Report

On

Geological Reconnaissance, Mapping and Prospecting

Of the

Lemon Lake Property, B.C.

Cariboo Mining Division
NTS 93 A/06

Latitude 52° 21' 00" N
Longitude 121° 16' 00" W

By: H.P. Salat, P.Eng
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Date: July 7, 2002

On behalf of AN-Kobra Resources Inc.
Calgary, Alberta

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PROPERTY STATUS AND TENURE

The Lemon Lake property consists of two MGS (modified grid system) / four-cornered post claims for a total of thirty units. The legal corner post is common to both claims and is placed approximately 100 meters west of the northwest corner of Lemon Lake, that is 150 meters in a N 193° E direction from the "km 8504" sign post placed along the "8500" logging road.

The list of claims is presented in table form and their layout shown in Figure 1.

Claim Name	Number of Units	Record Number	Expiry Date *
MAEDA	18	389313	August 19, 2005
AUDRAN	12	389314	August 18, 2005

(* It assumes that assessment work herein reported is accepted)

LOCATION AND ACCESS

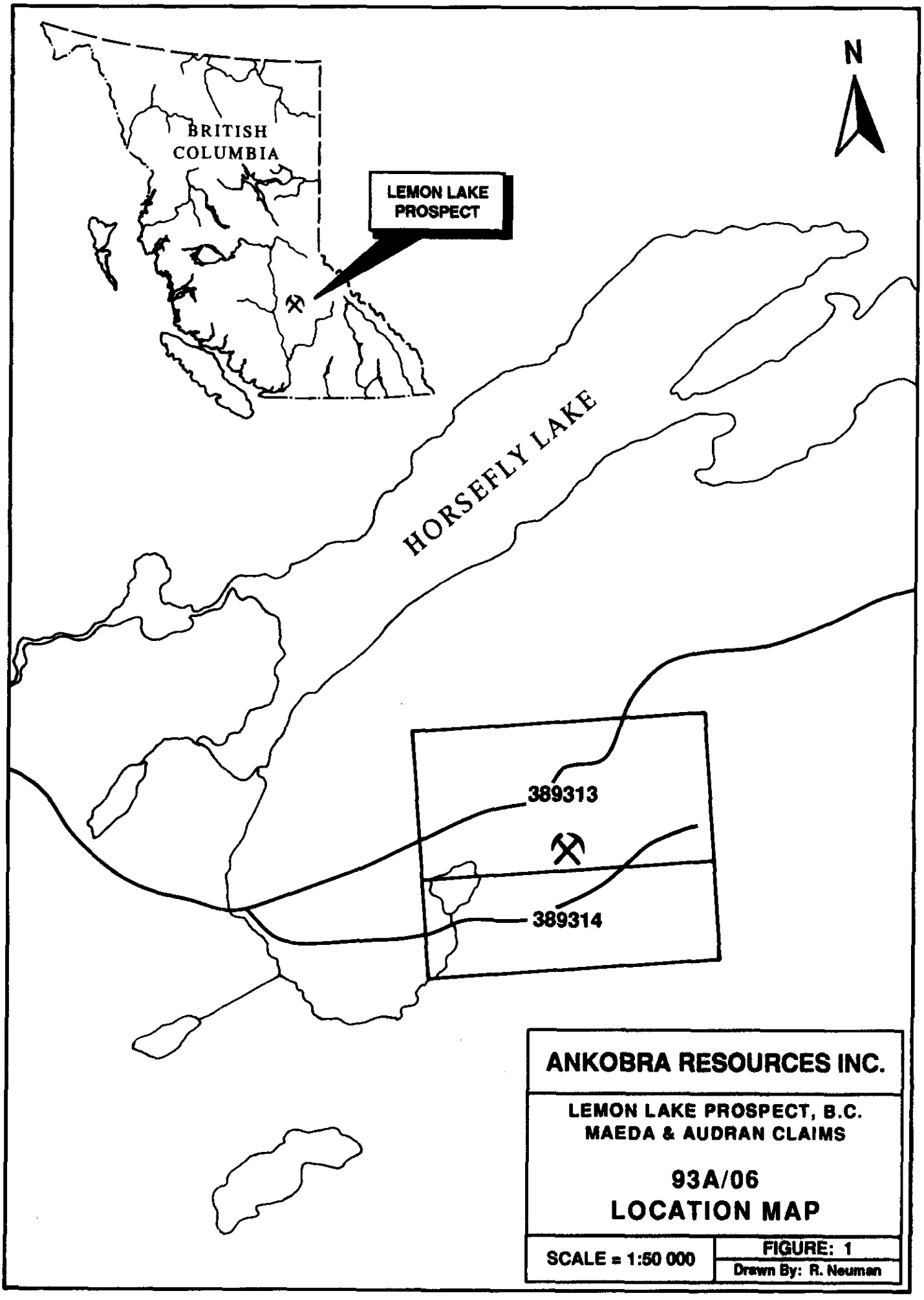
The claims are located 3 to 4 kilometers South of Horsefly Lake and approximately 75 kilometers east of the town of Williams Lake, in the Cariboo region of central British Columbia (Figure 1). Approximate coordinates in the center of the claims are 52° 21' N of latitude and 121° 16' W of longitude.

The morphology of the area is transitional between the low grounds of the Horsefly Lake-Horsefly River system and the high ridges of the Cariboo Mountains. The topography consists of fairly rolling hills where it abuts more rugged terrain on the eastern border. The claim area has been logged off in several places. Including Gibbons Creek marking the southern boundary of the claims, and which follows a glacially related topographical valley, the area is poorly drained with lows occupied by swamps, ponds or beaver-ponds. Otherwise the area is heavily wooded with a mixture of poplar and spruce. Elevation varies between 850 meters and 990 meters above sea-level.

Access to any part of the claims is fairly easy. The property is crossed from west to east by a good gravel road (logging road "8500"), and a series of short logging road leading to logged off area, radiates from the main road providing additional access. Clear cuts also offer easy travel to some areas and tend to improve rock exposures, where forest soil is reduced or has been disturbed.

PREVIOUS WORK

Copper mineralization was discovered in the area in the late 1960's and more precisely near Lemon Lake where it was to be recorded as the PINE showing in the B.C. provincial MINFILE database, under designation number 093A 002.


N
BRITISH COLUMBIA
LEMON LAKE PROSPECT
HORSEFLY LAKE
389313
389314
ANKOBRA RESOURCES INC.
LEMON LAKE PROSPECT, B.C.
MAEDA & AUDRAN CLAIMS
93A/06
LOCATION MAP
SCALE = 1:50 000
FIGURE: 1
Drawn By: R. Neuman

Much of the exploration activity on the showing followed in steps with exploration around larger discoveries of the Mount Polley and QR deposits some 30km and 50km to the northwest. The search was originally for Copper-porphyry deposits and thereafter for Copper-Gold porphyry systems associated with alkaline intrusions.

The Lemon Lake area has known two major periods of exploration first between 1970 and 1974, again in 1986-1987. A summary of work done is given below with the main results.

1966: Induced Polarization – Resistivity survey (2.5 km) - ARIS report no. 00883 – by Helicon Exploration and found an IP anomaly on the West flank of the N-S trending lake located at eastern boundary of the property (Figure 2).

1970: Silver Standard Resources carried out 176 km of gridded IP resistivity survey and delineated a large anomaly stretching in a E-W direction over most of the property and located just to the north of Lemon Lake - ARIS report no. 02779.

1973-1974: Hudson Bay Oil and Gas continued with soil geochemistry (1154 samples collected) but analyzed only for Molybdenum - ARIS report no. 04679.
They followed up with percussion drilling, 670 meters in a total of 14 holes (less than 50 m per hole) and analyzed 207 cuttings from the drilling for Cu, Mo, Zn, Pb and Ag. ARIS report no 05117.
Along with a ground magnetometer survey of 37 km – ARIS report no. 05260

1986-1987: Work done by Orbex Minerals or Industries showed anomalous gold (not previously analyzed for) values in soils surrounding the Lemon Lake dioritic stock (ARISreport no. 15456).
It was followed up by 7 NQ-size diamond drill holes (1090.8 m total), which showed a propylitized halo surrounding the Lemon Lake stock with weakly anomalous gold values – ARIS report no. 15925.

Work has been sporadic and was focused on different commodities (Cu, then Mo and later Cu-Au). Programs were small and inefficient with insignificant follow-up. Since 1987, no significant exploration has been carried out on the property area. The property was restaked by the present owner in 2001 as ground came opened over the Pine showing.

The Pine showing is classified in MINFILE as Copper-gold mineralization associated with an Alkalic-porphyry. The capsule geology indicates that "the maximum value obtained from trenching in 1984 was 0.25 percent copper over 21.3 meters, gold was not assayed (Northern Miner, April, 1984)". No report in the ARIS system refers to any trenching or work done in 1984; it probably relates to older work done by Helicon

exploration, known to have trenched in the claim area, work not reported in their assessment report (ARIS no. 00883).

REGIONAL GEOLOGY

The Lemon Lake property is situated on the eastern margin of the Lower Mesozoic Quesnellia Terrane consisting of Triassic and Jurassic rocks of the Nicola Group. The volcanic and sedimentary formations are characteristic of back-arc deposition near a continental margin. Quesnellia Terrane has been accreted to the Lower Paleozoic Cariboo domain lying to the east during the Columbian orogeny in Upper Jurassic time. At such time, the Upper Triassic basalts and overlying Lower Jurassic pyroclastics, which make up the formations in the area, were intruded by many plutonic stock of calc-alkaline to alkaline affinity.

Some of these stocks were mineralization such as at Gibraltar Mine (a Cu-Mo porphyry of calc-alkaline affinity) or Mount Polley, an alkaline intrusion. In the region, the alkaline intrusive suites tend to be more gold enriched than their calc-alkaline counterparts.

PROPERTY GEOLOGY (Figure 2)

1. ***Outcropping and morphology***
   The Lemon Lake property sits at the transition between the high hills and mountains of the Cariboos to the east and the vast glacio-fluvial plains to the west. Thick glacial deposits of sand and gravel are widespread on the southern border of the claims and are well exposed in deep cuts along Gibbons Creek.

   In the rest of the claim area, rock exposure is rather poor as the dense forest has created good soil cover. However, near hill tops and long steeper slopes, soil is reduced and provides many sub outcroppings; frost-heaved blocks and boulders appear on surface. Road cuts have also removed enough soil and exposed many angular boulders.

2. ***Layered rock units.***
   Some rusty sandstone, coarse grained and pebble conglomerate are found near the outlet of Lemon Lake. Well indurate, they represent local sub-outcrops of Pleistocene formations, better exposed in low lying areas near Horsefly, where they are often exploited for their alluvial gold potential.

   A few large erratics of local derivation are encountered to the north of Gibbons Creek along the first slopes; they consist of polygenic grain-supported conglomerate. All types of debris can be observed from chert, argillite, volcanic clasts, granite or diorite. Some blocks contain essentially rounded granitic clasts, they are all poorly sorted and clast size can reach half a meter in diameter (Plate 1). Unfortunately, no contact was found, which hindered any stratigraphic

consideration. However, the conglomerate can be tentatively correlated with similar rock units of Lower to Middle Jurassic age (Campbell, 1978).

The northern and eastern parts of the claims are underlain by massive volcanic rock-units. However, contacts are never observed. The northern outcrops are essentially composed of massive basaltic flows, sometimes pillowed but most often auto-brecciated to pyroclastic. Toward the center of the property, andesite and trachy-andesite predominate. The rare angular boulders encountered to the west and south, are of andesitic composition.

On the eastern borders, the volcanic units are fairly well exposed along the high hills. Trachytic to shonkinitic flows with augite-phyric and auto-brecciated basalt flows predominate.

All the volcanic rock-units are correlated with the Nicola Group formations of Upper Triassic to Lower Jurassic age.

3. ***Intrusive rock units.***

The claims cover for the most part, a multi-phase dioritic stock known as the Lemon Lake stock. The aeromagnetic map (EMR – 1988) shows the intrusive stock as a semi-circular positive feature terminated on its southern edge by a straight (N 105° E) gradient drop off; this linear termination is interpreted as a fault line.

The intrusive rocks are not well exposed and all found mostly in rounded boulders. Rare tan syenitic rock exposures crop out on the eastern part of the property. Otherwise, a large proportion of the Lemon Lake stock is of dioritic composition with augite the most dominant mafic mineral while the core of the Lemon Lake stock displays a pronounced gabbro phase (see Appendix III). The gabbroic phase is locally pegmatitic especially to the south. Again, on the southern edge of the property nepheline syenite has been reported.

Plagioclase, where preserved in thin sections, shows a relatively low anorthite content for such rocks, and in occasion, albite is suspected. Along with the rare nepheline phases, the intrusive is considered to be of alkaline to shonkinitic affinity. Indeed, intrusive rock units observed in outcrops or sub-outcropping are rarely unaltered as hydrothermal alteration is widespread (see later); consequently the original composition can only be surmised from preserved primary minerals.

4. ***Hydrothermal alteration.***

Three types of alteration are recognized within the claim area. Propylitzation affects all rock-units of the Lemon Lake stock and the surrounding and overlying volcanic rocks near its contact. It consists of calcite, chlorite and minor quartz in addition to the normal suite of minerals. On the northern edge of the claim, strong albitization is also recognized within the diorite and the overlying basaltic outcrops.

The second type of widespread alteration is more restricted to the Lemon Lake stock; however volcanic rocks in close proximity can be locally affected. The alteration consists in replacement of mafic minerals and plagioclase by sericite and addition of secondary biotite. However, biotite can more locally substituted for mafic mineral, developing either in the center of minerals or on their border.

The last and very pervasive alteration is restricted to the dioritic Lemon Lake stock rock-units. It can be considered as a syenitization of the intrusive rocks as K-Feldspar material, usually pinkish in outcrop, break through the rock, creating a magmatic breccia (see Plate 2) then pervasively replacing the matrix and fragments, to the point where original mafic and felsic minerals have disappeared.

Epidote replacement and infilling of veinlets or fractures, is widely noticed in volcanic rock-units. However, epidote is never observed in outcrop or thin sections, within the intrusive rock-units. Epidote presence can be related to the metamorphism or alteration which is typical at the regional scale of the Triassic, Nicola Group volcanics of the Quesnellia Terrane and thence, can not be linked to the hydrothermal alteration associated with the Lemon Lake intrusive and its correlative mineralization.

MINERALIZATION

The original copper occurrence (the PINE showing) was discovered in the 1960's and was reported near Lemon Lake. In fact it is located in the southeast corner of the property and the capsule geology of the MINFILE report mentioned that a value of 0.25% Copper over 21.3 meters was obtained from trenching. Gold was not assayed at that time.

All traces of trenching or surface work have disappeared over the years. Logged off areas were cleared five to ten years ago and new forest growth has re-claimed the ground. Therefore, it was difficult to resample past reports of mineralization on the property and it was possible to examine the presence of sulphide or copper stains in only a few places.

In an area of rubble among small trees, which is suspected to correspond to the original showing, chip samples were gathered over a length of 25 to 30 meters. The sample (AUDRAN. 1) returned highly anomalous Copper values in ICP analysis and was assayed at 1.4% Cu (see Appendix II). The other samples also returned geochemically somewhat anomalous Cu values but more interestingly, the results confirm the elevated gold background (45 to 835 ppb Au) typically associated with copper values.

The few samples confirmed past reported Cu-Au values on the property. These values were associated with the Lemon Lake stocks and it's overlapping volcanics in proximity to Lemon lake.

Economic minerals in the area consists mainly of chalcopyrite seen in narrow veinlets within oxidized vuggey andesite at the original showing. Magnetite is associated with the

copper mineralization. Magnetite is also frequent in all intrusive rock units, especially in diorite and explains the strong aeromagnetic signature of the Lemon Lake stock. Magnetite is also clearly secondary in veinlets associated to the potassic (K-feldspar, biotite, sericite) hydrothermal alteration.

CONCLUSION AND RECOMMENDATION

Prospecting and mapping of the MAEDA – AUDRAN claims (the Lemon Lake property) has confirmed the size of the Lemon Lake alkalic intrusive, its' extension and the strong potassic alteration associated with copper, gold mineralization.

In spite of poor rock exposure and vegetation cover, some samples have demonstrated that mineralization can reach economic value and one ship sample yielded 1.40% Cu and 0.835 g/t Au. The magnetite association with Cu-Au mineralization is documented and provides a tool for future exploration. As well, pyrite accompanies Cu-Au values and could guide exploration effort toward economical mineralization. The Cu-Au mineralization is also associated with K-feldspar/potassic alteration in a porphyry-type setting.

Therefore, it is recommended that exploration should be further carried out over the property to ascertain the extent and economic potential of the Lemon Lake stock. A program should consist of trenching, soil geochemistry and geophysics (magnetics, and Induced Polarization to detect pyrite concentration). A small drilling program consisting of diamond-coring could help to refine the geology and appraise the geochemical/geophysical anomalies.

Budget for recommended exploration program:

1. Trenching	$ 20,000
2. Prospecting, mapping, logging	$ 15,000
3. Line cutting: 50 kilometers at $300.00/km	$ 15,000
4. Soil geochemistry: 2000 samples & analysis	$ 50,000
5. Geophysics: Ground Magnetometry, IP-Resistivity	$ 40,000
6. Core-drilling: 2000 meters at $100/m	$200,000
15% contingencies and administration	$ 51,000
Total	$391,000

REFERENCES

Campbell, P.B. 1978. Geology of the Quesnel Lake Map Area, 93A; Geological Survey of Canada, Open File 574

EMR. 1988. Quesnel Lake, British Columbia, 93A; Geological Survey of Canada, Geophysical Series (Aeromagnetic) Map 19520-G

STATEMENT OF EXPENDITURES

Field Work:	
Consulting geologist – 6 days at $450/day	$ 2,700
Geological assistant – 6 days at $180/day	$ 1,080
Food & lodging: 2 persons x 6 days at $90/day	$ 1,080
Transportation: truck rental & fuel, 2400 km at $0.45/km	$ 1,080
Laboratory work:	
Chemical analysis (Loring Lab)	$ 258
Petrographical work ($450/day)	$ 450
Report Preparation:	
Review, research & report: 4 days at $450/day	$ 1,800
Drafting & Reproduction	$ 425.24
Thin-section (3) preparation	$ 55.38
Sub total	$ 8,928.62
10% overhead, secretarial & sundries	$ 892.86
Total	**$ 9,821.48**

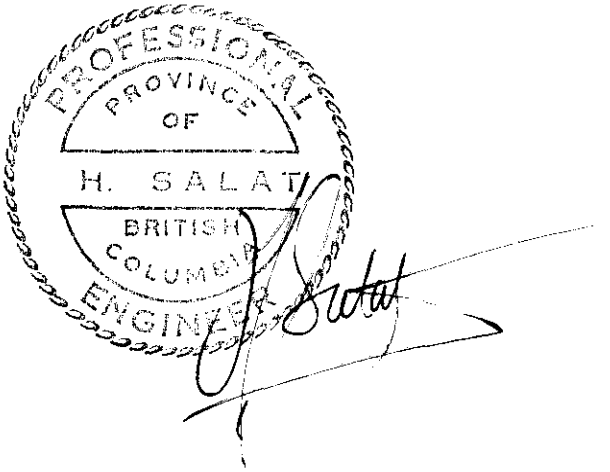
CERTIFICATE

1. HUGHES SALAT, of the city of Calgary, certify that:

    1) My present address is 5904 Dalhousie Drive NW, Calgary, Alberta, T3A 1T1 and my occupation is that of a consulting geologist.
    2) I am a holder of the French Baccalaureat in Mathematics, Physics, Latin and Greek.
    3) After three years of general sciences and successfully being admitted to the Ecole nationale Superieure de Geologie Applquee de Nancy, I graduated from that school with a degree in Geological Engineering and with the diploma of License-es-Sciences from the Faculty of Earth Sciences, University of Nancy (France). I have also obtained an M.Sc. equivalence and completed all credits and research requirements for a degree of Ph.D. at the University of Southern California in Los Angeles (unwritten thesis due to military recall).
    4) I have been practicing continuously my profession of geologist since 1968 in Canada and Europe in mineral exploration, first with Aquitaine Company of Canada then with SNEAP (Elf-Aquitaine).
    Concomitantly from 1983 to 1987, I have also worked for the latter, as petroleum geologist on international projects dealing with Central Africa, Indonesia and South America.
    Since 1988, I have operated as an independent consultant in mineral exploration from the above mentioned address.
    5) I am a fellow member of Society of Economic Geology, of the Geological Association of Canada, of the Canadian Institute of Mining and Metallurgy, of the Canadian Society of Petroleum geologists, of the Association of Professional Engineers, geologists and geophysicists of the Province of Alberta and the Association of professional Engineers and Scientists of the Province of British Columbia.
    6) This report is based on my personal knowledge of the area, compilation of available technical data and field work on the concerned property from August 25, 2001 to July 31, 2002.

    This 17 day of October, 2002

    Hughes P. Salat, P.Eng.



APPENDIX I

PLATES

Plate 1 - Granite pebble conglomerate

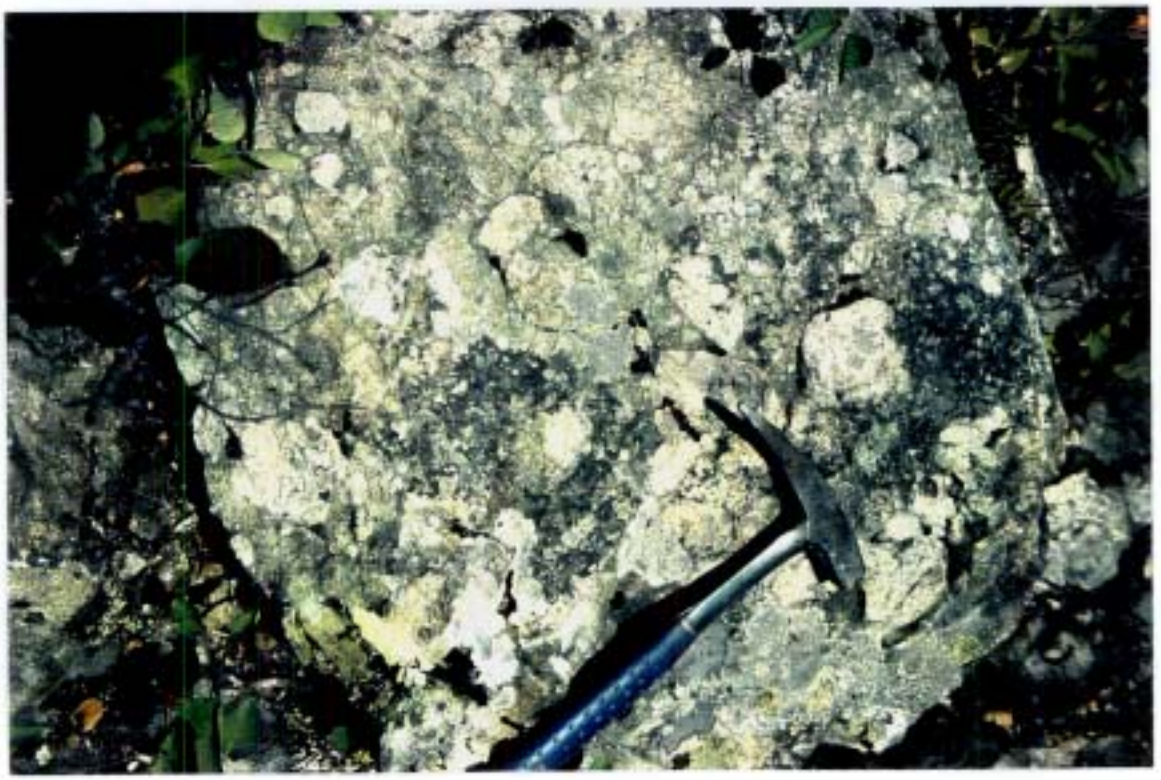


Plate 2 - Polygenic conglomerate (Tertiary ?)

Plate 3 - Mineralized and altered andesite

plate 4 - Diorite brecciated with K-Feldspar material

APPENDIX II

CHEMICAL ASSAY RESULTS

AND

LABORATORY PRECEDURES

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541

TO: **JORANEX INCORPORATED**
5904 Dalhousie Drive N.W.
Calgary, Alberta

FILE: 44702

DATE: May22, 2002

Attn: Hughes Salat

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppb	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
MAEDA- 1	0.7	3.36	24	**45**	40	45	5	2.38	2	63	54	92	6.84	0.27	15	2.08	1063	5	0.08	34	0.244	31	<1	91	4	0.35	<1	265	<1	109
MAEDA- 2	0.5	2.19	121	**50**	34	97	5	1.75	<1	66	71	254	6.48	0.56	16	1.43	454	1	0.06	69	0.232	5	<1	42	5	0.32	<1	200	<1	22
AUDRAN-1	6.2	2.49	31	**835**	32	41	7	2.85	<1	62	60	13500*	6.52	0.31	15	1.94	673	19	0.05	61	0.160	2	<1	69	5	0.31	<1	213	<1	47

0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.
Gold analyzed Fire assay/A.A.
* Assay recommended.

Certified by: Gary Swaby

To : JORANEX INCORPORATION
5904 Dalhousie Drive N.W.
Calgary, Alberta

ATTN: Hughes Salat

File No : 44702-1
Date : June 4, 2002
Samples :
Project :
P.O.#

Certificate of Assay

Loring Laboratories Ltd.

629 Beaverdam Road, NE Calgary Alberta T2K 4W7
Tel: (403)274-2777 Fax: (403)275-0541

Sample No.	Cu %
"Assay Analysis"	
Audran-1	1.40

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples :

Assayer

Rejects and pulps are retained for one month unless specific arrangements are made in advance.

629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W7

LORING LABORATORIES LTD.

E-mail: loringll@cadvision.com

Tel: (403) 274-2777
Fax: (403) 275-0541

Fire Assay Procedure

50 grams of 100% -100 mesh pulp material is weighed and placed in a fire assay crucible containing a suitable flux for the type of ore being analyzed.

Samples are then fused for 1 hour in an electric furnace at 1100°.

Samples are then cupelled to remove lead leaving an alloy of gold, platinum and palladium.

Prills are then transferred to appropriate glassware with a total dissolution of all metals using very strong acid mixtures. Blanks, standards and repeats are carried out with the samples.

Final results are analyzed using ICP or AA instrumentation. If the metal content were high, i.e. gold, then a gravimetric procedure would be used.

30 ELEMENT ICP

1 WEIGH **0.500 gm** SAMPLE INTO A 22 x 177mm **TEST TUBE.**

2 DIGEST WITH **3 ml 3:1:2 HCl:HNO3:H2O,** AT **95 °C** FOR 1 HOUR IN A HOT WATER BATH ON A 2 sw PLATE.

3 DILUTE TO **10 ml** WITH DISTILLED WATER AND THEN **MIX WELL** ON THE VORTEX MIXER.

4 THE SAMPLES ARE LOADED INTO AUTO-SAMPLER OF THE ICP UNIT AND RUN WITH STANDARD WHEN THE SET UP IS COMPLETED.

APPENDIX III

PETROGRAPHICAL DESCRIPTIONS

(See Figure 2 for sample locations)

MAEDA – 1

HAND SPECIMEN

Color: Dark greenish gray (5 G 4/1), rusty coating dark yellowish orange to dusty brown

Structure: Massive.

Texture: White blotches and dark spots.

Mineralization: Less than 1 mm, seams of massive sulphides, and specks of pyrite (5%) throughout – Not magnetic

UNDER THE MICROSCOPE

Texture: Heterogranular to porphyritic. The pyroxene phenocryst varies in size from 0.2 to 2 mm. The original groundmass is altered by secondary minerals; its original texture is not observable. However optical continuity suggests a crystalline, equigranular texture for the groundmass.

Modal Composition

- Pyroxene – Augite: 15%
- Biotite: 20%
- Moscovite: 5%
- Opaque minerals / pyrite: 5%
- Quartz: 3%
- Sericite: 52%

Pyroxene phenocryst varies from euhedral (rare) to altered. Crystals are usually broken-up by replacing minerals (biotite, sericite, quartz), proceding from borders to inside. The best perserved augite shows rims of biotite, around rounded crystal borders. The pyroxene are often cracked by brittle fracture and thence deeply altered. Some of the best perserved crystals are twinned.

Sericite – (feldspar): The majority of the groundmass shows imbrications of optically continuous areas with ghost of twinnings. The texture is micro to crypto-crystalline. Sericite, after feldspar show a consistent to equant shape and range from 0.7 to 1.0 mm in size. Only one grain was observed, fairly fresh and display multiple twinning (albite).

Biotite (in minute, 0.05 to 1.0 mm equant crystals) is dark brown. Most of the biotite develops from sericite groundmass and is dispersed; however, a quarter of the biotite tend to be organized in elongated aggregate with

incipient common orientation. This is observed most often along small fractures.

Muscovite: develops from sericite either along cracks or mottled blotches of well advanced sericitic alteration after pyroxene.

Quartz: in rare small (0.1 mm) scattered subhedral grain, most often along cracks showing straining, or with biotite. Quartz is late in the alteration process.

Opaque minerals: mostly pyrite along cracks or more often in poikilitic aggregates to 1.0 / 1.5 mm in size, with rounded continuous border, never euhedral.

Alteration: the sample shows intense sericitic replacement of original rock type; the strong development of biotite indicates potassium replacement followed by slight silica invasion.

Rock Type: sericitized gabbro.

MAEDA 2

HAND SPECIMEN

Color: Dark greenish gray (5G 4/1), slight rusty orange coating.

Structure: Massive, with a 2 mm wide, beige colored veinlet..

Texture: Crystalline, white and green crystals.

Mineralization: 10% whitish pyrite, in small crystals, less than 0.1 mm, scattered or aligned along tiny fractures – Magnetic.

UNDER THE MICROSCOPE

Texture: Holocrystalline, 0.5 to 1.0 mm crystal, with slight tendency to porphyritic (pyroxene to 2 mm in size).

Modal Composition

- Pyroxene – Augite: 30%
- Feldspar: 35%
- Biotite: 50%
- Quartz: 15%
- Epidote: 5%
- Opaque minerals – pyrite: 10%

Pyroxene: euhedral, augite often zoned or twinned, have retained their shapes; however, many are rounded by alteration and most have internal rings of alteration leaving core intact and producing globular shapes. When alteration is well advanced, augite contain inclusions of biotite and pyrite.

Feldspars: plagioclase laths show internal advanced alteration (saussurite); some crystals display multiple twinnings, allowing measurements of An 40 to 70. Laths tend to have common orientation, and are euhedral.

Biotite: in tiny crystals (0.1 to 0.3 mm) well scattered in the section, but developed along edges of plagioclase, often parallel to their border or interstitial. Also develops along cleavages inside pyroxene crystals. Freshness and clear edges indicate the biotite to be secondary, especially where develop within clouded mass of plagioclase. Dark brown color suggests iron rich biotite.

Quartz: clear, subhedral, intersticial, somewhat strained, but tends to be euhedral with straight edge in places, 0.2 to 0.3 mm in size. Sometime polycrystalline, develops clots near plagioclase, rare near pyroxene.

Quartz found in one, 0.5 mm wide veinlet containing a few 1.0 mm long laths of K-feldspar (orthoclase) and tiny 0.05 mm apatite and epidote crystals.

K- Feldspar: in veinlet with quartz as noted above; otherwise rare within quartz rich phase, of the host rock.

Epidote: in small grains, 0.01 to 0.1 mm, usually aggregated along narrow structures, or rarely scattered; often associated with quartz.

Opaque mineral: pyrite / pyrrhotite, subhedral, scattered uniformly throughout; interstitial, rarely larger than 0.5 mm across, late in voids or cracks in pyroxene.

Alteration: well developed late potassium alteration with biotite and K. feldspar plus quartz (silicification) but original texture preserved.

Rock Type: potassium-altered and mineralized gabbro.

AUDRAN – 2

HAND SPECIMEN

Color:	greenish black (5G 2/1), dark rusty coating on surface.
Structure:	massive.
Texture:	crystalline with white, green and black crystals, set in a micro-crystalline matrix.
Mineralization:	5 to 7% sulphides, mainly along dense network of dry, closed cracks in 0.5 to 1.0 mm aggregates. 25 to 30% of sulphides are scattered throughout the rock, but in very tiny grains (less than 0.1 mm)-Magnetic.

UNDER THE MICROSCOPE

Texture: porphyritic in a pseudo-cryptocrystalline matrix.

Modal Composition:

- Pyroxene – Augite: 15% to 20%
- Feldspar: 50%
- Biotite: 20%
- Quartz: 5% to 10%
- Epidote: 3% to 5%
- Chlorite: 1% to 2%
- Opaque minerals - pyrite – pyrrhotite: 7%

Pyroxene: rare euhedral 1 to 2 mm crystal, corroded with biotite and sulphide inclusion; more often broken-up in small pieces. Some preserved diamond-shaped crystals show nice zoning or twinning. Most crystals are comminuted to less than 0.5 mm rounded crystals.

Feldspars: entirely clouded with sub-microscopic biotite and saussurite. Remaining ghosts of albite twinning, composition undetermined. Probably fairly equigranular: 0.5 to 1.0 mm. Some are rimmed with quartz crystals; many show pervasive quartz replacement where clearer, and possible K-Feldspar development.

Biotite: in large, 0.2 to 0.5 mm, clear lamellae within the feldspatic mass or in large (over 1.0 mm) aggregates of tiny blades developed around and replacing pyroxene as well as plagioclase. Outlines are often after plagioclase crystal/pseudomorphic. Otherwise, scattered in tiny (les than 0.1 mm) crystals throughout and to be confused with sericite or saussurite. Probably in larger amounts than estimated.

Quartz: rare small euhedral crystal but common in anhedral mesostasis within plagioclase and possible K-Feldspar. Also found in a few narrow 0.1 mm veinlet cutting across the host rock.

Epidote: small grains, less than 0.05 mm, associated within larger biotite masses.

Chlorite: rare blades surrounding aggregates of sulphides or quartz veining.

Opaque minerals: along cracks or scattered in anhedral crystals within the thin section. Rarely associated to quartz.

Alteration: strong replacement by biotite and secondary quartz of a pyroxene-rich host rock (diorite or gabbro).

Rock Type: altered (potassium-rich fluid) diorite.

121°15'

52°21'

basalt(pillowed)
basalt
pyro. basalt
and. pyro.
bas. agglomerate
autobrec. basalt
trachyte
3250'
bas.
py
autobrec. basalt
ep.
brec. basalt
massive pyrite
old trench
and.
Cu
porph. and.+ep.,KF
syen.
brec. bas.
and.+ep.
py
3000'
2750'
bas.
py
old trench?
py
trach.-and.
trach.-and.
and.(MAEDA #1)
py
dior.(MAEDA #2)
dior.(+KF)
and.(+KF vein)
and.
py
gabbro(+bio)
km 8506
and.
py+Cu
dior.(+KF vein)
dior.
py
and.(+KF)
dior.(+KF)
Cu
and.
py,Cu
dior.(+KF,ep.)
dior. breccia(+KF)
dior.(+KF)
dior.(+KF vein,ep.)
syen.
dior.
cu
dior.(+bio)
3250'
syen. breccia(+KF)
dior. breccia(+KF)
dior.(+KF vein)
Cu
syen.
brec. syen.
"N500" ROAD
dior.(+KF)
dior.(+bio.)
dior.(+KF vein)
dior.(+KF,bio.)
and.
Cu
dior.
syen. brec.
dior.
cgl. volc. brec.
and.+KF(AUDRAN #2)
Cu(AUDRAN #1)
km 8504
MAEDA
(3N x 6E)
LCP
AUDRAN
(2S x 6E)
LEMON
LAKE
cgl.
and.
dior.
3000'
gabbro
and.
CREEK
GIBBONS
3000'

LEGEND

and.	andesite		outcropping area
bas.	basalt		logged off area
bio.	biotite		open field
brec.	breccia		claim boundary
cgl.	conglomerate	LCP	legal corner post
dior.	diorite		road/trail
ep.	epidote		
KF	potassium feldspar		
pyro.	pyroclastic		
syen.	syenite		
volc.	volcanic		

Mineralization:

x	occurrence
py	pyrite
Cu	chalcopyrite

MAEDA #1 sample location and numbering

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. SALAT

ANKOBRA RESOURCES INC.

LEMON LAKE PROPERTY

RECONNAISSANCE GEOLOGICAL MAP

SCALE: 1:5000	FIGURE 2
DATE: JULY 2002	
DRAWN BY: R. NEUMAN	

To accompany "Report on geological reconnaissance mapping and prospecting of the Lemon Lake Property, B.C." prepared by H.P. Salat, July 2002.