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GEOCHEMICAL AND GEOLOGICAL

ASSESSMENT REPORT

on the

ASH, BARBI AND RACHEL CLAIMS

(ALBERT RIVER PROPERTY)

of

DIA MET MINERALS LTD.

GOLDEN MINING DIVISION

GEOHROIGHIGOBUMBARANCH ASSESSMENT REPORT

1722&M **U82J/12**

NTS: Latitude: Longitude: Owner: Operator: Consultants: Author: Date:

50° 38' North 115° 35' West Dia Met Minerals Ltd. Discovery Consultants T.H. Carpenter October 8, 1992

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APPENDIX

A:	Analytical	Procedures	and	Results, Rock Descriptions - Rocks
				Results - Soils
С:	Analytical	Procedures	and	Results - Heavy Minerals in Rocks

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<u>SUMMARY</u>

The Albert River Property, owned by Dia Met Minerals Ltd., consists of three claims containing 42 claim units, located approximately 75 kilometres east of Radium, B.C.

The claims are underlain by various units of the Chancellor Group comprising limestone, argillaceous limestones, slates and calcareous slates.

The property was staked in 1980 to cover the area of a heavy mineral tungsten anomaly. Follow-up work included an airborne magnetic survey in 1981 and in 1984 a program of mapping, sampling, line cutting and geophysical surveys comprising magnetics, I.P. and resistivity, which outlined probable sources for the anomalous tungsten.

Subsequent work was concentrated in the northern part of the claim group in the area of high Au (to 50,000 ppb) and high rare earth (Ce-La-Th) heavy mineral anomalies. This work included a radiometric survey to define a possible alkaline intrusion with auriferous skarns, follow-up heavy mineral sampling, prospecting and litho-geochemical sampling. Further anomalous values were detected in the heavy mineral samples.

This report describes the work done on the Albert River property in July 1992. This program of soil sampling, prospecting and geological mapping was carried out in an attempt to define the source of the heavy mineral anomalies.

INTRODUCTION

The Albert River Property comprises 3 contiguous claims totalling 42 units. These claims, the Ash, Barbi and Rachel, are located in the Golden Mining Division and are 100% owned by Dia Met Minerals Ltd. The 1992 program consisted of contour and grid soil sampling bracketing a drainage containing high (to 50,000 ppb) Au and high rare earth (Ce-La-Th) heavy mineral anomalies.

Previous work, including sampling of quartz float material and continuous chip sampling along the ridge above the drainage, had failed to adequately define the source of the anomalies.

The 1992 program was designed to test for a possible source for the anomalies within the calcareous rocks underlying the anomalous drainage. As well it is possible that Au values may be segregated within the sideritic or calcitic component of quartz/carbonate veins which occur in the limestone and calcareous slates of the area.

LOCATION, ACCESS and TOPOGRAPHY

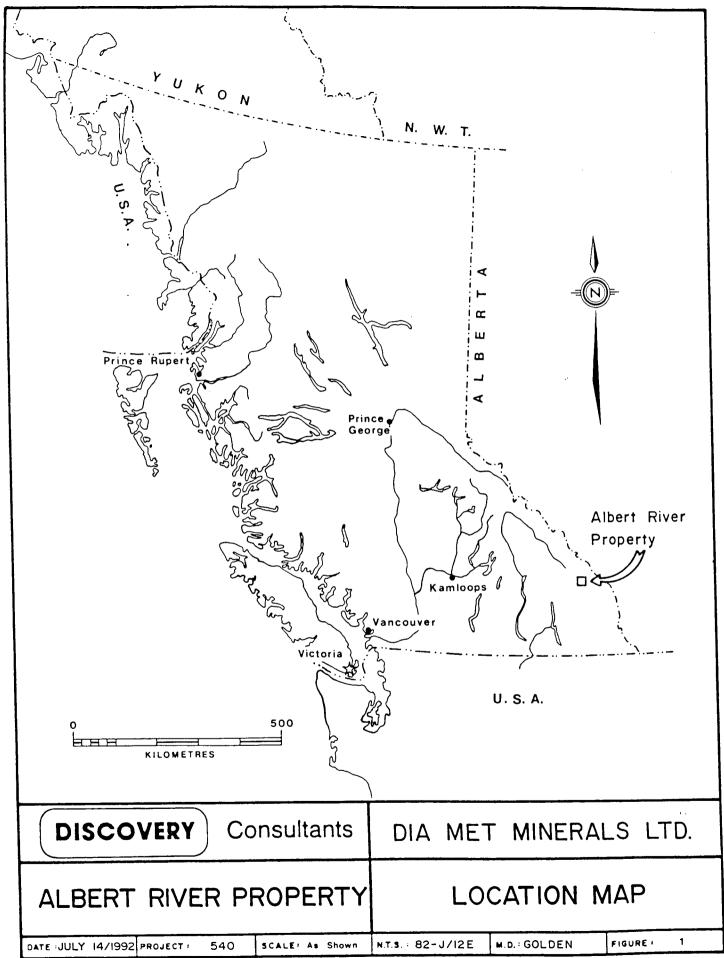
The Ash, Barbi and Rachel claims are centred at Latitude 50°38' N, Longitude 115°35' W in the Golden Mining Division, approximately 75 kilometres east of Radium, B.C. The claims lie near the west headwaters of Albert River between Tangle Peak and Albert River (*Figure 1*).

The claims are accessible by a four wheel drive vehicle from Highway 93 at a point 4 kilometres north of Swede Creek. From this point logging roads lead 20 kilometres southeasterly to Palliser River, crossing the Kootenay River at Yearling Creek, proceeding 8 kilometres easterly to the Albert River and then northerly for 12 kilometres to the property.

The northern portion of the property is accessed 12 kilometres up the Cross River road from Kootenay River by proceeding southwesterly 12 kilometres to Miller Pass and southerly 2 kilometres to the central part of the Barbi claim. The section over Miller Pass and to the south is poorly maintained.

Access is also available up Cochran Creek at a point 4 kilometres south of where the main logging road crosses the Kootenay River. Difficult four wheel drive access is possible for 11 kilometres up Cochran Creek to a point approximately 2 kilometres west of the property.

The east side of the property, on the west side of a tributary of the Albert River, is at an elevation of 1,300 metres and rises steeply to the west to over 2,600 metres. The central portion of the property is difficult to traverse because of steep topography and dense bush.



DWG - 540-001

PROPERTY

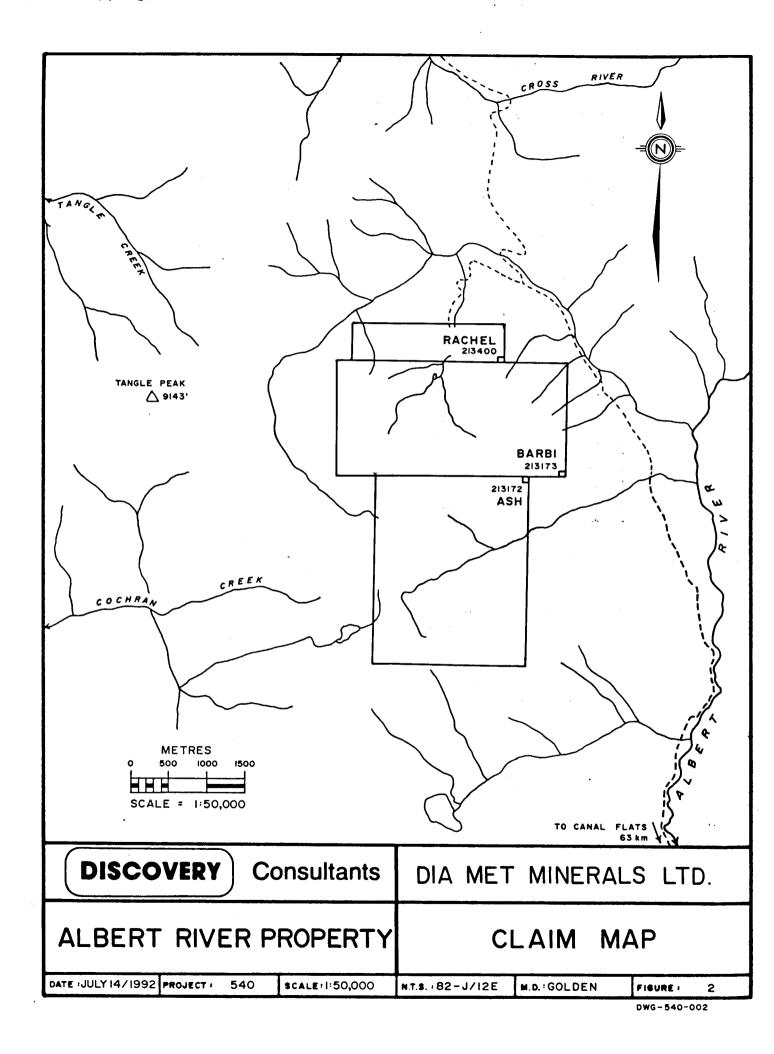
The Albert River Property consists of three 4-post claims, totalling 42 units, in the Golden Mining Division, British Columbia (*Figure 2*). The claims were located in July, 1980 and are owned by Dia Met Minerals Ltd.

The following table lists the pertinent information:

Claim Name	Record #	<u>Units</u>	Expiry Date *	Owner
Ash	213172	20	July 10/1993	Dia Met Minerals Ltd.
Barbi	213173	18	July 10/1993	Dia Met Minerals Ltd.
Rachel	213400	4	July 10/1993	Dia Met Minerals Ltd.

* Pending acceptance of this report

These claims are grouped as the W. Albert River Group.



<u>HISTORY</u>

The property was originally staked in 1980 to cover the area of a tungsten anomaly discovered during the course of an extensive heavy mineral stream sediment reconnaissance survey. Follow-up exploration, comprising various exploration techniques, were successful in following mineralization upstream but did not define a bedrock source for the mineralization.

The property was covered by an airborne magnetic survey in 1981 to outline possible skarn zones associated with intrusive rocks. No marked anomalous areas were outlined by the survey.

In 1982 the claims were mapped geologically. The mapping revealed the presence of a spotted hornfels and quartz-carbonate veins possibly associated with a buried intrusive within calcareous phyllites, argillaceous limestone and calcareous argillites.

During 1984 various exploration surveys were carried out including line cutting, mapping and prospecting, geophysics (ground magnetometer, I.P. and resistivity), conodont sampling and heavy mineral sampling.

The geophysical surveys indicated the interpreted presence of a buried intrusion in the central part of the claims flanked by skarn zones. The areas surrounding the intrusion are intensely anomalous in tungsten and exhibit zoning patterns in Cu-Pb-Zn, Au-As and Mo.

The heavy mineral sampling defined an area in the northern part of the claims outlined an area with high Au (50,000 ppb), La (51,700 ppm) and Ce (56,300 ppm).

The area of these anomalous samples was covered by additional exploration including a ground magnetometer survey in 1986 and in 1990 a ground radiometric survey and geochemical rock and heavy mineral sampling. The heavy mineral sampling confirmed the presence of anomalous gold values in the area. No anomalous Au, W or rare earth elements were detected in the talus and outcrop samples collected.

In 1991 continuous rock chip samples were collected along the ridge drained by the stream anomalous in Au values and within the drainage itself. None of these sample yielded anomalous results in Au or other elements.

GEOLOGY and MINERALIZATION

The claims are reported by Fipke & Suggitt (1987) and Fipke (1990) to be underlain by the Middle Cambrian Chancellor Group of marine sedimentary rocks in three units. The basal unit (Chap) consists of a sequence of light and dark, thin and medium-bedded argillaceous limestone with local beds of calcareous argillite containing limestone nodules. This basal unit is conformably overlain by a locally non or weakly calcareous grey shale or locally sericitic, pelitic phyllite (Chpp). This grey shale unit appears conformably overlain by a commonly cream coloured thickbedded to massive limestone (Chml).

The marine sedimentary and sill units are tightly isoclinically folded about gently plunging to subhorizontal NNW or SSE trending fold axis with NNW trending and steeply (50 -80°) west dipping axial planes.

Quartz-carbonate veins that range up to 1 to 2 metres thick are, for the most part, confined to the axial plane cleavages of folds. Locally veins contain minor amount of epidote and pyrite with chlorite alteration envelopes or pyrite and chalcopyrite with muscovite sericite alteration envelopes. In some minor cases the quartz carbonate veins contain minor amounts of galena and sphalerite.

A 3 kilometre zone of silicification is associated with a central area of intensely anomalous scheelite and moderately anomalous Cu \pm Au and Pb heavy mineral geochemistry surrounded by strongly anomalous Cu and Pb, moderately anomalous Au-As and Zn, and weakly anomalous Mo.

The area of intensely anomalous scheelite is coincident with two magnetic highs postulated to represent possible skarn deposits near the contact of a \pm 550 metres in diameter buried intrusive cupola. This area contains localized quartz - sericite \pm andalusite alteration. A large block of intensely scheelite mineralized marble was located by prospecting directly downslope from one of the ground magnetic highs.

1992 Program

Work on the Albert River Property in 1992 comprised prospecting and mapping in the area of the creek anomalous in Au in heavy mineral samples, contour soil sampling at 25 metre intervals along slope and above the anomalous sites and at 50 metre grid intervals along lines bounding the above drainage.

The above work was carried out on the Barbi claim. A total of 80 soil samples and 12 rock samples was collected. The 'B' soil horizon was sampled at an average depth of 30 cm. Soil samples were collected in paper soil bags. Both soil and rock samples were sent to Eco-Tech Laboratories Ltd. in Kamloops for Au analysis, by fire assay/A.A. methods, and multi-element analysis by I.C.P. methods. Sample location are shown on Figure 3 and gold values plotted on Figure 4. Analytical results are contained in Appendices A and B.

In addition to the above, the twenty two rock chip samples collected in 1991 from the ridge above the drainage were subjected to heavy mineral extraction and analysis. The purpose was to:

- 1. more accurately determine the gold content by processing a large complete sample
- 2. determine which size fraction contained the gold, if present

Analytical procedures and results are contained in Appendix C. Sample locations are shown on Figure 3 and gold values plotted on Figure 4.

PROGRAM RESULTS

Soil sampling results were disappointing. Of the 80 samples collected, only two (UL-51 & UL-52) contained anomalous gold values, 20 and 40 ppb respectively. Both these samples however were located in the upper drainage of the anomalous creek.

A NW-SE trending fault zone noted during the field work (Fig 3) contained narrow (to .3 m) quartz-carbonate veins. Since this fault was found in the vicinity of sample AR-05 it was viewed as a possible source for the anomalous heavy mineral samples. However chip samples collected from the veins contained no significant gold values.

The location of rock samples is shown on Figure 3 and rock types are described in Appendix A.

Attention was paid to the float in the creek near the anomalous heavy mineral samples. The results are summarized below.

- AR-01 grey shaly limestone (60%) and light brown weathering thinly bedded dolomitic limestone
- AR-02 similar to AR-01 except about 5% quartz-carbonate vein float
- AR-03 light brown weathering thinly bedded limestone. One large boulder of dolomitic limestone with grey limestone rip-up clasts. Outcrop in area; shaly dolomitic limestone
- AR-04 grey shaly limestone and massive limestone (80%) and light brown dolomitic limestone (20%) cut by veinlets of carbonate

Upstream from AR-04 the rock is phyllitic and interbedded with shaly limestone.

The analysis of heavy minerals extracted from previously collected chip samples confirms the low gold values obtained, except for sample XA-01. The -60HN fraction contained 6990 ppb Au. Since the sample size is very small (0.17 g) the amount of gold in the several kg of rock is still small. However, the sample is anomalous when compared to the other chip samples and its location at one end of a sampling line might indicate an exploration potential nearby. To date the heavy mineral drainage sediment anomalies have not been fully explained. The anomalous gold values in one chip sample may be indicative of a gold source. However during the field work it was noted that the anomalous creek contains significant accumulations of glacial till, whereas a parallel drainage immediately to the south which cuts across the same rock units and drains the area of the anomalous XA-01 rock sample, contained little glacial till.

Perhaps significantly this parallel drainage contained no significant heavy mineral anomalies. This would perhaps indicate a source within the glacial till for the gold values in the anomalous creek.

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- Fipke, C.E. & Report on the Albert River Tungsten Property, Suggitt, J.C. September, 1987.
- Fipke, C.E., Assessment Report on the Albert River Claims, September, 1990.

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Schiller, E.A. Geophysical Report on the Albert River Claims, April, 1987.

STATEMENT OF COSTS

1.	<pre>Professional Services T.H. Carpenter, geologist field mapping, prospecting, rock sampling including mob/demob 5 days @ \$384/day July 5 - 9, 1992 data compilation, report wri 2 days @ \$384/day W.R. Gilmour, geologist data compilation 1 day @ \$400/day</pre>	\$ 1920.00 ting 768.00 <u>400.00</u>	\$ 3088.00
2.	Personnel D. Tomelin 5 days @ \$150/day July 5 - 9, 1992		750.00
3.	Transportation 4x4 vehicle 5 days @ \$120 July 5 - 9, 1992 Fuel	\$ 600.00 <u>194.70</u>	794.70
4.	Accommodation, meals		330.06
5.	<pre>Analysis and Sample Preparat: Soil samples 80 soils @ \$15.00 Au + 30 element I.C.P. 12 rocks @ \$15.75 Au + 30 element I.C.P. 22 heavy mineral samples - acid leaching (supplies & labour) - heavy mineral extraction - neutron activation analys 39 analyses @ \$12.50</pre>	1200.00 213.00 699.09 4002.50	6845.09
6.	Drafting		586.40
7.	Field supplies, rental		175.28
8.	Data compilation, secretaria printing, telephone etc.	1,	328.41
		Total	<u>\$12867.94</u>

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STATEMENT OF QUALIFICATIONS

I, THOMAS H. CARPENTER, of 1102 21st Avenue, Vernon, B.C., DO HEREBY CERTIFY that:

- 1. I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, B.C.
- 2. I am a graduate of Memorial University of Newfoundland with a Bachelor of Science degree in Geology.
- 3. I have been practising my profession continuously for the past twenty-one years in Canada, the United States and Australia.
- 4. I am a Fellow of the Geological Association of Canada.
- 5. This report is based on the reports of others and upon knowledge gained during a field programme in July, 1992.
- 6. I hold no interest, either direct of indirect in the Albert River property.

T. H. Carper

Thomas H. Carpenter

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October 8, 1992

Vernon, B.C.

Appendix A

Analytical Procedures and Results

Rocks

APPENDIX A

Description of Rock Samples

- TC-01 grab sample; quartz-carbonate veining in thin-bedded limestone
- TC-02 grab sample; brown weathering slaty limestone; limonite on fractures
- TC-03 float; carbonate-quartz pods in black c.g. limestone; py disseminated in limestone and minor galena in carbonate-quartz
- TC-04 grab samples; quartz-carbonate veins in 15 to 25 cm 05 wide fault zones (3 to 5 m spacing with 140°/60°N 06 attitude)
- TC-07 grab sample; calcite vein in c.g. limestone
- TC-08 float; quartz-carbonate vein
- TC-09 grab sample; light brown breccia
- TC-10 float; breccia; limestone fragments in light brown carbonate matrix
- TC-11 float; dark brown weathering (dark grey when fresh) cut by carbonate and quartz veinlets bounded by sericite alteration
- TC-12 float; light brown weathering dolomitic limestone cut by quartz veinlets and carbonate veinlets with carbonate cutting quartz veins; minor sericite

Geochemical Analysis

by Eco-Tech Laboratories Ltd. :

		LOWER		UPPER		
ELEMEN	NT	DETEC	TION	LIMIT	EXTRACTION	METHOD
Au (Gold	5.00	ppb	1000.00	HCL-HNO ₃	fire assay/atomic absorption
AL A	Aluminum	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
Ag S	Silver	0.20	ppm	30.00	HCL-HNO3	ind. coupled plasma
As A	Arsenic	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
ВĘ	Boron	2.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Ba f	Barium	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Bi B	Bismuth	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Ca (Calcium	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
Cd (Cadmium	1.00	ppm	1000.00	HCL-HNO3	ind. coupled plasma
Co (Cobalt	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
Cr (Chromium	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Cu (Copper	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Fe	Iron	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
ĸ	Potassium	0.01	%	10.00	HCL-HNO3	ind. coupled plasma
La i	Lanthanum	10.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Mg I	Magnesium	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
Mn /	Manganese	1.00	ррт	10000.00	HCL-HNOZ	ind. coupled plasma
Mo I	Molybdenum	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Na * :	Sodium	0.01	%	10.00	HCL-HNO3	ind. coupled plasma
Nil	Nickel	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
P * 1	Phosphorus	10.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Pb	Lead	2.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Sb /	Antimony	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Sn	Tin	20.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
\$r *	Strontium	1.00	ррт	10000.00	HCL-HNO3	ind. coupled plasma
Ti *	Titanium	0.01	%	10.00	HCL-HNO3	ind. coupled plasma
U	Uranium	10.00	ррт	10000.00	HCL-HNO3	ind. coupled plasma
v	Vanadium	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
W	Tungston	10.00	ррт	10000.00	HCL-HNO3	ind. coupled plasma
Y	Yttrium	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Zn	Zinc	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
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 \bullet Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HCl-HNO_3 extraction. The ICP data will be low biased.

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APPENDIX A

Date of Report: 14-Aug-92

Project 540

Albert River

Rock Sampling Results 1992

Sample ID	Au	Ag	As	Ba	Bi	Co	Cr	Cu	۶e ۲	Mo	Ni	Pb	Sb	W	Zn
	ppb 	pp n 	ppm 	ppa 	pp n 	ppm 	ppm 			ppm 	ppm 	pp n	ppa 	pp m	pp
TC-01	<5	<.2	<5	10	<5	3	198	32	0.92	10	11	2	<5	<10	22
TC-02	<5	<.2	۲5	20	<5	2	18	4	1.28	<1	3	<2	10	<10	19
TC-03	<5	۲.2	<5	35	<5	<1	71	9	0.36	4	4	32	<5	<10	8
TC-04	<5	<.2	<5	10	<5	i	126	5	0.53	4	3	2	<5	<10	16
TC-05	<5	۲.2	<5	5	<5	<1	48	2	0.59	2	2	<2	`∢5	<10	7
TC-06	<5	۲.2	<5	10	<5	1	52	<1	0.64	1	2	<2	5	<10	8
TC-07	<5	۲.2	<5	<5	<5	<1	38	<1	0.32	1	2	<2	5	10	5
TC-08	<5	۲.2	<5	<5	<5	<1	115	1	0.39	4	2	<2	<5	<10	10
TC-09	<5	۲.2	5	45	<5	10	18	6	4.92	1	30	8	5	10	60
TC-10	<5	۲.2	<5	5	<5	1	42	2	0.81	1	3	<2	<5	10	14
TC-11	<5	۲.2	5	5	<5	2	38	4	1.68	2	5	<2	10	<10	16
TC-12	<5	<.2	<5	5	<5	1	39	1	1.17	1	2	12	10	10	14

Project 540

Rock Sampling Results (part 2)

Sample ID	A1 7	B ppm	Ca %	Cd ppe	K Z	La ppm	Mg Z	Mn ppa	Na %	P ppm	Sn. ppa	Sr ppna	Ti %	U pp e	V ppm
TC-01	0.40	<2	4.52	<۱	0.03	<10	0.39	89	<.01	60	<20	110	<.01	<10	2
TC-02	0.62	<2	13.88	<1	0.06	<10	5.13	226	<.01	180	<20	1004	<.01	<10	4
TC-03	0.12	<2	>15.00	<1	0.03	10	0.48	156	<.01	160	<20	816	<.01	<10	1
TC-04	0.17	<2	8.12	<1	0.01	<10	0.21	191	<.01	40	<20	566	<.01	<10	<1
TC-05	0.04	<2	>15.00	<1	<.01	20	0.29	462	<.01	30	<20	2412	<.01	<10	<1
TC-06	0.09	<2	>15.00	<1	0.03	10	1.56	208	<.01	450	<20	1850	<.01	<10	1
TC-07	0.01	<2	>15.00	<1	<.01	<10	1.09	183	<.01	120	<20	606	<.01	<10	<1
TC-08	0.05	<2	12.51	<1	<.01	10	0.19	189	<.01	10	<20	409	<.01	<10	<1
TC-09	0.88	<2	10.57	(1	0.07	<10	2.72	755	<.01	190	<20	569	<.01	<10	2
TC-10	0.11	<2	>15.00	<1	0.02	20	0.54	226	<.01	190	<20	1913	<.01	<10	1
TC-11	0.08	<2	12.87	<1	<.01	<10	3.70	294	0.02	250	<20	968	<.01	<10	2
TC-12	0.04	<2	13.35	<1	<.01	10	2.71	251	0.01	200	<20	1081	<.01	<10	1

Appendix B

Analytical Procedures and Results

Soils

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Geochemical Analysis

by Eco-Tech Laboratories Ltd. :

		LOWER		UPPER		
ELEM	ENT	DETEC	TION	LIMIT	EXTRACTION	METHOD
Au	Gold	5.00	ppb	1000.00	HCL-HNO3	fire assay/atomic absorption
Al	Aluminum	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
Ag	Silver	0.20	ppm	30.00	HC1-HNO3	ind. coupled plasma
As	Arsenic	5.00	ppm	10000.00	HCL-HNO ₃	ind. coupled plasma
В	Boron	2.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Ba	Barium	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Bi	Bismuth	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Ca	Calcium	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
Cd	Cadmium	1.00	ppm	1000.00	HCL-HNO3	ind. coupled plasma
Co	Cobalt	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Cr	Chromium	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Cu	Copper	1.00	ррт	10000.00	HCL-HNO3	ind. coupled plasma
Fe	Iron	0.01	%	15.00	HCL-HNO3	ind. coupled plasma
κ	Potassium	0.01	%	10.00	HCL-HNO3	ind. coupled plasma
La	Lanthanum	10.00	ppm	10000.00	HCL-HNO-	ind. coupled plasma
Mg	Magnesium	0.01	%	15.00	HCL - HNO3	ind. coupled plasma
Mn	Manganese	1.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Mo	Molybdenum	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
Na	• Sodium	0.01	%	10.00	HCt - HNO3	ind. coupled plasma
Ni	Nickel	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
Ρ	* Phosphorus	10.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Рb	Lead	2.00	ррп	10000.00	HCL-HNOZ	ind. coupled plasma
Sb	Antimony	5.00	ppm	10000.00	HCL-HNO3	ind. coupled plasma
Sn	Tin	20.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
S٢	• Strontium	1.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
Ti	* Titanium	0.01	%	10.00	HCL-HNOZ	ind. coupled plasma
υ	Uranium	10.00	ppm	10000.00	HCL-HNOZ	ind. coupled plasma
v	Vanadium	1.00	• •	10000.00	HCL-HNO ₃	ind. coupled plasma
Ŵ	Tungston	10.00	••	10000.00	HCL-HNOZ	ind. coupled plasma
Ŷ	Yttrium	1.00		10000.00	HCL-HNO3	ind. coupled plasma
Zn	Zinc	1.00	• •	10000.00	HCL-HNO3	ind. coupled plasma
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 Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HCl-HNO₃ extraction. The ICP data will be low biased.

APPENDIX B

Date of Report: 14-Aug-92 Project 540

Albert River

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Soil Sampling Results 1992

Sample ID	Au ppb	Ag ppna	As ppox	Ba ppm	8i ppm	Co ppm	Cr ppm	Cu ppm	Fe X	No ppm	Ni ppm	Pb pp n	Sb ppm	W ppm	Zn pp n
LL0 01	<5	<.2	<5	60	<5	19	19	25	3.43	3	26	14	5	<10	99
LLO 02	<5	۲.۷	<5	80	<5	16	12	19	3.16	2	22	24	<5	<10	75
LLO 03	<5	0.2	<5	100	<5	18	11	24	2.81	1	22	16	<5	10	68
LL0 04	<5	۲.2	<5	65	. <5	37	16	32	4.92	1	37	38	5	<10	108
LL0 05	(5	۲.2	<5	65	<5 (5	17	17	12	3.24	1	24	20	5	10	61
LLO 06	<5 (5	<.2	<5	55	<5 (5	17	11	13	3.40	2	22	18	<5 5	<10 (10	64
LLO 07	<5 /5	<.2	<5	50 55	<5 <5	19 29	13	22	3.29	2 1	24 25	20 32	5 5	<10 10	68 70
LLO 08 LLO 09	<5 <5	<.2 <.2	<5 <5	ээ 50	<5	17	19 10	33 17	3.58 2.97	1	20	32 20	ວ ∢5	<10 <10	79 59
LLO 10	<5	<.2	<5	70	<5	18	16	17	3.39	1	21	30	5	(10	67
LLO 10	<5	<.2	<5	45	< 5	16	21	18	3.29	2	23	16	5	<10	70
LL0 12	< 5	<.2	<5	50	<5	19	10	22	4.04	ī	27	16	<5	40	74
LLO 13	<5	<.2	<5	70	<5	8	13		2.83	1	11	8	<s< td=""><td><10</td><td>53</td></s<>	<10	53
LLO 14	<5	٢.2	<5	60	<5	11	10	7	4.08	2	11	24	<5	<10	51
LL0 15	<5	<.2	<5	65	<5	21	12	24	3.63	1	23	16	<5	10	76
LLO 16	<5	۲.2	<5	30	<5	11	8	21	2.99	1	18	4	<5	<10	61
LLO 17	<5	۲.2	<5	65	<5	11	13	12	3.07	1	15	10	<5	<10	61
LLO 18	<5	۲.2	<5	75	<5	18	16	16	3.81	1	26	14	<5	20	64
LLO 19	<5	۲.2	<5	45	<5	6	12	8	3.13	2	11	8	<5	<10	44
LLO 20	<5	۲.2	<5	5	<5	9	18	13	4.55	<1	23	<2	<5	<10	73
LLO 21	<5	<.2	<5	<5	<5	13	22	15	5.28	<1	30	<2	<5	<10	83
LL0 22	K5 j	<.2	<5	25	< 5	5	17	8	4.68	<1	12	2	< 5	<10	50
LL0 23	(5	< . 2	<5 (5	10	<5 (5	3	18	6	3.56	<1	12	<2	<5 (5	<10	43
LL0 24	<5 (5	<.2	<5 (F	<5 (5	<5 (5	4	18	5	3.26		16	<2	<5 (5	<10 (10	51
LL0 25	<5 /5	<.2	<5 <5	<5 <5	<5 /5	9 6	24 20	8 8	4.81 4.24	<1 <1	25 20	〈2 〈2	<5 <5	く10 く10	83 69
LLO 26 LLO 27	<5 <5	<.2 <.2	<5	<5	<5 <5	о 5	16	7	3.42	<1	19	<2 <2	<5	<10	61
LLO 28	<5	<.2	<5	30	< 5	7	9	ģ	3.88	<1	16	2	<5	<10	70
LLO 29	<5 <5	<.2	<5	5	<5	3	14	8	2.30		14	<2	< <u>5</u>	<10	46
LL0 30	<5		<5		<5	18	13	23		<1		16	<5		92
ML0 31	<5	<.2	(5	50	<5	6	20	5	3.50	<1	14	6	<5	<10	59
ML0 32	<5	٢.2	5	75	<5	11	9	13	3.11	<1	25	6	<5	<10	91
MLO 33	<5	۲.2	<5	35	<5	13	12	15	3.71	1	27	6	5	<10	136
MLO 34	<5	۲.2	<5	180	<5	14	17	14	4.09	2	23	14	5	<10	107
MLO 35	<5	۲.۷	<5	85	<5	12	18	18	4.34	2	28	6	5	<10	102
NLO 36	<5	۲.۷	5	55	<5	9	18	14	4.08	2	22	<2	10	<10	91
MLO 37	<5	۲.2	<5	85	<5	10	18	12	4.14	1	19	2	<5	<10	8(
ML0 38	<5	<.2	<5	20	<5	10	20	16	4.04	1	21	<2	5	<10	75
MLO 39	<5	٢.2	<5	< 5	<5	18	20	24	4.07	6	26	14	5	70	119
MLO 40	<5	۲.2	<5	70	<5	7	17	8	4.72	2	16	6	<5	<10	6

Project 540

Soil Sampling Results (part 2)

ample ID	Al	8	Ca	Cd	K	La	Mg	Mn	Na	የ	Sn	Sr	Ti	U	۷	۱
	۲ 	ppm 	Χ	ppa 	% 	ppa 	% 	pp#	X	ppa	ppa 	ppa 	X	рра 	pp n	pp:
LLO 01	1.99	<2	0.74	<1	0.06	10	1.93	594	<.01	540	<20	25	<.01	<10	22	15
LLO 02	1.41	<2	1.66	1	0.04	20	0.94	471	<.01	440	<20	67	۲.01	<10	14	30
LLO 03	1.23	4	2.10	<1	0.06	10	0.86	1803	<.01	980	<20	136	<.01	<10	8	1
LLO 04	1.76	2	1.66	<1	0.04	20	1.33	451	<.01	640	<20	118	<.01	<10	8	2
LLO 05	1.83	<2	0.87	<1	0.06	20	1.14	279	<.01	290	<20	65	<.01 ·	<10	12	1
LLO 06	1.43	<2	0.98	<1	0.03	20	0.77	321	<.01	330	<20	82	<.01	<10	8	1
LLO 07	1.60	<2	1.07	<1	0.03	20	1.06	316	۲.01	440	<20	77	<.01	<10	9	1
LLO 08	1.88	4	1.99	<1	0.07	20	1.57	678	<.01	780	<20	108	<.01	<10	11	2
LLO 09	1.40	<2	1.17	1>	0.04	20	0.78	709	<.01	360	<20	84	<.01	<10	9	1
LLO 10	1.87	<2	0.98	<1	0.05	30	1.16	316	<.01	290	<20	86	<.01	<10	12	1
LLO 11	2.32	<2	0.52	(1	0.05	40	2.10	445	<.01	340	<20	49	0.01	<10	19	1
LLO 12	1.30	<2	0.19	<1	0.02	20	0.54	220	<.01	290	<20	22	<.01	<10	8	1
LLO 13	1.89	<2	0.03	<1	0.02	20	0.56	98	<.01	270	(20	8	0.01	<10	24	
LLO 14	1.41	<2	0.29	(1	0.02	30	0.34	195	<.01	360	<20	29	0.01	<10	17	
LL0 15	1.68	<2	0.51	<1	0.05	30	1.06	611	<.01	590	<20	29	0.01	<10	13	1
LLO 16	0.95	<2	0.05	<1	0.04	20	0.38	51	<.01	250	<20	7	<.01	<10	17	
LLO 17	1.97	<2	0.30	(1	0.04	20	0,67	85	<.01	210	(20	34	<.01	<10	19	
LLO 18	2.70	<2	0.31	(1	0.05	30	0.94	162	<.01	390	<20	27	0.02	<10	19	1
LLO 19	1.69	<2	0.04	<1	0.01	10	0.51	39	<.01	270	<20		0.01	<10	18	
LL0 20	1.77	<2	0.04	<1	<.01	10	1.03	64	<.01	250	<20	9	0.01	<10	19	(
LLO 21	2.09	<2	0.02	(1	<.01	10	1.37	177	<.01	200	<20	8	<.01	<10	12	
LL0 22	3.51	<2	0.03	<1	<.01	10	0.61	42	<.01	240	<20	10	0.05	<10	31	
LL0 23	2.72	<2	0.02	<1	<.01	10	0.68	28	<.01	250	<20	8	0.02	<10	21	
LL0 24	1.75	<2	0.01	<1	<.01	10	0.77	38	<.01	240	<20	8	<.01	<10	15	(
LL0 25	2.10	<2	0.01	<1	<.01	10	1.15	105	<.01	210	<20	7	<.01	<10	14	•
LL0 26	1.79	<2	0.02	<1	<.01	10	0.84	71	<.01	240	<20	8	<.01	<10	15	•
LL0 27	1.65	<2	0.02	<1	<.01	10	0.71	41	<.01	190	<20	8	<.01	<10	15	
LL0 28	1.85	<2	0.05	<1	<.01	10	0.39	73	<.01	300	<20	12	0.01	<10	16	
LLO 29	1.81	<2	0.04		<.01	20	1.11	23	<.01	250	<20	13	<.01	<10	19	
LL0 30	2.17	<2	0.47		<.01	20	1.38	1107	<.01	750	<20	46	0.01	<10	14	
ML0 31	3.69	<2	0.06	<1	0.03	10	1.09	93	<.01	180	<20	13	0.06	<10	44	
ML0 32	1.85	<2	0.74		0.06	20	0,50	757	<.01	630	<20	54	0.01	<10	23	
ML0 33	1.92	<2	0.36	<1	0.02		1.07	241	<.01	510	<20	23	<.01	<10	17	
MLO 34	2.90	<2	0.35	<1	0.02	20 20	1.07	460	<.01	410	<20 <20	12	0.01	<10	36	
		<2	0.05	<1	0.08			460	<.01 <.01	370	<20 <20	11	0.01	<10	30 27	
MLO 35	2.83		0.08			20	1.52						<.01	<10	31	
MLO 36	2.30	<2 /2		<1	0.04	20	1.67	91 155	<.01	210	<20	8	<.01	<10	31	
MLO 37	2.17	<2 /2	0.02	<1	0.05	20	1.59	155	<.01	280	<20 (20	9				
ML0 38	2.44	<2	0.05	<1	0.05	30	1.83	152	<.01	180	<20	10	<.01	<10 <10	28	
MLO 39	2.62	4	0.12	<1	0.03	30	2.02	666	<.01	480	<20	12	0.01	<10	28 38	

APPENDIX B

Date of Report: 14-Aug-92

ERLO 80

<5

<.2

<5

105

<5

11

15

10

2.90

1

18

16

<5

<10

Project 540

Albert River

98

Soil Sampling Results 1992

Reference: 92ETK-381 Sample ID Au Aq Ba Bi Co Cr Cu Fe No Ni Pb Sb W Zn As 7 ppb ppa ppm ppm pp≞ pp∎ ppm ppa ppm **D**D∰ ppa ppa ppm DDE ML0 41 <5 0.2 <5 30 <5 3 13 8 2.64 (1 10 2 <5 <10 48 ML0 42 <5 <5 <.2 <5 45 18 3.82 2 19 11 8 8 5 <10 107 ML0 43 <5 <5 <.2 <5 70 17 17 21 3.54 1 22 8 5 <10 83 MLO 44 <5 <.2 <5 15 <5 10 15 17 3.36 <1 20 <2 5 <10 61 ML0 45 <5 <.2 <5 20 <5 20 18 24 4.08 25 5 (10 79 1 8 <5 <.2 35 ML0 46 <5 <5 18 15 20 3.59 **(1**) 21 6 5 20 68 ML0 47 **{**5 <.2 <5 25 <5 12 15 4 17 3.28 **(1** 21 <5 <10 84 UL0 48 <5 <.2 <5 <5 <5 12 13 17 3.57 (1 19 <2 5 <10 60 UL0 49 <5 <.2 <5 5 <5 18 20 17 3.83 <1 24 <2 5 <10 68 UL0 50 <5 <.2 <5 35 <5 25 22 3.79 16 <1 25 4 5 <10 65 29 ULO 51 25 <.2 10 50 <5 17 17 20 4.81 2 8 10 <10 102 UL0 52 40 <.2 5 45 <5 15 14 18 4.24 2 25 12 5 <10 92 UL0 53 <5 <.2 <5 70 <5 18 15 16 4.08 (1) 22 12 (5 <10 81 <5 0.4 165 <5 27 19 13 3.88 23 14 <10 80 UL0 54 <5 <1 <5 UL0 55 <5 <.2 <5 50 <5 12 20 16 4.13 2 23 2 5 <10 80 <5 <.2 <5 4.26 UL0 56 <5 45 18 19 19 27 5 <10 81 1 8 UL0 57 <5 <.2 <5 <5 <5 7 10 18 2.38 {1 15 (2 10 <10 41 RL0 58 <5 <.2 <5 5 <5 11 11 15 2.93 {1 15 10 <5 40 75 RL0 59 <.2 <5 <5 <5 <5 6 16 10 3.17 4 14 4 <5 40 55 <5 <5 <.2 70 8 15 12 3.53 1 19 <5 <10 84 RL0 60 <5 6 RL0 61 <5 <.2 -5 <5 <5 13 17 3.49 21 <2 <5 <10 57 11 <1 RL0 62 <5 <.2 <5 <5 <5 9 26 9 4.51 **(1**) 27 <2 <5 <10 82 RL0 63 <5 <.2 10 15 <5 5 6 9 3.47 <1 13 <2 <5 <10 49 RL0 64 <5 <.2 <5 65 <5 16 14 12 4.08 2 20 12 (5 <10 83 <5 <5 10 55 10 10 8 2.71 17 22 <5 30 51 RL0 65 <.2 1 (.2 **(**5 12 2.68 21 81 RL0 66 {5 5 50 11 9 1 18 ٢5 10 RL0 67 <5 <.2 50 <5 7 14 1.78 11 14 <5 30 91 <5 4 1 <5 12 90 RL0 68 <5 0.2 5 125 11 8 14 2.21 1 16 <5 <10 74 **ERLO 69** <5 <.2 10 60 <5 11 12 10 3.04 1 20 14 <5 <10 10 ERL0 70 <5 <.2 5 85 5 7 17 9 3.40 16 <5 <10 67 1 <5 17 <5 ERL0 71 <5 <.2 10 85 10 17 13 4.28 1 18 <10 60 ERL0 72 <5 <.2 10 55 <5 8 22 7 3.95 19 10 5 <10 63 1 **ERLO 73** <5 <.2 20 105 5 12 15 11 5.37 2 19 30 <5 <10 69 4.08 <10 71 ERL0 74 <5 <.2 80 <5 17 20 26 2 24 18 5 10 <5 100 <5 21 10 3.35 22 12 5 <10 64 **ERLO 75** <.2 10 11 1 ERL0 76 <5 <.2 15 65 <5 11 19 13 4.68 1 22 14 <5 <10 66 ERL0 77 <5 <.2 45 5 10 2.90 15 14 <5 70 53 10 6 15 4 2 25 30 60 ERL0 78 <5 <.2 10 65 ٢5 27 17 18 3.88 34 5 <5 <5 15 3.54 23 5 70 104 **ERLO 79** <.2 10 140 17 13 5 28

Project 540

Soil Sampling Results (part 2)

Gample ID	Al	B	Ca	Cd	K	La	Mg	Mn	Na	P	Sn	Sr	Ti	U	۷	Y
	χ.	ppe	χ.	ppm	%	ppa	7.	pp n	7.	pp n	ppa	ppa	χ.	ppa	ppm	ppm
ML0 41	2.90	<2	0.02	<1	0.01	10	0.76	45	<.01	320	<20	8	0.02	<10	27	3
MLO 42	2.51	<2	0.35	<1	0.04	20	1.43	336	<.01	190	<20	19	0.01	<10	42	2
MLO 43	2.43	<2	0.67	<1	0.04	30	1.51	1617	<.01	260	<20	28	<.01	<10	26	16
MLO 44	1.88	<2	0.07	(1	0.02	20	1.72	227	<.01	330	<20	10	<.01	<10	15	2
MLO 45	2.34	<2	0.35	<1	0.04	30	1.82	390	<.01	330	<20	23	<.01	<10	15	14
MLO 46	2.46	<2	0.71	<1	0.02	30	1.61	580	<.01	420	<20	29	0.01	<10	- 14	23
MLO 47	2.29	<2	0.07	{ 1	0.03	30	1.54	215	<.01	240	<20	10	<.01	<10	21	8
ULO 48	1.89	<2	0.36	<1	<.01	30	2.13	378	<.01	290	<20	17	<.01	<10	6	27
ULO 49	2.33	<2	0.35	<1	0.02	30	2.30	893	<.01	390	<20	19	<.01	<10	10	18
ULO 50	2.36	<2	0.77	<1	0.02	30	1.68	636	<.01	440	<20	28	0.01	<10	13	26
ULO 51	2.70	<2	0.12	<1	0.03	20	1.63	289	<.01	260	<20	15	0.01	<10	21	6
ULO 52	2.50	<2	0.40	< 1	0.03	20	1.19	487	<.01	420	<20	22	0.02	<10	20	10
ULO 53	3.54	<2	0.13	<1	0.02	20	1.12	272	<.01	270	<20	14	0.04	<10	22	9
ULO 54	2.48	<2	0.37	<1	0.06	20	1.53	4467	<.01	250	<20	21	0.01	<10	21	10
ULO 55	2.37	<2	0.04	<1	0.05	20	1.65	369	<.01	250	<20	10	0.01	<10	25	1
ULO 56	2.57	<2	0.10	<1	0.05	20	1.84	408	<.01	250	<20	12	0.01	<10	20	6
ULO 57	1.63	2	13.72	<1	0.01	10	2.04	269	<.01	200	<20	425	<.01	<10	7	7
RL0 58	1.83	<2	0.28	<1	0.04	20	1.39	278	<.01	360	<20	20	0.01	<10	13	15
RLO 59	1.96	2	0.03	<1	0.01	20	0.85	56	<.01	250	<20	11	0.01	<10	34	1
RLO 60	2.69	<2	0.05	<1	0.02	20	0.96	85	<.01	270	<20	9	0.01	<10	28	3
RLO 61	1.56	<2	0.06	<1	0.01	20	0.92	69	<.01	120	<20	10	<.01	<10	16	1
RL0 62	2.31	<2	0.02	<1	<.01	10	1.40	50	<.01	140	<20	7	<.01	<10	12	<1
RLO 63	1.05	<2	0.09	<1	<.01	10	0,26	43	<.01	230	<20	12	<.01	<10	11	(1
RLO 64	1.96	<2	0.34	<1	<.01	20	1.22	225	<.01	340	<20	30	<.01	<10	21	7
RLO 65	1.05	2	0.80	<1	0.02	10	0.55	285	<.01	330	<20	60	<.01	<10	11	11
RLO 66	1.19	<2	0.81	<1	0.03	20	0.62	272	<.01	360	<20	60	0.01	<10	13	16
RLO 67	0.86	2	2,46	<1	<.01	10	0.29	896	<.01	570	<20	155	0.01	<10	8	15
RLO 68	1.04	2	0.62	<1	0.04	10	0.44	1046	<.01	940	<20	42	0.01	<10	16	ļ
ERLO 69	1.47	<2	0.08	<1	0.03	20	0.70	280	<.01	280	<20	8	<.01	<10	15	
ERLO 70	1.87	<2	0.12	<1	0.03	20	0.81	193	<.01	440	<20	7	0.01	<10	23	<
ERLO 71	3.04	<2		<1	0.02	20	0.65	128	<.01	460	<20	5	0.02	<10	21	,
ERL0 72	2.05	<2	0.02	<1	0.01	10	1.03	58	<.01	190	<20	2	0.01	<10	21	<
ERLO 73	2.07		0.06	<1	0.02	20	0.49	95	<.01	280	<20	7	0.01	<10	23	<
ERLO 74	2.41		0.35	<1	0.03	30	1.73	110	<.01	340	<20	23	<.01	<10	19	1
ERLO 75	2.32		0.22	(1	0.06	20	1.46	77	<.01	210	<20	25	0.01	<10	26	
ERLO 76	2.02		0.12	<1	0.02	20	0.85	58	<.01	200	<20	13	0.01	<10	19	<
ERL0 77	1.67		0.03	<1	0.01	10	0.59	58	<.01	250	<20	4	0.01	(10	20	
ERLO 78	2.27		0.66	<1	0.02	30	1.24	210	<.01	340	<20	62	0.02	<10	18	
ERL0 79	2.28		0.14	<1	0.07	20	1.07	348	<.01	510	<20	15	0.02	<10	27	
ERL0 80	2.71	<2	0.48	<1	0.04	20	0.74	260	<.01	250	<20	22	0.02	<10	47	1

Appendix C Analytical Procedures and Results Heavy Minerals in Rocks

APPENDIX C

The following is a summary of the sample preparation process for rock samples XA01 to XA22, as carried out by C.F. Mineral Research Ltd. of Kelowna.

- 1. Crush and pulverize to -20 mesh
- 2. Acid digestion (10% HCl) and neutralization
- 3. Soaping, spraying down and settling followed by careful decanting
- 4. weigh samples
- 5. wet sieve sample
- 6. collect three size fractions

-20 + 35 mesh (up to 2 kg) -35 + 60 mesh (up to 2 kg) -60 mesh

- 7. dry and sieve fractions to -18 mesh
- extract heavy minerals by using heavy liquids, tetrabromoethene first, followed by methylene iodide ("heavy" or "H" fraction).
- 9. magnetically separate fractions to produce 6 fractions

-20+60 HM (magnetic), HP (paramagnetic), HN non-magnetic -60 HM, HP, HN

- 10. weigh fractions to .02g
- 11. ensure at least 0.1g in -20+60 HN and -60HN fractions (in some cases -20 HN or even a -20 HN/HP was needed).
- 12. vial -20 + 60HN and -60HN fractions for analysis by neutron activation

ANALYTICAL PROCEDURES

Geochemical Analysis

by Activation Laboratories :

		LOW	ER		
ELEM	IENT	DETECTIO	<u>LIMIT</u>	EXTRACTION	METHOD
		F 0			•
Au	Gold Silver	5.0	ppb		INAA
Ag		5.0	ppm		INAA
As D-	Arsenic	2.0	ppm		INAA
Ba	Barium	200.0	ppm		INAA
Br	Bromine	5.0	ppm */		INAA
Ca	Calcium	1.0	%		INAA
Ce	Cerium	3.0	ppm		INAA
Co	Cobalt	5.0	ppm		INAA
Cr	Chromium	10.0	ppm		INAA
Cs	Cesium	2.0	ppm		INAA
Eu	Europium	0.2	ppm		INAA
Fe	Iron	0.02			INAA
Hf	Hafnium	1.0	ppm		INAA
Нg	Mecury	5.0	ppm		INAA
Ir	Iridium	40.0	ppb		INAA
La	Lanthanum	1.0	ppm		INAA
Lu	Lutetium	0.1	ppm		INAA
Мо	Molybdenum	20.0	ppm		INAA
Na	Sodium	500.0	ррт		INAA
Nd	Neodymium	10.0	ppm		INAA
Ni	Nickel	200.0	ppm		INAA
RЬ	Rubidium	50.0	ppm		INAA
Sb	Antimony	0.2	ppm		INAA
Sc	Scandium	0.1	ppm		INAA
Se	Selenium	20.0	ppm		INAA
Sm	Samarium	0.1	ppm		INAA
Sr	Strontium	0.2	%		INAA
Ta	Tantalum	1.0	ppm		INAA
Тb	Terbium	2.0	ppm		INAA
Th	Thorium	0.5	ppm		INAA
U	Uranium	0.5	ppm		INAA
W	Tungsten	4.0	ppm		INAA
Yb	Yttebium	0.2	ppm		INAA
Zn	Zinc	200.0	ppm		INAA

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APPENDIX C

Date of Report: 6-Oct-92

Project 540

Albert River Properties

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Rock Samples Heavy Mineral Fractions Weight Chart 1992

Reference: CFM92-175

Gample ID	Original	-20+60HM	-20+60HP	-20+60HN	-60HM	-60HP	-60HN	
	Sample Wt kg	g	g	9	g	g	g	
(A-01	8.5	0.09	0.08	0.18	0.10	0.11	0.17	
(A-02	5.0	0.06	0.13	1.41	0.06	0.21	2.31	
(A-03	7.8	0.12	0.13	0.17	0.09	0.10	0.24	
XA-04	2.0	0.07	0.10	0.07	0.09	0.17	0.37	
(A-05	7.5	0.05	0.39	4.59	0.05	0.39	5.99	
XA-06	7.2	0.05	0.08	0.36	0.09	0.15	1.79	
KA-07	7.7	0.05	0.42	7.53	0.06	0.16	3.57	
XA-08	6.6	0.09	0.44	16.74	0.10	0.34	18.89	
A-09	7.6	0.08	0.07	0.21	0.06	0.09	0.82	
XA-10	6.9	0.02	0.18	4,70	0.06	0.10	5.25	
(A-11	2.1	0.07	0.17	0.13	0.10	0.16	0.12	
XA-12	2.7	0.06	0.08	0.53	0.08	0.08	0.30	
XA-13	3.5	0.08	0.06	0.33	0.04	0.04	0.20	
XA-14	3.6	0.03	0.05	0.01	0.09	0.05	0.03	
XA-15	2.6	0.05	0.03	0.20	0.06	0.06	0.19	
XA-16	2.1	0.04	0.06	0.02	0.05	0.08	0.02	
XA-17	2.2	0.07	0.04	0.50	0.03	0.02	0.29	
XA-18	2.7	0.01	0.05	0.06	0.07	0.08	0.11	
XA-19	2.6	0.05	0.11	1.36	0.08	0.10	0.45	
XA-20	3.2	0.03		0.05	0.04	0.07	0.04	
XA-21	2.7	0.03	0.05	0.02	0.04	0.03	0.04	
XA-22	2.6	0.04	0.03	0.02	0.07	0.05	0.07	

APPENDIX C

Date of Report: 6-Oct-92 Project 540

Albert River

Rock Sampling Results - Heavy Mineral Fractions 1992 (Method of Analysis = INAA)

Cample ID	Fraction	Wt	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir
Sample ID	rraction	g	ppb	ppa	bbw	ppm	pp	X	ppn	ppn	ppn	X 	pp n	ppa	ppb
XA-01	-20+60HN	0.19	<7	<6	230	<200	21	<4	1600	<10	<2	59.0	<1	(5	<50
XA-01	-60HN	0.17	6990	<6	200	<250	44	<5	2500	64	9	54.1	20	< 5	<50
XA-02	-20+60HN	1.41	<5	<5	33	500	80	<1	160	<10	<2	55.3	<1	<5	<50
XA-02	-60HN	2.32	<15	<8	51	1200	160	<7	180	<10	<2	63.2	9	12	<40 (50
XA-03	-20+60HN	0.18	27	<5	260	<200	93	<4	340	28	<2	54.6	<1	<5 /5	<50
XA-03	-60HN	0.24	71	<5	150	<200	65	<1	320	24	<2	42.8	37	<5	<50
XA-04	-20+60HP/HN	0.09	< 9	<6	54	<200	150	<5	190	2100	<2	55.0	<1	<5 /5	<50
XA-04	-60HN	0.37	87	<5	32	<200	83	<3	44	46	<2	58.9	34	<5 (5	く50 く40
XA-05	-20+60HN	4.59	<8	<5	35	<200	92	<4	120	23	<2	43.2	<1	<5 (5	<40 <40
XA-05	~60HN	5.98	<8	<5	40	1000	190	<4	170	40	<2	46.2	3	<5 (5	<50
XA-06	-20+60HN	0.36	24	<5	130	1400	64	<3	170	<10	<2	60.7	<1	<5	<50
XA-06	-60HN	1.78	<5	<5	74	840	57	<1	88	<10	<2	51.0	17	<5 /5	<40
XA-07	-20+60HN	7.52	<6	<5	55	2500	90	<4	120	23	<2	52.5	<1	<5 /5	<40 <40
XA-07	-60HN	3.56	<11	<6	71	9300	150	<5	160	<10	<2	56.3	10	<5 /5	<50
XA-08	-20+60HN	16.71	<6	<5	42	850	150	<4	55	<10	<2	48.6	<1	<5 /5	(50
XA-08	-60HN	18.86	10	<5	55	<200	200	<4	45	33	<2	52.6	5	<5 <5	(50
XA-09	-20+60HN	0.21	46	<5	78	<200	66	<4	160	33	<2	59.1	3	<5 <5	<50
XA-09	-60HN	0.82	<5	<5	96	<200	110	<2	250	26	<2	53.5	30	(j (5	(40
XA-10	-20+60HN	4.69	<8	<5	42	<200	16	.<4	88	<10	<2	47.7	<1	9	<40
XA-10	-60HN	5.22	<8	<5	40	<200	12	<4	100	<10	<2	50.7	<1	9	<50
XA-11	-20+60HN	0.12	<9	<6	88	<210	250	<6	160	55	<2	54.2	<1 05	ر 5	<5(
XA-11	-60HN	0.12	<12	<8	180	1300	230	<6	880	12	<2	57.3	95	<5	<50
XA-12	-20+60HN	0.52	<5	<5	130	<200	62	<2	130	<10	<2	62.2	2 10	<5	(50
XA-12	-60HN	0.31	71	<5	140	<200	100	<3	210	<10	<2	61.7		<5	<5
XA-13	-20+60HN	0.33	<5	<5	50	<200	22	<3	120	<10	<2	65.5 55.8	<1 10	(5	(5)
XA-13	-60hn	0.21	<10	<7	78	<230	47	<5	240	20	<2	40.1	110	<7	12
XA-14	~20 HP/HN	0.06	<21	<14	32	<490	230	<8	250	1500	<4 <2	62.9	<1	<5	<5
XA-15	-20+60HN	0.20	<6	<5	150	<200	47	\4	100	<10	8	64.8	8	<5	<5
XA-15	-60HN	0.19	<8	<6	99	<200	54	<5	110 450	く10 8200	<5	57.0	20	< 9	<5
XA-16	-20 HP/HN	0.04	<27	<17	130	<630	350	<11	430	<10	2		1	<5	<5
XA-17	-20+60HN	0.50	15	<5	20	470	15	<3	190	22	<2	63.3	5	<5	<5
XA-17	-60HN	0.29	<5	<5	29	380	24	<3		12000	<3	55.1	<2	<5	<5
XA-18	-20+60HP/HN	0.05	121	<7	83	<330	150	۲) ۲		<10	<2		48	10	<5
XA-18	-60HN	0.11	<12	<8	110	<290	52			12	<2		<1	<5	<5
XA-19	-20+60HN	1.35	<5	<5 (5	16	<200	30	<1		<10	(2		14	<5	<5
XA-19	-60HN	0.45	<5	(5	23	(200	51	<3		4600	<2		17	<5	<5
XA-20	-20 HP/HN		54	<7	150		730	<4 //0		1700	<5		180	<9	<
XA-21	-20 HP/HN		<27	<18	71		480	<10		4900	<2		51		
XA-22	-20 HP/HN	0.12	66	<8	110	<280	250	<5	Vaq	4200	14	0.66			

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Rock Sampling Results - Heavy Mineral Fractions (part 2)

Sample ID	Fraction	Mo	Na	Ni	Rb	Sb	Sc	Se	Sr	Ta	Th	U	W	Zn
		pp n	ppa	pp#	ppm	ppm	pp n	ppa	χ.	ppe	ppm	ppa	ppe	ppa
XA-01	-20+60HN	<20	<500	<200	<50	0.4	1.4	<20	<0.2	<2	<0.6	(0.9	<4	<200
KA-01	-60HN	<20	1030	<260	<53	<0.3	2.6	<20	<0.2	<3	53.0	(1.4	43	〈 200
(A-02	-20+60HN	<20	<500	<200	<50	1.8	0.4	58	<0.2	<1	<0.5	<0.5	{4	<200
XA-02	-60HN	<20	1570	1300	<50	12.0	4.4	100	<0.2	<1	12.0	<1.4	<4	330
(A-03	-20+60HN	<20	1940	<200	<50	8.3	1.4	44	<0.2	<1	1.8	<0.7	<4	11000
KA-03	-60HN	23	3300	<200	<50	4.6	1.9	37	<0.2	<1	32.0	7.1	<4	21000
KA-04	-20+60HP/HN	51	1100	<210	<50	9.5	13.0	81	<0.2	<1	<0.7	(1.1	13	230
XA-04	-60HN	33	746	<200	<50	3.4	4.5	<20	<0.2	<1	39.0	6.3	11	<200
XA-05	-20+60HN	<20	557	<200	<50	6.5	1.4	<20	<0.2	<1	<0.5	<0.8	<4	<200
XA-05	-60HN	<20	1420	<200	<50	4.7	1.9	<20	<0.2	4	<0.5	<0.7	<4	<200
XA-06	-20+60HN	23	670	<200	<50	18.0	0.8	60	<0.2	<1	2.4	<0.5	<4	<200
XA-06	-60HN	<20	<500	<200	<50	10.0	1.1	80	<0.2	2	15.0	4.7	<4	260
XA-07	-20+60HN	<20	<500	<200	<50	<0.2	0.8	54	<0.2	<1	<0.5	<0.6	{4	<200
XA-07	-60HN	31	599	1100	<50	2.2	2.2	43	<0.2	<1	8.1	<1.1	<4	260
XA-08	-20+60HN	<20	<500	<200	<50	1.9	0.8	53	<0.2	<1	<0.5	<0.8	<4	<200
XA-08	-60HN	<20	2190	<200	<50	1.5	1.9	46	<0.2	<1	2.7	<0.8	<4	<200
XA-09	-20+60HN	<20	985	<200	<50	6.7	1.3	50	<0.2	<1	<0.5	<0.6	<4	<200
XA-09	-60HN	26	971	<200	<50	6.6	2.0	41	<0.2	1	23.0	2.7	< 4	<200
XA-10	-20+60HN	<20	<500	<200	<50	6.2	1.2	44	<0.2	<1	<0.5	<0.7	{ 4	<200
XA-10	-60HN	<20	577	<200	<50	7.1	1.3	40	<0.2	<1	3.7	<0.8	\ 4	<200
XA-11	-20+60HN	<20	1090	<210	<50	25.0	3.2	150	<0.2	<1	<0.6	(1.1	<4	530
XA-11	-60HN	51	2860	<260	<53	33.0	7.4	. 77	<0.2	5	78.0	16.0	25	1600
XA-12	-20+60HN	<20	<500	<200	<50	23.0	0.9	120	<0.2	<1	<0.5	<0.5	<4	480
XA-12	-60HN	29	1130	<200	110	23.0	1.9	120	<0.2	<1	13.0	<0.6	<4	3200
XA-13	-20+60HN	<20	< 500	640	<50	12.0	1.1	70	<0.2	2	6.4	<0.6	{4	<200
XA-13	-60HN	<20	3830	<220	<50	18.0	2.5	40	<0.2	<2	55.0	<1.2	<4	<200
XA-14	-20 HP/HN	240	2970	<440	<75	13.0	62.0	<20	<0.2	44	220.0	34.0	<8	14000
XA-15	-20+60HN	56	1320	690	<50	15.0	1.0	<20	<0.2	<1	6.3	<0.7	9	<200
XA-15	-60HN	<20	2690	<200	<50	11.0	1.9	<20	<0.2	<2	28.0	<1.0	<4	210
XA-16	-20 HP/HN	610	2830	5400	<110	31.0	14.0	67	<0.3	<5	34.0	17.0	< 9	1000
XA-17	-20+60HN	<20	<500	<200	<50	1.6	0.5	26	<0.2	<1	<0.5	<0.5		<200
XA-17	-60HN	72	1250	<200	<50	12.0	1.4	<20	<0.2	<1	5.9	<0.6	<4	220
XA-18	-20+60HP/HN	980	1750	3700	<54	15.0	7.1	76	<0.2	<2	1.1	<1.8	<5	66000
XA-18	-60HN	58	1450	<290	<51	9.7	4.6	210	<0.2	<2	64.0	14.0	<4	31000
XA-19	-20+60HN	<20	<500	<200	<50	1.3	0.4	38	<0.2	1>	<0.5	<0.5	<4	<200
XA-19	-60HN	22	1010	<200	<50	2.8	1.4	30	<0.2	<1	14.0	<0.5	15	<200
XA-20	-20 HP/HN	250	1610	1700	<50	28.0	16.0	<20	<0.2	<2	33.0	<1.2	<4	13000
XA-21	-20 HP/HN	44	6120	<560	<110	15.0	23.0	<22	<0.2	<6	180.0	34.0	<10	32000
XA-22	-20 HP/HN	310	2360	<260	<50	8.5	27.0	<20	<0.2	<2	120.0	17.0	<4	1300

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Rock Sampling Results - Heavy Mineral Fractions (part 3)

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Sample ID	Fraction	La	Ce	Nd	Sa	Eu	Tb	Yb	Lu
		pps	ppa	ppm	pps	ppm	ppm	ppa	ppa
XA-01	-20+60HN	302	418	104	8.9	<0.2	<2	<0.2	<0.1
XA-01	-60HN	985	1500	456	50.0	6.9	<2	2.4	<0.1
XA-02	-20+60HN	t	<3	<10	0.3	<0.2	<2	<0.2	<0.1
XA-02	-60HN	56	110	<16	4.2	<0.3	<2	<0.4	<0.1
XA-03	-20+60HN	2	<3	<10	0.2	<0.2	<2	<0.2	<0.1
XA-03	-60HN	133	291	91	13.0	1.7	<2	2.0	0.4
XA-04	-20+60HP/HN	11	55	<11	4.5	<0.3	<2	3.5	0.5
XA-04	-60HN	97	207	75	14.0	1.7	<2	2.5	0.6
XA-05	-20+60HN	2	<4	<10	0.2	<0.2	<2	<0.2	<0.1
XA-05	-60HN	18	25	<10	1.3	<0.2	<2	<0.2	<0.1
XA-06	-20+60HN	3	<3	<10	0.6	<0.2	<2	<0.2	<0.1
XA-06	-60HN	96	146	42	5.9	1.3	<2	1.1	0.2
XA-07	-20+60HN	2	<3	<10	0.2	<0.2	<2	<0.2	<0.1
XA-07	-60HN	78	140	<11	4.4	<0.2	<2	<0.3	0.5
XA-08	-20+60HN	3	<3	<10	0.4	<0.2	〈2	<0.2	<0.1
XA-08	-60HN	14	<3	<10	1.2	<0.2	<2	<0.2	<0.1
XA-09	-20+60HN	6	<3	<10	0.6	<0.2	<2	<0.2	<0.1
XA-09	-60HN	220	383	98	11.0	1.8	<2	1.4	0.4
XA-10	-20+60HN	5	<3	<10	0.3	<0.2	<2	<0.2	<0.1
XA-10	-60HN	66	120	<10	4.1	<0.2	<2	<0.2	<0.1
XA-11	-20+60HN	2	<5	<10	0.3	<0.3	<2	<0.3	<0.1
XA-11	-60HN	471	782	174	36.0	5.7	<2	5.6	1.0
XA-12	-20+60HN	3	<3	<10	0.5	0.3	<2	<0.2	<0.1
XA-12	-60HN	87	162	<10	6.6	<0.2	<2	1.1	<0.1
XA-13	-20+60HN	228	504	134	13.0	3.6	<2	<0.2	<0.1
XA-13	-60HN	1170	1980	576	63.0	8.6	<2	<0.3	0.3
XA-14	-20 HP/HN	798	1580	424	97.0	21.3	42	89.6	10.9
XA-15	-20+60HN	115	189	<10	5.8	0.7	<2	<0.2	<0.1
XA-15	-60HN	484	788	226	27.0	4.3	<2	1.6	<0.1
XA-16	-20 HP/HN	822	1360	344	37.0	<0.8	<2	<0.9	<0.2
XA-17	-20+60HN	2	<3	<10	0.1	<0.2	<2	<0.2	<0.1
XA-17	-60HN	161	282	80	10.0	1.5	<2	<0.2	<0.1
XA-18	-20+60HP/HN	4	< 9	<18	1.2	<0.4	<2	<0.5	<0.1
XA-18	-60HN	652	1210	358	42.0	<0.3	4	4.2	<0.1
XA-19	-20+60HN	5	9	<10	0.6	<0.2	<2	<0.2	<0.1
XA-19	-60HN	294	553	160	16.0	2.4	<2	1.1	0.2
XA-20	-20 HP/HN	169	374	92	20.0	3.1	6	12.9	1.8
XA-21	-20 HP/HN	3720	5820	1300	180.0	31.3	39	75.2	9.3
XA-22	-20 HP/HN	626	1110	402	60.0	7.5	10	8.9	1.5

