

520101
92I/10

GEOLOGICAL, SOIL GEOCHEMICAL AND GEOPHYSICAL REPORT
ON THE
SAVONA PROPERTY

NTS 92 I/10
50° 41' NORTH LATITUDE
120° 42' WEST LONGITUDE

KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

FOR

C.R.C. EXPLORATIONS LIMITED
2197 PARK CRESCENT
COQUITLAM, BRITISH COLUMBIA V3J 6T1

BY

PROMIN EXPLORATIONS LIMITED
2197 PARK CRESCENT
COQUITLAM, BRITISH COLUMBIA V3J 6T1

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DATE: MAY 24, 1991

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SUMMARY AND CONCLUSIONS

The Savona Property consists of eleven claims totalling 98 units, located 30 kilometres west of Kamloops in the Kamloops Mining Division, south-central British Columbia on NTS sheet 92 I/10. Forestry roads provide access to most areas of the property.

The claims are 100% owned by C.R.C. Explorations Limited.

Previous exploration work in the area concentrated on mercury (in the late 1800's) and for copper in the 1970's. During the 1980's limited exploration work was carried out, in the area of the claims for base metals and gold by Placer Development Ltd. and Newmont Exploration of Canada Ltd.

During 1990, an exploration program consisting of limited geological mapping/prospecting, rock sampling, two grids were established totalling 46.0 kilometres, 1,408 soil samples were collected and 34.6 kilometres of VLF-EM and magnetometer surveys were carried out on the claims. The purpose of the surveys was to define areas indicative of economic concentrations of "epithermal style" base and precious metals.

The property is underlain by northwest trending upper Triassic, Nicola Group basic to intermediate volcanic rocks, agglomerates, minor argillite, wacke and tuffaceous rock. Locally, these rocks are intruded by elongate (northwest-southeast) stocks and dykes of diorite and quartz porphyry. The intrusive rocks appear to be related to regionally extensive northwest-southeast orientated faulting and brecciation which is believed in part responsible for the development of laterally extensive alteration zones consisting of ankeritization, silicification and hematization (ASH) with chalcedonic veining and quartz/calcite stockworks.

Soil sampling on the north grid outlined two gold-in-soil anomalies extending some 1,200 metres and up to 100 metres wide north-south across the grid. Soil anomalies remain open to the north and south. Gold values in soils ranged from 1ppb to 2,280ppb and copper from 10ppm to 212ppm. Outcrop and rock float samples collected in the area of the soil anomalies ranged from 1ppb to 1,655ppb, copper up to 11,810ppm, lead to 2,130ppm, zinc to 4,663ppm and silver up to 36ppm. Mineralization consists of disseminated chalcopryrite, malachite, azurite, galena, sphalerite pyrite and hematite in an ASH altered, silica flooded breccia with brecciated chalcedonic veining. A small trench located 150 metres east of the gold-in-soil anomalies exposed similar looking brecciated material which returned gold values up to 4,520ppb, copper to 7,506, lead to 19,157ppm, zinc to 15,670ppm and silver to 243.8ppm. It is suggested that northeast-southwest orientated cross faulting also hosts significant concentrations of precious and base metals.

Coincident with the gold-in-soil anomalies are linear 100 metre wide relative magnetic low features with weak to strong VLF-EM conductive zones. It is believed that the magnetic low features aid in outlining ASH alteration zones associated with the extensive faulting and brecciation which hosts the "epithermal style" mineralization.

The strike and width extent of the soil and geophysical anomalies defined on the north grid, with highly anomalous gold, copper, lead, zinc and silver values in rock and float samples suggests this target could be of economic significance.

Soil sampling carried out on the south grid returned coincident but weakly anomalous gold values ranging from 1ppb to 369ppb and copper ranged from 19ppm to 267ppm. The target areas defined on the south grid are of a lower order than that observed on the north grid. This could be due to an abrupt change in topography (flat on south grid) and an increase in overburden thickness which has masked the soil geochemical response.

Within the south grid area are laterally extensive relative magnetic low features with coincident weak to strong VLF-EM conductive zones. These features appear much larger than the zones observed on the north grid.

Rock sample results from prospecting the southern part of the property has defined two weak but persistent "trends" anomalous in gold and copper. One trend extends north-south through the central part of the property and consists of four rock samples which returned gold values which ranged from 71ppb to 1,098ppb. The other trend is located along the western side of the property and consists of six samples ranging from 47ppb to 411ppb gold.

The author has outlined a success contingent phased exploration program to further develop this prospect of merit. An estimated budget of \$115,000 is recommended to bring the north grid area to the diamond drilling stage and further exploration work on the south grid area.

INTRODUCTION

This report is a summary of soil sampling, VLF-EM and magnetometer surveys, geological mapping/ prospecting and rock sampling carried out on the Savona property during the period May to November, 1990. The purpose of the exploration program was to investigate and delineate areas on the property for indications of economic concentrations of epithermal style precious and base metals.

LOCATION AND ACCESS (Figure 1)

The Savona property is located approximately 30 kilometres west of Kamloops and eight kilometres southeast of Savona in south-central British Columbia. The property is centered at 50° 41' north latitude and 120° 42' west longitude.

Access to the property is via Highway 1 for 30 kilometres west of Kamloops, south on the old Kamloops highway and southwest on forestry roads to the north-central part of the claims. A network of old forestry roads provide good access to all areas of the claim block.

Land use permits will be required if trenching and diamond drilling are to be carried out on the property.

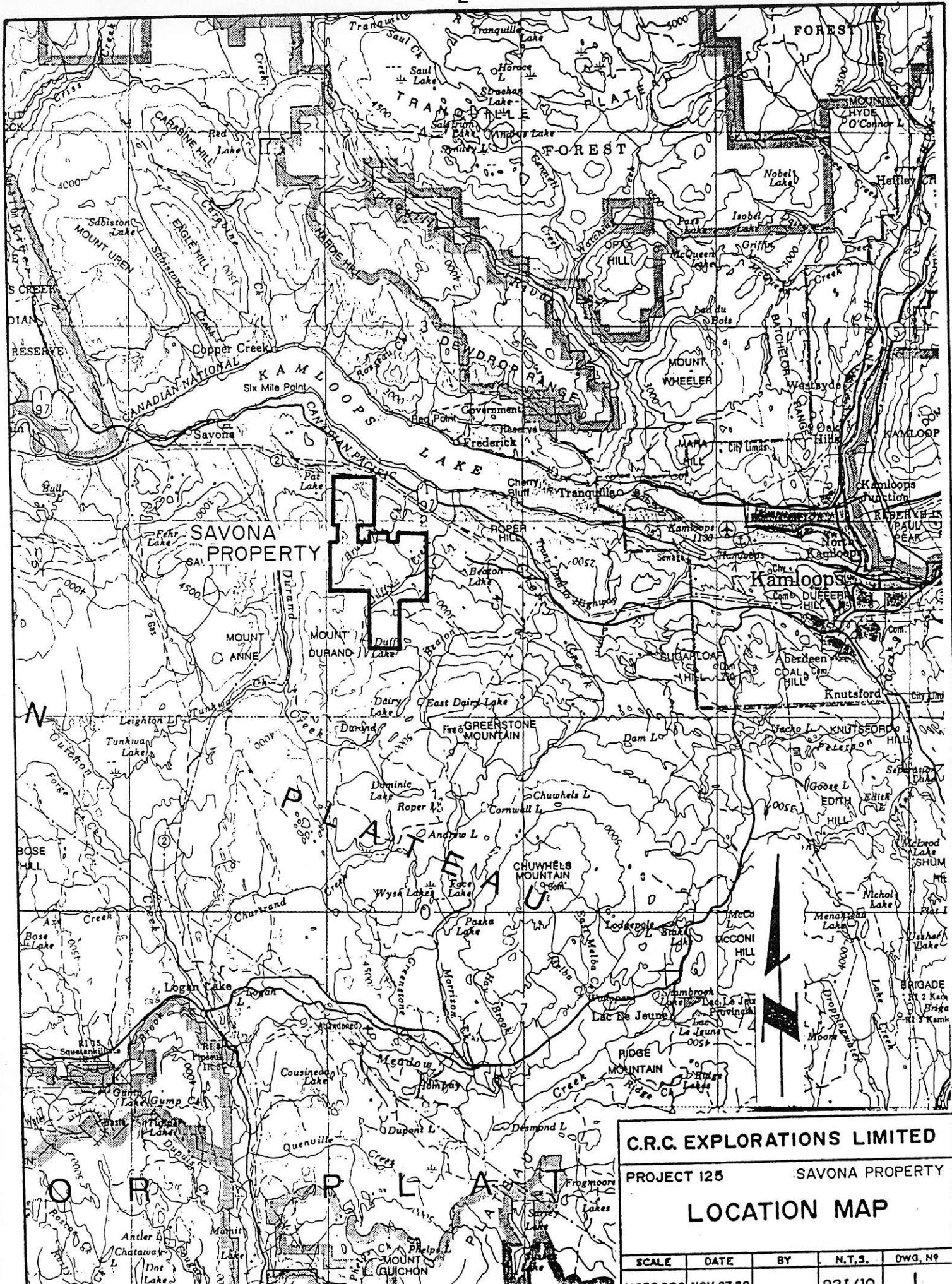
TOPOGRAPHY AND VEGETATION

Elevations on the property range from about 775 metres in the northern part to 1,220 metres in the south-central part of the claim block. Relief is gentle to moderate.

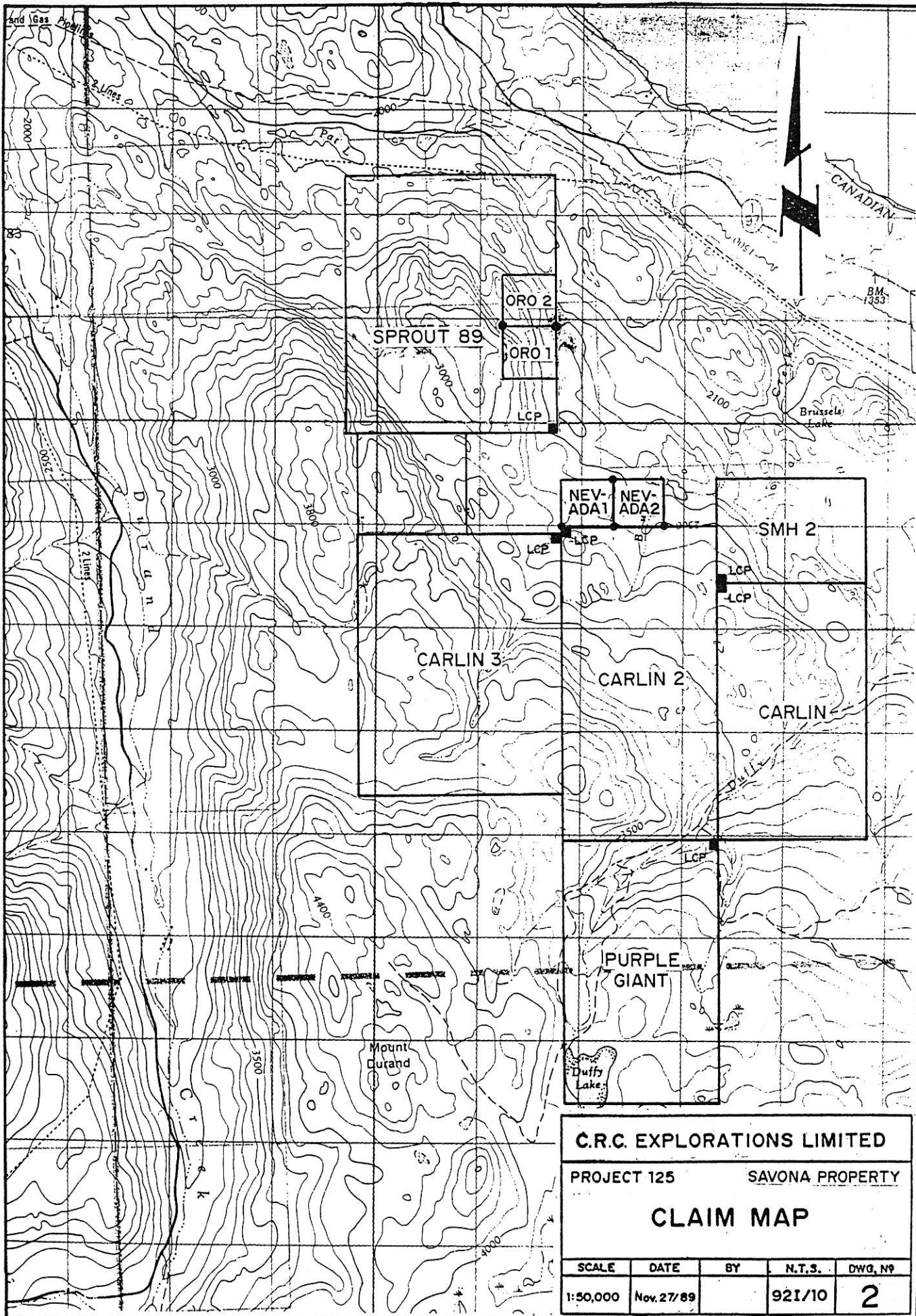
Vegetation is typical of the semi-arid region of the Kamloops area consisting of grasses, sagebrush, ponderosa pine and at higher elevations douglas fir. Much of the mature timber has been selectively logged.

CLAIMS (Figure 2)

The Savona property consists of ten contiguous metric claims totalling 98 units (2,450ha). All claims are registered in the name of C.R.C. Explorations Limited.



C.R.C. EXPLORATIONS LIMITED				
PROJECT 125			SAVONA PROPERTY	
LOCATION MAP				
SCALE	DATE	BY	N.T.S.	DWG. N°
1:50,000	NOV 27 1981		921/10	1



C.R.C. EXPLORATIONS LIMITED				
PROJECT 125		SAVONA PROPERTY		
CLAIM MAP				
SCALE	DATE	BY	N.T.S.	DWG. NO.
1:50,000	Nov. 27/89		921/10	2

TABLE 1 CLAIMS DATA

Claim Name	Record No.	Units	Anniversary Date	Mining Division
Sprout 89	8661	20	July 1, 1992	Kamloops
Oro 1	8624	1	July 1, 1992	Kamloops
Oro 2	8625	1	July 1, 1992	Kamloops
Nevada 1	9013	1	Nov. 22, 1992*	Kamloops
Nevada 2	9014	1	Nov. 22, 1992*	Kamloops
Carlin	9015	15	Nov. 23, 1992*	Kamloops
Carlin 2	9016	18	Nov. 22, 1992*	Kamloops
Carlin 3	9017	20	Nov. 28, 1992*	Kamloops
Purple Giant	9018	15	Nov. 24, 1992*	Kamloops
SMH 2	9347	6	May 8, 1992*	Kamloops

* Subject to acceptance of 1990 assessment work.

HISTORY

The area of the Savona claims has been explored for mercury, base metals and precious metals since the late 1800's.

The Sprout 89 and Oro 1 and 2 claims were in part explored by Newmont Exploration in 1982. Newmont discovered a wide band of altered and silicified volcanics which returned up to 0.23 ounces gold per ton over one metre. None of Newmont's exploration activity was recorded as assessment work. During the mid 1980's Placer Development Ltd. worked in the area east of the claims and carried out limited soil sampling and percussion drilling.

1990 WORK PROGRAM

An exploration program consisting of limited geological mapping/prospecting, rock sampling (172 rock samples were collected), grid establishment totalling 46.0 kilometres, soil geochemical sampling totalling 1,408 samples and 34.6 kilometres of VLF-EM and magnetometer surveying was carried out on the Sprout 89, Oro 1 and 2, Nevada 1 and 2, Carlin, Carlin 2 and 3, Purple Giant and SMH 2 claims.

REGIONAL GEOLOGY (Figure 3)

The Savona property is underlain by Upper Triassic, Nicola Group volcanic and minor sedimentary rocks. The volcanic rocks consist of andesite, basalt, agglomerate and tuff. Sedimentary rocks include wacke, siltstone, argillite and south of the property limestone. The north-northwesterly trending Nicola Group package

varies in width up to 40 kilometres and extends some 50 kilometres north of Kamloops Lake and 170 kilometres to the south. Nicola Group rocks are intruded by Jurassic-Cretaceous and possibly Tertiary? rocks ranging in composition from granite and syenite to pyroxenite.

Within the Savona area laterally extensive faults have occurred along Deadman River, Sabiston Creek, Carabine Creek and Durand Creek. The Sabiston Creek fault and associated lineaments pass through the Savona group of claims.

Early Tertiary? syenitic intrusives with related carbonate and siliceous alteration zones are coincident with these lineaments.

Mercury deposits occur in a belt roughly 14 kilometres wide, extending from Tunkwa/Dominic Lakes in the south to Criss Creek to the north, a distance of some 39 kilometres. Mineralization occurs in Nicola Group rocks as well as late Cretaceous sedimentary and volcanic rocks. Generally, the rocks exhibit extensive silicification with chalcedonic veining, intense alteration to ankerite and the development of dolomitic veins and stringers in shear and fracture zones. Associated with the cinnabar is stibnite, galena, tetrahedrite, malachite, azurite, chalcopyrite, pyrite, hematite and gold.

PROPERTY GEOLOGY (Figure 4)

The Savona property is underlain by northwest trending upper Triassic, Nicola Group basic to intermediate volcanic rock, coarse sedimentary rocks and locally tuffaceous rock. The Nicola Group rocks have been intruded by Jurassic/Cretaceous diorite and Tertiary? quartz porphyry dykes.

Nicola Group

The most common rock type observed on the property is a mottled, maroon, green, grey, fine to medium grained volcanic flow rock (Unit 1). Locally, the rock contains subrounded phenocrysts of black, 1 millimetre to 4 millimetre pyroxene or hornblende. The rock is weakly to moderately calcareous and also weakly to moderately magnetic. In the western part of the property several outcrops of agglomerate (Unit 2) vary widely in appearance. Generally the fragments are subrounded to angular and vary in size up to 5 centimetres. The fragments are of volcanic origin, however, locally fragments of siliceous wacke and argillite are observed. The matrix is fine grained and grey to green in colour. Breccias (Unit 3) also vary widely in appearance and range in colour from maroon to dark green-grey and are usually siliceous. Fragments vary in size up to 2 centimetres but are usually smaller and range in colour from reddish-purple to light green. The breccias are similar in appearance to the agglomerate except they lack the sedimentary

fragments.

Tuffaceous rocks (Unit 4) outcrop on the western part of the property but appear to be of limited lateral extent. These rocks are grey-green, fine grained, layered and locally siliceous. The tuffaceous rocks observed are associated with wackes. The wackes (Unit 5) are light grey to black, well banded, fine grained (gritty), siliceous rocks. The dark bands are argillaceous. Locally, disseminated pyrite cubes are common. Unit 6 has been given "unit" status based on its readily distinguishable appearance from other Nicola Group rocks described above. Unit 6 is considered undifferentiated Nicola group rocks due to the extensive alteration which has destroyed the original character of the rock. Generally the rocks are brick red to brown in colour and to varying degrees foliated. Unit 6 will be discussed more fully under Alteration.

Intrusive Rocks

Intruding the Nicola group rocks on the property are small, elongate (northwest-southeast) stocks of diorite (Unit D). These rocks are exposed on a ridge in the central part of the Sprout 89 claim. The diorite is grey-green, medium grained, siliceous, massive with 2 millimetre to 5 millimetre phenocrysts of augite set in a siliceous grey-green matrix. The diorite is moderately magnetic.

In the southern part of the property is a poorly exposed northwest trending quartz porphyry dyke (Unit QP). This dyke is intermittently exposed over a length of 500 metres and is fine to medium grained with 1 millimetre to 3 millimetre rounded to subrounded quartz phenocrysts. Very fine grained (<1%) biotite and hornblende laths are disseminated throughout. Locally, subrounded (1 millimetre to 3 millimetre) pink feldspar phenocrysts are observed. Trace to 1% pyrite cubes are disseminated throughout the rock. Contact relationships with the surrounding Nicola Group rocks are not exposed.

ALTERATION

All rocks on the property exhibit some form of alteration. The most common form of alteration is associated with major through going northwest-southeast orientated fault and breccia zones. This form of alteration is a combination of ankeritization, silicification and hematization (ASH) and is included under Property Geology as a unit because of the lateral extensiveness of the zones. ASH alteration varies widely in form, composition and intensity. Generally, the original texture of the host rock is replaced by a massive, fine grained orange-brown to brick red foliated rock. Commonly this material is vuggy with abundant well developed calcite and quartz veinlet stockworks, each crosscutting the other. Chalcedonic veining is common along these structures. Locally,

northwest-southeast orientated ASH alteration zones have been crosscut by northeast-southwest orientated fault zones. At the intersection of the two fault zones extensive silicification and brecciation has occurred.

Weak to intense propylitization of the Nicola Group rocks is prevalent throughout the property. Intense propylitization (in angular float samples) was found along Duffy Creek. The rock is mottled dark green to light green, fine grained with abundant chlorite and epidote which also occurs as crystal growths along fractures in the rocks.

STRUCTURE

Faulting and brecciation are the most common structural deformation seen on the property.

The dominant structural trend is northwest-southeast and is observed as regionally extensive fault systems which are seen in outcrop as well foliated and brecciated rock and as linear topographic depressions. Wide and laterally extensive zones of ASH alteration has developed along these faults. This fault set is believed to be the southeast extension of the Sabiston Creek fault. A northeast-southwest orientated set of faults appears to have offset (up to 200 metres) the northwest-southeast set at least locally. Age relations between the fault sets is unknown.

MINERALIZATION

A total of 172 rock samples were collected on the property while mapping and prospecting. All samples were analyzed for 30 elements by ICP methods and gold by atomic absorption by Acme Analytical Laboratories Ltd. Vancouver, British Columbia. Rock and soil sample preparation techniques are described in Appendix I. All analytical results and rock sample descriptions are listed in Appendix II.

The main zone of mineralization found on the property is within the ASH alteration. This mineralization is composed of disseminated pyrite, chalcopyrite, galena, sphalerite, malachite, azurite and trace hematite in a silica flooded brecciated zone with chalcedonic veining, quartz-carbonate veining with angular orange-brown volcanic? fragments. This mineralization is exposed in a sloughed in 4 metre long by 3 metre wide trench on the Sprout 89 claim. Rock geochemical results from the showing ranged from 210ppm to 7,506ppm copper, 719ppm to 19,157ppm lead, 1,933ppm to 15,670ppm zinc, 5.2ppm to 243.8ppm silver and 280ppb to 4,520ppb gold.

A limited amount of prospecting was carried out over an area four hundred metres west of the trench showing where anomalous gold and copper values are reported in soil samples. The area of anomalous

gold values in soils is largely covered by overburden and talus. Angular rock float samples and outcrop samples confirmed the presence of anomalous values of gold ranging from 49ppb to 878ppb, copper ranged from 136ppm to 11,810ppm, lead 29ppm to 1,460ppm, zinc from 104ppm to 2,563ppm and silver from 1ppm to 14.9ppm.

Rock sampling throughout the southern part of the property revealed sporadic "spot" highs of gold and copper. However, the "spot" highs appear to occur in "strings" with a preferred northwest-southeast orientation. One such "string" is samples 2498, 2497, 2366 and 2511 where gold values from these samples range from 71ppb to 1,098ppb. Two samples (2522 and 2373) collected along Duffy Creek returned highly anomalous copper values ranging up to 4,060ppm and weakly anomalous gold up to 34ppb.

Three hundred metres south of Duffy Creek is a sloughed in trench which returned anomalous copper values up to 2,292ppm.

Another "string" of anomalous gold values extends northwest-southeast across the western part of the claims consisting of six samples (2422, 2423, 2427, 2317, 2323 and 2316) where gold values range from 47ppb to 411ppb.

SOIL GEOCHEMICAL SURVEYS (Figures 5 to 11)

North Grid

Soil samples were collected every 25 metres along grid lines spaced 50 metres or 100 metres apart. A total of 427 soil samples were collected from the B soil horizon at depths varying between 25 centimetres to 35 centimetres. Samples were placed in brown kraft bags and numbered according to grid location. The samples were shipped to Acme Analytical Laboratories Ltd., Vancouver, British Columbia and analyzed for 30 elements by ICP methods and gold by atomic absorption. Geochemical results are listed in Appendix III.

South Grid

A total of 981 soil samples were collected from the south grid using the method described for the north grid. However, the gridline spacing varied from 100 metres to 200 metres and sample spacing is 25 metres.

North Grid, Soil Geochemical Results - Gold (Figure 5)

Gold values range from 1ppb to 2,280ppb with the average being 49.7ppb. Anomalous values were visually estimated from the data as follows:

Threshold: ≥ 20 ppb
 Anomalous: ≥ 40 ppb ≤ 59 ppb (21 samples)
 Highly Anomalous: ≥ 60 ppb (54 samples)

Anomaly 1 extends to the north some 700 metres from L98N, 51+25E to L104N, 49+25E and varies up to 125 metres in width. The continuity in "trend" of the anomaly is disrupted between lines 97N and 99 N with the offset being approximately 200 metres to the west (south side) due to cross structures trending to the northeast. South of the cross structure, this anomaly extends another 600 metres. Anomaly 1 remains open to the north and south.

Anomaly 2 extends from L98N, 53+50E to L104N, 51+75E some 750 metres to the north. This anomaly varies up to 70 metres wide. Again the southern extension appears to be offset to the west approximately 200 metres and extends 400 metres to the south. Anomaly 2 remains open to the south.

North Grid, Soil Geochemical Results - Copper (Figure 6)

Copper values range from 10ppm to 212ppm with the average being 76.3ppm. Anomalous values were visually estimated from the data as follows:

Threshold: ≥ 100 ppm
 Weakly Anomalous: ≥ 120 ppm ≤ 139 ppm (22 samples)
 Anomalous: ≥ 140 ppm (18 samples)

Anomaly 1 extends to the north some 550 metres from L99N, 50+25E to L104N, 49+25E. The southern part of the anomaly is offset to the west some 200 metres and extends 300 metres further to the south from L96N, 48+25E to L93N, 48+50E. This anomaly is coincident with gold anomaly 1 and remains open to the south.

Within the grid area are local "spot" copper anomalies consisting of three or four samples but are of limited lateral extent.

North Grid, Soil Geochemical Results - Lead (Figure 7)

Lead values range from 2ppm to 427ppm with the average being 9.2ppm. Anomalous values were visually estimated from the data as follows:

Threshold: ≥ 10 ppm
 Weakly Anomalous: ≥ 20 ppm ≤ 29 ppm (11 samples)
 Anomalous: ≥ 30 ppm (16 samples)

Anomaly 1 extends to the northeast some 800 metres across the grid. This anomaly is coincident with or parallels the cross structure located at L97 to L98N, 48+00E to L99N, 56+00E. This anomaly is a series of "spot" highs along its length with "spurs" of the anomaly extending to the north-northwest. The western part of the anomaly

between L98N, 49+50E to L101N, 48+74E is coincident with gold anomaly 1 and copper anomaly 1.

North Grid, Soil Geochemical Results - Boron (Figure 9)

Boron values range from 2ppm to 69ppm and average 10.6ppm. Anomalous values were visually estimated from the data as follows:

Threshold:	>10ppm	
Weakly Anomalous:	>20ppm<=29ppm	(28 samples)
Anomalous:	>=30ppm	(8 samples)

Anomaly 1 extends some 1,250 metres to the north-northwest across the grid from L93N, 53+00E to L105N, 49+50E. This anomaly varies up to 150 metres wide. Boyle, 1979 has suggested that anomalous amounts of boron is associated with the presence of tourmaline and/or axinite ((Ca-Al(Fe-Mn) B-silicate)), dumortierite (Al-Fe-B-silicate) or danburite (Ca-B silicate) all of which are generally associated with quartz veins and or silicified zones; thus areas of structural deformation (fault and/or breccia zones). Coincident with boron is anomalous values of strontium which is commonly associated with calcium rich minerals such as calcite, dolomite, axinite, danburite and calcium rich tourmaline?. The presence of anomalous values of both boron and strontium suggests that fault/breccia zones are infilled with quartz/carbonate material enriched in gold and base metals.

South Grid, Soil Geochemical Results - Gold (Figure 9)

Gold values range from 1ppb to 369ppb with the average being 4.7ppb. Anomalous values were visually estimated from the data as follows:

Threshold:	>=10ppb	
Weakly Anomalous:	>=15ppb	(22 samples)

Anomaly 1 extends 1,150 metres to the northwest from L69N, 62+75E to 75+75N(at baseline), to 55+00E. The anomaly varies up to 50 metres wide. Between lines 66N and 68N there is a break in the trend of the gold anomaly but continues to the southeast some 550 metres from L66N, 65+00E to L62N, 67+75E. This anomaly remains open to the southeast.

Anomaly 2 is a northwest-southeast trending zone some 750 metres long and up to 70 metres wide. This zone remains open to the northwest and southeast. The anomaly is located at L74N, 64+75E and extends to the southeast at L69N, 70+00E.

Several other weakly anomalous areas have been outlined from the data; but are of limited lateral extent.

South Grid, Soil Geochemical Results - Copper (Figure 10)

Copper values range from 19ppm to 267ppm with the average being 75.1ppm. Anomalous values were visually estimated from the data as follows:

Threshold:	>=100ppm	
Weakly Anomalous:	>=120ppm<=139ppm	(29 samples)
Anomalous:	>=140ppm	(14 samples)

Anomaly 1 comprises two parallel zones which extend northwest-southeast some 1,700 metres and remains open to the northwest. This anomaly varies up to 50 metres wide for each zone. This anomaly is in part coincident with gold anomaly 1.

Anomaly 2 extends some 800 metres in a northwest-southeast direction from L64N, 57+25E to L58N, 62+50E. This anomaly is up to 100 metres wide.

South Grid, Soil Geochemical Results - Boron (Figure 11)

Boron values range from 2ppm to 540ppm with the average being 20.2ppm. Anomalous values were visually estimated from the data as follows:

Threshold:	>=10ppm	
Anomalous:	>=20ppm<=29ppm	(132 samples)
Highly Anomalous:	>=30ppm	(97 samples)

Anomaly 1 extends some 900 metres to the northeast from L60N (at baseline), 55+00E to L74N, 61+00E. This part of the anomaly is up to 80 metre wide. Three "spurs" of this anomaly extend to the south-southeast at the following locations L69N, 56+00E to L64N, 56+00E, L70N, 58+00E to L66N, 59+00E and L70N, 59+00E to L69N, 60+25E. The latter "spur" anomalous trend reappears (weakly) on L68N, 62+25E and extends 650 metres to the southeast at L64N, 66+50E. The southern end of this anomaly is in part coincident with gold anomaly 1 and copper anomaly 1.

Again both boron and strontium anomalies are coincident and are believed to indicate the presence of underlying fault and or breccia zones.

GEOPHYSICAL SURVEYS (Figures 12 and 13)

Figures 12 and 13 are compilation maps of the geophysical data for the north and south grid areas respectively.

North Grid (Figure 12)

The VLF-EM data indicates a strong conductive zone trending northwest some 700 metres from L99N, 51+50E to L105N, 50+75E and remains open to the north. This conductive zone is parallel to and coincident with a relative magnetic low. The south end of the conductive zone and relative magnetic low feature abruptly terminate at a northeast-southwest trending cross structure which appears to offset the conductive zone approximately 200 metres to the west where there is a weak but persistent conductive zone extending 550 metres to the southeast.

Another weak conductive zone extends for 400 metres to the northwest from L100N, 48+25E to L104N, 48+50E. In the southeast corner of the grid area, two northwest trending weak to moderate conductive zones extend some 400 metres within a relative magnetic low feature.

The cross structure located between lines 98N and 99N and extending 700 metres northeast across the grid appears to offset VLF-EM conductive zones and terminates a relative magnetic high feature to the north. VLF-EM readings from the Annapolis station suggests this structure may be conductive.

South Grid (Figure 13)

The geophysical surveys carried out on the south grid were more of a reconnaissance nature with line spacings of 100 metres or 200 metres.

Results of the VLF-EM survey has outlined several weak to moderate conductive zones all of which appear to be associated with relative magnetic low features. Some of the conductive zones appear to be offset by northeast trending cross structures. Generally the offset (either east or west) is approximately in the order of 200 metres to 300 metres.

DISCUSSION (Figure 14)

Figure 14 is a compilation of geological, soil geochemical and geophysical data on the property. Three significant gold-copper targets have been outlined on the north grid and three target areas were outlined on the south grid.

North Grid

Target 1

Target 1 consists of the following supportive data:

- 1) Coincident and anomalous gold and copper values in soils. Gold soil anomaly extends some 700 metres to the south where it is offset approximately 200 metres to the west and then extends another 600 metres south. This anomaly varies up to 100 metres wide and remains open to the north and south. Anomalous gold values in soils range up to 2,280ppb. Coincident with the gold anomaly is a copper soil anomaly extending some 550 metres to the south and again is offset to the west 200 metres. The copper anomaly varies up to 70 metres wide and remains open to the south.
- 2) Coincident with the gold-copper soil anomalies is a series of linear (up to 100 metres wide) subparallel relative magnetic low features with weak VLF-EM conductive zones. Flanking and parallel to the relative magnetic low features and gold-copper soil anomaly is a strong VLF-EM conductive zone. The relative magnetic lows and VLF-EM conductive zones remain open to the north and south. The magnetic low features are believed to be underlain by ASH alteration zones.
- 3) Anomalous gold values from outcrop and rock float (talus) samples within target 1 range up to 878ppb gold, 1,460ppm lead, 2,563ppm zinc and 14.9ppm silver.
- 4) The length and width of target 1 as indicated by the soil geochemical and geophysical results with significant gold-copper values in rock samples suggests this target maybe of economic significance.

Target 2

- 1) A gold soil anomaly extending some 750 metres to the south is offset approximately 200 metres to the west then extends for 400 metres further to the south. Gold values in soils in target 2 range up to 890ppb. This anomaly varies up to 70 metres wide and remains open to the south.
- 2) Coincident (in part) with the gold soil anomaly is a relative magnetic low feature which extends to the south 1,200 metres and varies up to 200 metres wide. On the south end of the relative

magnetic low is coincident weak to strong VLF-EM conductive zones.

3) Outcrop and rock float samples collected from the area of the anomaly returned up to 1,655ppb gold, 2,130ppm lead, 4,683ppm zinc and 36ppm silver.

4) The strike and width extent of this anomaly with highly anomalous gold values in outcrop and float samples suggests this target could be of economic significance.

Target 3

To the east, some 150 metres from target 2 is a partially filled in trench which exposed a silica flooded breccia zone containing abundant chalcedonic veining (also brecciated) with 1% to 3% disseminated galena, chalcopryrite, malachite, azurite, hematite and pyrite. Rock samples from the trench returned up to 4,520ppb gold, 7,506ppm copper, 19,157ppm lead, 15,670ppm zinc and 243.8ppm silver. The location of this trench in relation to the "breaks" in the geophysical and anomalous lead soil geochemical trends and supported by the "offsets" in the gold-copper soil anomalies suggests that the northeast-southwest fault zones contain significant precious and base metal concentrations.

South Grid

Target areas outlined on the south grid appear to be of a lower order than those observed from the north grid. However, this could be due in part to an abrupt change in topography and a thickening of overburden thus masking the soil geochemical response. Three target areas were outlined on the south grid.

Target Area 1

Within target area 1 are several weakly anomalous gold soil anomalies extending northwest-southeast some 1,100 metres and up to 50 metres wide. This weak gold anomaly remains open to the northwest. Coincident with the gold soil anomalies are weak copper soil anomalies extending to the southeast some 1,600 metres and varying up to 70 metres wide.

Target Area 2

The magnetometer and VLF-EM surveys show a good correlation between relative magnetic low features and coincident weak to strong VLF-EM conductive zones.

The geophysical anomalies show a similar north-south trend to that observed on the north grid, however the soil geochemical data suggests a northwest-southeast trend. A possible explanation of the cross cutting trends is that the soil data reflects a glacial dispersion pattern.

Target Area 3

Outcrop and rock float samples collected throughout the south grid area shows two weak but persistent "trends" in weakly anomalous gold-copper values. One zone extends approximately north-south through the central part of the property where copper values range up to 18,587ppm and gold values to 1,098ppb.

The second "trend" extends north-south along the western side of the property and is associated with the southern extension of the Sabiston Creek fault. Gold values along this "trend" range up to 273ppb and copper values up to 2,051ppm,

More detailed exploration work is required to define precious or base metal targets on this grid.

RECOMMENDATIONS

To further develop this gold, copper, lead, zinc, silver prospect of merit a Phase 2 budget of \$115,000 is estimated to carry out the following work.

North Grid

Detailed geological mapping and prospecting, soil sampling along strike to the north and south of present grid boundaries, extend the magnetometer and VLF-EM surveys to the north and south to aid in geological mapping and structural interpretation and carry out a pole-dipole IP survey to help define the downdip and strike potential of known disseminated mineralization observed at surface.

It is also suggested that grid lines be established parallel to the baseline to help define the northeast-southwest trending cross structures in the central part of the north grid. Trenching of targets should be carried out after examination of the data by the above work. To carry out the above described exploration work an estimated budget of \$90,000 would be required.

South Grid

Detailed mapping and prospecting should be carried out over the entire grid area with fill in soil sampling, magnetometer and VLF-EM surveying over weakly anomalous areas defined by Phase 1 exploration work. To complete this work an estimated budget of \$25,000 would be required.

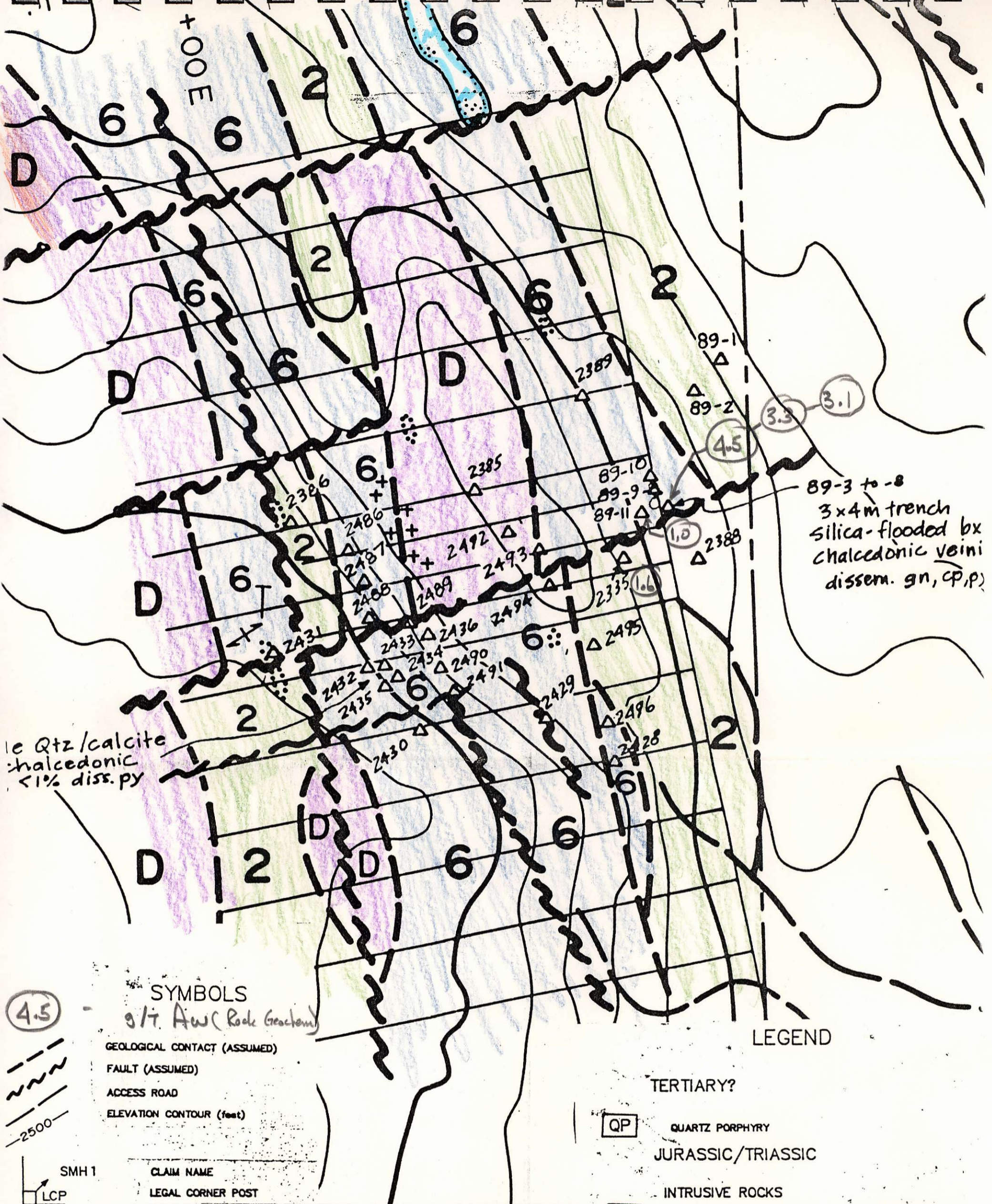
Craig W. Payne M.Sc FGAC
May 24, 1991

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SAMPLE
NUMBER Cu(ppm) Pb(ppm) Zn(ppm) Ag(ppm) Au(ppb)

2335	188	726	1771	4.8	1655
2385	129	2	62	0.1	1
2386	146	5	64	0.2	9
2387	64	4	68	0.1	2
2388	77	5	58	0.3	7
2389	973	2130	4663	36	802
2428	79	4	62	0.1	6
2429	23	3	105	0.2	3
2430	105	5	51	0.1	3
2431	1	4	41	0.1	3
2432	161	2	123	0.7	209
2433	136	2	93	1.9	213
2434	5	8	44	0.3	153
2435	3	10	50	0.2	163
2436	11810	4	108	9.8	660
2486	15	90	182	0.8	757
2487	165	29	104	1	49
2498	1133	8	55	0.2	19
2489	1732	9	49	0.9	4
2490	119	1460	2563	3.5	878
2491	338	109	256	14.9	434
2492	34	24	59	0.8	33
2493	79	7	100	0.2	5
2494	32	5	15	0.4	5
2495	25	3	52	0.5	3
2496	226	8	68	3.8	6
89-1	558	2	93	0.4	2
89-2	182	5	78	0.2	25
89-3	7506	19157	15670	243.8	4520
89-4	210	719	2064	5.2	290
89-5	505	1422	4079	22.3	680
89-6	3572	5146	5185	197.2	570
89-7	643	1377	1333	27.3	3160
89-8	2100	11996	10063	91.3	3300
89-9	113	87	162	2.1	520
89-10	173	1279	1677	6.2	340
89-11	1337	4655	3750	79.1	1000



SYMBOLS
 9/17 Awc (Rock Geology)

GEOLOGICAL CONTACT (ASSUMED)
 FAULT (ASSUMED)
 ACCESS ROAD
 ELEVATION CONTOUR (feet)
 -2500-

SMH1
 LCP

CLAIM NAME
 LEGAL CORNER POST
 CLAIM LINE

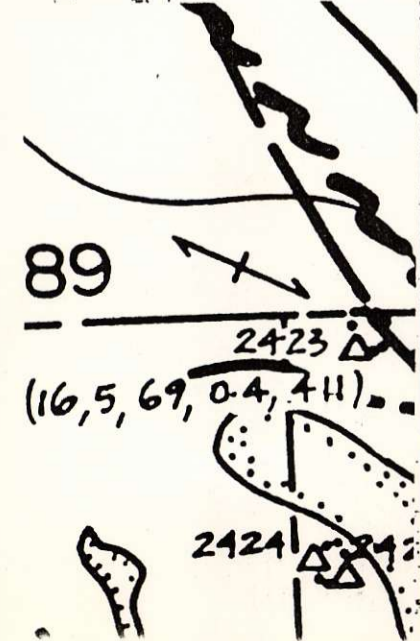
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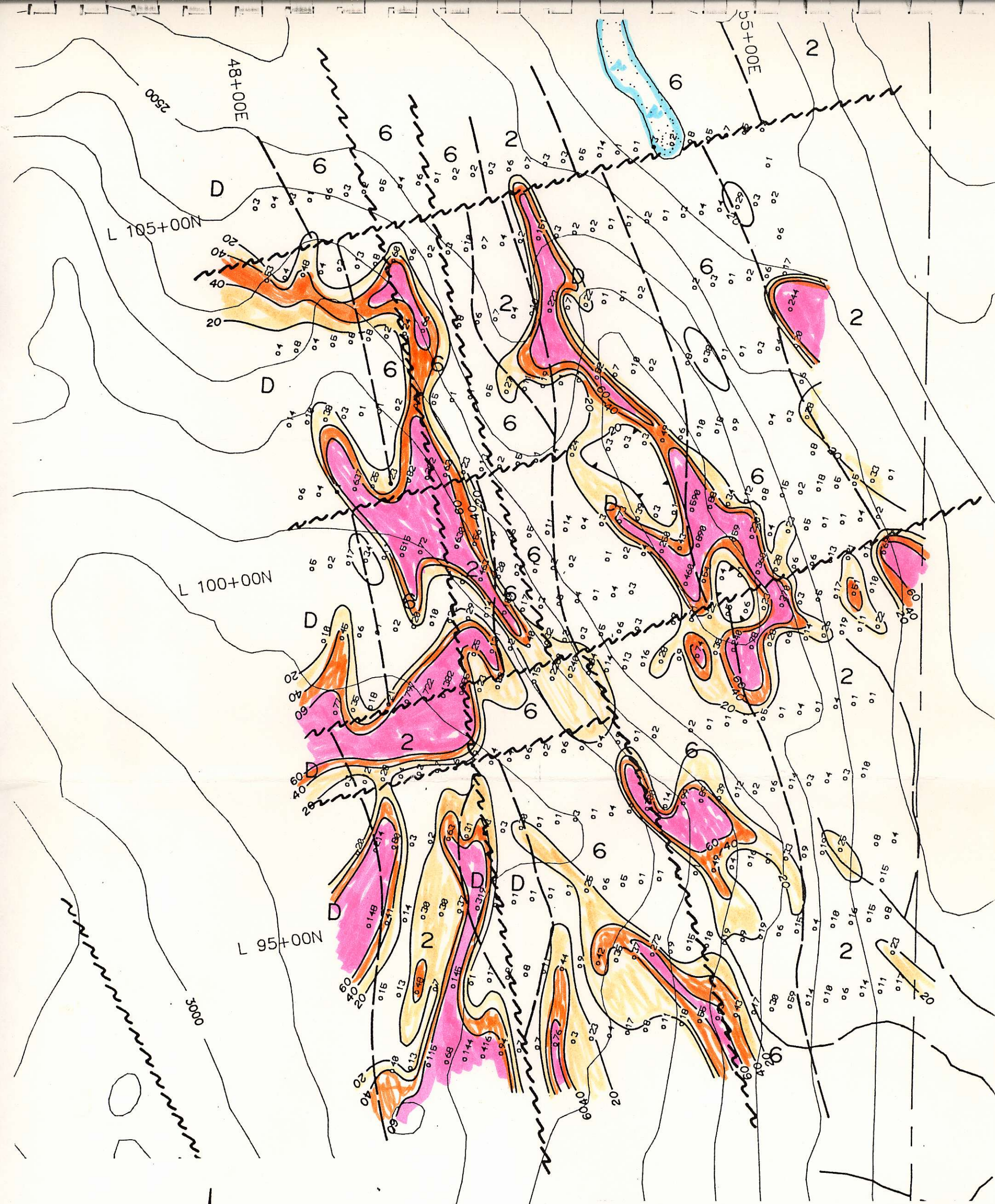
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PROPERTY GEOLOGY

SCALE	DATE	BY	NTS.	FIG. NO.
1:10,000	MAY /91		92 1/10	4

- LEGEND**
- TERTIARY?
- QUARTZ PORPHYRY
 - JURASSIC/TRIASSIC
 - INTRUSIVE ROCKS
 - DIORITE, QUARTZ DIORITE, SUBVOLCANIC? EQUIVALENT OF NICOLA GROUP VOLCANIC ROCKS
 - TRIASSIC
 - NICOLA GROUP
 - ALTERED NICOLA GROUP ROCKS, UNDIFFERENTIATED
 - WACKE, ARGILLITE, SILICEOUS, WELL BANDED
 - TUFFACEOUS, VOLCANIC ROCK
 - VOLCANIC/SEDIMENTARY BRECCIA
 - AGGLOMERATE
 - VOLCANIC FLOW ROCK, PORPHYRITIC





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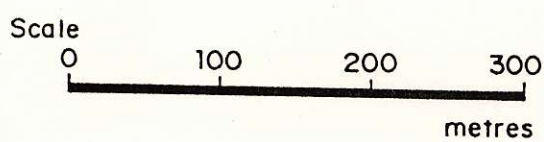
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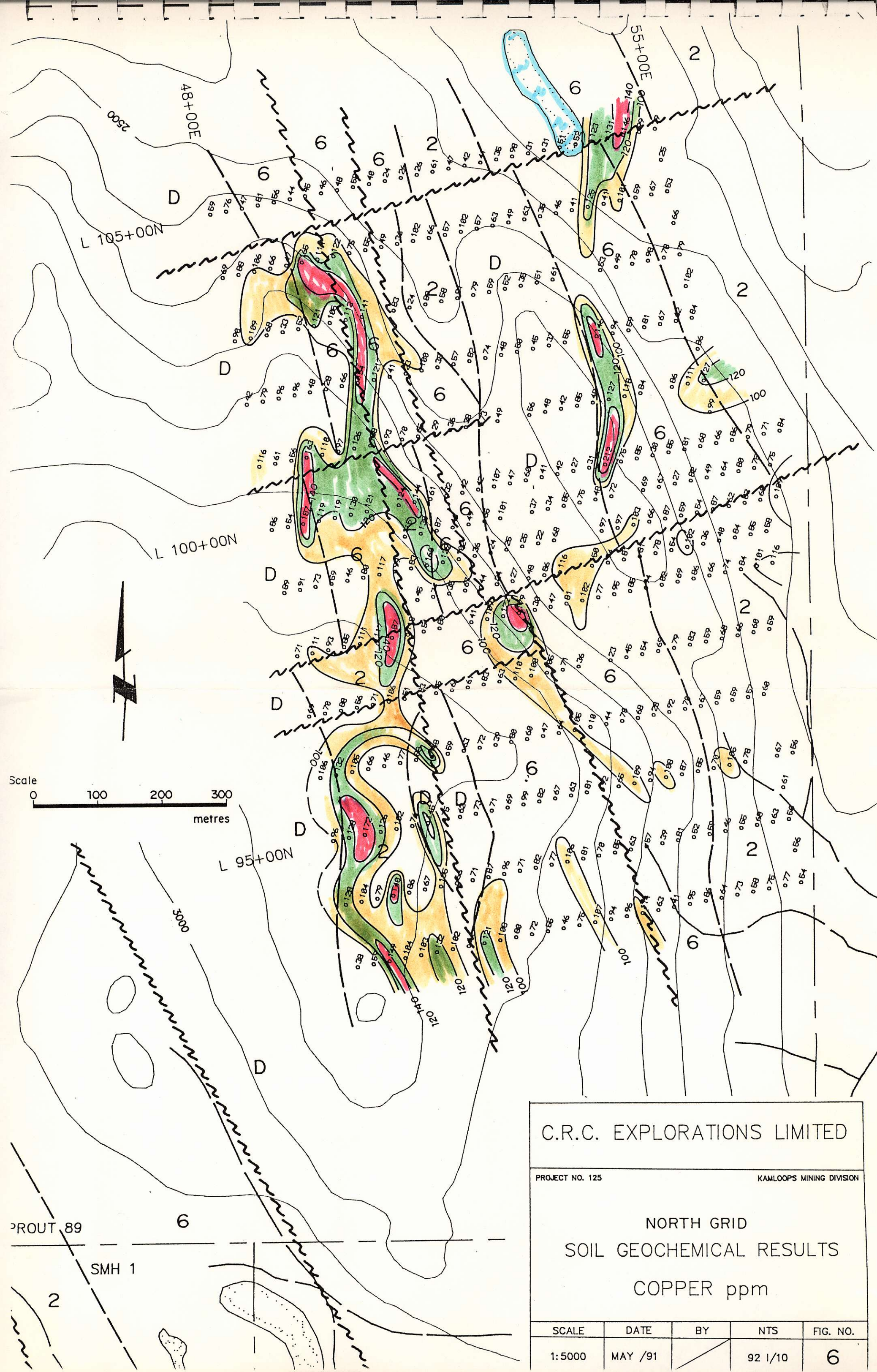
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NORTH GRID
 SOIL GEOCHEMICAL RESULTS
 GOLD ppb

SCALE	DATE	BY	NTS	FIG. NO.
1:5000	MAY /91		92 1/10	5

PROMIN EXPLORATIONS LIMITED, GEOLOGICAL CONSULTANTS



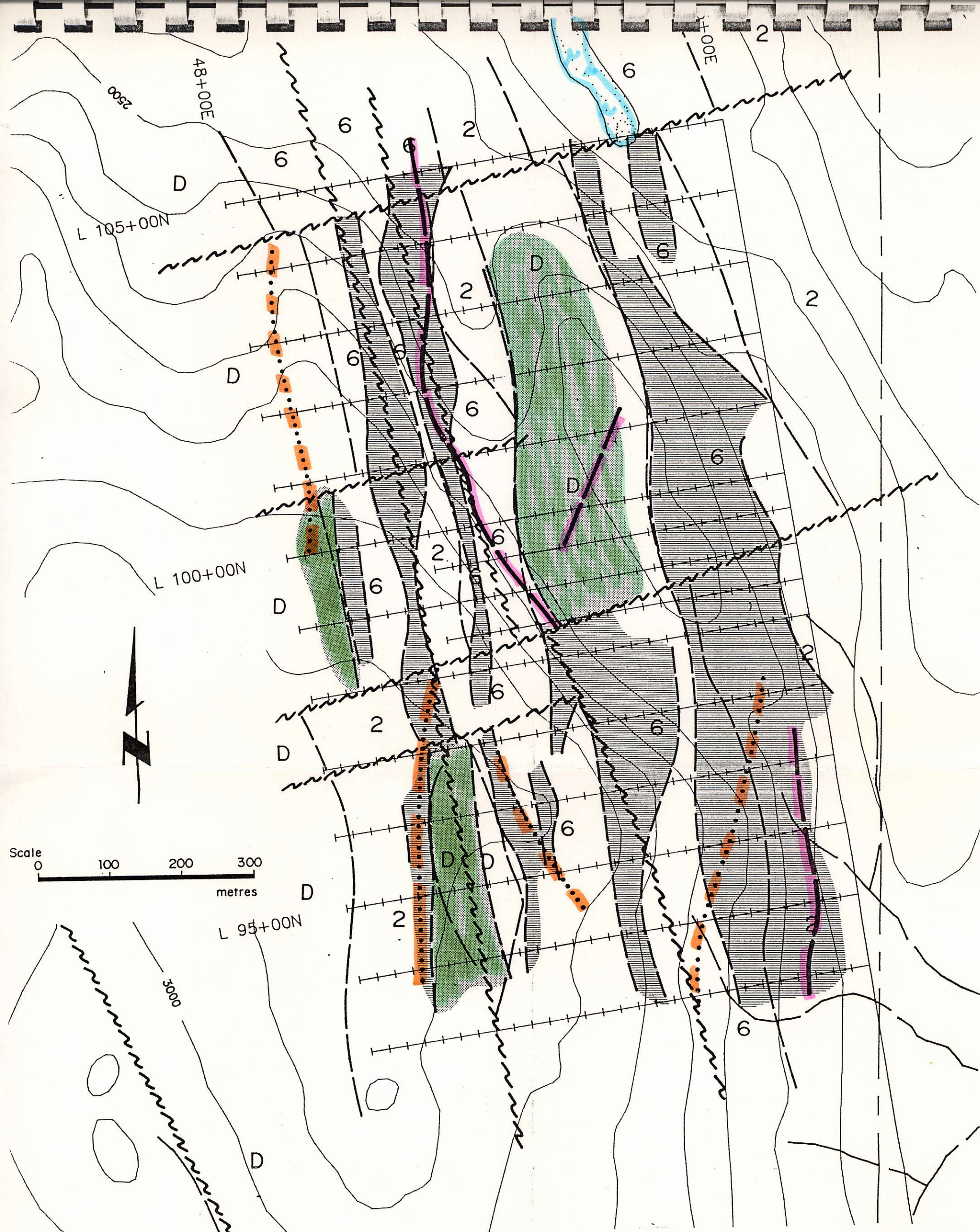


C.R.C. EXPLORATIONS LIMITED


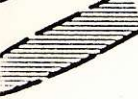


PROJECT NO. 125 KAMLOOPS MINING DIVISION

NORTH GRID
SOIL GEOCHEMICAL RESULTS
COPPER ppm

SCALE	DATE	BY	NTS	FIG. NO.
1:5000	MAY /91		92 1/10	6



GEOPHYSICAL SYMBOLS

-  OUTLINE OF RELATIVE MAGNETIC HIGH
-  OUTLINE OF RELATIVE MAGNETIC LOW
-  VLF-EM CONDUCTIVE ZONE (MODERATE TO STRONG)
-  VLF-EM CONDUCTIVE ZONE (WEAK)

C.R.C. EXPLORATIONS LIMITED

PROJECT NO. 125

KAMLOOPS MINING DIVISION

NORTH GRID
GEOPHYSICAL SURVEYS
COMPILATION MAP

SCALE	DATE	BY	NTS	FIG. NO.
1:5000	MAY /91		92 1/10	12