

84-#140 - 12054

GEOCHEMICAL REPORT
XAVONA MINERAL CLAIM
Kamloops Mining Division
92I/15W

24 January 1984
R.A. Boyce
Placer Development Limited

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,054

1. INTRODUCTION

Exploration work was undertaken on the Xavona claim, Kamloops Mining Division, on 9 December 1983. Work included prospecting, cursory mapping, and rock-chip sampling for geochemical analysis. Work was hampered by icy conditions and in a minor way, by snow cover. This work is additional to that reported in 1981 which involved only geochemical sampling. Purpose was search for precious metal mineralization.

2. LOCATION AND ACCESS

The Xavona claim is located on the north shore of Kamloops Lake, near its west end, opposite the village of Savona. It is approximately 40 kilometers west-northwest of Kamloops.

The southeast corner of the property, where it touches Kamloops Lake, is crossed by the main line of the Canadian National Railway. A rough road may be driven to the southwest corner of the claim, from Savona Siding.

3. PHYSICAL FEATURES

Xavona claim lies on the moderate to steep, south-facing wall of Kamloops Lake valley. This is the slope at the southern edge of Tranquille Plateau. Topography is fairly rugged with deeply incised gullies, and rocky knobs in the upper slopes. Alluvial fans have formed where stream gullies debouche into Kamloops Lake. Elevations range from 345 metres at lake level to 736 metres.

The claim lies within the Interior arid climatic zone which has hot, dry summers and cool winters. Annual precipitation is about 20 centimeters.

Vegetation is a semidesert association. Scattered ponderosa pine, Douglas fir and minor juniper grow in gulleys, while intervening slopes host mainly grasses and sagebrush with very few trees.

4. HISTORY AND OWNERSHIP

The area of Thompson River valley has witnessed prospecting since earliest settlement. The first prospectors, probably in the 1890's, searched for gold and copper. Several mercury showings have been known in the district around the west end of Kamloops Lake. Claims have previously been located in the area, but there is no record. A larger block of claims has been located to the west by Placer Development Ltd. and on the east by A. Ablett.



FIGURE 1 - LOCATION MAP

SCALE

A mercury occurrence is reported in the vicinity, known as the Davis Showings. They were originally staked as the Bee claims in 1937. They exist between 550 and 730 metres elevation. The showings were not seen in this investigation. The only development work done on the showing was the digging of a few small trenches.

Xavona claim was located on 12 March, 1981, by Murray Morrison of Kelowna, B.C. It was subsequently acquired by Placer Development Ltd., the current operator. It is a four-unit claim, two units east by two units north, staked under the modified grid system. Its record number is 3323.

5. GENERAL GEOLOGY

The Xavona claim is underlain entirely by rocks of the Triassic Nicola Group. Common lithologies are greenstone, andesite, basalt, agglomerate, breccia, and tuff; and minor argillite, limestone and conglomerate.

Rock types described in the vicinity of Davis showings include dark green volcanic breccia, and minor tuff and agglomerate. Mineralization is evident as thin films of cinnabar in white dolomite veins and stringers. The veins are associated with shear zones which strike 100° to 120° azimuth and dip 30° southwest. Associated are rusty brown ankeritized zones twenty centimeters to six metres in width, centered on main and subsidiary shears.

The commonest rock type noted on the Xavona claim was a brown, red or green weathering, chloritized, porphyritic basalt. Locally, epidote was evident. This rock is brecciated over much of the northwestern part of the claim. Hematization was locally evident by small fragments stained reddish, or purple matrix. Another basalt seen in two locations had a bluish, glassy matrix and was amygdaloidal at one place. A section along the gully near the eastern claim boundary was a dark gray-green andesitic tuff. A fine-grained dyke rock was noted adjacent to a shear. Agglomerate was seen south of the claim.

Carbonate veining was fairly common, with veins often discontinuous, and generally less than 3 cm thick. Quartz was noted in two places. Chlorite slickensides were seen in several places. Carbonate-limonite alteration was seen associated with some shears, but in only two locations was considered significant, up to 15 cm wide. It was a bright pink to rusty color. Orientations of veining and shears were measured at several points, but it appears to be random.

6. GEOCHEMICAL SAMPLING

Eight rock chip samples were collected during the traverse, from outcrops not visited in 1981. Outcrop was common in gullies, in numerous knobs in the upper slopes, and in railway cuttings. Samples were 1 to 1.5 Kg. of chips hammered from outcrop. All samples were analyzed for content of Au, As, Sb, Hg, Ag, Mo, Cu, Zn and Pb. Analysis was performed by Placer Development Ltd. Research Centre in Vancouver. Analytical methods are listed in Appendix A..

7. ANALYTICAL RESULTS

Analyses were received in mid-January, 1984. Results are plotted on a map at the end of this report. All values are low. Mo, Zn, Pb and Hg are all at background levels. Ag and As are not detectable. Copper values are weakly raised above standard background. However, variation is not great, and the values are very similar to the 1981 samples. Hence it is thought that the analytical values are not significantly high.

Two samples on the northern edge of the property have above-detection-limit gold of .02 and .03 ppm. This is significantly variant, but not high enough to give encouraging indications of a mineral deposit. Similarly, the sample in the northwestern corner of the claim shows antimony at detection level. This is possibly anomalous, but not considered significant. All three of the above samples were taken from highly-fractured or brecciated outcrop, with significant carbonate veining and fracture filling.

8. CONCLUSION AND RECOMMENDATION

The sampling program has demonstrated very minor bedrock enrichment of copper, gold and antimony. It is anticipated that significantly higher values would not be encountered on the property. Therefore, it is recommended that no further work be performed.

RAB/cs

9. SUMMARY OF EXPENDITURES

Salaries:

Field Work:	R.A. Boyce - 1 day @ \$320	=	\$320.00	
	B.S. Ott - 1 day @ \$335	=	\$335.00	
Office:	R.A. Boyce 1 1/2 days @\$320	=	<u>480.00</u>	
			<u>\$1,135.00</u>	\$1,135.00
Geochemistry:	8 Samples analysis @ \$17.20			137.60
Vehicle Cost:	Operating expense and fuel			90.00
Report preparation				<u>40.00</u>
				<u><u>40.00</u></u>
TOTAL COST APPLIED TO ASSESSMENT:				\$1,402.60

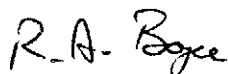
10. STATEMENT OF QUALIFICATIONS

I R.A. Boyce, with business address at Box 49330, Bentall Postal Station, Vancouver, B.C. V7X 1P1, do hereby certify that:

1. I have personally carried out the field work, and have assessed and interpreted the data from this geochemical program on the Xavona claim, Kamloops Mining Division.
2. I am a graduate of the University of British Columbia, Vancouver (B.Sc., Geological Sciences, 1977).
3. I am a member of the Canadian Institute of Mining and Metallurgy.
4. I have engaged in the practice of mineral exploration since graduation in the Provinces of British Columbia and Saskatchewan, and Yukon and Northwest Territories.

Respectfully submitted,

PLACER DEVELOPMENT LIMITED



R.A. Boyce

RAB/cs
01:26:84

APPENDIX A

PLACER DEVELOPMENT LTD (RESEARCH CENT)
 GEOCHEMICAL DATA LISTING: ren sediment

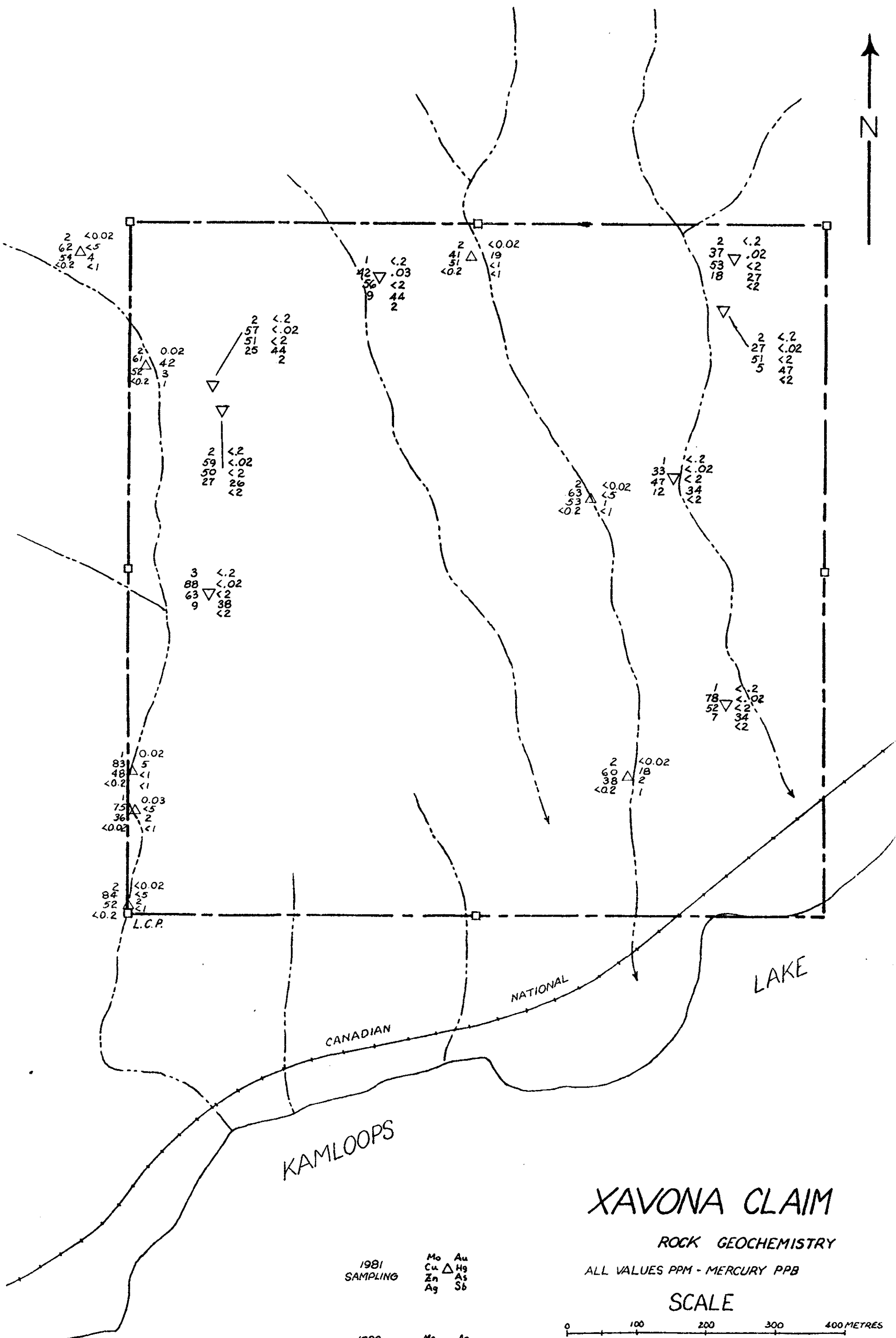
PDL lab data file: P3201
 AREA: KEN
 MAP SHEET NO: 92115W
 VENTURE: CARABINE
 GEOLOGIST: R. BOYCE
 LAB PROJECT NO: 3201

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. BOYCE S. TENNANT S. HODGS
 I. THOMSON D. JENKINS R. SHKLA

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:
 ALL RESULTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.
 SAMPLE NUMBERS FOLLOWED BY * ARE DUPLICATE ANALYSES.

	UNITS	WT.G	ATTACK USED	TIME	RANGE	METHOD
VC	PPM	0.5	C HCL04/HN03	4HRS	1-1000	ATOMIC ABSORPTION
CU	PPM	0.5	C HCL04/HN03	4HRS	2-4000	ATOMIC ABSORPTION
ZN	PPM	0.5	C HCL04/HN03	4HRS	2-3000	ATOMIC ABSORPTION
PB	PPM	0.5	C HCL04/HN03	4HRS	2-3000	A.A. BACKGROUND COR.
CD	PPM	0.5	C HCL04/HN03	4HRS	0.2-200	A.A. BACKGROUND COR.
NI	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
CO	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	0.5	C HCL04/HN03	4HRS	0.2-20	A.A. BACKGROUND COR
AG2	PPM	0.5	C HN03	2HRS	0.02-4.00	A.A. SOLVENT EXTRACT
AU	PPM	10.0	AQUA REGIA	3HRS	0.02-4.00	A.A. SOLVENT EXTRACT.
U	PPM	0.25	DIL HN03	2HRS	1.0-1000	FLOURIMETRY SOLV. EX.
V	PPM	0.5	C HF/HCL04/HN03/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	1.0	C HF/HN03/HCL/H2SO4	4HRS	5-500	A.A. SOLVENT EXTRACT.
F	PPM	0.25	NA2CO3/KN03 FUSION	30MIN	40-4000	SPECIFIC ION ELECTRODE
AS	PPM	0.5	C HCL04/HN03	4HRS	2-1000	A.A. BACKGROUND COR.
SE	PPM	0.5	C HCL04/HN03	4HRS	2-1000	A.A. BACKGROUND COR.
BI	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
MN	PPM	0.5	C HCL04/HN03	4HRS	2-3000	ATOMIC ABSORPTION
FE	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	0.5	DIL HN03	2HRS	5-2000000	A.A. COLD VAPOR GEN.
BA	%	0.25	C HF/HI/OXALIC	4HRS	0.02-20%	ATOMIC ABSORPTION
NA	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HCL04/HN03/HCL	6HRS	10-2000	ATOMIC ABSORPTION
MG	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
SN	PPM	1.0	NH4I FUSION	15MIN	5-500	A.A. SOLVENT EXTRACT.
LOI	%	1.0	ASH 600 DEG C	2HRS	0.02-99%	WEIGH RESDUE



2 <0.02
62 <5
54 <4
<0.2 <1

1 <2
42 .03
56 <2
9 44
2

2 <0.02
41 <1
51 <1
<0.2

2 <2
37 .02
53 <2
18 27
<2

2 <2
57 <0.02
51 <2
25 44
2

2 <2
27 <0.02
51 <2
5 47
<2

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1

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<0.02 <1

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60 <1
38 <1
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18 2
1

2 <0.02
84 <5
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L.C.P.

KAMLOOPS

NATIONAL

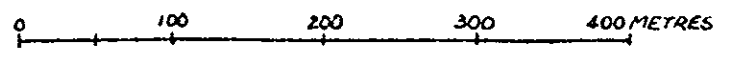
LAKE

XAVONA CLAIM

ROCK GEOCHEMISTRY

ALL VALUES PPM - MERCURY PPB

SCALE



1981 SAMPLING

Mo	△	Au
Cu	△	Hg
Zn	△	As
Ag	△	Sb

1983 SAMPLING

Mo	▽	Ag
Cu	▽	Au
Zn	▽	As
Pb	▽	Hg
		Sb

R. A. Boye