# GEOLOGICAL BRANCH 1258 - 13322 ASSESSMENT REPORT

ON THE

### NI/OREGON PROPERTY

Kamloops Mining Division, British Columbia

Claim(s):

NI - 1

2326(12)

NI - II

2327(12)

OREGON 100

5291(12)

OREGON 200

5326(12)

Latitude: 50°38.3'N. Longitude: 121°24'W.

N.T.S. 92I/11W.

Owner:

YUCANA RESOURCES INC.

and Operator

P.O. Box 12137 Nelson Square

Suite 501 - 808 Nelson Street

Vancouver, B.C. V6Z 2H2

(604) 684-7527

Consultant:

MINOREX CONSULTING LTD.

2391 Bossert Avenue

Kamloops, B.C. V2B 4V6

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December 19, 1984

J.D. Blanchflower, F.G.A.C. P.P.L. Chung, B.Sc. Consulting Geologists

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#### INTRODUCTION

Yucana Resources Inc. of Suite 501 - 808 Nelson Street, Vancouver, British Columbia owns four contiguous claims situated in the Kamloops Mining Division, B.C. This report on the NI/OREGON property, prepared at the request of the directors of Yucana Resources Inc., describes the 1984 prospecting programme.

The purpose of the programme was to evaluate the exploration potential of the property. This assessment work, including report preparation, was undertaken between October 23rd and December 19th, 1984.

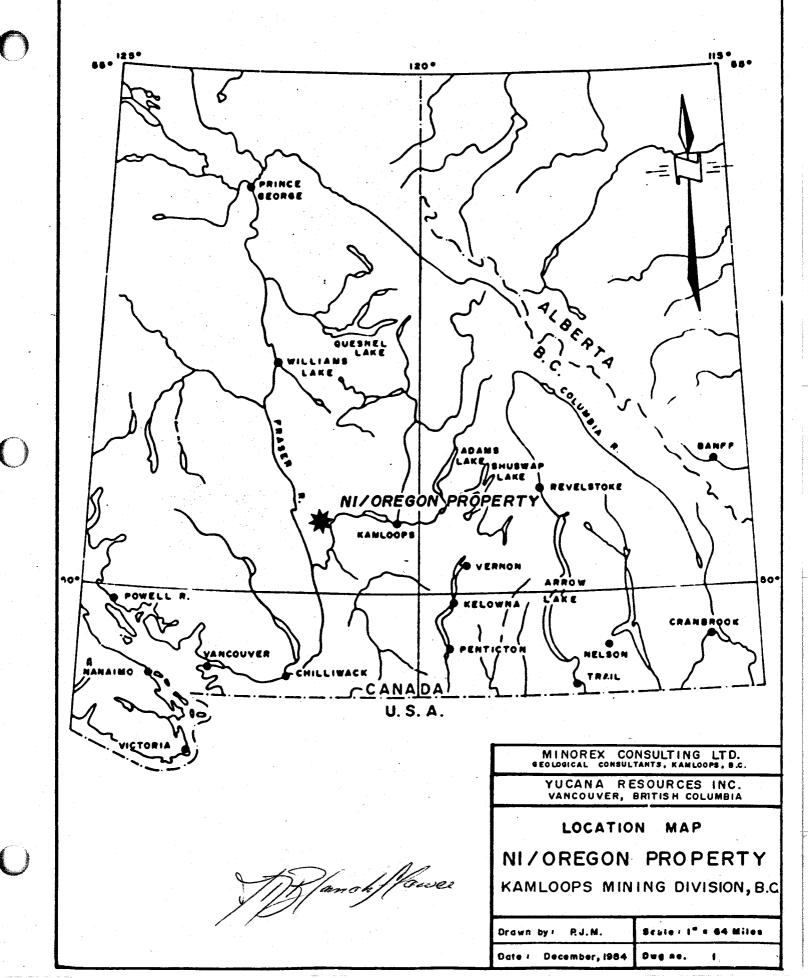
#### SUMMARY

The property is comprised of the NI-I, Oregon 100 and Oregon 200 M.G.S. claims and the NI-II two-post claim; totalling 43 units. The claims are situated on both sides of Oregon Jack Creek, approximately 13 kilometres southwest of the city of Ashcroft, B.C. They are located in the Kamloops Mining Division at geographic coordinates 50°38.3'N. latitude by 121°24'W. longitude (N.T.S. 92I/11W).

Vehicular access is possible via Highway 1 south for 8 kilometres from the Ashcroft - Highway 1 road junction; thence west on the Oregon Jack Creek road for 4.5 kilometres to the property.

Most of the property is situated within relatively gentle terrain although its western portion does overlie the northeasterly facing slopes of White Mountain. Elevations range from 2,200 feet at Oregon Jack Creek to 4,600 feet A.M.S.L.

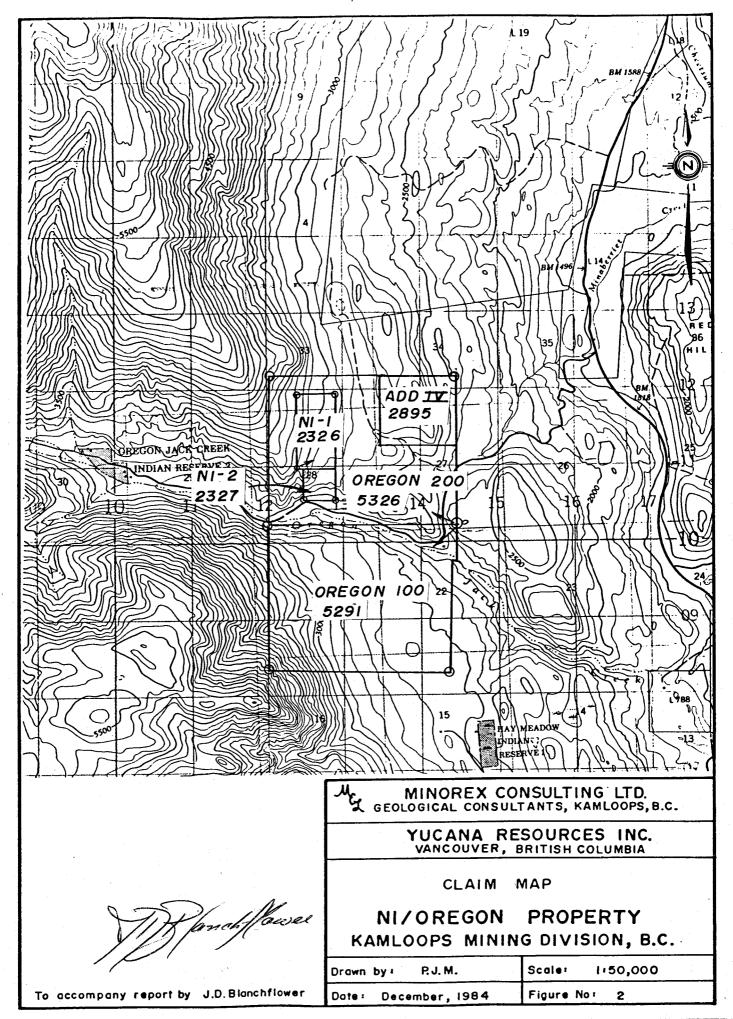
This region has undergone intermittent exploration since the days of the Fraser River and Cariboo gold rushes in the late 1800's. Immediately east of the property, Selco (BP Resources) is currently exploring for gold and silver-bearing massive sulphide mineralization on the ADD-MOLY property owned by Rea Gold Corporation. Although there has been no known exploration on the subject claims, in 1962 J.M. Carr, then a B.C.D.M. geologist, reported that gneissic rocks north of Oregon Jack Creek host malachite within quartz-ankerite veins.



The property lies regionally within the Intermontane Belt of southcentral British Columbia. It is underlain by a major north-northwesterly trending contact between marine sediments and volcanics of the Pennsylvanian and Permian Cache Creek Group and limestone of the Permian Marble Canyon Formation.

Results of the 1984 prospecting programme show that the northwestern portion of the property is underlain by rocks of the Cache Creek Group, while the southwestern portion is underlain by limestone of the Marble Canyon Formation. During the programme minor malachite, bornite and chalcopyrite mineralization were discovered in limonitized argillite. Assay results returned values of 0.1% copper and 0.75 o.p.t. silver for this mineralization.

Geological and soil geochemical surveying, and possible trenching are recommended to further test the results of this year's programme.



#### PROPERTY AND OWNERSHIP

The property consists of four contiguous mineral claims, situated in the Kamloops Mining Division of southcentral British Columbia. The configuration of the claims is shown in Figure 2. The following table summarizes all pertinent mineral claim data.

Claim Name	Record No.	<u>Type</u>	<u>Units</u>	Record Date	<u>Owner</u>
NI-I	2326	M.G.S.	2	Dec. 20/79	Yucana Resources Inc.
NI-II	2327	2-post	1	Dec. 20/79	Yucana Resources Inc.
OREGON 100	5291	M.G.S.	20	Dec. 20/83	Yucana Resources Inc.
OREGON 200	5326	M.G.S.	20	Dec. 22/83	Yucana Resources Inc.

The claims are wholly owned and operated by Yucana Resources Inc. of Vancouver, B.C.

#### LOCATION AND ACCESS

The property is situated over Oregon Jack Creek, 3 kilometres west of Highway 1 and 13 kilometres southwest of Ashcroft, B.C. Its geographic coordinates are 50°38.3'N. latitude by 121°24'W. longitude; N.T.S. 921/11W.

Vehicular access is readily possible via Highway 1 south for 8 kilometres from the Ashcroft - Highway 1 junction to the Oregon Jack Creek gravel road; thence, westward for 4.5 kilometres on the gravel road to the property.

#### **PHYSIOGRAPHY**

The claims cover the north and south sides of Oregon Jack Creek. Most of the terrain is quite gentle, although the relief increases towards the southwestern boundary near the eastern slopes of White Mountain. Elevations range from 2,200 to 4,600 feet A.M.S.L.

The climate of the region is relatively dry with precipitation usually totalling 180 to 250 mm. annually and snowfalls are generally 100 to 150 cm. in higher elevations. Temperatures range between -10 to +30°C. The exploration season extends from May to November.

The area is forested with hemlock, fir, and jackpine with little undergrowth at higher elevations. In the lower regions much of the area has been used for grazing cattle; thus it is mostly vegetated with bunch grass, low shrubs, and an occasional stand of hemlock, fir, and jackpine.

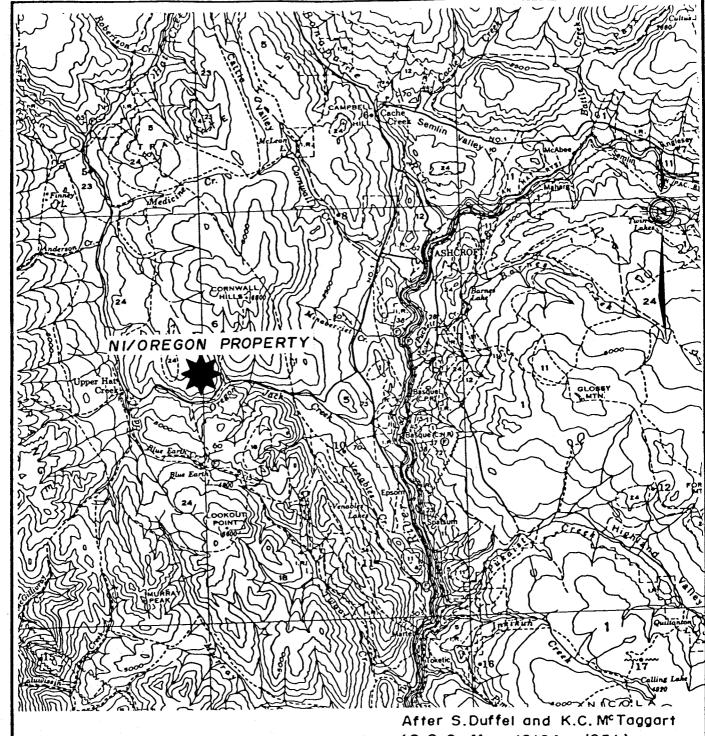
The property is very poorly exposed except along its western boundary where is higher relief.

#### **HISTORY**

Most of the region has undergone intermittent exploration since the gold rushes of the late 1800's. The most intense exploration activity took place during the late 1960's and early 1970's when numerous major and junior resource companies explored the nearby Guichon batholith and its margins for porphyry copper-molybdenum deposits.

The Red Hill copper deposit, situated immediately east of the subject claims, has received most of the exploration attention since it is underlain by a very large and prominent gossan zone. This deposit has been tested in the past for its porphyry copper potential but recently Selco (BP Resources) has been successfully exploring it for gold and silver-bearing massive sulphide mineralization. The adjoining ADD and MOLY claims, covering the eastern portion of the Red Hill deposit, are owned by Rea Gold Corporation and under option to Selco (BP Canada).

The subject property has no known exploration history. However, in 1962 Dr. J.M. Carr, then a B.C.D.M. geologist, reported malachite mineralization in quartz-ankerite veins hosted by gneissic rocks north of Oregon Jack Creek (Carr, 1962). It is not known whether this reported mineralization was tested.



(G.S.C. Map 1010A, 1951)

MINOREX CONSULTING LTD.

GEOLOGICAL CONSULTANTS, KAMLOOPS, B.C.

YUCANA RESOURCES INC. VANCOUVER, BRITISH COLUMBIA

REGIONAL GEOLOGY MAP

NI/OREGON PROPERTY KAMLOOPS MINING DIVISION, B.C.

Scale: 1:253,440 (1'=1/4mile) Drawn by: PJ.M. Dote: December, 1984 Figure No:

Hanch Howel

To accompany report by J.D. Blanchflower

#### LEGEND

#### (After Duffell and McTaggart, 1951)

#### CENOZOIC

#### TERTIARY

Miocene or Earlier

Kamloops Group

24 Basalt, andesite, and rhyolite; associated tuffs and breccias.

Coldwater Beds (?): Sandstone, shale, and conglomerate; coal.

#### MESOZOIC

#### **CRETACEOUS**

Lower Cretaceous

Spences Bridge Group

Andesite, dacite, basalt, and rhyolite; tuff, breccia, and agglomerate; conglomerate, sandstone, greywacke, and arkose.

#### **JURASSIC**

Middle and Upper Jurassic

12 Shale, conglomerate and sandstone.

#### TRIASSIC

Upper Triassic

Nicola Group

Basalt and andesite; tuff and agglomerate; limestone, quartzite, argillite, greywacke and arkose.

#### PALAEOZOIC

### PERMIAN AND (?) EARLIER

Cache Creek Group

- 6 Marble Canyon Formation: limestone.
- Greenstone: chert, argillite, minor limestone and quartzite: chlorite and quartz-mica schist.

#### INTRUSIVE ROCKS

#### **MESOZOIC**

#### JURASSIC

Lower Jurassic

Guichon Creek batholith: granite, granodiorite, quartz diorite, diorite.

**GEOLOGY** 

Regional Geology

This region lies within the Intermontane Belt of the Canadian Cordillera. West of the Thompson River most of the region is underlain by the Pennsylvanian to Permian-age Cache Creek Group. This group is conformably overlain to the west by limestone of the Permian-age Marble Canyon Formation. The stratigraphic contact between these two major formations trends north-northwesterly through the Oregon 100 and 200 claims.

The Cache Creek Group comprises volcanic sediments, greenstones and rare, thin lenses of limestone. The rocks are generally quite massive, propylitically altered and bedding is usually indiscernible. The volcanic sediments include conglomerate, grit, wacke and tuff. Regional bedding within this group commonly strikes north to north-northwesterly and dips -55° to -75° westerly (Carr, 1962).

The Marble Canyon Formation is comprised principally of limestone with a minor chert and/or detrital sediment component.

Structural features of the region include a number of periods of faulting and uplift. During Upper Triassic time a major fault zone along the Thompson River valley produced a horst-graben setting which uplifted the land mass east of the valley during the intrusion of the Guichon batholith. Later during post-Jurassic time there was more tilting and faulting prior to the extrusion of Tertiary volcanics.

In strata throughout the region, folding is subordinate to tilting, warping and faulting. Where folds occur they are small and appear to be caused by fault movement (Carr, 1962).

There are several precious and/or base-metal occurrences known in the region. Many of these occurrences are spatially related to brecciated and altered fault zones, clearly vein or replacement deposits; however, in light of recent exploration activity the region may have potential for syngenetic polymetallic deposits. See Figure 3 for a map of the regional geology.

#### DISCUSSION OF THE 1984 PROSPECTING PROGRAMME

The prospecting programme was undertaken between October 23rd and 27th, 1984. Mr. Paul Chung, an experienced geologist, and Mr. K. Kaye, an experienced geological assistant, prospected most of the claim group during the 5-day period.

Six rock samples were collected during the programme from favourable geologic targets. These samples were bagged, labelled and delivered to Kamloops Research and Assay Laboratory Ltd. in Kamloops, B.C. for assaying. All samples were assayed for gold, silver, copper, lead and zinc under the supervision of professional assayers. See Appendix I for the Certificate of Assay and Figure 4 for the plotted sample locations and assay results. Sample descriptions and assay summaries accompany this report in Appendix II.

Due to the paucity of outcrop in the eastern part of the property, most of the prospecting traverses were concentrated in the better exposed, western half of the property. Soil geochemical and geophysical surveying will be required to test the covered areas of the property.

#### a) Lithology

Results of the programme show that the northwestern portion of the property is underlain by argillite, greenstone and limestone of the Cache Creek Group. Limestone of the Marble Canyon Formation underlie the southwestern portion of the property. The units of the Cache Creek Group and Marble Canyon Formation are described as follows:

#### PERMIAN

#### 2. MARBLE CANYON FORMATION

Limestone: White to light grey or blue in colour. The rock is fine-to medium-grained and so massive that bedding is indiscernible. Most of the limestone has been recrystallized obliterating the original textures.

#### PENNSYLVANIAN TO PERMIAN

#### 1. CACHE CREEK GROUP

Argillite: Grey to black in colour, often weather brown due to limonite. Varies in appearance from mudstone to schist. Schistocity trends 125°. Local silica alteration.

Greenstone: Green to greyish-green in colour and quite massive. Locally the rocks are silicified with numerous quartz veinlets.

Limestone: Range in colour from white to black but usually weather white or grey. Fine-to medium-grained and locally quite pure.

#### b) Alteration

All lithologies have undergone regional metamorphism. Metamorphic effects are most apparent within the fine-grained sedimentary rocks of the Cache Creek Group. Locally these rocks may vary in metamorphism from lower to upper greenschist facies.

#### c) Mineralization

During the programme minor malachite, bornite and chalcopyrite mineralization were discovered in outcrop. This mineralization was hosted by limonitized argillites and fine-grained volcanoclastics of the Cache Creek Group. The sulphide minerals occurred as fine-grained disseminations along multiple fracture surfaces. A number of samples were collected in the vicinity but only one sample returned significant values of 0.1% copper and 0.75 o.p.t. silver.

Samples were collected elsewhere within the property of a 0.3 metre-wide quartz vein and other limonitized sediments but the assay results were negative.

#### CONCLUSIONS

The prospecting programme was successful in identifying the local geologic setting and discovering copper mineralization in fine-grained Cache Creek sedimentary rocks.

Due to the paucity of outcrop soil geochemical and geophysical surveying will be required to further test the economic potential of the claim group.

#### RECOMMENDATIONS

Based on the results of the 1984 prospecting programme it is recommended that the following programme be conducted on the property.

- (1) A control grid should be established over the poorly exposed areas.
- (2) Soil geochemical and possibly magnetic surveying should be conducted over the established grid.
- (3) Any resultant geochemical and/or geophysical anomalies should be trenched, surveyed and sampled to define their source.

Submitted by,

Tanah flower

MINOREX CONSULTING LTD.

J.D. Blanchflower, F.G.A.C.
Geologist

December 19, 1984 Kamloops, B.C.

#### STATEMENT OF QUALIFICATIONS

- I, J. DOUGLAS BLANCHFLOWER, of the City of Kamloops, Province of British Columbia, DO HEREBY CERTIFY THAT:
- 1) I am a Consulting Geologist with business office at 2391 Bossert Avenue, Kamloops, British Columbia, V2B 4V6; and President of Minorex Consulting Ltd.
- 2) I am a graduate in geology with a Bachelor of Science, Honours Geology degree from the University of British Columbia in 1971.
- 3) I am a Fellow of the Geological Association of Canada.
- 4) I have practised my profession as a geologist for the past thirteen years.

Pre-Graduate experience in Geology - Geochemistry - Geophysics in British Columbia, Yukon and Northwest Territories (1966 to 1970).

Three years as Geologist with the B.C. Ministry of Energy, Mines and Petroleum Resources (1970 to 1972).

Seven years as Exploration Geologist with Canadian Superior Exploration Limited (1972 to 1980).

Three years as Exploration Geologist with Sulpetro Minerals Limited (1980 to 1982).

Two years as Consulting Geologist with Minorex Consulting Ltd.

Active exploration and development experience in Western North America.

5) This report is based on a prospecting programme undertaken on the property between October 23 and 27, 1984; and on available published reports and maps.

Manchflower

J.D. Blanchflower, F.G.A.C.

#### STATEMENT OF QUALIFICATIONS

- I, PAUL P.L. CHUNG, of the City of Richmond, Province of British Colombia, DO HEREBY CERTIFY THAT:
- 1) I am a Consulting Geologist with business address office at 705-543 Granville Street, Vancouver, British Columbia; and President of Boa Services Ltd.
- 2) I am a graduate in geology with a Bachelor of Science (Major: Geology) degree from the University of British Columbia, in 1981.
- 3) I have practised my profession as a geologist for the past three years.

Pre-graduate experience in Geology - Geochemistry in British Columbia and Yukon (1979-1980).

Two years as Exploration Geologist with Sulpetro Minerals Limited (1981-1982).

4) I conducted the prospecting programme between October 23rd and 27th, 1984 and co-authored this report.

Saul Ching

#### STATEMENT OF COSTS

Prospected the Oregon 100 and 200 claims utilizing available enlarged topographic maps for control. Collected six rock samples and assayed them for gold, silver, copper, lead and zinc. All resultant data was plotted, interpreted and documented.

Project Period: October 23 to October 27 - field work
October 28 to December 19 - data collation and
report writing

#### Labour

Mr. P.P.L. Chung - Geologist Oct. 23 to 27 and Dec. 16 & 17 7 days @ \$228./day	\$1,596.00	
Mr. K. Kaye - Geologist's assistant/		
prospector		
Oct. 23 to 27 (5 days) 5 days @ \$187./day	935.00	
J days e \$107./day	\$2,531.00	\$2,531.00
Vehicle Expense		
'80 Chevrolet 4x4 Pickup		
5 days @ \$35./day rental	\$175.00	
532 km. @ \$.35/km. expenses	186.20	
	\$361.20	361.20
Food - 10 man days @ \$17.23/man day		172.30
Accommodation - 10 man days @-\$18.62/man	day	186.20
Assaying - 6 samples for Au, Ag, Cu, Pb,	Zn	155.55
Supervision, Report Writing & Map Prepare J.D. Blanchflower - Geologist	ation	
Oct. 23, Dec. 18 and 19 - 3 days 3 days @ \$300./day		900.00
Drafting (P. Mason) - 12 hrs. @ \$15	./hr.	180.00
Typing (J & L Enterprises) - 7 hrs.	@ \$15./hr.	105.00
Reproduction charges, photocopying, office supplies (Universal Pri	nting)	85.85
Total Cost of Prospecting for Assessment Credit	Programme	\$4,677.10

To be applied as follows:

Claim Name	Record No.	Units	Years Applied	
NI-I	2326(12)	2		\$ 400.00
NI-II	2327(12)	1		200.00
OREGON 100	5291(12)	20		2,000.00
OREGON 200	5326(12)	20		2,000.00
			Assessment Credit applied	\$4,600.00

### BIBLIOGRAPHY

Carr, J.M. (1962):

The Geology of Part of the Thompson River Valley between Ashcroft and Spences Bridge; B.C. Minister of Mines Annual Report, 1962, pp. 28-45.

Duffell, S. and : McTaggart, K.C. (1951)

Ashcroft Map-Area, B.C. G.S.C. Map 1010A.

B.C. Ministry of Mines

Minfile 092I/NW.

### APPENDIX I

Kamloops Research and Assay Laboratory Ltd.

Certificate of Assay



## KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

B.C. LICENSED ASSAYERS GEOCHEMICAL ANALYSTS METALLURGISTS

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 — TELEX: 048-8320 CERTIFICATE OF ASSAY

то _	Yucana Resources Inc.	·					Certif	ficate No. 🗀	K-6750	
	501 - 808 Nelson Street	<u> </u>						Novembe		
<u></u>	Vancouver, B.C. V67 2H2  I hereby certify that the follow	ing are the result	s of assays made			-NI P84- described		sa	mples	
).	Marked	Au	Arj	Ph		Cu_				
		ounces/ton	ounces/ton	percent	percent	percent				ļ

Kral No.	Marked	Au	Arj	Ph	7n	Cu				
		ounces/ton	ounces/ton	percent		percent	·			
1	P84-36-1	L.001	. C8	.04	.02	.01				
2	P84-36-2	L.001	.05	.04	.04	.02				
3	P84-36-3	.001	.75	.09	.05	.10				
4	P84-36-4	L.001	.01	.02	.02	.01				·
5	P84-36-5	L.001	L.01	.01	.01	L.01				
6	P84-36-6	L.001	L.01	.01	.02	.01	·			
				•				<i>*</i>		
•										
			·						,	

NOTE: Rejects retained three weeks Pulps retained three months Allon

### APPENDIX II

Sample Descriptions and Assay Summaries

### Sample Descriptions and Assay Summaries

				Assay 1	Result	<u>s</u>	
Sample No.	Sample Type	Au o.p.t.	Ag o.p.t.	Cu _%	Pb _%_	Zn	Description
P84-36-1	Grab	L.001	.08	.01	.04	.02	White quartz vein material with no visible sulphides. Limonite staining.
P84-36-2	Grab	L.001	.05	.02	.04	.04	Limonitized argillite wallrock to quartz vein.
P84-36-3	Grab	.001	.75	.10	.09	.05	Limonitized argillite with minor malachite, bornite and chalcopyrite disseminations along fractures.
P84-36-4	Grab	L.001	.01	.01	.02	.02	Limonitized argillite wallrock near sulphide mineralization.
P84-36-5	Grab	L.001	L.01	L.01	.01	.01	Limonitized argillite. No obvious quartz veining.
P84-36-6	Grab	L.001	L.01	.01	.01	.02	Intensely oxidized argillite with no obvious sulphide mineralization.

