

Report

BC Geological Survey  
Assessment Report  
30097

on the

RATS Mineral Claim  
Christian Creek Project

Similkameen Region, 92H/9W  
British Columbia, Canada

Latitude 49° 33' 30" N.  
Longitude 120° 27' 27" W.

by

James W. McLeod, P. Geo.

on behalf of

Mr. Larry R.W. Sostad

July 17, 2008  
(Revised January 3, 2009)  
Savona, B.C.

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## Summary

During the period May 6 - May 23, 2007 inclusive, a contour-oriented mobile metal ion (MMI) soil survey was undertaken on the RATS mineral claim, Christian Creek project area in the Similkameen region of British Columbia (see Figure 7). The program was designed to test a covered area in between two known zones of mineralization.

The methods used for the geochemistry program were 1) for the rock samples a standard aqua regia digestion and a 35 element induction coupled plasma (ICP) detection and 2) for the MMI soil samples a proprietary digestion and 42 element detection by ICP (see Appendices 1&2).

Two sub-parallel contour-oriented grid lines L1 and L2 were installed and sampled at an interval of 60 metres and 150 metres, respectively.

A number of positive features were revealed by the program.

Further fieldwork is recommended on the property including fill-in, grid controlled MMI soil geochemistry, followed by a deep reaching tracked-hoe trenching program using simultaneous fill-in and subsequent reclamation. If positive results are obtained by carrying-out this work, a Quantec, Titan-type of deep penetrating induced polarization (IP) survey could be undertaken. If positive results continue to prevail, a drilling program of coincident anomalies could then be undertaken.

The recommended program is expected to take approximately 4 months to complete at an estimated cost of \$507,500.

## Introduction

The current fieldwork program consisting of MMI soil geochemistry was conducted under the writers' supervision during the period May 6-23, 2007.

The fieldwork program was conducted on behalf of and at the request of Larry Ralph W. Sostad of North Vancouver, British Columbia, Canada, the registered owner of the RATS mineral claim.

## Location and Access

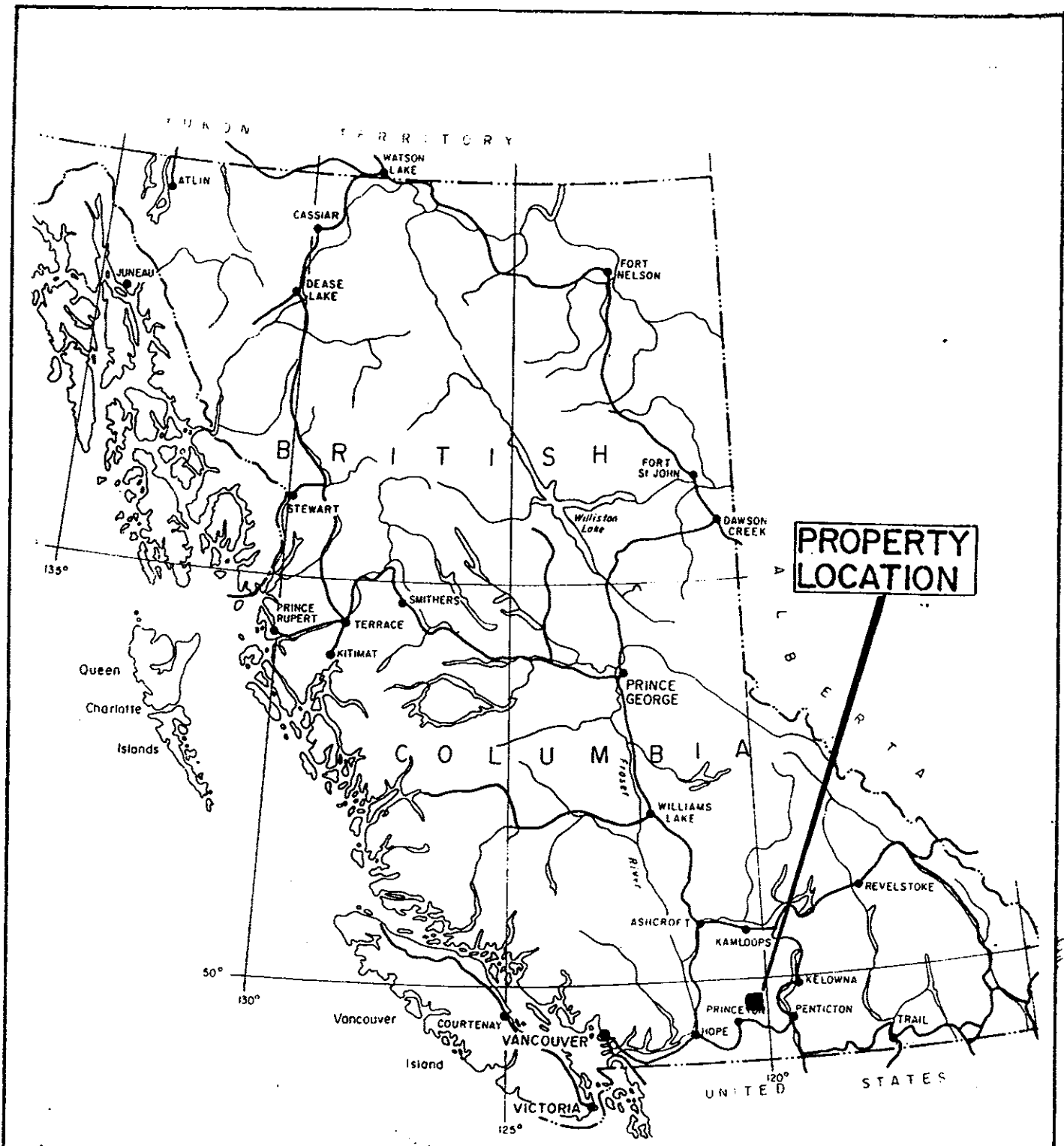
The claim area may be located on NTS map sheet, 92H/9W at latitude 49° 33' 30" north and longitude 120° 27' 27" west. The mineral claim lies about Christian Creek to the north of Jura, B.C. approximately 13 air kilometers north of the Town of Princeton, B.C.

Access to the mineral claim is gained by traveling 14 km. north-northeast of Princeton, B.C. on the good all weather Summerland road to the Separation Lakes and then to the north for 4 km. on the Rampart Lake road.

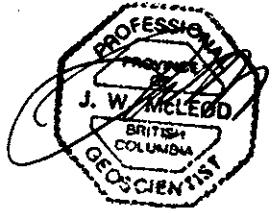
## Topographical and Physical Environment

The mineral claims lie within the Dry Interior zone and more particularly cover low, rounded mountainous terrain with patches of conifer covered plateau or terraced benches. The elevations of the claim area range from 945 m. (3,100') to 1,250 m. (4,100'). The easterly flowing Similkameen River valley is the most dominant feature in the area which is 13 air kilometers south of the RATS mineral claim. The glacial and/or fluvial glacial cover on the claim area is generally thin with thicker occurrences in the bedrock depressions and areas of intense alteration and/or faulting. The coniferous tree patches are composed of western yellow pine (*ponderosa*), Douglas fir (*spruce*), lodgepole pine while separate clusters of aspen occur in moister areas which may at times indicate an underlying zone of alteration and/or faulting. The stream valleys in the area often exhibit a north-south or east-west pattern which may reflect underlying faults/contacts.

The general area experiences approximately 40 cm. of precipitation annually, of which 25%-30% may occur as a snow equivalent. The winter weather usually lasts for less than four months, November - February. It is not uncommon for the property area to experience little or no snow and mild conditions throughout the winter.



**PROPERTY  
LOCATION**



<b>DIAMOND S HOLDINGS LTD.</b>	
<b>CHRISTIAN CREEK PROJECT</b>	
( No. 530877 )	
<b>LOCATION MAP</b>	
NTS. 92 H-9W SIMILKAMEEN REGION, B.C.	
0      150      300      450 KM.	
SCALE: 1:7,500,000	DATE: OCT. 2007
DRAWN BY: J.M.	FIGURE: 1

## Property and Ownership

The located, lode RATS mineral claim is comprised of 16 contiguous cells in a 4 x 4 configuration and is described as follows:

<u>Name</u>	<u>Tenure No.</u>	<u>Cells</u>	<u>Good to Date</u>
RATS	530877	16	May 30, 2011

The claim area totals approximately 335 hectares or 828 acres.

The above listed mineral claim is registered in the name of Larry Ralph W. Sostad of North Vancouver, British Columbia.

## History

The historical record of the general RATS claim area is sparse prior to 1969-71 when Amax Exploration out of their Vancouver office conducted geological, geochemical and geophysical survey over the main copper-molybdenum prospect (see References - R.L. Morton and C.J. Hodgson). Prior to this time, 1927-28 in the B.C. Annual Reports is mention of the Lucky Strike copper property that underwent some hand trenching. Later in 1947 Rice when regionally mapping and writing Memoir 243 for the Geological Survey of Canada mentions a gold occurrence in the same vicinity as the Lucky Strike. These records refer to the area immediately south of the Jura Station on the abandoned CPR railroad, approximately 1.5 - 2.0 miles further south of the southern boundary of the present RATS mineral claim. In 1959 Kennco Explorations Ltd. undertook a comprehensive exploration program near the Lucky Strike property. The Amax fieldwork and results from 1969-71 are still the most detailed that the writer has found. He believes that on the basis of this data he can develop a meaningful two phase exploration program that will test the possibility of structuring a Phase 3 detailed drilling program, if and contingent upon positive results being revealed from both Phase 1 and 2.

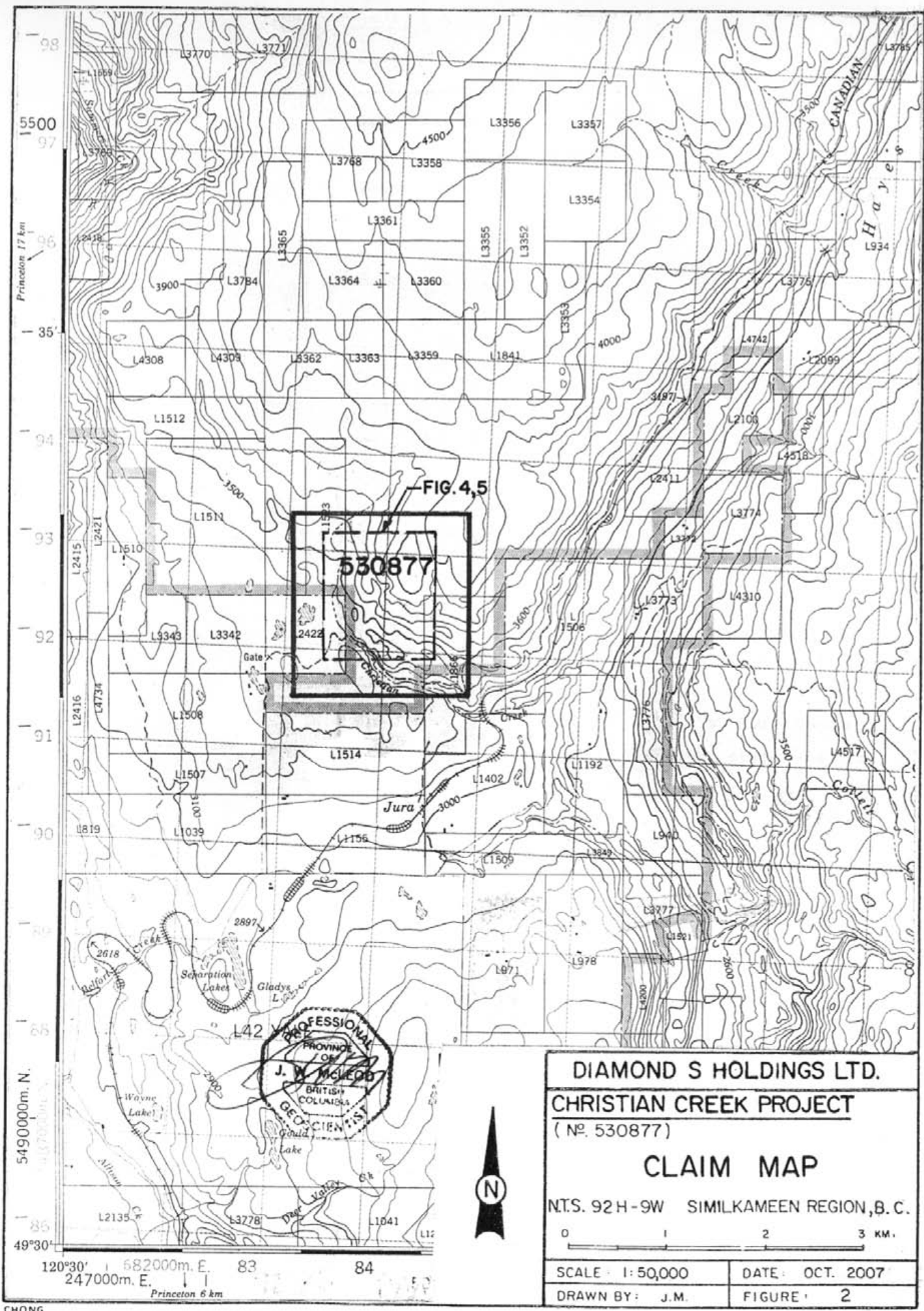


FIG. 4,5

530877

**DIAMOND S HOLDINGS LTD.**  
**CHRISTIAN CREEK PROJECT**  
 (No. 530877)

**CLAIM MAP**

N.T.S. 92 H - 9W SIMILKAMEEN REGION, B. C.

0 1 2 3 KM.

SCALE: 1:50,000	DATE: OCT. 2007
DRAWN BY: J.M.	FIGURE: 2

PROFESSIONAL  
 PROVINCE OF  
 J. W. McLEOD  
 BRITISH COLUMBIA  
 GEOSCIENTIST



## Regional Geology

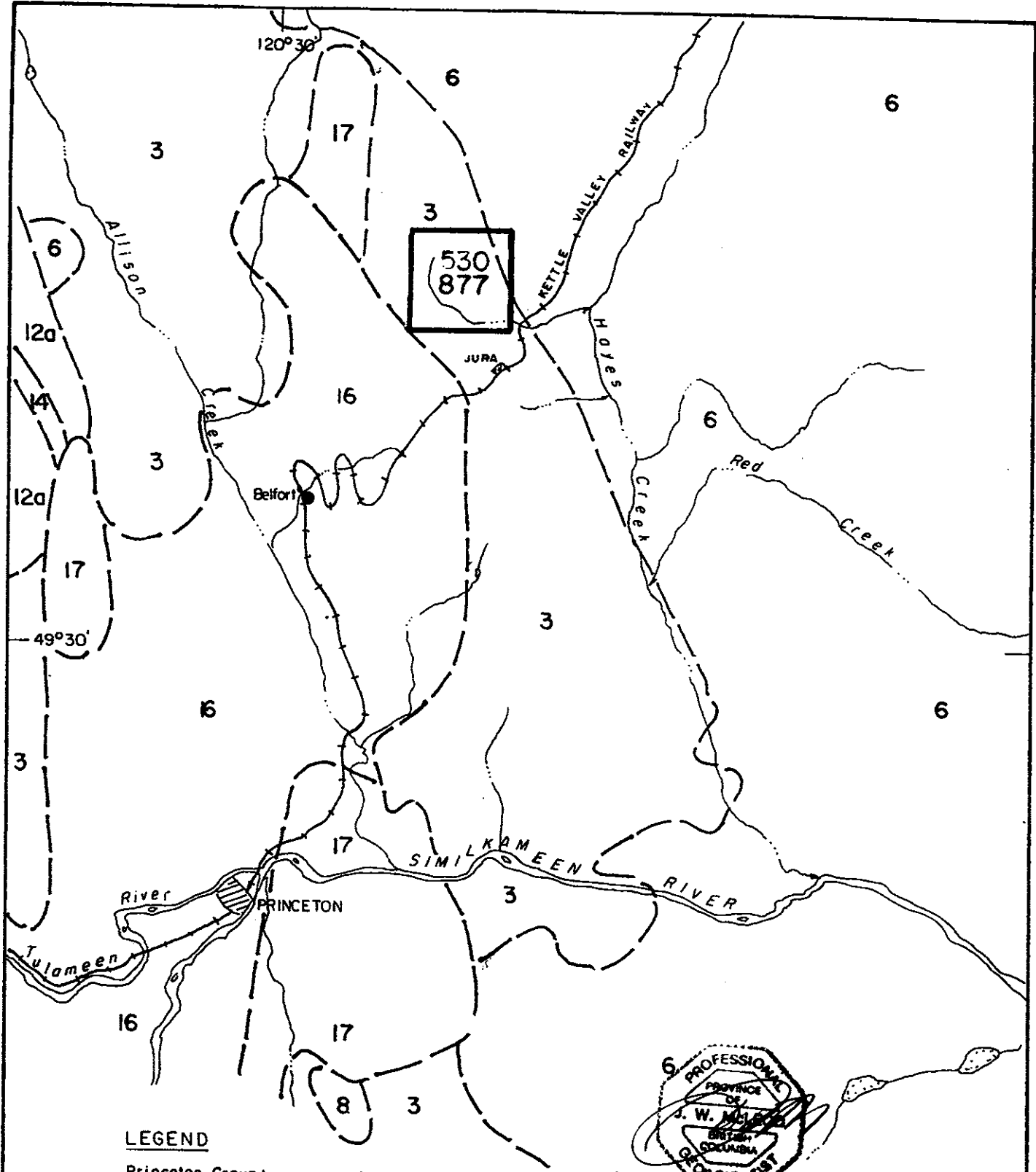
The regional geology about the RATS mineral claim is described as being underlain by mainly a central core of alkaline intrusives and/or volcanics that have been assigned to the highly productive Upper Triassic Nicola Group. These centrally occurring units appear to be a phased or zoned crystalline package of northwesterly trending, elongate-concentric mineralized and altered rocks. On the east, south and southwest of the central zone are calc-alkaline intrusives that appear to be of a later igneous event. This mineral zone outwardly appears to be like so many others in this very large eugeosyncline setting of Nicola and younger aged intrusive and possibly comagmatic volcanic rocks.

## Local Geology

The local geology about the RATS property is situated on or near the strong north-south trending Summers Creek Fault (SCF). This fault lies between and runs sub-parallel to the Boundary-Allison Faults (B-AF) and Sisler Creek Fault (SCF) on the eastside and westside, respectively. Near Jura, B.C. occurs a NW-SE trending zone of possibly 3-5 km. in width that appears to broach all three semi-major faults. This crossing zone hosts intrusive, calc-alkaline (granodiorite) occurrences similar in composition to the Penask batholith to the northeast of SCF and the Christian Creek Project area. There have been multi-intrusions in the local area that exhibit distinct compositional differences, as well as many porphyry-type mineral occurrences. The mineralizing conduits in an active intrusive and volcanic setting are very positive features that define the local area.

## Property Geology

The geology of the RATS property exhibits many requisite features of a high priority exploration area. These may be listed as good geology, structure and known mineral occurrences. The unknown, adjacent overburden covered areas of which there are many require detailed exploration to reveal if structurally prepared, altered and mineralized material of economic significance is at hand and how readily.



**LEGEND**

- 17 Princeton Group:  
Andesite & basalt
- 16 Mainly shale, sandstone, conglomerate
- 14 Otter Intrusive
- 12a Kingsvale Group: Mainly volcanics breccia
- 8 Copper Mountain Intrusions
- 6 Coast Intrusions:  
Coarse grained siliceous granite & sandstone
- 3 Nicola Group:  
Lava, argillite, tuff, limestone, schist



<b>DIAMOND S HOLDINGS LTD.</b>	
<b>CHRISTIAN CREEK PROJECT</b>	
( No. 530877 )	
<b>REGIONAL GEOLOGY</b>	
NTS: 92H-8,9	SIMILKAMEEN RIVER, B.C.
SCALE: 1:100,000	DATE: OCT. 2007
DRAWN BY: J.M.	FIGURE: 3

After GSC Map 888A

## Deposit Type

The deposit types that are found occurring in the regional area and the more localized areas vary somewhat. Porphyry-type mineralization as both base and precious metal occurrences within an alkaline or calc-alkaline host are predominant. The calc-alkaline occurrences of copper-molybdenum mineralization are not unusual in the area, but the alkaline-type of copper-gold-platinum group elements (PGE) with a predominance of palladium are quite common. As well, precious and/or base metal vein-type deposits and replacement skarn zones are common in the general area as are minerals of copper, gold, silver, lead and zinc.

Ground geophysical techniques may be most effective in the covered areas as a follow-up to mapping, prospecting, MMI tight grid soil sampling followed tracked hoe excavation of the Phase 1 anomalous areas of interest.

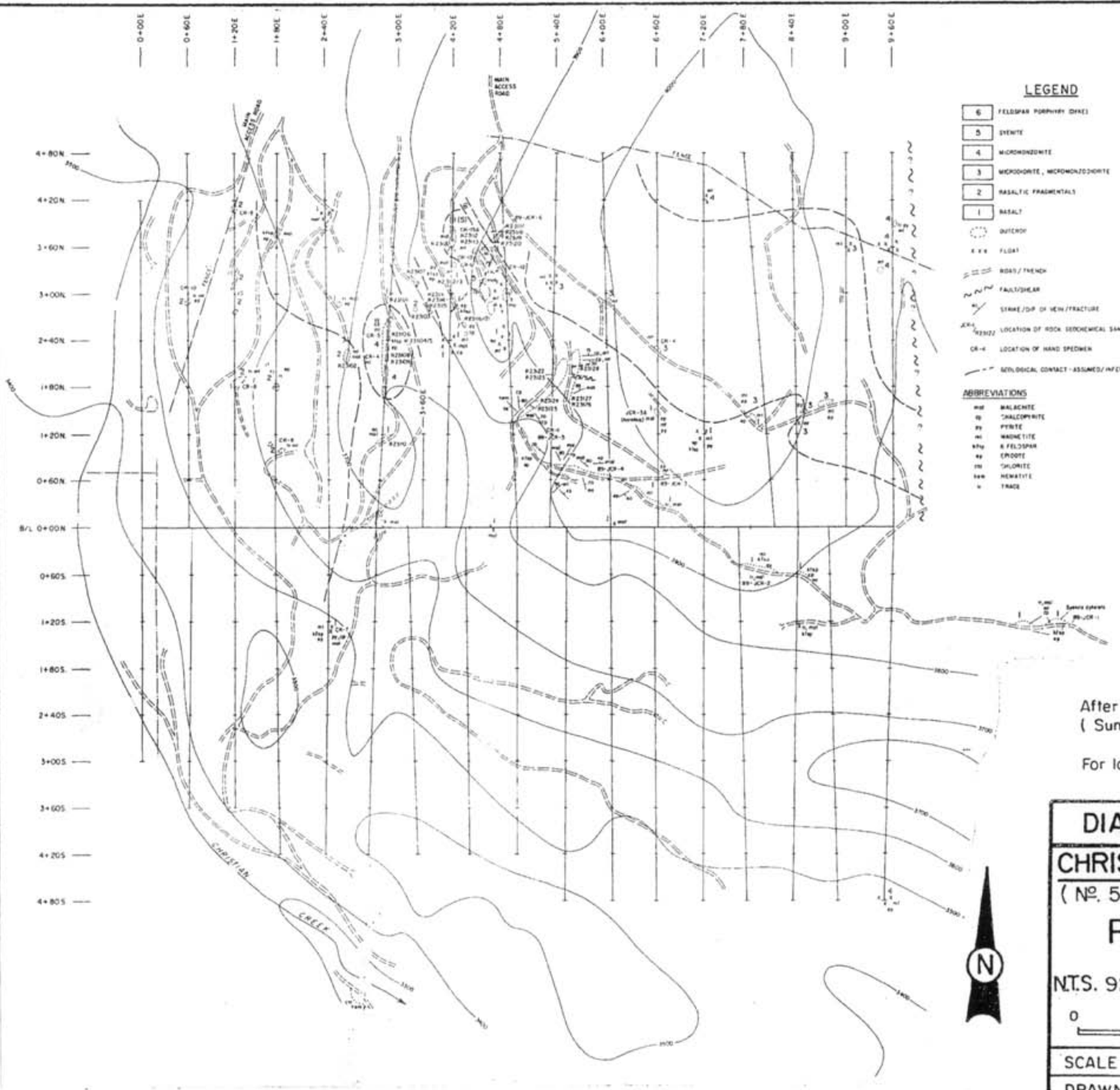
## Mineralization

By far the largest production in the area comes from the large porphyry copper or gold mines and with byproduct molybdenum (Mo), gold (Au), silver (Ag), lead (Pb) and zinc (Zn)

## Geophysics of the RATS Mineral Claim

The aeromagnetic results shown in Figure 6 are from a survey after the Geological Survey of Canada, GSC Map, 8528, 8532G.

The RATS property is seen to occur on the nose of a northwest - southeast trending, elliptical magnetic "high". This feature appears to outline rather well the underlying intrusive rock units that are seen to host some of the mineralization. The change in the magnetic gradient in the claim area suggests a northwesterly dip into a possible in-filled basin or alteration zone. Specialized ground geophysical surveys may add more detail to our understanding of the possible potential of the claim area.

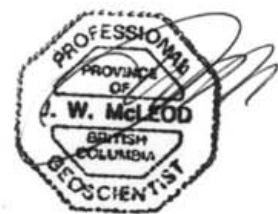


**LEGEND**

- 6 FELDSPAR PORPHYRY DYKE
- 5 GYENITE
- 4 MICROKUNZITE
- 3 MICROQUARTZ, MICROKUNZITE
- 2 BASALTIC FRAGMENTALS
- 1 BASALT
- INTERIOR
- x x x FLOAT
- ROAD / FENCE
- ~ FAULT/SHEAR
- STRIKE/DP OR VIEW/FRACURE
- JK-1 LOCATION OF ROCK SEROLOGICAL SAMPLE
- CR-1 LOCATION OF HAND SPECIMEN
- METEOROLOGICAL CONTACT - ASSUMED/INFERRED

**ABBREVIATIONS**

- mal MALACHITE
- sp SPHALERITE
- py PYRITE
- mn MANGANESE
- sp+ FELDSPAR
- ep EPIDOTE
- chl CHLORITE
- hep HEAVY METALS
- tr TRACE



After Geological Branch Assessment Report 19,165  
( Sundial Resources Ltd. )

For location see Fig. 2

<b>DIAMOND S HOLDINGS LTD.</b>	
<b>CHRISTIAN CREEK PROJECT</b>	
( No. 530877 )	
<b>PROPERTY GEOLOGY</b>	
N.T.S. 92 H-9W SIMILKAMEEN REGION, B. C.	
SCALE : 1:7500	DATE : OCT. 2007
DRAWN BY : J.M.	FIGURE : 4



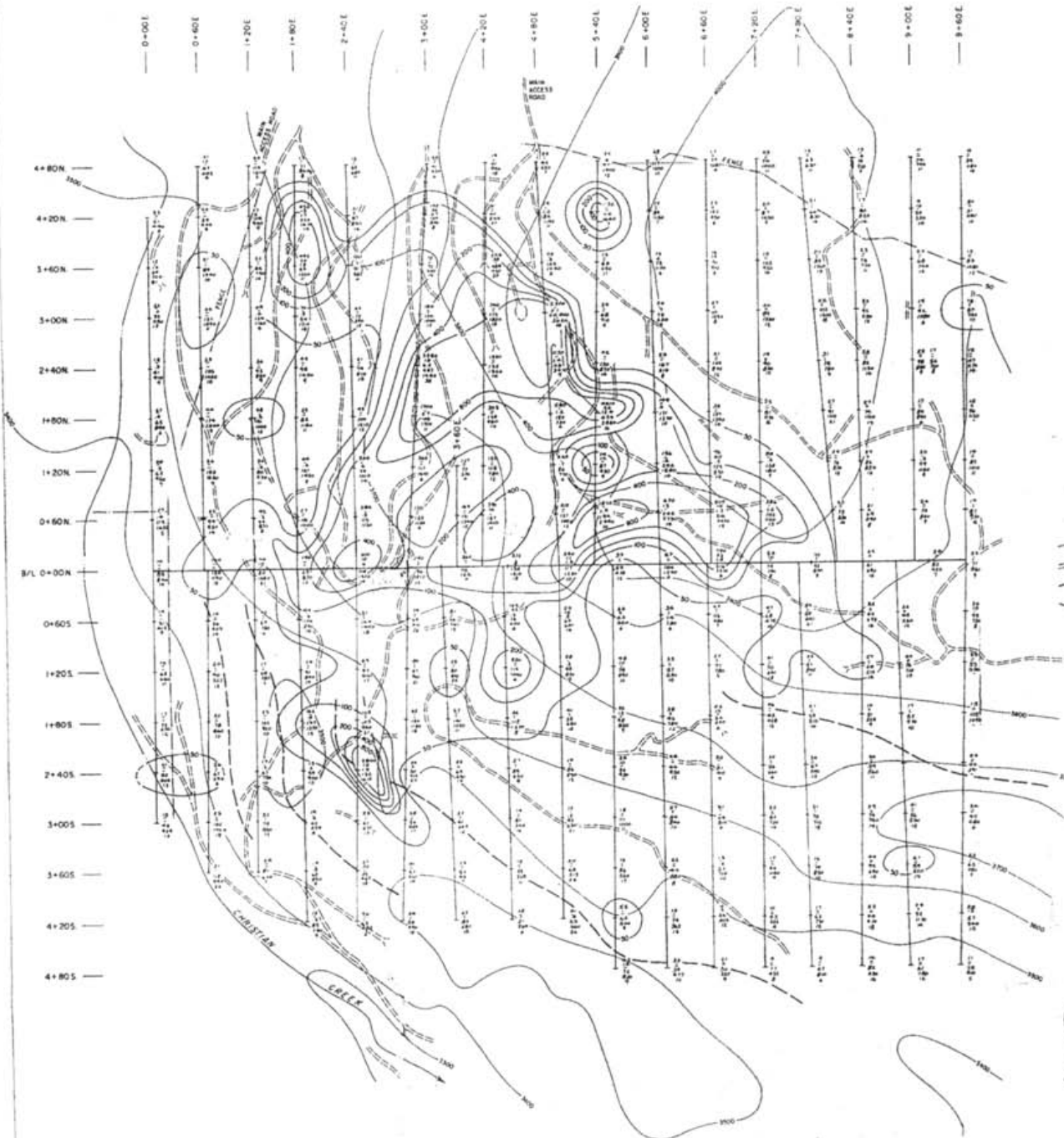
## Geochemistry of the RATS Mineral Claim

The RATS property has undergone detailed ground exploration work including conventional soil geochemistry which has had usefulness in this area, but which may not be definitive enough to detect mineralization below the overburden of soil and/or till, etc. A common or naturally developed soil profile in the northern interior plateau area generally was considerably affected by the amount of precipitation it receives as rain and/or snow, groundwater and of course the nature or chemical make-up of the mineralization that is being weathered and oxidized to affect the outcome of the developing soil. A sequence often involved the dissolving of material in a layer below the humus, (Ao) and creation of a white, leached layer (A). The next lower layer that could develop is a zone of oxidation, with an increase in the downward migration of elements and an enrichment of some of the mobilized elements or compounds in this layer or rusty, (B) horizon. This soil development generally attributes most of its characteristics to downward mobilization by means of ground water, pH and reduction-oxidation conditions

With the development of the somewhat detailed soil sampling method and subsequent proprietary sample digestion using mobile metal ion (MMI) technology a possibly useful technique is available to more thoroughly test the covered areas peripheral to known zones of mineralization.

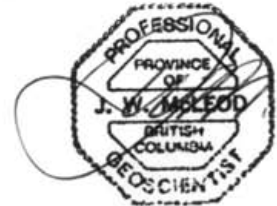
The method was tested by the author at the RATS mineral claim in May 2007.

Two sub-parallel, similar contour sample lines were utilized. Their locations were determined by seeking the smallest topographic gradient. On line L1 - L1R1 - 23 sample stations at 60 m. spacing were dug and sampled. On line L2 - L2R1 - 8 sample stations at 150 m. spacing were dug and sampled (see Figure 7 and Appendix 1&2). Three rock exposure samples were taken through the main zone of abundant malachite and visible chalcopyrite mineralization from a dark grey colored, fine-medium grain-sized monzonite or diorite that has undergone weak propylitic alteration (see Figure 4).



**LEGEND**

- Soil Sample Site
- ppm Cu (Contours at 50, 100, 200, 400, 800 ppm)
- ppm Ag (<math>\times 10</math> ppm detection limit of blank)
- ppm Pb (<math>\times 4</math> ppm detection limit of blank)
- ppm Zn
- ppm Ni
- ppm As
- 1000 Topographic Contour in Feet
- Road
- Esker Ridge Top
- Stream Bed



After Geological Branch Assessment Report 19,165 ( Sundial Resources Ltd.)

For location see Fig. 2

<b>DIAMOND S HOLDINGS LTD.</b>	
<b>CHRISTIAN CREEK PROJECT</b>	
( No. 530877 )	
<b>SOIL GEOCHEMISTRY</b>	
NTS. 92 H-9W SIMILKAMEEN REGION, B. C.	
SCALE : 1 : 7500	DATE : OCT. 2007
DRAWN BY : J.M.	FIGURE : 5

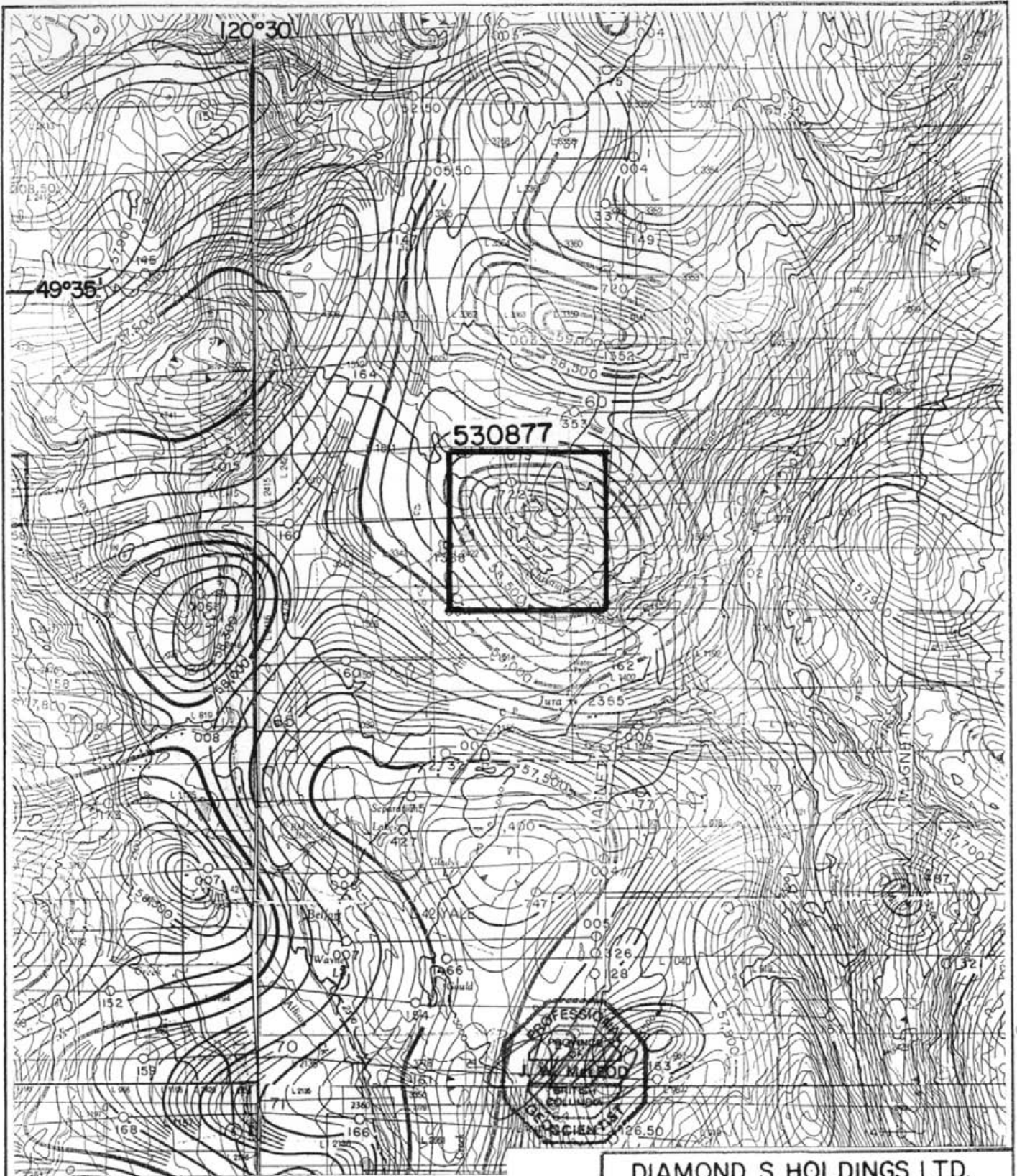
## Present Work Program

The present fieldwork program was undertaken during the period May 6 - 23, 2007. The work program consisted of the installation of 2 km. of sample line. A total of three rock samples were taken from mineralized rock exposures in the high, central portion of the property in a northeast direction, i.e. start-mid-eastend, across the central "bullseye" magnetic high (see Figure 6). These samples were digested by aqua regia and by ICP. A total of 31 MMI-M soil samples underwent proprietary digestion and ICP detection. The analyses were carried-out at the ALS Chemex labs. in North Vancouver, B.C. and Perth, Australia, respectively (see Appendices).

## Results and Conclusions

There are a number of positive factors about the Christian Creek project that make it a good exploration undertaking and to summarize they are: the geological setting, known rock type productivity, known copper, molybdenum, lead, zinc mineralization with gold, silver and PGE values in the general area. The location and logistics of the project area are excellent as long as a multi-use land philosophy prevails as it appears not to be in many of the areas in British Columbia.

The initial MMI results indicate a number of locations that are not just anomalous in one or two elements, such as copper and molybdenum, but in three possible suites of elements, the Gold Exploration Suite, the Porphyry Pathfinder Suite (partial) and the Base metal Suite. The following parameters were determined by standard statistical techniques and frequency distribution percentages.



ISOMAGNETIC LINES (absolute total field)

- 500 gammas . . . . .
- 100 gammas . . . . .
- 20 gammas . . . . .
- 10 gammas . . . . .
- Magnetic depression . . . . .

Flight lines . . . . . 15 687  
 Flight altitude 1000 feet above ground level



After GSC Maps  
 N<sup>o</sup>. 8528,85326

DIAMOND S HOLDINGS LTD.  
 CHRISTIAN CREEK PROJECT  
 (N<sup>o</sup>. 530877)

**AEROMAGNETIC MAP**

NTS. 92 H-9W SIMILKAMEEN REGION, B.C.



SCALE: 1:63,360

DATE: OCT. 2007

DRAWN BY: J.M.

FIGURE 6



a) Gold Exploration Suite (GES):

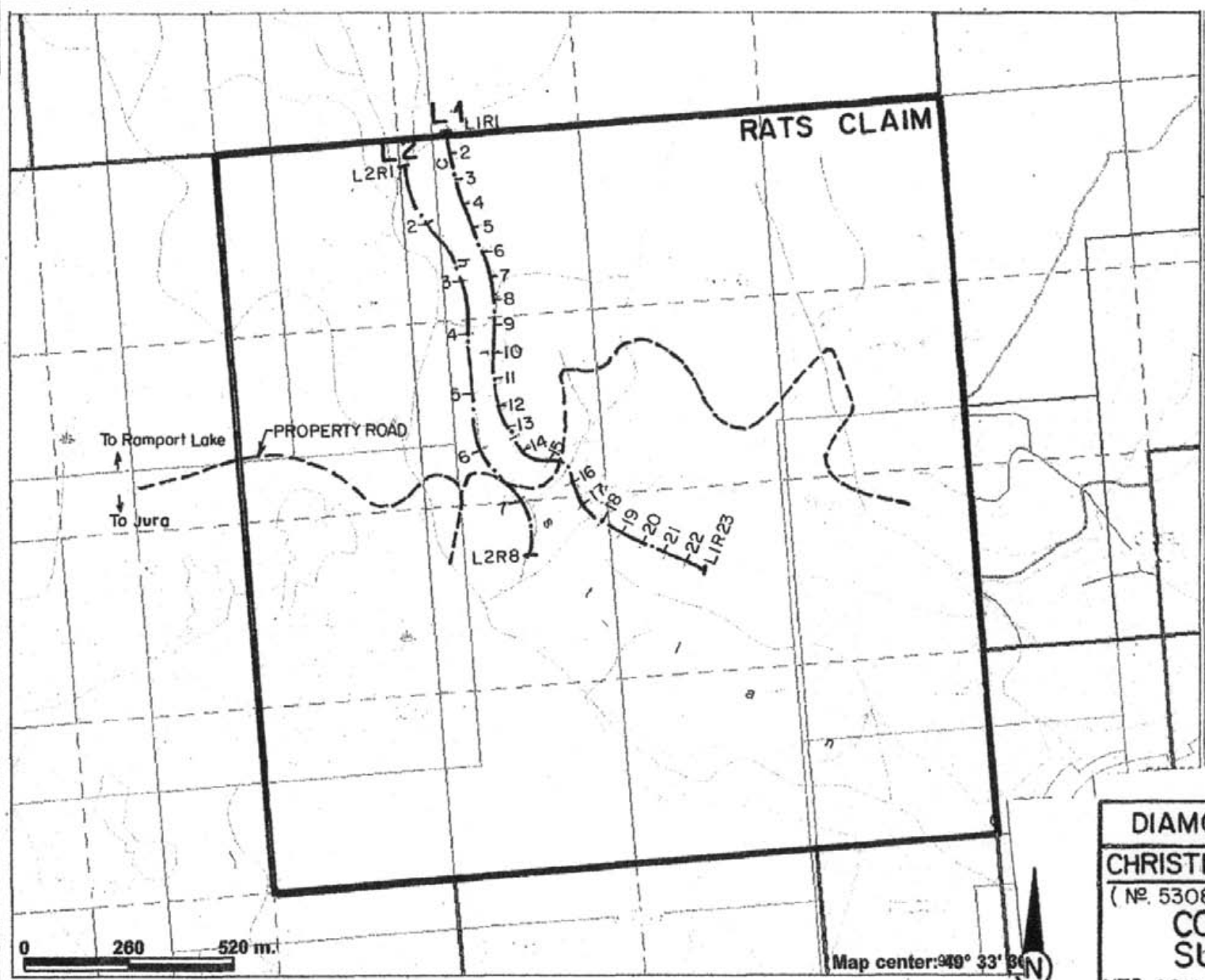
<u>Element</u>	<u>Background</u>	<u>Anomalous</u>	<u>Location</u>
Silver	0-48 ppb	>48 ppb	<u>L1</u> : 2, 8, 12, 16
Gold	0-6	> 6	<u>L1</u> : 16, 20
Cobalt	0-27	>27	<u>L1</u> : 16 <u>L2</u> : 7
Nickel	0-320	>320	<u>L1</u> : 6, 17
Palladium	0-7.2	>7.2	<u>L1</u> : 19, 22, 23 <u>L2</u> : 6

b) Porphyry Pathfinder Suite (PPS): (Only partial results)

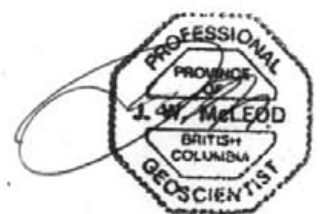
<u>Element</u>	<u>Background</u>	<u>Anomalous</u>	<u>Location</u>
Arsenic	0-8	>8	<u>L1</u> : 2, 19, 23 <u>L2</u> : 6
Molybdenum	0-40	>40	<u>L1</u> : 6, 11, 13, 15, 19 <u>L2</u> : 7
Iron	0-45 ppm	>45 ppm	<u>L1</u> : 19, 22, 23 <u>L2</u> : 6

\*Note: Mercury and selenium MMI data not available and antimony were all < 1 ppb. The rock analyses indicate mercury and antimony to be present in the samples. Selenium was not analysed for in the rock or soil samples.

CHONG



- Mineral Claim
- Mineral Lease
- Reserves (Mineral - LRDW Sites)
- Soil sampling line



DIAMOND S HOLDINGS LTD.  
 CHRISTIAN CREEK PROJECT  
 ( No. 530877 )  
**CONTOUR SOIL SURVEY LINES**  
 N.T.S. 92 H-9W SIMILKAMEEN REGION, B. C.

0 300 600 900 metres

SCALE: 1:14,829	DATE: OCT. 2007
DRAWN BY: J.M.	FIGURE: 7

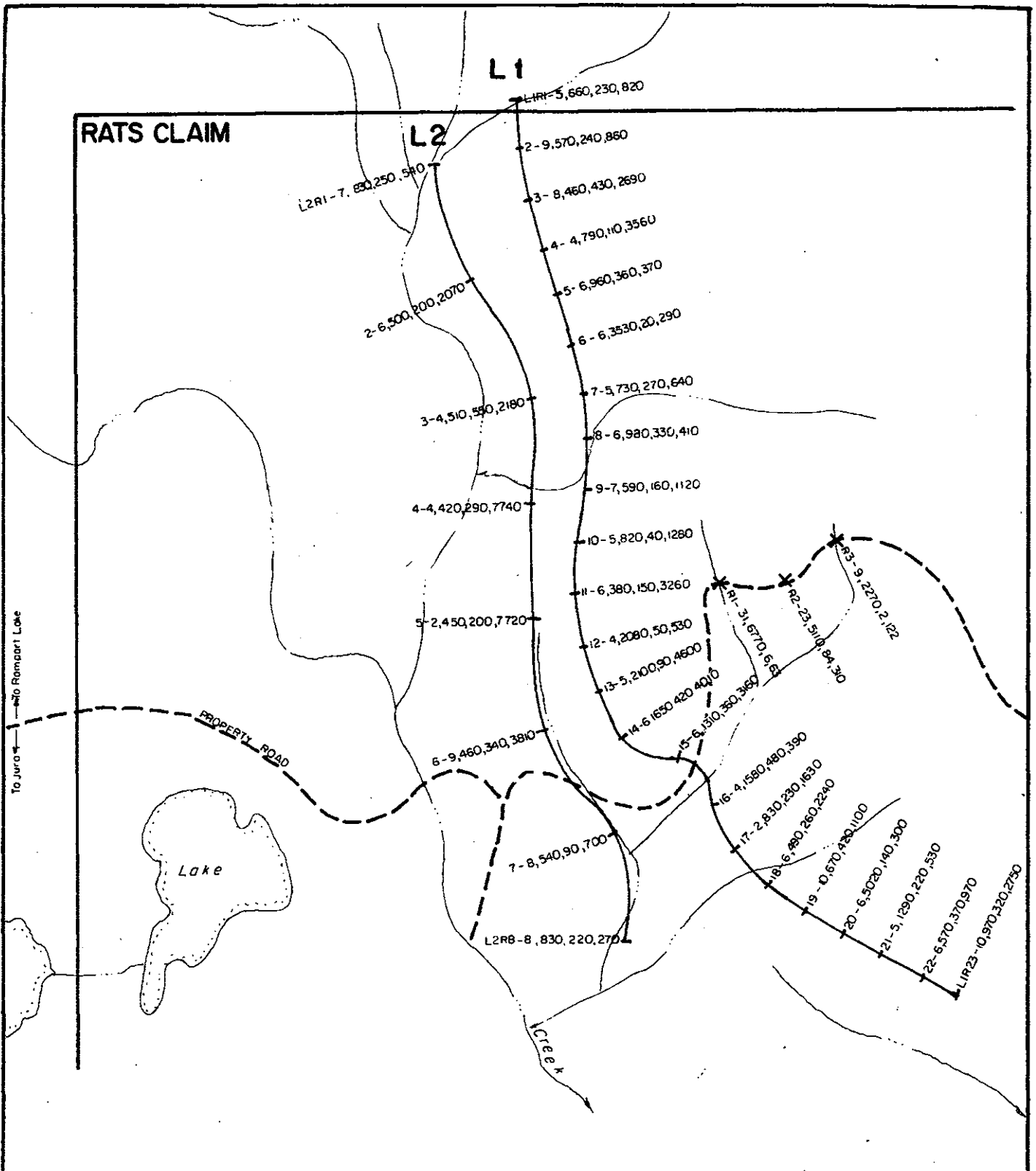
c) Base Metal Suite (BMS):

<u>Element</u>	<u>Background</u>	<u>Anomalous</u>	<u>Location</u>
Copper	0-2800 ppb	>2800 ppb	<u>L1: 6, 20</u>
Cadmium	0-96	>96	<u>L1: 11</u> <u>L2: 3, 4</u>
Lead	0-470	>480	<u>L1: 16</u> <u>L2: 3</u>
Zinc	0-3480	>3480	<u>L1: 4, 13, 14</u> <u>L2: 4, 5, 6</u>

The author realizes that to make far reaching decisions based on a small sample population, simple statistical testing and the age of the historical data may not be the best approach to take, but his experience in the regional area and the host rocks of the Nicola Group in particular suggests that further work should be performed on the property. It does appear that for the three groups of elements that have affinity and frequency of occurrence, the grouping could be significant.

### Recommendations

Preliminary reconnaissance results from the current work undertaken by the author partly corroborate the historical results and suggest adjacent areas to the main zone of known mineralization that encourage performing further MMI work. It appears that the MMI soil sampling method, Phase 1 could indicate adjacent areas of interest holding promise of discovery for favorable structures, such as linear (radial) or concentric (pipe-like) "crackle zones" of prepared ground that have undergone alteration and/or mineralization. A paleoprint of favorable geochemistry may reveal areas of interest below the overburden. If anomalous areas of interest are indicated by the follow-up MMI sampling they could be tested with a deep



To Juvro ← Rampart Lake

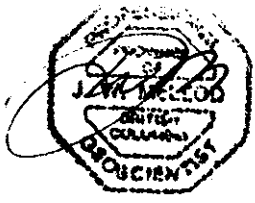
**RATS CLAIM**

X 12- 4,2080,50,530

Soil sample location  
Sample No. - As,Cu,Pb,Zn in ppb

X R1- 31,6770,6,63

Rock sample location  
Sample No. - As,Cu,Pb,Zn in ppm



<b>DIAMOND S HOLDING LTD.</b>	
<b>CHRISTIAN CREEK PROJECT</b> (No. 530877)	
<b>GEOCHEMISTRY</b>	
N.T.S. 92H-9W      SIMILKAMEEN REGION, B.C.	
SCALE: 1:7000	DATE: JAN. 2009
DRAWN BY: J.M.	FIGURE: 8

reaching tracked hoe and in the event satisfaction is found at this point a Phase 2, geophysical survey, such as the Quantec Titan 24 system of deep penetrating induced polarization (IP), resistivity and magnetotelluric (MT) resistivity may be a definitive method of testing the MMI anomalies prior to drilling if sufficiently positive MMI anomalies are found.

## Cost Estimate

### Phase 1

Geologist - as supervisor and for limited overburden and very extensive trench mapping and sampling	\$ 33,000
Geological and supervisory assistant for 1 month	9,000
Grid installation - GPS control points	22,500
Camp and board, 180 mandays @ \$150/md	27,000
Transportation rentals and fuel	25,000
Instrument rentals	3,000
MMI-M sampling and follow-up	10,000
Hoe trench mapping, sampling and directing reclamation	7,000
Analyses and assays	10,000
Permits, fees, filings, insurance, etc.	15,000
Reports and maps	6,000
Contingency	<u>30,000</u>
Sub-total	\$197,500

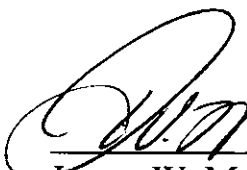
### Phase 2

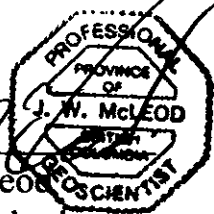
Quantec Titan survey of the MMI anomalies, all inclusive	<u>42,000</u>
Sub-total	239,500

Drilling

1,500 metres NQ-core drilling, all inclusive @ \$150/m.	225,000
Core handling and sampling	15,000
Analyses and assays - 500 sa./\$25	12,500
Reports, map and filings	<u>16,000</u>
Sub-total	\$268,000
Total	<u>\$507,500</u>

Respectfully submitted,

  
James W. McLeod  
Consulting Geologist



The seal is an octagonal stamp with a double border. The outer border contains the text 'PROFESSIONAL' at the top and 'GEOLOGIST' at the bottom. The inner border contains 'PROVINCE OF' at the top and 'ONTARIO' at the bottom. In the center, the name 'J. W. McLEOD' is printed, with a handwritten signature over it.

## Statement of Costs

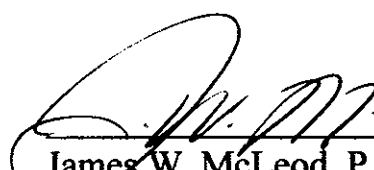
Geology and supervision, J.W. Mcleod, 5 full days during the period May 6-23, 2007	\$ 2,100
2 assistants - J.A. McLeod and S.C. McLeod, 5 full days during the period May 6-23, 2007	1,750
Room and board, 15 mandays	750
Transportation, fuel, rental and mileage	550
Analyses and assays	900
Maps and reports - 2days + draughting	<u>950</u>
Total	\$ 7,000

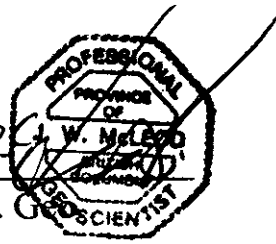
**Certificate**

**I, James W. McLeod, of the Town of Savona, Province of British Columbia, hereby certify as follows:**

- 1) I am a Consulting Geologist with an office at P.O. Box 216, 6857 Valley Road, Savona, B.C. V0K 2J0.**
- 2) I am a Professional Geoscientist registered in the Province of British Columbia and a Fellow of the Geological Association of Canada.**
- 3) I graduated with a degree of Bachelor of Science, Major Geology, from the University of British Columbia in 1969.**
- 4) I have practiced my profession since 1969.**
- 5) I have no interest either direct or indirect in the RATS mineral claim.**
- 6) The above report is based on personal field experience gained by working on the property at various times during the past 30 years, the latest in 2007.**

**DATED at Savona, British Columbia this 17th day of July 2008.**

  
**James W. McLeod, P. Geoscientist**  
**Consulting Geologist**





## References

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## Appendix 1

### Rock Sample Analyses - ME ICP41



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## CERTIFICATE VA07052972

Project: R

P.O. No.:

This report is for 3 Rock samples submitted to our lab in Vancouver, BC, Canada on 23-MAY-2007.

The following have access to data associated with this certificate:

JIM MCLEOD

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Au-AA23	Au 30g FA-AA finish	AAS

To: OMEGA SERVICES  
ATTN: JIM MCLEOD  
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Lawrence Ng, Laboratory Manager - Vancouver



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## CERTIFICATE OF ANALYSIS VA07052972

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	B ppm	Be ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
LRWSSTR		2.14	<0.005	5.5	1.51	31	<10	50	0.5	<2	3.66	0.5	23	47	6770	5.10
LRWSMIDR		2.44	0.006	7.1	1.77	23	<10	50	0.6	7	2.79	3.7	23	3	5110	8.15
LRWSEHDR		1.92	<0.005	0.6	2.84	9	<10	90	0.6	<2	1.96	<0.5	30	141	2270	5.55



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## CERTIFICATE OF ANALYSIS VA07052972

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm
		10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
LRWSSTR		10	<1	0.23	<10	0.88	1715	74	0.02	16	2250	6	0.11	<2	12	111
LRWSMDR		10	1	0.25	<10	1.46	1680	42	0.06	7	1320	84	0.10	6	7	104
LRWSENR		10	<1	1.51	<10	3.17	1130	16	0.08	70	2790	2	0.04	<2	6	189



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Project: R

## CERTIFICATE OF ANALYSIS VA07052972

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Tn	Ti	Ti	U	V	W	Zn
		ppm	%	ppm	ppm	ppm	ppm	ppm
		20	0.01	10	10	1	10	2
LRWSSTR		<20	0.11	<10	<10	169	10	63
LRWSMDR		<20	0.16	<10	<10	167	10	310
LRWSENR		<20	0.26	<10	<10	201	<10	122

**Appendix 2**

**Soil Sample Analyses - ME MS18 (MMI-M)**



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## CERTIFICATE VA07052971

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This report is for 31 Soil samples submitted to our lab in Vancouver, BC, Canada on 23-MAY-2007.  
The following have access to data associated with this certificate:  
JIM MCLEOD

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS18	MMI-M - Complete Multi element package	ICP-MS

To: OMEGA SERVICES  
ATTN: JIM MCLEOD  
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SAVANA BC V0K 2J0

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Signature: \_\_\_\_\_

Wayne Abbott, Operations Manager, Western Australia





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## CERTIFICATE OF ANALYSIS VA07052971

Sample Description	Method Analyte Units LOR	WEI-21	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	
		Recvd Wt.	Ag	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Er	Fe	Gd
		kg	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb
		0.02	0.1	1	0.1	10	3	0.2	1	0.1	0.3	1	10	0.1	0.1	0.1
L1R 1		0.66	38.0	5	0.1	1580	<3	502	46	59.0	13.3	14	660	15.2	17.8	31.2
L1R 2		0.84	50.7	9	0.1	500	<3	418	55	20.1	6.2	3	570	6.4	16.6	9.9
L1R 3		0.78	7.8	8	0.1	730	<3	333	83	48.5	23.4	9	460	9.9	23.9	15.2
L1R 4		1.06	23.4	4	0.1	700	<3	515	49	23.3	7.5	9	780	9.6	21.2	18.1
L1R 5		0.86	22.8	6	0.2	540	<3	293	62	103.0	12.2	9	960	19.8	38.1	31.7
L1R 6		0.46	39.2	5	0.4	620	<3	784	84	2.3	5.8	<1	3530	1.9	4.9	3.0
L1R 7		0.90	32.1	5	0.1	480	<3	283	55	85.6	9.8	6	730	18.5	24.8	30.3
L1R 8		0.70	54.4	6	0.2	900	<3	499	23	49.4	10.2	16	980	15.4	24.0	29.3
L1R 9		0.72	25.1	7	0.3	1030	<3	519	77	46.7	14.1	21	590	11.1	29.2	21.4
L1R 10		0.90	28.8	5	0.3	3830	<3	798	45	52.7	25.5	3	820	32.8	8.4	69.8
L1R 11		0.90	16.0	6	0.2	4260	<3	685	113	56.0	21.8	9	380	21.8	14.2	44.9
L1R 12		1.02	57.0	4	0.3	2820	<3	685	55	16.8	17.6	8	2080	16.2	8.4	40.5
L1R 13		0.80	28.8	5	<0.1	2400	<3	473	78	52.0	12.6	23	2100	15.0	23.1	29.1
L1R 14		0.80	26.6	6	0.1	1580	<3	400	90	69.0	12.5	9	1650	19.3	26.0	28.5
L1R 15		0.82	27.3	6	0.1	1950	<3	533	71	119.0	25.2	26	1310	20.9	30.0	39.1
L1R 16		0.94	90.4	4	1.7	2190	<3	917	30	5.3	29.3	5	1580	6.0	1.9	8.0
L1R 17		0.74	34.0	2	0.1	2440	<3	540	38	118.0	20.7	20	830	20.5	17.5	45.1
L1R 18		0.78	23.6	6	0.1	1780	<3	573	39	56.5	13.5	19	490	11.8	21.8	26.8
L1R 19		0.66	24.5	10	0.1	1100	<3	371	37	105.5	19.1	38	670	19.2	45.2	33.8
L1R 20		0.90	34.5	6	0.9	2580	<3	576	21	83.0	23.6	25	5020	43.6	14.4	90.5
L1R 21		0.74	32.6	5	0.2	3180	<3	604	18	118.0	17.3	27	1290	20.1	22.6	42.3
L1R 22		0.88	16.5	6	0.1	2840	<3	378	15	256	25.2	52	570	28.3	47.2	63.6
L1R 23		0.76	29.7	10	0.1	1470	<3	402	60	119.0	21.2	38	970	23.1	51.4	38.6
L2R 1		0.82	27.9	7	0.1	880	<3	421	58	63.7	12.4	19	830	19.5	27.8	33.2
L2R 2		0.60	15.1	6	<0.1	560	<3	487	37	12.7	7.0	11	500	5.0	17.2	8.6
L2R 3		0.58	10.1	4	0.1	910	<3	374	184	56.9	13.1	8	510	19.3	22.9	25.3
L2R 4		0.62	16.2	4	<0.1	1420	<3	652	145	48.5	14.1	17	420	16.6	18.1	30.9
L2R 5		0.60	21.1	2	0.2	2360	<3	593	92	68.8	7.5	22	450	14.0	23.6	27.3
L2R 6		0.60	21.3	9	0.1	1770	<3	379	45	136.5	24.1	55	460	33.4	64.2	57.3
L2R 7		0.64	18.3	8	0.1	2040	<3	622	17	46.3	43.2	20	540	10.8	18.1	24.9
L2R 8		0.64	15.4	4	0.1	1620	<3	515	22	191.0	21.9	35	830	34.8	32.1	67.4



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## CERTIFICATE OF ANALYSIS VA07052971

Sample Description	Method Analyte Units LOR	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	
		La	Li	Mg	Mn	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Rb	Sb	Sc	Sm
		ppb	ppb	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
L1R 1		54.3	3.5	58.0	1.79	12	1.3	93.8	117	230	4.1	20.5	38	<1	24	24.9
L1R 2		16.3	2.7	20.1	1.71	9	1.4	26.6	98	240	2.0	5.5	109	<1	21	7.3
L1R 3		27.8	6.2	27.8	6.97	12	1.6	46.4	116	430	3.4	9.4	103	<1	40	12.2
L1R 4		26.5	4.9	39.0	1.30	18	1.3	54.7	180	110	2.3	10.0	66	<1	27	14.0
L1R 5		60.4	2.9	18.30	2.73	19	1.4	105.5	123	360	5.0	21.4	95	<1	50	25.7
L1R 6		<0.1	25.8	61.3	0.67	40	0.3	5.4	426	20	0.5	<0.1	57	<1	10	1.5
L1R 7		55.0	1.7	24.2	2.03	13	1.1	101.5	80	270	6.2	20.5	112	<1	48	25.2
L1R 8		47.4	2.9	37.8	0.98	12	1.5	88.4	133	330	3.6	17.3	35	<1	28	23.3
L1R 9		36.4	12.2	37.9	3.27	23	2.2	68.8	154	160	3.6	13.1	104	<1	48	17.4
L1R 10		58.2	2.8	72.7	4.66	14	0.3	154.0	197	40	3.9	26.7	41	<1	26	50.7
L1R 11		40.4	5.3	83.0	5.96	52	1.0	113.5	178	150	5.9	19.1	40	<1	22	33.5
L1R 12		37.0	3.2	64.4	2.17	12	0.6	96.7	265	50	3.1	16.2	33	<1	15	30.2
L1R 13		46.6	17.9	35.4	3.59	46	2.7	88.1	232	90	5.2	16.5	78	<1	61	23.1
L1R 14		38.7	13.5	36.8	3.70	34	2.1	76.0	168	420	4.4	14.3	95	<1	62	21.1
L1R 15		89.8	12.2	65.7	5.93	71	3.6	133.5	292	350	4.9	28.3	84	<1	38	31.9
L1R 16		0.2	17.6	246	1.89	15	0.2	9.0	206	480	0.9	0.2	10	<1	6	3.5
L1R 17		83.3	10.8	58.0	5.09	34	1.8	146.0	381	230	3.4	28.3	48	<1	29	37.0
L1R 18		54.6	13.5	58.4	2.79	27	2.4	88.8	248	260	2.9	17.6	71	<1	46	22.4
L1R 19		76.3	21.1	31.7	4.32	48	4.8	115.0	130	420	8.5	23.9	104	<1	75	27.7
L1R 20		130.0	29.8	71.0	3.22	32	1.2	238	302	140	5.3	44.1	70	<1	38	65.8
L1R 21		89.0	4.9	74.0	2.72	27	2.2	140.0	203	220	4.7	28.6	51	<1	24	34.7
L1R 22		175.5	39.7	49.5	3.24	28	6.4	245	175	370	8.3	54.9	66	<1	98	55.8
L1R 23		76.1	26.8	33.7	3.67	26	5.1	130.5	166	320	8.8	26.4	118	<1	86	31.3
L2R 1		48.6	2.7	35.2	1.98	9	1.4	100.5	109	250	4.1	19.2	133	<1	35	26.1
L2R 2		8.8	6.4	43.9	1.32	10	1.4	23.5	125	200	1.8	3.4	87	<1	30	6.3
L2R 3		35.5	5.6	30.0	3.38	27	1.5	70.5	150	550	3.8	13.5	79	<1	44	18.8
L2R 4		38.5	7.1	62.6	2.85	10	1.3	80.6	227	290	3.3	15.1	51	<1	26	22.0
L2R 5		41.0	8.3	69.2	1.66	19	1.1	84.7	300	200	2.4	16.0	70	<1	49	21.5
L2R 6		95.2	39.8	37.1	4.31	21	5.5	176.0	151	340	13.3	36.1	119	<1	137	45.5
L2R 7		37.0	18.8	86.4	5.62	38	2.5	72.3	161	90	5.0	13.3	81	<1	55	19.4
L2R 8		103.0	11.5	76.4	3.07	13	1.8	219	254	220	7.2	43.0	92	<1	52	56.2



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Project: R

## CERTIFICATE OF ANALYSIS VA07052971

Sample Description	Method Analyte Units LOR	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	ME-MS18	
		Sn	Sr	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
		0.2	10	0.1	1	1	10	10	1	0.2	0.1	0.1	20	1
L1R 1		<0.2	3220	4.8	<1	11	160	<10	33	0.5	146.5	11.5	820	73
L1R 2		<0.2	2000	1.5	<1	4	170	<10	22	0.7	60.2	5.3	860	43
L1R 3		<0.2	1500	2.4	<1	12	440	<10	16	1.0	94.4	8.3	2690	72
L1R 4		<0.2	2670	2.7	<1	11	190	<10	21	0.5	96.7	7.5	3560	45
L1R 5		<0.2	1070	5.0	<1	18	230	<10	22	0.7	198.0	15.5	370	94
L1R 6		<0.2	3230	0.3	<1	<1	40	<10	43	0.3	24.3	1.8	290	9
L1R 7		<0.2	900	4.8	<1	14	250	<10	23	0.8	181.5	14.5	640	118
L1R 8		<0.2	2620	4.5	<1	21	160	<10	33	0.6	155.0	11.5	410	69
L1R 9		<0.2	2630	3.2	<1	13	550	<10	22	0.6	108.6	8.1	1120	81
L1R 10		<0.2	4960	11.3	<1	12	30	<10	32	0.3	338	21.9	1280	53
L1R 11		<0.2	3180	7.0	<1	15	140	<10	34	0.7	212	15.6	3260	118
L1R 12		<0.2	3080	6.0	<1	16	70	<10	55	0.3	179.0	11.2	530	49
L1R 13		<0.2	2480	4.4	<1	21	610	<10	23	1.1	141.5	11.5	4600	111
L1R 14		<0.2	2000	4.7	<1	13	480	<10	23	1.2	186.5	15.0	4010	94
L1R 15		<0.2	3350	6.1	<1	43	380	<10	45	0.9	199.0	17.3	3160	114
L1R 16		<0.2	6250	1.2	<1	1	10	<10	61	2.3	61.5	4.6	380	7
L1R 17		<0.2	3210	6.6	<1	43	270	<10	58	0.9	207	15.5	1630	63
L1R 18		<0.2	3120	3.9	<1	33	450	<10	31	1.2	122.0	8.8	2240	73
L1R 19		0.2	1690	5.2	<1	38	1190	<10	40	2.1	191.0	15.3	1100	202
L1R 20		<0.2	4750	14.2	<1	69	180	<10	42	0.9	417	32.5	300	81
L1R 21		<0.2	3640	6.4	<1	59	130	<10	50	0.7	213	15.8	530	89
L1R 22		0.4	2660	9.3	<1	83	1360	<10	49	2.6	285	22.0	970	197
L1R 23		0.3	2180	6.1	<1	39	1230	<10	32	1.8	228	18.3	2750	215
L2R 1		<0.2	1820	5.3	<1	12	160	<10	32	0.6	191.0	15.2	540	89
L2R 2		<0.2	2110	1.2	<1	4	310	<10	16	0.6	50.8	3.8	2070	47
L2R 3		<0.2	1650	4.3	<1	9	330	<10	22	0.9	189.0	15.4	2180	96
L2R 4		<0.2	3120	4.9	<1	14	290	<10	39	0.6	154.5	12.2	7740	76
L2R 5		<0.2	3680	4.2	<1	18	220	<10	81	1.0	145.0	10.8	7720	57
L2R 6		0.6	2020	9.3	<1	32	1870	<10	41	2.6	327	26.9	3810	334
L2R 7		<0.2	3620	3.6	<1	12	480	<10	59	1.0	118.5	7.5	700	89
L2R 8		<0.2	3330	10.7	<1	36	346	<10	46	0.6	336	26.3	270	145