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FOCAL RESOURCES LIMITED

Buffalo Property

Assessment Report

19950027

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August 1995

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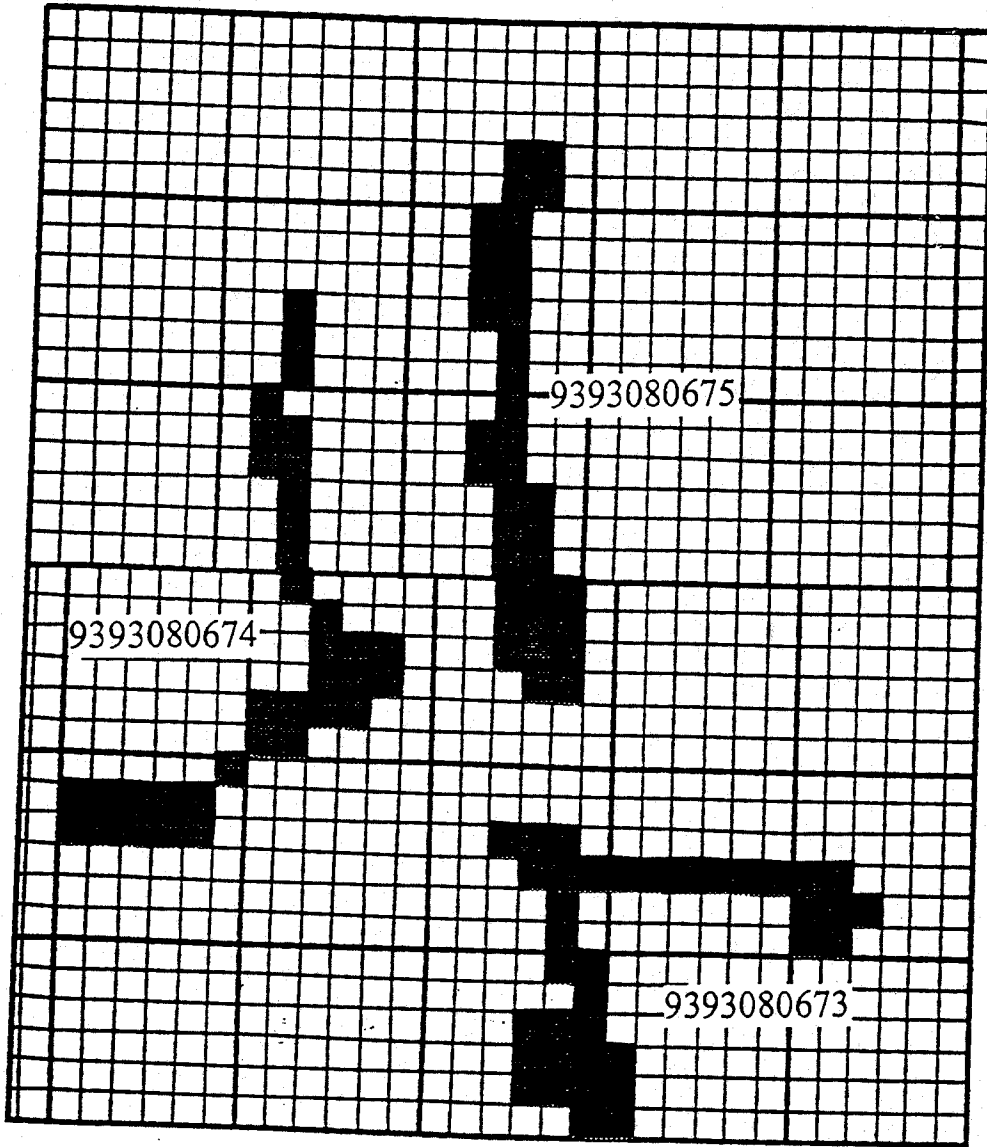
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Buffalo Property

R23

R21

R19W4M



T88

T86

T84

TROYMIN RESOURCES LTD.

Buffalo Property
Permits

June 1995

SCALE: 1:400 000

NTS REFERENCE: #4A

Summary

Focal Resources Limited began its Northeast Alberta exploration programme in the spring of 1994. The Buffalo Property was included in that study and is 69,145 acres (27,658 hectares) in size. The principal exploration objective was to find gold and other metals in the Devonian limestones. In order to test the mineralisation model, lake water, lake sediment, and peat samples were collected and analysed.

The results show that there are elevated levels of zinc in the area. However, further exploration is not recommended at this time, and it is recommended that the property be dropped.

Introduction

This report summarises the exploration efforts carried out by Focal Resources Limited on the Buffalo Property (NTS 84 H; 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

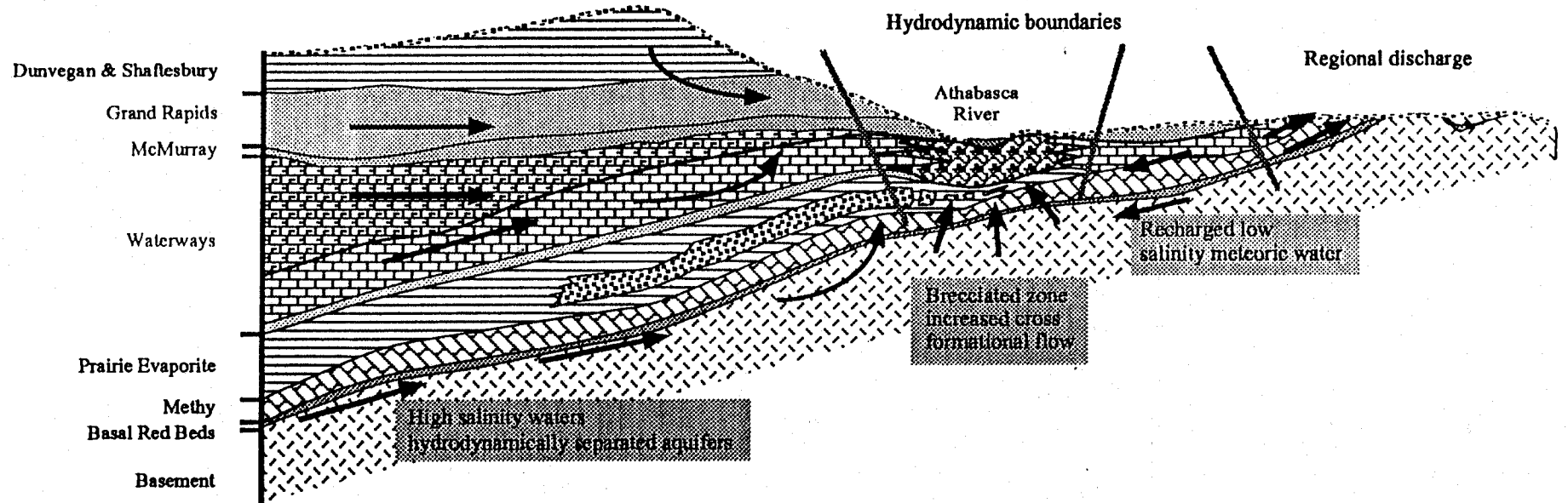
Diagram 1. Generalized Stratigraphy of Northeastern Alberta.


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			
			Upper	Beaverhill Lake	Waterways	Mildred	argillaceous limestone
						Moberly	limestone & shale
Christina	shale & limestone						
Calumet	limestone & shale						
Firebag	shale, minor limestone						
Devonian	Middle	Upper Elk Point	Slave Point	limestone			
			Prairie Evaporite	salts, anhydrite, shale & dolomite			
			Methy	dolomite, minor reefs			
	Lower	Lower Elk Point	McLean River	shale, siltstone, dolomite			
			Cold Lake	salt, minor shale			
			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 CALGARY, CANADA	
Regional Hydrodynamic Model Hydrogeology adapted from work by Groundwater Solutions	
DRAWN BY: M. Innes/R. Hardy	DIAGRAM NO.
DATE: April 1993	2
APPROVED BY:	SCALE: 1 : 2,000,000; VS 100X
PRIME CONSULTANT LAB ENERGY ASSOCIATES LIMITED	NTS REFERENCE: 84A, 84H, 74E, 74L

breaching of aquatards in the overlying formations. Dissolution of the Prairie Evaporite 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 lake water, lake sediment, and peat was conducted. The analyses show elevated geochemical values for several metals in the peat samples.

Location, Access and Permit Tabulation

The BuffaloProperty comprises the lands listed in Table 1. They are found within NTS map 84 M . 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 Buffalo 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	Range	Meridian
9393080673	5-9;17;18	85	19	W4
	6;7;18	84	20	W4
	13-18	85	20	W4
	1;10-15;22-25;35;36	84	21	W4
	2;11;13-15;21-23	85	21	W4
	9393080674	5-10;14-16;21-23;28;32	86	22
9393080674	4;9;16;20;21;28;29;32	87	22	W4
	4;9;16	88	22	W4
	19-23;26-30;36	85	23	W4
	9393080675	14,15,21-23;26-28;33-35	86	21
9393080675	2;3;10;11;14;15;21;22;27;28;34	87	21	W4
	3;10;15;16;21;22;27;28;33;34	88	21	W4
	2;3;10;11	89	21	W4

Access was gained via helicopter from Fort McMurray as there are no roads in the area.

Work Performed

Tables 2 and 3 show the work carried out on and/or in support of work on the Buffalo Property from August 1994 - April 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	13 samples
Lake Water Sampling	August & October 1994	8 samples
Peat Sampling	August & October 1994	10 samples
Sample Analysis	August - October 1994	
Data Analysis, Interpretation and Consolidation	November 1994	

Table 3
 Cost of Work Performed

Company Labour & Consulting Fees	\$ 1,162.42
Geological Studies	1,437.50
Geochemical Studies	1,437.50
Assaying/Analysis	1,437.50
Transportation - helicopter	2,478.00
Transportation - fixed wing	288.00
Permits & Licences	37.58
Overhead	1,047.50
Total	\$ 9,326.00

Sampling Rationale, Procedures and Analysis

Exploration Strategy

The permits discussed in this report form a portion of the lands considered in Focal Resources Limited overall Northeast Alberta exploration programme. 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.

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. Peat samples were also collected.

Lake Water Study

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 1 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 1 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.

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

Slow fluid movement and a clay-rich basal layer tend to trap metallic ions in peat bogs. Therefore peat was considered a viable sampling medium. Peat was sampled using a sampler devised and constructed by Dr. Jack Campbell of Jaycon Reconnaissance. Attempts were made to sample peat at the base of bogs, and where possible the peat and the clay below were taken as separate samples

The peat samples were assayed using ICP-AES and FA-AA for gold (Appendix 1, Table 5 and 6).

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. None of these samples were taken from within the boundaries of this property, however, the analysis of this 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			<50-170 ppm	<100 ppm
Peat	5-14 ppb	4-14 ppm	2-14 ppm	21-77 ppm	4-29 ppm

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 has not been statistically defined, but it can be assumed to be well above detection for Pb, Zn, Cu, Ni, and Au in peats, and above detection for Zn in lake sediments.

The small number of samples from the area makes interpretation difficult. The fact that the background for the various elements in peats is undefinable, coupled with the fact that the correlation between peats and other 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 largely covered with muskeg underlain 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. Thick overburden and lack of easy access to the property compound the problem.

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.

Leslie A. Smith, B.Sc., P. Geol. is a registered geologist in Alberta and has over 20 years of experience in mining and petroleum geology and project management.

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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
Mangnese	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

Corrected Data			atomic number		5	11	12	15	19	20	21	22	23
Datapoint Id	Sample Id	Sample Type	Lab Id	LOI	B	Na	Mg	Al	P	K	Ca	Ti	V
			units	%	ppm	%	%	%	%	%	%	%	ppm
			detection limit		3	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1
BOMI-PT-1	BOMI-PT-1	peat	73056	93.09	9	0.01	0.16	0.12	0.05	0.06	0.81	0.00	3
BOMI-PT-2	BOMI-PT-2	peat	73057	78.30	27	0.01	0.36	0.55	0.03	0.10	2.02	0.00	12
BOMI-PT-3	BOMI-PT-3	peat	73058	95.85	6	0.00	0.22	0.08	0.02	0.02	0.77	0.00	2
BOMI-PT-4	BOMI-PT-4	peat	73059	87.67	15	0.00	0.22	0.20	0.03	0.03	1.82	0.00	4
BOMI-PT-5	BOMI-PT-5	peat	73060	31.88	33	0.04	0.35	2.13	0.06	0.35	1.32	0.01	45
BOMI-PT-6	BOMI-PT-6	peat	73061	46.91	8	0.01	0.10	0.57	0.06	0.07	0.57	0.01	16
BOMI-PT-7	BOMI-PT-7	peat	73062	89.04	11	0.00	0.11	0.16	0.03	0.02	1.49	0.00	3
BOMI-PT-8	BOMI-PT-8	peat	73063	75.86	13	0.01	0.17	0.58	0.05	0.07	2.38	0.01	14
BOMI-PT-9	BOMI-PT-9	peat	73064	27.38	17	0.01	0.17	0.71	0.04	0.14	1.00	0.01	20
BOMI-PT-9	BOMI-S-9	soil	73055	6.73	21	0.04	0.27	1.67	0.04	0.34	0.38	0.01	35

Corrected Data			atomic number		24	25	26	27	28	29	30	33	38
Datapoint Id	Sample Id	Sample Type	Lab Id	LOI	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Sr
			units	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
			detection limit		1	2	0.01	1	1	1	1	2	1
BOMI-PT-1	BOMI-PT-1	peat	73056	93.09	63	286	0.29	1	12	7	44	0	45
BOMI-PT-2	BOMI-PT-2	peat	73057	78.30	29	274	1.40	4	14	14	54	5	155
BOMI-PT-3	BOMI-PT-3	peat	73058	95.85	8	72	0.08	0	4	4	23	0	43
BOMI-PT-4	BOMI-PT-4	peat	73059	87.67	7	119	0.73	1	5	5	54	2	81
BOMI-PT-5	BOMI-PT-5	peat	73060	31.88	57	153	1.79	7	24	12	77	7	99
BOMI-PT-6	BOMI-PT-6	peat	73061	46.91	116	141	1.10	3	11	8	27	2	38
BOMI-PT-7	BOMI-PT-7	peat	73062	89.04	13	131	1.20	2	6	6	21	5	73
BOMI-PT-8	BOMI-PT-8	peat	73063	75.86	15	381	0.99	3	10	8	53	4	112
BOMI-PT-9	BOMI-PT-9	peat	73064	27.38	81	178	1.12	7	23	12	76	10	90
BOMI-PT-9	BOMI-S-9	soil	73055	6.73	87	106	1.46	8	29	12	66	7	60

Corrected Data			atomic number	42	47	48	51	56	57	74	79	82	
Datapoint Id	Sample Id	Sample Type	Lab Id	LOI	Mo	Ag	Cd	Sb	Ba	La	W	Au	Pb
			units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm
			detection limit		1	0.3	0.2	2	1	1	2	5	3
BOMI-PT-1	BOMI-PT-1	peat	73056	93.09	2	0.2	1.1	<2	39	1	0	NSS	6
BOMI-PT-2	BOMI-PT-2	peat	73057	78.30	1	0.2	1.1	1	23	5	0	NSS	3
BOMI-PT-3	BOMI-PT-3	peat	73058	95.85	1	0.3	1.6	0	4	0	0	NSS	3
BOMI-PT-4	BOMI-PT-4	peat	73059	87.67	1	0.5	1.8	<2	11	2	<1	NSS	3
BOMI-PT-5	BOMI-PT-5	peat	73060	31.88	1	0.3	0.7	<2	247	23	1	5	11
BOMI-PT-6	BOMI-PT-6	peat	73061	46.91	1	0.3	1.5	<2	103	8	1	7	6
BOMI-PT-7	BOMI-PT-7	peat	73062	89.04	2	0.1	0.8	<2	16	1	<1	NSS	2
BOMI-PT-8	BOMI-PT-8	peat	73063	75.86	1	0.2	0.7	<2	22	6	<1	14	4
BOMI-PT-9	BOMI-PT-9	peat	73064	27.38	2	0.6	1.0	2	177	15	1	7	7
BOMI-PT-9	BOMI-S-9	soil	73055	6.73	2	<.1	0.7	<2	185	26	1	6	14

Corrected Data			atomic number		83	90	92
Datapoint Id	Sample Id	Sample Type	Lab Id	LOI	Bi	Th	U
			units	%	ppm	ppm	ppm
			detection limit		2	2	5
BOMI-PT-1	BOMI-PT-1	peat	73056	93.09	1	0	<5
BOMI-PT-2	BOMI-PT-2	peat	73057	78.30	0	2	<5
BOMI-PT-3	BOMI-PT-3	peat	73058	95.85	<2	0	<5
BOMI-PT-4	BOMI-PT-4	peat	73059	87.67	<2	0	<5
BOMI-PT-5	BOMI-PT-5	peat	73060	31.88	<2	6	<5
BOMI-PT-6	BOMI-PT-6	peat	73061	46.91	<2	3	<5
BOMI-PT-7	BOMI-PT-7	peat	73062	89.04	<2	1	<5
BOMI-PT-8	BOMI-PT-8	peat	73063	75.86	<2	2	<5
BOMI-PT-9	BOMI-PT-9	peat	73064	27.38	<2	5	9
BOMI-PT-9	BOMI-S-9	soil	73055	6.73	<2	6	<5

NAA Data											
Sample Id	Sample Type	Lab Id	Na	Ca	Sc	Cr	Fe	Co	Ni	Zn	As
		units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
BOMI-PT-10	biological	73101	3800	<10000	2.00	420.0	11000	5.0	< 100	70	2.0
BOMI-S-10	soil	73102	4800	<10000	1.80	220.0	6000	< 5.0	< 100	< 50	< 2.0
BOMI-BS-11A	lake sediment	73103	800	140000	1.30	10.0	13000	6.0	< 100	100	4.0
BOMI-BS-11B	lake sediment	73104	900	100000	1.60	20.0	16000	7.0	< 100	130	6.0
BOMI-BS-12A	lake sediment	73105	500	10000	1.00	10.0	13000	5.0	< 100	170	6.0
BOMI-BS-12B	lake sediment	73106	500	10000	1.00	10.0	12000	6.0	< 100	170	6.0
BOMI-BS-13A	lake sediment	73107	1500	150000	1.80	20.0	13000	6.0	< 100	60	5.0
BOMI-BS-13B	lake sediment	73108	800	190000	1.00	10.0	8000	< 5.0	< 100	< 50	3.0
BOMI-BS-14	lake sediment	73109	600	10000	0.80	10.0	6000	< 5.0	< 100	< 50	3.0
BOMI-BS-15	lake sediment	73110	1800	10000	2.70	30.0	19000	5.0	< 100	130	3.0
BOMI-BS-16	lake sediment	73111	1500	10000	3.80	40.0	16000	7.0	< 100	90	5.0
BOMI-BS-17	lake sediment	73112	1200	<10000	5.20	40.0	20000	9.0	< 100	130	5.0
BOMI-BS-18	lake sediment	73113	2900	<10000	11.40	90.0	41000	14.0	< 100	120	8.0

NAA Data											
Sample Id	Sample Type	Lab Id	Se	Br	Pb	Sr	Mo	Ag	Sb	Cs	Ba
		units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
BOMI-PT-10	biological	73101	< 5.0	26.00	< 30	< 500	< 5.0	< 5.0	0.4	< 3.0	300
BOMI-S-10	soil	73102	< 5.0	5.00	< 30	< 500	< 5.0	< 5.0	0.6	< 3.0	300
BOMI-BS-11A	lake sediment	73103	< 5.0	39.00	< 30	700	< 5.0	< 5.0	< 0.2	< 3.0	100
BOMI-BS-11B	lake sediment	73104	< 5.0	49.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	100
BOMI-BS-12A	lake sediment	73105	< 5.0	73.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	200
BOMI-BS-12B	lake sediment	73106	< 5.0	74.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	200
BOMI-BS-13A	lake sediment	73107	< 5.0	56.00	< 30	1000	< 5.0	< 5.0	0.2	< 3.0	200
BOMI-BS-13B	lake sediment	73108	< 5.0	36.00	< 30	1200	< 5.0	< 5.0	< 0.2	< 3.0	200
BOMI-BS-14	lake sediment	73109	< 5.0	66.00	< 30	< 500	< 5.0	< 5.0	0.2	< 3.0	100
BOMI-BS-15	lake sediment	73110	< 5.0	54.00	< 30	< 500	< 5.0	< 5.0	< 0.2	< 3.0	200
BOMI-BS-16	lake sediment	73111	< 5.0	61.00	< 30	< 500	< 5.0	< 5.0	0.3	< 3.0	200
BOMI-BS-17	lake sediment	73112	< 5.0	53.00	< 30	< 500	< 5.0	< 5.0	0.3	< 3.0	200
BOMI-BS-18	lake sediment	73113	< 5.0	40.00	70	< 500	7.0	< 5.0	0.4	6.0	500

NAA Data											
Sample Id	Sample Type	Lab Id	Hf	Ta	W	Ir	Au	La	Ce	Nd	Sm
		units	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
BOMI-PT-10	biological	73101	3.0	< 1.0	< 4.0	< 20	< 5.0	11.0	21.0	< 10	1.4
BOMI-S-10	soil	73102	4.0	< 1.0	< 4.0	< 20	< 5.0	11.0	21.0	10	1.4
BOMI-BS-11A	lake sediment	73103	1.0	< 1.0	< 4.0	< 20	< 5.0	5.0	8.0	< 10	0.6
BOMI-BS-11B	lake sediment	73104	1.0	< 1.0	< 4.0	< 20	< 5.0	6.0	11.0	< 10	0.8
BOMI-BS-12A	lake sediment	73105	1.0	< 1.0	< 4.0	< 20	< 5.0	3.0	6.0	< 10	0.5
BOMI-BS-12B	lake sediment	73106	1.0	< 1.0	< 4.0	< 20	< 5.0	3.0	5.0	< 10	< 0.5
BOMI-BS-13A	lake sediment	73107	2.0	< 1.0	< 4.0	< 20	< 5.0	8.0	15.0	< 10	1.1
BOMI-BS-13B	lake sediment	73108	< 1.0	< 1.0	< 4.0	< 20	< 5.0	4.0	8.0	< 10	0.5
BOMI-BS-14	lake sediment	73109	< 1.0	< 1.0	< 4.0	< 20	< 5.0	3.0	5.0	< 10	< 0.5
BOMI-BS-15	lake sediment	73110	1.0	< 1.0	< 4.0	< 20	< 5.0	9.0	18.0	< 10	1.2
BOMI-BS-16	lake sediment	73111	2.0	< 1.0	< 4.0	< 20	< 5.0	12.0	22.0	10	1.8
BOMI-BS-17	lake sediment	73112	2.0	< 1.0	< 4.0	< 20	< 5.0	17.0	33.0	10	2.3
BOMI-BS-18	lake sediment	73113	3.0	< 1.0	< 4.0	< 20	< 5.0	35.0	69.0	30	4.7

NAA Data								
Sample Id	Sample Type	Lab Id	Eu	Tb	Yb	Lu	Th	U
		units	ppm	ppm	ppm	ppm	ppm	ppm
BOMI-PT-10	biological	73101	0.3	< 0.5	0.8	0.09	2.9	1.9
BOMI-S-10	soil	73102	0.7	< 0.5	0.7	0.10	2.5	0.8
BOMI-BS-11A	lake sediment	73103	0.4	< 0.5	0.4	< 0.05	1.2	1.7
BOMI-BS-11B	lake sediment	73104	0.4	< 0.5	0.4	0.05	1.6	2.1
BOMI-BS-12A	lake sediment	73105	0.2	< 0.5	0.3	< 0.05	0.9	0.8
BOMI-BS-12B	lake sediment	73106	0.2	< 0.5	0.2	< 0.05	0.9	0.9
BOMI-BS-13A	lake sediment	73107	0.2	< 0.5	0.4	< 0.05	1.8	3.7
BOMI-BS-13B	lake sediment	73108	0.3	< 0.5	0.3	< 0.05	1.0	4.6
BOMI-BS-14	lake sediment	73109	0.4	< 0.5	< 0.2	< 0.05	< 0.5	0.8
BOMI-BS-15	lake sediment	73110	0.5	< 0.5	0.6	0.10	2.4	1.0
BOMI-BS-16	lake sediment	73111	0.6	< 0.5	0.8	0.12	3.3	1.7
BOMI-BS-17	lake sediment	73112	0.5	< 0.5	1.2	0.17	4.3	1.9
BOMI-BS-18	lake sediment	73113	1.2	< 0.5	2.2	0.37	9.4	3.1

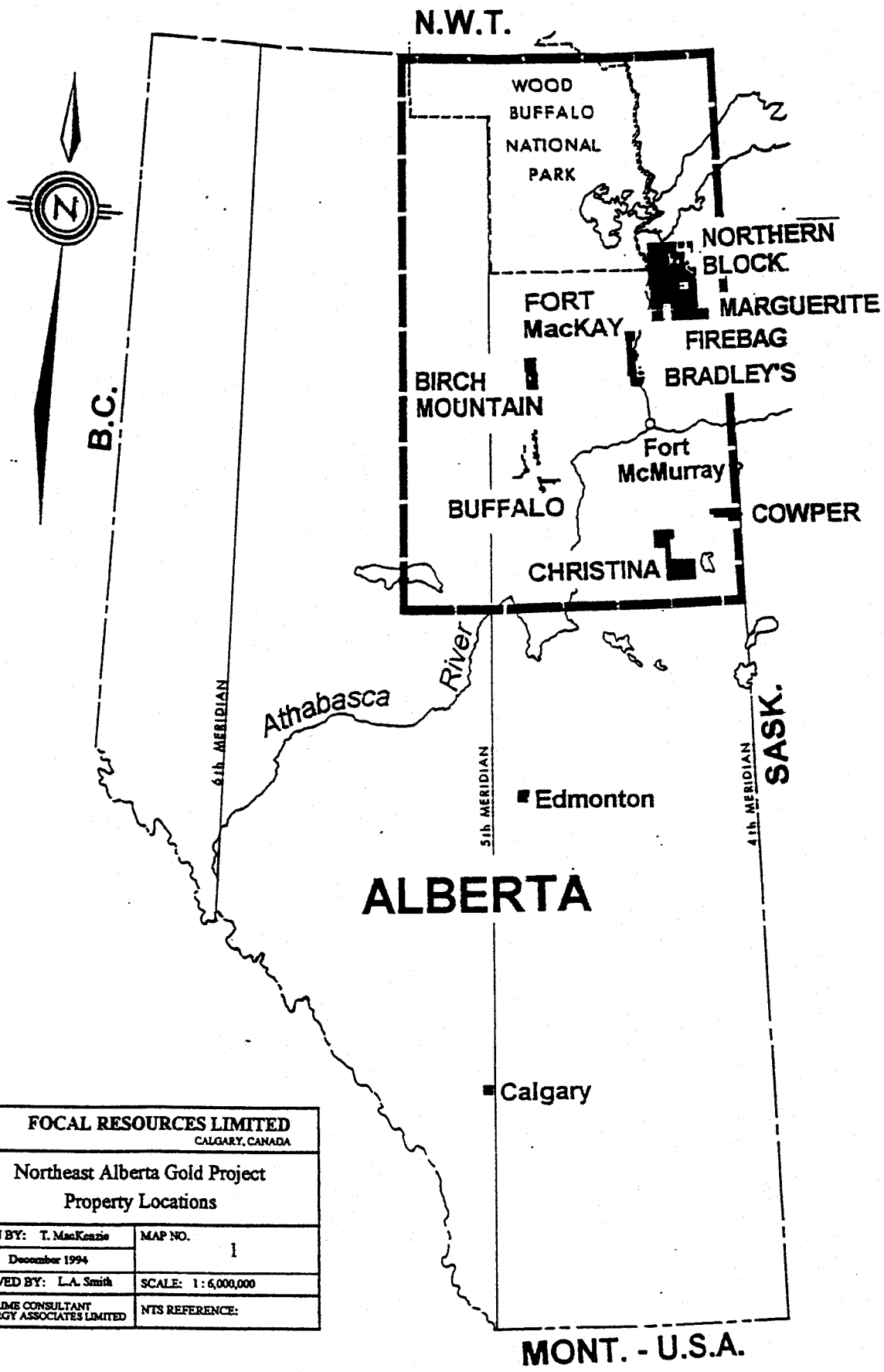
Appendix III Assay and Analysis Certificates


Raw Data		Atomic number		5	11	12	13	15	19	20	22	23	24
Datapoint Id	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	
BOMI-PT-1	BOMI-PT-1	73056	93.09	124	0.12	2.33	1.78	0.667	0.89	11.69	0.03	43	905
BOMI-PT-2	BOMI-PT-2	73057	78.30	123	0.06	1.67	2.55	0.145	0.44	9.29	0.02	57	132
BOMI-PT-3	BOMI-PT-3	73058	95.85	135	0.07	5.31	1.94	0.584	0.44	18.61	0.03	38	183
BOMI-PT-4	BOMI-PT-4	73059	87.67	118	0.04	1.75	1.63	0.252	0.24	14.8	0.02	34	53
BOMI-PT-5	BOMI-PT-5	73060	31.88	49	0.06	0.51	3.13	0.09	0.51	1.94	0.02	66	84
BOMI-PT-6	BOMI-PT-6	73061	46.91	15	0.02	0.18	1.08	0.12	0.14	1.08	0.01	31	218
BOMI-PT-7	BOMI-PT-7	73062	89.04	98	0.04	0.96	1.44	0.295	0.22	13.58	0.02	30	117
BOMI-PT-8	BOMI-PT-8	73063	75.86	55	0.03	0.69	2.39	0.202	0.27	9.87	0.03	57	63
BOMI-PT-9	BOMI-PT-9	73064	27.38	24	0.02	0.24	0.98	0.059	0.19	1.38	0.01	27	112

Raw Data		Atomic number	25	26	27	28	29	30	33	38	42	47	48
Datapoint Id	Sample Id	Lab Id	Mn	Fe	Co	Ni	Cu	Zn	As	Sr	Mo	Ag	Cd
		Units	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection limit			1	1	1	1	2		1	0.1	0.2
BOMI-PT-1	BOMI-PT-1	73056	4144	4.18	19	176	103	630	7	644	33	3.2	15.4
BOMI-PT-2	BOMI-PT-2	73057	1263	6.46	17	64	64	249	21	714	4	1	5.1
BOMI-PT-3	BOMI-PT-3	73058	1744	2.01	11	100	105	565	12	1031	13	6.5	37.8
BOMI-PT-4	BOMI-PT-4	73059	967	5.89	8	40	44	442	14	659	5	4.2	14.2
BOMI-PT-5	BOMI-PT-5	73060	224	2.63	10	35	17	113	11	146	2	0.5	1
BOMI-PT-6	BOMI-PT-6	73061	265	2.08	5	21	16	50	4	72	2	0.5	2.8
BOMI-PT-7	BOMI-PT-7	73062	1195	10.99	19	59	52	196	49	669	14	1.3	7.1
BOMI-PT-8	BOMI-PT-8	73063	1580	4.09	12	42	32	221	15	462	6	0.7	3
BOMI-PT-9	BOMI-PT-9	73064	245	1.54	10	32	17	105	14	124	3	0.8	1.4

Raw Data		Atomic number	51	56	57	74	79	82	83	90	92
Datapoint Id	Sample Id	Lab Id	Sb	Ba	La	W	Au	Pb	Bi	Th	U
		Units	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
		Detection limit	2		2	1	5	2	2	2	5
BOMI-PT-1	BOMI-PT-1	73056	< 2	559	9	1	NSS	84	12	3	< 5
BOMI-PT-2	BOMI-PT-2	73057	5	105	21	1	NSS	16	2	7	< 5
BOMI-PT-3	BOMI-PT-3	73058	2	87	12	1	NSS	74	< 2	4	< 5
BOMI-PT-4	BOMI-PT-4	73059	< 2	87	14	< 1	NSS	27	< 2	4	< 5
BOMI-PT-5	BOMI-PT-5	73060	< 2	363	34	2	8	16	< 2	9	< 5
BOMI-PT-6	BOMI-PT-6	73061	< 2	194	15	1	14	12	< 2	5	< 5
BOMI-PT-7	BOMI-PT-7	73062	< 2	150	11	< 1	NSS	17	< 2	5	< 5
BOMI-PT-8	BOMI-PT-8	73063	< 2	91	23	< 1	56	15	< 2	7	< 5
BOMI-PT-9	BOMI-PT-9	73064	3	244	20	2	10	9	< 2	7	12

Appendix IV Maps

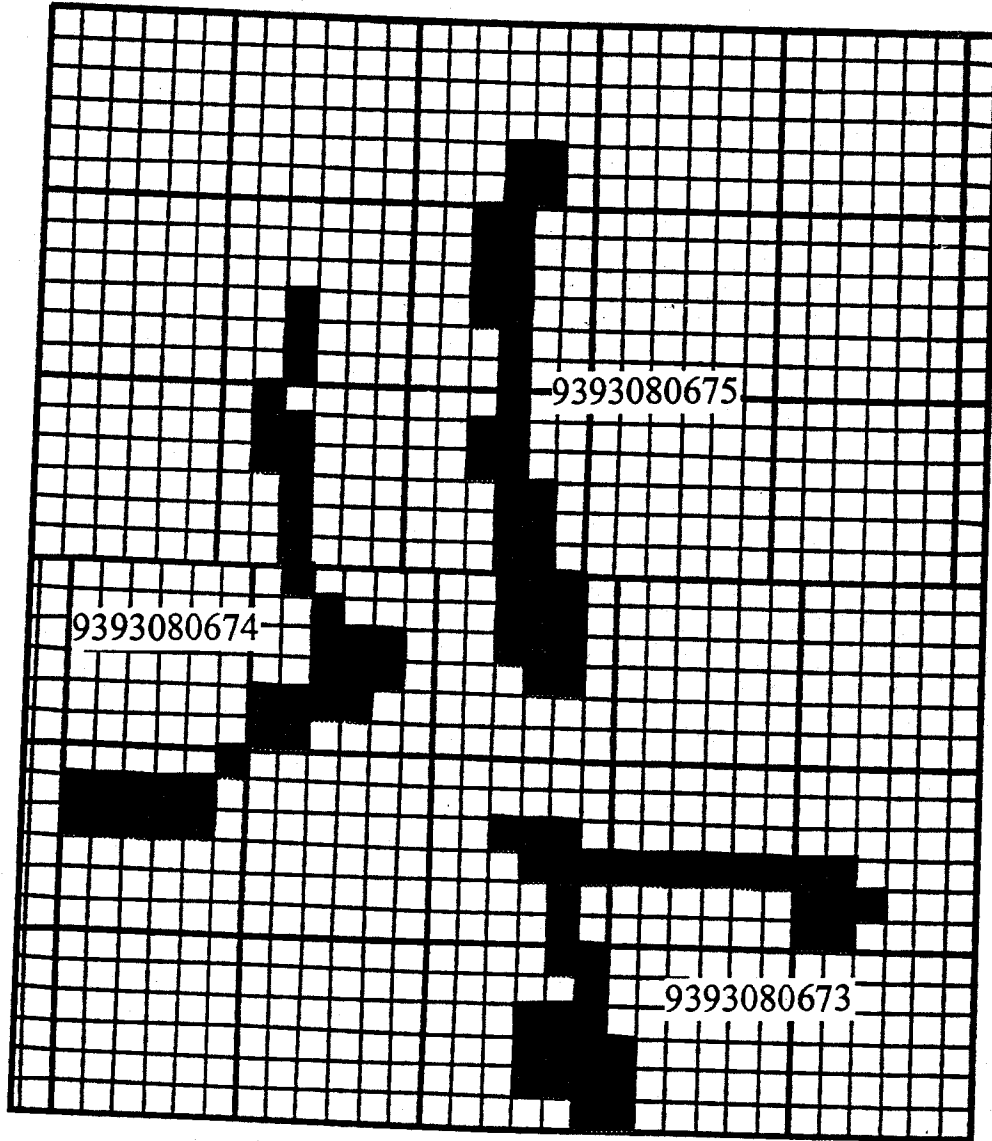


 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Northeast Alberta Gold Project Property Locations	
DRAWN BY: T. MacKenzie DATE: December 1994	MAP NO. 1
APPROVED BY: L.A. Smith PRIME CONSULTANT LAS ENERGY ASSOCIATES LIMITED	SCALE: 1:6,000,000 NTS REFERENCE:

R23

R21


R19W4M

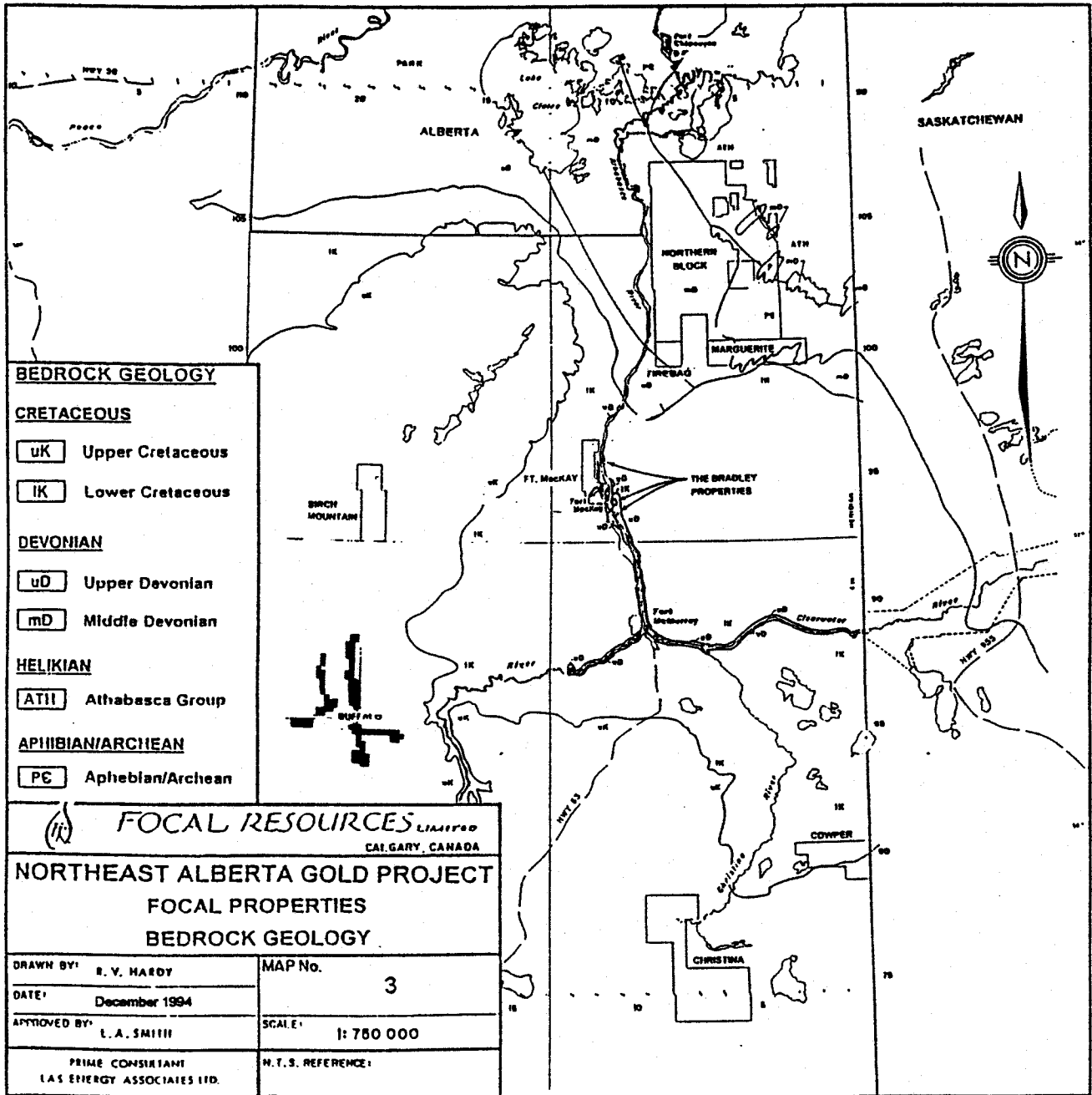


T88

T86

T84

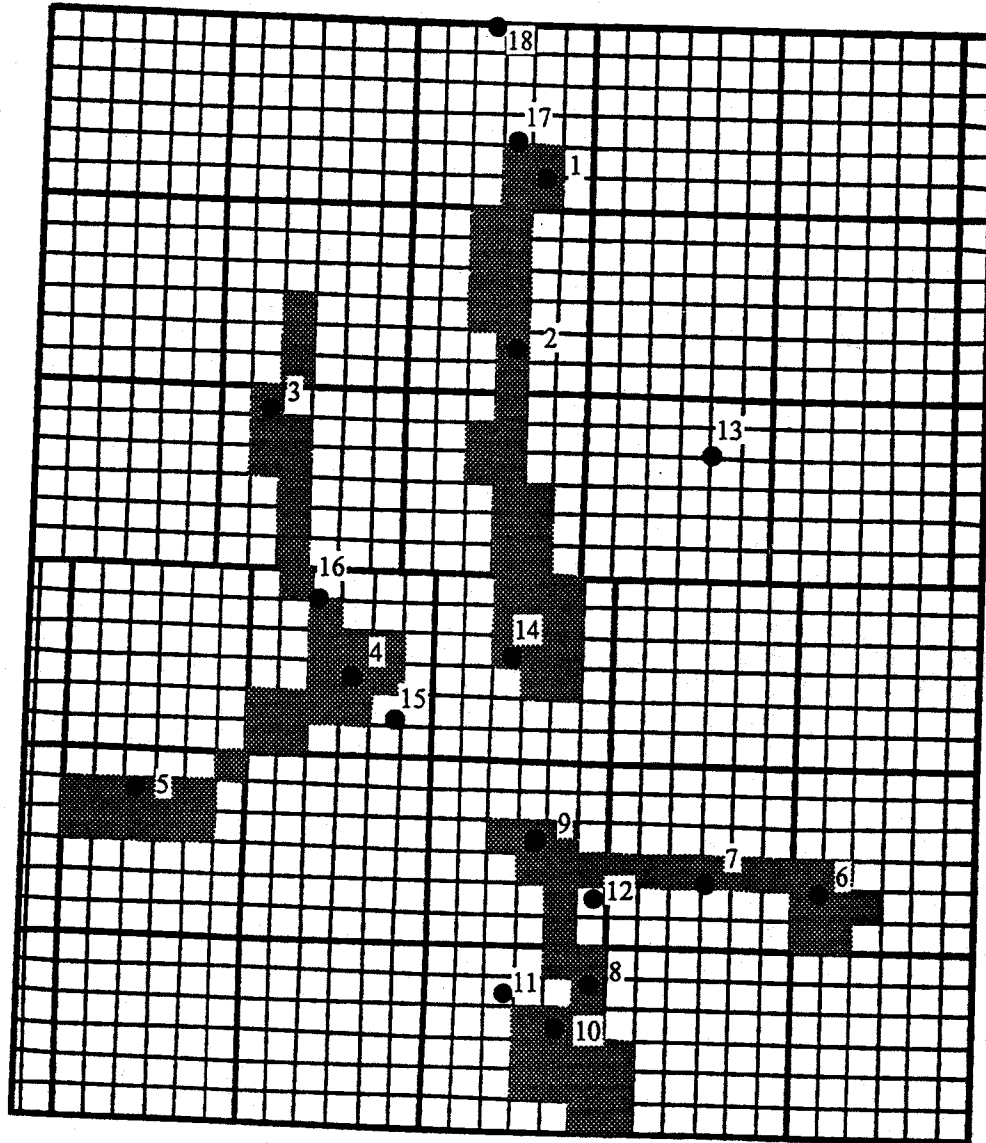
 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Buffalo Property Permits	
DRAWN BY: M. Innes	MAP NO. 2
DATE: June 1995	
APPROVED BY:	SCALE: 1:400 000
	NTS REFERENCE: 84A



R23

R21


R19W4M

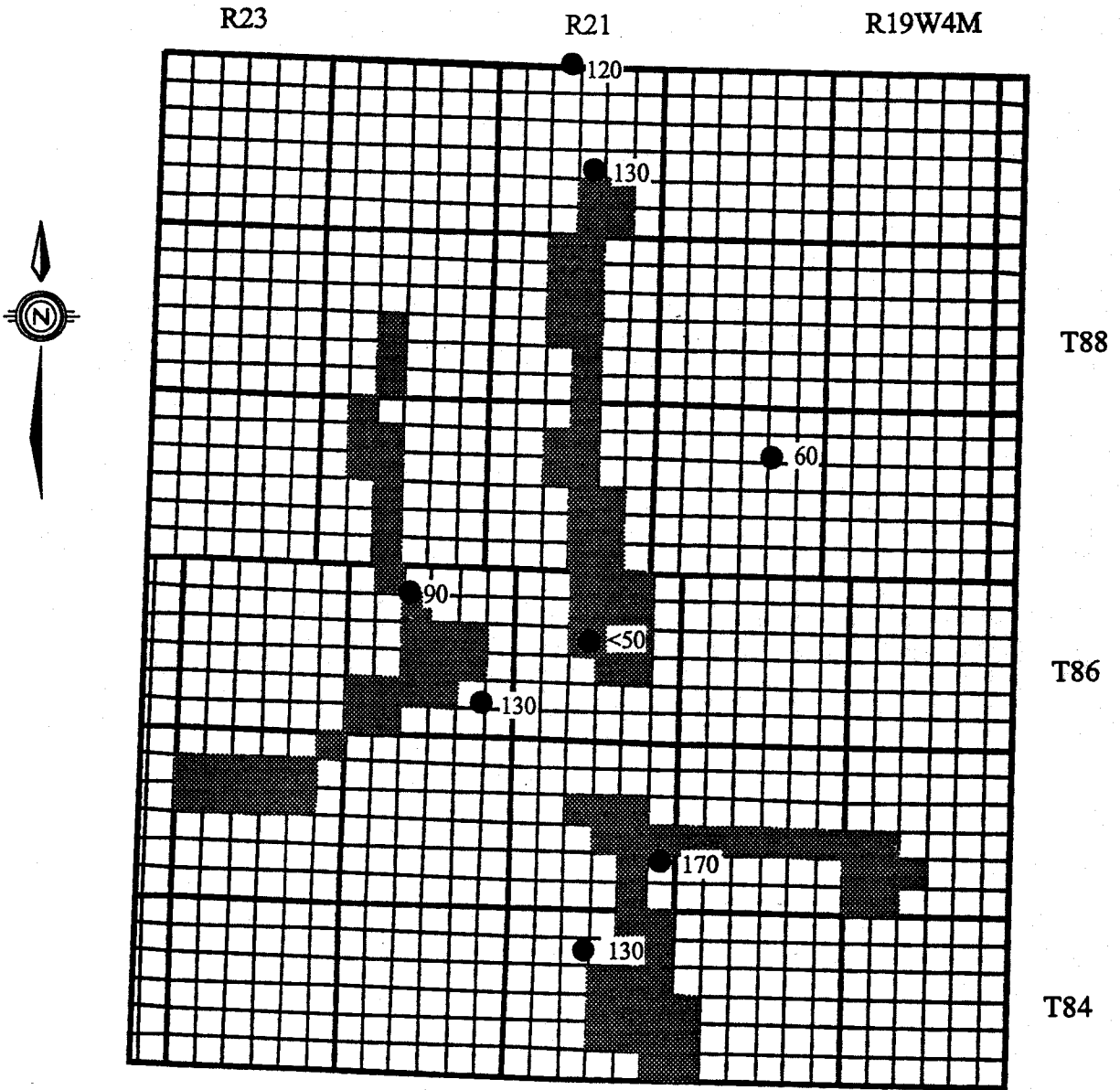



T88

T86

T84

 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Buffalo Property Sample Locations	
DRAWN BY: M. Innes	MAP NO. 4
DATE: June 1995	
APPROVED BY:	SCALE: 1:400 000
	NTS REFERENCE: 84A



 FOCAL RESOURCES LIMITED CALGARY, CANADA	
Buffalo Property Lake Sediment Results - Zinc (ppm)	
DRAWN BY: M. Innes	MAP NO. 5
DATE: June 1995	
APPROVED BY:	SCALE: 1:400 000
	NTS REFERENCE: 84A

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 - Buffalo Property
Metallic and Industrial Minerals
Permits 939308673 to 939308675

Please be advised that expenditures in the amount of \$9,326.00 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 1,865 hectares all within Permit 9393080673, namely sections 11, 13, 14, 15, 21, 22 and 23 all in Twp 85, Rge 21 W5

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 1

FOCAL RESOURCES LIMITED

**PROJECT NAME: 1723- TROYMIN CHRISTINA IV
FOR THE PERIOD ENDING: NOVEMBER 30, 1994**

TABLE I

Permits 9393080673 to 9393080675

BUFFALO PROPERTY

CODE	ACC. 5762 CLR: N. E. ALTA MAPPING MINING EXPLORATION ACTIVITIES	OPENING BALANCE	CURRENT PERIOD	CLOSING BALANCE		
1	Company labor	\$1,012.42		\$1,012.42		
2	Travel and vehicles					
3	Contract labor					
10	Consulting fees	150.00		150.00		
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	2,478.00		2,478.00		
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	531.00	516.50	1,047.50		
	PROJECT TOTAL	\$4,497.00	\$4,829.00	\$9,326.00		
WORKING INTEREST DISTRIBUTION:						
	Focal Res. Ltd	100.000000%		\$9,326.00		
	TOTAL WORKING INTERESTS:	100.000000%		\$9,326.00		