THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERING OF THESE SECURITIES ONLY IN THOSE JURISDICTIONS WHERE THEY MAY BE LAWFULLY OFFERED FOR SALE AND THEREIN ONLY BY PERSONS PERMITTED TO SELL SUCH SECURITIES. NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENSE.

PROPERTY FILE D.L. Lawk Roparty

VEW ISSUE

INITIAL PUBLIC OFFERING

Etitective Date: October 14, 1988

## MOONGOLD RESOURCES INC.

1407 - 750 West Pender Street, Vancouver, British Columbia V6C 2T7

(the "Issuer")

#### OFFERING OF 600,000 COMMON SHARES

PRICE: \$0.35 per SHARE

	Price to Public (1)	Agent's Commission	Net Proceeds to be Received by the Issuer (2)
Per Share	\$0.35	\$0.05	\$0.30
Total:	\$210,000	\$30,000	\$180,000

- (1) The price to the public was established pursuant to negotiations between the Issuer and the Agent.
- (2) In addition, the Agent will be granted Agent's Warrants as described in the section captioned "Plan of Distribution" herein.
- (3) Before deducting offering expenses estimated to be \$20,000, which will be paid by the Issuer.

A copy of the Option and Joint Venture Agreement will be available for inspection during the Offering Period at the offices of Devlin Jensen Harvey, Barristers & Solicitors, 2550 - 555 West Hastings Street, Vancouver, British Columbia, V6B 4N5, during normal business hours.

The Issuer entered into a Finder's Fee Agreement, dated September 11, 1987, whereby the Issuer paid the sum of \$8,000 to Gregory Explorations Inc., a non-reporting British Columbia company, 100% owned by Greg Sinitsin, and the sum of \$9,000 directly to Greg Sinitsin, in consideration for Gregory Exploration Inc.'s assistance in acting as a middleman in the Issuer acquiring its interest in the Option and Joint Venture Agreement.

By an agreement (the "Joint Venture Agreement"), dated August 29, 1979, entered into between Northair Mines Ltd. (Northair) and Newhawk, Northair and Newhawk agreed to enter into a Joint Venture Agreement for the exploration and development of the Claims. It was agreed that each party was entitled to a 50% interest in the profits from the Claims, for which Northair paid Newhawk \$25,000.

Northair is a British Columbia reporting corporation with a business office located at 600 - 890 West Pender Street, Vancouver, British Columbia. There are no greater than 10% shareholders of Northair.

## Description of the Hawk Claims

#### Location and Access

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The Claims are situated about 80 kilometers south-southwest of Dease Lake, British Columbia, and about 35 kilometers west-southwest of Iskut Village on the Cassiar Highway, west of Nuttlude Lake.

Access to the Claims is best by helicopter from Dease Lake or Iskut Village, or by float plane to Nuttlude Lake. Although an old airstrip exists near the lakeshore, it is currently overgrown. A bulldozed road built in 1979 exists from the old strip to the adit portal; it is usable by allterrain vehicles, but would require some reconditioning for use by 4-wheel drive vehicles. Commercial flights in small aircraft are available by arrangement from Terrace to Dease Lake, and to the Iskut landing strip, by Trans-Provincial Airlines.

#### Exploration History

The following historical information is extracted from an engineering report dated December 21, 1987 (the "Report"), prepared for the Issuer by Frank Di Spirito, B.A. Sc.,

P.Eng., Peter Kaczkowski, B.Sc., M.Sc., Martin St. Pierre, B. Sc. and David Coffin, all of Shangri-La Minerals Limited, of Vancouver, British Columbia, a copy of which Report is attached hereto and forms part of this Prospectus:

"In early 1957 Torbrit Silver Mines staked several claims over silver-gold vein occurrences along Hawk Creek, which flows into Nuttlude Lake from the west. They conducted geological mapping and surface sampling surveys and retained the claims for about ten years. In 1967 Shawnigan Mining and Smelting Co. staked the Claims and performed a small amount of diamond drilling on the original discovery.

In February 1978, Highhawk Gold Mines staked the Hawk claims, and that year employed G.A. Noel and Associates to perform geological mapping and soil sampling. Several gold bearing quartz veins were located on the surface in the north-western portion of the Hawk 1 Claim, the most prominent containing high gold values over an aggregate length of 200 m (0.85 oz/ton Au; 2.04 oz/ton Ag weighted average across 34 cm). Soil and silt sampling indicated potential for other gold bearing veins on the Hawk 1 Claim to the east and south of known showings.

In 1979 and 1980, Newhawk Gold Mines (formerly Highhawk Gold Mines) conducted underground exploration an concentrating exclusively on the evaluation of the main vein. A total of 358 metres of drifting and crosscutting was performed, from an elevation of 1280 metres, and was accompanied by 430 metres (9 holes) of diamond drilling. This work indicated that the vein changed from a strong, well mineralized structure at the surface to a weak, highly faulted and poorly mineralized structure at depth. The best underground intersections with the vein averaged 0.195 oz/ton gold across 1 metre, along a drift length of 12 metres. G.A. Noel postulated that the ore may rake to the northwest, and recommended testing the hypothesis by diamond drilling.

A mineral estimate based on the 1980 drilling results concluded that 12,700 tons grading 0.352 oz/ton gold over an average width of 43.4 cm is available between the adit and the surface. This estimate neglects any reserves below the adit, and was made without consideration of mining practicalities.

In 1981 G.A. Noel and Associates performed widespread geological mapping of the Newhawk holdings. The surface vein showings were re-located and the results of the previous work were compiled and presented in a report by B. Taylor in 1982. It was recommended that further surface exploration be undertaken on the Hawk 1 Claim to locate and

define additional gold bearing veins. The recommended program included surface mapping, trenching and sampling and geological mapping over an extended portion of the Claim, including the area South of Hawk Creek.

In 1984, under an option agreement with Newhawk Gold Mines, Cominco Ltd. performed a widespread soil and rock geochemical survey over the Hawk Claims (and over the adjoining Northcal holdings, the Red Dog Claims), as well as additional geological mapping and examination of existing core from the Red Dog showing. They were also the first to perform geophysical measurements in this area and ran ground magnetometer and VLF-EM over the geochemical grid. Most of the work on the Hawk Claims was done south of Hawk Creek, except for two short lines at the western edge of the Hawk 1 Claim over a zone of known high copper geochemical values.

The results of the geochemical survey indicated the presence of anomalous high gold values throughout the Hawk Property, as well as in the adjoining Red Dog Claims. Peak gold values often corresponded with peak arsenic and copper values.

 $(\cdots)$ 

The geophysics was moderately helpful in mapping zones of economic interest. The magnetic high anomalies were related to intrusive activity, and some magnetic effects may map skarn zones....Testing of the gold source areas has been restricted to a fairly small region  $(300 \times 400 \text{ m})$ ."

## <u>Underground Exploration/Reserve Estimate</u>

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The underground exploration program, conducted during 1979 and 1980, consisted of 358 metres of 3x3 metre trackless drifting and crosscutting and 430 metres of diamond drilling. The portal to the underground drillings is caved.

A 1982 summary report on the Hawk Claims prepared by B. Taylor, P.Eng., included a reserve estimate based on information obtained during the underground exploration.

The reserve estimate, based on the intersections with the vein and without any consideration of mining practicalities, calculated that a total of 12,700 short tons grading 0.352 oz/ton gold, across an average width of 43.4 cm, is available between the adit and the surface. The gross total of 4,474 ounces of gold makes no allowance for material either below the adit or within an extension of the vein beyond the adit.

There are no known reserves of commercial ore located on the Claims, and the Issuer is conducting an exploratory search for ore only.

There are no known material underground or surface workings, plant or equipment located on the Claims, except as disclosed herein.

### Current Exploration

From September 8, 1987 to October 8, 1987 Shangri-La Minerals Limited conducted a program of linecutting and grid establishment, rock and soil sampling and ground magnetometer, electromagnetic and induced polarization surveys, with the object of confirming and expanding on some of the results obtained by others in previous surveys, and to test the effectiveness of several geophysical methods in exploring for gold bearing mineralization. The program was undertaken on behalf of the Issuer at a cost of \$84,915.51.

The program conducted for the Issuer was designed to test the effectiveness of various geophysical techniques in locating buried vein systems, and to test several geochemical responses from previous surveys. Several induced polarization and resistivity responses, east of the main showings areas, coincide with high gold and arsenic values in soil samples, indicating the likely presence of buried gold-bearing veins at those locations. It is concluded that combined soil chemistry and IP testing is an effective tool for the location of buried veins on the Claims.

The Report concludes, at page 22, as follows:

"The complexity of the geology and the high degree of sulphide dissemination mask the geophysical responses of vein type gold deposits on the Hawk 1 Claim. Confidence in the interpretation of anomalies is greatly enhanced by an integrated data set, combining several different techniques. In the case of the Hawk 1 property the combined use of soil geochemistry, ground magnetometer and Induced Polarization at a station spacing of 12.5 metres is a suitable combination of exploration tools. Many areas of interest have been outlined and are recommended for further work.

The results obtained on the east side of the 1987 grid (Hawk 1 Claim, north of Hawk Creek) indicated the presence of gold bearing rocks. The recommended program for the Hawk 1 claim includes detailed geological and geochemical mapping of known anomalous zones by blast trenching and sampling. In addition, exploration should be extended further east because there is no indication that the anomalous zone surveyed this year terminates at the east end of the grid; indeed there are two single point geochemical anomalies discovered by Cominco along the road."

# GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL PROGRAM REPORT HAWK PROPERTY

FOR MOONGOLD RESOURCES INC.

HAWK PROPERTY, NUTTLUDE LAKE AREA
LIARD MINING DIVISION
BRITISH COLUMBIA

NIS 104G/9W, 10E

NORTH LATITUDE: 57° 42'

WEST LONGITUDE: 130° 30'

BY

FRANK DI SPIRITO, B.A.Sc., P.Eng.

PETER KACZKOWSKI, B.Sc., M.Sc.

MARTIN ST.-PIERRE, B.Sc.

DAVID COFFIN

21 DECEMBER, 1987

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#### SUMMARY

At the request of Moongold Resources Inc., an exploration program has been completed on the Hawk mineral property by Shangri-La Minerals Limited. The program included magnetometer, electromagnetic, induced polarization, and soil and rock sampling surveys designed to expand on work conducted by previous operators. Moongold has obtained an option on the property from Newhawk Gold Mines Ltd.

The property is located west of Nuttlude Lake, approximately 80 km south of Dease Lake and 35 km west of Iskut village, in north-western British Columbia. Access is via float plane to Nuttlude Lake, or directly by helicopter from Dease Lake.

Geology of the property is composed of intermediate to felsic volcanics and intercalated sediments of Triassic age, which have been intruded by granodiorite and monzonite of Jurassic or Cretaceous age. Contained within these units are areas of porphyry copper deposition, and of small polymetallic quartz veins which may contain high concentrations of gold and silver. Overlying this sequence are Tertiary and younger, Mount Edziza basalt flows.

North-northwesterly trending quartz-sulfide-gold veins found on the Hawk 1 claim have been periodically explored since 1957. In 1980, Newhawk Gold Mines completed underground and diamond drill testing of the main vein and concluded that it contained, in the portion tested, 12,700 tons of material grading 0.325 oz/ton gold across an average width of .43 meters. Widespread soil testing by Cominco Ltd. in 1984 indicated a number of anomalously high values for both gold and copper.

The program conducted for Moongold Resources the amenability of various geophysical designed to test techniques in locating buried vein systems, and to test several geochemical responses from previous surveys. Several induced polarization and resistivity responses, east of the main showings area, coincide with high gold and arsenic values in soil samples, indicating the likely presence of buried gold-bearing veins at those locations. It is concluded that combined soil geochemistry and IP testing is an effective tool for the location of buried veins on the Hawk property.

recommended that blast trenching of the coincident in order to discover their source. anomalies be carried out Areas of the property which have returned anomalous soil values should undergo an IP survey, and detailed soil in the past sampling should be carried out as response dictates. eastern portion of Hawk 1 should undergo both detailed soil geochemistry and induced polarization.

A sum of \$115,000 should be allocated in order to complete Contingent upon favourable the proposed next phase of work. response from the proposed work, a follow-up phase of work would include equipment trenching of accessible areas, and require preliminary diamond drilling of exposed veins.

Signed at Vancouver, B.C.

per Peter Kaczkowski, M.Sc.

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Frank Di Spirito, B.A.Sc., 21 December, 1987

F. DISPIRITO

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Shangri-La Minerals Limited-

## PART A INTRODUCTION

## 1. Survey Objective

An initial exploration program was conducted on the HAWK 1 claim by Shangri-La Minerals Limited, from September 8, 1987 to October 8, 1987 for Moongold Resources Ltd. The program consisted of linecutting and grid emplacement, rock and soil sampling, ground magnetometer, electromagnetic and induced polarization surveys. The purpose of the program was to confirm and expand on some of the results obtained by others in previous surveys, and to test the effectiveness of several geophysical methods in exploring for gold bearing mineralization.

This report compiles information from previous work and presents results from this year's program. The report concludes with a current evaluation of the property and recommendations for further work.

## 2. Property Status

The HAWK 1 claim is comprised of 18 units, the Hawk 2 of 20 units, located in the Liard Mining Division of British Columbia. The HAWK 1 and HAWK 2 claims were staked in February, 1978 for Highhawk Gold Mines, which has subsequently reorganized to as Newhawk Gold Mines. Moongold Resources Inc. has an option agreement with Newhawk for the HAWK 1 and 2 claims.

The claim record data is as follows:

NAME	RECORD NO.	ANNIVERSARY	UNITS
HAWK 1	532	21 Feb., 1991	18
HAWK 2	533	21 Feb., 1991	20

## 3. Location, Access and Physiography

The property is located west of Nuttlude Lake, about 80 km south-southwest of Dease Lake, B.C. and about 35 kilometers west-southwest of Iskut Village on the Cassiar Highway. The property location map is presented in Figure 1, and the HAWK claims are located in Figure 2. The claims are entirely within the Mount Edziza Recreational Area, at the boundary of the Mount Edziza Provincial Park. Any exploration work in the Recreational Area requires approval from the Ministry of Parks and Recreation, which is contingent on filing a Resource Use Permit. This approval process takes at least 30 days and may require the posting of a damage bond.

Access to the property directly is by helicopter from Dease Lake or, Iskut Village, or by float plane to Nuttlude Lake. Although an old airstrip exists near the lakeshore, it is currently overgrown. A bulldozer road built in 1979 exists from the old strip to the adit portal; it is usable by all-terrain vehicle, but would require some reconditioning for use by 4-wheel drive vehicles. The supply point for the 1987 survey was Dease Lake. Commercial flights in small aircraft are available by arrangement from Terrace to Dease Lake, and to the Iskut landing strip, by Trans-Provincial Airlines.

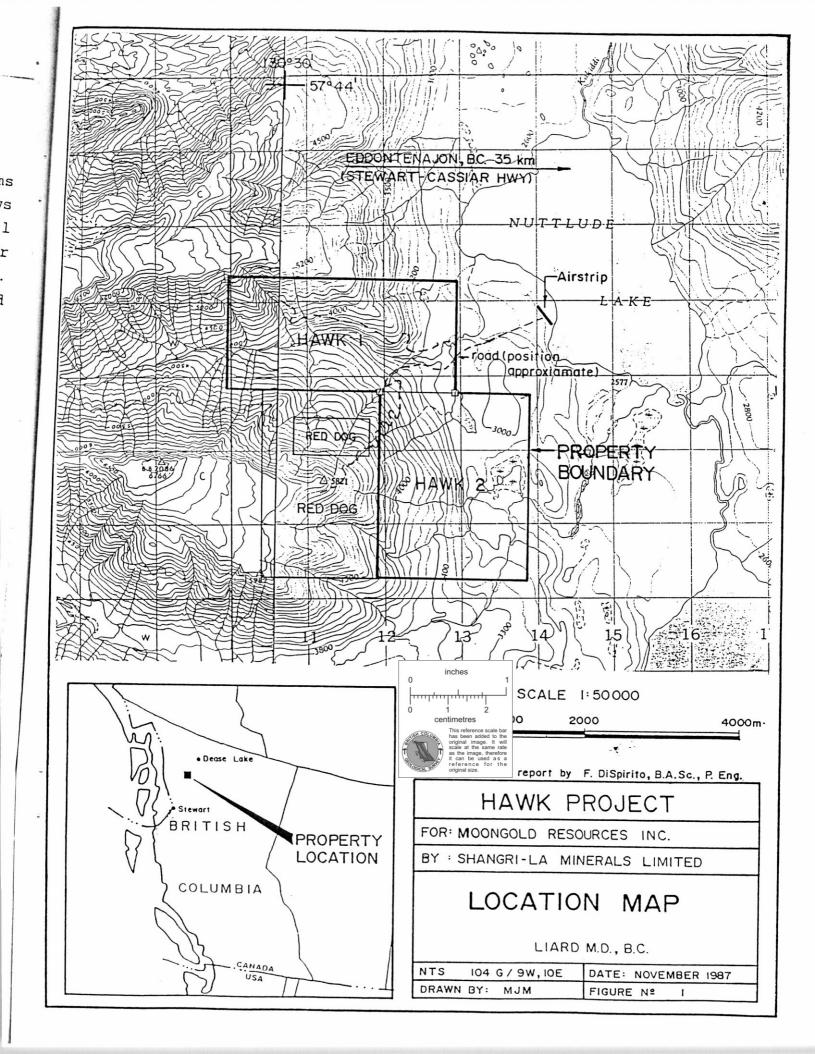
The property physiography ranges from moderately steep, heavily wooded areas to near vertical cliffs and talus slopes. The HAWK 1 claim straddles a glacial valley trending east away from the Mount Edziza volcano. A number of small creeks have eroded deep canyons in the northern flank of the valley, exposing mineralized veins of interest. Tree line is at approximately 1,300 m of elevation, and snow can be expected to fall between September and May.

## 4. Exploration History

In early 1957 Torbrit Silver Mines staked several claims over silver-gold vein occurrences along Hawk Creek, which flows into Nuttlude Lake from the west. They conducted geological mapping and surface sampling surveys and retained the claims for about ten years. In 1967 Shawnigan Mining and Smelting Co. staked the claims and performed a small amount of diamond drilling on the original discovery.

In February 1978, Highhawk Gold Mines staked the HAWK claims, and that year employed G.A. Noel and Associates (ref.1) to perform geological mapping and soil sampling. Several gold bearing quartz veins were located on the surface in the north-western portion of the HAWK 1 claim, the most prominent containing high gold values over an aggregate length of 200 m (0.85 oz/ton Au; 2.04 oz/ton Ag weighted average across 34 cm). Soil and silt sampling indicated potential for other gold bearing veins on the Hawk 1 claim to the east and south of known showings.

In 1979 and 1980, Newhawk Gold Mines (formerly Highhawk Gold Mines) conducted an underground exploration program concentrating exclusively on the evaluation of the main vein (ref. 2, ref. 3, A total of 358 metres of drifting and crosscutting was performed, from an elevation of 1280 metres, and was accompanied diamond drilling. metres (9 holes) of This indicated that the vein changed from a strong, well mineralized structure at the surface to a weak, highly faulted and poorly best underground mineralized structure at depth. The intersections with the vein averaged 0.195 oz/ton gold across 1 metre, along a drift length of 12 metres. G.A. Noel postulated that the ore may rake to the northwest, and recommended testing the hypothesis by diamond drilling.



A mineral estimate based on the 1980 drilling results concluded that 12,700 tons grading 0.352 oz/ton gold over an average width of 43.4 cm is available between the adit and the surface (Noel, 1981). This estimate neglects any reserves below the adit, and was made without consideration of mining practicalities.

In 1981 G.A. Noel and Associates performed wide spread geological mapping of the Newhawk holdings. The surface vein showings were re-located and re-sampled, and the results of previous work were compiled and presented in a report by B. Taylor in 1982 (ref. 5). It was recommended that further surface exploration be undertaken on the HAWK 1 claim to locate and define additional gold bearing veins. The recommended program included surface mapping, trenching and sampling of the known veins, as well as geochemical soil sampling and geological mapping over an extended portion of the claim, including the area south of Hawk Creek.

In 1984, under an option agreement with Newhawk Gold Mines, Cominco Ltd. performed a widespread soil and rock geochemical survey over the HAWK claims (and over the adjoining Northcal holdings, the Red Dog claims), as well as additional geological mapping and examination of existing core from the Red Dog showing (ref. 6). They were also the first to perform geophysical measurements in this area and ran ground magnetometer and VLF-EM over the geochemical grid. Most of the work on the HAWK claims was done south of Hawk Creek, except for two short lines at the western edge of the HAWK 1 claim over a zone of known high copper geochemical values.

The results of the geochemical survey indicated the presence of anomalous high gold values throughout the HAWK property, as well as in the adjoining Red Dog claims. Peak gold values often corresponded with peak arsenic and copper values.

Three different types of gold bearing mineralization were identified:

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- 1) Quartz-carbonate veins containing massive arsenopyrite and variable amounts of galena, sphalerite, tetrahedrite, chalcopyrite and pyrite.
- 2) Zones of disseminated pyrite and arsenopyrite with anomalous values in gold, silver and copper.
- 3) Calc-silicate (skarn) zones characterized by the absence of arsenic and the presence of magnetite, epidote and actinolite, showing a high correlation between gold and copper content.

The geophysics was moderately helpful in mapping zones of economic interest. The magnetic high anomalies were related to intrusive activity, and some magnetic effects may map skarn zones. The VLF-EM survey was cut short by bad weather, but some of the anomalously conductive zones (those not caused by topographic effects) were related to gouge zones and disseminated mineralization. Testing of the gold source areas has been restricted to a fairly small region (300x400 m).

In 1987, Shangri-La Minerals Ltd. conducted exploration of the HAWK 1 claim by performing a geochemical and geophysical survey over a portion of the claim north of Hawk Creek but south and east of the known vein showings. The work expands on the recommendations made by Taylor in 1982, and complements the work by Cominco, which covered the area south of Hawk Creek. The results of the 1987 survey follow in the body of this report.

## PART B 1987 Survey Specifications

#### 1. Grid

Linecutting and grid emplacement on the HAWK 1 claim consisted of 400 metres of baseline, 2,425 metres of crossline, and 275 metres of tie-line for a total of 3,100 metres of cut lines. Pickets were placed at 25 metre intervals, and trees and brush were removed from a 1 metre swath. The baseline trend is 340°. Lines 112N, 200N and 300N are interrupted by steep canyon walls; these are either cliffs or loose talus slopes.

## 2. Geochemical Survey

The grid was soil sampled at 12.5 metre intervals Samples were collected from the "B" total of 182 samples. horizon using an iron mattock and placed in Kraft paper gusset Samples contained at least 200 grams of soil. Analysis by ACME Analytical were performed on all soil samples which analyzed the samples by ICP for 30 Laboratories Ltd., elements, and also for gold by Atomic Absorption. results and geochemical analysis certificate appear in Appendix D, and results for gold, silver, arsenic and copper are presented in Figures 5, 6, 7 and 8.

A total of 22 rock samples was also collected for analysis, and representative types rock from the same locations were also collected for descriptive purposes. The locations of these samples appear on Figure 3.

## 3. Magnetometer Survey

The survey was conducted using a Scintrex MP-2 proton precession magnetometer. This instrument measures the magnitude of the Earth's total magnetic field with a 1 gamma accuracy. Data was collected at 8 to 12.5 metre intervals over the grid and

along portions of the road and central canyon creek for a total of 3,470 metres. Diurnal variation was small (less than 15 gamma) thus corrections were not necessary. The measurements were made on September 30, and on October 5, 6, and 7. Weekly variations were corrected by tying all lines to the values measured on the baseline profile.

## 4. Crone Shootback EM Survey

The shootback method involves two identical coils, each capable of transmitting and receiving. While transmitting the coils are accurately held with the same angle of tilt and their axes roughly in the same plane. Both coils in turn transmit, then measure the dip angle at their respective positions. The two dip angles are added together and, if no conductors are present, the "resultant dip angle" equals "0". The reading is recorded at the mid point between the two operators.

Line 25N, 112N and 200 N were surveyed using a 50 metre coil separation, at stations spaced 12.5 metres apart, for a total of 2,125 metres.

## 5. Induced Polarization Survey

Induced polarization measurements were taken on lines 25N and line 112N, using a pole-dipole array of 25 metre separation. On one section of line 25N a test using 12.5 metre separation was performed to compare resolutions. A total of 1,750 metres was surveyed.

The I.P. survey was performed using a time domain Phoenix IPT-1, 2 kW transmitter and a BRGM IP-2 receiver. The pulse length was 2 seconds; four integration windows were used in the chargeability calculation. Four dipoles were used at each station; stainless steel rods were used for both current source

electrodes and receiver electrodes. The data is presented in pseudosection form for both the chargeability and resistivity.

#### PART C GEOLOGY

## 1. Nuttlude Lake Region

Work published by Souther in 1972 (ref. 7), and summarized by Taylor (ref. 5), state that the local rock belongs to a volcano-sedimentary package of Upper Triassic age. The section consists of volcanic agglomerate, greywacke, grit and chert breccia interbanded with tuffaceous siltstone. Minor amounts of limestone are also present. This relatively thick section (up to 900 metres in places) is overlain by at least 1,200 metres of volcanic consisting of green, grey and occasionally purple andesite and derived volcaniclastics. The volcanic rock is cut by andesite dykes and sills, and by irregular sub-volcanic intrusive bodies. The entire Triassic section is cut by a number of small diorite and granodiorite intrusive bodies of Jurassic or Cretaceous age.

The Upper Triassic rocks are warped into open folds with east-west trending axes, and are cut into blocks by north-south, east-west, northwest and northeast trending faults. Some north-south faults show post-Pleistocene movement. Northerly striking photo-linears are present on the east end of the HAWK 1 claim.

This Triassic unit is overlain in places by recent (late Tertiary to Pleistocene) flat lying basalt flows from the Mt. Edziza volcanic centre.

#### 2. Hawk Claims

Taylor's 1982 report best describes the property geology:
"A thick assemblage of Upper Triassic volcanic and pyroclastic rocks underlies most of the area below 1,600 metres in elevation, except for a large area on Hawk 2 which is covered by Edziza valley flow. These volcanic include tuffaceous chert and siltstone overlain by andesite and dacite tuffs. Banding is

infrequent but does occur often enough to give some structural detail. The pyroclastics are in turn overlain by a thick section of flows and intrusions, which are largely dacites and andesites. The intrusions occur as dykes, sills and irregular masses of andesite dacite porphyry. The volcanic are permeated with disseminated pyrite and occasionally pyrrhotite and show widespread iron oxide coatings on surface.

The Upper Triassic strata are intruded by northeast trending dykes of quartz monzonite, several of which are exposed in the west canyon on Hawk 1 [see Figure 3]. This quartz monzonite is of Jurassic to Cretaceous age and is considered to be part of the granodiorite mapped in Hawk Creek just to the west of Hawk 1. They probably are related, at a deeper level, with the granodiorite mapped on the Red Dog property and which hosts in part, the gold found there.

The Upper Triassic strata are cut by steeply dipping northeast and northwest trending faults. Movement along these faults is believed to be at least partially pre-mineral.

All of the older rocks are covered by late Tertiary basalt, andesite, latite and rhyolite flows from the Mount Edziza volcanic centre. These flows are exposed in the northwest corner of Hawk 1 claim. The Hawk 2 claim has been similarly covered by valley flows below 1,300 metres elevation. Most of the Edziza flows consist of columnar basalt interbedded with scoria and pumiceous ash."

# MineralizationSurface Showings

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Noel and Associates mapped a number of gold bearing quartz veins on the HAWK 1 claim. The best exposures were found in the largest canyon, referred to as the central canyon, in which the adit is located.

These veins range from 10 cm to over 1 metre in width and generally trend north-northwest (310° to 330°). They contain sections well mineralized with pyrite, arsenopyrite, sphalerite, chalcopyrite and galena in a quartz-calcite gangue. Where mineralized with arsenopyrite the veins show considerable gold and silver values. However, occasional well mineralized veins with pockets of massive sulphides show little gold or silver content (rock samples HKK-2, HKK-7 and HKK-14). A description of the visual appearance of gold bearing veins appear in HKK-20 and 21.

There were no mineralized veins found in the west canyon, although there were significant geochemical copper concentrations. The east canyon has one exposed vein which was reported (Noel, 1982) to contain high gold and silver in surface samples.

Most of the veins are terminated in at least one direction by faults. Since the vein extensions or offsets were generally not located, some of the faults are thought to be pre-date mineralization. It is also possible that most if not all vein segments of economic interest in the centre canyon are faulted sections of the same vein.

## Underground Mineralization/Reserve Estimate

The underground exploration program consisted of 358 metres of 3x3 metre trackless drifting and crosscutting, and of 430 metres of diamond drilling over a two year period. The program established a number of facts about the principal vein; in particular it provided a mineral estimate for the region between the adit and the surface.

## Quoting Taylor:

- "1. The vein generally strikes  $N55^{O}W$  and dips  $75^{O}$   $80^{O}$  south-west but due largely to the influence of faulting it swings to  $N70^{O}W$  and back to  $N30^{O}W$  as it is followed to the north-west.
- 2. The vein widths vary widely and the vein is in some places very difficult to follow as it pinches down and swings into subsidiary faults.
- 3. The vein is cut by numerous faults and these faults tend to disorient the vein, though actual vein displacements are generally small. The cross-faults strike N40 $^{\rm O}$  to 70 $^{\rm O}$ W with variable steep dips both to northeast and to south-west.
- 4. The gold content of the vein varies considerably both along strike and down dip. The surface gold values are considerably higher and generally more consistent than those obtained in the drift.
- 5. The main cross-fault offsets the vein to some extent at drift level although it does not on surface. The decrease in gold values southeast of the fault is probably due to the vein pinching out as it merges with the creek fault."

The vein may also be part of an en-echelon series, and may rake



to the northwest.

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The reserve estimate, based on the intersections with the vein and without any consideration of mining practicalities, calculated that a total of 12,700 short tons grading 0.352 oz/ton gold, across an average width of 43.4 cm, is available between the adit and the surface. The gross total of 4,474 ounces of gold make no allowance for material either below the adit or within an extension of the vein beyond the adit.

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#### PART D DISCUSSION OF GEOCHEMISTRY RESULTS

#### 1. Previous Work

Previous soil geochemical work by G.A. Noel (ref. 1) on the HAWK 1 claim indicated the presence of small north to northwest trending gold anomalies just north of Hawk Creek and east of the east canyon.

Cominco's results on the HAWK claims are presented in Figure 4. The findings on the HAWK 1 claim south of Hawk Creek are spotty, but trend north-south and warrant further investigation. A large anomalous area in the HAWK 2 claim, and also within the Red Dog group, is certainly worthy of further exploration.

#### 2. 1987 Results

The 1987 program performed by Shangri-La Minerals Ltd. is described in the survey specifications. The soil results are presented in profile form on grid maps in Figures 5 through 8, for gold, silver, arsenic and copper, respectively. Overall, the east side of the grid shows many areas of anomalous gold content, some of which correlate approximately with Noel's findings. Simple statistical manipulation for selected elements produced the following results:

	HAWK	SOIL	GEOCHEM	STATISTICS	(ALL	IN	PPM	EXCEPT	ΑU	(PPB	)
--	------	------	---------	------------	------	----	-----	--------	----	------	---

ELEMENT	MIN	MAX	MEAN	STD DEV	MEDIAN
Copper	$2\overline{7.0}$	1082.0	110.5	102.3	84.0
Zinc	38.0	655.0	184.7	102.4	157.0
Silver	0.1	1.5	0.4	0.3	0.4
Arsenic	4.0	644.0	57.4	70.6	38.0
Antimony	2.0	36.0	3.7	3.6	2.0
Gold	1.0	910.0	40.6	94.6	13.0

TOTAL NUMBER OF SAMPLES = 182



The small sample population limits the relevance of these calculations and they should therefore be used as a guide only. By plotting the results in profile coincident gold and arsenic peaks, which may represent buried veins, can be more closely related to geophysical responses. Gold and arsenic have been plotted with to IP pseudosections (Fig. 12a & 13) to better illustrate this.

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Generally, the gold and arsenic values correlate very well, while silver and gold do not. One anomaly near 200E on line 112N shows good correlation between elements, and also high gold values. This region also exhibits anomalous geophysical characteristics and is worthy of further study.

#### PART E DISCUSSION OF GEOPHYSICAL RESULTS

## 1. Survey Objectives

Three different geophysical methods were used to assist in the exploration for gold-bearing mineralization. Cominco's experience with magnetic measurements and the VLF-EM method indicated that these techniques could help locate mineralized zones of interest. The VLF-EM method was able to locate faults and gouge zones in the Northeal claims which contain high gold concentrations (0.35 oz/ton over 6 m, 0.96 oz/ton over 5.8 m). In this survey the Shootback EM method was tested, which also detects conductive bodies.

Previously outlined magnetic anomalies were related to a variety of features. Most are related to variation in magnetite concentration due to intrusive activity or alteration of volcanic rock. One magnetic high response is on strike with a monzonite dyke that is an integral part of gold mineralization on Northcal ground just west of the Hawk 2 claim.

The Induced Polarization and Resistivity method was also used because of its suitability in locating zones of disseminated or massive sulphides as well as conductivity. Additional information provided by resistivity calculations would assist in mapping geological facies and in the interpretation of anomalies observed in chargeability.

## 2. Electromagnetic Method: Crone Shootback EM Survey

The data measured by the Shootback method is presented as profiles for the vertical and horizontal loop portions respectively, in Figure 9a and 9b. Overall, there are no strong responses visible, and only the vertical loop orientation shows any structure. These anomalies are of very small amplitude,

indeed they are just above the noise level for the instrument. The anomalies do not clearly correlate with resistivity information from the Induced Polarization survey, and we conclude that there are no conductors massive enough, or no resistivity contrasts great enough on this grid to provoke a response from this instrument. It was not possible to obtain a signature response over the largest vein on the property because of the steep topography.

## 3. Magnetic Survey

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The results of the ground magnetometer survey are presented as profiles in Figure 10. Magnetic data was taken over grid lines, and also along sections of the road and part of the main canyon creek. These latter measurements were made in areas of visible outcrop in order to provide a tie between geological information and geophysical measurements.

The magnetic response in and near the creeks, including Hawk creek, exhibits sharply defined low values. This correlation suggests that magnetite was either removed or altered in the creek areas, or that diamagnetic rocks are present. Either possibility is consistent with the expectation that the creeks are associated with faults trending north-northwest.

The only other feature of interest is a 200-300 gamma high The shape of this anomaly on line 112N near station 225E. anomaly indicates the existence of a relatively shallow body (depth <= 15 metres) dipping steeply to the west. The magnetic high was traced on the ground for 25 metres north and south of line 112 and the strength of the anomaly was found to diminish that it plunges rapidly, implying that the body is small, or The trend was determined, within a few degrees, to be An anomaly of this size could be caused by a north/south. or a fairly strong moderate concentration of magnetite

magnetic anomaly Since this concentration of pyrrhotite. Induced the chargeability anomaly in coincides with a Polarization data, the latter explanation is favored. No rock taken from this area, but soil geochemistry samples were This anomaly indicates high gold values at the same location. will be discussed in the next section.

Several station spacings were used in this survey, from 8 to 25 metres. The rather shallow nature of the exploration targets and of other geological features which also create anomalies suggest that a fine sampling be used in any subsequent work. Stations at 12.5 metre intervals seem adequate for reconnaissance; 5 metre measurements may be required in follow up work.

## 4. Induced Polarization Survey

The I.P. Survey data is presented in pseudo-section form in Figures 12 and 13. For each line the magnetic and gold geochemistry profiles have been plotted at the same level. This presentation greatly facilitates an integrated interpretation of the survey results.

### Line 112N

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475E:

A moderate chargeability high, associated with a small magnetic low near the creek indicate the possible existence of a fault at this location. The chargeability high may be due to an increase in pyrite concentration, but this zone does not appear to be mineralized with gold.

325E:

A slight chargeability high is associated with a gold anomaly. This zone is worthy of further investigation.

200E:

A definite chargeability high correlates well with a magnetic high and gold, arsenic, silver and copper geochemical anomalies. The correlation between magnetic and chargeability responses indicate the likely presence of a body of pyrrhotite. Because of the associated geochemical anomalies, this area is of interest. Detailed geological work and trenching are recommended.

225E:

The geochemical anomaly at 225E is in the canyon, and may be related to nearby sources such as the one at 200E, especially since there are no associated geophysical indicators. Nevertheless, its proximity to the magnetic body makes it an interesting anomaly to follow up.

100E to 125E:

This area seems to be a contact between a zone of moderately high chargeability to the east with a zone of high chargeability to the

west. The band of high resistivity suggests there may also be a dyke at this contact. Detailed geology in this area is warranted because of the smaller geochemical anomalies in this region. There is an area of exposed rock in the nearby canyon and on the roadcut which would facilitate such study.

The remainder of the line to the west is characterized by high background chargeability, due to the pervasive dissemination of pyrite. The pyrite is often distributed in interconnected fracture planes which results in overall high chargeability and low resistivity.

#### Line 25N

425E:

The geochemical anomaly here may be a result of its proximity to the creek, but the line shows no such response. The only geophysical response tied to this anomaly may be a small magnetic high at 400E.

375E:

A moderately high chargeability zone is flanked by geochemical anomalies, but no relationship is clearly established.

250E:

The resistivity low is not tied to a chargeability high, and therefore is probably not related to sulphide concentration. It is likely related to a fault, which also may have been responsible for the formation of the creek. This relationship is less evident on line 112N because of the proximity of the magnetic body.

175E: A geochemical anomaly is associated with a region of complicated but higher chargeability, and flanked by two small magnetic spikes. These may be manifestations of the body detected on line 112N at 200E. which was found to trend North/South.

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The high resistivity region represents a contact between two regions of different chargeability and resistivity, and possibly includes a layer of high resistivity in between.

75E: This region is characterized by high (and complex) chargeability and lower resistivity. This may imply a greater concentration of sulphides.

The geochemical anomalies to the west are up slope from the creek, and warrant investigation.

The western part of line 25N is overall very chargeable, again indicating the presence of large amounts of disseminated sulphides. The lack of gold geochemical anomalies makes this part of the grid less interesting economically, but the complex nature of the I.P. data exemplifies the difficulties in using geophysics to prospect this area.

Figure 12b shows a small section of line 25N which was remeasured using a 12.5 metre separation pole-dipole array. It is clear that this density of measurements is appropriate for resolution of the rapidly changing geological features. The resistive zone at 125W is well defined, and the chargeability pseudo-section is smoother.

## PART F CONCLUSIONS AND RECOMMENDATIONS

The complexity of the geology and the high degree of sulphide dissemination mask the geophysical responses of vein type gold deposits on the HAWK 1 claim. Confidence in the interpretation of anomalies is greatly enhanced by an integrated data set, combining several different techniques. In the case of the HAWK 1 property the combined use of soil geochemistry, ground magnetometer and Induced Polarization at a station spacing of 12.5 metres is a suitable combination of exploration tools. Many areas of interest have been outlined and are recommended for further work.

The results obtained on the east side of the 1987 grid (HAWK 1 claim, north of Hawk Creek) indicated the presence of gold bearing rocks. The recommended program for the HAWK 1 claim includes detailed geological and geochemical mapping of known anomalous zones by blast trenching and sampling. In addition, exploration should be extended further east because there is no indication that the anomalous zone surveyed this year terminates at the east end of the grid; indeed there are two single point geochemical anomalies discovered by Cominco along the road.

The area south of Hawk Creek should be surveyed with a more detailed grid then that used by Cominco, in order to better define the geochemical anomalies known to exist there, again using soil geochemistry, magnetometer and induced polarization.

## ESTIMATED COST OF PROPOSED EXPLORATION PROGRAM

Line Cutting, 22km @ \$750/km	\$	16,500
Induced Polarization, 20km @ \$1,500/km		30,000
allowance for detail		10,000
Magnetometer survey, 5km @ \$200/km		1,000
Soil sampling and analysis,		
1,000 @ \$20/sample		20,000
Blasting and Trenching, 10 days @ \$1,000/day		10,000
Geological support, 21 days @ \$400/day		8,400
Rock sampling, allow		1,000
Report preparation and Engineering, allow		9,000
Contingencies, allow	_	9,100
Total	<b>\$</b> :	115,000

the proposed Contingent on encouraging results from exploration program, a third phase of exploration would include equipment trenching of anomalous zones, and possibly preliminary diamond drilling. Allocation for a third phase should be made after the proposed program.

Signed at Vancouver, B.C.

per Peter Kaczkowski, M.Sc.

21 December, 1987

F. DISPIRITO

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- 1. Report on the 1978 fieldwork, HAWK Property, Nuttlude Lake Area, Liard Mining Division, B.C. for Highhawk Mines Ltd. by G.A. Noel, P.Eng., Feb. 20, 1979.
- 2. Report on the 1979 fieldwork, HAWK Property, Kinaskan Lake Area, Liard Mining Division, B.C. for Newhawk Gold Mines Ltd. by G.A. Noel, P.Eng., Mar. 10, 1980.
- 3. Report on the 1980 fieldwork, HAWK 1 Claim, Liard Mining Division, B.C. for Newhawk Gold Mines Ltd. by G.A. Noel, P.Eng., Feb. 20, 1981.
- 4. Report on the 1980 fieldwork, HAWK Property, Nuttlude Lake Area, Liard Mining Division, B.C. for Newhawk Gold Mines Ltd. by R.D. Hogarth.
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- 6. Owners report (Cominco Ltd.), SPECTRUM Property, Geological Mapping, Soil/Rock Geochemistry, Magnetics and VLF for Northcal Resources Ltd. and Newhawk Gold Mines Ltd. by A.M. Pauwells, Jan. 21, 1985.
- 7. Souther, J.G., Telegraph Creek, Map-Area, British Columbia GSC paper 71-44.

APPENDIX A CERTIFICATES

- I, Frank Di Spirito, of the City of Vancouver in the Province of British Columbia, do hereby certify:
- I am a Consulting Engineer residing at 1319 Shorepine Walk, Vancouver, British Columbia, V6H 3T7 for the firm of Shangri-La Minerals Limited at #706-675 W. Hastings Street, Vancouver, British Columbia, V6B 1N2.
- II) I am a graduate of the University of British Columbia (1974) and hold a Bachelor of Applied Science in Geological Engineering.
- III) I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
- IV) Since graduation, I have been involved in numerous mineral exploration programs throughout Canada and the United States of America.
- V) This report is based upon data collected by a Shangri-La Minerals Limited crew from September 8 to October 8, 1987.
- VI) I hold no direct or indirect interest in the property described herein, or the securities of Moongold Resources Inc., nor do I expect to receive any.
- VII) This report may be utilized by Moongold Resources Inc. for inclusion in a Prospectus or a Statement of Material Facts.

Signed at Vancouver, B.C.

F. DISPIRITO

BRITISH

COLUMBIA

Frank Di Spirito B.A.Sc., P.Eng. 22 December, 1987

- I, Peter Kaczkowski, of the City of Portland in the State of Oregon, in the United States of America, do hereby certify:
- I am a Canadian Citizen residing at 0301 S.W. Nebraska, I) Portland, Oregon 97201, U.S.A.
- I am a Consulting geophysicist with the firm of Shangri-La Minerals Limited at 706-675 West Hastings Street, Vancouver, B.C., V6B 1N2.
- III) I am a graduate of the University of Colorado in Boulder, Colorado, U.S.A., and hold a Bachelor of Science (1977) in Electrical Engineering degree from that institution.
- I am a graduate of the Colorado School of Mines in Golden, IV) Colorado, U.S.A., and hold a Master of Science (1986) in Geophysics degree from that institution.
- I am a member in good standing of the European Association V) of Exploration Geophysicists (EAEG).
- I have worked as a geophysicist since 1982 on numerous VI) mineral exploration projects in Canada, the United States, France, Spain and Portugal.
- VII) This report is based upon the field work carried out by this author and a Shangri-La Minerals Limited crew between September 25 and October 8, 1987, and upon the previously reported work of others which this author has compiled and approriately referenced.
- VIII)I hold no direct nor indirect interest in this property, nor in any securities of Moongold Resources Inc., nor in any associated companies, nor do I expect to receive any.

Signed at Vancouver, B.C.

Peter Kaczkowski,

20 November, 1987

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nc. for Facts.

I, Martin St-Pierre, of the City of Vancouver in the Province of British Columbia, do hereby certify:

- I) I am a Consulting Geophysicist to the firm of Shangri-La Mineral Limited at 706-675 West Hastings Street, Vancouver, British Columbia, V6B 1N2.
- II) I graduated in 1984 from McGill University in Montreal with a B.Sc. in Geophysics.
- III) I have been involved in numerous mineral exploration programs since 1982.
- IV) The geophysical portion of this report is based upon fieldwork carried out by myself and a crew from Shangri-La Minerals Limited for Moongold Resources Inc. from September 25 to October 8, 1987.
- V) I have no direct or indirect interest in the property, nor in any securities of Moongold Resources Inc., or in any associated companies, nor do I expect to receive any.
- VI) This report may be utilized by Moongold Resources Inc.for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

Martin St-Pierre, B.Sc.

22 December, 1987

- I, David Coffin, of the City of Vancouver in the Province of British Columbia, do hereby certify that:
- I am a consultant with the firm of Shangri-La Minerals Limited at 706-675 West Hastings St., Vancouver, B.C., V6B 1N2.
- II) I attended the Haileybury School of Mines, Ontario, in the department of Mining Technology, from 1975 to 1977.
- III) Since 1974 I have worked at a variety of jobs in the Canadian mineral exploration field, including regional and detailed prospecting, detailed geological mapping, core logging, property management and program development.
- IV) This report is based upon field work conducted by this author between September 25 and 28, 1987 and a Shangri-La Minerals Limited crew.
- V) I hold no direct or indirect interest in the property or in the securities of Moongold Resources Inc., nor do I expect to receive any.
- VI) This evaluation report may be used by Moongold Resources Inc. for inclusion in a Prospectus or a Statement of Material Facts.

Submitted at Vancouver, B.C.

David Coffin

22 December 1987

# APPENDIX B ROCK SAMPLE DESCRIPTIONS

Shangri-La Minerals Limited-

# ROCK SAMPLE DESCRIPTIONS HAWK PROPERTY

- HKK-1 Fine grained intermediate volcanic, previously disseminated with sulphides < 1 mm; and irregular fractures < .3 m filled by quartz and sulphides (mostly pyrite). Heavily oxidized and rust stained.
- HKK-2 Quartz vein with gray pockets of fine-grained pyrite and copper sulphides. Some blebs of pyrite up to 5 mm.
- HKK-3 Same as HKK-2.
- HKK-4 Grey-green clay gouge with re-crystallized pyrite. Some staining colour from yellow to brown. Values in Au, As, Ag and Cr are above background.
- HKK-5 Quartz vein zone, quite heavily mineralized with sulphides, often interconnected. Resembled 2 and 3 but with few massive pockets. Significant quartz veining.
- HKK-6 Similar to 1, but more siliceous, and with larger pyrite crystals (up to 3 mm).
- HKK-7 Quartz vein with massive fine grained sulphides. Assay shows 17% iron, all other elements at background. STR =  $90^{\circ}$  DIP =  $40^{\circ}$ S.
- HKK-8 Medium grained felsic flow with few disseminated sulphides. Competent, greyish-green rock.
- HKK-9 Like HKK-8 but finer grained and more heavily altered.
- HKK-10 Dacite tuff, competent, with disseminated pyrite.
- HKK-11 Same as HKK-10, with quartz pockets and sulphide stringers.
- HKK-12 Similar to HKK-10, but feldspar altering to clay in gouge zone. Some quartz vein as well.
- HKK-13 Similar to HKK-12.
- HKK-14 Vein with quartz and pockets of massive sulphides. May associated with felsic dyke.

- HKK-15 Rhyolite with small vein as in HKK-7.
- HKK-16 Dacite with banding includes small vein as HKK-15.
- HKK-17 Coarser grained rhyolite.
- HKK-18 Rhyolite, with unweathered platy pyrite in fractures. Some calcite along fractures as well.

# Fire Assay

- HKK-19 Gouge zone, contact between rhyolite and intermediate volcanic as in HKK-1.
- Vein 4 Quartz vein showing limonitic staining with a yellow-green stain from arsenopyrite. Appears greenish-grey from a distance. Sulphide pockets with pyrite, and a mix of other sulphides (arsenopyrite, galena and some sphalerite) all having a dull grey fine grained appearance.
- HKK-21 Vein 3 Quartz vein with sulphide pockets. Minerals
  may be slightly coarser than average.

Strikes of gold bearing veins are north-northwest. Similar looking veins striking north do not tend to contain significant gold (see Analytical Results APPENDIX D).

APPENDIX C ANALYTICAL RESULTS



Shangri-La Minerals Limited-

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: NOV 16 1987 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED:

# ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp Auby FEA.

. DEAN TOYE, CERTIFIED B.C. ASSAYER

SHANGRI-LA MINERALS File # 87-5301 R

SAMPLE#	AS	SB	AU**
	7.	%	OZ/T
HKK-19	.01	.01	.003
HKK-19TYPE	.01	.01	.001
HKK-20LOWER	5.18	.40	.452
HKK-20UPPER	5.79	.11	.326
HKK-21	1 17	<u> </u>	117

# GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH JML 1-1-2 HCL-HN03-H20 AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MM FE CA P LA CR MG BA TI B N AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE, BLA SOIL B7-B0RY AND MORE BY AN ECON TO SOAN SAMPLE.

- SAMPLE TYPE: PI-6 SOIL P7-ROCK AUI ANALYSIS BY AA FROM 10 GRAM SAMPLE. ASSAYER DE MEHLY DATE RECEIVED: OCT 27 1987 .. DEAN TOYE, CERTIFIED B.C. ASSAYER SHANGRI-LA MINERALS File # 87-5301 Fage 1 SAMPLE ZN A6 ИI CO МX FΕ AS U ΑU TH SR CD SB BI CA P LA CR BA TI В PPM PPM PPM 1 PPH PPN PPH PPM PPN PPM PPN PPM PPN 1 1 PPM PPH HWK: 200N 400W 407 30 42 2401 7.87 221 1.38 .37 6 3.65 14 HWK 200N 387W 21 1297 5.89 37 5 ΝĐ 51 2 117 .61 .080 15 55 1.06 109 4 2.48 . 25 .04 70 77 HWK 200N 175E 33 16 . 1 9 7 405 5.33 14 8 ND 18 3 2 2 66 .30 .075 11 26 .22 11 .50 2 3.23 .06 HWK 200N 187.5E 55 14 140 . 2 15 12 740 4.12 16 5 ND 28 2 2 91 .38 .081 13 37 .35 94 .50 3 2.92 .05 1 3 HWK 200N 200E 5 141 65 247 .7 24 27 1591 7.91 45 54 8 ND .77 .111 20 41 1.34 111 2 3.56 26 4 174 HWK 200H 212.5E 21 164 76 29 1197 7.42 68 187 .93 .118 27 111 2.44 113 .36 4 3.46 .04 2 86 HWK 200N 225E 6 139 47 345 41 30 2031 4.95 104 5 ND 4 45 9 2 139 .80 .097 21 57 1.02 125 .24 2 2.82 .03 83 HWK 200N 237.5E 24 153 .4 68 1994 9.82 392 XD. 3 44 131 5 .59 .123 18 53 1.02 75 .20 3 2.99 .03 .15 2 159 HWK 200N 250E 21 144 .3 85 37 1404 8.16 49 247 5 מא 3 2 9 2 107 .65 .109 14 54 .99 72 .14 2 2.64 .02 .15 1 149 HWK 200N 262.5E 23 194 4 84 . 3 37 913 6.95 20 63 5 ND 2 48 2 141 .50 .088 10 52 1.08 .30 2 3.09 .04 37 HWK 200N 275E 973 6.19 80 14 .2 22 32 2 .43 .077 11 62 2 2.88 .03 33 HWK 200N 287.5E 18 177 .3 38 42 20 992 6.70 38 9 ND 40 2 107 .46 .088 11 49 .77 78 .47 5 3.70 .06 2 13 HWK 200N 300E 30 259 47 5 87 .1 21 916 7.35 70 ND 3 42 3 2 2 140 .54 .099 11 59 1.23 69 .41 2 3.50 .05 26 HWK 200N 312E 27 211 20 98 .4 82 713 7.40 138 5 ND 5 36 2 5 2 129 .37 .041 14 82 1.45 62 .39 3 4.62 .04 430 1 HWK 200N 325E 25 253 . 2 17 859 4.44 47 ND 39 2 105 .59 .071 12 52 .74 49 3 3.40 .06 1 10 HWK 200N 337E 104 20 211 54 15 723 7.35 38 155 .39 .071 77 1.42 16 11 46 .30 2 3.35 . 03 70 HWK 200N 350E 63 20 293 . 2 48 21 756 7.07 ND 38 2 124 .48 .085 11 66 1.12 48 .50 2 3.32 . 05 161 HWK 200H 362E 21 161 . 2 31 1470 5.85 43 3 2.46 .05 5 ND 2 96 .70 .129 11 44 .70 111 . 25 1 32 HWK 200W 375E 5 116 16 224 . . 3 39 38 2451 5.48 108 1.77 .138 30 5 ND 1 112 4 2 2 14 47 .94 191 7 2.14 . 15 .04 1 8 HWK 200H 412E 73 77 614 . 2 43 21 1224 4.61 57 ND 53 2 116 .72 .087 15 53 1.01 138 2 1.60 .04 1 12 HWK 200N 425E 55 43 489 38 26 1904 4.45 .84 .087 44 .95 5 3.78 .05 2 14 HWK 200N 437E 43 785 4.54 13 5 45 3 3 2 112 .69 .062 12 67 1.03 136 .48 2 3.38 . 05 1 6 HWK 200N 450E 50 21 148 53 18 945 6.20 15 37 .1 5 ND 3 2 2 105 .52 .082 11 82 1.30 7 73 .34 6 3.68 .04 1 1 HWK 200N 462E 5 155 22 217 .2 77 37 1841 7.10 34 5 MD 6 51 3 8 2 168 .54 .117 19 91 2,35 261 . 33 8 3.92 .03 30 HWX 200M 475E 22 215 3 263 .4 136 55 2196 7.25 50 75 159 1.58 .137 5 ND 19 120 2.41 179 .25 3 3.46 .03 10 HWK 112N 012E 12 165 . 4 34 19 1079 6.40 7 11 98 .47 .090 21 41 .68 2 3.56 .04 187 17 581 4.01 42 5 20 2 2 2 88 . 26 .074 14 35 .45 2 3.86 HWK 112N 025E 53 21 . 2 35 ND 72 .39 .04 .07 1 10 18 17 35 62 21 158 . 3 22 13 1159 6.48 38 å 2 3 2 106 . 23 .071 .44 98 .40 5 2.63 11 HWK 112H 037E 25 997 5.25 34 5 ND 3 37 2 89 .44 .088 25 36 . 65 92 .21 2 2.73 HWK 112N 050E 4 102 15 145 .03 2 21 HWK 112H 062E 131 15 151 44 20 964 6.07 98 5 ΝĐ 5 44 2 119 .53 .102 24 49 1.13 135 . 25 5 2.64 .03 .16 1 71 HWK 112H 075E 5 193 27 178 . 3 42 29 1106 7.34 131 5 46 10 132 .54 .106 21 42 1.12 102 .20 1 2.79 .03 .13 43 2 122 . 33 29 HWK 112H 100E 88 22 155 . 1 23 1007 6.58 7 29 2 108 .38 .081 17 44 .81 3 3.40 . 03 12 7 15 85 .24 .062 9 33 .48 88 .37 2 3.65 .05 1 22 HWK 112N 112E 49 14 116 21 508 5.60 45 ND 5 2 2 4 39 2 HWX 112H 125E 56 20 204 . 1 23 16 809 4.48 55 5 ND 22 3 4 2 116 .35 .088 9 . 68 69 . 39 2 2.86 .03 .11 11 107 198 67 27 1172 8.83 122 5 В 2 121 .26 .095 17 54 1.20 140 .28 2 3.55 .02 1 111 HWK 112N 137E 14 . 1 HKK 112H 150E 30 15 848 5.97 5 ND 5 20 3 4 2 88 .30 .073 15 28 .53 70 . 41 2 3.28 .04 .08 1 - 11

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HWK 112M 225E HWK 112M 237E HWK 112M 250E HWK 112M 262E	3 5 6 4	82 196 200 47	17 33 43 16	164 196 252 198	.4 .8 1.5	55 62 79 25		• • •		60 278 444 33	5 5 5 5	ИО ИО ОМ ОМ	4	42 39 37 35	! ! !	3 2 3 2	2 3 5 2	91 138 141 95	.45 .41 .37 .45	.149	23 18 18	88	1.04 1.29 1.36	230 73 70 129	.28 .20 .17	3 2	3.24 2.61 3.52 1.95	.03	.15	! ! !	20 114 550 74
HWK 112H 275E HWK 112H 287E	2	59	17	154	.1	32	15	1054	4.30	32	5	KD	i	39	i	2	1	96	.55	.093	12	28	.82	130	.15	1	1.61	.02	.15	i	21
HWK 112H 300E HWK 112H 312E 1 HWK 112H 325E	4	55 68 76 77	15 26 32 31	189 209 326 363	1.3 .6 .7	39 54 68	15 14 25 25	760 1418	5.10 5.02 6.11	56 104 125	5 5 5 5	ДК ОК ОК	2 3 2 5	37 40 38 43	1	2 2 3	2 2 2	99 103 112 110	.45 .51 .36	.059	11	39 39 56	.91 .90	102 83 76 63	.26	5 3	2.28 2.64 2.61	.03	.15	1	8 40 34
HWK 112N 337E		126	46	633	.5	86	40	1893		286	5	HO	2	70	;	10	5	159	.61		13	79	1.11	131	.42	2	3.99 3.25	.02	.11	1	25 910
HWK 112H 350E HWK 112H 362E HWK 112H 375E	5 4 4	53 53	42 73 31	655 570 298	.6	. 45 . 39	18 12	921 562	1.32 5.73	39 48	5 5	ND DN	4	38 27 25	2 2	2 2	2 2	112 121 118	.36	.080 .055 .059	12 10 10	51	.99 1.09 .96	68 73 73	.43	5 3	3.63 3.72 2.86	.03	.13	1 1	50 1 1
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HWK 112H 412E HWK 112H 425E HWK 112H 432E	4	92 28 21	35 17 19	284 135 252	.2 .7 .5	44 26 52	17 10 20	549 964		52 18 21	5 5 5	ОМ ОМ ОМ	5 3 3	65 32 46	1 1 2	2 2 2	2 2 2	98 75 105	.40	.073 .074 .072	10 14 8	46 38 69		72 46 64	.39 .37 .29	2 5	3.37 3.78 3.28	.04	.13	1 1	23 1 1
HWK 112N 450E HWK 112N 462E	5		20 40	171 353	.5	43 90		2189		19 47	5	HD KD	3	40 60	1	2	2	106 179	.85	.091	15	113		130 204	.15	5	3.51 4.15	.01	.17	1	18
HMK 112M 475E HMK 112M 487E HMK 112H 500E HMK 025M 162E HMK 025M 275E	4	58 100 110 175 85	17 42 19 19 22	71 265 217 181 195	.5 3 6 .2	33 93 57 137 49	26	384 1463 1898 1502 940	5.77 4.93 6.48	14 54 19 87 40	5 5 5 5	ИО ОИ ОИ ОИ	1 1 1 1	20 65 86 92 44	2 1 4 2 1	2 2 2 2 2	2 2 2 2 2	73 126 108 115 95	.94 1.31 .99	.108 .111 .108 .106 .096	14 11 9 27 14	56 105		38 172 250 89 95	.31 .18 .14 .23	5	3.52 2.91 2.05 3.28 2.92	.02 .01 .03	.08	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 12 3 20 3
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SAMPLE НO PB A6 CU 2 H HI CO MX FE AS U AU TH SR CD 58 81 V CA P LA CR MG BA 11 B AL NA ¥ AU1 PPM PPM PPM PPM PPH PPH PPM PPM I PPM PPH PPH PPH PPH PPH PPH PPH PPH 1 1 PPM PPH 1 PPM Z PPM PPH PPS 1 HNK 025H 382E 3 10 104 . 2 10 1103 4.45 17 5 NO 13 2 2 69 .15 .098 .37 26 58 5 3.21 .03 .10 3 HWK 025N 375E 83 .4 16 9 962 4.63 20 5 3 28 67 .28 2 .196 27 .31 . 18 5 2.19 .02 .09 32 HWK 025N 387E 38 .1 5 362 4.45 5 18 2 2 64 .21 .173 34 .23 38 10 .28 2 2.98 .02 .04 1 HWK 025H 400E 5 59 12 77 .3 8 1255 5.17 26 . 14 5 3 36 ND 2 2 83 .18 .096 10 41 .28 40 .35 2 1.93 .03 .05 HWK 025N 412E 3 76 19 161 . 8 60 19 1307 5.24 38 5 3 45 2 100 .46 .118 11 78 1.04 103 . 17 4 2.88 .01 46 HWK 025H 425E 3 96 19 123 . 2 53 15 810 4.96 73 5 22 96 . 25 3 .419 12 88 .97 56 . 15 5 2.45 .02 180 HWK 025H 432E 5 66 12 83 . 5 16 7 440 4.91 30 5 3 .14 ND 11 3 2 86 .403 32 . 25 54 9 . 19 3 1.51 .02 .10 2 7 HWK 025H 450E 2 114 13 62 1.1 22 5 170 5.17 16 5 ND 3 8 1 2 2 65 .09 .314 14 3.4 .07 49 . 18 2 1.46 .01 1 1 HNK 025N 462E 1 100 16 247 47 14 1959 4.63 26 5 . 3 ND 2 64 1 2 2 94 1.07 .115 24 34 3 2.15 .71 203 .10 .02 1 HWK 025N 475E 79 12 171 .6 40 14 1142 4.83 30 5 ND 17 88 2 .22 .161 21 38 .62 123 4 1.89 HWK 025N 487E 78 17 35 16 1122 4.79 . 2 31 33 .48 26 31 .64 145 . 16 6 2.08 .03 . 13 22 HWK 025N 500E 3 75 162 .5 35 15 1177 4.82 29 5 ИD 3 28 b 2 88 .36 .099 24 35 . 64 125 .16 7 2.33 .02 .14 29 1 H L2+00N 1+00W 4 104 52 218 .3 31 23 1014 5.92 124 5 .53 .104 38 1.08 ND 5 40 8 2 118 20 119 . 20 3 2.19 .03 . 16 1 220 H L2+00N 0+75W 77 17 170 ه. 17 13 867 6.39 39 5 ND 4 16 3 2 87 .17 .094 18 30 .30 76 .37 4 3.57 .03 13 H L2+00M 0+50W 7 61 7 105 .3 14 12 851 5.38 31 5 NO 26 73 .34 .104 13 25 .35 2 89 .32 2 3.45 .05 H LZ+00N 0+25W 141 15 1024 5.87 ٨ .1 24 15 5 21 .30 .128 19 29 .39 96 .37 4 4.94 .05 .06 10 H L2+00N 0+00N 57 12 131 .3 23 12 588 6.48 21 5 ND á 24 2 2 69 .30 .094 21 38 .36 63 .57 3 3.80 .05 .09 1 11 H L2+00N 0+25E 59 2 176 .1 38 23 1085 6.89 17 5 ND 9 18 1 5 2 84 .25 .161 28 35 .55 131 .51 2 6.79 .04 1 9 H L2+00N 0+50E 50 11 124 . 2 26 485 6.08 43 11 5 ND 5 18 80 .24 .078 2 2 15 35 . 45 86 .44 2 4.41 .05 .06 1 12 H L1+12H 5+00H 8 123 12 129 .1 26 12 601 5.96 26 5 KD 5 25 2 81 .30 .108 18 31 .55 78 .41 2 4.30 .05 .07 1 4 H L1+12N 4+87W 78 92 . 2 24 16 707 5.80 10 5 ND 10 14 2 82 .17 .092 39 34 .42 47 .56 2 4.28 .06 .05 H L1+12N 4+75W 45 2 80 .1 12 405 4.08 5 10 11 9 ХD 13 2 48 .18 .051 11 14 .27 41 .36 2 3.91 .09 1 H L1+12N 4+62W 6 116 129 .2 27 788 5.80 28 5 5 ND 25 2 92 .35 .123 15 35 .70 85 .36 2 3.29 .04 .08 43 1 H L1+12N 4+50W 137 5 90 2 . 1 37 19 707 5.86 12 5 ИD 1 25 2 75 .33 28 3 .107 31 .58 102 .43 4 5.68 .04 .04 1 3 H L1+12H 4+37W 49 142 .1 28 15 646 5.53 8 HD 7 15 5 2 2 64 .21 .090 15 27 .39 80 .47 2 4.91 .05 1 H L1+12N 4+25W 55 125 26 . 1 12 602 6.04 .35 .120 15 5 ΧĐ **7B** 82 21 33 .42 72 .56 3 4.42 .05 2 .05 H L1+12N 4+12W 141 .3 32 684 6.04 18 42 5 סא 5 24 87 5 2 .40 .098 22 34 .64 77 .41 2 4.47 .04 .06 H L1+12N 4+00W 92 5 5 94 ١. 17 11 531 4.95 20 5 ND 5 16 2 2 64 .25 .080 19 25 1 .37 63 .40 2 3.84 .08 .07 1 5 H L1+12N 3+87W 5 58 102 .1 23 13 498 5.08 10 5 ИD 5 13 46 2 .20 .084 18 27 .40 63 . 42 2 4.41 .04 H L1+12N 3+75W 10 254 162 . 4 37 22 841 7.10 23 ND 26 114 .53 .153 17 5 3 38 1.08 84 .38 4 4.03 .03 H L1+12N 3+62W 8 131 5 119 . 2 20 15 847 6.08 18 5 ND 25 92 .31 .084 22 32 .52 63 .39 3 3.64 .05 H L1+12N 3+50W 132 7 8 133 .2 23 13 591 5.72 16 5 ND 23 5 2 83 .30 .095 18 32 .52 80 .43 2 4.19 .06 .06 33 H L1+12H 3+37W 11 206 2 150 . 2 33 23 766 6.82 21 ND 23 3 95 3 .33 .116 34 29 .76 128 .36 6 5.70 .04 .08 1 H L1+12H 3+25W 5 56 2 100 .1 16 11 531 4.46 8 ND 5 18 2 2 57 .24 .076 14 19 .29 66 .40 2 4.09 .07 1 H L1+12N 3+12W 10 102 8 127 . 2 18 13 883 6.03 16 5 ND 14 5 2 84 .18 .124 16 29 .29 71 . 42 2 2.55 .04 .04 1 15 H L1+12N 3+00W 52 9 97 461 4.92 7 5 ND 2 15 1 2 2 70 .18 .086 13 30 . 26 82 . 38 2 3.00 . 05 . 05 STD C/AU-S 35 132 7.6 29 1058 4.05 71 42 16 8 40 53 17 16 20 61 .50 .092 40 62 .89 181 .09 12 49 34 1.94 .06 .14

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SAMPLER	NO PPH		P8 PPM	ZN PPH	A6 PPM	NI PPM	CO PPM	MN PPM	FE	AS PPM	U PPM	AU PPM	TH PPM	SR PPH	CD PPM	SB Mqq	BI PPH	V PPM	CA I	P	LA PPM	CR PPM	#6 I	BA PPM	TI I	B PPM	AL I	NA I	K 1	¥ PPM	AUI PPB
H L1+12H 2+87W	10		6	136	.3	19	15		6.57	22	6	ND	7	16	1	2	2	97	.21		16	31	.46	60	.51		4.13	.01	. 05	ł	2
H L1+12H 2+75W	11		1	116	. 3	18	7		5.26	15	5	ND	4	26	ı	4	2	81		.092	16	28	.50	41	. 34		3.94	.04	. 05	1	1
H L1+12N 2+62W	8		8	109	. 1	17	10		4.93	11	5	ND	4	18	l .	2	2	71		.077	17	27	.33	59	.37		3.53	.05	.05	1	1
H L1+12N 2+50W	19		7		. 2	45	13		5.48	37	5	D	5	56	1	4	2				25	30	.98	15	.31		2.78	.04	.08	I	27
H L1+12N 2+37N	10	44	5	103	.1	15	8	287	5.47	15	, 5	MD	4	15	1	2	2	76	. 24	.080	19	26	. 29	50	.44	3	3.46	.04	.05	ı	ı
H L1+12N 2+25W	15		8	141	. 2	25	15	737		56	5	DK	3	26	1	3	4	128	. 49		15		1.01	124	. 28		3.56	.02	.07	2	38
H L1+12N 2+12W	8	93	8	129	. 2	20	13	700		50	5	ND	4	19	!	2	2	83		.074	19	29	.46	57	. 39		3.60	.04	.06	1	2
H L1+12N 2+00W	18	87	14	153	٠,6	23		1688		23	5	KD	4	28	1	2	2	74		.084	23 9	28 35	.44	66	.31		3.03	.03	.06	1	1
H L1+12N 1+87W H L1+12N 1+75W	1	53 34	14 11	140 80	.3	21 13	8	425 366		35 15	<b>5</b> 5	D ON	3	18 14	2	2	1	108 72	.25 .20	.072	10	28	.58 .31	75 62	.25 .39		2.45 2.77	.02	.06 80.	1	31
n [1*12n 1*73#	,	31	11	80	.,	13	•	200	4.1/	13	,	עא	,	17		•		12	. 20	.012	10	26	.31	02	. 31		2.77	.04	.08	ı	3
H L1+12H 1+62.5W	4	92	17	150	. 2	34	19	937	5.30	38	5	HD	3	37	1	5	2	120	.53	.118	16	41	1.07	109	.24	2	2.24	.03	. 16	1	9
H L1+12N 1+50W	15	319	19	185	.4	36	28	1063 -	7.60	134	5	סא	b	45	1	5	2	137	. 69	.136	41	39	1.15	120	. 27	2	2.47	.03	.13	1	61
H L1+12N 1+37N 🐪	13	371	18	135	٠,	29	24	664	7.59	110	5	מא	5	65	1	9	2	146	.79		23		1.24	157	.28		2.19	.04	.20	1	17
H L1+12H 1+25W	8	44	7	74	.4	12	1	288	5.57	33	5	ND	6	11	1	2	2	71	.14		10	26	.28	39	.43		3.66	.06	.06	1	1
H L1+12N 1+12.5W	8	42	4	123	. 2	11	8	690	5.79	31	5	ND	4	25	1	2	2	80	.34	. 145	11	21	.24	76	.47	2	3.04	.01	.08	ı	7
H L1+12N 1+00W	۵	92	5	208	.4	40	15	807	5.64	53	5	ND	5	16	3	2	2	85	.21	.098	19	34	.58	192	.31	3	3.80	.04	. 07	1	6
H L1+12N 0+87.5W	8	50	10	148	.3	22	12	845	6.33	34	5	ND	5	18	2	2	2	93	.22	. 122	13	35	.43	110	.47	2	3.38	.04	.06	2	8
H L1+12H 0+75W	6	43	9	124	.3	19	10	690	5.10	24	5	ИD	4	12	ı	2	2	79	.19	.112	15	30	.53	74	. 29	4	3.23	.05	.07	ı	2
H L1+12N 0+62.5W	7	68	20	148	. 4	23	16	1658	5.51	55	5	ND	3	16	1	2	2	112	.20 .	. 085	16	33	.59	81	. 23		2.25	.03	.08	1	12
H L1+12N 0+50W	5	27	8	71	. 4	9	8	752	4.14	13	5	ND	4	14	1	2	2	45	.25	.075	11	17	.22	75	.34	2	3.59	.08	.07	1	4
H L1+12N 0+37.5W	7	61	12	153	.4	25	10	613	6.42	49	5	סא	5	18	1	2	2	115	.25 .	. 086	20	40	.60	84	.40	2	3.16	.04	.10	1	16
H L1+12H 0+25W	7	49	8	198	.3	26	14	865	5.95	29	5	ND	5	20	1	2	2	88	.35 .	.073	20	32	.54	97	.43	2	4.09	.04	.12	1	9
H L1+12N 0+12.5W	6	51	3	148	.6	26	13	647	5.71	24	6	ND	6	17	1	2	2	84	.21 .	.082	20	34	.46	74	.46	4	3.82	.05	.08	1	7
H L1+12H 0+00W	5	71	6	199	٠.	39	16	725	5.97	85	5	ND	7	26	2	2	2	92		.095	20	29	.79	127	. 33		4.68	.03	.07	i	16
H LO+25N 2+75W	20	1082	9	109	1.3	33	51	1206	15.77	6	5	ND	5	37	4	7	2	245	1.15 .	. 165	19	28	3.78	20	.20	2	2.73	.01	.05	1	33
H LO+25N 2+62W	10	400	16	309	1.2	88	. 41	1942 1	15.21	47	5	ND	5	42	4	36	2	106	.93 .	163	39	10	3.25	37	.05	6	2.39	.01	.18	1	38
H LO+25N 2+50W	13	305	9	113 .	.7	42	31	1194 1	0.26	33	5	ND	5	36	1	10	2	144	. 65 .	166	22	76	1.93	71	. 29	2	2.16	.04	.17	1	34
H LO+25N 2+37W	7	116	10	132	.5	37	17	853	5.83	26	5	KD	6	33	1	2	2	82	.59 .	101	23	34	.94	85	. 36	2	2.45	.06	.11	1	32
H LO+25N 2+25W	7	107	8	128	.1	49	19	865	6.48	15	5	NO	7	33	1	2	2	89	.43 .	098	21	40	.96	93	.48	3	2.78	.05	.05	1	. 6
H LO+25H 2+12W	6	87	11	130	. 1	36	16	802	5.97	15	5	ON	4	23	1	2	2	87	.36 .	120	15	37	.78	87	. 38	2	2.88	.04	.05	i	2
H LO+25N 2+00W	6	108	7	153	. 4	36	15	845	5.59	22	5	ND	8	55	1	2	2	78	.86 .	105	24	23	.92	141	. 35	2	1.94	.08	.14	1	6
H LO+25N 1+87W	8	105	8	141	. 1	30	14	781		28	5	ND	6	34	١	2	2	86	.58 .	099	21	34	.77	89	. 36	3	2.85	.05	.09	1	7
H LO+25N 1+75W	15	133	5	161	. 4	23	16	998		31	5	ND	5	59	ĺ	2	2			103	35		.78	101	.32		2.51	.05	.10	1	13
H LO+25H 1+62W	b	101	8	161	. 2	36	17	731		19	5	ND	6	28	1	2	2	80	.40 .	101	25	31	.81	142	.33	2	2.84	.04	.09	1	2
H LO+25N 1+50W	6	104	10	148	.2	35	16	863		21	5	ND	7	44	ı	2	2	78	,61 .	102	29	21	.85	127	.36	2	2.20	.05	.12	l	11
H LO+25N 1+37W	10	328	15	180	. 6	62	34	1742	8.18	100	5	ND	1	46	1	14	2	147	. 81 .	109	40	48 1	.51	88	. 24	2	3.00	.03	.10	J	27
STD C/AU-S	20	61	38		7.7	71		1048		40	19	8	40	52	18	17	20	63	.50 .	089	40	61	.88	180	.09	34	1.93	.06	.14	13	52
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SAMPLE!	MO PPM	CU PPM	PB PPM	ZN PPK	AG PPM	NI PPN	CO PPM	NN PPN	FE 1	AS PPM	U Mqq	AU PPM	HT Haq	SR PPM	CD	S0 PPM	BI PPM	V PPN	CA 1	P I	LA PPH	CR PPM	H6 1	BA PFM	7 [ 1	B PPM	AL I	NA I	K I	¥ PPM	AU1 PPB
H LO+25H 1+25W H LO+25H 1+12M H LO+25H 1+00W H LO+25H 0+87W H LO+25H 0+75W	, 16 13 7 8	329 87 35 128 48	23 15 12 13	182 111 55 240 125	.8 .5 .4 .6	42 23 6 33	33 10 5 16	1076 561 423 660 802	4.95 7.46	82 80 12 70	5 5 5 6 5	00 00 00 03 04	13 9 3 7 3	31 21 12 20 22	1 1 1	7 3 2 4 2	3 6 2 2	128 110 69 114 106	.56 .34 .20 .37	.263 .080 .147	39 13 10 15	38 45 27 40 37	1.19 .63 .16 .96	101 51 48 100 64	.33 .45 .47 .35	2 3 4	3.16 4.06 2.62 4.30 2.14	.03 .02 .04 .02	.11 .05 .05 .06	1 2 1 2	29 1 8 14
H L0+25N 0+62W H L0+25N 0+50W H L0+25N 0+37W H L0+25N 0+25W H L0+25N 0+12W	7 5 8 5 6	34 59 95 103 115	15 17 11 15 10	100 153 165 133 185	.1 .2 .8 .4	15 22 24 23 33	10 13 10 9	639 953 871	6.68 5.48 5.09 4.90	11 30 46 33	7 5 5 6 5	00 00 00 00 00	6 4 4 4	11 37 44 38 43	1 1 1 1	2 2 5 2 2	2 2 2 2 2	93 82 74 61 77	.16 .69 .87 .79	.082 .089 .103	11 23 41 32 33	39 28 28 25 32	.33 .41 .43 .27	47 85 92 67 80	.70 .40 .29 .32	3 4 5 2	3.43 3.13 3.06 3.41 3.36	.05 .04 .04 .04	.06 .05 .06 .04	1 1 1 1	1 13 4 8
H L0+25H 0+00W H L0+25H 0+12E H L0+25H 0+25E H L0+25H 0+37E H L0+25H 0+50E	4 4 5 5	38 57 51 77 237	16 11 15 16 16	82 157 156 145 222	.3 .4 1.0 .3 .4	18 26 18 27 70	9 14 10 14 30	1064	5.86 5.34 5.88	38 44 84 42 122	14 5 5 5 5	0 ND 0 ND 0 ND 0 ND	7 5 2 3 6	23 18 27 26 32	1 1 1 1	3 2 3 2 12	2 2 2 2 3	60 76 86 87 115	.42 .25 .45 .42	.059 .087 .088 .092	18 19 15 15	32 31 31 37 45	.36 .44 .39 .60	40 88 90 91 74	.55 .41 .36 .33	4	4.50 3.95 2.50 2.83 3.45	.06 .05 .05 .04	.04 .06 .06 .07	1 1 1 2 2	4 16 102 9 63
H L0+25H 0+62E H L0+25H 0+75E H L0+25H 0+87E H L0+25H 1+00E H L0+25H 1+12E	4 4 4	157 126 68 192 91	27 20 17 29 23	197 194 112 187 207	.6 .9 .4 .6	44 40 28 43 32	24 16 11 25 19	623 812	7.79 7.12 6.59 7.11 6.48	211 140 74 190 64	5 5 5 5 5	ND ND ND ND	3 3 4 7 6	47 37 23 37 28	1 1 1 1	14 9 3 3	5 2 2 5 7	138 132 95 117 110	.80 .50 .28 .55	.112	13 13 14 22 13	47 40	1.19 1.10 .63 1.09	91 82 62 113 91	.18 .20 .33 .28	2 4 4	2.72 3.05 3.39 2.64 3.11	.03 .02 .04 .04	.08 .07 .07 .10	1 1 1 1	40 31 30 29
H L0+25H 1+25E H L0+25H 1+37E H L0+25H 1+50E H L0+25H 1+62E H L0+25H 1+75E	3 7 6 7 3	195 184 258 297 167	210 32 39 48 24	533 232 399 479 230	.8 .6 .1.1	51 65 63	22 22 28	1296 1534 1908 6027 1318	8.64 7.47 8.07	131 172 151 259 130	5 5 5 5 5	NO ND ND ND	7 6 5 6 4	50 41 39 56 63	2 1 1 3	9 4 14 10 4	2 2 2 2 3	117 101 112 112 121	.79 .85 1.35	.121 .112 .116 .110	26 42 37 35 25	40 46 38	1.31 .75 1.20 1.14 1.33	110 111 92 168 120	.26 .33 .27 .21	7 4 6	2.79 2.73 2.99 2.77 2.18	.04 .04 .03 .03	.49 .11 .13 .17	1 2 1 3 1	50 16 48 148 305
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H L0+25N 2+50E 325N 000 300N 025N 300N 000 300N 025E	2 7 7 1	112 93 61 60 79	16 17 8 14	118 98 129 114 143	.4 .5 .2 .5	26 18 25 18 24	15 13	845 1407 1056 763 1344	6.61 5.56 6.07	78 50 21 23 31	5 5 5 5 5	ND ND ND ND	5 2 4 4 2	29 52 31 18 23	1 1 1 2 1	2 2 4 2 3	3 2 2 2 2	119 81 71 79 84	.46 .19	.061 .090 .096 .078	22 13 18 18	37 24 29 27 30	.97 .31 .44 .28 .35	101 68 77 82 63	.21 .31 .41 .42 .25		2.89	.03 .04 .05 .05	.07 .08 .06 .07	1 1 1 1	53 12 2 9
275N BL Std C/AU-S	4 18	81 62	18 42	146 132	.6 7.5	25 71	12 29		6.08 4.05	39 41	5 18	D D 8	2 40	31 52	1 18	2 16	2 20	99 61		.069 .091	10 40	32 61	.73 .89	100 180	.11	2 2 34 1		.02 .06	.14	1 12	82 51

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SAMPLED	MO PPM	CU PPM				NI PPM	03 899				U PPM	AU Maq	TH PPM	SR PPM	CD, PPM	, SB PPM	81 Maq	۱ ۱۹۹		P	LA PPM	CR PPM	M6 1	BA PPM	11	B PPM	AL I	NA I	K	W PPM	AU :	
HKK-1	. 9	323	5	31	.4	11	14	469	5.28	11	5	ND	7	29	ı	4	2	128	2.06	. 196	19	17	1.01	29	.24	9	1.97	.04	.06	1	4	
HXK-2	12	753	5	43	. 6	16	23	377	10.29	7	5	ND	4	62	1	4	2	212	1.01	.216	11		2.11	17	. 39	5	2.65	.11	. 65	2	15	
HKK-3	2	514	6	23	. 9	16	114	159	18.61	. 6	5	ND	4	14	3	2	11	140	.41	.135	8	16	.54	7	.23	2	.72	.03	.30	1	36	
HKK-4	6	548	14	74	1.1	64	22	936	10.96	126	5	ND	4	61	2	24	2	167		. 209	7	248	3.52	9	.37	ī	3.15	.07	1.60	i	64	
HKK-5	29	243	2	13	.5	7	11	232	5.30	9	5	ND	4	35	1	6	2		1.00		12	21	.66	47	.31	6	.96	.04	.18	2	10	
HKK-6	6	325	2	20	. 3	6	· ģ	299	5.13	3	5	ND	3	27	1	2	2	163	.89	.223	14	14	1.33	52	. 30	2	1.31	. 05	. 39	1	6	
HKK-7	93	533	8	20	1.0	17	63	110	16.78	14	8	ND	7	14	3	2	7	54		.067	14	10	. 19	1	. 15	2	.60	.02	.06	i	11	
HKK-8	3	107	2	20	. 2	6	7	222	2.83	5	5	ND	11	36	1	2	2	59		.111	33	5	.55	47	.17	2	.86	.05	.07	i	2	
HKK-9	7	310	7	31	.5	19	29	309	8.75	10	5	. ND	5	44	2	2	2	121	.69	. 162	13	39	1.15	22	. 26	2	1.52	.08	. 25	1	1	
HKK-10	2	191	3	26	.4	23	20	446	4.35	5	5	ND	4	78	1	2	2	105		.210	17		1.18	41	. 25	9	1.51	.11	. 18	İ	4	
HKK-11	, 11	262	3	23	.5	30	31	324	9.37	8	5	ND	4	35	1	2	3	117	.76	. 182	14	51	1.21	19	. 26	2	1.28	. 05	. 11	ı	4	
HXK-12	. 5	111	2	- 11	. 2	22	30	187	7.11	9	5	ИD	3	19	1	2	2	90	.48	.120	9	48	.73	32	.28	2	.76	. 05	.08	1	3	
HKK-13	4	143	2	25	.4	16	15	269	7.30	3	5	ND	6	46	1	2	2	124	.66	. 194	21	70	1.15	51	.30	4	1.27	. 07	.24	i	6	
HKK-14	28	246	4	35	1.0	7	11	297	7.03	5	5	ND	4	41	ı	2	2	102	1.15	.156	17	15	.65	26	. 24	9	1.15	.08	.08	2	11	
HKK-15	11	301	9	59	.6	26	28	435	7.61	9	5	ND	7	75	1	7	2	123	1.80	.193	20	41	1.54	35	.28	12	2.00	.07	.20	1	4	
HKK-16	4	232	5	37	. 3	15	17	479	5.87	5	5	ND	5	37	ı	2	2	108	1.85	. 187	18	24	1.09	19	. 23	7	1.78	. 05	. 15	1	2	
HKK-17	3	184	5	. 66	. 3	17	22	840	4.57	42	5	ND	6	39	- 1	2	2	107	1.35	. 157	20	33	1.08	26	.23	b	1.57	.05	.24	1	13	
HKK-18	6	223	10	49	.4	18	19	675	6.13	11	5	ND	5	54	1	2	2	151	2.41	.212	18	18	1.39	28	.30	5	1.75	.05	. 25	2	6	
HKK-19	6	326	2	92	٠.6	25	25	993	6.14	34	5	ND.	6	70	1	2	2	78	2.59	.163	33		1.10	67	.08	13	1.86	.05	.37	1	116	
HKK-19 TYPE	6	233	7	118	.3	28	20	1109	5.76	19	5	מא	5	124	1	2	2	145		.238	34		2.46	99	.23		2.74	.13	. 48	ı	34	
HKK-20 LOWER	36	517	7422	6424	8.0	5	9	564	7.25	43044	5	11	3	7	56	2989 -	5	44	. 16	.048	8	13	.72	14	.03	5	1.00	.01	.20	1 1	3220	
HKK-20 UPPER	43	986	2150	2110	69.1	2	3			42098 V	5	10	2	40	21	998	26	23	.06	.052	7	5	.11	19	.04	2	. 27	.01	. 21		1110	
HKK-21	3	271	378	3408	8.2	9	10			9024	5	2	3	137	28	337	2	18	1.20	.107	i	i	.12	10	.01	6	.36	.01	. 22		3990	
STO C/AU-R	19	60	38	128	7.4	70		1078		41	22	8	39	49	18	18	22	61		.091	39	61	.88	174	.09	-	1.91	.07	.14		510	

ASSAY REQUIRED FOR CORRECT RESULT -

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