

82-205-10264.

GEOLOGY AND GEOCHEMISTRY OF THE  
BOOMERANG PROPERTY  
BOOMERANG #1-4, OVERNIGHTER #1-8  
NORTHERN LIGHTS #1-4, RED SUSPENDERS #1-6  
JB #1-2, CH #1-4 MINERAL CLAIMS  
CARIBOO MINING DIVISION  
NTS 93A/11W  
LATITUDE 52°43'N LONGITUDE 121°20'W  
DATES OF WORK: JULY 28/81 to MARCH 20/82

OPERATOR	E & B EXPLORATIONS INC. #1440-800 W. Pender St. Vancouver, B.C.
CONTRACTOR	JMT SERVICES CORP. 8827 Hudson Street Vancouver, B.C.
WRITTEN BY	J. S. Christie, Ph.D. K. W. Livingstone, M.Sc. Colin Harivel, B.Sc.
SUBMITTED	March 20, 1982

10264

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## INTRODUCTION

The Boomerang property was staked on May 26, 1981 immediately after the government geochem data was released. The property covers the drainage basin of sample #805136 which ran 750 ppm arsenic, the highest arsenic value reported in the released geochem. At the time of staking snow cover was extensive. In late July, two geologists, Wayne Livingstone and Colin Harivel completed traverses on the claims and collected 35 soil and 9 silt samples in the anomalous drainage. Results indicated moderate to highly anomalous arsenic in soil and silts (values to 345 ppm) and two samples were highly anomalous in lead (125 and 1500 ppm) Gold values obtained were all low.

Geological observation and the geochem pattern suggest that a northwest trending mineralized zone may cross the property. Several areas of very rusty red soils were noted along this trend, especially upslope from samples WL 230-235, where an obvious area for more detailed work has been identified. Lode-gold mineralization is the principal exploration target on the property.

## LOCATION AND ACCESS

The claim block covers most of the upper slopes of Badger Peak at the west flank of the Goose Range, the height of land between Quesnel Lake and Cariboo Lake. The presently identified geochemical target area lies on the northwest slope of Badger Peak (at the headwaters of the east fork of Sellar Creek) about 20 km northeast of the town of Likely. A new logging road up the west side of Sellar Creek ends 3.5 km west of the target area. Logging is active and new-roads may improve accessibility to the claims before long. At present, access to the property is easiest by helicopters based at Williams Lake or Quesnel. Flying time to the property is about 25-30 minutes from either location. There are a number of natural clearings suitable for helicopter landing on the property.

## TOPOGRAPHY AND VEGETATION

Elevations range from 1370-200 meters on the claims and the area of current interest is between 1525-2000 metres. Slopes in that area are steep and rocky under the ridge lines but moderate below 2000 m.

Forest cover is dense spruce-balsam below approximately the 1500 meter contour. Above, the vegetation is more alpine in nature with open grassy meadows and swamp with scattered smaller trees.



## MINERAL CLAIMS

The property consists of 102 claim units as listed below and shown on Figure 2.

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>RECORD NO.</u>	<u>RECORD DATE</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
<u>LCP CLAIMS</u>					
BOOMERANG #1	20	3721(6)	June 24/81	June 24/82	K.W. Livingstone
#2	20	3722(6)	"	"	"
#3	20	3723(6)	"	"	"
#4	20	3724(6)	"	"	"
<u>BOMERANG</u>					
FRACTION	N/A	3749(6)	"	"	"
<u>2-POST CLAIMS</u>					
OVERNIGHTER 1-8	8	3735-42 (6)	"	"	"
<u>RED SUSPENDERS</u>					
1-6	6	3743-48 (6)	"	"	"
JB 1-2	2	3725-26 (6)	"	"	"
<u>NORTHERN</u>					
LIGHTS 1-4	4	3727-30 (6)	"	"	"
CH 1-4	4	3731-34 (6)	"	"	"

The 2-post claims were staked first to tie up the anomalous drainage and then overstaked with the 80 units LCP block. the 2-post claims should be allowed to lapse and work applied to the LCP claims which would thereafter control the current area of 2-post claims.

## GEOLOGY

Detailed geological work has not been undertaken on the property. Regional mapping indicates the anomalous drainage to be underlain by fairly high grade metamorphic schists, quartzites and sandstones of the Snowshoe Formation, which rocks appear to be a southeasterly extension of the geology mapped in the Barkerville-Wells area. A northwesterly elongate narrow mass of biotite granodiorite gneiss has been mapped on the west side of the anomalous drainage and the granodiorite contact may lie close to the inferred structural-mineralized zone shown on Figure 3. This zone is characterized by limited areas of very rusty soil and outcrop in the few areas where overburden does not conceal the trend. Pyrite is the only sulfide that has been identified in place although galena, tetrahedrite and sphalerite were noted in vein-quartz float.

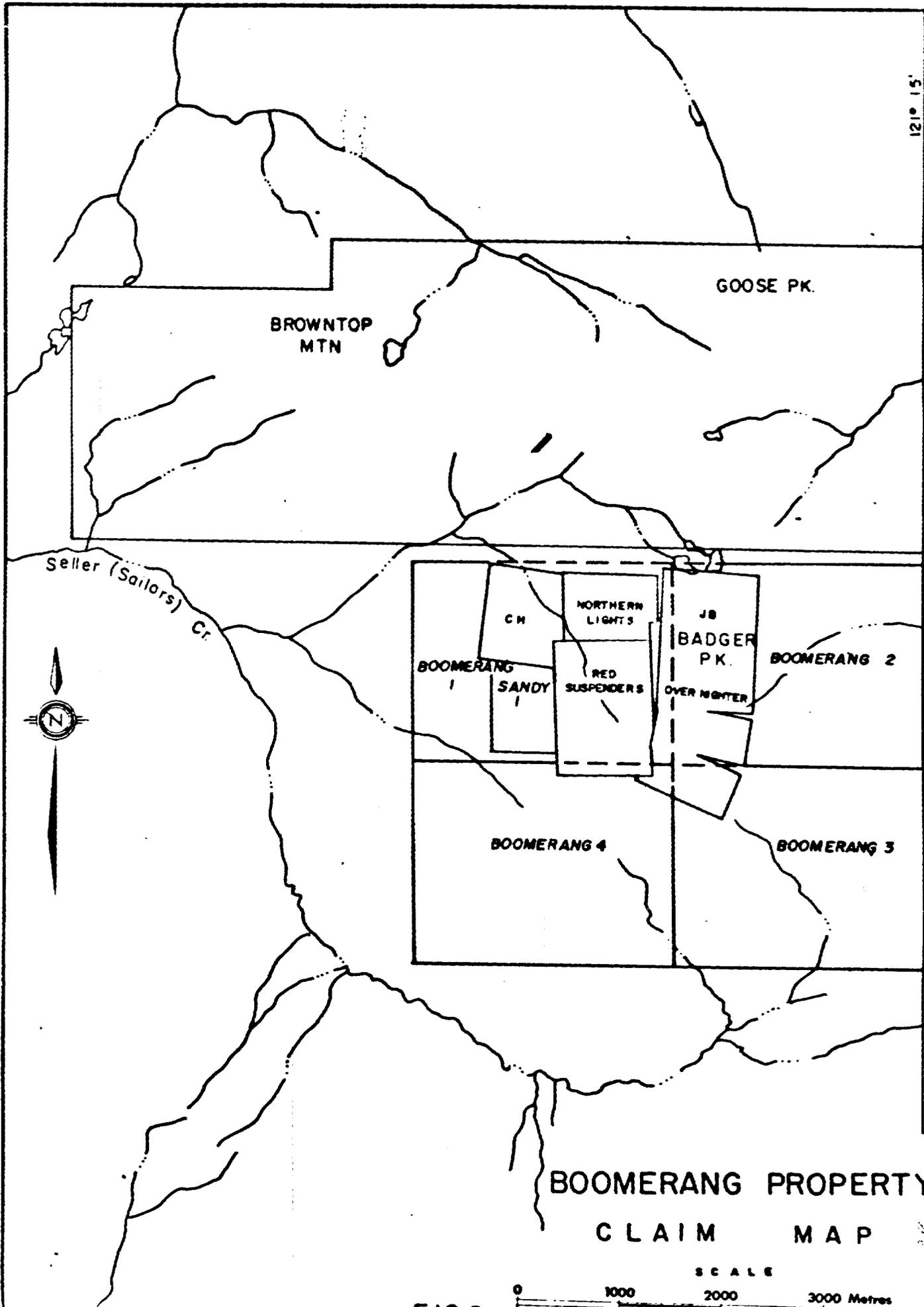


FIG. 2.

## GEOCHEMISTRY

Reconnaissance type sampling traverses were utilized in an attempt to achieve a geochemical cross section and to observe lithologies and variations.

Sampling was completed by two geologists.

Soil samples were collected from pits 15-25 cm deep dug with the aid of a hand pick. About 300 grams of "B" horizon soil or the best approximation available was collected from each pit using a stainless steel spoon or scoop and transferred to a gusseted kraft paper sample bag which was appropriately identified.

Silt samples were collected, where available, on streams or drainages traversed or crossed by traverse lines. 300-500 grams of active silt was collected using a stainless steel scoop or spoon and transferred to an appropriately marked gusseted kraft sample bag. Where sediments were of a coarse nature, a correspondingly larger sample was collected so as to ensure an adequate supply of fine material for analysis.

Rock chip samples were usually 300 to 500 grams in size and typically consisted of several (three to five or more) rock chips from an outcrop. Where systematic outcrop sampling has been done the weight and number of chips is often larger over specific intervals.

Silts and soils were dried and sieved and the -80 mesh fraction, or a portion of it, retained for analysis.

Rock chip samples were crushed and pulverized with a portion of the -100 mesh product retained for analysis.

Arsenic determinations were made using perchloric-nitric acid digestion followed by a standard atomic absorption hydride finish.

Gold determinations were made by using a fire assay preconcentration followed by neutron activation analysis.

Lead values were determined by using a perchloric-nitric acid digestion and standard atomic absorption techniques.

All analyses were performed by Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C.

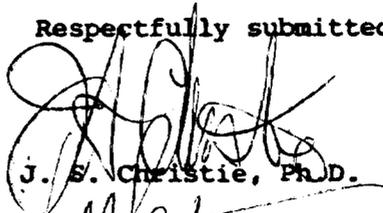
Arsenic values and anomalous lead values obtained from 44 soil and silt samples and a few rock chips are shown on Fig. 3. There is a good correlation with highly anomalous geochemical values and the inferred structural mineralized zone associated with rusty soils. Gold analyses were also done on all of the samples and no anomalous results were obtained. Sampling to date is not sufficiently detailed to evaluate the potential of the system for precious metals, but it has provided a framework to focus the next phase of work.

**CONCLUSIONS AND RECOMMENDATIONS**

The occurrence of highly anomalous arsenic-lead geochemistry along an apparent southerly extension of the geology of the Wells-Barkerville district makes the Boomerang property an attractive exploration target. A two phase programme is suggested. Phase I work would include fairly detailed geology and sampling in the areas of the projected mineralized zone in the central part of the property and reconnaissance sampling and geology outside of the central area.

Phase II contingent on Phase I results would provide a budget for hand trenching or backhoe trenching if a suitable route for a backhoe access trail is located.

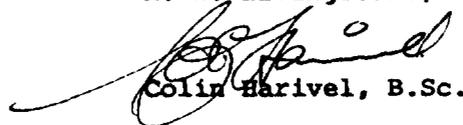
Respectfully submitted,



J. S. Christie, Ph.D.



K. W. Livingstone, M.Sc.



Colin Harivel, B.Sc.

## STATEMENT OF COSTS

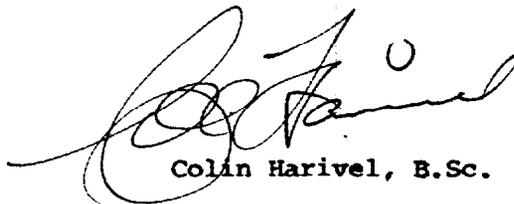
## BOOMERANG

C. Harivel	Oct 21, 22, 23(½), 24(½)	3 days @ \$200	\$ 600.00
	July 28	1 " @ \$200	200.00
J.S. Christie	Dec 21, 22	2 days @ \$300	600.00
K.W. Livingstone	July 28	1 " @ \$300	300.00
Chemex Labs Invoice #2895			558.25
Min. of Finance #C8686 (airphotos)			53.30
Pacific Helicopters Invoice #3631			1,443.20
Vancal Invoice #20308			48.49
	#20324 (share)		94.93
Truck rental (share)			50.00
Mob-demob - Vancouver (share)			200.00
Motel/meals			125.00
Report preparation			<u>1,400.00</u>
			<u>\$5,673.13</u>

STATEMENT OF QUALIFICATIONS

I, Colin Harivel, of Vancouver, British Columbia, do hereby certify that:

1. I am a geologist residing at 3996 West 10th Avenue  
Vancouver, British Columbia
2. I am a graduate of the University of British Columbia;  
B.Sc. Honours Geology, 1972
3. I have practised my profession as a mining exploration  
geologist continuously since 1972
4. I am a Fellow of the Geological Association of Canada.

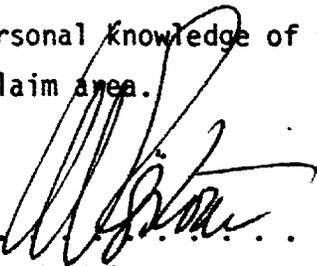


Colin Harivel, B.Sc.

STATEMENT OF QUALIFICATIONS

I, K. WAYNE LIVINGSTONE of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Geologist, working in British Columbia and residing at 6775 West Blvd. Vancouver, B.C.
2. I am a graduate of CARLETON UNIVERSITY, Ottawa, Ontario with BSc honours geology 1966.
3. I am a graduate of the UNIVERSITY OF BRITISH COLUMBIA with MSc geology 1968.
4. I have practiced my profession as a mining exploration geologist since 1965.
5. I am a Member of the Geological Association of Canada.
6. I am a Member of the CIMM.
7. This report is based on personal knowledge of the geology and mineral potential of the claim area.

  
.....  
K. WAYNE LIVINGSTONE, MSc.

STATEMENT OF QUALIFICATIONS

I, James S. Christie of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Geologist residing at 3921 West 31st Avenue, Vancouver, B.C. , V6S 1Y4
2. I am a graduate of the University of British Columbia B. Sc., Honours Geology - 1965; Ph.D. Geology - 1973
3. I have practised my profession as a mining exploration geologist, continuously since 1965.
4. I am a Fellow of the Geological Association of Canada.
5. I am a Member of the Geological Society of America.
6. This report is based on my personal knowledge of the district, and mapping of the geology at the property.

  
James S. Christie, Ph.D.



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE (604) 984-0221  
 TELEX 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

AUG 31 1981

CERTIFICATE OF ANALYSIS

TO : JMT SERVICES CORP;  
 8827 HILDSON ST;  
 VANCOUVER, B.C.  
 V6B 4N1

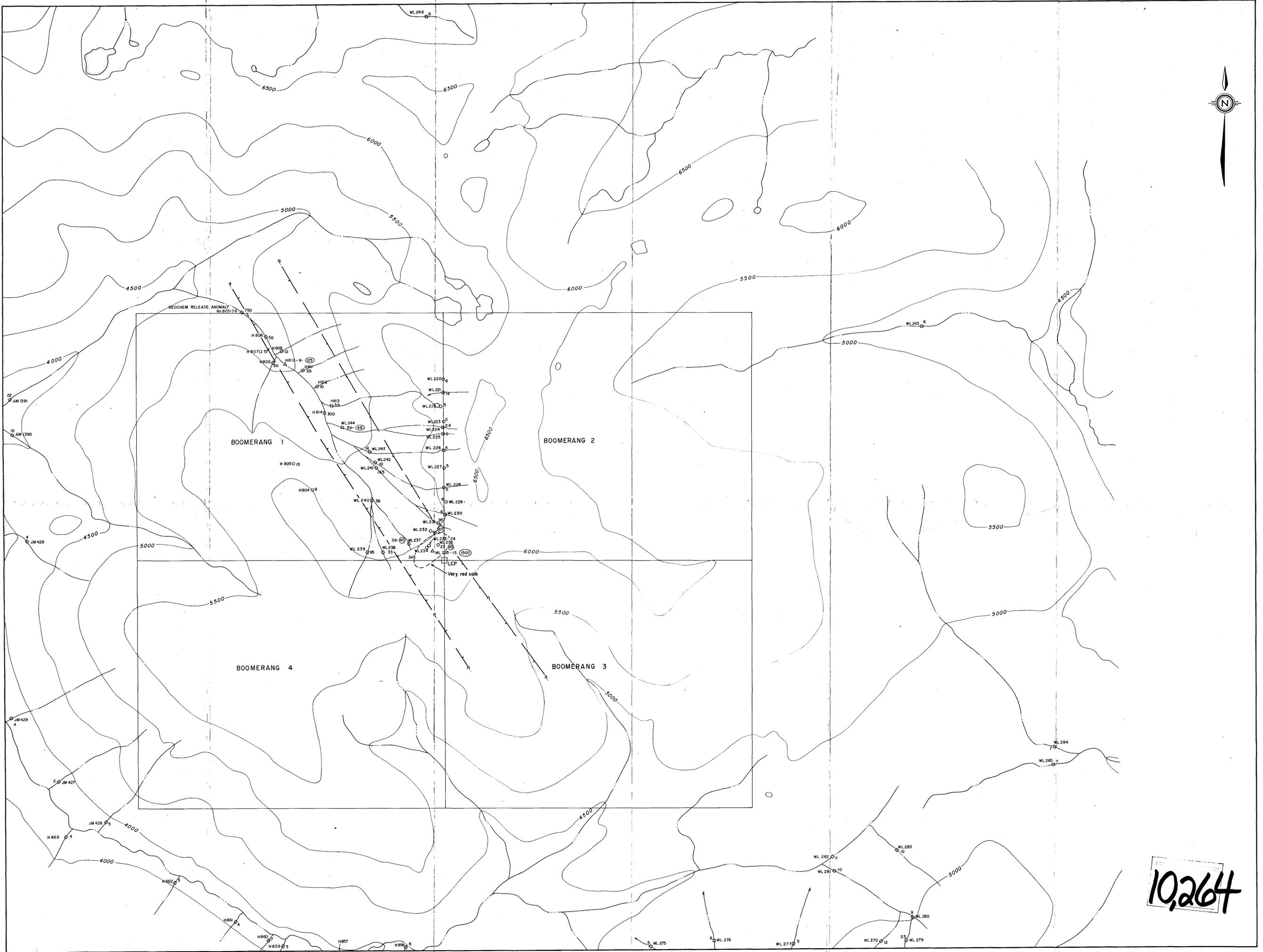
CERT. # : A8112895-001-A  
 INVOICE # : I8112895  
 DATE : 31-AUG-81  
 P.C. # : NONE  
 02-240 BCCMERANG

Sample description	Prep code	Pb ppm	AS ppm	AU-NAA ppb			
81-H-804	201	28	9	<1	--	--	--
81-H-805	201	22	15	<1	--	--	--
81-H-806	201	19	<u>50</u>	<1	--	--	--
81-H-807	201	24	<u>57</u>	<1	--	--	--
81-H-808	201	16	<u>50</u>	<1	--	--	--
81-H-809	201	15	12	<1	--	--	--
81-H-810	201	<u>125</u>	9	<1	--	--	--
81-H-811	201	<u>16</u>	<u>35</u>	<1	--	--	--
81-H-812	201	18	<u>10</u>	1	--	--	--
81-H-813	203	14	<u>39</u>	1	--	--	--
81-H-814	201	16	<u>300</u>	<1	--	--	--
81-H-815	201	14	12	<2	--	--	--
81-H-816	203	13	12	<1	--	--	--
81-H-817	203	13	9	3	--	--	--
81-H-818	203	22	14	6	--	--	--
WL-81-220	201	24	6	<1	--	--	--
WL-81-221	201	16	14	<1	--	--	--
WL-81-222	201	14	5	<1	--	--	--
WL-81-223	201	15	5	1	--	--	--
WL-81-224	201	14	<u>24</u>	<1	--	--	--
WL-81-225	201	16	6	<1	--	--	--
WL-81-226	201	15	5	<1	--	--	--
WL-81-227	201	12	5	<1	--	--	--
WL-81-228	201	17	5	<1	--	--	--
WL-81-229	201	17	6	<1	--	--	--
WL-81-230	203	12	6	<1	--	--	--
WL-81-231	201	18	<u>95</u>	1	--	--	--
WL-81-232	203	<u>67</u>	<u>45</u>	<1	--	--	--
WL-81-233	201	16	<u>24</u>	<1	--	--	--
WL-81-234	201	14	<u>345</u>	2	--	--	--
WL-81-235	201	<u>1500</u>	15	1	--	--	--
WL-81-236	201	<u>45</u>	<u>27</u>	<1	--	--	--
WL-81-237	201	45	<u>39</u>	<1	--	--	--
WL-81-238	201	23	<u>33</u>	<1	--	--	--
WL-81-239	201	18	<u>95</u>	<1	--	--	--
WL-81-240	203	24	<u>36</u>	<1	--	--	--
WL-81-241	201	22	<u>165</u>	3	--	--	--
WL-81-242	203	16	10	2	--	--	--
WL-81-243	201	17	16	<1	--	--	--
WL-81-244	201	46	39	<1	--	--	--



Certified by Harv Biddle

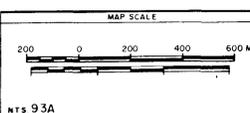




- SOIL SAMPLE
- △ ROCK CHIP SAMPLE
- SILT SAMPLE

ARSENIC VALUES IN PPM. - 70  
ANOMALOUS LEAD VALUES IN PPM. - (45)

POSSIBLE N.W. TRENDING  
STRUCTURAL ZONE  
CONTROLLING  
MINERALIZATION



NO.	DATE	MADE BY	DESCRIPTION
1			
2			
3			
4			
5			

**E & B Explorations Inc.**

QUESNEL REGIONAL PROJECT BOOMERANG PROPERTY			
COMPOSITE GEOLOGY & GEOCHEM PLAN			
MAP INDEX NUMBER	SCALE	DRAWING NUMBER	
	1:10,000	3	

DATE	DRAWN BY	CHECKED	APPROVED	OFFICE	DEPARTMENT
4.1.82	JVV				