

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
DATE RECEIVED JAN 05 1996

**GEOLOGICAL, GEOCHEMICAL AND DRILLING REPORT**

**ON THE**

**GRANITE BASIN PROPERTY**

**N.T.S.: 94C/5**

**DECEMBER, 1995**

56° 28'  
125° 55'

**RECEIVED**

**DEC 21 1995**

**Gold Commissioner's Office  
VANCOUVER, B.C.**

**FILMED**

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Operator: Hemlo Gold Mines Inc./Canasil Resources**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**24,220**

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## 1.0 INTRODUCTION

During the period of June 15, 1995 to September 9, 1995, Hemlo Gold Mines Inc. and Britton Brothers Diamond Drilling conducted a programme of linecutting, detailed mapping, rock sampling and diamond drilling. A total of 1.235 line km were established for mapping purposes, 103 chip samples were collected and 2 holes were drilled, totaling 182.9 m.

### 1.1 Location and Access

The Granite Basin Property is centered at latitude 56° 29' N and 125° 52' E on N.T.S. Mapsheet 94C05W. It lies to the northwest of Aiken Lake in the Omineca Mining Division of British Columbia (Drawing 1).

The Omineca Resource Access Road and main line logging roads provide access to within 3.6 km of the property. This distance is 365 road km north of Fort St. James, B.C. The final 3.6 km is accessible by 4-wheel drive only.

The geological and drilling crews were housed at a temporary exploration camp located at the southeast end of Johanson Lake, approximately 35 km by road north of the Granite Basin Property. Geological personnel accessed the property by road, drill crew changes and drill moves were achieved via a helicopter based at Johanson Lake.

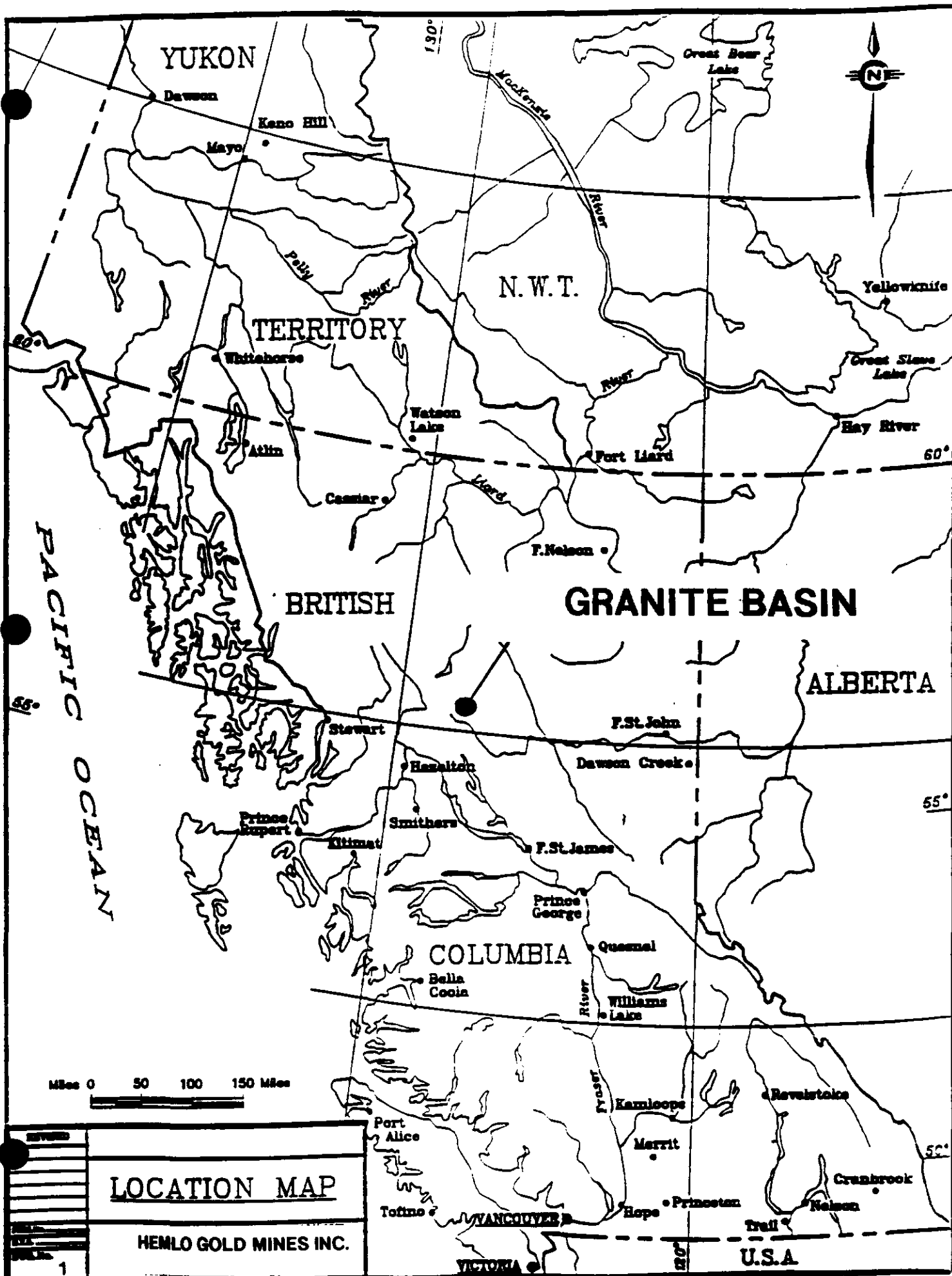
### 1.2 Topography and Physiography

The Granite Basin Property is situated within the Osilinka Ranges and covers 2 northeast trending ridges separated by a cirque valley, as well as several northeasterly trending drainage's flowing into Lay Creek. Topography is steep to precipitous over the ridged areas, but is subdued to fairly flat in creek valleys and on the eastern edge of the property, toward Lay Creek. Elevations range from 1200 meters in the valley of Lay Creek to 2180 meters on the western edge of the property. The higher elevations are devoid of vegetation, or are covered by grasses and mountain willow. At lower elevations mature conifer forests are dominant. Intervening elevations are covered by dense growths of sub-alpine lodgepole pine and spruce.

### 1.3 History

Below is a brief outline of work performed on the Granite Basin Property in chronological order.

- 1936: The area was staked by Cominco and 1,142 linear feet of hand trenching was completed. A drift of 110 feet was driven without reaching bedrock.
- 1937: A 158 foot drift with 2 crosscuts of 66 feet and 10 feet respectively was driven at a higher elevation and good gold grades were intersected (6.86 gpt/12.2m).



**LOCATION MAP**

**HEMLO GOLD MINES INC.**

- 1939: Douglas Lay of the Department of Mines visited the property, collected samples and wrote a summary report.
- 1962: Prospecting by Emil Bronlund located new showings to the west of the adit workings and the area was restaked.
- 1963: Kerr Addison Gold Mines Ltd. sampled the area.
- 1971-73: Union Minere and Stellac Exploration conducted a soil geochemical survey and collected rock samples.
- 1974-75: Susie Gold Mines conducted geochemical soil and rock chip surveys, road access was constructed and trenching was completed to the southeast of the 1936 trenching.
- 1979-80: Mark V Petroleum Ltd. conducted EM and magnetometer surveys and collected chip samples along the access road.
- 1990-92: Paul Weishaupt re-staked the area (Granite claim) , conducted a soil survey, collected rock samples, and blasted trenches into the cliff face.
- 1993-94: Noranda Exploration Co., Ltd. as agents for Hemlo Gold Mines Inc. staked the surrounding ground (Basin 1-3), conducted a geochemical soil survey, collected rock samples, and completed reconnaissance style mapping.

#### 1.4 Claims

The Granite Basin Property is comprised of three 20 unit claim blocks and one 16 unit claim block. Following is a list of the claims with corresponding tenure number, anniversary date (upon acceptance of this report) and owner (Drawing 2).

<u>Claim Name</u>	<u>Tenure No.</u>	<u>Units</u>	<u>Anniversary Date</u>	<u>Owner</u>
Basin 1	321854	16	October 9, 1997	Hemlo Gold Mines Inc.
Basin 2	321855	20	October 10, 1997	Hemlo Gold Mines Inc.
Basin 3	321856	20	October 10, 1997	Hemlo Gold Mines Inc.
Granite	242792	20	October 8, 2005	Canasil Resources

#### 1.5 Economic Potential

The Granite Basin Property is considered promising for hosting an economic shear hosted gold/silver deposit. Early work concentrated on 5 porphyritic diorite sills which produce a strong colour anomaly (gossan), but overall results were poor. Later work has shown the Au-Ag mineralization to be hosted in shears which cut across all rock types and



contacts. Previous results of 9.4 gpt Au/439 gpt Ag over 3m and 7.54 gpt/271 gpt Ag over 3m suggest the potential exists for a bulk mineable gold/silver deposit.

### **1.6 Survey Control**

Flagged lines were established for mapping purposes using a compass and hip chain. All lines were slope corrected, as the talus slope has an average angle of 35 , and were tied into topographic features. In addition the previously established trails along and up the talus slope were surveyed in the same manner. Drill collars were tied into the surveyed grid.

### **1.7 Sampling**

Rock samples were collected as chips across shear and fracture zones and the corresponding structural measurements were noted. Chips varied in width dependent on the width of the exposed shear. Sampling of drill core was done primarily at 1.0m intervals. Interval length depended on lithology, as well as intensity of alteration. All samples were sent to the Noranda Exploration Laboratory at Unit #1, 7550-76th Street, Delta B.C.

Refer to Appendix I for laboratory analytical techniques and Appendix II for geochemical results from chip samples and drill core.

A total of 55 rock chips and 84 drill core samples and their accompanying analytical charges are being applied for assessment.

## **2.0 GEOLOGY**

### **2.1 Regional**

The Granite Basin Property is situated within the Intermontane Belt. In the vicinity of the Granite Basin Property this is comprised of Upper Triassic to Lower Jurassic island arc volcanics, volcanoclastics and minor sediments of the Takla Group. The dominantly volcanic package has been intruded by Jura-Cretaceous aged diorites, monzonites and syenites associated with the Hogem batholith. In fault contact to the east are volcanics and sediments of the Mississippian Cache Creek Group, intruded by ultramafics of the Triassic Trembleur intrusions.

### **2.2 Property Geology**

Geologic mapping was done at a scale of 1:200 and was confined to the central part of the Granite claim, in the vicinity and to the west and south of the 1937 Cominco adit.

The following geological descriptions are relevant for the property as a whole, not all of the rock types below were observed during the 1995 mapping programme.

The dominant rock type is a fine to medium grained augite porphyritic andesite. It is composed of up to 15% 0.5mm to 3 mm pyroxene crystals in a dark to medium green groundmass. It may also contain, in equal abundance, phenocrysts of feldspar to 0.5 mm in diameter.

Higher in the section black silstones, impure limestones and volcanoclastics are intercalated in the augite porphyry. These rocks have been hornfelsed where they are in contact with bodies of feldspar porphyry (see below).

Dioritic intrusives are of two types - a porphyritic and a generally non-porphyritic type. Both types are leucocratic, fine to medium grained, have a sugary texture, and contain hornblende as well as feldspar. The porphyritic diorite contains feldspar phenocrysts up to 3 mm in diameter and hornblende crystals to 5mm in length. It most likely had the same magmatic source as the non-porphyritic diorite, but followed a different cooling path. Both types are present as sills.

Isolated outcrops of quartz-feldspar or hornblende only porphyritic diorite are also present in outcrop but could not be followed for any distance. The former was included with the porphyritic diorite, the latter with the non-porphyritic diorite.

Feldspar porphyry is present as dykes and sills cutting both the volcanosedimentary package as well as both phases of diorite. It varies in colour from light grey to dark green, and contains up to 20% light grey feldspar phenocrysts up to 3 mm in size. It contains little to no hornblende. This rock type appears to be restricted to the vicinity of the gossanous central area.

Structural measurements on bedded sediments or volcanoclastics located on ridge tops indicate an approximate north-south strike ( $172^{\circ}$  to  $192^{\circ}$ ) with dips to the west from  $25^{\circ}$  to  $40^{\circ}$ . Further to the north the strike becomes more westerly (approximately  $220^{\circ}$ ), however the angle of dip remains the same.

Prior to the work by Noranda in 1994 exploration programmes had identified three zones of shearing, identified as Zones 1 to 3. Zone 1, the easternmost zone, strikes at  $310^{\circ}$  and dips steeply to the northeast at  $75^{\circ}$ . This is the zone intersected by Comincos 1937 adit and is reported to have a width of 12 meters. Zones 2 and 3 lie to the southwest, are higher in elevation by 85m and 182m respectively and have similar strikes and dips  $266^{\circ}/40^{\circ}$ N (Zone 2) and  $262^{\circ}/58^{\circ}$ N (Zone 3). These latter two zones are now believed to be outcrops of the same shear, with the steep talus slope between Zones 2 and 3 covering an irregular dip slope exposing the upper limits and hanging wall of the shear. Although the footwall of this second zone is never exposed it is at least 5 meters wide, as measured at the previously named Zone 3.



### 2.3 Mineralization

The augite porphyritic andesite and associated sediments are generally non-mineralized, or may be sparsely mineralized with fine grain disseminated pyrite. However in contact with the porphyritic diorite these rocks may be heavily pyritized.

The porphyritic diorite always hosts pyrite, in concentrations of up to 20%. Prior to 1975, exploration programmes focused on these pyritic horizons, and in general the gold content was negligible except in the vicinity of the adit where a pyritic horizon is coincident with the Zone 1 shear.

In 1975 it was recognized that it was the shears which hosted the Au-Ag mineralization and that these shears cut across all rock types. Rocks within the shears are foliated, altered to a fine grain, white to light blue colour, and contain cryptocrystalline quartz veinlets, patchy carbonate, sericite, minor mariposite(?), and pyrite, both as wavy laminations as well as disseminated. Two generations of pyrite are clearly visible: 1. An early fine grain silvery phase often observed as a film along fracture planes, and 2. a later coarser grained yellowish phase occurring along foliation planes and as irregular pods. Very rarely trace amounts of galena are associated with the quartz veinlets.

Detailed mapping by Hemlo in 1995 (Drawing 3) shows that the sheared foliated outcrops always occur in the footwall of a 5cm wide brittle fault generally striking from 310° to 330° and dipping shallowly to the northeast. Rocks exposed in the hanging wall are unaltered andesites or limy sediments, and may or may not contain pyrite. This fault does not have a flat planar surface but undulates in both the dip and strike direction, as evidenced by the dip slope connecting Zones 2 and 3, and in outcrop above the trench blasted by Canasil in 1992.

### 3.0 CHIP SAMPLING PROGRAMME

As both the non-anomalous pyritic horizons and the Au-Ag mineralized shears display the same "gossanous" weathering surface, and the pyritic horizons themselves are locally sheared and brittlely fractured it was decided to chip sample the many shear and fracture directions to better delineate which direction was anomalous. Chip sample widths correspond to shear/fracture sample widths and range in size from 0.05m to 1.5m. Locally chip samples were also collected from either the hangingwall or footwall or both, to determine if mineralization extends beyond the boundaries of the sampled shear or fracture. Geological descriptions, chip sample widths and corresponding shear or fracture directions are given in Appendix II.

Forty two chip samples were collected in the adit area, extending from the road, upslope to the south (Drawing 3 (blow-up 4)). Of these, only one area was found to be highly anomalous in Au and Ag, with values from 1.3 gpt Au, 7.2 gpt Ag/0.7m to 10.7 gpt Au, 14.8 gpt Ag/0.4m. Although all of these anomalous samples were collected within a single outcrop the attitudes of the sampled shears ranged from 130°/40° to

330°/68°, suggesting that there are several shear directions within a major structure. Of interest is the fact that several of the anomalous samples contained "spots" of a bright green mineral, tentatively identified as mariposite.

Ten chip samples were collected from the 1992 Canasil trench on Zone 2 which previously returned values of (Drawing 3 (blow-up 1)). Samples from the immediate hanging wall of the shallowly dipping fault are only weakly anomalous in Au-Ag whereas those collected from the foliated (average 275°/60°) mariposite(?) bearing rock in the footwall of the fault are anomalous in both Au and Ag (Au from 0.3 gpt to 3.7 gpt and Ag from 10.2 gpt to 88.0 gpt). Locally trace amounts of galena occur, associated with quartz in thin veinlets.

Twenty six samples were collected from a prominent rusty spine on the west edge of the grid (Drawing 3 (blow-up 3)). This outcrop is well fractured, locally exhibits argillic alteration, and displays varying intensities of oxidation. Only one Au-Ag anomalous horizon was discovered, on the west side of the spine and bounded by shears to both the north (265°/80°) and south (200°/80°). Within this horizon, foliated mariposite(?) bearing rocks returned values from 1.0 gpt Au, 82.4 gpt Ag/0.2 m to 16.95 gpt Au, 492.0 gpt Ag/0.5m. This horizon is also part of the Zone 2 shear structure.

During the course of the detailed sampling programme a previously unreported outcrop of foliated (average 277°/55°) mariposite(?) bearing rock was discovered. This lies to the west and slightly higher in elevation than Canasil's 1992 trench and lies to the east of the rusty spine described above. It is in the footwall of a thin fault (310°/28°) (Drawing 3 (blow-up 2)), and from its position on the ground is believed to be another outcrop of the Zone 2 shear. Ten samples were collected from this location. Values for Au and Ag are only weakly anomalous (160 to 270 ppb Au, 1.8 to 3.6 ppm Ag), a fact which may be attributed to the oxidized nature of the sampled material.

The remainder of the samples were collected from shears/fractures located in isolated outcrops within the area of the grid (Drawing 3). Only two of these samples were anomalous, sample numbers GM0270 and LE0645, with values of 975 ppb Au and 335 ppb Au respectively. These two samples are from foliated outcrops and are thought to be part of the same structure as the one sampled in Zones 2 and 3.

Foliated, mariposite(?) bearing outcrops of Zone 2 outcrop discontinuously in an east-west direction over a distance of approximately 240 meters, suggesting the mineralized structure has an east-west strike.

#### **4.0 DIAMOND DRILLING PROGRAMME**

The focus of the 1995 drilling programme was to establish the lateral extent and thickness of the Au anomalous horizon, as well as to test the theory that this horizon is located in the footwall, and is cut off by, a shallowly dipping fault.

Core is stored at the Granite Basin Property.

#### 4.1 Presentation of Drill Hole Data

Drilling parameters for holes 1 and 2 are listed in the table below. Refer to Drawings 3,4 and 5 for plan view and hole sections. Sections show Au and Ag results with corresponding sample widths in meters. Detailed hole logs are found in Appendix IV and geochemical results from core are found in Appendix II.

<u>HOLE#</u>	<u>TOTAL LENGTH</u> (meters)	<u>COORDINATES</u> <u>NORTH</u> <u>EAST</u>		<u>AZIMUTH DIP</u>		<u>DATE COLLARED</u>	<u>DATE COMPLETED</u>
HGB 95-1	94.5	9995	9995	230°	-45°	August 6,1995	August 7, 1995
HGB-95-2	88.4	9875	9872	190°	-60°	August 7, 1995	August 8, 1995

#### 4.2 Synopsis of Drill Holes

##### DDH-HGB-95-1

This hole (Drawings 3 and 4) was collared near Cominco's 1937 adit (exact position unknown) in an attempt to intersect the gold anomalous horizon sampled by Cominco in the underground workings. It was thought that the underground horizon and the one exposed in outcrop and sampled by Hemlo during the course of this programme were part of the same structure.

The hole intersected a series of feldspar, augite and hornblende porphyries, some of which could be identified as intrusions, others of which could either be volcanic or intrusive. Identifiable intersections of andesitic volcanics were rare. In general the feldspar porphyries have an average pyrite content of 12%, whereas the other lithologies have pyrite contents ranging from 1-3%. Sericite/clay alteration begins below 57.7m with local sections showing abundant fractures. From 88.4m to 93.4m silica flooding has overprinted the sericite/clay alteration.

Only one of the 47 sample intervals contained anomalous values of Au-Ag. Sample number 91377, from 75.1m to 76.1m, contained 0.65 gpt Au and 4.0 gpt Ag. This sample also analyzed 178 ppm Pb and 478 ppm Zn, although only pyrite was observed in core, suggesting that the gold is associated with base metals.

##### DDH-HGB-95-2

The second hole (Drawings 3 and 5) was targeted to test the width of the mineralized horizon. It's collar location was slightly downslope from Canasil's 1992 trench and after 3.0m of overburden it intersected 13.1m of foliated, sericitic,

(?) bearing altered volcanic tuff. From 16.1m to 67.6m the hole intersected a series of dykes intrusive into various types of diorite, and below 67.6m hornblende or feldspar porphyritic andesites are dominant. Below 30.5m the diorites have a brownish colour, from the alteration of mafic minerals to biotite whereas the volcanic porphyries at the bottom of the hole exhibit sericite alteration.

This hole intersected two Au-Ag anomalous sections, from 3.0 to 12.1m and 57.0 to 60.3m respectively. The former averaged 3.36 gpt Au, 11.7 gpt Ag/9.1m the latter 1.67 gpt Au, 4.4 gpt Ag/4.5m. Anomalous concentrations of Pb and Zn are also present, but these are not always associated with anomalous Au-Ag, however wherever Au-Ag is anomalous Pb and Zn are also.

## 5.0 SUMMARY

- Detailed mapping and sampling of the many shears and fractures on the Granite Basin Property restrict the Au-Ag anomalies to two, as yet unconnected, structural zones: the eastern zone (Zone 1), in the vicinity of Cominco's 1937 adit, and a western zone, represented by Zones 2 and 3. Chip samples from Zone 1 contained up to 10.7 gpt Au, 14.8 gpt Ag over 0.4m and from Zone 2 up to 16.95 gpt Au, 492 gpt Ag over 0.5m. Zone 3 was sampled by Noranda in 1994 and returned 3.8 gpt Au, 23 gpt Ag over 5m.
- A previously unsampled outcrop of Zone 2 was discovered between the known Zone 2 outcrops at Canasil's 1992 trench and the rusty spine. This confirms an indicated east-west strike length of 240 meters.
- Anomalies are restricted to a foliated, sericitic, mariposite(?) bearing altered volcanic or intrusive which lies in the footwall of a shallowly dipping brittle fault. This fault undulates in both the dip and strike direction.
- Gold-silver anomalies are often associated with Pb and Zn anomalies.
- At depth, but not exposed in outcrop, is a biotized dioritic intrusive with elevated levels of Pb, Zn and Cu, and locally Au-Ag.
- DDH-HGB-95-1 intersected a series of foliated, fractured, clay and sericite altered volcanics and intrusives, but contained only one - 1 meter, slightly anomalous intersection (0.6 gpt Au and 4.0 gpt Ag).
- DDH-HGB-95-2 intersected foliated and sericitic volcanics intruded by biotized intrusive diorites, the latter in turn intruded by an unaltered hornblende-feldspar porphyritic dyke. Anomalous Au-Ag was intersected from 3.0 - 12.1 meters and 57.0 - 61.5 meters (3.36 gpt Au, 11.7 gpt Ag and 1.67 gpt Au, 4.4 gpt Ag respectively).

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

The Granite Basin property is host to a gold-silver +/- base metal anomalous structure which outcrops in two areas of the property, an eastern and a western zone. This structure is a ductile shear cutting across all lithologies and is evidenced by foliated, mariposite(?) bearing, sericitic rocks. The shearing is restricted to the footwall of a shallowly dipping brittle fault, perhaps of regional extent. The western zone (Zone 2) has a confirmed strike length of at least 240 meters in an approximate east-west direction, and extends for 250 meters upslope to connect with Zone 3. Based on results from DDH-HGB-95-2 the zone has a width of 9.1m. As DDH-HGB-95-1 did not intersect the anomalous shear the relationship between the western and eastern zones is still unknown. If these zones do in fact connect at depth the strike length becomes at least 600 meters.

In addition the discovery of a biotized diorite at depth suggests a potential porphyry system and should be explored further.

Further drill testing should be pursued, with a vertical hole collared above the anomalous outcrop at Zone 1 (testing the width of this Zone), a second hole placed on the road down slope from DDH-HGB-95-2 (testing the downdip extension of Zone 2), and a third upslope and to the west of the newly discovered Zone 2 outcrop (testing the western extent and thickness of Zone 2). If possible a fourth hole, downslope from Zone 3, would test the updip extent and thickness of Zone 2 and would confirm that Zone 2 and 3 are part of the same structure.

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**APPENDIX I**  
**LABORATORY ANALYTICAL TECHNIQUES**

## ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver.

### Preparation of Samples:

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for geochemical analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples \* from constant volume), are analysed in its entirety, when it is to be determined for gold without further sample preparation.

### Analysis of Samples:

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.4 g and chemical quantities are doubled relative to the above noted method for digestion.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with a conventional atomic absorption spectrometric procedure. A Varian-Techtron, Model AA-5 or Model AA-475 is used to measure elemental concentrations.

### Elements Requiring Specific Decomposition Method:

Antimony - Sb: 0.2 g sample is attacked with 3.3 ml of 6% tartaric acid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the dissolution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.3 g sample is digested with 1.5 ml of perchloric 70% and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL is used to measure arsenic content in the digest.

Barium - Ba: 0.1 g sample digested overnight with conc. perchloric, nitric and hydrofluoric acid; Potassium chloride added to prevent ionization. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest with an AA-475 complete with EDL.



Gold - Au: 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBK from the aqueous solution. AA is used to determine Au.

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 1 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with the use of a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot from a perchloric-nitric decomposition, usually from the multi-element digestion, is buffered. The aqueous solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

N.B.: If additional elemental determinations are required on panned samples, state this at the time of sample submission. Requests after gold determinations would be futile.

LOWEST VALUES REPORTED IN PPM:

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

**APPENDIX II**

**ROCK AND DRILL CORE RESULTS AND DESCRIPTIONS**

# NORANDA DELTA LABORATORY

## Geochemical Analysis

Project Name & No.: GRANTIE BASIN - 176

Material: S2 Rx

Remarks: \* Sample screened @ -35 MBSH (0.5 mm)

‡ Organic, & Humus, S Sulfide

Geol.: G.G.

Sheet: 1 of 2

Date received: JULY 19

Date completed: AUG. 01

LAB CODE: 9507-031

R #34583

Au - silt & soil, 15.0 g sample digested with aqua-regia and determined by A.A. (D.L. 2 PPB); Rx, 10.0 g/AR/AA (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

I.T. No.	SAMPLE No.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sr	Ti	V	Zn
		ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
71	1.E0550	15	0.4	3.47	16	522	0.3	5	1.01	0.3	45	16	83	50	6.13	0.32	13	14	1.44	876	1	0.19	32	0.08	8	255	0.30	121	187
72	1.E0551	65	0.4	5.51	29	506	0.3	5	1.82	1.6	51	19	63	42	7.02	0.62	12	14	1.52	1379	9	0.26	31	0.08	18	236	0.31	151	149
73	1.E0552	130	0.2	6.54	35	798	0.4	5	1.41	0.8	50	17	67	43	10.07	1.15	15	16	1.29	1342	4	0.25	28	0.09	22	311	0.32	165	180
74	1.E0553	5	0.4	5.56	20	221	0.4	5	4.39	0.9	57	19	44	43	5.03	0.18	13	14	1.59	1254	1	0.22	26	0.07	7	206	0.29	148	112
75	1.E0554	20	0.2	4.93	21	447	0.4	5	4.13	1.7	60	20	50	54	6.89	0.40	14	14	1.71	1551	5	0.21	24	0.07	8	310	0.27	136	287
76	1.E0555	5	0.2	5.50	24	259	0.4	5	3.55	2.7	58	21	68	56	7.00	0.27	14	16	1.95	1602	9	0.23	27	0.07	7	150	0.31	152	549
77	1.E0556	15	0.2	5.95	24	228	0.4	5	1.84	3.6	49	21	57	81	10.56	0.57	11	15	1.67	1581	12	0.11	26	0.08	10	73	0.30	145	859
78	1.E0557	55	0.2	6.19	30	642	0.3	5	1.62	1.6	50	13	70	54	8.68	0.84	13	14	1.46	1151	11	0.24	20	0.08	19	176	0.34	157	538
79	1.E0558	170	1.2	5.10	51	703	0.3	5	1.48	0.4	50	12	82	45	5.61	1.23	12	11	0.67	963	2	0.33	26	0.08	45	269	0.27	111	243
80	1.E0562	100	2.0	5.72	78	435	0.4	5	2.02	0.9	57	16	45	39	7.78	0.83	14	17	1.47	1092	28	0.27	28	0.09	16	139	0.32	121	301
81	1.E0563	450	3.2	8.45	101	3381	0.4	5	0.76	0.2	37	9	46	34	6.65	3.29	11	11	1.03	525	21	0.16	18	0.09	23	175	0.34	146	59
82	1.E0564	4550	11.0	10.84	215	3523	0.4	5	2.51	0.8	61	10	44	46	5.88	3.71	14	29	1.95	955	7	0.23	19	0.10	54	202	0.40	172	170
83	1.E0565	3000	17.4	11.94	316	3991	0.4	5	0.26	1.0	35	11	35	47	5.30	5.12	13	15	1.65	630	3	0.12	22	0.10	110	55	0.36	169	119
84	1.E0566	7850	27.2	12.17	374	3471	0.4	5	0.74	1.4	46	14	36	73	6.42	4.87	12	19	1.65	728	4	0.16	22	0.11	148	67	0.40	177	364
85	1.E0567	10725	14.8	9.78	222	4494	0.3	5	0.41	0.6	46	5	38	35	7.11	4.09	17	13	1.28	486	4	0.17	9	0.12	75	171	0.35	163	66
86	1.E0568	120	1.6	7.22	58	884	0.4	5	2.37	0.6	61	13	47	50	6.95	0.86	15	25	1.87	1132	13	0.42	30	0.10	12	201	0.36	131	112
87	1.E0569	140	1.6	6.25	60	494	0.4	5	1.94	1.0	60	19	54	38	5.85	1.08	15	18	1.66	962	15	0.44	38	0.10	13	119	0.37	121	102
88	1.E0570	1345	7.2	9.27	198	4157	0.4	5	3.05	0.9	58	7	41	50	7.30	3.67	14	17	1.41	807	4	0.16	13	0.10	63	102	0.35	148	119
89	1.E0571	4700	26.4	10.75	423	4087	0.3	5	0.25	1.3	29	7	44	51	7.47	4.46	14	10	1.05	373	2	0.15	13	0.10	310	116	0.31	166	301
90	1.E0572	8350	23.2	9.50	337	3645	0.4	5	2.35	1.1	55	10	40	71	6.80	3.65	16	18	1.36	843	10	0.18	15	0.11	287	89	0.28	144	210
91	1.E0573	3650	20.4	10.36	298	4133	0.3	5	0.15	0.5	23	7	42	33	4.95	4.41	11	12	1.33	455	12	0.15	13	0.09	281	71	0.31	160	67
92	1.E0575	275	1.0	4.42	55	1051	0.2	5	0.58	0.3	32	7	72	33	6.08	1.12	9	14	1.11	535	9	0.18	28	0.09	9	281	0.28	134	89
93	1.E0576	330	1.2	4.86	44	890	0.2	5	0.74	0.4	35	5	72	28	6.15	1.02	9	14	1.12	589	18	0.16	26	0.08	12	235	0.28	137	71
94	1.E0577	200	1.2	4.21	61	914	0.2	5	0.47	0.3	27	6	81	26	6.40	1.31	9	11	0.90	473	25	0.16	31	0.09	6	135	0.32	141	90
95	1.E0578	70	0.2	4.68	47	1100	0.2	5	0.73	0.2	35	1	75	29	7.31	1.24	10	9	0.83	410	33	0.21	18	0.09	5	284	0.28	140	55
96	1.E0579	30	0.6	5.50	23	166	0.4	5	2.90	1.5	59	35	62	88	7.29	0.35	15	30	3.03	1586	1	0.12	65	0.13	5	131	0.37	254	131
97	1.E0580	4600	25.6	10.18	395	2826	0.4	5	0.59	1.8	42	13	38	89	6.49	3.90	13	16	1.83	641	6	0.20	21	0.11	223	54	0.29	150	521
98	1.E0581	185	2.2	6.54	60	1038	0.4	5	0.15	0.6	20	11	38	44	6.42	2.39	8	9	0.92	500	4	0.10	20	0.09	30	20	0.19	140	125
01	1.E0582	125	3.0	6.24	46	1858	0.3	5	0.07	0.2	18	4	12	26	4.83	2.63	9	4	0.41	215	12	0.13	7	0.07	16	37	0.23	135	47
02	1.E0583	260	2.0	5.56	48	1141	0.3	5	0.31	0.2	21	6	57	34	5.43	1.85	7	6	0.49	330	10	0.17	18	0.09	21	103	0.29	121	110
03	1.E0584	805	4.6	8.01	90	1818	0.4	5	0.84	0.6	41	7	36	62	7.94	2.10	12	28	2.52	1228	31	0.15	14	0.13	34	112	0.38	193	175
04	1.E0585	185	2.8	5.00	53	1125	0.2	5	0.43	0.2	25	7	70	35	5.97	1.69	8	9	0.71	450	19	0.17	25	0.09	15	74	0.33	137	99
05	1.E0586	185	3.0	5.55	56	1212	0.3	5	0.29	0.2	24	6	47	28	5.40	2.13	9	6	0.51	315	13	0.16	18	0.09	20	46	0.30	134	97
06	1.E0587	165	1.4	4.66	42	866	0.2	5	0.65	0.2	35	3	74	20	5.57	1.48	11	5	0.39	210	17	0.22	17	0.09	2	237	0.32	130	55
07	1.E0588	135	1.0	4.39	47	906	0.2	5	0.52	0.2	30	4	70	27	7.04	1.30	9	10	0.82	396	22	0.19	25	0.09	7	177	0.30	146	66

108 66 gm  
M.T.M.W.

LT. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bc ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Lj ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	0607-031 Pg. 2 of 2
08	1.E0589	55	0.4	5.18	24	659	0.3	5	1.02	0.8	48	12	94	38	5.78	0.39	13	24	2.28	1060	1	0.21	38	0.09	3	438	0.31	122	120	
09	1.E0590	150	2.0	11.09	66	3203	0.5	5	2.07	0.5	52	3	39	30	4.98	4.03	13	16	1.32	534	6	0.12	10	0.10	16	176	0.35	167	41	
10	1.E0591	325	3.4	10.00	105	3077	0.4	5	1.57	1.0	49	6	36	28	6.29	3.77	13	18	1.36	702	5	0.19	16	0.10	27	180	0.35	147	82	
11	1.E0594	25	0.4	5.11	10	676	0.4	5	2.54	0.2	49	6	69	55	5.23	1.48	9	7	0.68	319	3	0.09	24	0.07	2	129	0.23	123	30	
12	1.E0595	580	2.4	5.14	10	826	0.4	5	2.24	0.2	49	7	53	39	5.12	1.60	9	6	0.59	311	2	0.10	23	0.07	2	122	0.25	132	31	
13	1.E0596	35	0.2	5.36	2	574	0.3	5	1.52	0.2	43	3	33	68	5.99	2.00	10	5	0.50	298	5	0.12	10	0.09	2	116	0.23	124	34	
14	1.E0597	35	0.4	5.51	7	98	0.4	5	3.52	0.6	55	18	38	72	6.12	0.62	12	18	1.64	877	4	0.16	22	0.09	5	232	0.37	211	89	
15	1.E0599	30	1.6	9.34	37	1458	0.6	5	5.16	0.9	64	24	60	64	5.65	0.39	15	14	1.99	1581	2	0.87	35	0.09	10	260	0.39	188	121	
16	1.E0600	170	5.0	9.18	117	2128	0.4	5	0.72	0.2	40	12	35	31	5.87	3.75	9	11	0.79	448	4	0.23	24	0.09	15	68	0.19	130	131	
17	1.E0601	195	7.0	9.93	279	1050	0.5	5	3.29	1.6	65	24	54	56	6.27	2.36	13	14	1.03	954	28	0.66	60	0.11	17	149	0.26	150	165	
18	1.E0602	330	23.2	10.62	144	885	0.4	5	0.54	0.7	36	20	41	41	6.71	4.63	10	12	0.80	522	1	0.15	43	0.11	13	39	0.31	148	189	
19	1.E0604	300	12.0	9.96	184	1554	0.6	5	4.32	1.1	60	25	87	68	6.80	1.54	15	18	1.39	1835	35	0.73	64	0.11	38	165	0.32	159	155	
20	1.E0605	390	37.6	10.25	111	1170	0.4	5	0.83	2.7	35	17	40	79	5.94	4.24	10	13	0.83	564	1	0.19	34	0.10	80	38	0.27	142	651	
21	1.E0606	695	88.0	9.43	142	1279	0.4	5	2.77	1.3	53	19	45	58	5.85	3.48	12	11	0.63	1386	7	0.31	44	0.09	54	68	0.26	136	305	
22	1.E0608	3700	25.6	8.90	113	1526	0.5	5	1.36	2.9	45	18	38	61	5.58	3.55	11	10	0.71	1204	1	0.18	42	0.10	157	47	0.25	120	631	
23	1.E0611	565	26.8	9.04	99	1548	0.4	5	1.95	1.5	52	19	40	36	5.36	3.25	11	12	0.66	958	1	0.25	44	0.10	37	51	0.29	129	321	
24	1.E0612	635	10.2	7.99	52	1045	0.5	5	3.70	1.0	55	18	42	31	5.38	2.08	11	12	0.75	2576	1	0.19	39	0.09	3	55	0.26	123	113	

# NORANDA DELTA LABORATORY

## Geochemical Analysis

Project Name & No.: GRANITE BASIN -- 176

Geol.: G.G.

Date received: JULY 24

LAB CODE: 9507-037

Material: 48 Rx

Sheet: 1 of 2

Date completed: AUG. 01

R #34586

Remarks: \* Sample screened @ -35 MESH (0.5 mm)

‡ Organic, Δ Humus, S Sulfide

Au - silt & soil, 15.0 g sample digested with aqua-regia and determined by A.A. (D.L. 2 PPB); Rx, 10.0 g/AR/AA (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
03	1.E0614	20	0.2	4.62	8	511	0.3	5	2.71	0.6	56	15	19	35	6.21	0.97	11	11	0.75	724	14	0.24	14	0.08	5	157	0.27	191	55
04	1.E0615	5	1.8	5.72	11	54	0.4	5	3.93	0.6	60	10	15	147	6.21	0.22	12	15	1.40	1538	26	0.21	9	0.09	16	160	0.40	190	108
05	1.E0616	10	2.2	6.59	6	40	0.4	5	4.54	0.7	61	5	9	140	6.25	0.14	11	13	1.11	1191	32	0.11	6	0.08	18	144	0.36	172	79
06	1.E0617	10	0.2	6.16	5	173	0.4	5	3.58	0.8	61	19	14	117	5.10	0.38	11	12	1.22	780	20	0.60	14	0.06	4	237	0.20	153	75
07	1.E0618	25	2.4	5.04	7	170	0.4	5	3.81	0.8	53	21	67	126	6.22	0.37	13	9	1.92	1184	4	0.34	29	0.11	31	131	0.29	165	89
08	1.E0619	35	5.6	3.78	5	92	0.4	5	3.96	0.8	51	19	77	114	5.74	0.22	10	8	1.94	998	2	0.25	30	0.12	5	134	0.31	147	55
09	1.E0620	1030	82.4	5.18	15	31	0.4	5	5.02	1.1	50	28	183	628	5.36	0.10	10	12	2.31	1806	4	0.10	83	0.06	268	90	0.34	212	136
10	1.E0621	700	46.0	7.28	15	1023	0.5	5	4.71	0.2	58	22	18	344	5.24	0.65	13	12	0.85	629	1	0.48	21	0.08	56	244	0.16	193	53
11	1.E0622	60	5.0	3.62	18	33	0.5	5	4.76	1.1	53	27	79	130	5.89	0.11	12	7	2.89	1604	2	0.22	44	0.12	37	102	0.29	170	93
12	1.E0623	55	3.8	6.86	7	463	0.3	5	3.08	0.5	54	9	16	143	9.05	1.15	12	9	0.75	783	3	0.14	10	0.10	53	111	0.24	211	61
13	1.E0624	1470	6.8	8.96	9	1606	0.5	5	2.73	0.8	63	17	29	115	6.24	2.65	15	19	1.39	2654	9	0.30	20	0.07	12	317	0.28	202	98
14	1.E0625	55	1.8	9.08	4	1504	0.5	5	1.70	0.5	54	21	48	82	5.55	3.23	12	17	1.02	1087	5	0.26	32	0.07	5	203	0.30	209	76
15	1.E0626	1395	31.2	8.00	35	2335	0.5	5	5.05	2.0	62	12	28	163	8.10	1.69	13	12	0.85	4682	27	0.21	28	0.08	29	228	0.22	121	357
16	1.E0627	35	0.8	9.27	8	951	0.4	5	3.11	2.7	53	21	13	60	4.75	2.23	10	9	0.44	1330	20	0.49	25	0.08	6	143	0.15	216	106
17	1.E0628	5	0.2	7.01	7	738	0.4	5	1.21	0.6	45	14	12	111	6.40	1.96	10	12	0.67	858	35	0.30	11	0.09	5	101	0.20	207	97
18	1.E0629	10	0.2	4.78	5	717	0.3	5	3.55	0.2	59	9	12	87	6.06	0.59	12	9	0.55	920	8	0.16	9	0.08	5	324	0.28	183	50
19	1.E0630	5	0.2	5.29	8	435	0.4	5	4.74	0.3	57	4	10	61	5.27	0.96	11	7	0.36	710	2	0.10	5	0.07	5	186	0.30	165	39
20	1.E0631	5	0.2	5.63	13	107	0.5	5	5.73	0.9	59	28	17	165	6.40	0.18	15	15	2.19	1462	2	0.19	22	0.13	4	522	0.43	282	84
21	1.E0632	95	1.8	9.44	59	1508	0.3	5	0.19	0.2	22	11	30	20	4.65	4.33	10	10	0.55	258	1	0.12	22	0.07	13	30	0.20	125	33
22	1.E0633	160	1.8	10.04	86	1559	0.3	5	0.28	0.2	31	18	24	21	3.80	4.58	11	11	0.73	348	1	0.11	36	0.07	24	15	0.15	108	30
23	1.E0634	110	2.6	7.89	78	944	0.4	5	4.64	1.1	74	18	35	38	4.65	2.13	16	13	1.00	1850	1	0.40	34	0.08	25	101	0.18	110	83
24	1.E0636	90	2.6	7.83	77	1329	0.4	5	6.19	0.8	78	17	27	26	3.62	2.68	15	10	0.57	1858	1	0.32	36	0.06	24	59	0.12	93	54
25	1.E0637	160	2.2	9.91	66	2086	0.4	5	2.92	1.3	71	18	31	24	4.17	3.14	19	15	0.75	1135	1	0.47	39	0.09	27	91	0.18	112	71
26	1.E0638	205	3.4	11.19	98	2134	0.4	5	1.05	0.9	57	23	26	22	3.97	4.55	15	11	0.81	363	1	0.29	37	0.09	41	37	0.15	117	32
27	1.E0639	270	3.6	11.84	117	1616	0.5	5	1.20	1.3	67	18	37	24	5.49	4.50	20	13	1.12	502	1	0.32	40	0.09	38	50	0.23	143	48
28	1.E0640	165	1.0	11.44	99	1930	0.4	5	0.57	0.9	50	15	35	23	5.64	4.79	15	11	0.86	298	1	0.22	34	0.09	32	29	0.26	146	51
29	1.E0641	110	0.4	7.55	19	1282	0.3	5	0.66	0.2	42	14	36	18	3.96	2.69	12	8	0.69	264	5	0.28	35	0.07	8	80	0.11	120	32
30	1.E0642	165	0.6	6.97	25	589	0.4	5	0.43	0.5	31	10	32	24	3.52	2.40	10	8	0.45	169	3	0.23	28	0.06	3	69	0.08	94	62
31	1.E0643	15	0.2	9.00	2	1301	0.4	5	1.00	0.4	35	10	35	94	6.51	3.85	9	4	0.36	539	1	0.15	15	0.08	2	70	0.24	157	35
32	1.E0644	5	0.2	7.46	2	700	0.4	5	3.24	0.5	56	13	34	138	4.64	1.94	13	7	0.60	1480	1	0.21	28	0.09	2	259	0.19	140	43
33	1.E0645	335	10.2	7.37	3	1103	0.3	5	0.10	0.3	12	2	35	93	10.11	3.17	8	4	0.27	124	12	0.15	6	0.08	17	61	0.11	166	42
34	1.E0646	160	5.4	7.71	4	768	0.3	5	0.24	0.2	17	7	37	43	5.14	2.88	7	8	0.38	176	5	0.25	13	0.05	13	78	0.10	160	28
35	1.E0647	25	0.6	7.21	2	1308	0.3	5	1.14	0.3	44	12	28	123	5.78	2.46	12	9	1.06	554	1	0.17	17	0.08	2	221	0.19	179	66
36	1.E0649	15	0.2	7.32	2	1215	0.2	5	0.64	0.4	33	7	8	34	5.87	3.21	9	8	0.52	587	1	0.16	5	0.08	8	38	0.34	181	62
37	1.E0650	20	0.2	4.09	9	69	0.3	5	3.01	1.0	55	6	17	118	6.34	0.30	11	9	1.01	1178	38	0.19	9	0.08	11	133	0.32	154	125

12/18 9.00

T. No.	SAMPLE No.	Au	Ag	Al	As	Ba	Bc	Bi	Ca	Cl	Cc	Co	Cr	Cu	Fe	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sr	Ti	V	Zn	8507	037
		ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	Pa. 2 of 2
38	1.E0651	15	0.2	4.62	13	196	0.3	5	2.54	1.0	55	11	12	49	6.60	0.46	13	12	1.11	1020	35	0.27	14	0.07	12	182	0.27	174	49		
39	1.E0652	100	2.0	6.21	16	1041	0.3	5	3.02	1.3	53	4	31	66	4.80	1.60	12	10	0.71	433	4	0.07	8	0.08	36	54	0.20	105	123		
40	1.E0653	20	2.6	7.43	13	462	0.4	5	3.75	0.8	56	15	16	110	4.58	1.57	12	9	0.64	907	1	0.36	15	0.07	11	134	0.19	288	53		
41	1.E0654	16950	492.0	9.07	22	2086	0.4	5	0.77	2.6	40	13	35	313	5.47	3.26	12	13	1.20	850	6	0.21	25	0.09	364	57	0.20	159	687		
42	1.E0655	370	8.2	10.89	88	1445	0.4	5	0.44	0.2	31	19	37	111	5.94	3.72	8	11	0.30	236	20	0.49	44	0.06	21	135	0.08	148	111		
43	1.E0656	135	5.4	10.19	118	1281	0.3	5	0.16	0.2	21	1	36	142	7.79	3.55	5	10	0.47	508	10	0.44	5	0.12	21	117	0.14	175	54		
44	1.E0657	45	5.8	10.45	40	1145	0.4	5	0.40	0.5	33	17	39	67	5.77	3.36	8	17	0.42	695	27	0.53	39	0.08	16	141	0.09	176	43		
45	1.E0658	100	2.0	6.76	10	796	0.3	5	1.84	0.4	55	14	18	51	6.16	1.91	11	9	0.42	1120	11	0.31	15	0.09	14	114	0.29	236	58		
46	1.E0659	20	0.8	6.21	10	736	0.3	5	2.38	0.5	61	11	14	39	5.61	1.65	11	9	0.41	867	2	0.24	8	0.08	13	127	0.26	188	31		
47	1.E0660	10	0.2	7.21	9	706	0.4	5	3.16	0.7	59	5	12	53	5.58	1.48	11	8	0.38	774	15	0.14	8	0.10	3	128	0.30	215	31		
48	1.E0661	75	1.0	6.13	11	566	0.3	5	1.48	0.6	53	8	37	78	4.72	1.68	12	11	1.23	570	6	0.25	17	0.08	12	154	0.23	149	88		
51	1.E0662	745	3.2	10.28	24	826	0.3	5	0.17	0.2	11	12	36	40	4.94	3.55	4	8	0.30	147	7	0.50	19	0.04	6	114	0.07	193	28		
52	1.E0663	50	0.2	9.25	5	759	0.3	5	0.13	0.3	15	15	43	57	4.75	3.57	6	4	0.23	119	2	0.25	24	0.04	7	72	0.10	176	27		

# NORANDA DELTA LABORATORY

## Geochemical Analysis

Project Name & No.: GRANITE BASIN - 176 (HEMLO)

Geol.: G.G.

Date received: AUG. 16

LAB CODE: 9508-016

Material: 3 Rx

Sheet: 1 of 1

Date completed: AUG. 22

R #34591

Remarks: \* Sample screened @ -35 MESH (0.5 mm)

□ Organic, Δ Humus, S Sulfide

Au - silt & soil, 15.0 g sample digested with aqua-regia and determined by A.A. (D.L. 2 PPB); Rx, 10.0 g/AR/AA (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
188	GM0269 rx	45	0.2	6.68	2	279	0.7	5	4.24	0.7	62	7	14	61	4.33	0.69	13	14	1.12	929	3	0.05	6	0.12	8	229	0.23	137	86
189	GM0270	975	2.4	8.37	56	1074	0.3	5	0.27	0.2	8	5	38	91	8.08	3.70	7	10	0.83	376	4	0.14	6	0.06	11	38	0.34	213	65
190	GM0271 rx	10	0.2	4.69	2	770	0.5	5	2.77	0.4	66	12	27	158	3.99	0.83	14	15	1.26	1194	1	0.10	9	0.12	6	371	0.22	154	75

# NORANDA DELTA LABORATORY

## Geochemical Analysis

**Project Name & No.:** GRANITE BASIN - 176 (HEMLO)  
**Material:** 84 Cores (HGB95-1/2)  
**Remarks:** \* Sample screened @ -35 MESH (0.5 mm)

**Geol.:** GG  
**Sheet:** 1 of 3

**Date received:** SEP. 05  
**Date completed:** SEP. 07

**LAB CODE:** 9509-008  
**R #** 34605

‡ Organic, Δ Humus, S Sulfide

Au - silt & soil, 15.0 g sample digested with aqua-regia and determined by A.A. (D.L. 2 PPB); Rx, 10.0 g/AR/AA (DL 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 °C for 4 hours diluted to 10 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
3	091351	50	0.6	5.40	8	656	0.4	5	3.27	0.2	43	17	30	39	4.95	1.04	6	5	0.37	546	1	0.34	11	0.07	2	444	0.20	124	89
4	091352	75	1.0	6.10	2	752	0.4	5	2.54	0.2	41	20	49	35	4.96	1.17	6	5	0.39	413	1	0.34	15	0.07	2	415	0.16	130	91
5	091353	60	1.2	7.17	2	676	0.4	5	2.52	0.2	41	18	26	27	4.59	1.38	8	7	0.49	516	1	0.44	14	0.07	2	274	0.14	132	77
6	091355	40	0.8	6.84	4	625	0.4	5	2.84	0.2	45	20	30	39	3.49	1.30	7	7	0.45	483	1	0.38	16	0.06	7	299	0.09	119	53
7	091356	75	0.6	7.15	5	646	0.5	5	2.65	0.2	45	19	35	31	4.39	1.45	8	7	0.48	515	1	0.41	17	0.07	4	278	0.13	129	47
8	091357	45	0.8	6.53	5	468	0.5	5	3.18	0.2	48	20	46	35	4.26	1.03	8	8	0.52	571	1	0.47	19	0.06	7	202	0.11	110	66
9	091358	140	1.6	7.11	11	543	0.5	5	2.92	0.3	49	22	38	46	4.70	1.36	9	8	0.52	555	1	0.41	19	0.07	11	217	0.15	129	92
10	091359	110	1.2	7.17	10	656	0.5	5	2.82	0.4	49	19	30	29	4.46	1.55	9	8	0.57	579	1	0.36	18	0.07	9	255	0.17	133	46
11	091360	130	1.6	7.15	2	1450	0.5	7	3.28	0.2	48	18	24	28	3.55	1.72	5	7	0.46	636	2	0.31	16	0.06	9	172	0.15	118	51
12	091361	170	2.2	5.00	15	574	0.5	11	4.45	2.1	57	15	41	61	4.75	1.11	8	17	1.38	1552	3	0.14	22	0.09	207	152	0.22	130	468
13	091362	75	0.2	4.42	9	310	0.5	12	3.51	1.3	61	15	44	60	4.74	0.67	14	21	1.83	1834	3	0.14	19	0.10	85	90	0.23	127	334
14	091363	75	0.4	5.03	8	699	0.5	10	7.83	0.9	60	16	45	40	3.33	1.85	5	10	0.63	2175	3	0.07	33	0.07	69	66	0.14	102	238
15	091364	60	1.2	6.37	21	896	0.5	11	4.55	1.5	61	16	31	47	3.40	2.59	8	11	0.80	1155	10	0.05	25	0.07	52	59	0.14	103	359
16	091365	65	1.0	4.84	16	492	0.5	18	4.53	1.1	63	20	52	49	4.27	1.36	9	18	1.55	1310	26	0.08	36	0.06	25	48	0.11	109	95
17	091366	15	0.4	4.66	14	91	0.5	21	7.08	1.0	71	36	116	107	6.47	0.14	10	26	3.87	1781	1	0.01	50	0.12	2	90	0.26	211	123
18	091367	25	0.2	4.45	18	314	0.5	21	6.73	0.8	69	21	61	133	4.71	0.72	9	26	2.12	2232	4	0.03	48	0.07	11	49	0.20	140	125
19	091368	40	0.2	5.23	15	103	0.6	19	7.79	0.6	69	33	97	103	6.65	0.24	8	34	4.02	1937	1	0.01	70	0.09	2	95	0.35	266	122
20	091369	20	0.2	5.18	16	82	0.6	26	6.62	1.2	65	38	90	95	6.67	0.16	11	32	4.12	1654	1	0.01	67	0.09	2	98	0.35	271	108
21	091370	20	0.2	5.56	7	26	0.6	5	8.18	0.8	47	35	121	113	7.02	0.07	7	27	4.28	1652	1	0.01	62	0.11	2	140	0.35	268	99
22	091371	35	0.4	2.39	12	146	0.4	5	5.70	0.5	54	15	80	27	4.41	0.32	10	15	1.34	1113	1	0.04	30	0.07	3	39	0.19	107	82
23	091372	30	0.2	3.40	3	215	0.4	5	5.18	0.3	54	14	57	29	4.21	0.52	9	15	1.34	1018	1	0.06	27	0.07	2	40	0.21	108	85
24	091373	30	0.2	3.53	8	241	0.4	5	5.74	0.7	57	16	66	30	4.40	0.71	9	16	1.26	1211	1	0.10	29	0.08	3	39	0.20	113	81
25	091374	80	0.2	4.01	9	456	0.4	5	5.61	0.6	53	15	64	32	4.29	1.21	9	13	0.98	1030	3	0.07	28	0.08	2	38	0.17	121	72
26	091375	60	0.4	3.01	15	372	0.4	5	5.61	0.8	53	15	61	25	5.04	0.92	9	12	0.88	986	14	0.06	31	0.07	6	30	0.12	104	79
27	091376	60	1.4	3.51	14	301	0.4	5	4.57	0.8	52	15	71	28	7.03	0.94	12	14	1.10	936	24	0.07	30	0.07	16	34	0.15	107	83
28	091377	655	4.0	3.64	20	243	0.5	5	5.83	7.7	61	15	59	55	6.51	0.91	12	17	1.34	1107	34	0.06	29	0.07	178	35	0.12	100	478
29	091378	20	0.4	4.85	10	229	0.5	5	3.90	0.6	58	18	58	36	4.85	0.94	11	24	2.05	1074	1	0.12	37	0.09	9	40	0.15	114	94
30	091379	30	0.2	4.51	11	170	0.5	5	3.22	0.9	54	18	63	36	4.72	0.82	10	25	2.08	924	1	0.06	34	0.08	5	26	0.11	112	93
31	091380	15	0.2	4.76	10	239	0.5	5	4.05	1.1	43	16	57	26	4.53	1.03	10	23	1.85	953	1	0.07	34	0.08	2	30	0.10	107	83
32	091381	55	0.2	5.27	3	187	0.5	5	5.45	1.0	49	17	60	23	4.43	0.93	7	37	2.22	1039	1	0.06	32	0.08	2	43	0.11	112	97
33	091382	5	0.2	5.98	2	225	0.5	5	4.82	0.9	48	21	52	49	4.96	1.13	12	37	2.44	931	1	0.06	35	0.08	2	34	0.14	147	106
34	091383	15	0.2	7.36	2	348	0.7	5	6.01	0.8	49	30	64	102	5.84	1.33	10	66	2.35	925	1	0.14	54	0.09	2	58	0.17	223	114
35	091384	5	0.2	7.40	2	297	0.8	5	6.01	1.1	53	19	43	74	4.69	1.39	9	47	2.06	913	1	0.20	39	0.09	2	76	0.06	127	110
36	091385	10	0.2	6.98	4	386	0.8	5	6.29	1.0	55	19	44	91	4.48	1.58	8	38	1.78	906	1	0.16	32	0.09	5	78	0.07	140	87
37	091386	15	0.2	6.44	8	488	0.8	5	8.00	0.5	58	18	35	43	4.19	1.80	5	28	1.26	904	2	0.09	29	0.08	4	80	0.16	136	69



T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bc ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	9500-000 Pg. 2 of 3
38	091387	5	0.2	6.32	5	324	0.7	5	6.81	0.8	61	17	45	43	4.13	1.60	3	34	1.31	828	3	0.13	34	0.09	4	62	0.17	133	80	
39	091388	5	0.2	6.35	7	592	1.0	5	8.31	0.8	60	15	40	40	3.04	2.03	1	20	0.91	797	1	0.10	25	0.08	3	70	0.12	105	72	
40	091389	10	0.2	7.95	10	457	1.0	5	9.73	1.2	64	18	48	53	4.74	1.60	2	24	1.46	1067	10	0.03	28	0.10	8	253	0.25	140	95	
41	091390	5	0.2	5.70	2	66	0.6	5	9.84	0.5	59	21	80	83	4.92	0.22	2	19	1.96	1197	7	0.01	35	0.08	2	309	0.28	179	84	
42	091391	5	0.2	6.52	3	41	0.7	5	9.85	0.6	61	23	60	68	5.59	0.04	6	20	2.25	1355	8	0.01	35	0.09	2	387	0.30	169	96	
43	091392	5	0.2	5.12	3	20	0.6	5	10.09	0.5	63	16	44	66	4.83	0.04	6	15	1.60	1290	16	0.01	20	0.08	2	343	0.27	117	98	
44	091393	40	0.8	5.37	2	25	0.7	5	14.40	0.6	46	12	35	105	4.11	0.04	1	13	1.13	1322	19	0.01	18	0.08	2	311	0.20	103	111	
45	091394	5	0.2	6.10	20	65	1.5	5	13.43	1.9	59	24	51	146	4.87	0.12	10	23	1.25	1310	27	0.01	33	0.09	6	408	0.23	154	134	
46	091395	10	0.2	5.66	3	178	0.7	5	6.08	0.4	62	22	32	97	5.88	0.22	10	36	3.02	1496	5	0.01	32	0.10	2	107	0.35	187	147	
47	091396	30	0.4	6.45	2	730	0.4	5	3.24	0.2	51	22	45	65	5.26	1.13	8	12	0.77	639	1	0.24	25	0.07	2	364	0.21	141	135	
48	091397	40	0.8	6.01	9	814	0.3	5	2.50	0.5	52	19	30	34	4.04	1.24	8	10	0.66	545	1	0.23	20	0.05	2	326	0.16	120	136	
51	091398	10	0.2	5.30	2	834	0.5	5	3.33	0.2	49	19	41	54	5.39	0.93	11	14	0.86	749	1	0.13	19	0.08	2	393	0.26	141	94	
52	091401	8000	28.4	7.43	97	671	0.6	5	6.19	5.4	62	17	39	66	4.35	2.44	13	20	3.01	15000	2	0.03	36	0.09	819	68	0.16	100	1220	
53	091402	1210	4.2	7.96	51	487	0.7	5	5.11	1.9	57	17	36	46	4.81	2.26	12	19	4.04	12000	1	0.05	34	0.10	118	76	0.19	96	472	
54	091403	300	1.8	8.90	44	807	0.7	5	2.38	1.5	49	20	35	31	4.76	2.95	16	19	3.96	6621	1	0.06	34	0.10	87	69	0.15	101	305	
55	091404	215	2.2	9.23	39	739	0.7	5	2.54	2.2	53	21	37	41	4.51	2.59	13	22	4.53	7519	1	0.08	39	0.10	191	51	0.15	99	355	
56	091405	525	3.6	9.58	51	801	0.7	5	1.87	1.4	50	22	43	33	4.64	2.95	15	23	4.32	7012	1	0.10	43	0.10	103	28	0.11	110	198	
57	091406	135	1.8	8.62	60	1013	0.6	5	0.75	0.7	33	21	37	30	4.36	3.16	13	18	2.89	4694	1	0.05	36	0.10	69	17	0.12	103	151	
58	091407	380	5.2	8.97	39	1260	0.6	5	0.60	4.1	29	20	38	266	4.69	3.03	15	22	3.90	6655	1	0.03	38	0.11	444	17	0.14	117	1051	
59	091408	220	1.4	8.91	46	1773	0.6	5	0.45	1.5	28	22	42	38	4.98	2.96	14	24	4.35	6776	1	0.02	40	0.11	91	29	0.14	112	285	
60	091409	120	1.6	8.42	37	1779	0.6	5	0.81	3.7	34	20	44	47	5.40	2.46	13	28	5.22	8589	1	0.04	36	0.10	307	41	0.13	105	913	
61	091410	265	2.0	8.47	23	2435	0.6	5	1.24	1.9	40	21	42	137	5.77	2.68	12	23	4.26	5937	2	0.07	36	0.10	187	59	0.12	100	462	
62	091411	210	1.2	9.13	16	2268	0.6	5	0.65	1.1	35	18	33	94	5.36	3.28	13	24	3.95	5346	1	0.07	32	0.10	77	43	0.19	111	374	
63	091412	75	0.8	9.19	17	1525	0.6	5	0.80	1.5	41	19	37	24	5.21	3.63	11	25	4.18	5300	1	0.06	35	0.10	83	39	0.20	105	432	
64	091413	40	0.2	9.21	7	1335	0.6	5	1.18	1.0	43	20	47	19	5.12	3.68	11	23	4.25	6363	1	0.11	43	0.10	13	60	0.18	107	188	
65	091414	105	0.2	8.90	6	2561	0.6	5	1.05	0.7	44	18	44	17	4.97	3.83	13	20	3.53	5456	1	0.08	37	0.10	100	66	0.16	98	186	
66	091415	100	0.8	9.12	13	2881	0.6	5	0.81	1.5	39	18	42	22	5.07	3.84	13	22	3.79	5910	1	0.06	34	0.11	120	42	0.19	108	368	
67	091416	150	0.2	9.12	13	2474	0.6	5	0.98	1.3	38	18	41	20	5.29	3.56	12	24	4.10	6377	1	0.08	33	0.10	40	34	0.20	110	462	
68	091417	240	0.4	8.97	20	2887	0.6	5	0.86	0.9	39	20	41	23	5.62	3.19	13	30	4.86	7085	1	0.06	37	0.11	25	25	0.21	113	223	
69	091418	85	0.8	8.86	22	3023	0.6	5	1.38	1.7	46	20	47	25	5.74	3.37	16	27	4.28	7356	1	0.13	39	0.11	122	42	0.22	115	312	
70	091419	240	1.0	8.73	22	2838	0.6	5	1.43	3.7	46	19	62	63	5.38	3.48	13	24	3.62	7550	1	0.13	38	0.10	92	39	0.23	115	801	
71	091420	510	4.6	8.52	8	2296	0.6	5	1.47	5.0	43	25	49	208	6.11	2.53	15	29	4.84	6796	1	0.13	42	0.09	1544	37	0.29	163	1335	
72	091421	300	5.4	8.24	30	2838	0.5	5	1.40	11.4	44	22	47	119	5.87	2.38	13	27	4.38	5502	4	0.15	40	0.09	3185	34	0.27	136	2924	
73	091422	1590	4.4	7.78	28	1906	0.5	5	3.07	6.9	56	18	59	190	5.28	2.19	14	18	2.39	3343	2	0.34	30	0.09	231	72	0.19	102	1425	
74	091423	2600	6.8	7.14	43	1415	0.5	5	3.44	13.0	64	17	54	252	5.15	2.20	12	17	2.27	2240	5	0.43	30	0.09	382	81	0.20	104	2775	
75	091424	310	1.8	6.87	30	838	0.6	5	5.00	1.9	69	18	56	124	5.23	1.00	14	19	2.01	3515	2	0.31	31	0.09	58	123	0.26	122	393	
76	091425	305	0.8	8.20	5	1404	0.5	5	1.99	1.1	61	18	51	40	5.12	2.44	12	23	2.74	2469	1	0.17	44	0.09	45	69	0.23	114	240	
77	091426	75	1.2	7.99	9	231	0.6	5	5.21	1.4	68	22	53	56	5.44	0.55	11	17	2.54	2294	1	0.13	40	0.09	16	182	0.32	154	124	
78	091427	160	2.6	7.61	24	387	0.6	5	3.99	0.9	62	24	56	64	5.83	0.77	12	20	2.72	1990	1	0.10	47	0.09	24	106	0.32	167	168	
79	091428	135	2.2	6.97	13	284	0.6	5	3.72	1.1	60	23	46	43	5.95	0.68	13	22	2.79	1881	1	0.05	42	0.09	17	61	0.32	171	147	
80	091429	300	1.4	6.79	4	153	0.6	5	4.27	1.1	60	21	36	48	5.37	0.49	13	24	2.77	2184	1	0.05	36	0.09	19	61	0.31	141	141	
81	091430	200	1.4	7.39	12	490	0.7	5	4.00	0.7	57	21	49	52	5.44	1.15	12	22	2.43	1874	1	0.06	39	0.09	13	60	0.29	146	138	
82	091431	225	0.8	7.70	14	996	0.6	5	1.86	0.3	51	17	35	38	5.02	2.45	12	22	2.30	1416	1	0.08	29	0.09	18	42	0.22	122	135	
83	091432	275	1.6	7.84	15	658	0.6	5	2.82	0.8	60	22	59	62	5.46	1.51	14	21	2.70	1725	1	0.25	38	0.09	16	75	0.28	147	141	
84	091433	110	1.4	8.00	9	327	0.7	5	3.98	0.8	64	23	66	53	5.79	0.76	14	19	2.98	1792	1	0.31	40	0.09	9	96	0.29	147	104	

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Bc ppm	Bi ppm	Ca %	Cl ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sc ppm	Ti %	V ppm	Zn ppm	8509-008 Pg. 3 of 3
85	091434	35	0.2	7.82	12	284	0.7	5	4.22	0.8	64	24	64	53	5.86	0.62	13	20	2.79	1470	1	0.28	42	0.09	6	100	0.28	158	115	
86	091435	55	1.8	7.68	12	163	0.7	5	5.66	1.0	69	24	65	69	5.15	0.49	10	19	2.37	1596	1	0.27	41	0.09	7	101	0.32	161	120	
87	091436	40	0.8	7.78	13	339	0.7	5	3.99	1.1	67	20	71	50	5.31	1.14	16	24	2.73	2429	1	0.07	51	0.10	17	132	0.28	132	139	











HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN05

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)								SAMPLED BY
LE0587	Porphyritic diorite, shear at 244/85 on cliff face, yellow fracture fill, weak hematite fracture fill, weak sericite.	5 Pyrite	Chip	0.35								L. Erdman
LE0588	Trench 1 + 12. Porphyritic diorite, similar to 0587, shear at 230/80.	3 Pyrite	Chip	0.2								L. Erdman
LE0589	Porphyritic diorite, hanging wall to 0576, no shear, strongly argillic, moderately sericitic, weak hematite fracture fill, local bleaching.	10 Pyrite	Chip	0.5								L. Erdman
LE0590	Porphyritic diorite, totally bleached, shear at 320/60, yellow/rusty fracture fill.	-	Chip	0.7								L. Erdman
LE0591	Porphyritic diorite, bleached, similar to 0590, shear at 330/54, Trench 1 + 10.	15 Pyrite	Chip	1.5								L. Erdman
LE0594	Trench 1 + 09. Andesite tuff, 2 shears 1 cm each 140/60, strong argillic alteration in shears.	-	Chip	0.6								L. Erdman
LE0595	Andesite tuff, argillic shears (004/29) <1cm thick, rusty fracture fill, hairline clear quartz fracture fill, moderate	3 Pyrite	Chip	0.7								L. Erdman

HEMLO GOLD MINES INC.







HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN95

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)								SAMPLED BY
LE0613	Andesite, similar to 600 but local carbonate fracture fill and local hematite fracture fill. Foliation 292/70.	10 Pyrite	Chip	1.3								L. Erdman
LE0614	Two 1 cm shears (220/40, 175/008), discontinuous carbonate lenses, diorite host.	20 Pyrite	Chip	1.0								L. Erdman
LE0615	Shear zone, 50 cm wide, quartz veinlets, chlorite, epidoted. Fractures/shear at 158/40, rusty outcrop.	-	Chip	0.7								L. Erdman G. Manson
LE0616	Shear at 256/42, cuts off 0615 shear (above), extremely chloritic.	-	Chip	0.6								L. Erdman G. Manson
LE0617	Porphyritic diorite, footwall of 0615 and hanging wall of 0616, locally silicified, hairline quartz veinlets.	5 Pyrite	Chip	1.0								L. Erdman G. Manson
LE0618	Shear Zone, 1 m wide, rusty fracture fill, extremely chloritic, rubbly outcrop.	-	Chip	1.0								L. Erdman G. Manson
LE0619	Footwall of 0618 shear, 1-2 cm shears at an average of 074/10, porphyritic diorite, weak sericite.	15 Pyrite	Chip	0.7								L. Erdman G. Manson



HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN95.

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)							SAMPLED BY
LE0626	Footwall to 0625, structural depression trending 262°, intersection of 2 shears 084/72 and 200/80, fault gouge.	-	Chip	0.9							L. Erdman
LE0627	1 cm fractures at 300/46, rusty weathered surface on feldspar crystal tuff, many different fractures give rock a veined appearance, fractures are cream colour.	15 Pyrite	Chip	0.6							L. Erdman G. Manson
LE0628	Shear zone (80 cm), at 320°/vertical, bleached, rusty fracture fill.	1 Pyrite	Chip	1.0							L. Erdman G. Manson
LE0629	Footwall to 0628, volcanic tuff weakly silicified, mafics to chlorite/pyrite.	5 Pyrite	Chip	1.0							L. Erdman G. Manson
LE0630	Shear zone (1 m) at 358/38. Bleached/cream colour, very fractured.	-	Chip	1.0							L. Erdman G. Manson
LE0631	Footwall of 0630, strongly chloritic, local rusty fracture fill. Fractures at 258/40, 110/70, 350/54, 256/vertical.	-	Chip	1.2							L. Erdman G. Manson
LE0632	Foliated at 272/48, tuff, trace mariposite, weak to moderate sericite.	10 Pyrite	Chip	1.0							L. Erdman & G. Gill

HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN95.

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)								SAMPLED BY
LE0633	Same location as 0632. Hanging wall of 0632 but foliation less obvious in outcrop.	10 Pyrite	Chip	1.0								L. Erdman & G. Gill
LE0634	Foliated at 276/42, similar to 0633 and hanging wall to 0633.	7 Pyrite	Chip	1.0								L. Erdman & G. Gill
LE0636	Outcrop does not appear foliated but is hanging wall to 0634, locally silicified, trace mariposite.	7 Pyrite	Chip	0.7								L. Erdman & G. Gill
LE0637	Dip slope, possibly footwall of shear at 310/28. In hanging wall of 0636.	7 Pyrite	Chip	0.7								L. Erdman & G. Gill
LE0638	Same as 0636, trace mariposite, footwall of 0639.	7 Pyrite	Chip	0.7								L. Erdman & G. Gill
LE0639	Shear at 288/65, possibly hanging wall of shear @ 310/28, well foliated in outcrop, brittle fractures, no mariposite observed.	7 Pyrite	Chip	1.2								L. Erdman & G. Gill
LE0640	Similar to 0639, fractures at 282/60, hanging wall of 0639 and also shear at 310/28.	10 Pyrite	Chip	1.0								L. Erdman & G. Gill

HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN95

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)								SAMPLED BY
LE0641	To west of previous chip sequence, foliated at 280/ (56-64), trace mariposite moderate sericite, pyrite along foliation.	7 Pyrite	Chip	1.0								L. Erdman & G. Gill
LE0642	To west of 641. Foliation at 270/60, no visible mariposite, feldspar porphyritic diorite.	15 Pyrite	Chip	0.7								L. Erdman & G. Gill
LE0643	Shear on east side of rusty spine, 296/64, rusty fractures, trace mariposite, moderate sericite.	10 Pyrite	Chip	0.3								L. Erdman G. Manson
LE0644	Footwall of 0643, appears unfoliated, weak epidote alteration, diorite, rusty surface.	3 Pyrite	Chip	0.7								L. Erdman G. Manson
LE0645	Shear at 208/66, tuff, no sericite/mariposite, weakly argillic, rusty/bleached.	3 Pyrite	Chip	0.5								L. Erdman G. Manson
LE0646	Extension of 0645 along strike but wider here, fractured at 204/60 to 198/80, bleached with rusty fracture fill.	-	Chip	1.2								L. Erdman G. Manson
LE0647	Footwall of 0645, volcanic tuff, weak pyrite/chlorite replacing mafics,	15 Pyrite	Chip	0.6								L. Erdman G. Manson





HEMLO GOLD MINES INC.

PROJECT #: 176

N.T.S. : 94C/5

LAB REPORT #:

DATE: July 14, 1995

PROJECT: GRANITE BASIN

ROCK SAMPLE REPORT

Filename: GBASIN95

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPH.	TYPE	WIDTH (m)								SAMPLED BY
LE0655	Foot wall of shear at 0656, foliated tuff, possible mariposite clear quartz fractures cut foliation.	15 Pyrite	Chip	0.35								L. Erdman
LE0656	Shear at 070/80, sampled 5 cm shear only.	-	Chip	0.05								L. Erdman
LE0657	Hanging wall of 0656 shear. Sample description same as 0655.											L. Erdman
LE0658	Feldspar porphyritic diorite, rusty/yellow surface, hairline clear quartz, weak sericite. Foot wall to fracture at 250/58, cream fracture zones <0.5 cm.	15 Pyrite	Chip	0.7								L. Erdman
LE0659	Hanging wall or perhaps structure zone itself, increase in cream fractures.	-	Chip	0.7								L. Erdman
LE0660	Down dip extension of 0630, bleached, rusty surface.	-	Chip	1.0								L. Erdman
LE0661	Shear zone @ 216/54, bleached, yellow green weathering, feldspar porphyritic diorite, weak to moderate sericite, weakly propylitic host.	3 Pyrite	Chip	1.4								L. Erdman G. Manson









**APPENDIX III**

**DETAILED DRILL LOGS**

## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NO		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°						
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 1 OF 6		MAGNETIC DECLINATION 23°				
JAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED	CONNECTED	RECORDED	CONNECTED	LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN					
DEP. 9995E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING		HGB-95-1		DATE AUGUST 9, 1995					
		ROCK TYPE		DESCRIPTION				GEO TECH				GEOCHEM				ASSAY					
FROM	TO			FROM	TO	% RECO VERY	Py	Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au			
0.0	16.8			CASING (thick overburden)																	
16.8	39.8			FELDSPAR PORPHYRITIC INTRUSIVE (SPOTTED TEXTURE)				16.8	18.3	60	12	3	16.8	39.8	-	1	-				
				Light grey with 40% whole feldspar phenocrysts				18.3	21.3	70											
				All fractures are oxidized (rusty). No shears, non-foliated.				21.3	24.4	45											
				Locally very fractured in all directions. Disseminated fine grained pyrite in matrix so that it appears feldspars are encircled by pyrite.				24.4	27.4	80											
				Carbonate fracture fill, no carbonate veins.				27.4	28.9	100											
				Possible fault (rubble) at 33.8m				28.9	30.5	100						33.5	35.5	91396	30		
				Final 0.9m has weak pervasive carbonate as well as fracture fill carbonate. Also fracture density increases to 5 from 2.				30.5	33.5	80						35.5	36.6	91397	40		
								33.5	36.6	90					36.6	39.8	91398	10			
								36.6	39.8	80											
39.6	41.6	AP	AUGITE PORPHYRITIC ANDESITE (DYKE (?))				39.6	41.6	-	Tr	1	39.6	41.6	2	3	-					
			Upper contact at 45° to CA, lower contact broken.				39.6	42.7	100												
			Green grey, fine grained with pyroxene phenocrysts in a feldspar rich matrix. Pervasive carbonate and chlorite. Quartz/carbonate veinlets (<0.5 cm) at 30°, 20°, 45°, 120°.																		
			At 39.9 the Qtz/carbonate veins have chloritic alteration envelopes of 4 mm thickness and host rock is less chloritic than in remainder of interval.																		
41.6	42.1	FP	FELDSPAR PORPHYRITIC INTRUSIVE				41.6	42.1	-	12	1	41.6	42.1	-	1	-					
			As at 16.8 to 39.8 but less oxidized, more competent pieces of core. Upper and lower contacts are broken.																		
42.1	42.7	AP	AUGITE PORPHYRITIC ANDESITE				42.1	42.7	-	Tr	1	42.1	42.7	2	3	-					
			As at 39.6 to 41.6																		
42.7	53	FP	FELDSPAR PORPHYRY INTRUSIVE - SPOTTED TEXTURE				42.7	53.0	-	15	3	42.7	53.0	-	2	-	1	42.7	43.7	91351	50
			Light grey colour, porphyritic with phenocrysts to 5 mm.				42.7	45.7	100									43.7	44.7	91352	75
			Phenocryst volume ~40%. Abundant very fine grained pyrite, yellow colour. Pyrite appears to be replacing mafic minerals.				45.7	48.8	100									44.7	45.7	91353	60
			Fine fractures in many directions, carbonate filled. Hairline.				48.8	51.8	100									45.7	46.7	91354	Lost
							51.8	54.9	100								46.7	47.7	91355	80	

## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 2 OF 6		MAGNETIC DECLINATION 23°			
LAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	LAT.	ELEV.	DIP	HOLE No.		LOGGED BY L. ERDMAN			
DEP. 9995E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING	HGB-95-1		DATE AUGUST 9, 1995			
FROM	TO	ROCK TYPE	DESCRIPTION	GEOTECH				GEOCHEM					ASSAY					
				FROM	TO	% RECO VERY	Py	Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au
			clear quartz filled fractures, many directions. Possible mariposite at 52.1m. Does not appear to be foliated. Rare rusty fracture planes. Rare milky quartz/carbonate veins at 40° to CA (6 mm). Interval ends with quartz/carbonate vein (4mm) at 10° to CA.												47.7	48.7	91358	75
															48.7	49.7	91357	85
															49.7	50.7	91358	140
															50.7	51.8	91359	110
															51.8	53	91360	130
53.0	57.7	HP	<b>HORNBLLENDE PORPHYRY</b> Light grey, siliceous, feldspars are sausseritized. sections show phenocrysts of hornblende, other sections are very fine grained non porphyritic. At bottom of interval is a distinct breccia texture. Very fractured in many directions, filled with carbonate. Quartz vein (5mm) at 54.7, 20° to CA. Disseminated pyrite is medium grain forming discrete cubic shapes. At 53.3, very fine grained pyrite in quartz veinlet at 55° to CA. The core has such abundant carbonate filled fractures cannot determine if carbonate is pervasive within the host. Sericite fracture planes but the rock is not foliated. The very fine grained sections are siliceous but have pervasive carbonate and carbonate fractures. Also have ghostly, sausseritized feldspar. Hornblende porphyritic predominant from 53.4 to 54.2 and 56.5 to 57.2. This interval is either a hornblende intrusive cut by siliceous dykes or a siliceous volcanic cut by hornblende intrusive.	53.0	57.7	-	2	10	53.0	57.7	-	3	2	-	53	55	91361	170
				54.9	57.9	100									55	57	91362	75
															57	58	91363	75
57.7	60.4	FP	<b>FELDSPAR PORPHYRY (?) ALTERED</b> Light grey. Pervasive, fracture fill and vein carbonate. Clay fault gouge at 59.5 and at 60.1. Locally feldspar phenocrysts are observed so this is possibly the feldspar porphyry but overall it is so altered and fractured the original rock type is difficult to determine. Thicker (3mm to 5mm) milky carbonate veins at 40°, 45°, 10°. Sericitic fractures and clay on fractures but non foliated. Very fine grained pyrite ranges from 2% to locally 15%, generally 7%. Locally pyrite replaces mafics but generally is disseminated in ground mass with ghostly white	57.7	60.4	-	10	20	57.7	60.4	-	4	2	-	58.0	59.4	91364	60
				57.9	61.0	100									59.4	60.4	91365	65



## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 3 OF 6		MAGNETIC DECLINATION 23°			
LAT. 9095N		ELEV. 1550 m		DIP -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN				
DEP. 9095E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING		HGB-95-1		DATE AUGUST 9, 1995				
						GEOTECH				GEOCHEM						ASSAY				
FROM	TO	ROCK TYPE	DESCRIPTION		FROM	TO	% RECO VERY	Py	Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au	
			feldspar being unpyritic.																	
60.4	62.5	AND	ANDESITE		60.4	62.5	-	Tr	5	60.4	62.5	3	4	-	-	60.4	62.5	91366	15	
			Green grey, fine grain, non-porphyrific. Fine to medium grained disseminated pyrite. Pervasive and fracture fill carbonate. Fractures range from 10° to 50° to CA, rarely 0°. Upper contact at 45°, lower contact 20°. Quartz carbonate veinlets (<3mm) milky, irregular, at same angles as fracture fill carbonate. From 60.8 to 61.1 - feldspar porphyry as at 57.7 to 60.4. Upper contact 50°, lower contact broken.		61	64	100													
62.5	63.8	FP	FELDSPAR PORPHYRY (ALTERED)		62.5	63.8	-	2	50	62.5	63.8	2	4	2		62.5	63.8	91367	25	
			Light grey, extremely fractured. Similar to 57.7 to 60.4 but far more fractures. Many pieces are so fractured they fall apart when handled. Sericite, clay on fracture surfaces. Pyrite is fine grained and occurs disseminated in matrix. Pervasive and fracture fill chlorite.																	
63.8	69.1	AP	AUGITE PORPHYRIFIC ANDESITE		63.8	69.1	-	1	10	63.8	69.1	3	4	1	-	63.8	65.8	91368	40	
			Grey green, fine grained but locally ghosty pyroxene phenocrysts (3% volume) are visible. Pervasive chlorite, feldspar to epidote. Pervasive and fracture fill carbonate. Irregular veinlet (<5mm) carbonate ranging from 10° to 60° to CA. At 66.9 Milky/cream quartz carbonate epidote "vein" (35") 4cm, ill defined vein margins more like a pervasive flooding, but no distinct central fracture. This is cut by carbonate veinlets at 20° to CA. Interval does not appear to be foliated. Local sections extremely fractured and chloritic so that they core breaks apart when handled. Local sections appear similar to 60.4 to 62.5		64.0	67.1	100									65.8	67.8	91369	20	
					67.1	70.1	100									67.8	69.1	91370	20	
69.1	75.9	FP	FELDSPAR PORPHYRY - WEAKLY FOLIATED		69.1	75.9	-	10	50	69.1	75.9	1	4	1	-	69.1	70.1	91371	35	
			Light grey, fine grained but locally feldspar phenocrysts are observed. Extremely fractured. Pervasive and fracture fill carbonate similar to 62.5 to 63.8 but more pyritic with thick		70.1	73.2	100									70.1	71.1	91372	30	
					73.2	76.2	100									71.1	72.1	91373	30	
																72.1	73.1	91374	80	



## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°										
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 5 OF 6		MAGNETIC DECLINATION 23°								
LAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	LAT.	ELEV.	DIP	HOLE No.		LOGGED BY L. ERDMAN										
DEP. 9995E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING	HGB-95-1		DATE AUGUST 9, 1995										
						GEOTECH				GEOCHEM						ASSAY									
FROM	TO	ROCK TYPE	DESCRIPTION			FROM	TO	% RECO VERY	Py	Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au					
			upper contacts at 45°. Sericitic spots (possibly feldspar), pyrite replacing mafics and along foliations.																						
86.3	87.4	FP	FELDSPAR PORPHYRITIC ANDESITE			86.3	87.4	-	9	70	86.3	87.4	-	4	4		86.1	87.1	91388	5					
			Light grey, extremely fractured with almost all pieces of core clay-like. Pervasive and fracture fill carbonate. Pervasive sericite, most probably the basal section of the interval directly above. Well foliated at 45° to CA.			85.3	88.4	100																	
87.4	88.4	FP	FELDSPAR PORPHYRITIC ANDESITE							20	87.4	88.4	-	4	2	2	87.1	88.1	91389	10					
			Continuation of interval above but silica flooding has overprinted the sericitic alteration so that the core is locally siliceous but other sections are soft and sericitic. Silicified rock has clear carbonate fractures at 45° to CA (dominant direction).																						
88.4	93.4	FP	FELDSPAR PORPHYRITIC INTRUSIVE (?) - SPOTTY TEXTURE			88.4	93.4	-	1	3	88.4	93.4	-	3	2	4	88.1	89.1	91390	5					
						88.4	91.4	100									89.1	90.1	91391	5					
			Light grey to light greenish yellow colours. Spotted feldspar porphyritic texture observed locally but generally pervasive silicification has obscured the texture. Totally silicified sections have only trace pyrite, less silicified rock has 2% pyrite. Silica flooding accompanied by carbonate flooding so that silicified rock is also carbonaceous. Quartz/carbonate veins (< 1 cm) at 10° to 45° to CA. Local weak pervasive epidote accompanies silica/carbonate flooding causing rock to be yellow green in colour. Foliation observed locally, defined by sericite. Rare quartz only veinlets, discontinuous, < .3cm. 88.6 - 89.5 - Non silicified pyroxene porphyritic dyke. Pyroxene altering to chlorite on crystals margin. Fracture fill carbonate, some fractures also carry pyrite. Pyrite in matrix replacing mafics and locally on margins of pyroxene phenocrysts (Py = 1%).			91.4	94.5	100										90.1	91.1	91392	5				
																	91.1	92.1	91393	40					
																	92.1	93.4	91394	5					



## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°										
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 1 OF 6		MAGNETIC DECLINATION 23°										
LAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	LAT.	ELEV.	DIP	HOLE No.		LOGGED BY L. ERDMAN										
DEP. 9995E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING	HGB-95-1		DATE AUGUST 8, 1995										
		ROCK		DESCRIPTION		GEOTECH				GEOCHEM				ASSAY											
FROM	TO	TYPE			FROM	TO	% RECO VERY	Py		Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au					
0.0	16.8			CASING (thick overburden)																					
16.8	39.6			FELDSPAR PORPHYRITIC INTRUSIVE (SPOTTED TEXTURE)	16.8	18.3	60	12		3	16.8	39.6	-	1	-										
				Light grey with 40% whole feldspar phenocrysts	18.3	21.3	70																		
				All fractures are oxidized (rusty). No shears, non-foliated.	21.3	24.4	45																		
				Locally very fractured in all directions. Disseminated fine grained pyrite in matrix so that it appears feldspars are	24.4	27.4	80																		
				encircled by pyrite.	27.4	28.9	100																		
				Carbonate fracture fill, no carbonate veins.	28.9	30.5	100											33.5	35.5	91396	30				
				Possible fault (rubble) at 33.8m	30.5	33.5	80											35.5	36.6	91397	40				
				Final 0.9m has weak pervasive carbonate as well as fracture fill carbonate. Also fracture density increases to 5 from 2.	33.5	36.6	90											36.6	39.6	91398	10				
					36.6	39.6	80																		
39.6	41.6	AP		AUGITE PORPHYRITIC ANDESITE (DYKE (?))	39.6	41.6	-	Tr		1	39.6	41.6	2	3	-										
				Upper contact at 45° to CA, lower contact broken.	39.6	42.7	100																		
				Green grey, fine grained with pyroxene phenocrysts in a feldspar rich matrix. Pervasive carbonate and chlorite.																					
				Quartz/carbonate veinlets (<0.5 cm) at 30°, 20°, 45°, 120°.																					
				At 39.9 the 92/carbonate veins have chloritic alteration envelopes of 4 mm thickness and host rock is less chloritic than in remainder of interval.																					
41.6	42.1	FP		FELDSPAR PORPHYRITIC INTRUSIVE	41.6	42.1	-	12		1	41.6	42.1	-	1	-										
				As at 16.8 to 39.6 but less oxidized, more competent pieces of core. Upper and lower contacts are broken.																					
42.1	42.7	AP		AUGITE PORPHYRITIC ANDESITE	42.1	42.7	-	Tr		1	42.1	42.7	2	3	-										
				As at 39.6 to 41.6																					
42.7	53	FP		FELDSPAR PORPHYRY INTRUSIVE - SPOTTED TEXTURE	42.7	53.0	-	15		3	42.7	53.0	-	2	-	1	42.7	43.7	91351	50					
				Light grey colour, porphyritic with phenocrysts to 5 mm.	42.7	45.7	100											43.7	44.7	91352	75				
				Phenocryst volume ~40%. Abundant very fine grained pyrite, yellow colour. Pyrite appears to be replacing mafic minerals.	45.7	48.8	100											44.7	45.7	91353	60				
				Fine fractures in many directions, carbonate filled. Hairline,	48.8	51.8	100											45.7	46.7	91354	Lost				
					51.8	54.9	100											46.7	47.7	91355	80				



## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NO		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°											
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 178			SHEET 3 OF 6		MAGNETIC DECLINATION 23°									
LAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN						
DEP. 9995E		LENGTH 94.5 m		BEARING 230°										DEP.	LENGTH	BEARING		HGB-95-1		DATE AUGUST 9, 1995						
						GEO TECH				GEOCHEM								ASSAY								
FROM	TO	ROCK TYPE	DESCRIPTION			FROM	TO	% RECO	Py	Frac	Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au					
			feldspar being unpyritic.																							
60.4	62.5	AND	ANDESITE			60.4	62.5	-	Tr	5	60.4	62.5	3	4	-	-		60.4	62.5	91368	15					
			Green grey, fine grain, non-porphyrific. Fine to medium grained disseminated pyrite. Pervasive and fracture fill carbonate. Fractures range from 10° to 50° to CA, rarely 0°. Upper contact at 45°, lower contact 20°. Quartz carbonate veinlets (<3mm) milky, irregular, at same angles as fracture fill carbonate. From 60.8 to 61.1 - feldspar porphyry as at 57.7 to 60.4. Upper contact 50°, lower contact broken.			61	64	100																		
62.5	63.8	FP	FELDSPAR PORPHYRY (ALTERED)			62.5	63.8	-	2	50	62.5	63.8	2	4	2			62.5	63.8	91367	25					
			Light grey, extremely fractured. Similar to 57.7 to 60.4 but far more fractures. Many pieces are so fractured they fall apart when handled. Sericite, clay on fracture surfaces. Pyrite is fine grained and occurs disseminated in matrix. Pervasive and fracture fill chlorite.																							
63.8	69.1	AP	AUGITE PORPHYRITIC ANDESITE			63.8	69.1	-	1	10	63.8	69.1	3	4	1	-		63.8	65.8	91368	40					
			Grey green, fine grained but locally ghosty pyroxene phenocrysts (3% volume) are visible. Pervasive chlorite, feldspar to epidote. Pervasive and fracture fill carbonate. Irregular veinlet (<5mm) carbonate ranging from 10° to 60° to CA. At 66.9 Milky/cream quartz carbonate epidote "vein" (35") 4cm, ill defined vein margins more like a pervasive flooding, but no distinct central fracture. This is cut by carbonate veinlets at 20° to CA. Interval does not appear to be foliated. Local sections extremely fractured and chloritic so that they core breaks apart when handled. Local sections appear similar to 60.4 to 62.5			64.0	67.1	100											65.8	67.8	91369	20				
						67.1	70.1	100											67.8	69.1	91370	20				
69.1	75.9	FP	FELDSPAR PORPHYRY - WEAKLY FOLIATED			69.1	75.9	-	10	50	69.1	75.9	1	4	1	-		69.1	70.1	91371	35					
			Light grey, fine grained but locally feldspar phenocrysts are observed. Extremely fractured. Pervasive and fracture fill carbonate similar to 62.5 to 63.8 but more pyritic with thick			70.1	73.2	100											70.1	71.1	91372	30				
						73.2	78.2	100											71.1	72.1	91373	30				
																			72.1	73.1	91374	80				





## HEMLO GOLD MINES INC.

DATE COLLARED Aug 6/95		DATE COMPLETED August 7, 1995		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 5 OF 8		MAGNETIC DECLINATION 23°			
LAT. 9995N		ELEV. 1550 m		DIP -45°		RECORDED	CONNECTED	RECORDED	SUGGESTED	LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN				
DEP. 9995E		LENGTH 94.5 m		BEARING 230°						DEP.	LENGTH	BEARING		HGB-95-1		DATE AUGUST 9, 1995				
FROM	TO	ROCK TYPE	DESCRIPTION	GEOTECH				GEOCHEM					ASSAY							
				FROM	TO	% RECO VERY	Py	Frac Dens	FROM	TO	Chl.	Carb	Ser	Sil	FROM	TO	SAMPLE No.	Au		
			upper contacts at 45°. Sericitic spots (possibly feldspar), pyrite replacing mafics and along foliations.																	
86.3	87.4	FP	FELDSPAR PORPHYRITIC ANDESITE	86.3	87.4	-	9	70	86.3	87.4	-	4	4		86.1	87.1	91388	5		
			Light grey, extremely fractured with almost all pieces of core clay-like. Pervasive and fracture fill carbonate. Pervasive sericite, most probably the basal section of the interval directly above. Well foliated at 45° to CA.	85.3	88.4	100														
87.4	88.4	FP	FELDSPAR PORPHYRITIC ANDESITE					20	87.4	88.4	-	4	2	2	87.1	88.1	91389	10		
			Continuation of interval above but silica flooding has overprinted the sericitic alteration so that the core is locally siliceous but other sections are soft and sericitic. Silicified rock has clear carbonate fractures at 45° to CA (dominant direction).																	
88.4	93.4	FP	FELDSPAR PORPHYRITIC INTRUSIVE (?) - SPOTTY TEXTURE.	88.4	93.4	-	1	3	88.4	93.4	-	3	2	4	88.1	89.1	91390	5		
			Light grey to light greenish yellow colours. Spotted feldspar porphyritic texture observed locally but generally pervasive silicification has obscured the texture. Totally silicified sections have only trace pyrite, less silicified rock has 2% pyrite. Silica flooding accompanied by carbonate flooding so that silicified rock is also carbonaceous. Quartz/carbonate veins (< 1 cm) at 10° to 45° to CA. Local weak pervasive epidote accompanies silica/carbonate flooding causing rock to be yellow green in colour. Foliation observed locally, defined by sericite. Rare quartz only veinlets, discontinuous, < .3cm. 88.6 - 89.5 - Non silicified pyroxene porphyritic dyke. Pyroxene altering to chlorite on crystals margin. Fracture fill carbonate, some fractures also carry pyrite. Pyrite in matrix replacing mafics and locally on margins of pyroxene phenocrysts (Py = 1%).	88.4	91.4	100									89.1	90.1	91391	5		
				91.4	94.5	100									90.1	91.1	91392	5		
															91.1	92.1	91393	40		
															92.1	93.4	91394	5		





## HEMLO GOLD MINES INC.

DATE COLLARED Aug. 7/95		DATE COMPLETED Aug. 8/95		CORE SIZE NO		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 3 OF 4		MAGNETIC DECLINATION 23°							
AT. 9875N		ELEV. 1635M		DIP -60°		RECORDED	CONNECTED	RECORDED	CONNECTED	LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN								
DEP. 9872E		LENGTH 88.4M		BEARING 190°						DEP.	LENGTH	BEARING		HGB-95-2		DATE AUG. 11/95								
						GEO TECH				GEOCHEM						ASSAY								
FROM	TO	ROCK TYPE	DESCRIPTION			FROM	TO	% RECO VERY	PYRITE	FRAC DEN	FROM	TO	CHL.	CARB	SER	SIL	FROM	TO	SAMPLE No.	AU				
			parallel to CA. Silica flooded core adjacent to vein also contains increased pyrite (10%).																					
			59.5 - 60° to CA quartz/pyrite vein/flooded area. Vein 1cm, flooding 5 cm.																					
60.3	61.5	DI	DIORITE			60.3	61.5	-	2	2	60.3	61.5	-	1	-	3	60.3	61.5	91424	810				
			Same rock as above interval but 30% of the rock is silica flooded. Quartz flooding has indistinct margins. Quartz/carbonate veinlets at 40° to CA within flooded sections. Pyrite content increases to 5% in silica flooding. Overall pyrite content is generally 1%.																					
61.5	64.2	HP	HORNBLLENDE PORPHYRY (INTRUSIVE)			61.5	64.2	-	1						1		61.5	64	91425	305				
			Light grey, fine grained matrix with 1mm - 3mm hornblende phenocrysts. Porphyritic texture becomes better defined downhole. Hornblende, altered to biotite + disseminated pyrite. Weak alignment of phenocrysts, possible foliation at 45° to CA. Weakly sericitic. Pyrite is fine grained to medium grained and is generally cubic. Possible trace disseminated galena.			61.0	64.0	100																
64.2	67.6	DI	DIORITE			64.2	67.6	-	1															
			Medium grey, fine grained. No silica flooding, fine grained disseminated pyrite. Similar to 55.1 to 60.3 but mafic minerals are more finely crystalline. Fractures at 40° to CA, quartz + pyrite in fractures. Irregular contact with interval below.																					
67.6	72.7	AND	FELDSPAR PORPHYRITIC ANDESITE			67.6	72.7	-	Tr	1					1		70.0	71.5	91436	40				
			Light to medium grey, fine to medium grained. Most of interval shows feldspar crystals but locally rock is as above. Interval starts within 1 cm quartz/carbonate 'vein' at 20° to CA offset by horizontal carbonate fracture. Feldspar crystals euhedral, 1-3mm, 30% volume. Sericitic fracture surfaces. Rare epidote fractures. 70.2 - quartz/carbonate vein at 45°, 6cm, vuggy oxidized.														71.5	72.7	91426	75				

## HEMLO GOLD MINES INC.

DATE COLLARED Aug. 7/85		DATE COMPLETED Aug. 8/85		CORE SIZE NO		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94C5		GRID NORTH (W.R.T. TRUE) 0°							
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			Sheet 2 of 4		MAGNETIC DECLINATION 23°					
LAT. 9875N		ELEV. 1635M		DIP -60°		RECORDED		CORRECTED		RECORDED		CORRECTED		LAT.	ELEV.	DIP	HOLE No.		LOGGED BY L. ERDMAN			
DEP. 9872E		LENGTH 88.4M		BEARING 190°										DEP.	LENGTH	BEARING	HGB-05-2		DATE AUG. 11/85			
						GEO TECH				GEOCHEM				ASSAY								
FROM	TO	ROCK TYPE	DESCRIPTION			FROM	TO	% RECO VERY	PYRITE	FRAC DEN	FROM	TO	CHL	CARB	SER	EP	FROM	TO	SAMPLE No.	AU		
			Medium grained disseminated pyrite cubes. Galena in fractures at 31.6m and 37.0m.																			
37.5	38.6	DK	CHILLED MARGIN OF HORNBLENDE/FELDSPAR DYKE below. Dark grey, fine grain at top becoming ghostly feldspar porphyritic downhole. Hornblende crystals altering to biotite 38.4 - 38.6 - broken core with pieces of quartz vein approximately 3cm thick, 40° to CA. Quartz vein also contains chlorite blebs, trace pyrite.			37.5	38.6	-	3	-			-	-	-							
38.6	52.6	DK	HORNBLENDE/FELDSPAR PORPHYRITIC DYKE Medium green, porphyritic, spotted texture. Carbonate fracture fill, epidote fracture fill, local epidote flooding. Hornblende and feldspar phenocrysts vary in size and proportion one to another. Hornblende crystals to 1 cm, feldspar rarely larger than 0.5 cm.			38.6	52.6	-	Tr	1			-	1	-	2						
						39.6	45.7	100														
						45.7	48.8	95														
						48.8	51.8	100														
52.6	55.1	DK	HORNBLENDE/FELDSPAR DYKE-CHILLED LOWER MARGIN. Dark grey to black with <1mm white feldspar phenocrysts and <3mm hornblende crystals. Hornblende altering to chlorite. Feldspar are saussuritized. Epidote fracture fill. Lower contact broken.			52.6	55.1	-	1	1			1	-	-	1						
						51.8	54.9	100														
55.1	60.3	DI	DIORITE Light grey to brownish grey, ghostly feldspar crystals, hornblende crystals. Contact with dyke above is broken. Fine grained disseminated pyrite. Pyrite also has cubic crystals in altered mafics. Hornblende altered to fine grained biotite with pyrite rims. No pervasive carbonate, local carbonate fracture fill. Core surface shows porphyritic texture but broken surface is not obviously porphyritic. Silica flooding from 58.3 to 58.5, with no obvious quartz vein but fractures at 30°, 40°, 60°. Carbonate in these fractures. 59.3 - silica vein with 30% fine grained pyrite. Vein is 4mm,			55.1	60.3	-	2	1			-	1	-		Sil 1	57.0	59.0	91422	1590	
						54.4	61	100										59.0	60.3	91423	2800	

## HEMLO GOLD MINES INC.

DATE COLLARED Aug. 7/95		DATE COMPLETED Aug. 8/95		CORE SIZE NQ		DIP TESTS				PROPERTY Granite Basin			N.T.S. No. 94CS		GRID NORTH (W.R.T. TRUE) 0°				
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		PROJECT NO. 176			SHEET 1 OF 4		MAGNETIC DECLINATION 23°		
LAT. 9875N		ELEV. 1635M		DIP -60°		RECORDED	CORRECTED	RECORDED	CORRECTED	LAT.	ELEV.	DIP		HOLE No.		LOGGED BY L. ERDMAN			
DEP. 9872E		LENGTH 86.4M		BEARING 190°						DEP.	LENGTH	BEARING		HGB-95-2		DATE AUG. 11/95			
FROM	TO	ROCK TYPE	DESCRIPTION	GEOTECH				GEOCHEM						ASSAY					
				FROM	TO	RECO VERY	PYRITE	FRAC DEN	FROM	TO	CHL	CARB	SER	FROM	TO	SAMPLE No.	AU		
0	3.0		CASING																
3.0	16.1	TUFF	VOLCANIC TUFF	3.0	16.1	-	5	1											
			Light grey fine grained, no mafics. mariposite spot at 4.0m, 5.0m. Locally ghostly feldspar crystals are observed	3.0	6.1	50										3.0	6.1	91401	8900
			From 3.0 to 9.1 the core is broken and rusty; 5.8m - maroon	6.1	9.1	80										6.1	7.1	91402	1210
			fault gouge, 7.8m - 4 cm oxidized shear at 50° to CA, 6.4m -	9.1	12.2	95										7.1	8.1	91403	300
			rusty rubble. From 3.0 to 6.3 pervasive and fracture fill carbon	12.2	15.2	90										8.1	9.1	91404	215
			ate 1% fine grained pyrite. Unfoliated. At 3.4m - 5mm quartz/	15.2	17.7	100										9.1	10.1	91405	525
			carbonate veinlet @ 30° to CA with 1% galena and 1% pyrite.													10.1	11.1	91406	335
			Below 6.2m - foliated, weakly sericitic, foliations at 45° to													11.1	12.1	91407	380
			50° to CA, 3% to 5% fine grained pyrite in foliation planes.													12.1	13.1	91408	220
			Indistinct contacts appear to be at 80° to CA.													13.1	14.1	91409	120
																14.1	15.1	91410	265
																15.1	16.1	91411	210
16.1	18.5	DK	DYKE	16.1	15.5	-	1	1											
			Dark grey to black, fine grain with white <1mm feldspar	17.7	20.7	90													
			phenocrysts. Upper contact 30°, lower contact 45°. Has																
			"cooked" the host andesite tuff for 10 cm at both upper and																
			lower contacts. From 16.6 to 17.1 core appears similar to																
			host rock tuff, a large Xenolith, or perhaps the dyke is																
			irregular. Discrete medium grain to coarse grain pyrite																
			crystals evenly disseminated. Conjugate fractures at 40° to																
			45° and 130° to 135°. Fractures filled with carbonate + pyrite																
			and at 18.3 epidote is in fracture envelope.																
18.5	30.5	DI	DIORITE - LEUCOCRATIC	18.5	30.5	-	3	-								18.5	20.5	91412	75
			Light grey, medium grained, non foliated. Feldspar pheno-	20.7	23.8	100										20.5	22.5	91413	40
			crysts to 3mm. Medium grained disseminated pyrite. 23.6m	23.8	26.9	100										22.5	24.5	91414	105
			- 4mm quartz vein at 50° to CA with trace galena.	26.9	30.2	100										24.5	26.5	91415	100
				30.2	33.5	100										26.5	28.5	91416	150
30.5	37.5	HD	HORNBLLENDE PORPHYRITIC DIORITE (?)	30.5	37.5	-	2	-								30.5	32.5	91418	85
			Brown grey colour, fine grain to medium grain. Hornblende	33.5	35.5	100										32.5	34.5	91419	240
			phenocrysts <1mm to 5mm. Rare feldspar phenocrysts of	35.5	36.6	95										34.5	36.5	91420	510
			similar size. Hornblende altering to fine grain biotite + pyrite	36.6	39.6	95										36.5	37.5	91421	300

**APPENDIX IV**

**STATEMENT OF COSTS**

**HEMLO GOLD MINES INC.**  
**STATEMENT OF COSTS**

PROJECT: GRANITE BASIN

DATE: December 14, 1995

TYPE OF REPORT: Geological/Drilling

- a) Wages: Geological Crew  
No. of Mandays : 79  
Rate per Manday: \$215.73  
Dates From : June 15 to September 9, 1995  
Total Wages : \$17,043.00
  
- b) Food & Accommodations: Geological Crew Plus Drillers  
No. of Mandays : 93  
Rate per Manday: \$27.50  
Dates From : June 15 to September 9, 1995  
Total Costs : \$2,557.00
  
- c) Transportation: Trucks  
No. of Mandays : 40  
Rate per Manday: \$62.92  
Dates From : June 15 to September 9, 1995  
Total Costs : \$2,517.00
  
- d) Supplies:  
No. of Mandays : 79  
Rate per Manday: \$36.91  
Dates From : June 15 to September 9, 1995  
Total Costs : \$2,916.00
  
- e) Drilling: Britton Bros. Diamond Drilling  
No. of Meters: 182.9  
Cost Per Meter: \$75.80  
Dates From: June 15 to September 9, 1995  
Total Cost: \$13,865.00



f) Analysis: \$2,100.00  
(See attached schedule)

g) Cost of Preparation of Report:  
Author : 2 days x \$300.00 = \$600.00  
Drafting: 2 days x \$220.00 = \$440.00  
Typing : 1 day x \$150.00 = \$150.00

h) Other: Helicopter Flights  
Total Cost: \$21,089.00

Contractor: Pacific Western Helicopters  
Fort St. James, B.C.

**GRAND TOTAL    \$63,277.00**

**HEMLO GOLD MINES INC.**

**DETAILS OF ANALYSIS COSTS**

**PROJECT: Granite Basin**

<b>ELEMENT</b>	<b>NO. OF DETERMINATIONS</b>	<b>COST PER DETERMINATION</b>	<b>TOTAL COSTS</b>
ICP + Au	56 rocks	\$15.00	\$ 840.00
ICP + Au	84 core	\$15.00	\$1,260.00

**APPENDIX V**

**STATEMENT OF QUALIFICATIONS**

**STATEMENT OF QUALIFICATIONS**

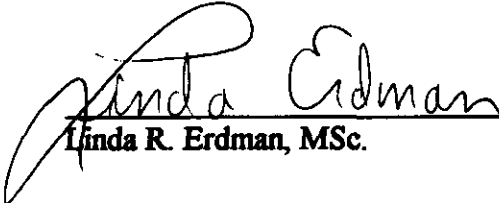
I, Linda R. Erdman, of the City of Vancouver, Province of British Columbia, hereby certify that:

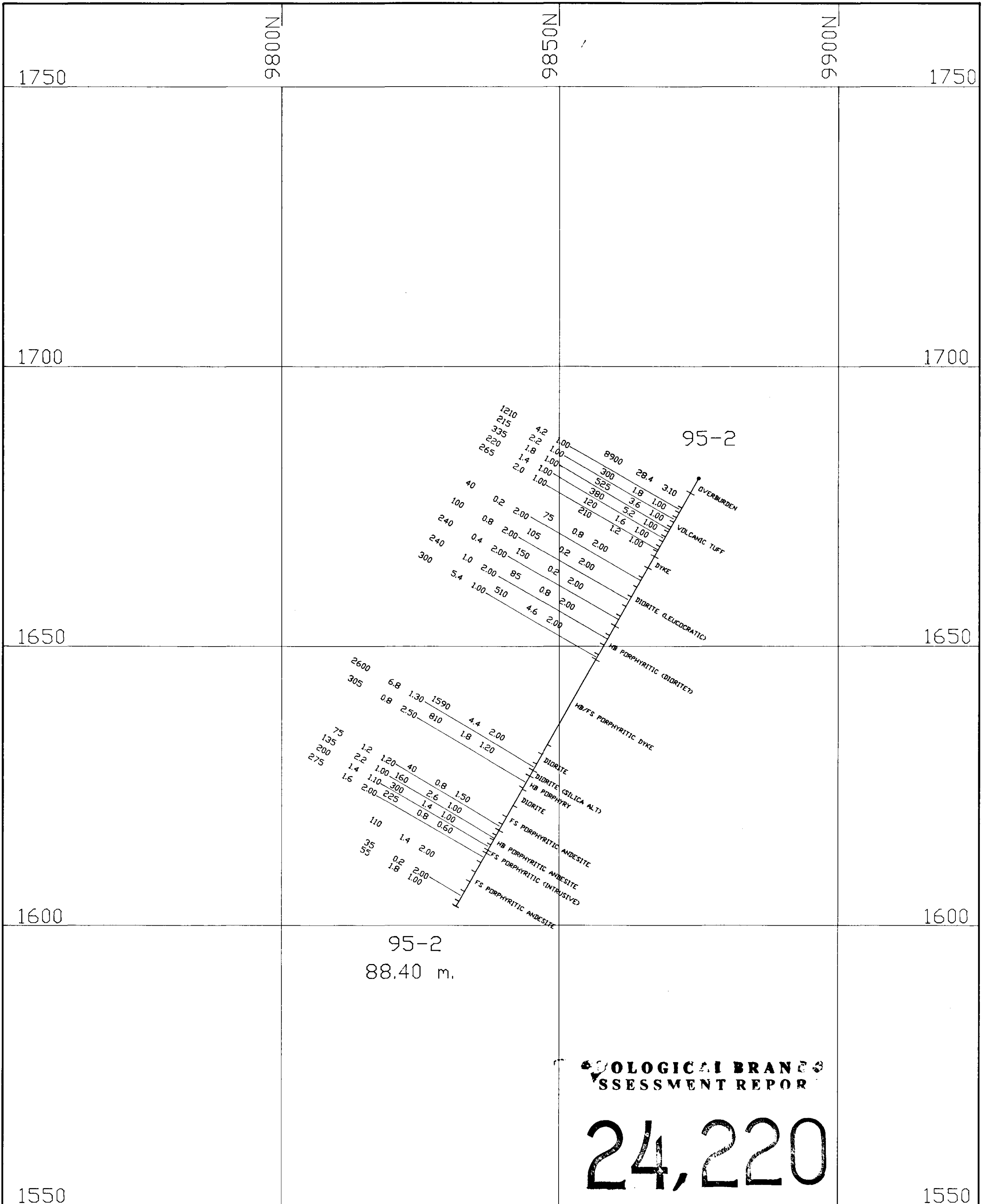
I am a geologist residing at 1397 Matthews Avenue, Vancouver, B.C.

I have graduated from the Univeristy of British Columbia in 1978 with a BSc in geology, and in 1985 with an MSc in geology.

I have worked in mineral exploration since 1976.

I have been with Hemlo Gold Mines Inc. since March, 1995.

  
Linda R. Erdman, MSc.



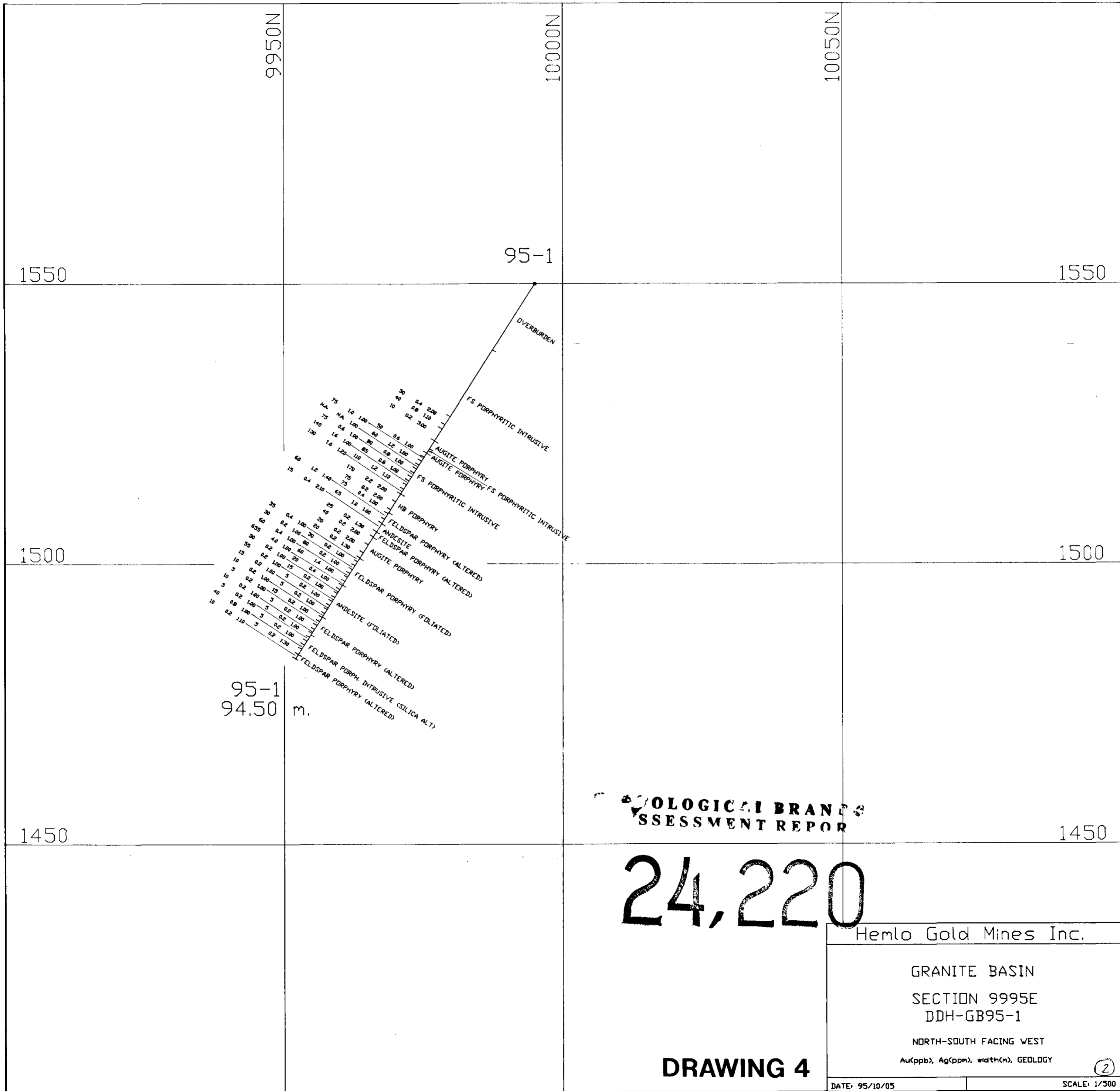
Hemlo Gold Mines Inc.

GRANITE BASIN  
SECTION 9872E  
DDH-G95-2

NORTH-SOUTH FACING WEST

Au(ppb), Ag(ppm), width(m), GEOLOGY

**DRAWING 5**



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

24,220

Hemlo Gold Mines Inc.

GRANITE BASIN  
SECTION 9995E  
DDH-GB95-1

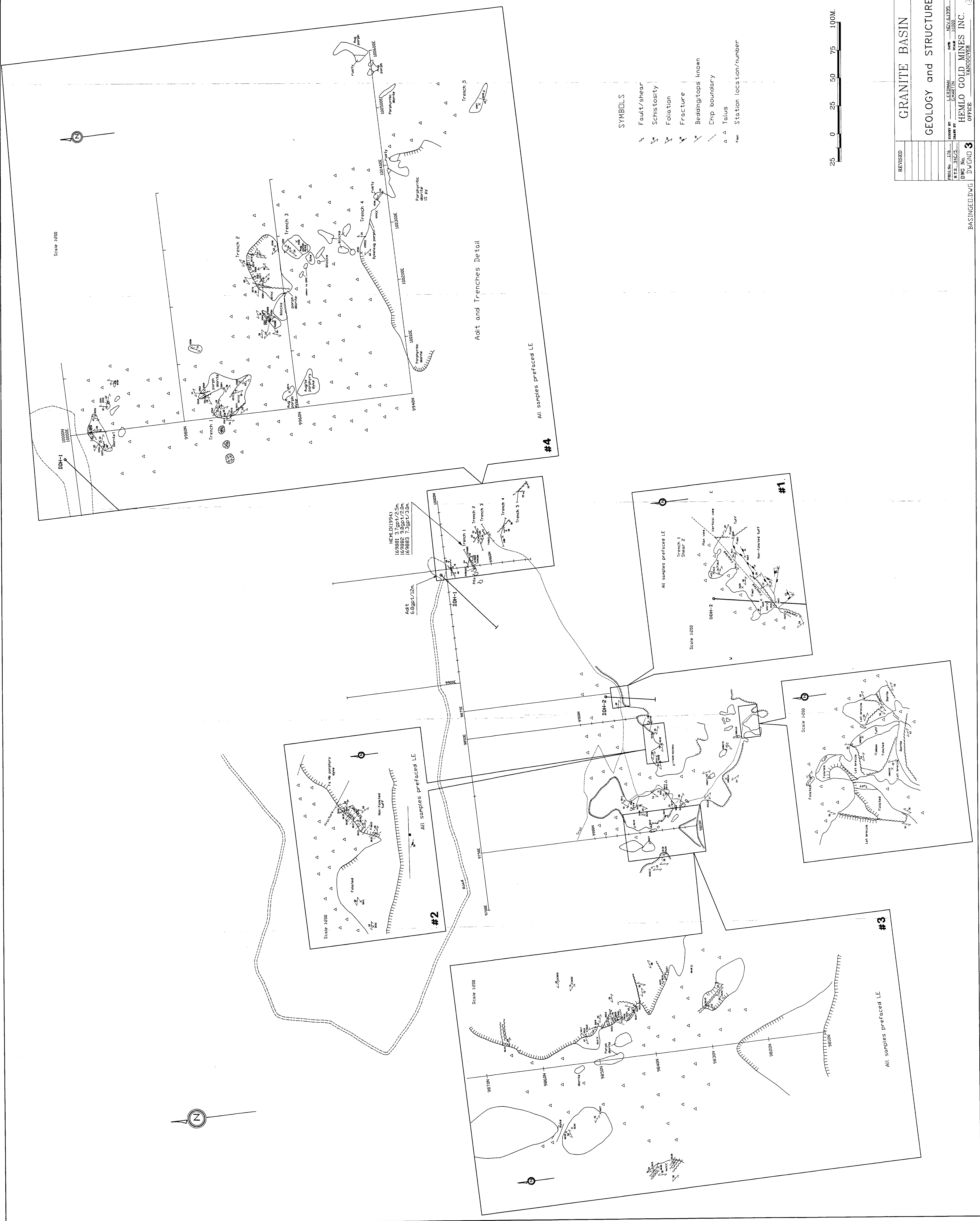
NORTH-SOUTH FACING WEST  
Au(ppb), Ag(ppm), width(m), GEOLOGY

DRAWING 4

DATE: 95/10/05

SCALE: 1/500

2



REVISED	
<b>GRANITE BASIN</b>	
<b>GEOLOGY and STRUCTURE</b>	
PROJECT NO. 275	PROJECT #
DATE 10/2/02	DATE
BY M. GARDNER	BY M. GARDNER
SCALE 1:200	SCALE 1:200
HEMLO GOLD MINES INC.	
OFFICE VANCOUVER	
DRAWING 3	