	5	1	11	<10	0.02	68	<5	184	<1
L4+00S 2+50E	0.22	191	4	0.01	6	0.11	128	<5	1	22	<10	0.01	60	<5	71	<1
L4+00S 2+75E	0.46	184	7	0.01	4	0.12	105	<5	1	26	<10	0.02	47	<5	71	1
L4+00S 3+00E	0.29	379	4	<0.01	6	0.07	93	<5	1	25	<10	0.03	77	<5	92	<1
L4+00S 3+25E	0.37	360	3	<0.01	6	0.07	30	<5	1	16	<10	0.02	72	<5	68	<1
L4+00S 3+50E	0.24	206	7	<0.01	9	0.20	58	<5	1	17	10	0.01	41	<5	89	<1
L4+00S 3+75E	0.40	595	5	0.11	5	0.19	45	<5	1	61	12	0.02	42	<5	149	<1
L4+00S 4+00E	0.28	336	5	0.11	4	0.18	55	<5	<1	61	10	0.01	41	<5	105	<1
L4+00S 4+25E	0.63	1187	6	0.10	7	0.19	46	5	3	64	13	0.05	45	<5	222	<1
L4+00S 4+50E	0.63	1436	7	0.11	5	0.20	46	6	3	68	15	0.04	46	<5	238	<1
L4+00S 4+75E	0.60	492	7	0.02	12	0.33	48	9	2	47	21	0.03	90	<5	139	<1
L4+00S 5+00E	0.40	466	6	0.01	8	0.11	87	<5	1	30	10	0.03	73	<5	94	1
L4+00S 5+25E	1.00	1718	9	<0.01	10	0.18	25	<5	2	44	<10	0.03	49	<5	324	<1
L4+00S 5+50E	1.02	1700	6	<0.01	11	0.16	19	6	2	37	11	0.05	47	<5	261	1
Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample



INTERNATIONAL PLASMA LABORATORY LTD

2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
L4+00S 5+75E	Soil	65	0.6	2.12	12	106	<2	0.44	2.2	21	9	107	>5.00	<3	0.08	11
L4+00S 6+00E	Soil	<5	0.6	2.08	14	90	<2	0.49	1.1	14	21	44	4.68	<3	0.12	8
L4+00S 6+25E	Soil	15	0.8	2.25	13	271	<2	1.20	3.5	16	8	144	4.78	<3	0.10	15
L4+00S 6+50E	Soil	10	1.1	2.09	15	246	<2	1.18	3.1	15	9	140	4.63	<3	0.11	19
L4+00S 6+75E	Soil	5	1.8	1.95	9	487	<2	2.19	5.7	9	16	185	2.44	<3	0.11	23
L4+00S 7+00E	Soil	40	0.8	3.06	16	74	<2	0.17	1.2	10	16	23	>5.00	<3	0.12	11
L4+00S 7+25E	Soil	<5	0.3	1.04	10	36	2	0.15	0.3	1	3	2	1.02	<3	0.05	7
L4+00S 7+50E	Soil	<5	0.7	1.71	12	48	<2	0.10	0.3	1	5	6	1.20	<3	0.05	9
L4+00S 7+75E	Soil	5	0.5	1.39	11	26	<2	0.12	0.3	2	7	3	1.73	<3	0.05	7
L4+00S 8+00E	Soil	<5	0.7	1.99	12	62	<2	0.15	0.7	8	13	4	4.30	<3	0.05	8
L4+00S 8+25E	Soil	<5	0.4	1.42	11	50	<2	0.09	0.4	3	11	4	1.79	<3	0.06	8
L4+00S 8+50E	Soil	10	0.6	2.08	15	46	<2	0.10	0.7	8	9	9	4.55	<3	0.08	7
L4+00S 8+75E	Soil	5	0.6	1.40	7	284	<2	0.53	0.4	5	8	5	1.78	<3	0.09	10
L4+00S 9+00E	Soil	10	0.6	2.05	10	38	<2	0.14	0.7	8	8	6	3.63	<3	0.08	8
L4+00S 9+25E	Soil	<5	0.7	1.63	11	44	<2	0.12	0.3	3	10	5	2.33	<3	0.06	10
L4+00S 9+50E	Soil	<5	0.6	2.08	12	27	<2	0.21	0.7	8	10	7	3.81	<3	0.06	7
L4+00S 9+75E	Soil	<5	0.6	1.45	10	66	<2	0.38	0.9	7	4	14	2.69	<3	0.09	9
L4+00S 10+00E	Soil	10	0.7	1.67	10	34	<2	0.55	0.7	13	10	22	3.19	<3	0.10	11
L4+00S 10+25E	Soil	<5	1.8	3.15	10	622	<2	2.04	3.2	9	14	130	3.13	<3	0.18	28
L4+00S 10+50E	Soil	<5	0.6	1.36	10	94	<2	0.23	0.6	4	7	12	2.50	<3	0.09	8
L4+00S 10+75E	Soil	5	0.1	3.53	<5	744	<2	1.76	5.4	14	20	141	3.58	<3	0.27	29
L4+00S 11+00E	Soil	<5	0.7	2.12	9	407	<2	0.39	0.8	5	9	21	1.97	<3	0.06	11
L4+00S 11+25E	Soil	<5	0.4	1.78	<5	204	<2	0.58	1.5	13	11	8	3.56	<3	0.14	9
L4+00S 11+50E	Soil	<5	0.7	2.06	<5	190	<2	0.30	1.5	12	15	7	3.31	<3	0.09	8
L4+00S 11+75E	Soil	<5	0.5	1.27	7	37	<2	0.23	0.4	3	5	3	1.50	<3	0.05	6
L4+00S 12+00E	Soil	<5	0.6	2.65	7	326	<2	0.47	1.7	14	19	20	4.08	<3	0.09	10
L4+00S 12+25E	Soil	10	0.7	2.12	8	414	<2	0.57	1.9	11	11	22	4.02	<3	0.10	12
L4+00S 12+50E	Soil	5	0.6	2.46	14	57	<2	0.23	1.0	9	11	15	4.62	<3	0.06	7
L4+00S 12+75E	Soil	<5	0.7	1.39	<5	197	<2	0.41	1.4	12	12	14	4.62	<3	0.10	8
L4+00S 13+00E	Soil	5	1.0	1.92	6	359	<2	1.03	2.4	9	16	54	3.02	<3	0.20	17
L7+50N 0+00E	Soil	<5	0.7	2.18	10	46	<2	0.13	0.5	13	12	9	4.81	<3	0.06	8
L7+50N 0+25E	Soil	5	0.6	2.25	14	76	<2	0.09	0.6	8	13	9	4.18	<3	0.06	10
L7+50N 0+50E	Soil	<5	0.7	2.99	13	37	<2	0.35	0.8	24	23	14	>5.00	<3	0.09	11
L7+50N 0+75E	Soil	95	0.6	2.13	10	66	13	0.38	0.7	23	20	11	4.98	<3	0.09	9
L7+50N 1+00E	Soil	20	0.6	1.84	12	52	<2	0.22	0.8	15	15	8	>5.00	<3	0.09	11
L7+50N 1+25E	Soil	<5	0.6	2.26	11	48	<2	0.30	0.9	19	16	7	>5.00	<3	0.09	9
L7+50N 1+50E	Soil	<5	0.7	2.30	13	56	<2	0.25	0.6	16	17	11	4.72	<3	0.08	9
L7+50N 1+75E	Soil	<5	0.5	1.62	7	44	<2	0.46	0.6	12	19	5	3.04	<3	0.09	6
L7+50N 2+00E	Soil	<5	0.6	1.59	7	48	<2	0.30	0.3	10	15	6	3.26	<3	0.08	6

Minimum Detection	5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection	10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP
-- = Not Analysed	unr = Not Requested	ins = Insufficient Sample													



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
L4+00S 5+75E	1.07	1799	8	<0.01	10	0.16	20	<5	3	37	<10	0.05	47	<5	273	<1
L4+00S 6+00E	1.37	1873	5	<0.01	7	0.14	9	6	2	36	10	0.06	48	<5	235	1
L4+00S 6+25E	1.05	2041	9	<0.01	9	0.16	23	<5	2	78	<10	0.03	44	<5	366	1
L4+00S 6+50E	1.02	1599	7	<0.01	9	0.17	22	5	2	76	<10	0.03	40	<5	305	2
L4+00S 6+75E	0.37	1520	6	<0.01	8	0.21	25	<5	3	111	<10	0.01	28	<5	245	2
L4+00S 7+00E	0.80	935	4	<0.01	13	0.08	71	<5	2	33	11	0.04	84	<5	185	<1
L4+00S 7+25E	0.04	61	1	0.01	1	0.03	10	<5	<1	18	<10	0.01	27	<5	17	1
L4+00S 7+50E	0.06	68	2	<0.01	1	0.05	23	<5	<1	16	<10	0.01	30	<5	31	<1
L4+00S 7+75E	0.16	218	2	<0.01	3	0.02	15	<5	1	17	<10	0.02	50	<5	40	<1
L4+00S 8+00E	0.60	858	3	<0.01	9	0.06	13	<5	1	17	<10	0.03	64	<5	97	<1
L4+00S 8+25E	0.15	264	2	0.01	6	0.05	21	5	1	12	<10	0.01	44	<5	41	<1
L4+00S 8+50E	0.52	1021	4	<0.01	7	0.07	24	<5	1	16	<10	0.04	110	<5	105	<1
L4+00S 8+75E	0.33	516	3	<0.01	4	0.06	10	<5	1	34	<10	0.02	36	<5	74	<1
L4+00S 9+00E	0.64	835	3	<0.01	7	0.06	16	<5	1	20	<10	0.03	65	<5	100	<1
L4+00S 9+25E	0.24	391	2	<0.01	6	0.08	16	<5	1	18	<10	0.02	48	<5	54	<1
L4+00S 9+50E	0.58	1027	2	<0.01	6	0.15	15	<5	1	22	<10	0.03	50	<5	91	<1
L4+00S 9+75E	0.63	770	3	<0.01	4	0.11	12	<5	1	37	<10	0.02	38	<5	125	<1
L4+00S 10+00E	0.86	1804	1	<0.01	7	0.14	7	<5	2	41	<10	0.05	37	<5	140	1
L4+00S 10+25E	0.69	1654	5	<0.01	8	0.27	18	<5	4	77	<10	0.01	40	<5	325	12
L4+00S 10+50E	0.26	434	2	<0.01	5	0.08	27	<5	1	20	<10	0.02	46	<5	87	1
L4+00S 10+75E	0.83	5314	9	<0.01	8	0.22	21	<5	5	74	<10	0.01	42	<5	362	11
L4+00S 11+00E	0.37	627	4	<0.01	5	0.10	14	<5	<1	34	<10	0.01	39	<5	114	1
L4+00S 11+25E	1.04	5939	3	<0.01	12	0.16	8	<5	1	34	<10	0.04	41	<5	175	<1
L4+00S 11+50E	0.77	5770	5	<0.01	9	0.11	10	<5	1	24	<10	0.02	44	<5	149	<1
L4+00S 11+75E	0.27	422	1	<0.01	3	0.05	9	<5	1	23	<10	0.03	31	<5	61	<1
L4+00S 12+00E	1.12	3471	5	<0.01	10	0.12	12	5	2	32	<10	0.03	52	<5	263	1
L4+00S 12+25E	0.56	4183	5	<0.01	8	0.13	26	<5	1	35	<10	0.03	49	<5	278	<1
L4+00S 12+50E	0.67	1074	3	<0.01	9	0.10	26	<5	1	20	<10	0.03	75	<5	130	<1
L4+00S 12+75E	0.35	3670	6	<0.01	8	0.08	31	<5	1	27	<10	0.03	51	10	129	<1
L4+00S 13+00E	0.59	3509	4	<0.01	6	0.20	13	<5	3	36	<10	0.01	41	<5	264	4
L7+50N 0+00E	0.77	1325	2	<0.01	11	0.09	8	<5	1	12	<10	0.08	89	<5	107	<1
L7+50N 0+25E	0.44	460	2	<0.01	9	0.05	8	<5	1	15	<10	0.07	93	<5	67	<1
L7+50N 0+50E	1.70	1626	2	<0.01	18	0.13	2	7	5	14	10	0.15	110	<5	178	2
L7+50N 0+75E	1.43	1796	2	<0.01	15	0.07	8	5	4	19	<10	0.16	121	<5	139	1
L7+50N 1+00E	0.71	1379	2	<0.01	11	0.07	10	5	3	17	10	0.15	127	<5	95	1
L7+50N 1+25E	1.30	1895	2	0.01	14	0.09	5	5	3	16	10	0.13	133	<5	129	1
L7+50N 1+50E	1.15	1153	2	<0.01	13	0.06	5	<5	3	17	<10	0.11	103	<5	125	1
L7+50N 1+75E	1.03	1735	1	0.01	5	0.09	5	<5	2	41	<10	0.11	53	<5	105	1
L7+50N 2+00E	0.69	1189	2	<0.01	6	0.06	6	<5	1	33	<10	0.09	56	<5	84	1

Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

Sample Name	Type	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %	La ppm
L7+50N 2+25E	Soil	<5	0.4	1.93	10	39	<2	0.40	0.6	14	20	5	3.98	<3	0.10	6
L7+50N 2+50E	Soil	<5	0.5	1.99	11	60	<2	0.36	0.5	11	10	22	3.30	<3	0.09	8
L7+50N 2+75E	Soil	<5	0.7	1.74	7	46	<2	0.30	0.5	15	15	5	3.87	<3	0.10	8
L7+50N 3+00E	Soil	<5	0.6	1.92	14	48	<2	0.18	0.5	12	13	11	4.01	<3	0.09	8
L7+50N 3+25E	Soil	5	0.6	2.36	15	70	<2	0.26	0.5	13	15	38	4.01	<3	0.09	11
L7+50N 3+50E	Soil	<5	0.7	2.36	12	54	<2	0.36	0.6	17	11	17	4.28	<3	0.10	11
L7+50N 0+25W	Soil	<5	0.6	2.74	15	52	<2	0.44	0.9	23	15	11	>5.00	<3	0.09	9
L7+50N 0+50W	Soil	<5	0.7	2.53	14	45	<2	0.35	0.8	22	21	13	>5.00	<3	0.08	9
L7+50N 0+75W	Soil	<5	0.2	2.28	12	41	<2	0.30	0.7	19	19	12	4.92	<3	0.09	8
L7+50N 1+00W	Soil	<5	0.6	2.53	15	67	<2	0.17	0.5	11	14	19	3.42	<3	0.06	12
L7+50N 1+25W	Soil	<5	0.5	1.93	12	26	<2	0.42	0.5	12	17	6	3.72	<3	0.08	7
L7+50N 1+50W	Soil	<5	0.7	2.13	11	32	<2	0.39	0.5	13	12	4	4.45	<3	0.09	8
L7+50N 1+75W	Soil	<5	0.6	1.92	9	43	<2	0.63	0.3	12	19	9	3.19	<3	0.10	6
L7+50N 2+00W	Soil	<5	0.5	1.40	9	34	<2	0.38	0.2	7	9	4	2.35	<3	0.06	5
L7+50N 2+25W	Soil	<5	0.6	1.62	10	40	<2	0.31	0.4	8	13	3	2.85	<3	0.08	6
L7+50N 2+50W	Soil	<5	0.6	1.49	8	30	<2	0.31	0.3	7	4	3	2.22	<3	0.05	5
L7+50N 2+75W	Soil	<5	0.6	1.99	14	36	<2	0.43	0.5	11	9	6	3.61	<3	0.08	9
L7+50N 3+00W	Soil	<5	0.8	3.08	15	293	<2	0.49	0.9	11	15	22	2.88	<3	0.14	12
L9+00N 0+00E	Soil	<5	0.6	1.93	14	66	<2	0.31	0.8	12	14	8	3.88	<3	0.10	9
L9+00N 0+25E	Soil	<5	0.6	2.20	12	52	<2	0.28	0.6	12	19	5	3.77	<3	0.09	7
L9+00N 0+50E	Soil	<5	0.7	3.07	14	55	<2	0.25	0.9	19	18	21	3.40	<3	0.09	12
L9+00N 0+75E	Soil	<5	0.6	2.43	11	50	<2	0.26	0.7	20	19	8	>5.00	<3	0.09	8
L9+00N 1+00E	Soil	<5	0.5	2.45	13	62	<2	0.37	0.6	14	16	9	4.58	<3	0.09	8
L9+00N 1+25E	Soil	<5	0.2	2.51	11	151	<2	0.42	0.8	17	13	17	4.49	<3	0.09	19
L9+00N 1+50E	Soil	<5	0.2	2.36	12	43	<2	0.43	0.5	13	9	6	4.27	<3	0.09	9
L9+00N 0+25W	Soil	25	0.4	2.39	11	51	<2	0.31	0.7	20	25	11	>5.00	<3	0.10	10
L9+00N 0+50W	Soil	<5	0.3	2.61	12	46	<2	0.42	0.8	25	21	11	>5.00	<3	0.06	8
L9+00N 0+75W	Soil	<5	0.4	1.86	12	50	<2	0.19	0.7	20	15	10	>5.00	<3	0.06	8
L9+00N 1+00W	Soil	<5	0.3	1.95	9	36	<2	0.22	0.5	24	16	8	>5.00	<3	0.06	7
L9+00N 1+25W	Soil	5	0.5	1.93	14	51	2	0.16	0.7	14	17	11	4.37	<3	0.09	10
L9+00N 1+50W	Soil	15	0.9	2.75	20	61	<2	0.14	0.8	9	14	32	3.81	<3	0.08	13
L9+00N 1+75W	Soil	15	0.7	1.73	14	41	<2	0.28	0.5	9	9	9	3.70	<3	0.08	8
L9+00N 2+00W	Soil	<5	0.6	2.32	13	43	<2	0.27	0.7	16	20	12	>5.00	<3	0.09	9
L9+00N 2+25W	Soil	5	0.5	1.70	11	50	<2	0.25	0.5	13	16	15	3.84	<3	0.10	9
L9+00N 2+50W	Soil	<5	0.5	2.05	11	49	<2	0.29	0.5	12	13	8	4.04	<3	0.10	9
L9+00N 2+75W	Soil	20	0.9	2.13	15	117	<2	0.58	0.6	11	17	15	3.51	<3	0.10	9
L9+00N 3+00W	Soil	<5	0.9	2.62	12	270	3	0.83	0.6	9	11	14	2.58	<3	0.10	10

Minimum Detection	5	0.1	0.01	5	2	2	0.01	0.1	1	1	1	0.01	3	0.01	2
Maximum Detection	10000	100.0	5.00	10000	10000	10000	10.00	10000.0	10000	10000	20000	5.00	10000	10.00	10000
Method	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP
-- = Not Analysed	unr = Not Requested	ins = Insufficient Sample													



2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

Sample Name	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	V ppm	W ppm	Zn ppm	Zr ppm
L7+50N 2+25E	1.14	1445	2	<0.01	8	0.08	6	5	3	34	<10	0.13	75	<5	117	1
L7+50N 2+50E	0.88	1576	2	<0.01	10	0.10	<2	<5	1	31	<10	0.04	54	<5	119	<1
L7+50N 2+75E	1.01	1549	2	0.01	8	0.07	4	<5	2	22	<10	0.10	71	<5	120	1
L7+50N 3+00E	0.79	992	2	<0.01	12	0.08	7	<5	1	15	<10	0.06	71	<5	100	1
L7+50N 3+25E	1.05	1021	2	<0.01	17	0.08	5	<5	3	16	<10	0.09	67	<5	117	2
L7+50N 3+50E	1.27	1655	1	<0.01	14	0.10	2	5	3	18	<10	0.13	78	<5	169	2
L7+50N 0+25W	1.68	1615	2	0.01	18	0.09	3	6	5	20	10	0.18	122	<5	175	2
L7+50N 0+50W	1.54	1291	2	<0.01	17	0.07	2	6	5	16	10	0.18	111	<5	160	3
L7+50N 0+75W	1.19	1527	2	<0.01	12	0.08	5	5	3	16	10	0.13	94	<5	146	2
L7+50N 1+00W	0.67	1196	2	<0.01	9	0.11	5	<5	<1	19	<10	0.02	55	<5	100	1
L7+50N 1+25W	0.90	917	2	<0.01	7	0.05	10	5	2	36	<10	0.14	64	<5	92	2
L7+50N 1+50W	0.96	2080	2	<0.01	6	0.08	3	6	2	35	<10	0.11	64	<5	116	1
L7+50N 1+75W	1.03	1170	2	0.04	10	0.10	5	<5	1	50	<10	0.07	55	<5	105	1
L7+50N 2+00W	0.43	740	2	0.01	3	0.05	8	<5	1	37	<10	0.11	45	<5	56	1
L7+50N 2+25W	0.59	873	1	0.01	4	0.05	8	<5	1	32	<10	0.09	50	<5	74	1
L7+50N 2+50W	0.48	832	2	<0.01	4	0.09	6	<5	1	33	<10	0.05	37	<5	62	<1
L7+50N 2+75W	0.86	1148	2	<0.01	8	0.09	7	<5	2	41	<10	0.09	63	<5	106	1
L7+50N 3+00W	0.61	1996	2	0.01	9	0.15	10	<5	1	44	<10	0.01	67	<5	113	1
L9+00N 0+00E	0.84	1199	2	<0.01	7	0.08	6	5	1	28	<10	0.07	55	<5	105	1
L9+00N 0+25E	0.79	1812	2	<0.01	7	0.06	3	<5	1	30	<10	0.09	56	<5	115	<1
L9+00N 0+50E	0.93	1804	2	0.01	12	0.12	8	5	1	18	<10	0.04	64	<5	124	1
L9+00N 0+75E	1.20	1828	3	<0.01	13	0.07	6	<5	3	16	11	0.14	114	<5	134	2
L9+00N 1+00E	0.91	1156	2	<0.01	10	0.08	7	5	2	31	<10	0.11	82	<5	118	2
L9+00N 1+25E	1.00	2637	2	0.01	12	0.13	6	<5	1	40	10	0.06	90	<5	137	1
L9+00N 1+50E	1.00	1352	2	<0.01	7	0.10	4	5	2	35	<10	0.12	73	<5	106	1
L9+00N 0+25W	1.30	1823	2	0.01	18	0.08	4	<5	4	18	10	0.14	106	<5	158	2
L9+00N 0+50W	1.76	1823	2	<0.01	17	0.09	3	<5	6	16	13	0.21	130	<5	180	3
L9+00N 0+75W	0.87	1628	3	<0.01	9	0.05	11	<5	4	12	<10	0.19	114	<5	103	2
L9+00N 1+00W	1.30	2023	2	<0.01	12	0.05	5	6	4	14	10	0.20	108	<5	139	2
L9+00N 1+25W	0.69	1186	2	<0.01	11	0.08	10	<5	2	15	<10	0.10	96	<5	91	1
L9+00N 1+50W	0.59	804	3	<0.01	13	0.14	20	<5	1	18	<10	0.04	59	<5	105	1
L9+00N 1+75W	0.60	554	2	<0.01	7	0.06	9	<5	2	26	<10	0.10	69	<5	80	1
L9+00N 2+00W	1.06	970	2	<0.01	13	0.05	6	<5	4	23	<10	0.16	108	<5	126	1
L9+00N 2+25W	0.72	1178	2	<0.01	7	0.05	10	<5	2	27	<10	0.11	72	<5	96	1
L9+00N 2+50W	0.69	997	2	<0.01	8	0.04	13	<5	2	33	<10	0.12	75	<5	92	1
L9+00N 2+75W	0.84	784	2	<0.01	10	0.07	8	6	2	47	<10	0.07	58	<5	108	1
L9+00N 3+00W	0.58	2022	3	0.01	8	0.24	12	<5	1	66	<10	0.01	59	<5	95	1

Minimum Detection	0.01	1	1	0.01	1	0.01	2	5	1	1	10	0.01	5	5	1	1
Maximum Detection	10.00	10000	1000	5.00	10000	5.00	20000	1000	10000	10000	1000	1.00	10000	1000	20000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

-- = Not Analysed unr = Not Requested ins = Insufficient Sample

APPENDIX VI
STATEMENT OF COSTS

CONSOLIDATED HARLIN RESOURCES LIMITED
Project 90BC048
JOANNA III AND IV CLAIMS
TOODOGGONE AREA

Period of Field Work: September 13, 1990 to September 22, 1990

Salaries

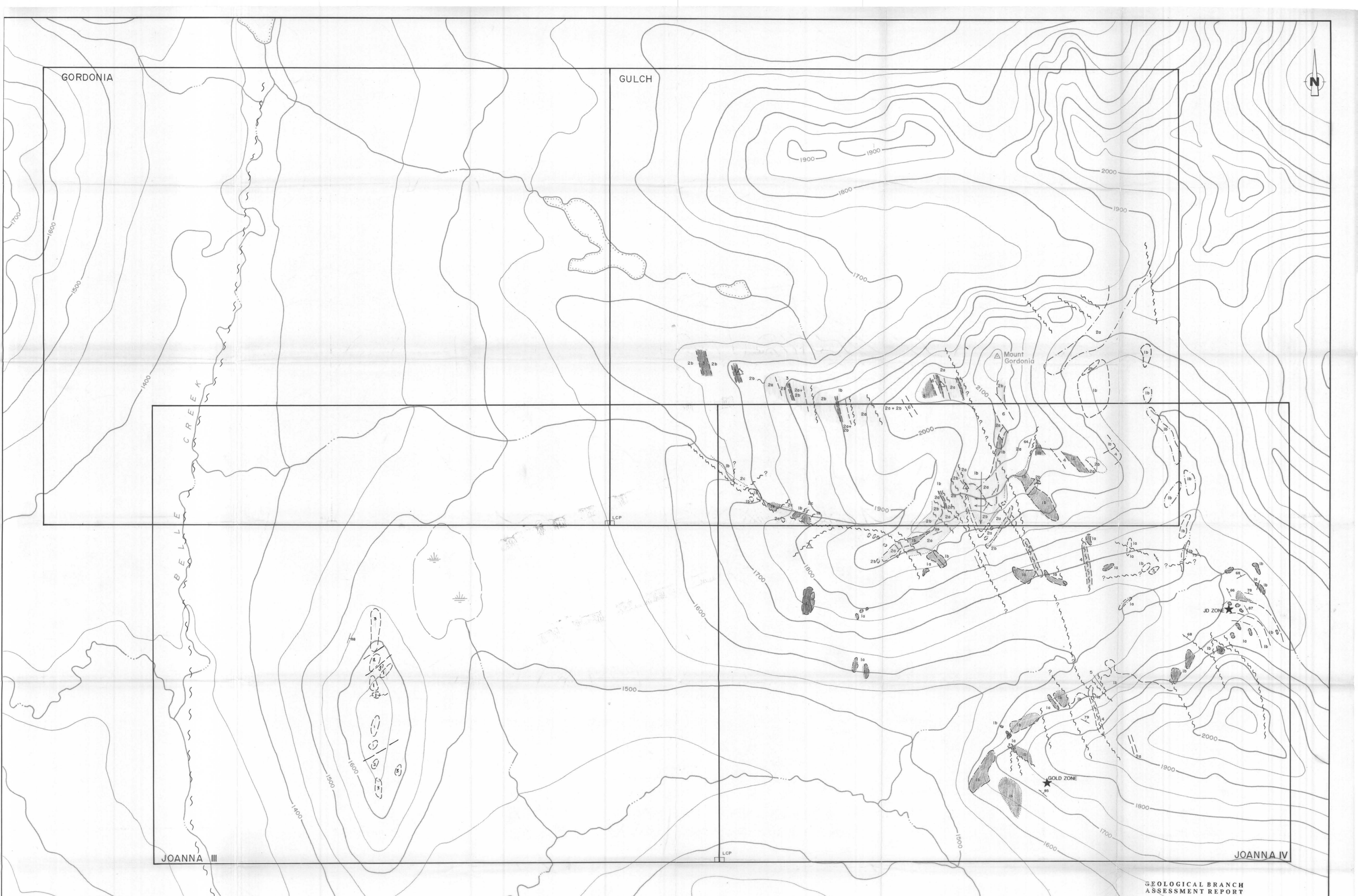
J.Dahrouge, Proj. Geologist, 10.0 days @ \$350/day	\$ 3,500.00	
D.Osijuk, Geologist, 10.0 days @ \$300/day	3,000.00	
D.Hebditch, Technician, 10.0 days @ \$225/day	2,250.00	
D.Carstens, Prospector, 6.0 days @ \$300/day	<u>1,800.00</u>	\$ 10,550.00

Project Expenses

Project Preparation		2,725.00
Mobilization/Demobilization		21,500.00
Domicile 36.00 man days @\$110/man/day		3,960.00
Geochemistry and Laboratory Service		
Soils		
154 Samples \$1.00/sample preparation	154.00	
154 Samples \$10.00/sample 30 Element ICP;Au FA	1,540.00	
Rocks		
106 Samples \$3.00/sample preparation	318.00	
106 Samples \$10.00/sample 30 Element ICP;Au FA	1,060.00	
Miscellaneous charges	<u>60.95</u>	3,132.95
Helicopter Support 9.2 hours @ \$778.71/hour		7,164.13
Fixed Wing support		2,163.55
Radio Rental 0.5 months @\$250/month		125.00
Walkie talkie rental		159.00
Field Supplies		1,886.01
Chain Saw Rental .5 months @ \$250/month		125.00
Expediting		709.86
Supervision		1,200.00
Assessment Filing(Government filing)		350.00
Accounting, Communication and freight		754.19

Computer Rental 10 days @\$20.00/day	200.00
Data Compilation of previous work	1,750.00
Report Preparation, drafting and compilation	5,550.00
15% Management Fees(Not on Field Salaries)	<u>8,018.20</u>
TOTAL	<u>\$ 72,022.89</u>

Page (2) Two of two (2) pages

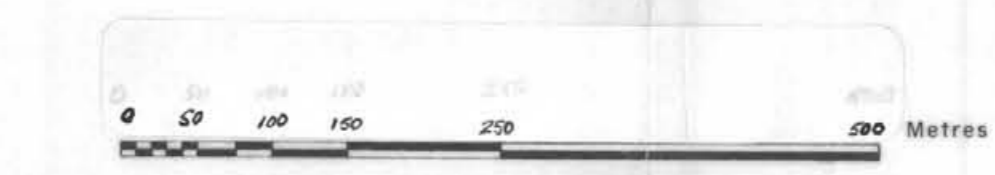


GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,671

SYMBOLS	
	Creek
	Lake, Pond
	Swamp
	Contour (50m intervals)
	Claim outline
	Geological contact
	Outcrop
	Outcrop, covered in part
	Fault, ? where uncertain
	Fault with lateral movement
	Bedding
	Jointing; vertical, inclined
	Veining
	Overturned anticline

LEGEND	
909	UNIT 1 TAKLA GROUP: Andesitic flows and pyroclastics. Late Triassic. a) Light to dark green massive. Some Rhyolite interbeds. b) Light to dark green, porphyritic.
920	UNIT 2 TOODOOGONE VOLCANICS: Middle Jurassic. a) Purple Agglomerate and Grey to Purple Tuffs. b) Rhyolites and Orange crystal to lithic Tuffs. c) Lacustrine sediments with interbedded Tuff beds.
INTRUSIVES	
429	UNIT 3 OMINECA INTRUSIVES: Quartz Monzonite.
	UNIT 4 QUARTZ FELDSPAR PORPHYRY DYKES (RHYOLITE)
	UNIT 5 DIABASE - ANDESITE DYKES
FLOWS	
	UNIT 6 TRACHYTE.



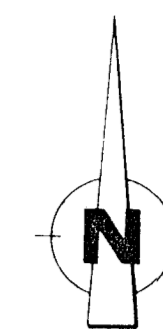
CONSOLIDATED HARLIN RESOURCES LTD.
JOANNA PROPERTY
GIMBEE W.D., N.C.

Geology

SCALE: 1:20,000	N.T.S. 94E/8	FIGURE NO. 5
DRAWN BY: [Name]	DATE: OCT. 1990	
CHECK BY: [Name]	PROJECT NO. BOB/COR/6	FILE NO. [Number]

INTEC RESOURCE MANAGEMENT LTD.

S-026 + S-020
+ S-021
S-025 + + S-022
+ S-023



GORDONIA

GULCH

JOANNA IV

JOANNA III


MINERALOGICAL BRANCH
ASSESSMENT REPORT

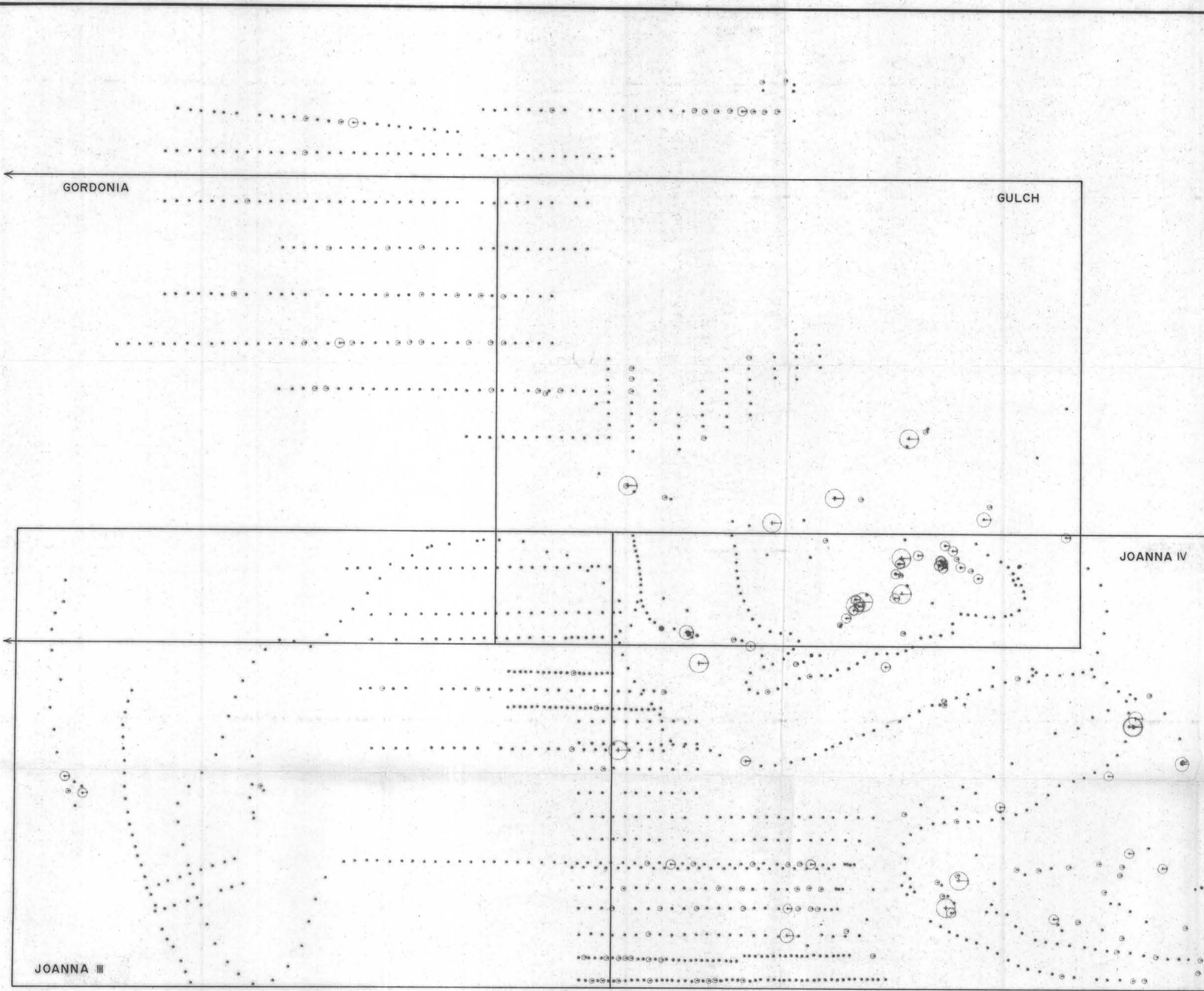
20,671
600 metres

CONSOLIDATED HARLIN RESOURCES LTD.

JOANNA PROPERTY
OMINECA M.O., B.C.

COMPILATION
Sample Location Map
1985, 1986, 1988, 1990

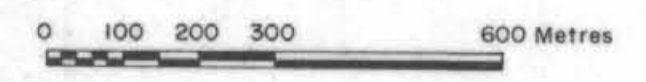
	SCALE 1:10,000	N.T.S. 94E/6	FIGURE No. 7
	OWN. BY	DATE OCT. 1990	FILE No.
CHKD BY	PROJECT No. 90BC048		




o 0 - 25 ppb, Au
o 26 - 100 ppb, Au
o 101 - 500 ppb, Au
o 501 - 1000 ppb, Au
o 1001 - 10,000 ppb, Au

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,671



CONSOLIDATED HARLIN RESOURCES LTD.		
JOANNA PROPERTY		
OMINECA M.D., B.C.		
COMPILATION MAP		
Gold Geochemistry		
1985, 1986, 1988, 1990.		
	SCALE: 1:10,000	N.T.S. 94E/6
	DWN. BY:	DATE: OCT. 1990
	CHKD. BY:	PROJECT No: 90BC048
		FIGURE No: 8



GORDONIA

GULCH

JOANNA IV

JOANNA III

- ▲ 0 - 100 ppm, Cu
- △ 101 - 500 ppm, Cu
- △ 501 - 1000 ppm, Cu
- △ 1001 - 10,000 ppm, Cu
- △ 10,000 - 20,000, Cu

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,671

0 100 200 300 600 Metres

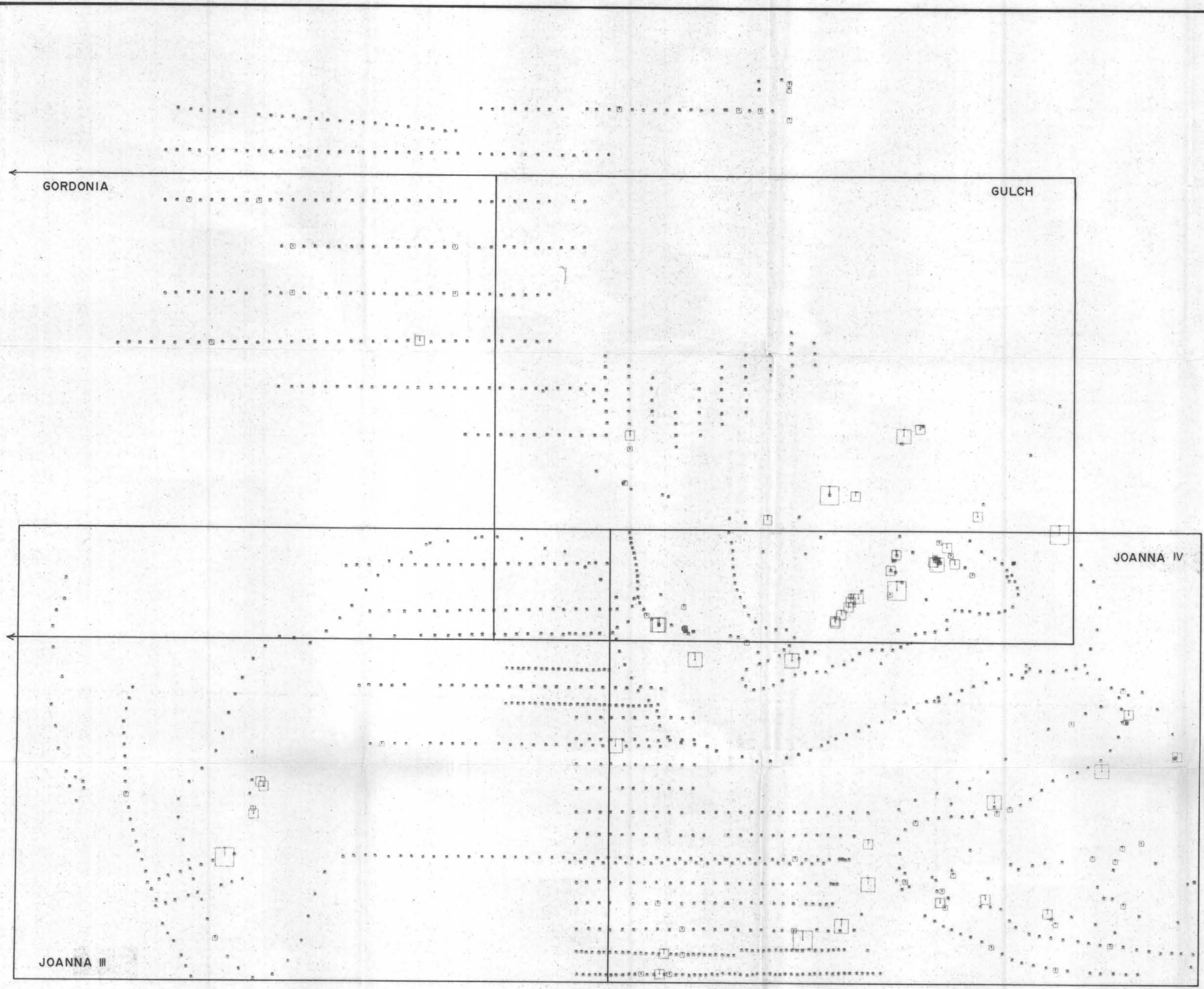
CONSOLIDATED HARLIN RESOURCES LTD.

JOANNA PROPERTY
OMINECA M.D., B.C.

COMPILATION MAP
Copper Geochemistry
1985, 1986, 1988, 1990



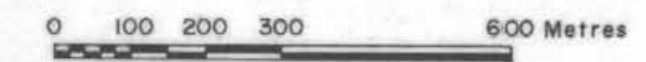
SCALE: 1:10,000	N.T.S.: 94E/6	FIGURE No: 9
DWN. BY:	DATE: OCT. 1990	FILE No:
CHKD. BY:	PROJECT No: 90BC048	



- 0-2.0 ppm, Ag
- ◻ 2.1-4.0 ppm, Ag
- ◻ 4.1-10.0 ppm, Ag
- ◻ 10.1-25.0 ppm, Ag
- ◻ 25.1-500 ppm, Ag

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,671



CONSOLIDATED HARLIN RESOURCES LTD.			
JOANNA PROPERTY			
<small>OMINECA M.D., B.C.</small>			
COMPILATION MAP			
<i>Silver Geochemistry</i>			
1985, 1986, 1988, 1990			
	SCALE: 1:10,000	N.T.S. 94E/6	FIGURE No: 10
	DWN BY:	DATE: OCT. 1990	FILE No:
	CHKD. BY:	PROJECT No: 90BC048	
	H-TEC RESOURCE MANAGEMENT LTD.		