093599

1996 ASSESSMENT REPORT
GEOCHEMICAL SOIL SAMPLING
on the
ORIN 1-42 & OCCO 1-60 CLAIMS
Dawson Mining District, Yukon

Claims: Occo 1-25 (YB54376-YB54400)
Occo 26-60 (YB67401-YB67435)
Orin 1-42 (YB67436-YB67475)

Location: 1. 405 km North of Whitehorse, Y.T.
2. NTS Sheet 116-A/4
3. Latitude 64°05'
Longitude 137°52'

For: **ORINOCO GOLD INC.**
1351 - 409 Granville Street
Vancouver, B.C.
V6C 1T2

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Y1A 3T5

March 11, 1997

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of $ 10,200 .

M. Burke

for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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INTRODUCTION

This report was prepared to fulfil the assessment reporting requirements under the Yukon Quartz Mining Act. Its purpose is to report on a soil sampling program completed on the Orin and Occo Claims between September 1 and 10, 1996.

The field work was completed by Aurum Geological Consultants Inc., and included establishing flagged soil lines along the claim location lines of the Orin 1-42 and Occo 1-60 Claims. The objective of the field programs was to complete a preliminary soil geochemical survey of the claims in efforts to locate anomalous zones indicative of Fort Knox style gold mineralization related to Tombstone suite intrusions.

Location and Access

The Panorama Ridge property consists of the Aus, Orin, and Occo claims and is located approximately 15 km east of Viceroy Resources Ltd's Brewery Creek mine. The property is on the northeast side of the Tintina Trench in the Southern Ogilvie Mountains physiographic region, approximately 75 km east of Dawson City, Yukon. The Panorama property is between Aussie Creek and East O'Brien Creek. Brewery, Aussie, and Hamilton Creeks all drain from the south slopes of the Ogilvie Mountains into the South Klondike River.

The property is on the southern portion of NTS map area 116A/4. The geographic coordinates of a point approximately in the centre of Panorama Ridge is 64°05' north latitude and 137°52' west longitude, (Figure 1).

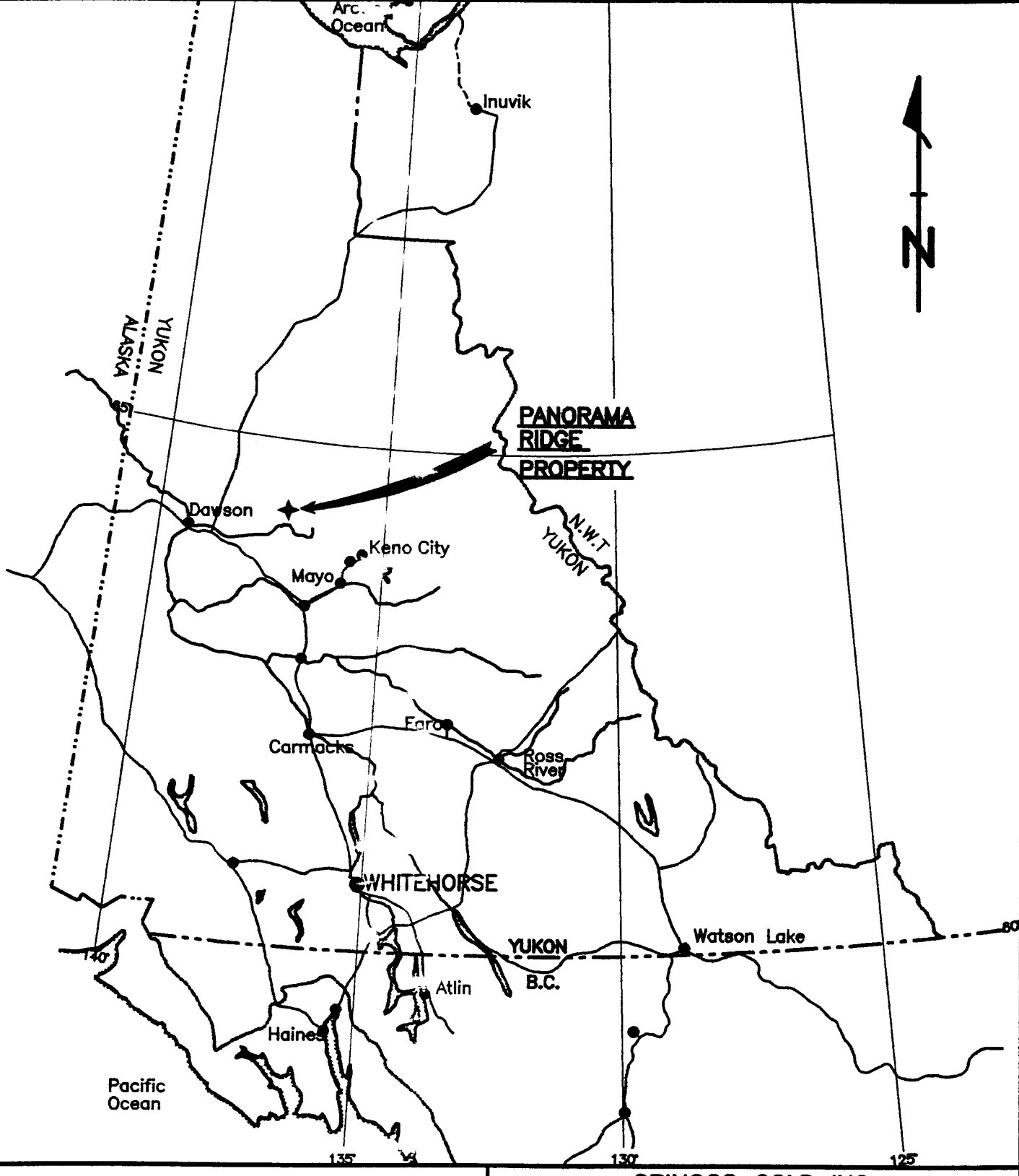
Access to the property is via the Klondike Highway (#2) north from Whitehorse to the Dempster Highway and from there six kilometres north to the "Ditch Road" which leads to the Brewery Creek property.

The nearest road access to the property terminates on the eastern side of the Brewery Creek deposit approximately 14 km southwest of Panorama Ridge. Helicopters based in either Dawson or Mayo are needed to access Panorama Ridge.

Physiography, Climate, and Vegetation

The Panorama Ridge property is within the Southern Ogilvie Mountains physiographic region of the southern Yukon. Elevations range from 2000' on the lowest part of the Orin claims to over 4800' elevation on the top of Panorama Ridge. The property overlooks the Tintina Trench, a major physiographic feature that marks a zone of right lateral faulting that has resulted in major displacements of some 450 kilometres.

An interior continental climate with moderate to low precipitation (40 cm annually), warm summers and cold winters typifies the area. Permafrost is discontinuous, present



200 100 0 200

kilometres

ORINOCO GOLD INC.

AUS–OCCO–ORIN CLAIMS

DAWSON MINING DISTRICT, YUKON TERRITORY

PROPERTY LOCATION MAP

Aurum Geological Consultants Inc.			date: FEBUARY, 1997
NTS: 116 A/4	drawn: JC	scale: 1:6,000,000	figure: 1

only on the steeper north and east facing slopes and low marshy forested areas. The properties are normally snow free from mid June to late September.

At Panorama Ridge, vegetation consists of Black Spruce, Western Spruce, poplar, alder and willow in the valleys to ground cover consisting of moss, alpine plants, willow, and dwarf birch above 4000' elevation. The most recent glaciation affected only the larger south trending valleys such as Hamilton and Brewery Creeks, but did not cover most of the higher ridges. As a result outcrop exposure is poor (~5%) except on ridge tops and incised drainage channels and gullies.

The area around Panorama Ridge was part of a large burn that occurred in 1989 and most vegetation and trees on Panorama Ridge were consumed by the fire. The area trenched in 1995 on Panorama Ridge was on a southwest facing steep slope and no permafrost was encountered.

There is a thick B horizon brunisol developed on the Panorama Ridge property. This is an old (50,000 to 1,000,000 Ma) soil developed in situ that has not been affected by glaciation. The soil has been leached and probably masks underlying bedrock geochemical anomalies.

Property

Orinoco Gold Inc.'s Panorama property consist of the Aus, Orin and Occo Claims and consists of 137 Full and 4 Fractional claims. The claims were staked in accordance with the Yukon Quartz Mining Act and are all registered under Orinoco Gold Inc.'s name within the Dawson Mining District. The claims cover an area of approximately 2,925 hectares (7,225 acres). A list of claim names, grant numbers and expiry dates are found in Table I. Figures 2 show the claim locations for the Panorama Ridge property.

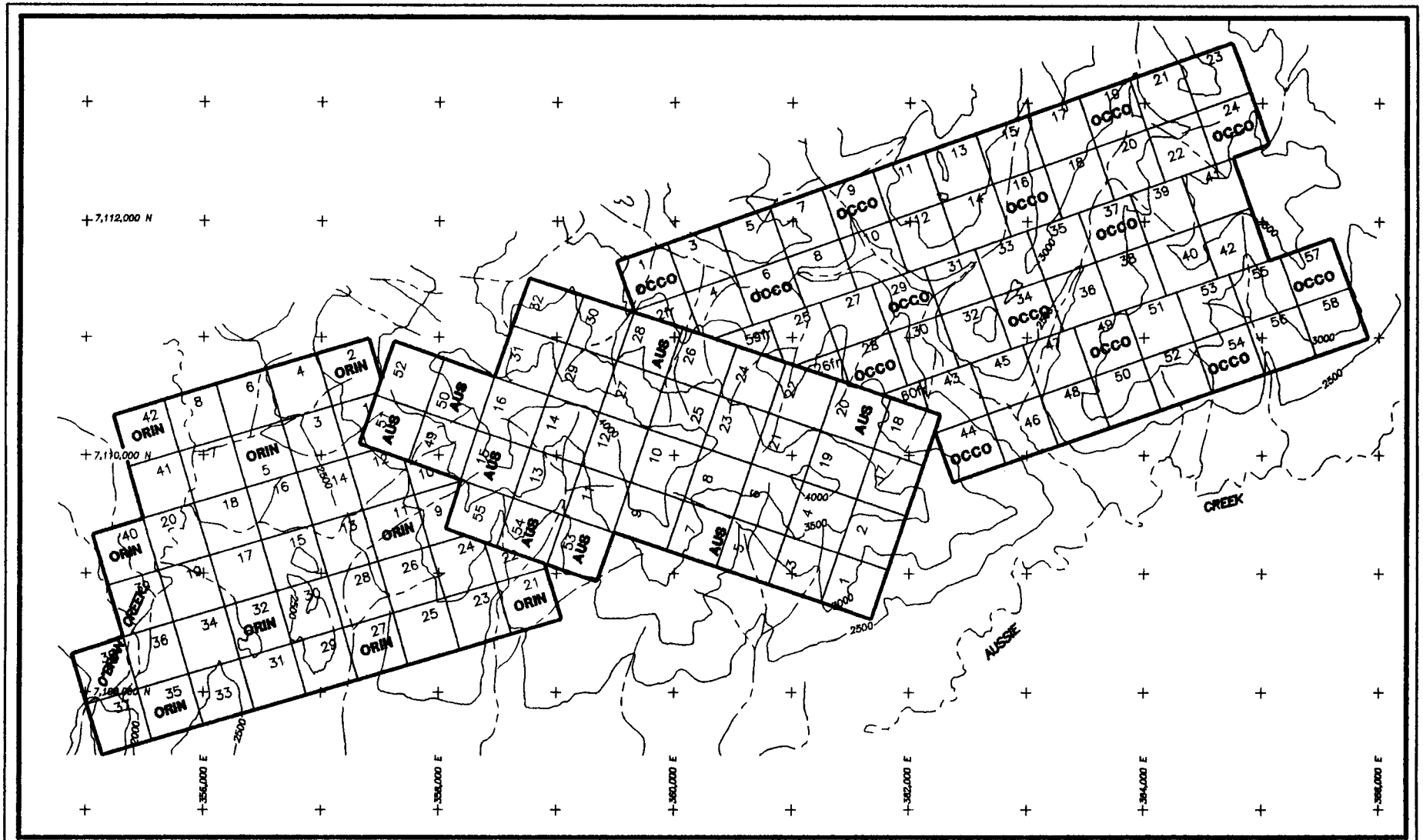
History

The Panorama Ridge property was first staked as the Aus 1-32 claims in October of 1987 to cover areas of anomalous gold in soil discovered during reconnaissance exploration conducted by Noranda Exploration Company Ltd. The area was an obvious exploration target after Noranda personnel had located gold in soil anomalies that led to the discovery of the Brewery Creek deposit. Brewery Creek was subsequently acquired by Loki Gold Corporation who have raised public and private financing to bring the deposit into production. Production of heap leach gold at Brewery Creek is scheduled to begin in 1996.

TABLE I - CLAIM DATA

PANORAMA RIDGE CLAIMS

CLAIM NAME	GRANT No.	No. CLAIMS	EXPIRY DATE (Y/M/D)
OCCO 1	YB54376	1	1997.09.14
OCCO 2 FR	YB54377	1	1997.09.14
OCCO 3-25	YB54378-4400	23	1997.09.14
OCCO 26 FR	YB67401	1	1997.09.14
OCCO 27-58	YB67402-7433	32	1997.09.14
OCCO 59 FR	YB67434	1	1997.09.14
OCCO 60 FR	YB67435	1	1997.09.14
AUS 1-32	YB04454-4485	32	2001.01.20
AUS 49-52	YB31209-1212	4	2001.07.31
AUS 53-55	YB54208-4210	3	2001.07.31
ORIN 1-42	YB67436-7475	42	2001.09.14



LEGEND

1500 — elevation contour interval (500 feet)

4 | 2
3 | 1 ORO — Claim Group

UTM N/A — TN — mN

0 500 1000 1500 2000
METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
CLAIM MAP

Aurum Geological Consultants Inc.

SCALE: 1 : 50,000		DATE: Febuary 1997
N.T.S.: 116 A/4	DRAWN: JO	FIGURE: 2

Work programs on Panorama Ridge completed by Noranda Exploration Company Ltd. in 1988, 1989 and 1990 consisted of establishing cut grid lines, silt, soil and rock sampling, mapping, and magnetometer and IP surveys, and back-hoe trenching. Noranda personnel spent approximately 200 man days exploring the Panorama Ridge property. Work included establishing 51 km of cut and picketed line, collecting 1150 soil samples, 187 rock grab samples and 258 chip samples from seven trenches that totalled 836 m in length. The trenching was completed using a Kubota back-hoe that was mobilized to the property by helicopter.

Geophysical surveys completed on the Panorama Ridge property in 1988 and 1990 consisted of 68 line-kilometres of magnetometer surveys and 16 line-kilometres of IP. The magnetometer survey shows a broad magnetic low over the area of interest within the intrusion. The IP survey delineated zones of iron enrichment within the hornfelsed zone at the intrusive-sedimentary contact.

Noranda's work between 1987 and 1990 outlined a 1500 m by 800 m area of >60 ppb gold in soils with a coincident arsenic in soil anomaly. Trenching and rock sampling was focused on the intrusive-sedimentary contact and the best values found in rock grab samples included 2745 ppb gold in a quartz and actinolite vein at 170000E/29700N, 1380 ppb Au at 17200E/30242N, 2840 ppb Au at 16365E/29830N, 1430 ppb Au at 17090E/30100N, 3580 ppb Au at 16600E/30220N and 3660 ppb Au at 17295E/30100N. Most samples were from veins in the hornfelsed sedimentary rocks. One trench sample returned 1673 ppb Au over 2 m in hornfels sedimentary rocks from Trench 7.

GEOLOGY

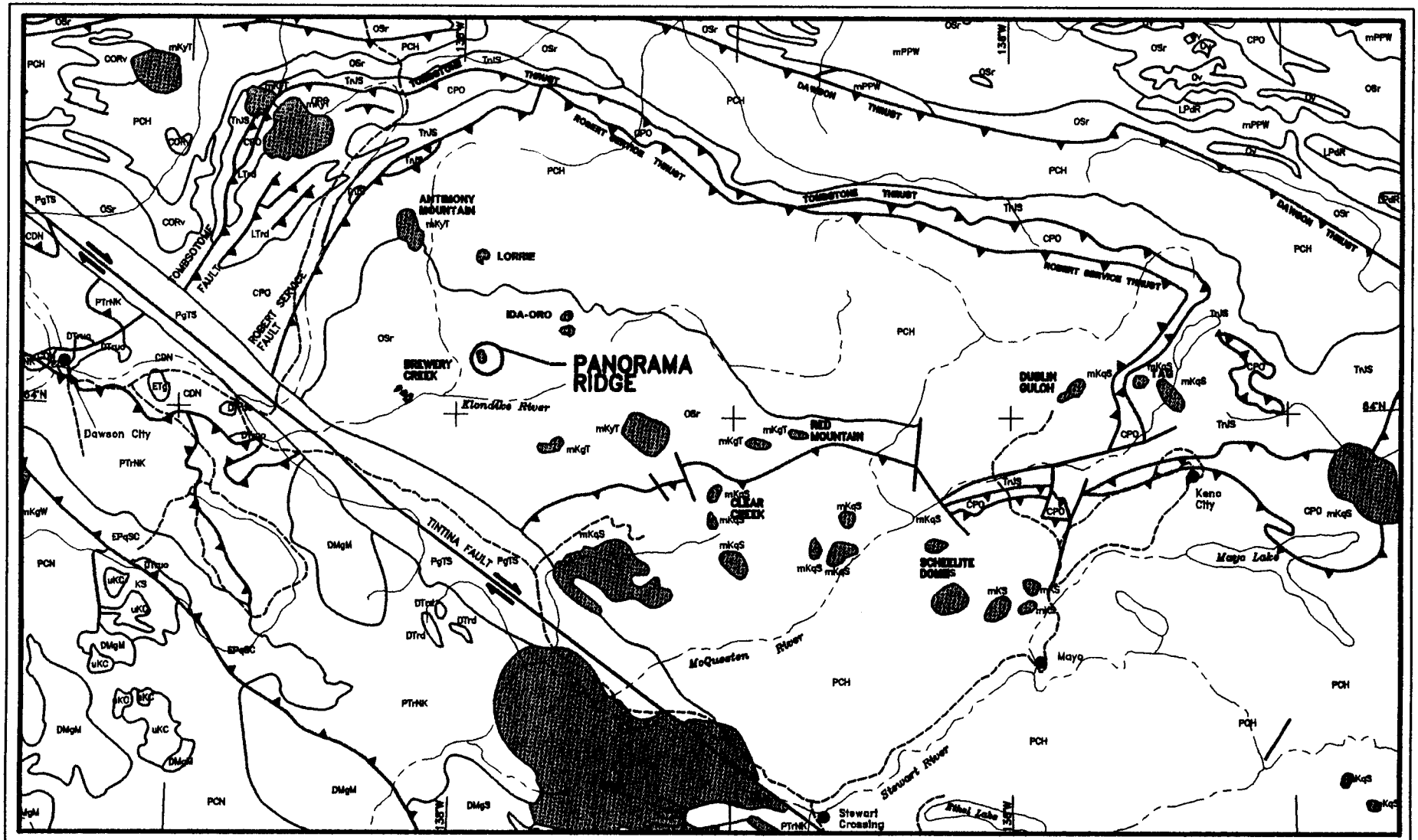
Regional Geology

The Panorama Ridge property is situated within the western portion of the Selwyn Basin, part of the Ominica Belt (Wheeler, et al., 1991; Murphy, et al., 1993) as shown on Figure 4. The regional geology of this area of the Yukon has been mapped by Green 1972, at 1:250,000 scale. More detailed 1:50,000 scale mapping has been completed on the map sheets to the southeast of Panorama Ridge and Ida properties (Murphy, et al., 1993; Murphy and Heon, 1994). The area northeast of the Tintina Trench is characterized by three regionally extensive northerly directed thrust sheets. The Robert Service, Tombstone, and Dawson thrusts, have displaced large packages of rocks within the Selwyn Basin during the Jura-Cretaceous compressional tectonic event. The Robert Service thrust underlies and defines one of the largest thrust sheets in the Canadian Cordillera (Murphy et al., 1993). It extends eastward from Dawson City area through the Keno Hill area and into the Lansing area. The Robert Service thrust typically juxtaposes Upper Proterozoic Hyland Group rocks (PCH) on the upper plate over Mississippian Keno Hill Quartzite and Triassic-Jurassic schist (TrJs) on the lower plate. The Tombstone thrust typically juxtaposes Proterozoic and Paleozoic Selwyn Basin rocks over an immediate footwall ranging in age from Devonian to Late Jurassic (Murphy, et al, 1993, Abbott, 1993). Structural evidence suggests an early northwestward, followed by northeastward translation of the Tombstone thrust sheet and underlying Paleozoic rocks on the Tombstone Thrust (Roots, 1993: Murphy and Heon, 1994).

Selwyn Basin rocks were deformed and intruded by felsic plutons and stocks during the waning stages of the Jura-Cretaceous compressional tectonic event. Three suites of granitoid intrusives are recognized, a 98 Ma Selwyn Suite, the 89-95 Ma Tombstone Suite and a 64 Ma Southern Suite. The Selwyn and Tombstone Suite intrusions are distributed along a northwest trending arcuate belt within the Selwyn Basin. The intrusives are mainly granitic in composition and host tin, tungsten, and molybdenum mineralization (Emond, 1992). Recent exploration efforts have identified Fort Knox style intrusive hosted gold mineralization associated with the Tombstone Suite intrusions. Geochemically, Fort Knox style mineralization has a strong Au, As, Bi, Sb, +/- Hg, and Pb geochemical signature that reflects the intrusive source for the mineralization.

Felsic Cretaceous intrusives of the 89-95 Ma Tombstone Suite are known to host low grade Fort Knox style intrusive hosted gold mineralization at Fort Knox, Dublin Gulch, Clear Creek, Red Mountain, and Scheelite Dome. Intrusive bodies range in size from meter-scale dykes to stocks several square kilometres in area (Murphy, et al., 1993). They are primarily granitic to quartz monzonitic in composition, although bodies of syenite and diorite are also found in the belt.

Regional metamorphism has imprinted a greenschist facies metamorphic mineral assemblage on rocks of the Hyland Group and Road River Group. Contact metamorphic aureoles consist of biotite hornfels enriched in iron and, locally, precious and base metals.



LEGEND

- Road
- Major River
- Townsite
- Thrust Fault
- Strike slip Fault

See table for Lithologies

Geology modified from: Wheeler and McFeely, 1991

UTM N.A. gTN mN

0 10 20 30 40 KILOMETRES

ORINOCO GOLD INC.
AUS-ORCO-ORIN
MAYO/DAWSON MINING DISTRICTS

REGIONAL GEOLOGY
NTS 105, 106, 115, 116

Aurum Geological Consultants Inc. | Date: FEBRUARY, 1997
NTS: 116 A/4 | Drawn: JC | Scale: 1:1000000 | Figure: 3

Often the larger intrusions have a low magnetic signature surrounded by an area of high magnetic relief related to the hornfelsed zone.

Table II shows the simplified stratigraphy and intrusive events to accompany Figure 4.

TABLE II

TABLE OF FORMATIONS

(Rock units between the Tintina Trench and the Dawson Thrust)

CRETACEOUS		
Stippled Areas	Tombstone Suite:	Granodiorite, Biotite Quartz monzonite
TRIASSIC AND JURASSIC		
TrJs	Lower Schist	
CARBONIFEROUS & PERMIAN		
CPo	Keno Hill Quartzite	
ORDOVICIAN-SILURIAN		
OSr	Road River Group:	Shale, siltstone, argillite, chert, pebble conglomerate
UPPER PROTEROZOIC-LOWER PALEOZOIC		
PCH	Hyland Group:	grey green and maroon shale, sandstone, quartz pebble conglomerate minor limestone

Deposit Model

The main exploration target associated with Tombstone Suite intrusions is bulk tonnage low grade deposit similar to the Fort Knox deposit currently being developed near Fairbanks, Alaska. Total mineable proven and probable reserves at Fort Knox currently stand at 174.5 million tons grading 0.024 opt gold (0.82 g/t)(Northern Miner, Mar. 29, 1993).

The 'Fort Knox' deposit model is one of intrusive hosted gold genetically related to a porphyritic granite stock. The genesis of the 'Fort Knox' deposit is comparable to porphyry copper or porphyry molybdenum systems and as such the 'Fort Knox' deposit type may be classified as a 'porphyry gold' system (Hollister, 1991). Deuteric and hydrothermal fluids deposited economic concentrations of native gold within the granite during and after emplacement of the stock.

These deposits are sulfide deficient; gold is associated with trace amounts of molybdenum, tungsten and bismuth. Mineralization is primarily within quartz veinlets, veins, and shears within the intrusive although gold is also found as disseminations within the stock (Hollister, 1991). Associated minerals are molybdenite, scheelite, arsenopyrite, pyrite, bismuthinite and rarely tetradymite (Bi_2Te_2S). Total sulfide content rarely exceeds one percent.

Potassic, phyllic, and argillic alteration is locally present within the intrusive (Hollister, 1991). Generally, small amounts of potassium feldspar, sericite, and or clay minerals are found within or as thin selvages adjacent to the mineralized quartz veins. Post mineral veins consist of calcite, calcite-quartz, and clay.

The Dublin Gulch deposit is similar to the above described 'Fort Knox' deposit although the Dublin Gulch deposit contains a higher percentage of sulfide minerals including arsenopyrite, pyrrhotite, pyrite, molybdenite, chalcopyrite, and bismuthinite (Hollister, 1991).

Both Fort Knox and Dublin Gulch, are located in historic, and currently active, placer gold camps. The Clear Creek property, Red Mountain, and Scheelite Dome shares this characteristic. All three properties are also characterized by large low magnitude gold in soil anomalies over and immediately adjacent to the intrusive stocks. There is no record of active placer operations near Brewery Creek, Panorama Ridge, Ida, Lorrie, or Antimony Mountain.

On Loki Gold Corporation's Brewery Creek deposit, located approximately 15 kilometres west of Panorama Ridge, 18,200,000 tons of ore grading 0.044 opt gold (BBN James Capel Inc., 1994) has been delineated in nine zones over a strike length of 6.7 kilometres (Yukon Minfile #116B 160). These zones are structurally controlled by several imbricated low-angle thrusts faults. The main thrust fault separates a sill-like slab of Tombstone Suite quartz monzonite from Devono-Mississippian Earn Group greywacke, shale, graphitic argillite, bedded barite, pyroclastic rocks and chert pebble conglomerate (Yukon Minfile #116B 160). At the Antimony Mountain and Lorrie occurrences, to the north of Panorama Ridge and the Ida properties, gold is found in quartz-arsenopyrite veins and disseminations associated with Tombstone Suite felsic stocks, plugs dykes and sills.

Most exploration efforts within the belt have been directed at intrusive hosted

mineralization. More recently, work at Red Mountain, Scheelite Dome and the Tag property have indicated that gold mineralization also occurs within porous or reactive or structurally prepared sedimentary rocks adjacent to the intrusions.

At all the above mentioned occurrences, the sheeted veins or mineralized zones are localized within brittle fracture zones that have 070° to 100° trends.

Geology, mineralization, and geochemistry at both Panorama Ridge and Ida properties share many of the characteristics of the Fort Knox model.

Property Geology - Panorama Ridge

The Panorama Ridge property covers a Tombstone Suite quartz monzonite intrusion that cuts fine grained siltstone, shale, and chert of the Ordovician-Silurian Road River Group (Figure 5). The intrusion is lenticular in shape and has been traced over a 4 km length with an average thickness of 500 m. The intrusion has a rough 110° trend and is steeply dipping. On both the northern and southern side of the main intrusion, narrow fine grained dykes of similar composition have been mapped. All intrusives appear to be broadly conformable with sedimentary layering and can be considered sill-like bodies.

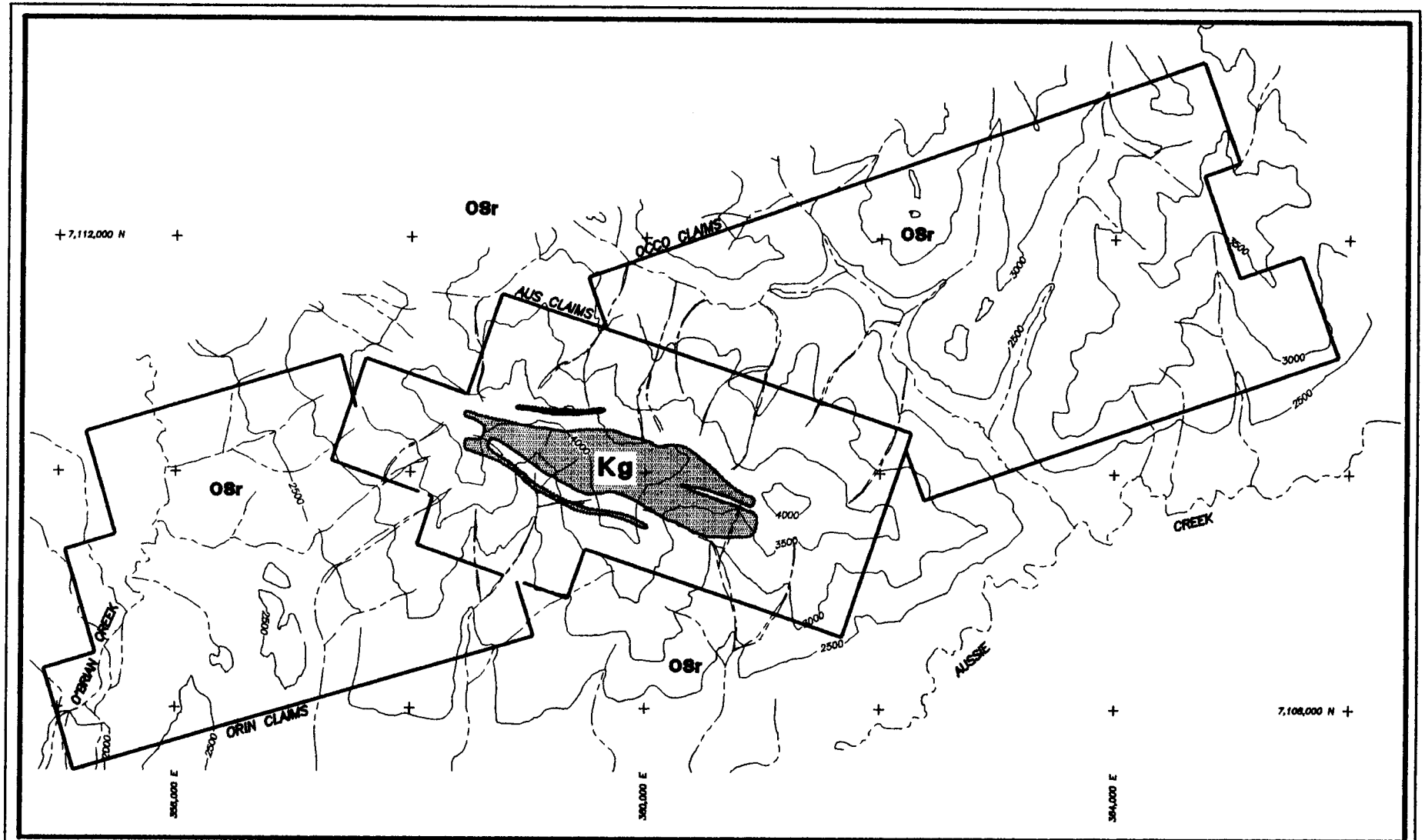
The cherts and siltstones are commonly finely laminated, have steep to vertical dips, and strike roughly 110°. Near the contact with the quartz monzonite the cherts are bleached and silicified to a dense fine grained hornfels. Local areas contain brecciated chert with a dark blue, black, or green matrix. On the southern side of the quartz monzonite a finely laminated chert unit forms a prominent marker horizon. This chert band is very resistive and forms a tor-like ridge of rock that can easily be traced along strike.

The quartz monzonite is commonly a medium grained sparsely megacrystic intrusion with a closely spaced jointing set that trends between 085° and 110°. Fine mm scale quartz veins and dry fractures are common within the intrusion. Occasionally vein densities approach 5 per metre. The veins and dry fractures commonly host blebs of oxidized arsenopyrite and pyrite. On surface exposures, alteration is at best incipient. Near areas with increased vein densities or disseminated sulfides, a light green waxy alteration of feldspars is common. Patches of limonite and iron oxide staining are a good indicator of blebby sulfides on dry fractures or along vein selvages.

Outcrop on the Panorama ridge is sparse and is confined to ridge tops. Approximately 5% of the property has outcrop or talus slopes that are indicative of underlying lithologies.

Most exposed outcrops are of resistant unaltered quartz monzonite that is weakly

anomalous in gold. The 100° trending altered and mineralized structure exposed in Trenches 8 & 9 is marked by a shallow grassy depression. Tors of unaltered quartz monzonite outcrop on either side of the structure and apart from the recessive profile across the structure, there is no other physical evidence that this structure crosses the property. Trenches 95-8 & 9 exposed extremely altered quartz monzonite with regularly spaced, thin, quartz veinlets with a strong red Fe-oxide stain. Arsenopyrite and pyrite are found on the vein selvages and as disseminations in the wall rock. Limonite, green scorodite ($FeAsO_4.2H_2O$) and other iron oxides are common in the more altered quartz monzonite. Locally arsenopyrite and stibnite were noted. Soil geochemistry over this area was at background levels of approximately 50 ppb Au. The lack of a soil geochemical anomaly reflecting the underlying mineralization is caused by the thick in situ B horizon soil.



LEGEND

CRETACEOUS

Kg granodiorite, quartz monzonite

ORDOVICIAN-SILURIAN

ROAD RIVER GROUP

OSr shale, siltstone, chert

CLAIM BOUNDARY

-2000- ELEVATION CONTOUR

CREEK

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — R. A. MUHERTY — GEOSCIENTIST

UTM N TN mN

0 500 1000 1500 2000

METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
PROPERTY GEOLOGY

Aurum Geological Consultants Inc.

SCALE: 1 : 50,000		DATE: Feb, 1997
N.T.S.: 116 A/4	DRAWN: JC	FIGURE: 4

1996 EXPLORATION RESULTS - Orin & Occo Claims

Introduction

The 1995 work program on the Orin and Occo claims consisted of flagged soil lines located along the claim location lines. Soil samples were collected at 100 m intervals along lines spaced 900 m apart. Samplers were set out in the morning at he line ends and walked back to a camp located on the Aus 13 claim. A total of 128 soil samples were collected.

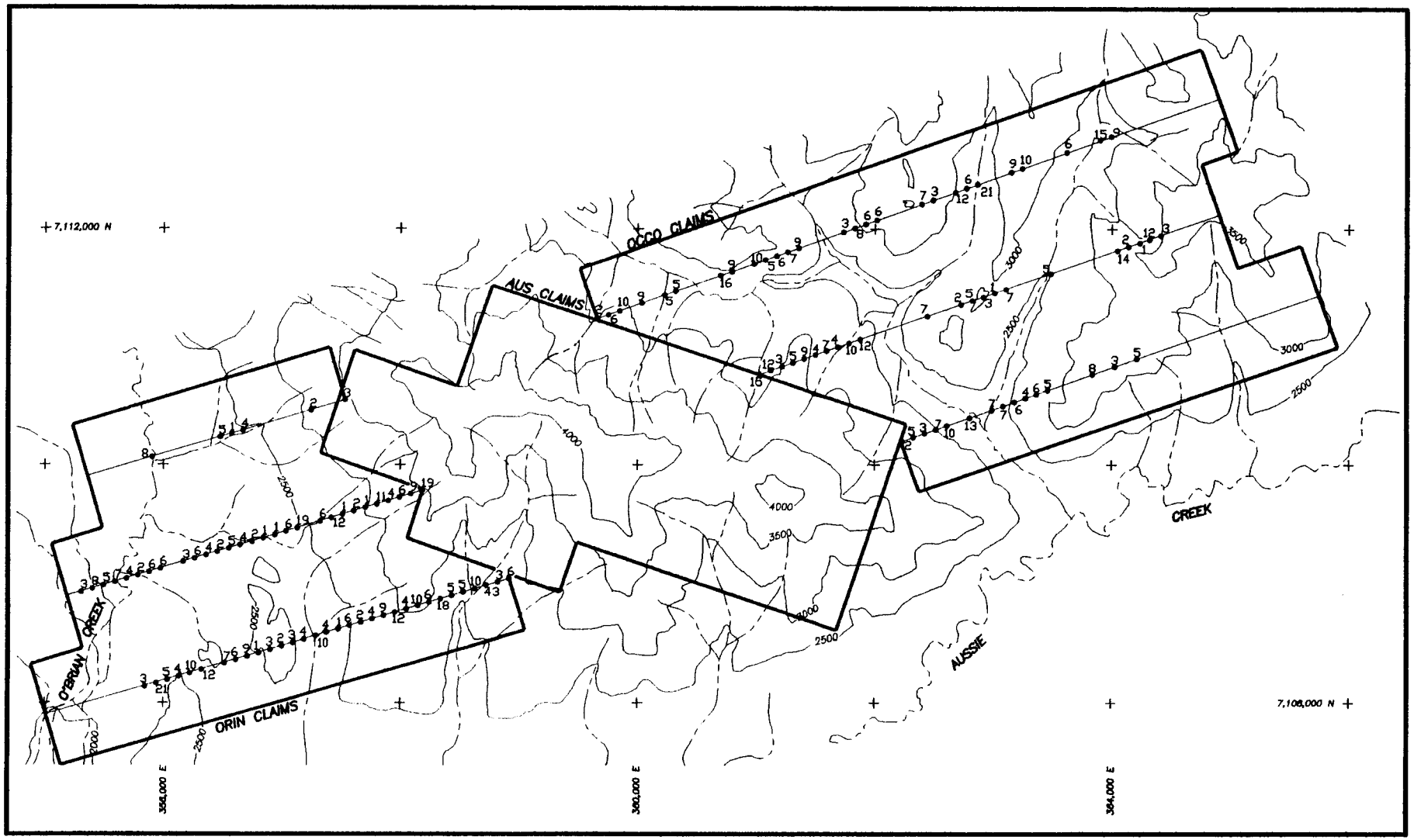
Samples were analyzed at Min-En Laboratories Ltd., for gold plus 31 element ICP.

Soil Sample results

Figures 5-8 show posted soil geochemical results for Au, As, Ag, and Sb. These four elements commonly display coincident anomalies over mineralized areas within the quartz monzonite intrusion on Panorama ridge and it is assumed that this signature would be present in mineralized areas outside the intrusions.

Because of the thick B horizon soil developed over most of the property, the anomalous soil data, especially those areas with coincident Au, As, Bi, and Sb, must be considered as significant and probably representative of underlying bedrock mineralization. In the authors experience, the magnitude of soil sample results over Fort Knox style mineralization is normally much lower than results obtained from sampling fresh exposed outcrop beneath the soil anomalies.

Three areas are slightly anomalous in Au, As, and Sb. The area are at the beginning of the two southernmost soil lines extending westward from the Aus 15 and 53 Claim boundary and from the middle line extending west from the Aus 23 claim boundary.



LEGEND

- CLAIM BOUNDARY
- SAMPLE LINE
- 2000 ELEVATION CONTOUR
- CREEK
- 6 1996 SOIL SAMPLE LOCATION ASSAY RESULT

PROFESSIONAL ENGINEER PROVINCE OF R. A. GHERTY GEOLOGICAL

UTM N/ TN mN

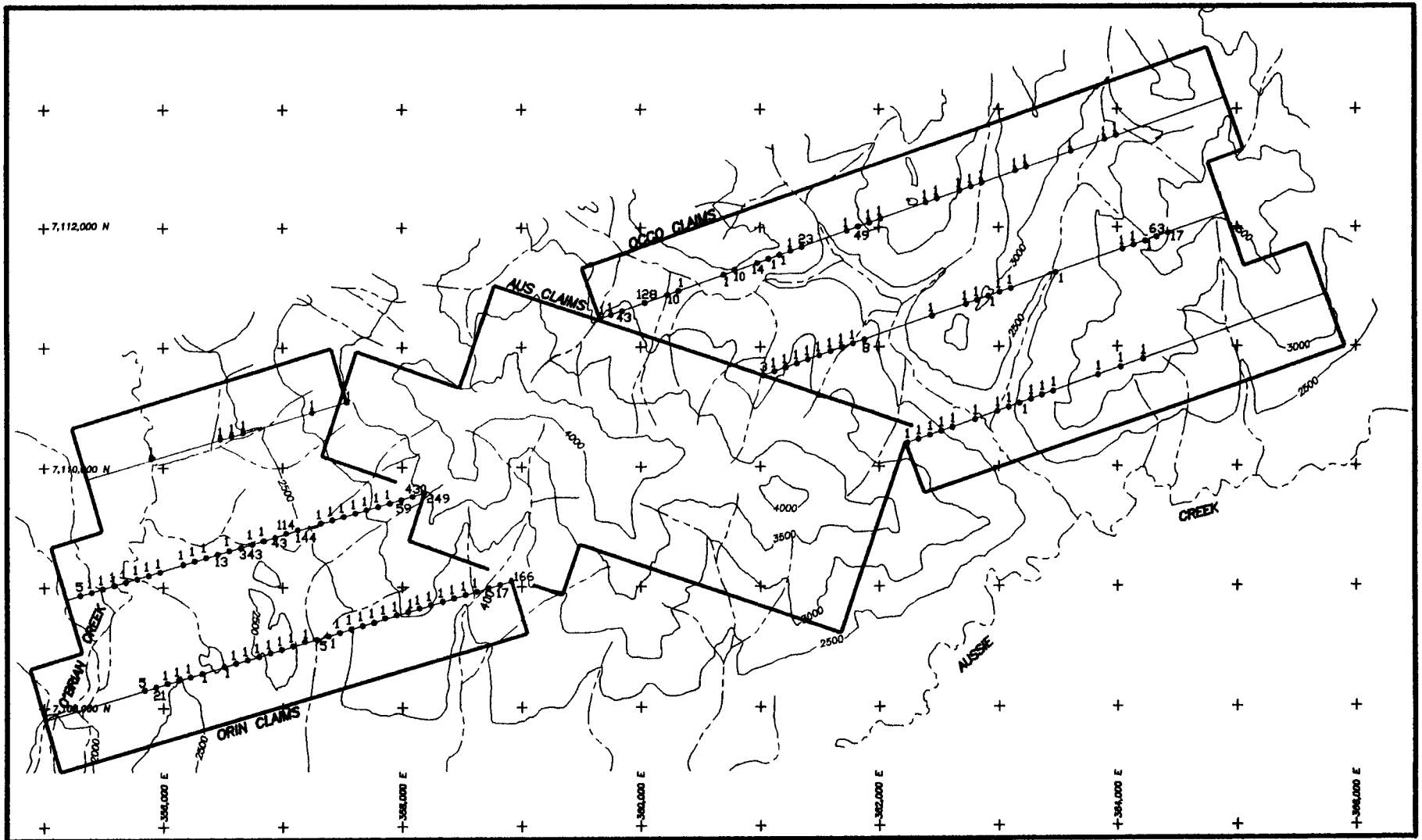
0 500 1000 1500 2000 METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
Au SOIL GEOCHEMISTRY

Aurum Geological Consultants Inc.

SCALE: 1 : 50,000		DATE: Feb, 1997
N.T.S.: 116 A/4	DRAWN: JC	FIGURE: 5



LEGEND

- CLAIM BOUNDARY
- SAMPLE LINE
- 2000 ELEVATION CONTOUR
- CREEK
- 21 1996 SOIL SAMPLE LOCATION ASSAY RESULT

UTM NAD 83

TN

MN

0 500 1000 1500 2000

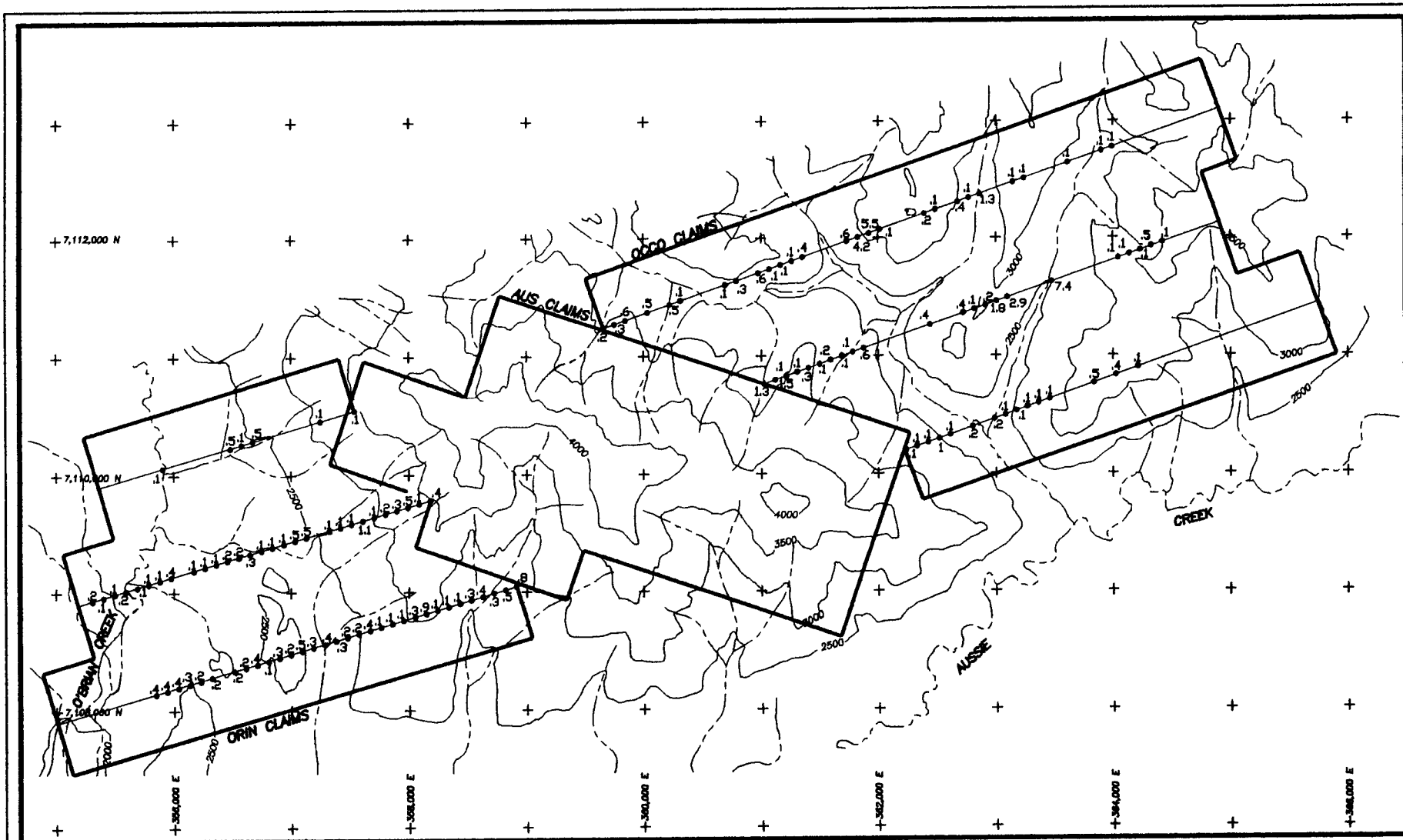
METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
As SOIL GEOCHEMISTRY

Aurum Geological Consultants Inc.

SCALE: 1 : 50,000		DATE: Feb. 1997
N.T.S.: 116 A/4	DRAWN: JO	FIGURE: 6



LEGEND

- CLAIM BOUNDARY
- SAMPLE LINE
- 2000 ELEVATION CONTOUR
- CREEK
- 1996 SOIL SAMPLE LOCATION ASSAY RESULT

UTM N

TN

MN

500 1000 1500 2000

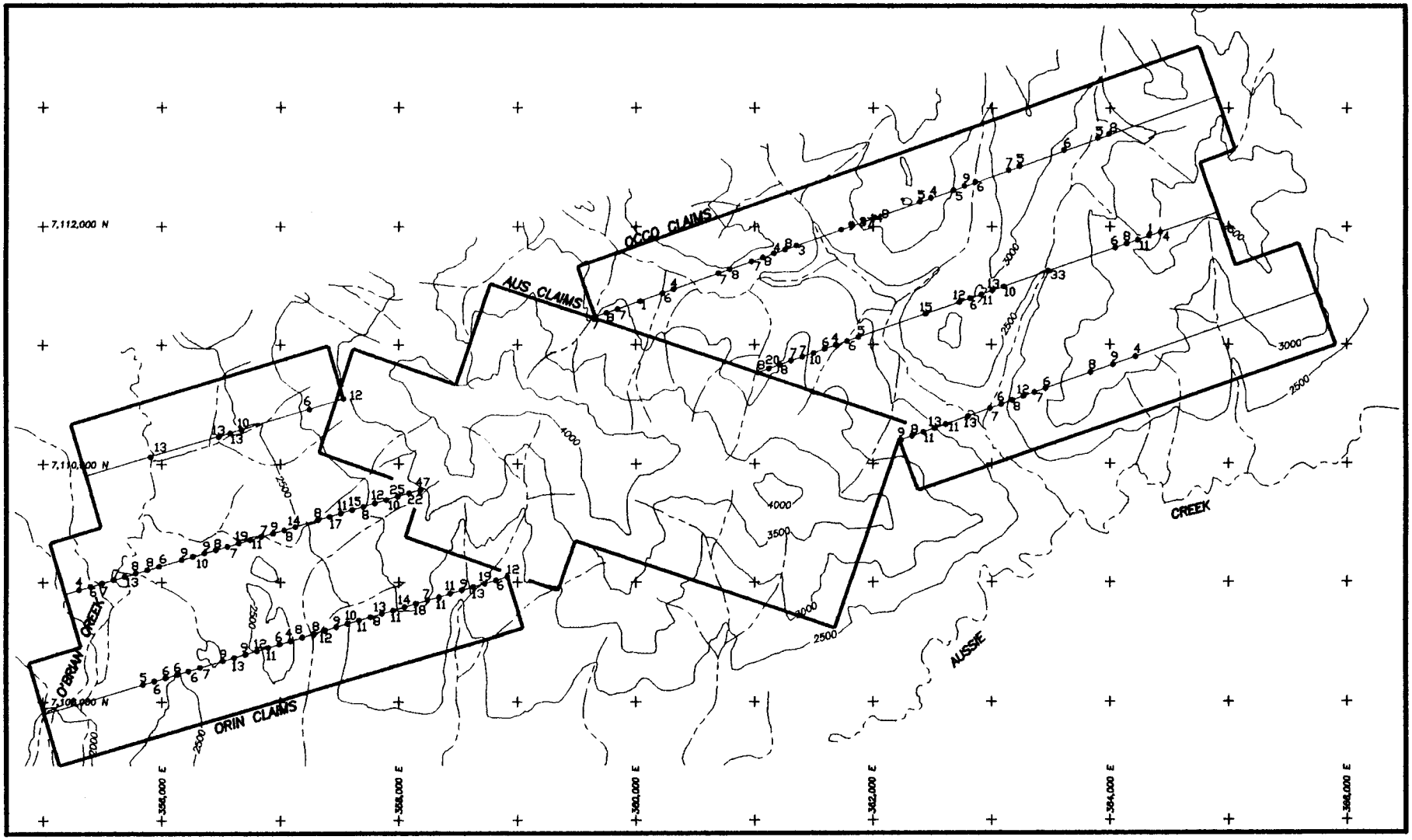
METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
Ag SOIL GEOCHEMISTRY

Aurum Geological Consultants Inc.

SCALE: 1 : 50,000		DATE: Feb. 1997
N.T.S.: 116 A/4	DRAWN: JO	FIGURE: 7



LEGEND

- CLAIM BOUNDARY
- SAMPLE LINE
- 2000 ELEVATION CONTOUR
- CREEK
- 5 1996 SOIL SAMPLE LOCATION ASSAY RESULT

PROFESSIONAL ENGINEER PROVINCE OF R. A. PETER GEOSCIENTIST

UTM N/A TN mN

0 500 1000 1500 2000 METRES

ORINOCO GOLD INC.
AUS-OCCO-ORIN CLAIMS

PANORAMA RIDGE
Sb SOIL GEOCHEMISTRY

Aurum Geological Consultants Inc.

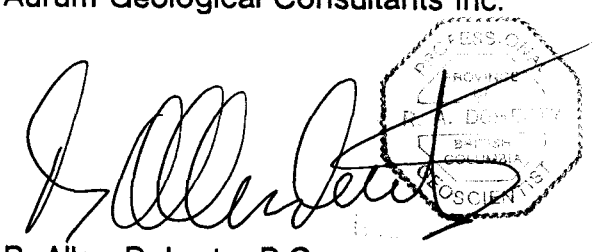
SCALE: 1 : 50,000		DATE: Feb, 1997
N.T.S.: 116 A/4	DRAWN: JC	FIGURE: 8

CONCLUSIONS

The soil sampling program on the Orin and Occo claims has returned a number of low grade anomalous areas just outside the boundaries of the Aus claim block.

Since there is a thick cover of loess or brunisol over most of this area, weak soil geochemical results can be significant. It is recommended that more detailed soil sampling be carried out over these areas.

Respectfully submitted,
Aurum Geological Consultants Inc.



R. Allan Doherty, P.Geo.

March 12, 1997

REFERENCES

Abbott, J.G., 1993. Revised Stratigraphy and New Exploration Targets in the Hart River Area, Southeastern Ogilvie Yukon. *in* Yukon Exploration and Geology , 1992; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 13-23.

BBN James Capel Inc., 1994. Loki Gold Corporation, Heap Leach Mining Comes to the Klondike; September 2, 1994.

Emond, D.S. and Lynch, T., 1992. Geology, and Mineralogy and Geochemistry of Tin and Tungsten Veins, Breccias and Skarns, McQuesten River Region (115 P (north) and 105 M 13), Yukon; *in* Yukon Geology Vol. 3; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.133-159.

Hollister, V.F., 1991. Fort Knox Porphyry Gold Deposit, Fairbanks, Alaska. *in* Case Histories of Mineral Deposits, Volume 3, Porphyry Copper, Molybdenum, and Gold Deposits, Volcanogenic Deposits in Layered Rock, V.F. Hollister ed., Society for Mining, Metallurgy, and Exploration, Inc., Litteton, Colorado.

Minfile, 1993. Yukon Minfile, WP 5.1 Version, 15 Feb/93; Exploration and Geological Services, Department of Indian and Northern Affairs, Whitehorse Yukon.

Murphy, D.C., Heon, D., and Hunt, J., 1993. Geological Map of Clear Creek Map Area, Western Selwyn Basin (NTS 115P/14). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada.

Murphy, D.C., Heon, D., 1994. Geology and Mineral Occurrences of Sprague Creek Map Area (115P/15), Western Selwyn Basin. *In*: Yukon Exploration and Geology 1993; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 29-46

Northern Miner, Amax Gold Reports Reserve Increase, The Northern Miner, Southam Business Communications Inc., (Mar 29, 1993), Vol. 79 No. 74.

Roots, C.F., 1993. Nature of the Robert Service thrust on Fork Plateau and implications for mineral exploration, Mayo map area, In: Yukon Exploration and Geology 1992 Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada.

Wheeler, J.O. and McFeely, P., 1991. Tectonic Assemblage Map of the Canadian Cordilleras and Adjacent parts of the United States of America; Geological Survey of Canada, Map 1712A, scale 1:2,000,000.

STATEMENT OF QUALIFICATIONS (RAD)

I, R. Allan Doherty, with business address:
Aurum Geological Consultants Inc.
205 - 100 Main Street
P.O. Box 4367
Whitehorse, Yukon
Y1A 3T5

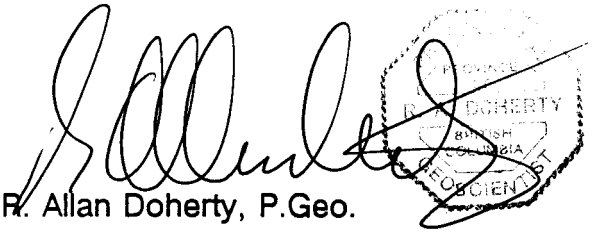
1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 205 - 100 Main Street, P.O. Box 4367, Whitehorse, Yukon.

2. I am a graduate of the University of New Brunswick, with a degree in geology (Hons. B.Sc., 1977) and that I attended graduate school at Memorial University of Newfoundland (1978-81). I have been involved in geological mapping and mineral exploration continuously since then.

3. I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 20564, and of the CIMM.

4. I supervised the 1996 work program and the preparation of this report on the Orin and Occo Claims which is based on data collected during property work in 1996 by Aurum Geological Consultants Inc. and on referenced property reports.

5. I have no direct or indirect interests in the properties or securities of Orinoco Gold Inc.



March 11, 1997 R. Allan Doherty, P.Geo.

STATEMENT OF COSTS

Costs are for work completed between September 1 and 10, 1996 on the Orin 1-42 and Occo 1-60 Claims.

A. Personnel

Peter Neugebauer, Soil Sampler	
Sept 2-10, 1996, 7 days @ 300/day	$2,100.00
Michel Tetrault, Soil Sampler	
Sept 2-10, 1996, 6 days @ $300/day	$1,800.00
Jeff Hunt, Soil Sampler	
Sept 1-5, 1996, 4 days @ $300/day	$1,200.00
Brian Sauer, Prospector Soil sampler	
Sept 4, 1997, 1 day @ $300/day	$300.00
Tom Tremmils, Geologist	
September 4, 1997 1 day $350/day	$350.00

B. Analytical

128 soil samples @ $ 18.50 per sample	$2,368.00

C. Support Costs

Helicopter 8 hrs $800/hr	$6,400.00
Sample bags, Flagging tape etc.	$100.00
Camp Costs (19 man days @ $60 per man)	$1,140.00

D. Report Costs

Report preparation and AutoCad Drafting	$2,000.00

Total Costs	**$17,750.00**

APPENDIX A

Analytical Reports

COMP: ORINOCO GOLD
PROJ:
ATTN:

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0713-SJ1+2
DATE: 96/10/02
* * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SN PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM	Au-fire PPB
L100W 000	.1	1.32	1	315	.1	1	.11	.1	7	22	30	2.95	1	.07	9	.33	232	11	.01	21	1340	28	12	2	42	1	.02	1	59.1	1	106	3
L100W 300	.1	1.08	1	113	.1	1	.12	.1	5	16	15	1.89	1	.03	9	.39	129	6	.01	17	680	11	6	1	17	1	.02	1	38.3	1	62	2
L100W 900	.5	.80	1	279	.1	1	.07	.1	5	16	18	2.55	1	.06	5	.14	108	9	.01	18	720	41	10	1	57	1	.01	1	95.4	1	55	4
L100W 1000	.1	1.79	1	287	.1	1	.10	.1	12	28	28	3.17	1	.05	13	.51	762	13	.01	29	810	51	13	2	28	1	.03	1	84.5	1	194	1
L100W 1100	.5	1.78	1	247	.1	1	.08	.1	10	25	27	2.38	1	.03	7	.34	265	9	.01	23	400	18	13	1	17	1	.02	1	79.1	1	81	5
L100W 1700	.1	1.22	1	80	.1	1	.03	.1	6	15	51	4.57	1	.03	7	.08	70	10	.01	17	500	62	13	2	1	1	.01	1	54.7	1	34	8
L200W 000	.4	.91	249	139	.1	1	.23	.1	6	22	30	3.22	1	.04	4	.22	254	14	.01	15	2750	153	47	2	23	1	.03	1	121.4	1	43	19
L200W 001	.1	2.52	430	126	.1	1	.15	.1	13	32	165	4.48	1	.09	35	1.36	194	25	.01	78	1040	1	22	3	20	1	.03	1	68.8	1	62	9
L200W 002	.5	1.37	59	110	.1	1	.11	.1	9	23	30	3.07	1	.06	18	.58	224	11	.01	23	480	57	25	2	14	1	.06	1	72.3	1	72	6
L200W 003	.3	1.41	1	119	.1	1	.12	.1	8	24	27	2.58	1	.05	18	.46	138	9	.01	22	310	5	10	1	26	1	.05	1	63.3	1	44	4
L200W 004	.2	1.89	1	106	.1	1	.08	.1	11	26	23	2.81	1	.05	19	.53	215	10	.01	27	350	8	12	2	15	1	.04	1	50.4	1	78	11
L200W 005	.1	1.40	1	167	.1	1	.08	.1	8	22	23	2.76	1	.07	14	.53	185	10	.01	27	580	7	8	2	16	1	.05	1	60.7	1	97	1
L200W 006	1.1	1.99	1	297	.1	1	.09	.1	11	26	37	3.58	1	.04	16	.43	532	12	.01	29	860	12	15	2	15	1	.05	1	67.1	1	182	2
L200W 007	.1	1.51	1	182	.1	1	.06	.1	11	23	39	4.11	1	.03	11	.22	348	10	.01	30	490	8	11	2	9	1	.03	1	71.0	1	122	1
L200W 008	.1	2.10	1	206	.1	1	.07	.1	15	27	80	4.41	1	.04	16	.28	385	13	.01	42	540	48	17	2	12	1	.03	1	69.6	1	114	12
L200W 009	.1	1.12	1	282	.1	1	.06	.1	18	14	185	6.57	1	.10	6	.18	443	13	.01	44	730	34	8	4	10	1	.01	1	32.6	1	139	6
L200W 011	.5	.82	144	273	.1	1	.58	.1	6	15	86	1.61	1	.03	12	.38	325	7	.01	28	810	31	14	1	38	1	.02	1	50.4	1	99	19
L200W 012	.5	.71	114	254	.1	1	.44	.1	5	14	58	1.52	1	.03	7	.33	190	7	.01	19	860	30	8	1	39	1	.01	1	56.5	1	79	6
L200W 013	.1	1.21	43	221	.1	1	.22	.1	10	20	35	2.21	1	.04	12	.46	414	8	.01	23	690	6	9	1	27	1	.02	1	50.2	1	77	1
L200W 014	.1	1.10	1	194	.1	1	.08	.1	8	15	29	3.11	1	.03	8	.27	191	12	.01	37	280	2	7	2	9	1	.01	1	38.5	1	163	1
L200W 015	.1	1.76	1	278	.1	1	.11	.1	9	21	15	2.75	1	.03	12	.38	186	9	.01	26	250	7	11	2	15	1	.03	1	48.8	1	100	2
L200W 016	.3	1.60	343	234	.1	1	.11	.1	10	26	64	3.74	1	.06	14	.44	299	14	.01	34	1110	42	19	2	31	1	.03	1	87.0	1	111	4
L200W 017	.2	1.22	1	332	.1	1	.49	.1	10	21	44	2.65	1	.04	11	.52	382	9	.01	30	760	3	7	1	38	1	.03	1	41.0	1	83	5
L200W 018	.2	1.16	13	275	.1	1	.31	.1	8	21	38	2.26	1	.04	10	.46	281	9	.01	26	740	4	8	1	32	1	.03	1	41.7	1	84	2
L200W 019	.1	1.25	1	321	.1	1	.50	.1	13	23	26	2.55	1	.05	11	.50	388	9	.01	25	830	7	9	2	41	1	.03	1	48.5	1	88	4
L200W 020	.1	1.54	1	395	.1	1	.25	.1	12	25	33	2.61	1	.05	11	.48	982	9	.01	29	510	8	10	2	32	1	.03	1	50.0	1	64	6
L200W 021	.1	1.27	1	384	.1	1	.21	.1	13	17	32	3.20	1	.08	8	.30	447	11	.01	32	220	1	9	2	25	1	.01	1	37.0	1	78	3
L200W 023	.4	1.01	1	393	.1	1	.56	.1	5	20	39	1.54	1	.04	7	.29	116	5	.01	18	1110	8	6	1	90	1	.02	1	70.7	1	47	6
L200W 024	.1	1.43	1	387	.1	1	.38	.1	9	24	34	2.37	1	.04	13	.56	288	8	.01	26	640	1	8	2	36	1	.04	1	47.0	1	66	6
L200W 025	.1	1.42	1	231	.1	1	.15	.1	10	22	20	2.46	1	.04	12	.47	257	8	.01	25	300	4	8	2	21	1	.03	1	42.4	1	54	2
L200W 026	.1	1.97	1	317	.1	1	.28	.1	11	30	28	2.96	1	.05	15	.63	252	11	.01	28	320	1	13	2	35	1	.05	1	59.9	1	71	4
L200W 027	.2	1.24	1	339	.1	1	.62	.1	9	21	24	2.19	1	.04	11	.47	430	8	.02	23	680	1	7	2	45	1	.03	1	42.6	1	56	7
L200W 028	.1	1.19	1	312	.1	1	.57	.1	10	20	27	2.21	1	.03	11	.46	366	8	.02	26	720	2	7	1	42	1	.03	1	39.3	1	60	5
L200W 029	.1	1.18	1	336	.1	1	.47	.1	10	20	29	2.32	1	.04	12	.46	240	8	.01	24	780	3	6	1	46	1	.03	1	40.2	1	68	8
L200W 030	.2	.88	5	231	.1	1	.48	.1	6	15	16	1.32	1	.03	10	.39	117	4	.01	17	760	2	4	1	38	1	.03	1	33.1	1	54	3
L300W 000	.8	1.93	166	183	.1	1	1.74	.1	13	28	94	2.06	1	.05	20	.73	620	13	.02	38	1030	10	12	2	85	1	.03	1	61.9	1	240	6
L300W 100	.5	.90	17	147	.1	1	1.72	.1	8	17	54	1.30	1	.03	7	.32	620	9	.01	21	650	8	6	1	77	1	.02	1	36.1	1	68	3
L300W 200	.3	1.59	400	166	.1	1	.33	.1	11	25	64	2.64	1	.07	20	.59	330	10	.01	37	950	30	19	2	35	1	.04	1	56.4	1	90	43
L300W 300	.4	2.04	1	165	.1	1	.14	.1	10	28	29	2.81	1	.06	22	.57	259	11	.01	32	350	8	13	2	21	1	.05	1	63.1	1	86	10
L300W 400	.3	1.31	1	287	.1	1	.18	.1	8	21	21	2.39	1	.06	13	.39	376	9	.01	25	580	7	9	2	25	1	.03	1	62.2	1	80	5
L300W 500	.1	2.05	1	242	.1	1	.14	.1	15	28	35	3.19	1	.14	20	.76	346	12	.01	40	950	1	11	2	24	1	.03	1	78.3	1	209	5
L300W 600	.1	1.54	1	266	.1	1	.14	.1	10	21	24	3.43	1	.10	11	.33	412	12	.01	33	740	6	11	2	18	1	.02	1	53.4	1	178	18
L300W 700	.1	1.12	1	361	.1	1	.34	.1	10	22	47	2.42	1	.04	10	.48	405	9	.01	33	740	5	7	2	35	1	.03	1	48.4	1	105	6
L300W 800	.9	2.34	1	286	.1	1	.08	.1	13	28	30	3.53	1	.04	16	.36	254	12	.01	32	450	16	18	2	15	1	.04	1	56.5	1	62	10
L300W 900	.3	1.88	1	241	.1	1	.07	.1	12	25	39	3.67	1	.04	13	.39	343	11	.01	35	240	6	14	2	13	1	.03	1	55.7	1	80	4
L300W 1000	.1	1.60	1	258	.1	1	.08	.1	11	26	63	4.06	1	.04	13	.30	341	11	.01	32	320	13	11	2	11	1	.04	1	65.7	1	100	12
L300W 1100	.1	1.92	1	309	.1	1	.10	.1	9	26	38	2.78	1	.05	13	.49	201	10	.01	29	270	5	13	2	20	1	.03	1	52.9	1	71	9
L300W 1200	.1	1.19	1	202	.1	1	.12	.1	5	16	12	1.44	1	.03	8	.27	110	5	.01	14	240	9	8	1	17	1	.03	1	43.4	1	35	4

COMP: ORINOCO GOLD
PROJ:
ATTN:

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0713-SJ3+4
DATE: 96/10/02
* * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SN PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM	Au-fire PPB
L300W 1300	.4	2.03	1	324	.1	1	.11	.1	10	26	18	2.66	1	.03	12	.43	238	10	.01	26	320	5	11	2	20	1	.03	1	55.8	1	54	2
L300W 1400	.2	2.10	1	343	.1	1	.16	.1	11	29	39	3.00	1	.04	16	.57	242	12	.01	33	280	1	10	2	27	1	.03	1	67.8	1	81	6
L300W 1500	.2	1.49	1	196	.1	1	.11	.1	7	21	18	2.46	1	.04	12	.35	155	9	.01	20	310	4	9	1	18	1	.03	1	53.7	1	47	1
L300W 1600	.3	2.17	1	309	.1	1	.24	.1	11	32	35	3.08	1	.05	16	.60	242	12	.01	33	240	1	12	2	36	1	.04	1	65.4	1	67	4
L300W 1700	.4	1.46	5	369	.1	1	.42	.1	11	27	43	2.76	1	.05	13	.56	374	11	.01	31	600	1	8	2	42	1	.04	1	52.4	1	80	10
L300W 1800	.3	1.35	1	294	.1	1	.31	.1	12	24	45	2.69	1	.05	10	.44	388	10	.01	29	690	1	8	2	38	1	.03	1	53.5	1	98	4
L300W 1900	.5	1.04	1	300	.1	1	.62	.1	10	20	27	2.34	1	.05	12	.54	634	8	.02	31	830	1	4	2	45	1	.03	1	40.3	1	78	3
L300W 2000	.2	.79	1	172	.1	1	.09	.1	5	13	15	1.64	1	.04	4	.15	212	6	.01	11	370	8	6	1	15	1	.03	1	53.8	1	33	2
L300W 2100	.3	1.85	1	175	.1	1	.10	.1	12	25	33	3.46	1	.04	19	.32	252	12	.01	28	340	7	11	2	16	1	.04	1	58.9	1	55	3
L300W 2200	.1	2.02	1	332	.1	1	.09	.1	10	28	45	3.22	1	.04	12	.42	221	12	.01	30	220	5	12	2	19	1	.03	1	55.8	1	67	1
L300W 2300	.4	1.69	1	358	.1	1	.15	.1	11	29	41	2.96	1	.05	13	.54	241	11	.01	33	170	1	9	2	27	1	.04	1	54.6	1	72	9
L300W 2400	.2	2.12	1	505	.1	1	.16	.1	13	26	18	3.15	1	.05	13	.42	275	12	.01	32	290	10	13	2	22	1	.04	1	54.6	1	71	6
L300W 2500	.2	1.63	1	449	.1	1	.12	.1	11	27	37	2.67	1	.04	12	.44	187	10	.01	29	160	2	9	2	22	1	.02	1	53.3	1	64	7
L300W 2700	.2	.63	1	827	.1	1	2.77	.1	31	11	28	2.57	1	.02	1	.32	9066	18	.01	54	1780	34	7	2	155	1	.01	1	23.1	1	32	12
L300W 2800	.2	.88	1	594	.1	1	.29	.1	11	16	42	2.56	1	.14	8	.27	380	15	.01	27	1010	16	6	1	112	1	.01	1	45.6	1	55	10
L300W 2900	.3	1.11	1	234	.1	1	.29	.1	9	20	25	2.24	1	.04	10	.43	276	9	.01	24	700	1	6	2	37	1	.02	1	42.5	1	58	4
L300W 3000	.4	1.24	1	340	.1	1	.47	.1	9	22	26	2.31	1	.04	12	.50	269	9	.02	26	750	1	6	2	41	1	.03	1	45.1	1	79	5
L300W 3100	.4	1.24	21	374	.1	1	.52	.1	9	20	22	2.08	1	.04	11	.44	263	8	.01	23	690	1	6	1	40	1	.03	1	39.0	1	55	21
L300W 3200	.4	1.12	5	314	.1	1	.68	.1	8	19	18	1.96	1	.04	11	.45	327	8	.01	22	800	1	5	1	46	1	.03	1	37.2	1	58	3
L400E 000	.2	1.22	1	117	.1	1	.05	.1	8	22	28	3.45	1	.05	12	.29	202	11	.01	22	390	4	7	2	12	1	.05	1	78.3	1	67	2
L400E 100	.3	1.37	1	247	.1	1	.09	.1	12	24	58	3.19	1	.10	12	.48	514	11	.01	35	640	12	8	2	26	1	.05	1	59.8	1	129	6
L400E 200	.6	1.39	43	254	.1	1	.54	.1	7	25	38	1.83	1	.06	19	.57	141	8	.01	29	600	1	7	2	40	1	.04	1	44.3	1	102	10
L400E 400	.5	2.44	128	120	.1	1	.19	.1	12	39	29	3.23	1	.16	34	1.85	373	13	.01	38	300	1	1	3	20	1	.07	1	65.3	1	62	9
L400E 600	.5	1.94	10	256	.1	1	.23	.1	15	30	64	3.51	1	.11	26	1.03	595	15	.01	47	790	1	6	3	34	1	.04	1	56.7	1	117	5
L400E 700	.1	.99	1	113	.1	1	.05	.1	8	18	58	3.15	1	.05	7	.32	323	11	.01	31	950	2	4	2	15	1	.03	1	56.6	1	89	5
L400E 1100	.1	.99	1	265	.1	1	.29	.1	17	18	54	3.97	1	.05	10	.35	1125	12	.01	60	790	62	7	2	35	1	.02	1	39.8	1	340	16
L400E 1200	.3	1.49	10	280	.1	1	.22	.1	10	22	33	2.30	1	.05	13	.56	352	9	.01	33	560	18	8	2	28	1	.03	1	44.0	1	131	9
L400E 1400	.6	1.29	14	285	.1	1	.23	.1	7	24	31	2.31	1	.04	10	.44	120	8	.01	24	890	17	7	2	43	1	.02	1	42.2	1	80	10
L400E 1500	.1	1.50	1	195	.1	1	.12	.1	11	21	23	3.39	1	.04	16	.34	559	10	.01	26	550	7	8	2	16	1	.03	1	49.5	1	83	5
L400E 1600	.1	.69	1	110	.1	1	.04	.1	4	9	14	1.43	1	.04	2	.10	119	6	.01	7	270	7	4	1	12	1	.02	1	42.4	1	25	6
L400E 1700	.1	1.81	1	157	.1	1	.09	.1	12	29	29	3.05	1	.05	18	.63	297	11	.01	34	330	1	8	2	18	1	.03	1	61.2	1	127	7
L400E 1800	.4	1.29	23	206	.1	1	.71	.1	10	24	34	2.34	1	.07	15	.81	279	10	.01	38	580	1	3	2	43	1	.02	1	39.0	1	140	9
L400E 2200	.6	1.27	1	773	.1	1	.35	.1	17	38	85	3.98	1	.11	8	.54	410	34	.01	146	760	2	9	2	57	1	.04	1	161.7	4	1551	3
L400E 2300	4.2	.85	49	783	.1	1	.96	.1	5	100	229	2.41	1	.10	3	.11	45	56	.01	71	4560	19	37	1	373	1	.01	1	990.7	21	707	8
L400E 2400	5.5	1.54	1	301	.1	1	.34	.1	7	63	33	3.42	1	.07	15	.34	164	27	.01	35	3580	37	14	2	142	1	.02	1	287.2	6	317	6
L400E 2500	.1	1.37	1	620	.1	1	.08	.1	12	20	24	3.21	1	.06	13	.28	1201	12	.01	30	350	8	8	2	19	1	.02	1	53.8	1	121	6
L400E 2900	.2	1.05	1	933	.1	1	.63	.1	12	15	61	3.38	1	.12	11	.36	209	15	.01	29	840	3	5	2	70	1	.01	1	48.7	1	105	7
L400E 3000	.1	.54	1	338	.1	1	.14	.1	6	9	46	1.90	1	.07	2	.10	119	9	.01	21	430	5	4	1	18	1	.01	1	42.4	1	84	3
L400E 3200	.4	.74	1	315	.1	1	.26	.1	8	12	52	2.03	1	.07	6	.21	555	10	.01	22	710	5	5	1	19	1	.02	1	46.5	1	129	12
L400E 3300	.1	1.88	1	231	.1	1	.09	.1	10	26	19	3.03	1	.03	16	.45	205	11	.01	24	290	1	9	2	15	1	.03	1	53.2	1	53	6
L400E 3400	1.3	.50	1	1061	.1	1	.70	.1	5	22	42	1.92	1	.10	1	.07	104	14	.01	32	1840	11	6	1	182	1	.01	1	165.4	2	120	21
L400E 3700	.1	1.38	1	235	.1	1	.13	.1	12	22	49	3.09	1	.06	13	.42	185	11	.01	28	330	1	7	2	31	1	.01	1	51.4	1	81	9
L400E 3800	.1	1.11	1	233	.1	1	.10	.1	8	16	17	2.05	1	.08	9	.36	284	8	.01	17	680	1	5	1	17	1	.01	1	41.9	1	50	10
L400E 4200	.1	1.27	1	515	.1	1	.42	.1	12	20	58	3.13	1	.05	17	.35	332	11	.01	31	320	1	6	2	30	1	.02	1	54.9	1	107	6
L400E 4500	.1	1.06	1	448	.1	1	.13	.1	15	22	132	3.80	1	.09	14	.36	752	16	.01	46	940	1	5	2	21	1	.01	1	57.0	1	232	15
L400E 4600	.1	1.58	1	157	.1	1	.08	.1	16	23	40	3.09	1	.04	15	.37	794	10	.01	31	530	5	8	2	18	1	.03	1	40.8	1	79	9
L500E 000	1.3	1.20	3	199	.1	1	.36	.1	13	27	69	3.25	1	.09	11	1.01	568	23	.01	80	700	1	8	2	60	1	.01	1	105.6	1	338	15
L500E 001	1.5	1.32	1	356	.1	1	.24	.1	8	40	26	3.37	1	.05	7	.17	318	15	.01	30	4280	51	20	2	136	1	.03	1	223.0	3	94	12

COMP: ORINOCO GOLD
PROJ:
ATTN:

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0713-SJ5+6
DATE: 96/10/02
* * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SN PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM	Au-fire PPB
L500E 002	.1	1.74	1	299	.1	1	.12	.1	10	23	21	3.44	1	.05	18	.40	294	11	.01	30	370	3	8	2	19	1	.04	1	54.0	1	63	3
L500E 003	.1	1.15	1	345	.1	1	.22	.1	9	19	23	2.51	1	.07	9	.32	347	9	.01	29	240	5	7	2	24	1	.03	1	51.1	1	78	5
L500E 004	.3	1.52	1	292	.1	1	.33	.1	10	26	41	2.39	1	.05	12	.52	368	9	.01	30	740	1	7	2	38	1	.04	1	48.7	1	95	9
L500E 005	.1	2.07	1	198	.1	1	.13	.1	14	27	23	4.04	1	.06	26	.41	741	13	.01	37	750	4	10	3	19	1	.04	1	53.9	1	68	4
L500E 006	.2	1.45	1	270	.1	1	.37	.1	14	24	39	3.26	1	.07	13	.53	429	11	.01	44	750	1	6	2	37	1	.03	1	40.9	1	97	7
L500E 007	.1	.85	1	184	.1	1	.10	.1	6	14	16	2.16	1	.06	9	.21	163	8	.01	16	230	2	4	1	16	1	.03	1	51.8	1	47	4
L500E 008	.1	1.17	1	242	.1	1	.21	.1	16	19	60	3.99	1	.08	11	.40	476	15	.01	73	360	1	6	2	44	1	.02	1	35.8	1	341	10
L500E 009	.6	1.40	8	312	.1	1	.77	.1	11	24	45	2.67	1	.12	13	.71	317	14	.01	41	660	1	5	2	59	1	.02	1	56.2	1	132	12
L500E 1500	.4	1.40	1	602	.1	1	.09	.1	13	27	55	4.79	1	.16	12	.25	738	15	.01	48	790	56	15	3	100	1	.02	1	72.9	1	130	7
L500E 1800	.4	2.16	1	220	.1	1	.09	.1	14	24	23	3.29	1	.04	18	.37	310	11	.01	28	480	5	12	2	17	1	.03	1	56.8	1	68	2
L500E 1900	.1	1.36	1	245	.1	1	.12	.1	8	20	22	2.32	1	.05	10	.35	325	9	.01	23	390	6	6	2	26	1	.02	1	48.6	1	44	5
L500E 2000	.2	2.05	1	382	.1	1	.14	.1	11	31	24	2.96	1	.06	12	.45	233	11	.01	33	290	2	11	2	26	1	.03	1	78.1	1	129	3
L500E 2100	1.8	1.65	1	351	.1	1	.14	.1	10	35	34	3.11	1	.04	14	.35	245	24	.01	54	700	5	13	2	44	1	.03	1	156.2	2	295	1
L500E 2200	2.9	1.85	1	511	.1	1	.28	.1	14	52	45	4.26	1	.11	18	.61	331	17	.01	76	1420	1	10	3	63	1	.08	1	135.3	2	370	7
L500E 2600	7.4	.71	1	880	.1	1	.74	.1	7	86	179	3.33	1	.13	2	.06	219	58	.01	103	5150	29	33	2	415	1	.01	1	463.4	11	806	5
L500E 3200	.1	1.37	1	444	.1	1	.18	.1	12	20	72	2.78	1	.10	14	.51	281	13	.01	39	280	1	6	2	21	1	.01	1	51.7	1	136	14
L500E 3300	.1	1.56	1	622	.1	1	.15	.1	17	20	39	3.55	1	.09	15	.38	756	13	.01	32	380	4	8	2	24	1	.02	1	41.3	1	74	2
L500E 3400	.1	1.39	1	288	.1	1	.12	.1	10	20	25	2.91	1	.10	11	.29	203	23	.01	32	290	4	11	2	27	1	.02	1	125.4	1	335	1
L500E 3500	.5	2.03	63	925	.1	1	.92	.1	13	27	42	3.18	1	.12	36	1.58	394	16	.01	39	700	1	1	2	63	1	.01	1	51.8	1	84	12
L500E 3600	.1	1.82	17	488	.1	1	.68	.1	11	24	26	3.01	1	.13	26	.96	689	13	.01	30	560	1	4	2	39	1	.01	1	59.1	1	78	3
L600E 000	.1	1.45	1	136	.1	1	.09	.1	5	23	13	2.04	1	.04	7	.38	187	9	.01	14	930	13	9	1	20	1	.02	1	51.9	1	81	2
L600E 100	.1	1.41	1	116	.1	1	.15	.1	7	30	20	3.25	1	.04	8	.32	222	11	.01	23	1210	20	8	2	26	1	.04	1	97.3	1	86	5
L600E 200	.1	1.90	1	118	.1	1	.10	.1	8	26	13	3.33	1	.03	14	.33	248	11	.01	21	400	7	11	2	17	1	.04	1	60.1	1	45	3
L600E 300	1.0	1.57	1	196	.1	1	.17	.1	8	44	41	3.40	1	.06	9	.43	328	14	.01	39	2690	40	13	2	169	1	.02	1	172.4	2	193	7
L600E 400	.1	1.65	1	373	.1	1	.87	.1	11	30	48	3.18	1	.07	18	.53	347	13	.01	37	5620	9	11	2	136	1	.02	1	77.1	1	167	10
L600E 600	.2	1.52	1	205	.1	1	.26	.1	11	24	46	2.90	1	.04	16	.50	523	10	.01	29	690	77	13	2	31	1	.03	1	48.4	1	126	13
L600E 800	.2	1.23	1	272	.1	1	.42	.1	24	22	27	2.83	1	.05	11	.48	1743	12	.01	26	1260	73	7	2	43	1	.02	1	63.7	1	122	7
L600E 900	.1	1.17	1	388	.1	1	.20	.1	13	21	54	2.88	1	.06	9	.27	922	10	.01	40	960	11	6	2	53	1	.02	1	43.8	1	170	7
L600E 1000	.1	1.38	1	210	.1	1	.07	.1	14	21	55	3.82	1	.08	10	.31	975	13	.01	40	850	18	8	2	49	1	.01	1	48.8	1	153	6
L600E 1100	.1	1.86	1	145	.1	1	.06	.1	9	21	19	3.51	1	.03	15	.17	297	12	.01	17	370	17	12	2	12	1	.05	1	74.0	1	40	4
L600E 1200	.1	1.08	1	153	.1	1	.06	.1	10	22	94	3.27	1	.05	5	.26	271	12	.01	31	660	5	7	2	19	1	.03	1	78.7	1	88	6
L600E 1300	.1	1.21	1	262	.1	1	.25	.1	10	19	30	2.80	1	.05	11	.37	299	9	.01	30	190	4	6	2	21	1	.02	1	40.4	1	114	5
L600E 1700	.5	1.13	1	475	.1	1	.25	.1	10	25	33	3.38	1	.13	8	.31	255	15	.01	33	1640	7	8	2	75	1	.02	1	116.3	1	125	8
L600E 1900	.4	1.32	1	334	.1	1	.12	.1	14	21	125	4.19	1	.06	5	.15	401	12	.01	57	690	10	9	2	28	1	.01	1	74.2	1	164	3
L600E 2100	.1	.87	1	285	.1	1	.24	.1	9	14	26	2.38	1	.08	7	.28	482	10	.01	26	690	3	4	1	40	1	.01	1	37.5	1	57	5