MAP NO.: 115 P 15	**ASSESSMENT REPORT** X **PROSPECTUS** **CONFIDENTIAL** X **OPEN FILE**		**DOCUMENT NO:** 092793 **MINING DISTRICT:** Dawson **TYPE OF WORK:** Geology, Geochemistry

REPORT FILED UNDER: M.J. Moreau Enterprises Ltd.

DATE PERFORMED: June 29-July 5, 1989 **DATE FILED:** November 27, 1989

LOCATION: **LAT.:** 63° 55'N **AREA:** McQuesten (East Ridge)

LONG.: 136° 49'W **VALUE $:** 6000.00

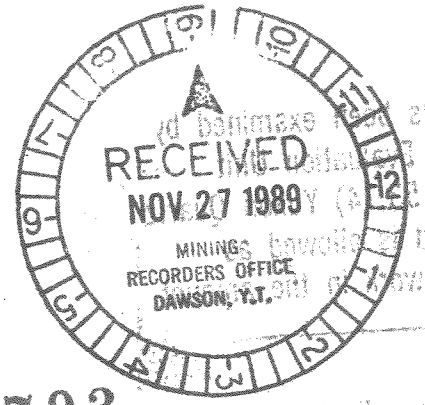
CLAIM NAME & NO.: MAHTIN 1-20 YB 17426-445

WORK DONE BY: Aurum Geological Consultants Ltd.

WORK DONE FOR: M.J. Moreau Enterprises Ltd.

DATE TO GOOD STANDING:

REMARKS: #27 MAHTIN Quartz monzonite intrusives and related dykes intrude Road River sedimentary rocks and minor metasedimentary rocks A total of 179 soil, rock and silt samples were collected. Eight roc samples (mostly quartz-arsenopyrite float) returned values of betwee 501 and 3741 ppb gold. Soil samples returned up to 1213 ppb gold an 16.5 ppm silver.



092793

GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON THE MAHTIN 1-20 CLAIMS

Dawson M.D., Yukon
June 29-30, July 5, 1989

Claims: Mahtin 1-20 (YB17426-445)

Location:
1. 120 Km ESE of Dawson, Yukon
2. NTS Sheet 115 P/15
3. Latitude 63° 55' N
   Longitude 136° 49' W

For: Mr. Jacques Moreau
M.J. Moreau Enterprises Ltd.
P.O. Box 5282
Whitehorse, Yukon
Y1A 4Z2

By: Roger Hulstein, B.Sc.
Aurum Geological Consultants Inc.
412-675 West Hastings Street
Vancouver, B.C.
V6B 1N2

November 17, 1989

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 $ 600.00.

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

09279

SUMMARY

The Mahtin claims consist of 20 contiguous mineral claims centered on East Ridge, McQuesten map sheet, Yukon. They are accessible by helicopter, based out of Dawson or Mayo. A 4WD road passes within 5 km of the claims.

The claims lie within the Mcquesten Mineral Belt, a metallogenic district approximately 30-50 km wide extending from Mayo to Clear Creek, a distance of 80 km.

Interest in the ground developed in 1987-1988 when Goldrite Mining Corp. acquired a gold property at Clear Creek and subsequently diamond drilled it with encouraging results. In 1988 numerous claims were staked in the area following the release by the Geological Survey of Canada the results of a regional stream sediment survey.

Sedimentary lithologies of the Road River Formation underlie most of the property with minor exposures of the Hadrynian Yukon Group restricted to the southeast corner. Cretaceous quartz monzonite intrusives and related dykes intrude the sedimentary rocks.

Previous work carried out by CCH Resources Limited included geological mapping and geochemical sampling. This work located a broad (700 metre width) arsenic in soil anomaly (>500 ppm) over an area underlain by intrusives and dykes near known fault structures.

In 1989 the claims were examined by Aurum Geological Consultants Inc., Total Energold Corporation and Noranda Exploration Company, Limited to determine their economic potential. The arsenic anomaly in particular was examined for associated gold mineralization. A total of 179 samples were collected in 1989. Numerous rock, soil, and stream samples from various locations returned anomalous values for gold, silver, copper, arsenic and antimony. Eight rock samples, mostly of quartz-arsenopyrite float, returned between 501 and 3741 ppb gold. Soil samples returned up to 1213 ppb gold and 16.5 ppm silver.

Samples collected in the headwaters of Bolivia Creek consistently returned anomalous gold - silver values. This area coincides with the quartz monzonite - limestone contact, arsenic in soil anomaly, possible faults and areas of intensely altered quartz monzonite cut by quartz-arsenopyrite veining.

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

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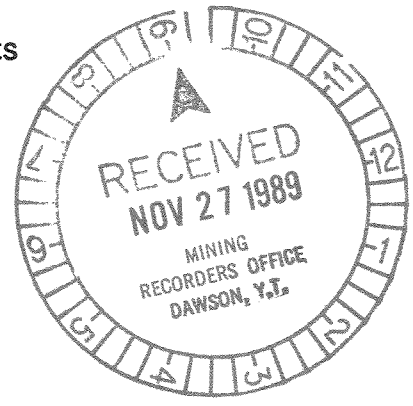


INTRODUCTION

This report was prepared at the request of Mr. Jacques Moreau, owner of the *Mahtin 1-20* claims. Its purpose is to assess the property's economic potential and to satisfy assessment requirements through a description of exploration work carried out in 1989.

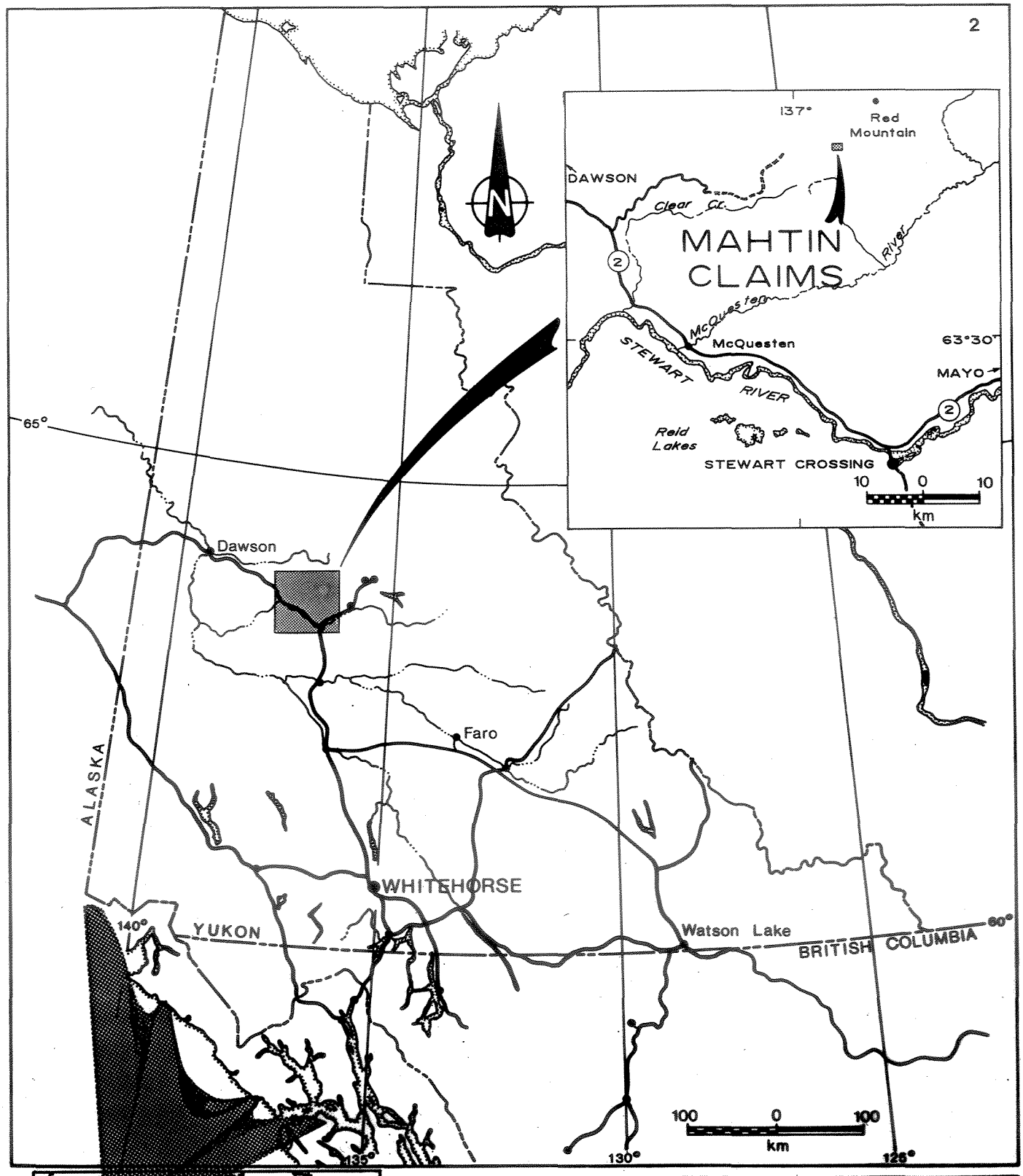
The claims are located approximately 130 kilometers ESE of Dawson, Yukon (Figure 1) in the Dawson Mining District, and are accessible by helicopter.

Exploration work carried out in 1989 consisted of geological mapping and geochemical sampling for the purpose of locating gold deposits. This work was carried out by R. Hulstein, B.Sc. and J. Zbeetnoff, B.Sc., of Aurum Geological Consultants Inc. on July 5, 1989. Additional work, incorporated in this report, was carried out by Total Energold Corporation on June 29-30, 1989 and Noranda Exploration Company, Limited on July 5, 1989. Previous work is summarized from Paul (1981) and Paul and Rota (1981), assessment reports, published reports and maps.

LOCATION AND ACCESS

The *Mahtin 1-20* claims are located on East Ridge, 120 km ESE of Dawson, Yukon (Figure 1). The Clear Creek Road leading to the Klondike Highway (#2) comes within 10 km to the west. The claims are centered at approximately 63° 55' N latitude and 136° 49' W longitude on NTS map sheet 115 P/15.

Access to the property is via helicopter based in Mayo or Dawson. A 4WD road, "Cat" trails, and winter tote roads pass within 5 km of the property.



M. J. MOREAU ENTERPRISES LTD.

MAHTIN CLAIMS

LOCATION

Aurum Geological Consultants Inc.			Date Nov. 1988
NTS 115 P/15	Drawn by MH		Figure: 1

PHYSIOGRAPHY, CLIMATE AND VEGETATION

The *Mahtin* property straddles East Ridge, a prominent topographic feature of the Stewart Plateau. Steep hills with local cliffs and felsenmeer covered ridges are cut by a dendritic drainage system. Elevations range from 1200 metres to 1700 metres.

An interior continental climate with moderate to low precipitation of 30 cm annually, warm summers and cold winters typifies the area. Permafrost is discontinuous, present only on the steeper north and east facing slopes and low marshy forested areas. The property is usually snow free from mid June to mid September.

Most of the property is above treeline. Ground cover consists of moss, alpine plants, dwarf willow and birch.

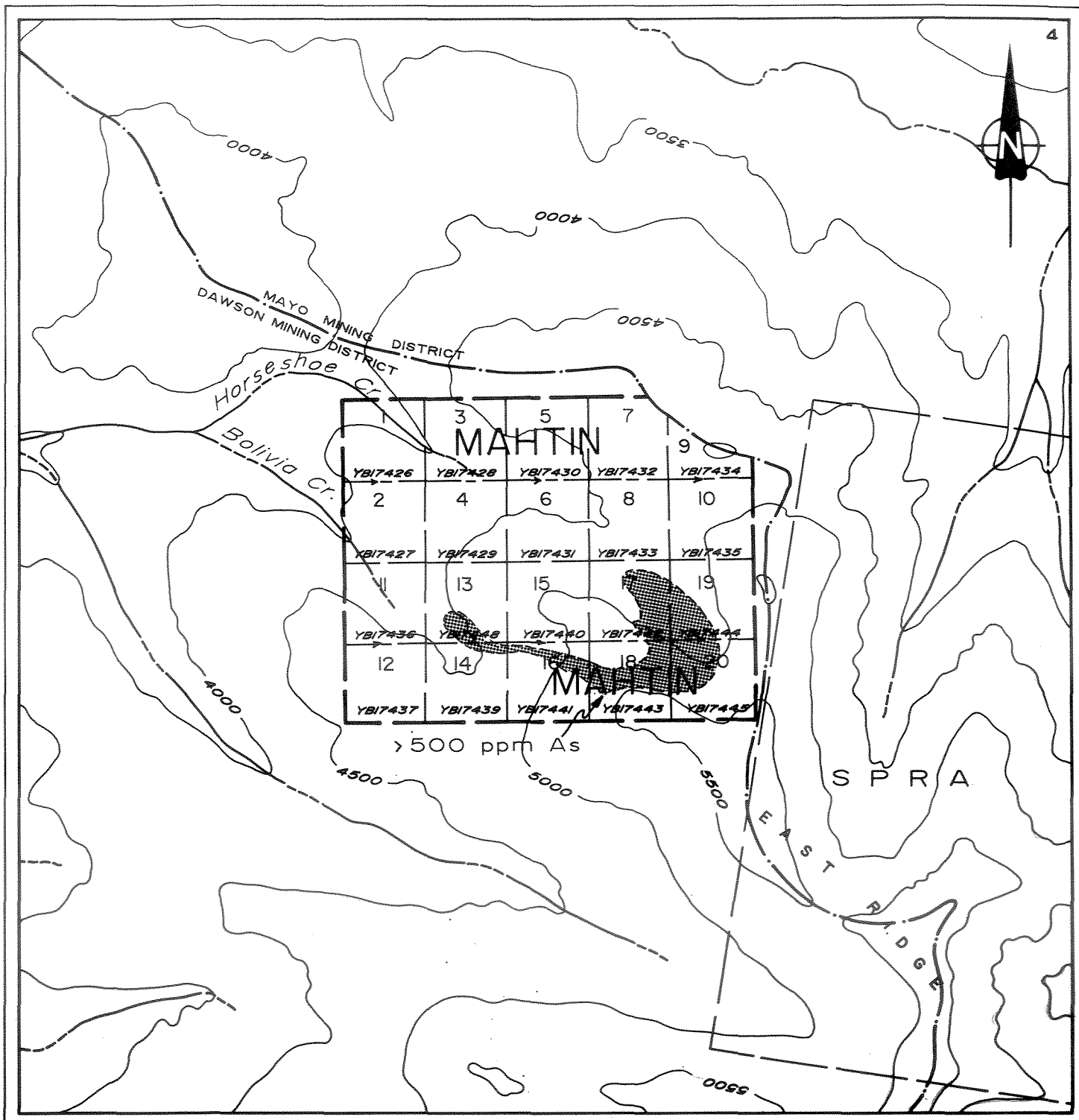
Except for small alpine glaciers on the higher peaks the most recent Pleistocene glaciation did not cover much of the area. As a result outcrop is poor (5-10%) except on ridge tops and along creek and stream gullies. A large portion of the property is covered by felsenmeer and talus fines.

PROPERTY

The property consists of 20 contiguous unsurveyed two post quartz claims covering approximately 1030 acres (417 hectares) staked in accordance with the Yukon Quartz Mining Act (Figure 2). The claims were staked by Aurum Geological Consultants Inc. for Mr. Jacques Moreau on June 24, 1988 and recorded on July 8, 1988. The eastern side of the claim group abuts on the common boundary betwwen the Dawson and Mayo Mining Districts. Claim data are as follows:

CLAIM NAME	GRANT No.	No. CLAIMS	EXPIRY DATE
Mahtin 1-20	YB17426-445	20	July 8, 1992*

*subject to approval of 1989 assessment work.



LEGEND

- 20 — claim boundary
- claim number
- YBI7445 — tag number
- staking direction
- creek
- 3500 — elevation contour; interval 500 ft.
- arsenic in soil anomaly, > 500 ppm As (after Paul & Rota, 1981)

Note: adapted from D.I.A.N.D. map sheet 115 P/15

M. J. MOREAU ENTERPRISES LTD.			
MAHTIN CLAIMS			
CLAIM MAP			
Aurum Geological Consultants Inc.			NOVEMBER 1989
NTS 115 P/15	DRAWN BY NH	SCALE 1:31,680	FIGURE : 2

HISTORY

According to Paul and Rota (1981), no exploration activity is reported on the property prior to 1979. However they reported finding very old claim posts on East Ridge suggesting that the area had been previously examined. The Geological Survey of Canada reported finding galena-bearing veins at the north end of East Ridge in 1948 (Paul and Rota, 1981).

Immediately adjacent to the *Mahtin* Group, in the Mayo Mining District, E. Weiz and L. Havranek staked the *Ram* and *Wolf* claims in 1979 and reportedly carried out bulldozer trenching later that year.

CCH Resources Ltd. staked the *Mahtin 1-24* claims in 1979 to cover the source area of high tin, tungsten and arsenic values detected in stream sediments. In 1980 they carried out geological and geochemical surveys over the *Mahtin 1-24* claims and added the *Mahtin 25-32* claims on the eastern side of the mining district boundary. Due to poor geochemical results for tin and tungsten, and low metal prices, the claims were allowed to lapse in August, 1985.

The present *Mahtin 1-20* claim group is staked over the southeastern corner of the original *Mahtin 1-32* claims. They were staked to cover a circular 700 metre diameter arsenic soil anomaly (>500 ppm) over a quartz monzonite intrusive which hosts arsenopyrite-pyrite-stibnite mineralization reported by Paul (1981), Paul and Rota (1981), and Emond (1986). The current exploration model is focused on gold deposits that may be associated with this arsenic anomaly.

In July 1988, Total Energold staked the *Spra 1-85* claims immediately east of the *Mahtin 1-20* following a regional stream sediment geochemical release by the Geological Survey of Canada.

GEOLOGY

Regional Geology

The East Ridge area is situated within the McQuesten mineral belt (Aho, 1963) and is located on the northern limb of the east trending McQuesten anticline. The *Mahtin* property straddles the contact between the Yukon Group (unit Hqp) to the south and the Road River Group (unit OSDr) to the north (Figure 3). The metamorphosed and deformed Hadrynian Yukon Group is comprised predominantly of gritty quartzite, argillite, shale, and phyllite while the Ordovician, Silurian and Lower Devonian Road River Group is comprised of black graptolitic shale, chert, limestone, slate, phyllite and quartzite (Bostock, 1964; Gabrielse et al. 1977). The sedimentary units are intruded by Cretaceous granitoid plugs, stocks, sills and dykes (unit Kqm) during a period of plutonism and deformation.

The McQuesten mineral belt is 30-50 kilometers wide and extends from Clear Creek in the west to the Mayo area in the East (Emond 1986). It consists of a major transverse zone of ENE trending folds, Cretaceous felsic intrusions and related mineralization. The continuity of the McQuesten anticline throughout most of the McQuesten mineral belt, similarities in rock type, structure, and mineralization have led to the conclusion that the area is one metallogenic district. Intrusion of felsic stocks parallel to the fold axes indicates spatially and probably temporally related fault controlled mineralization (Emond, 1986). Mineralization consists of; tin-tungsten and gold, silver-lead-zinc veins, and silver-lead-antimony veins. Mineralization associated with felsic stocks has been found at Clear Creek (Robinson and Doherty, 1988), Arizona Creek, Boulder Creek, Haggart Creek, Highet Creek, Sunshine Creek, Scheelite Dome and Mayo Lake Creek (Aho, 1963; Emond, 1986).

Geology of the Mahtin 1-20 Claims

The most common sedimentary lithologies on the property are Ordovician-Silurian-Devonian Road River Group rocks. These rocks dip north to north-westerly and young to the north grading from shallow water siltstones, chert and limestone to a deeper water sequence composed primarily of argillite and calcarenite. Hadrynian psammitic rocks of the Yukon Group are found in the southeastern corner of the property, having been thrust northwards over the younger rocks (Paul, 1981).

This combined sedimentary package has been intruded by a large body of Cretaceous biotite quartz monzonite and a dyke swarm that trends east-west and ranges in composition from monzonite to syenite (usually porphyritic). Local crackle breccias are found adjacent to the porphyry dykes and in the periphery of the quartz monzonite intrusive body.

Paul and Rota (1981) inferred northwest trending faults in Horseshoe and Bolivia Creeks. These faults are at right angles to the thrust fault and presumably related to it. A large number of porphyry dykes parallel the thrust fault contact and the quartz monzonite intrusive body may have intruded along it suggesting a structural weakness (Paul, 1981).

A topographic linear visible on LANDSAT imagery crosses the upper reaches of Bolivia Creek and is thought to represent an ENE trending fault or fault zone. This fault would parallel the Road River Group - Yukon Group contact and continue to the ENE in pronounced depressions where mineralized float has been found.

MINERALIZATION

Mineralization discovered to date on the property commonly consists of variable amounts (<25% total sulfides) of pyrite, stibnite and arsenopyrite. These sulfides are found as constituents of; quartz and quartz-carbonate veins, breccia zones within the quartz monzonite intrusive, dykes, sediments and skarns. Mineralized exposures are often gossanous and may only be found as float in talus or felsenmeer.

Samples from the upper drainage area of Bolivia and Horseshoe Creeks returned anomalous values for all elements from a variety of rock types including quartz-arsenopyrite veining, skarn, altered intrusives, quartzites and breccia zones. Narrow, <10 cm wide, quartz-arsenopyrite veins occupying fractures are common within the quartz monzonite. Some areas of intense alteration and strong sulphide veining, such as the skarn located south of Bolivia Creek, returned low gold values.

A pervasive zone of clay altered quartz monzonite at the head of Bolivia Creek contains arsenopyrite and pyrite (<3% total) and is cut by narrow (<10 cm) quartz arsenopyrite veins. At least one and possibly several of the porphyritic dykes (K-feldspar) have been intensely altered to medium grained quartz sericite rocks (Paul, 1981).

The crackle breccias adjacent to many of the porphyry dykes, intrusive and in the quartz monzonite intrusive body (often close to the margin) are commonly mineralized with sulphides in the matrix (Paul 1981). One such breccia was located by Noranda in 1989 on the south end of the ridge separating Bolivia and Horseshoe creeks. Emond (1986) describes a tourmaline-arsenopyrite breccia containing silver within or adjacent to the same quartz monzonite stock. The breccia is believed to be steeply dipping, vein-like and presumably fault controlled.

Hornfels and skarn are moderately well developed adjacent to the quartz monzonite intrusive, which is itself cut by arsenopyrite bearing fractures. Pyrrhotite, pyrite, arsenopyrite and chalcopyrite are found in accessory amounts with almandine, diopside, calcite and tremolite in many skarn horizons on the claims. More massive skarns, or sulphide replacements of mainly pyrite and arsenopyrite, commonly brecciated, are found in a number of localities (Paul, 1981).

GEOCHEMISTRY

Previous Work

Over 1300 soil samples were collected in 1980 and 1981 on the claim group and analyzed for tin, tungsten, copper, silver and arsenic (Paul, 1981; Paul and Rota, 1981). Sample sites were spaced at 50 metre intervals on 100 metre line spacings oriented perpendicular to the claim lines.

This survey outlined a large circular arsenic anomaly (>500 ppm) in the southeast corner of the property (Figure 2). Coincident with the arsenic anomaly are numerous smaller silver (>3.0 ppm), tin (>20-50 ppm), tungsten (>12 ppm) and copper (>300 ppm) anomalies. A large part of this soil anomaly lies over the quartz monzonite intrusive body hosting abundant arsenopyrite as fracture fillings and as a constituent of skarns. None of the 1981 soil samples were analyzed for gold.

In July, 1988 the Geological Survey of Canada released regional stream sediment and water geochemical data from the area. The current *Mahtin* claims are in a region of highly anomalous W, Sn, F, Pb, Ag and moderately anomalous Au, As, and Sb (Hornbrook and Friske, 1988).

1989 Results

A total of 112 soil, 14 stream sediment and 53 rock, samples (179 samples of all types) were collected on the *Mahtin* claim group in 1989. Of these, Aurum collected 47, Total Energold 32, and Noranda 100 samples. All samples were analyzed for total gold and silver content, and over half the samples for 29 additional elements including As, W, Hg, Pb, Cu and Sb. Results for the work carried out by Aurum are shown on Figure 3. Total Energold and Noranda's results are shown on Figure 4. Complete analytical results and sample descriptions are included in the appendices.

Anomalous rock and soil samples are concentrated in the upper reaches of Bolivia and Horseshoe Creeks.

Rock Samples

Aurum collected 18 rock samples from outcrop, talus, felsenmeer and frost boils; 4 returned values >500 ppb gold. Rock samples of quartz-arsenopyrite veining returned the highest values for gold, 3741 ppb (sample #9122202) and silver, 23.6 ppm (sample #9122002).

Total Energold and Noranda collected a total of 35 rock samples of which 4 returned values ranging from 620 to 2920 ppb gold. These 4 samples also returned anomalous silver (up to 50.6 ppm), arsenic (up to 98207 ppm), antimony (up to 12411 ppm), bismuth (up to 637 ppm) and copper (up to 10559 ppm). Numerous samples returned anomalous values (>1000 ppm) for copper, arsenic, antimony, and silver (>20 ppm) and gold (up to 230 ppb).

Soil Samples

Soil samples were collected with the aid of a spade or mattock from the 'B' horizon wherever possible. Soil samples (total of 27) were collected by Aurum along two soil contour traverses and within saddles and topographic lineaments (Figure 3). The soil contour lines at the head waters of Horseshoe creek and along the east side of Horseshoe Creek valley tested the arsenic anomaly located in 1980-81 and an intrusive sediment contact. Geochemical results from soil samples returned numerous anomalous gold values including one (#123003) from the head of Bolivia Creek that returned 1213 ppb Au and 16.5 ppm Ag.

A total of 85 soil samples were collected by Total Energold and Noranda (Figure 4). Geochemical results included 12 samples over 100 ppb gold and a high of 610 ppb. Anomalous elements associated with high gold values include silver, arsenic, antimony and copper.

Stream Sediment Samples

A total of 14 stream sediment samples collected returned anomalous values for gold (up to 449 ppb), silver (up to 3.7 ppm), antimony (up to 630 ppm), arsenic (up to 50,000 ppm) and copper (up to 433 ppm). Although samples from both Horseshoe and Bolivia Creeks returned anomalous results, closely spaced samples in the upper drainage of Bolivia Creek returned the highest results.

CONCLUSIONS AND RECOMMENDATIONS

The *Mahtin* claims cover part of a Cretaceous quartz monzonite intrusive and felsic dykes hosted by limy sedimentary rocks of the Road River Group. Sulphide mineralization including arsenopyrite, pyrite, pyrrhotite, and chalcopyrite is found in and adjacent to the intrusive and dykes as fracture veinlets, breccia fillings, and as a constituent of skarns.

A large part of the arsenic in soil anomaly can be attributed to narrow quartz-arsenopyrite veins within the quartz monzonite intrusion. This anomaly also covers larger altered mineralized areas within and adjacent to the intrusive and talus filled gullies containing mineralized float.

Four fault structures have been found or inferred on the property; a large regional thrust fault, presumed related faults in the creeks draining the property and a postulated ENE trending fault lineament visible on LANDSAT imagery.

Results from work carried out in 1989 included 8 rock samples, mostly of quartz-arsenopyrite float, returning between 501 - 3741 ppb gold and anomalous silver, arsenic, antimony and copper values. Soil and stream sediment samples from the upper drainage of Bolivia and Horseshoe Creeks returned numerous anomalous values for the above elements.

The head of Bolivia Creek is of particular interest since soil samples returned up to 1213 ppb gold in an area underlain by limy sediments and clay altered quartz monzonite and thought to be cut by large fault structures.

Mineralized rock samples (mostly quartz-arsenopyrite float), soil and stream sediment samples returned significant gold values and the property is underlain by favorable lithologies and structures. Therefore the property should be further explored for gold mineralization.

The following is recommended:

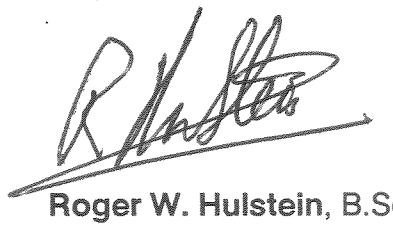
1. Compile a 1:5,000 scale orthophoto map of the Mahtin property incorporating all available geological, geochemical and remote sensing data to better identify potential exploration targets.

2. Further exploration consisting of prospecting, geological mapping and rock and soil geochemistry should be carried out in the upper reaches of Bolivia Creek and other areas where gold-arsenic anomalies, known mineralization, fault structures and Tertiary-Cretaceous felsic intrusives are found.

3. A claim survey is recommended to determine possible claim fractions and adjacent property boundaries.

4. Any further work (geophysics, trenching, etc.) is contingent on results of the above work.

Respectfully submitted,



November 17, 1989

Roger W. Hulstein, B.Sc.

REFERENCES

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Paul, B., Rota, D., 1981. Geochemical Survey, August 4-7, 1981, Mahtin Claims 25-32: CCH Minerals Ltd., NTS 115P-15, Dawson Mining District, D.I.A.N.D. Assessment Report #090956, December 15, 1981.

Robinson, S.D. and Doherty, R.A., 1988. Geological, Geochemical, Geophysical and Diamond Drilling, 1988 Summary Report on the Rum, Rye and Roll Claims, Dawson Mining District, Yukon Territory: Private Report by Aurum Geological Consultants Inc. for Goldrite Mining Corporation.

STATEMENT OF QUALIFICATIONS

I, ROGER W. HULSTEIN, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 412-675 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. M.J. Moreau.

5. I am the author of this report on the Mahtin 1-20 claims, which is based on my personal examination on the ground July 5, 1989, information supplied to me by Total Energold Corporation, Noranda Exploration Company, Limited and on referenced sources.

November 17, 1989

Roger W. Hulstein, B.Sc.

STATEMENT OF COSTS

Assessment Work Valuation: Mahtin Property

1. Geological and Geochemical

A. Fieldwork

Aurum Geological Consultants Inc.	
R. Hulstein, B.Sc.,of Whitehorse, Yukon.	
July 4-5,1989; 1.5 days @ $300.00/day:	$450.00
J. Zbeetnoff, of Vancouver, B.C.	
July 4-5, 1989; 1.5 days @ $250.00/day:	375.00
Noranda Exploration Company, Limited	
J. Duke, M.Sc. of Whitehorse, Yukon	
July 5, 1989; 1 day @ $250.00/day:	250.00
G. Wober, of Vancouver, B.C.	
July 5, 1989; 1 day @ $150.00/day:	150.00
R. Young, of Vancouver, B.C.	
July 5, 1989; 1 day @ $150.00/day:	150.00
B. Bark assistant, of Vancouver, B.C.	
July 5, 1989; 1 day @ $150.00/day:	150.00
Total Energold Corporation	
R. Bassnett, M.Sc., of Whitehorse, Yukon	
June 29-30, 1989; 2 days @ $250.00/day:	500.00
T. Tucker, B.Sc., of Whitehorse, Yukon	
June 29-30, 1989; 2 days @ $200/day:	400.00

B. Geochemical Analysis

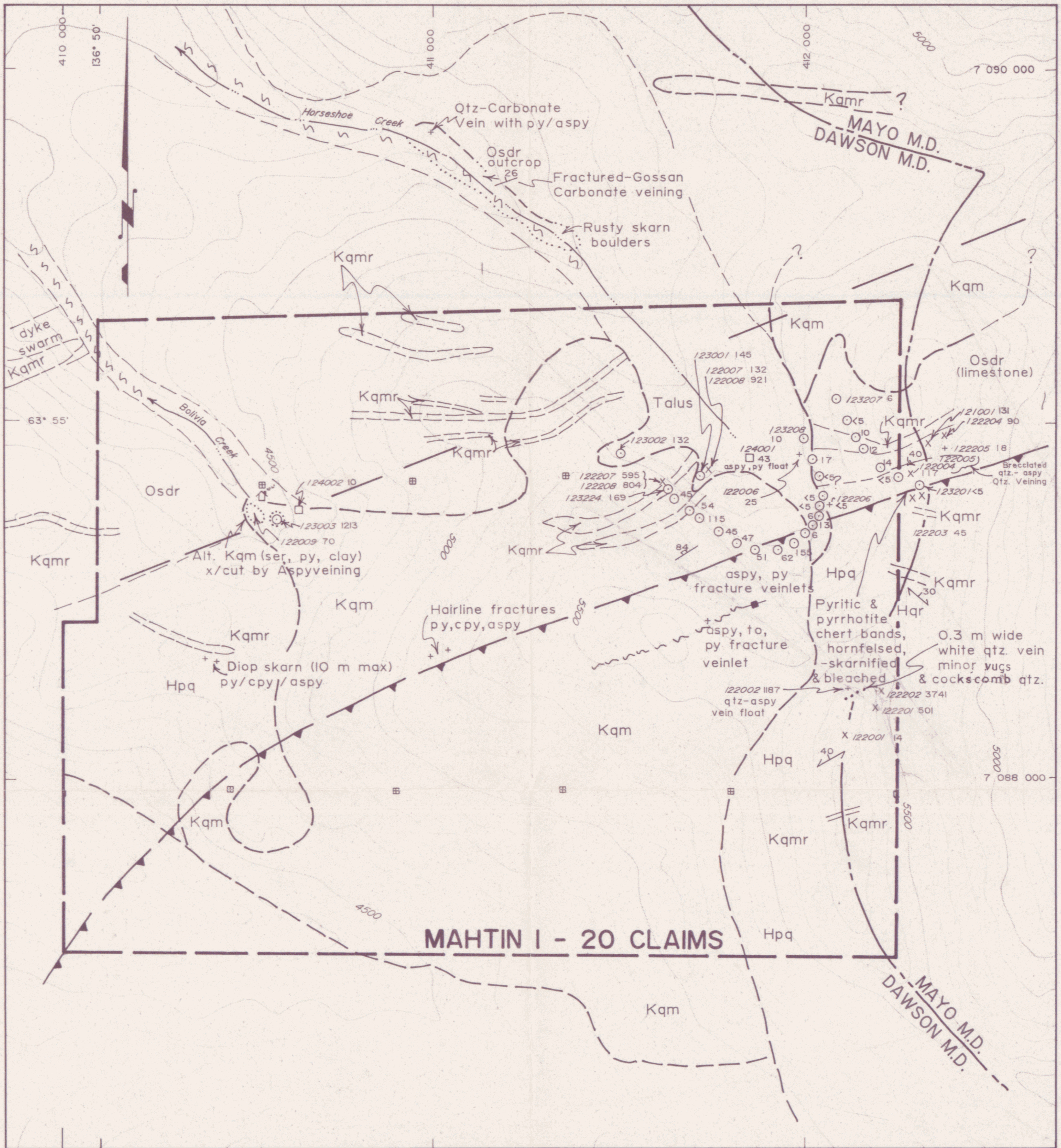
53 rock, 112 soil, and 14 stream sediment samples:	3,580.00

C. Support Costs

Groceries and Meals;	52.08
Camp costs; 8 mandays @ $25.00/manday:	200.00
Sample bags, flagging tape & thread:	86.50
Gasoline & Truck Rental:	290.78
Radio and phone charges:	25.00
Helicopter:	3,509.50

D. Research and Report Preparation

R. Hulstein, B.Sc. April, May, Oct., 1989:	2,243.78
Total Valuation of 1989 Assessment Work:	**$12,412.64**



Geology modified after Paul, 1981

LEGEND :

SYMBOLS

- geological contact (defined, assumed)
- fault (approximate)
- 30 — attitude of foliation (inclined)
- 84 — attitude of veining (inclined)
- thrust fault (teeth on upper package)
- area of outcrop
- claim boundary
- X — rock sample location
- □ — stream sediment sample location
- ⊙ — soil sample location
- stream
- 4500 — elevation contour (int. 100')
- ⊞ — Mahtin claim post
- camp site
- topographical linear (landsat imagery)

LITHOLOGIES

CRETACEOUS

Kqm	quartz monzonite; Kqmr: quartz feldspar porphyry "rhyolite"

ORDOVICIAN, SILURIAN, LOWER DEVONIAN
ROAD RIVER FORMATION

Osdr	black graptolitic shales, chert, limestone limestone, slate, phyllite and quartzite

HADRYNIAN
YUKON GROUP

Hqp	gritty quartzite, argillite, shale and phyllite

GEOCHEMICAL RESULTS

123002 — sample no.; 136 — Au (ppb)

Abbreviations :
aspy - arsenopyrite
py - pyrite
to - tourmaline
cpy - chalcopyrite

100 0 100 200 300 400 500 600
SCALE IN METRES

230

M. J. MOREAU ENTERPRISES LTD.

MAHTIN CLAIMS

GEOLOGY & GEOCHEMISTRY

Aurum Geological Consultants Inc.		November 1989	
NTS 115 P / 15	DRAWN: RH JF	SCALE 1:10,000	FIGURE 3

MAHTIN I - 20 CLAIMS

SOIL LINE CONTINUES TO 13600 E

SOIL LINE CONTINUES TO 17000E

410 000 | 411 000 | 412 000

136° 50'

63° 55'

7 090 000

7 088 000

Horseshoe Creek

Bolivia Creek

MAYO M.D.

DAWSON M.D.

90 ppb Au

24ppb Au

91 ppb Au

56 ppb Au

(RL7-5A)

(RL7-5B)

(RL7-5BB)

(RL7-5B)

8000E

10000E

11000N

14000

20000E

5000

4500

34187/16
34186/1
34185/3
TIN 89-3/42
TIN 89-1/74
34184/4
34183/620
E1270 / < 0.002
E1271 / < 0.002
E1272 / < 0.002
TIN 89-2/70
34182/20
34181/6
34180/2
34179/11
34178/149
34177/1960
34176/6
53973/46
53974/33
53975/1
53917/108
53916/97
53913/3
53914/230
53915/1
89-15/78
89-10/127
89-14/50
TIN 89-7/74
89-9/213
TIN 89-6/449
0.007 E1273
89-13/610
89-16/43
89-11/170
89-17/84
89-12/418
TIN 89-5/130
E1274/0.002
TIN 89-8/138
89-8/142
89-1/21
89-2/33
89-3/45
89-4/47
89-5/88
89-6/116
89-7/196
E1269 < 0.002
53908/84
53912/21
53909/148
53911/7
53910/3
53905/113
53906/23
53904/870
53903/69
53902/11
53901/2920

LEGEND

SYMBOLS

- claim boundary
- rock sample location
- stream sediment sample
- soil sample location
- soil sample line
- stream
- elevation contour (interval 100')

GEOCHEMICAL RESULTS

E 1270 / 0.002
↑ sample no. ↑ Au. oz. per tonne

53909 / 148
↑ sample no. / ↑ Au. (ppb)

Geochemical Data supplied by: TOTAL ENERGOLD CORP.
NORANDA EXPLORATION CO. LTD.

100 0 100 200 300 400 500 600
SCALE IN METRES

229

M. J. MOREAU ENTERPRISES LTD.

MAHTIN CLAIMS

GEOCHEMISTRY

092793

Aurum Geological Consultants Inc.			November 1989
NTS 115P/15	DRAWN:RJS	Scale 1:10,000	FIGURE 4

APPENDIX A

Rock Sample Descriptions

ROCK

AURUM GEOLOGICAL CONSULTANTS INC.

ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: JULY 5/89 Project: MAMTIN #12 Area: EAST RIDGE Page 1 of

Sample No.	Location	Description	Attitude	Width	Analytical Results	
					Au ppb	Ag ppm
#122001	ON E. RIDGE NEAR S. CLAIM LINE (25 m S)	FRACTURED AND VEINED GREY QTZ - FELDSPAR SCHIST AND GNEISS. 10% BARITE - QTZ VEINING, MICROVEINING AND FILLINGS. LIMONITE ON OPEN SPACES AND FRACTURES	FLOAT	FLOAT	14	2.3
#122002	ON E RIDGE at BULL QTZ VN (N. OF #122001) - SAME SITE AS J.Z. #122201 & MORRISON #34177	WHITE QUARTZ VEINING CUTTING QUARTZITE CONTAINING 2-5% Aspy. FRACTURED & BRECCIATED, HEMATITE STRINGERS.	FLOAT	15-20 cm	1187	23.6
#122003	IS SADDLE ABOVE HORSE SHOE CREEK.	FLOAT OF QTZ - Aspy VEIN ~5-10% BRIGHT Aspy AS BLEBS AND DISSEMINATIONS. - HAND SIZED PIECE OF FLOAT	FLOAT	—	180	11.2
#122004	IN SADDLE ON E. RIDGE 50m S OF LIMESTONE O.C.	BRECCIATE QTZ VEINING CONTAINING <5% Aspy. FLOAT OF RHYOLITE ± ALTERED AND BRECCIATED VEINED RHY IN AREA WITH 5% QTZ EYES	FLOAT	—	117	13.2
#122005	SAME AS 004	DARK GREY FRACTURED BRECCIATED CHERT. <5% DISSEMINATED AND STRINGERS OF Po,	FLOAT	—	40	0.4

Rock

AURUM GEOLOGICAL CONSULTANTS INC. ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: July 89 Project: #12 Area: Page 2 of

Sample No.	Location	Description	Attitude	Width	Analytical Results Au ppb	Ag ppm
121 001	LOCATED ABOVE #122204 ON LST O.C.	COARSE GRAINED CALCITE (2cm X-TALS) VEINING.	—	0.30m	131	<0.1
122006	BELOW PASS ON E. RIDGE - 50m BELOW J.Z. #123008	RUSTY WEATHERING - VUGGY (LEACHED) QTZ BRECCIA, "DRY-SHATTER" BRECCIA, SIMILAR TO FAULT Bx. Tr Aspy? AND WEATHERED OUT Py.	FLOAT —	-	25	0.8
122007	75m NORTH ON CONTOUR FROM MINERAL #7, P#2.	GRAPEFRUIT SIZE PIECE OF FLOAT CONSISTING OF: Aspy (30%), QTZ, TREMOCITE/ ACTINOLITE.	FLOAT	—	132	1.6
122008	25m UPSLOPE FROM #2007	HORNFELSED SILTSTONE BOULDER, 60% PO. ALSO FLOAT OF Aspy & Py SKARN, ASSOCIATED WITH Fe CARB. ALT "OYLE ROCK".	FLOAT	—	921	7.5
122009	IN BOLIVIA CK. S. BANK @ UPPER FORK.	FLOAT / SUBCROP OF ASPY VEINING IN HIGHLY ALTERED (SER - PY) Kqm, 2% Aspy IN SAMPLE. - ALT Kqm O.C. 50m IN LENGTH.	FLOAT	10 - 15cm	70	0.8

SOIL

AURUM GEOLOGICAL CONSULTANTS INC. ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: July 89 Project: #12 Area: Page 1 of 1

Sample No.	Location	Description	Attitude	Width	Analytical Results	
					Au ppb	Ag ppm
#123201 J.Z #	SAME SITE AS 122004 & 005	- SAMPLE LINE ENDS 350m TO N.	—	—	<5	0.2
SILT #124001	HORSE JAW CK.	GOOD SILT - SAND.			43	0.5
#123001	LOCATED JUST ABOVE #2008	Fe - CARBONATE ALTERED "DYKE ROCK", CONTAINS MINOR - TR Aspy & FUSCHITE - U. INTERESTING GULLY - LOTS OF MINERALIZED FLOAT			145	3.1
#123002	See MAP -				132	2.4
SILT #124002	UPPER BOLIVIA CREEK.	SILT - SAND			10	0.1
#123003	UPPER FORK IN BOLIVIA CK.	Pebbles, silt - RUSTY RED TALUS FINES.			1213	16.5

Rock

AURUM GEOLOGICAL CONSULTANTS INC. ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: July 5, 1999 Project: MAHTIN Area: Page 1 of

Sample No.	Location	Description	Attitude	Width	Analytical Results	
					Au (ppb)	Ag (ppm)
9122201	MAHTIN 20	Quartz-Aspy vein: vuggy white quartz vein (1.5-2.0cm) hosts 15% massive Aspy stringers.	Grab from talus		501	9.1
9122202	MAHTIN 20	Quartz-Aspy vein: ~~vein~~ vuggy quartz vein upto 30-~~40~~cm wide. Float from vein contains 25-30% vuggs and 2-5% clotty and stringers of massive Aspy	grab from talus		3741	9.2
9122203	MAHTIN 19	Quartz monzonite: Strongly altered to clay and limonite, 0-1% weathered Py. Sample taken as composite grab from frost boils.	Comp grab from frost boil		45	0.5
9122204	MAHTIN 19	Quartz-Aspy vein: Quartz is light grey to white, Aspy occurs in 0.5cm bands (upto 60%) in a zone >6cm in width.	grab from talus		90	0.5
9122205	MAHTIN 19	Argillite (?): dark gray very fine grained, moderately silicified hosts 5% disseminated Py and 10% clotty white to light vein quartz			18	0.4

AURUM GEOLOGICAL CONSULTANTS INC. ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: July 5 1989 Project: MAHTIN Area: Page 2 of

Sample No.	Location	Description	Attitude	Width	Analytical Results	
					Au (ppb)	Ag (ppm)
9122206	MAHTIN 20	Quartz monzonite / rhyolite(?): Strongly sheared and altered to clay, moderate limonitic alteration, 0-trace Py as clotts, 2% open vuggs parallel shear fabric.	grab from talus		<5	0.4
9122207	MAHTIN 17	Quartz vein: dark to medium smoky grey, 7-10% massive clotts and stringers of Aspy	grab from talus		595	5.2
9122208	MAHTIN 17	Quartz vein: 10-15% massive clotts to subhedral grains of Aspy, trace-3% clotty Py, 0-2% very fine grained massive stringers to fine grained accicular clusters of black tourmaline. Quartz is very dark gray to white.	grab from talus		804	3.1

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 115 P/15

PROPERTY MAHTIN PROPERTY EVALUATION

DATE July 5/09

PROJECT 312

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐ Ag	G☐ A☐ As	G☐ A☐ Sb	G☐ A☐ Au	G☐ A☐	G☐ A☐	SAMPLE BY
53973	breccia w/ float with some clay altered clasts near crest of ridge on claim line. Pockets of stringer rock up to 2 cm lengths.		FLOAT			1.7	229	6081	46			GRAB
53974	Rusty dacite intrusive slightly magnetic, spots, <1% sulphides in form of pyrite, fair clay altered w/ crystals.	<1%	FLOAT			.8	209	3	33			
53975	clay altered rusty qtz-feldspar intrusive		FLOAT			.3	38	92	1			
53901	Fe-oxide weather surface on siliceous brecciated (?) float 1mm wide stringers of pyrite and arsenopyrite ~1%. Also ~2% 1mm needles of arsenopyrite in siliceous matrix. One vug lined with qtz xtals was seen to have a 5mm cube shape (?) clay altd. xtal remains of actinolite(?) on rusty surface.	3%	FLOAT			1.7	5775	12411	2920			

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 115 P/15

PROPERTY IMAHTIN

DATE July 5/89

ROCK SAMPLE REPORT

PROJECT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
53902	Diorite intrusive with 1½ mm vein	1%	FLOAT			Ag	As	Sb	Au			GCR[illegible]
	of sulphides transecting rock.					.5	807	17	11			↓
	Pyr and arsenopyrite identified											
	Felsenmeer?											
					Cu						Bi	
53903	Mineralized zone within granitic	10%	GRAB		728	7.7	46197	161	69	Fe %	42	
04	intrusive 40 m long. Samples				10559	50.6	98207	267	670	13.34	637	
05	taken at ≈10 m intervals. Fine				650	9.3	99999	244	113	13.93	94	
06	grained arsenopyrite + pyrite in				484	3.1	7732	25	23	4.26	14	
	breccia zones as well as ½ to 1cm											
	veins. Zone trends 056° in form of											
	Felsenmeer O.C. filling fractures											
	etc in the intrusive.											
53908	Bag of rocks taken randomly from		FLOAT			3.2	705	37	84			
	numerous gossanous frost boils											
	in saddle. Hand specimen is not very											
	representative of sample as sample											
	is very heterogenous mixture.											
					Cu					Bi		
53909	Rusty [illegible] amongst bedded silicified		FLOAT		2570	73.0	48779	405	148	551		
	Lmst ([illegible]) Some pyrite + arseno											
	≈1%. No hand specimen											

3/8

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 115 P/15

PROPERTY MATTIN

DATE July 5/89

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☑ A☐ Ag	G☑ A☐ As	G☑ A☐ Sb	G☑ A☐ Au	G☐ A☐	G☐ A☐	SAMPLED BY
53910	white bleached intrusive with stock-work of dark grey siliceous veins containing ≤ 1% pyr. Oly eyes <1%	<1%	FLOAT			6.9	1412	20	3			GERNOT W ↓
53911	bleached intrusive to grey siliceous veining containing pyrite + arseno ± 1% Sphalerite(?) on top of ridge.	1%	GRAB			21.5	9686	67	7			
53912	Rusty weathered bleached intrusive with low thickness grey veins containing finely disseminated sulphides including pyrite and arsenopyrite.	2%	GRAB			22.3	3326	162	21			
NOTE	SAMPLES # 53909 → # 53912 lie in a trend of 086° and are outlined sporadically by float + bleached rusty outcrop. 50m between #53909 and #53910 with #53911, #53912 lying between #53909 and #53910											

G = GEOCHEM A = ASSAY

4/8

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 115 P/15

PROPERTY Mahtin

DATE July 5/89

ROCK SAMPLE REPORT

PROJECT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☑ A☐ Ag	G☑ A☐ As	G☑ A☐ Sb	G☑ A☐ AU	G☐ A☐	G☐ A☐	SAMPLED BY
53913	light grey/blue intrusive [illegible] weathered surface. FLOAT [illegible] gossanous talus slope next to crk. <1% pyrite finely disseminated also the odd [illegible] blebs of pyrite.	[illegible]	FLOAT			.6	290	19	3			GERSONDE ↓
53914	light [illegible] dark grey siliceous rock [illegible] 1→2mm diam. arsenopyrite and pyrite veins, some calcopyrite. total sulphides 2-3% FLOAT NEXT to #53913 on gossanous talus slope	2-3%	FLOAT			2.5	26749	102	230	Bi 181		
53915	light grey clay altd. rock [illegible] some silica present as blebs, a few rust pockets as well. 3m above #53914. talus float		FLOAT			.2	541	26	1			
53916	10cm wide siliceous vein in O.C. [illegible] 1cm wide veins of arsenopyrite pyrite, and schorlite. Gossanous O.C. next to crk up from old camp.	[illegible]%	GRAB	10cm		.9	8777	183	97			

G = GEOCHEM A = ASSAY

APPENDIX B

Analytical Methods and Reports

ACME ANALYTICAL LABORATORIES LTD.
852 East Hastings Street, Vancouver, B.C., V6A 1R6

Analytical Methods

Sample Preparation

Rock samples are crushed to -3/16", then 1/2 lb of crushed material is pulverized to -100 (inch) mesh (98%).

Analytical Methods

For Au; 20 or 30 gram samples are fused ignited at 600°C, digested with hot aqua regia, extracted by MIBK and, analyzed by graphite furnace atomic absorption.

For;

Element	Detection
Ag	0.1 ppm
Cd,Co,Cr,Cu,Mn,Mo,Ni,Sr,Zn	1 ppm
As,Au,B,Ba,Bi,La,Pb,Sb,Th,V,W	2 ppm
U	5 ppm
Al,Ca,Fe,K,Mg,Na,P,Ti;	0.01%

For the above elements the following procedure is followed:
0.5 gram samples are digested with 3 mls 3-1-2 HCL-HNO_3-H_2Oat 95°C for one hour then diluted to 10 ml with water. Thisleach is near total for base metals, partial for Mn,Fe,Sr,Ca, P,La,Cr,Mg,Ba,Tl,B,W and limited for Na,K, and Al. Solubility limits Ag,Pb,Sb,Bi, and W for high grade samples.

Yukon Geo (JD)

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 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR 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 ROCK P2-P3 SOIL P4 SILT AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: JUL 13 1989 DATE REPORT MAILED: July 21/89 SIGNED BY. C. Leong ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-051 312 File # 89-2147 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	Hg PPB
RL 7-SB 34175	1	135	15	26	.2	9	6	28	6.30	2711	5	ND	17	4	1	251	6	8	.01	.049	37	7	.07	52	.01	9	.66	.01	.03	1	6	30
RL 7-SB 34177	3	54	7	10	.8	9	2	22	2.41	3342	5	2	1	6	1	2142	4	1	.02	.005	5	4	.01	56	.01	12	.10	.01	.03	1	1350	20
RL 7-SB 34178	2	213	4	15	1.7	4	3	93	3.01	25	6	ND	17	31	1	2	17	63	.38	.081	27	87	1.24	237	.21	2	2.00	.06	.11	4	149	5
RL 7-SB 34179	2	36	9	64	.3	35	10	131	3.45	24	5	ND	19	13	1	10	2	33	.02	.013	40	26	.77	37	.09	2	2.57	.01	.50	1	11	5
RL 7-SB 34180	1	328	10	13	.9	41	16	67	4.54	345	5	ND	2	252	1	2	5	60	3.43	.149	7	22	.44	54	.09	9	6.05	.37	.06	1	2	5
RL 7-SB 34181	2	16	25	39	.3	25	10	95	2.61	31	5	ND	11	264	1	6	2	36	4.38	.043	18	45	.30	169	.15	6	7.22	.09	.55	1	6	5
RL 7-SB 34183	2	130	4350	32	10.7	6	4	50	2.64	1061	5	ND	4	48	2	1692	25	5	.03	.026	15	7	.03	62	.01	25	.22	.01	.06	1	520	70
RL 7-SB 34184	1	22	7	38	.2	17	6	236	1.77	40	5	ND	7	334	1	23	2	14	1.57	.035	20	19	.71	224	.01	11	1.51	.06	.13	1	4	5
RL 7-SB 34185	1	20	50	35	.4	8	5	294	2.02	71	7	ND	25	9	1	6	2	18	.33	.077	26	16	.02	16	.01	5	.57	.01	.01	1	3	10
RL 7-SB 34186	1	41	9	23	.2	9	4	290	1.24	76	5	ND	5	494	1	15	2	9	19.64	.032	12	11	.35	313	.02	7	1.36	.12	.07	1	1	5
RL 7-SB 53901	2	63	31	15	1.7	11	8	95	2.27	5775	5	3	3	14	1	12411	14	2	.51	.006	5	8	.12	48	.01	6	.12	.01	.05	1	2920	20
RL 7-SB 53902	3	90	11	32	.5	10	6	176	2.71	807	8	ND	26	19	1	17	11	48	.43	.077	46	46	.92	161	.18	4	1.29	.03	.50	15	11	5
RL 7-SB 53903	2	728	11	16	7.7	12	19	25	5.92	46197	5	ND	20	7	1	161	42	1	.09	.042	6	5	.01	36	.01	11	.10	.01	.11	1	69	20
RL 7-SB 53904	1	10559	49	153	50.6	12	33	16	13.34	98207	5	ND	17	17	10	257	637	1	.08	.028	5	2	.01	13	.01	39	.09	.01	.35	1	670	110
RL 7-SB 53905	2	650	81	30	9.3	14	41	28	13.93	99999	7	ND	14	17	1	244	94	1	.05	.034	5	4	.01	11	.01	17	.10	.01	.09	9	113	10
RL 7-SB 53906	3	484	24	20	3.1	10	10	38	4.26	7732	5	ND	19	7	1	25	14	1	.08	.051	9	6	.01	43	.01	26	.10	.01	.08	2	23	20
RL 7-SB 53908	2	83	22	45	3.2	20	7	431	3.94	705	5	ND	10	43	2	37	2	20	5.87	.039	24	11	.27	122	.02	18	.68	.02	.09	2	84	30
RL 7-SB 53909	1	2570	387	97	73.0	7	7	115	22.59	48779	5	ND	7	21	4	405	551	8	.22	.035	6	7	.04	31	.01	15	.30	.01	.12	3	148	130
RL 7-SB 53910	3	286	105	17	6.9	4	1	32	2.54	1412	5	ND	14	28	1	20	4	1	.09	.054	20	6	.02	115	.01	31	.21	.01	.13	1	3	10
RL 7-SB 53911	3	321	387	45	21.5	6	5	29	3.82	9686	5	ND	13	10	1	67	36	1	.05	.044	4	5	.03	110	.01	50	.27	.01	.07	1	7	10
RL 7-SB 53912	1	282	116	16	22.3	6	10	64	10.13	33216	5	ND	5	10	1	152	70	2	.03	.042	3	5	.02	66	.01	47	.11	.01	.05	1	21	50
RL 7-SB 53913	3	130	11	44	.6	27	8	492	3.68	290	5	ND	20	408	1	19	2	35	4.35	.135	50	34	1.88	53	.01	10	.20	.01	.14	2	3	60
RL 7-SB 53914	3	52	115	112	2.5	13	21	246	3.54	26745	5	ND	14	90	5	102	181	2	1.13	.073	9	5	.29	61	.01	21	.17	.01	.09	1	230	10
RL 7-SB 53915	2	24	18	15	.2	7	3	230	.72	541	5	ND	17	15	1	26	2	1	.42	.078	19	6	.02	27	.01	95	.11	.01	.03	1	1	5
RL 7-SB 53916	3	52	96	76	.9	8	15	34	7.53	87777	5	ND	3	9	2	183	46	1	.09	.010	2	5	.03	19	.01	14	.04	.01	.02	1	97	30
RL 7-SB 53973	1	59	2	9	1.7	12	6	21	1.01	229	5	ND	8	5	1	6081	2	2	.03	.005	25	7	.02	38	.01	9	.31	.01	.15	1	46	10
RL 7-SB 53974	2	242	3	38	.8	51	20	132	3.38	209	5	ND	15	35	1	3	12	56	.30	.053	22	82	1.21	193	.19	2	1.88	.05	.75	7	33	5
RL 7-SB 53975	2	89	5	10	.3	6	3	27	2.87	38	5	ND	13	3	1	92	2	15	.01	.013	27	14	.04	45	.01	5	.51	.01	.13	1	1	50
STD C/AU-R	18	62	41	131	6.8	67	30	1020	4.21	38	16	7	38	50	19	41	21	59	.52	.093	39	53	.93	136	.07	34	2.04	.06	.13	12	530	1300

Rock
Rock
Rock

* ASSAY REQUIRED FOR CORRECT RESULT *

for Cu, As > 1%
Ag > 30 ppm
Sb > 1000 ppm

Nice, Mhse

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	Hg PPB
RL 7-5A 17000E	2	18	12	41	.1	10	4	93	1.93	20	5	ND	1	11	1	2	2	51	.11	.049	9	19	.20	57	.04	2	.38	.01	.03	1	6	40
RL 7-5A 17100E	2	30	16	64	.1	27	8	200	2.67	22	5	ND	2	10	1	2	2	45	.09	.039	13	22	.40	123	.04	4	1.65	.01	.04	1	5	30
RL 7-5A 17200E	2	18	17	76	.1	27	9	330	2.56	60	5	ND	4	75	1	2	2	36	1.41	.038	21	28	.61	169	.04	2	2.16	.05	.05	1	62	30
RL 7-5A 17300E	1	22	13	71	.1	21	9	279	2.39	13	5	ND	5	56	1	2	2	35	.85	.070	18	22	.53	127	.06	9	1.37	.04	.06	1	8	20
RL 7-5A 17400E	1	34	17	90	.3	25	10	257	2.71	22	5	ND	5	61	1	2	2	41	1.15	.052	19	25	.74	139	.07	5	2.07	.05	.10	1	11	30
RL 7-5A 17500E	1	20	24	70	.1	22	9	282	3.08	19	5	ND	2	21	1	2	2	46	.28	.046	13	24	.45	207	.04	5	1.95	.01	.05	1	4	20
RL 7-5A 17600E	1	107	6	71	.2	21	8	385	2.16	75	5	ND	1	46	1	2	3	21	1.41	.055	14	19	.33	255	.03	4	1.60	.02	.05	1	9	220
RL 7-5A 17700E	1	76	14	100	.1	30	11	394	3.19	40	5	ND	9	81	1	2	2	46	1.26	.081	22	34	.67	354	.08	6	2.74	.03	.08	1	20	40
RL 7-5A 17800E	6	150	15	72	1.2	14	12	1543	1.44	61	5	ND	1	52	2	4	4	30	1.72	.135	12	13	.36	220	.02	15	1.18	.02	.05	1	16	110
RL 7-5A 17900E	1	88	58	98	2.2	22	9	273	2.87	1148	5	ND	2	25	1	5	15	35	.44	.054	14	21	.40	123	.03	7	1.55	.01	.05	1	91	40
RL 7-5A 18000E	1	38	28	72	1.0	15	7	188	2.68	459	5	ND	1	31	1	5	12	36	.25	.150	12	22	.40	118	.03	2	1.74	.01	.05	1	5	30
RL 7-5A 18100E	1	62	20	89	.2	25	11	355	2.39	282	5	ND	5	62	1	6	2	36	1.11	.063	19	24	.65	550	.05	4	1.59	.04	.07	1	58	20
RL 7-5A 18200E	1	16	5	23	.1	4	2	56	.79	45	5	ND	1	7	1	3	2	21	.06	.022	18	7	.09	47	.01	5	.42	.01	.04	1	6	10
RL 7-5A 18300E	1	45	12	69	.2	20	8	387	2.43	47	5	ND	7	23	1	2	2	37	.26	.075	23	22	.43	152	.06	2	1.16	.01	.07	3	3	20
RL 7-5A 18400E	1	29	15	57	.3	15	7	259	2.59	37	5	ND	10	25	1	2	2	42	.25	.077	25	31	.59	121	.09	5	1.69	.01	.10	5	2	30
RL 7-5A 18500E	3	26	9	53	.4	16	7	386	2.31	66	5	ND	3	24	1	5	2	38	.33	.074	27	25	.44	241	.06	7	1.11	.01	.07	11	11	30
RL 7-5A 18600E	2	35	15	72	.1	19	9	357	2.87	135	5	ND	7	21	1	4	2	46	.09	.070	17	28	.54	126	.06	3	1.39	.01	.09	23	1	20
RL 7-5A 18700E	2	22	14	90	.2	18	7	345	2.83	44	5	ND	2	16	1	4	2	49	.17	.055	17	26	.40	167	.07	3	1.23	.01	.07	3	4	50
RL 7-5A 18800E	1	23	10	67	.1	21	7	363	2.56	25	5	ND	3	15	1	2	2	42	.12	.058	20	25	.45	127	.07	7	1.28	.01	.08	5	6	30
RL 7-5A 18900E	5	160	39	94	1.4	13	15	589	4.60	1782	6	ND	22	64	1	28	33	38	.67	.093	62	25	.92	402	.04	2	2.55	.01	.05	1	24	20
RL 7-5A 19000E	1	26	9	72	.1	23	8	301	2.77	54	5	ND	5	11	1	2	2	42	.12	.031	22	24	.42	101	.06	5	1.33	.01	.05	2	17	40
RL 7-5A 19100E	1	54	7	73	.1	21	7	236	2.41	128	5	ND	8	22	1	17	2	39	.30	.074	28	24	.47	123	.07	2	1.31	.01	.06	6	6	30
RL 7-5A 19200E	1	186	11	72	.3	18	7	239	2.63	696	5	ND	9	48	1	6	2	40	.24	.081	35	26	.53	122	.07	2	1.31	.01	.09	9	9	10
RL 7-5A 19300E	1	98	12	65	.4	22	9	256	2.64	69	5	ND	8	19	1	2	2	39	.28	.079	25	25	.52	96	.07	2	1.32	.01	.07	3	4	20
RL 7-5A 19400E	1	100	10	69	.1	18	7	249	2.53	459	5	ND	9	30	1	4	2	38	.39	.077	31	25	.55	163	.07	2	1.15	.01	.08	3	5	10
RL 7-5A 19500E	1	76	14	75	.4	20	8	327	3.06	214	5	ND	12	23	1	6	2	42	.33	.081	32	29	.53	182	.07	9	1.35	.01	.07	2	7	30
RL 7-5A 19600E	1	56	14	60	.1	19	7	211	2.54	70	5	ND	11	25	1	2	2	40	.37	.077	30	29	.55	177	.09	2	1.22	.01	.10	1	13	20
RL 7-5A 19700E	1	71	6	76	.1	38	13	330	4.02	168	5	ND	6	25	1	18	2	55	.19	.063	25	48	.82	232	.09	6	2.54	.01	.21	2	13	90
RL 7-5A 19800E	2	102	12	56	.1	21	11	195	4.79	301	5	ND	13	14	1	76	3	53	.03	.044	34	40	.52	123	.06	4	1.93	.01	.29	1	3	10
RL 7-5A 19900E	1	58	13	79	.1	35	16	264	4.13	117	5	ND	5	15	1	109	5	38	.12	.056	21	24	.42	94	.05	7	1.32	.01	.12	1	15	30
RL 7-5A 20000E	1	20	12	55	.1	16	5	187	2.49	71	5	ND	1	8	1	13	2	28	.08	.036	13	18	.30	48	.03	5	1.00	.01	.04	1	1	20
RL 7-5B 13600N	1	21	27	81	.2	29	10	372	2.55	11	5	ND	2	69	1	2	2	35	1.40	.055	19	26	.54	193	.04	4	2.31	.04	.05	1	1	60
RL 7-5B 13500N	1	14	37	78	.1	20	9	357	2.73	12	5	ND	1	47	1	2	2	42	.82	.061	16	25	.37	207	.04	3	2.78	.02	.04	1	1	50
RL 7-5B 13400N	1	25	28	99	.3	29	13	313	3.12	9	5	ND	4	46	1	2	2	42	.52	.037	18	27	.71	153	.06	6	2.15	.01	.09	1	5	20
RL 7-5B 13300N	1	46	61	134	.6	32	11	281	3.59	17	5	ND	4	63	1	2	2	54	1.06	.069	18	30	.80	216	.09	7	1.99	.03	.11	1	4	40
RL 7-5B 13200N	1	44	41	174	.3	24	15	250	5.13	27	5	ND	5	151	1	8	2	80	1.63	.078	17	37	1.47	398	.13	2	4.19	.03	.55	1	3	10
STD C/10-6-87	18	62	39	132	6.7	71	31	1025	4.15	38	18	7	38	50	19	19	23	59	.52	.095	39	55	.92	181	.07	32	1.92	.06	.13	12	17	1100

7 TO S

2

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	Hg PPB
RL 7-5B 13100N	1	29	19	82	.2	32	13	374	3.16	20	5	ND	3	15	1	2	2	45	.17	.039	13	27	.62	171	.08	2	2.76	.01	.06	1	4	30
RL 7-5B 13000N	1	15	23	52	.1	15	8	160	2.73	11	5	ND	2	13	1	2	2	56	.21	.023	12	21	.38	140	.05	5	1.93	.01	.04	1	2	30
RL 7-5B 12900N	2	28	36	72	.2	27	11	243	3.09	13	5	ND	2	20	1	2	2	53	.16	.040	13	26	.56	128	.05	2	2.73	.01	.06	1	3	50
RL 7-5B 12800N	1	52	46	102	.2	29	13	326	3.57	18	5	ND	4	14	1	2	2	51	.52	.080	13	25	.70	252	.08	4	2.68	.01	.10	1	7	10
RL 7-5B 12700N	1	19	31	79	.1	22	10	214	3.10	15	5	ND	1	20	1	2	2	46	.25	.032	11	22	.38	140	.04	2	2.02	.01	.04	1	2	30
RL 7-5B 12600N	1	31	83	113	.4	23	12	365	2.95	22	5	ND	2	30	1	2	2	41	.31	.063	21	24	.53	209	.05	5	1.80	.01	.08	1	4	30
RL 7-5B 12500N	1	25	61	120	.1	20	7	221	3.03	23	5	ND	2	15	1	6	2	41	.25	.036	14	22	.39	116	.02	4	1.45	.01	.05	1	5	20
RL 7-5B 12400N	1	53	32	117	.4	24	9	163	2.64	31	5	ND	5	55	1	2	2	51	1.08	.122	33	30	.85	207	.06	6	2.32	.02	.07	1	8	30
RL 7-5B 12300N	1	29	12	70	.1	16	6	233	2.38	21	9	ND	6	21	1	2	2	36	.29	.051	22	22	.51	119	.06	2	1.34	.01	.06	1	4	10
RL 7-5B 12200N	1	22	13	73	.1	23	9	259	2.75	14	5	ND	1	14	1	2	2	49	.29	.046	12	26	.48	119	.04	2	1.74	.01	.04	1	2	40
RL 7-5B 12100N	1	54	15	40	.4	18	11	171	1.73	15	5	ND	5	230	1	2	2	9	21.47	.037	17	6	.23	40	.02	8	1.04	.03	.04	2	9	10
RL 7-5B 12000N	1	28	49	70	.8	25	8	352	2.39	13	5	ND	3	71	1	2	2	33	.92	.049	22	23	1.13	133	.04	5	2.32	.03	.05	1	5	40
RL 7-5B 11900N	1	123	23	90	.8	21	7	251	2.50	9	5	ND	4	39	1	6	16	31	.52	.055	21	22	.63	209	.03	5	2.30	.02	.05	1	12	20
RL 7-5B 11800N	1	28	25	76	.2	20	8	256	2.33	13	5	ND	3	33	1	2	2	30	.49	.065	17	24	.53	150	.03	5	1.95	.01	.04	1	6	30
RL 7-5B 11700N	1	23	20	71	.2	18	6	173	2.41	13	5	ND	1	27	1	2	2	31	.33	.058	15	23	.41	156	.02	4	2.23	.01	.03	1	6	80
RL 7-5B 11600N	1	67	22	158	.8	20	8	305	2.93	366	9	ND	5	40	1	57	2	29	.24	.068	33	25	.36	152	.02	4	2.07	.01	.04	1	21	150
RL 7-5B 11500N	1	58	12	72	.1	21	9	302	2.75	175	5	ND	8	22	1	2	2	35	.20	.076	29	20	.41	109	.05	4	1.33	.01	.05	1	90	20
RL 7-5B 11400N	1	31	18	94	.2	21	10	436	2.91	149	8	ND	2	30	1	2	2	39	.38	.081	27	25	.44	179	.04	2	1.34	.01	.06	1	5	70
RL 7-5B 11300N	1	52	11	82	.1	20	8	350	2.53	56	5	ND	7	37	1	2	2	32	.46	.093	32	21	.45	199	.04	7	1.84	.01	.05	1	11	30
RL 7-5B 11200N	1	34	17	99	.1	22	10	390	2.94	138	8	ND	4	43	1	6	3	35	.45	.086	31	23	.49	191	.03	4	1.38	.01	.06	1	8	40
RL 7-5B 11100N	1	21	32	98	.2	15	11	663	2.62	14	6	ND	1	45	1	3	2	38	.33	.114	20	23	.41	146	.03	4	2.13	.02	.05	1	11	40
RL 7-5B 11000N	1	19	18	63	.2	15	7	272	2.49	20	5	ND	1	46	1	2	2	31	.62	.088	21	20	.35	165	.02	2	2.29	.01	.03	2	15	30
RL 7-5B 10900N	1	22	14	76	.2	19	11	402	2.72	100	6	ND	2	51	1	2	2	28	.97	.094	16	21	.42	186	.03	4	2.81	.01	.04	1	10	60
RL 7-5B 10800N	1	21	11	61	.1	48	16	303	2.60	29	5	ND	3	13	1	2	2	35	.13	.030	11	48	.51	93	.04	2	1.38	.01	.05	1	1	20
RL 7-5B 10700N	1	22	8	52	.1	24	14	261	2.91	96	5	ND	4	12	1	2	2	33	.10	.027	16	21	.39	68	.04	2	1.39	.01	.05	1	1	<20
RL 7-5B 10600N	1	26	11	57	.2	19	8	211	2.98	119	6	ND	2	9	1	6	11	36	.08	.034	16	23	.35	51	.04	4	1.31	.01	.07	1	3	30
RL 7-5B 10500N	1	25	16	78	.2	20	12	385	3.20	96	6	ND	2	12	1	4	3	39	.11	.051	22	23	.38	93	.04	3	1.50	.01	.08	3	7	110
RL 7-5B 10400N	1	29	14	75	.1	27	14	374	3.00	77	5	ND	4	14	1	2	2	33	.17	.043	17	23	.44	88	.04	3	1.46	.01	.05	4	15	20
RL 7-5B 10300N	2	53	13	76	.1	29	10	307	4.98	56	8	ND	4	25	1	11	2	45	.06	.075	30	30	.44	109	.04	3	2.11	.01	.29	1	14	50
RL 7-5B 10200N	1	32	5	55	.1	18	9	240	3.18	22	5	ND	2	11	1	6	2	36	.07	.035	14	21	.33	59	.04	3	1.20	.01	.07	2	2	50
RL 7-5B 10100N	1	93	18	68	.3	27	11	203	3.43	705	5	ND	9	26	1	94	2	23	.09	.043	16	18	.33	80	.02	4	1.35	.01	.08	1	11	20
RL 7-5B 10000N	1	25	6	66	.1	18	9	235	3.37	34	5	ND	1	10	1	11	2	37	.09	.036	14	23	.43	69	.04	2	1.45	.01	.06	1	2	20
RL 7-5 53907	1	106	40	77	1.2	14	9	788	5.74	434	8	ND	3	21	1	22	3	35	1.58	.047	22	17	.80	155	.02	15	1.11	.01	.06	1	2	40
STD C/AU-S	18	59	35	132	6.6	69	31	1011	4.18	43	22	7	37	49	18	18	16	53	.53	.090	38	56	.94	180	.07	35	2.04	.06	.13	11	51	1300

SOIL

DAT

4

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	Hg PPB
RL 7-5 34182	1	118	16	89	.5	22	13	462	3.76	587	5	ND	4	34	1	35	5	40	.46	.072	34	29	.62	181	.04	3	2.25	.01	.10	3	20	40
RL 7-5 34187	1	64	19	101	.9	23	11	453	3.16	499	5	ND	3	66	1	51	4	36	1.02	.079	27	25	.59	197	.04	5	2.05	.02	.08	2	16	60
RL 7-5 53917	1	82	18	91	.5	18	9	438	2.90	721	5	ND	4	42	1	25	4	35	.75	.073	25	23	.51	191	.04	2	1.56	.02	.07	3	108	30

SILT

SILT

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
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BONDAR-CLEGG

Geochemical Lab Report

REPORT: V89-04312.0 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: 12

SUBMITTED BY: R. HULSTEIN
DATE PRINTED: 20-JUL-89

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	47	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	47	0.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption

SAMPLE TYPES		NUMBER	SIZE FRACTIONS		NUMBER	SAMPLE PREPARATIONS	NUMBER
S	SOILS	28	1	-80	29	DRY, SIEVE -80	29
T	STREAM SEDIMENT,SILT	1	2	-150	18	CRUSH,PULVERIZE -150	18
R	ROCK OR BED ROCK	18					

REPORT COPIES TO: MR. R. HULSTEIN
MR. JACQUES MOREAU

INVOICE TO: MR. JACQUES MOREAU

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Geochemical Lab Report

DATE PRINTED: 20-JUL-89

REPORT: V89-04312.0 | PROJECT: 12 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM
S1 123001		145	3.1	R2 9122202		3741	9.2
S1 123002		132	2.4	R2 9122203		45	0.5
S1 123003		1213	16.5	R2 9122204		90	0.5
S1 123204		12	0.2	R2 9122205		18	0.4
S1 123205		10	0.2	R2 9122206		<5	0.4
S1 123206		<5	0.1	R2 9122207		595	5.2
S1 123207		6	0.2	R2 9122208		804	3.1
S1 123208		10	0.1				
S1 123209		17	0.4				
S1 123210		<5	0.1				
S1 123211		<5	<0.1				
S1 123212		6	0.1				
S1 123213		6	0.1				
S1 123214		13	0.2				
S1 123215		6	0.3				
S1 123216		155	0.1				
S1 123217		62	0.3				
S1 123218		51	0.9				
S1 123219		47	1.2				
S1 123220		45	0.5				
S1 123221		115	2.5				
S1 123222		54	0.3				
S1 123223		45	0.9				
S1 123224		169	2.0				
S1 124002		10	0.1				
S1 9123201		<5	0.2				
S1 9123202		<5	0.4				
S1 9123203		14	0.3				
T1 124001		43	0.5				
R2 121001		131	<0.1				
R2 122001		14	2.3				
R2 122002		1187	23.6				
R2 122003		180	1.2				
R2 122004		117	13.2				
R2 122005		40	0.4				
R2 122006		25	0.8				
R2 122007		132	1.6				
R2 122008		921	7.5				
R2 122009		70	0.8				
R2 9122201		501	9.1				

Northern Analytical Laboratories ltd.

SAMPLE PREPARATION

Soils

Incoming soils are sorted, counted and logged. The soils are placed in an oven devoted to geochem and dried at 150 F.

When soils are dry, they are sieved through an 80 mesh screen. If 20g of -80 # soil is not obtained, the +80 # is then sieved through a 40 # sieve and placed in a separate bag. The reject is stored in its' origional bag.

Rocks

Incoming rocks are sorted, counted and logged. Rocks are first crushed through a jaw crusher set at 3/8" gap and then crushed through a 1/8" gap.

The crushed sample is split using a Jones Riffle until a 250g sample is obtained. The reject is placed in its' origional bag and stored.

The sample is then dried at 150 F and pulverized to -150 # using a ring pulverizer.

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

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TRACE LEVEL GOLD FIRE ASSAY

15g of sample is mixed with a suitable flux in a 30g crucible, inquarted with 2 mg Ag and fused at 1900 F. The contents of the crucible is poured into a mold and allowed to cool. The slag is broken off and discarded. The lead button is then pounded into a cube.

The lead button is placed into a bone ash cupel which has been preheated to 1800 F. When the lead is completely molten, the temperature is dropped to 1750 F. The dampers are opened to allow air inside the furnace. When cupelation is complete, the cupel is taken out and allowed to cool.

The silver-gold prill is picked out of the cupel and dropped into a 16 x 150 mm test tube. 2 mls of 1:1 Nitric Acid is added and the test tube is heated to dissolve the silver. 3 mls of HCl is then added to dissolve the gold. The test tube is made up to 10 mls using a reference, mixed and run on the A.A.

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Northern Analytical Laboratories ltd.

ATOMIC ABSORPTION ANALYSIS

Geochem Digestion [Trace Level Analysis]

0.500g of sample is weighed into a 16 x 150 mm test tube. 2 mls of 1:1 Nitric Acid is added and the test tube is placed in a hot water bath for 20 minutes. 3 ml of HCl is added and the sample is heated for 40 minutes. When digestion is completed, the sample is cooled in a cold water bath. The test tube is then bulked to 10 mls using a reference, stirred and allowed to settle. The sample is now ready to run on the A.A.

For ICP the sample is digested in one step using 5 mls of 3 parts HCl, 1 Part Nitric Acid and 2 parts water.

Assay Digestion [Ore Level Analysis]

1.000g of sample is weighed into a class A 100 ml volumetric flask. 5 mls of Nitric Acid is added and the flask is placed on a 400 F hot plate until the red fumes indicating reaction subside. 20 mls of water* and 10 mls of HCL are added and placed on the hot plate for 5 minutes. The flask is then bulked to the neck with water and brought to a boil. The flask is then cooled, bulked to the mark, shaken and allowed to settle prior to running on the A.A.

* Some elements require special treatment. For example, Sb requires 20 mls 10% Tartaric acid.

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Northern Analytical Laboratories ltd.

July 18, 1989

Total Energold Corp
21 - 1114 - 1st Ave
Whitehorse, Yukon
Y1A 1A3

ASSAY CERTIFICATE

Work Order # 29003 File # 29003b PO# 3009

Sample	ppb Au	ppm Ag
MAH 1	21	3.6
MAH 2	33	1.3
MAH 3	45	1.9
MAH 4	47	0.9
MAH 5	88	2.5
MAH 6	116	2.4
MAH 7	196	6.6
MAH 8	142	1.5
MAH 9	213	2.8
MAH10	127	0.9
MAH11	170	2.3
MAH12	418	3.2
MAH13	610	1.9
MAH14	50	1.9
MAH15	78	0.8
MAH16	43	1.3
MAH17	84	1.4
TIN 1	74	1.0
TIN 2	70	1.8
TIN 3	42	0.4
TIN 4	49	0.2
TIN 5	130	0.9
TIN 6	449	3.7
TIN 7	74	0.6
TIN 8	138	0.4

Au -- 15g fire assay/AAS finish
Ag -- Aqua-regia digestion/AAS

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Whitehorse, Yukon
Y1A 1A3

ASSAY CERTIFICATE

Work Order # 29003 File # 29003c PO# 3009

Sample	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb	ppb Au	ppm Ag
MAH 1	20	12	82	<10	140	21	3.6
MAH 2	23	6	66	<10	100	33	1.3
MAH 3	19	<10	74	60	140	45	1.9
MAH 4	27	27	70	40	190	47	0.9
MAH 5	61	22	87	180	170	88	2.5
MAH 6	24	50	63	230	190	116	2.4
MAH 7	280	13	92	5390	210	196	6.6
MAH 8	116	37	72	630	170	142	1.5
MAH 9	49	14	111	450	130	213	2.8
MAH10	37	13	82	690	150	127	0.9
MAH11	540	7	89	8520	250	170	2.3
MAH12	838	12	114	8440	280	418	3.2
MAH13	637	1	151	4860	350	610	1.9
MAH14	102	6	99	790	240	50	1.9
MAH15	45	35	79	400	80	78	0.8
MAH16	35	17	81	80	120	43	1.3
MAH17	148	58	126	2650	170	84	1.4
TIN 1	173	44	113	2060	340	74	1.0
TIN 2	193	27	86	1760	220	70	1.8
TIN 3	47	28	87	550	160	42	0.4
TIN 4	60	36	135	560	200	49	0.2
TIN 5	76	34	123	600	130	130	0.9
TIN 6	433	87	82	50000	630	449	3.7
TIN 7	47	7	79	1400	110	74	0.6
TIN 8	58	17	77	370	100	138	0.4

Metals by Aqua-regia/AAS

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Northern Analytical Laboratories ltd.

July 6, 1989

Total Energold Corp
21 - 1114 - 1st Ave
Whitehorse, Yukon
Y1A 1A3

Work order # 29003 Purchase order # 3009

ASSAY CERTIFICATE

Rock

Sample	oz/t Au
1268	<0.002
1269	<0.002
1270	<0.002
1271	<0.002
1272	<0.002
1273	0.007
1274	0.002

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