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## ASSESSMENT REPORT

describing

## PROSPECTING AND GEOCHEMICAL SURVEYS

on the

### ARN CLAIMS

Arn 1-8	YB06323-YB06330
9-14	YB27511-YB27516
15-18	YB38261-YB38264

NTS 115F/15

Latitude 61°58'N; Longitude 140°41'W

in the

Whitehorse Mining District  
Yukon Territory

Prepared by

Archer, Cathro & Associates (1981) Limited

for

**NORDAC RESOURCES LTD.**

by

R.C. Carne, M.Sc., P. Geo.

Field work conducted from June 16 to 30 and August 15 to 23, 1998  
April, 1999

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 900.00.

*M. B. [Signature]*  
Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

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## SUMMARY AND RECOMMENDATIONS

The Arn 1-18 claims are 100% owned by Nordac Resources Ltd. The property covers a series of gold and copper enriched skarns near the headwaters of Miles Creek in southwest Yukon Territory. A three week program of geological mapping, prospecting, grid soil sampling and hand trenching was carried out over one of the areas of mineralization in 1998.

The Arn property lies about 7 km from the Alaska Highway in the Kluane Ranges. Accommodation, food and fuel are available some 50 km to the northwest at Beaver Creek, the nearest community and airport.

The area was originally staked as a copper prospect in 1970 but first recognition of the gold potential was not until 1980. Exploration since then by a number of operators has included geological mapping, geochemical surveys and geophysical surveys with limited hand trenching.

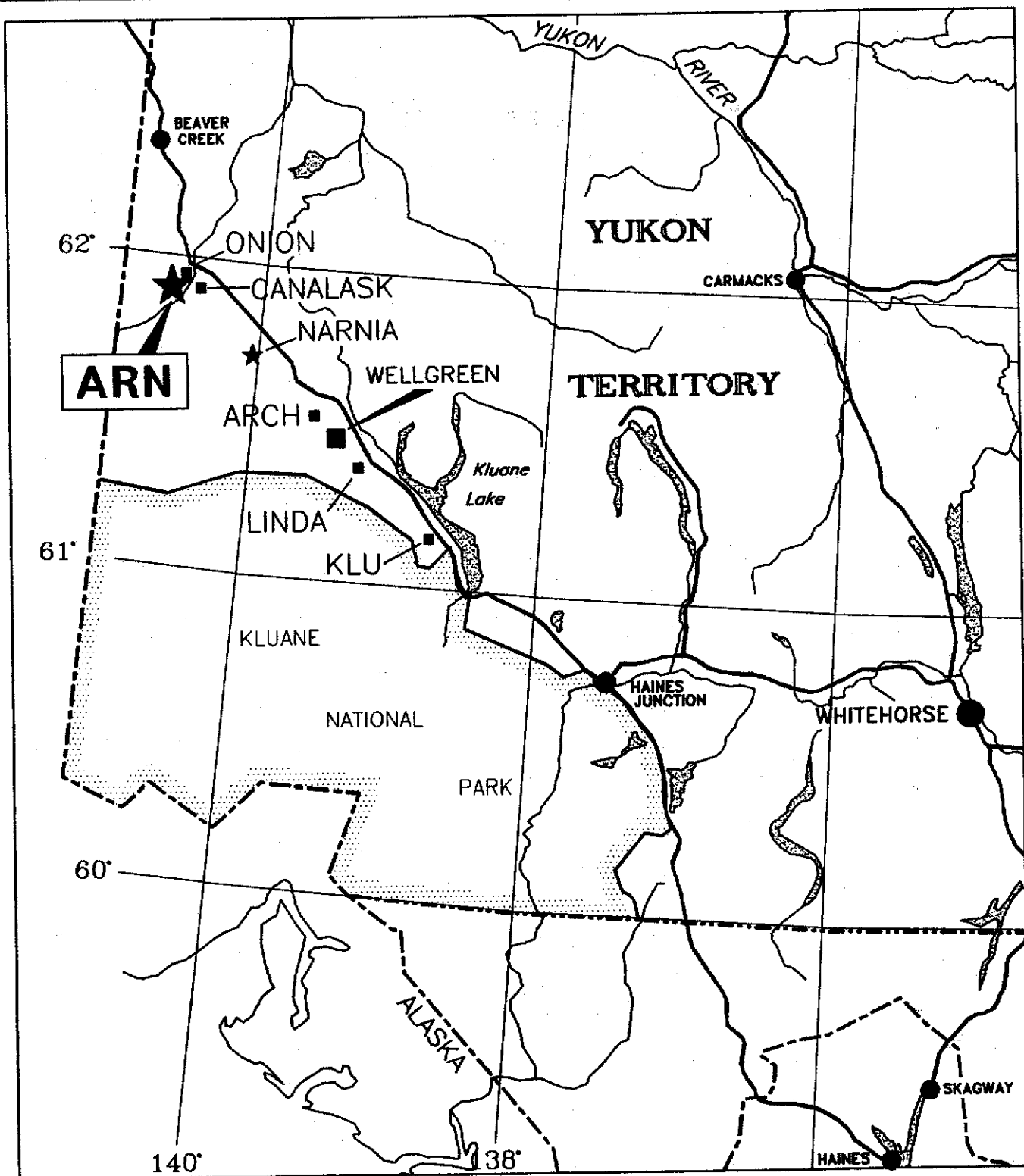
The Arn claim block lies just southwest of the Shakhwak-Denali Fault system, a major northwest-trending right-lateral fault that extends from British Columbia into Alaska. The fault marks a major geological boundary separating Wrangellia Terrane from Yukon-Tanana Terrane to the northeast. The property is underlain by Early to Middle Mesozoic volcanic and sedimentary rocks that are intruded by a swarm of Cretaceous andesite, diorite and latite dykes. Skarns are formed in all layered rocks but they are concentrated at or near the contact between limestone and intrusive rocks. They are dominated by garnet with less abundant epidote, hornblende, magnetite and pyrrhotite with minor clinopyroxene, pyrite, chalcopyrite and native gold.

Eight areas of mineralized skarn have been investigated on the Arn property. The skarn zones are complex. Well mineralized examples discovered to date are recessive phases that have only been exposed through frozen soil and iron oxide cemented talus cover by hand trenching.

The 1998 exploration program tested Skarns A, B and H which occur within a relatively restricted area near the east-central part of the property. Earlier surveys had identified high grade float and bedrock occurrences in this trend and the 1998 soil sampling and hand trenching was designed to test the skarns for the potential to be of economic size as well as grade.

The program was not fully successful as priority targets in Skarns A and B were only partially exposed by trenching due to permafrost. Nonetheless, high grade intercepts were recorded including 1.5 m grading 6.21% copper and 4.3 g/t gold (Skarn A-4) and 2.5 m grading 0.20% copper and 15.1 g/t gold (Skarn A-5). Skarn B-2 is a nearby 5.0 by 7.5 m sulphide rich pod with an average grade of 4.72% copper and 3.4 g/t gold. A relatively large area downslope of Skarn B-2 and adjacent to Skarn B-1, a magnetite rich zone, is obscured by iron oxide cemented talus and soil. The iron oxide cement is enough of a barrier to trenching in itself but, because its typically spongy texture allows a high moisture content, it is usually permanently frozen at this altitude. Samples taken in 1993 of the cemented overburden assayed 0.32% copper and 4.5 g/t gold over 3.0 m. This area was hand trenched in 1998 and a 1.5 m wide section was opened up to bedrock revealing pyrrhotite, magnetite and chalcopyrite rich skarn. A chip sample across the trenched area returned values of 0.33% copper and 2.2 g/t gold over 1.5 m. Ultimate size of the mineralized body is probably much larger although a great deal of hand work or the use of explosives will be required to open the zone up for sampling.

Skarn H lies at the uphill end of a 250 m long trend of mineralized skarns and highly anomalous soil geochemistry that includes Skarns A and B. Hand trenching here revealed altered volcanic rocks that contain small bodies of pyrrhotite rich skarn. Grades are low, ranging up to



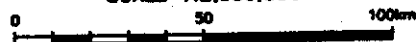
- ★ Property owned by Nordac
- Nickel-copper-platinum prospect owned by others

**NORDAC RESOURCES LTD.**

FIGURE 1  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**LOCATION  
 ARN PROPERTY  
 SOUTHWEST YUKON**

SCALE 1:2,000,000

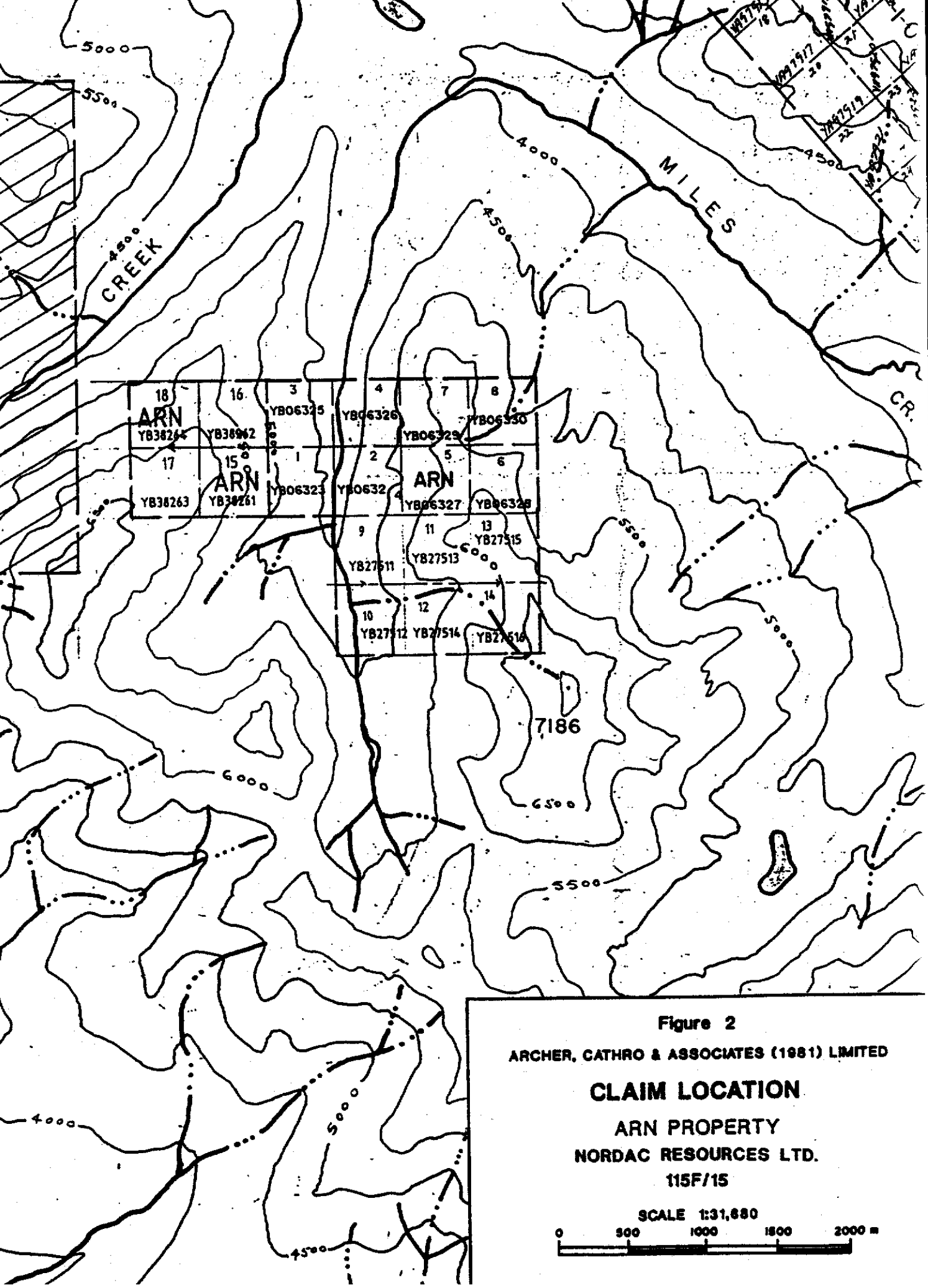


DRAWN/REVISED BY: AG

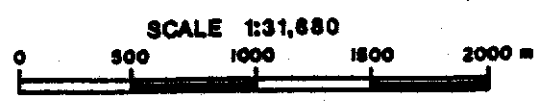
PROJECT:

FILE: NOR\ARN\ACAD08\AR-PLOC.DWG

DATE: MARCH, 1989



**Figure 2**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**  
**CLAIM LOCATION**  
**ARN PROPERTY**  
**NORDAC RESOURCES LTD.**  
**115F/15**



0.16% copper with 0.7 g/t gold over 2.0 m and 0.84% copper with 0.1 g/t gold over 0.4 m. Grab samples of similar material collected from a talus chute about 150 m downslope of Skarn H however, assayed up to 0.84% copper and 4.2 g/t gold suggesting that better zones of mineralization remain to be discovered through overburden cover in the vicinity. This is substantiated by the results of soil sampling which outline an anomaly adjacent to Skarn H that is 100 m wide and at least 200 m long and open to expansion uphill in an unsampled area. This is the largest and strongest anomaly on the property with peak values reaching 8340 ppb gold and 4420 ppm copper.

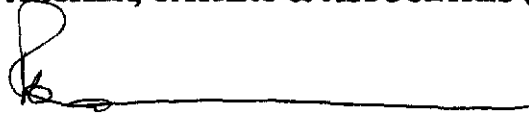
Detailed exploration in 1998 within a relatively restricted area enclosing Skarns A, B and H has exposed potentially economic grades of mineralization over narrow widths. Hand trenching has proven to be only partially effective because the well mineralized skarns are pyrrhotite rich. Not only do they weather readily and are recessive but overlying overburden is usually cemented by permanently frozen iron oxide. Consequently only the associated, but weakly mineralized silicate and magnetite skarns are naturally exposed, even on the steep hillsides present on the Arn property. Fortunately results of soil geochemical sampling are a reliable guide to areas of potential mineralization.

Weakly mineralized skarns with associated large and high strength copper-gold geochemical anomalies have previously been discovered adjacent to the 1998 exploration area in Skarns C, D, E, F and G. Hand trenching has not yet been carried out in these areas to determine whether the source of the elevated geochemical response is due to recessive, higher grade, pyrrhotite rich skarns as is the case elsewhere on the claims.

In conclusion, the Arn property has a demonstrated potential for economic grades of copper-gold skarn mineralization. Unfortunately widths of mineralized zones known to date are too small to be considered mineable. This, however, is not necessarily due to the actual size of the mineralized skarns but more likely to the limited exposures available for sampling because of their recessive nature and the limitation to hand trenching imposed by iron oxide cemented overburden and permafrost. These difficulties can be overcome with a reasonable investment in labour for continued hand trenching and this effort is strongly warranted as the best method for positioning follow-up diamond drill holes.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



R.C. Carne, M.Sc., P.Geo.

## INTRODUCTION

The Arn claims are 100% owned by Nordac Resources Ltd. The property covers a series of gold and copper enriched skarns near the headwaters of Miles Creek in southwest Yukon Territory. Over the period June 16 to 30 and August 15 to 23, 1998 a program of geological mapping, prospecting, grid soil geochemical sampling and hand trenching was conducted under the author's supervision. The author's Statement of Qualifications is included as Appendix I while a List of Personnel who worked on the project appears in Appendix II.

## PROPERTY, LOCATION AND ACCESS

The Arn property lies just north of Mount Taylor at the headwaters of Miles Creek on NTS 115F/15 at latitude 61°58'N and longitude 140°41'W (Figure 1). The claims are approximately 7 km from the Alaska Highway, about 5 km west of the White River. Accommodation, food and fuel are normally available at the nearby White River Lodge (closed in 1998) or in Beaver Creek, 50 km to the northwest. Access to the property in 1998 was via helicopter from the highway. A number of horse trails connect the area with the Alaska Highway but there is no road access.

The property consists of eighteen contiguous mineral claims (Figure 2) registered with the Whitehorse Mining Recorder as listed below.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Arn 1-8	YB06323-YB06330	March 31, 2004
9-14	YB27511-YB27516	March 31, 2004
15-18	YB38261-YB38264	March 31, 2004

\*Expiry dates include 1998 work filed for assessment credit but not yet accepted.

## **TOPOGRAPHY AND VEGETATION**

The claims straddle the upper reaches of Miles Creek just above treeline. Thick patches of alder and willow occupy the creek valley. These give way to sub-alpine and alpine vegetation in the upper elevations. Numerous ice fields shown on government topographic maps are, in fact, moraines or rock glaciers which occupy the upper cirques. Elevations on the claims vary from 1300 m along Miles Creek to 1800 m on the southwest boundary of the property.

## **HISTORY**

The area was initially staked as a copper prospect in 1970 by a syndicate composed of Imperial Oil, Bow Valley Industries Ltd. and Canadian Industrial Gas and Oil. The property was restaked by NAT Joint Venture (Chevron Canada Ltd. and Armco Mineral Exploration Co.) in 1980 on the basis of anomalous gold in stream sediments. Prospecting in the following two years turned up skarn float assaying up to 7 g/t gold. NAT Joint Venture dropped the claims when it was determined the target did not represent a large open pittable deposit. In July 1987 the Arn 1-8 claims were staked by Kluane Joint Venture (All-North Resources Ltd. and Chevron Minerals Ltd). In 1988 the joint venture conducted geological, geochemical and geophysical surveys.

Acne Joint Venture bought out the Chevron and All-North interests in the property and subsequently optioned the claims to Mendocino Resources Ltd. Mendocino carried out geological, geochemical and geophysical surveys before returning the property to Acne Joint Venture which later sold a 100% interest in the property to Nordac Resources Ltd.

### **1998 EXPLORATION PROGRAM**

The 1998 exploration program was designed to define the tenor and extent of high grade gold and copper bearing skarn mineralization outlined by earlier operators. The twenty-four day program (including mobilization and demobilization periods) was carried out by an experienced two-person crew under supervision of the author.

A total of 100 soil samples and 55 rock samples were collected from hand trenches excavated in the central part of the property where previous exploration had returned promising results.

## GEOLOGY

### Regional Geology

The Arn claim block lies just southwest of the Shakwak-Denali Fault system, a major northwest-trending right-lateral fault that extends from British Columbia into Alaska. The fault marks a major geological boundary separating Wrangellia Terrane from Yukon-Tanana Terrane to the northeast.

The property is underlain by Early to Middle Mesozoic volcanic and sedimentary rocks which generally are gently to moderately dipping to the east or northeast (Figure 3). These are intruded by a swarm of Cretaceous porphyritic to non-porphyritic andesite, diorite and latite dykes. Tertiary andesite dykes were later emplaced along tension fractures and minor faults. Skarns are formed in all intruded rock types but they are concentrated along the contact between limestone and the Cretaceous intrusive rocks. They are dominated by garnet with less abundant epidote, hornblende, magnetite and pyrrhotite with minor clinopyroxene, pyrite, chalcopyrite and native gold. The rocks were offset along the Arn Fault, a major east-west structure, possibly associated in origin with the Shakwak Fault. The amount of offset is uncertain but the north side has probably moved down and to the west at least a few tens of metres relative to the south side.

### Stratigraphy

#### Nikolai Group

Nikolai Group volcanic rocks, the oldest lithologies on the property, are exposed in the Miles Creek valley on its western slope south of the Arn Fault. The dominant rock type consists

of dark green, amygdaloidal to massive basalt flows (Unit mTRb) of undetermined thickness.

Flows contain up to 40% amygdules, mainly filled with calcite and chlorite.

### Chitistone/Nizina Limestone

Late Triassic Chitistone/Nizina limestone occurs stratigraphically above the Nikolai Group volcanic rocks. On the property and regionally the unit is discontinuous and averages less than 30 m thick. In places it consists of extremely fine to very fine grained, light to medium grey, slightly recrystallized limestone in which bedding is poorly to well preserved (Unit ITRl). Locally, alternating beds of different shades of grey are prominent. Commonly near contacts of intrusive dykes and plugs, limestone is recrystallized as medium to coarse grained marble (Unit ITRm). In such areas bedding is unrecognizable.

### Dezadeash Formation

The Late Cretaceous Dezadeash Formation consists mainly of a sequence of thin bedded, siliceous mudstone to siltstone alternating with fine sandstone (Unit IKs). Colours vary widely between adjacent beds in shades of white, cream and pale green to dark green and black. Numerous examples of graded beds indicate the sequence is upright with tops to the east and northeast.

At the north end of the property, the lower part of the section consists of thin, massive andesite to basalt flows or sills (Unit 1Kb) containing minor interlayers of sedimentary rocks similar to those in the upper part of the section. Texturally some of the flows are similar to parts of the Nikolai Group as well as Cretaceous andesite dykes and the present identification is only tentative.

### **Structure of the Stratiform Rocks**

Regionally the stratified rocks dip gently to moderately, rarely exceeding 40°. In much of the property south of Arn Fault rocks strike north and dip 10 to 30° east. To the north of Arn Fault and east of Miles Creek, the strike of bedding planes is warped moderately to strongly east-southwest and the dips steepen to 60 to 80° to the north. Farther north, near the northeast corner of the property, rocks dip 50° northeast.

### **Cretaceous Intrusive Rocks**

Intrusive rocks include a major dyke swarm of mainly andesite to diorite composition and several larger diorite intrusions. Most dykes trend from 120 to 160° and dip steeply to the southwest. Age relations are commonly uncertain between different types of intrusions and various lithologic types may have been intruded at more than one time although all varieties are apparently Cretaceous in age. In a few places diorite intrusions appear to truncate andesite dykes.

Diorite (Unit Kd) forms dykes ranging from a few metres to several tens of metres thick and larger intrusions up to a few hundred metres across. The dykes occur mainly east of Miles Creek and are parallel to the andesite dykes. A large body of diorite occurs on the lower slopes on the west side of Miles Creek north of Arn Fault and another occurs on the ridge northwest of Taylor Peak. Many diorite bodies have a finer grained border zone and a coarser grained core while most smaller sills are of the finer grained variety. Locally, east of Miles Creek is an intrusion breccia containing fragments of andesite dykes and Nikolai Group volcanic rocks intruded by wispy dykelets and interstitial patches of very fine to fine grained diorite.

Felsite dykes (Unit Kf) are non-porphyrific to slightly porphyritic (mainly plagioclase) and have a pale cream to green colour. In several places abundant dykes and sills intrude the Chitistone/Nizina limestone. These are predominantly of very fine grained latite/andesite. One such dyke swarm occurs north of Arn Fault west of Miles Creek.

Andesite dykes are of three main types. The most distinctive is a plagioclase-hornblende porphyritic dyke (Unit Kpp) containing up to 20% phenocrysts averaging 0.5 to 1.2 cm long. In some dykes hornblende forms distinctive radiating twins of interlocking crystals. A second variety contains 3 to 5% plagioclase phenocrysts mainly less than 2 mm in size. With decreasing grain size and abundance of phenocrysts both types grade into slightly porphyritic to non-porphyrific andesite (Unit Ka). Most of these dykes have a medium to dark green groundmass. A few dykes are of basaltic andesite (Unit Kb). These have a dark green colour and a higher content of mafic minerals.

### Skarn

Skarn deposits range from less than a metre to a few tens of metres across and are lensey to irregular in outline. Almost all (on a regional and property scale) occur in and near the Chitistone limestone. Some follow bedding plane contacts between the Nikolai Group and the overlying Chitistone/Nizina limestone and others occur below Cretaceous andesite sills which intrude the limestone. Several irregular pods and lenses occur in the upper part of the Nikolai volcanic rocks and in the lower part of the Dezadeash Formation. Irregular pods and lenses of skarn occur in the intrusive rocks as well.

Skarn (Unit Ks) shows a wide variety of compositions and textures. Most skarns are dominated by one of the following assemblages: 1) garnet-(magnetite); 2) epidote-calcite; 3) magnetite-amphibole; 4) pyrrhotite rich pods and lenses; and, 5) pyrite.

Garnet rich skarn contains 60 to 90% garnet in places, showing well developed euhedral crystals up to a few millimetres across. Mainly interstitial to garnet are patches of one or more of the following minerals: magnetite, clinopyroxene, calcite, hornblende/actinolite/tremolite and quartz. Some samples contain minor to moderately abundant pyrrhotite. Garnet rich skarn generally is massive but locally is coarsely interbanded with magnetite rich skarn.

Epidote rich skarns were formed from limestone and contain abundant recrystallized, medium to coarse grained calcite. Quartz and actinolite are locally abundant.

Magnetite-amphibole rich skarn ranges widely in composition between the two end members. Amphibole rich skarns commonly are banded and contain calcite rich patches and lenses parallel to bedding. A few samples contain minor interstitial pyrite.

Pyrrhotite rich skarns form moderately abundant pods and lenses averaging 0.5 to 5 m or more in size, commonly scattered through andesite dykes and diorite near the limestone. They weather readily to limonite gossan and are generally recessive so that abundance could be much higher than currently known. Intergrown with pyrrhotite are minor to moderately abundant magnetite and actinolite with minor garnet, epidote and chalcopyrite.

There are also localized skarns which have formed from porphyritic andesite dykes. These contain moderately abundant patches of pyrite with only minor chalcopyrite.

Skarn related veinlets range widely in composition. They contain one or more of the following minerals in approximate order of decreasing abundance: calcite, quartz, tremolite/actinolite, K-feldspar, epidote, scapolite and chalcopyrite. Late stage limonite and hematite veinlets are present in some sulphide bearing skarns. Mineralized skarns are further described in a following section.

### **Tertiary Intrusive Rocks**

A few aphanitic to slightly porphyritic andesite dykes (Unit Ta), generally less than 2 m wide, cut the older rocks, including some of the skarn deposits. Several of the dykes are intruded along minor faults. They are compositionally similar to dykes dated as Oligocene elsewhere in the Klauane Ranges.

All dykes dip steeply, mainly to the southwest. Many have a well developed joint set parallel to margins of the dyke and some have one or two orthogonal joint sets.

### **Late Structures**

The main fault on the property is the east-west trending Arn Fault which cuts across the northern part of the area. It truncates the Chitistone/Nizina limestone and may offset it by a few hundreds of metres left-laterally. Part of the uncertainty of the offset is because of the large diorite intrusion west of Miles Creek. This fault may be related to the regional scale Shakwak Fault, a few tens of kilometres northeast of the property.

Numerous small faults were mapped throughout the property and many others probably underlie talus covered gullies.

## MINERALIZATION AND GEOCHEMISTRY

Eight areas of mineralized skarn have been investigated on the Arn property. The skarn zones are complex and well mineralized examples discovered to date are recessive and have only been exposed for sampling by hand trenching. Locations of various skarns are shown on the accompanying geology and geochemistry maps (Figures 3 to 5 and 9 to 12). Individual bedrock and float sample locations are given on the sample location maps (Figures 6 to 8) and descriptions of the rocks are listed in Appendix III.

Skarns A, B and H occur within a relatively restricted area near the east-central part of the property. Earlier surveys had identified high grade float and bedrock occurrences in this trend and the 1998 program was designed to test the skarns for their potential to be of economic size as well as grade. Because the existing data base was not detailed enough to position diamond drill holes, detailed soil sampling with follow up hand trenching was selected as the next phase of exploration.

Soil samples were collected at 20 m intervals from lines spaced 50 m apart that are oriented approximately perpendicular to the local strike direction of the mineralized skarns. The samples were collected with the use of a mattock from B horizon material where possible. Due to steep slopes with immature soil development, C horizon material or talus fines were taken in many areas. Samples were collected in standard kraft soil bags and sent to Chemex Labs Ltd. in North Vancouver, B.C. for preparation and analysis by the Induced Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) method for 32 elements on a standard partial extraction (aqua regia) leach of the -80 mesh fraction. Gold determinations were by Fire Assay of a one-half assay ton split of the prepared sample.

## Skarn A

This skarn is located between sample lines 21N and 22N (1993 grid) just southwest of the baseline. It has been intermittently exposed by hand trenching through talus and frozen soil over a 90 m long northwest trend. Host rocks are Middle Triassic Nikolai Group calcareous andesitic tuff that are intruded by minor Cretaceous diorite dykes adjacent to a prominent gully running up the mountain slope. This feature marks the trace of the Arn Fault. Detailed geology and geochemistry of the various exposures of Skarn A are given on Figures 4 and 11, respectively with sample locations given on Figure 7.

Skarn A-1 consists of altered andesite tuffs with minor magnetite, epidote, garnet, calcite, tremolite and chalcopyrite. Analyses of this skarn carried out in 1993 revealed only low copper values (<200 ppm) but gold values are anomalous, ranging up to 1.39 g/t over 3.0 m. Adjacent magnetite rich skarn lenses exposed by 1998 hand trenching returned low grades of copper (<350 ppm) with gold values below detection limits.

Skarn A-2 consists of a 7.5 m wide exposure of vuggy silicified limestone with scattered epidote alteration and disseminated to patchy pyrrhotite. Chip samples returned copper values between 23 and 327 ppm with negligible gold.

Skarn A-3 lies 10 m north of Skarn A-2. Magnetite and epidote rich skarn exposed by hand trenching across 4.0 m returned low copper values and negligible gold.

Skarn A-4 was uncovered by hand trenching late in the 1998 field program and exposure was limited due to frozen overburden. Mineralization consists of about 30% pyrrhotite with abundant chalcopyrite in a gangue of calcite, garnet and epidote. A chip sample across 1.5 m returned values of 6.21% copper and 4.3 g/t gold.

Skarn A-5 lies at the southeast end of the Skarn A area. A 1993, 3.0 m long random chip sample of talus material consisting of pyrrhotite rich, epidote altered andesite returned values of 0.18% copper and 79.2 g/t gold. A 2.5 m wide chip sample of a limonitic garnet-epidote skarn taken in 1998 at the downhill end of the talus sample assayed 0.20% copper and 15.1 g/t gold. Attempts in 1998 to locate the bedrock source of the highly mineralized talus sampled in 1993 were frustrated by frozen overburden.

Soil samples taken from the area of Skarn A returned only moderately anomalous values of copper and gold although sample density in the area is such that known showings were well represented by the sampling.

### Skarn B

Skarn B, which is located near line 21+50N about 50 m west of the 1993 baseline, is the most well explored skarn on the property. Detailed chip samples have been taken from orthogonal hand trenches in 1993 and 1998. Host rocks are Middle Triassic Nikolai Group calcareous andesitic tuff. Detailed geology and geochemistry of the two exposures of Skarn B are given on Figures 4 and 11, respectively with sample locations shown on Figure 7.

Skarn B-1 consists of altered andesitic tuff with subrounded lenses of magnetite rich skarn which measure up to 2 by 5 m in surface dimension. Chip sampling of this material in 1993 returned low, but above background, levels of copper and gold (e.g. 0.08% copper and 0.12 g/t gold over 3.0 m). Enclosing altered volcanic rocks also contain weakly anomalous values

(e.g. 0.21% copper and 0.07 g/t gold over 3.0 m). The exposure of magnetite rich skarn and altered volcanic rocks outlined by hand trenching in 1993 was limited along the south and west sides by iron oxide cemented overburden or ferricrete. The iron oxide cement is enough of a barrier to hand trenching in itself but, because its typically spongy texture allows a high moisture content, it is usually also frozen at this altitude. Consequently, little progress was made in exposing underlying bedrock although chip samples of the cemented overburden range from above background levels to highly anomalous (e.g. >1.00% copper and 7.4 g/t gold over 1.1 m). Samples taken in 1993 of a ferricrete cemented overburden in an area immediately uphill and to the south of the former sample assayed 0.32% copper and 4.5 g/t gold over 3.0 m. This area was hand trenched in 1998 and a 1.5 m wide section was opened up to bedrock revealing pyrrhotite, magnetite and chalcopyrite rich skarn. A chip sample across this trench returned values of 0.33% copper and 2.2 g/t gold. Ultimate size of this mineralized body is probably much larger although a great deal of hand work or the use of explosives will be required to open the zone up for sampling.

Skarn B-2 is a 7.5 by 5.0 m sulphide rich pod with an average grade of 4.72% copper and 3.4 g/t gold established by extensive chip sampling. Silver values range from 41.0 to 47.4 g/t. Arsenic values are unusually low, ranging between <2 and 10 ppm. Mercury levels are below the 1 ppm detection limit for the analytical technique employed. Values of base and other metals are only slightly enhanced. This skarn is hosted by altered Middle Triassic andesitic tuff and cut by a post-mineralization diorite dyke. Trenching appears to have limited the potential for immediate expansion to the size of Skarn B-2.

Soil sample values for copper and gold in the area of Skarn B reflect the known mineralized zones. The strongest soil geochemical response however, was from a soil sample taken about 50 m directly downslope of Skarn B-1 which carried 1000 ppb gold and 2650 ppm copper. This probably reflects an, as yet, unknown mineralized northwest extension to Skarn B.

A 24 m long hand trench was excavated to expose the talus covered area between Skarns A and B. Variably altered and sheared Nikolai Group andesite volcanic rocks were uncovered. Continuous chip samples across the zone returned only background levels of gold and copper.

### Skarn C

Skarn C was sampled and mapped in 1993 and lies near line 19N, 1+00W (1993 grid). A series of small skarns are adjacent to and within a relatively large body of Lower Triassic limestone and marble that is intruded by Cretaceous andesite. The majority of skarn consists of intensely silicified and limonitic zones of fine grained pyrrhotite with minor patches of malachite and azurite. Pods of coarse grained calcite and magnetite are developed locally. Results were disappointing, averaging only 0.05% copper and 0.16 g/t gold over the several areas sampled.

A moderate strength soil geochemical anomaly corresponds to the area of Skarn C. The best response of 1000 ppb gold and 837 ppm copper however, lies downslope of one of the skarn zones which was thoroughly sampled. This suggests that relatively recessive and high grade pyrrhotite rich zones similar to Skarns A-5 and B-2 may be present at Skarn C but they are buried by talus.

### Skarns D and E

A number of small mineralized zones located just west of the 1993 baseline between lines 15N and 18N comprise Skarns D and E. They occur mainly in Lower Triassic Chitistone/Nizina

Limestone with interlayers of Nikolai Group basalt. They are characterized by intense fracturing, silicification, chloritization and argillic alteration with fine grained pyrrhotite and minor malachite. In general values were disappointing with most ranging less than 0.06% copper and 0.13 g/t gold.

Both Skarns D and E are reflected by much larger areas of highly anomalous soil geochemical response. Peak values reach 1080 ppb gold and 852 ppm copper (Skarn D) and 1350 ppb gold and 5780 ppm copper (Skarn E). Both skarns remain attractive exploration targets. Because they occur at higher elevation than Skarns A and B, and correspondingly lack soil development and vegetation cover, hand trenching may not be as impeded by permafrost.

#### **Skarn F**

Skarn F was explored in 1993. It lies northeast of the 1993 grid between lines 21N and 22N where magnetite and magnetite-amphibole skarn are developed in Cretaceous andesite. Assays of grab samples range up to 0.24% copper and 9.3 g/t gold. Skarn F is located outside the limit of 1998 and earlier soil geochemical surveys but the area downslope of the known mineralization is anomalous with peak values up to 1145 ppb gold and 416 ppm copper.

#### **Skarn G**

Skarn G was also explored in 1993 and lies about 110 m southeast of Skarn F. Pyrite-bearing skarn is developed in Cretaceous andesite adjacent to a fault zone. Assays of grab samples range up to 0.02% copper and 1.2 g/t gold. Similar to Skarn F, this area is outside the area of soil geochemical surveys and probably too far uphill to be reflected by the data.

## Skarn H

Skarn H was discovered in 1993 but not explored until 1998. Relatively weak copper-gold mineralization is hosted by altered Middle Triassic andesite that contains small bodies of pyrrhotite rich skarn. Grades of hand trench chip samples range up to 0.16% copper with 0.7 g/t gold over 2.0 m and 0.84% copper with 0.1 g/t gold over 0.4 m. Grab samples of similar material collected from a talus chute about 150 m downslope of Skarn H assayed up to 0.84% copper and 4.2 g/t gold, suggesting that better zones of mineralization remain to be discovered through overburden cover in the vicinity. This is confirmed by the results of soil sampling which outline an anomaly 100 m wide and at least 200 m long that is open to expansion uphill in an unsampled area. This is the largest and strongest anomaly on the property with peak values reaching 8370 ppb gold and 4420 ppm copper. Again, this area lies uphill of extensive soil and vegetation cover and hand trenching may be an effective tool for establishing discrete drill targets.

Several other currently unexplored soil geochemical anomalies are present including one large, poorly defined area downslope of Skarn C which contains soil with up to 775 ppb gold and 604 ppm copper.

**APPENDIX I**

**AUTHOR'S STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, Robert C. Carne, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Burnaby, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1974 with a B.Sc. and in 1979 with an M.Sc. majoring in Geological Sciences.
2. I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (registration number 19868).
3. From 1974 to present, I have been actively engaged as a geologist in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981 became a partner of Archer, Cathro & Associates (1981) Limited.
4. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



Robert C. Carne, M.Sc., P. Geo.

**APPENDIX II**

**LIST OF PERSONNEL**

<b><u>Name</u></b>	<b><u>Position</u></b>	<b><u>Period</u></b>
Rob Carne	Geologist/Supervisor	June 24, 30
Greg Duso	Geologist/Party Chief	June 16-30, August 15-23
Iain Weatherston	Field Assistant	June 16-30, August 15-23

All are employees of Archer, Cathro & Associates (1981) Limited with address at:  
1016 - 510 West Hastings Street  
Vancouver, BC V6B 1L8

**APPENDIX III**

**DESCRIPTIONS OF ROCK SAMPLES WITH COPPER AND GOLD VALUES**

**APPENDIX III**  
**DESCRIPTION OF ROCK SAMPLES WITH COPPER AND GOLD VALUES**

<b><u>Sample Number</u></b>	<b><u>Description</u></b> (chip sample configurations are shown on Figures 7 and 8)	<b><u>Cu ppm</u></b>	<b><u>Au g/t</u></b>
59277	1.0 m chip sample, siliceous altered VOLC with 1-5% disseminated py adjacent to 598283	1840	<0.1
59278	1.0 m chip sample, siliceous altered VOLC with 1-5% disseminated py adjacent to 598279	3970	0.3
59279	2.0 m chip sample from oval-shaped sx rich lens (Skarn B-2) with po, mg, ep, cp±gr, ct, ac, ml, li	4.91%	3.4*
59280	2.0 m chip sample from oval-shaped sx rich lens (Skarn B-2) with po, mg, ep, cp±gr, ct, ac, ml, li	5.29%	3.3*
59281	2.5 m chip sample from oval-shaped sx rich lens (Skarn B-2) with po, mg, ep, cp±gr, ct, ac, ml, li	4.58%	6.3*
59282	2.0 m chip sample from oval-shaped sx rich lens (Skarn B-2) with po, mg, ep, cp±gr, ct, ac, ml, li	4.71%	2.6*
59283	2.5 m chip sample from oval-shaped sx rich lens (Skarn B-2) with po, mg, ep, cp±gr, ct, ac, ml, li	4.27%	1.4*
59284	2.0 m chip sample of Skarn H mineralization	1340	<0.1
59285	2.0 m chip sample of Skarn H mineralization	348	<0.1
59286	grab sample 25 m SE of Skarn H	5460	0.1
59287	2.75 m chip sample of Skarn H mineralization (>50% po)	765	0.1
59288	3.0 m chip sample of Skarn H mineralization	658	<0.1
59289	3.0 m chip sample of Skarn H mineralization	560	0.1
59290	2.0 m chip sample of Skarn H mineralization (<50% po)	1625	0.7
59291	2.0 m chip sample of Skarn H mineralization	574	<0.1
59292	0.4 m chip sample of Skarn H mineralization (massive sx)	8420	0.1
59293	1.0 m chip sample of Skarn H mineralization (massive sx)	2210	0.3
59294	3.0 m chip sample of Skarn H mineralization	1810	0.4
59295	0.75 m chip sample of Skarn H mineralization	2250	0.8
59296	2.5 m chip sample of Skarn H mineralization, limonitic VOLC with ep, 5% po	422	<0.1

<b><u>Sample Number</u></b>	<b><u>Description</u></b> (chip sample configurations are shown on Figures 7 and 8)	<b><u>Cu ppm</u></b>	<b><u>Au g/t</u></b>
59297	3.0 m chip sample of Skarn H mineralization, limonitic VOLC with ep, 5% po	729	<0.1
59298	1.5 m chip sample of po-mg-cp rich skarn, Skarn B-1	3320	2.2
59299	2.5 m chip sample of li-gr-ep zone, Skarn A-5	2050	15.1
59300	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	42	<0.1
59351	3.0 m chip sample, 5-40% mg in skarn, Skarn A-Skarn B	38	0.8
59352	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	34	1.2
59353	3.0 m chip sample, shear zone, Skarn A-Skarn B	41	<0.1
59354	3.0 m chip sample, shear zone, Skarn A-Skarn B	23	<0.1
59355	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	50	<0.1
59356	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	67	<0.1
59357	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	65	<0.1
59358	3.0 m chip sample, altered VOLC, Skarn A-Skarn B	503	<0.1
59359	float, Skarn A	12	1.1
59360	float, Skarn A	36	0.6
59361	float, Skarn A	5770	0.3
AA4958	3.0 m chip sample, po rich hornfels	926	0.4
AA4959	1.0 m composite grab sample, skarn fragments in fault gouge, Skarn A-5	140	<0.2
AA4960	float, talus chute below Skarn H	0.84%	4.2
AA4961	float, talus chute below Skarn H	4460	0.5
AA4962	float, talus chute below Skarn H	3100	0.5
AA4963	2.0 m chip sample, mg-ep skarn, Skarn A-1	64	<0.2
AA4964	2.0 m chip sample, mg-ep skarn, Skarn A-1	17	<0.2
AA4965	2.0 m chip sample, mg-ep skarn, Skarn A-1	25	<0.2
AA4966	2.0 m chip sample, mg-ep skarn, Skarn A-1	125	<0.2
AA4967	2.0 m chip sample, mg-ep skarn, Skarn A-1	313	<0.2
AA4968	2.0 m chip sample, mg-ep skarn, Skarn A-1	233	<0.2
AA4969	2.0 m chip sample, mg-ep skarn, Skarn A-3	472	<0.2
AA4970	2.0 m chip sample, mg-ep skarn, Skarn A-3	93	<0.2

<b>Sample Number</b>	<b>Description</b> (chip sample configurations are shown on Figures 7 and 8)	<b>Cu ppm</b>	<b>Au g/t</b>
AA4971	1.5 m chip sample, 30% po, >4% cp, ct, gr, ep, Skarn A-4	6.21%	4.3*
AA4972	2.5 m chip sample, vuggy silicified altered LISN±ep, po, Skarn A-2	109	<0.2
AA4973	2.5 m chip sample, vuggy silicified altered LISN±ep, po, Skarn A-2	151	<0.2
AA4974	2.5 m chip sample, vuggy silicified altered LISN±ep, po, Skarn A-2	285	<0.2
AA4975	2.5 m chip sample, vuggy silicified altered LISN±ep, po, Skarn A-2	327	<0.2
AA4976	2.5 m chip sample, vuggy silicified altered LISN±ep, po, Skarn A-2	23	<0.2
AA4977	grab sample, strong ep altered LISN, Skarn A-2	753	<0.2

\* 41.0-47.4 g/t Ag

### ABBREVIATIONS

ac	actinolite
ct	calcite
cp	chalcopyrite
ep	epidote
gr	garnet
li	limonite
mg	magnetite
ml	malachite
po	pyrrhotite
sx	sulphide
LISN	limestone
VOLC	volcanic rock (andesite)

**APPENDIX IV**  
**ANALYTICAL CERTIFICATES**



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## CERTIFICATE OF ANALYSIS A9829317

SAMPLE	PREP CODE	Au FA g/t	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
AA4958	208 226	0.4	0.2	1.94	6	< 10	< 0.5	< 2	0.87	< 0.5	33	84	926	6.67	< 10	1	0.03	< 10	0.32	205
AA4959	208 226	< 0.2	< 0.2	2.11	< 2	< 10	< 0.5	4	13.30	< 0.5	9	40	140	9.03	10	1	0.02	< 10	0.94	1690
AA4960	208 226	4.2	2.0	0.80	< 2	< 10	< 0.5	6	1.29	1.0	285	17	7990	>15.00	10	1	0.02	< 10	0.20	525
AA4961	208 226	0.5	0.8	0.34	< 2	< 10	< 0.5	16	2.53	< 0.5	193	25	4460	>15.00	< 10	2	0.01	< 10	0.05	495
AA4962	208 226	0.5	0.6	1.19	< 2	< 10	< 0.5	2	1.16	0.5	221	30	3100	>15.00	10	< 1	0.12	< 10	0.22	555
AA4963	208 226	< 0.2	< 0.2	1.69	< 2	10	< 0.5	< 2	13.65	< 0.5	6	44	64	10.15	< 10	3	0.01	< 10	0.22	1795
AA4964	208 226	< 0.2	< 0.2	2.04	2	< 10	< 0.5	< 2	4.47	< 0.5	15	183	17	11.00	10	3	0.08	< 10	1.71	920
AA4965	208 226	< 0.2	< 0.2	3.01	< 2	< 10	< 0.5	< 2	2.90	< 0.5	22	185	25	4.00	< 10	1	0.09	< 10	2.37	740
AA4966	208 226	< 0.2	< 0.2	0.80	< 2	< 10	< 0.5	6	5.41	0.5	13	46	125	>15.00	10	1	0.04	< 10	0.44	2020
AA4967	208 226	< 0.2	< 0.2	0.77	< 2	< 10	< 0.5	8	7.32	1.0	13	19	313	>15.00	10	4	0.07	< 10	0.15	1135
AA4968	208 226	< 0.2	< 0.2	0.97	< 2	< 10	< 0.5	< 2	8.94	< 0.5	11	27	233	>15.00	10	1	0.09	< 10	0.32	1335
AA4969	208 226	< 0.2	< 0.2	2.76	18	20	< 0.5	< 2	7.92	< 0.5	62	48	472	6.06	10	< 1	0.04	< 10	0.58	1130
AA4970	208 226	< 0.2	< 0.2	1.22	6	< 10	< 0.5	2	1.93	< 0.5	20	36	93	13.40	< 10	3	0.05	10	0.67	3310
AA4971	208 226	4.3	47.0	0.63	< 2	< 10	< 0.5	Intf*	2.69	11.0	265	20	>10000	>15.00	10	< 1	< 0.01	< 10	0.06	720
AA4972	208 226	< 0.2	< 0.2	1.58	2	< 10	< 0.5	< 2	3.71	< 0.5	15	35	109	8.93	< 10	1	0.04	< 10	0.74	2320
AA4973	208 226	< 0.2	< 0.2	0.32	18	< 10	< 0.5	2	3.34	0.5	14	38	151	>15.00	10	4	0.02	10	1.45	6820
AA4974	208 226	< 0.2	< 0.2	2.76	8	< 10	< 0.5	< 2	4.36	< 0.5	20	23	285	10.25	10	< 1	0.05	< 10	0.80	2490
AA4975	208 226	< 0.2	< 0.2	1.59	42	< 10	< 0.5	< 2	4.04	0.5	29	42	327	13.40	10	1	0.05	10	0.79	3590
AA4976	208 226	< 0.2	< 0.2	1.25	< 2	10	< 0.5	2	1.66	< 0.5	20	51	23	3.43	< 10	< 1	0.11	< 10	0.75	760
AA4977	208 226	< 0.2	< 0.2	1.90	< 2	< 10	< 0.5	< 2	9.12	< 0.5	34	62	753	7.30	10	1	0.03	< 10	0.43	1735

\*\*INTERFERENCE: Cu ON Bi AND P\*\*

CERTIFICATION: *Hartfelder*



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SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Cu %
AA4958	208 226	3	0.10	54	750	< 2	< 2	6	48	0.14	< 10	< 10	122	< 10	32	-----
AA4959	208 226	3	< 0.01	4	720	8	< 2	4	63	0.04	< 10	< 10	62	< 10	48	-----
AA4960	208 226	1	0.01	86	320	6	< 2	1	7	0.04	< 10	10	31	< 10	98	0.84
AA4961	208 226	3	< 0.01	78	510	8	< 2	< 1	< 1	0.01	< 10	10	23	< 10	34	-----
AA4962	208 226	2	0.07	60	780	< 2	< 2	1	3	0.03	< 10	10	49	< 10	54	-----
AA4963	208 226	5	< 0.01	3	810	6	< 2	2	45	0.04	< 10	< 10	35	< 10	40	-----
AA4964	208 226	1	0.02	70	530	< 2	< 2	3	38	0.07	< 10	< 10	57	< 10	68	-----
AA4965	208 226	2	0.04	91	520	< 2	< 2	5	55	0.11	< 10	< 10	84	< 10	72	-----
AA4966	208 226	3	0.02	21	930	2	< 2	3	34	0.01	< 10	10	42	< 10	64	-----
AA4967	208 226	5	0.04	1	500	10	< 2	1	52	0.03	< 10	10	32	< 10	48	-----
AA4968	208 226	5	0.05	6	810	< 2	4	1	81	0.03	< 10	10	33	< 10	50	-----
AA4969	208 226	4	0.02	23	2390	< 2	< 2	6	52	0.07	< 10	< 10	104	< 10	48	-----
AA4970	208 226	< 1	0.05	36	950	2	6	24	61	< 0.01	< 10	< 10	133	< 10	100	-----
AA4971	208 226	< 1	< 0.01	111	Intf*	< 2	6	1	3	0.01	< 10	10	22	10	1050	6.21
AA4972	208 226	5	0.04	30	890	< 2	< 2	13	71	0.01	< 10	< 10	81	< 10	72	-----
AA4973	208 226	4	0.03	39	670	4	< 2	29	27	< 0.01	< 10	10	134	< 10	168	-----
AA4974	208 226	3	0.05	47	820	< 2	2	12	45	0.01	< 10	< 10	95	< 10	86	-----
AA4975	208 226	3	0.04	63	920	< 2	< 2	20	50	0.01	< 10	< 10	129	< 10	108	-----
AA4976	208 226	3	0.07	26	1540	< 2	< 2	14	46	0.05	< 10	< 10	111	< 10	50	-----
AA4977	208 226	4	0.01	20	1630	< 2	< 2	5	36	0.08	< 10	< 10	108	< 10	62	-----

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## CERTIFICATE OF ANALYSIS A9829316

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	201	202	FA+AA																		
AA4848	201	202	305	0.4	2.73	24	60	< 0.5	< 2	1.20	< 0.5	43	33	365	5.63	< 10	< 1	0.06	< 10	0.80	540
AA4849	201	202	1060	1.2	2.62	6	20	< 0.5	< 2	1.16	< 0.5	22	54	879	>15.00	10	< 1	0.06	< 10	0.43	405
AA4850	201	202	2290	0.8	1.40	8	10	< 0.5	< 2	0.49	< 0.5	6	52	805	>15.00	10	< 1	0.07	< 10	0.47	235
AA4851	201	202	360	0.2	3.54	10	50	< 0.5	< 2	2.17	< 0.5	55	53	488	7.37	< 10	< 1	0.09	< 10	1.08	810
AA4852	201	202	90	0.2	3.65	6	30	< 0.5	< 2	2.43	< 0.5	55	280	246	5.53	< 10	< 1	0.06	< 10	1.97	725
AA4853	201	202	105	0.4	3.46	10	60	< 0.5	< 2	1.94	< 0.5	34	28	374	4.89	< 10	< 1	0.11	< 10	0.91	620
AA4854	201	202	45	0.4	1.85	10	70	< 0.5	< 2	1.43	< 0.5	19	27	128	3.27	< 10	< 1	0.07	< 10	0.65	480
AA4855	201	202	35	0.4	3.16	2	40	< 0.5	< 2	1.70	< 0.5	40	44	338	5.02	< 10	< 1	0.08	< 10	1.41	635
AA4856	201	202	20	0.2	2.99	8	60	< 0.5	< 2	1.31	< 0.5	36	45	176	6.25	< 10	< 1	0.16	< 10	0.95	1250
AA4857	201	202	60	0.2	2.45	30	60	< 0.5	< 2	1.38	< 0.5	33	50	140	5.50	< 10	< 1	0.18	10	0.71	995
AA4858	201	202	915	0.8	2.94	10	40	< 0.5	< 4	1.42	< 0.5	78	44	1510	9.04	< 10	< 1	0.11	< 10	0.95	1060
AA4859	201	202	55	0.6	4.59	< 2	60	< 0.5	< 2	1.65	< 0.5	53	136	360	6.64	10	< 1	0.09	< 10	1.90	985
AA4860	201	202	35	0.4	2.61	26	60	< 0.5	< 2	2.18	< 0.5	36	29	238	5.69	< 10	< 1	0.10	10	0.79	1425
AA4861	201	202	55	0.2	1.54	8	50	< 0.5	< 2	0.53	< 0.5	14	47	74	2.90	< 10	< 1	0.06	< 10	0.75	295
AA4862	201	202	140	0.8	3.53	6	50	< 0.5	< 2	2.00	< 0.5	38	29	455	5.39	< 10	< 1	0.10	< 10	0.99	655
AA4863	201	202	< 5	0.2	3.25	14	40	< 0.5	< 2	1.61	< 0.5	31	41	167	5.26	< 10	< 1	0.10	< 10	0.89	850
AA4864	201	202	1145	0.6	2.49	10	40	< 0.5	< 2	1.42	< 0.5	38	50	416	10.85	10	< 1	0.12	10	0.67	1275
AA4865	201	202	95	0.6	2.14	< 2	30	< 0.5	< 2	1.76	< 0.5	38	32	389	7.18	< 10	< 1	0.06	10	0.53	1335
AA4866	201	202	130	0.6	3.61	8	50	< 0.5	< 2	1.57	< 0.5	72	64	704	7.88	< 10	< 1	0.16	< 10	1.21	915
AA4867	201	202	170	0.8	3.04	8	70	< 0.5	< 2	1.20	< 0.5	44	58	428	6.66	< 10	< 1	0.10	< 10	1.11	750
AA4868	201	202	360	0.4	2.95	10	70	< 0.5	< 2	1.39	< 0.5	45	55	426	6.69	< 10	< 1	0.11	< 10	0.93	915
AA4869	201	202	25	0.2	3.28	< 2	70	< 0.5	< 2	0.87	< 0.5	34	56	184	5.07	< 10	< 1	0.09	< 10	1.06	835
AA4870	201	202	35	0.2	2.79	< 2	80	< 0.5	< 2	1.02	< 0.5	27	50	144	4.91	< 10	< 1	0.09	< 10	1.01	745
AA4871	201	202	35	0.2	2.57	6	50	< 0.5	< 2	2.49	< 0.5	23	49	140	4.19	< 10	< 1	0.07	< 10	1.15	675
AA4872	201	202	45	0.4	3.63	22	60	< 0.5	< 2	1.99	< 0.5	37	71	276	5.42	10	< 1	0.11	10	1.52	875
AA4873	201	202	70	0.2	2.63	8	40	< 0.5	< 2	1.21	< 0.5	30	50	267	9.27	< 10	< 1	0.09	10	0.79	1360
AA4874	201	202	85	0.4	2.68	10	40	< 0.5	< 2	1.81	< 0.5	30	46	223	8.01	< 10	< 1	0.08	< 10	0.80	1150
AA4875	201	202	45	0.2	4.70	< 2	30	< 0.5	< 2	2.89	< 0.5	28	34	145	5.39	10	< 1	0.12	< 10	0.81	1015
AA4876	201	202	40	0.2	2.41	< 2	70	< 0.5	< 2	1.38	< 0.5	24	66	214	4.34	< 10	< 1	0.18	< 10	1.56	465
AA4877	201	202	510	0.6	3.38	14	40	< 0.5	< 2	1.62	< 0.5	64	58	855	10.75	< 10	< 1	0.09	< 10	0.84	820
AA4878	201	202	650	0.6	3.04	6	50	< 0.5	< 2	1.60	< 0.5	42	55	539	9.37	< 10	< 1	0.08	< 10	0.90	725
AA4879	201	202	30	0.4	3.44	< 2	50	< 0.5	< 2	1.72	< 0.5	39	63	356	5.09	10	< 1	0.14	< 10	1.33	700
AA4880	201	202	40	0.6	3.43	6	80	< 0.5	< 2	1.19	< 0.5	34	53	292	5.04	< 10	< 1	0.09	< 10	1.07	640
AA4881	201	202	75	0.4	2.59	10	80	< 0.5	< 2	1.19	< 0.5	36	42	262	4.59	< 10	< 1	0.07	< 10	0.86	855
AA4882	201	202	50	0.2	3.31	8	60	< 0.5	< 2	1.55	< 0.5	36	58	317	5.73	< 10	< 1	0.10	< 10	0.99	895
AA4883	201	202	1955	12.4	2.27	< 2	20	< 0.5	10	1.62	0.5	54	30	7160	>15.00	10	< 1	0.07	< 10	0.45	715
AA4884	201	202	115	1.6	3.22	8	60	< 0.5	< 2	1.73	< 0.5	38	50	1125	6.25	< 10	< 1	0.10	< 10	1.02	835
AA4885	201	202	10	0.2	4.61	< 2	20	< 0.5	< 2	2.81	< 0.5	24	137	123	3.71	< 10	< 1	0.09	< 10	2.35	650
AA4886	201	202	300	0.2	3.66	22	10	< 0.5	< 2	6.37	< 0.5	18	17	151	7.72	< 10	< 1	0.06	< 10	0.83	2080
AA4887	201	202	80	0.8	3.47	40	30	< 0.5	< 2	2.88	0.5	71	104	642	8.27	10	< 1	0.08	< 10	1.98	1460

CERTIFICATION: *Hart Richler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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To: NORDAC RESOURCES LTD.  
C/O ARCHER, CATHRO  
BOX 4127, 2054 SECOND AVE.  
WHITEHORSE, YT  
Y1A 3S9

Project: ARN  
Comments:

Page Number: 1-B  
Total Pages: 3  
Certificate Date: 02-SEP-1998  
Invoice No.: I9829316  
P.O. Number:  
Account: MTT

## CERTIFICATE OF ANALYSIS

A9829316

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
AA4848	201	202	1	0.04	39	770	6	< 2	4	69	0.09	< 10	< 10	99	< 10	60
AA4849	201	202	1	0.01	24	1080	12	2	9	42	0.13	< 10	< 10	119	< 10	36
AA4850	201	202	1	0.01	16	1010	6	< 2	5	17	0.18	< 10	< 10	132	< 10	30
AA4851	201	202	1	0.07	60	740	< 2	< 2	7	119	0.11	< 10	< 10	92	< 10	66
AA4852	201	202	3	0.04	161	670	< 2	< 2	10	73	0.09	< 10	< 10	87	< 10	44
AA4853	201	202	1	0.06	28	1100	6	< 2	7	117	0.09	< 10	< 10	109	< 10	68
AA4854	201	202	< 1	0.03	21	850	2	< 2	5	63	0.08	< 10	< 10	71	< 10	76
AA4855	201	202	< 1	0.07	75	710	4	< 2	7	96	0.10	< 10	< 10	99	< 10	70
AA4856	201	202	< 1	0.04	41	740	6	2	15	83	0.08	< 10	< 10	132	< 10	98
AA4857	201	202	2	0.05	52	1440	2	< 2	14	78	0.06	< 10	< 10	111	< 10	92
AA4858	201	202	< 1	0.05	83	680	6	< 2	11	69	0.15	< 10	< 10	126	< 10	84
AA4859	201	202	< 1	0.05	113	540	< 2	< 2	15	127	0.15	< 10	< 10	134	< 10	66
AA4860	201	202	2	0.04	39	850	< 2	< 2	14	124	0.04	< 10	< 10	94	< 10	60
AA4861	201	202	< 1	0.04	34	580	2	< 2	3	34	0.09	< 10	< 10	57	< 10	52
AA4862	201	202	1	0.06	29	1130	2	< 2	8	121	0.11	< 10	< 10	125	< 10	72
AA4863	201	202	< 1	0.04	55	780	< 2	< 2	12	99	0.09	< 10	< 10	112	< 10	74
AA4864	201	202	3	0.04	38	1240	4	2	13	56	0.10	< 10	< 10	125	< 10	92
AA4865	201	202	1	0.05	27	1300	6	< 2	8	54	0.08	< 10	< 10	83	< 10	52
AA4866	201	202	< 1	0.05	67	780	2	< 2	9	73	0.17	< 10	< 10	123	< 10	72
AA4867	201	202	1	0.05	52	870	2	< 2	7	68	0.13	< 10	< 10	97	< 10	70
AA4868	201	202	< 1	0.04	61	940	6	< 2	9	91	0.08	< 10	< 10	108	< 10	72
AA4869	201	202	< 1	0.03	60	870	< 2	< 2	8	67	0.08	< 10	< 10	105	< 10	66
AA4870	201	202	< 1	0.04	40	970	2	< 2	8	78	0.07	< 10	< 10	99	< 10	70
AA4871	201	202	< 1	0.05	51	830	< 2	< 2	8	136	0.07	< 10	< 10	91	< 10	82
AA4872	201	202	< 1	0.05	61	770	6	< 2	12	96	0.11	< 10	< 10	111	< 10	82
AA4873	201	202	2	0.03	43	1050	2	< 2	12	60	0.08	< 10	< 10	116	< 10	76
AA4874	201	202	1	0.04	35	900	2	< 2	10	70	0.08	< 10	< 10	101	< 10	72
AA4875	201	202	1	0.01	26	940	2	< 2	10	175	0.10	< 10	< 10	104	< 10	64
AA4876	201	202	< 1	0.01	38	630	< 2	< 2	6	50	0.22	< 10	< 10	127	< 10	68
AA4877	201	202	< 1	0.04	63	730	6	< 2	9	64	0.13	< 10	< 10	111	< 10	62
AA4878	201	202	< 1	0.05	49	800	2	< 2	7	63	0.13	< 10	< 10	104	< 10	56
AA4879	201	202	< 1	0.06	51	930	< 2	< 2	10	94	0.16	< 10	< 10	118	< 10	58
AA4880	201	202	< 1	0.05	48	880	2	< 2	7	71	0.14	< 10	< 10	110	< 10	66
AA4881	201	202	1	0.04	42	860	< 2	< 2	6	76	0.09	< 10	< 10	89	< 10	66
AA4882	201	202	< 1	0.04	64	960	4	< 2	12	99	0.06	< 10	< 10	106	< 10	72
AA4883	201	202	< 1	0.03	49	860	10	2	8	60	0.08	< 10	< 10	81	< 10	130
AA4884	201	202	< 1	0.05	58	730	2	< 2	10	103	0.11	< 10	< 10	110	< 10	92
AA4885	201	202	< 1	0.08	85	600	< 2	< 2	15	183	0.09	< 10	< 10	104	< 10	50
AA4886	201	202	< 1	< 0.01	15	660	8	< 2	6	88	0.06	< 10	< 10	75	< 10	70
AA4887	201	202	< 1	0.03	82	490	16	< 2	17	78	0.05	< 10	< 10	112	< 10	100

CERTIFICATION: *Hart Riedler*



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Total Pages: 3  
Certificate Date: 02-SEP-1998  
Invoice No.: I9829316  
P.O. Number:  
Account: MTT

## CERTIFICATE OF ANALYSIS A9829316

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	FA+AA																				
AA4888	201	202	100	0.2	2.98	8	40	< 0.5	< 2	1.94	< 0.5	26	44	215	4.66	< 10	< 1	0.08	< 10	1.34	615
AA4889	201	202	15	0.2	3.26	6	30	< 0.5	< 2	1.64	< 0.5	21	33	114	4.45	< 10	< 1	0.08	< 10	0.86	775
AA4890	201	202	15	0.2	3.82	< 2	40	< 0.5	< 2	2.30	< 0.5	21	29	127	4.27	< 10	< 1	0.13	< 10	0.73	850
AA4891	201	202	15	< 0.2	2.77	8	50	< 0.5	< 2	1.26	< 0.5	26	44	102	3.91	< 10	< 1	0.08	< 10	0.97	700
AA4892	201	202	20	0.2	3.21	8	50	< 0.5	< 2	1.02	< 0.5	33	58	122	4.84	< 10	< 1	0.08	< 10	1.05	940
AA4893	201	202	15	0.2	3.51	10	40	< 0.5	< 2	1.52	< 0.5	28	94	143	4.34	< 10	< 1	0.09	< 10	1.14	750
AA4894	201	202	135	0.4	3.58	6	60	< 0.5	< 2	0.98	< 0.5	40	84	475	6.54	< 10	< 1	0.12	< 10	1.44	645
AA4895	201	202	50	0.6	2.30	6	100	< 0.5	< 2	1.09	< 0.5	27	40	176	4.15	< 10	< 1	0.08	< 10	0.81	760
AA4896	201	202	190	0.2	3.29	4	100	< 0.5	< 2	1.19	< 0.5	32	60	266	5.60	< 10	< 1	0.11	< 10	1.17	755
AA4897	201	202	25	0.6	2.59	8	100	< 0.5	< 2	1.03	< 0.5	27	42	218	4.07	< 10	< 1	0.06	< 10	0.82	975
AA4898	201	202	105	0.2	3.41	6	90	< 0.5	< 2	1.01	< 0.5	33	58	275	5.52	< 10	< 1	0.09	< 10	0.98	770
AA4899	201	202	130	0.8	3.33	12	90	< 0.5	< 2	1.07	< 0.5	37	50	471	5.89	< 10	< 1	0.09	< 10	0.96	875
AA4900	201	202	50	1.6	1.64	< 2	60	< 0.5	< 2	0.70	< 0.5	17	27	534	4.54	< 10	< 1	0.05	< 10	0.43	395
AA4901	201	202	310	2.0	3.27	12	80	< 0.5	< 2	1.23	< 0.5	34	54	895	6.51	< 10	< 1	0.08	< 10	1.03	855
AA4902	201	202	255	1.4	2.21	< 2	80	< 0.5	< 2	1.42	< 0.5	25	43	579	5.80	< 10	< 1	0.06	< 10	0.77	680
AA4903	201	202	210	0.4	3.11	6	70	< 0.5	< 2	1.27	< 0.5	38	62	278	6.76	< 10	< 1	0.08	< 10	1.29	1055
AA4904	201	202	80	0.2	2.94	10	80	< 0.5	< 2	1.38	< 0.5	29	56	152	4.82	< 10	< 1	0.12	< 10	1.44	620
AA4905	201	202	135	3.2	1.48	18	40	< 0.5	< 2	1.04	< 0.5	19	29	380	4.60	< 10	< 1	0.05	< 10	0.47	530
AA4906	201	202	25	0.2	2.74	6	30	< 0.5	< 2	3.06	< 0.5	16	33	191	3.12	< 10	< 1	0.08	< 10	0.88	440
AA4907	201	202	20	< 0.2	2.85	< 2	50	< 0.5	< 2	1.16	< 0.5	25	45	131	4.72	< 10	< 1	0.05	< 10	0.75	875
AA4908	201	202	10	< 0.2	2.39	10	60	< 0.5	< 2	1.12	< 0.5	20	44	99	4.02	< 10	< 1	0.05	< 10	1.05	635
AA4909	201	202	40	0.2	2.96	8	60	< 0.5	< 2	1.81	< 0.5	28	46	117	3.77	< 10	< 1	0.08	< 10	0.91	950
AA4910	201	202	15	0.2	3.62	< 2	50	< 0.5	< 2	1.46	< 0.5	36	46	232	5.51	< 10	< 1	0.14	< 10	1.37	800
AA4911	201	202	10	0.2	2.55	8	80	< 0.5	< 2	1.17	< 0.5	30	48	139	4.54	< 10	< 1	0.10	< 10	1.01	1050
AA4912	201	202	80	0.2	3.21	8	60	< 0.5	< 2	1.56	< 0.5	34	55	309	5.14	< 10	< 1	0.07	< 10	0.94	1185
AA4913	201	202	20	< 0.2	3.37	< 2	60	< 0.5	< 2	1.52	< 0.5	29	66	159	4.77	< 10	< 1	0.11	< 10	0.97	975
AA4914	201	202	40	0.4	2.64	2	70	< 0.5	< 2	0.96	< 0.5	30	50	238	4.51	< 10	< 1	0.07	< 10	0.86	795
AA4915	201	202	60	0.4	3.71	8	70	< 0.5	< 2	1.41	< 0.5	36	73	487	6.35	< 10	< 1	0.10	< 10	1.29	715
AA4916	201	202	90	0.2	3.22	< 2	110	< 0.5	< 2	0.81	< 0.5	34	60	265	4.99	< 10	< 1	0.11	< 10	1.29	725
AA4917	201	202	75	0.2	2.32	< 2	90	< 0.5	< 2	0.59	< 0.5	21	39	149	4.00	< 10	< 1	0.06	< 10	0.80	510
AA4918	201	202	65	0.6	3.44	6	100	< 0.5	< 2	1.43	< 0.5	31	56	273	5.12	< 10	< 1	0.08	< 10	1.13	800
AA4919	201	202	265	0.8	3.39	< 2	70	< 0.5	< 2	1.99	< 0.5	27	61	303	5.36	< 10	< 1	0.09	< 10	1.20	735
AA4920	201	202	180	0.2	3.13	6	30	< 0.5	< 2	2.64	< 0.5	27	104	262	6.16	< 10	< 1	0.07	< 10	1.50	1050
AA4921	201	202	110	0.8	2.38	6	60	< 0.5	< 2	2.11	< 0.5	19	46	352	4.48	< 10	< 1	0.06	< 10	0.89	600
AA4922	201	202	175	0.6	2.50	10	90	< 0.5	< 2	0.98	< 0.5	24	47	137	4.73	< 10	< 1	0.08	< 10	0.81	770
AA4923	201	202	60	0.6	3.37	10	50	< 0.5	< 2	1.78	< 0.5	33	57	315	5.23	< 10	< 1	0.13	< 10	1.28	780
AA4924	201	202	40	0.2	2.74	< 2	30	< 0.5	< 2	1.72	< 0.5	20	38	122	4.49	< 10	< 1	0.08	< 10	0.84	640
AA4925	201	202	30	0.4	2.23	4	40	< 0.5	< 2	2.00	< 0.5	16	29	137	3.52	< 10	< 1	0.07	< 10	0.64	490
AA4926	201	202	110	0.2	2.93	10	70	< 0.5	< 2	0.99	< 0.5	26	56	134	5.12	< 10	< 1	0.09	< 10	0.97	725
AA4927	201	202	140	0.2	2.56	2	80	< 0.5	< 2	1.84	< 0.5	22	52	151	3.98	< 10	< 1	0.08	< 10	1.05	660

CERTIFICATION: *Hart R. Keller*



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## CERTIFICATE OF ANALYSIS

A9829316

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
AA4888	201	202	1	0.04	40	690	< 2	< 2	14	101	0.05	< 10	< 10	98	< 10	62
AA4889	201	202	< 1	0.01	24	820	4	< 2	11	94	0.10	< 10	< 10	102	< 10	58
AA4890	201	202	1	0.01	25	900	< 2	< 2	10	152	0.10	< 10	< 10	98	< 10	58
AA4891	201	202	< 1	0.04	38	1260	< 2	< 2	6	73	0.09	< 10	< 10	84	< 10	70
AA4892	201	202	< 1	0.02	75	650	< 2	2	9	67	0.09	< 10	< 10	99	< 10	64
AA4893	201	202	< 1	0.02	70	670	2	< 2	7	103	0.10	< 10	< 10	83	< 10	58
AA4894	201	202	1	0.03	64	630	< 2	< 2	12	61	0.14	< 10	< 10	127	10	66
AA4895	201	202	1	0.04	30	1110	6	< 2	5	61	0.08	< 10	< 10	79	< 10	76
AA4896	201	202	< 1	0.04	50	750	2	< 2	8	77	0.15	< 10	< 10	120	< 10	88
AA4897	201	202	1	0.04	36	980	4	< 2	6	77	0.08	< 10	< 10	81	< 10	76
AA4898	201	202	1	0.04	57	820	< 2	< 2	8	69	0.10	< 10	< 10	114	10	80
AA4899	201	202	1	0.03	56	950	6	< 2	8	71	0.10	< 10	< 10	105	< 10	78
AA4900	201	202	< 1	0.03	19	740	< 2	< 2	3	38	0.08	< 10	< 10	68	< 10	60
AA4901	201	202	1	0.03	47	890	2	< 2	8	82	0.08	< 10	< 10	104	< 10	82
AA4902	201	202	< 1	0.03	32	930	6	< 2	6	89	0.06	< 10	< 10	78	< 10	70
AA4903	201	202	< 1	0.04	47	540	6	< 2	7	69	0.13	< 10	< 10	106	< 10	64
AA4904	201	202	< 1	0.06	45	330	< 2	< 2	8	79	0.18	< 10	< 10	120	< 10	68
AA4905	201	202	< 1	0.04	23	770	2	< 2	5	36	0.06	< 10	< 10	61	< 10	54
AA4906	201	202	1	0.03	27	950	< 2	< 2	7	98	0.08	< 10	< 10	76	< 10	50
AA4907	201	202	< 1	0.02	33	1140	< 2	< 2	10	60	0.08	< 10	< 10	102	< 10	58
AA4908	201	202	< 1	0.01	32	820	2	< 2	7	54	0.13	< 10	< 10	103	< 10	64
AA4909	201	202	1	0.02	35	1140	2	< 2	7	102	0.10	< 10	< 10	89	< 10	62
AA4910	201	202	< 1	< 0.01	50	570	< 2	< 2	11	66	0.20	< 10	< 10	150	< 10	70
AA4911	201	202	< 1	0.02	53	730	< 2	< 2	11	55	0.13	< 10	< 10	115	< 10	64
AA4912	201	202	6	0.03	51	950	2	< 2	13	81	0.09	< 10	< 10	115	< 10	70
AA4913	201	202	1	0.03	56	860	< 2	2	10	101	0.09	< 10	< 10	96	< 10	66
AA4914	201	202	< 1	0.03	38	940	2	< 2	7	62	0.09	< 10	< 10	90	< 10	64
AA4915	201	202	< 1	0.03	62	870	< 2	< 2	14	78	0.10	< 10	< 10	121	< 10	74
AA4916	201	202	< 1	0.03	54	580	4	< 2	7	62	0.13	< 10	< 10	114	< 10	78
AA4917	201	202	< 1	0.03	33	550	2	< 2	5	45	0.09	< 10	< 10	86	< 10	74
AA4918	201	202	< 1	0.04	48	780	< 2	< 2	10	92	0.11	< 10	< 10	107	< 10	80
AA4919	201	202	1	0.05	50	770	2	< 2	11	101	0.12	< 10	< 10	105	< 10	72
AA4920	201	202	< 1	0.04	68	630	10	< 2	13	86	0.07	< 10	< 10	95	< 10	66
AA4921	201	202	1	0.04	34	1060	6	< 2	6	66	0.09	< 10	< 10	71	< 10	62
AA4922	201	202	1	0.02	31	1100	8	< 2	5	59	0.07	< 10	< 10	96	< 10	74
AA4923	201	202	1	0.04	54	850	6	< 2	12	86	0.10	< 10	< 10	110	< 10	80
AA4924	201	202	< 1	0.02	30	640	< 2	< 2	10	74	0.10	< 10	< 10	101	< 10	58
AA4925	201	202	1	0.03	23	1190	4	< 2	6	79	0.07	< 10	< 10	72	< 10	50
AA4926	201	202	< 1	0.01	41	940	4	< 2	7	59	0.09	< 10	< 10	110	< 10	72
AA4927	201	202	< 1	0.02	43	910	2	< 2	7	68	0.11	< 10	< 10	94	< 10	64

CERTIFICATION:

*Hart Richler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: NORDAC RESOURCES LTD.  
 C/O ARCHER, CATHRO  
 BOX 4127, 2054 SECOND AVE.  
 WHITEHORSE, YT  
 Y1A 3S9

Project: ARN  
 Comments:

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 Invoice No.: 19829316  
 P.O. Number:  
 Account: MTT

## CERTIFICATE OF ANALYSIS A9829316

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	FA+AA																				
AA4928	201	202	10	0.2	2.75	< 2	40	< 0.5	< 2	1.26	< 0.5	26	56	167	4.16	< 10	< 1	0.08	< 10	1.24	695
AA4929	201	202	10	0.2	2.06	8	60	< 0.5	< 2	0.80	< 0.5	26	43	119	3.82	< 10	< 1	0.08	< 10	0.81	570
AA4930	201	202	10	0.2	2.37	< 2	60	< 0.5	< 2	1.64	< 0.5	22	46	101	3.96	< 10	< 1	0.09	< 10	0.90	710
AA4931	201	202	25	0.4	3.47	2	50	< 0.5	< 2	1.71	< 0.5	32	38	262	5.07	< 10	< 1	0.06	< 10	1.00	1110
AA4932	201	202	100	0.4	3.71	10	30	< 0.5	< 2	1.88	< 0.5	23	52	271	4.37	< 10	< 1	0.07	< 10	1.03	730
AA4933	201	202	25	< 0.2	2.57	< 2	70	< 0.5	< 2	1.39	< 0.5	21	50	116	4.04	< 10	< 1	0.08	< 10	0.95	595
AA4934	201	202	50	0.4	3.17	4	80	< 0.5	2	1.37	< 0.5	32	62	339	5.53	< 10	< 1	0.09	< 10	1.04	800
AA4935	201	202	35	0.2	2.93	8	70	< 0.5	< 2	0.96	< 0.5	37	50	469	5.06	< 10	< 1	0.07	< 10	1.04	780
AA4936	201	202	65	0.6	3.50	12	50	< 0.5	2	1.75	< 0.5	29	55	343	5.51	< 10	< 1	0.11	< 10	1.28	715
AA4937	201	202	170	0.2	3.17	20	50	< 0.5	< 2	1.37	< 0.5	34	57	236	6.37	< 10	< 1	0.06	< 10	1.00	850
AA4938	201	202	100	0.4	3.00	8	50	< 0.5	< 2	1.16	< 0.5	33	56	218	5.56	< 10	< 1	0.07	< 10	0.96	1030
AA4939	201	202	60	0.2	2.83	12	80	< 0.5	< 2	0.98	< 0.5	29	54	132	5.46	< 10	< 1	0.08	< 10	0.87	920
AA4940	201	202	70	1.0	2.81	12	50	< 0.5	< 2	1.20	< 0.5	25	51	191	5.02	< 10	< 1	0.08	10	0.85	805
AA4941	201	202	45	0.2	3.36	10	50	< 0.5	< 2	1.33	< 0.5	26	72	186	4.97	< 10	< 1	0.07	< 10	1.19	695
AA4942	201	202	20	0.2	2.33	6	50	< 0.5	< 2	1.36	< 0.5	23	42	167	3.63	< 10	< 1	0.06	< 10	1.18	530
AA4943	201	202	15	0.2	2.82	6	50	< 0.5	< 2	1.80	< 0.5	24	88	211	3.67	< 10	< 1	0.06	< 10	1.21	555
AA4944	201	202	10	0.2	1.58	< 2	40	< 0.5	< 2	2.45	< 0.5	13	32	134	2.16	< 10	< 1	0.07	< 10	0.76	380
AA4945	201	202	10	< 0.2	2.58	4	70	< 0.5	< 2	0.96	< 0.5	27	56	157	4.46	< 10	< 1	0.10	< 10	0.93	795
AA4946	201	202	10	0.2	2.57	10	60	< 0.5	< 2	0.70	< 0.5	36	84	163	5.89	< 10	< 1	0.14	< 10	1.18	1025
AA4947	201	202	355	0.6	3.32	6	40	< 0.5	< 2	1.68	< 0.5	28	73	215	5.51	< 10	< 1	0.09	< 10	1.19	685
AA4948	201	202	45	< 0.2	3.03	22	50	< 0.5	< 2	1.36	< 0.5	30	57	150	5.27	< 10	< 1	0.07	< 10	0.94	810
AA4949	201	202	20	< 0.2	2.16	10	90	< 0.5	< 2	0.65	0.5	22	47	77	4.55	< 10	< 1	0.08	< 10	0.71	655
AA4950	201	202	65	0.2	3.51	10	70	< 0.5	< 2	1.32	< 0.5	30	67	196	5.28	< 10	< 1	0.07	< 10	1.12	875
AA4951	201	202	< 5	0.2	2.86	10	70	< 0.5	< 2	1.60	0.5	23	57	170	4.07	< 10	< 1	0.07	< 10	0.94	660
AA4952	201	202	35	0.2	3.22	22	40	< 0.5	6	1.50	0.5	29	66	183	5.09	< 10	< 1	0.07	< 10	0.89	880
AA4953	201	202	40	< 0.2	2.79	10	50	< 0.5	< 2	1.52	< 0.5	30	61	121	4.98	< 10	< 1	0.05	< 10	1.09	805
AA4954	201	202	< 5	< 0.2	2.78	6	60	< 0.5	< 2	2.03	< 0.5	25	67	152	4.26	< 10	< 1	0.10	< 10	1.15	655
AA4955	201	202	15	< 0.2	1.81	< 2	70	< 0.5	< 2	0.63	< 0.5	24	38	69	3.27	< 10	< 1	0.09	< 10	0.62	925
AA4956	201	202	< 5	< 0.2	2.29	8	100	< 0.5	< 2	0.93	< 0.5	32	44	102	3.64	< 10	< 1	0.07	< 10	0.72	1365
AA4957	201	202	< 5	< 0.2	1.54	6	90	< 0.5	< 2	1.06	0.5	17	34	57	2.78	< 10	< 1	0.09	< 10	0.50	475

CERTIFICATION: *Hart Kichen*



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 Account : MTT

Project : ARN  
 Comments :

## CERTIFICATE OF ANALYSIS A9829316

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
AA4928	201	202	< 1	0.02	70	890	< 2	< 2	8	72	0.09	< 10	< 10	89	< 10	54
AA4929	201	202	1	0.03	40	1270	< 2	< 2	4	45	0.08	< 10	< 10	81	< 10	62
AA4930	201	202	4	0.03	40	1280	< 2	< 2	6	86	0.08	< 10	< 10	92	< 10	62
AA4931	201	202	4	0.06	39	1050	< 2	< 2	10	122	0.09	< 10	< 10	129	< 10	68
AA4932	201	202	5	0.04	39	890	< 2	< 2	9	124	0.08	< 10	< 10	108	< 10	66
AA4933	201	202	1	0.04	41	860	< 2	< 2	6	75	0.09	< 10	< 10	89	< 10	62
AA4934	201	202	< 1	0.03	57	1050	6	< 2	12	82	0.07	< 10	< 10	110	< 10	78
AA4935	201	202	< 1	0.04	47	810	2	< 2	7	60	0.09	< 10	< 10	89	< 10	78
AA4936	201	202	< 1	0.04	52	830	4	< 2	11	83	0.10	< 10	< 10	112	< 10	80
AA4937	201	202	1	0.03	57	760	2	< 2	11	77	0.09	< 10	< 10	124	< 10	84
AA4938	201	202	< 1	0.03	47	1110	2	< 2	8	67	0.08	< 10	< 10	110	< 10	74
AA4939	201	202	1	0.02	36	1220	4	< 2	7	60	0.08	< 10	< 10	108	< 10	76
AA4940	201	202	1	0.02	41	1220	8	< 2	8	68	0.06	< 10	< 10	94	< 10	64
AA4941	201	202	< 1	0.01	61	630	2	< 2	10	73	0.09	< 10	< 10	102	< 10	62
AA4942	201	202	< 1	0.03	67	860	< 2	< 2	6	66	0.09	< 10	< 10	74	< 10	56
AA4943	201	202	5	0.03	96	630	< 2	< 2	8	94	0.08	< 10	< 10	74	< 10	56
AA4944	201	202	3	0.06	31	960	< 2	< 2	4	88	0.09	< 10	< 10	57	< 10	38
AA4945	201	202	1	0.03	57	1090	< 2	< 2	8	58	0.09	< 10	< 10	95	< 10	56
AA4946	201	202	< 1	0.02	90	500	< 2	< 2	12	42	0.10	< 10	< 10	118	< 10	68
AA4947	201	202	1	0.03	57	830	6	< 2	12	77	0.09	< 10	< 10	112	< 10	90
AA4948	201	202	5	0.03	52	990	< 2	< 2	7	67	0.08	< 10	< 10	116	< 10	78
AA4949	201	202	5	0.02	32	1030	8	< 2	4	45	0.08	< 10	< 10	113	< 10	82
AA4950	201	202	4	0.03	59	1160	< 2	< 2	9	72	0.08	< 10	< 10	115	< 10	84
AA4951	201	202	3	0.03	50	1470	2	< 2	7	81	0.07	< 10	< 10	90	< 10	68
AA4952	201	202	1	0.02	55	1070	2	< 2	9	78	0.07	< 10	< 10	111	< 10	74
AA4953	201	202	23	0.02	59	880	< 2	< 2	8	66	0.12	< 10	< 10	121	< 10	60
AA4954	201	202	7	0.05	65	560	< 2	< 2	7	85	0.13	< 10	< 10	107	< 10	78
AA4955	201	202	4	0.04	28	1200	< 2	< 2	4	43	0.07	< 10	< 10	77	< 10	58
AA4956	201	202	4	0.04	38	1340	< 2	< 2	4	56	0.08	< 10	< 10	84	< 10	56
AA4957	201	202	4	0.04	26	1290	< 2	< 2	4	58	0.09	< 10	< 10	74	< 10	56

CERTIFICATION: Hart Kichler



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To: NORDAC RESOURCES LTD.  
 C/O ARCHER, CATHRO  
 BOX 4127, 2054 SECOND AVE.  
 WHITEHORSE, YT  
 Y1A 3S9

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Project : ARN  
 Comments : FAX: NORDAC RESOURCES c/o ARCHER, CATHRO

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A9823332

SAMPLE	PREP CODE	Au FA g/t	Cu %	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
59277	208 226	< 0.1	-----	0.2	3.05	10	10	< 0.5	< 2	4.43	< 0.5	29	67	1840	5.42	< 10	< 1	0.08	< 10	0.91
59278	208 226	0.3	-----	2.8	3.15	4	< 10	< 0.5	< 2	7.31	0.5	26	40	3970	6.65	< 10	< 1	0.05	< 10	0.22
59279	208 226	3.4	4.91	42.0	0.51	6	< 10	< 0.5	Intf*	6.57	6.0	179	18	>10000	>15.00	< 10	< 1	0.03	< 10	0.06
59280	208 226	3.3	5.29	47.4	0.36	4	< 10	< 0.5	Intf*	8.33	5.5	165	26	>10000	>15.00	< 10	< 1	0.01	< 10	0.04
59281	208 226	6.3	4.58	43.8	0.44	< 2	< 10	< 0.5	Intf*	7.28	5.0	170	33	>10000	>15.00	< 10	< 1	0.02	< 10	0.05
59282	208 226	2.6	4.71	41.6	0.43	6	< 10	< 0.5	Intf*	6.21	4.5	148	30	>10000	>15.00	< 10	< 1	0.01	< 10	0.06
59283	208 226	1.4	4.27	41.0	0.35	10	< 10	< 0.5	Intf*	6.79	5.0	174	45	>10000	>15.00	< 10	< 1	0.01	< 10	0.04
59284	208 226	< 0.1	-----	0.2	3.30	8	< 10	< 0.5	< 2	10.60	< 0.5	10	71	1340	7.41	< 10	1	0.03	< 10	0.24
59285	208 226	< 0.1	-----	0.4	3.04	12	< 10	< 0.5	< 2	3.85	< 0.5	8	50	348	2.39	< 10	< 1	0.07	< 10	0.41
59286	208 226	0.1	-----	2.6	0.96	6	< 10	< 0.5	< 2	3.51	< 0.5	165	51	5460	>15.00	< 10	< 1	0.03	< 10	0.10
59287	208 226	0.1	-----	< 0.2	1.35	< 2	< 10	< 0.5	< 2	9.33	< 0.5	51	78	765	11.95	< 10	< 1	0.01	< 10	0.06
59288	208 226	< 0.1	-----	< 0.2	1.47	6	< 10	< 0.5	< 2	9.46	< 0.5	47	85	658	10.95	< 10	< 1	0.01	< 10	0.10
59289	208 226	0.1	-----	< 0.2	2.11	< 2	< 10	< 0.5	2	7.21	< 0.5	25	107	560	6.89	< 10	< 1	0.04	< 10	0.07
59290	208 226	0.7	-----	0.6	0.99	18	< 10	< 0.5	4	8.05	< 0.5	107	66	1625	>15.00	< 10	< 1	< 0.01	< 10	0.07
59291	208 226	< 0.1	-----	< 0.2	1.96	< 2	< 10	< 0.5	< 2	6.04	< 0.5	16	84	574	4.41	< 10	< 1	0.03	< 10	0.22
59292	208 226	0.1	-----	1.4	0.60	6	< 10	< 0.5	12	1.81	< 0.5	259	26	8420	>15.00	< 10	< 1	0.01	< 10	0.10
59293	208 226	0.3	-----	< 0.2	0.69	14	< 10	< 0.5	8	5.76	< 0.5	118	56	2210	>15.00	< 10	< 1	< 0.01	< 10	0.05
59294	208 226	0.4	-----	0.2	1.51	6	< 10	< 0.5	< 2	4.64	< 0.5	142	25	1810	>15.00	< 10	< 1	0.06	< 10	0.11
59295	208 226	0.8	-----	0.4	0.15	< 2	< 10	< 0.5	6	7.05	< 0.5	135	11	2250	>15.00	< 10	< 1	0.01	< 10	0.05
59296	208 226	< 0.1	-----	< 0.2	4.48	4	< 10	< 0.5	< 2	4.91	< 0.5	25	118	422	7.98	10	< 1	0.05	< 10	0.21
59297	208 226	< 0.1	-----	< 0.2	4.03	< 2	< 10	< 0.5	< 2	2.98	< 0.5	34	78	729	6.76	10	< 1	0.05	< 10	0.21
59298	208 226	2.2	-----	1.0	0.64	< 2	< 10	< 0.5	< 2	0.64	< 0.5	122	24	3320	>15.00	10	< 1	0.02	< 10	0.05
59299	208 226	15.1	-----	1.6	0.82	10	< 10	< 0.5	< 2	8.49	1.0	152	60	2050	>15.00	< 10	< 1	0.02	< 10	0.36

\* INTERFERENCES: Cu ON BI AND P.

CERTIFICATION: Hart Bichler



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\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A9823332

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
59277	208	226	1000	3	0.05	18	690	6	< 2	4	65	0.09	< 10	< 10	81	< 10	86
59278	208	226	1005	3	0.06	7	1270	4	< 2	4	78	0.06	< 10	< 10	89	< 10	106
59279	208	226	580	4	< 0.01	58	Intf*	28	< 2	< 1	18	0.01	< 10	< 10	24	< 10	678
59280	208	226	725	3	< 0.01	48	Intf*	18	2	< 1	12	0.01	< 10	< 10	15	< 10	600
59281	208	226	730	6	< 0.01	56	Intf*	32	2	< 1	17	0.02	< 10	< 10	23	< 10	604
59282	208	226	695	4	< 0.01	47	Intf*	34	< 2	< 1	17	0.02	< 10	< 10	38	< 10	546
59283	208	226	795	6	< 0.01	53	Intf*	34	2	< 1	16	< 0.01	< 10	< 10	13	< 10	520
59284	208	226	2100	3	0.03	14	260	8	< 2	4	23	0.09	< 10	< 10	40	< 10	50
59285	208	226	495	3	0.24	8	490	8	2	2	136	0.09	< 10	< 10	46	< 10	48
59286	208	226	685	3	0.01	47	330	4	< 2	6	< 1	0.09	< 10	< 10	25	< 10	76
59287	208	226	1765	3	0.01	24	610	< 2	< 2	2	< 1	0.03	< 10	< 10	32	< 10	30
59288	208	226	1560	2	< 0.01	19	450	2	< 2	4	< 1	0.04	< 10	< 10	39	< 10	26
59289	208	226	1575	2	0.01	30	210	2	< 2	8	< 1	0.16	< 10	< 10	46	< 10	26
59290	208	226	1020	6	< 0.01	31	580	< 2	< 2	3	< 1	0.04	< 10	< 10	28	< 10	40
59291	208	226	1115	3	0.01	8	130	< 2	< 2	4	6	0.06	< 10	< 10	47	< 10	44
59292	208	226	425	4	< 0.01	73	680	10	< 2	< 1	< 1	0.01	< 10	< 10	11	< 10	110
59293	208	226	725	2	< 0.01	39	400	< 2	< 2	1	< 1	0.03	< 10	< 10	19	< 10	34
59294	208	226	720	1	0.10	33	800	2	< 2	1	42	0.03	< 10	< 10	22	< 10	36
59295	208	226	650	4	< 0.01	60	120	4	< 2	< 1	38	< 0.01	< 10	< 10	32	< 10	54
59296	208	226	805	5	0.22	38	1130	< 2	4	9	83	0.24	< 10	< 10	186	< 10	32
59297	208	226	315	3	0.24	37	770	< 2	4	4	119	0.20	< 10	< 10	158	< 10	28
59298	208	226	220	3	0.01	33	740	2	< 2	1	10	0.03	< 10	< 10	19	< 10	64
59299	208	226	1045	4	0.01	100	440	< 2	< 2	3	8	0.05	< 10	< 10	39	10	64

\* INTERFERENCES: Cu ON BI AND P.

CERTIFICATION: *Hant Bichler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: NORDAC RESOURCES LTD.  
 C/O ARCHER, CATHRO  
 BOX 4127, 2054 SECOND AVE.  
 WHITEHORSE, YT  
 Y1A 3S9

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 14-JUL-98  
 Invoice No. : I9823731  
 P.O. Number :  
 Account : MTT

Project : ARN  
 Comments : FAX: NORDAC RESOURCES C/O ARCHER, CATHRO

## CERTIFICATE OF ANALYSIS A9823731

SAMPLE	PREP CODE		Au FA	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
			g/t	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
59300	205	226	< 0.1	< 0.2	1.46	< 2	< 10	< 0.5	< 2	8.30	< 0.5	9	44	42	4.83	< 10	< 1	0.05	< 10	0.74	1100
59351	205	226	0.8	0.4	1.08	< 2	< 10	< 0.5	< 2	11.30	< 0.5	7	49	38	4.38	< 10	< 1	0.04	< 10	0.44	1310
59352	205	226	1.2	< 0.2	1.52	< 2	< 10	< 0.5	< 2	11.45	< 0.5	6	52	34	5.00	< 10	< 1	0.07	< 10	0.68	1310
59353	205	226	< 0.1	< 0.2	3.76	< 2	< 10	< 0.5	< 2	6.27	< 0.5	19	159	41	6.38	< 10	< 1	0.09	< 10	2.81	1305
59354	205	226	< 0.1	< 0.2	5.90	< 2	40	< 0.5	2	5.21	< 0.5	9	71	23	2.79	< 10	< 1	0.19	< 10	0.81	445
59355	205	226	< 0.1	< 0.2	4.77	< 2	60	< 0.5	< 2	4.57	< 0.5	15	79	50	4.10	< 10	< 1	0.22	< 10	1.40	595
59356	205	226	< 0.1	< 0.2	4.19	2	40	< 0.5	< 2	3.48	< 0.5	13	75	67	3.58	< 10	< 1	0.21	< 10	0.82	440
59357	205	226	< 0.1	< 0.2	4.47	< 2	30	< 0.5	4	3.81	< 0.5	10	56	65	2.94	< 10	< 1	0.19	< 10	0.67	330
59358	205	226	< 0.1	< 0.2	4.91	< 2	< 10	< 0.5	2	7.70	< 0.5	16	123	503	7.01	< 10	< 1	0.07	< 10	0.24	1405
59359	205	226	1.1	< 0.2	0.61	< 2	< 10	< 0.5	2	8.92	< 0.5	< 1	21	12	14.50	< 10	1	0.04	< 10	0.23	990
59360	205	226	0.6	< 0.2	0.49	< 2	< 10	< 0.5	2	>15.00	< 0.5	< 1	33	36	9.15	< 10	1	0.05	< 10	0.19	1420
59361	205	226	0.3	4.6	0.45	4	< 10	< 0.5	< 2	12.75	6.5	13	21	5770	8.12	< 10	< 1	0.05	< 10	0.35	1565

CERTIFICATION: Hart Biddle



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221 FAX: 604-984-0218

To: NORDAC RESOURCES LTD.  
C/O ARCHER, CATHRO  
BOX 4127, 2054 SECOND AVE.  
WHITEHORSE, YT  
Y1A 3S9

Page No. : 1-B  
Total Pages : 1  
Certificate Date : 14-JUL-98  
Invoice No. : 19823731  
P.O. Number :  
Account : MTT

Project : ARN  
Comments : FAX: NORDAC RESOURCES C/O ARCHER, CATHRO

## CERTIFICATE OF ANALYSIS A9823731

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
59300	205	226	3	0.03	17	890	4	< 2	3	74	0.05	< 10	< 10	45	< 10	32
59351	205	226	1	0.01	10	880	< 2	< 2	1	69	0.04	< 10	< 10	24	< 10	18
59352	205	226	1	0.05	10	570	< 2	< 2	3	72	0.06	< 10	< 10	37	10	22
59353	205	226	1	0.11	77	740	8	< 2	6	106	0.15	< 10	10	102	< 10	78
59354	205	226	< 1	0.62	16	630	< 2	< 2	8	548	0.19	< 10	< 10	102	10	40
59355	205	226	< 1	0.36	31	940	2	< 2	10	276	0.23	< 10	< 10	126	< 10	54
59356	205	226	2	0.35	25	960	2	< 2	6	271	0.20	< 10	< 10	121	< 10	46
59357	205	226	2	0.46	18	990	< 2	< 2	5	334	0.17	< 10	< 10	102	< 10	44
59358	205	226	< 1	0.30	29	680	< 2	2	10	201	0.18	< 10	< 10	155	< 10	32
59359	205	226	< 1	0.03	< 1	1330	< 2	< 2	< 1	53	0.01	< 10	10	36	< 10	22
59360	205	226	3	0.03	2	890	< 2	< 2	< 1	79	0.03	10	< 10	18	< 10	20
59361	205	226	10	0.03	40	870	2	< 2	< 1	68	0.02	10	< 10	10	< 10	166

CERTIFICATION:

*Hart Biella*

**ARCHER, CATHRO**  
\* ASSOCIATES (1981) LIMITED  
**CONSULTING GEOLOGICAL ENGINEERS**

1016 - 510 WEST HASTINGS STREET, VANCOUVER, B.C. V6B 1L8 TEL (604) 688 - 2568 • FAX (604) 688 - 2578

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May 27, 1999

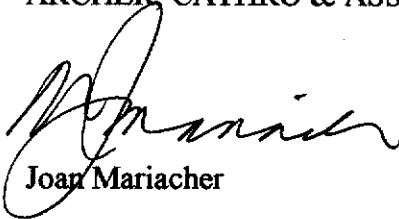
Rona Clark  
Whitehorse Mining Recorder  
102 - 300 Main Street  
Whitehorse, YT Y1A 2B5

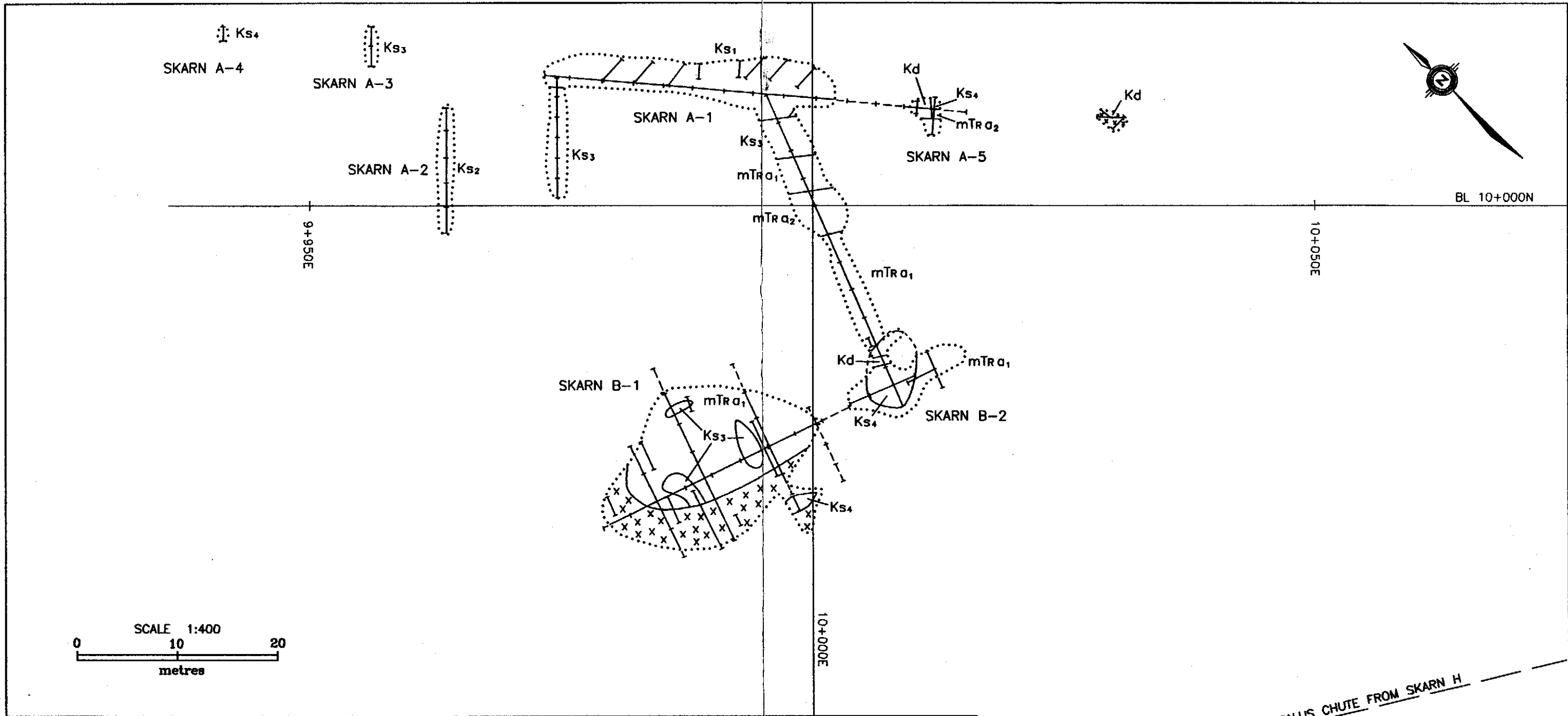
Dear Rona:

Enclosed please find two copies of the assessment report for the Arn claims.

Yours truly,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

  
Joan Mariacher



**NORDAC RESOURCES LTD.**

FIGURE 4  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

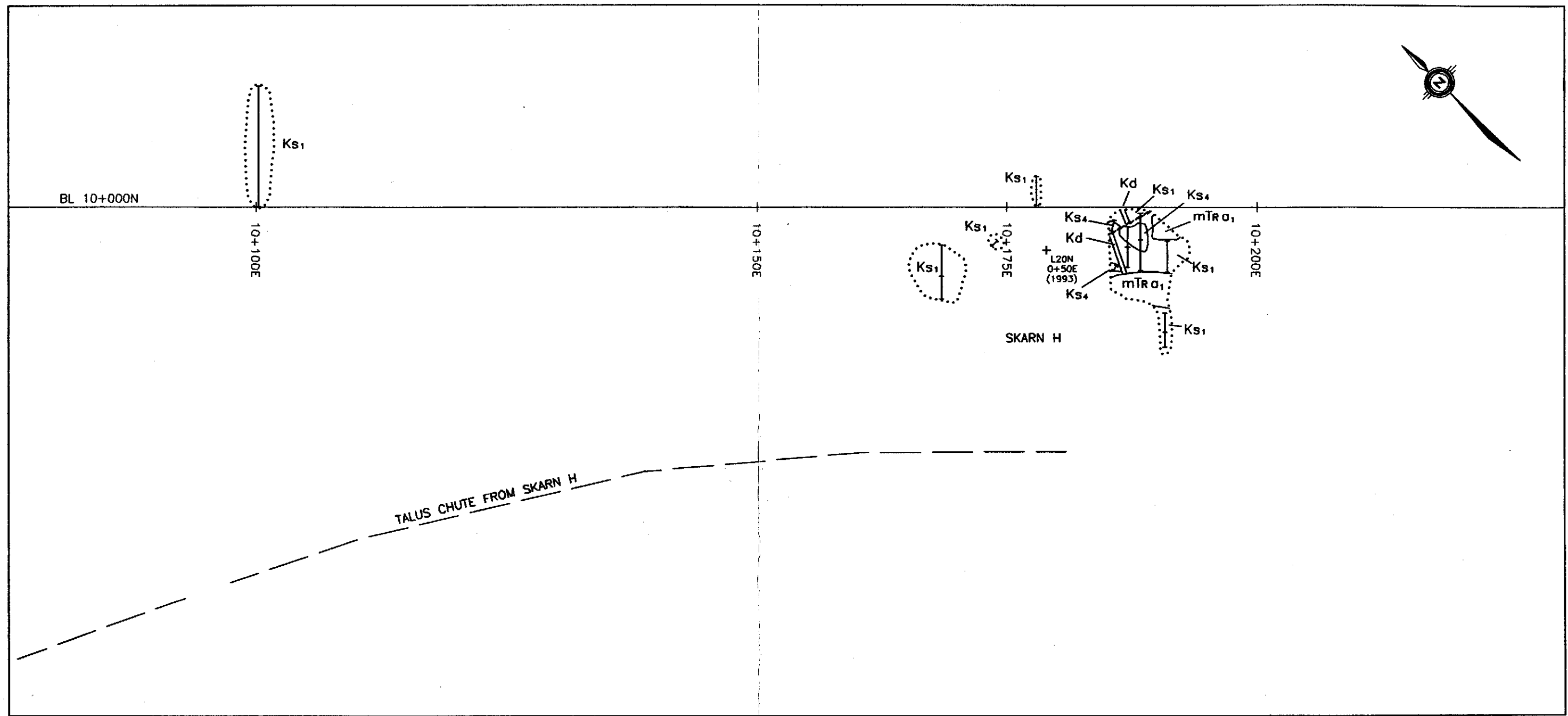
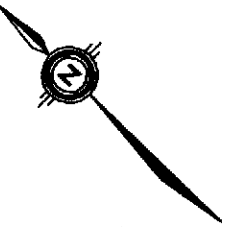
**GEOLOGY**  
NORTHWEST DETAIL AREA  
ARN PROPERTY

094009

- Kd diorite dyke
- mTRa<sub>1</sub> altered andesite
- mTRa<sub>2</sub> sheared andesite
- Ks<sub>1</sub> weak skarn in andesite
- Ks<sub>2</sub> weak skarn in limestone
- Ks<sub>3</sub> magnetite rich skarn
- Ks<sub>4</sub> pyrrhotite rich skarn
- x x x iron oxide cemented overburden (ferricrete)

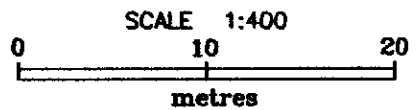
- ..... area stripped to bedrock
- bedrock chip sample
- - - talus chip sample

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FILE: AC\NORDAC\ARN\ACAD98\NWD-GEO.DWG	DATE: MARCH, 1999

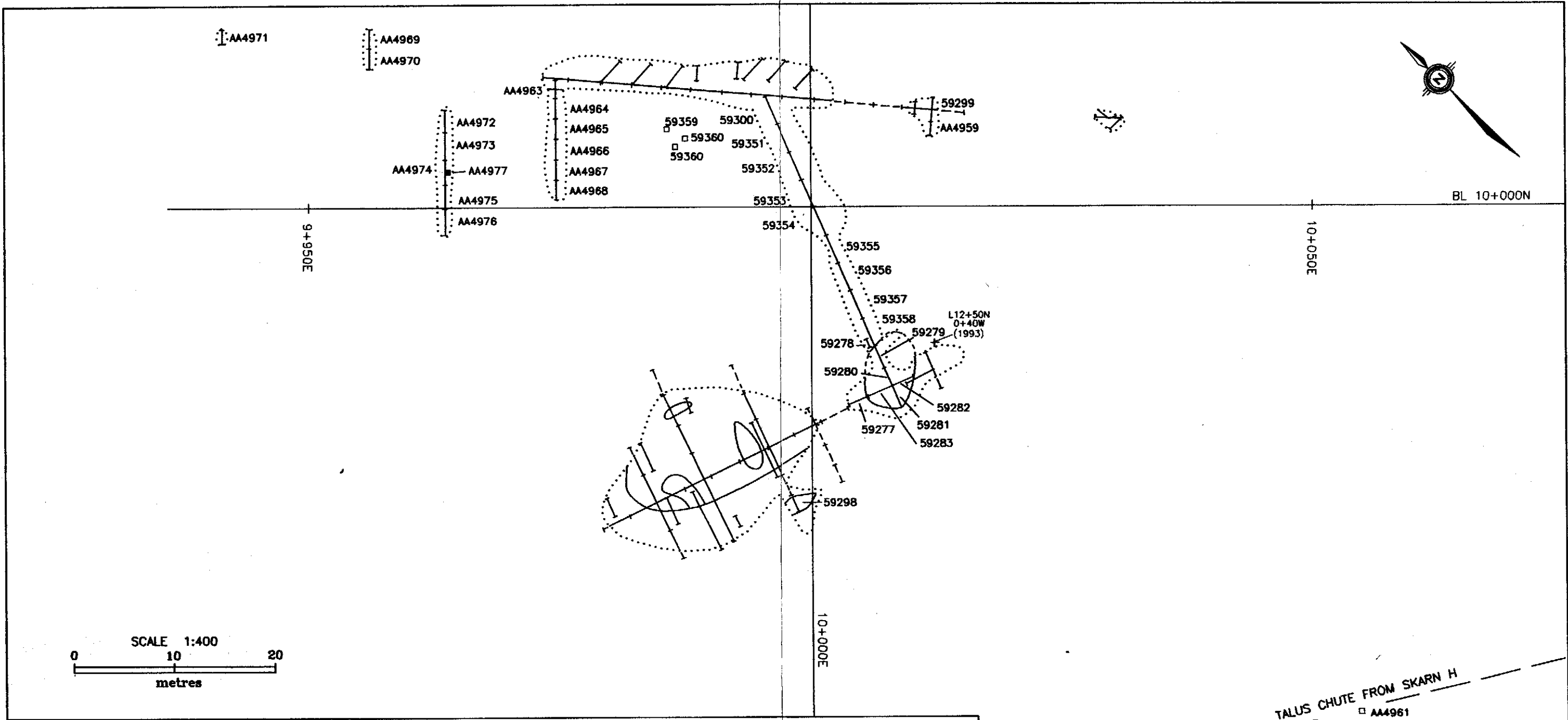


- Kd diorite dyke
- mTRa<sub>1</sub> altered andesite
- mTRa<sub>2</sub> sheared andesite
- Ks<sub>1</sub> weak skarn in andesite
- Ks<sub>2</sub> weak skarn in limestone
- Ks<sub>3</sub> magnetite rich skarn
- Ks<sub>4</sub> pyrrhotite rich skarn
- x x x iron oxide cemented overburden (ferricrete)
- ..... area stripped to bedrock
- bedrock chip sample
- - - talus chip sample

094009



<b>NORDAC RESOURCES LTD.</b>	
FIGURE 5	
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
<b>GEOLOGY</b>	
SOUTHEAST DETAIL AREA	
ARN PROPERTY	
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**NORDAC RESOURCES LTD.**

FIGURE 7

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**SAMPLE LOCATION**

NORTHWEST DETAIL AREA  
ARN PROPERTY

094009

- ..... area stripped to bedrock
- bedrock grab sample
- talus grab sample
- bedrock chip sample
- - - overburden chip sample

sample numbers given for 1998 samples only

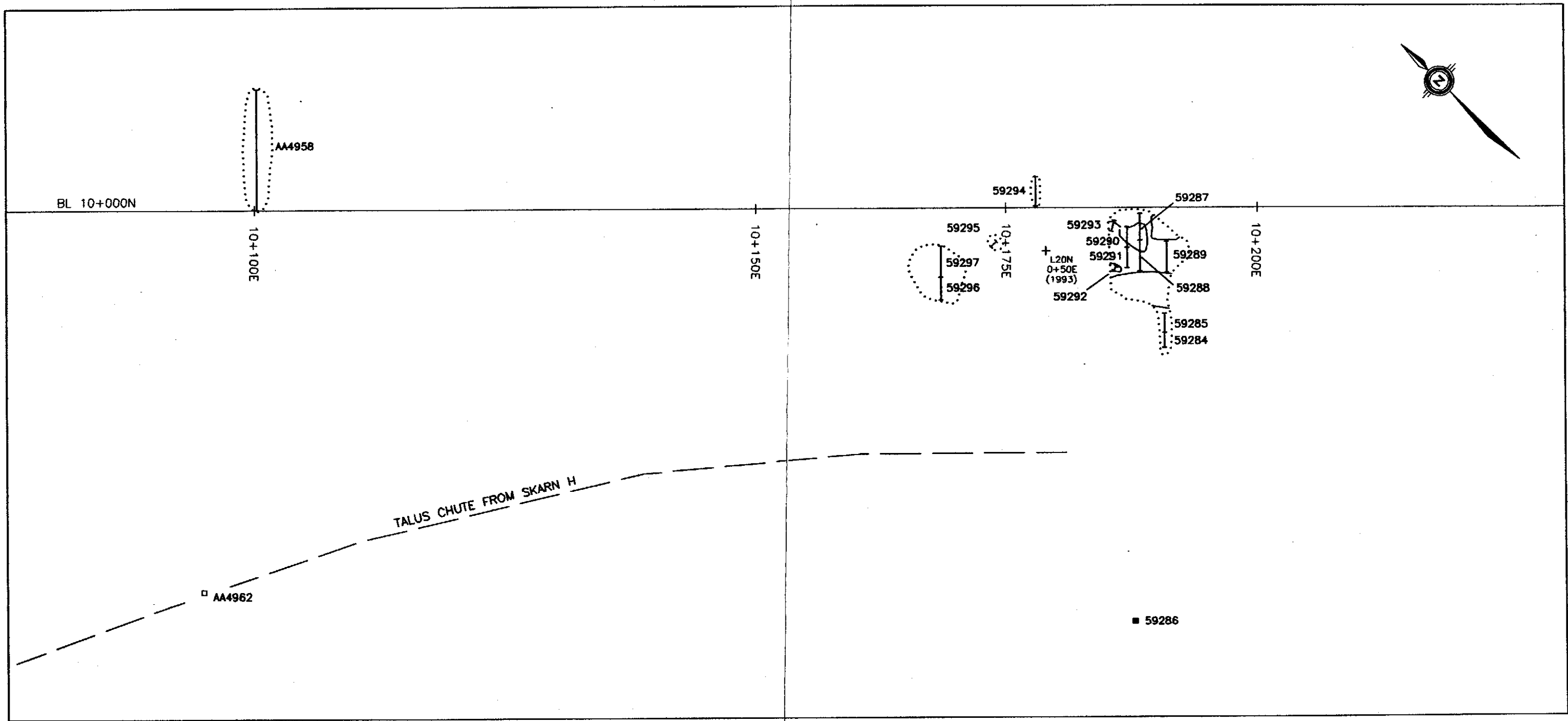
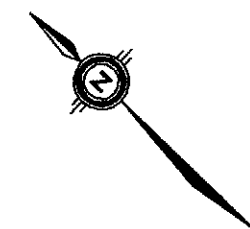
DRAFTED/REVISED BY: AG

PROJECT:

FILE: AC\NORDAC\ARN\ACAD98\NWD-SL.DWG

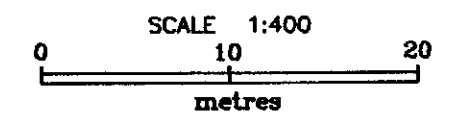
DATE: MARCH, 1999

DIAND - YUKON REGION, LIBRARY



- ..... area stripped to bedrock
  - bedrock grab sample
  - talus grab sample
  - |—|— bedrock chip sample
  - - -| - - -| - - - overburden chip sample
- sample numbers given for 1998 samples only

094009

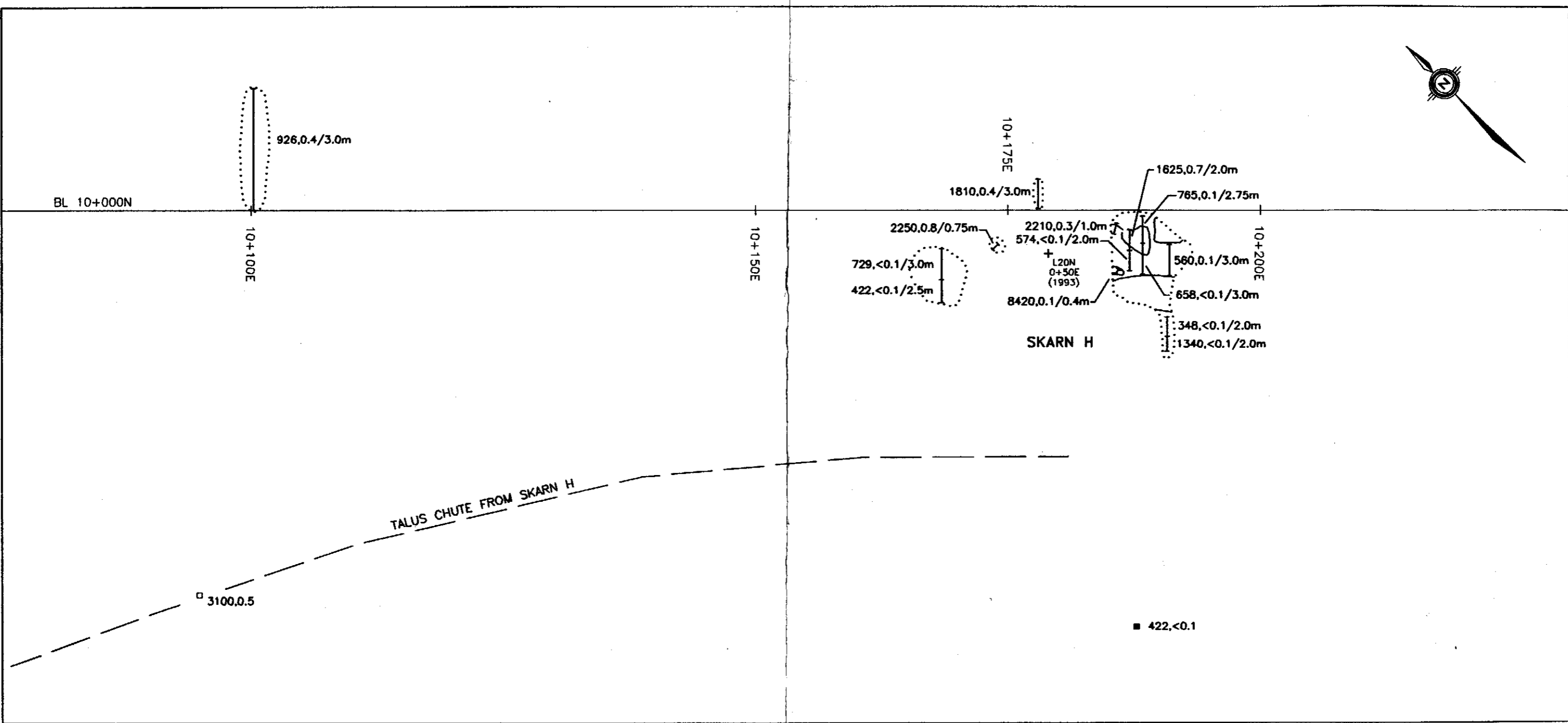
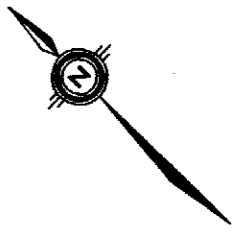


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FIGURE 8  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**SAMPLE LOCATION**  
 SOUTHEAST DETAIL AREA  
 ARN PROPERTY

DRAFTED/REVISED BY: AG	PROJECT:
FILE: AC\NORDAC\ARN\ACAD98\SED-SL.DWG	DATE: MARCH, 1999

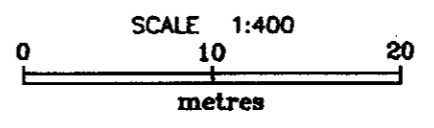
DIAND - YUKON REGION, LIBRARY



- ..... area stripped to bedrock
- bedrock grab sample
- talus grab sample
- bedrock chip sample
- - - overburden chip sample
- ┌ 1800, 79.2/3.0m Cu (ppm or %), Au (g/t) over width in metres
- significant assay (>1% Cu or 1g/t Au)

1998 values are shown as well as significant earlier values

094 009



<b>NORDAC RESOURCES LTD.</b>	
FIGURE 12 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
<b>GEOCHEMISTRY</b> SOUTHEAST DETAIL AREA ARN PROPERTY	
DRAFTED/REVISED BY: AG	PROJECT:
FILE: AC\NORDAC\ARN\ACAD98\NED-CH.DWG	DATE: MARCH, 1999

DIAND - YUKON REGION. LIBRARY

6.21%, 4.3/1.5m  
SKARN A-4

472, <0.2/2.0m  
93, <0.2/2.0m  
SKARN A-3

SKARN A-1

SKARN A-5

109, <0.2/2.5m  
151, <0.2/2.5m  
285, <0.2/2.5m  
327, <0.2/2.5m  
23, <0.2/2.5m  
SKARN A-2

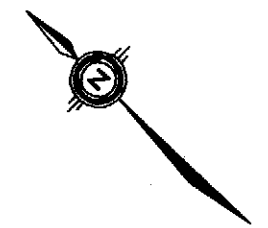
64, <0.2/2.0m  
17, <0.2/2.0m  
25, <0.2/2.0m  
125, <0.2/2.0m  
313, <0.2/2.0m  
233, <0.2/2.0m  
12, 1.1  
36, 0.6  
5770, 0.3

2050, 15.1/2.5m  
1800, 79.2/3.0m  
140, <0.2/1.0m  
42, <0.1/3.0m  
38, <0.8/3.0m  
34, 1.2/3.0m  
41, <0.1/3.0m  
23, <0.1/3.0m  
50, <0.1/3.0m  
67, <0.1/3.0m  
65, <0.1/3.0m

503, <0.1/3.0m  
3970, <0.3/1.0m  
4.91%, 3.4/2.0m  
5.29%, 3.3/2.0m  
4.71%, 2.6/2.0m  
4.58%, 6.3/2.5m  
4.27%, 1.4/2.5m  
SKARN B-2

SKARN B-1

3320, 2.2/1.5m  
>1.0%, 7.4/1.1m

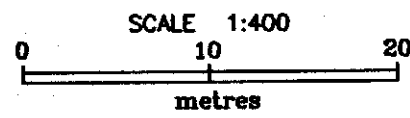


BL 10+000N

9+950E

10+050E

10+000E



TALUS CHUTE FROM SKARN H  
0.84%, 4.2  
4460, 0.5

094009

NORDAC RESOURCES LTD.

FIGURE 11

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**GEOCHEMISTRY**

NORTHWEST DETAIL AREA

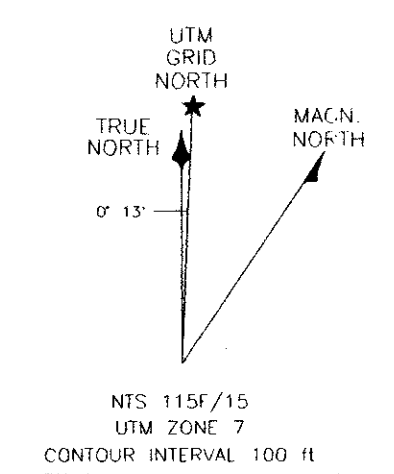
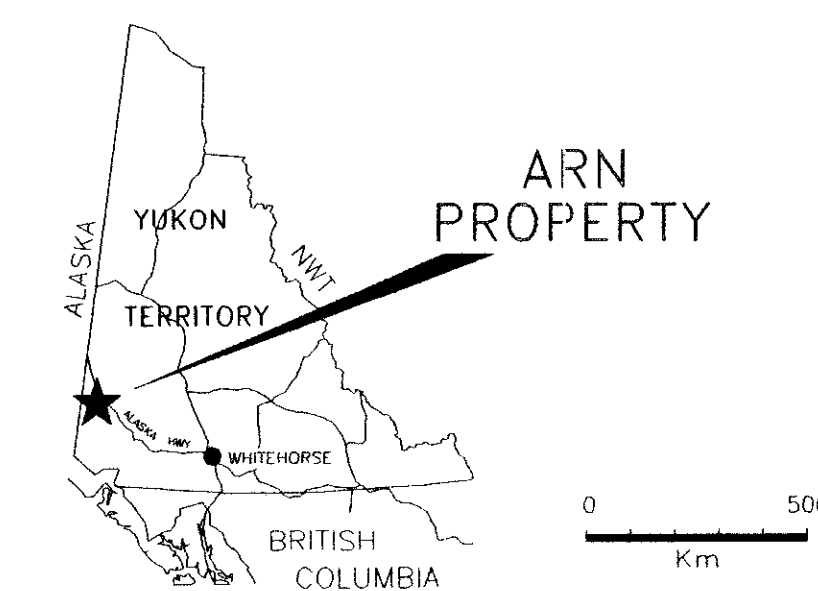
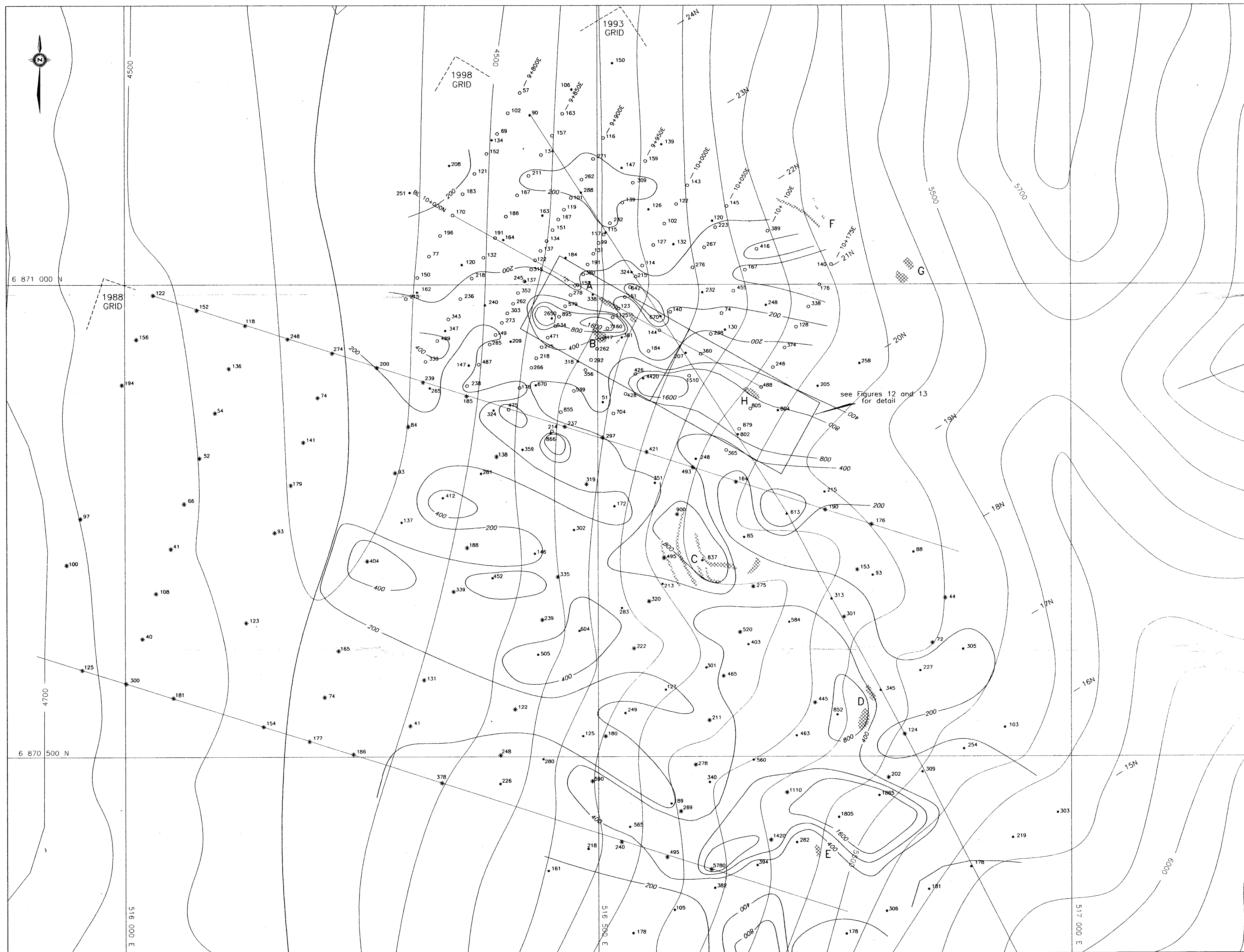
ARN PROPERTY

- area stripped to bedrock
- bedrock grab sample
- talus grab sample
- bedrock chip sample
- - - overburden chip sample

1800, 79.2/3.0m Cu (ppm or %), Au (g/t) over width in metres  
— significant assay (>1% Cu or 1g/t Au)

1998 values are shown as well as significant earlier values

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**LEGEND**

- \* 1988 soil sample
- 1993 soil sample
- 1998 soil sample
- A skarn (refer to text for description)

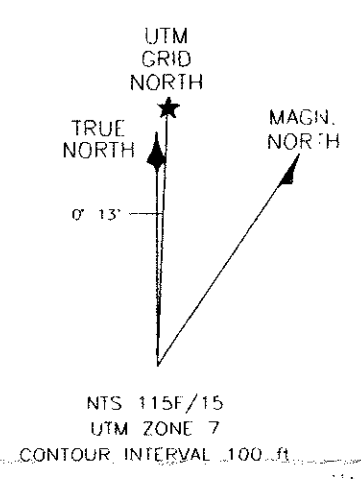
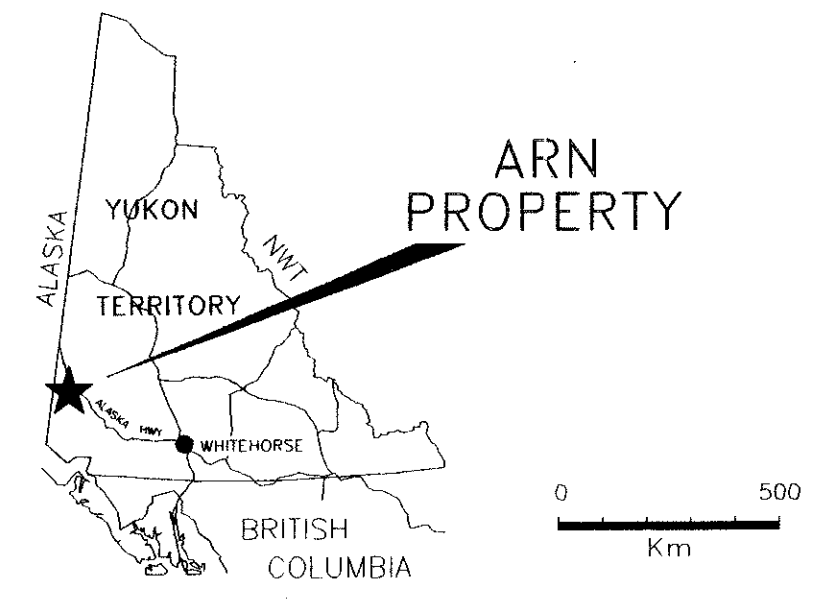
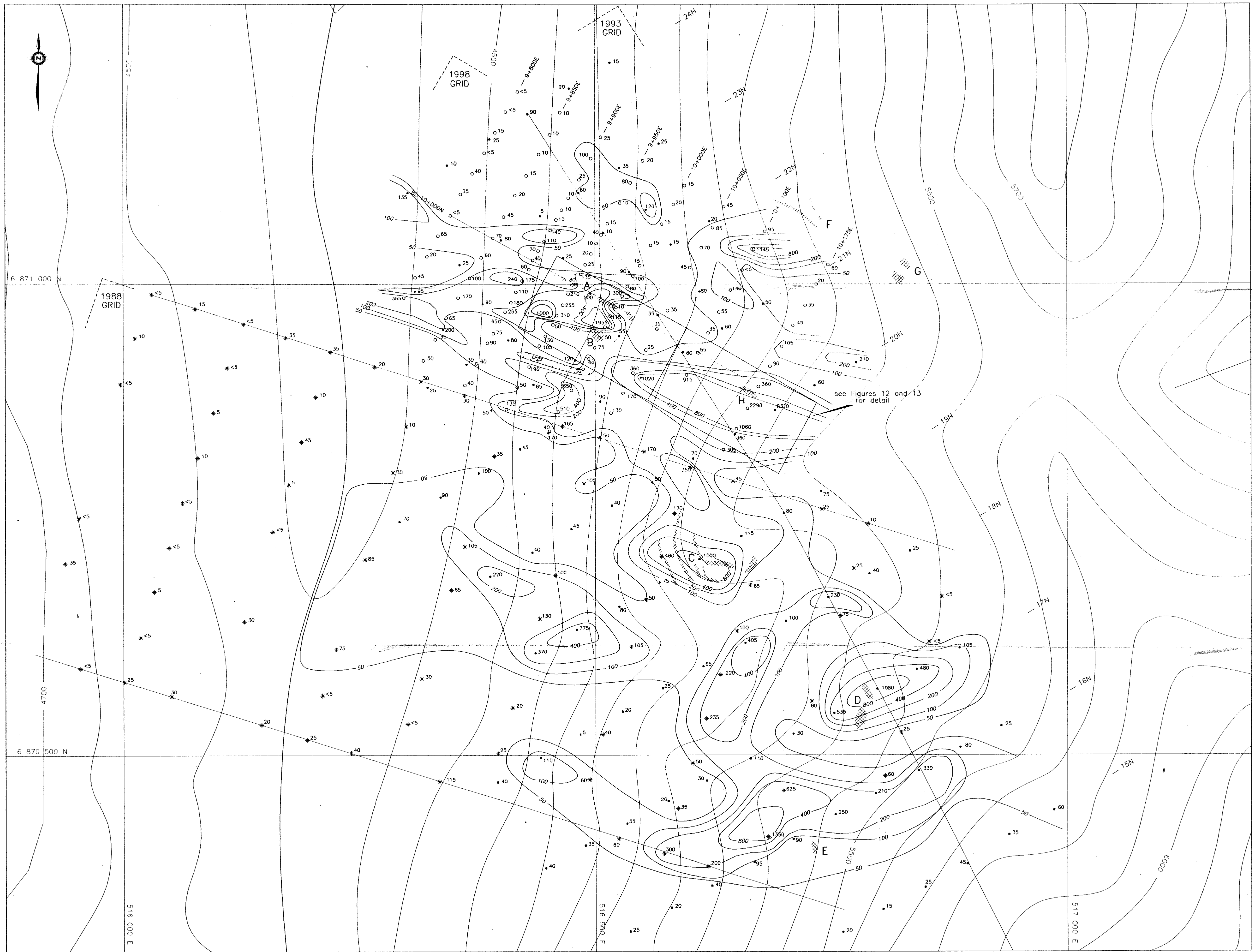
Copper values are in ppm with geochemical contour intervals at 200, 400, 800 and 1600 ppm Cu

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Dwg 4

<b>NORDAC RESOURCES LTD.</b>	
FIGURE 10 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
<b>COPPER GEOCHEMISTRY</b>	
ARN PROPERTY	
SCALE 1:2000	
DRAWN/REVISED BY: AG	PROJECT:
FILE: AC\NORDAC\ARN\ACAD98\AR-2K-SL.DWG	DATE: MARCH, 1999





**LEGEND**

- \* 1988 soil sample
- 1993 soil sample
- o 1998 soil sample with
- A skarn (refer to text for description)

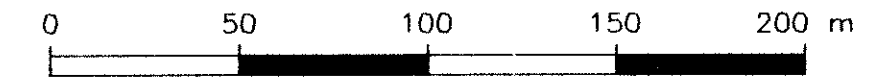
Gold values are in ppb with geochemical contour intervals at 50, 100, 200, 400 and 800 ppb Au

094009  
DWG 3

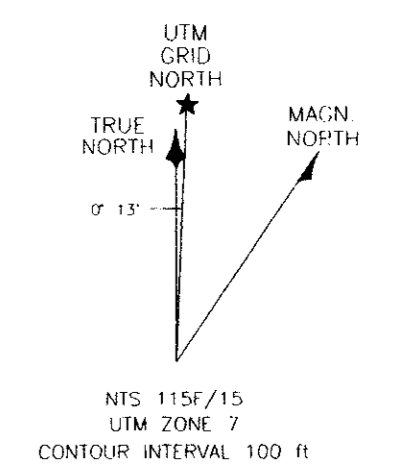
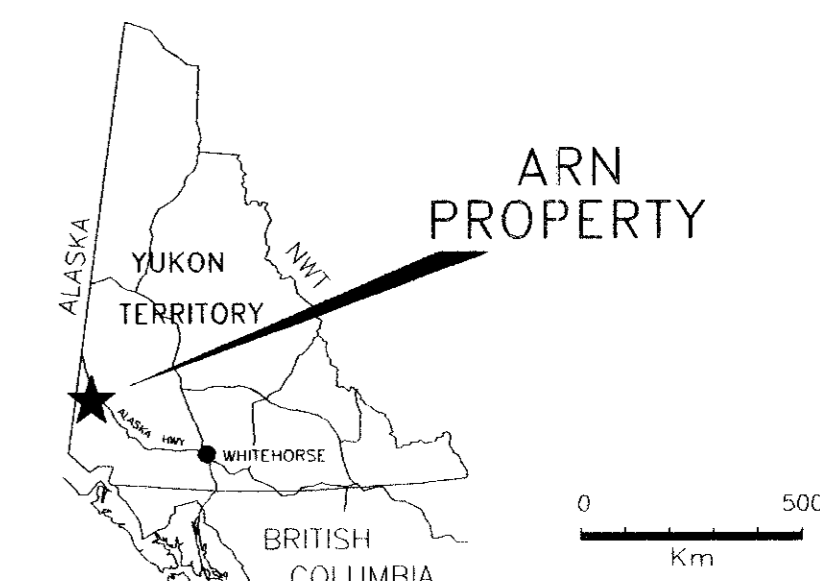
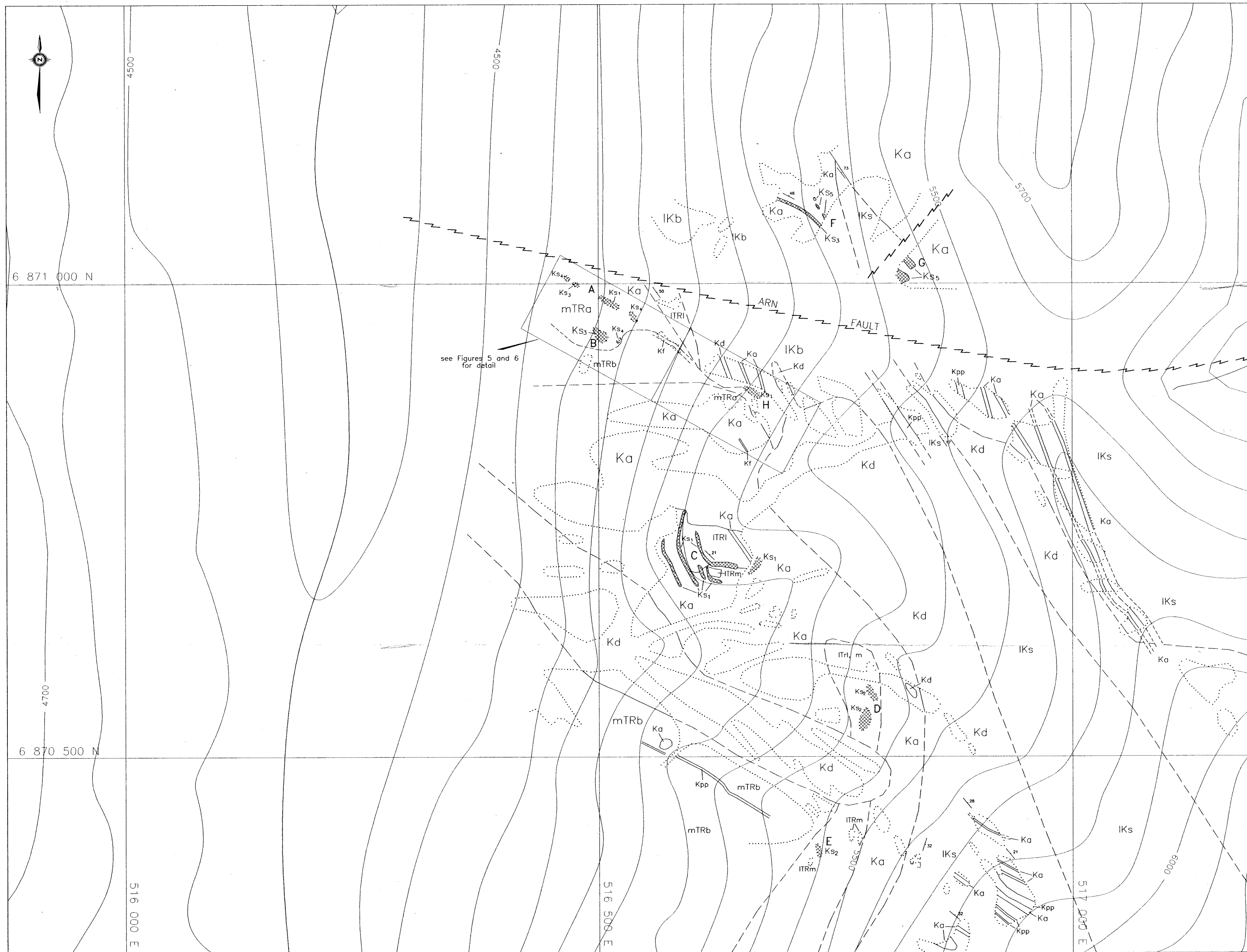
**NORDAC RESOURCES LTD.**

FIGURE 9  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**GOLD GEOCHEMISTRY**  
ARN PROPERTY

SCALE 1:2000



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**LEGEND**

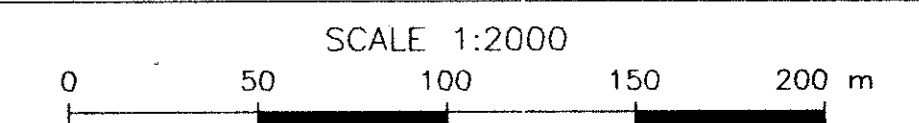
- CRETACEOUS**
- Skarn
  - Ks undifferentiated skarn
  - Ks<sub>1</sub> garnet (magnetite) skarn
  - Ks<sub>2</sub> edidote (calcite) skarn
  - Ks<sub>3</sub> magnetite, amphibole-magnetite skarn
  - Ks<sub>4</sub> pyrrhotite-bearing skarn
  - Ks<sub>5</sub> pyrite-bearing skarn
- Andesite dykes
  - Kf felsic to intermediate
  - Ka andesite, aphanitic to slightly porphyritic
  - Kpp hornblende-plagioclase phyric andesite
  - Kb basalt, basaltic andesite
  - Kd diorite, fine to medium grained
- LOWER CRETACEOUS**
- Dezadeash Formation
  - IKs mudstone, siltstone, sandstone
  - IKb andesite to basalt flows, sills
- LATE TRIASSIC**
- Chitstone/Nizina Limestone
  - ITRI limestone, well bedded to massive
  - ITRm marble
- MIDDLE TRIASSIC**
- Nikolai Group
  - mTRb amygdaloidal basalt
  - mTRa andesite flows, tuff, minor interbedded phyllite
- outcrop
- lithological contact (defined, assumed)
- fault
- A skarn (refer to text for description)
- bedding attitude

**094009**

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FIGURE 3  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**GEOLOGY**  
ARN PROPERTY



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