#### ARIS SUMMARY SHEET

District Geologist, Smithers

#### Off Confidential: 94.12.20

ASSESSMENT REPORT 23234 MINING DIVISION: Liard

PROPERTY: Contact LOCATION: LAT 59 17 00 LONG 129 53 00 UTM 09 6571727 449667 NTS 104P05W

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Contact 1-4 CLAIM(S): Cons. Ramrod Gold OPERATOR(S): Doherty, R.A.; VanRanden, J AUTHOR(S): **REPORT YEAR:** 1993, 33 Pages COMMODITIES SEARCHED FOR: Gold Cretaceous, Granites, Skarns, Tungsten, Molybdenum, Scheelite **KEYWORDS:** Molybdenite WORK Prospecting DONE: PROS 25.0 ha RELATED

REPORTS: 02168,08265,09406,10512,22778 MINFILE: 104P 004,104P 071

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# REPORT ON THE 1993 GEOLOGICAL AND GEOCHEMICAL ASSESSMENT WORK ON THE CONTACT PROPERTY

Liard Mining Division, B.C. September 30, 1993

- Location: 1.
  - 2. 104 P/5W
  - 3. Latitude: 59° 17'N Longitude: 129° 53'W

For:

By:

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Gold Commissioner's Office VANCOUVER, B.C.

# **Consolidated Ramrod Gold Corporation** 1440 - 625 Howe Street Vancouver B.C., V6C 2T6

2 km N of Cassiar, B.C.

R. Allan Doherty, B.Sc., P.Geo. Jo-Anne vanRanden, B.Sc. **Aurum Geological Consultants Inc.** 412-675 West Hastings Street Vancouver, British Columbia V6B 1N2





December 10, 1993

Aurum Geological Consultants Inc.



#### SUMMARY

The Contact property consists of four contiguous mineral claims totalling 60 units located north of Cassiar, British Columbia. The property is currently accessible by road via the Cassiar Mine Haul road which runs along the eastern boundary of the claims.

The claims lie within the Ominica Belt: rocks consist of volcanic and sedimentary units of Precambrian to Jurassic age deposited along the western margin of ancient North America. A suite of Cretaceous granitoid intrusions (Selwyn Plutonic Suite) intrude the stratified rocks as plugs, plutons and batholiths. One such pluton is found on the property intruding the host sedimentary rocks.

Interest in the ground developed in 1991 when significant gold mineralization was discovered at Dublin Gulch, Yukon using the Fort Knox, Alaska deposit model. The Dublin Gulch deposit is hosted by a pluton of the Selwyn Plutonic Suite.

Previous work has identified skarn deposits within and adjacent to the current property. The largest of these, the Kuhn Zone North is reported to contain 409,300 tonnes @ 0.48% W and 0.13% Mo. Regional stream sediment surveys by the Geological Survey of Canada and the B.C Ministry of Mines obtained anomalous results in copper, molybdenum, antimony, arsenic and tungsten from creeks draining the property.

In 1992, the claims were examined by Aurum Geological Consultants Inc. to determine their economic potential. The granitic intrusive in particular was examined for associated gold mineralization. A total of 15 samples were collected all of which returned gold values less than five ppb. One sample containing finely disseminated molybdenite contained 106 ppm Mo. Alteration ranged from a weak yellowish - green staining to a moderately developed stockwork of quartz veins.

In 1993, Aurum Geological Consultants Inc. visited the property and collected 12 rock and 3 soil samples while prospecting. A quartz vein and associated alteration zone was sampled and traced for over 100 m but gold values reported less than 5 ppb Au. Extensive snow cover hindered exploration efforts during both the 1992 and 1993 seasons.

Based on these results, a summer program of prospecting, geological mapping and geochemical sampling is recommended.

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Aurum Geological Consultants Inc.

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This report was prepared at the request of the directors of Consolidated Ramrod Gold Corp., owner of the Contact 1-4 claims, herein after called the Contact property. Its purpose is to assess the property's economic potential and to satisfy assessment requirements through a description of exploration work carried out in 1993.

The property is located approximately two kilometres north of Cassiar, British Columbia (Figure 1) in the Liard Mining Division, and is accessible by road.

Exploration work carried out in 1993 consisted of geological mapping and geochemical sampling and prospecting for the purpose of locating gold deposits. Field work was carried out on September 29-30, 1993 by; Al Doherty, B.Sc., P.Geo., Jo-Anne vanRanden, B.Sc., and Conrad Fox, of Aurum Geological Consultants Inc. This years work was hindered by extensive snow cover. Previous work is summarized from published reports and maps.

#### LOCATION AND ACCESS

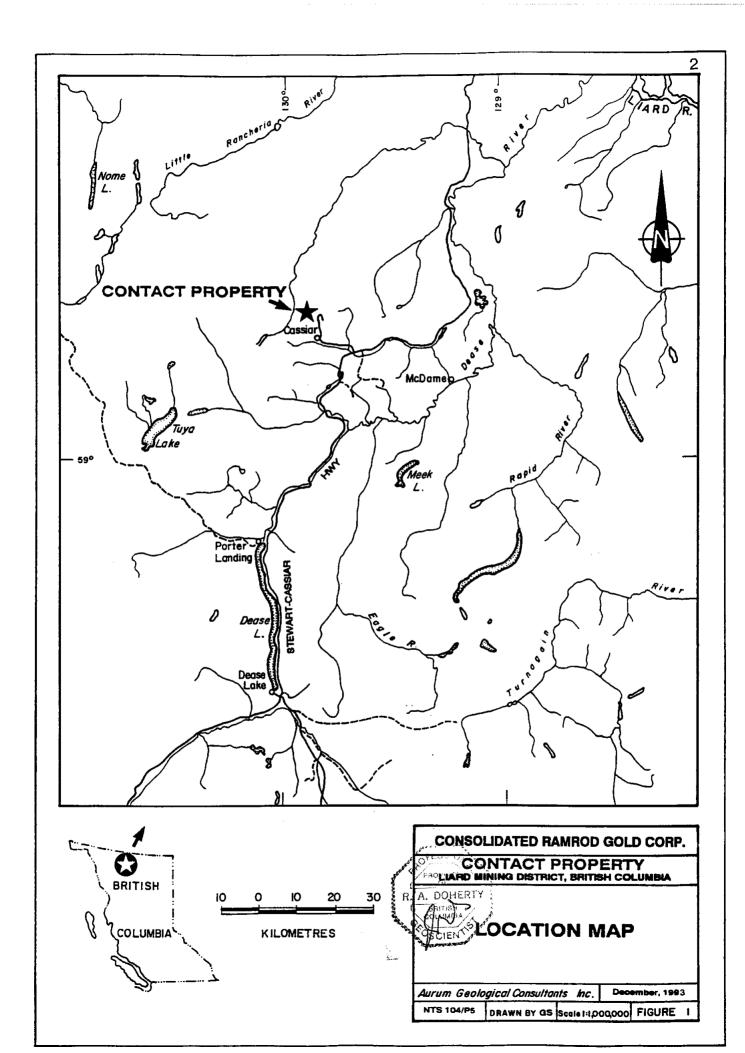
The Contact property is located two kilometres north of Cassiar, British Columbia (Figure 1). The claims are centred at approximately 59° 17' N latitude and 129° 53' W longitude within NTS map area 104P/5.

Access to the property, in 1993, was by truck from Whitehorse, Yukon. Watson Lake, 100 kilometres north by road from Cassiar, is the site of the nearest supplies and hotel accommodations. The Cassiar Mine Haul road abuts the eastern boundary of the property, however, with the closure of the Cassiar Mine, the future reliability of this road is uncertain. A "Cat" trail crosses the central portion of the property.

#### PHYSIOGRAPHY, CLIMATE AND VEGETATION

The Contact property covers an area of mountainous terrain five kilometres northwest of Mount McDame. Elevations on the property range from 1200 m to 1950 m above sea level. The terrain is rugged with sharp peaks flanked by steep slopes with local cliffs and felsenmeer covered ridges. Several circues lie within the property boundaries.

An interior west-coast type climate with moderate to high precipitation of naerly 400 cm annually, warm summers and cold winters typifies the area. The property is usually snow free from late June to mid September. Some snow on the uppermost northeast facing slopes may remain year round.



eet | است | ويرن 1.88 1.5 m Lup ي ا Ĺīsā Much of the property is above timberline. Ground cover consists of moss, alpine plants, dwarf willow and birch. Sparse spruce forest covers the slopes below timberline. Recent Pleistocene glaciation has scoured the slopes and as a result outcrop is good (25%) except on lower ridge slopes and forested areas. A large portion of the property is covered by felsenmeer and talus.

# PROPERTY

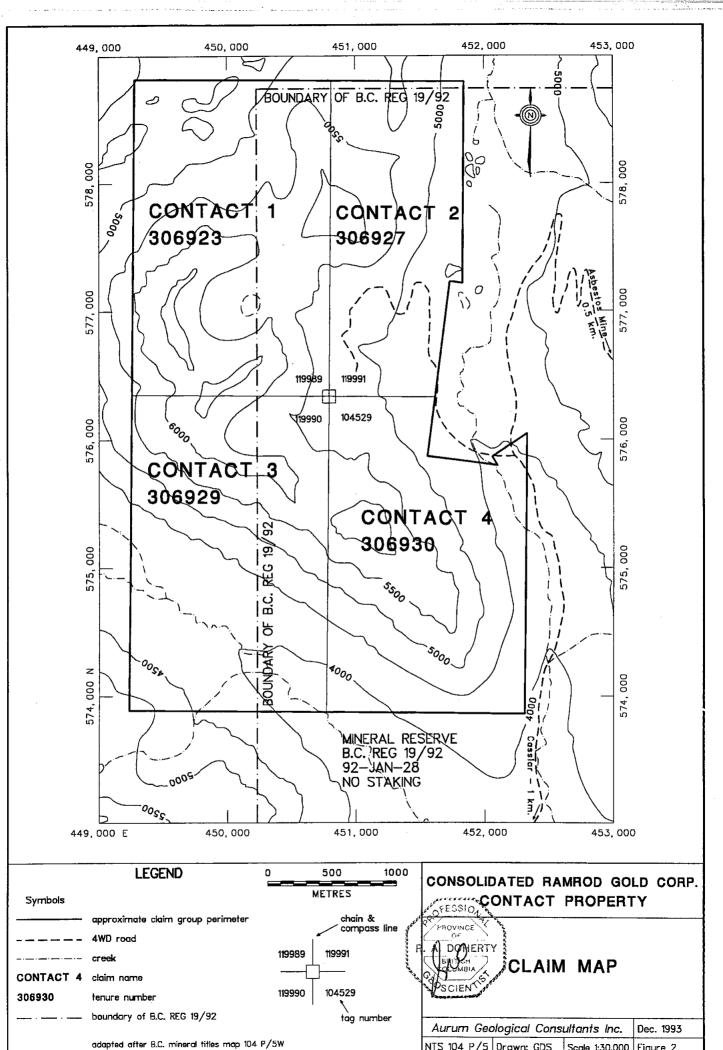
The Contact property (Figure 2) consists of four contiguous unsurveyed mineral claims totalling 60 units and covering approximately 3700 acres (1500 hectares). The claims are held in accordance with the British Columbia Mineral Tenure Act. The claims were staked by Aurum Geological Consultants Inc. for Kokanee Explorations Ltd. (now Consolidated Ramrod Gold Corp.) on December 21, 1991. Claim data are as follows:

TABLE 1.	CONTACT PROPERTY CLAIM DATA												
CLAIM NAME	RECORD No.	UNITS	EXPIRY DATE *										
Contact 1	306923	15	Dec. 21, 1994										
Contact 2	306927	15	Dec. 21, 1994										
Contact 3	306929	15	Dec. 21, 1994										
Contact 4	306930	15	Dec. 21, 1994										

\*subject to approval of 1993 assessment work.

The claims are shown on B.C. Mineral Titles Reference Map 104P/5W, Liard Mining Division, and are known collectively as the Contact property. With the closure of the Cassiar asbestos mine in 1991, the government of British Columbia imposed a "no staking" block over the mine site and surrounding area. The boundary of this mineral reserve runs through the Contact 1 and 3 claims and inhibits further expansion of the Contact claim block to the east and south of the current Contact property. Activity, on ground in good standing within this reserve block, is in no way hindered by this Regulation 19/92 (Figure 2).

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# HISTORY

Placer gold was discovered on McDame Creek, approximately 20 km east of the property, in 1874. The area received little exploration until 1943 when the Alaska Highway was completed. The Cassiar asbestos deposit, two kilometres east of the property, was put into production in 1950 and closed in 1991 when Cassiar Asbestos was put into receivership. Efforts are currently underway to reprocess the mine tailings.

The Contact skarn, covered by the current property, was first staked in 1951. Harvest Queen Mill and Elevator Company drilled the showing in 1954 leading up to Fort Reliance Minerals shipping 25 tons of skarn ore from underground operations in 1954. The shipment produced 10,451 grams of silver, 25 kilograms of copper, and 1,947 kilograms of lead. Cassiar Asbestos explored the area in 1968 using airborne magnetometer surveys (Crosby, 1968).

The area was restaked in 1978 and optioned to Shell Canada Resources who explored for tungsten and molybdenum between 1979 and 1982. In excess of \$425,000 was spent on mapping, geochemical surveys, geophysics, trenching, and diamond drilling (Moffat, 1982). Shell outlined three significant tungsten-bearing skarn deposits; one in the north-central part of the Contact property, and two immediately north of the current property.

Aurum Geological Consultants Inc. staked the Contact 1-4 claims for Kokanee Explorations Ltd. on December 21, 1991. Aurum completed a one-day field examination on October 21, 1992. In 1993, personnel of Aurum Geological Consultants Inc. again visited the property and collected rock and soil samples while prospecting the area.

The current exploration model is focused on gold deposits hosted by granite intrusives. This became an attractive target with the discovery of the Fort Knox gold deposit, located near Fairbanks Alaska, and the discovery of similar intrusive hosted gold at Dublin Gulch, Yukon.

# GEOLOGY

#### **Regional Geology**

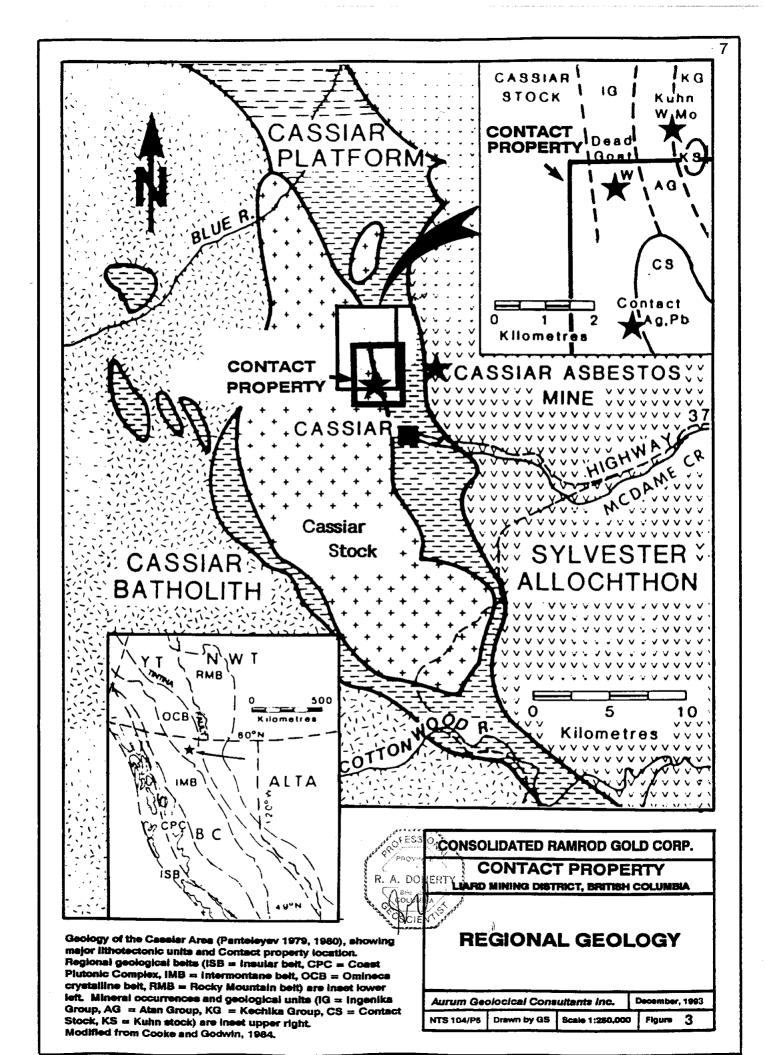
The Contact property lies within the Ominica Belt (Wheeler et al., 1991) of the Western Cordillera (Figure 3). Stratified rocks consist partly of displaced North American strata of the Cassiar terrane, ranging in age from Hadrynian to Early Mississippian. These rocks are structurally overlain by the Sylvester allochthon, which occupies the core of the McDame synclinorium (Gabrielse, 1963).

In the McDame and Cassiar map areas, components of the Sylvester allochthon range at least from Early Mississippian to Late Triassic age, and include marginal basin and arc volcanic-sedimentary sequences, and subcrustal ultramafic complexes (Nelson et al., 1989b). Structure is dominated by northwest-trending faults including the Tintina Fault, located 75 km east of the property.

The Tintina Fault generally follows the Mesozoic suture which separates ancestral North America from accreted terranes. At least 450 km of dextral strike slip movement has taken place along the Tintina Fault since latest Cretaceous or Early Tertiary time (Tempelman-Kluit, 1979). This movement has caused older stratified rocks to be offset and juxtaposed against themselves along the fault.

Two suites of granitoid intrusives, ranging from Paleozoic to Cenozoic age, related to underplating and or subduction, are found on both sides of the Tintina fault. Granitoid emplacement peaked during the Early - Middle Cretaceous (Tempelman-Kluit, 1981). The Western Suite granitoid intrusives found west and southwest of the Selwyn Basin are predominantly granodiorite in composition and are associated with porphyry copper molybdenum and copper skarn deposits. The Eastern or Selwyn Plutonic Suite of granitoid intrusives are distributed along a northwest trending arcuate belt within the Selwyn Basin. The granitoids are mainly granitic in composition and are associated with tin, tungsten, and molybdenum mineralization.

The Dublin Gulch deposit is hosted by a quartz monzonite pluton of the Selwyn Plutonic Suite (Tempelman-Kluit, 1981). The Cretaceous stock underlying the Contact property also appears to be part of the Selwyn Plutonic Suite.



#### **Property Geology**

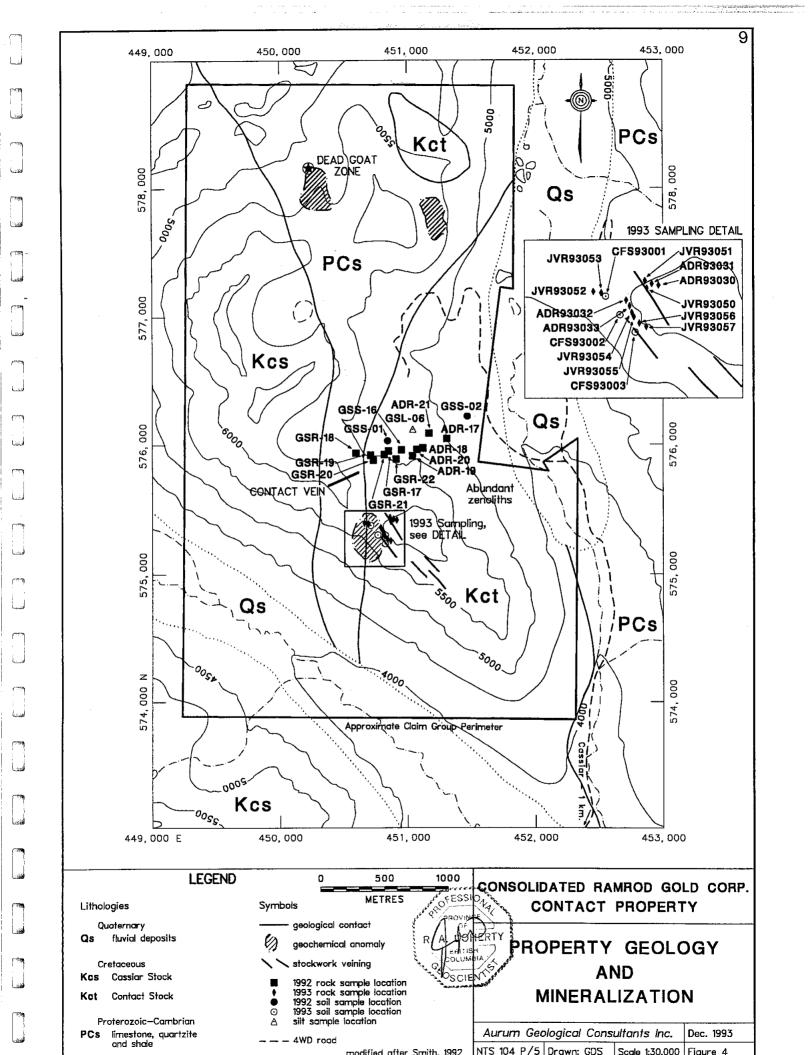
The following is taken largely from a private company report by Crysi Exploration (1992). The Contact property is underlain by a north-northwestern trending 35 - 65 degree easterly dipping sequence of Proterozoic-Ordovician carbonate and pelitic sediments, forming the western limb of the McDame synclinorium. The eastern margin of the Cassiar stock is exposed cutting the stratigraphy (Figure 4).

At least two generations of late-phase granitoids of the Cassiar stock have invaded the sediments in a series of cupolas paralleling the eastern contact of the stock. One cupola, the Contact stock, underlies the east-central portion of the claim block. This stock is separated from the main Cassiar stock by a 200-300 meter wide strip of metasedimentary rocks that contain mineralized skarn zones within the carbonate units.

The 2 x 4 km contact stock is roughly elliptical and elongate north-south. One small satellite body occurs immediately north of the pluton. The predominate intrusive phase of the stock consists of pinkish-grey, medium to coarse grained porphyritic granite. Potassium feldspar phenocrysts measuring  $1 \times 2$  cm in size make up 20-30% of the rock. Near the margins of the stock a light-grey equigranular granite phase is present.

Hornblende and biotite occur locally in both phases of the intrusion composing 2-3% of the rock. Quartz-feldspar porphyry dikes and aplite dikes are exposed in several outcrops within the Contact stock. Within the dikes disseminated pyrite, pyrrhotite and more rarely chalcopyrite can reach up to 5% total sulfides by volume. Large areas of xenoliths outcrop in the southeastern portion of the intrusive. Preliminary reconnaissance mapping in 1992 indicates that the granite contact is far more irregular than is currently shown on Figure 4.

The eastern margin of the Contact Stock is characteristically xenolith rich. Field evidence such as the presence of K-Feldspar megacrysts within xenoliths suggest that the megacrysts are late stage. Biotite rich mafic schlerin are commonly rusty weathering due to enriched iron content of the mafic minerals.



#### MINERALIZATION

Significant mineralization discovered, to date, on or near the Contact property consists of tungsten-copper-zinc-molybdenum skarns. Due to the snow cover these showings were neither sought nor located in 1992 or 1993, however there locations are plotted on Figure 4 using information from publicly available reports. Work in 1992 and 1993 was directed towards testing the granite for its' bulk-tonnage disseminated gold potential.

#### **Previous Work**

The Contact lead-zinc-silver-bismuth skarn vein is a past producing mine located in the centre of the claim block (BCDM Minfile, 104P 04). Mineralization is found in highly contorted Proterozoic marbles sandwiched between the Cassiar and Contact stocks. The deposit is composed of two east-west striking fissure veins up to 1.2 meters in width which crosscut the marbles. The minerals associated with the calcite-quartz veining are magnetite, sphalerite, pyrite, arsenopyrite, alabandite, chalcopyrite, tetrahedrite, bismuthinite and native silver and bismuth. Limited underground development produced 10,451 grams of silver, 25 kilograms of copper, and 1,947 kilograms of lead from 25 tonnes of ore. No record of gold content is available.

Three tungsten-molybdenite skarn deposits (Kuhn Zone North, Kuhn Zone South, Dead Goat Zone) located within and immediately north of the property were drill tested by Shell Minerals between 1979 and 1982. BC Minfile describes the main showing as massive calc-silicate skarn in semi-continuous layers up to 10 meters thick along the western contacts of marble layers. Scheelite, molybdenite, pyrite, pyrrhotite, and rare magnetite form coarse disseminations interstitial to the calc-silicates. Layered magnetite skarn and retrograde massive pyrrhotite-sphalerite skarn are found as pods and veins replacing other skarn facies. The Kuhn Zone North, one kilometre north of the Contact property, contained the largest deposit with a drill indicated reserve of 409,300 tons grading 0.48% WO<sub>3</sub> and 0.134%  $MOS_2$ , with an additional 78,700 tonnes grading 0.50% WO<sub>3</sub> (BCDM Minfile, 104P 071).

In the northern section of the current property, drilling on the Dead Goat skarn (Moffat, 1982) intersected mineralization within the associated intrusive, similar to the current bulk-tonnage disseminated gold target. Hole 80-B-4 contained 58.9 metres of porphyritic quartz monzonite with disseminated pyrite, hematite, and minor magnetite and molybdenite. This and similar non-skarn drill-intercepts were for the most part not split or analyzed. None of the samples from Shell's exploration were analyzed for gold.

White and clear quartz veins containing pyrite, molybdenite, scheelite and bismuthinite are present within the Cassiar stock near the southern margin (Crysi, 1992). Generally the veins strike southeast and dip to the northeast at low angles. Many of the

veins have drusy quartz cavities with thin sericite envelopes developed along the vein margins. The veins have never been analyzed for gold. Due to snow and weather conditions this area was not examined as part of the 1992 field program.

Disseminated pyrite (<0.5%) was the most common sulfide noted within the intrusive during the 1992 examination. Pyrite was locally concentrated on fractured surfaces or in quartz veinlets. Veining and fractures were neither strong nor exceptionally common. Traces of arsenopyrite, molybdenite and possibly chalcopyrite were noted along with the pyrite. Quartz veinlets and penetrative fractures or joints have local sericitized, chloritized, or bleached selvages.

A sample of megacrystic granodiorite, GSR-22, containing a trace amount of visible disseminated molybdenite at hand-specimen scale returned 106 ppm Mo. The only other anomalous element for this sample is anomalously low levels of iron; 0.32% Fe versus an average for similar rocks of 2.5%. Two other 1992 samples of megacrystic granodiorite returned weakly anomalous levels of molybdenum; ADR-021 with 30 ppm Mo, and GSR-021 with 15 ppm Mo.

As is typical of the Selwyn Plutonic Suite, hornfels is moderately well developed adjacent to the granite intrusive. The hornfels commonly contain disseminated and blebs of pyrite, pyrrhotite, and chalcopyrite and locally arsenopyrite. A sample collected in 1992, sample GSR-016, of mineralized hornfelsed material returned 4.17% iron, 15 ppm Co, and 20 ppm copper but all other elements including gold and silver were background or below detection limits.

#### **1993 Results**

A total of 12 rock chip samples were collected during the one-day property examination on September 30, 1993.

Rock sampling concentrated in an area, previously outlined as containing stockwork veining, on the western edge of the southern most peak in the claim block, (Figure 4). Extensive snow cover limited exploration to elevations above the 5500 foot contour.

Relatively few sulfides were observed in the samples of the Contact intrusive unit. Fine grained pyrite dominated and trace amounts of chalcopyrite, arsenopyrite and bismuthinite were reported.

A zone of fractured, rusty quartz and associated alteration was traced to a maximum width of 10 m along an orientation of 120°/35° NE for over 100 m. The vein consisted of stacked discrete 10-15 cm wide segments with lenses of limonitic intrusive caught-up between the veins. Mineralization in the form of fine grained pyrite occurs as selvages to the fractured veins and as disseminations and micro veinlets within the

granitic plug itself. Alteration consists of limonite coating the fracture surfaces with local manganese, sericite and clay in both the vein and host intrusive unit. Samples JvR93052 - JvR93057 and ADR93033 - ADR93032, inclusive, were chip samples taken across the exposed structure. The vein contained visible sulfides with pyrite greater than arsenopyrite and bismuthinite, yet values for gold and silver remained at background levels.

#### GEOCHEMISTRY

#### Previous Work

At least 20 stream sediment samples have been collected from streams draining the property. In 1978 the Geological Survey of Canada released regional stream sediment and water geochemical data, GSC Open File 562, for the McDame map sheet (Hornbrook et al., 1990). Fieldwork by the British Columbia Ministry of Mines in the Cassiar area completed in 1978 and 1979 included the collection of 112 stream sediment samples (Panteleyev, 1978 and 1979). The 76 samples collected in 1978 and the 36 samples from 1979 were intended as an orientation survey to assist in the interpretation of the regional data.

Five samples collected by the GSC and 14 from the BCDM work are from streams draining the property. Results of stream sediments collected in the area of the Contact property are summarized in Table 1. Using geochemical thresholds established as part of the 1979 sampling ten of the nineteen samples were anomalous. Anomalous elements include silver, copper, lead, zinc, cobalt, molybdenum, and tungsten.

Shell Canada Minerals collected at least 1,106 soil samples (Moffat, 1980) within and adjacent to the current Contact property, as part of their exploration for tungsten-molybdenite skarn deposits. The majority of samples were collected immediately north of the Contact property, however, a significant part of the current ground was covered. The samples were analyzed for tungsten, molybdenum, zinc, and copper. Moffat (1980) calculated background levels for the first three elements as 30 ppm, 5 ppm, and 185 ppm respectively.

Twelve rock (seven outcrop and four float), two soil and one silt samples were collected on the Contact property in 1992. All samples were analyzed for total gold and silver content, and for 29 additional elements including As, Bi, W, Mo, and Te.

All samples returned less than five ppb gold and only one sample contained detectable (>0.2 ppm) silver; GSR-018 with 0.4 ppm Ag. No significant concentration of anomalous metal values are noted.

#### 1993 Results

During the 1993 property visit, a total of 3 soil and 12 rock samples were collected and analyzed for total Au and Ag, and 31 element ICP including Bi, As, W, Zn, and Mo. Significant lithogeochemical results are discussed under the 'mineralization' section.

Three contour soil samples, consisting of talus fines, were collected at an depth of 10-20 cm, and approximately 50 m down-slope from the vein structure described earlier. The soil line is also located on the eastern margin of a previously defined coincident tin-tungsten geochemical anomaly (Figure 4). The soil samples were shipped to Chemex Labs Ltd in Vancouver and processed according to the analytical procedures listed in Appendix A. Thirty-two element ICP-AES and fire assay with a AA finish for gold was the standard process employed for both the rock and soil samples. All gold assays reported were below the detection limit and the highest silver value was 13.2 ppm Ag reported for sample CFS-02. With background levels of 5 ppm Mo and 185 ppm Zn calculated by Moffat (1980), all three of the 1993 soil samples are anomalous in Mo, and CFS-03 is anomalous in both Zn and Mo.

Location of all samples are shown on Figure 4. Rock sample descriptions are in Appendix A and complete analytical procedures and results are included in Appendix B.

# CONCLUSIONS AND RECOMMENDATIONS

Consolidated Ramrod Gold Corp.'s Contact property covers a Cretaceous granite pluton, the Contact stock; and dikes hosted by sedimentary rocks of the Cassiar terrane and the Sylvester allochthon. Veins within the intrusive carry pyrite, molybdenite, scheelite, and bismuthinite. Large areas of xenoliths indicate that portions of the stock have recently been unroofed. Widespread tungsten and molybdenum mineralization occur within skarn zones along the margin of the intrusives. The molybdenite-bismuthinite quartz veins within the Contact stock have never been analyzed for gold.

The Contact lead-zinc-silver-bismuth skarn vein is a past producing mine located in the centre of the claim block. Limited underground development produced 10,451 grams of silver, 25 kilograms of copper, and 1,947 kilograms of lead from 25 tonnes of ore. No record of gold content is available. Three tungsten-molybdenum skarn deposits (Kuhn Zone North, Kuhn Zone South, Dead Goat Zone) are located within and immediately north of the property. The Kuhn Zone North, one kilometre north of the Contact property, was the largest deposit with a drill indicated reserve of 409,300 tons grading 0.48% WO<sub>3</sub> and 0.134% MoS<sub>2</sub>, with an additional 78,700 tonnes grading 0.50% WO<sub>3</sub>.

The 12 rock samples collected in 1992, and the 3 soil and 12 rock 1993 samples all returned values below the detection limit for gold. Rocks samples consisted largely of megacrystic granite variably altered, and limonitic quartz vein material with fine grained sulfides including pyrite, arsenopyrite and bismuthinite. Three 1992 and two 1993 rock samples contained anomalous levels of molybdenum.

Stream sediment samples from creeks draining the north and east sides of the property, collected by the Geological Survey of Canada and B.C. Ministry of Mines, returned anomalous values. Anomalous elements include silver, copper, lead, zinc, cobalt, molybdenum, and tungsten. Samples were not analyzed for gold.

Mineralized rock samples and anomalous stream sediment samples indicate potential exists for undiscovered mineralization on the Contact property. The property is underlain by favourable lithologies and structures and it should be further explored for gold mineralization. The following is recommended:

1. Compile a 1:5,000 scale orthophoto map of the Contact property incorporating all available geological, geochemical and remote sensing data to better identify potential exploration targets.

2. Further exploration consisting of prospecting, geological mapping, rock, soil, and stream sediment geochemistry should be carried out over and adjacent to the known granite intrusives, during the summer field season when snow cover is at a minimum.

3. The diamond drill core from Shell Canada Ltd's drill programs on the Contact Plug should be located, re-logged and sampled using an intrusive hosted gold target model.

4. Implementation of any further work such as geophysics, trenching, and diamond drilling is contingent on encouraging results reported from the initial phase of exploration.

#### Respectfully submitted;

POFESSIO, PROVINCE QE R. A. DOHER BRITISH COLUMB SCIEN

R. Allan Doherty, P.Geo.,

Jo-Anne vanRanden, B.Sc.

December 10, 1993

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# STATEMENT OF QUALIFICATIONS (RAD)

I, R. Allan Doherty, hereby certify that:

- 1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 205 100 Main Street, P.O. Box 4367, Whitehorse, Yukon, Y1A 3T5.
- 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, 1978-80. 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 am a co-author of this report based on information collected during property work completed on September 29-30, 1993, and on referenced sources.
- 5. I have no direct or indirect interest in the properties or securities of Consolidated Ramrod Gold Corporation.
- 6. I consent to the use of this report by Consolidated Ramrod Gold Corporation provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

OF OSCIEN

BoAllan Doherty, P. Geo. R. A. BRITISH COLUMBIA

December 10, 1993

# STATEMENT OF QUALIFICATIONS (JvR)

I, Jo-Anne vanRanden, hereby certify that:

- 1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 205 100 Main Street, P.O. Box 4367, Whitehorse, Yukon, Y1A 3T5.
- I am a graduate of the University of British Columbia, with a degree in geology (B.Sc., 1989). I have been involved in mineral exploration continuously since 1982.
- 3. I am a co-author of this report on the Contact 1-4 Claims of Consolidated Ramrod Gold Corporation, which is based on my examination of the property (September 29 - September 30, 1993) and on referenced sources.
- 4. I have no direct or indirect interest in the properties or securities of Consolidated Ramrod Gold Corporation.
- 5. I consent to the use of this report by Consolidated Ramrod Gold Corporation provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

19

December 10, 1993

Jo-Anne vanRanden, B.Sc.

Aurum Geological Consultants Inc.

# STATEMENT OF COSTS

STATEMENTC	DF COSTS
Field Work	
Professional Services	
Al Doherty, B.Sc., P.Geo.;	
	ember 29-30, 1993: \$700.00
Jo-Anne vanRanden, B.Sc.;	
2 days @ \$280/day, Sept	ember 29-30, 1993: \$560.00
Conrad Fox, assistant;	
	ember 29-30, 1993: <u>\$400.00</u>
Subtotal:	\$1,660.00
Expenses	
Meals and Accommodations:	\$360.00
Truck Rental (\$100/day * 2 days):	\$200.00
Fuel	\$80.80
Analytical (15 samples):	\$331.04
Field Supplies:	\$144.07
Radio Rental:	\$30.00
Accounting (10% of \$1145.91):	<u>\$114.59</u>
Subtotal:	\$1,126.50
GST (#R100341692) 7% of \$2,92	20.50: <u>\$204.44</u>
Total Field Expenses:	<u>\$3,124.94</u>
Research and Report Preparation	
Professional Services	
Allan Doherty, P. Geo.;	
1.5 days @ \$350/day:	\$525.00
Jo-Anne vanRanden, B.Sc.;	••==•••
5.5 days @ \$300/day:	\$1650.00
Expenses	
Photocopies (147 @ \$0.15):	\$22.05
Laser Printing:	\$25.00
Report Materials:	\$50.00
Computer Drafting:	<u>\$185.00</u>
Subtotal:	\$282.05
GST(#R100341692) 7% of \$2,45	7.05: <u>\$171.99</u>
Total Report Expenses:	<u>\$2,629.04</u>
TOTAL VALUATION OF 1993 ASSESSMENT	<u>WORK:</u> \$5,753.98

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# APPENDIX A

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ر ب **Rock Sample Descriptions** 

# Aurum Geological Consultants Inc.

# **ROCK SAMPLE LOCATION AND DESCRIPTION RECORD**

# AURUM GEOLOGICAL CONSULTANTS INC.

| Date: Septembe                        | er 1993 P | roject: 12 Area: 104 P/5 WEST Page1        | _of1_    |       |
|---------------------------------------|-----------|--------------------------------------------|----------|-------|
| SAMPLE NO.                            | LOCATION  | DESCRIPTION                                | ТҮРЕ     | WIDTH |
| ADR93 030                             | See Map   | Qtz-Monz to GRDR, 1% py to trace, biotite  | grab     | 1     |
| ADR93 031                             | See Map   | GRDR, Biotite rich, trace sulfides         | grab     | 1     |
| ADR93 032                             | Vein      | Qtz vein, 3% py, arsenopy, ?bismuthinite   | chip     | 1.00m |
| ADR93 033                             | Vein      | Qtz vein, clay altered, 3% euhedral pyrite | chip     | 1.00m |
| 4 <u></u>                             |           |                                            |          |       |
| · · · · · · · · · · · · · · · · · · · |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       |           |                                            |          |       |
|                                       | <u>.</u>  | )<br>                                      |          |       |
| ·····                                 |           |                                            | <u> </u> |       |

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# ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

#### AURUM GEOLOGICAL CONSULTANTS INC.

Project: 12 Area: 104 P/5 WEST Date: September 1993 Page 1 \_of\_\_1 SAMPLE NO. LOCATION TYPE WIDTH DESCRIPTION JvR93 050 See Map Fe rich intrusive, 5% biotite, trace py and cpy grab JvR93 051 leucocratic GRDR, 3% f.g. py, trace cpy grab 0.55m JvR93 052 Vein Qtz vein, open space, <1% py, manganese chip Intrusive, diss py, Mn?/tourmaline? 0.35m JvR93 053 Vein chip 1.15m JvR93 054 Vein Vein structure, 40% qtz, trace py chip 1.00m JvR93 055 8m S 054 same as 054, silica flooding, sericite chip 12m S 055 0.30m **JvR93 056** Qtz vein, <1% py, cockade qtz filling open space chip JvR93 057 20m S 056 grey Qtz vein, 5% pyrite, + silicified host grab

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# APPENDIX B

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Analytical Methods and Reports



# Chemex Labs Ltd. Analytical Chemists ' Geochemists ' Hegistered Assayers

212 Brocksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 To: CONSOLIDATED RAMROD GOLD CORPORATION ATTN: HOBERT J. MILLER 1440 - 625 HOWE ST. VANCOUVER, BC VGC 2T6

A9324516

Comments:

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# CERTIFICATE

A9324516

CONSOLIDATED RAMROD GOLD CORPORATION

Project: P.O. # :

Samples submitted to our lab in Vancouver, BC. This report was printed on 14-DEC-93.

|                | SAMPLE PREPARATION |                                                     |  |  |  |  |  |  |  |  |  |  |  |
|----------------|--------------------|-----------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| CHEMEX<br>CODE | NUMBER<br>SAMPLES  | DESCRIPTION                                         |  |  |  |  |  |  |  |  |  |  |  |
| 201<br>229     | 3                  | Dry, siave to -80 mesh<br>ICP - AQ Digestion charge |  |  |  |  |  |  |  |  |  |  |  |
|                |                    | · .                                                 |  |  |  |  |  |  |  |  |  |  |  |
| . NDTR         | 1,                 |                                                     |  |  |  |  |  |  |  |  |  |  |  |

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia ligestion is possibly incomplete are: Al, is, Be, Ca, Cr. Ga, K, La, Mg, Na, Sr, Ti, '1, W.

| CHEMEX | NUMBER<br>SAMPLES | DESCRIPTION                      | METHOD  | DETECTION  | UPPER<br>Limit |
|--------|-------------------|----------------------------------|---------|------------|----------------|
| 983    | 3                 | Au ppb: Fuse 30 g sample         | FA-ARS  | 5          | 10000          |
| 2118   | 3                 | Ag ppm: 32 element, soil & rock  | ICP-AES | 0.2        | 200            |
| 2119   | 3                 | Al %: 32 element, soil & rock    | ICP-ARS | 0.01       | 15,00          |
| 2120   | 3                 | hs ppm: 32 element, soil & rock  | icp-res | 2          | 10000          |
| 2121   | 3                 | Ba ppm: 32 element, soil E rock  | ICP-AES | 10         | 10000          |
| 2122   | 3                 | Be ppm: 32 element, soil & rock  | ICP-AES | 0.5        | 100.0          |
| 2123   | 3                 | Bi ppm: 32 element, soil & rock  | ICP-ABS | 2          | 10000          |
| 2124   | 3                 | Cu %: 32 element, soil 5 rock    | ICP-ARS | 0.01       | 15.00          |
| 2125   | 3                 | Cd ppm: 32 element, soil & rock  | icp-res | 0.5        | 100.0          |
| 2126   | 3                 | Co ppm: 32 element, soil & rock  | ICP-AES | 1          | 10000          |
| 2127   | 3                 | Cr ppm: 32 element, soil & rock  | ICP-AES | 1          | 10000          |
| 2128   | 3                 | Cu ppm: 32 element, soil & rock  | ICP-AES | 1          | 10000          |
| 2150   | 3                 | Fe %: 32 element, soll & rock    | icp-aes | 0.01       | 15.00          |
| 2130   | 3                 | Ga ppm: 32 element, soil & rock  | ICP-AES | 10         | 10000          |
| 2131   | 3                 | Hg ppm: 32 element, soil & rock  | ICP-AES | 1          | 10000          |
| 2132   | 3                 | K %: 32 element, soil & rock     | ICP-AES | 0.01       | 10.00          |
| 2151   | 3                 | La ppm: 32 element, soil & rock  | ICP-AES | 10         | 10000          |
| 2134   | 3                 | Mg %: 32 element, soil & rock    | ICP-AES | 0.01       | 15.00          |
| 2135   | 3                 | Mn ppm: 32 element, soil & rock  | ICP-RES | 5          | 10000          |
| 2136   | 3                 | Mo ppm: 32 element, soil & rock  | icp-aes | 1          | 10000          |
| 2137   | 3                 | Na %: 32 element, soil & rock    | ICP-ABS | 0.01       | 5.00           |
| 2138   | 3                 | Ni ppm: 32 element, soil & rock  | ICP-AES | 1          | 10000          |
| 2139   | 3                 | P ppm: 32 element, soil & rock   | ICP-ABS | 10         | 10000          |
| 2140   | 3                 | Pb ppm: 32 element, soil & rock  | ICP-ABS | 2          | 10000          |
| 2141   | 3                 | Sb ppm: 32 element, soll & rock  | ICP-ABS | 2          | 10000          |
| 2142   | 3                 | Sc ppm: 32 elements, soil & rock | ICP-AES | 1          | 10000          |
| 2143   | 3                 | Sr ppm: 32 element, soil & rock  | îcp-abs | 1          | 10000          |
| 2144   | 3                 | Ti %: 32 element, soil & rock    | ICP-AES | 0.01       | 5.00           |
| 2145   | 3                 | Tl ppm: 32 element, soil & rock  | ICP-ABS | 10         | 16000          |
| 2146   | 3                 | U ppm: 32 element, soil & rock   | ICP-AES | 10         | 10000          |
| 2147   | 3                 | V ppmr 32 element, soil & rock   | ICP-AES | - <u>1</u> | 10000          |
| 2148   | 3                 | W fymn: 32 element, soil & rook  | ICP-ABS | 10         | 10000          |
| 2149   | 3                 | Zn ppm: 32 element, soil & rock  | ICP-ABS | 2          | 10000          |

# **ANALYTICAL PROCEDURES**

CJ.C





# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C 1 PHONE: 604-984-0221

To: CONSOLIDATED RAMROD GOLD CORPORATION ATTN: ROBERT J. MILLER 1440 - 625 HOWE ST. VANCOUVER, BC V6C 2T6

Page Number 1-A Total Pages 1 Certilicale Date: 7-NOV-93 Invoice No. I-9324516 P.O. Number Account •

(12D)Contact Project : Comments:

|                            |                   |                   |                 |                     |                      |                   |                 |                   |                   |                      | CE                          | RTIFI         | CATE          | OF /             | ANAL                  | (SIS             | /                                          | A9324516             |                  |                      |                     |  |  |  |
|----------------------------|-------------------|-------------------|-----------------|---------------------|----------------------|-------------------|-----------------|-------------------|-------------------|----------------------|-----------------------------|---------------|---------------|------------------|-----------------------|------------------|--------------------------------------------|----------------------|------------------|----------------------|---------------------|--|--|--|
| SAMPLE<br>DESCRIPTION      | PR<br>CO          |                   | Au ppb<br>FA+AA | Ag<br>ppm           | A1<br>%              | As<br>ppm         | Ba<br>ppm       | Be<br>ppm         | Bi<br>ppm         | Ca<br>१              | Cd<br>ppm                   | Co<br>ppm     | Cr<br>ppm     | Cu<br>ppm        | Fe<br>%               | Ga<br>ppm        | Hg<br>ppm                                  | K<br>%               | La<br>ppm        | Mg<br>%              | Mn<br>ppm           |  |  |  |
| CPS-01<br>CPS-02<br>CPS-03 | 201<br>201<br>201 | 229<br>229<br>229 | 6.5             | (0.2<br>]3.2<br>4.0 | 0.97<br>1.72<br>1.86 | 276<br>448<br>250 | 70<br>90<br>120 | 0.5<br>1.5<br>3.0 | 710<br>732<br>228 | 0.18<br>0.18<br>0.46 | <pre>&lt; 0.5 i.0 1.5</pre> | 8<br>15<br>31 | 11<br>13<br>9 | 96<br>251<br>245 | 6.08<br>E2.10<br>5.81 | < 10<br>10<br>10 | <pre>{ 1 &lt; 1 &lt; 1 &lt; 1 &lt; 1</pre> | 0.34<br>0.34<br>0.31 | 40<br>60<br>1.00 | 0.42<br>0.59<br>0.50 | 515<br>1645<br>4720 |  |  |  |
|                            |                   |                   |                 |                     |                      |                   |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   | -                 |                 |                     |                      |                   |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   |                   |                 |                     |                      | •                 |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   |                   |                 |                     |                      |                   |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   |                   |                 |                     |                      |                   |                 |                   |                   | ·                    |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   |                   | 9.<br>2         |                     |                      |                   |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |
|                            |                   |                   |                 |                     |                      |                   |                 |                   |                   |                      |                             |               |               |                  |                       |                  |                                            |                      |                  |                      |                     |  |  |  |

| F                          | Chemex Labs Ltd.<br>Analytical Chemists * Geochemists * Registered Assayers<br>212 Brooksbank Ave., North Vancouver<br>British Columbia, Canada V7J 2C1<br>PHONE: 604-984-0221<br>To: CONSOLIDATED RAMROD GOLD CORPORATION<br>ATTN: ROBERT J. MILLER<br>1440 - 625 HOWE ST.<br>VANCOUVER, BC<br>V6C 2T6<br>Project : CONTACT<br>Comments: |           |                        |             |                      |                   |                |             |                 |                      |                      | ** Page Number 1-B<br>Total Pages 1<br>Certilicate Date:17-NOV-<br>Invoice No. I-932451<br>P.O. Number :<br>Account : |                |                |                   |          |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------|-------------|----------------------|-------------------|----------------|-------------|-----------------|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|----------------|----------------|-------------------|----------|
| SAMPLE                     | PREP                                                                                                                                                                                                                                                                                                                                      | Мо        | Na                     | Nj.         | P                    | Pb                | Sb             | Sc          | <br>Sr          | R                    |                      | CATE                                                                                                                  |                | 1127 NZ        |                   | A9324516 |
| DESCRIPTI                  |                                                                                                                                                                                                                                                                                                                                           | no<br>ppm | 80<br>1                | bbm<br>Tu   | ppm                  | ppm               | ppm            | ppm         | ppm             | Ti<br>%              | ppia                 | U<br>PPm                                                                                                              | v<br>ppn       | W<br>ppm       | Zn<br>ppm         |          |
| CFS-OL<br>CFS-O2<br>CFS-O3 | 201 229<br>201 229<br>201 229                                                                                                                                                                                                                                                                                                             | 9 12      | $0.01 \\ 0.02 \\ 0.01$ | 7<br>7<br>7 | 1670<br>2450<br>1710 | 520<br>720<br>264 | 88<br>76<br>22 | 4<br>7<br>5 | 56<br>53<br>198 | 0.05<br>0.01<br>0.04 | < 10<br>< 10<br>< 10 | 20<br>20<br>30                                                                                                        | 27<br>25<br>34 | 20<br>30<br>20 | 100<br>184<br>328 |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           |           |                        |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |
|                            |                                                                                                                                                                                                                                                                                                                                           | \$        | ·                      |             |                      |                   |                |             |                 |                      |                      |                                                                                                                       |                |                |                   |          |



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

#### To: CONSOLIDATED RAMROD GOLD CORPORATION ATTN: ROBERT J. MILLER 1440 - 625 HOWE ST. VANCOUVER, BC V6C 2T6

Comments:

A9324517

#### CONSOLIDATED RAMPOD GOLD CORPORATION

Project: P.O. # ;

Samples submitted to our lab in Vancouver, MC. This report was printed on 14-DEC-93.

|                   | SAMPLE PREPARATION |                                                                                         |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--------------------|-----------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| CHEMEX            | NUMBER<br>SAMPLES  | DESCRIPTION                                                                             |  |  |  |  |  |  |  |  |  |  |  |
| 205<br>274<br>229 | 12<br>12<br>13     | Geochem ring to approx 150 mesh<br>0-15 1b crush and split<br>ICF - AQ Digestion charge |  |  |  |  |  |  |  |  |  |  |  |
| * NOTE            | 1.                 |                                                                                         |  |  |  |  |  |  |  |  |  |  |  |

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the mitric-aqua regia digestion is possibly incomplete aro: Al, Ba, Bo, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Ti, W.

| ANALYTICAL PROCEDURES |                   |                                  |         |                    |                |  |  |  |  |  |
|-----------------------|-------------------|----------------------------------|---------|--------------------|----------------|--|--|--|--|--|
| CODE                  | NUMBER<br>SAMPLES | DESCRIPTION                      | METHOD  | DÉTECTION<br>LIMIT | UPPEF<br>LIMIT |  |  |  |  |  |
| 983                   | 12                | Au ppb: Fuse 30 g sample         | Fa-AAS  | 5                  | 10000          |  |  |  |  |  |
| 2118                  | 12                |                                  | 1CP-ARS | 0.2                | 200            |  |  |  |  |  |
| 2119                  | 12                |                                  | ICP-ABS | 8.01               | 15.00          |  |  |  |  |  |
| 2120                  |                   | As ppm: 32 element, soil & rock  | ICP-AES | 2                  | 10000          |  |  |  |  |  |
| 2121                  | 12                | Ba ppm: 32 element, soil & rock  | ICP-ABB | 10                 | 10000          |  |  |  |  |  |
| 2122                  | 12                | Be prm: 32 element, soil & rock  | ICP-AES | 0.5                | 100.0          |  |  |  |  |  |
| 2123                  | 12                | Bi ppm: 32 element, soil & rock  | ICP-AES | 2                  | 10000          |  |  |  |  |  |
| 2124                  | 12                | Ca %: 32 element, soil & rock    | ICP-ARS | 0.01               | 15,00          |  |  |  |  |  |
| 2125                  | 12                | Cd ppm: 32 element, soil & rock  | ICP-AES | 0.5                | 100.0          |  |  |  |  |  |
| 2126                  | 12                | Co ppm: 32 element, soil & rock  | ICP-ABS | 1                  | 10000          |  |  |  |  |  |
| 2127                  | 12                | Cr ppm: 32 element, soil & rock  | ICP-ARS | 1                  | 10000          |  |  |  |  |  |
| 2126                  | 12                | Cu ppm: 32 element, soil & rock  | ICP-AES | 1                  | 10000          |  |  |  |  |  |
| 2150                  | 12                | Fe %: 32 element, soil & rock    | ICP-AKS | 0.01               | 15.00          |  |  |  |  |  |
| 2130                  | 12                | Ga ppm: 32 element, soil & rock  | ICP-AES | 10                 | 10000          |  |  |  |  |  |
| 2131                  | 12                | Hg ppm: 32 element, soil & rock  | ICP-ARS | 1                  | 10000          |  |  |  |  |  |
| 2132                  |                   | R %: 32 element, soil & rook     | ICP-ARS | 0.01               | 10.00          |  |  |  |  |  |
| 2151                  |                   | La ppm: 32 element, soil & rock  | ICP-AES | 10                 | 10000          |  |  |  |  |  |
| 2134                  |                   | Ng %: 32 element, soil & rock    | ICP-ABS | 0.01               | 15.00          |  |  |  |  |  |
| 2135                  | 12                | Ma ppm: 32 element, soil & rock  | ICP-AES | 5                  | 10000          |  |  |  |  |  |
| 2136                  | 12                | No ppm: 32 element, soil & rock  | ICP-AES | 1                  | 10000          |  |  |  |  |  |
| 2137                  | 12                | Na %: 32 element, soil & rock    | ICP-BES | 0.01               | 5,00           |  |  |  |  |  |
| 2138                  | 12                | Ni ppm: 32 element, soil & rock  | ICP-ARS | 1                  | 10000          |  |  |  |  |  |
| 2139                  | 12                | P ppm: 32 element, soil & rock   | ICP-AES | 10                 | 10000          |  |  |  |  |  |
| 2140                  | 12                | Pb ppm: 32 element, soil & rock  | ICP-AES | 2                  | 10000          |  |  |  |  |  |
| 2141                  | 12                | Sb ppm: 32 element, soil & rock  | ICP-ARS | 2                  | 10000          |  |  |  |  |  |
| 2142                  | 12                | So ppm: 32 elements, soil & rock | ICP-ABS | 1                  | 10000          |  |  |  |  |  |
| 2143                  | 12                | St ppm: 32 element, soil & took  | ICP-ABS | 1                  | 10000          |  |  |  |  |  |
| 2144                  | 12                | Ti %: 32 element, soil & rock    | ICP-AES | 0,01               | 5,00           |  |  |  |  |  |
| 2145                  | 12                | Tl ppm: 32 element, soil & rock  | ICP-ABS | 10                 | 10000          |  |  |  |  |  |
| 2146                  | 12                | U ppm: 32 alamant, soil & rock   |         | 10                 | 10000          |  |  |  |  |  |
| 2147                  | 12                | V ppm: 32 element, soll & rock   | ICP-AES | 1                  | 10000          |  |  |  |  |  |
| 2148                  | 12                | W ppm: 32 element, soll & rock   |         | 10                 | 10000          |  |  |  |  |  |
| 2149                  | 12                | Zn ppm: 32 element, soil & rock  | ICP-ABB | 2                  | 10000          |  |  |  |  |  |

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# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Conada V7J 2C1 PHONE: 604-984-0221

CONSOLIDATED RAMROD GOLD CORPORATION To: ATTN: ROBERT J. MILLER 1440 - 625 HOWE ST. VANCOUVER, BC V6C 2T6 Project: 12 Contr

Page Number 1-A Total Pages 1 Certificate Date: 7-NOV-93 Invoice No. I-9324517 P.O. Number : Account :

| g     Al     As       m     %     ppm       2     0.36     < 2       2     0.53     2       6     0.39     18       4     0.37     8       2     0.36     2 | 40<br>40       | Be<br>ppm<br>< 0.5<br>< 0.5<br>< 0.5<br>< 0.5<br>< 0.5<br>< 0.5 | Bi<br>ppm<br>2<br>2260<br>294<br>12                                   |                                                | Cd<br>ppm<br>< 0.5<br>< 0.5<br>< 0.5<br>< 0.5<br>< 0.5                                                   | Co<br>ppm<br>10<br>9<br>4<br>1                                                                                         | Cr<br>ppm<br>117<br>142<br>168<br>160                 | Cu<br>ppm<br>34<br>34<br>34<br>29                     | Fe<br>%<br>1.01<br>1.35<br>2.57<br>1.86                                                                                                                 | Ga<br>ppm<br>< 10<br>< 10<br>< 10<br>< 10                                                                        | Hg<br>ppm<br>< 1<br>< 1<br>< 1                        | K<br>8<br>0.17<br>0.34<br>0.41                        | La<br>ppm<br>20<br>70<br>< 10                         | Mg<br>%<br>0.21<br>0.40<br>0.24                       | Mn<br>ppm<br>60<br>75                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| 2       0.53       2         6       0.39       18         4       0.37       8         2       0.36       2                                                | 40<br>40<br>40 | < 0.5<br>< 0.5<br>< 0.5                                         | 294                                                                   | $0.29 \\ 0.07 \\ 0.11$                         | < 0.5<br>< 0.5<br>< 0.5                                                                                  |                                                                                                                        | $\frac{142}{168}$                                     | 34<br>34                                              | 1.35 2.57                                                                                                                                               | < 1.0                                                                                                            |                                                       | 0.34                                                  | 70                                                    | 0.40                                                  | 75                                                    |
| 2       0.53       2         6       0.39       18         4       0.37       8         2       0.36       2                                                | 40<br>40<br>40 | < 0.5<br>< 0.5<br>< 0.5                                         | 294                                                                   | $0.29 \\ 0.07 \\ 0.11$                         | < 0.5<br>< 0.5<br>< 0.5                                                                                  |                                                                                                                        | $\frac{142}{168}$                                     | 34<br>34                                              | 1.35 2.57                                                                                                                                               | < 1.0                                                                                                            |                                                       |                                                       | 70                                                    | 0.40                                                  | 75                                                    |
| 6       0.39       18         4       0.37       8         2       0.36       2                                                                             | 40<br>40       | < 0.5<br>< 0.5                                                  | 294                                                                   | $0.07 \\ 0.11$                                 | < 0.5<br>< 0.5                                                                                           | 4<br>1                                                                                                                 | 168                                                   | 34                                                    | 2.57                                                                                                                                                    |                                                                                                                  | < Ĩ.                                                  |                                                       |                                                       |                                                       |                                                       |
| 4 0.37 8<br>2 0.36 2                                                                                                                                        | 40             | < 0.5                                                           | 294                                                                   | 0.11                                           | < 0.5                                                                                                    | 1                                                                                                                      | 160                                                   | 29                                                    | 1 0/                                                                                                                                                    |                                                                                                                  |                                                       |                                                       |                                                       |                                                       | 45                                                    |
| 2 0.36 2                                                                                                                                                    |                |                                                                 |                                                                       | 0.17                                           |                                                                                                          |                                                                                                                        |                                                       |                                                       | 1.80                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.36                                                  | 10                                                    | 0.12                                                  | 30                                                    |
|                                                                                                                                                             |                |                                                                 | 14                                                                    | 0.17                                           | < 0.5                                                                                                    | 4                                                                                                                      | 126                                                   | 23                                                    | 1.15                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.27                                                  | 20                                                    | 0.27                                                  | 70                                                    |
| 2 0.39 2                                                                                                                                                    | 30             | < 0.5                                                           | 4                                                                     | 0.56                                           | < 0.5                                                                                                    |                                                                                                                        | 122                                                   | 35                                                    | 0.93                                                                                                                                                    | < 10                                                                                                             | < <u>1</u> .                                          | 0.25                                                  | 20                                                    | 0.26                                                  | 90                                                    |
| 4 0.46 142                                                                                                                                                  | 10             | < 0.5                                                           | 62                                                                    | 0.45                                           | < 0.5                                                                                                    | 2                                                                                                                      | 148                                                   | 25                                                    | 1.02                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.18                                                  | 10                                                    | 0.09                                                  | 405                                                   |
| 4 0.56 170                                                                                                                                                  | 30             | < 0.5                                                           | 10                                                                    | 0.18                                           | < 0.5                                                                                                    | 3                                                                                                                      | 164                                                   | 46                                                    | 1.47                                                                                                                                                    | < 1.0                                                                                                            | < 1                                                   | 0.36                                                  | 20                                                    | 0.09                                                  | 285                                                   |
| 4 0.67 12                                                                                                                                                   | 30             | 0.5                                                             | 222                                                                   | 0.15                                           | < 0.5                                                                                                    | 4                                                                                                                      | 59                                                    | 120                                                   | 5.34                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.42                                                  | 10                                                    | 0.10                                                  | 375                                                   |
| 0 0.48 24                                                                                                                                                   | 20             | < 0.5                                                           | 778                                                                   | 0.10                                           | < 0.5                                                                                                    | L                                                                                                                      | 171                                                   | 28                                                    | 1.66                                                                                                                                                    | < 1.0                                                                                                            | ·< 1                                                  | 0.30                                                  | 30                                                    | 0.04                                                  | 80                                                    |
| 0 0.28 18                                                                                                                                                   | < 10           | < 0.5                                                           | 286                                                                   | 0.02                                           | < 0.5                                                                                                    |                                                                                                                        | 1.72                                                  | 10                                                    | 0,38                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.17                                                  | 10                                                    | 0.03                                                  | 80                                                    |
| 0 0.61 744                                                                                                                                                  | 20             | < 0.5                                                           | 354                                                                   | 0.25                                           | 1.0                                                                                                      | 3                                                                                                                      | 180                                                   | 32                                                    | 1.66                                                                                                                                                    | < 10                                                                                                             | < 1                                                   | 0.37                                                  | 10                                                    | 0.11                                                  | 470                                                   |
| 0                                                                                                                                                           | 0.48 24        | 0.48 24 20<br>0.28 18 < 10                                      | 0.48         24         20 < 0.5           0.28         18 < 10 < 0.5 | 0.48 24 20 < 0.5 778<br>0.28 18 < 10 < 0.5 286 | 0.48         24         20         < 0.5         778         0.10           0.28         18         < 10 | 0.48         24         20         < 0.5         778         0.10         < 0.5           0.28         18         < 10 | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 0.48         24         20         < 0.5         778         0.10         < 0.5         1         171         28           0.28         18         < 10 | 0.48     24     20     < 0.5     778     0.10     < 0.5     1     171     28     1.66       0.28     18     < 10 | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |

Comments:

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| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  | Chemex Labs Ltd.<br>Analytical Chemists * Geochemists * Registered Assayers<br>212 Brooksbank Ave., North Vancouver<br>British Columbia, Canada<br>V7J 2C1<br>PHONE: 604-984-0221 |                                                     |                   |                              |                  |                          |                      |                       |                    | Projo                | ATTN: F<br>1440 - 6                                            | NOBERT<br>25 HOW<br>UVER, B          | D RAMRO<br>J. MILLE<br>E ST.<br>C<br>NG                                   | в<br>c.f           |                           |                     | ** Page Number 1-B<br>Total Pages 1<br>Certificate Date 17-NOV-93<br>Invoice No. I-9324517<br>P.O. Number :<br>Account |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|------------------------------|------------------|--------------------------|----------------------|-----------------------|--------------------|----------------------|----------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------|--------------------|---------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------|
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                                                                                                                                                                                   |                                                     |                   |                              |                  |                          |                      |                       |                    |                      | Ti.                                                            | T1                                   | ŋ                                                                         | V                  | W                         | Zn                  |                                                                                                                        |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | D93-030<br>D93-031<br>D93-032<br>D93-032<br>R93-050                                                                                                                               | 205 274<br>205 274<br>205 274<br>205 274<br>205 274 | 12<br>2<br>2<br>4 | 0.04<br>0.06<br>0.01<br>0.02 | 3<br>2<br>4<br>2 | 790<br>770<br>310<br>560 | 8<br>4<br>928<br>156 | < 2<br>< 2<br>24<br>4 | 1<br>2<br>1<br>< 1 | 15<br>16<br>18<br>31 | 0.11<br>0.12<br>0.01<br>0.02                                   | < 10<br>< 10<br>< 10<br>< 10<br>< 10 | <pre>&lt; 1.0 &lt; 1.0 &lt; 1.0 &lt; 1.0 &lt; 1.0 &lt; 1.0 &lt; 1.0</pre> | 14<br>21<br>8<br>7 | < 10<br>< 10<br>50<br>100 | 10<br>14<br>16<br>6 |                                                                                                                        |
|                                                        | 7R93-051<br>/R93-052<br>/R93-053<br>/R93-054<br>/R93-055                                                                                                                          | 205 274<br>205 274<br>205 274                       | < 1 <<br>< 1<br>5 | 0.01<br>0.01<br>0.01         | 3<br>3<br>1      | $190 \\ 540 \\ 650$      | 84<br>12<br>198      | 16<br>6<br>4          | < L<br>L<br>1      | 9<br>7<br>8          | <pre>&lt; 0.03<br/>&lt; 0.03<br/>&lt; 0.01<br/>&lt; 0.01</pre> | < 10<br>< 10<br>< 10                 | 10<br>←10<br>←10                                                          | 2<br>5<br>4        | € 10€ 10€ 10€ 10          | 24<br>64<br>38      | · · · · · · · · · · · · · · · · · · ·                                                                                  |
|                                                        | R93-057                                                                                                                                                                           |                                                     |                   |                              |                  |                          |                      |                       |                    |                      |                                                                |                                      |                                                                           |                    |                           |                     |                                                                                                                        |

CERTIFICATION: