MAP NO.: 115 I 2, 3	**ASSESSMENT REPORT** X **PROSPECTUS** **CONFIDENTIAL** **OPEN FILE** X	**DOCUMENT NO:** **MINING DISTRICT:** **TYPE OF WORK:**	092133 Whitehorse GEOLOGICAL, GEOCHEMICAL TRENCHING

REPORT FILED UNDER:	Aurum Geological Consultants Inc.		
DATE PERFORMED:	October 15-21, 1987	**DATE FILED:**	May 5, 1988
LOCATION: **LAT.:**	62°06'N	**AREA:**	Mt. Nansen
LONG.:	137°06'W	**VALUE $:**	51,500.00

CLAIM NAME & NO.: ROBERT 1-54 (YA93689-742); ROBERT 55-72 (YA94679-696); JS 1-152 (YA94458-609); NULEE 1-126 (YA94697-822; MOON 1-4 (YA96510-513)

WORK DONE BY: R.W. Hulstein; H.J. Keyser

WORK DONE FOR: Gordon F. Dickson

DATE TO GOOD STANDING:

REMARKS: # 95 ROBERT

In 1988, a new area of quartz-sulphide float, the MONTGOMERY CREEK zone, was found while prospecting placer trenches. Three samples of silicified andesite and quartz float containing up to 15% pyrite and 1% galena and arsenopyrite assayed up to 15.7 g/t Au, 132.5 g/t Ag, 14 242 ppm As and 2723 ppm Sb.

REPORT ON THE 1987 GEOLOGICAL, GEOCHEMICAL, AND TRENCHING ASSESSMENT WORK ON THE McDADE PROPERTY

Whitehorse M.D., Yukon Territory
October 15-21, 1987

Claims:

Robert 1-54 (YA93689-742)
Robert 55-72 (YA94679-696)
JS 1-152 (YA94458-609)
Nulee 1-126 (YA94697-822)
Moon 1-4 (YA96510-513)

Location:

1. 185 km NW of Whitehorse, Yukon
2. NTS 115 I/2 & 3
3. Latitude 62° 06' N
   Longitude 137° 00' W

For:

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By:

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V6B 1N2

April 12, 1988

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 $51 500.00.

for Regional Manager, Exploration and Geological Services [illegible] of Yukon Territory.

SUMMARY

The McDade property consists of 354 contiguous mineral claims in the Dawson Range Gold Belt, Yukon. It is accessible by road from Carmacks. The claims became an attractive exploration target in 1985 when potential bulk-mineable heap-leachable gold deposits were recognized in the area.

The current work program consisted of geological mapping, geochemical sampling, excavator and bulldozer trenching on anomalies located by geological and geochemical exploration work carried out in 1986 and 1987.

Underlain mainly by Paleozoic metamorphic rocks, a Jurassic and two separate Cretaceous to Tertiary intrusive/volcanic events have been mapped on the unglaciated claims.

Four zones of mineralization have been identified to date on the McDade property: (1) gold in quartz-stibnite-chalcedony breccia at the Lee Zone; (2) gold in lithic-quartz-chalcedony breccia at the Wind Zone; and (3) gold in white quartz at the Bear Zone. Bedrock is not exposed at the above occurrences but rock samples collected in 1986 returned up to 0.028 opt gold. Gold/silver ratios are very high. Antimony, arsenic and mercury are associated with the gold mineralization, particularly at the Lee Zone. An additional zone, the Red Trench Zone, has returned anomalous mercury and arsenic values from clay gouge. Anomalous gold values have been found in stream sediments and soil samples adjacent to known mineralization, indicating more mineralization remains to be found.

A large number of geochemical stream sediment and soil anomalies and anomalous areas were identified over a wide area on the claims in 1986. With the exception of the Lee Zone, anomalies tested by trenching in 1987 revealed variably altered volcanic lithologies and/or fault structures suggestive of mineralization. However, no ore-grade mineralization has yet been exposed.

Based on the 1987 results, continued exploration consisting of trenching, geological mapping and geochemical sampling is warranted and recommended.

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INTRODUCTION

This report was prepared at the request of Mr. Gordon Dickson, owner of the McDade Property. Its purpose is to summarize the economic potential of the Robert 1-72, Moon 1-4, JS 1-152, and Nulee 1-126 mineral claims through a description of exploration work carried out during 1987.

The claims are located about 185 kilometers northwest of Whitehorse, Yukon (Figure 1) in the Dawson Range Gold Belt, and are accessible by road.

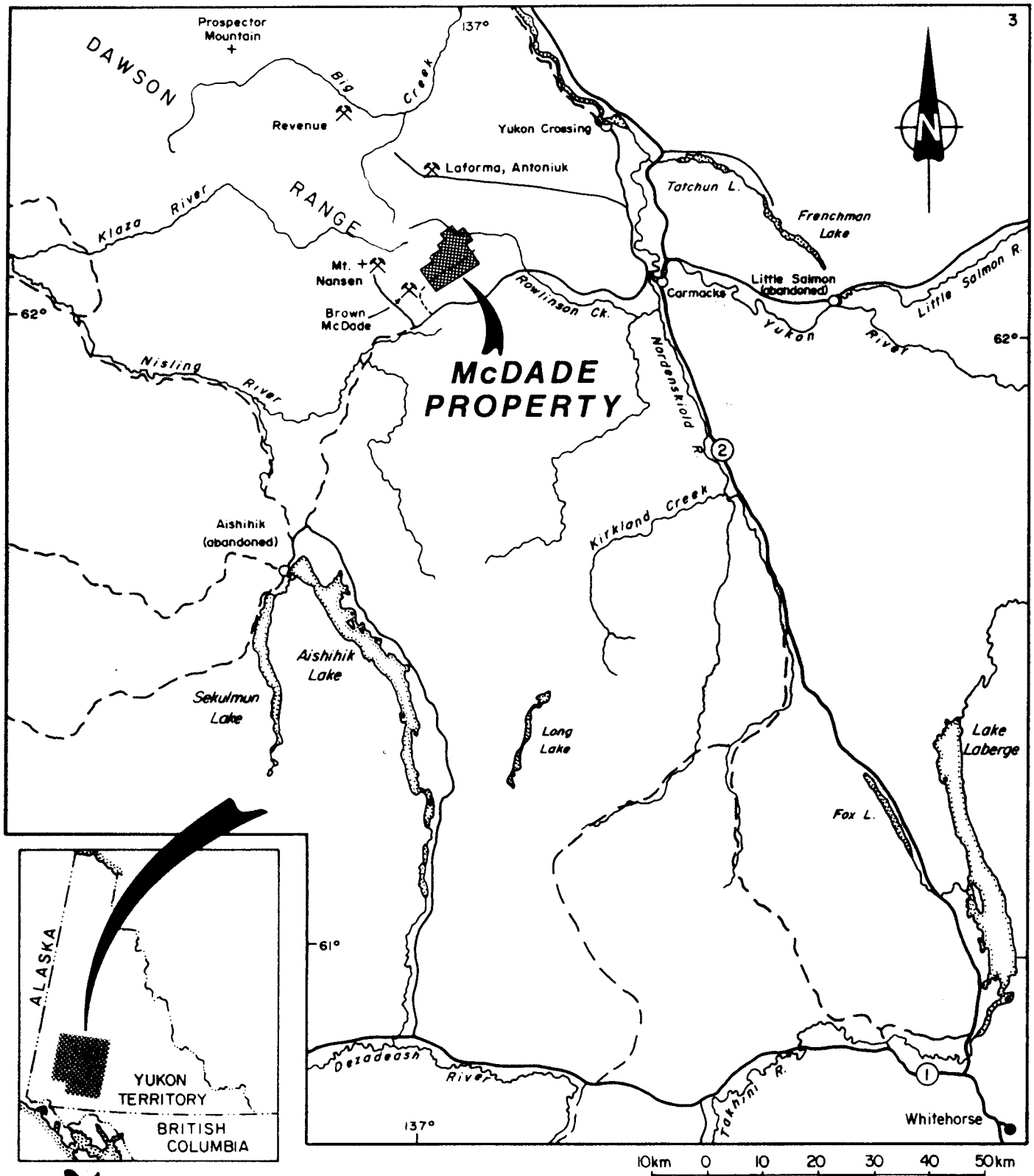
Exploration work completed in 1987 consisted of trenching, geological mapping and geochemical sampling for the purpose of locating gold deposits. Trenching was performed by Mr. Gordon Dickson at selected areas on three claim groups using a Caterpillar D3B bulldozer with backhoe attachment and a Hitachi UH-07 excavator. The remaining work was carried out by Roger Hulstein of Aurum Geological Consultants Inc. preferentially on the JS and Robert claim groups for assessment purposes during the period October 15 to 21, 1987.

LOCATION AND ACCESS

The McDade Property is located in southwestern Yukon, about 36 kilometers west of Carmacks (Figure 1). The geographic coordinates of a point approximately in the center of the property are 62^{O} 06' north latitude and 137^{O} 00' west longitude.

Access is by a good gravel road leading from Carmacks to the Mt. Nansen area, as far as Victoria Creek. A trail suitable for track-type or ATC-type vehicles then follows Victoria Creek and onto several parts of the property. The main portion of this trail is part of the old Mt. Nansen-Mt. Freegold trail which traverses northeasterly across the entire claim group.

Alternatively, helicopters are available for charter at Carmacks and Whitehorse.



McDADE PROPERTY			
LOCATION			
Aurum Geological Consultants Inc.		January, 1988	
Drawn by N.H.	Checked by H.K.	Scale 1:1,000,000	FIGURE 1

HISTORY

Mining history in the area of the McDade Property began in the early 1900's with the discovery and production of placer gold at Nansen and Victoria Creeks. Subsequent prospecting, in part by Mr. Gordon Dickson, in the 1930's to 1960's culminated in the discovery of numerous gold and silver vein-type occurrences. Placer gold has been a good indicator of lode deposits. The most important of these are:

Name	Tonnes	Au opt	Ag opt	Source
Laforma	198,000	0.32	?	1
Brown-McDade	800,000	0.23	1.0	2
Huestis	85,728	0.45	9.11	2
Webber	58,524	0.34	19.29	2
Tinta Hill	516,000	0.12	6.4	1

1. B.Y.G. Natural Resources Inc., 1987 Annual Report
2. Carlson, 1987

Laforma operated in 1965-66 and Mount Nansen in 1968-69 and 1975-76. Although there are at present no producing mines in the area, there is currently considerable exploration interest toward potential bulk-mineable heap-leachable Au-Ag deposits in what is now known as the Dawson Range Gold Belt. Companies currently evaluating this potential include Archer-Cathro and Associates (1981) Limited, Chevron Canada Resources Ltd. and Kerr Addison Mines Ltd., active since 1985. Published reserves of these deposits include:

Name	Tonnes	Au opt	Ag opt	Source
Antoniuk	4,097,000	0.033	?	1
Casino	176,000,000	0.011	?	2

1. Nordac Mining Corporation, Dec. 1986 News Release.
2. Eaton and Main 1986

Parts of the ground now covered by the McDade Property have been previously staked as evidenced by old claim posts found in the Wind and Lee Zone areas. Except for a porphyry copper geochemical exploration program described by Deighton (1974), there is no written record of prior exploration

programs or mineral discoveries. Old trenches and placer workings have been located in several areas, but their history is unknown. Seasonally active placer gold production occurs along several sections of Victoria Creek. Placer deposits have apparently also been evaluated at Montgomery Creek, Victoria Creek, McDade Creek, and Lee Creek.

The present property owner, Mr. Gordon Dickson, discovered and staked antimony-bearing float at what is now called the Lee Zone in 1973. No work was completed and the claims were allowed to lapse. The present ground was acquired by staking in 1985-1986. Work carried out by Mr. Gordon Dickson and Aurum Geological Consultants Inc. during the 1986 field season is summed up in a report by Keyser (1987).

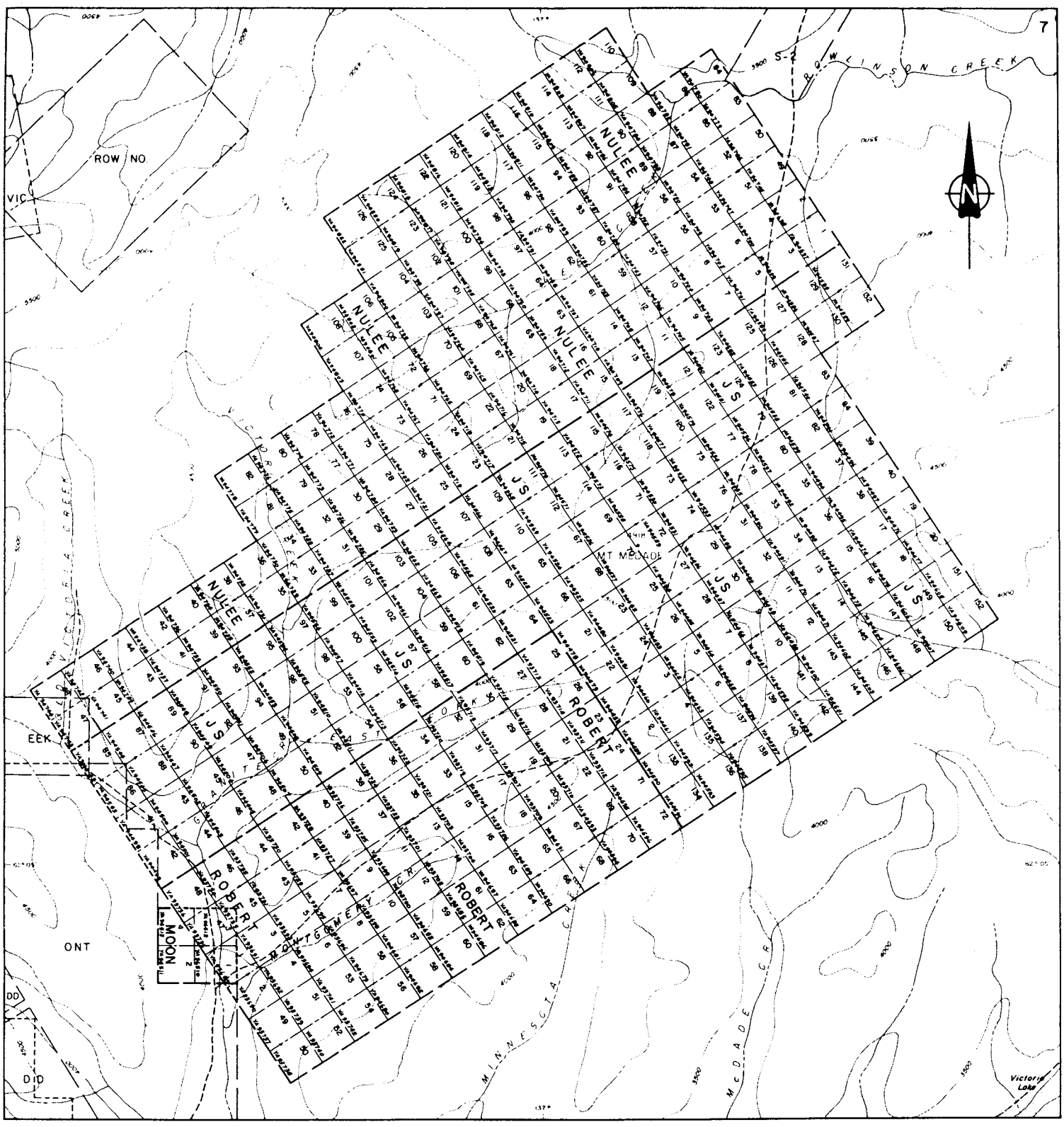
PROPERTY

The property consists of 354 two-post unsurveyed mineral claims (Figure 2) staked under the Yukon Quartz Mining Act totaling approximately 7400 hectares (18,300 acres). Claim data are as follows:

Claim Name	Grant No.'s	Recording Date	Expiry Date *
Robert 1-54	YA93689-742	Sept. 26, 1985	Sept. 26, 1988
Robert 55-72	YA94679-696	May 30, 1986	May 30, 1988
JS 1-40	YA94458-497	May 21, 1986	May 21, 1988
JS 41-152	YA94498-609	May 22, 1986	May 22, 1988
Nulee 1-126	YA94697-822	May 30, 1986	May 30, 1988
Moon 1-4	YA96511-513	Nov. 7, 1986	Nov. 7, 1989

* prior to recording assessment work described herein.

The claims are owned 100% by Mr. Gordon F. Dickson and are shown on Yukon Quartz and Placer Sheets 115 I-2 and I-3, Whitehorse Mining Division. They are known collectively as the McDade Property, after Mr. George McDade who prospected in the area in the 1930's and 1940's. When encountered during the exploration program, claim posts were observed to be properly tagged and otherwise exceptionally well staked.



1km. 0 1 2km.

1mi. 0 1mi.

LEGEND

- claim boundary
- claim number
- tag number
- gravel road
- creeks
- elevation contour ; interval 500 ft.

Notes - adapted from D.I.A.N.D. claim sheets
115 I - 2&3
- all locations subject to survey

McDADE PROPERTY

CLAIM LOCATION

Aurum Geological Consultants Inc.			JANUARY, 1988
NTS 115I-2&3	Drawn by N.H.	Scale 1:63,360	FIGURE 2

CLIMATE, TOPOGRAPHY AND VEGETATION

The climate in the area of the McDade Property is variable with hot summers and long, cold winters. Because the area lies in the rain shadow of the St. Elias Mountains, precipitation amounts to approximately 25 cm (10 inches) annually. Eaton and Main (1986) report that climatic conditions are suitable for seasonal heap leach mining.

Situated in the southeastern end of the unglaciated (Bostock 1936) Dawson Range, topography is moderate and is characterized by well developed dendritic drainages separated by broad grass covered ridges. Elevations on the property range from 1040 m (3400 ft) in Rowlinson and Victoria Creek valleys to 1500 m (4918 ft) at Mt. McDade.

Vegetation is characterized by sparse stunted spruce and balsam, with thick shrubs locally known as buckbrush at lower elevations, and alpine grasses and tundra at higher elevations.

Sufficient water sources are available for any exploration or mining requirement.

GEOLOGY

Regional Geology

The McDade Property is situated at the northeastern margin of the Yukon Crystalline Terrane. Bostock (1936), Tempelman-Kluit (1984) and Carlson (1987) have adequately described the regional geology.

The oldest rocks exposed in the Dawson Range Gold Belt are Paleozoic (or older ?) Yukon Crystalline Terrane schists and gneisses that correlate with Tempelman-Kluit's (1984) Pelly Gneiss Complex. Foliated granitoids of the Klotassin and Freegold suites intruded the Yukon Crystalline Terrane during the Early Jurassic metamorphic and plutonic event. Cretaceous to Paleocene rocks of the region comprise two major plutonic-volcanic events: (1) the Cretaceous Mount Nansen event includes the Dawson Range Batholith, Casino Granodiorite, Coffee Creek Granite, and the Mount Nansen intermediate to felsic volcanic suite, and (2) the late Cretaceous to Paleocene Carmacks event represented by subvolcanic and volcanic mafic to felsic rocks that intrude or unconformably overlie all other units. The Cretaceous to Paleocene intrusives and volcanics have a close spatial relationship with the older granitoids and a spatial-temporal relationship with known mineralization. Numerous plugs, dikes, and flows of the Mount Nansen and Carmacks Suites have been mapped on the property.

Structure is dominated by northwest trending faults. The Big Creek Fault, mapped 5 km northeast of the property, forms the boundary between the Yukon Cataclastic Complex to the northeast and the Yukon Crystalline Complex to the southwest. This fault is thought to be a normal fault, southeast side down, formed as a collapse or graben structure in response to extensive Mount Nansen volcanism. (Tempelman-Kluit, personal communication 1987). Major northwest trending structures such as the Big Creek Fault and related structures were important in localizing igneous activity (in particular felsic magmas), providing structures for plumbing systems, and openings for ore deposition (Carlson, 1987). The Big Creek Fault closely coincides with the trend of many gold and silver occurrences in the Dawson Range Gold Belt.

Permafrost is present throughout, reaching a depth of up to 50 meters (Saager and Bianconi 1971). Overburden consists of residual soil and local alluvium covered by a layer of Recent volcanic ash ranging up to 1 meter in thickness, blanketing all bedrock except at some ridge crests. Bedrock can be oxidized and weathered to depths reaching 75 meters.

Geology of the McDade Property

Property geology (Figure 3) is much more complex than that described under regional geology. Rock outcrops are scarce and deeply weathered, owing to the pre-Quaternary weathered surface that escaped Pleistocene glaciation. Bedrock exposures are generally restricted to ridge crests underlain by resistive-weathering unaltered lithologies.

Metamorphic rocks (map unit Pm) of the Yukon Crystalline Terrane comprised of intercalated quartzite, mica schist, and local amphibolite are the oldest and most commonly exposed lithology on the McDade Property. These rocks are thought to be part of the Pelly Gneiss Complex and would therefore be Paleozoic (?) in age (Tempelman-Kluit 1984).

Equigranular granodiorite and monzonite to syenite (Map unit Jgd) of the Klotassin and Freegold Suites has been mapped at several locations as intruding the metamorphic rocks. The granodiorite is referred to as the Big Creek Syenite by Tempelman-Kluit (1984). These intrusives are weak to moderately foliated and local pink K-feldspar rich varieties may be porphyritic. Hornblende and biotite are present in approximately equal amounts and both typically exhibit variable chloritization.

Cretaceous to Paleocene volcanic rocks consisting of andesite (map unit KMNa) and rhyolite and dacite (map unit KMNr) occur as isolated plugs and flows over a wide area. Propylitic alteration is prominent in the andesite and argillic alteration present in the rhyolite, though sometimes difficult to identify because of weathering. Although there was no evidence whatsoever found for the rhyolite outliers mapped by Tempelman-Kluit (1984),

rhyolite outcrops, felsenmeer and scree were found in other areas. Mineralization located to date invariably occurs near or adjacent to rhyolite or andesite.

A northeast trending Cretaceous diorite dike (map unit Kgd) has been mapped near the summit of Mt. McDade. It weathers dark brown and is predominantly composed of medium to coarse grained plagioclase and varying amounts of hornblende (<30%).

Basalt of the Late Cretaceous to Paleocene Carmacks Group (map unit KCb) has been found at or near ridge crests from two separate areas: (1) The Red Trench Zone immediately northeast of Mt. McDade; and (2) the north corner of the property (Figure 3). Some sections of the basalt found at the Red Trench Zone is highly siliceous, dense and dark colored, and may actually be rhyolitic in composition.

A tabulated geological history of the property and area is given as Table 1.

TABLE 1. **Tabulated Geologic History of the McDade Property Area.** Relative ages of KMNa and KMNr are uncertain.

Unit	Age *	Event/Lithology
Qs	Quaternary-Tertiary.	Unconsolidated surficial debris/colluvium. Supergene weathering.
KCb	Upper Cretaceous to Paleocene	Carmacks basalt flows; basal rhyolite unit.
KMNr,a Kgd	Mid Cretaceous	Mount Nansen Group hypabyssal rhyolitic to andesitic plugs, breccias, and flows, emplacement of granitoid batholiths. Contemporaneous faulting and mineralization (?).
Jgd	Jurassic	Folding, faulting, metamorphism, emplacement of granodiorite plutons.
Pm	Paleozoic	Deposition of sedimentary and volcanic rocks on unknown basement. Possible plutonism.

* modified from Tempelman-Kluit 1984, Carlson 1987, and Lowey et al 1986.

MINERALIZATION AND TRENCHING

There is no record of previous mineral discoveries on the McDade property. Although the ground was prospected previously for copper and antimony, there apparently has been no detailed exploration specifically for precious metals until the present owner initiated a systematic bulldozer trenching program in 1986.

McInnes et al., (1988) state, "The association of gold-bearing quartz veins and porphyry copper deposits with felsic intrusion of Late Cretaceous age in the Freegold Mountain, Mount Nansen and Casino areas suggests that a regional volcanogenic-metallogenetic event occurred in the Dawson Range." Most gold discoveries (e.g. Mt. Nansen, Laforma) have been epithermal or mesothermal vein-type occurrences, but current exploration is focused toward low-grade large-tonnage gold mineralization partly in leached caps overlying known porphyry copper deposits (Eaton and Main 1986).

Six distinct zones on the McDade Property; the Lee, Wind, Bear, Red Trench, Victoria Creek and Number 26 Zones, along with other areas were trenched by Mr. Gordon Dickson using a bulldozer and/or an excavator. Trenching in 1987 was based on anomalous results returned from the 1986 program as reported by Keyser (1987).

Lee Zone

First discovered in 1973 by Mr. Gordon Dickson, the Lee Zone is characterized by quartz-stibnite-chalcedony-jasperoid breccia boulders, containing 5-10% stibnite, apparently hosted by schist and quartzite. There is no outcrop in the area but the distribution of mineralized float follows a north trend.

In excess of 500 linear meters of excavator trenching totalling approximately 1740 cubic meters was completed during the 1987 field season.

Results in 1986 returned rock values ranging from 40 to 950 ppb gold.

In soil, mercury (up to 1820 ppb) and antimony (up to 140 ppm) were anomalous, but gold was low (< 25 ppb). The three soil samples and one rock sample collected in 1987 returned low gold (<37 ppb), silver (<0.3 ppm), and arsenic (<15 ppm) values but a highly anomalous antimony value (up to 37,192 ppm in soil).

Wallrock alteration appears to consist of variable argillization and minor silicification, though it is difficult to recognize because of supergene weathering and older (?) metamorphism. Vein-type quartz and clay-altered andesite (?) porphyry have been found in the immediate Lee Zone area. Rhyolite and vein type quartz float anomalous in gold (220 ppb), arsenic (68 ppm) and mercury (>5000 ppb) were located 800 meters to the west in 1986.

Wind Zone

The Wind Zone is characterized by brecciated quartz-feldspar porphyry intrusions in Paleozoic metamorphic rocks, as indicated from lithologic distributions in trenched overburden. The nearest outcrop is over 1 km away. Rhyolitic and chalcedonic breccias are associated with the porphyry intrusions, along with quartz and chalcedonic veinlets. No sulfide minerals have been identified.

Numerous bulldozer and excavator trenches, totalling in excess of 1880 cubic meters, plus several shallow (<1 meter deep) prospecting trenches, were completed in an attempt to locate the source of anomalous stream sediment samples returned in 1986.

Rock sampling completed in 1986 returned anomalous gold (up to 740 ppb), arsenic and mercury values while soil samples returned background levels for gold (<35 ppb), silver, lead, arsenic, antimony and mercury. Four samples collected from trenches completed in 1987 returned background values for gold, silver and antimony with arsenic anomalous at 65 ppm.

Bear Zone

The Bear Zone (Figure 4) was located and trenched in 1987 while following up on anomalous soil samples (up to 160 ppb) collected the previous season. There is no outcrop in the area. Altered float of granodiorite, rhyolite, andesite and gneiss was found in the trenches.

Trenching by bulldozer and excavator on the zone in 1987 exceeded 400 linear meters and 1492 cubic meters of material removed.

A rock sample of white quartz float found in a trench returned 420 ppb gold and 0.6 ppm silver, other rock samples returned low values. Soil samples returned anomalous gold (up to 340 ppb), arsenic (up to 450 ppm) and low values for silver (<0.6 ppm) and mercury (<60 ppb).

Red Trench Zone

First trenched and examined in 1986 by Mr. Gordon Dickson, the Red Trench Zone is named after the dark red hematitic clay-rich soil found there. The nearest outcrop, 300 meters to north, is of silicified basalt or possibly aphanitic black rhyolite. Mr. Dickson reported finding an extensive east-west trending clay gouge zone cutting rocks of the Carmacks Group. This zone was not permanently frozen in contrast to the surrounding area and the 6 meter deep trenches filled rapidly with water thereby making an examination impossible.

Analyses of jasperoid and chalcedonic rubble found in 1986 returned up to 320 ppb gold and 90 ppm arsenic. The one rock sample collected in 1987 by Mr. Gordon Dickson returned background values for gold, silver, arsenic, and antimony, while the six soil samples collected returned anomalous arsenic values (up to 479 ppm), and one sample is anomalous in antimony (508 ppm). All samples contained low gold (<3 ppb) and silver values (<0.7 ppm). Two samples from the clay gouge zone analyzed for mercury contained 850 and 1000 ppb.

Victoria Creek Zone

The Victoria Creek Zone (Figure 5) was trenched by Mr. Gordon Dickson while conducting followup on anomalous 1986 soil samples that returned up to 100 ppb gold. Trenching revealed unaltered to argillically altered felsenmeer of Mount Nansen Group rhyolite, dacite and Jurassic granodiorite. A three meter wide northeast trending shear or fault zone crosscuts rhyolite and granodiorite outcropping in trench number 40.

Analytical results returned background values for eight rock samples (<40 ppb gold), while ten of the eighteen soil samples were weakly anomalous in gold (up to 80 ppb), with low to background values for silver. Two soil samples analyzed for arsenic and mercury returned anomalous arsenic (up to 46 ppm) and low mercury (<85 ppb) values.

Number 26 Zone

Trenching on the Number 26 Zone (Figure 6) was based on anomalous soil samples (up to 230 ppb gold) obtained in 1986. Crackle brecciated float of andesite and possibly rhyolite was found in the trenches. Outcrop was not located in the area.

Two rock samples and five soil samples were collected from the trenches and returned low gold (<40 ppb) and silver (<0.3 ppm) values.

Other Trenching

Trenches number 19, 20 and 21 (Figure 3) east of the Number 26 Zone were excavated over anomalous soil samples (up to 230 ppb gold) obtained in 1986. Float of schist and minor andesite were found in the shallow trenches. Outcrop is not found in the area. Permafrost hindered work even though the area was striped early in the season. Seven soil samples and two rock samples returned low values for gold (<40 ppb) and silver (<0.6 ppm).

Trenches located in the southern corner of the property were

completed and existing trenches deepened over a porphyritic rhyolite plug. Felsenmeer of unaltered rhyolite was found in the upper area and schist and gneiss float in the lower portion. The presumed contact between the metasediments and rhyolite is obscured by a zone of clay and mud. Eight soil samples from the trenches returned weakly anomalous values for gold (up to 70 ppb) and silver (up to 1.0 ppm).

Trenching on the ridge above and to the south of the Victoria Creek Zone located a rhyolite dyke cutting granodiorite similar in appearance to the plug located in the south corner of the property. A total of three soil samples and a rock sample from the area returned background values for gold and silver.

Other Mineralization

Old bulldozer trenches were located in 1986 at several areas on the McDade property, especially at the northern and southern corners. Although the original targets of these trenches are unknown, minor copper (?) mineralization has been identified at the trenches near Rowlinson Creek, and felsic porphyry dikes have been found at the southern trenches west of Minnesota Creek.

GEOCHEMISTRY

A total of 101 samples were collected from trenches during the 1987 exploration program on the McDade property. Of these, geochemical analyses were made for total gold and silver content on 76 soil samples and 25 rock samples. Mercury and arsenic analyses were made on 9 soil samples. Two of the rock samples and twelve soil samples were analyzed for an additional 26 elements including antimony, lead, zinc and barium. The analytical work was performed by Bondar-Clegg & Company Ltd. and Acme Analytical Laboratories Ltd. of Vancouver, B.C. Results are shown on Figure 3.

Twenty-two rock samples from float and three from bedrock were taken of altered, veined, and/or mineralized material. Soil samples were taken from B and C soil horizons in 0.5 to 4.0m deep trenches.

Based on the large number of soil samples collected in the Mount Nansen Area, Archer Cathro & Associates Ltd. reported to Mr. G. Dickson the following range of values considered background to strongly anomalous (G. Dickson pers comm.)

Element	Background Value	Weakly Anomalous	Moderately Anomalous	Strongly Anomalous
Au (ppb)	5	25	50	100
Ag (ppm)	0.2	1	2	4
As (ppm)	30	100	200	400

The above values are consistent with results from the McDade Property. The sample population analyzed for antimony and mercury was considered too small to calculate statistical threshold values. Keyser (1987) gives a background value of 4.0 ppm for antimony and 242 ppb for mercury based on the 446 sample 1986 soil and sediment survey.

Soil Samples

Gold values in soil range from 1 to 340 ppb. Definitely anomalous values are clustered at the Bear Zone. Float of quartz feldspar porphyry, dacite, altered and mineralized granodiorite and white quartz has been found here.

The Bear and Red Trench Zones have arsenic values ranging from 6 to 600 ppm with a coincident mercury anomaly (up to 1000 ppb) occurring at the Red Trench Zone in clay gouge. A sample from the Lee Zone returned a value of 37,192 ppm antimony in an area of known mineralization.

Rock Samples

Of the rock samples collected in 1987 gold and antimony appear to be the main elements of interest ranging up to 420 ppb and 301 ppm respectively. The high gold value (#792204) is from the Bear Zone while the anomalous antimony values are from the Lee Zone.

CONCLUSIONS AND RECOMMENDATIONS

The McDade property is underlain by Paleozoic metamorphic rocks which have undergone at least three separate plutonic-volcanic episodes in the Jurassic, Cretaceous and Late Cretaceous to Early Tertiary Periods. Known gold-silver deposits in the Dawson Range Gold Belt are closely associated with these volcanic/intrusive rocks. Similar rocks on the McDade property therefore provide a setting that is highly permissive for the development of precious metal deposits.

The property is an epithermal gold-silver prospect. Potential exists for hosting both disseminated gold in volcanic porphyries and vein-type gold. Four anomalous Zones; the Lee, Wind, Bear, and Red Trench Zones have been located to date.

Known mineralization on the Lee Zone consists of quartz-stibnite-chalcedony breccia anomalous in antimony and mercury (>5000 ppm each), while gold values in rock float range up to 950 ppb (0.028 opt; 1986 results). Trenching in 1987 reached bedrock in places but failed to locate the source of mineralized float. The vein type quartz and altered rhyolite anomalous in gold (220 ppb) and mercury (>5000 ppb) located 800 meters to the west of the Lee Zone was not addressed in 1987. When considered with the lithological, geochemical, mineralogical and alteration setting, the Lee Zone may represent an outer or upper margin of a major epithermal gold deposit.

As in the case of the Lee Zone the bedrock source of anomalous rock and stream silt located in 1986 at the Wind Zone was not resolved in 1987.

Trenching on the Bear Zone uncovered float of altered rhyolite, andesite and mineralized altered granodiorite. Soil sampling outlined an area anomalous in gold (up to 340 ppb) and arsenic (up to 450 ppm). A rock sample of white quartz returned 420 ppb gold. The altered lithologies and widespread geochemical soil anomaly (100 by 50 m) indicates possible epithermal mineralization associated with rhyolite and andesite.

Trenching on the Red Trench Zone uncovered a clay gouge zone cutting rocks of the Carmacks Group. The clay gouge is anomalous in arsenic and mercury (up to 479 ppm & 1000 ppb respectively) and is not permanently frozen. Rock samples from the area returned up to 320 ppb gold (1986 results).

Trenching and sampling on the Victoria Creek Zone, Number 26 Zone and other trenched areas in 1987 did not return encouraging values. However, the trenches did uncover the favorable rhyolite and andesite lithologies.

Gold (+/- antimony, arsenic, lead and silver) anomalies identified in 1986 located elsewhere on the property are indicative of epithermal systems. Although ore-grade mineralization has not been identified, areas underlain by rhyolite such as the north corner of the property may host mineralization based on deposit types located elsewhere in the Dawson Range.

Extensive overburden and a lack of outcrop make mineral exploration difficult on this large property. Because the Dawson Range escaped Pleistocene continental glaciation, a well developed pre-Quaternary weathered surface has been preserved. This makes the visual identification of alteration and mineralization difficult; however the deeply weathered rocks and potential ores within them may be suitable for heap leaching. Given ideal conditions, a four million tonne deposit grading 1.7 g/t (0.050 opt) should be economically feasible in the Dawson Range (Eaton and Main 1986).

Based on results of surface exploration carried out on the McDade property in 1986 and 1987, further work is warranted. The following is recommended:

1. More bulldozer trenching with combined mapping and sampling should be carried out over and about the Lee Zone to further investigate the source of antimony and gold bearing float. The area 800 m to the west of the Lee Zone where rhyolite and vein type float anomalous in gold and mercury was discovered in 1986 requires trenching, mapping and sampling.

2. More trenching with combined mapping and sampling should be carried out in the vicinity of the Wind Zone to determine the source of gold found during the 1986 rock and stream sediment sampling program.

3. Follow up on the anomalous soil samples and rock samples found at the Bear Zone with more trenching, sampling and mapping.

4. The Red Trench Zone requires more trenching, mapping, and sampling to evaluate the clay gouge zone and surrounding area.

5. Further followup on the anomalous stream and soil samples collected in 1986 with more detailed sampling, mapping and trenching. Due to permafrost, prestripping may be required prior to trenching.

6. Should any of the above targets yield positive results, drilling may be warranted. Geophysical surveys including, Induced Polarization, VLF, Resistivity and Magnetics may facilitate a better understanding of geometry prior to drilling.

Respectfully submitted,

April 12, 1988

Roger W. Hulstein, B.Sc.

Harmen J. Keyser, B.Sc., FGAC

GEOLOGICAL ASSOCIATION OF CANADA
HARMEN J. KEYSER
FELLOW

REFERENCES

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STATEMENT OF QUALIFICATIONS (RWH)

I, ROGER W. HULSTEIN, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 604-675 West Hastings Street, Vancouver, British Columbia.

2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.

3. I am a member of the Geological Association of Canada (A3572).

4. I have no direct or indirect interest in the properties of Mr. Gordon F. Dickson.

5. I am a co-author of this report on the McDade Property, Dawson Range, Yukon which is based on my personal examination of the ground in 1986 and October 15-21, 1987, and on referenced sources.

April 12, 1988

Roger W. Hulstein, B.Sc.

STATEMENT OF QUALIFICATIONS (HJK)

I, HARMEN J. KEYSER, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 604-675 West Hastings Street, Vancouver, British Columbia.

2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since then.

3. I am a fellow of the Geological Association of Canada (F3759).

4. I have no direct or indirect interest in the properties of Mr. Gordon F. Dickson.

5. I am a co-author of this report on the McDade Property, Dawson Range, Yukon which is based on my personal examination of the ground October 9-20, 1986, and on referenced sources.

April 12, 1988

Harmen J. Keyser, B.Sc., F.G.A.C.

STATEMENT OF COSTS

Assessment Work Valuation; McDade Property

1. Geological and Geochemical	
A. Fieldwork	
R. Hulstein, B.Sc., of Vancouver, B.C.	
Oct.15-21, 1987; 7 days @ 300/day:	$ 2,100.00
B. Geochemical Analyses	
25 rock and 76 soil samples:	1,407.60
C. Rock Assays	
3 rocks:	34.50
D. Sample Shipments	
Inclusive costs:	98.00
E. Report Preparation	
R. Hulstein, B.Sc.	
Jan. 14-April 7, 1988;	
7 days @ 300/day:	2,100.00
H. Keyser, B.Sc.	
Jan. 14- April 12, 1987;	
2 days @ 300/day:	600.00
Drafting:	361.00
Reprographics and typing:	312.14
Subtotal:	$ 7,013.24
2. Trenching	
Gordon Dickson of Whitehorse, Yukon.	
Caterpillar D3B with backhoe attachment;	
452 hrs @ 60.00/hr :	27,120.00
Phil Veenhof of Whitehorse, Yukon.	
Hitachi UH-07 Excavator	
October 15-25, 1987; 90.5 hrs @ $100/hr:	9050.00
Support Costs; Trucks, groceries,	
consumables, Bombardier, ATV:	
101 days @ 140/day:	14,140.00
Subtotal:	$ 50,310.00
Total Valuation of 1987 Assessment Work:	**$ 57,323.24**

LEGEND

LITHOLOGIES

QUATERNARY (and older)

Qs — unconsolidated surficial debris

CRETACEOUS to LOWER TERTIARY

Kcb — CARMACKS GROUP: basalt

CRETACEOUS

RELATIVE AGES UNCERTAIN

KMNa — MOUNT NANSEN GROUP: andesite

KMNr — MOUNT NANSEN GROUP: rhyolite, dacite

Kgd — granodiorite, monzonite, syenite

JURASSIC

Jgd — granodiorite, monzonite, syenite

PALEOZOIC (?)

Pm — *PELLY GNEISS COMPLEX (?)* gneiss, schist, quartzite, amphibolite

Abbreviations

gn	gneiss	bi	biotite
sh	schist	mu	muscovite
qt	quartzite	hbl	hornblende
Q	quartz	ppy	porphyry
f	feldspar	P	post
Kf	potassium feldspar	m^3	volume material removed

SYMBOLS

- fault
- trench
- claim post; refer to FIGURE 2
- creek
- 4400 — elevation contour; interval 100 ft
- "cat" trail
- 50 — attitude of bedding/structure
- 30 — attitude of foliation, schistosity
- attitude of jointing
- distribution of outcrop
- approximate/assumed lithologic contact
- airphoto lineament
- ○ 796206 / 088XXX — soil sample location and number / Au (ppb), Ag (ppm), (As (ppm), Sb (ppm), Hg (ppb))
- + 792222 / 088404 / 088409 — rock sample location and number / Au (ppb), Ag (ppm), (As (ppm), Sb (ppm), Hg (ppb))

0.5km 0 0.5 1.0 1.5km

Note - all locations subject to survey

References - CARLSON, G.G., 1987; Geology of Mount Nansen (115 I/3) and Stoddart Creek (115 I/6) map areas Dawson Range Central Yukon, D.I.A.N.D. Whitehorse, Yukon

McDADE PROPERTY

092133

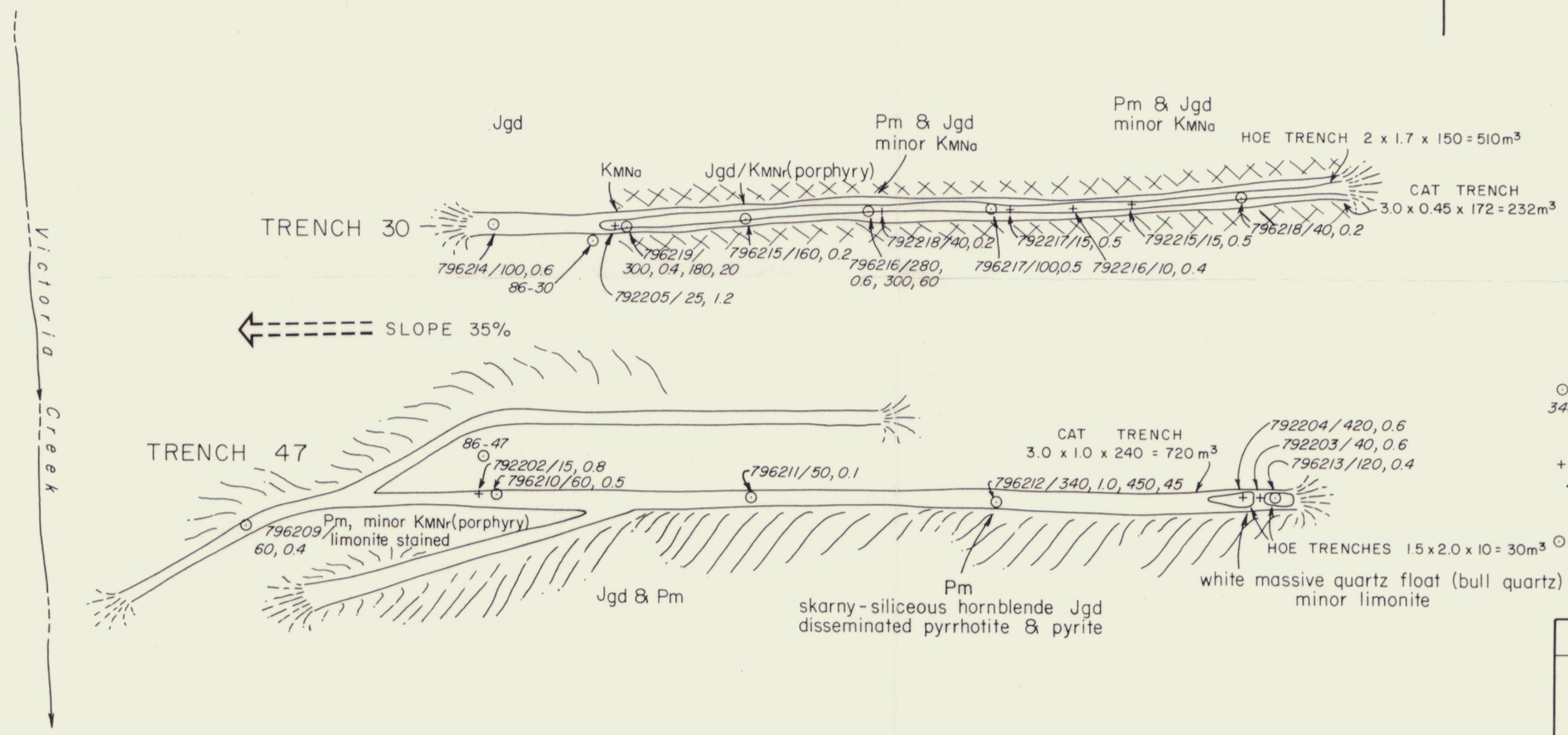
GEOLOGY

&

GEOCHEMISTRY

807

Aurum Geological Consultants Inc.		JANUARY, 1988	
NTS 115 I/2&3	Drawn by R.H., H.K./N.H.	Scale 1:25,000	FIGURE 3



LEGEND

LITHOLOGIES

CRETACEOUS

- KMNa — MOUNT NANSEN GROUP: andesite
- KMNr — MOUNT NANSEN GROUP: rhyolite, dacite

JURASSIC

- Jgd — granodiorite, monzonite, syenite

PALEOZOIC (?)

- Pm — *PELLY GNEISS COMPLEX(?)*: gneiss, schist, quartzite

SYMBOLS

- trench, with soil dumps
- ⊙796212/340, 1.0, 450, 45 — soil sample location and number / Au (ppb), Ag (ppm), (As (ppm), Hg (ppb))
- +792204/420, 0.6 — rock sample location and number / Au (ppb), Ag (ppm)
- ⊙86-30 — 1986 soil sample location

10m 0 10 20 30 40 50m

Note - bedrock not exposed in any trench

- locations based on chain and compass survey

McDADE PROPERTY

092133

BEAR ZONE

Aurum Geological Consultants Inc.			JANUARY, 1988
NTS 115 I/3	DRAWN BY RH/NH	SCALE 1:1000	FIGURE: 4

Qs

TRENCH 42

TRENCH 43

TRENCH 40

Victoria Creek (valley floor)

TRENCH 39

796245/45, 0.3

HOE TRENCH
2.0 x 1.5 x 17 = 51m³

796244/25, 0.2

P1 JS 47 YA94504
P1 JS 48 YA94505
P2 JS 45 YA94502
P2 JS 46 YA94503

Jgd

crushed
KMNr
clay zone

90° 792211/<5, 0.3
796239/35, 0.6, 46, 85
792212/<5, 0.2

796238/10, 0.2

KMNr
Jgd

796237/10, 0.4

Jgd
clay zone

+ 792210/5, 0.6
+ 792209/5, 0.4
796236/20, 0.5

HOE TRENCH
2.0 x 0.8 x 78 = 124.8 m³

796246/45, 0.1
796247/25, 0.6

KMNr float

+ 792213/10, 0.5

+ 792207/<5, 0.2

Jgd (minor KMNr, quartz eye)

796243/40, 0.2

CAT TRENCH
2.8 x 0.4 x 130 = 145.6m³

mn stained KMNr

+ 792208/<5, 0.2
796235/75, 0.2, 11, 10

Jgd

Qs

Jgd

HOE TRENCH
0.5 x 1.5 x 82 = 62m³

796234/<5, 0.2

CAT TRENCH
4.0 x 0.7 x 240 = 672m³

CAT TRENCH
3.0 x 0.7 x 230 = 483m³

KMNr float

796248/30, 0.2
+ 792214/5, 0.3

Qs

Jgd
10% KMNr float

796225/60, 0.4

KMNr

CAT TRENCH
0.70 x 3.0 x 240 = 504m³

Jgd float
KMNr (5%) float
796224/25, 0.1

Qs

HOE TRENCH
0.5 x 1.5 x 40 = 30m³

KMNr

796242/<5, 0.4

Jgd

+ 792206/40, 0.6
796223/10, 0.1

796241/15, 0.2

HOE TRENCH
0.75 x 1.5 x 46 = 51.75m³

KMNr (& altered medium grained Jgd, quartz feldspar porphyry?)

Jgd

796240/80, <0.1

Jgd

SLOPE
35%

Note : bedrock not exposed in any trench

locations based on chain and compass survey

LEGEND

LITHOLOGIES

QUATERNARY (and older)

Qs — unconsolidated surficial debris

CRETACEOUS

KMNr — MOUNT NANSEN GROUP: rhyolite, dacite

JURASSIC

Jgd — granodiorite, monzonite, syenite

SYMBOLS

trench

assumed contact

claim post

90 fault zone, with dip

796243/40, 0.2 — soil sample location and number / Au (ppb), Ag (ppm), (As (ppm), Hg (ppb))

+ 792207/<5, 0.2 — rock sample location and number / Au (ppb), Ag (ppm)

0.8 x 1.5 x 80 = 96m³ — trench measurements and total cubic metres

092133

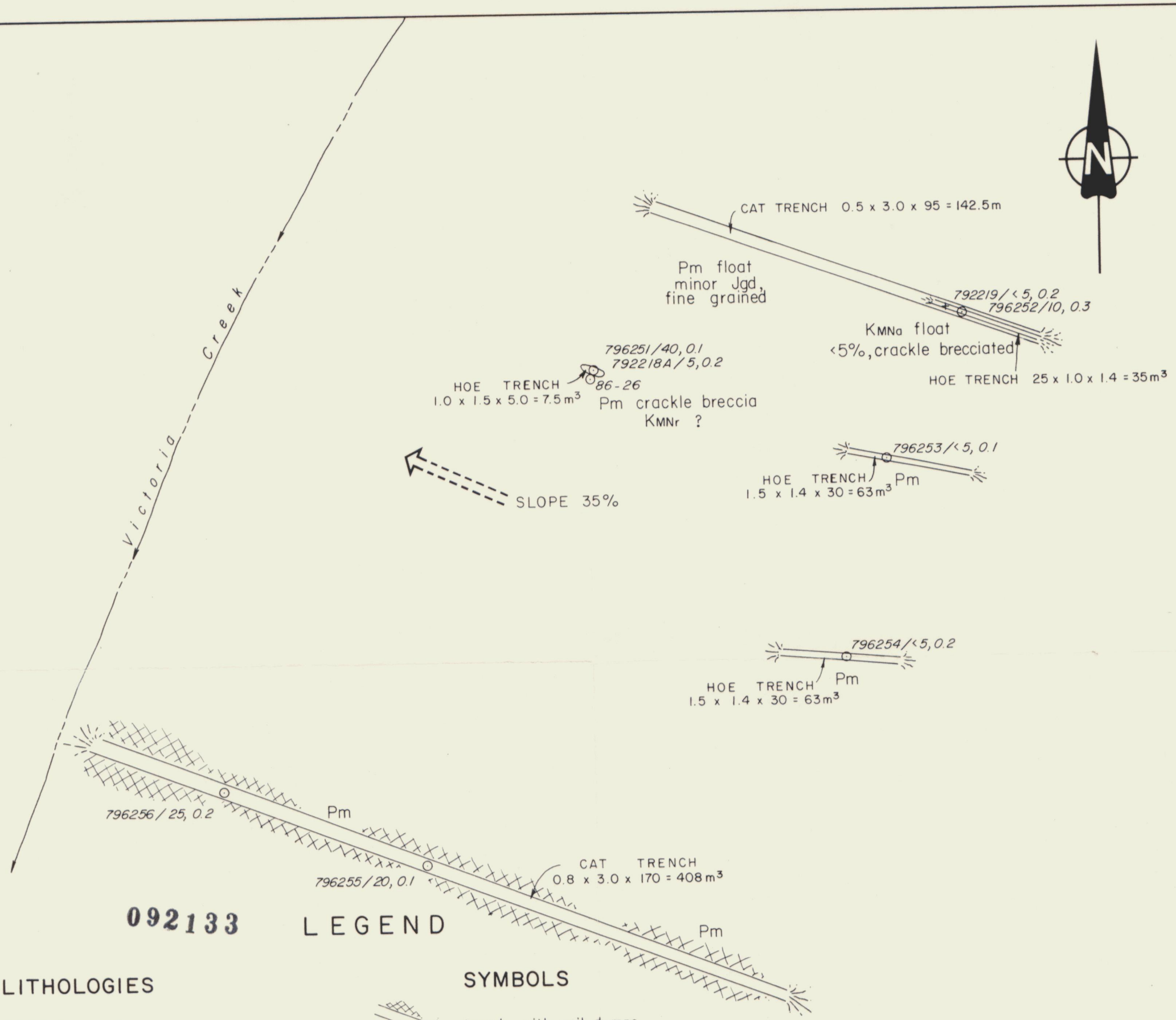
10m 0 10 20 30 40 50m

McDADE PROPERTY

808

VICTORIA CREEK ZONE

Aurum Geological Consultants Inc.		JANUARY, 1988	
NTS 115 I/3	DRAWN BY RH / NH	SCALE 1:1000	FIGURE: 5



092133

LEGEND

LITHOLOGIES

CRETACEOUS

- KMNa — MOUNT NANSEN GROUP: andesite
- KMNr — MOUNT NANSEN GROUP: rhyolite, dacite

JURASSIC

- Jgd — granodiorite, monzonite, syenite

PALEOZOIC (?)

- Pm — *PELLY GNEISS COMPLEX (?)*: gneiss, schist, quartzite

SYMBOLS

- trench, with soil dumps
- ⊙796253/<5, 0.1 — soil sample location and number / Au (ppb), Ag (ppm)
- +792219/<5, 0.2 — rock sample location and number / Au (ppb), Ag (ppm)
- ⊙86-26 — 1986 soil sample location

Note – bedrock not exposed in any trench

– locations based on chain and compass survey

10m 0 10 20 30 40 50m

McDADE PROPERTY

#26 ZONE

Aurum Geological Consultants Inc.			JANUARY, 1988
NTS 115I/3	DRAWN BY RH/NH	SCALE 1:1000	FIGURE: 6

APPENDIX

Aurum Geological Consultants Inc. — Rock Sample Location and Description Record

Date: October 15 - October 21, 1988 Samplers: RH & GD Lab: B.C. & Acme Project: McDade Property NTS: 115 I/2 & 3

Sample No.	Location	Description	Attitude	Width	Au (ppb)	Ag (ppm)	Sb (ppm)	As (ppm)	Hg (ppb)	Ba (ppm)
792201	Robert claims NE of camp	Limonitized argillically altered gneiss. Mn stain. Qtz-calcite and siderite veining and breccia.	Float	Float	5	1				
792202	Bear Zone Trench #47	Fine grained qtz-Feldspar porphyry, limonite fractures.	Float	Float	15	0.8				
792203	Bear Zone Trench #47	Hornblende granodiorite, argillically altered, qtz-calcite replacement (<5%). Dissem. Po & Py & fracture coatings.	Float	Float	40	0.6				
792204	Bear Zone Trench #47	Milky white quartz. Limonite on fractures.	Float	Float	420	0.6				
792205	Bear Zone Trench #30	Brecciated quartzite-gneiss (?) with 80% matrix of chalcedony, limonite coated fractures.	Float	Float	25	1.2				
792206	Victoria Creek Zone	Light tan rhyolite-dacite;2-5% qtz phenocrysts, Mn & Limonite stain, Tr diss. Py.	Float	Float	40	0.6				
792207	Victoria Creek Zone	Leucocratic med-crse grained granodiorite. 1% diss. brassy Py.	Float	Float	5	0.2				
792208	Victoria Creek Zone	Rusty-limonite altered rhyolite-dacite. Mn stained.	Float	Float	5	0.2				
792209	Victoria Creek Zone	Light grey rhyolite, flow banded, Tr pyrite, Mn stain.	Float	Float	5	0.4				
792210	Victoria Creek Zone	Composite sample of rhyolite float, tan-grey, limonite, Mn stain, Tr pyrite.	Float	Float	5	0.6				
792211	Victoria Creek Zone	LIght grey-green rhyolite; Tr Py & possible fine sulphides or Mn, in contact with fault gouge crushed rhyolite.	085/90	0.5 m	5	0.3				
792212	Victoria Creek Zone	Fault shear crush zone in rhyolite. <10% clay.	085/90	1.0 m	5	0.2				
792213	Victoria Creek Zone	Weakly brecciated rhyolite limonite coated fractures. Minor qtz stringers.	Float	Float	10	0.5				
792214	Victoria Creek Zone	Rhyolite, weak quartz stringers, poss. fine sulphides, limonite coated fractures	Float	Float	5	0.3				
792215	Bear Zone Trench #30	Tan limonitized dacite propylitically/argillically altered.	Float	Float	15	0.5				
792216	Bear Zone Trench #30	Hornblende granodiorite. Siliceous, limonitized, chalcedonic qtz pods.	Float	Float	10	0.4				

Aurum Geological Consultants Inc. Rock Sample Location and Description Record

Date: October 15 - October 21, 1988 Samplers: RH & GD Lab: B.C. & Acme Project: McDade Property NTS: 115 I/2 & 3

Sample No.	Location	Description	Attitude	Width	Au (ppb)	Ag (ppm)	Sb (ppm)	As (ppm)	Hg (ppb)	Ba (ppm)
792217	Bear Zone Trench #30	Argillically altered granodiorite, limonitized, calcareous, & light green feldspar porphyry crosscut by occasional qtz stringers.	Float	Float	15	0.5				
792218	Bear Zone Trench #30	Altered light green qtz-feldspar porphyry-probably gneiss. Minor qtz stringers.	Float	Float	15	0.4				
792218A	Number 26 Zone	Altered, limonitized, siliceous, crackle brecciated gneiss. Poss. some Bx rhyolite-fine grained granodiorite. Weak argillic alteration, minor qtz stringers.	Float	Float	5	0.2				
792219	Number 26 Zone	Crackle Bx purple dacite (?); < 5% qtz stringers. Minor open spaces with fine cockscomb qtz.	Float	Float	5	0.2				
792220	Hoe Trench #21	Light grey, rhyolite, limonite & Mn stained. Qtz phenocrysts.	Float	Float	10	0.3				
792221	Hoe Trench #21	Tan-brown-limonite stained massive qtz.	Float	Float	5	0.2				
792222	Hoe Trench on ridge top; S.E. of Victoria Ck. Zone	Sheared and crushed tan rhyolite. 30% clay gouge qtz phenocrysts, Tr pyrite	N/A	1.5 m	5	0.2				
088404*	Lee Zone	Quartz boulder.	Float	Float	2	0.1	301	15		56
088409*	Red Trench Zone	Quartz, composite sample of siliceous material.	Float	Float	1	0.1	2	11		176

* analysed for suite of 30 elements.

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
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Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

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Geochemical Lab Report

REPORT: 227-8957 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: MCDADE

SUBMITTED BY: R. HOLSTEIN
DATE PRINTED: 13-JAN-88

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	As	Arsenic	6	2 PPM	NITRIC PERCHLOR DIG	Colourimetric
2	Hg	Mercury	6	5 PPB	HNO3-HCL HOT EXTR	Cold Vapour AA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
S SOILS	6	1 -80	6	DRY, SIEVE -80	6

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Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 127-10249 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: NONE GIVEN

SUBMITTED BY: GORDON DIXON
DATE PRINTED: 22-DEC-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	As	Arsenic	3	2 PPM	NITRIC PERCHLOR DIG	Colourimetric
2	Hg	Mercury	3	5 PPB	HNO3-HCL HOT EXTR	Cold Vapour AA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
P PREPARED PULP	3	4 AS REC'D	3	AS RECEIVED, NO SP	3

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BONDAR-CLEGG

Certificate of Analysis

REPORT: 427-10249 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: NONE GIVEN

SUBMITTED BY: GORDON DIXON
DATE PRINTED: 21-DEC-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - FIRE ASSAY	3	0.001 OPT		
2	Ag	Silver	3	0.01 OPT		

SAMPLE TYPES		NUMBER	SIZE FRACTIONS		NUMBER	SAMPLE PREPARATIONS	NUMBER
P	PREPARED PULP	3	4	AS REC'D	3	AS RECEIVED, NO SP	3

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Geochemical Lab Report

REPORT: 127-8957 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: MCDADE

SUBMITTED BY: R. HULSTEIN
DATE PRINTED: 6-NOV-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Ag Silver	87	0.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
2	Au 30g Gold 30 grams	87	5 PPB	FIRE-ASSAY	Fire Assay AA
3	Au/wt Sample weight/grams	87	0.1 G		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
S SOILS	64	1 -80	64	DRY, SIEVE -80	64
R ROCK OR BED ROCK	23	2 -150	23	CRUSH,PULVERIZE -150	23

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Geochemical Lab Report

REPORT: 127-8957 | PROJECT: MCDADE | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Au 30g PPB	Au/wt G	SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Au 30g PPB	Au/wt G
S1 796201		0.6	45	30.0	S1 796240		<0.1	80	30.0
S1 796202		0.2	35	20.0	S1 796241		0.2	15	30.0
S1 796203		0.2	30	30.0	S1 796242		0.4	<5	30.0
S1 796203A		0.2	20	30.0	S1 796243		0.2	40	30.0
S1 796204		0.1	20	30.0	S1 796244		0.2	25	26.0
S1 796205		0.2	<5	30.0	S1 796245		0.3	45	30.0
S1 796206		0.2	<5	30.0	S1 796246		0.1	45	30.0
S1 796207		0.2	70	30.0	S1 796247		0.6	25	16.0
S1 796208		0.2	<5	30.0	S1 796248		0.2	30	30.0
S1 796209		0.4	60	30.0	S1 796249		0.2	10	30.0
S1 796210		0.5	60	30.0	S1 796250		0.1	25	30.0
S1 796211		0.1	50	30.0	S1 796251		0.1	40	30.0
S1 796212		1.0	340	30.0	S1 796252		0.3	10	30.0
S1 796213		0.4	120	30.0	S1 796253		0.1	<5	30.0
S1 796214		0.6	100	30.0	S1 796254		0.2	<5	25.0
S1 796215		0.2	160	30.0	S1 796255		0.1	20	30.0
S1 796216		0.6	280	30.0	S1 796256		0.2	25	30.0
S1 796217		0.5	100	21.0	S1 796257		0.1	<5	30.0
S1 796218		0.2	40	30.0	S1 796258		<0.1	15	30.0
S1 796219		0.4	300	30.0	S1 796259		0.6	10	25.0
S1 796220		0.2	<5	30.0	S1 796260		<0.1	40	30.0
S1 796221		0.2	5	30.0	S1 796261		0.3	<5	16.0
S1 796222		0.2	10	30.0	S1 796262		0.1	20	30.0
S1 796223		0.1	10	25.0	S1 796263		<0.1	35	30.0
S1 796224		0.1	25	30.0	R2 792201		1.0	<5	30.0
S1 796225		0.4	60	30.0	R2 792202		0.8	15	30.0
S1 796226		0.1	5	30.0	R2 792203		0.6	40	30.0
S1 796227		0.1	<5	30.0	R2 792204		0.6	420	30.0
S1 796228		<0.1	15	30.0	R2 792205		1.2	25	30.0
S1 796229		<0.1	35	30.0	R2 792206		0.6	40	30.0
S1 796230		0.1	20	30.0	R2 792207		0.2	<5	30.0
S1 796231		0.1	30	30.0	R2 792208		0.2	<5	30.0
S1 796232		0.2	45	30.0	R2 792209		0.4	5	30.0
S1 796233		0.2	5	30.0	R2 792210		0.6	5	30.0
S1 796234		0.2	<5	30.0	R2 792211		0.3	<5	30.0
S1 796235		0.2	75	30.0	R2 792212		0.2	<5	30.0
S1 796236		0.5	20	30.0	R2 792213		0.5	10	30.0
S1 796237		0.4	10	30.0	R2 792214		0.3	5	30.0
S1 796238		0.2	10	15.0	R2 792215		0.5	15	30.0
S1 796239		0.6	35	25.0	R2 792216		0.4	10	30.0

Bondar-Clegg & Company Ltd.
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Telex: 04-352667

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Au 30g PPB	Au/wt G
R2 792217		0.5	15	30.0
R2 792218		0.4	15	30.0
R2 792218A		0.2	5	30.0
R2 792219		0.2	<5	30.0
R2 792220		0.3	10	30.0
R2 792221		0.2	<5	30.0
R2 792222		0.2	<5	30.0

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Geochemical Lab Report

REPORT: 227-8957 PROJECT: MCDADE

SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
S1 796212		450	45
S1 796216		300	60
S1 796219		180	20
S1 796235		11	10
S1 796239		46	85
S1 796240		6	5

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Certificate of Analysis

McDADE

REPORT: 427-10249

PROJECT: NONE GIVEN PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT
P4 088405		<0.002	<0.02
P4 088406		<0.002	<0.02
P4 088408		<0.002	<0.02

Company Ltd.
n Ave.
uver, B.C.
P 2R5
04) 985-0681
A-352667

[redacted]

Geochemical Lab Report

McOADE

REPORT: 127-10249

PROJECT: NONE GIVEN PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
P4 088405		160	1000
P4 088406		110	850
P4 088408		600	5

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SOIL P2-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: OCT 29 1987 DATE REPORT MAILED: Nov 10/87 ASSAYER..D. Toye..DEAN TOYE, CERTIFIED B.C. ASSAYER

GORDON F. DICKSON File # 87-5266 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
088405	1	80	10	37	.7	15	4	99	3.09	191	5	ND	8	405	1	2	4	66	.42	.064	21	51	.15	593	.01	3	.76	.02	.07	1	3
088406	2	26	10	38	.6	18	6	279	3.47	135	5	ND	7	231	1	2	2	104	.39	.041	14	72	.13	563	.01	2	.71	.02	.07	2	1
088407	6	10	19	31	.7	4	4	186	4.20	68	6	ND	19	36	1	2	2	10	.12	.040	34	4	.07	165	.01	3	.35	.03	.33	1	1
088408	2	28	8	40	.5	21	8	798	6.67	479	5	ND	4	274	1	2	2	131	.73	.043	9	65	.29	314	.02	5	1.10	.04	.08	1	1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
088404	2	4	2	10	.1	1	2	211	.92	15	10	ND	7	10	1	301	2	2	.01	.006	4	1	.01	56	.01	2	.14	.01	.07	2	2
088409	8	18	10	37	.1	14	5	524	2.33	11	7	ND	4	36	1	2	2	28	.39	.037	9	19	.25	176	.01	11	.46	.03	.11	4	1
088410	1	20	11	50	.1	4	9	442	1.71	61	9	ND	8	27	1	2	2	32	.13	.049	14	6	.03	269	.01	7	.55	.01	.08	1	1
088411	1	9	10	15	.4	1	3	87	1.57	94	14	ND	26	21	1	4	2	6	.09	.018	41	1	.03	138	.01	3	.36	.03	.17	2	1
088412	1	7	5	6	.1	1	1	112	.86	6	5	ND	11	11	1	3	2	5	.03	.007	10	1	.01	70	.01	3	.35	.01	.10	2	1
088413	3	17	9	135	.3	2	7	983	4.63	13	9	ND	18	15	1	12	3	13	.02	.030	23	1	.02	181	.01	6	.41	.01	.14	1	1
088414	2	14	11	59	.2	11	17	649	2.61	65	7	ND	7	45	1	2	2	50	.15	.060	12	10	.02	332	.01	3	.49	.01	.07	1	1
088415	1	19	8	68	.2	7	13	695	2.93	58	5	ND	6	92	1	2	2	115	.26	.079	13	23	.07	315	.01	9	.85	.02	.06	1	2
088416	3	6	2	12	.2	3	1	47	.47	10	9	ND	1	6	1	37192	3	5	.01	.001	2	1	.01	11	.01	2	.23	.01	.10	1	37
088417	2	13	7	25	.4	2	4	216	1.94	90	12	ND	21	17	1	508	3	6	.04	.011	33	1	.02	192	.01	5	.27	.02	.14	2	1
STD C/AU-R	22	63	43	132	7.2	69	30	1070	4.15	41	21	8	40	52	19	15	22	59	.50	.080	40	60	.87	189	.06	37	1.89	.08	.14	14	515