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FOCAL RESOURCES LIMITED

Christina Property

Assessment Report

19950025

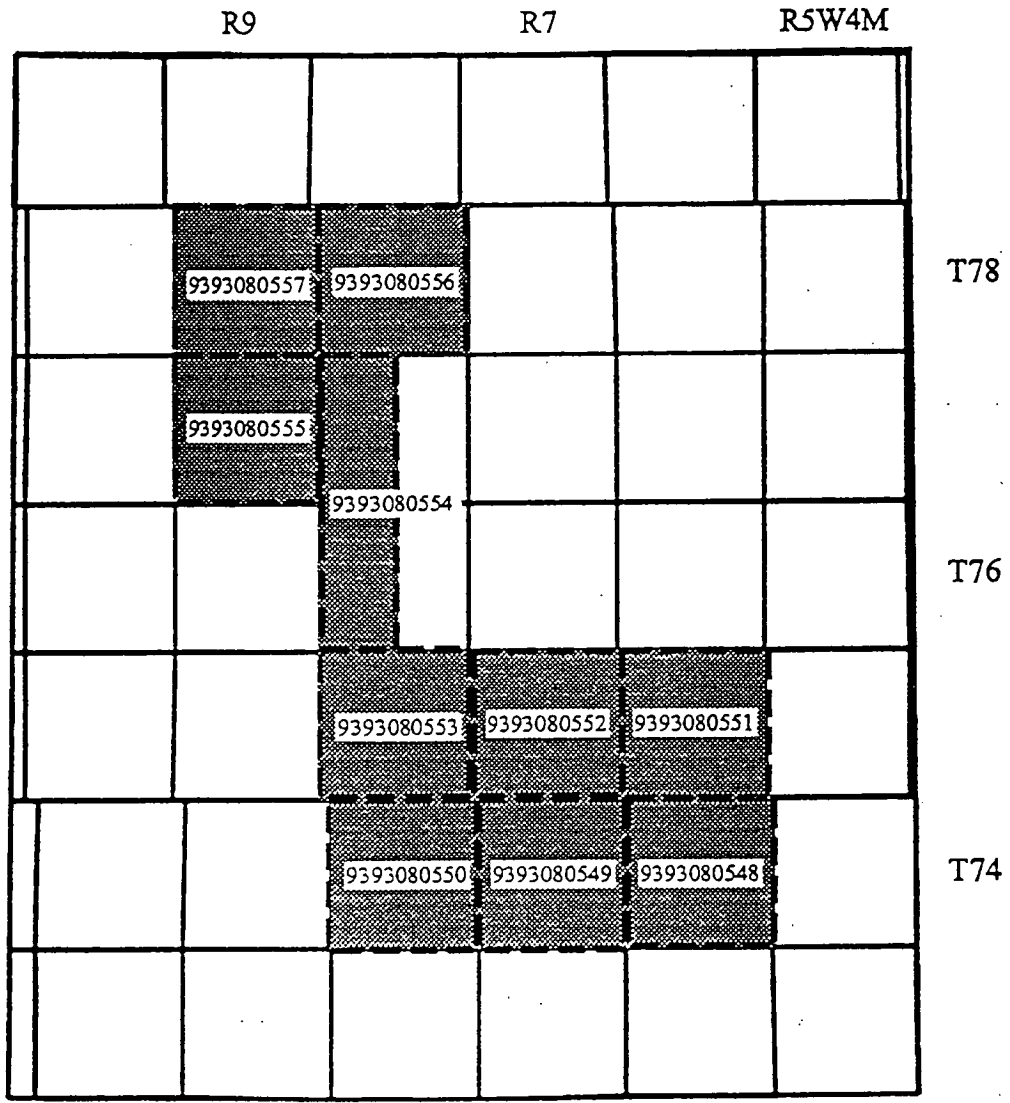
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August 1995

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Christina Property



TROYMIN RESOURCES LTD.	
Christina Property Permits	
June 1995	
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	NTS REFERENCE: 73M

Appendix IV Maps

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Summary

Focal Resources Limited began its Northeast Alberta exploration programme in the spring of 1994. The Christina Property was included in that study. The principal exploration objective was to find gold and other metals in the Devonian limestones. In order to test the mineralisation model, lake sediment, lake water, soil and peat samples were collected and analysed.

Relatively high geochemical values were found in all sample types. However, due to the difficulty in interpreting the results and the amount of work that would be required to obtain a meaningful data set, it is recommended that the property be dropped.

Introduction

This report summarises the exploration efforts carried out by Focal Resources Limited on the Christina Property (NTS 73 M; Maps 1 and 2) during the 1994 summer field season.

Regional Geology

The Northeast corner of Alberta is occupied by rocks of the Canadian Shield belonging to the Churchill Structural Province. These rocks are overlain by Phanerozoic sediments, thickening westwards. The Precambrian rocks in the region consist of the basement complex of intrusive and metasedimentary gneisses, unconformably overlain by the flat-lying sandstones of the Athabasca Group. During the Hudsonian Orogeny these rocks were structurally deformed, and metamorphosed to amphibolite grade. A hematitic regolith (the La Loche Formation), is commonly found overlying the Athabasca Formation (if present) or the Precambrian basement. A wedge of Devonian limestones unconformably overlies the Precambrian rocks, but is rarely found in outcrop due to the thick layer of glacial cover. Further west the Devonian is overlain by Cretaceous sandstones and shales.

Map 3 shows the bedrock geology of North-eastern Alberta, and Diagram 1 represents the regional stratigraphy of Northeast Alberta.

Mineralisation Model

Several variations of a working model were developed before the field work began and have been improved upon since (Diagram 2). The generic model for metallic mineral deposition involves ion rich waters migrating upwards and precipitating metals upon reaching an appropriate change in redox conditions. The upward migration of such fluids from the basal red beds or granite wash (La Loche Formation) is dependent on the breaching of aquatards in the overlying formations. Dissolution of the Prairie Evaporite

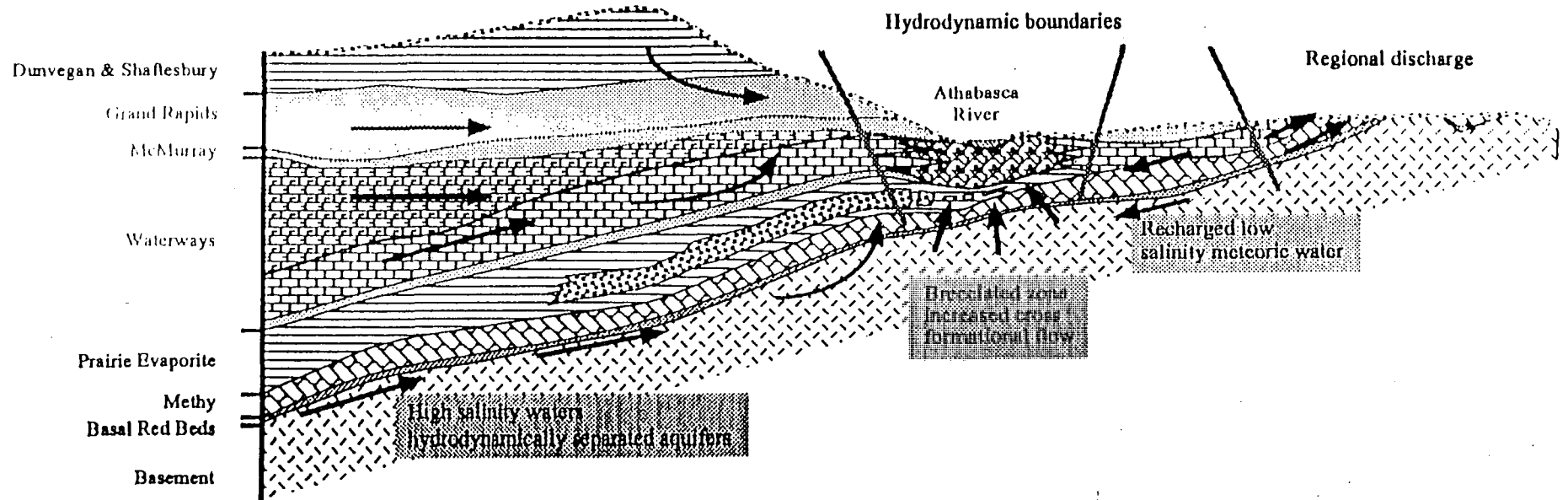
Diagram 1. Generalized Stratigraphy of Northeastern Alberta.


SYSTEM	GROUP	FORMATION	MEMBER	DOMINANT LITHOLOGY
Recent-Pleistocene		Drift		till outwash gravels aeolian sands
Cretaceous	Upper	La Biche	La Biche	shale
			Dunvegan	sandstone, siltstone
			Shaftsbury	shale, bentonites fish scale horizon
			Pelican	sand
			Joli Fou	shale
	Lower	Mannville	Grand Rapids	lithic sands
			Clearwater	shale & glauconite sands
			McMurray	quartzose sands, heavy oil
Devonian	Upper	Beaverhill Lake	Waterways	Mildred argillaceous limestone
			Moberly limestone & shale	
			Christina shale & limestone	
			Calumet limestone & shale	
			Firebag shale, minor limestone	
			Slave Point limestone	
	Middle	Upper Elk Point	Prairie Evaporite	salts, anhydrite, shale & dolomite
			Methy	dolomite, minor reefs
		Lower Elk Point	McLean River	shale, siltstone, dolomite
			Cold Lake	salt, minor shale
	Lower		Erestina	shale, limestone, anhydrite
			Lotsberg	salt, minor shale
La Loche			arkosic sand & conglomerate (basal red beds/granite wash)	
Precambrian		Athabasca Group	sandstone	
		Basement Complex	granitoids	

Modified after Dufresne et al (1994), and Hamilton and Mellon (1973).


SW

NE



 Collapse Zone

 Interpreted direction of groundwater flow

 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Regional Hydrodynamic Model <small>Hydrogeology adapted from work by Groundwater Solutions</small>	
<small>DRAWN BY: M. Innes/R. Hardy</small>	<small>DIAGRAM NO. 2</small>
<small>DATE: April 1993</small>	<small>SCALE: 1:2,000,000; VS 100X</small>
<small>APPROVED BY:</small>	<small>NOTE REFERENCE: 84A, 84H, 74B, 74L</small>
<small>PRIME CONSULTANT LAS ENERGY ASSOCIATES LIMITED</small>	

salts results in collapse structures, and the associated faulting/brecciation would provide the necessary fluid conduits for cross-formational fluid migration. The salts also provide a source of ions for the migrating fluids. Fluids with meteoric compositions moving downward through the overlying surficial material will also affect overall fluid chemistry. The resultant fluids have a high oxygen content, and precipitation of the dissolved ions will occur when the fluids encounter a reducing environment. The McMurray Formation in the area contains hydrocarbons, providing the necessary reducing conditions. The redox boundary may not be a planar horizon, such as the base of the McMurray Formation, but due to leakage of hydrocarbons into the underlying rocks may be a wider zone enveloping the McMurray/Waterways contact. As such, there is potential for mineralisation in the Cretaceous sands as well as in the Devonian limestones.

The model described above is a variation of the two-fluid mixing model for the deposition of Mississippi Valley Type lead-zinc ores. The carbonate rocks in the area exhibit several of the regional characteristics of MVT deposits: high porosity and permeability as a result of karstification, fracturing or faulting; the presence of biostromal carbonates; dolomitization and silicification; and an association with hydrocarbons (Olson et al, 1994).

In order to determine the potential for the type of mineralisation described above, geological interpretation (air photo and Landsat image analysis) and subsequent geochemical sampling of soils, peats, lake waters and sediments was conducted. The analyses show elevated geochemical values for several metals in all sample types.

Location, Access and Permit Tabulation

The Christina Property comprises the lands listed in Table 1. They are found within NTS map 73 M (Christina Lake). Map 1 shows the regional context of the property, and Map 2 shows the boundaries and permit numbers in detail. All Metallic Mineral Permits for the Christina Property are currently held by Troymin Resources Limited, under option to Focal Resources Limited.

Table 1
Permit Numbers and Locations

Permit Number	Section(s)	Township	R a n g e	Meridian
9393080548	1-36	74	6	W4
9393080549	1-36	74	7	W4
9393080550	1-36	74	8	W4
9393080551	1-36	75	6	W4
9393080552	1-36	75	7	W4
9393080553	1-36	75	8	W4
9393080554	4-9;16-21,38-33,	76	8	W4
	4-9;16-21,38-33,	77	8	W4
9393080555	1-36	77	9	W4
9393080556	1-36	78	8	W4
9393080557	1-36	78	9	W4

Access to the area was gained by road and all terrain vehicle.

Work Performed

Tables 2 and 3 show the work carried out on and/or in support of work on the Christina Property from May 1994 - June 1995, and the cost of that work.

Table 2
Work Performed - Geological and Geochemical Surveys

Type of Work	Dates	Statistics
Compilation of Existing Information	May - July 1994	
Lake Sediment Sampling	August & October 1994	16 samples
Lake Water Sampling	August & October 1994	10 samples
Soil Sampling	June - August 1994	12 samples
Peat Sampling	July - August 1994	6 Samples
Sample Analysis	August - October 1994	
Data Analysis, Interpretation and Consolidation	November 1994	

Table 3

Cost of Work Performed (as of June 30, 1995)

	Permits 5546557	Permits 5486553
Geological and Geochemical Surveys		
Company Labour & Consulting Fees	\$ 617.18	1654.53
Geological Studies	1,437.50	1437.50
Geochemical Studies	1,437.50	1437.50
Assaying/Analysis	1,437.50	1437.50
Transportation - helicopter	621.95	621.00
Transportation - fixed wing	288.00	216.00
Permits & Licences	37.58	25.00
Overhead	720.50	829.50
Total	\$ 6,597.71	\$ 7,658.53

Sampling Rationale, Procedures and Analysis

Exploration Strategy

The permits discussed in this report form a small portion of the lands considered in Focal Resources' overall programme for 1994. Positioning any specific property in a regional geological framework is an essential step in the interpretation of any data collected from that property. The information gathered from the literature was assembled and interpreted, an exploration and data collections strategy was developed, the appropriate field work was implemented, and the results were interpreted within a regional framework.

Due to the lack of bedrock exposure in this area, alternatives to the conventional approach were taken. Based on the literature and the available sampling media, peat, soil, lake sediment and lake water samples were collected for geochemical analysis.

The possibility that metallic ion rich waters could be migrating upward through conductive zones was tested by taking a series of lake water and sediment samples. It was believed that the lakes, many of which do not receive inflow from regional streams, would be the most likely repository for geochemical concentrations of metallic ions if these ions were reaching the near surface.

Lake Sediment Sampling

The lake sediment samples were collected using a tube-type sampling device designed by Dr. J. D. Campbell of Jaycon Reconnaissance. The lake sediment samples were transported to the lab as is (sealed in plastic bottles), where they were subsequently analysed using Neutron Activation Analysis (NAA) on the whole sample (Appendix I, Table 7).

Peat Sampling

Peat samples were taken, using a peat sampler designed by Dr. J.D Campbell of Jaycon Reconnaissance.

The peat samples were assayed using ICP-AES and FA-AA for gold (Appendix I, Table 5 and 6).

Soil Sampling

Soil samples taken on the Christina Property were mainly clay/sand from beneath the peats.

The soil samples were assayed using ICP-AES and FA-AA for gold (Table 5 and 6, Appendix I).

Water Sampling

Water samples were collected from a wide variety of locations throughout the Christina Property. Surface samples were collected in 1l bottles and, in the case of springs, as close to the source as possible.

Lake water samples were taken using a pontoon equipped helicopter. Sampling devices were designed and built by Dr. J. D. Campbell of Jaycon Reconnaissance. All water samples were placed in clean 1 l, sample bottles and were treated as follows (Cody, 1995):

Electrical conductivity and pH were measured on the raw, un-filtered water as soon as possible. Samples were filtered through a 0.45 μm cellulose acetate filter housed in a 2.4 l barrel filter unit using hand pumped air as a drive. Water was collected into 2, 125 ml polypropylene bottles. One was acidified to a pH<2 with five drops of concentrated nitric acid, sealed, labelled filtered acidified water and sent for analysis. The other was sealed and archived as filtered un-acidified water. A second filtered acidified sample was commonly taken for quality assurance and quality control purposes.

Gold, silver, and platinum group elements (PGEs) are unstable in aqueous solutions in plastic containers. To preserve these specific elements and to allow for lower limits of detection, a pre-concentration technique following that of Hall (1986), was utilised. To one litre of acidified water, 250 mg of activated carbon was added and vigorously agitated. The unstable elements are adsorbed onto the activated carbon. This mixture has been shown to be stable for over 30 days. The water plus activated carbon mixture was then re-filtered through a 0.45 μm cellulose acetate filter to collect the activated carbon. The collected activated carbon was then analysed for the above mentioned elements.

The acidified water samples and the activated carbon samples were analysed using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) by Elemental Research

Incorporated of Vancouver. The acidified water samples were run as received at ten times dilution. Table 7, Appendix I lists the elements and the standard detection limits for the water analyses. The activated carbon samples were made into solutions; 0.2g of dried sample was dissolved in 2 ml of aqua regia, and made up to 10 ml of solution with 18 megaohm water. These solutions were run at 2.5X dilution. Table 8, Appendix I lists the elements analysed and their respective detection limits for the activated carbon analyses.

The collecting, handling and treatment of all water samples was done under the supervision of John Cody of Ground Water Solutions Limited, Calgary.

Regional Ground Water Study

Water chemistry data from deep formations was collected over a wide area in the vicinity of this and other properties of interest. Existing wells were sampled using the best technology available. The waters were treated and analysed as described above for the surface waters. Existing water observation wells drilled by the Alberta Research Council and others formed the bulk of those sampled. Additional samples were taken from water supply wells and gas well separators in areas not covered by the existing piezometers. Four such samples were taken from within the boundaries of this property, however, the analysis of all the data formed an important part of the overall evaluation of the mineral potential of these permits.

Results

The analytical results are presented in Appendices II and III. Table 4 summarizes the ranges of selected elements.

Table 4
Analytical Results - Ranges of Selected Elements

	Gold	Copper	Lead	Zinc	Nickel
Lake Sediment	<5 ppb			60-180 ppm	<100 ppm
Peat	10-15 ppb	4-7 ppm	3-14 ppm	15-116 ppm	1-18 ppm
Soil	<5-16 ppb	3-25 ppm	4-19 ppm	12-186 ppm	4-51 ppm
Water	<0.1-0.4 ppb	<0.5-10.7 ppb	<0.10-33.3 ppb	3.58-68.3 ppb	<0.50-17.8 ppb

Conclusions

This area is geochemically interesting due to the presence of elevated values for several base metals. There is not enough data to conduct meaningful statistics, but a review of the data shows that the values are relatively high. Background values for the various elements have not been statistically defined, but it can be assumed to be well above detection for Pb, Zn, Cu, Ni, and Au in peats.

The small number of samples from the area makes interpretation difficult. The fact that the correlation between the various sampling media is unknown makes interpretation of this data almost impossible.

From the field work done to date, there is no indication that the elevated values have a bedrock source. The fact that the area is covered by thick glacial sediments lends credence to the alternative: that the elevated values have a surficial source.

At the present time there is no evidence that these values are anomalous, because we have no indication of background abundances of the various elements. Detailed geochemical study of suites of elements will be the key to understanding the geology and mineralisation potential of this area.

Recommendation

Although there are seemingly high geochemical values on the property, it is recommended that Focal not proceed with further work at this time. The amount of work necessary to determine the meaning of the geochemical results found to date would be phenomenal, and the costs would outweigh the benefits. The presence of thick overburden compounds the problem, in that exploration in the area is exceedingly difficult.

It is recommended that this property be dropped.

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Author Information

This report was prepared by L.A. Smith, D. Nikols, M. Innes, and D. Reynolds. The geological service work and results reported herein was carried out by or under the supervision of the preparation team.

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Michele B. Innes, B.Sc., MBA, G.I.T., a recent graduate of the University of Saskatchewan was directly involved in the mapping, sampling, and data collection on this project.

Darryl M. Reynolds, B.Sc., (Wildlife Biology), a recent graduate of the University of Montana was directly involved in the mapping, sampling, and data collection on this project.

Appendices

Appendix I Analytical Techniques and Detection Limits

Table 5
ICP-AES Element Suite and Detection Limits

Element	Atomic Number	Symbol	Detection Limit	Units
Molybdenum	42	Mo	1	ppm
Copper	29	Cu	1	ppm
Lead	82	Pb	3	ppm
Zinc	30	Zn	1	ppm
Silver	47	Ag	0.3	ppm
Nickel	28	Ni	1	ppm
Cobalt	27	Co	1	ppm
Manganese	25	Mn	2	ppm
Iron	26	Fe	0.01	%
Arsenic	33	As	2	ppm
Uranium	92	U	5	ppm
Thorium	90	Th	2	ppm
Strontium	38	Sr	1	ppm
Cadmium	48	Cd	0.2	ppm
Antimony	51	Sb	2	ppm
Bismuth	83	Bi	2	ppm
Vanadium	23	V	1	ppm
Calcium	20	Ca	0.01	%
Phosphorous	15	P	0.001	%
Lanthium	57	La	1	ppm
Chromium	24	Cr	1	ppm
Magnesium	12	Mg	0.01	%
Barium	56	Ba	1	ppm
Titanium	22	Ti	0.01	%
Boron	5	B	3	ppm
Aluminum	13	Al	0.01	%
Sodium	11	Na	0.01	%
Potassium	19	K	0.01	%
Tungsten	74	W	2	ppm

Table 6
Fire Assay Elements and Detection Limits (ICP-AES samples)

Element	Atomic Number	Symbol	Detection Limit	Units
Gold	79	Au	5	ppb

Table 7
Neutron Activation Analysis Element Suite and Detection Limits

Element	Atomic Number	Symbol	Detection Limit	Units
Silver	47	Ag	5.0000	ppm
Arsenic	33	As	2.0000	ppm
Gold	79	Au	5.0000	ppb
Barium	56	Ba	100.0000	ppm
Bromine	35	Br	1.0000	ppm
Calcium	20	Ca	1.0000	%
Cadmium	48	Cd	5.0000	ppm
Chromium	24	Cr	10.0000	ppm
Cesium	58	Cs	3.000	ppm
Iron	26	Fe	0.1000	%
Hafnium	72	Hf	1.0000	ppm
Molybdenum	42	Mo	5.0000	ppm
Sodium	11	Na	500.0000	ppm
Nickel	28	Ni	100.0000	ppm
Rubidium	37	Rb	30.0000	ppm
Antimony	51	Sb	0.2000	ppm
Selenium	34	Se	5.0000	ppm
Strontium	38	Sr	500.0000	ppm
Tantalum	73	Ta	1.0000	ppm
Thorium	90	Th	0.5000	ppm
Uranium	92	U	0.5000	ppm
Tungsten	74	W	4.0000	ppm
Zinc	30	Zn	50.0000	ppm
Lanthanum	57	La	1.0000	ppm
Cerium	58	Ce	3.0000	ppm
Neodymium	60	Nd	10.0000	ppm
Samarium	62	Sm	0.5000	ppm
Europium	63	Eu	0.2000	ppm
Terbium	65	Tb	0.5000	ppm
Ytterbium	70	Yb	0.2000	ppm
Lutetium	71	Lu	0.0500	ppm
Iridium	77	Ir	20.0000	ppb

Table 8
Acidified Water ICP-MS Analysis Elements and Standard Detection Limits

Element	Atomic Number	Symbol	Detection Limit	Units*
Sodium	11	Na	10	µg/l
Magnesium	12	Mg	0.3	µg/l
Calcium	20	Ca	10	µg/l
Manganese	25	Mn	0.3	µg/l
Iron	26	Fe	2	µg/l
Nickel	28	Ni	0.3	µg/l
Copper	29	Cu	0.5	µg/l
Zinc	30	Zn	1	µg/l
Silver	47	Ag	0.08	µg/l
Cesium	58	Ce	0.03	µg/l
Platinum	78	Pt	0.03	µg/l
Lead	82	Pb	0.2	µg/l
Gold	79	Au	0.02	µg/l

* 1 µg/l = 1 ppb

Table 9
Activated Carbon ICP-MS Analysis Elements and Standard Detection Limits

Element	Atomic Number	Symbol	Detection Limit	Units
Silver	47	Ag	0.08	µg/l*
Platinum	78	Pt	0.03	µg/l
Gold	79	Au	0.02	µg/l
Ruthenium	44	Ru	0.04	µg/l
Rhodium	45	Rh	0.03	µg/l
Palladium	46	Pd	0.06	µg/l
Rhenium	75	Re	0.03	µg/l
Osmium	76	Os	0.02	µg/l
Iridium	77	Ir	0.02	µg/l

* 1 µg/l = 1 ppb

Appendix II Summary of Analytical Results

Christina Lake Sediment Data

Sample Id	Sample Type	Lab Id	Na units ppm	Ca ppm	Sc ppm	Cr ppm	Fe ppm	Co ppm	Ni ppm	Zn ppm
CLRV-BS-09A	lake sediment	73126	<500	10000	0.60	10.0	8000	< 5.0	< 100	70
CLRV-BS-09B	lake sediment	73127	<500	<10000	0.60	10.0	6000	< 5.0	< 100	70
CLRV-BS-10A	lake sediment	73128	1200	<10000	3.40	40.0	9000	11.0	< 100	180
CLRV-BS-10B	lake sediment	73129	1300	<10000	3.70	40.0	9000	11.0	< 100	150
CLRV-BS-11A	lake sediment	73130	3900	10000	6.40	60.0	101000	18.0	< 100	120
CLRV-BS-11B	lake sediment	73131	4500	10000	7.00	60.0	92000	15.0	< 100	130
CLRV-BS-12A	lake sediment	73132	1700	<10000	1.60	20.0	6000	5.0	< 100	100
CLRV-BS-12B	lake sediment	73133	1600	<10000	1.50	20.0	5000	< 5.0	< 100	90
CLRV-BS-13A	lake sediment	73134	1600	10000	2.60	40.0	11000	6.0	< 100	60
CLRV-BS-13B	lake sediment	73135	2000	<10000	2.90	30.0	12000	7.0	< 100	80
CLRV-BS-14A	lake sediment	73136	3400	<10000	4.70	60.0	21000	8.0	< 100	130
CLRV-BS-14B	lake sediment	73137	3700	10000	4.80	50.0	21000	9.0	< 100	140
CLRV-BS-15A	lake sediment	73138	3300	10000	5.50	70.0	84000	13.0	< 100	120
CLRV-BS-15B	lake sediment	73139	4200	<10000	5.60	90.0	67000	14.0	< 100	70
CLRV-BS-16A	lake sediment	73140	1800	20000	3.90	30.0	12000	7.0	< 100	70
CLRV-BS-16B	lake sediment	73141	1900	10000	3.90	30.0	12000	7.0	< 100	70

Christina Lake Sediment Data

Sample Id	As ppm	Sa ppm	Br ppm	Rb ppm	Sr ppm	Mo ppm	Ag ppm	Sb ppm	Os ppm	Ba ppm	Hf ppm	Ta ppm
CLRV-BS-09A	6.0	< 5.0	93.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	100	< 1.0	< 1.0
CLRV-BS-09B	5.0	< 5.0	82.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	100	< 1.0	< 1.0
CLRV-BS-10A	5.0	< 5.0	65.00	< 30	< 500	< 5.0	< 5.0	0.3	< 3.0	200	2.0	< 1.0
CLRV-BS-10B	5.0	< 5.0	63.00	30	< 500	< 5.0	< 5.0	0.4	< 3.0	200	2.0	< 1.0
CLRV-BS-11A	15.0	< 5.0	34.00	60	< 500	< 5.0	< 5.0	0.2	< 3.0	400	5.0	< 1.0
CLRV-BS-11B	13.0	< 5.0	32.00	30	< 500	< 5.0	< 5.0	< 0.2	3.0	600	5.0	< 1.0
CLRV-BS-12A	6.0	< 5.0	43.00	< 30	< 500	< 5.0	< 5.0	< 0.2	< 3.0	200	1.0	< 1.0
CLRV-BS-12B	5.0	< 5.0	41.00	< 30	< 500	< 5.0	< 5.0	< 0.2	< 3.0	100	1.0	< 1.0
CLRV-BS-13A	6.0	< 5.0	69.00	< 30	500	< 5.0	< 5.0	0.4	< 3.0	200	1.0	< 1.0
CLRV-BS-13B	6.0	< 5.0	72.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	200	1.0	< 1.0
CLRV-BS-14A	7.0	< 5.0	95.00	< 30	< 500	< 5.0	< 5.0	0.4	< 3.0	200	4.0	< 1.0
CLRV-BS-14B	6.0	< 5.0	88.00	< 30	< 500	< 5.0	< 5.0	0.3	< 3.0	300	4.0	< 1.0
CLRV-BS-15A	28.0	< 5.0	48.00	< 30	< 500	< 5.0	< 5.0	0.4	3.0	800	3.0	< 1.0
CLRV-BS-15B	31.0	< 5.0	31.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	600	4.0	< 1.0
CLRV-BS-16A	3.0	< 5.0	80.00	30	< 500	< 5.0	< 5.0	< 0.2	< 3.0	200	2.0	< 1.0
CLRV-BS-16B	3.0	< 5.0	82.00	< 30	< 500	< 5.0	< 5.0	< 0.2	< 3.0	200	2.0	< 1.0

Christina Lake Sediment Data

Sample Id	W ppm	Ir ppm	Au ppb	La ppm	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Th ppm
CLRV-BS-09A	< 4.0	< 20	< 5.0	2.0	3.0	< 10	< 0.5	0.3	< 0.5	0.2	< 0.05	0.8
CLRV-BS-09B	< 4.0	< 20	< 5.0	2.0	< 3.0	< 10	< 0.5	0.2	< 0.5	< 0.2	< 0.05	0.5
CLRV-BS-10A	< 4.0	< 20	< 5.0	13.0	25.0	10	1.9	0.7	< 0.5	0.8	< 0.05	3.4
CLRV-BS-10B	< 4.0	< 20	< 5.0	14.0	27.0	10	2.0	0.7	< 0.5	1.0	< 0.05	4.3
CLRV-BS-11A	< 4.0	< 20	< 5.0	26.0	49.0	20	3.6	1.1	< 0.5	1.9	< 0.05	6.2
CLRV-BS-11B	< 4.0	< 20	< 5.0	27.0	53.0	20	3.9	0.9	0.5	1.9	0.30	6.6
CLRV-BS-12A	< 4.0	< 20	< 5.0	5.0	10.0	< 10	0.8	0.4	< 0.5	0.3	< 0.05	1.1
CLRV-BS-12B	< 4.0	< 20	< 5.0	5.0	10.0	< 10	0.7	0.2	< 0.5	0.3	< 0.05	1.4
CLRV-BS-13A	< 4.0	< 20	< 5.0	9.0	18.0	< 10	1.4	0.2	< 0.5	0.7	0.08	2.8
CLRV-BS-13B	< 4.0	< 20	< 5.0	11.0	19.0	10	1.4	0.8	< 0.5	0.7	0.09	2.5
CLRV-BS-14A	< 4.0	< 20	< 5.0	18.0	35.0	10	2.5	0.7	< 0.5	1.2	0.14	5.2
CLRV-BS-14B	< 4.0	< 20	< 5.0	19.0	37.0	10	2.7	1.1	< 0.5	1.3	0.19	5.0
CLRV-BS-15A	< 4.0	< 20	< 5.0	21.0	42.0	20	3.0	0.8	< 0.5	1.4	0.20	5.6
CLRV-BS-15B	< 4.0	< 20	< 5.0	23.0	45.0	20	3.4	1.2	< 0.5	1.4	0.21	5.7
CLRV-BS-16A	< 4.0	< 20	< 5.0	13.0	25.0	10	1.8	0.3	< 0.5	0.8	0.15	3.9
CLRV-BS-16B	< 4.0	< 20	< 5.0	14.0	26.0	10	2.0	0.6	< 0.5	0.8	0.16	3.5

Christina Lake Sediment Data

Sample Id	U ppm
CLRV-BS-09A	1.2
CLRV-BS-09B	0.5
CLRV-BS-10A	0.9
CLRV-BS-10B	1.1
CLRV-BS-11A	1.8
CLRV-BS-11B	1.7
CLRV-BS-12A	< 0.5
CLRV-BS-12B	< 0.5
CLRV-BS-13A	1.2
CLRV-BS-13B	1.8
CLRV-BS-14A	2.3
CLRV-BS-14B	1.0
CLRV-BS-15A	1.1
CLRV-BS-15B	1.6
CLRV-BS-16A	1.1
CLRV-BS-16B	0.6

Corrected Data		atomic number		5	11	12	15	19	20	21	22	23	24	25	26
Sample Id	Sample Type	Lab Id	LOI	B	Na	Mg	Al	P	K	Ca	Ti	V	Cr	Mn	Fe
		units	%	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	%
		detection limit		3	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	2	0.01
CLDR-P1A	biological	72659	98.53	6	0.00	0.05	0.05	0.01	0.04	0.27	0.00	0	3	161	0.10
CLDR-S1B	biological	72658	87.16	5	0.00	0.18	0.14	0.03	0.02	1.20	0.00	3	58	232	0.34
CLDR-S2A	biological	72660	84.97	67	0.03	0.39	0.21	0.06	0.05	2.82	0.00	4	15	170	0.43
CLDR-S3A	biological	72661	65.12	7	0.01	0.11	0.43	0.03	0.08	0.96	0.01	7	67	70	0.53
CLDR-S4B	biological	72663	57.03	9	0.02	0.12	1.03	0.05	0.20	0.32	0.00	15	126	174	0.96
CLDR-S5B	biological	72665	15.96	8	0.03	0.08	0.98	0.03	0.22	0.12	0.01	15	398	91	1.10
CLDR-S1A	soil	72657	6.00	9	0.03	0.16	1.00	0.01	0.19	0.19	0.02	19	157	212	0.85
CLDR-S4A	soil	72662	6.72	17	0.04	0.21	2.15	0.02	0.45	0.14	0.01	29	91	113	1.28
CLDR-S5A	soil	72664	1.97	11	0.02	0.13	0.98	0.02	0.20	0.09	0.01	22	1395	351	2.56
CLDR-S3A	soil	72664 RB	1.97	11	0.03	0.13	1.00	0.02	0.21	0.09	0.01	22	1326	335	2.45
CLDR-S6A	soil	72666	29.93	19	0.04	0.27	1.97	0.05	0.47	0.37	0.01	33	67	341	2.16
CLDR-S7A	soil	72667	14.75	18	0.03	0.20	2.27	0.03	0.47	0.26	0.01	26	85	92	0.90
CLDR-S7B	soil	72668	85.29	8	0.01	0.11	0.55	0.04	0.09	0.70	0.00	8	24	145	0.40
CLDR-S8A	soil	72669	14.34	12	0.03	0.21	1.95	0.01	0.34	0.32	0.01	28	56	137	0.96
CLDR-S8B	soil	72670	6.15	14	0.03	0.23	2.17	0.01	0.37	0.28	0.01	32	38	135	1.02
CLRV-02S	soil	72856		3	<.01	0.06	0.41	0.03	0.04	0.06	0.01	12	6	39	0.91
CLRV-03S	soil	72857		7	<.01	0.19	0.95	0.03	0.09	0.12	0.01	23	14	217	1.60
CLRV-07S	soil	72858		9	0.02	0.26	1.61	0.04	0.17	0.18	<.01	27	17	305	2.76

Corrected Data		atomic number		27	28	29	30	33	38	42	47	48	51	56	57
Sample Id	Sample Type	Lab Id	LOI	Co	Ni	Cu	Zn	As	Sr	Mo	Ag	Cd	Sb	Ba	La
		units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		detection limit		1	1	1	1	2	1	1	0.3	0.2	2	1	1
CLDR-P1A	biological	72659	98.53	0	1	4	21	0	7	0	0.0	0.2	<2	8	0
CLDR-S1B	biological	72658	87.16	1	6	4	15	2	24	1	0.0	0.2	0	60	1
CLDR-S2A	biological	72660	84.97	1	6	4	22	2	162	1	0.0	0.2	0	17	2
CLDR-S3A	biological	72661	65.12	1	9	5	55	<2	73	1	<.1	0.2	<2	99	5
CLDR-S4B	biological	72663	57.03	3	14	6	116	<2	36	1	0.1	0.3	<2	94	11
CLDR-S5B	biological	72665	15.96	3	18	7	18	<2	25	3	0.2	0.2	<2	90	13
CLDR-S1A	soil	72657	6.00	4	14	5	31	2	23	2	0.1	0.3	<2	89	18
CLDR-S4A	soil	72662	6.72	5	15	7	65	<2	37	<1	0.2	<2	<2	140	28
CLDR-S5A	soil	72664	1.97	15	40	18	34	<2	21	5	<.1	0.4	<2	71	16
CLDR-S5A	soil	72664 RB	1.97	15	37	17	34	2	21	5	<.1	<2	<2	72	16
CLDR-S6A	soil	72666	29.93	20	51	12	186	6	48	2	0.1	1.1	<2	156	29
CLDR-S7A	soil	72667	14.75	3	12	6	45	<2	50	1	0.2	0.2	<2	141	26
CLDR-S7B	soil	72668	85.29	3	13	7	108	1	54	1	0.0	0.7	<2	33	6
CLDR-S8A	soil	72669	14.34	3	12	6	33	<2	40	1	<.1	<2	<2	97	22
CLDR-S8B	soil	72670	6.15	4	15	7	37	<2	36	<1	0.2	<2	<2	98	25
CLRV-02S	soil	72856		2	4	3	12	<2	8	<1	<.1	<2	<2	28	16
CLRV-03S	soil	72857		7	17	13	40	6	22	1	0.2	<2	2	50	21
CLRV-07S	soil	72858		8	23	25	50	10	70	1	0.3	<2	<2	163	34

Corrected Data		atomic number		74	79	82	83	90	92
Sample Id	Sample Type	Lab Id	LOI	W	Au	Pb	Bi	Th	U
		units	%	ppm	ppb	ppm	ppm	ppm	ppm
		detection limit		2	5	3	2	2	5
CLDR-P1A	biological	72659	98.53	< 1	NSS	3	< 2	0	< 5
CLDR-S1B	biological	72658	87.16	< 1	NSS	4	0	1	< 5
CLDR-S2A	biological	72660	84.97	0	10	6	< 2	0	< 5
CLDR-S3A	biological	72661	65.12	< 1	15	4	< 2	1	< 5
CLDR-S4B	biological	72663	57.03	< 1	14	14	< 2	3	< 5
CLDR-S5B	biological	72665	15.96	< 1	13	8	< 2	3	< 5
CLDR-S1A	soil	72657	6.00	3	< 5	10	< 2	6	< 5
CLDR-S4A	soil	72662	6.72	2	16	13	< 2	7	< 5
CLDR-S5A	soil	72664	1.97	1	< 5	10	3	4	< 5
CLDR-S3A	soil	72664 RB	1.97	1		8	4	4	< 5
CLDR-S6A	soil	72666	29.93	< 1	15	12	< 2	6	< 5
CLDR-S7A	soil	72667	14.75	1	< 5	9	< 2	7	< 5
CLDR-S7B	soil	72668	85.29	< 1	NSS	4	< 2	1	< 5
CLDR-S8A	soil	72669	14.34	2	< 5	7	< 2	7	< 5
CLDR-S8B	soil	72670	6.15	1	5	10	< 2	8	< 5
CLRV-02S	soil	72856		< 1	< 5	5	< 2	4	< 5
CLRV-03S	soil	72857		1	< 5	8	< 2	7	< 5
CLRV-07S	soil	72858		< 1	< 5	19	< 2	6	< 5

Christina Water Data

Sample Id	Mapping zone	Na	Na mg/l	Mg	Ca	Mn	Fe	FA H2O analysis (ppb)			Ag	Ce
								Ni	Cu	Zn		
CLRV - 01	Lake Water/Surface	2900	2.9	1310	5680	28.6	206	5.05	1.77	13.5	1.72	<0.10
CLRV - 04	Lake Water/Surface	296	0.296	1560	6270	163	1630	7.57	<0.5	16.8	2.08	<0.10
CLRV - 08	Lake Water/Surface	2170	2.17	2400	9050	125	360	17.8	10.7	68.3	1.71	<0.10
CLRV - 10	Lake Water/Surface	1320	1.32	456	2960	1.13	153	<0.50	1.34	6.53	<0.05	<0.10
CLRV - 11	Lake Water/Surface	9900	9.9	9420	32800	0.902	140	2.11	3.15	8.36	<0.05	<0.10
CLRV - 12	Lake Water/Surface	2510	2.51	6300	23300	2.4	311	2.05	3.09	9.85	<0.05	<0.10
CLRV - 13	Lake Water/Surface	1890	1.89	6890	17800	0.496	<100	0.631	<0.50	7.16	<0.05	<0.10
CLRV - 14	Lake Water/Surface	5910	5.91	16000	38500	3.52	352	3.18	<0.50	7.8	<0.05	<0.10
CLRV - 15	Lake Water/Surface	9200	9.2	9990	32000	1.43	<100	3.05	3.24	6.01	<0.05	0.846
CLRV - 16	Lake Water/Surface	14300	14.3	12100	30700	2.2	<100	1.71	3.28	3.58	<0.05	<0.10
CLRV - 9	Lake Water/Surface	8900	8.9	9430	20800	<0.10	<100	<0.50	1.23	5.08	<0.05	<0.10

Christina Water Data

Sample Id	Pt	Au	Pb	Activated Carbon (ppm in 250 mg AC)								Pt	Au
				Ruth	Rhod	Pd	Ag	Rhen	Os	Ir	Pt		
CLRV - 01	<0.10	<0.10	<0.10	<.001	<.001	0.002	0.014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 04	<0.10	<0.10	0.543	<.001	0.001	<.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 08	<0.10	<0.10	2.68	<.001	<.001	0.003	0.006	0.001	<0.001	<0.001	<0.001	<0.001	0.002
CLRV - 10	<0.10	<0.10	33.3	<0.001	<0.001	0.01	0.029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 11	<0.10	<0.10	1.02	<0.001	<0.001	0.005	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 12	0.103	<0.10	<0.10	<0.001	<0.001	0.009	0.015	<0.001	<0.001	<0.001	0.002	0.007	0.007
CLRV - 13	<0.10	<0.10	<0.10	<0.001	<0.001	0.005	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	0.008
CLRV - 14	0.13	<0.10	<0.10	<0.001	<0.001	0.007	0.056	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 15	<0.10	<0.10	0.28	<0.001	<0.001	0.006	0.013	0.001	<0.001	<0.001	<0.001	<0.001	0.003
CLRV - 16	<0.10	<0.10	<0.10	<0.001	<0.001	0.004	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CLRV - 9	<0.10	<0.10	<0.10	<0.001	<0.001	0.007	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	0.001

Christina Water Data

Sample Id	Pd ppb (AC)	Ag ppb (AC)	Pt ppb (AC)	Au ppb (AC)
CLRV - 01	0.4027	2.8192	below detection	below detection
CLRV - 04	below detection	0.3331	below detection	below detection
CLRV - 08	0.3134	0.6267	below detection	0.2089
CLRV - 10	0.4027	1.1678	below detection	below detection
CLRV - 11	0.2999	0.2399	below detection	below detection
CLRV - 12	0.3002	0.5004	0.0667	0.2335
CLRV - 13	0.2675	0.8024	below detection	0.4279
CLRV - 14	0.3659	2.9271	below detection	below detection
CLRV - 15	0.1944	0.4212	below detection	0.0972
CLRV - 16	0.2787	0.3484	below detection	below detection
CLRV - 9	0.3386	0.8223	below detection	0.0484

Appendix III Assay and Analysis Certificates

XRAL ACTIVATION SERVICES INCORPORATED

DATE: 29-NOV-94

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SAMPLE NUMBERS

ELEMENT !
& UNITS !

73126** 73127** 73128** 73129** 73130**

ELEMENT ! & UNITS !	73126**	73127**	73128**	73129**	73130**
AG PPM	<5	<5	<5	<5	<5
AS PPM	6	5	5	5	15
AU PPB	<5	<5	<5	<5	<5
BA PPM	100	100	200	200	400
BR PPM	93	82	65	63	34
CA %	1	<1	<1	<1	1
CD PPM	<5	<5	11	11	18
CR PPM	10	10	40	40	60
CS PPM	<3	<3	<3	<3	<3
FE %	0.8	0.6	0.9	0.9	10.1
HF PPM	<1	<1	2	2	5
MO PPM	<5	<5	<5	<5	<5
NA PPM	<500	<500	1200	1300	3900
NI PPM	<100	<100	<100	<100	<100
RB PPM	<30	<30	<30	30	60
SB PPM	0.2	0.2	0.3	0.4	0.2
PPM	0.6	0.6	3.4	3.7	6.4
PPM	<5	<5	<5	<5	<5
SR PPM	<500	<500	<500	<500	<500
TA PPM	<1	<1	<1	<1	<1
TH PPM	0.8	0.5	3.4	4.3	6.2
U PPM	1.2	0.5	0.9	1.1	1.8
W PPM	<4	<4	<4	<4	<4
ZN PPM	70	70	180	150	120
LA PPM	2	2	13	14	26
CE PPM	3	<3	25	27	49
ND PPM	<10	<10	10	10	20
SM PPM	<0.5	<0.5	1.9	2.0	3.6
EU PPM	0.3	0.2	0.7	0.7	1.1
TB PPM	<0.5	<0.5	<0.5	<0.5	<0.5
YB PPM	0.2	<0.2	0.8	1.0	1.9
LU PPM	<0.05	<0.05	0.12	0.13	0.25
IR PPB	<20	<20	<20	<20	<20

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SAMPLE NUMBERS

ELEMENT ! & UNITS !	** 73137**	** 73138**	** 73139**	** 73140**	** 73141**
AG PPM	<5	<5	<5	<5	<5
AS PPM	6	28	31	3	3
AU PPB	<5	<5	<5	<5	<5
BA PPM	300	800	600	200	200
BR PPM	88	48	31	80	82
CA %	1	1	<1	2	1
CO PPM	9	13	14	7	7
CR PPM	50	70	90	30	30
CS PPM	<3	3	<3	<3	<3
FE %	2.1	8.4	6.7	1.2	1.2
HF PPM	4	3	4	2	2
MO PPM	<5	<5	<5	<5	<5
NA PPM	3700	3300	4200	1800	1900
NI PPM	<100	<100	<100	<100	<100
RB PPM	<30	<30	<30	30	<30
SD PPM	0.3	0.4	0.2	<0.2	<0.2
SE PPM	4.8	5.5	5.6	3.9	3.9
SI PPM	<5	<5	<5	<5	<5
SR PPM	<500	<500	<500	<500	<500
TA PPM	<1	<1	<1	<1	<1
TH PPM	5.0	5.6	5.7	3.9	3.5
U PPM	1.0	1.1	1.6	1.1	0.6
W PPM	<4	<4	<4	<4	<4
ZN PPM	140	120	70	70	70
LA PPM	19	21	23	13	14
CE PPM	37	42	45	25	26
ND PPM	10	20	20	10	10
SH PPM	2.7	3.0	3.4	1.8	2.0
EU PPM	1.1	0.8	1.2	0.3	0.6
TB PPM	<0.5	<0.5	<0.5	<0.5	<0.5
YB PPM	1.3	1.4	1.4	0.8	0.8
LU PPM	0.19	0.20	0.21	0.15	0.16
IR PPB	<20	<20	<20	<20	<20

Raw ICP Data	Atomic number		5	11	12	13	15	19	20	22	23	24
Sample Id	Lab Id	LOI	B	Na	Mg	Al	P	K	Ca	Ti	V	Cr
	Units	%	ppm	%	%	%	%	%	%	%	ppm	ppm
	Detection limit		2	0.01	0.01		0.001	0.01	0.01	0.01	2	
CLDR-P1A	72659	98.53	379	0.29	3.23	3.68	0.444	2.45	18.34	0.01	24	211
CLDR-S1A	72657	6.00	10	0.03	0.17	1.06	0.015	0.2	0.2	0.02	20	167
CLDR-S1B	72658	87.16	36	0.03	1.44	1.08	0.256	0.16	9.31	0.02	21	448
CLDR-S2A	72660	84.97	446	0.22	2.62	1.41	0.392	0.3	18.74	0.02	27	98
CLDR-S3A	72661	65.12	21	0.03	0.31	1.22	0.078	0.24	2.74	0.02	19	192
CLDR-S4A	72662	6.72	18	0.04	0.22	2.31	0.024	0.48	0.15	0.01	31	98
CLDR-S4B	72663	57.03	22	0.05	0.27	2.39	0.114	0.47	0.74	0.01	35	293
CLDR-S5A	72664	1.97	11	0.02	0.13	1	0.02	0.2	0.09	0.01	22	1423
CLDR-S5A	72664 RE		11	0.03	0.13	1.02	0.02	0.21	0.09	0.01	22	1353
CLDR-S5B	72665	15.96	10	0.03	0.09	1.17	0.041	0.26	0.14	0.01	18	474
CLDR-S6A	72666	29.93	27	0.06	0.39	2.81	0.072	0.67	0.53	0.02	47	96
CLDR-S7A	72667	14.75	21	0.04	0.23	2.66	0.039	0.55	0.3	0.01	30	100
CLDR-S7B	72668	85.29	54	0.05	0.72	3.75	0.28	0.6	4.75	0.02	54	165
CLDR-S8A	72669	14.34	14	0.03	0.24	2.28	0.016	0.4	0.37	0.01	33	65
CLDR-S8B	72670	6.15	15	0.03	0.24	2.31	0.013	0.39	0.3	0.01	34	40
CLRV-02S	72856		3	< .01	0.06	0.41	0.027	0.04	0.06	0.01	12	6
CLRV-05S	72857		7	< .01	0.19	0.95	0.029	0.09	0.12	0.01	23	14
CLRV-07S	72858		9	0.02	0.26	1.61	0.041	0.17	0.18	< .01	27	17

Raw ICP Data	Atomic number		25	26	27	28	29	30	33	38	42	47
Sample Id	Lab Id	LOI	Mn	Fe	Co	Ni	Cu	Zn	As	Sr	Mo	Ag
	Units	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Detection limit				1	1	1	1	2		1	0.1
CLDR-P1A	72659	98.53	10979	6.76	5	36	258	1441	18	507	6	3.4
CLDR-S1A	72657	6.00	225	0.9	4	15	5	33	2	24	2	0.1
CLDR-S1B	72658	87.16	1804	2.66	9	46	28	117	12	189	11	0.3
CLDR-S2A	72660	84.97	1129	2.89	7	40	25	147	12	1076	6	0.3
CLDR-S3A	72661	65.12	201	1.53	4	26	13	157	<2	210	3	<.1
CLDR-S4A	72662	6.72	121	1.37	5	16	7	70	<2	40	<1	0.2
CLDR-S4B	72663	57.03	406	2.24	8	32	15	269	<2	83	3	0.3
CLDR-S5A	72664	1.97	358	2.61	15	41	18	35	<2	21	5	<.1
CLDR-S5A	72664 RE		342	2.5	15	38	17	35	2	21	5	<.1
CLDR-S5B	72665	15.96	108	1.31	3	21	8	22	<2	30	3	0.2
CLDR-S6A	72666	29.93	486	3.08	29	73	17	265	9	68	3	0.2
CLDR-S7A	72667	14.75	108	1.06	3	14	7	53	<2	59	1	0.2
CLDR-S7B	72668	85.29	984	2.75	18	88	47	737	6	367	9	0.3
CLDR-S8A	72669	14.34	160	1.12	4	14	7	38	<2	47	1	<.1
CLDR-S8B	72670	6.15	144	1.09	4	16	7	39	<2	38	<1	0.2
CLRV-02S	72856		39	0.91	2	4	3	12	<2	8	<1	<.1
CLRV-05S	72857		217	1.6	7	17	13	40	6	22	1	0.2
CLRV-07S	72858		305	2.76	8	23	25	50	10	70	1	0.3

Raw ICP Data	Atomic number		48	51	56	57	74	79	82	83	90	92
Sample Id	Lab Id	LOI	Cd	Sb	Ba	La	W	Au	Pb	Bi	Th	U
		Units	%	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
		Detection limit	0.2	2		2	1	5	2	2	2	5
CLDR-P1A	72659	98.53	12.2	< 2	530	6	< 1	NSS	185	< 2	2	< 5
CLDR-S1A	72657	6.00	0.3	< 2	95	19	3	< 5	11	< 2	6	< 5
CLDR-S1B	72658	87.16	1.2	2	471	9	< 1	NSS	33	2	4	< 5
CLDR-S2A	72660	84.97	1.1	2	113	12	1	64	43	< 2	3	< 5
CLDR-S3A	72661	65.12	0.6	< 2	285	14	< 1	44	12	< 2	3	< 5
CLDR-S4A	72662	6.72	< .2	< 2	150	30	2	17	14	< 2	8	< 5
CLDR-S4B	72663	57.03	0.6	< 2	219	26	< 1	32	32	< 2	6	< 5
CLDR-S5A	72664	1.97	0.4	< 2	72	16	1	< 5	10	3	4	< 5
CLDR-S5A	72664 RE		< .2	< 2	73	16	1		8	4	4	< 5
CLDR-S5B	72665	15.96	0.2	< 2	107	16	< 1	16	10	< 2	4	< 5
CLDR-S6A	72666	29.93	1.5	< 2	222	41	< 1	21	17	< 2	9	< 5
CLDR-S7A	72667	14.75	0.2	< 2	165	31	1	< 5	11	< 2	8	< 5
CLDR-S7B	72668	85.29	4.9	< 2	224	39	< 1	NSS	29	< 2	10	< 5
CLDR-S8A	72669	14.34	< .2	< 2	113	26	2	< 5	8	< 2	8	< 5
CLDR-S8B	72670	6.15	< .2	< 2	104	27	1	5	11	< 2	9	< 5
CLRV-02S	72856		< .2	< 2	28	16	< 1	< 5	5	< 2	4	< 5
CLRV-05S	72857		< .2	2	50	21	1	< 5	8	< 2	7	< 5
CLRV-07S	72858		< .2	< 2	163	34	< 1	< 5	19	< 2	6	< 5

Permits Related to Assessments

11/9/95

Assessment: 19950025 11/9/95

Period Permit Map Area

YMIN RESOURCES LTD

1	9393080548	73M
1	9393080549	73M
1	9393080550	73M
1	9393080551	73M
1	9393080552	73M
1	9393080553	73M
1	9393080554	73M
1	9393080555	73M
1	9393080556	73M
1	9393080557	73M

TROYMIN RESOURCES LTD.

200, 622 - 5 Avenue SW Calgary AB T2P 0M6
Phone (403) 269-5811 ♦ Fax (403) 262-8786

November 7, 1995

Alberta Energy
9945 - 108 Street
Edmonton, AB T5K 2G6

Attention: Mr. Brian Hudson
Manager, Mineral Agreements

Dear Mr. Hudson:

Re: Assessment Work Report - Christina Property
Metallic and Industrial Minerals
Permits 9393080548 to 9393080557

Please be advised that expenditures in the amount of \$14,256.24 have been incurred on these permits as summarized on Table 1. Based upon the required expenditure of \$5 per hectare during the first and second year of the term of the permits, we are therefore surrendering and downsizing the permits to a cumulative size of 2,850 hectares all within Permit 939308056, namely sections 7, 8, 9, 14, 15, 16, 17, 18, 21, 22 and 23. ₅

Pursuant to section 15 of the Metallic and Industrial Mineral Regulations, enclosed are two (2) copies of the Assessment Work Report prepared for Troymin by Focal Resources who had the property under an Option Agreement which has now expired.

Yours truly


Jack D. McCleary,
President

JDM/cma

NOV 9 9 45 AM '95

ENERGY / ENV. PROT.
MAIL

**PROJECT NAME: 1722- TROYMIN CHRISTINA III
FOR THE PERIOD ENDING: NOVEMBER 30,1994**

TABLE I

Permits 9393080554 to 9393080557

CHRISTINA PROPERTY

CODE	ACC. 5762 CLR: N. E. ALTA MAPPING MINING EXPLORATION ACTIVITIES	OPENING BALANCE	CURRENT PERIOD	CLOSING BALANCE
1	Company labor	\$367.18		\$367.18
2	Travel and vehicles			
3	Contract labor			
10	Consulting fees	250.00		250.00
15	Meals and entertainment			
90	Safety and security			
100	Site access and preparation			
105	Site clean-up			
110	Camp and catering			
120	Communications			
130	Surface land costs			
140	Damage claims			
160	Permits and licenses	37.58		37.58
170	Claim staking & recording			
180	Line costs			
190	Surveying and photogrammetry			
200	Assaying and testing		1,437.50	1,437.50
210	Studies-geological and mapping		1,437.50	1,437.50
211	Studies-geophysical			
212	Studies-geochemical		1,437.50	1,437.50
213	Studies-geotechnical			
214	Studies-environ. & social affairs			
220	Drilling - diamond			
221	Drilling - rotary			
230	Trenches, pits, underground open			
240	Logging services and materials			
250	Fresh water and storage			
255	Fuel, lubricants and utilities			
260	Printing and reproduction			
290	Drill bits and accessories			
300	Non-controllable material			
310	Controllable equipment			
411	Transportation-helicopters	621.95		621.95
412	Transportation-fixed wing aircraft	288.00		288.00
413	Transportation-vehicles			
430	Move-in/out			
480	Equipment rentals			
900	Miscellaneous			
950	Administrative Costs (Inhouse)			
990	Overhead	204.00	516.50	720.50
	PROJECT TOTAL	\$1,768.71	\$4,829.00	\$6,597.71
WORKING INTEREST DISTRIBUTION:				
	Focal Res. Ltd	100.000000%		\$6,597.71
	TOTAL WORKING INTERESTS:	100.000000%		\$6,597.71

**PROJECT NAME: 1721- TROYMIN CHRISTINA II
FOR THE PERIOD ENDING: NOVEMBER 30, 1994**

TABLE I

CHRISTINA PROPERTY Cont.'d

Permits 9393080548 to 9393080553

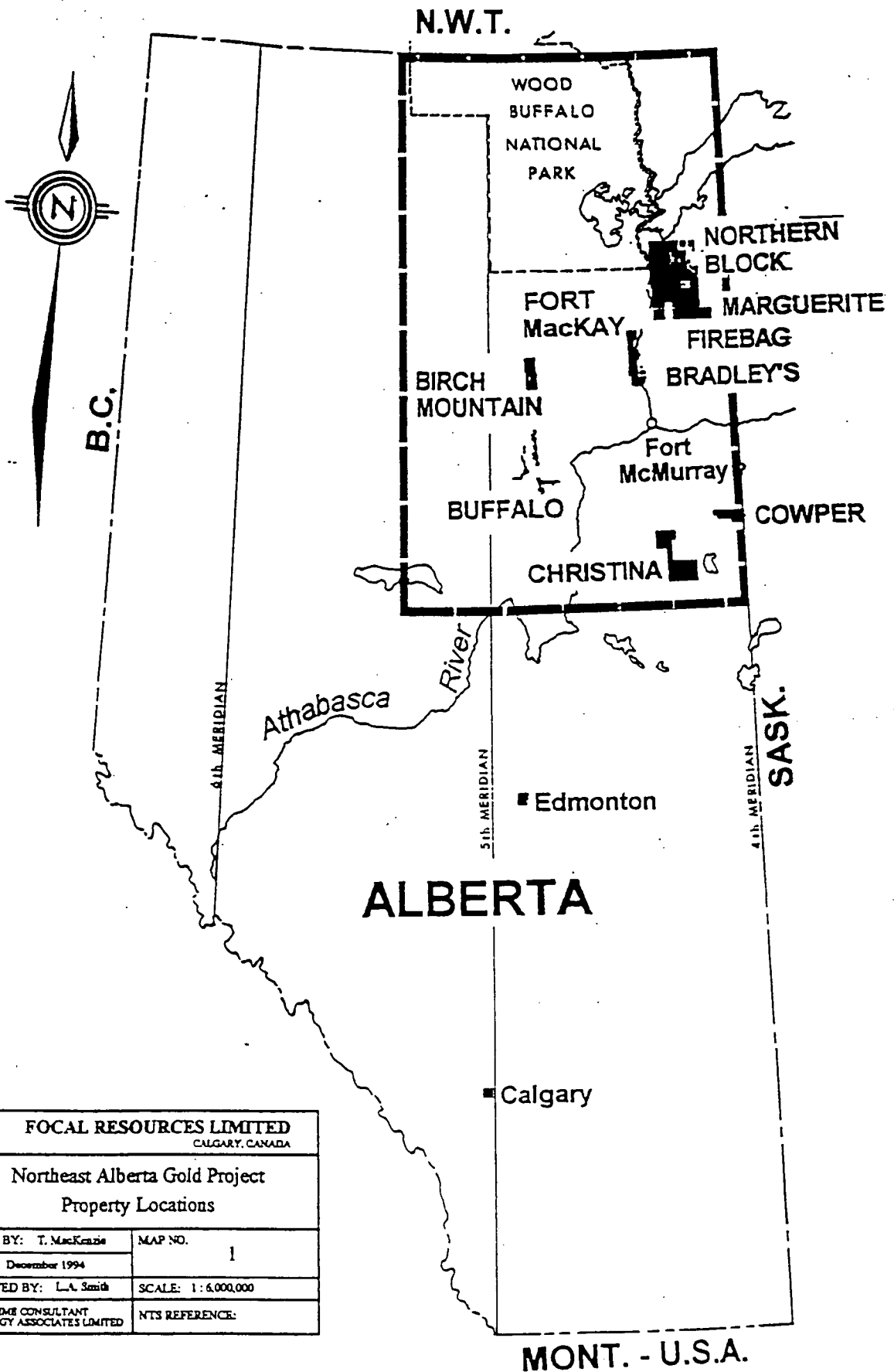
CODE	ACC. 5762 CLR: N. E. ALTA MAPPING MINING EXPLORATION ACTIVITIES	OPENING BALANCE	CURRENT PERIOD	CLOSING BALANCE		
1	Company labor	\$1,554.53		\$1,554.53		
2	Travel and vehicles					
3	Contract labor					
10	Consulting fees	100.00		100.00		
15	Meals and entertainment					
90	Safety and security					
100	Site access and preparation					
105	Site clean-up					
110	Camp and catering					
120	Communications					
130	Surface land costs					
140	Damage claims					
160	Permits and licenses					
170	Claim staking & recording					
180	Line costs					
190	Surveying and photogrammetry					
200	Assaying and testing		1,437.50	1,437.50		
210	Studies-geological and mapping		1,437.50	1,437.50		
211	Studies-geophysical					
212	Studies-geochemical		1,437.50	1,437.50		
213	Studies-geotechnical					
214	Studies-environ. & social affairs					
220	Drilling - diamond					
221	Drilling - rotary					
230	Trenches, pits, underground open					
240	Logging services and materials					
241	Fresh water and storage					
255	Fuel, lubricants and utilities					
260	Printing and reproduction					
290	Drill bits and accessories					
300	Non-controllable material	25.00		25.00		
310	Controllable equipment					
411	Transportation-helicopters	621.00		621.00		
412	Transportation-fixed wing aircraft	216.00		216.00		
413	Transportation-vehicles					
430	Move-in/out					
480	Equipment rentals					
900	Miscellaneous					
950	Administrative Costs (Inhouse)					
990	Overhead	313.00	516.50	829.50		
	PROJECT TOTAL	\$2,829.53	\$4,829.00	\$7,658.53		
WORKING INTEREST DISTRIBUTION:						
	Focal Res. Ltd	100.000000%		\$7,658.53		
	TOTAL WORKING INTERESTS:	100.000000%		\$7,658.53		


Raw ICP Data		Atomic number	5	11	12	13	15	19	20	22	23	24
Sample Id	Lab Id	LOI	B	Na	Mg	Al	P	K	Ca	Tl	V	Cr
		Units	%	%	%	%	%	%	%	%	ppm	ppm
		Detection limit	2	0.01	0.01		0.001	0.01	0.01	0.01	2	
CLDR-P1A	72659	98.53	379	0.29	3.23	3.68	0.444	2.45	18.34	0.01	24	211
CLDR-S1A	72657	6.00	10	0.03	0.17	1.06	0.015	0.2	0.2	0.02	20	167
CLDR-S1B	72658	87.16	36	0.03	1.44	1.08	0.256	0.16	9.31	0.02	21	448
CLDR-S2A	72660	84.97	446	0.22	2.62	1.41	0.392	0.3	18.74	0.02	27	98
CLDR-S3A	72661	65.12	21	0.03	0.31	1.22	0.078	0.24	2.74	0.02	19	192
CLDR-S4A	72662	6.72	18	0.04	0.22	2.31	0.024	0.48	0.15	0.01	31	98
CLDR-S4B	72663	57.03	22	0.05	0.27	2.39	0.114	0.47	0.74	0.01	35	293
CLDR-S5A	72664	1.97	11	0.02	0.13	1	0.02	0.2	0.09	0.01	22	1423
CLDR-S5A	72664 RE		11	0.03	0.13	1.02	0.02	0.21	0.09	0.01	22	1353
CLDR-S5B	72665	15.96	10	0.03	0.09	1.17	0.041	0.26	0.14	0.01	18	474
CLDR-S6A	72666	29.93	27	0.06	0.39	2.81	0.072	0.67	0.53	0.02	47	96
CLDR-S7A	72667	14.75	21	0.04	0.23	2.66	0.039	0.55	0.3	0.01	30	100
CLDR-S7B	72668	85.29	54	0.05	0.72	3.75	0.28	0.6	4.75	0.02	54	165
CLDR-S8A	72669	14.34	14	0.03	0.24	2.28	0.016	0.4	0.37	0.01	33	65
CLDR-S8B	72670	6.15	15	0.03	0.24	2.31	0.013	0.39	0.3	0.01	34	40
CLRV-02S	72856		3	< .01	0.06	0.41	0.027	0.04	0.06	0.01	12	6
CLRV-05S	72857		7	< .01	0.19	0.95	0.029	0.09	0.12	0.01	23	14
CLRV-07S	72858		9	0.02	0.26	1.61	0.041	0.17	0.18	< .01	27	17

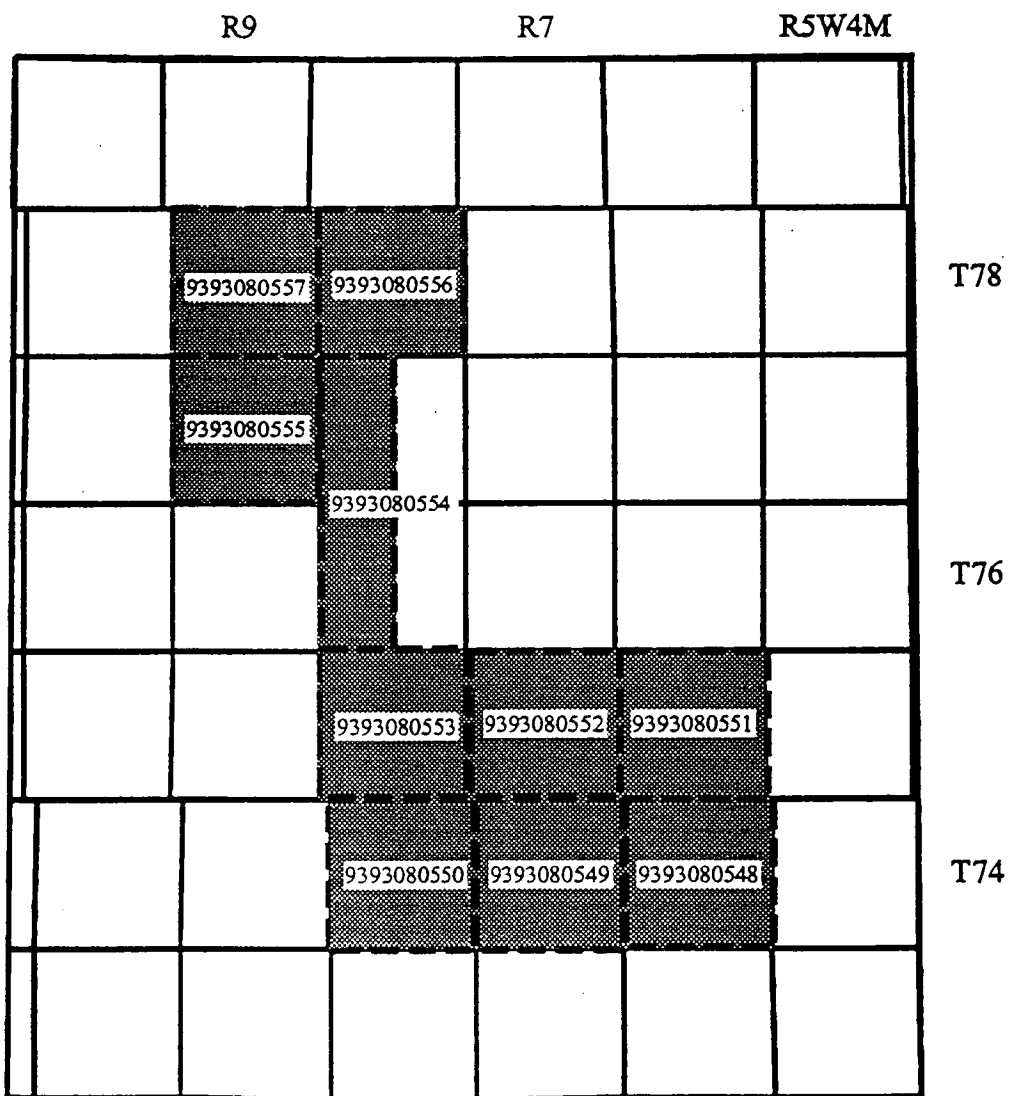
Raw ICP Data	Atomic number		25	26	27	28	29	30	33	38	42	47
Sample Id	Lab Id	LOI	Mn	Fe	Co	Ni	Cu	Zn	As	Sr	Mo	Ag
	Units	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Detection limit				1	1	1	1	2		1	0.1
CLDR-P1A	72659	98.53	10979	6.76	5	36	258	1441	18	507	6	3.4
CLDR-S1A	72657	6.00	225	0.9	4	15	5	33	2	24	2	0.1
CLDR-S1B	72658	87.16	1804	2.66	9	46	28	117	12	189	11	0.3
CLDR-S2A	72660	84.97	1129	2.89	7	40	25	147	12	1076	6	0.3
CLDR-S3A	72661	65.12	201	1.53	4	26	13	157	<2	210	3	<.1
CLDR-S4A	72662	6.72	121	1.37	5	16	7	70	<2	40	<1	0.2
CLDR-S4B	72663	57.03	406	2.24	8	32	15	269	<2	83	3	0.3
CLDR-S5A	72664	1.97	358	2.61	15	41	18	35	<2	21	5	<.1
CLDR-S5A	72664 RE		342	2.5	15	38	17	35	2	21	5	<.1
CLDR-S5B	72665	15.96	108	1.31	3	21	8	22	<2	30	3	0.2
CLDR-S6A	72666	29.93	486	3.08	29	73	17	265	9	68	3	0.2
CLDR-S7A	72667	14.75	108	1.06	3	14	7	53	<2	59	1	0.2
CLDR-S7B	72668	85.29	984	2.75	18	88	47	737	6	367	9	0.3
CLDR-S8A	72669	14.34	160	1.12	4	14	7	38	<2	47	1	<.1
CLDR-S8B	72670	6.15	144	1.09	4	16	7	39	<2	38	<1	0.2
CLRV-02S	72856		39	0.91	2	4	3	12	<2	8	<1	<.1
CLRV-05S	72857		217	1.6	7	17	13	40	6	22	1	0.2
CLRV-07S	72858		305	2.76	8	23	25	50	10	70	1	0.3

Raw ICP Data	Atomic number		48	51	56	57	74	79	82	83	90	92
Sample Id	Lab Id	LOI	Cd	Sb	Ba	La	W	Au	Pb	Bi	Th	U
	Units	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
	Detection limit		0.2	2		2	1	5	2	2	2	5
CLDR-P1A	72659	98.53	12.2	< 2	530	6	< 1	NSS	185	< 2	2	< 5
CLDR-S1A	72657	6.00	0.3	< 2	95	19	3	< 5	11	< 2	6	< 5
CLDR-S1B	72658	87.16	1.2	2	471	9	< 1	NSS	33	2	4	< 5
CLDR-S2A	72660	84.97	1.1	2	113	12	1	64	43	< 2	3	< 5
CLDR-S3A	72661	65.12	0.6	< 2	285	14	< 1	44	12	< 2	3	< 5
CLDR-S4A	72662	6.72	< .2	< 2	150	30	2	17	14	< 2	8	< 5
CLDR-S4B	72663	57.03	0.6	< 2	219	26	< 1	32	32	< 2	6	< 5
CLDR-S5A	72664	1.97	0.4	< 2	72	16	1	< 5	10	3	4	< 5
CLDR-S5A	72664 RE		< .2	< 2	73	16	1		8	4	4	< 5
CLDR-S5B	72665	15.96	0.2	< 2	107	16	< 1	16	10	< 2	4	< 5
CLDR-S6A	72666	29.93	1.5	< 2	222	41	< 1	21	17	< 2	9	< 5
CLDR-S7A	72667	14.75	0.2	< 2	165	31	1	< 5	11	< 2	8	< 5
CLDR-S7B	72668	85.29	4.9	< 2	224	39	< 1	NSS	29	< 2	10	< 5
CLDR-S8A	72669	14.34	< .2	< 2	113	26	2	< 5	8	< 2	8	< 5
CLDR-S8B	72670	6.15	< .2	< 2	104	27	1	5	11	< 2	9	< 5
CLRV-02S	72856		< .2	< 2	28	16	< 1	< 5	5	< 2	4	< 5
CLRV-05S	72857		< .2	2	50	21	1	< 5	8	< 2	7	< 5
CLRV-07S	72858		< .2	< 2	163	34	< 1	< 5	19	< 2	6	< 5

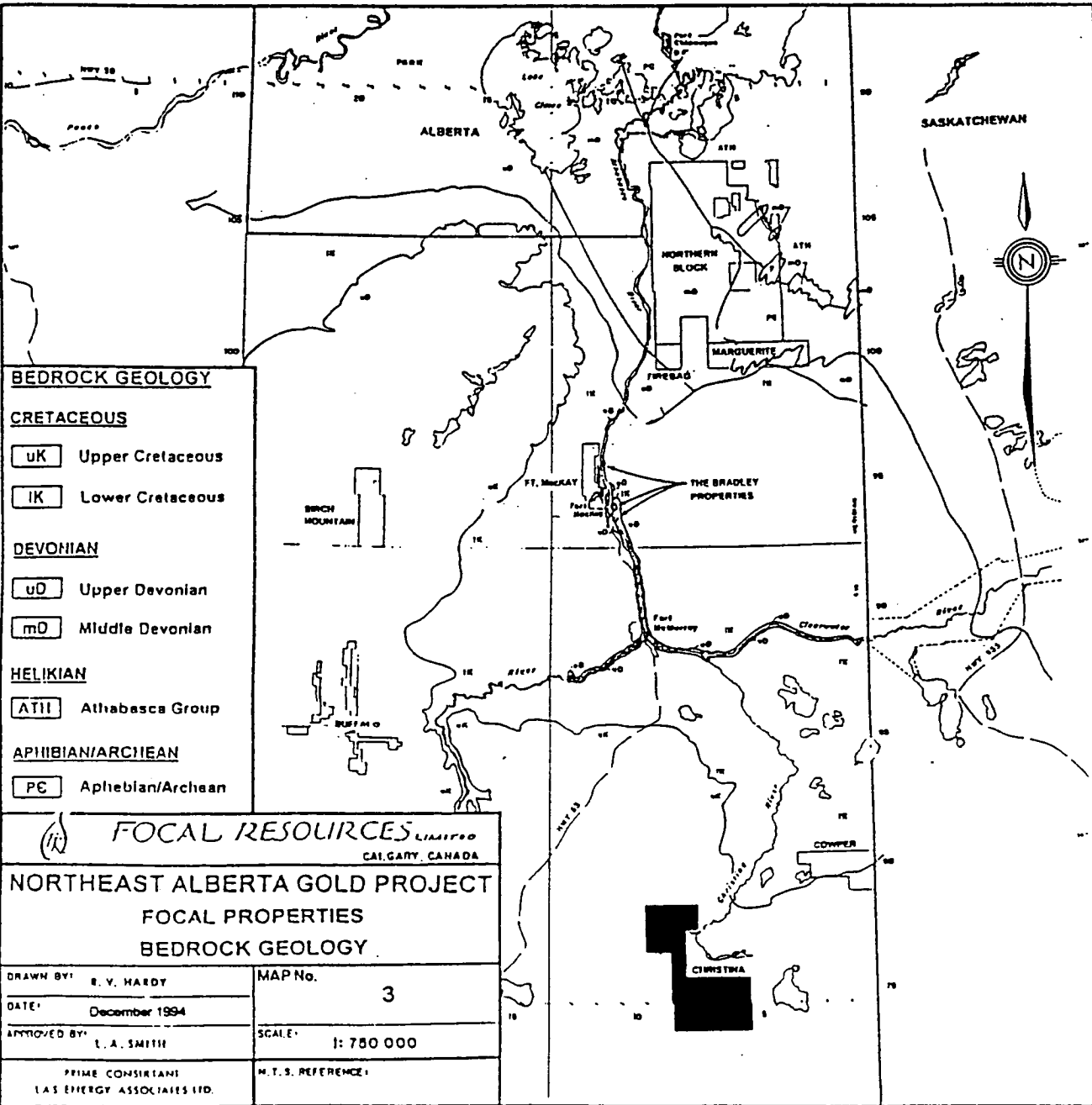
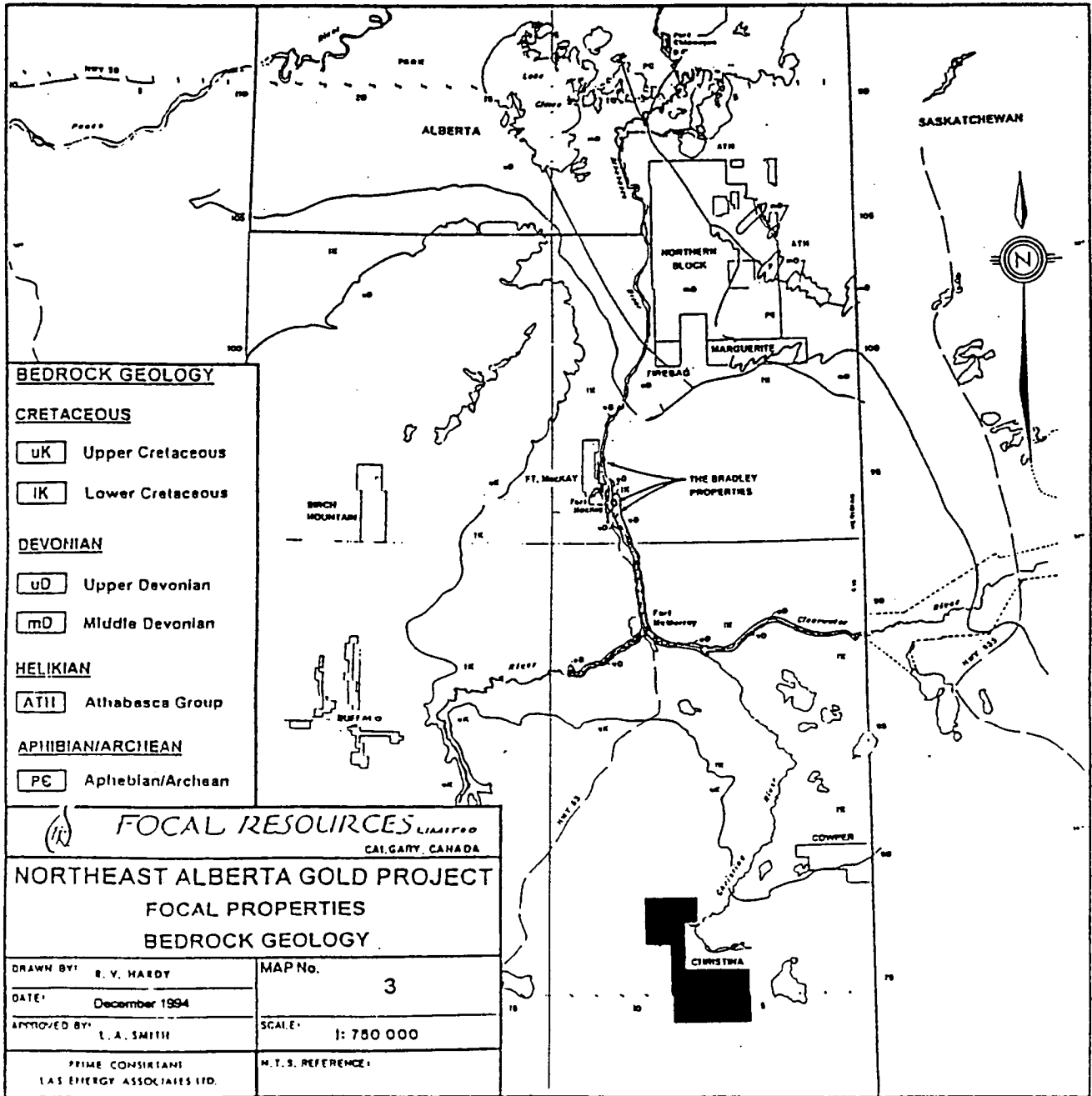
Appendix IV Maps

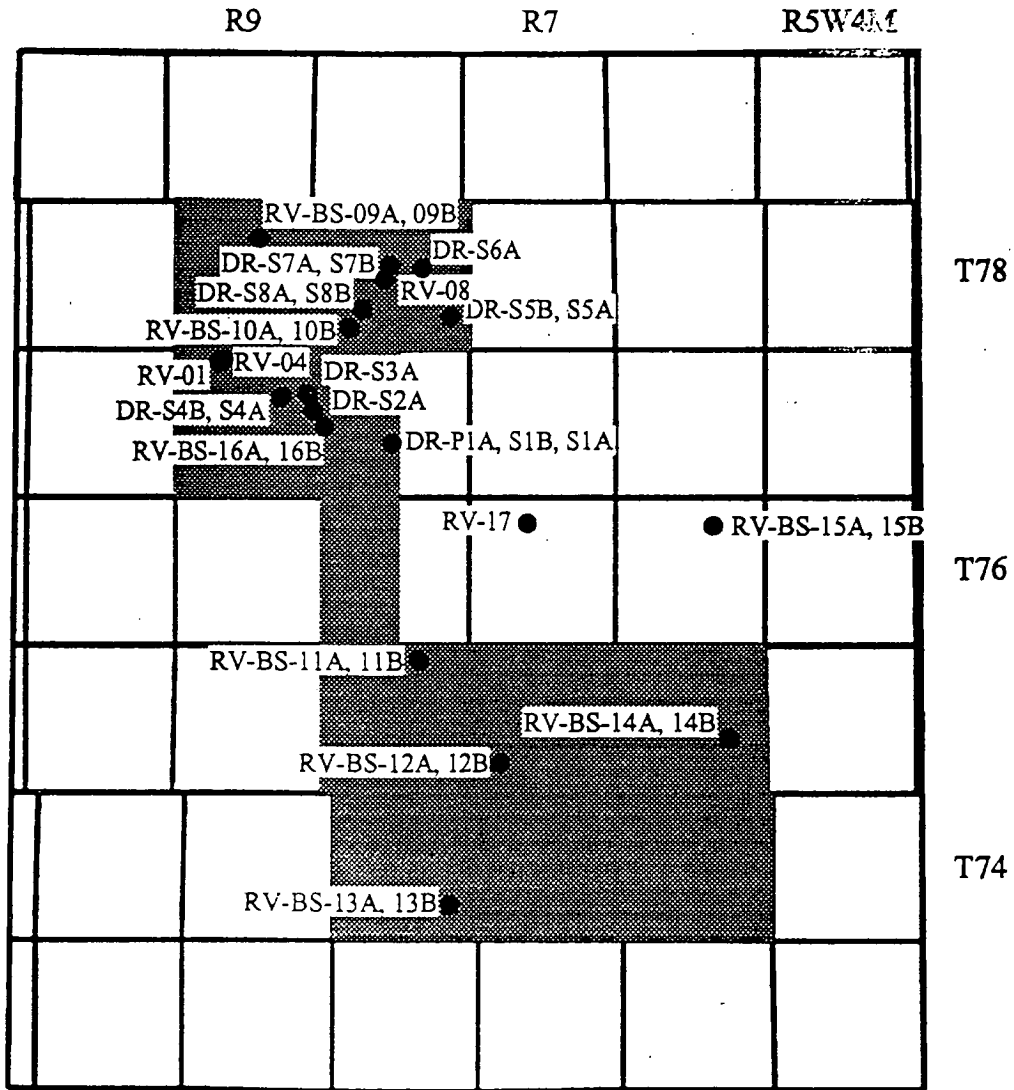



 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Northeast Alberta Gold Project Property Locations	
DRAWN BY: T. MacKenzie	MAP NO. 1
DATE: December 1994	
APPROVED BY: L.A. Smith	SCALE: 1:6,000,000
PRIME CONSULTANT LAS ENERGY ASSOCIATES LIMITED	NTS REFERENCE:

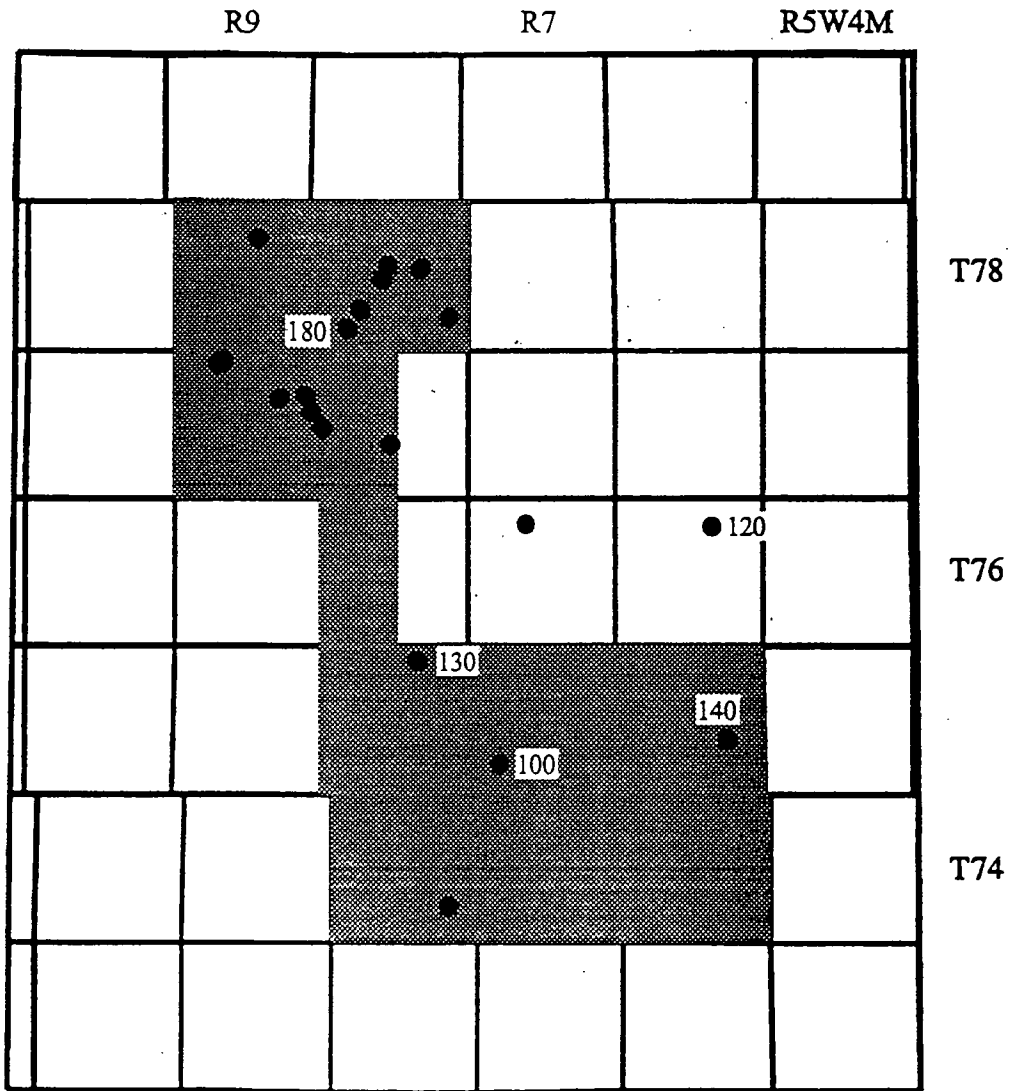



FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Permits	
DRAWN BY: M. Iimes	MAP NO. 2
DATE: June 1995	SCALE: 1:500 000
APPROVED BY:	NTS REFERENCE: 73M

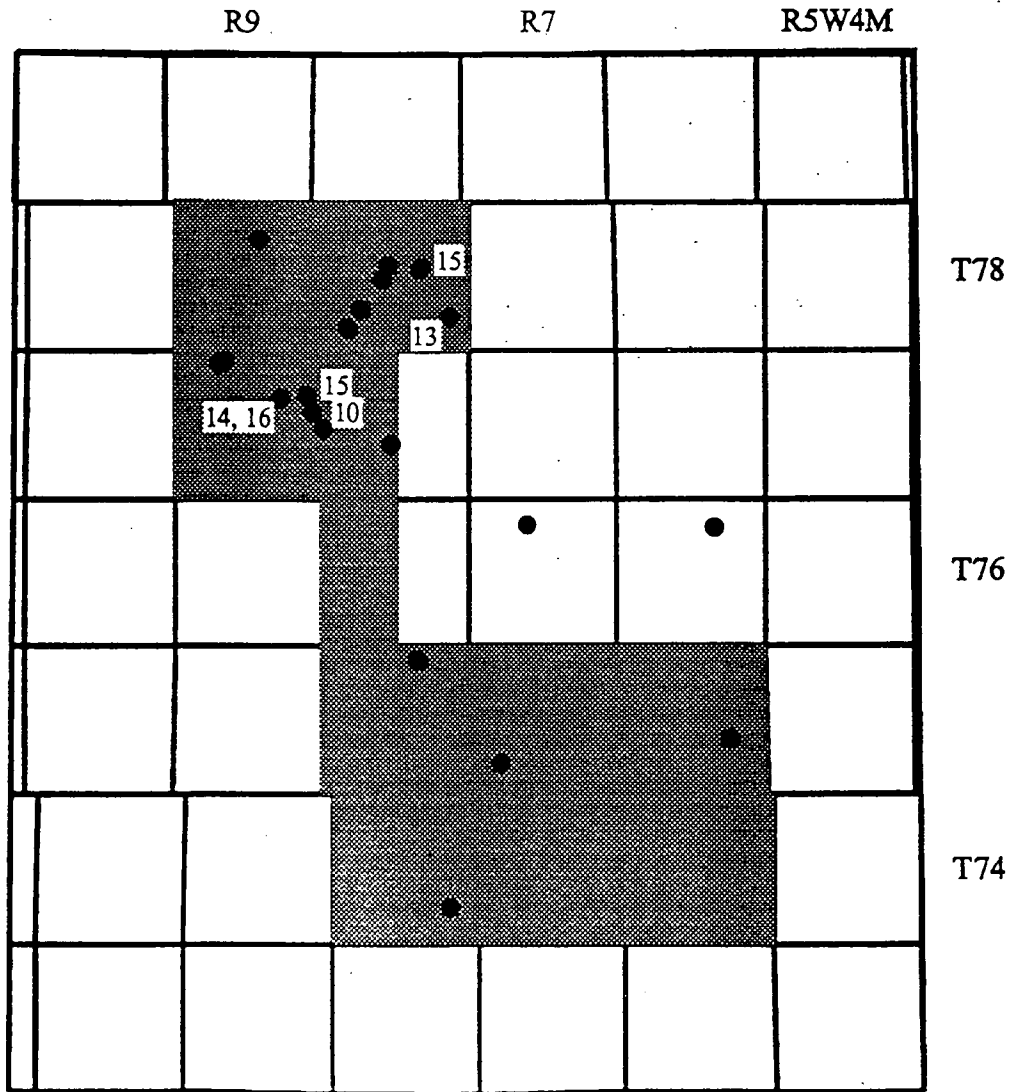





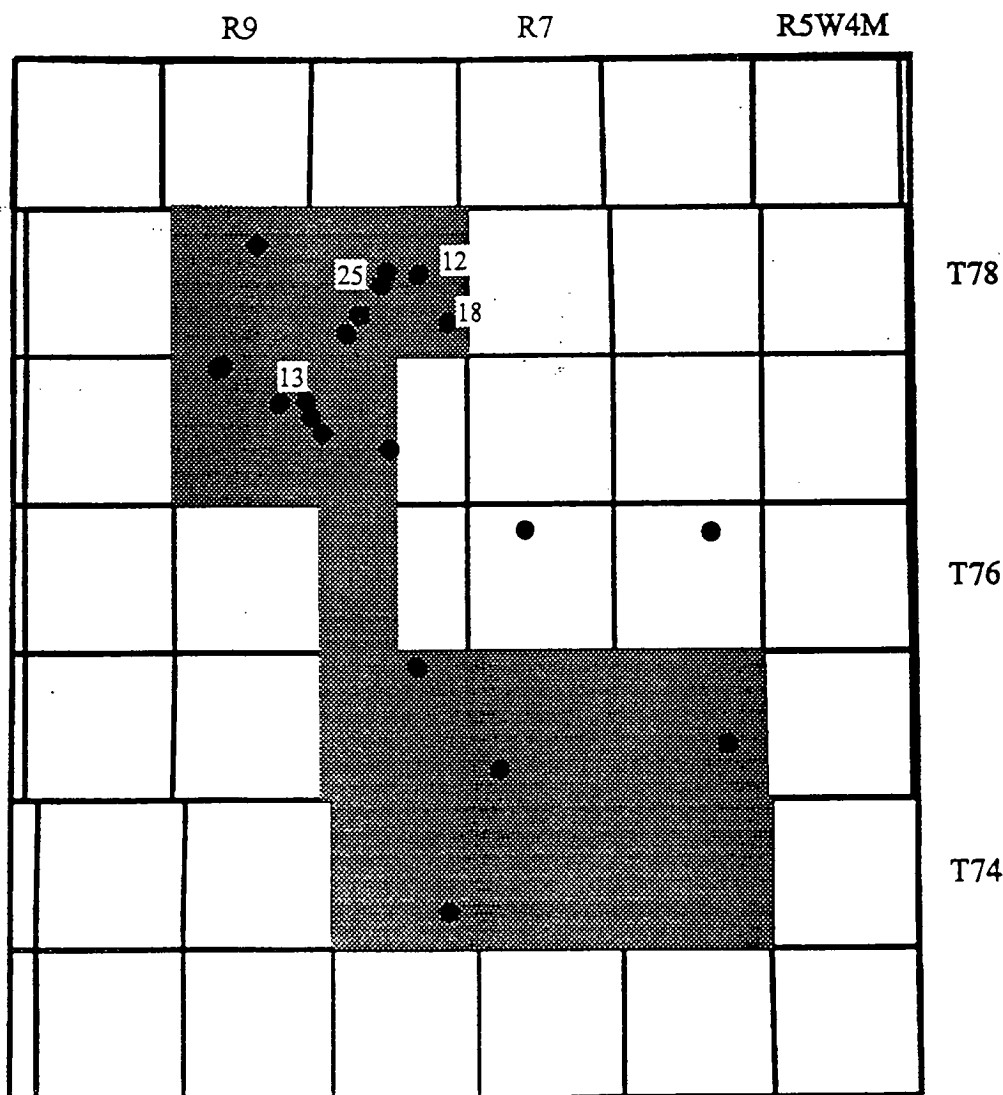
 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Sample Locations	
DRAWN BY: M. Limes	MAP NO. 4
DATE: June 1995	
APPROVED BY:	SCALE: 1 : 500 000
	NTS REFERENCE: 73M




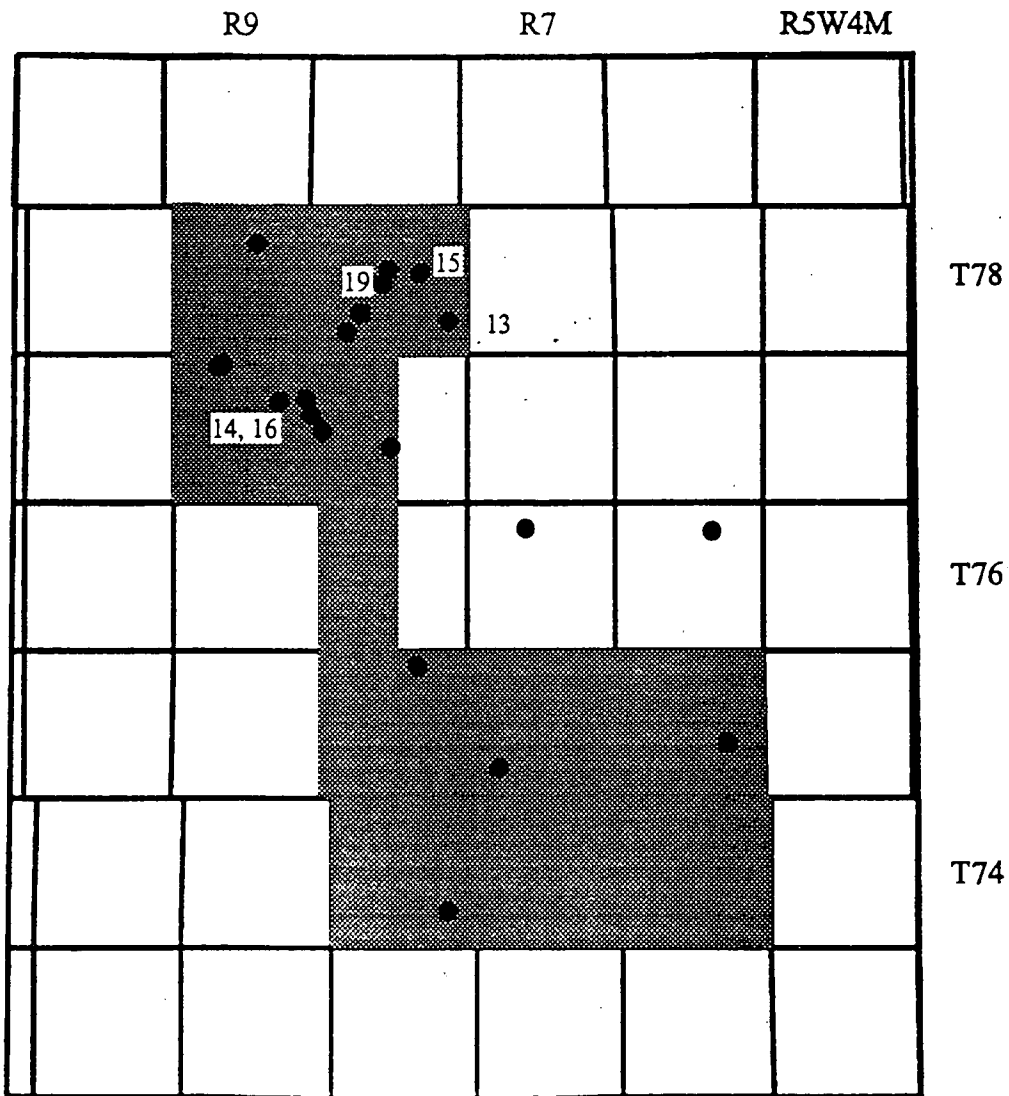
 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Lake Sediment Results - Zn (ppm)	
DRAWN BY: M. Imms	MAP NO. 5a
DATE: June 1995	
APPROVED BY:	SCALE: 1 : 500 000
	NTS REFERENCE: 73M




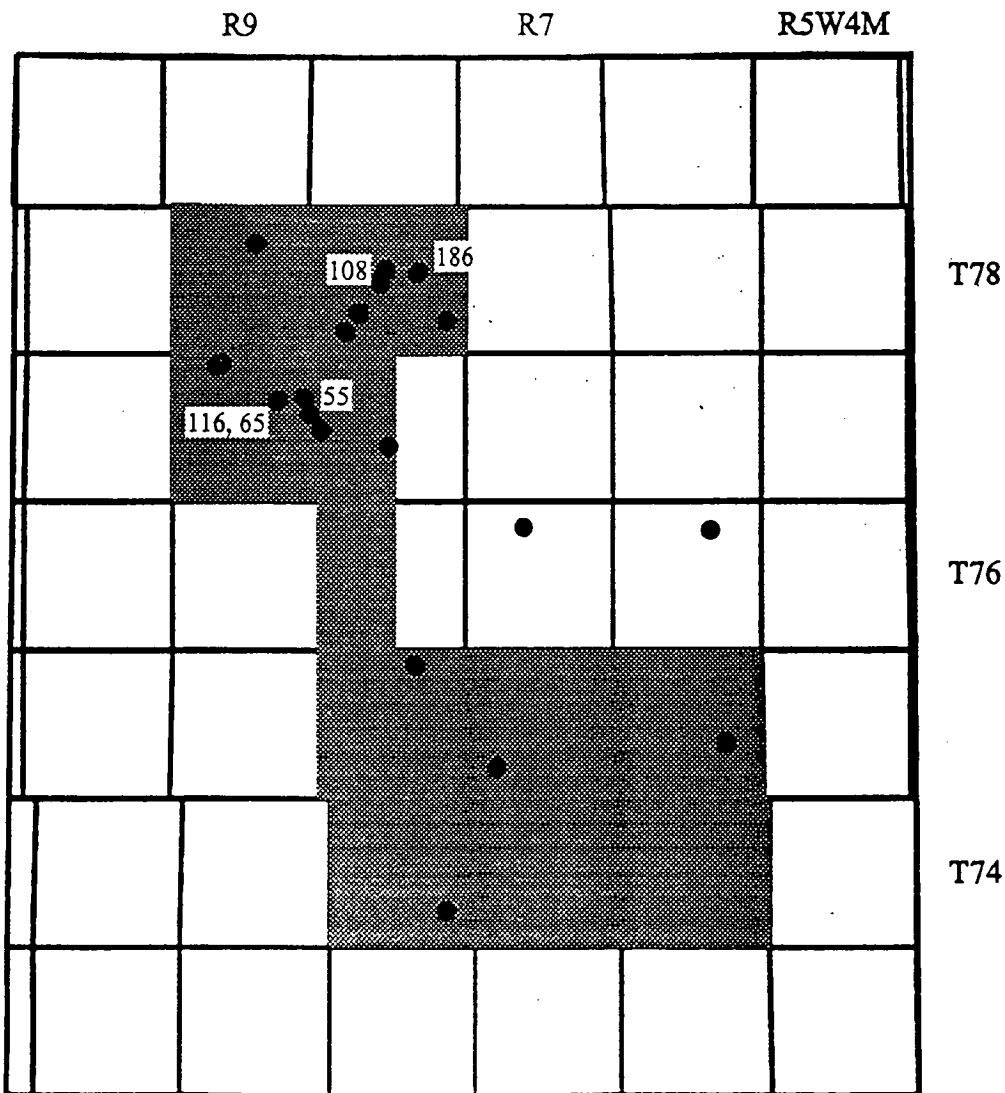
 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Peat and Soil Results - Gold (ppb)	
DRAWN BY: M. Imms	MAP NO. 5b
DATE: June 1995	
APPROVED BY:	SCALE: 1 : 500 000
	NTS REFERENCE: 73M




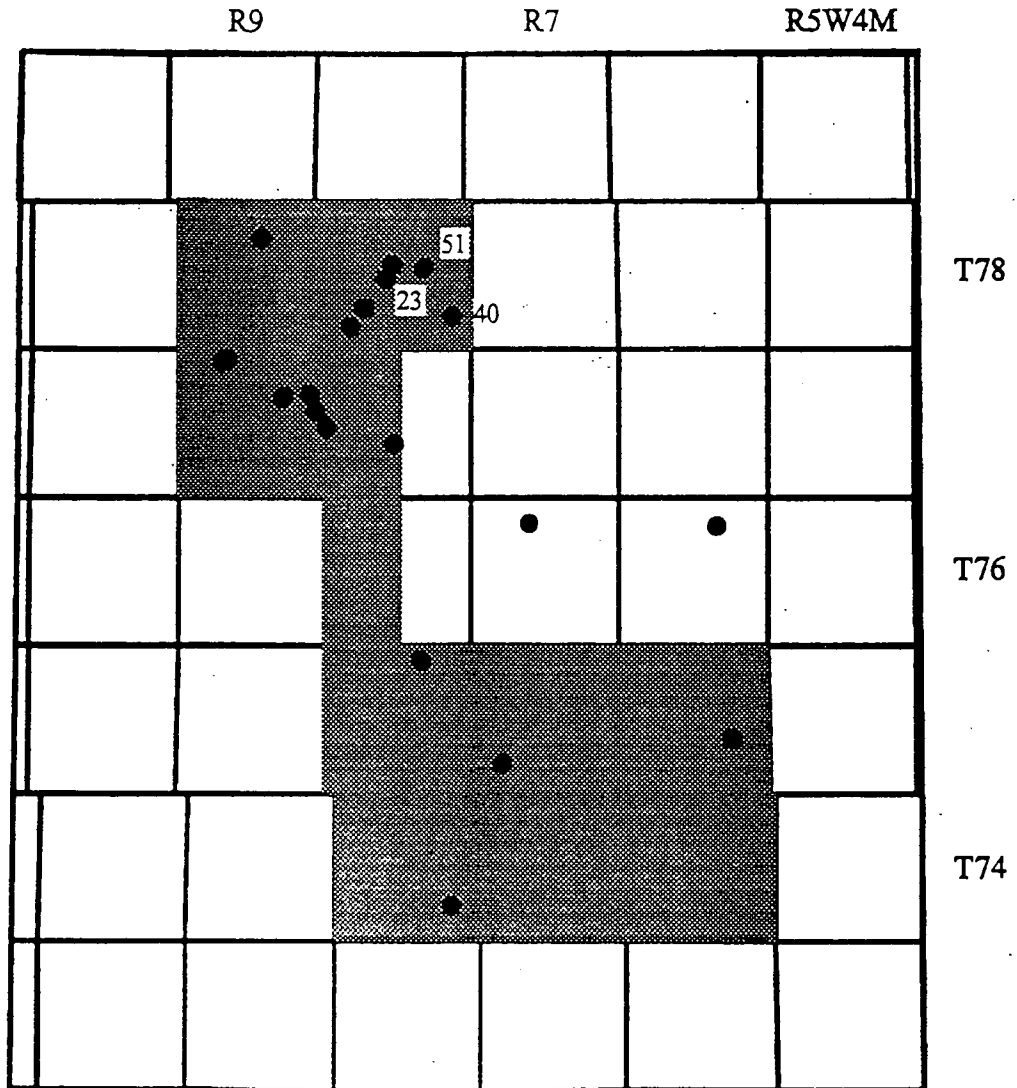
 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Soil Results - Cu (ppm)	
DRAWN BY: M. Imms	MAP NO. 5c
DATE: June 1995	
APPROVED BY:	SCALE: 1 : 500 000
	NTS REFERENCE: 73M




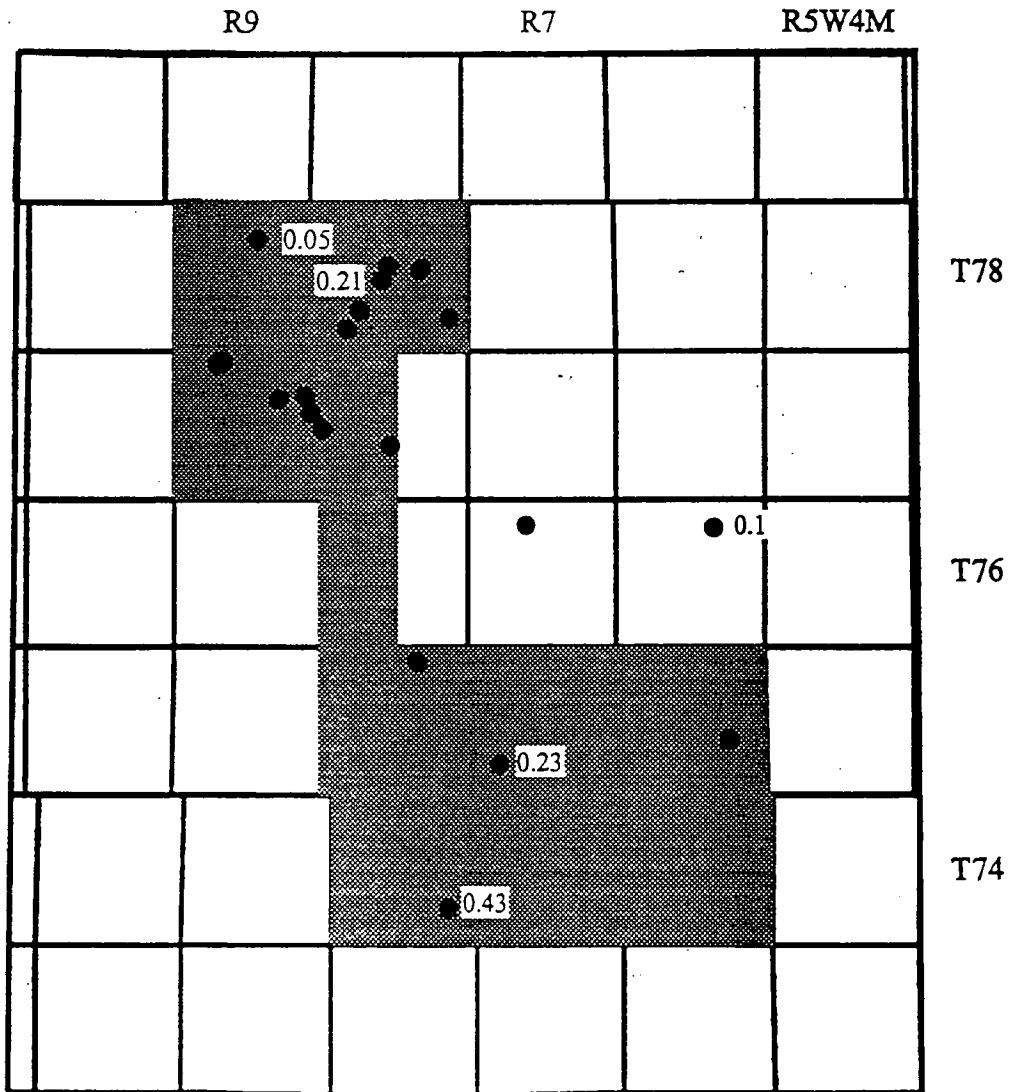
 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Peat and Soil Results- Pb (ppm)	
DRAWN BY: M. Innes	MAP NO. 5d
DATE: June 1995	SCALE: 1: 500 000
APPROVED BY:	NTS REFERENCE: 73M




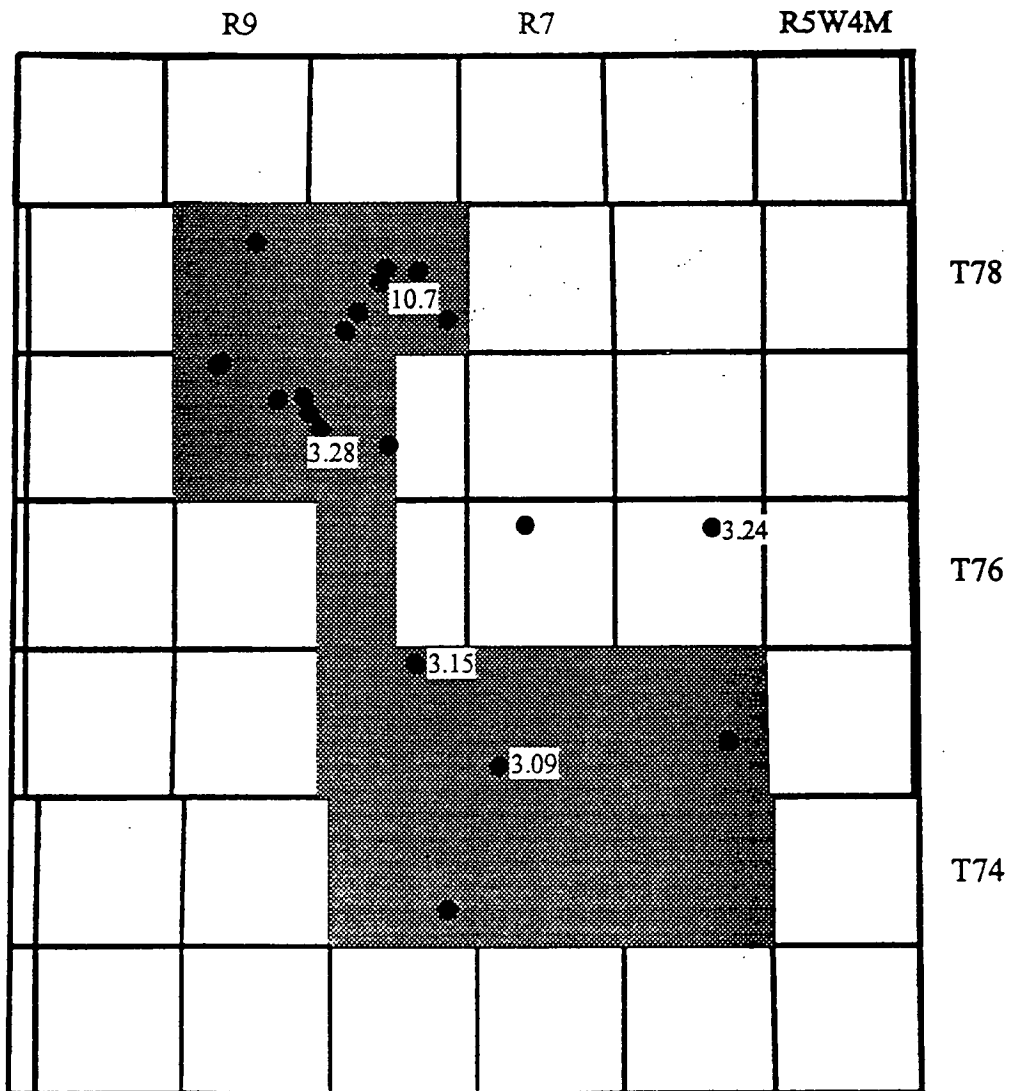
 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Peat and Soil Results - Zn (ppm)	
DRAWN BY: M. Innes	MAP NO. Se
DATE: June 1995	SCALE: 1 : 500 000
APPROVED BY:	NTS REFERENCE: 73M




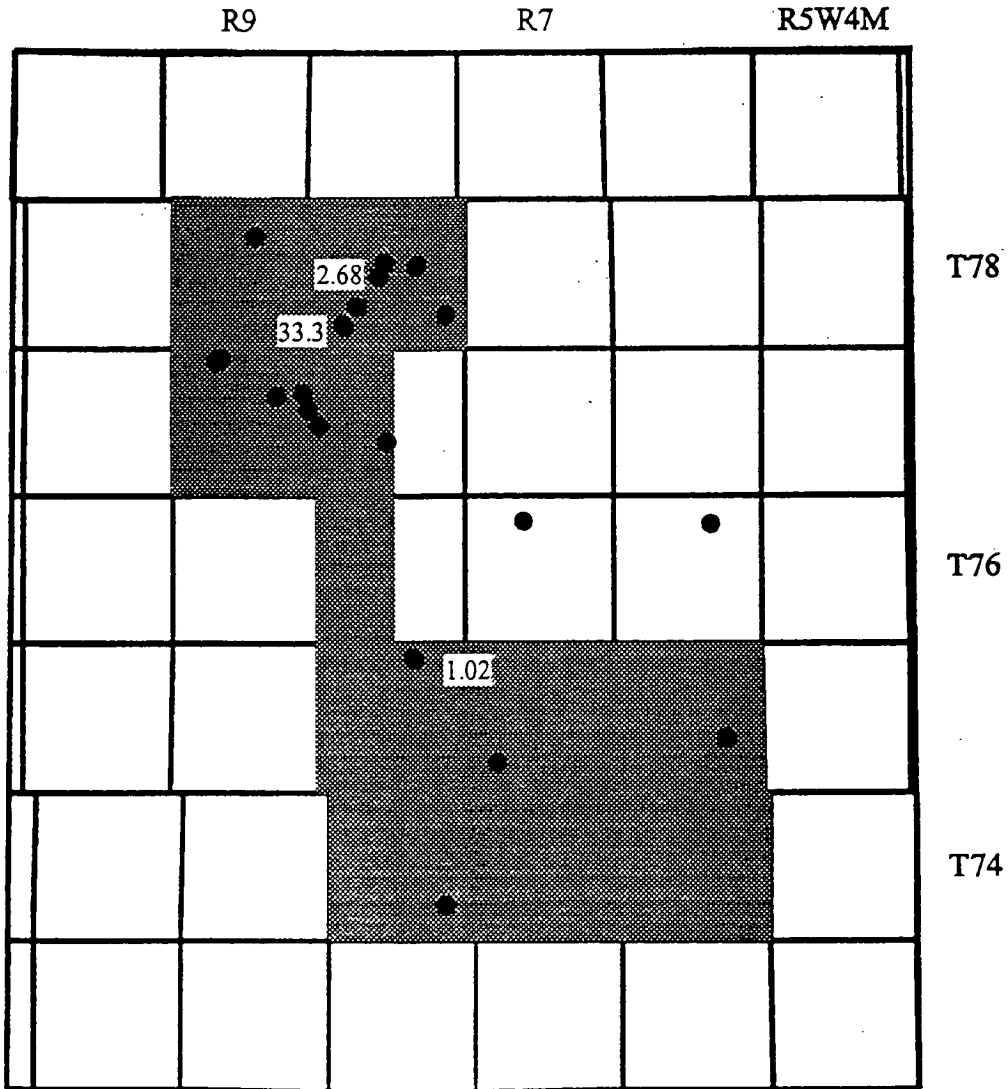
 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Peat and Soil Results - Ni (ppm)	
DRAWN BY: M. Innes	MAP NO. 5f
DATE: June 1995	SCALE: 1:300 000
APPROVED BY:	NTS REFERENCE: 73M




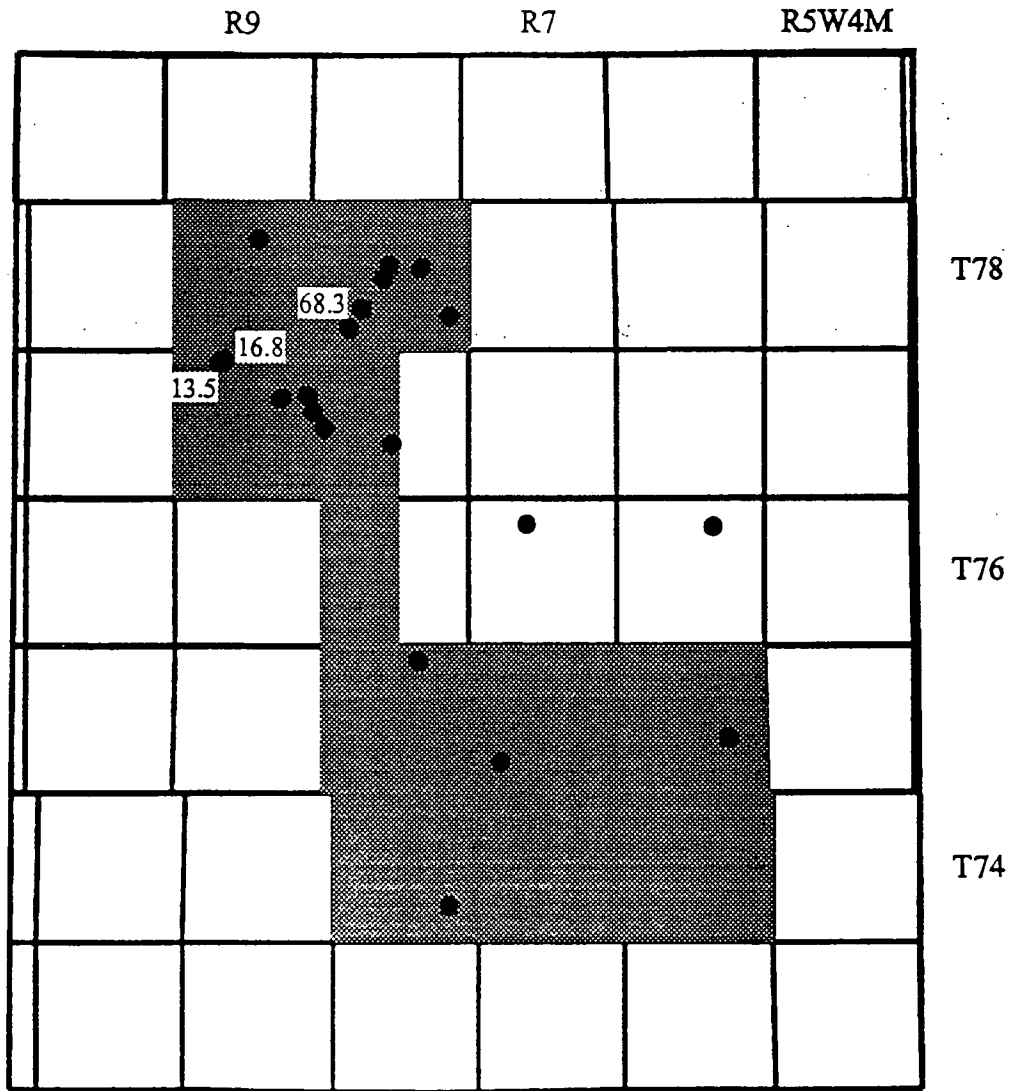
 FOCAL RESOURCES LIMITED <small>CALGARY, CANADA</small>	
Christina Property Water Results (AC) - Au (ppb)	
DRAWN BY: M. Imms	MAP NO. 5g
DATE: June 1995	SCALE: 1:500 000
APPROVED BY:	NTS REFERENCE: 73M




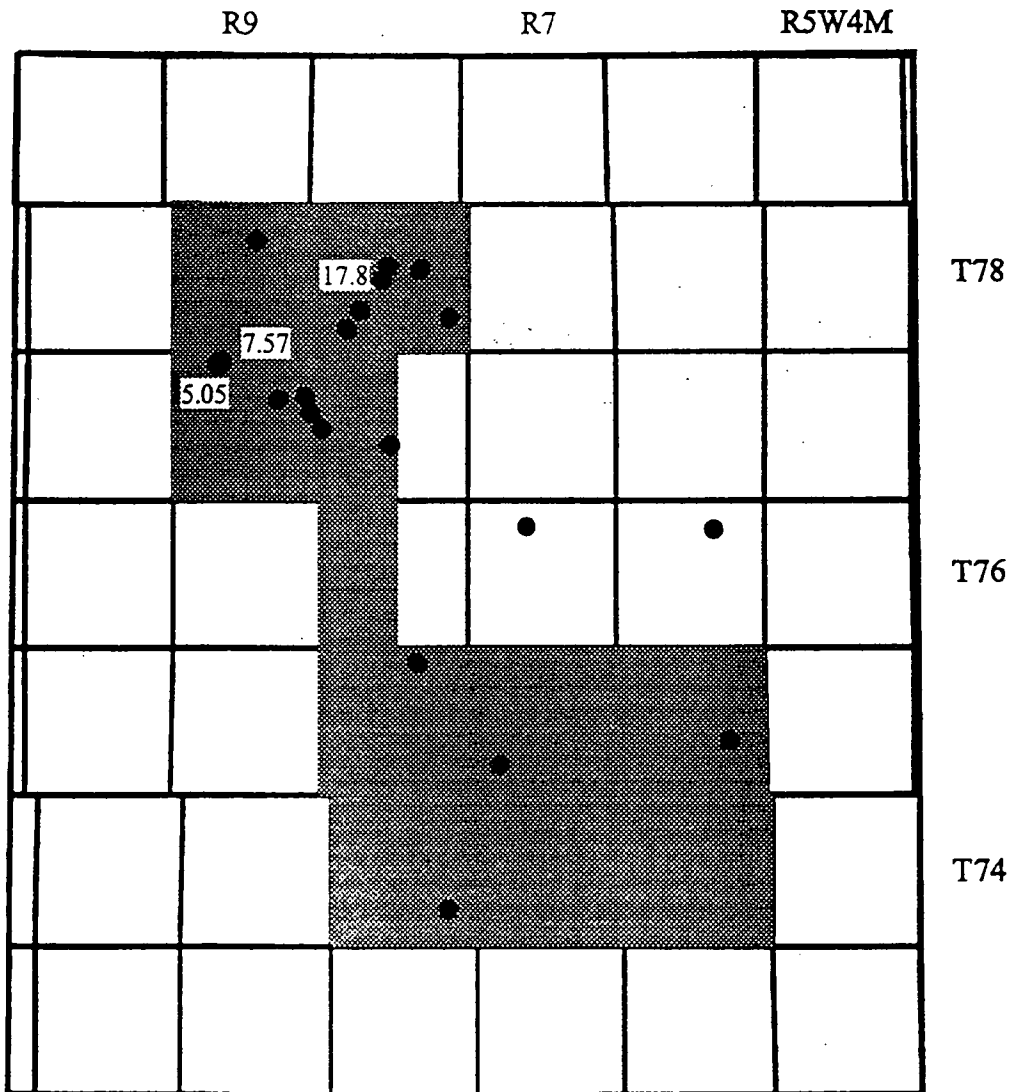
 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Water Results - Cu (ppb)	
DRAWN BY: M. Imms	MAP NO. 5h
DATE: June 1995	SCALE: 1 : 500 000
APPROVED BY:	NTS REFERENCE: 73M




 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Water Results Pb (ppb)	
DRAWN BY: M. Jones	MAP NO. 5i
DATE: June 1995	SCALE: 1 : 500 000
APPROVED BY:	NTS REFERENCE: 73M



 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Water Results - Zn (ppb)	
DRAWN BY: M. James	MAP NO. 5j
DATE: June 1995	SCALE: 1 : 500 000
APPROVED BY:	NTS REFERENCE: 73M



 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Christina Property Water Results - Ni (ppb)	
DRAWN BY: M. Imas	MAP NO. 5k
DATE: June 1995	SCALE: 1 : 500 000
APPROVED BY:	NTS REFERENCE: 73M