



Geological Report

CORK CLAIM GROUP

Claim Sheet 115-G-6

Whitehorse M.D.
Yukon

(N. Lat. $139^{\circ} 25'$; W. Long. $61^{\circ} 23'$)

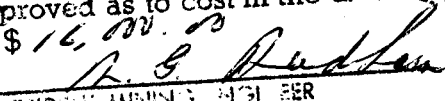
By

Richard W. Oddy

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:


RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$16,000.00


RESIDENT MINING ENGINEER

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.


COMMISSIONER OF YUKON

(Supervision by Dr. Neil Campbell, P.Eng.)

July 4 - August 10, 1969

Imperial Oil Enterprises Ltd.
500 - 6 Avenue S.W.
Calgary 1, Alberta

019088

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I. INTRODUCTION

A. LOCATION, ACCESS AND OWNERSHIP

The Cork Claim Group of 32 claims is located at approximately $61^{\circ} 23'$ N. Latitude, $139^{\circ} 25'$ W. Longitude on Burwash Creek about 15 miles due west from Burwash Landing in the Kluane Ranges of southwestern Yukon. Burwash Landing is at Mile 1093 on the Alaska Highway about 140 miles northwest of Whitehorse, Y.T. and 200 miles north of Haines, Alaska. The index map indicates the location of the claims in relation to Burwash Creek.

The property is on the south facing slope of an east-west trending ridge which rises from 4,100' above sea-level at Burwash Creek to 6,300' elevation at the ridge top. The mineralized showings are located between 4,750' and 5,500'.

Access is by a temporary road which follows Burwash Creek for about 10 miles from Mile 1104 on the Alaska Highway.

Ownership of the Cork 1-32 claims is 50% Imperial Oil Enterprises Ltd., 25% Canadian Industrial Gas & Oil Ltd., and 25% Bow Valley Land Co.

B. PREVIOUS WORK

Claims were originally staked in 1966 as the result of the discovery of copper and molybdenite showings. In the 1967 field season reconnaissance geological mapping and magnetic, induced polarization and soil geochemical surveys were carried out. Additional claims were staked at that time. In 1968, the property was left idle with the exception of a brief examination of the showings by Imperial Oil geologists.

INDEX MAP OF CORK CLAIM GROUP, WHITEHORSE M.D.

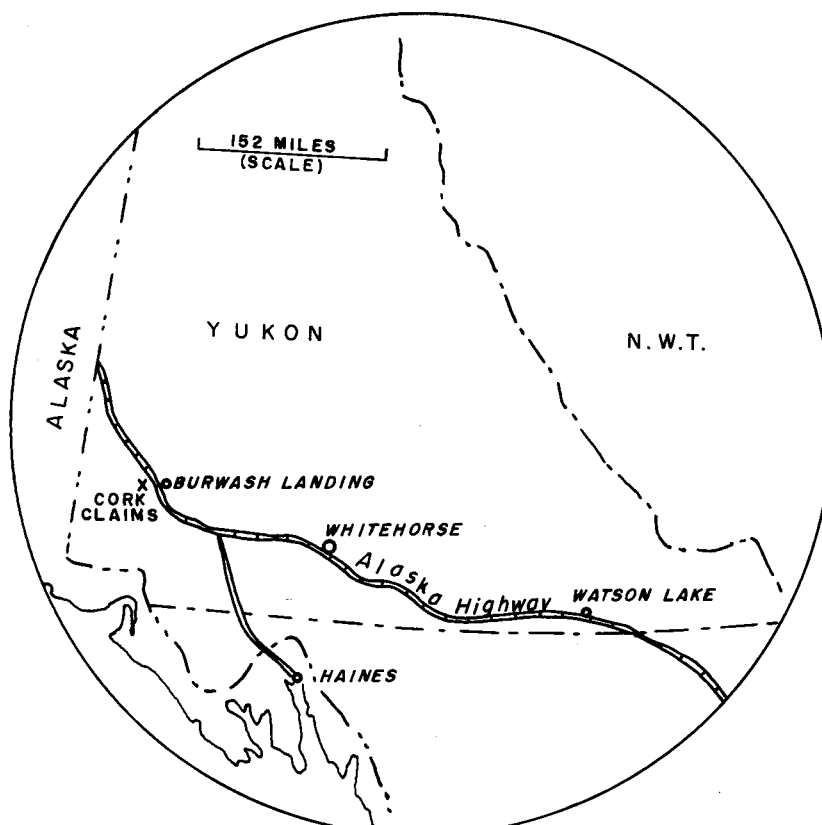
1/2 MILE
APPROXIMATE SCALE

27 Y20906	28 Y20907	19 Y20898	20 Y20899	15 Y20894	16 Y20895		
25 Y20904	26 Y20905	17 Y20896	18 Y20897	13 Y20892	14 Y20893		
22 Y20901	21 Y20900	8 Y9763	7 Y9762	2 Y9757	1 Y9756	30 Y25463	29 Y25462
24 Y20903	23 Y20902	10 Y9765	9 Y9764	4 Y9759	3 Y9758	32 Y25465	31 Y25464
		12 Y9767	11 Y9766	6 Y9761	5 Y9760		

BURWASH CREEK

61°22' LAT.
139°25' LONG.

N



GROUP "A" CORK CLAIM NOS
1-6; 13-16
19-20; 29-32

GROUP "B" CORK CLAIM NOS
7-12; 17-18
21-28

C. SCOPE OF 1969 FIELD PROGRAM

In the 1969 field season, a crew of 4 men, employed by Imperial Oil Enterprises carried out detailed geological mapping and rock sampling for assay between July 4 and August 10. In addition to mapping and sampling, bulldozer work was carried out to build a rough access road to the property and blasting was done to facilitate the collection of samples. This report and the included maps and assay reports summarize the work performed in 1969.

II. GEOLOGY

A. REGIONAL GEOLOGY

The area in which the Cork claims lie is described by J. E. Muller in Geological Survey of Canada Memoir 340, Kluane Lake Map Area, 1967.

The area lies within a northwesterly trending belt of Lower Permian to Lower Cretaceous sedimentary and volcanic rocks lying to the west of a major northwesterly trending structural feature - the Shakwak Lineament. The rocks are complexly folded, cut by numerous northwest and westnorthwest trending faults and intruded by basic and acidic sills, dykes, stocks and batholiths of various ages. Several copper and nickel-copper mineral deposits are known to occur in the area and a few of these have been explored in recent years.

B. GEOLOGY OF CORK CLAIMS

Rock exposures on the Cork claims are mainly confined to the valleys and walls of several deeply incised creeks which drain the south facing slope of the ridge. Approximately 10% to 15% of the total claim area is outcrop. Mapping was facilitated by the use of government air photos blown up to 1" to 400' and the data was later transferred to 1" to 200' base maps which were prepared from the air photos. Figure 1, in pocket, is the resulting geological map.

The southern part of the Cork claims is underlain by sedimentary rocks of the Cache Creek Group (Lower Permian); the northern part by volcanic rocks of the Mush Lake Group (Middle to Upper Triassic). Diorite is exposed in Burwash Creek along the southern boundary of the claims. A feldspar porphyry body is intruded into rocks of both the Cache Creek and Mush Lake groups, approximately along the contact between the two. A small body of gabbro cuts Mush Lake volcanic rocks in the northwestern part of the claims and basic dykes occur in Cache Creek sedimentary rocks in the southeastern corner of the claim area.

The following table of formations will serve to summarize the rock units mapped on the property.

*TABLE OF FORMATIONS

ERA	GROUP OR FORMATION	LITHOLOGY
Tertiary	Tertiary Intrusions	Prophyritic latite or feldspar porphyry
Cretaceous and Jurassic	Kluane Range Intrusions	Diorite
Permian to Triassic or Younger ?	Basic Intrusions	Gabbro

INTRUSIVE CONTACT

Upper and Middle Triassic	Mush Lake Group (Volcanic Division)	Andesite, basalt, tuff, agglomerate, shale
---------------------------	-------------------------------------	--

DISCONFORMITY

Lower Permian and Pennsylvanian ?	Cache Creek Group (Sedimentary Division)	Argillite, shale, quartzite, conglomerate, limestone
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* After J.E. Muller (1967), G.S.C. Memoir 340, pp. 18-19.

1. Cache Creek Group - Lower Permian

Sedimentary rocks belonging to the Cache Creek Group are exposed on claims 3, 4, 5, 6, 11 and 32 between elevations 4,100' and 5,000'. Rusty weathering black argillites and shales are the most abundant rocks present but slate, quartzite, conglomerate and limestone are found interbedded with the argillite and shale. Generally, the argillites and shales are intensely fractured and pyritized. Along contacts with the intrusive feldspar porphyry the rocks have been indurated to hornfels with a corresponding increase in pyrite content. Structurally the sequence strikes roughly east-west, dipping 20° to 40° to the north.

2. Mush Lake Group - Middle and Upper Triassic

Mush Lake Group volcanic rocks are exposed to the north of and above the Cache Creek rocks and continue to the top of the ridge. Most of the exposures are on claims 1, 2, 7, 8 and 30. Rock types include andesite, basalt, volcanic breccia and agglomerate, limy and siliceous tuff, and shale. The andesites are generally dark green, brown or purple in color and many are amygdaloidal with calcite infilling of the vesicles. Some of the andesites are porphyritic with phenocrysts of feldspar up to 1 mm long and small hornblende crystals. Basalts are dark brown to black and fine grained. The breccias and agglomerates contain subangular fragments of sedimentary and volcanic rocks and rounded particles of tuffaceous rock in a fine-grained light green to dark green matrix. The tuffs are generally pale green, cherty or limy and very fine-grained.

In general, the volcanic rocks have undergone low grade metamorphism and contain chlorite, epidote and calcite. Portions of the volcanic sequence have been caught up in the porphyry intrusive body and remain as inclusions or roof pendants of highly altered and pyritized rock. Near contacts with porphyry, the rocks have been altered to hornfels or skarn with abundant pyrite, epidote, calcite, garnet, and minor chalcopyrite, magnetite, specularite and bornite.

The volcanic sequence has about the same structural attitude as the underlying Cache Creek unit, striking nearly east-west and dipping 15° to 35° to the north.

The contact between Cache Creek and Mush Lake rocks is not clearly exposed but according to J. Muller (1967) a disconformity exists between the two sequences.

3. Intrusive Rocks

a. Basic Intrusions

A small plug of gabbro is exposed on claim 8 within volcanic rocks of the Mush Lake group. The gabbro is dark green, medium grained, with visible plagioclase and augite crystals. Scattered but minor pyrite or pyrrhotite is visible; magnetite content is low. The structural relationship of the intrusion to the intruded rocks is not certain but it may be an irregular shaped discordant plug about 800 feet by 500 feet in dimension. Basic dykes cut the Cache Creek sedimentary rocks near the southeastern part of the claim area on claims 3 and 4.

The age relationships of the basic intrusives is uncertain. Muller (1967) reports that many of the basic and ultrabasic intrusions in the area are between Permian and Triassic in age, however, the gabbro plug may be younger since it is found intruding Middle to Upper Triassic volcanics.

b. Kluane Range Intrusions

Diorite is found intruding the Cache Creek sedimentary rocks and is well exposed along Burwash Creek in the southern part of the claim area. The diorites are

salt and pepper colored, medium grained, and equigranular and are composed of feldspar, biotite and hornblende.

The rocks are relatively unaltered and are part of a large mass of discordant granitic intrusives mapped by Muller as part of the Kluane Range Intrusions of probable Cretaceous age.

c. Tertiary Intrusions

The feldspar porphyry or porphyritic latite occurs as an elliptical shaped stock intruding both Cache Creek and Mush Lake rocks. The main body occurs on claims 2, 4, 6, 7, 9 and 10 but several outlying dykes of porphyry have been mapped in both the Cache Creek and Mush Lake rocks. The stock is about 2,400 feet long in a general east-west direction and about 1,800 feet across, but is open at both ends. The porphyry is the host of most of the sulphide mineralization and therefore it has received most of the attention in the mapping and sampling program.

Muller has mapped similar bodies which he has called porphyritic latites but in the present field mapping the term feldspar porphyry has been used. The porphyry is composed of white phenocrysts of sodic plagioclase in a white, light grey or dark grey fine-grained matrix containing up to 5% biotite and 3% pyrite. The phenocrysts are generally 2 to 5 mm in length and 2 to 3 mm across. In outcrop the porphyry body is characterized by a bleached, oxidized and altered appearance and ranges in color from

white to yellowish orange. Metallic minerals that have been identified include pyrite, chalcopyrite, molybdenite and magnetite. The metallic sulphides generally make up about 1% to 2% of the total rock. Secondary oxides include malachite, azurite, and limonite.

The porphyry is generally highly fractured and contains numerous narrow quartz filled fractures which tend to occur more abundantly in some areas than others.

Alteration within the porphyry includes kaolinization of the feldspars, development of secondary biotite, and sericitization of the fine-grained matrix.

Talus and overburden tend to obscure the contact relationships, however, the intrusion has the gross appearance of a concordant body emplaced along the contact between the Cache Creek and Mush Lake formations and elongated parallel to the strike of the intruded rocks. Further study will be required to determine the true structural relationship.

Muller has assigned Tertiary age to the porphyritic latites and tentatively the feldspar porphyry has been assigned the same age.

4. Mineralization

The primary metallic minerals present are pyrite, chalcopyrite, molybdenite and lesser amounts of magnetite, specularite, gold and bornite. On Figure 1, locations of visible mineralization are indicated by symbols as shown in the legend.

Pyrite is the most abundant sulphide present and occurs in the porphyry and in altered contact rocks. In the porphyry it occurs along fractures, sometimes with quartz, and as disseminations. The porphyry generally contains between 0.25% and 2.0% pyrite by volume, and values up to 3% were noted. In the altered contact rocks pyrite content varies widely but ranges up to 10% by volume.

Chalcopyrite is much less abundant and is present in the porphyry along pyritic fractures and as disseminations. It is the main primary copper mineral present. Chalcopyrite also occurs in lesser quantity in some of the contact rocks, particularly in skarn.

Molybdenite occurs with quartz along narrow fractures in the porphyry.

Small quantities of magnetite have been detected in the altered contact rocks and in the porphyry, generally near the contacts.

Specularite is present in the more highly altered contact rocks along with pyrite and other sulphides.

Bornite (?) was tentatively identified in skarn developed from limy tuff bands near a contact with the porphyry.

Gold is present in very minor quantities in altered contact rocks, limy tuff and the feldspar porphyry.

The most abundant secondary minerals present are malachite, azurite and limonite. Malachite is particularly widespread in the feldspar porphyry; azurite is less common and limonite is found wherever pyrite occurs.

C. ROCK SAMPLING AND ASSAY RESULTS

In total, 341 rock samples were collected and sent for assay to Bondar-Clegg and Company Ltd. in Vancouver. All samples were assayed for copper, 295 for molybdenite, 37 for gold, 16 for silver, 16 for tungsten, 9 for zinc, 8 for lead, and 4 for nickel. The location of each sample was plotted on the 1" to 400' air photo and later transferred to a 1" to 200' map. Figure 2, in pocket, shows the assay results and a copy of the assay reports is enclosed in the Appendix. Approximately one-half of the samples collected were essentially grab samples composed of chips taken over an area of a few feet in diameter. The other half of the samples were collected along continuous lines with each sample representing a length of 10 feet. The line samples are distinguished from the grab samples on the map.

1. Copper

Copper is the main metal of economic interest and samples from the feldspar porphyry, the altered contact rocks and the country rocks were assayed for copper. The highest copper assay obtained was 4.44%, however, this was from a high grade grab sample of well mineralized skarn. Other samples from the skarn zone ran over 0.50% copper but values from samples of the feldspar porphyry range from trace to 0.49%. The best mineralized portion of the exposed porphyry is on claim 9 where line samples gave the following values: 180' averaging 0.22% copper; 110' averaging 0.26%; 110' averaging 0.21%; 90' averaging 0.21% and 80' averaging 0.24%.

Other areas within the porphyry average much less in copper with most values falling between 0.02% and 0.10%. With the exception of a few high grade skarn zones the copper values in the altered contact rocks are low, ranging from 0.01% to 0.05%. A few samples from the Mush Lake volcanic rocks also gave low copper values, ranging from trace to .02%.

Although the copper values are generally low, one area carries values averaging just over 0.20% which is encouraging considering the bleached and oxidized nature of the porphyry. However, at no place within the exposed feldspar porphyry body have commercial 'ore grade' values been found.

2. Molybdenite

Almost all of the samples collected from the feldspar porphyry were assayed for MoS_2 . The assays range from 0.001% (lower limit of detectability) to 0.045%. Generally, MoS_2 content in the porphyry ranges between 0.010% and 0.005%. Line samples from a higher grade area on claim 9 averaged 0.013% MoS_2 over 110', and 0.010% MoS_2 over 80'. These better zones in terms of MoS_2 content are in a portion of the porphyry which contains numerous narrow quartz filled fractures and coincide with the area in which the best values of copper mineralization are found.

The presence of molybdenite in quantities above average for igneous rocks is established but no areas of commercial 'ore grade' molybdenite have been found.

3. Gold, Silver, Lead, Zinc, Tungsten and Nickel

Gold and silver are present in only slightly above trace amounts. The highest gold values obtained were 0.04 oz./ton and 0.03 oz./ton from samples of skarn. Samples of the feldspar porphyry ran very low, 0.02 oz./ton to trace, in gold. The highest silver values also came from skarn samples, 0.66 oz./ton being the highest value obtained. Only trace quantities of silver are present in the porphyry.

Lead and zinc were found to be present in only trace amounts in the few samples which were assayed for these metals.

Tungsten was assayed in a number of samples of the altered contact rocks but only trace amounts were indicated. A few samples of the basic intrusives were assayed for nickel but again only trace amounts were indicated.

III. CONCLUSIONS

The following conclusions can be made from a study of the geological and assay data collected:

1. Low grade copper and molybdenum mineralization is present in the feldspar porphyry stock and to a lesser extent in immediately adjacent altered contact rocks which form a pyritic halo around the intrusive body.
2. The highest grade area of mineralization in the exposed porphyry averages about 0.22% copper and 0.010% molybdenite.

3. The copper and molybdenum minerals are chalcopyrite and molybdenite. Chalcopyrite is present as disseminations and along fractures, molybdenite occurs along fractures with quartz.
4. Surface leaching and oxidation have affected mineralization in the porphyry exposures and an increase in grade with depth can be reasonably expected.
5. Certain features are present which are among the characteristic features shared by porphyry copper-type ore deposits. These include the highly fractured nature of the porphyry body, the presence of quartz veinlets in the porphyry, hydrothermal alteration of the porphyry, propylitic alteration of adjacent volcanic rocks, skarn development in adjacent limy rocks, pyritization of adjacent argillites, and the presence of copper and molybdenum mineralization in the porphyry.

IV. RECOMMENDATIONS

1. Drilling is recommended to test the mineralized feldspar porphyry body at depth. A minimum program of 10,000' of drilling is recommended on the basis of 15 to 20 holes to a depth of 500' and one or two holes to a depth of 1,000'. Spacing between holes should be approximately 500'.
2. Bulldozer trenching and ripping is recommended to facilitate more extensive mapping and sampling in overburden covered areas.
3. Geological mapping should be extended to the outlying claims.

A preliminary estimate of costs for a 10,000' diamond drilling program along with bulldozer trenching and geological mapping is given below:

Diamond Drilling - 10,000' @ \$18/Ft.	\$ 180,000
Bulldozer - 100 Days @ \$350/day	35,000
Camp and Supplies	10,000
Salaries - Geologist & Helper	4,800
Miscellaneous - Helicopter Costs, Transportation, Equipment, Assays, Truck Rental, Etc.	16,000
Total Estimate	\$ 245,800

/gf

A P P E N D I X

CERTIFICATE OF QUALIFICATIONS

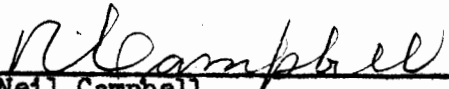
I, Neil Campbell, of the City of Spokane, State of Washington,
do certify that:

1. I am a geologist and mining engineer residing at 10624 Kensington, Spokane, Washington.
2. I am a graduate of the University of Alberta with a B.Sc. in Mining Engineering (1937); and of the Massachusetts Institute of Technology with a Ph.D. in Economic Geology (1943).
3. I am a member of the Association of Professional Engineers of Alberta, a registered Professional Mining Engineer of the State of Washington, Fellow of the Royal Society of Canada and the Geological Association of America, and a member of the following: Society of Economic Geology, American Association of Petroleum Geologists, the Canadian Institute of Mining, and the American Institute of Mining and Metallurgy.
4. I have been practising my profession for thirty-two years.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Imperial Oil Enterprises Ltd. or any affiliate.
6. The statements made in this report are based on field examinations at the property and a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Calgary

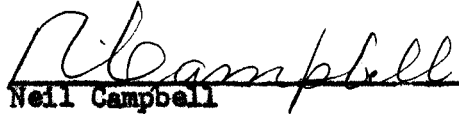
This 24th day of September 1969.


Neil Campbell

STATEMENT OF SUPERVISOR

I did between the dates of July 5, 1969 and August 10, 1969
carry out supervisory activities on the mapping and sampling work on the
Cork Claims, Whitehorse M.D., Yukon.

Dated September 24, 1969


Neil Campbell

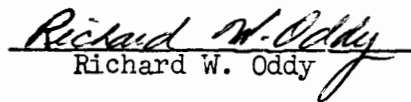
STATEMENT OF QUALIFICATIONS

I, Richard William Oddy, of the City of Calgary, Province of Alberta, do certify that:

1. I am a geologist residing at 1015 Cameron Avenue, Calgary, Alberta.
2. I am a graduate of the University of British Columbia with a B.Sc. in Geology (1962); and of the University of Manitoba with a M.Sc. in Geology (1969).
3. I am a fellow of the Geological Association of Canada and a member of the Alberta Society of Petroleum Geologists.
4. I have been practising my profession for seven years.
5. I am an employee of Imperial Oil Enterprises Ltd., and have worked for Imperial for three and one-half years.
6. The statements made in this report are based on field examinations at the property and a study of published geological literature and unpublished private reports.

Dated at Calgary

This 30th Day of September, 1969


Richard W. Oddy

LIST OF PERSONS EMPLOYED

ON

CORK CLAIM PROJECT

Dr. Neil Campbell, P.Eng.
10624 North Kensington,
Spokane, Washington, U.S.A.

Consulting Geological Engineer

Richard W. Oddy,
1015 Cameron Avenue,
Calgary, Alberta.

Geologist

Peter A. Christopher,
c/o Geology Department,
University of British Columbia,
Vancouver, British Columbia

Geologist

William G. L. Anderson,
10796 Deep Cove Road,
R.R. 1,
Sidney, British Columbia.

Student

Roy A. Grant,
21 Gillian Crescent,
St. Albert, Alberta.

Student

Canada
Province of Alberta

TO WIT:

In the Matter of an Application from Imperial Oil Enterprises Ltd. to Department of Indian Affairs and Northern Development pursuant to the Yukon Quartz Mining Act for a Certificate of Work

I, **JOHN NORMAN CRYDERMAN**,
of the **City of Calgary**,
in the Province of Alberta, **Geologist**,
do solemnly declare that

1. During the period June 27th to August 10th, 1969, Imperial Oil Enterprises Ltd. incurred the undernoted gross expenditures with respect to work done by said Company in such period on the Cork claims in the Whitehorse Mining District, Yukon Territory:

Bulldozing and Road Building		
Art Smith Construction Ltd.	\$2,278.00	
Burwash Mining Co. Ltd.	995.00	\$3,273.00
Helicopter charter (Trans-North Turbo Air Ltd.)		8,212.65
Assaying (Bondar-Clegg & Co. Ltd.)		2,780.72
Hammer drilling and blasting (Agilis Exploration Serv.)		3,814.12
Truck Rental (No. 1 Rent-A-Car)		866.24
Salaries for field personnel		
(Details of this amount previously forwarded to you by Declaration of the undersigned dated September 3rd, 1969.)		
Lodging for field personnel (Burwash Lodge)		3,401.70
Food and supplies for field personnel		742.70
Travel expenses and lodging for supervisory personnel		857.65
R. W. Oddy	\$671.50	
Dr. H. Campbell	314.99	
J. N. Cryderman	274.81	
		<u>1,261.30</u>
		<u>\$25,210.08</u>

2. This Declaration is made for the purpose of obtaining a Certificate of Work for the Cork claims.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of "The Canada Evidence Act."

DECLARED before me at the **City**
of **Calgary**

in the Province of Alberta,

this **2nd** day of **October**

A.D. 19**69**

John N Cryderman

[Signature]
NOTARY PUBLIC

BCC

BONDAR-CLEGG & COMPANY LTD.

geologists • geochemists • analysts • assayers

1500 PEMBERTON AVENUE, NORTH VANCOUVER. B.C.

Phone 988-5315

CERTIFICATE OF ASSAY

TO Imperial Oil Enterprises, Attn: Mr. Oddy
500 - 6th Avenue S. W.
Calgary 1, Alberta

Report Number: A29-168
 Date Rec'd: July 21/69
 Date Compl't'd: July 25/69

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	Pb	Zn	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
151	Trace			.02			.002				
152	.010	.35	.10	.10	.004	.003					
153				.02							
154				.04							
155				.05							
156	.020	.70		.18		.005					
157				.07							
158				.01							
159	Trace			.05			.002				
160				.08							
161				.01							
353	.015	.54	Trace	.21			.012				
354	.010	.35	Trace	.16	.002		.045				
355	Trace		.12								
356	Trace		Trace	.02							

NOTE:

Rejects retained two weeks
 Pulps retained three months
 unless otherwise arranged.

Gold & Silver values reported on these sheets
 have not been adjusted to compensate losses and
 gains inherent in fire assay methods.

Gold calculated at \$ per ounce

Peter Kump

Registered Assayer, Province of British Columbia

To: Perial Oil EnterprisesPAGE No. 2

BONDAR-CLEGG & COMPANY LTD.

REPORT No. A. 168DATE: July 25/69

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	Pb	Zn	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
357	Trace		Trace	Trace			.002				
358	Trace		.02	.03	.002	.002					
359				1.85			.004				
360	.030	1.05	.34	.57	.004	.007	.012				
361	.020	.70	.02				.006				
362	Trace		.10	.01			.002				
363				.01			.002				
364				Trace			.002				
365	Trace			Trace			.001				
366				Trace							
367				Trace							
368				Trace							
369				Trace							
370	Trace			Trace			.001				
371	Trace			Trace			.001				
372				Trace							
373	Trace			.02							
374	Trace			.01		.004					
375	Trace			Trace							
376				Trace							

Peter Kempe
 Registered Assayer, Province of British Columbia

To: perial Oil EnterprisesPAGE No. 3

BONDAR-CLEGG & COMPANY LTD.

REPORT No. A2^r 168DATE: July 25, 1969

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	Pb	Zn	MoS ₂	Ni			TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
377				.04							
378				.02							
379				.02							
380				.03							
381				.03							
382				Trace							
383				.01				.01			
384				.01				.01			
385	Trace			Trace							
386				.01				Trace			
387				Trace			.002				
388	Trace			.01			.003				
389				.02							
390				Trace							
391				.01							
392	Trace			.04							
393				.03							
394	Trace			.05			.002				
395				.01							
396				.02							
397				.01							
398				.07							

Peter Kumpse

Registered Assayer, Province of British Columbia

**BONDAR-CLEGG & COMPANY LTD.**

geologists • geochemists • analysts • assayers

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

Phone 988-5315

CERTIFICATE OF ASSAY

TO Mr. R. W. Oddy, Imperial Oil Enterprises,
500 - 6th Avenue S. W.
CALGARY, Alberta.

Report No.: **A-29-197**Date Rec'd: **July 29, 1969**Date Compt'd: **Aug. 7, 1969**

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
162				.03			trace				
163				.01			trace				
164				.01			trace				
165				.07			.004				
166				.02			.005				
167				.03			.005				
168				.04			.002				
169				.05			.003				
170				.03			.001				
171				.02			.035				
172				.03			.005				
173				.04			.007				
174				.02			.006				
175				.03			.008				
176				.07			.017				

NOTE:

Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

Gold & Silver values reported on these sheets
have not been adjusted to compensate losses and
gains inherent in fire assay methods.

Gold calculated at \$ **35.00** per ounce

Registered Assayer, Province of British Columbia

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MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
177				.01			.013				
178				.05			.009				
179				.04			.008				
180				.06			.013				
181				.05			.007				
182				.02			.005				
183				.06			.003				
184				.04			.002				
185				.07			.003				
186				.05			.010				
187				.04			.004				
188				.13			.003				
189				.07			trace				
190				.04			trace				
191				.05			.004				
192	trace		trace	.15	trace	trace	.001				
193				.32			trace				
194				.11			trace				
195				.09			trace				
196				.29			.001				

Peter Kemper
 Registered Assayer, Province of British Columbia

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
197	.005	\$0.18	.04	.28	trace	trace	.001				
198				.18			trace				
199				.19			trace				
200				.08			trace				
801				.19			.004				
802				.26			.004				
803				.25			.013				
804				.34			.022				
805				.22			.005				
806				.22			.002				
807				.26			.004				
808				.23			.004				
809				.22			.004				
810				.17			.005				
811				.23			.023				
812				.17			.005				
813				.21			.006				
814				.27			.013				
815				.21			.012				
816				.46			.017				

Peter Kempe
 Registered Assayer, Province of British Columbia

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MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
817				.32			.007				
818				.25			.012				
819				.05			.005				
820				.08			.005				
821				.23			.007				
822				.25			.005				
823				.46			.007				
824				.49			.012				
825				.26			.010				
826				.31			.005				
827				.26			.017				
828				.33			.023				
829				.15			.022				
830				.07			.012				
831				.10			.017				
832				.23			.015				
833				.01			.003				
834				.01			trace				
835				.01			.003				
836				.01			trace				

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MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)									
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent										
837	trace			.01			.002													
838				.02			.001													
851				.11			.001													
852				.12			trace													
853				.01			trace													
901	trace			.03			trace													
902				.07			.001													
903				.05			trace													
904				.12			.012													
905				.07			.009													
906				.03			trace													
907				.04			trace													
908				.01			trace													
909				.03			.002													
910				.02			.022													
911													.01			trace				
912													.20							
913													.04			trace				
914													.02							
915													.01							

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MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂	Nickel			TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
916				.06			trace				
917				.02			.003				
918				.01			.005				
919				.04			.001				
920				.08			trace				
921	trace			.06			.005				
922				.02			.001				
923				.01			trace				
924				.03			trace				
925				.02			trace				
926				.01			trace				
927	trace			.03	.01	trace					
928				.02			trace				
929				.02			trace				
930				.02				.001			
931				.23			.022				
932				.05			.012				
933				.09			.006				
934				.03			.002				
935				.03			.002				

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MARKED	GOLD		SILVER	Copper	Lead	Zinc	MoS ₂				TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
936	.005	\$0.18		.13			.004				
937				.07			.002				
938				.01		trace	.001				
939				.04			trace				
940				.02			trace				
941	trace			.01			trace				
942				.02			trace				
943				.01			trace				
944				.06			.009				
945				.07			.001				
946				.02			.014				
947				.17			.009				
948				.05			.002				
949				.06			.004				
950				.07			.001				
951				.08			.004				
952				.05			.007				
953				.04			.004				
954				.04			.002				
955				.06			.003				

Peter Kempe
 Registered Assayer, Province of British Columbia

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present claim: JY 51

Drillhole: IOE Ltd. 70-1

Inclination: -90°

Core Size: BQ

Depth: 90.98 m

Core recovered: 62.07 m, 71.8%

Location: 1900' S, 1400' W on IOE grid

Elevation: 1547 m ± 5 (from 1:5000
topo map)

Drilled: 1970 06 08 to 17

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1984 01

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. Available core was relogged and resampled to check for gold and other metals in the intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 4.57	4.57	<u>Overburden</u>
4.57- 60.47	55.90	<u>Latite porphyry</u> , 20% milky white feldspar phenocrysts to 4 mm in size in light-grey matrix with grain size to ½ mm, 3% biotite phenocrysts to 3 mm in size grading down to size of matrix, 1-2% disseminated pyrite, minor chalcopyrite along fractures, minor MoS ₂ with chalcopyrite in fractures 5.54-5.72 m 0.18 m lost core 5.72-6.71 m 3-4% disseminated pyrite, odd darker xenolith 4 cm in size, minor azurite and malachite along fractures, locally buff for 4-5 mm along fractures, locally minor quartz veins, matrix lighter in color downhole 6.71-7.24 m very light matrix, mostly very sparse sulfides with the odd clot of chalcopyrite and pyrite to 5 mm, locally cut by sucrosic white veins with 2-3% disseminated sulfides, some veins of grey quartz, other veins of white quartz 7.24-8.03 m matrix locally slightly darker-grey, odd xenolith of black volcanic with sharp contacts with 10% pyrite stringers to 1 cm in size, grey quartz stringers locally with sparse MoS ₂ and other sulfides SAMPLE 3001 (Imperial Oil Enterprises Ltd.) 4.57-7.62 m 3.05 m Cu 0.21%, MoS ₂ 0.013% SAMPLE 4635 4.57-8.03 m 3.25 m (representative chips) Au 95 ppb, Cu 2650 ppm, Mo 160 ppm, Pb 9 ppm, Zn 25 ppm 8.03-8.48 m feldspar phenocrysts with local yellowish-green sericitic alteration, few grey quartz stringers, sulfides along fractures - some rusty 8.48-8.94 m sparse sulfides, locally to 1% in white sucrosic masses 8.94-9.07 m 0.13 m lost core 9.07-9.45 m slightly darker-grey matrix, very sparse sulfides, biotite phenocrysts to 4 mm

Metrage	Interval	Description
	9.45-9.64 m	darker matrix as above, local tinges of malachite
	9.64-10.22 m	matrix as in run above, sulfides and veins practically absent
	10.22-10.92 m	locally lighter-grey, partly white sucrosic with 1-2% disseminated pyrite, grey quartz stringers 1-2 mm thick with sparse sulfides
SAMPLE 3002	(IOE Ltd.) 7.62-10.67 m	3.05 m Cu 0.17%, MoS ₂ 0.007%
	10.92-11.13 m	0.21 m lost core
	11.13-11.93 m	as in run right above, mostly sparse sulfides but locally to 2% disseminated, minor chalcopyrite along fractures, few grey quartz stringers some to 5 mm with minor sulfides
	11.93-12.89 m	phenocrysts to 6 mm, few grey quartz stringers to 5 mm with ½% MoS ₂ and 1% chalcopyrite some in clots to 5 mm, locally white sucrosic with 1-2% finely disseminated sulfides
	12.89-13.04 m	0.15 m lost core
	13.04-13.26 m	few stringers of grey quartz with 1-2% finely disseminated pyrite
SAMPLE 3003	(IOE Ltd.) 10.67-13.72 m	3.05 m Cu 0.20%, MoS ₂ 0.005%
	13.71-14.62 m	locally almost devoid of sulfides, elsewhere 2-3% pyrite and chalcopyrite disseminated and along fractures
	14.62-14.85 m	2-3% disseminated sulfides
	14.85-15.27 m	darker-grey matrix, mostly devoid of disseminated sulfides, locally lighter-grey to sucrosic with sparse sulfides, minor chalcopyrite along fractures
	15.27-15.54 m	as in run above, few stringers of grey quartz with sparse chalcopyrite
	15.54-15.70 m	0.16 m lost core
	15.70-16.35 m	few stringers of grey quartz, matrix locally lighter-grey
	16.35-16.46 m	0.11 m lost core
	16.46-17.62 m	mostly devoid of sulfides except for 2-3% in local white sucrosic masses, minor fine chalcopyrite along fractures

Metrage	Interval	Description
SAMPLE 3004	(IOE Ltd.) 13.72-16.76 m 3.04 m	Cu 0.20%, MoS ₂ 0.003%
SAMPLE 4636	16.46-17.62 m 1.16 m (representative chips)	Au 65 ppb, Cu 1500 ppm, Mo 27 ppm, Pb 4 ppm, Zn 24 ppm
	17.62-17.68 m 0.06 m	lost core
	17.68-18.92 m	locally with 2-5% disseminated sulfides, few grey quartz stringers with minor very fine chalcopyrite and somewhat coarser pyrite
	18.92-19.20 m 0.28 m	lost core
	19.20-20.05 m	identical to run above, odd quartz vein to 15 mm wide
SAMPLE 3005	(IOE Ltd.) 16.76-19.81 m 3.05 m	Cu 0.17%, MoS ₂ 0.008%
	20.05-20.12 m 0.07 m	lost core
	20.12-20.62 m	local white sucrosic masses with 2-3% pyrite
	20.62-20.73 m 0.11 m	lost core
	21.31-21.64 m 0.33 m	lost core
	21.64-22.22 m	very sparse pyrite
	22.22-22.25 m 0.03 m	lost core
	22.25-23.45 m	sparse pyrite except 1-2% disseminated in local white sucrosic masses with diffuse borders and parts with lighter-grey matrix, very minor chalcopyrite along fractures
	23.00-23.45 m 2%	pyrite
SAMPLE 3006	(IOE Ltd.) 19.81-22.86 m 3.05 m	Cu 0.17%, MoS ₂ 0.003%
	23.45-23.77 m 0.32 m	lost core
	24.90-25.07 m 0.17 m	lost core
	25.07-25.30 m	same as previous but with pyrite not chalcopyrite along fractures
	25.30-26.04 m	locally with 2-3% pyrite plus chalcopyrite disseminated and along fractures, elsewhere almost devoid of sulfides, one fracture with minor magnetite

Metrage	Interval	Description
	25.83-25.95 m	phenocrysts only 2-3 mm in size similar to those in latite porphyry in drillhole 70-3 close to contact
SAMPLE 3007	(IOE Ltd.) 22.86-25.91 m	3.05 m Cu 0.14%, MoS ₂ 0.002%
	26.04-26.21 m	0.17 m lost core
	26.21-26.77 m	lighter-grey matrix, longitudinal grey quartz vein 4 cm wide with pyrite and magnetite in centre to 3 mm thick with minor chalcopyrite
	26.77-26.84 m	0.07 m lost core
	26.84-27.13 m	lighter-grey, 2-3% disseminated pyrite
	27.13-27.31 m	locally lighter-grey, fracture with minor chalcopyrite and MoS ₂
SAMPLE 4637	26.21-27.31 m	1.03 m (representative chips) Au 70 ppb, Cu 1900 ppm, Mo 54 ppm, Pb 4 ppm, Zn 20 ppm
	27.31-27.43 m	0.12 m lost core
	27.43-28.19 m	locally with 1-2% disseminated pyrite mostly in white sucrosic masses
	27.86-28.14 m	feldspar phenocrysts to 2 mm or less in size
	28.14-28.36 m	0.22 m lost core
	28.36-28.96 m	locally up to 3-4% disseminated pyrite, elsewhere minor chalcopyrite along fractures, magnetite along one fracture
SAMPLE 3008	(IOE Ltd.) 25.91-28.96 m	3.05 m Cu 0.17%, MoS ₂ 0.003%
	28.96-29.28 m	identical to interval above
	29.28-30.12 m	mostly with 2-3% disseminated pyrite along fractures, local white sucrosic masses
	30.12-30.48 m	0.36 m lost core
	30.48-30.65 m	sparse disseminated sulfides
	30.65-30.78 m	0.13 m lost core
	30.78-31.20 m	locally with 2% disseminated pyrite, pyrite and minor magnetite along fractures
	31.20-31.73 m	0.53 m lost core

Metrage	Interval	Description
	31.73-31.91 m	white sucrosic with 3% pyrite disseminated and along fractures
	31.91-32.08 m	light-grey matrix, sparse disseminated pyrite
SAMPLE 3009	(IOE Ltd.) 28.96-32.00 m	3.04 m Cu 0.14%, MoS ₂ 0.005%
	32.08-32.20 m	mostly white sucrosic
	32.20-32.31 m	0.11 m lost core
	32.31-32.66 m	1% disseminated pyrite plus chalcopyrite
	32.61-33.18 m	light-colored matrix, minor sulfides, minor chalcopyrite along fractures
	33.18-33.53 m	0.35 m lost core
	33.53-33.97 m	locally with up to 2% disseminated pyrite plus chalcopyrite
	33.97-34.29 m	0.32 m lost core
	34.29-34.62 m	identical with run above, minor magnetite along fractures
	34.62-34.75 m	0.13 m lost core
	34.75-35.31 m	locally with up to 3% disseminated sulfides and some along fractures, few stringers of grey quartz
SAMPLE 3010	(IOE Ltd.) 32.00-35.05 m	3.05 m Cu 0.19%, MoS ₂ 0.005%
	35.31-35.97 m	0.66 m lost core
	36.15-36.27 m	0.12 m lost core
	36.27-36.71 m	locally white sucrosic masses, 1% disseminated sulfides mostly pyrite
	36.71-37.19 m	0.48 m lost core
	37.19-37.46 m	almost devoid of sulfides
	37.46 m	mud seam according to drillers' marker
	37.46-38.50 m	1.04 m lost core
SAMPLE 3011	(IOE Ltd.) 35.05-38.10 m	3.05 m Cu 0.17%, MoS ₂ 0.007%
	38.50-39.62 m	locally with 1-2% sulfides mostly along fractures, odd clot of chalcopyrite to 5 mm, few quartz stringers, minor magnetite along fractures, local areas to 5 cm long with whiter matrix

Metrage	Interval	Description
	39.62-40.22 m	few grey quartz stringers with minor finely disseminated chalcopyrite
	40.22-40.48 m	same as run above
	40.48-40.68 m	0.20 m lost core
	40.68-41.15 m	lighter-grey, more sucrosic masses
	40.98-41.15 m	quartz stringers
SAMPLE 3012	(IOE Ltd.) 38.10-41.15 m	3.05 m Cu 0.19%, MoS ₂ 0.003%
	41.15-41.45 m	identical with run above, minor chalcopyrite along fractures and in quartz stringers
	41.45-42.05 m	lighter-grey matrix, locally with 2-3% disseminated sulfides, minor magnetite along fractures, minor chalcopyrite in quartz stringers
	42.05-42.18 m	0.13 m lost core
	42.18-42.67 m	lighter-grey matrix, local white sucrosic masses with up to 2-3% disseminated sulfides
	42.67-42.95 m	few grey quartz stringers with minor chalcopyrite and magnetite
	42.95-43.13 m	0.18 m lost core
	43.13-43.43 m	local white sucrosic masses with 2-3% sulfides, minor pyrite and chalcopyrite along stringers
	43.43-43.70 m	up to 1% pyrite disseminated and along fractures
	43.70-43.82 m	0.12 m lost core
	43.82-44.50 m	1% pyrite disseminated and along fractures
SAMPLE 3013	(IOE Ltd.) 41.15-44.20 m	3.05 m Cu 0.16%, MoS ₂ 0.007%
	44.80-46.41 m	1.61 m lost core
	46.41-46.63 m	minor magnetite and chalcopyrite along fractures, sparse disseminated pyrite
	46.63-46.96 m	locally 2-3% disseminated pyrite
	46.96-47.46 m	0.50 m lost core
SAMPLE 3014	(IOE Ltd.) 44.20-47.24 m	3.04 m Cu 0.13%, MoS ₂ 0.003%

Metrage	Interval	Description
	47.46-47.55 m	2-3% disseminated pyrite
	47.55-48.15 m	2-3% disseminated pyrite, locally lighter-grey matrix, minor chalcopyrite along grey quartz stringer
	48.15-48.34 m	0.19 m lost core
	48.34-48.77 m	sparse sulfides but locally to 1%
SAMPLE 4638	46.63-48.77 m	1.67 m (representative chips) Au 65 ppb, Cu 1300 ppm, Mo 26 ppm, Pb 4 ppm, Zn 20 ppm
	48.77-49.22 m	minor pyrite and chalcopyrite along stringers, sparse disseminated
	49.22-49.46 m	sparse disseminated pyrite
	49.46-49.82 m	lighter-grey matrix, minor chalcopyrite and pyrite along fractures
	49.82-51.21 m	darker matrix in top 10 cm, light-grey below, locally 1% disseminated sulfides, minor pyrite, chalcopyrite, and magnetite along fractures
SAMPLE 3015 (IOE Ltd.)	47.24-50.29 m	3.05 m Cu 0.17%, MoS ₂ 0.003%
	51.21-51.66 m	light matrix, odd fracture with 5% chalcopyrite, minor magnetite along fractures
	51.66-52.51 m	odd splash of chalcopyrite along fractures, locally 2-3% disseminated sulfides, odd fracture with 5-8% pyrite
	52.51-52.81 m	1% disseminated pyrite locally, minor pyrite along fractures
	52.81-53.36 m	locally to 3% pyrite disseminated and along fractures
SAMPLE 3016 (IOE Ltd.)	50.29-53.34 m	3.05 m Cu 0.14%, MoS ₂ 0.005%
	53.36-53.65 m	few grey quartz stringers, minor pyrite and magnetite along fractures
	53.65-53.96 m	0.31 m lost core
	53.96-54.25 m	lighter-grey, local white sucrosic masses, odd stringer of grey quartz
	54.25-55.17 m	mud seam (according to drillers' block) - no core

Metrage	Interval	Description
	55.17-55.64 m	0.47 m lost core
	55.64-55.78 m	2% disseminated sulfides
	55.78-55.93 m	minor pyrite on fractures
	55.93-56.16 m	sparse sulfides, local lighter-grey matrix
	56.16-56.54 m	0.38 m lost core
	SAMPLE 3017 (IOE Ltd.) 53.34-56.39 m	3.05 m Cu 0.10%, MoS ₂ 0.005%
	56.54-56.89 m	few fine-grained grey quartz stringers, locally to 3% disseminated sulfides but mostly less than 1%
	56.89-57.21 m	0.32 m lost core
	57.21-58.06 m	lighter-grey matrix mostly less than 1% sulfides disseminated and along fractures, more abundant pyrite on fractures in lower part
	58.06-58.36 m	minor pyrite along fractures
	58.36-58.51 m	locally lighter-grey matrix, minor pyrite
	58.51-58.98 m	0.47 m lost core
	58.98-59.38 m	minor pyrite
	59.38-60.42 m	1.04 m lost core
	SAMPLE 3018 (IOE Ltd.) 56.39-59.44 m	3.05 m Cu 0.13%, MoS ₂ 0.005%
60.47- 60.98	0.51	<u>Fault gouge</u> , earthy grey material
	60.66-60.98 m	0.32 m lost core
60.98- 69.87	8.89	<u>Latite porphyry</u> , as 4.57-60.47 m
	61.11-61.84 m	light-grey matrix, locally to 3% disseminated pyrite, few pale-greenish fragments resembling phenocrysts but more like tuff
	61.84-62.18 m	0.34 m lost core
	62.18-62.98 m	lighter-grey matrix, locally up to 3% disseminated sulfides
	SAMPLE 3019 (IOE Ltd.) 59.44-62.48 m	3.04 m Cu 0.08% MoS ₂ 0.003%
	62.98-63.32 m	0.34 m lost core

Metrage	Interval	Description
	63.32-64.01 m	lighter-grey matrix, up to 5% disseminated pyrite, odd xenolith of dark sulfide-bearing volcanic to 5 mm
	64.01-64.51 m	lighter-grey matrix, minor pyrite on fractures
SAMPLE 4639	62.18-64.51 m	1.99 m (representative chips) Au 70 ppb, Cu 695 ppm, Mo 25 ppm, Pb 2 ppm, Zn 18 ppm
	64.51-64.92 m	0.41 m lost core
	64.92-65.25 m	locally lighter-grey matrix, minor pyrite and magnetite on fractures
	65.25-65.68 m	0.43 m lost core
SAMPLE 3020	(IOE Ltd.) 62.48-65.53 m	3.05 m Cu 0.08%, MoS ₂ 0.003%
	65.81-66.70 m	phenocrysts altered medium-green in a white matrix more altered (chalkier) downhole, few clots of disseminated pyrite
	66.70-66.74 m	chalky rubble
	66.74-66.91 m	fresher, similar to 65.81-66.70 m
SAMPLE 4640	65.81-66.91 m	1.10 m (representative chips) Au 10 ppb, Cu 600 ppm, Mo 23 ppm, Pb 1 ppm, Zn 17 ppm
	66.91-67.21 m	0.30 m lost core
	67.21-67.46 m	lighter-grey matrix, slightly more biotite phenocrysts
	67.46-67.79 m	0.33 m lost core
	67.79-68.25 m	identical to run above
	68.25-68.30 m	granules and sand
	68.30-68.46 m	minor pyrite, chalcopyrite, and magnetite along fractures
	68.46-68.58 m	0.12 m lost core
SAMPLE 3021	(IOE Ltd.) 65.53-68.58 m	3.05 m Cu 0.06%, MoS ₂ 0.003%
	68.58-69.35 m	matrix mostly medium-grey, local white sucrosic masses with 2-3% dissiminated sulfides
	69.35-69.80 m	0.45 m lost core

Metrage	Interval	Description
69.87- 70.71	0.84	<u>Fault gouge</u> , light-grey earthy rubble 70.36-70.71 m 0.35 m lost core
70.71- 90.98	20.27	<u>Latite porphyry</u> , as 4.57-60.47 m 70.71-70.97 m light-pale-greenish-yellow feldspar phenocrysts from sericitic? alteration 70.97-71.63 m 0.66 m lost core SAMPLE 3022 (IOE Ltd.) 68.58-71.63 m 3.05 m Cu 0.05%, MoS ₂ 0.002% 71.63-71.71 m buff feldspar phenocrysts 71.71-71.73 m light-grey earthy rubble - fault gouge? 71.73-72.52 m medium-light-grey matrix, 3-4% biotite phenocrysts, sparse pyrite 72.52-73.19 m 0.67 m lost core 73.19-73.46 m up to 40% feldspar phenocrysts some buff- colored, 3-4% biotite, 2-3% pyrite along fractures 73.46-73.57 m as above with one fragment of <u>fault gouge</u> 73.57-74.05 m 2-cm wide longitudinal quartz vein for part of interval with minor pyrite and possibly MoS ₂ 74.05-74.65 m medium-light-grey matrix, sparse chalcopyrite, minor disseminated pyrite in lower part, minor MoS ₂ along one fracture SAMPLE 4641 73.19-74.65 m 1.46 m (representative chips) Au 35 ppm, Cu 230 ppm, Mo 17 ppm, Pb 2 ppm, Zn 24 ppm SAMPLE 3023 (IOE Ltd.) 71.63-74.68 m 3.05 m Cu 0.03%, MoS ₂ 0.001% 74.65-74.73 m 0.08 m lost core 74.73-75.59 m minor disseminated pyrite and chalcopyrite locally to 1% or so, minor pyrite and magnetite along fractures 75.59-76.25 m sparse disseminated pyrite, odd fracture with 5-10% pyrite 76.25-76.63 m 0.38 m lost core

Metrage	Interval	Description
	76.63-77.11 m	lighter-grey matrix, few veins of fine-grained grey quartz, odd fracture with 50% pyrite
	76.96-77.03 m	on one side of core only about 5% feldspar phenocrysts 1-2 mm mostly in matrix of ½ mm grain size
	77.11-77.47 m	local areas with light-grey matrix with gradational contacts over 5 mm or so, feldspar phenocrysts buff and/or pale-yellow from slight alteration
	77.47-78.03 m	0.56 m lost core
	SAMPLE 3024 (IOE Ltd.) 74.68-77.72 m 3.04 m Cu 0.09%, MoS ₂ 0.003%	
	78.08-78.21 m	very light grey matrix, grey quartz veins
	78.36-79.61 m	1.25 m lost core
	79.61-79.86 m	few core fragments without phenocrysts, grain size less than ½-1 mm, other fragments with mostly white matrix, minor chalcopyrite along fractures
	79.86-80.11 m	local mass of white sucrosic quartz to 2 cm in size
	80.11-80.85 m	0.74 m lost core
	SAMPLE 3025 (IOE Ltd.) 77.72-80.77 m 3.05 m Cu 0.10%, MoS ₂ 0.001%	
	80.85-81.38 m	locally lighter-grey matrix, one clot of chalcopyrite to 12 mm
	81.62-81.76 m	0.14 m lost core
	81.76-82.14 m	locally white along grey quartz veins, minor pyrite along stringers
	82.14-82.38 m	devoid of sulfides, locally white along grey quartz veinlets
	82.38-82.78 m	0.40 m lost core
	82.78-83.06 m	white along grey quartz veins, sparse pyrite in veins
	83.06-83.60 m	white along grey quartz veins with minor pyrite
	83.60-83.78 m	0.18 m lost core
	83.78-84.58 m	grey quartz veins with minor pyrite offset by veins of white massive quartz, minor pyrite along fractures
	SAMPLE 3026 (IOE Ltd.) 80.77-83.82 m 3.05 m Cu 0.10%, MoS ₂ 0.003%	

Metrage	Interval	Description
	84.58-84.79 m	odd vein of grey quartz with minor pyrite
	84.79-85.91 m	1.12 m lost core
	85.91-86.11 m	few veinlets of grey quartz with minor pyrite
	86.11-86.51 m	one piece of split core with 75% pyrite along a fracture, rubble - generally light-grey
	86.51-86.74 m	0.23 m lost core
	86.74-87.33 m	light-grey rubble
SAMPLE 3027	(IOE Ltd.) 83.82-86.87 m	3.05 m Cu 0.12%, MoS ₂ 0.001%
SAMPLE 4642	85.91-87.33 m	1.19 m (representative chips) Au 335 ppb, Cu 350 ppm, Mo 6 ppm, Pb 3 ppm, Zn 23 ppm
	87.33-88.33 m	odd hexagonal-shaped biotite phenocryst
	87.77 m	1½-cm white quartz vein at 44°CA
	88.33-88.55 m	0.22 m lost core
	88.55-89.15 m	slight pale-green alteration of phenocrysts, sucrosic white along grey quartz veins, devoid of sulfides
	89.15-89.35 m	no sulfides
	89.35-89.88 m	0.53 m lost core
	89.88-90.22 m	minor pyrite along fractures
	90.22-90.77 m	identical to interval above
SAMPLE 3028	(IOE Ltd.) 86.87-90.98 m	4.11 m Cu 0.05%, MoS ₂ 0.001%
	90.77-90.98 m	0.21 m lost core
90.98	-	End of hole

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present Claim: JY 58

Drillhole: IOE Ltd. 70-2

Inclination: -90°

Core Size: BQ

Depth: 103.94 m

Core recovered: 68.35 m, 71.6%

Location: 1200' S, 2450' W on IOE grid

Elevation: 1689 m $\pm$ 5 (from 1:5000
topo map)

Drilled: 1970 06 21 to 28

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1983 11

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. The core was relogged and resampled to check for gold and other metals in the intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 8.53	8.53	<u>Overburden</u>
8.53- 10.20	1.67	<u>Intermediate tuff</u> , medium-dark-grey, very fine grained, angular light-grey grains to $\frac{1}{2}$ mm in size in darker matrix, 3-5% disseminated pyrite in grains to $\frac{1}{4}$ mm, pyrite clots on fracture surfaces, few elongated whitish clots to 3-5 mm, odd fragment of light-brown color to 5 mm SAMPLE 3947 8.53-9.03 m 0.50 m (representative chips) Au 115 ppb, Cu 245 ppm, Mo 18 ppm, Pb 16 ppm, Zn 38 ppm 9.03-10.20 m 1.17 m lost core
10.20- 10.59	0.39	<u>Rhyolite</u> , buffish-white, 10-20% greyish glassy fragments to 2-3 mm in size and 10% milky white fragments or grains to 5 mm in whitish fine-grained matrix, few dark spots to 2 mm, slight rust on fracture surfaces, partly altered downhole with fine pyrite along one oxidized fracture 2-3 mm wide (lower contact and thickness uncertain because of lost core; thickness given is a minimum) SAMPLE 4138 10.20-10.59 m 0.39 m (representative chips) Au 48 ppb, Cu 275 ppm, Mo 59 ppm, Pb 1 ppm, Zn 29 ppm
10.59- 17.00	6.41	<u>Intermediate tuff</u> , medium-dark-grey, 20-30% whitish fragments to 2-3 mm in very fine grained darker matrix, 3-5% disseminated pyrite and pyrite along fractures 10.57-11.04 m white veinlets to 3-4 mm wide with irregular veinlets SAMPLE 3948 10.59-11.06 m 0.47 m (representative chips) Au 60 ppb, Cu 230 ppm, Mo 28 ppm, Pb 10 ppm, Zn 49 ppm

Metrage	Interval	Description
		11.06-12.80 m 1.74 m lost core
		12.80-13.25 m whitish fragments mostly less than 1 mm in size, moderate number of whitish veinlets and few irregular whitish clots to 2-3 mm in size
		SAMPLE 3949 12.80-13.25 m 0.45 m (representative chips) Au 55 ppb, Cu 295 ppm, Mo 30 ppm, Pb 5 ppm, Zn 53 ppm
		13.25-15.54 m 2.29 m lost core
		15.54-15.95 m local light- and dark-grey laminae with disseminated pyrite more concentrated along dark laminae, greenish-grey downhole possibly from alteration along fracture
		15.95-16.31 m 0.36 m lost core
		16.31-16.67 m only 1-3% pyrite: some disseminated cubes to 1 mm in size
		SAMPLE 3950 15.54-16.67 m 0.77 m (representative chips) Au 45 ppb, Cu 208 ppm, Mo 25 ppm, Pb 1 ppm, Zn 41 ppm
		16.67-16.92 m 0.25 m lost core
17.00- 18.30	1.30	<u>Vitrophyric tuff</u> , light-grey, 10-30% tiny white crystallites in light-grey glassy matrix, 1-2% disseminated pyrite
		17.07-18.16 m 1.09 m lost core
18.30- 20.65	2.35	<u>Intermediate tuff</u> , medium-dark-grey, similar to intermediate tuff uphole, 1-2% disseminated pyrite with 20% pyrite on some fracture surfaces
		SAMPLE 4126 16.92-18.44 m 0.42 m (representative chips) Au 66 ppb, Cu 210 ppm, Mo 10 ppm, Pb 1 ppm, Zn 49 ppm
		18.44-19.02 m includes layer of whitish-buff-grey 4-5 mm thick with larger aggregates of pyrite at 10° CA, numerous whitish veins to 2 mm thick
		19.02-19.11 m lighter-grey and less pyrite than uphole
		SAMPLE 4127 18.44-19.11 m 0.67 m (representative chips) Au 59 ppb, Cu 175 ppm, Mo 21 ppm, Pb 1 ppm, Zn 45 ppm

Metrage	Interval	Description
		19.11-19.27 m with very finely disseminated pyrite and coarser aggregates on fracture surfaces
		19.27-19.51 m 0.24 m lost core
		19.51-19.73 m 1-3% finely disseminated pyrite becoming more abundant from 19.69-19.73 m
		19.73-19.89 m 0.16 m lost core
		19.89-20.12 m 2-4% finely disseminated pyrite, few white veinlets 2-3 mm thick
		SAMPLE 4128 19.11-20.12 m 0.61 m (representative chips) Au 13 ppb, Cu 153 ppm, Mo 61 ppm, Pb 1 ppm, Zn 42 ppm
		20.12-20.19 m 0.07 m lost core
		20.19-20.61 m slightly lighter-grey, 1-2% disseminated pyrite with up to 10% on some fracture surfaces, few white veinlets some with more abundant pyrite than adjacent rock
		20.61-20.65 m 0.04 m lost core
20.65-21.16	0.51	<u>Vitrophyric tuff</u> , light-grey, 50-60% white crystallites to $\frac{1}{2}$ mm in darker matrix
		20.75-21.16 m 0.41 m lost core
21.16-22.85	1.69	<u>Intermediate tuff</u> , medium-dark-grey, similar to intermediate tuff uphole, mostly sparse pyrite but one fragment of rhyolite tuff with 2-3% disseminated pyrite
		21.26-21.52 m sparse pyrite
		SAMPLE 4129 20.19-21.52 m 0.87 m (representative chips) Au 14 ppb, Cu 95 ppm, Mo 21 ppm, Pb 1 ppm, Zn 36 ppm
		21.52-21.56 m 0.04 m lost core
		21.56-21.70 m medium-dark-grey, sparse pyrite
		21.70-22.10 m 0.40 m lost core
		22.10-22.40 m 1-3% disseminated pyrite, some along fractures
		SAMPLE 4130 21.56-22.40 m 0.46 m (representative chips) Au 18 ppb, Cu 163 ppm, Mo 24 ppm, Pb 1 ppm, Zn 33 ppm

Metrage	Interval	Description
		22.40-22.85 m 0.45 m lost core
22.85-31.44	8.59	<u>Rhyolite tuff</u> , whitish-buff to medium-grey, aphanitic to very fine grained, locally compact and sucrosic
		22.85-23.35 m whitish-buff, 3-5% pyrite disseminated and along fractures
		23.35-23.62 m 0.27 m lost core
		23.62-23.89 m medium-grey, 1-2% pyrite disseminated and along fractures
		SAMPLE 4131 22.85-23.89 m 0.67 m (representative chips) Au 20 ppb, Cu 153 ppm, Mo 12 ppm, Pb 1 ppm Zn 40 ppm
		23.89-24.54 m 0.65 m lost core
		24.54-24.62 m medium-grey, 2-4% pyrite disseminated and along fractures
		24.62-24.93 m whitish-buff, where coarse enough whitish grains are visible in slightly darker matrix; sucrosic, 20% or more rust spots on fracture surfaces, some pyrite visible, pyrite? smears on diamond cut surface, minor disseminated pyrite, some fragments cleaved parallel to CA, few calcite filled fractures
		24.93-25.30 m 0.37 m lost core
		25.30-25.42 m one fragment of medium-dark-grey with abundant pyrite on fracture surfaces, another light-grey, glassy and banded
		SAMPLE 4132 24.54-25.42 m 0.51 m (representative chips) Au 14 ppb, Cu 148 ppm, Mo 19 ppm, Pb 1 ppm, Zn 31 ppm
		25.42-26.06 m 0.64 m lost core
		26.06-26.38 m whitish-buff, very fine grained, sucrosic, 25-30% disseminated rust spots to 1-2 mm throughout, odd bit of pyrite
		SAMPLE 4133 26.06-26.38 m 0.32 m (representative chips) Au 25 ppm, Cu 120 ppm, Mo 13 ppm, Pb 2 ppm, Zn 27 ppm
		26.38-26.97 m 0.59 m lost core

Metrage	Interval	Description
		26.97-28.19 m 1.22 m lost core (sand according to driller's block)
		28.19-28.32 m whitish-buff, sucrosic, similar to 26.06-26.38 m, 25% rust spots, odd glint of very finely disseminated pyrite?
		28.32-28.50 m 0.18 m lost core
		28.50-28.78 m whitish-buff, sucrosic as above, 20% rust spots, some fracture surfaces coated with rust
		28.78-29.11 m 0.33 m lost core
		29.11-29.59 m whitish-buff, sucrosic as above, 10% rust spots to 1 mm, very thin fractures with scaly rust
		SAMPLE 4134 28.19-29.59 m 0.89 m (split core) Au 40 ppb, Cu 126 ppm, Mo 23 ppm, Pb 1 ppm, Zn 26 ppm
		29.59-29.72 m 0.13 m lost core
		29.72-29.89 m upper half- whitish-buff, sucrosic as above, with fine pyrite as well as rust; lower half- light-grey, vitrophyric with 1-2% disseminated pyrite some along fractures
		SAMPLE 4135 29.72-29.89 m 0.17 m (representative chips) Au 27 ppb, Cu 172 ppm, Mo 21 ppm, Pb 2 ppm, Zn 29 ppm
		29.89-31.24 m 1.35 m lost core and previously sampled
		31.24-31.36 m whitish-buff, sucrosic as above, up to 5% finely disseminated pyrite
		31.36-31.44 m 0.08 m lost core
31.44-32.00	0.56	<u>Intermediate tuff</u> , medium-dark-grey, similar to intermediate tuff uphole, 2-3% disseminated pyrite
		31.62-31.85 m 0.23 m lost core
		31.85-32.00 m some pyrite along dark laminae at 90° CA
		SAMPLE 3029 (Imperial Oil Enterprises Ltd.) 30.48-32.00 m 1.52 m Cu 0.06%, MoS ₂ 0.003%
32.00-33.53	1.53	<u>Rhyolite tuff</u> , similar to intermediate tuff above but grading to light-grey, 2-3% disseminated pyrite, more abundant pyrite on fracture surfaces

Metrage	Interval	Description
		SAMPLE 4136 31.24-32.16 m 0.61 m (representative chips) Au 235 ppb, Cu 515 ppm, Mo 43 ppm, Pb 1 ppm, Zn 34 ppm 32.16-32.76 m 2-3% finely disseminated pyrite, rust and pyrite on fractures 32.76-32.92 m 0.16 m lost core 32.92-33.22 m 1-2% disseminated pyrite locally more, few fragments of intermediate tuff 33.22-33.31 m fragments of rhyolite and intermediate tuff with 1-2% disseminated pyrite (probably lighter and darker- grey tuff interlayered but rubbly core makes observations of this impossible) SAMPLE 4137 32.16-33.31 m 0.99 m (split core) Au 16 ppb, Cu 153 ppm, Mo 30 ppm, Pb 1 ppm, Zn 27 ppm 33.31-33.53 m 0.22 m lost core
33.53- 33.72	0.19	<u>Magnetitic flow or tuff</u>, dirty dark-greenish-grey, altered, local clots of magnetite to 1 cm or so, few clots of pyrite, irregular gypsum veinlets 2 mm wide at 30° CA but not parallel to each other (possibly a fault) 33.53-33.61 m indistinctly brecciated: fragments of whitish tuff 4 cm or so in size 33.72m lower contact marked by 3 mm veinlet of whitish gypsum at 30° CA
33.72- 42.06	8.34	<u>Rhyolite tuff</u>, greyish to light-greyish white locally with up to 10% finely disseminated pyrite 33.77-33.89 m brecciated, irregularly veined with irregular gypsum to 3 mm, 2-cm black magnetic layer at 30° CA, clots of pyrite in aggregates to 2 cm, abundant disseminated pyrite, rust on fracture surfaces SAMPLE 4139 33.53-33.89 m 0.36 m (split core) Au 220 ppb, Cu 780 ppm, Mo 12 ppm, Pb 2 ppm, Zn 70 ppm 33.89-34.10 m light-grey-buff, 1% pyrite, locally brecciated 34.10-34.59 m 0.49 m lost core

Metrage	Interval	Description
	34.59-35.10 m	whitish-buff similar to interval above grading to greyish, 1-3% finely disseminated pyrite (so fine amount difficult to estimate) pyrite more abundant along fractures, pyrite vein 7 cm long by 1½ mm wide at 10° CA, odd bit of MoS ₂ ? on one fracture surface; bottom fragment shows a contact at 50-100° CA between whitish-buff and medium-grey below with more pyrite in medium-grey
SAMPLE 4140	33.89-35.10 m	0.72 m (split core) Au 105 ppb, Cu 155 ppm, Mo 45 ppm, Pb 4 ppm, Zn 53 ppm
	35.10-35.66 m	0.56 m lost core
	35.66-35.97 m	whitish-buff, sucrosic, 20% rust spots; two light-grey fragments with 2% finely disseminated pyrite
	35.97-36.27 m	0.30 m lost core
	36.27-36.65 m	some fragments of whitish-buff with sparse pyrite but moderate rust and rust along fractures; other fragments of medium-grey with sparse disseminated pyrite
SAMPLE 4141	35.66-36.65 m	0.69 m (representative chips) Au 30 ppm, Cu 112 ppm, Mo 85 ppm, Pb 1 ppm, Zn 26 ppm
	36.65-36.73 m	0.08 m lost core
	36.73-36.81 m	medium-grey, sparse disseminated pyrite
	36.81 m	contact at about 30° CA
	36.81-36.93 m	dark-grey, brecciated and irregularly veined with light-buff - appears bleached for 1-2 mm adjacent to whitish veins
	36.93-37.09 m	whitish-buff with rusty spots
	37.09-37.64 m	0.55 m lost core
	37.64-37.74 m	light-greyish white, brecciated at top with fragments to 1 cm or so in a blackish matrix, rust on fracture surfaces
SAMPLE 4142	36.73-37.74 m	0.46 m (split core and representative chips) Au 31 ppb, Cu 95 ppm, Mo 85 ppm, Pb 1 ppm, Zn 22 ppm
	37.74-38.10 m	0.36 m lost core
	38.10-38.28 m	fragments of white sucrosic and medium-grey with sparse finely disseminated pyrite
	38.28-38.56 m	0.28 m lost core

Metrage	Interval	Description
	38.56-39.19 m	whitish-buff, sucrosic, sparse pyrite but locally to 1% disseminated, minor rust locally brecciated, odd pyrite-filled veinlet 2 mm wide
	39.09-39.19 m	prominent streak of pyrite at 38° CA
SAMPLE 4143	38.10-39.19 m	0.81 m (split core) Au 34 ppb, Cu 153 ppm, Mo 34 ppm, Pb 1 ppm, Zn 33 ppm
	39.19-39.47 m	0.28 m lost core
	39.47-39.60 m	light-grey, sparse pyrite some in clots to 5 mm
	39.60-39.63 m	breccia: subangular pieces of dark-grey tuff to 2 cm in size irregularly surrounded by white border 1-2 mm thick, interstices partly filled by pyrite, breccia zone at 30° CA
	39.63-39.93 m	medium-grey, 1-2% finely disseminated pyrite, rusty fractures, whitish rusty veins at 30° CA
	39.93-40.11 m	dark-grey, fractured with irregularly branching whitish pyrite-bearing veins, probably 5% pyrite in whole rock
	40.11-40.53 m	0.42 m lost core
	40.53-40.69 m	dark-grey similar to that above, fractured with 5% or more pyrite in irregular clots to 1 cm and along fractures
SAMPLE 4144	39.47-40.69 m	0.80 m (split core) Au 65 ppb, Cu 390 ppm, Mo 51 ppm, Pb 1 ppm, Zn 50 ppm
	40.69-41.14 m	dark-grey, slightly magnetic, 2-3% disseminated pyrite, 10-15% light- or medium-grey fragments to 2-3 cm with 5% or more pyrite
	41.14-41.76 m	0.62 m lost core
	41.76-41.95 m	fragments of moderately magnetic dark-grey with sparse pyrite
SAMPLE 4145	40.69-41.95 m	0.64 cm (split core) Au 235 ppb, Cu 410 ppm, Mo 175 ppm, Pb 1 ppm, Zn 52 ppm
	41.95-42.06 m	0.11 m lost core
42.06-66.70	24.64	Basic lava, dark-grey, grain size 2-3 mm or more in upper part irregularly decreasing to ½-1 mm downhole, upper contact not observed

Metrage	Interval	Description
	42.06-42.37 m	slightly magnetic, fractures to ½ mm filled with pyrite, 1% disseminated pyrite, white veinlets 2-3 mm wide at 30° CA, 3-5% dark clots of magnetite to 4 mm, moderate epidote along fractures
	42.37-42.50 m	0.13 m lost core
	42.50-43.59 m	more typical gabbro or coarse flow, about 60-70% light-grey feldspars with dark minerals in interstices, slightly magnetic, whitish veinlets 2 mm wide at about 30° and 45° CA, 2-3% pyrite both disseminated and along narrow veinlets with most along veinlets, becoming fresher downhole
SAMPLE 4146	42.06-43.59 m	1.40 m (split core) Au 47 ppb, Cu 298 ppm, Mo 115 ppm, Pb 1 ppm, Zn 43 ppm
	43.59-44.30 m	gabbroic as previous, moderately magnetic, 1% disseminated pyrite in grains to 1-2 mm mostly less, fewer fractures with pyrite than interval above
	44.30-44.91 m	gabbroic as previous, 1% disseminated pyrite, few fractures to 2 mm some with discontinuous minor pyrite, some to 2 mm with brown gypsum
SAMPLE 4610	43.59-44.91 m	1.30 m (split core) Au 14 ppb, Cu 190 ppm, Mo 5 ppm, Pb 1 ppm, Zn 40 ppm, Ni 56 ppm
	44.91-45.48 m	gabbroic as previous with feldspars to 5 mm, aggregates of pyrite to 1-2 cm along fractures some rusty
SAMPLE 4147	44.91-45.48 m	0.57 m (split core) Au 31 ppb, Cu 313 ppm, Mo 235 ppm, Pb 4 ppm, Zn 40 ppm
	45.48-45.57 m	0.09 m lost core
	45.57-46.18 m	grain size 1-2 mm, sparse disseminated pyrite
	46.18-47.09 m	feldspars to 5 mm, dark magnetic streaks to 2 cm long by 2-3 mm wide along core, very sparse pyrite but locally more abundant along fractures where they are more numerous, rust on fractures
	46.18-46.72 m	highly fractured
	46.37 m	white quartz vein 3 mm thick at 70° CA
	46.72-46.77 m	0.05 m lost core
	46.77-46.91 m	60% dark aggregates to 4 mm surrounded by white matrix
	46.99-47.44 m	highly fractured

Metrage	Interval	Description
	46.94-47.09 m	¼-mm pyrite stringers more abundant
SAMPLE 4611	45.57-47.09 m	1.47 m (split core) Au 75 ppb, Cu 375 ppm, Mo 98 ppm, Pb 1 ppm, Zn 40 ppm, Ni 44 ppm
	47.09-47.32 m	moderately magnetic, 1-2% pyrite disseminated and in fractures, few elongated dark magnetic streaks in addition to magnetic matrix
	47.32-47.55 m	few prominent white veins to 5-6 mm wide at 45° CA, sparse pyrite
	47.55-48.20 m	sparse pyrite, grain size decreasing to 1 mm or so near bottom of interval, few whitish-buff veinlets at 45°
	47.84-47.93 m	more abundant ¼-mm pyrite-filled fractures
SAMPLE 4612	47.09-48.20 m	1.11 m (split core) Au 18 ppb, Cu 190 ppm, Mo 170 ppm, Pb 1 ppm, Zn 35 ppm, Ni 45 ppm
	48.20-48.36 m	0.16 m lost core
	48.36-48.93 m	moderately magnetic, 2-3% pyrite both disseminated and in fine fractures but mostly disseminated particularly in lower part of interval
	48.49-48.59 m	crumbly and altered, likely a <u>fault</u>
SAMPLE 4148	48.36-48.93 m	0.57 m (split core) Au 50 ppb, Cu 285 ppm, Mo 88 ppm, Pb 1 ppm, Zn 37 ppm
	48.93-49.33 m	grain size 2-3 mm, sparse pyrite more abundant on fractures, rusty fractures
	49.07 m	white veinlet with pyrite 2 mm wide at 45°
	49.33-49.99 m	moderately magnetic, sparse pyrite - 10% disseminated and 90% along fractures
	49.99-51.05 m	grain size mostly about 1 mm, few coarser white areas to 3 mm in size mostly associated with pyrite- bearing fractures, irregular areas to 8 cm mottled with light-grey or buff-colored spots
	50.12 m	smears of MoS ₂ on fracture at 32° CA with pyrite and sparse chalcopyrite
	50.59 m	white stringer to 5 mm wide with 10-15% pyrite at 30° CA
	50.59-50.88 m	few dark magnetic streaks 3-4 cm long, some S-shaped, irregular blobs to 6 cm with higher proportion of whitish grains associated with pyrite

Metrage	Interval	Description
	50.88-51.05 m	grain size mostly about 1 mm
SAMPLE 4613	48.93-51.05 m	2.12 m (split core) Au 22 ppb, Cu 235 ppm, Mo 35 ppm, Pb 1 ppm, Zn 32 ppm, Ni 44 ppm
	51.05-52.59 m	grain size mostly $\frac{1}{2}$ -1 mm, moderately magnetic, dark magnetic streaks, sparse pyrite, few irregular whitish streaks and blobs, local pyrite aggregates to 2 cm, some fracture surfaces 20% or more covered with thin pyrite films, irregular greenish-grey-pink blobs to 5 cm, pyritiferous stringers 3 mm wide at 40° CA, orange-brown calcite along some fractures; may be basal part of a flow based on fine-grain size and jumbled appearance
	52.40 m	fine-grained MoS ₂ with pyrite along fracture at 35° CA
	52.59 m	veinlet of white quartz 8 mm wide at 70° CA
	52.59-53.67 m	grain size about 1 mm, magnetic, local aggregates of pyrite to 3 cm with chalcopyrite comprising 5% of sulfides, 2-3% pyrite disseminated and to 2 or 3 mm along fractures, few poikilitic feldspars? to 1 cm at bottom of interval
	52.94 m	minor smear of MoS ₂ on fracture at 65°
	53.67-54.63 m	grain size about 1 mm, magnetic, sparse pyrite at top of interval locally increasing to 4% disseminated downhole
	54.63-55.32 m	0.69 m lost core
	55.32-55.60 m	locally less magnetic than uphole, 2-3% pyrite disseminated and in stringers to 3 mm wide
	55.60-55.88 m	0.28 m lost core
	55.88-56.85 m	grain size $\frac{1}{2}$ mm, magnetic generally but locally not magnetic, calcite veinlet 2-3 mm wide at 20° CA, 5-10% disseminated pyrite, white vein 5 mm wide at 45° CA, calcite along some fractures
	56.85-58.30 m	grain size $\frac{1}{2}$ -1 mm, moderately magnetic, 1-2% pyrite disseminated and along $\frac{1}{4}$ -mm fractures, locally to 5% or more, sparse chalcopyrite, one or two irregular pyrite-bearing white stringers to 3 mm wide
	58.30-59.22 m	moderately magnetic, 3-4% pyrite disseminated and along fractures associated with sparse chalcopyrite, some fractures coated with calcite, others rusty, local irregular whitish patches

Metrage	Interval	Description
	59.22-60.20 m	grain size $\frac{1}{2}$ mm, moderately magnetic, 3% pyrite as disseminated aggregates and along fractures, one lighter-greenish-grey layer 2 cm thick at 65° CA, few irregular blobs of whitish grey
	60.06-60.11 m	0.05 m lost core
	60.20-60.68 m	grain size $\frac{1}{2}$ -1 mm, magnetic, 2-4% pyrite, local irregular lighter-green-grey masses 8 cm in size
	60.68-61.01 m	moderately magnetic, 5-10% pyrite with much disseminated
	61.01-61.12 m	0.11 m lost core or missing from previous splitting and sampling
	61.12-61.26 m	3-4% pyrite
	61.26-61.74 m	grain size $\frac{1}{2}$ -1 mm, variably magnetic
	61.74-61.86 m	0.12 m lost core or missing from previous splitting and sampling
	61.86-63.40 m	grain size $\frac{1}{2}$ mm, magnetic, variable pyrite to 5% or more some in aggregates to 3 cm, white veinlet 4 mm wide about 45° CA
SAMPLE 3030	(IOE Ltd.) 61.00-62.52 m	1.52 m Cu 0.06%, MoS ₂ 0.003%
	63.40-63.77 m	moderately magnetic, 1-2% pyrite disseminated and in fractures, orange-brown calcite on fractures, veinlets 3 mm thick and aggregates of massive pyrite
SAMPLE 4614	61.86-63.77 m	1.91 m (representative chips and split core) Au 49 ppb, Cu 290 ppm, Mo 32 ppm, Pb 1 ppm, Zn 32 ppm, Ni 48 ppm
	63.77-63.85 m	sucrosic white tuff with pyrite to 1 mm thick, irregular dark markings and blotches on surface, some disseminated pyrite, rusty fractures, sharp upper contact at 75° CA, lower contact irregular - probably a bomb
	63.85-64.12 m	magnetic dark-grey volcanic again
SAMPLE 4149	63.77-63.92 m	0.15 m (split core) Au 25 ppb, Cu 60 ppm, Mo 16 ppm, Pb 1 ppm, Zn 30 ppm
	64.12-64.79 m	grain size about 1 mm, magnetic 2-3% pyrite, rust on fractures, some irregular lighter-grey masses, stringers of massive pyrite 2-3 mm thick at 65° CA

Metrage	Interval	Description
	64.79-65.76 m	grain size $\frac{1}{2}$ mm, magnetic, 2% pyrite
SAMPLE 4615	63.92-65.22 m	1.30 m (split core) Au 49 ppb, Cu 295 ppm, Mo 24 ppm, Pb 1 ppm, Zn 29 ppm, Ni 44 ppm
	65.76-66.70 m	grain size $\frac{1}{2}$ -1 mm, magnetic, 2-3% pyrite
SAMPLE 4616	65.22-66.70 m	1.44 m (split core) Au 29 ppb, Cu 310 ppm, Mo 230 ppm, Pb 1 ppm, Zn 32 ppm, Ni 47 ppm
66.70- 69.95	3.25	"Wormy" tuff, medium-grey, non-magnetic except locally along fractures with few magnetite grains to $\frac{1}{2}$ or 1 mm, 5-10% pyrite mostly along fractures, but some finely disseminated, probably sparse chalcopyrite; diamond cut surface shows 25% or so irregular elongated whitish blobs $\frac{1}{2}$ -8 mm in size some with aggregates of pyrite 1-2 mm across as cores; 5% dark streaks to 5 mm long by 1-2 mm wide all in fine greyish matrix, some dark minerals bordered by whitish blobs possibly formed by crystallization of a greyish-glassy matrix, narrow randomly oriented fractures to $\frac{1}{2}$ mm with discontinuous pyrite, epidote along one or two fractures, minor calcite on some orange-coated fractures, odd white veinlet 2-3 mm wide at 35° CA, whitish blobs and dark streaks distinctly oriented at about 40° CA, some dark streaks with disseminated pyrite
	67.71 m	1½-cm thick layer consisting almost completely of whitish blobs merging into each other adjacent to orange-brown coated fracture at 35° CA
SAMPLE 4150	66.70-68.01 m	1.31 m (split core) Au 25 ppb, Cu 325 ppm, Mo 39 ppm, Pb 6 ppm, Zn 38 ppm
	69.10-69.49 m	0.39 m lost core
	69.49-69.72 m	with up to 15% white euhedral crystals (feldspar?) to 4 mm in size, mostly less
SAMPLE 4182	68.01-69.72 m	1.32 m (representative chips and split core) Au 43 ppb, Cu 260 ppm, Mo 45 ppm, Pb 1 ppm, Zn 33 ppm
	69.72-69.95 m	0.23 m lost core

Metrage	Interval	Description
69.95-72.12	2.17	<u>Basic lava</u>, dark-grey, grain size mostly $\frac{1}{2}$ mm but locally coarser, probably about equal proportions light-grey feldspars and darker pyroxenes, moderately magnetic, few irregular wisps of magnetite, 3% pyrite finely disseminated and along fractures, few white veinlets 1-2 mm wide at 40° CA, one at 25° CA SAMPLE 4617 69.95-71.01 m 1.06 m (split core) Au 32 ppb, Cu 312 ppm, Mo 31 ppm, Pb 1 ppm, Zn 36 ppm, Ni 50 ppm 71.01-71.17 m 0.16 m lost core 71.17-71.31 m grain size about 1 mm, moderately magnetic, at least one vein 3 mm wide of massive pyrite at 18° CA, pyrite also in finer fractures, irregular volumes to 3 cm in size with coarser and more abundant white minerals 71.31-71.48 m altered rusty-orange zone with calcite possibly a fault, mostly crumbly and earthy, fracture at about 20° CA SAMPLE 4183 71.17-71.48 m 0.31 m (split core) Au 72 ppb, Cu 200 ppm, Mo 64 ppm, Pb 1 ppm, Zn 45 ppm 71.48-71.71 m 0.23 m lost core 71.71-72.03 m grain size 2-3 mm, magnetite veinlets and wisps to 5-6 cm long by 2-3 mm wide 72.03-72.12 m lighter-green-grey, grain size up to $\frac{1}{4}$-$\frac{1}{2}$ mm, few aggregates of epidote to 2 mm, some buff-white grains, 3-4% pyrite mostly along fractures, sparse chalcopyrite along fractures
72.12-72.32	0.20	<u>Latite porphyry intertongued with basic lava</u> 72.12-72.15 m latite porphyry - light-grey-white, 10-15% white masses to 5 mm with fuzzy borders (feldspar phenocrysts?) in fine-grained matrix, 5% biotite, sharp upper and lower contacts at 50° CA 72.15-72.19 m basic lava similar to 72.03-72.12 m, lower contact at 28° CA 72.19-72.32 m latite porphyry similar to previous, biotite phenocrysts to 2-3 mm in size
72.32-84.80	12.48	<u>Basic lava</u>, dark-grey

Metrage	Interval	Description
	72.32-72.73 m	grain size to 1 mm, moderately magnetic with dark magnetic wisps as in basic lava uphole, 3% pyrite most prominent along fractures
	72.64 m	2-3 mm thick altered earthy veinlet at 280 CA
	72.73-73.99 m	grain size 1 mm, magnetic, 3% pyrite disseminated and along fractures, one white veinlet 2-3 mm thick with some pyrite along core for 35 cm
SAMPLE 4618	71.71-73.50 m	1.79 m (split core) Au 41 ppb, Cu 320 ppm, Mo 150 ppm, Pb 1 ppm, Zn 36 ppm, Ni 45 ppm
	73.99-74.98 m	grain size ½-1 mm, moderately magnetic, 2-3% pyrite mostly along fractures, odd pyrite clot to 3 cm associated with white veins 1-3 mm or so wide partly rimmed by green epidote 2-5 mm thick
	74.98-75.34 m	0.36 m lost core
	75.34-75.68 m	grain size 1-2 mm, black magnetic band 6-7 mm wide at 380 CA, interlocking white feldspar laths mostly ½ - 3 or 4 mm long in 3-cm interval below magnetic band
	75.68-76.67 m	porphyritic, 5-10% white feldspar phenocrysts to 2 by 6 mm in size some in aggregates randomly oriented in aphanitic black matrix, as magnetic as previously or more so, probably 2-3% pyrite along ¼ mm fractures and few larger grains, rusty fractures, white veinlets to 3 mm wide, irregular upper contact
	75.96-76.67 m	grain size of matrix coarsening to ¼ mm, black magnetic streaks, slightly more magnetic than non-porphyritic lava uphole, few white veinlets 1-2 mm wide, 2-3% pyrite along fractures and disseminated
	76.67 m	sharp irregular lower contact averaging 350 CA
SAMPLE 4619	75.34-76.67 m	1.33 m (split core) Au 24 ppb, Cu 445 ppm, Mo 19 ppm, Pb 1 ppm, Zn 32 ppm, Ni 27 ppm
	76.67-76.81 m	lighter-green-grey (altered?) than basic lava uphole, magnetic but locally non-magnetic
	76.81-77.30 m	dark-grey locally paler-green-grey with irregular white veins and irregular black magnetic clots to 2 cm in size, moderately magnetic throughout, pyrite along fractures

Metrage	Interval	Description
	77.30-77.39 m	half core - magnetic porphyritic basic lava similar to that uphole; other half separated by 1-cm white vein - irregularly veined with white, pyrite, and magnetic clots
	77.39-77.73 m	porphyritic, similar to 75.68-76.67 m, grain size to 1 mm, wispy black magnetic streaks 4 cm long by 1-2 mm wide many oriented at about 60° CA; 1-cm wide white vein above extends 6 cm into porphyritic basic lava; epidote associated with pyrite clots near bottom of interval
	77.73 m	irregular contact with non-porphyritic lava below averages 38° CA
	77.73-79.87 m	magnetic, 3-4% pyrite, white veins 2-3 mm thick - one at 100° CA - some irregular with epidote and magnetite clots to 3 cm
SAMPLE 4620	77.85-79.87 m	2.02 m (split core) Au 52 ppb, Cu 630 ppm, Mo 89 ppm, Pb 1 ppm, Zn 30 ppm, Ni 46 ppm
	79.87-80.57 m	somewhat lighter-grey than previous, grain size 1 mm, magnetic, 3-4% pyrite, white veins as previous with one 8 mm wide
	80.57m	irregular vein 1-2 cm wide at 38° CA with 40% pyrite in massive aggregates, 20% epidote, 5-10% magnetite, balance white minerals (quartz?)
	80.57-84.80 m	porphyritic, similar to previous, magnetic, clots to 2 cm in size of pyrite, epidote, magnetite, and white minerals (quartz?), 3-4 or even 5% pyrite mostly along fractures, part brecciated with interstices mostly filled with black magnetic material and few per cent pyrite
	82.19-82.35 m	earthy rusty rubble, possibly a fault
	82.35-82.60 m	0.25 m lost core
	82.82-82.89 m	earthy brown rubble
	82.89-82.91 m	0.02 m lost core
	82.91-83.11 m	brecciated with brown clayey material along fractures
	83.11-83.52 m	with white veins and pyrite as previous
SAMPLE 4184	82.19-83.52 m	1.06 m (split core) Au 72 ppb, Cu 1000 ppm, Mo 77 ppm, Pb 1 ppm, Zn 45 ppm

Metrage	Interval	Description
	83.61-83.73 m	mostly earthy brown rubble
	83.73-83.85 m	0.12 m lost core
	83.85-83.91 m	veined with quartz and magnetite
	83.91-84.20 m	brecciated, cemented with brown clayey material, abundant magnetite-bearing quartz veins
	84.58-84.80 m	5-10% feldspar phenocrysts as previous, medium-green-grey, heavily veined with white quartz veins in various orientations and up to 5-6 mm thick, pyrite in quartz veins as well as $\frac{1}{4}$ - $\frac{1}{2}$ -mm veins cutting the quartz veins, abundant rust on fractures, some pyrite aggregates to 2 cm by 3 mm, minor chalcopryrite on fractures
	84.64-84.80 m	not magnetic in altered green-grey part
	SAMPLE 4185 83.52-84.80 m	1.16 m (split core) Au 265 ppb, Cu 1150 ppm, Mo 92 ppm, Pb 1 ppm, Zn 50 ppm
84.80-94.79	9.99	<u>Latite porphyry</u>, medium-grey, 10-15% white euhedral feldspar phenocrysts to 1 cm in size but mostly 2-4 mm, 1-2% biotite phenocrysts to 2 mm, matrix medium-grey with grain size mostly less than 1 mm but with size gradation of feldspar phenocrysts down to size of feldspars in matrix, rusty fractures, less than 1% finely disseminated pyrite in matrix; contact with porphyritic basic lava above obscure because of previous splitting of core and its rubbly nature 85.23-85.68 m only partly fresh, gypsum on some fractures locally, thin film of pyrite covering 10-20% of a few fractures SAMPLE 4186 84.80-85.68 m 0.88 m (representative chips) Au 56 ppb, Cu 225 ppm, Mo 16 ppm, Pb 1 ppm, Zn 38 ppm 85.68-86.13 m up to 20% white phenocrysts some of which appear to be quartz about same size as feldspar phenocrysts, up to 5% biotite and hornblende phenocrysts, about 1% sulfides disseminated and along fractures - mostly pyrite but some chalcopryrite 86.13-86.68 m hard, tough, phenocrysts becoming buff-colored in lower part of interval, up to 10% biotite and hornblende? phenocrysts grading in size from 2-3 mm to less than $\frac{1}{2}$ mm, slightly higher proportion of dark minerals in matrix than higher up hole, sparse sulfides mostly along fractures

Metrage	Interval	Description
SAMPLE 4187	85.68-86.68 m 1.00 m	(representative chips) Au 56 ppb, Cu 173 ppm, Mo 7 ppm, Pb 3 ppm, Zn 37 ppm
SAMPLE 3031	(IOE Ltd.) 84.80-86.13 m 1.33 m	Cu 0.04%, MoS ₂ trace
	86.68-86.89 m 0.21 m	lost core
	87.33-88.85 m	medium-grey as previous, sparse disseminated chalcopyrite, feldspar phenocrysts buff-colored in lower part
	88.13 m	fracture partly coated with chalcopyrite
SAMPLE 4188	86.89-88.85 m 1.96 m	(representative chips) Au 2140 ppb, Cu 130 ppm, Mo 5 ppm, Pb 8 ppm, Zn 42 ppm
	88.85-89.42 m	buff feldspar phenocrysts
	89.42 m	irregular contact at about 30° CA
	89.42-89.86 m	dark minerals all altered to light-rusty- brown similar to feldspar phenocrysts
	89.61-89.86 m	earthy and chalky, local calcite
SAMPLE 4189	88.85-89.86 m 1.01 m	(representative chips) Au 2745 ppb, Cu 22 ppm, Mo 7 ppm, Pb 6 ppm, Zn 39 ppm
SAMPLE 3032	(IOE Ltd.) 86.13-89.61 m 3.48 m	Cu 0.03% MoS ₂ 0.002%
	89.86-90.13 m 0.27 m	lost core
	90.13-90.68 m	phenocrysts and dark minerals mostly all altered to light-rusty-brown but such alteration only extends 1 cm or so along both sides of cracks; locally where not altered, matrix appears fresh, dark minerals also but feldspar phenocrysts are all pale-green - probably sericitic alteration
	90.68-92.14 m	buff-brown color from brown specks throughout matrix from altered dark minerals, locally unaltered matrix with less than 1% disseminated sulfides, feldspar phenocrysts altered greenish, moderate rust on fractures
SAMPLE 4190	90.13-91.09 m 0.96 m	(representative chips) Au 575 ppb, Cu 18 ppm, Mo 8 ppm, Pb 5 ppm, Zn 36 ppm

Metrage	Interval	Description
		SAMPLE 4191 91.09-92.14 m 1.05 m (representative chips) Au 195 ppb, Cu 18 ppm, Mo 7 ppm, Pb 5 ppm, Zn 39 ppm
		92.14-93.24 m 1.10 m lost core
		93.24-93.88 m mostly altered brownish but locally unaltered and whitish
		93.55-93.88 m up to 2-3% finely disseminated sulfides
		SAMPLE 4192 93.24-93.88 m 0.64 m (representative chips) Au 150 ppb, Cu 37 ppm, Mo 14 ppm, Pb 4 ppm, Zn 30 ppm
		93.88-94.52 m 0.64 m lost core
		94.52-94.79 m mostly altered brownish, few dark fragments to 4-5 mm possibly xenoliths
		SAMPLE 4193 94.52-94.79 m 0.27 m (representative chips) Au 35 ppb, Cu 45 ppm, Mo 18 ppm, Pb 3 ppm, Zn 36 ppm
		SAMPLE 3033 (IOE Ltd.) 89.61-94.79 m 5.18 m Cu 0.02% MoS ₂ trace
94.79- 97.05	2.26	<u>Basic lava</u> , medium- to dark-grey, similar to basic lava uphole, grain size to 1 mm, moderately magnetic, few per cent disseminated pyrite
		94.79-95.10 m dark-grey, 4% sulfides including some chalcopyrite disseminated and along fractures, local whitish veins to 3 mm wide
		95.10-95.55 m 0.45 m lost core
		95.55-96.17 m locally green-grey, irregularly mottled with buff to 1 cm long, black magnetic streaks, 4-5% sulfides disseminated and along fractures, mostly pyrite but some chalcopyrite, local quartz veins to 8 mm wide with 5-10% clots of pyrite and less epidote at 30° CA
		SAMPLE 4194 94.79-96.17 m 0.93 m (split core) Au 200 ppb, Cu 470 ppm, Mo 40 ppm, Pb 1 ppm, Zn 30 ppm
		96.17-96.32 m 0.15 m lost core
		96.32-97.05 m dark-grey, grain size decreasing from about 1 mm to very fine grained about 1 cm from lower contact at 55° CA

Metrage	Interval	Description
97.05- 97.54	0.49	<u>Latite porphyry</u> 97.05-97.10 m light-grey, 10-15% white crystals from less than 1 mm to 1 cm in size in light-grey non-magnetic matrix, 1-2% biotite grains to 2 mm, numerous rusty stringers at all orientations to about 1 mm wide; lower contact irregular but averages 38-40° CA SAMPLE 4195 97.00-97.10 m 0.10 m (split core) Au 205 ppb, Cu 395 ppm, Mo 55 ppm, Pb 1 ppm, Zn 35 ppm 97.10-97.46 m medium-grey, very fine grained to aphanitic, non-magnetic, irregularly veined with white quartz, fine pyrite veinlets, gypsum on some fractures 97.46-97.54 m 20-30% white partly euhedral grains and masses to 8 mm in size, 4-5% dark biotite grains, 1-2% sulfides disseminated and along fractures all in light-grey matrix; upper contact irregular but averages about 32° CA; lower contact more regular at 55° CA
97.54- 103.94	6.40	<u>Basic lava</u>, dark-grey similar to basic lava uphole; grain size about 1 mm, magnetic, pyrite disseminated and along fractures 97.77-97.97 m 0.20 m lost core 97.97-98.23 m irregularly veined with 1-mm white and narrow pyrite, irregularly mottled with lighter-grey blobs and clots SAMPLE 4621 97.97-98.74 m 0.77 m (split core) Au 80 ppb, Cu 323 ppm, Mo 91 ppm, Pb 21 ppm, Zn 38 ppm, Ni 55 ppm 99.52-99.53 m 0.01 m lost core 99.90-101.48 m quartz veins to 1 cm wide with pyrite, epidote, and magnetite in upper part, locally non-magnetic because of alteration, odd aggregate of chalcopyrite to 1 cm or more in size, 2-3% pyrite dissiminated and along fractures and veins SAMPLE 4196 100.04-101.48 m 1.44 m (split core) Au 35 ppb, Cu 555 ppm, Mo 47 ppm, Pb 1 ppm, Zn 34 ppm 101.48-102.41 m generally not as many quartz veins with pyrite as previous run, calcite on some fractures 102.01-102.15 m quartz veins and mottling with epidote and pyrite

Metrage	Interval	Description
	102.41-103.94 m	local buffish irregular blotches to 3 cm in size with pyrite and epidote, 2-3% pyrite, locally altered and brecciated
	103.02-103.12 m	oxidized rubble
SAMPLE 4197	103.02-103.12 m	0.10 m (split core) Au 220 ppb, Cu 530 ppm, Mo 220 ppm, Pb 1 ppm, Zn 58 ppm
	103.12-103.29 m	0.17 m lost core
SAMPLE 4622	103.31-103.94 m	0.63 m (split core) Au 34 ppb, Cu 395 ppm, Mo 36 ppm, Pb 1 ppm, Zn 32 ppm, Ni 48 ppm
103.94	-	End of hole

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present claim: JY 51
Drillhole: IOE Ltd. 70-3

Inclination -90°

Core Size: BQ

Depth: 74.37 m

Core recovered: 28.23 m, 41.0%

Location: 2300' S, 2100' W on IOE grid

Elevation: 1608 m ±5 (from 1:5000
topo map)

Drilled: 1970 07 04 to 17

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1984 01

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. Available core was relogged and resampled to check for gold and other metals in the intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 5.49	5.49	<u>Overburden</u>
5.49- 12.73	7.24	<u>Latite porphyry</u> , 20% milky white feldspar phenocrysts to 5 mm in sizes in grey matrix of grain size to ½ mm, 3% biotite phenocrysts to 3 mm in size, variable amounts of disseminated pyrite and minor chalcopyrite
	5.49-5.80 m	very sparse sulfides
	5.80-7.16 m	1.36 m lost core
	7.49-8.84 m	1.35 m lost core
	9.00-9.45 m	0.45 m lost core
	9.45-9.50 m	matrix somewhat darker-grey
	9.50-10.21 m	0.71 m lost core
	10.34-10.52 m	0.18 m lost core
	10.52-10.69 m	whitish matrix
	10.69-10.76 m	0.07 m lost core
	10.76-10.97 m	whitish matrix
	10.97-11.11 m	white-buff matrix
	11.11-11.32 m	matrix so light-colored that phenocrysts are not prominent
	11.32-11.43 m	0.11 m lost core
	11.43-11.62 m	matrix greyer in lower part
SAMPLE 3034	(Imperial Oil Enterprises Ltd.)	5.49-11.58 m
	6.09 m	Cu 0.06%, MoS ₂ 0.003%
	11.62-12.65 m	1.03 m lost core

Metrage	Interval	Description
12.73-13.40	0.67	<u>Fault gouge</u> 12.73-13.26 m 0.53 m lost core 13.26-13.40 m light-green-brown earthy gouge
13.40-22.40	9.00	<u>Latite porphyry</u> , as 5.49-12.73 m 13.40-13.53 m medium-grey matrix 13.53-14.33 m 0.80 m lost core 14.46-14.78 m 0.32 m lost core 15.39-15.54 m 0.15 m lost core 15.69-16.31 m 0.62 m lost core 16.40-16.76 m 0.36 m lost core 16.76-16.97 m very sparse sulfides 16.97-18.29 m 1.32 m lost core SAMPLE 3035 (IOE Ltd.) 11.58-17.68 m 6.10 m Cu 0.09%, MoS ₂ 0.003% 18.43-18.90 m 0.47 m lost core 18.90-19.13 m sulfides absent 19.13-19.35 m 0.22 m lost core 19.35-19.44 m medium-grey matrix 19.44-20.27 m 0.83 m lost core SAMPLE 4623 15.16-20.40 m 1.27 m (representative chips) Au 55 ppb, Cu 790 ppm, Mo 21 ppm, Pb 5 ppm, Zn 33 ppm 20.40-21.64 m 1.24 m lost core 21.77-22.40 m 0.63 m lost core
22.40-25.76	3.36	<u>Fault gouge</u> , light-brown, earthy, local minor rust 22.55-22.86 m 0.31 m lost core 23.06-23.47 m 0.41 m lost core SAMPLE 4624 22.40-23.73 m 0.61 m (representative chips) Au 100 ppb, Cu 780 ppm, Mo 39 ppm, Pb 6 ppm, Zn 25 ppm

Metrage	Interval	Description
		23.73-24.69 m 0.96 m lost core
		SAMPLE 3036 (IOE Ltd.) 17.68-24.38 m 6.70 m Cu 0.08%, MoS ₂ 0.005%
		24.69-25.76 m 1.07 m lost core; drillers' block marked "washed out in front of bit"
25.76- 26.89	1.13	<u>Latite porphyry</u> , as 5.49-12.73 m
		25.80-26.21 m 0.41 m lost core
		26.21-26.61 m medium-grey matrix, minor malachite stain, sulfides absent
		26.61-26.67 m 0.06 m lost core
		26.67-26.89 m malachite stain along fractures
26.89- 27.28	0.39	<u>Fault gouge</u> , light-brown earthy rubble, some malachite
		27.04-27.28 m 0.24 m lost core
27.28- 27.70	0.42	<u>Latite porphyry</u> , as 5.49-12.73 m, locally kaolinized
		SAMPLE 3037 (IOE Ltd.) 24.38-27.43 m 3.05 m Cu 0.12%, MoS ₂ 0.010% Sludge: Cu 0.09%, MoS ₂ 0.005%
27.70- 28.96	1.26	<u>Fault gouge</u>
		27.70-27.88 m light- to medium-brown, earthy, minor malachite stain
		27.88-28.48 m mixture of earthy gouge and core fragments of partly argillized latite porphyry with local malachite stain
		28.48-28.96 m earthy gouge at top, few core fragments of latite porphyry at bottom
		SAMPLE 4625 26.21-28.96 m 2.45 m (representative chips) Au 90 ppb, Cu 2650 ppm, Mo 84 ppm, Pb 2 ppm, Zn 32 ppm
28.96- 29.90	0.94	<u>Latite porphyry</u> , as 5.49-12.73 m
		28.96-29.56 m 1% disseminated pyrite
		29.56-29.90 m sulfides absent

Metrage	Interval	Description
29.90- 30.06	0.16	<u>Fault gouge</u> , light-brown earthy rubble 30.01-30.06 m 0.05 m lost core
30.06- 31.59	1.53	<u>Latite porphyry</u> , as 5.49-12.73 m 30.06-30.10 m light- to medium-grey matrix 30.10-30.83 m 0.73 m lost core SAMPLE 3038 (IOE Ltd.) 27.43-30.48 m 3.05 m Cu 0.09%, MoS ₂ 0.012% Sludge: Cu 0.15%, MoS ₂ 0.12% 30.83-30.94 m medium-grey matrix, 1-2% disseminated sulfides, gypsum along thin fractures 30.94-31.32 m medium-grey matrix, less than 1% disseminated sulfides 31.32-31.39 m 0.07 m lost core 31.39-31.59 m medium-grey matrix
31.59- 32.46	0.87	<u>Fault gouge</u> , earthy 31.62-32.46 m 0.84 m lost core
32.46- 32.60	0.14	<u>Latite porphyry</u> , as 5.49-12.73 m 32.46-32.57 m medium-grey matrix
32.60- 34.52	1.92	<u>Fault gouge</u> , earthy brown material with small fragments of latite porphyry 33.08-34.52 m 1.43 m lost core SAMPLE 3039 (IOE Ltd.) 30.48-33.53 m 3.05 m Cu 0.13%, MoS ₂ 0.007% Sludge: Cu 0.14%, MoS ₂ 0.005%
34.52- 36.87	2.35	<u>Latite porphyry</u> , as 5.49-12.73 m 34.70-35.13 m 0.43 m lost core 35.37-35.66 m 0.29 m lost core 35.66-35.78 m one core fragment with light matrix and 2-3% disseminated sulfides, others with dark matrix and sparse or no sulfides 35.78-36.58 m 0.80 m lost core

Metrage	Interval	Description
		SAMPLE 3040 (IOE Ltd.) 33.53-36.58 m 3.05 m Cu 0.08%, MoS ₂ 0.005 Sludge: Cu 0.14%, MoS ₂ 0.006%
		36.58-36.87 m medium-light-grey-matrix, sparse sulfides
36.87- 37.69	0.82	<u>Fault gouge</u> , light-brown, earthy 36.87-37.64 m 0.77 m lost core
37.69- 74.37	36.68	<u>Latite porphyry</u> , as 5.49-12.73 m 37.69-37.96 m medium-light matrix 37.96-38.31 m 0.35 m lost core 38.31-38.40 m locally 1% disseminated sulfides 38.40-38.73 m matrix locally lighter-grey, 2-3% disseminated sulfides locally, fresher than uphole 38.73-38.86 m 0.13 m lost core 38.86-39.39 m medium-light-grey matrix with gradational contacts to fine-grained white sucrosic masses with 1-2% finely disseminated pyrite, magnetite locally on fractures 39.39-40.08 m 0.69 m lost core
		SAMPLE 3041 (IOE Ltd.) 36.58-39.62 m 3.04 m Cu 0.08%, MoS ₂ 0.007% Sludge: Cu 0.10%, MoS ₂ 0.007%
		40.08-40.34 m veined and cut by white sucrosic masses with finely disseminated pyrite
		40.34-40.54 m 0.20 m lost core
		40.54-40.85 m core fragments with light-grey matrix, some with medium-grey matrix, partly oxidized
		40.85-41.30 m 0.45 m lost core
		41.30-42.08 m mostly medium-grey matrix but irregularly cut and mottled with lighter-grey, sparse disseminated sulfides
		42.08-42.37 m 0.29 m lost core
		42.37-42.62 m as run above
		SAMPLE 4626 38.31-42.62 m 2.55 m (representative chips) Au 155 ppb, Cu 785 ppm, Mo 59 ppm, Pb 2 ppm, Zn 19 ppm
		42.62-42.98 m 0.36 m lost core

Metrage	Interval	Description
	SAMPLE 3042 (IOE Ltd.)	39.62-42.67 m 3.05 m Cu 0.8%, MoS ₂ 0.007% Sludge: Cu 0.10%, MoS ₂ 0.007%
	43.18-43.29 m	0.11 m lost core
	43.29-43.74 m	medium-light-grey matrix, sparse sulfides
	43.74-44.08 m	medium-grey matrix, 30% feldspar phenocrysts to 2-3 mm in size (smaller than typical), sparse or no sulfides
	44.08-44.17 m	0.09 m lost core
	44.17-44.65 m	as in run above
	44.65-45.05 m	mottled with light-grey matrix
	45.05-45.43 m	0.38 m lost core
	45.43-46.33 m	sparse sulfides in medium-grey matrix, cut by white sucrosic veins some with 1-2% disseminated pyrite
	SAMPLE 3043 (IOE Ltd.)	42.67-45.72 m 3.05 m Cu 0.07%, MoS ₂ 0.007% Sludge: Cu 0.13%, MoS ₂ 0.008%
	46.33-46.68 m	medium-grey matrix, sparse sulfides
	46.68-46.86 m	0.18 m lost core
	46.94-47.29 m	few white sucrosic veins with rust spots
	SAMPLE 4627	43.29-47.29 m 3.35 m (representative chips) Au 130 ppb, Cu 670 ppm, Mo 51 ppm, Pb 2 ppm, Zn 24 ppm
	47.29-48.25 m	0.96 m lost core
	48.25-48.62 m	cut by white sucrosic veins with 1% disseminated pyrite
	48.62-49.02 m	cut by white sucrosic veins or masses with disseminated rust spots
	SAMPLE 3044 (IOE Ltd.)	45.72-48.77 m 3.05 m Cu 0.09%, MoS ₂ 0.008% Sludge: Cu 0.12%, MoS ₂ 0.006%
	49.02-49.38 m	0.36 m lost core
	49.38-49.64 m	with partly assimilated xenoliths of medium- grey tuff to 4 cm in size with 3% finely disseminated pyrite
	SAMPLE 4628	49.38-49.64 m 0.26 m (representative chips) Au 130 ppb, Cu 760 ppm, Mo 55 ppm, Pb 1 ppm, Zn 21 ppm

Metrage	Interval	Description
	49.64-49.83 m	0.19 m lost core
	49.83-50.19 m	medium-grey matrix with no sulfides except locally, cut by white sucrosic veins with 1-2% finely disseminated pyrite
	50.19-50.60 m	0.41 m lost core
	50.60-50.65 m	one core fragment with malachite stain on surface, no sulfides
	50.65-50.90 m	0.25 m lost core
	51.01-51.36 m	0.35 m lost core
	51.36-51.69 m	minor magnetite along fractures
	51.69-52.88 m	1.19 m lost core
SAMPLE 3045 (IOE Ltd.)	48.77-51.82 m	3.05 m Cu 0.11%, MoS ₂ 0.008%
	52.88-53.12 m	darker matrix, odd fragment of dark volcanic or tuff, malachite stain along fracture surfaces
	53.12-54.56 m	1.44 m lost core (fault zone?)
	54.56 m	drillers' block labelled "sand"
	54.56-55.68 m	1.12 m lost core (fault zone?)
SAMPLE 3046 (IOE Ltd.)	51.82-54.86 m	3.04 m Cu 0.17% MoS ₂ 0.008% Sludge: Cu 0.73%, MoS ₂ 0.008%
	55.68-55.78 m	medium-grey matrix cut by white sucrosic veins 6-7 mm thick, few per cent malachite along fractures and in matrix, at least one core fragment of black volcanic with minor malachite vein
	55.78-56.16 m	medium-grey matrix with fine phenocrysts, minor malachite stain
	56.16-56.28 m	0.12 m lost core
	56.28-57.00 m	30% xenoliths of dark-grey tuff and porphyritic volcanics all veined with malachite and pyrite
SAMPLE 4629	56.28-57.00 m	0.72 m (representative chips) Au 225 ppb, Cu 2800 ppm, Mo 61 ppm, Pb 1 ppm, Zn 48 ppm
	57.00-57.12 m	as run above but with fewer volcanic and tuff xenoliths, no malachite noted
	57.12-57.19 m	0.07 m lost core

Metrage	Interval	Description
	57.19-57.45 m	medium-grey matrix, cut by white sucrosic masses with minor disseminated pyrite, xenoliths to 1 cm of dark-grey volcanics, malachite stain on fractures
	57.45-57.67 m	medium-grey with phenocrysts only 1-2 mm and without sulfides, 10% black fine-grained xenoliths, malachite stain on fractures
	57.67-57.92 m	0.25 m lost core
SAMPLE 3047 (IOE Ltd.)	54.86-57.91 m	3.05 m Cu 0.17%, MoS ₂ 0.007% Sludge: Cu 0.63%, MoS ₂ 0.010%
	57.92-58.37 m	phenocrysts only marginally coarser than matrix, 5-10% xenoliths of volcanics and tuff some with sulfides, minor malachite stain, odd speck of azurite, more magnetite than previous
	58.37-58.51 m	as in run above
	58.51-58.83 m	0.32 m lost core
	58.83-59.01 m	as in run above, minor azurite stain
	59.01-59.13 m	0.12 m lost core
	59.13-59.36 m	phenocrysts more distinct, one magnetic core fragment with 10-15% angular white grains to 2 mm in size
	59.36-59.59 m	0.23 m lost core
	59.59-59.89 m	with few tuff xenoliths with disseminated pyrite
SAMPLE 4630	57.00-59.89 m	1.90 m (representative chips) Au 80 ppb, Cu 1300 ppm, Mo 66 ppm, Pb 10 ppm, Zn 37 ppm
	59.89-60.14 m	with one white tuff core fragment, few dark ones, minor malachite stain, less than 1% disseminated sulfides
	60.14-60.35 m	0.21 m lost core
	60.35-60.59 m	medium-grey matrix, 1% disseminated pyrite, minor malachite stain, few tuff and volcanic xenoliths
	60.59-60.99 m	0.40 m lost core
SAMPLE 3048 (IOE Ltd.)	57.91-60.96 m	3.05 m Cu 0.17%, MoS ₂ 0.005% Sludge: Cu 0.39%, MoS ₂ 0.007%
	60.99-61.11 m	with odd xenolith of white tuff
	61.11-61.38 m	minor malachite and azurite stain
	61.38-61.57 m	0.19 m lost core

Metrage	Interval	Description
	61.57-61.83 m	less than 1% disseminated pyrite, minor malachite stain, few xenoliths of tuff
	61.83-62.03 m	0.20 m lost core
	62.03-62.48 m	as run above, phenocrysts 1-2 mm in size incipiently aligned at 10° CA
	62.48-62.88 m	with 1% pyrite, malachite along fractures, dark xenoliths of tuff and volcanics to 5 cm in size, one - moderately magnetic
	62.88-63.06 m	0.18 m lost core
	63.06-63.25 m	with minor malachite stain, few or no xenoliths
	63.25-63.48 m	with minor malachite and azurite stain, few xenoliths
	63.48-63.70 m	0.22 m lost core
	63.70-63.98 m	minor core fragments of white sucrosic material with disseminated pyrite, black fine-grained xenoliths, quartz vein 1½ cm thick at 18° CA
	63.98-64.16 m	0.18 m lost core
SAMPLE 3049 (IOE Ltd.)	60.96-64.01 m	3.05 m Cu 0.16% MoS ₂ 0.015% Sludge: Cu 0.43%, MoS ₂ 0.008%
	64.16-64.57 m	low proportion of latite porphyry with buff-colored phenocrysts aligned at 18° CA, odd magnetic xenolith, longitudinal vein of pyrite 8 mm thick in wider mass of white sucrosic material
	64.37 m	13-mm layer of almost massive pyrite at 43° CA
SAMPLE 4631	64.16-64.57 m	0.41 m (representative chips) Au 85 ppb, Cu 615 ppm, Mo 105 ppm, Pb 6 ppm, Zn 28 ppm
	64.57-65.07 m	0.50 m lost core
	65.18-65.53 m	0.35 m lost core
	65.53-65.92 m	with phenocrysts to 2 mm maximum size, greyer matrix, few xenoliths, very sparse sulfides
	65.92-67.06 m	1.14 m lost core
SAMPLE 3050 (IOE Ltd.)	64.01-67.06 m	3.05 m Cu 0.09%, MoS ₂ 0.035% Sludge: Cu 0.44%, MoS ₂ 0.007%
	67.06-67.20 m	as run above, with minor malachite stain
	67.20-67.51 m	0.31 m lost core

Metrage	Interval	Description
	67.51-67.71 m	with 30% xenoliths
	67.71-68.12 m	0.41 m lost core
	68.12-68.29 m	with minor malachite stain
SAMPLE 4632	65.07-68.29 m	1.01 m (representative chips)
		Au 100 ppb, Cu 750 ppm, Mo 32 ppm, Pb 1 ppm, Zn 28 ppm
	68.29-69.34 m	1.05 m lost core
	69.34-69.59 m	phenocrysts 1-2 mm in size, few xenoliths
	69.59-69.65 m	0.06 m lost core
	69.65-69.95 m	fine phenocrysts, half xenoliths of volcanics some moderately magnetic, minor malachite stain
	69.95-70.56 m	0.61 m lost core
SAMPLE 3051 (IOE Ltd.)	67.06-70.10 m	3.04 m Cu 0.13%
		MoS ₂ 0.005% Sludge: Cu 0.32%, MoS ₂ 0.007%
	70.56-70.86 m	75% volcanic and tuff xenoliths in latite porphyry
	70.86-71.02 m	0.16 m lost core
	71.02-71.26 m	as run above, very sparse sulfides, minor malachite stain
	71.26-72.24 m	0.98 m lost core
	72.24-72.34 m	minor white sucrosic material
	72.34-72.54 m	0.20 m lost core
	72.54-72.74 m	20% white feldspar phenocrysts 2-3 mm in size in medium-grey matrix with sparse pyrite, 2-3% biotite phenocrysts to 2 mm, minor malachite stain on fractures, rough alignment of phenocrysts at 30° CA, odd quartz vein 3 mm thick, odd dark xenolith
	72.74-72.85 m	0.11 m lost core
	72.85-72.96 m	as run above
	72.96-73.46 m	0.50 m lost core
	73.46-73.91 m	as run above, minor azurite

Metrage	Interval	Description
		SAMPLE 4633 71.02-73.91 m 1.10 m (representative chips) Au 55 ppb, Cu 1550 ppm, Mo 34 ppm, Pb 2 ppm, Zn 29 ppm
		73.91-74.37 m 0.46 m lost core
		SAMPLE 3052 (IOE Ltd.) 70.10-74.37 m 4.27 m Cu 0.15% MoS ₂ 0.003% Sludge: Cu 0.31%, MoS ₂ 0.012%
74.37	-	End of hole

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present claim: JY 51

Drillhole: IOE Ltd. 70-4

Inclination: -90°

Core Size: NQ

Depth: 122.12 m

Core relogged: 61.54 m

Recovery without Box 11: 61.2%,

with zero for Box 11: 51.2%

Location: 2550' S, 1000' W on IOE grid

Elevation: 1475 m ±5 (from 1:5000
topo map)

Drilled: 1970 07 26 to 08 10

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1984 01

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. Available core was relogged and resampled to check for gold and other metals in the intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 1.83	1.83	<u>Overburden</u>
1.83- 3.96	2.13	<u>Mixture of basic volcanics and latite porphyry in rubble of core fragments</u> 1.83-2.05 m 75% of fragments: dark- to medium-grey highly magnetic basic volcanics with 20% anhedral whitish spots to 1-2 mm in size in very fine grained matrix, 3-4% very finely disseminated sulfides including pyrite and some chalcopyrite; 25% of fragments: rusty-stained buffish-white latite porphyry, quartz and possibly feldspar phenocrysts in fine-grained sucrosic matrix, odd biotite phenocryst to 2 mm in size, 2-3% disseminated pyrite in grains to 1 mm 2.05-2.44 m 0.39 m lost core 2.44-3.14 m 20% of fragments: medium-grey magnetic basic volcanics as above with less abundant sulfides; 80% of fragments: latite porphyry with 10-20% cream-yellow feldspar phenocrysts and possibly some quartz in fine-grained sucrosic matrix, 4-5% disseminated pyrite in grains and aggregates to 6 mm, some malachite stains 3.14-3.35 m 0.21 m lost core 3.35-3.39 m fragments of latite porphyry as above 3.39-3.51 m 0.12 m lost core 3.51-3.53 m 50% of fragments: latite porphyry; 50% of fragments: dark-grey magnetic volcanics 3.53-3.96 m 0.43 m lost core SAMPLE 4590 1.83-3.53 m magnetic volcanics only 0.32 m (representative chips) Au 26 ppb, Cu 270 ppm, Mo 5 ppm, Pb 1 ppm, Zn 34 ppm, Ni 45 ppm

Metrage	Interval	Description
		SAMPLE 4591 1.83-3.53 m latite porphyry only 0.66 m (representative chips) Au 28 ppb, Cu 365 ppm, Mo 14 ppm, Pb 1 ppm, Zn 16 ppm, Ni 7 ppm
3.96- 10.32	6.36	<u>Tuff</u> , light-grey to greyish-white, cherty to fine-grained, pyritic 3.96-4.16 m light-grey, cherty, 3-4% pyrite disseminated and along fractures 4.16-4.59 m 0.43 m lost core 4.59-5.79 m whitish-grey similar to 3.96-4.16 m, 20-40% pyrite in blebs to 2-3 mm and along fractures becoming much less in lowest 25 cm, some pyrite associated with epidote, minor chalcopyrite, locally 3-10% disseminated magnetite
		SAMPLE 4592 3.96-5.79 m 1.40 m (representative chips) Au 375 ppb, Cu 1350 ppm, Mo 13 ppm, Pb 1 ppm, Zn 44 ppm, Ni 27 ppm
		SAMPLE 3053 (Imperial Oil Enterprises Ltd.) 1.83-4.88 m 3.05 m Cu 0.12%, MoS ₂ 0.002% 5.79-6.39 m whitish-grey, very fine grained, 10% pyrite and some chalcopyrite disseminated and along fractures, epidote associated with some pyrite, locally disseminated magnetite partly extending from some fractures 6.39-6.99 m as above, 3-5% pyrite, some epidote, locally buff-colored, less pyrite toward bottom
		SAMPLE 4593 5.79-6.99 m 1.20 m (representative chips) Au 135 ppb, Cu 1200 ppm, Mo 18 ppm, Pb 1 ppm, Zn 41 ppm, Ni 23 ppm 6.99-7.01 m 0.02 m lost core 7.01-8.53 m as above, 5-10% pyrite locally to 20%, up to 3-4% magnetite locally, both pyrite and magnetite associated with epidote laminae at 47° CA
		SAMPLE 3054 (IOE Ltd.) 4.88-7.92 m 3.04 m Cu 0.15%, MoS ₂ 0.002%

Metrage	Interval	Description
		SAMPLE 4594 7.01-8.53 m 1.53 m (representative chips) Au 550 ppb, Cu 2800 ppm, Mo 33 ppm, Pb 1 ppm, Zn 36 ppm, Ni 23 ppm
		8.53-9.21 m as above, odd lapilli to 1 cm of coarser- grained volcanic, 3-4% pyrite disseminated and along fractures
		SAMPLE 4595 8.53-9.21 m 0.68 m (representative chips) Au 175 ppb, Cu 1700 ppm, Mo 29 ppm, Pb 1 ppm, Zn 34 ppm, Ni 31 ppm
		9.21-10.32 m 1.11 m lost core
10.32- 11.73	1.41	<u>Andesite?</u> , dark-grey to lighter- and paler-green-grey, fine-grained, pyritic
		10.32-10.52 m dark-grey, fine-grained, irregularly veined with lighter green-grey, 5% pyrite disseminated and along fractures
		10.52-10.80 m as above, paler-green-grey, brecciated with angular fragments to 2 cm surrounded by fine-grained black matrix
		10.80-11.11 m 0.31 m lost core
		11.11-11.28 m as above, pale-green-grey phases more abundant
		11.28-11.68 m as above, contact between pale-green-grey and dark-grey to black at 62° CA in one fragment but probably not related to stratification
		SAMPLE 4596 10.32-11.68 m 1.05 m (representative chips) Au 18 ppb, Cu 475 ppm, Mo 20 ppm, Pb 1 ppm, Zn 45 ppm, Ni 100 ppm
		11.68-11.73 m 0.05 m lost core
		SAMPLE 3055 (IOE Ltd.) 7.92-11.89 m 3.97 m Cu 0.25%, MoS ₂ 0.005%
11.73- 30.27	18.54	<u>Latite porphyry</u> , about 20% phenocrysts mostly feldspar to 3 mm in size but grading down to grain size of light-buff- grey matrix, 1-2% biotite phenocrysts 1 mm or so in size, 2-3% pyrite disseminated and along fractures, minor chalcopyrite along fractures

Metrage	Interval	Description
	11.93-13.06 m	1.13 m lost core
SAMPLE 4597	11.73-13.26 m	0.40 m (representative chips) Au 11 ppb, Cu 270 ppm, Mo 4 ppm, Pb 1 ppm, Zn 21 ppm
	13.26-13.86 m	feldspar phenocrysts to 10 mm both euhedral and anhedral, 2% biotite in grains to 2 mm, 2-3% pyrite and up to 5% on some fractures
	13.86-13.88 m	0.02 m lost core
	13.88-14.48 m	as above with one or two xenolithic fragments of pyritic whitish-grey tuff
SAMPLE 4598	13.26-14.48 m	1.20 m (representative chips) Au 145 ppb, Cu 100 ppm, Mo 3 ppm, Pb 1 ppm, Zn 27 ppm
	14.48-15.24 m	as above, odd clot of pyrite to 2 cm
SAMPLE 3056	(IOE Ltd.) 11.89-14.94 m	3.05 m Cu 0.05% MoS ₂ trace
	15.24-15.81 m	0.57 m lost core
	15.81-16.31 m	as above, 2-4% biotite phenocrysts, 30% milky white feldspar phenocrysts
	16.31-16.46 m	as above
SAMPLE 4599	14.48-16.46 m	1.41 m (representative chips) Au 8 ppb, Cu 45 ppm, Mo 3 ppm, Pb 3 ppm, Zn 23 ppm
	16.46-16.76 m	0.30 m lost core
	16.76-17.12 m	matrix somewhat lighter colored from here downhole
	17.12-17.74 m	some fractures with 10-12% pyrite, biotite phenocrysts locally to 5%
SAMPLE 3057	(IOE Ltd.) 14.94-17.98 m	3.04 m Cu 0.03%, MoS ₂ 0.002%
	17.74-18.25 m	0.51 m lost core
	18.25-19.35 m	odd xenolith of tuff

Metrage	Interval	Description
SAMPLE 4600	16.46-19.35 m	2.08 m (representative chips) Au 6 ppb, Cu 49 ppm, Mo 1 ppm, Pb 2 ppm, Zn 18 ppm
	19.35-19.76 m	odd streak with 5-6% pyrite
	19.76-20.04 m	0.28 m lost core
	20.04-20.42 m	odd bit of chalcopyrite
	20.42-20.56 m	1-2% of greyish mineral in matrix
	20.56-20.68 m	0.12 m lost core
	20.68-21.34 m	as above
SAMPLE 3058	(IOE Ltd.) 17.98-21.03 m	3.05 m Cu 0.03% MoS ₂ trace
	21.34-21.74 m	as above, one fracture 60-70% coated with pyrite
SAMPLE 4601	19.35-21.74 m	1.99 m (representative chips) Au 5 ppb, Cu 34 ppm, Mo 2 ppm, Pb 3 ppm, Zn 19 ppm
	21.74-21.95 m	0.21 m lost core
	22.17-23.03 m	0.86 m lost core
	23.47-23.89 m	locally whiter with less biotite and fewer feldspar phenocrysts
SAMPLE 3059	(IOE Ltd.) 21.03-24.08 m	3.05 m Cu 0.04% MoS ₂ trace
	23.89-25.25 m	1.36 m lost core
	25.25-25.45 m	local xenolithic fragments of buff-colored tuff
SAMPLE 4602	21.95-25.45 m	1.28 m (representative chips) Au 3 ppb, Cu 60 ppm, Mo 1 ppm, Pb 2 ppm, Zn 19 ppm
	25.91-26.63 m	0.72 m lost core
SAMPLE 3060	(IOE Ltd.) 24.08-27.13 m	3.05 m Cu 0.04% MoS ₂ trace
	27.33-27.58 m	0.25 m lost core
	27.58-28.19 m	odd core fragment lighter-colored: free of biotite and feldspar phenocrysts, odd core fragment with slightly darker-grey matrix

Metrage	Interval	Description
		28.19-28.61 m up to 5% pyrite on one or two fractures in local whiter parts free of phenocrysts
		28.61-29.49 m 0.88 m lost core
		29.49-29.87 m odd core fragment with darker matrix, all buff and white with no biotite in lowest 6 cm
		SAMPLE 4603 25.45-29.87 m 2.57 m (representative chips) Au 5 ppb, Cu 108 ppm, Mo 1 ppm, Pb 3 ppm, Zn 20 ppm
		29.87-29.92 m as above
		29.92-30.27 m medium-grey matrix
		SAMPLE 3061 (IOE Ltd.) 27.13-30.18 m 3.05 m Cu 0.05%, MoS ₂ trace
30.27- 31.43	1.16	<u>Fault zone</u> in latite porphyry 30.27-30.37 m fault gouge: fragments of latite porphyry with medium-grey matrix cemented with earthy material 30.37-31.09 m 0.72 m lost core 31.09-31.20 m light-buff-grey partly earthy material - alteration along a fault SAMPLE 4604 29.87-31.20 m 0.61 m (representative chips) Au 6 ppb, Cu 98 ppm, Mo 4 ppm, Pb 2 ppm, Zn 22 ppm 31.20-31.37 m latite porphyry with very light-colored matrix 31.37-31.43 m fault gouge: altered earthy rubble
31.43- 66.45	35.02	<u>Latite porphyry</u> 31.43-31.77 m very light-colored matrix 31.43-31.49 m few clots of pyrite to 8 mm in size 31.77-32.01 m 0.24 m lost core 32.01-32.46 m very light-colored matrix, no biotite 32.46-33.66 m light-buff matrix, biotite almost absent, very minor malachite in spots 2 mm in size, local clots of pyrite to 1 cm some along fractures, matrix slightly darker from 33.26-33.66 m SAMPLE 3062 (IOE Ltd.) 30.18-33.22 m 3.04 m Cu 0.03%, MoS ₂ trace Sludge: Cu 0.04%, MoS ₂ trace

Metrage	Interval	Description
SAMPLE 4605	31.20-33.66 m	2.22 m (representative chips) Au 1 ppb, Cu 7 ppm, Mo 6 ppm, Pb 2 ppm, Zn 27 ppm
	33.66-34.29 m	0.63 m lost core
	34.29-34.53 m	light-brown matrix, 1-2% biotite phenocrysts
	34.53-36.03 m	1.50 m lost core
SAMPLE 3063	(IOE Ltd.) 33.22-36.27 m	3.05 m Cu 0.04% MoS ₂ trace Sludge : Cu 0.04%, MoS ₂ trace
	36.38-37.37 m	0.99 m lost core
	37.37-38.10 m	30% pyrite on some fractures, matrix somewhat lighter-colored from 37.70-38.10 m
SAMPLE 4606	34.29-38.10 m	1.32 m (representative chips) Au 13 ppb, Cu 33 ppm, Mo 4 ppm, Pb 2 ppm, Zn 22 ppm
SAMPLE 3064	(IOE Ltd.) 36.27-39.32 m	3.05 m Cu 0.03%, MoS ₂ trace Sludge : Cu 0.03%, MoS ₂ trace
	39.82-40.53 m	one piece of split core with medium-grey matrix in top 8 cm
	40.53-40.76 m	0.23 m lost core
	40.84-41.12 m	0.28 m lost core
	41.12-41.76 m	light-buff matrix, pyrite to 1 mm along fractures
SAMPLE 4607	38.10-41.76 m	3.15 m (representative chips) Au 7 ppb, Cu 12 ppm, Mo 5 ppm, Pb 3 ppm, Zn 19 ppm
	42.02-42.81 m	0.79 m lost core
SAMPLE 3065	(IOE Ltd.) 39.32-42.37 m	3.05 m Cu 0.03%, MoS ₂ trace Sludge : Cu 0.03%, MoS ₂ trace
	42.98-44.46 m	1.48 m lost core
	44.46-44.81 m	pyrite along fractures
	44.97-45.78 m	0.81 m lost core
SAMPLE 3066	(IOE Ltd.) 42.37-45.42 m	3.05 m Cu 0.04% MoS ₂ trace Sludge : Cu 0.03%, MoS ₂ 0.003%

Metrage	Interval	Description
SAMPLE 4608	41.76-46.02 m	1.18 m (representative chips) Au 8 ppb, Cu 84 ppm, Mo 2 ppm, Pb 2 ppm, Zn 23 ppm
	46.12-46.65 m	0.53 m lost core
	47.39-47.71 m	0.32 m lost core
SAMPLE 3067	(IOE Ltd.) 45.42-48.46 m	3.04 m Cu 0.04% MoS ₂ trace
	48.60-48.66 m	matrix slightly darker-grey
SAMPLE 4609	46.02-49.38 m	2.51 m (representative chips) Au 5 ppb, Cu 65 ppm, Mo 1 ppm, Pb 2 ppm, Zn 18 ppm
	49.38-49.50 m	light-grey, 10% milky white phenocrysts to 5 mm but mostly 2-3 mm and finer in fine-grained slightly darker-grey matrix, few whitish minerals in matrix, 1-2% biotite phenocrysts to 1 mm, 1% disseminated pyrite in grains less than 1 mm, minor pyrite on fractures
	49.50-49.83 m	0.33 m lost core
	49.83-49.87 m	2-3% sulfides including some chalcopyrite
	49.87-50.75 m	several unassimilated tuff fragments some larger than core diameter, 2-3% biotite phenocrysts in porphyry, also few white phenocrysts to 1 cm, odd clots of chalcopyrite and pyrite to 1 cm
	49.87 m	contact with darker-buff tuff fragment at 32° CA; fragment with 5-10% finely disseminated pyrite, other tuff fragments downhole some elongated with disseminated pyrite in aggregates 5 by 1 mm
	50.68-50.75 m	unassimilated tuff fragment with 5-10% finely disseminated sulfides including minor chalcopyrite in aphanitic light-grey matrix, few white equant cherty grains to 5 mm resembling phenocrysts, sharp contacts to fragment
	50.75-51.77 m	white phenocrysts and biotite slightly more abundant, biotite to 3 mm in size some with hexagonal shape
SAMPLE 3068	(IOE Ltd.) 48.46-51.51 m	3.05 m Cu 0.03% MoS ₂ 0.002%
	51.77-52.11 m	unassimilated highly pyrite tuff fragment
	52.11-52.32 m	2-3% biotite phenocrysts
	52.32-52.69 m	10-15% milky white phenocrysts
	52.69-53.53 m	0.84 m lost core

Metrage	Interval	Description
	SAMPLE 3069 (IOE Ltd.)	51.51-54.56 m 3.05 m Cu 0.03%, MoS ₂ trace
	53.91-55.30 m	1.39 m lost core
	56.11-56.69 m	medium-grey matrix
	SAMPLE 4558 55.30-56.69 m	1.39 m (representative chips) Au 7 ppb, Cu 76 ppm, Mo 2 ppm, Pb 2 ppm, Zn 22 ppm
	56.69-57.56 m	medium-grey matrix, 4-5% disseminated sulfides with some chalcopyrite, odd xenolith to 4 cm of pyritic tuff
	SAMPLE 3070 (IOE Ltd.)	54.56-57.61 m 3.05 m Cu 0.04%, MoS ₂ trace
	57.56-58.02 m	lighter-colored matrix, pyrite content decreasing
	SAMPLE 4559 56.69-58.02 m	1.33 m (representative chips) Au 13 ppb, Cu 135 ppm, Mo 1 ppm, Pb 42 ppm, Zn 135 ppm
	58.02-58.47 m	0.45 m lost core
	58.47-59.48 m	light-colored matrix, 3% finely disseminated pyrite
	59.48-59.80 m	0.32 m lost core
	59.80-60.20 m	light-colored matrix, 2% pyrite
	SAMPLE 4560 58.47-60.20 m	1.41 m (representative chips) Au 21 ppb, Cu 107 ppm, Mo 2 ppm, Pb 5 ppm, Zn 35 ppm
	60.20-60.55 m	lighter-grey matrix, less than 2% pyrite
	SAMPLE 3071 (IOE Ltd.)	57.61-60.66 m 3.05 m Cu 0.04%, MoS ₂ trace
	60.55-60.71 m	0.16 m lost core
	60.71-61.16 m	unassimilated tuff with 5% disseminated pyrite and 1-2% milky white grains 3-5 mm in size

Metrage	Interval	Description
		61.16-61.83 m 10-20% milky white phenocrysts in light-grey matrix with 2-3% disseminated pyrite locally to 5%
		SAMPLE 4561 60.20-61.83 m 1.47 m (representative chips) Au 10 ppb, Cu 53 ppm, Mo 2 ppb, Pb 12 ppm, Zn 34 ppm
		61.83-62.03 m 0.20 m lost core
		62.03-62.73 m 1-2% disseminated pyrite, one 4-cm fragment of very pyritic tuff
		62.73-62.80 m 0.07 m lost core
		62.80-63.40 m as immediately above
		SAMPLE 4562 62.03-63.40 m 1.30 m (representative chips) Au 4 ppb, Cu 52 ppm, Mo 1 ppm, Pb 3 ppm, Zn 19 ppm
		63.40-66.45 m core not available : IOE log indicates "Feldspar Porphyry" to 66.45 m
		SAMPLE 3072 (IOE Ltd.) 60.66-63.70 m 3.04 m Cu 0.03%, MoS ₂ 0.002%
		SAMPLE 3073 (IOE Ltd.) 63.70-66.75 m 3.05 m Cu 0.03%, MoS ₂ trace
66.45-71.93	5.48	<u>Fault gouge</u> 66.45-71.93 m core not available: IOE log indicates fault gouge within an interval of "Andesite" from 66.45-110.64 m
		SAMPLE 3074 (IOE Ltd.) 66.75-69.80 m 3.05 m Cu 0.05%, MoS ₂ trace Sludge : Cu 0.05%, MoS ₂ trace
71.93-83.21	11.28	<u>Core not available:</u> IOE log indicates "Andesite"
		SAMPLE 3075 (IOE Ltd.) 69.80-72.85 m 3.05 m Cu 0.05%, MoS ₂ trace Sludge : Cu 0.07%, MoS ₂ 0.002%
		SLUDGE SAMPLE (IOE Ltd.) 73.15-76.20 m 3.05 m Cu 0.06%, MoS ₂ 0.002%
		SLUDGE SAMPLE (IOE Ltd.) 76.20-79.25 m 3.05 m Cu 0.05%, MoS ₂ 0.002%
		SLUDGE SAMPLE (IOE Ltd.) 79.25-82.30 m 3.05 m Cu 0.07% MoS ₂ 0.003%

Metrage	Interval	Description
83.21-89.51	6.30	<u>Basic volcanics</u>
		83.21-83.43 m possibly tuffaceous or a flow top, some core fragments medium-grey-green with highly variable amounts up to 20% of milky white grains to 3 mm but mostly about 1 mm; matrix appears clastic; boundaries of fragments with fine-grained dark-grey rock are sharp or gradational across a few mm; all non-magnetic, pyrite on fracture surfaces
		83.43-83.67 m 0.24 m lost core
		83.67-83.78 m as interval above but more dark-grey fine-grained core fragments, cut by quartz-filled shear zone 5-6 cm wide more or less parallel CA, locally with 10% pyrite in veins and irregular clots; grey-green material appears to be alteration of dark-grey
		83.78-84.05 m 0.27 m lost core
		84.05-84.45 m dark-grey to black, very fine grained, slightly magnetic, 5-10% pyrite along fractures, few irregular patches of light-green-grey to 5 cm in size veined with quartz and pyrite (alteration of black)
SAMPLE 4563	83.21-84.45 m	0.73 m (split core) Au 22 ppb, Cu 78 ppm, Mo 1 ppm, Pb 22 ppm, Zn 67 ppm, Ni 72 ppm
		84.45-84.58 m 0.13 m lost core
		84.58-84.78 m black, fine-grained, igneous texture, moderately magnetic, mostly altered to medium-grey-green, local black masses 1-2 mm in size surrounded by grey-green, few quartz veins, locally with 10% milky white round spots to 2 mm or so
		84.78-85.04 m 0.26 m lost core
		85.04-85.44 m black magnetic lava irregularly altered to grey-green, 5% pyrite on fracture surfaces, irregular quartz veins
		85.13-85.16 m fault at 30° CA, sheared clayey gouge, serpentine on shear surface
SLUDGE SAMPLE	(IOE Ltd.) 82.30-85.34 m	3.04 m Cu 0.04%, MoS ₂ 0.003%
		85.44-85.50 m 0.06 m lost core

Metrage	Interval	Description
	85.50-85.90 m	as above, irregularly veined with quartz, pyrite, and altered grey-green, 10-20% pyrite along same fractures
	85.75 m	7-mm wide vein of massive pyrite in quartz zone up to 2 cm wide at 32° CA
SAMPLE 4564	84.58-85.90 m	1.00 m (split core) Au 16 ppb, Cu 103 ppm, Mo 4 ppm, Pb 5 ppm, Zn 50 ppm, Ni 70 ppm
	85.90-85.95 m	0.05 m lost core
	85.95-86.27 m	black with irregular altered patches of green-grey, unaltered irregular black bands at 32° CA
	86.27-86.41 m	0.14 m lost core
	86.41-87.17 m	25% black lava 75% irregularly altered to green-grey with sharp contacts, veined with quartz and pyrite, 50% or more pyrite on some fracture surfaces; one quartz-pyrite stringer 1-2 cm wide seems to feed much narrower very irregular stringers with adjacent pyrite; chalcopyrite in some fractures
	86.86-86.88 m	clayey fault gouge
	86.88-86.99 m	0.11 m lost core
	87.17-87.43 m	0.26 m lost core
	87.43-87.93 m	mostly altered black fine-grained lava with pyrite along fractures
	87.57-87.61 m	clayey fault gouge
	87.93-88.13 m	magnetic black lava with patches of altered grey-green, pyrite on fractures some 1 mm thick
SAMPLE 4565	85.95-88.13 m	1.67 m (split core) Au 24 ppb, Cu 365 ppm, Mo 6 ppm, Pb 2 ppm, Zn 50 ppm, Ni 86 ppm
	88.13-88.24 m	0.11 m lost core
SLUDGE SAMPLE (IOE Ltd.)	85.34-88.39 m	3.05 m Cu 0.05%, MoS ₂ 0.002%
	88.24-88.33 m	as above, some fragments with 1-2 mm white spots in green-grey matrix
	88.33-88.74 m	highly fractured pale-green <u>chert</u> with numerous veinlets of green chlorite at all orientations, 5-10% pyrite in irregular veins and patches, few irregular patches of black non-magnetic lava, irregular quartz masses

Metrage	Interval	Description
		88.55-89.15 m clayey pyritic fault gouge 2 cm thick longitudinally along core
		88.74-89.15 m medium-grey volcanic, grain size about 1 mm, along one side of fault
		SAMPLE 4566 88.24-89.15 m 0.91 m (split core) Au 29 ppb, Cu 308 ppm, Mo 6 ppm, Pb 1 ppm, Zn 42 ppm, Ni 65 ppm
		89.15-89.51 m dark-grey, locally altered to green-grey, locally slightly magnetic, fine-grained pyrite along fractures
89.51-90.73	1.22	<u>Tuff</u> , medium-green-grey to pale-green to darker-green
		89.51-89.84 m mostly medium-green-grey, some core fragments of pale-green chert, pyrite blobs to 2-3 cm locally
		SAMPLE 4567 89.15-89.84 m 0.69 m (split core) Au 35 ppb, Cu 500 ppm, Mo 10 ppm, Pb 1 ppm, Zn 47 ppm, Ni 60 ppm
		89.84 m irregular vein with pyrite, epidote, and quartz along contact
		89.84-90.11 m pale-green-grey on one side, dark-green on other side of core, grain size to 1-1½ mm, dark-green moderately magnetic, planar feature (incipient flow banding?) in dark at 30° CA, irregular areas of pale-grey-green cherty rock, pyrite and epidote in irregular stringers
		90.11-90.16 m dark cut by light-green-grey with pyrite and epidote, one vein along core, other at 60° CA, blob of pyrite 2 cm in size
		90.16-90.73 m pale-green chert irregularly veined with pyrite, epidote, and darker-green-grey streaks, blobs of pyrite 1-2 cm, dark-grey - slightly magnetic and mottled with medium-grey patches
		90.24 m laminations at 30° CA, with glassy quartz grains resembling a tuff
		SAMPLE 4568 89.84-90.73 m 0.89 m (split core) Au 80 ppb, Cu 985 ppm, Mo 6 ppm, Pb 1 ppm, Zn 41 ppm, Ni 40 ppm
90.73-95.71	4.98	<u>Tuff</u> , light-whitish-grey to greyish-white, pyritic

Metrage	Interval	Description
	90.73-91.23 m	light-greyish white with 10% pyrite along laminae at 70° and disseminated, irregular masses of fine-grained medium-grey volcanics?, pyrite ½-1 mm wide in centre of white quartz veins 2-3 mm wide with many orientations, few masses of medium-buff-grey fine-grained material, minor chalcopyrite on fractures
	91.23-92.13 m	mostly greyish-white, aphanitic, intricately fractured with irregular fillings of pyrite which along with disseminated constitutes 5-10% of rock; odd medium-grey fine-grained mass, odd bit of MoS ₂ along fractures, minor epidote associated with pyrite in some fractures, minor chalcopyrite along fractures
SAMPLE 4569	90.73-92.13 m 1.40 m	(representative chips) Au 80 ppb, Cu 1000 ppm, Mo 77 ppm, Pb 1 ppm, Zn 33 ppm, Ni 16 ppm
	92.13-92.43 m	as interval right above but no MoS ₂ noted
	92.43-92.91 m	20-30% pyrite
	92.91-93.07 m	0.16 m lost core
SAMPLE 3076	(IOE Ltd.) 90.53-92.96 m 2.43 m	Cu 0.12%, MoS ₂ 0.002% Sludge : Cu 0.06%, MoS ₂ 0.002%
SAMPLE 4570	92.13-93.42 m 1.13 m	(representative chips) Au 75 ppb, Cu 790 ppm, Mo 16 ppm, Pb 1 ppm, Zn 32 ppm, Ni 15 ppm
	93.83-94.39 m	0.56 m lost core
	94.39-94.59 m	minor chalcopyrite on fractures, local magnetite on fractures
	94.95 m	laminae at 62° CA
SAMPLE 4571	93.42-94.95 m 0.97 m	(representative chips) Au 150 ppb, Cu 1400 ppm, Mo 18 ppm, Pb 3 ppm, Zn 30 ppm, Ni 8 ppm
	94.95-95.71 m	0.76 m lost core
SAMPLE 3077	(IOE Ltd.) 92.96-95.71 m 2.76 m	Cu 0.14%, MoS ₂ 0.003% Sludge : Cu 0.09%, MoS ₂ 0.003%
95.71-100.79	5.08	<u>Andesite?</u> , dark-grey to medium-green-grey, very fine grained

Metrage	Interval	Description
	95.71-96.47 m	dark-grey to black, locally medium-green grey, 10% fragments of green-white tuff as in unit above, 2-3% pyrite mostly along fractures but some associated with quartz and light-green-grey in irregular masses 4-5 cm long, some white spots 1-2 mm in size, locally slightly magnetic, local rounded whitish spots to 2 mm in size resembling amygdules
	96.16-96.47 m	irregular wisps of paler-green-grey and pyrite 3-4 cm long by 4-5 mm wide at 35° CA, white tuff fragments almost absent
	96.47-96.82 m	0.35 m lost core
	96.82-97.11 m	as above, non-magnetic, clots and stringers of pyrite to 4-5 cm long associated with quartz and constituting 10% of rock, few per cent white amygdules
	97.11-97.26 m	0.15 m lost core
	97.26-97.59 m	as above, amygdules to 20% of rock, some to 1 cm in size, some oval shaped
SAMPLE 4572	95.71-97.59 m	1.38 m (split core) Au 60 ppb, Cu 550 ppm, Mo 41 ppm, Pb 1 ppm, Zn 58 ppm, Ni 51 ppm
SLUDGE SAMPLE (IOE Ltd.)	94.49-97.54 m	3.05 m Cu 0.07% MoS ₂ 0.005%
	97.59-97.81 m	0.22 m lost core
	97.81-99.26 m	as above, local bit of magnetite but mostly not, amygdules roughly aligned at 28° CA, not as much pyrite as uphole, ½ mm calcite on same fractures
SAMPLE 4573	97.81-99.26 m	1.45 m (split core) Au 23 ppb, Cu 225 ppm, Mo 5 ppm, Pb 1 ppm, Zn 56 ppm, Ni 43 ppm
	99.26-99.67 m	0.41 m lost core
	99.67-99.95 m	as above, less pyrite
	99.95-100.47 m	0.52 m lost core
	100.47-100.79 m	as above, 2-3% pyrite, fine-grained in lowest 8 cm
SLUDGE SAMPLE (IOE Ltd.)	97.54-100.58 m	3.04 m Cu 0.05%, MoS ₂ 0.002%

Metrage	Interval	Description
		SAMPLE 4574 99.67-100.79 m 0.60 m (split core) Au 55 ppb, Cu 300 ppm, Mo 5 ppm, Pb 1 ppm, Zn 47 ppm, Ni 42 ppm
100.79- 100.86	0.07	<u>Tuff</u> , whitish, aphanitic, 5-10% pyrite along fractures and disseminated, similar to 90.73-95.71 m
		SAMPLE 4575 100.79-100.86 m 0.07 m (split core) Au 185 ppb, Cu 3900 ppm, Mo 11 ppm, Pb 1 ppm, Zn 40 ppm, Ni 37 ppm
100.86- 106.25	5.39	<u>Tuff</u> , greyish-brown and medium-grey 100.86-103.11 m 2.25 m lost core 103.11-103.35 m some core fragments greyish-brown and very fine-grained, others green-grey and like andesite above
		SAMPLE 4576 103.11-103.35 m 0.24 m (split core) Au 30 ppb, Cu 600 ppm, Mo 8 ppm, Pb 1 ppm, Zn 52 ppm, Ni 148 ppm
		103.35-104.12 m 0.77 m lost core
		SLUDGE SAMPLE (IOE Ltd.) 100.58-103.63 m 3.05 m Cu 0.07%, MoS ₂ 0.003%
		104.12-104.70 m some core fragments fine-grained and medium-grey, others lighter-colored and cherty, grain size increasing to 1-2 mm in lower part with definite clastic texture: angular white grains to 2 mm in finer matrix, pyrite and quartz on some fractures
		SAMPLE 4577 104.12-104.70 m 0.58 m (split core) Au 38 ppb, Cu 340 ppm, Mo 4 ppm, Pb 1 ppm, Zn 32 ppm, Ni 9 ppm
		104.70-104.86 m same as lower part of run above, sparse pyrite in fractures and possibly finely disseminated
		SAMPLE 4578 104.70-104.86 m 0.16 m (split core) Au 16 ppb, Cu 56 ppm, Mo 3 ppm, Pb 1 ppm, Zn 32 ppm, Ni 5 ppm
		104.86-105.56 m 0.70 m lost core

Metrage	Interval	Description
		108.80-108.97 m some core fragments same as 107.82-107.84 m; most core fragments dark-grey and grey-green volcanics some with 1-2% pyrite possibly bombs
		108.97-109.23 m brown and greyish-brown tuff as above, fine-grained, 1-2% pyrite along fractures
SAMPLE 4581	107.82-109.23 m 0.94 m	(split core) Au 3 ppb, Cu 108 ppm, Mo 2 ppm, Pb 1 ppm, Zn 28 ppm, Ni 24 ppm
	109.23-109.61 m 0.38 m	lost core
	109.61-109.73 m	light-grey, cherty, sparse pyrite
SLUDGE SAMPLE (IOE Ltd.)	106.68-109.73 m 3.05 m	Cu 0.06%, MoS ₂ 0.002%
	109.73-109.89 m	medium- and dark-grey, cherty, lighter- grey at bottom
	109.89-110.28 m 0.39 m	lost core
	110.28-110.40 m	medium-grey, fine-grained
	110.40-110.44 m	light-grey, cherty, 2-3% finely disseminated pyrite
	110.44 m	sharp contact at 55° CA
	110.44-110.79 m	darker-grey, fine-grained, not cherty except toward bottom with greenish-grey, odd black patch - bomb?
	110.79-110.95 m	medium- to dark-grey, very fine grained, odd pyrite on fractures
SAMPLE 4582	109.61-110.95 m 0.95 m	(split core) Au 2 ppb, Cu 68 ppm, Mo 5 ppm, Pb 2 ppm, Zn 26 ppm, Ni 17 ppm
	110.95-111.05 m 0.10 m	lost core
111.05- 115.71	4.66	<u>Tuff</u> , mostly greyish-brown with a purplish cast, grain size to ½ mm 111.05-111.80 m dark-brownish-purplish-grey, grain size less than ½ mm, sparse disseminated pyrite with more on some fractures, odd core fragment of light-grey cherty tuff with 2-3% pyrite, planar layering at 32° CA indistinctly visible on a few split pieces

Metrage	Interval	Description
		105.56-106.01 m same as run above, medium-grey, white clasts to 3 mm, less than 1% pyrite disseminated and along fractures, faint laminations at about 30° CA
		106.01-106.07 m 0.06 m lost core
		106.07-106.25 m as in run above
		SAMPLE 4579 105.56-106.25 m 0.63 m (split core) Au 7 ppb, Cu 38 ppm, Mo 4 ppm, Pb 1 ppm, Zn 36 ppm, Ni 3 ppm
106.25- 111.05	4.80	<u>Tuff</u> , medium- to light-grey to whitish-grey, locally cherty or pyritic 106.25-106.62 m medium- to light-grey, cherty, less than 1% pyrite, lighter-grey in bottom half 106.62-107.42 m 0.80 m lost core SLUDGE SAMPLE (IOE Ltd.) 103.63-106.68 m 3.05 m Cu 0.06%, MoS ₂ 0.002% 107.42-107.71 m many types of core fragments including fine-grained light-brownish-grey, dark-grey resembling amygdaloidal lava uphole - possibly a bomb, some with disseminated sulfides; sparse pyrite in fractures SAMPLE 4580 106.25-107.71 m 0.66 m (split core) Au 7 ppb, Cu 135 ppm, Mo 3 ppm, Pb 1 ppm, Zn 29 ppm, Ni 27 ppm 107.71-107.82 m 0.11 m lost core 107.82-107.84 m brownish-grey, fine-grained, locally veined with quartz and pyrite but less than 1% pyrite overall 107.84-107.88 m pale-greenish-white with pyrite streaks at about 30° CA 107.88-107.99 m same as 107.82-107.84 m, sparse pyrite along a few fractures 107.99-108.09 m greyish-white, copiously veined with pyrite and pyrite in aggregates 108.09-108.42 m same as 107.82-107.84 m, very sparse disseminated pyrite 108.25 m clots of pyrite to 1 cm along fracture 108.42-108.80 m 0.38 m lost core

Metrage	Interval	Description
	111.80-111.93 m	0.13 m lost core
	111.93-112.06 m	dark-grey, uniform grain size to ½ mm, sparse pyrite disseminated and along fractures
	112.06-112.34 m	as run above, slightly purplish on diamond-cut surface, some cherty?, 1-2% chalcopyrite and pyrite on fracture surfaces
	112.34-112.82 m	as run above, dark-brownish-grey, very fine-grained almost aphanitic, sparse sulfides, few irregular lighter-grey mottles
SAMPLE 4583	111.05-112.82 m	1.64 m (split core) Au 13 ppb, Cu 71 ppm, Mo 3 ppm, Pb 1 ppm, Zn 28 ppm, Ni 20 ppm
SLUDGE SAMPLE (IOE Ltd.)	109.73-112.78 m	3.05 m Cu 0.05%, MoS ₂ 0.002%
	112.82-113.28 m	0.46 m lost core
	113.28-113.41 m	dark-brownish-grey, few angular white grains to 1 mm in finer matrix
	113.41-113.77 m	0.36 m lost core
	113.77-114.31 m	dark-greyish-purplish-brown, minor pyrite along some fractures, faint planar structure at about 30° CA, odd round area of lighter-grey with slightly coarser grain size - lapilli?, almost black in lowest 10 cm
	114.31-114.81 m	0.50 m lost core
	114.81-114.97 m	black in top 5 cm, below - dark-purplish-grey-brown, sparse pyrite along fractures
	114.97-115.24 m	0.27 m lost core
	115.24-115.40 m	dark-purplish-grey-brown
SAMPLE 4584	113.28-115.40 m	0.99 m (split core) Au 1 ppb, Cu 87 ppm, Mo 7 ppm, Pb 2 ppm, Zn 28 ppm, Ni 19 ppm
	115.40-115.47 m	0.07 m lost core
	115.47-115.71 m	as run above but with 3-4% pyrite as blobs to 1 cm and along fractures, black in lowest 2-3 cm
115.71-115.92	0.21	<u>Tuff</u> , whitish, 5% or more pyrite finely disseminated and along fractures, few angular fragments of purplish-brown tuff surrounded by very fine grained white matrix

Metrage	Interval	Description
		SAMPLE 4585 115.47-115.92 m 0.45 m (split core) Au 6 ppb, Cu 250 ppm, Mo 4 ppm, Pb 1 ppm, Zn 28 ppm, Ni 20 ppm
		SLUDGE SAMPLE (IOE Ltd.) 112.78-115.82 m 3.04 m Cu 0.05%, MoS ₂ 0.02%
115.92- 120.57	4.65	<u>Tuff</u> , mostly greyish-brown with a purplish cast 115.92-116.03 m mostly purplish-brown 116.03-116.74 m 0.71 m lost core 116.74-116.87 m dark-purplish-brownish-grey, very fine grained 116.87-117.42 m 0.55 m lost core 117.42-117.55 m somewhat lighter-colored 117.55-117.67 m as above but with whitish tuff layer 1 cm thick 117.67-118.06 m 0.39 m lost core 118.06-118.21 m as above but with 4-cm layer of whitish tuff, one core fragment with 50% pyrite some in cubes and minor chalcopyrite SAMPLE 4586 115.92-118.21 m 0.64 m (split core) Au 12 ppb, Cu 190 ppm, Mo 4 ppm, Pb 1 ppm, Zn 42 ppm, Ni 15 ppm 118.21-118.57 m 0.36 m lost core 118.57-118.74 m purplish-brown with 4-cm layer of white tuff, sparse pyrite 118.74-118.95 m 0.21 m lost core 118.95-119.13 m core fragments of purplish-brown and greenish-grey with grain size to 1 mm with minor pyrite on fractures 119.13-119.25 m 0.12 m lost core 119.25-119.38 m purplish-brown, very fine grained, one light-grey cherty core fragment, few blobs of pyrite to 1 cm in centre of whitish bleached veins to 2 cm wide 119.38-119.74 m 0.36 m lost core

Metrage	Interval	Description
		119.74-120.23 m purplish-brown, few fractures with 10-20% pyrite and adjacent white bleaching, whitish parts with 4-5% pyrite
		SAMPLE 4587 118.57-120.23 m 0.97 m (split core) Au 210 ppb, Cu 600 ppm, Mo 3 ppm, Pb 1 ppm, Zn 31 ppm, Ni 35 ppm
		120.23-120.57 m 0.34 m lost core
120.57- 120.91	0.34	<u>Tuff</u> , whitish, mottled and veined with 40-50% pyrite and minor chalcopyrite, irregular layering at about 45° CA - uncertain if parallel to bedding
		SAMPLE 4588 120.57-120.91 m 0.34 m (split core) Au 65 ppb, Cu 2500 ppm, Mo 3 ppm, Pb 1 ppm, Zn 32 ppm, Ni 15 ppm
120.91- 122.12	1.21	<u>Tuff</u> , mostly greyish-brown with a purplish cast
		120.91-120.99 m purplish-brown, sparse pyrite
		120.99-121.23 m 0.24 m lost core
		121.23-121.76 m purplish-brown, pyrite along fractures
		SAMPLE 4589 120.91-121.76 m 0.61 m (representative chips) Au 1 ppb, Cu 75 ppm, Mo 4 ppm, Pb 1 ppm, Zn 31 ppm, Ni 15 ppm
		121.76-122.12 m 0.36 m lost core
122.12	-	End of hole

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present claim: JY 49
Drillhole: IOE Ltd. 70-5

Inclination: -90°

Core Size: NQ

Depth: 152.70 m

Core relogged: 89.21 m

Recovery without Boxes 7, 8, and 9: 71.5%, with zero for Boxes 7, 8, and 9: 59.6%

Location: 1050' S, 150' W on IOE grid

Elevation: 1690 m $\pm$ 5 (from 1:5000 topo
map)

Drilled: August 1970

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1983 12

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. Available core was relogged and resampled to check for gold and other metals in the intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 3.05	3.05	<u>Overburden</u>
3.05- 5.38	2.33	<u>Latite porphyry</u> , light-buffish-white with thin rust on fracture surfaces, 20% milky white feldspar and possibly quartz phenocrysts mostly to 3-4 mm in size but some to 5-6 mm, up to 10% dark phenocrysts of biotite mostly 1-2 mm in size, all in an aphanitic light-grey matrix, few per cent rust spots to about 1 mm in size SAMPLE 4378 3.05-3.93 m 0.88 m (representative chips) Au 42 ppb, Cu 33 ppm, Mo 4 ppm, Pb 5 ppm, Zn 42 ppm, Ni 12 ppm 3.93-4.44 m 0.51 m lost core 4.78-5.44 m partly earthy and altered SAMPLE 4379 4.44-5.38 m 0.94 m (representative chips) Au < 1 ppb, Cu 22 ppm, Mo 4 ppm, Pb 5 ppm, Zn 41 ppm, Ni 17 ppm
5.38- 7.76	2.38	<u>Conglomerate</u> , generally dark-grey, sub-angular to subround clasts of various lithologies to 32 cm in size but mostly up to 3-5 cm 5.38-5.44 m clasts to 3 cm in size: greenish tuff with grain size to 1 mm, hard cherty black rock with 20% light-grey grains to $\frac{1}{4}$ mm in black matrix, whitish feldspars, fine-grained light-grey rock, dark-grey basic igneous rock with grain size 1-2 mm

Metrage	Interval	Description
		5.44-5.89 m clasts to 11 cm in size similar to 5.38-5.44 m but also 3½-cm light-grey limestone, rock with white grains in light-greenish-grey matrix, 11-cm medium-grey diorite with grain size 2-3 mm, 20% dark minerals probably altered biotite or possibly hornblende; very few pyrite grains, thin irregular calcite-coated fractures with sparse pyrite, minor rust on fractures
		5.89-6.27 m clasts similar to 5.38-5.89 m, local white gypsum veins to 3 mm wide
		6.27-6.55 m 0.28 m lost core
		6.55-6.75 m clasts as previous
		6.75-7.12 m 0.37 m lost core
		7.12-7.44 m 20-cm boulder of limestone composed of oval darker-grey grains to 3 mm in size in a lighter-grey limy matrix
7.76- 27.16	19.40	<u>Chert and limestone sequence</u>
		7.76-7.96 m black very hard cherty rock, almost aphanitic but with very fine whitish calcite grains in black matrix, 1-cm band of lighter-colored limestone at 45° CA, other bands of similar limestone
		7.96-8.23 m 0.27 m lost core
		8.23-8.43 m black limy chert with 1-cm bands of limestone
		8.43-8.84 m 0.41 m lost core
		8.84-9.04 m black limy chert with very fine whitish calcite grains visible in black matrix, few thin layers of limestone, odd bit of rust on fractures
		9.04-9.14 m 0.10 m lost core
		9.14-9.29 m black limy chert
		9.29-9.45 m 0.16 m lost core
		9.45-9.49 m black limy chert
		9.49-9.75 m 0.26 m lost core
		9.75-9.79 m black limy chert
		9.79-10.16 m 0.37 m lost core
		10.16-10.17 m black limy chert
		10.17-10.46 m 0.29 m lost core
		10.46-10.61 m black limy chert with interribbed limestone at about 90° CA, other lenticular bands at 55° CA

Metrage	Interval	Description
	10.61-11.25 m	0.64 m lost core
	11.25-11.33 m	black limy chert
	11.33-11.73 m	0.40 m lost core
	11.73-11.88 m	black limy chert, minor rust on surfaces of some fragments
	11.88-12.55 m	0.67 m lost core
	12.55-12.63 m	black limy chert with limestone ribbons to 5 mm thick
	12.63-13.21 m	0.58 m lost core
	13.21-13.31 m	black limy chert with limestone bands to 6 mm at 45° CA
	13.31-13.56 m	0.25 m lost core
	13.56-13.60 m	black limy chert, crossbedded
	13.60-13.64 m	0.04 m lost core
	13.64-13.74 m	black limy chert
	13.74-13.94 m	0.20 m lost core
	13.94-14.02 m	black limy chert
	14.02-14.33 m	0.31 m lost core
	14.33-14.38 m	black limy chert with grey limestone bands at 45° CA
	14.38-14.48 m	0.10 m lost core
	14.48-14.57 m	black limy chert
	14.57-14.94 m	0.37 m lost core
	14.94-15.08 m	black limy chert with grey limestone bands
	15.08-15.85 m	0.77 m lost core
	15.85-16.18 m	black limy chert laminae ½-1 mm thick separated by limestone bands mostly 4-5 mm thick at 47° CA, but some chert layers to 8-10 cm and limestone layers to 1½ cm
	16.18-16.23 m	0.05 m lost core
	16.23-16.56 m	bands of black limy chert and grey limestone as 15.85-16.18 m at 47° CA
	16.56-16.84 m	0.28 m lost core
	16.84-17.00 m	bands of black limy chert and grey limestone about 50 : 50

Metrage	Interval	Description
	17.00-17.12 m	0.12 m lost core
	17.12-17.22 m	as 16.84-17.00 m but less limestone
	17.22-17.27 m	0.05 m lost core
	17.27-17.35 m	as 16.84-17.00 m
	17.35-17.64 m	0.29 m lost core
	17.64-17.99 m	black limy chert or cherty limestone, few white calcite veins to 1 cm thick approximately along core axis
	17.99 m	contact at 65° CA
	17.99-18.26 m	bomb or boulder of tuff?, medium-grey, grain size to 2 mm with perhaps 50% light-grey grains and rest dark-grey, and few buff-white grains, possibly an altered igneous boulder
	18.26 m	irregular contact with black limy chert below at about 30° CA
	18.26-19.07 m	black limy chert with grey limestone bands at 48° CA
	19.07-19.52 m	0.45 m lost core
	19.52-19.82 m	black limy chert and grey limestone bands with variable amounts of chert to 3 cm thick at 48° CA
	19.82-19.88 m	grey limestone with black laminae ¼ mm thick, limestone with clastic texture of silt to fine sand
	19.88-19.91 m	black limy chert
	19.91-20.42 m	conglomerate: clasts of greyish limestone to 1½ cm but mostly smaller and of whitish fine-grained volcanic rocks all in fine black matrix, less than 1% disseminated pyrite
	20.42-20.49 m	very dark grey fine porous ash - somewhat like fine clinker, slightly magnetic
	20.49-20.67 m	black limy chert and cherty limestone
	20.67-20.73 m	0.06 m lost core
	20.73-21.02 m	black limy chert and grey limestone; one 3-cm layer of limestone with sharp lower contact with black chert at 54° CA and gradational upper contact with increasing amounts of black for at least 7-8 cm - resembles a turbidite with fining upward sequence but some upper contacts of other limestone layers are sharp
	21.02-21.34 m	0.32 m lost core

Metrage	Interval	Description
	21.34-22.93 m	interlayered black limy chert and grey limestone at 48° CA
	21.53-21.57 m	conglomeratic : subangular fragments of whitish limestone to about 5 cm in size in black matrix
	21.82-21.98 m	minor fault and brecciation almost parallel CA
	22.93-23.16 m	0.23 m lost core
	23.16-23.30 m	interlayered black limy chert and grey limestone, locally brecciated
	23.30-23.47 m	0.17 m lost core
	23.47-23.52 m	interlayered black limy chert and grey limestone
	23.52-23.63 m	0.11 m lost core
	23.63-23.66 m	porous ashy material similar to that from 20.42-20.49 m
	23.66-24.70 m	interbedded limestone and limy chert at 51° CA
	24.38-24.70 m	more rubbly parts are higher in chert; limy parts core better
	24.70-24.84 m	0.14 m lost core
	24.84-25.09 m	interbedded limestone and limy chert
	25.09-25.58 m	0.49 m lost core
	25.58-26.15 m	interbedded limestone and limy chert
	26.05-26.15 m	brecciated and irregularly veined with white calcite
	26.15-26.44 m	0.29 m lost core
	26.44-26.57 m	black cherty limestone
	26.57-27.08 m	grey limestone, minor faults with offsets of 1-2 cm, local irregular white calcite veinlets 2-3 mm wide
	27.08-27.16 m	black cherty limestone, few irregular white calcite veins
	27.16 m	irregular and brecciated contact

Metrage	Interval	Description
27.16- 27.55	0.39	<u>Latite porphyry</u>, 30-40% milky white feldspar phenocrysts and rounded masses of very fine grained buffish-white material in light-grey matrix, which also carries 2-3% angular xenoliths of black cherty limestone and grey limestone only incipiently metamorphosed if at all; much of porphyry is partly altered to clays but pieces are too strong to break in bare hands; part of interval may be a fault along which porphyry was intruded and brecciated 27.46-27.51 m 0.05 m lost core 27.55 m contact with banded limestone below at about 30° CA, but angle is uncertain because of small size of core fragment measured
27.55- 51.82	24.27	<u>Chert and limestone sequence</u> 27.55-27.81 m black cherty limestone and grey limestone brecciated and irregularly veined with white calcite to 3-4 mm but mostly less 27.81-27.93 m grey limestone laminae at 62° CA 27.93-28.30 m 0.37 m lost core 28.30-28.60 m mostly grey limestone laminated with darker-grey and black 28.60-28.88 m 0.28 m lost core 28.88-29.13 m mostly grey limestone as above but with irregular patch of black cherty limestone 29.13-29.31 m 0.18 m lost core 29.31-29.74 m black cherty limestone interbedded with granular light-grey limestone at 50° CA 29.74-30.63 m grey limestone laminated with black at 45° CA; interbedded with black cherty limestone which is locally brecciated and irregularly veined with white calcite 30.41-30.61 m free from brecciation but with 1% or more finely disseminated pyrite SAMPLE 4380 30.41-30.61 m 0.20 m (split core) Au 3 ppb, Cu 25 ppm, Mo 4 ppm, Pb 2 ppm, Zn 122 ppm, Ni 48 ppm 30.63-30.78 m 0.15 m lost core

Metrage	Interval	Description
	30.78-31.69 m	grey limestone, locally so-called "salt-and-pepper" appearance, with black laminae at 47° CA, few black cherty limy layers irregularly veined with calcite with a thicker one from 31.22-31.57 m
	31.69-31.92 m	0.23 m lost core
	31.92-32.30 m	grey limestone interbedded with cherty black limestone
	32.30-32.45 m	0.15 m lost core
	32.45-33.07 m	grey limestone interbedded with cherty black limestone
	33.07-33.28 m	grey limestone with 1 cm of black chert at base
	33.28-33.97 m	interbedded grey limestone and black chert at 49° CA
	33.97-34.53 m	limestone and chert as previous
	34.53-35.78 m	interbedded limestone and chert with 8 cm maximum thickness of limestone layers
	35.78-38.40 m	limestone and chert as previous
	36.64-37.91 m	local brecciation in chert layers apparently along fault of small displacement
	36.94 m	conformable post-brecciation 8-mm quartz vein
	37.13-38.49 m	banding at 51° CA
	38.49-38.87 m	0.38 m lost core
	38.87-39.18 m	more chert than limestone
	39.18-39.32 m	0.14 m lost core
	39.32-39.42 m	mostly black chert
	39.42-39.76 m	0.34 m lost core
	39.76-40.23 m	chert and limestone as previous
	40.23-40.85 m	interbedded chert and limestone, some layers of limestone with small irregular wavy protuberances of black chert at base, locally brecciated
	40.85-41.30 m	0.45 m lost core
	41.30-41.85 m	chert and limestone as before, bands at 73° CA, very sparse disseminated pyrite
	41.95-42.21 m	0.26 m lost core
	42.21-42.26 m	mostly chert

Metrage	Interval	Description
	42.26-44.02 m	1.76 m lost core
	44.02-44.30 m	mostly chert
	44.30-44.51 m	0.21 m lost core
	44.51-44.61 m	mostly black chert
	44.61-44.84 m	breccia : subangular pieces of limestone and black cherty limestone to 2 cm in size in a sandy? non-calcitic matrix
	44.84-44.94 m	0.10 m lost core
	44.94-45.01 m	grey limestone
	45.01-45.20 m	breccia similar to that from 44.61-44.84 m
	45.20-45.26 m	0.06 m lost core
	45.26-45.41 m	limestone and chert as previous
	45.41-45.64 m	0.23 m lost core
	45.64-45.79 m	limestone and limy chert as previous
	45.79-45.95 m	0.16 m lost core
	45.95-46.10 m	chert and limestone as previous; banding not as distinct as previous at 90° CA; two core fragments - greenish and fine-grained, moderately calcitic and with 1% disseminated pyrite
	46.10-46.48 m	0.38 m lost core
	46.48-46.59 m	grey cherty limestone as previous; laminae at 60° CA right above 1½-cm thick whitish-buff calcitic layer offset 5-8 mm
	46.59-46.63 m	brecciated : fragments of chert and limestone to 15 mm
	46.63-46.94 m	0.31 m lost core
	46.94-47.05 m	core fragments of greyish limestone, black chert without calcite except along hairline fractures, two fragments of light-greenish grey chert? which resembles vitrophyric tuff but tiny crystallites are virtually absent
	47.05-48.46 m	1.41 m lost core
	48.46-48.59 m	core fragments of "salt-and-pepper" cherty limestone with grain size to ¼ mm; grains appear aligned but no core fragment shows diamond cut surface from which orientation of CA can be determined; some fragments of greenish-grey chert similar to interval above, interlayered with material with up to 20-30% calcite in layers to 3-4 mm thick with some such layers devoid of calcite; few brown crumbly earthy fragments possibly from elsewhere in hole

Metrage	Interval	Description
	48.59-48.77 m	0.18 m lost core
	48.77-51.82 m	core not available; IOE log indicates above unit continues to 51.82 m
51.82-108.51	56.69	Latite porphyry with xenoliths, variable proportions of tuffaceous and other xenoliths resembling a breccia, locally to almost 100% xenolith fragments 51.82-73.61 m core not available SAMPLE 3078 (Imperial Oil Enterprises Ltd.) 55.47-58.52 m 3.05 m Cu 0.03%, MoS₂ 0.002% SAMPLE 3079 (IOE Ltd.) 58.52-61.57 m 3.05 m Cu 0.03%, MoS₂ 0.002% SAMPLE 3080 (IOE Ltd.) 61.57-64.62 m 3.05 m Cu 0.03%, MoS₂ 0.002% SAMPLE 3081 (IOE Ltd.) 64.62-67.67 m 3.05 m Cu 0.03%, MoS₂ 0.002% SAMPLE 3082 (IOE Ltd.) 67.67-70.71 m 3.04 m Cu 0.03%, MoS₂ 0.003% SAMPLE 3083 (IOE Ltd.) 70.71-73.76 m 3.05 m Cu 0.03%, MoS₂ 0.002% 73.61-74.22 m generally light-grey-buff, up to 50% angular fragments of white to light-grey tuff to 3 cm in size some with 20% disseminated pyrite and minor chalcopyrite, few non-calcitic soft dark-grey fine-grained fragments with 1% disseminated pyrite, all in light-buffish-white aphanitic matrix intergrown with 20-30% buff areas some euhedral to 3 mm or so in size, 2-3% finely disseminated sulfides in matrix, minor malachite associated with some disseminated sulfides in matrix 74.22-75.82 m similar to previous interval; up to 70% angular fragments but mostly less, 1-2% of fragments are black and resemble argillite; some argillite fragments are light-grey laminated with darker-grey; some light-grey fragments are cherty with 2-3% disseminated pyrite, odd crumbly fragment to 5 or 8 cm in size 75.02-76.07 m crumbly and altered, very sparse malachite, some fragments with orange-brown rusty earthy material along fractures, 4-mm vein of white gypsum at 220 CA

Metrage	Interval	Description
	SAMPLE 4407	73.61-75.82 m 2.21 m (representative chips) Au 15 ppb, Cu 100 ppm, Mo 16 ppm, Pb 32 ppm, Zn 670 ppm
	76.07-77.87 m	fresher and less crumbly, some tuff fragments with 5-30% black spots 1 mm or so in size some coalescing in a light-grey matrix (wormy tuff of DDH 70-6), pyrite along fractures
	76.72 m	fragment or lens of massive pyrite 3-4 cm long at about 70° CA
	76.72-76.80 m	some cherty-grey fragments are finely laminated - possible flow banding - with 3-4% finely disseminated pyrite some in cubes
	76.72-77.12 m	fragments less numerous
	76.80 m	buff-colored band about 1 cm thick at 65° CA between light-grey bands
	SAMPLE 3084 (IOE Ltd.)	73.76-76.81 m 3.05 m Cu 0.03%, MoS ₂ trace
	76.90 m	irregular contact between whitish aphanitic layer and light-greyish-green layer at 62° CA, few elongated dark-grey fragments in greyish-green layer approximately parallel to irregular contact
	76.90-77.12 m	whitish finely laminated rock with 3-5% finely disseminated pyrite, brecciated and veined dark-grey fragment irregularly oriented in whitish layer
	77.12-77.87 m	locally up to 80-90% angular fragments of light-grey tuff with finely disseminated pyrite in a buffish-greenish matrix with grain size to 1 mm but individual grains not readily distinguished except pyrite
	77.30-77.57 m	some pyrite grains to 3 mm in matrix which is now like an irregular network of veins to 8 mm wide
	SAMPLE 4408	75.82-77.87 m 2.05 m (representative chips) Au 21 ppb, Cu 95 ppm, Mo 6 ppm, Pb 28 ppm, Zn 345 ppm
	77.87-78.23 m	angular fragments: light-greyish white almost aphanitic and cherty with finely disseminated sulfides; others: laminated medium-grey irregularly veined with buffish matrix with disseminated pyrite; odd fragments of massive pyrite to 1 cm in size

Metrage	Interval	Description
	78.23-78.40 m	becoming argillized
	78.40-78.43 m	completely argillized, banding at 75° CA
	78.43-78.79 m	fresh again, no fragments; very fine grained finely laminated whitish tuff with 2-3% very finely disseminated pyrite, locally mottled with hard cherty medium-grained material, fractured and partly bleached with bleaching extending ½ mm from fractures
	78.49 m	banding at 72° CA
	78.76 m	banding at 75° CA
SAMPLE 4409	77.87-78.79 m	0.92 m (representative chips) Au 34 ppb, Cu 60 ppm, Mo 6 ppm, Pb 54 ppm, Zn 545 ppm
	78.79 m	whitish argillized layer with irregular upper contact
	78.79-79.07 m	whitish-buffish banded argillite? with laminae of pyrite ¼ mm thick, 3-mm gypsum layer
	78.94 m	banding at 75° CA
	79.07-79.16 m	brownish rubble
	79.16-79.37 m	0.21 m lost core
	79.37-79.87 m	light-straw-colored to buff crumbly and earthy material
SAMPLE 3085	(IOE Ltd.) 76.81-79.86 m	3.05 m Cu 0.03%, MoS ₂ trace
	79.87-80.20 m	angular xenoliths again, not completely fresh
	80.20-80.30 m	fragments more or less along CA with layering of light- and slightly darker-grey layers at 70° CA cut by zone with fragments, fresher again
SAMPLE 4410	78.79-80.30 m	1.30 m (representative chips) Au 31 ppb, Cu 102 ppm, Mo 10 ppm, Pb 66 ppm, Zn 670 ppm
	80.30-80.98 m	0.68 m lost core
	80.98-82.22 m	fragments and matrix partly to almost completely argillized, very crumbly except locally, light-greyish-brown, all pyrite oxidized to rusty spots; one fragment of dark-grey chert with disseminated pyrite

Metrage	Interval	Description
	82.12 m	fresh; fragments on one side of core cylinder - other side is latite porphyry with phenocrysts 2-3 mm in size in light-buff matrix with 1-3% disseminated pyrite
	82.22-82.50 m	0.28 m lost core
	82.50-82.94 m	argillized earthy rubble of xenolith fragments
SAMPLE 4411	80.98-82.94 m	1.68 m (representative chips) Au 25 ppb, Cu 103 ppm, Mo 10 ppm, Pb 69 ppm, Zn 680 ppm
SAMPLE 3086	(IOE Ltd.) 79.86-82.91 m	3.05 m Cu 0.03%, MoS ₂ 0.002%
	82.94-83.33 m	fairly fresh, fragments of light-grey pyritic tuff in matrix of latite porphyry
SAMPLE 4412	82.94-83.33 m	0.39 m (representative chips) Au 9 ppb, Cu 72 ppm, Mo 15 ppm, Pb 105 ppm, Zn 200 ppm
	83.33-83.53 m	0.20 m lost core
	83.53-84.83 m	mostly argillized, crumbly, partly earthy, odd fresh section with 2-3% disseminated pyrite some in cubes
	84.83-85.02 m	0.19 m lost core
	85.02-85.72 m	mostly argillized as above, locally fresh
SAMPLE 4413	83.53-85.72 m	2.00 m (representative chips) Au 15 ppb, Cu 72 ppm, Mo 13 ppm, Pb 48 ppm, Zn 340 ppm
	85.72-86.02 m	5% whitish cherty tuff fragments to 15 mm in size in buff-white latite porphyry with 10% quartz and feldspar phenocrysts to 5 mm but mostly less in fine-grained quartzo-feldspathic matrix with 3-4% disseminated pyrite some in cubes
SAMPLE 3087	(IOE Ltd.) 82.91-85.95 m	3.04 m Cu 0.03%, MoS ₂ 0.02%
	86.02-86.18 m	tuff fragments more numerous to 50% of rock
	86.18-86.99 m	variable proportions of numerous types of tuff, mostly pyritic, odd fragment with bit of malachite stain; matrix of latite porphyry with 1-3% disseminated pyrite, locally partly argillized

Metrage	Interval	Description
	SAMPLE 4414	85.72-86.99 m 1.27 m (representative chips) Au 10 ppb, Cu 52 ppm, Mo 10 ppm, Pb 31 ppm, Zn 240 ppm
		86.99-88.65 m fresh, 30-40% pyritic tuff fragments with malachite confined to one or two in a matrix of latite porphyry with grains 1-2 mm of buff feldspars, whitish quartz and 2-3% disseminated pyrite
	SAMPLE 4415	86.99-88.65 m 1.66 m (representative chips) Au 16 ppb, Cu 73 ppm, Mo 12 ppm, Pb 26 ppm, Zn 215 ppm
		88.65-90.23 m fresh, tuff fragments in latite porphyry matrix as previous, malachite confined to some tuff fragments - not seen in latite matrix
	SAMPLE 3088	(IOE Ltd.) 85.95-89.00 m 3.05 Cu 0.03%, MoS ₂ 0.002%
	SAMPLE 4416	88.65-90.23 m 1.58 m (representative chips) Au 23 ppb, Cu 65 ppm, Mo 13 ppm, Pb 89 ppm, Zn 295 ppm
		90.23-90.47 m becoming crumbly : some fresh fragments with crumbly matrix
		90.47-91.64 m 1.17 m lost core
		91.64-92.04 m reasonably fresh
	SAMPLE 3089	(IOE Ltd.) 89.00-92.05 m 3.05 m Cu 0.03% MoS ₂ trace
		92.04-92.30 m 0.26 m lost core
		92.30-92.54 m fresh, odd fragment with minor malachite stain and 1-2% disseminated pyrite
		92.54-92.70 m reasonably fresh, fragments as above
	SAMPLE 4417	90.23-92.70 m 1.04 m (representative chips) Au 15 ppb, Cu 50 ppm, Mo 11 ppm, Pb 54 ppm, Zn 240 ppm
		92.70-92.86 m 0.16 m lost core
		92.86-93.39 m mostly fresh, only 10-20% tuff fragments in matrix of latite porphyry
		93.39-94.03 m 0.64 m lost core

Metrage	Interval	Description
	94.03-94.45 m	similar to previous, locally argillized to earthy material, only 10% tuff fragments at bottom with malachite stain on odd one
	94.45-95.55 m	1.10 m lost core
SAMPLE 3090	(IOE Ltd.) 92.05-95.10 m	3.05 m Cu 0.03%, MoS ₂ trace
	95.55-96.10 m	similar to previous, 5-30% tuff fragments, mostly feldspar phenocrysts 2-3 mm in size in latite porphyry, 1-3% disseminated pyrite mostly in porphyry
SAMPLE 4418	92.70-96.10 m	1.50 m (representative chips) Au 11 ppb, Cu 58 ppm, Mo 7 ppm, Pb 105 ppm, Zn 265 ppm
	96.10-96.19 m	0.09 m lost core
	96.19-96.97 m	all argillized: angular fragments of mostly porphyry with some tuff cemented with crumbly clayey earthy material
	96.97-97.38 m	0.41 m lost core
	97.38-97.73 m	moderately fresh rubble of latite porphyry with feldspar phenocrysts to 3 mm and 1-3% disseminated pyrite, locally brecciated, up to 20% tuff fragments
	97.73-97.75 m	0.02 m lost core
	97.75-98.15 m	moderately fresh, locally with up to 20% angular tuff fragments, 2-3% disseminated sulfides
SAMPLE 3091	(IOE Ltd.) 95.10-98.15 m	3.05 m Cu 0.03%, MoS ₂ 0.002%
	98.15-98.45 m	moderately fresh, locally with up to 10% tuff fragments with minor malachite on odd one
SAMPLE 4419	96.19-98.45 m	1.83 m (representative chips) Au 20 ppb, Cu 51 ppm, Mo 6 ppm, Pb 53 ppm, Zn 345 ppm
	98.45-98.92 m	moderately fresh, 2-3% disseminated pyrite some concentrated along laminae about normal CA, locally to 10% tuff fragments with odd bit of malachite in some
	98.92-99.06 m	0.14 m lost core
	99.06-99.56 m	moderately fresh, similar to previous, 10-40% tuff fragments: some with minor malachite, some with 30% sulfides mostly pyrite, some medium-grey as found uphole

Metrage	Interval	Description
	99.56-99.82 m	0.26 m lost core
	99.82-100.58 m	similar to previous, locally with up to 90% tuff fragments of various kinds - medium-grey, cherty light-grey, odd one with minor malachite
SAMPLE 4420	98.45-100.58 m	1.73 m (representative chips) Au 39 ppb, Cu 62 ppm, Mo 12 ppm, Pb 155 ppm Zn 510 ppm
	100.58-100.93 m	similar to previous, fresh, up to 90% tuff fragments with at least one containing 30% finely disseminated pyrite, odd fragment with minor malachite stain
	100.93-101.02 m	0.09 m lost core
	101.02-102.03 m	mostly 50-70% tuff fragments 4-5 mm in size and up to 90%, some with 10% or more finely disseminated pyrite
SAMPLE 3092	(IOE Ltd.) 98.15-101.19 m	3.04 m Cu 0.03%, MoS ₂ 0.002%
	102.03-102.75 m	same as above, very fresh, up to 90% tuff fragments some with up to 40-50% pyrite both disseminated and along laminae 1-2 mm thick
SAMPLE 4421	100.58-102.75 m	2.08 m (representative chips) Au 13 ppb, Cu 56 ppm, Mo 13 ppm, Pb 40 ppm, Zn 240 ppm
	102.75-103.20 m	same as above, fresh, 90-95% tuff fragments at least half aphanitic white with 1% disseminated pyrite, few light- to medium-grey with 10% disseminated pyrite
	103.20-103.94 m	0.74 m lost core
	103.94-104.34 m	same as above, fresh, 90-95% tuff fragments averaging 2-3% pyrite
SAMPLE 4422	102.75-104.34 m	0.85 m (representative chips) Au 12 ppb, Cu 73 ppm, Mo 13 ppm, Pb 28 ppm Zn 180 ppm
	104.34-105.16 m	0.82 m lost core
	105.16-105.26 m	same as above
	105.26-105.54 m	partly altered crumbly fragments with earthy clayey material, pyrite mostly rusted with 2-3% disseminated rusty spots

Metrage	Interval	Description
		105.54-105.78 m 0.24 m lost core
		105.78-106.08 m fresh, as previous, 30-40% tuff fragments some with 10% pyrite
		106.08-106.38 m crumbly and earthy : altered
		SAMPLE 3093 (IOE Ltd.) 101.19-106.38 m 5.19 m Cu 0.03%, MoS ₂ 0.002%
		106.38-106.96 m fresh, mostly tuff fragments with 10% disseminated pyrite, one fragment with clots of unidentified dark-bluish-grey mineral
		106.96-107.14 m 0.18 m lost core
		107.14-107.74 m fresh, almost 100% tuff fragments, some with 10% disseminated pyrite, few larger clots of pyrite to 1 cm or so
		SAMPLE 4423 105.16-107.44 m 1.86 m (representative chips) Au 5 ppb, Cu 230 ppm, Mo 10 ppm, Pb 20 ppm, Zn 240 ppm
		107.44-108.51 m 1.07 m lost core
		SAMPLE 3095 (IOE Ltd.) 106.38-108.51 m 2.13 m Cu 0.03%, MoS ₂ 0.002%
108.51-111.44	2.93	<u>Latite porphyry</u> , 10-30% white or buffish-white feldspar phenocrysts to 5 mm in size in finer-grained greyish-white matrix mostly with up to 3% disseminated pyrite
		108.51-108.81 m generally fresh, 10-20% buffish-white feldspar phenocrysts mostly without euhedral shapes in fine-grained greyish matrix with up to 3% disseminated pyrite mostly as cubes but also irregular grains to ¼ mm, pyrite not in phenocrysts although some contain a few unidentified very fine dark spots
		108.81-109.47 m as above, some pyrite aggregates to 1-2 mm, locally more buff-colored from oxidation
		SAMPLE 4381 108.51-109.47 m 0.96 m (representative chips) Au 37 ppb, Cu 870 ppm, Mo 2 ppm, Pb 8 ppm, Zn 210 ppm, Ni 15 ppm
		109.47-109.74 m 0.27 m lost core

Metrage	Interval	Description
		109.74-110.59 m as above, 1-2% dark euhedral to subhedral phenocrysts, feldspar phenocrysts increasing to 30% toward bottom of interval, some flesh-colored phenocrysts rimmed with $\frac{1}{4}$ - to $\frac{1}{2}$ -mm white border
		110.25 m malachite-stained xenolith 5 mm across
		110.59-110.72 m 0.13 m lost core
		110.72-111.22 m as previous, few per cent clear glassy phenocrysts (quartz?) to 5 mm, white-rimmed feldspar phenocrysts
		SAMPLE 4382 109.74-111.22 m 1.35 m (representative chips) Au 32 ppb, Cu 20 ppm, Mo 2 ppm, Pb 7 ppm, Zn 218 ppm, Ni 6 ppm
		111.22-111.40 m 0.18 m lost core
		111.40-111.44 m as previous
111.44- 111.57	0.13	<u>Fault?</u> , brecciated: fragments of porphyry to about 1 cm in size in a whitish-grey clayey matrix, some with a greyish coating and fine pyrite
		SAMPLE 3096 (IOE Ltd.) 108.51-111.56 m 3.05 m Cu 0.03%, MoS ₂ trace
111.57- 118.37	6.80	<u>Latite porphyry</u> , similar to 108.51-111.44 m
		111.57-112.15 m fresh
		112.15-112.48 m argillized with intensity decreasing downhole
		112.24-112.48 m greyish coating with very fine pyrite crystals on surface of some core fragments
		112.48-112.68 m mostly altered (argillized) as above with grey smears and rusty coating, one fresher core fragment with up to 5% tiny pyrite cubes
		SAMPLE 4383 111.40-112.68 m 1.28 m (representative chips) Au 14 ppb, Cu 33 ppm, Mo 1 ppm, Pb 5 ppm, Zn 213 ppm, Ni 7 ppm
		112.68-113.81 m fresh, as previous (possible argillized interval in lowest 8 cm but could be from uphole but opposite in core box)

113.40-113.44 m irregular clot of pyrite (and minor
chalcopryite?) to 3 mm wide along fracture

113.81-113.84 m 0.03 m lost core

113.84-114.24 m fresh, as previous, locally with up to
5% disseminated pyrite mostly in euhedral crystals some
to 2 mm with occasional aggregates to 5 mm, some
chalcopryite? in larger aggregates

SAMPLE 4384 112.68-114.24 m 1.53 m (representative chips)
Au 7 ppb, Cu 31 ppm, Mo 2 ppm, Pb 8 ppm, Zn 670 ppm,
Ni 7 ppm

114.24-114.64 m fresh, as previous, up to 10% sulfides,
probably mostly pyrite but possibly chalcopryite in
aggregates to 5 mm not individual crystals

SAMPLE 3097 (IOE Ltd.) 111.56-114.60 m 3.04 m Cu 0.03%,
MoS₂ trace

SAMPLE 4385 114.24-114.64 m 0.40 m (representative chips)
Au 40 ppb, Cu 8 ppm, Mo 1 ppm, Pb 4 ppm,
Zn 32 ppm, Ni 7 ppm

114.64-114.88 m fresh, as previous, up to 5% disseminated
pyrite

114.88-115.21 m 0.33 m lost core

115.21-115.61 m fresh, as previous, up to 2% disseminated
pyrite

115.51-115.58 m fracture with thin greasy-grey (MoS₂?)
coating, pyrite and chalcopryite?

115.61-117.13 m fresh, as previous, up to 3% sulfides
as fine pyrite cubes and related habits, one larger
aggregate to 5 mm in size with some chalcopryite?

SAMPLE 4386 114.64-117.13 m 2.16 m (representative chips)
Au 16 ppb, Cu 32 ppm, Mo 1 ppm, Pb 5 ppm,
Zn 210 ppm, Ni 6 ppm

117.13-118.03 m fresh, as previous, 2% tiny pyrite cubes
throughout grey matrix, only a few larger sulfide
aggregates

118.03-118.26 m 0.23 m lost core

SAMPLE 3098 (IOE Ltd.) 114.60-118.26 m 3.66 m Cu 0.03%,
MoS₂ trace

Metrage	Interval	Description
		118.26-118.37 m as previous, two core fragments with sharp contact with dark-grey to black rock, coarse aggregates to 8 mm of euhedral pyrite crystals within 1 cm of contact
	SAMPLE 4387	117.13-118.37 m 1.01 m (representative chips) Au 22 ppb, Cu 20 ppm, Mo 4 ppm, Pb 17 ppm, Zn 2050 ppm, Ni 10 ppm
118.37-123.01	4.64	<u>Cherty tuff</u>
		118.37-118.56 m light-grey; resembles vitrophyric tuff but crystallites are hard to find, incipient banding, one black core fragment to 1½ cm in size, another with contact between grey and black tuff, another with 1-cm layer containing 3-4% disseminated pyrite, some core fragments almost white
		118.56-119.18 m 0.62 m lost core
		119.18-119.26 m very light grey and whitish, chert-like, some core fragments with white crystallites typical of vitrophyric, others with flow banding?
		119.26-119.49 m 0.23 m lost core
		119.49-119.68 m some core fragments of white porcelain-like rock with discontinuous laminae of fine pyrite at about 90° CA, one core fragment of light-greyish glassy vitrophyre with incipient banding
	SAMPLE 4388	118.37-119.68 m 0.46 m (representative chips) Au 10 ppb, Cu 64 ppm, Mo 16 ppm, Pb 4 ppm, Zn 263 ppm, Ni 37 ppm
		119.68-120.40 m 0.72 m lost core
		120.40-120.53 m whitish, chert-like, pyrite along fractures, some core fragments with disseminated pyrite
		120.53-121.01 m 0.48 m lost core
		121.01-121.22 m white to light-grey, 2-3% pyrite disseminated and along fractures, some layers of different colors at about 90° CA
		121.22-121.46 m 0.24 m lost core
	SAMPLE 3099 (IOE Ltd.)	118.26-121.31 m 3.05 m Cu 0.03%, MoS ₂ 0.002%

Metrage	Interval	Description
		121.46-121.70 m as above
	SAMPLE 4389	120.40-121.70 m 0.58 m (representative chips) Au 17 ppb, Cu 87 ppm, Mo 9 ppm, Pb 8 ppm, Zn 100 ppm, Ni 34 ppm
		121.70-121.92 m 0.22 m lost core
		121.92-122.01 m light-greyish white with pyrite along fractures
		122.01-122.48 m 0.47 m lost core
		122.48-122.72 m bands of light-grey and white (5-8 mm thick) at 76° CA, 1% pyrite-disseminated, along laminae, and in fractures
		122.72-122.99 m 0.27 m lost core
		122.99-123.01 m light-greyish
	SAMPLE 4390	121.92-123.01 m 0.35 m (representative chips) Au 13 ppb, Cu 680 ppm, Mo 15 ppm, Pb 4 ppm, Zn 73 ppm, Ni 26 ppm
	SAMPLE 3100	(IOE Ltd.) 121.31-123.19 m 1.88 m Cu 0.09%, MoS ₂ trace
123.01-130.92	7.91	<u>Basic volcanic rock</u> , dark-grey to lighter-greenish-grey in irregular areas, very fine grained, 2-3% pyrite along fractures and disseminated 123.01-123.59 m chalcopryrite along 4-mm quartz vein, one lighter-grey bomb? 4-5 cm in size with 10% disseminated pyrite SAMPLE 4391 123.01-123.59 m 0.58 m (split core) Au 17 ppb, Cu 445 ppm, Mo 7 ppm, Pb 2 ppm, Zn 120 ppm, Ni 96 ppm 123.59-123.62 m 0.03 m lost core 123.62-124.22 m 2-3% pyrite disseminated and along fractures, grain size to 1 mm, odd round whitish spot 5-8 mm in size 124.22-124.32 m 0.10 m lost core 124.32-124.97 m as above

Metrage	Interval	Description
	SAMPLE 4392	123.62-124.97 m 1.25 m (split core) Au 16 ppb, Cu 133 ppm, Mo 3 ppm, Pb 4 ppm, Zn 60 ppm, Ni 74 ppm
	124.97-125.42 m	as above
	125.42-125.53 m	0.11 m lost core
	125.53-125.93 m	as above
	125.78 m	rusty fracture
	125.83-125.93 m	few irregular narrow quartz stringers
	SAMPLE 4393	124.97-125.93 m 0.85 m (split core) Au 9 ppb, Cu 150 ppm, Mo 3 ppm, Pb 9 ppm, Zn 90 ppm, Ni 74 ppm
	125.93-126.03 m	0.10 m lost core
	126.03-127.20 m	pyrite mostly along fractures, some calcite on fractures
	SAMPLE 4394	126.03-127.20 m 1.17 m (split core) Au 5 ppb, Cu 98 ppm, Mo 2 ppm, Pb 7 ppm, Zn 52 ppm, Ni 85 ppm
	127.20-127.95 m	as above, few quartz stringers to 2 mm locally
	127.95-128.27 m	0.32 m lost core
	128.27-128.48 m	as above
	SAMPLE 4395	127.20-128.48 m 0.96 m (split core) Au 4 ppb, Cu 120 ppm, Mo 8 ppm, Pb 20 ppm, Zn 67 ppm, Ni 83 ppm
	128.48-128.60 m	lighter-grey layer at 77° CA, possible flow top
	128.60-128.77 m	dark-grey
	128.77-129.08 m	0.31 m lost core
	129.08-129.68 m	as above, dark-grey with light-grey sections
	SAMPLE 4396	128.48-129.68 m 0.89 m (split core) Au 5 ppb, Cu 157 ppm, Mo 9 ppm, Pb 1 ppm, Zn 53 ppm, Ni 54 ppm

Metrage	Interval	Description
		129.68-129.84 m 0.16 m lost core
		129.84-130.92 m dark-grey, fine-grained, about 1% sulfides disseminated and along fractures, locally lighter-green-grey, locally very slightly magnetic
		130.64-130.92 m becoming finer-grained probably at base of flow
		130.92 m sharp contact at 78° CA
130.92-131.06	0.14	<u>Cherty tuff</u> , light-whitish-grey, bands of slightly lighter- and darker-grey about 1 cm thick, few veinlets about 1-2 mm thick with magnetite and chalcopyrite? at 10° CA
		SAMPLE 4397 129.84-131.04 m 1.20 m (split core)
		Au 7 ppb, Cu 303 ppm, Mo 6 ppm, Pb 3 ppm, Zn 68 ppm, Ni 68 ppm
		131.04-131.06 m 0.02 m lost core
131.06-132.00	0.94	<u>Basic volcanic rock</u> , dark-grey, grain size variable with interlocking texture, magnetic
		131.06-131.14 m grain size to 1 mm, sparse pyrite, most core fragments moderately magnetic
		131.14-131.23 m 0.09 m lost core
		131.23-131.98 m fine-grained, moderately magnetic, about 1% pyrite disseminated and along fractures
		131.23-131.32 m brecciated with spaces filled with white calcite among volcanic fragments to 10 mm in size, contact of breccia at 10° CA, rust along fractures
		131.46-131.61 m brecciated as previous; may be part of breccia above as core not fitted, 2-3% disseminated pyrite in volcanic adjacent to breccia
		131.61 m breccia contact at 100-120° CA
		131.61-131.98 m more breccia fragments, core fragments with black magnetic wisps
		SAMPLE 4398 131.06-131.98 m 0.92 m (split core)
		Au 15 ppb, Cu 547 ppm, Mo 8 ppm, Pb 28 ppm, Zn 102 ppm, Ni 69 ppm
		131.98-132.00 m core fragments of magnetic basic lava as above

Metrage	Interval	Description
132.00- 132.33	0.33	<u>Tuff and basic volcanic rock</u> 132.00-132.01 m light-grey cherty tuff 132.01-132.02 m 0.01 m lost core 132.02-132.11 m magnetic dark-grey lava 132.11-132.33 m medium-grey tuff?, 3-4% pyrite mostly in veins, few irregular white calcite stringers, few black fragments 3-4 cm long by 5 mm wide 132.33 m prominent fracture at 14° CA SAMPLE 4399 131.98-132.33 m 0.34 m (split core) Au 17 ppb, Cu 278 ppm, Mo 5 ppm, Pb 34 ppm, Zn 145 ppm, Ni 80 ppm
132.33- 133.59	1.26	<u>Fault gouge</u> 132.33-132.44 m fragments to 2 cm in size of medium- grey tuff in light-greenish-brownish-grey earthy material 132.44-132.71 m some fragments fresh coarse-grained magnetic basic lavas, others nonmagnetic 132.71-132.91 m 0.20 m lost core 132.91-133.59 m locally with greyish clay, some fragments highly chloritized SAMPLE 4400 132.33-133.59 m 1.06 m (split core) Au 9 ppb, Cu 360 ppm, Mo 5 ppm, Pb 14 ppm, Zn 82 ppm, Ni 74 ppm
133.59- 152.70	19.11	<u>Basic volcanic rock, dark-grey grain size variable, interlocking texture, magnetic</u> 133.59-133.65 m brecciated, coarse-grained, veined with calcite and pyrite 133.65-133.81 m medium-grey feldspars and dark-grey pyroxenes, grain size to 5 mm, resembles gabbro, moderately magnetic

133.81-134.70 m resembles gabbro, dark-grey with 20-30% light-grey blotches 3-5 mm in size irregularly distributed throughout conspicuous on diamond cut surfaces but not on freshly broken surfaces, blotches composed of intergrowths of white feldspar? to 1 mm or so with medium-greenish-grey pyroxene?; area between is medium- to dark-grey intergrowth of pyroxenes and other mafics mostly in grains to 1 mm but some poikilitic to 5 or 8 mm, few thin calcite stringers, 2-3% pyrite overall mostly sparsely disseminated but up to 20% along some fractures with some in cubes, moderately to slightly magnetic, cut along CA by $\frac{1}{4}$ - $\frac{1}{2}$ mm irregular magnetic stringers 2-3 cm long

134.37 m band 1-2 cm thick with 50% white feldspars with upper contact at 55° CA and lower at 70°

134.55-134.70 m few areas with 50% or more white feldspars

SAMPLE 4424 133.59-134.70 m 1.11 m (split core)
Au 4 ppb, Cu 143 ppm, Mo 3 ppm, Pb 8 ppm,
Zn 68 ppm, Ni 72 ppm

134.70-136.40 m moderately magnetic

134.70-134.80 m one or two irregular whitish blobs to 1 or $1\frac{1}{2}$ cm

134.33-134.35 m layer with grain size less than 1 mm at about 90° CA, free of light-grey blotches

135.72-135.78 m medium-grey, finer-grained, no white blotches, not magnetic, 5% pyrite in veinlets and as blotches to 1-2 cm as well as disseminated

SAMPLE 4425 134.70-136.40 m 1.70 m (split core)
Au 5 ppb, Cu 580 ppm, Mo 4 ppm, Pb 4 ppm,
Zn 58 ppm, Ni 78 ppm

136.40-136.59 m coarse-grained as previous, moderately magnetic, locally with 2-3% disseminated pyrite

136.59 m irregular contact, irregular white calcite vein

136.59-136.85 m medium-green-grey, weakly magnetic to absent, white calcite vein 5 mm thick along CA, no white blotches

136.80-136.85 m moderately magnetic

136.85-137.03 m lighter-green-grey, possible flow contact

Metrage	Interval	Description
	137.03-137.38 m	magnetic, white blotches as above becoming less numerous to 137.26 m then increasing again, 1% pyrite disseminated and along fractures
	137.26-137.38 m	lighter-green-grey
	137.38-137.46 m	finer-grained with 1-2% very finely disseminated pyrite, no blotches, few white calcite stringers 2-3 mm wide at various angles
	137.46-137.97 m	white calcite stringers at 60° CA, finer-grained and lighter-colored for 2-3 cm above and 1-1½ cm below calcite, white blotches beyond this interval
SAMPLE 4551	136.40-137.97 m	1.57 m (split core) Au 6 ppb, Cu 295 ppm, Mo 1 ppm, Pb 7 ppm, Zn 64 ppm, Ni 76 ppm
	137.97-139.54 m	light-grey blotches only 2-3 mm in size downhole, moderately magnetic, few white calcite veins to 8 mm thick, 2-3% pyrite finely disseminated and along fractures
SAMPLE 4552	137.97-139.54 m	1.57 m (split core) Au 5 ppb, Cu 140 ppm, Mo 1 ppm, Pb 4 ppm, Zn 51 ppm, Ni 63 ppm
	139.54-140.77 m	moderately magnetic but locally only weakly magnetic, 20-30% whitish feldspars in subround spots 1-2 mm in size in darker matrix with grain size ½ mm or so, pyrite along longitudinal fractures
	139.54-140.06 m	few longitudinal fractures with 4-cm whitish blobs containing 30% dark minerals to 1-2 mm in size
	140.46 m	lighter-grey-green bands 1-2 cm thick with flow laminae at 62° CA
	140.68-140.77 m	grain size coarser, whitish blobs to 4 mm
	140.77 m	sharp but irregular contact
	140.77-140.96 m	medium- to light-grey, non-magnetic, 30% irregular rounded medium-grey spots mostly 2-4 mm in size in light-grey-green matrix
SAMPLE 4553	139.54-140.96 m	1.42 m (split core) Au 245 ppb, Cu 162 ppm, Mo 1 ppm, Pb 7 ppm, Zn 51 ppm, Ni 71 ppm

Metrage	Interval	Description
	140.96-141.37 m	medium- to light-grey as unit right above, locally weakly to moderately magnetic
	141.33 m	laminae at 70° CA
	141.37-141.71 m	dark-grey, whitish blobs, moderately magnetic, coarse-grained
	141.71 m	gradational contact across 1 cm at 55° CA
	141.71-141.82 m	light-grey, laminated, 5-10% very fine disseminated pyrite, non-magnetic
	141.77 m	2-mm white calcite stringer at 60° CA
	141.79 m	5-mm layer of almost massive pyrite at 58° CA
	141.82-141.96 m	dark-grey, coarse-grained, whitish blobs, magnetic
	141.96-142.12 m	finer-grained, not as magnetic, no white blobs, locally lighter-grey, abundant very finely disseminated pyrite
	142.12-142.19 m	dark-grey, white blobs, magnetic
SAMPLE 4554	140.96-142.19 m	1.23 m (split core)
		Au 75 ppb, Cu 200 ppm, Mo 1 ppm, Pb 19 ppm, Zn 150 ppm, Ni 87 ppm
	142.19-142.89 m	dark-grey blotchy alternates with two finer-grained layers 2-4 cm thick with abundant finely disseminated pyrite, all moderately magnetic, some chalcopyrite along fractures
	142.89-142.95 m	0.06 m lost core
	142.95-143.40 m	dark-grey, 30% feldspathic whitish spots 1-2 mm in size in darker matrix with grain size to ½ mm, 1% disseminated pyrite, few irregular white calcite stringers to 2 mm wide, odd fragment with pale-grey-green matrix with 30% medium-grey minerals as spots to 2 mm in size, not magnetic, similar to rock uphole, one larger core fragment to 13 cm of similar rock with very sharp contact with dark-grey magnetic flow at 10° CA, very sparse sulfides, similar core fragment at bottom of interval but 5-10% medium-grey minerals to ½ mm in aphanitic pale-grey-green matrix with 1-2% finely disseminated pyrite, flow layering
SAMPLE 4555	142.19-143.40 m	1.15 m (split core)
		Au 3 ppb, Cu 168 ppm, Mo 2 ppm, Pb 3 ppm, Zn 68 ppm, Ni 77 ppm

Metrage	Interval	Description
	143.40-143.71 m	0.31 m lost core
	143.71-143.97 m	similar to fragment at bottom of interval above
	143.97-144.13 m	dark-grey, moderately magnetic
	144.13-144.32 m	0.19 m lost core
	144.32-144.38 m	light-grey-green, coarse-grained at top, some longitudinal shearing with gypsum and minor calcite on shear surfaces
	144.38-144.50 m	dark-grey, coarse-grained, magnetic
	144.50 m	sharp contact at 22° CA partly marked by white calcite
	144.50-144.64 m	pale-grey-green
	144.64-144.78 m	0.14 m lost core
	144.78-145.62 m	dark-grey, coarse-grained, magnetic, with white blotches, 10-20% pyrite on infrequent fracture surfaces
SAMPLE 4556	143.71-145.00 m	0.86 m (split core) Au 7 ppb, Cu 150 ppm, Mo 2 ppm, Pb 5 ppm, Zn 48 ppm, Ni 68 ppm
	145.62-146.01 m	dark-grey as previous, coarse-grained, whitish blotches, moderately magnetic, few calcite stringers with pyrite and chalcopryite
SAMPLE 4557	145.00-146.01 m	1.01 m (split core) Au 6 ppb, Cu 153 ppm, Mo 3 ppm, Pb 3 ppm, Zn 65 ppm, Ni 86 ppm
	146.01-146.15 m	0.14 m lost core
	146.15-146.35 m	coarse-grained, whitish blotches, moderately magnetic, pyrite along fractures
	146.35-146.46 m	0.11 m lost core
	146.46-146.91 m	as above with some finer-grained intervals
	146.91-147.37 m	0.46 m lost core
	147.37-147.57 m	as above, few core fragments with pale-green-grey matrix
	147.57-148.03 m	0.46 m lost core
	148.03-148.23 m	as above, one core fragment with sharp contact with rock with grey-green matrix

	148.23-148.59 m	0.36 m lost core
	148.59-148.94 m	dark-grey, coarse-grained as above, white blotches, moderately magnetic
	148.94-149.05 m	0.11 m lost core
	149.05-149.25 m	same as run above
	149.25-149.43 m	0.18 m lost core
	149.43-149.96 m	same as run above
	149.96-150.00 m	0.04 m lost core
	150.00-150.82 m	same as run above
	150.19 m	quartz-calcite vein 1-1½ cm wide at 28° CA
	150.60-150.74 m	irregular blob of quartz, epidote, and light-pinkish-brown mineral on one side of core
	150.82-151.94 m	same as run above; grain size decreases locally to 1 mm or less
	151.94-152.24 m	same as above
	152.24-152.52 m	same as above, one core fragment near top with gradational contact at 32° CA across 5 mm to light-grey fine-grained non-magnetic lava with 2-3% fine pyrite disseminated and along fractures; absence of magnetism may be due to alteration; one core fragment with 4 mm of massive pyrite; magnetic again farther downhole
	152.52-152.70 m	same as above
SAMPLE 4634	151.94-152.70 m	0.76 m (split core) Au 17 ppb, Cu 230 ppm, Mo 39 ppm, Pb 440 ppm, Zn 205 ppm
152.70	-	End of hole

Bur Property, Burwash Creek, Yukon
(formerly Cork Property of
Imperial Oil Enterprises Ltd.)

Present claim: JY 51

Drillhole: IOE Ltd. 70-6

Inclination: -90°

Core Size: NQ

Depth: 142.95 m

Core relogged: 62.06 m

Recovery to 109.12 m without Boxes 5, 11, 12, and 13 : 81.3%; with zero for Boxes
5, 11, 12, and 13 : 59.7%

Location: 1800' S, 2200' W on IOE grid

Elevation: 1642 m $\pm$ 5 (from 1:5000
topo map)

Drilled: Summer 1970

Drilled by Arctic Drilling Ltd.

Relogged by L.B. Halferdahl 1983 12

Purpose: IOE Ltd. checked for copper and molybdenum in latite porphyry. Available
core was relogged and resampled to check for gold and other metals in the
intruded flows and tuffs as well as in the latite porphyry.

Metrage	Interval	Description
0.00- 5.18	5.18	<u>Overburden</u>
5.18- 21.57	16.39	<u>Tuff</u>
	5.18-5.28 m	light-grey, vitrophyric, 30-40% tiny white crystallites in grey glassy matrix, thin rust on fracture surfaces
	5.28-5.99 m	"wormy" tuff, medium-light-grey, 20-50% rounded whitish-grey grains to 1 mm or so in size with some touching each other in darker-grey aphanitic (glassy?) matrix, thin rust on fracture surfaces, upper contact brecciated, some core fragments of aphanitic white sucrosic rock, few core fragments of dark-grey fine-grained lava to 6 cm in size, irregular light- buff-grey veins to 1 cm wide, 2-3% rusty specks more prominent in white sucrosic fragments locally visible on diamond-cut surface
	SAMPLE 4319 5.18-5.99 m	0.71 m (representative chips) Au 100 ppb, Cu 142 ppm, Mo 30 ppm, Pb 1 ppm, Zn 27 ppm, Ni 33 ppm
	5.99-6.71 m	0.72 m lost core
	6.71-7.81 m	"wormy" tuff, same as 5.28-5.99 m
	SAMPLE 4318 6.71-7.81 m	1.10 m (representative chips) Au 80 ppb, Cu 110 ppm, Mo 37 ppm, Pb 1 ppm, Zn 27 ppm, Ni 35 ppm
	7.81-7.92 m	0.11 m lost core

Metrage	Interval	Description
	7.92-9.03 m	mostly "wormy" tuff, similar to previous, local vitrophyric layers or core fragments, whitish grains not as distinct on diamond-cut surfaces with fewer merging together
SAMPLE 4317	7.92-9.03 m 1.11 m	(representative chips) Au 40 ppb, Cu 100 ppm, Mo 28 ppm, Pb 1 ppm, Zn 24 ppm, Ni 32 ppm
	9.03-9.14 m	0.11 m lost core
	9.14-10.08 m	similar to previous, larger and more abundant core fragments of white sucrosic rock with rusty spots, local well developed fine dendrites on orange-brown fracture surfaces, local vitrophyric phases
SAMPLE 4198	9.14-10.08 m 0.94 m	(representative chips) Au 37 ppm, Cu 98 ppm, Mo 24 ppm, Pb 1 ppm, Zn 25 ppm
	10.08-10.52 m	0.44 m lost core
	10.52-10.76 m	similar to previous, core fragments of sucrosic white rock and light-grey vitrophyric
	10.76-11.58 m	0.82 m lost core
	11.58-12.03 m	mostly light-grey vitrophyric with few core fragments with coalescing white grains as in "wormy" tuff, some sucrosic white core fragments with prominent rusty spots
SAMPLE 4316	10.52-12.03 m 0.69 m	(representative chips) Au 41 ppb, Cu 123 ppm, Mo 36 ppm, Pb 1 ppm, Zn 20 ppm, Ni 25 ppm
	12.03-12.50 m	0.47 m lost core
	12.50-13.03 m	mostly light-grey vitrophyric, gradational contacts some locally irregular, across 1-2 mm between glassy vitrophyric and white sucrosic, some rusty spots with pyrite centres; white sucrosic rock may be a more completely crystallized phase of the vitrophyric
	13.03-13.26 m	0.23 m lost core
	13.26-13.77 m	chiefly vitrophyric and white sucrosic as previous with dark-rusty-brown spots on lighter-brown fractures, relict crystallites visible locally in white sucrosic

Metrage	Interval	Description
	SAMPLE 4315	12.50-13.77 m 1.05 m (representative chips) Au 43 ppb, Cu 132 ppm, Mo 37 ppm, Pb 12 ppm, Zn 110 ppm, Ni 20 ppm
	13.77-13.87 m	0.10 m lost core
	13.87-14.23 m	vitrophyric and sucrosic as previous, odd layer 1 cm thick with coalescing crystals at 25° CA
	14.23-14.63 m	0.40 m lost core
	14.63-15.33 m	mostly light-grey vitrophyric with moderate white sucrosic in upper part of interval
	SAMPLE 4314	13.87-15.33 m 1.06 m (split core) Au 25 ppb, Cu 135 ppm, Mo 21 ppm, Pb 1 ppm, Zn 22 ppm, Ni 30 ppm
	15.33-15.39 m	0.06 m lost core
	15.39-16.09 m	vitrophyric and white sucrosic as previous
	16.09-16.15 m	0.06 m lost core
	16.15-16.37 m	vitrophyric and white sucrosic as previous
	SAMPLE 4313	15.39-16.37 m 0.92 m (split core) Au 33 ppb, Cu 160 ppm, Mo 21 ppm, Pb 1 ppm, Zn 23 ppm, Ni 30 ppm
	16.37-16.46 m	0.09 m lost core
	16.46-16.50 m	vitrophyric and white sucrosic as previous
	16.50-16.61 m	0.11 m lost core
	16.61-17.22 m	as previous, light-grey vitrophyric with some white sucrosic, thin rust on joint surfaces
	SAMPLE 4312	16.46-17.22 m 0.65 m (split core) Au 29 ppb, Cu 150 ppm, Mo 41 ppm, Pb 1 ppm, Zn 23 ppm, Ni 36 ppm
	17.22-18.74 m	similar to vitrophyric but 70-80% crystals in matrix with some light-grey, white sucrosic patches with 1-2% finely disseminated pyrite, not much in greyer part, magnetite streak ½-3 mm wide by 7 cm long at 30° CA
	17.22-17.97 m	1-2% pyrite disseminated and along fractures
	SAMPLE 4199	17.22-17.97 m 0.75 m (split core) Au 95 ppb, Cu 200 ppm, Mo 28 ppm, Pb 1 ppm, Zn 29 ppm

Metrage	Interval	Description
		SAMPLE 4311 17.97-18.74 m 0.77 m (split core) Au 33 ppb, Cu 155 ppm, Mo 74 ppm, Pb 1 ppm, Zn 26 ppm, Ni 31 ppm 18.74-20.26 m grey vitrophyric with 70-80% crystals, veined and mottled with 20-30% white sucrosic with proportion decreasing downhole, 1-2% pyrite and rust spots in white sucrosic, thin gypsum on some fractures SAMPLE 4309 18.74-19.49 m 0.75 m (split core) Au 24 ppb, Cu 92 ppm, Mo 21 ppm, Pb 1 ppm, Zn 20 ppm, Ni 33 ppm SAMPLE 4310 19.49-20.26 m 0.77 m (split core) Au 38 ppb, Cu 103 ppm, Mo 17 ppm, Pb 1 ppb, Zn 26 ppm, Ni 30 ppm 20.26-20.43 m 0.17 m lost core 20.43-21.57 m light-grey similar to previous with minor pyrite along fractures, 20-40% veined and mottled with white sucrosic with 1-2% disseminated pyrite, fractures along CA coated with up to 2 mm gypsum 21.57 m curved contact at 15° CA marked by gypsum vein to 5 mm or more thick SAMPLE 4308 20.43-21.57 m 1.14 m (split core) Au 75 ppb, Cu 200 ppm, Mo 20 ppm, Pb 1 ppm, Zn 34 ppm, Ni 48 ppm
21.57- 23.58	2.01	<u>Basalt</u>, dark-grey to black 21.57-21.95 m grain size less than ¼ mm, very sparse pyrite 21.95-23.04 m slightly coarser grained than interval above, 2-3% very finely disseminated pyrite with odd grain to 2 mm, some pyrite along fractures, narrow gypsum-filled veinlets 22.94-23.04 m few subround greenish-white spots to 5 mm across SAMPLE 4200 21.95-23.04 m 1.09 m (split core) Au 25 ppb, Cu 320 ppm, Mo 21 ppm, Pb 1 ppm, Zn 65 ppm 23.04-23.16 m 0.12 m lost core 23.16-23.53 m as above, pyritiferous, few subround greenish- white spots in top 12 cm, and more below in 10-cm interval

Metrage	Interval	Description
		23.53-23.58 m similar to above but altered to softer rock
		SAMPLE 4300 23.16-23.58 m 0.42 m (split core) Au 25 ppb, Cu 2280 ppm, Mo 33 ppm, Pb 1 ppm, Zn 104 ppm, Ni 242 ppm
23.58-24.08	0.50	<u>Fault gouge</u> , grey-brown-green, earthy material cementing harder fragments of basalt, partly coherent as core but breakable between fingers except for altered basalt fragments, locally rusty, minor gypsum locally
		SAMPLE 4285 23.58-23.93 m 0.35 m (split core) Au 175 ppb, Cu 2650 ppm, Mo 67 ppm, Pb 1 ppm, Zn 130 ppm
		23.93-24.08 m 0.15 m lost core
24.08-24.20	0.12	<u>Basalt</u> , black, fine-grained, pyritiferous
		24.20 m irregular contact averaging 25° CA
24.20-25.79	1.59	<u>Latite porphyry</u> , 10-20% white partly euhedral to rounded grains or masses to 10 mm or so in very light-grey matrix, phenocrysts range down in size to whitish grains 1 mm or less in greyer matrix, 1-2% rusty spots (oxidized pyrite?) to 1-2 mm
		24.37-24.65 m 0.28 m lost core
		24.65-25.25 m as above, locally rusty and altered to dull argillaceous material
		SAMPLE 4286 24.08-25.25 m 0.89 m (split core) Au 45 ppb, Cu 660 ppm, Mo 65 ppm, Pb 1 ppm, Zn 39 ppm
		25.25-25.45 m altered, rusty brown locally, bronze-brown spots, core fragment with contact at low angle CA of dark-grey amygdaloidal volcanic with grain size less than 1 mm
		25.45-25.79 m similar to previous but with up to 50% whitish blobs some 2-3 cm in size surrounding xenoliths of dark-grey volcanics to 1 cm in size, few biotite grains in porphyry
		SAMPLE 4287 25.25-25.79 m 0.54 m (split core) Au 120 ppb, Cu 750 ppm, Mo 67 ppm, Pb 1 ppm, Zn 36 ppm
25.79-26.07	0.28	<u>Fault gouge</u> , grey-brown, earthy altered rubble

Metrage	Interval	Description
		25.89-26.07 m 0.18 m lost core
26.07-26.12	0.05	<u>Basalt</u> , dark-grey
26.12-26.41	0.29	<u>Fault gouge</u> , grey-brown clayey alteration
26.41-26.75	0.34	<u>Tuff</u> , light-grey, similar to vitrophyric but with greater proportion of crystals in matrix, mottled and veined with pyritic sucrosic white material, all partly argillized
26.75-26.87	0.12	<u>Fault gouge</u> , fragments in a green-brown-grey clayey matrix SAMPLE 4288 25.79-26.82 m 0.85 m (split core) Au 90 ppb, Cu 770 ppm, Mo 54 ppm, Pb 1 ppm, Zn 70 ppm
26.87-27.45	0.58	<u>Tuff or volcanic</u> , dark-grey, altered, core all fragments up to 4 cm with surfaces covered with a brownish mica-like mineral
27.45-27.84	0.39	<u>Fault gouge</u> SAMPLE 4289 26.82-27.52 m 0.70 m (split core) Au 53 ppb, Cu 560 ppm, Mo 19 ppm, Pb 1 ppm, Zn 100 ppm 27.52-27.84 m 0.32 m lost core
27.84-29.14	1.30	<u>Tuff</u> , light-grey, partly crystallized vitrophyric irregularly mottled with white aphanitic sucrosic material 27.84-28.04 m pyrite mostly along fractures - minor elsewhere 28.04-29.14 m grey crystallized vitrophyric, mottled with white sucrosic, less than 1% pyrite along fractures mostly in white sucrosic, minor gypsum along fractures 28.87 m bands and laminations 1½ cm thick at 20° CA 29.14 m irregular quartz veinlet 1 cm wide with pyrite aggregates in central part SAMPLE 4291 27.84-28.36 m 0.52 m (split core) Au 0.003 oz/T (102 ppb), Ag 0.05 oz/T (1.7 ppm), Cu 291 ppm, Mo 20 ppm, Pb 5 ppm, Zn 35 ppm SAMPLE 4292 28.36-29.14 m 0.78 m (split core) Au <0.003 oz/T (<102 ppb), Ag 0.08 oz/T (2.7 ppm), Cu 256 ppm, Mo 16 ppm, Pb 7 ppm, Zn 30 ppm

Metrage	Interval	Description
29.14- 29.81	0.67	<u>Fault gouge</u> 29.14-29.72 m fine-grained altered black fragments consisting of approximately equal parts of angular whitish grains to ½ mm in size in a black matrix all in an earthy clayey rubble 29.72-29.81 m porous brown silty clayey material SAMPLE 4290 29.14-29.81 m 0.67 m (split core) Au 35 ppb, Cu 465 ppm, Mo 32 ppm, Pb 1 ppm, Zn 80 ppm 29.81 m sharp contact at 43° CA
29.81- 32.66	2.85	<u>Tuff</u>, light-grey, crystallized and noncrystallized vitrophyric with white sucrosic mottling, 2-3% fine pyrite along fractures, locally more abundant pyrite in irregular clots to 1½ cm in whitish mottled parts 29.81-30.04 m chalcopyrite to 1 mm associated with fine pyrite along some fractures SAMPLE 4293 29.81-30.69 m 0.88 m (split core) Au 0.008 oz/T (272 ppb), Ag 0.04 oz/T (1.4 ppm), Cu 950 ppm, Mo 16 ppm, Pb 10 ppm, Zn 31 ppm SAMPLE 4294 30.69-31.30 m 0.61 m (split core) Au 0.010 oz/T (340 ppb), Ag 0.08 oz/T (2.7 ppm), Cu 480 ppm, Mo 26 ppm, Pb 5 ppm, Zn 32 ppm SAMPLE 4295 31.30-32.03 m 0.73 m (split core) Au 0.003 oz/T (102 ppb), Ag 0.06 oz/T (2.0 ppm), Cu 350 ppm, Mo 21 ppm, Pb 12 ppm, Zn 35 ppm 32.03-32.16 m 0.13 m lost core 32.36-32.41 m malachite-stained fracture SAMPLE 4296 32.16-32.41 m 0.25 m (split core) Au 0.003 oz/T (102 ppb), Ag 0.10 oz/T (3.4 ppm), Cu 780 ppm, Mo 40 ppm, Pb 12 ppm, Zn 34 ppm 32.41-32.66 m brecciated: veined with quartz, pyrite, and magnetite; locally dark-grey to black with 5-10% irregular white blobs to 3-6 mm in size

Metrage	Interval	Description
32.66-43.59	10.93	<u>Andesite</u>, dark-grey, grain size about 1 mm, magnetic 32.66-32.94 m porphyritic, up to 10% irregular whitish grains to 5 mm in size (not like crystals), 4-5% pyrite both disseminated and in fractures, few clots of magnetite and chalcopyrite on fractures 32.94 m contact gradational over 3-5 cm 32.94-34.14 m about 1% pyrite disseminated and in fractures, few irregular white stringers to 1 mm or so, gypsum along fractures SAMPLE 4297 32.41-33.11 m 0.70 m (split core) Au 95 ppb, Cu 850 ppm, Mo 55 ppm, Pb 1 ppm, Zn 44 ppm SAMPLE 4298 33.11-34.14 m 1.03 m (split core) Au 20 ppb, Cu 425 ppm, Mo 27 ppm, Pb 1 ppm, Zn 43 ppm 34.14-34.44 m few streaks of black magnetic material 4 cm long by 2-3 mm wide, 2-3% disseminated pyrite SAMPLE 4299 34.14-34.44 m 0.30 m (split core) Au 23 ppb, Cu 435 ppm, Mo 32 ppm, Pb 1 ppm, Zn 46 ppm 34.44-42.21 m whole box of core missing 42.21-43.51 m 1.30 m lost core 43.51-43.59 m non-magnetic, 2-3% rust and sulfides disseminated and along fractures 43.59 m contact at 20° CA
43.59-79.25	35.66	<u>"Wormy"</u> tuff, light-grey, very fine grained, resembles vitrophyric but with medium-grey areas with light-grey material (prominant on diamond cut surface) 43.59-45.39 m 1.80 m lost core 45.39-46.33 m fractured and partly silicified with sucrosic white material, 2-3% pyrite and rust disseminated and along fractures SAMPLE 4320 45.39-46.33 m 0.94 m (split core) Au 29 ppb, Cu 235 ppm, Mo 18 ppm, Pb 1 ppm, Zn 22 ppm, Ni 40 ppm 46.33-47.69 m fresher than right above, gypsum on fractures, pyrite more abundantly disseminated in white silicified patches

Metrage	Interval	Description
	46.33-46.48 m	flow? layering at 15° CA
	46.86-47.08 m	layering at 20° CA
SAMPLE 4321	46.33-47.05 m	0.72 m (split core) Au 85 ppb, Cu 360 ppm, Mo 20 ppm, Pb 1 ppm, Zn 19 ppm, Ni 42 ppm
	47.12-47.27 m	brecciated with irregular dark-grey fragments to 6-10 cm, abundant disseminated pyrite, irregular whitish masses with irregular dark rusty clots to 1-2 cm
SAMPLE 4322	47.05-47.69 m	0.64 m (split core) Au 110 ppb, Cu 272 ppm, Mo 23 ppm, Pb 1 ppm, Zn 22 ppm, Ni 46 ppm
	47.69-47.85 m	0.16 m lost core
	47.85-47.98 m	whitish-grey, somewhat less silicified
SAMPLE 4324	47.85-47.98 m	0.13 m (split core) Au 41 ppb, Cu 220 ppm, Mo 13 ppm, Pb 1 ppm, Zn 21 ppm, Ni 42 ppm
	47.98-48.16 m	0.18 m lost core
	48.16-48.37 m	somewhat darker-grey, slightly magnetic locally
	48.37-48.90 m	medium-light-grey with magnetite veins and veinlets at various orientations, magnetitic clots to 7-8 mm, considerable pervasive whitish silicification, clots of pyrite ½ mm to 2 cm, numerous pyrite-filled veins locally very abundant and disseminated pyrite, quartz vein to 5 mm, few whitish spots to 4 mm, gypsum along fractures
SAMPLE 4323	48.16-48.90 m	0.74 m (split core) Au 510 ppb, Cu 1900 ppm, Mo 44 ppm, Pb 1 ppm, Zn 42 ppm, Ni 108 ppm
	48.90-49.94 m	80-90% silicified with white sucrosic quartz, few rust spots, pyrite about 1% locally more
	49.55 m	clot of pyrite 2-3 cm in size
SAMPLE 4325	48.90-49.94 m	1.04 m (split core) Au 26 ppb, Cu 178 ppm, Mo 10 ppm, Pb 1 ppm, Zn 18 ppm, Ni 40 ppm

Metrage	Interval	Description
	49.94-50.15 m	0.21 m lost core
	50.15-50.71 m	mostly silicified white sucrosic material with rusty spots
SAMPLE 4351	50.15-50.71 m	0.56 m (split core) Au 185 ppb, Cu 232 ppm, Mo 15 ppm, Pb 17 ppm, Zn 31 ppm, Ni 41 ppm
	50.71-51.28 m	as above but only 20-30% silicified with white sucrosic material, 2-3% disseminated pyrite
SAMPLE 4352	50.71-51.28 m	0.57 m (split core) Au 54 ppb, Cu 210 ppm, Mo 10 ppm, Pb 1 ppm, Zn 19 ppm, Ni 30 ppm
	51.28-51.66 m	as above, angular rubble
	51.66-52.02 m	earthy rubble, fault?
SAMPLE 4353	51.28-52.02 m	0.74 m (split core) Au 170 ppb, Cu 280 ppm, Mo 10 ppm, Pb 1 ppm, Zn 29 ppm, Ni 51 ppm
	52.02-52.16 m	0.14 m lost core
	52.16-52.45 m	very sparse rust and pyrite, not much fractured nor silicified, minor rust on fractures
	52.45-52.67 m	as previous, 1-2% pyrite, minor rust on fractures
SAMPLE 4354	52.16-52.67 m	0.51 m (split core) Au 23 ppb, Cu 218 ppm, Mo 27 ppm, Pb 1 ppm, Zn 23 ppm, Ni 88 ppm
	52.67-53.80 m	medium-grey with abundant pyrite both disseminated and along fractures, locally 30-40% light-greyish-white grains in darker-grey very fine matrix, locally silicified with white
	52.91 m	layering at about 15° CA
SAMPLE 4355	52.67-53.80 m	1.13 m (split core) Au 35 ppb, Cu 325 ppm, Mo 31 ppm, Pb 1 ppm, Zn 19 ppm, Ni 106 ppm
	53.80-55.40 m	as above, locally 10-20% white spots, pyrite variable but up to 6-7% very finely disseminated and along fractures

Metrage	Interval	Description
	SAMPLE 4356	53.80-54.78 m 0.98 m (split core) Au 32 ppb, Cu 325 ppm, Mo 10 ppm, Pb 1 ppm, Zn 22 ppm, Ni 135 ppm
	54.78-55.40 m	much less pyrite
	SAMPLE 4357	54.78-55.40 m 0.62 m (split core) Au 16 ppb, Cu 203 ppm, Mo 8 ppm, Pb 1 ppm, Zn 22 ppm, Ni 95 ppm
	55.40-56.74 m	as above, mostly sparse pyrite, rust on fractures
	55.51 m	banding at 15° CA
	55.81-56.15 m	4-5% pyrite disseminated and along fractures, long streaks of magnetite
	56.44 m	banding at 15° CA
	SAMPLE 4358	55.40-56.74 m 1.34 m (split core) Au 11 ppb, Cu 190 ppm, Mo 8 ppm, Pb 1 ppm, Zn 20 ppm, Ni 98 ppm
	56.74-58.34 m	as above, medium-grey, locally silicified, locally "wormy", few pyrite veinlets - generally less than 1% pyrite but locally to 4-5%, angular greyish- white grains to 1 mm or so in glass-like matrix
	SAMPLE 4359	56.74-58.34 m 1.60 m (split core) Au 75 ppb, Cu 192 ppm, Mo 14 ppm, Pb 1 ppm, Zn 20 ppm, Ni 80 ppm
	58.34-59.73 m	as above, whitish alteration in an anastomosing network between dark-grey spots to 2 mm in size and surrounding some dark-grey, 4-5% very finely disseminated pyrite partly associated with white silicification, 5% irregular rusty-brown spots to 1 mm or so on diamond-cut surface, few wispy black magnetic smears on diamond-cut surface up to 8-9 cm long by 1-1½ cm wide aligned at about 20° CA, few veinlets ½ mm wide with pyrite and white alteration extending 1 mm on each side beyond pyrite filling, white-bordered pyrite veinlets and black magnetic wisps more abundant below 58.62 m, one vein at top of interval up to 4 mm wide with some chalcopyrite, thin gypsum along fractures
	59.43 m	1-cm ³ angular fragment of felsitic material: intergrowth of buff and whitish material with grain size to 1 mm, few glassy grains

Metrage	Interval	Description
	SAMPLE 4360	58.34-59.73 m 1.39 m (split core) Au 33 ppb, Cu 435 ppm, Mo 19 ppm, Pb 1 ppm, Zn 25 ppm, Ni 125 ppm
		59.73-61.31 m as above, local white efflorescence along core, inconspicuous layering of clastic fragments
		59.80-59.93 m prominent banding at 20° CA partly marked by black magnetic streaks
	SAMPLE 4361	59.73-60.90 m 1.17 m (split core) Au 20 ppb, Cu 200 ppm, Mo 14 ppm, Pb 1 ppm, Zn 25 ppm, Ni 115 ppm
		60.90-61.31 m fewer sulfides
		61.31-61.56 m white efflorescence along core
	SAMPLE 4362	60.90-61.56 m 0.66 m (split core) Au 105 ppb, Cu 148 ppm, Mo 28 ppm, Pb 1 ppm, Zn 26 ppm, Ni 95 ppm
		61.56-62.91 m as above, 3-4% sulfides finely disseminated and in veins, local wispy black magnetic streaks, few rounded whitish spots or fine-grained fragments to 15 mm locally
		62.69 m angular fragment of coarse-grained basic rock 3 cm across with 10-20% pyrite
	SAMPLE 4363	61.56-62.91 m 1.35 m (split core) Au 24 ppb, Cu 155 ppm, Mo 4 ppm, Pb 1 ppm, Zn 21 ppm, Ni 107 ppm
		62.91-64.49 m as above
		64.11 m 1-cm quartz vein with pyrite
		64.23 m black magnetic streak at 20° CA
	SAMPLE 4364	62.91-63.84 m 0.93 m (split core) Au 14 ppb, Cu 100 ppm, Mo 7 ppm, Pb 1 ppm, Zn 22 ppm, Ni 120 ppm
		64.49-65.20 m pyritic, prominent layering at 20° CA
	SAMPLE 4365	63.84-65.20 m 1.36 m (split core) Au 18 ppb, Cu 203 ppm, Mo 20 ppm, Pb 1 ppm, Zn 24 ppm, Ni 114 ppm

Metrage	Interval	Description
	65.20-66.09 m	as above, silicified with areas up to 8-10 cm of white sucrosic material, locally up to 5-6% pyrite along irregular stringers, some chalcopyrite
SAMPLE 4366	65.20-66.09 m	0.89 m (split core) Au 45 ppb, Cu 335 ppm, Mo 14 ppm, Pb 1 ppm, Zn 22 ppm, Ni 90 ppm
	66.09-67.64 m	as above, pyritic, locally silicified with buff-white material some in masses 8-10 cm constituting 20% of interval with some extending 2 cm on each side of pyrite veinlets, some clots of chalcopyrite
	66.09-67.09 m	layering at 20° CA
SAMPLE 4367	66.09-66.98 m	0.89 m (split core) Au 100 ppb, Cu 880 ppm, Mo 28 ppm, Pb 1 ppm, Zn 25 ppm, Ni 137 ppm
	67.07 m	rusty fracture with ¼ mm MoS ₂ at 45° CA
	67.53 m	minor malachite along fracture; layering may be as low as 10° CA
	67.64-69.19 m	as above
	67.64-68.00 m	medium-grey to dark-grey to medium-greenish-grey to light-grey, fracture with minor malachite stain, large irregular light-greyish-white silicified area, 5% disseminated sulfides : pyrite and chalcopyrite
SAMPLE 4368	66.98-68.00 m	1.02 m (split core) Au 100 ppb, Cu 705 ppm, Mo 180 ppm, Pb 1 ppm, Zn 23 ppm, Ni 110 ppm
	68.00-69.19 m	50% silicified with greyish-white, some fractures with minor malachite
	68.25-68.61 m	quartz-pyrite-magnetite veins
SAMPLE 4369	68.00-69.19 m	1.19 m (split core) Au 130 ppb, Cu 520 ppm, Mo 24 ppm, Pb 14 ppm, Zn 25 ppm, Ni 84 ppm
	69.19-70.00 m	as above, 4% finely disseminated pyrite
	69.41-69.72 m	irregular quartz, magnetite, and pyrite veins; clasts aligned at 12° CA
	70.00-70.33 m	0.33 m lost core

Metrage	Interval	Description
	70.33-71.12 m	as above, 4% finely disseminated pyrite
SAMPLE 4370	69.19-70.89 m	1.37 m (split core) Au 215 ppb, Cu 380 ppm, Mo 51 ppm, Pb 1 ppm, Zn 25 ppm, Ni 100 ppm
	71.12-72.24 m	as above
	71.12-71.35 m	brecciated and veined
	71.35-72.24 m	local quartz-pyrite veins with adjoining whitish bleached zone 7-8 mm wide, locally silicified with pyrite
SAMPLE 4371	70.89-72.24 m	1.35 m (split core) Au 45 ppb, Cu 175 ppm, Mo 18 ppm, Pb 1 ppm, Zn 19 ppm, Ni 70 ppm
	72.24-72.71 m	as above, 3-4% finely disseminated sulfides
	72.71-74.06 m	as above, finely disseminated sulfides, local silicification and bleaching 2-3 mm on each side of fractures
SAMPLE 4372	72.24-73.36 m	1.12 m (representative chips) Au 55 ppb, Cu 217 ppm, Mo 18 ppm, Pb 1 ppm, Zn 20 ppm, Ni 94 ppm
	74.06-74.76 m	partly silicified, alignment of "worms" at about 20° CA, fine film of gypsum along fractures
SAMPLE 4373	73.36-74.76 m	1.40 m (representative chips) Au 360 ppb, Cu 310 ppm, Mo 115 ppm, Pb 1 ppm, Zn 27 ppm, Ni 87 ppm
	74.76-75.16 m	as above, malachite locally along fractures, 1-2% finely disseminated sulfides locally
SAMPLE 3426 (Imperial Oil Enterprises Ltd.)	72.24-75.29 m	3.05 m Cu 0.06%, MoS ₂ 0.005%
	75.16-75.59 m	0.43 m lost core
	75.59-76.10 m	as above, locally 2-3% finely disseminated sulfides, sparse pyrite along fractures locally slightly more abundant and associated with 2-3 mm of white quartz and dark-green chlorite
SAMPLE 4374	74.76-76.10 m	0.91 m (representative chips) Au >10 000 ppb, 0.796 oz/T, Cu 1530 ppm, Mo 53 ppm, Pb 1 ppm, Zn 28 ppm, Ni 97 ppm

Metrage	Interval	Description
		76.10-76.35 m 0.25 m lost core
		76.35-77.11 m as above, 3-4% finely disseminated sulfides, some aligned at 20° CA, minor pyrite along fractures
SAMPLE 4375	76.35-77.11 m	0.76 m (representative chips) Au 145 ppb, Cu 282 ppm, Mo 14 ppm, Pb 1 ppm, Zn 24 ppm, Ni 88 ppm
		77.11-78.61 m as above, minor malachite along fractures locally, finely disseminated pyrite and minor chalcopyrite
		78.11-78.61 m light-greyish-white with irregular discontinuous stringers of pyrite
SAMPLE 3427	(IOE Ltd.) 75.29-78.33 m	3.04 m Cu 0.08%, MoS ₂ 0.002%
SAMPLE 4376	77.11-78.61 m	1.50 m (representative chips) Au 41 ppb, Cu 238 ppm, Mo 15 ppm, Pb 1 ppm, Zn 29 ppm, Ni 97 ppm
		78.61-78.65 m 0.04 lost core
		78.65-79.25 m as above
		78.65-78.75 m whitish with pyrite stringers as in interval right above, malachite staining along fractures
		78.89 m core fragment of partly pyritized basic igneous rock 2 cm in size, grain size 1-2 mm, about half whitish feldspar and half dark-greenish pyroxenes?, discontinuous rim less than 1 mm thick of more chloritized material
SAMPLE 4377	78.65-79.25 m	0.60 m (representative chips) Au 230 ppb, Cu 3300 ppm, Mo 29 ppm, Pb 1 ppm, Zn 28 ppm, Ni 100 ppm
79.25-99.06	19.81	Core not available; IOE log terms this interval "Chert and Intercalated Volcanics (Chloritized Andesite)" which extends from 29.87-106.07 m
SAMPLE 3428	(IOE Ltd.) 78.33-81.38 m	3.05 m Cu 0.10% MoS ₂ 0.002%
SAMPLE 3429	(IOE Ltd.) 81.38-84.43 m	3.05 m Cu 0.05% MoS ₂ 0.002%

Metrage	Interval	Description
		SAMPLE 3430 (IOE Ltd.) 84.43-87.48 m 3.05 m Cu 0.05%, MoS ₂ 0.002%
		SAMPLE 3431 (IOE Ltd.) 87.48-90.53 m 3.05 m Cu 0.08%, MoS ₂ 0.005%
		SAMPLE 3432 (IOE Ltd.) 90.53-93.57 m 3.04 m Cu 0.09%, MoS ₂ 0.007%
		SAMPLE 3433 (IOE Ltd.) 93.57-96.62 m 3.05 m Cu 0.09%, MoS ₂ 0.003%
		SAMPLE 3434 (IOE Ltd.) 96.62-99.67 m 3.05 m Cu 0.08%, MoS ₂ 0.005%
99.06- 101.99	2.93	"Wormy" tuff, similar to 43.59-79.25 m 99.06-99.96 m 30-40% silicified as whitish patches in previously fractured rock with only local patches of typical "wormy" tuff remaining, veined with pyrite and chalcopyrite SAMPLE 4401 99.06-99.96 m 0.90 m (representative chips) Au <0.003 oz/T (102 ppb), Ag 0.12 oz/T (4.1 ppm), Cu 780 ppm, Mo 49 ppm, Pb 9 ppm, Zn 34 ppm 99.96-99.98 m 0.02 m lost core 99.98-100.43 m 2-3% pyrite and other sulfides disseminated and along fractures, some greenish chlorite along fractures, practically no white silicification as in interval above 100.43-101.08 m locally fractured, odd whitish fragment to 12 mm, layering at 28° CA SAMPLE 4402 99.98-101.08 m 1.10 m (representative chips) Au 30 ppb, Cu 293 ppm, Mo 39 ppm, Pb 1 ppm, Zn 24 ppm, Ni 91 ppm 101.08-101.36 m 0.28 m lost core 101.36-101.96 m pyritic, few whitish spots, lighter-grey along fractures, odd core fragment to 2 cm of very pyritic volcanic rock 101.96-101.99 m few core fragments of typical "wormy" tuff and one or two of dark-grey cherty tuff at bottom

Metrage	Interval	Description
		SAMPLE 4403 101.36-101.99 m 0.63 m (representative chips) Au 31 ppb, Cu 365 ppm, Mo 38 ppm, Pb 1 ppm, Zn 22 ppm, Ni 76 ppm
		SAMPLE 3435 (IOE Ltd.) 99.67-102.72 m 3.05 m Cu 0.10%, MoS ₂ 0.003%
101.99- 104.24	2.25	<u>Intercalated black cherty rock and "wormy" tuff</u> 101.99-104.03 m 2.04 m lost core 104.03-104.24 m few core fragments of black cherty rock and whitish-grey "wormy" tuff with disseminated pyrite
104.24- 104.49	0.25	<u>Fault gouge?</u> 104.24-104.30 m earthy clayey material 104.30-104.49 m 0.19 m lost core
104.49- 105.19	0.70	<u>"Wormy" tuff</u> , similar to 43.59-79.25 m 104.49-104.88 m 10% silicified with white material 104.88-105.01 m 0.13 m lost core 105.01-105.19 m moderately silicified
105.19- 106.11	0.92	<u>Chert</u> , light-grey core fragments SAMPLE 4404 104.24-105.22 m 0.64 m (representative chips) Au 24 ppb, Cu 205 ppm, Mo 21 ppm, Pb 1 ppm, Zn 23 ppm, Ni 56 ppm 105.22-105.77 m 0.55 m lost core 105.77-105.89 m pyritic, fractured with whitish alteration resembling silicification uphole 105.89-106.07 m 0.18 m lost core 106.07-106.11 m chert as above
106.11- 107.49	1.38	<u>Fault gouge</u> 106.11-106.20 m light-greyish-white cherty fragments coated with dull earthy material 106.20-106.38 m 0.18 m lost core

Metrage	Interval	Description
		106.38-106.51 m darker chert fragments coated with dull earthy material
		106.51-106.98 m 0.47 m lost core
		SAMPLE 3436 (IOE Ltd.) 102.72-106.98 m 4.26 m Cu 0.07%, MoS ₂ 0.002%
		106.98-107.34 m core fragments of above chert, "wormy" tuff partly silicified with white, pyritic, odd bit of malachite stain
		SAMPLE 4405 105.77-107.34 m 0.74 m (representative chips) Au 42 ppb, Cu 270 ppm, Mo 20 ppm, Pb 1 ppm, Zn 30 ppm, Ni 54 ppm
		107.34-107.49 m 0.15 m lost core
107.49- 114.60	7.11	<u>Latite porphyry</u> , 10-20% white feldspar phenocrysts to 8 mm in size in a medium-grey matrix composed of whitish and greyish grains ½-1 mm in size with few per cent finely disseminated sulfides mostly pyrite but odd spot of malachite stain, up to 5 per cent biotite phenocrysts to 2-3 mm in size downhole with slightly coarser matrix
		108.05-109.00 m few more malachite-stained fractures than uphole
		SAMPLE 4406 107.49-109.00 m 1.51 m (representative chips) Au 42 ppb, Cu 388 ppm, Mo 33 ppm, Pb 4 ppm, Zn 20 ppm, Ni 9 ppm
		109.00-109.12 m 0.12 m lost core
		109.12-114.60 m core not available
		109.12-109.42 m fault according to IOE log
		SAMPLE 3437 (IOE Ltd.) 106.98-110.03 m 3.05 m Cu 0.08%, MoS ₂ 0.005%
		SAMPLE 3438 (IOE Ltd.) 110.03-113.08 m 3.05 m Cu 0.06%, MoS ₂ 0.003%
		SAMPLE 3439 (IOE Ltd.) 113.08-116.13 m 3.05 m Cu 0.11%, MoS ₂ 0.002%

Metrage	Interval	Description
114.60- 142.95	28.35	<u>Core not available</u> IOE log terms this interval: 114.60-124.05 m "Chert and Hornfels" 124.05-124.36 m "Feld Porph Fresh" 124.36-142.95 m "Chert and Hornfels" SAMPLE 3440 (IOE Ltd.) 116.13-119.18 m 3.05 m Cu 0.06%, MoS₂ 0.002% SAMPLE 3441 (IOE Ltd.) 119.18-122.22 m 3.04 m Cu 0.07%, MoS₂ 0.008% SAMPLE 3442 (IOE Ltd.) 122.22-125.27 m 3.05 m Cu 0.05%, MoS₂ 0.002% SAMPLE 3443 (IOE Ltd.) 125.27-128.32 m 3.05 m Cu 0.11%, MoS₂ 0.007% SAMPLE 3444 (IOE Ltd.) 128.32-131.37 m 3.05 m Cu 0.10%, MoS₂ 0.003% SAMPLE 3445 (IOE Ltd.) 131.37-134.42 m 3.05 m Cu 0.08%, MoS₂ trace SAMPLE 3446 (IOE Ltd.) 134.42-137.46 m 3.04 m Cu 0.05%, MoS₂ trace SAMPLE 3447 (IOE Ltd.) 137.46-140.51 m 3.05 m Cu 0.05%, MoS₂ trace SAMPLE 3448 (IOE Ltd.) 140.51-142.95 m 2.44 m Cu 0.05%, MoS₂ trace
142.95	-	End of hole

DRILL RUNS FOR DRILLHOLE 70-1

Run	Recovery (m)	Character
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Note: All the core from drillhole 70-1 was previously split and sampled by Imperial Oil Enterprises Ltd. Recoveries reported here were obtained by spreading the remaining half along the core box. Where only the length of the longest piece is given, all core now consists of split cylinders.

Box 1 4.57-11.43 m (15'-37½') H.S. Bostock Core Library Number 4151 (000695)
Section 11F

4.57-5.79	(15'-19')	0.97	max 9 cm for single piece
5.79-6.71	(19'-22')	0.99	max 10 cm
6.71-7.32	(22'-24')	0.53	max 12 cm
7.32-7.92	(24'-26')	0.79	max 8 cm
7.92-8.38	(26'-27½')	0.45	max 9 cm
8.38-9.14	(27½'-30')	0.46	max 6 cm
9.14-9.45	(30'-31')	0.38	max 12 cm
9.45-9.60	(31'-31½')	0.19	max 10 cm
9.60-10.21	(31½'-33½')	0.62	max 9 cm
10.21-11.13	(33½'-36½')	0.70	max 8 cm

6.08

Box 2 11.43-17.68 m (37½'-58') H.S. Bostock C.L.N. 4152 (000696), Section 11F

11.13-12.19	(36½'-40')	0.80	max 8 cm for single piece split core and angular fragments
12.19-12.95	(40'-42½')	0.96	max 10 cm
12.95-13.26	(42½'-43½')	0.22	max 8 cm, 12.95-13.26 m - rounded rubble
13.26-13.72	(43½'-45')	0.45	max 6 cm, split core and rounded fragments
13.72-14.48	(45'-47½')	0.91	max 8 cm
14.48-14.63	(47½'-48')	0.23	max 4 cm, mostly rounded rubble
14.63-15.24	(48'-50')	0.42	max 9 cm
15.24-15.70	(50'-51½')	0.27	max 9 cm
15.70-16.46	(51½'-54')	0.65	max 9 cm
16.46-17.68	(54'-58')	1.16	max 16 cm

6.07

Box 3 17.68-25.30 m (58'-83') H.S. Bostock C.L.N. 4153 (000697), Section 11F

17.68-19.20	(58'-63')	1.26	max 11 cm for single piece
19.20-20.12	(63'-66')	0.85	max 9 cm
20.12-20.73	(66'-68')	0.50	max 11 cm
20.73-21.64	(68'-71')	0.58	rounded rubble
21.64-22.25	(71'-73')	0.58	max 11 cm
22.25-23.77	(73'-78')	1.40	max 12 cm
23.77-24.99	(78'-82')	1.13	max 8 cm
24.99-25.30	(82'-83')	0.23	max 6 cm

6.53

DRILL RUNS FOR DRILLHOLE 70-1 (CONT.)

Run	Recovery (m)	Character
Box 4 25.30-32.61 m (83'-107') H.S. Bostock C.L.N. 4154 (000698), Section 11F		
25.30-26.21 (83'-86')	0.76	max 10 cm for single piece
26.21-26.82 (86'-88')	0.56	max 9 cm
26.82-27.13 (88'-89')	0.29	max 6 cm
27.13-27.43 (89'-90')	0.18	max 8 cm
27.43-28.35 (90'-93')	0.76	max 8 cm
28.35-28.96 (93'-95')	0.60	max 14 cm
28.96-29.26 (95'-96')	0.32	max 10 cm
29.26-30.48 (96'-100')	0.84	max 10 cm, split core and angular fragments
30.48-30.78 (100'-101')	0.17	max 8 cm, split core and angular and rounded fragments
30.78-31.70 (101'-104')	0.42	max 9 cm, split core and angular fragments
31.70-32.08 (104'-105½')	0.35	max 6 cm, 31.70-31.88 m - rounded fragments
32.08-32.31 (105½'-106')	0.12	rounded fragments
32.31-32.61 (106'-107')	0.35	angular and rounded fragments
	5.72	
Box 5 32.61-41.15 m (107'-135') H.S. Bostock C.L.N. 4155 (000699), Section 11F		
32.61-33.53 (107'-110')	0.57	rounded fragments and split core
33.53-34.29 (110'-112½')	0.44	max 6 cm for single piece, angular fragments and split core
34.29-34.75 (112½'-114')	0.33	max 7 cm, split core and angular fragments
34.75-35.97 (114'-118')	0.56	max 11 cm
35.97-36.27 (118'-119')	0.18	angular fragments
36.27-37.19 (119'-122')	0.44	angular fragments
37.19-38.71 (122'-127')	0.29	max 7 cm, split core and angular fragments
38.71-39.62 (127'-130')	1.10	max 12 cm
39.62-40.23 (130'-132')	0.60	max 9 cm
40.23-40.54 (132'-133')	0.26	max 10 cm
40.54-41.15 (133'-135')	0.47	max 8 cm
	5.24	
Box 6 41.15-49.07 m (135'-161') H.S. Bostock C.L.N. 4156 (000700), Section 11F		
41.15-41.45 (135'-136')	0.30	max 8 cm for single piece
41.45-42.06 (136'-138')	0.60	max 10 cm
42.06-42.67 (138'-140')	0.49	max 10½ cm
42.67-43.13 (140'-141½')	0.28	max 11 cm
43.13-43.43 (141½'-142½')	0.30	max 8½ cm
43.43-43.74 (142½'-143½')	0.27	max 10½ cm
43.74-44.50 (143½'-146')	0.68	max 9 cm
44.50-46.02 (146'-151')	0.30	mostly rounded fragments
46.02-46.63 (151'-153')	0.22	rounded fragments and split core
46.63-47.09 (153'-154½')	0.33	angular fragments and split core
47.09-47.55 (154½'-156')	0.09	max 6 cm
47.55-48.16 (156'-158')	0.60	max 13 cm
48.16-48.77 (158'-160')	0.43	max 7 cm
	4.89	

DRILL RUNS FOR DRILLHOLE 70-1 (CONT.)

Run	Recovery (m)	Character
Box 7 49.07-56.08 m (161'-184') H.S. Bostock C.L.N. 4157 (000701), Section 11E		
48.77-49.23 (160'-161½')	0.45	max 9 cm for single piece
49.23-49.83 (161½'-163½')	0.60	max 8½ cm
49.83-51.21 (163½'-168')	1.39	max 11 cm
51.21-51.66 (168'-169½')	0.45	max 8 cm
51.66-52.43 (169½'-172')	0.85	max 10½ cm
52.43-52.73 (172'-173')	0.30	angular fragments and split core, max 9 cm
52.73-53.34 (173'-175')	0.55	max 8 cm
53.34-53.95 (175'-177')	0.29	angular fragments
53.95-54.25 (177'-178')	0.29	max 9 cm
54.25-55.17 (178'-181')	0.00	
55.17-55.47 (181'-182')	0.00	
55.47-55.78 (182'-183')	0.14	rounded fragments
55.78-55.93 (183'-183½')	0.15	max 6 cm
	5.46	
Box 8 56.08-65.23 m (184'-214') H.S. Bostock C.L.N. 4158 (000702), Section 3C		
55.93-56.54 (183½'-185½')	0.23	max 9 cm for single piece
56.54-57.15 (185½'-187½')	0.35	max 8 cm
57.15-58.06 (187½'-190½')	0.75	max 9½ cm
58.06-58.37 (190½'-191½')	0.30	max 6 cm
58.37-58.98 (191½'-193½')	0.15	max 6 cm
58.98-60.05 (193½'-197')	0.40	mostly angular fragments, max 9 cm
60.05-60.66 (197'-199')	0.24	mostly rubble
60.66-61.11 (199'-200½')	0.13	angular fragments
61.11-62.18 (200½'-204')	0.73	max 5½ cm
62.18-63.25 (204'-207½')	0.80	max 6 cm
63.25-64.01 (207½'-210')	0.69	max 10 cm
64.01-64.92 (210'-213')	0.50	max 7 cm
	5.27	
Box 9 65.23-73.15 m (214'-240') H.S. Bostock C.L.N. 4159 (000703), Section 3C		
64.92-65.68 (213'-215½')	0.33	max 6 cm for single piece
65.68-67.21 (215½'-220½')	1.23	split core and rubble, max 8 cm
67.21-67.67 (220½'-222')	0.25	max 6½ cm
67.67-67.97 (222'-223')	0.18	angular fragments
67.97-68.58 (223'-225')	0.49	67.97-68.25 m - split core max 9 cm, 68.25-68.30 m - rubble, 68.30-68.46 m - angular fragments
68.58-69.80 (225'-229')	0.77	max 8½ cm
69.80-70.71 (229'-232')	0.56	69.80-69.87 m - split core max 5½ cm, 69.87-70.36m - rubble
70.71-71.63 (232'-235')	0.26	max 5 cm, rounded fragments
71.63-73.15 (235'-240')	0.99	71.63-71.71 m - rounded rubble max 5 cm, 71.71-71.73 m - fine earthy rubble, 71.73-72.72 m - split core max 12 cm
	5.06	

DRILL RUNS FOR DRILLHOLE 70-1 (CONT.)

Run	Recovery (m)	Character
<u>Box 10 73.15-81.38 m (240'-267')</u> H.S. Bostock C.L.N. 4160 (000704), Section 3C		
73.15-73.46 (240'-241')	0.27	max 7 cm for single piece
73.46-74.07 (241'-243')	0.59	max 8 cm, 73.46-73.57 m - rounded fragments, 73.57-74.05 m - mostly split core, angular fragments at bottom
74.07-74.68 (243'-245')	0.60	max 10 cm
74.68-75.59 (245'-248')	0.86	max 10½ cm
75.59-76.50 (248'-251')	0.66	max 9½ cm
76.50-77.11 (251'-253')	0.48	max 11 cm
77.11-78.03 (253'-256')	0.36	max 12 cm, about half fine angular rubble
78.03-78.94 (256'-259')	0.33	max 7 cm, split core and angular fragments
78.94-79.86 (259'-262')	0.25	angular fragments
79.86-80.31 (262'-263½')	0.25	max 9½ cm
80.31-81.38 (263½'-267')	0.53	max 7 cm, split core and angular fragments
	5.18	
<u>Box 11 81.38-89.61 m (267'-294')</u> H.S. Bostock C.L.N. 4161 (000705), Section 3C		
81.38-81.69 (267'-268')	0.24	angular fragments
81.69-82.14 (268'-269½')	0.40	81.69-81.76 m - rubble, 81.76-82.09 m - split core max 8½ cm for single piece
82.14-82.60 (269½'-271')	0.24	max 8 cm
82.60-83.06 (271'-272½')	0.28	max 8 cm
83.06-83.67 (272½'-274½')	0.54	max 10½ cm
83.67-84.58 (274½'-277½')	0.80	max 9 cm
84.58-85.04 (277½'-279')	0.21	split core and angular fragments
85.04-86.11 (279'-282½')	0.20	angular fragments and rubble
86.11-86.72 (282½'-284½')	0.40	max 6 cm, rubble and split core
86.72-87.33 (284½'-286½')	0.59	max 9 cm, alternating split core and rubble
87.33-88.54 (286½'-290½')	1.00	max 9½ cm
88.54-89.15 (290½'-292½')	0.60	max 9 cm
89.15-89.61 (292½'-294')	0.20	angular fragments
	5.70	
<u>Box 12 89.61-90.98 m (294'-298½')</u> H.S. Bostock C.L.N. 4162 (000706), Section 3C		
89.61-90.22 (294'-296')	0.34	max 6 cm
90.22-90.98 (296'-298½')	0.53	max 6½ cm
	0.87	

86.41 (283½') 62.07

$$\text{Recovery} = \frac{62.07}{86.41} \times 100 = 71.8\%$$

DRILL RUNS FOR DRILLHOLE 70-2

Run	Recovery (m)	Character
Box 1 8.53-22.25 m (28'-73')	H.S. Bostock Core Library Number 4163 (000707), Section 3C	
8.53-10.36 (28'-34')	0.66	only about half normal core in recovered length, 3 or 4 pieces 4-7 cm long, rest rubble
10.36-12.80 (34'-42')	0.68	only half or less normal core in recovered length, mostly rubble with odd piece to 5 cm, some pieces previously split
12.80-15.54 (42'-51')	0.45	only about half normal core in recovered length, few pieces to 4 cm but mostly smaller fragments, no fits
15.54-16.31 (51'-53½')	0.41	only half or less normal core in recovered length, one piece to 8 cm, others to 4 cm, rest rubble, no fits, some pieces previously split
16.31-16.92 (53½'-55½')	0.36	only half or less normal core in recovered length, max. 5-6 cm for single piece
16.92-17.98 (55½'-59')	0.15	less than half normal core in recovered length, all rubble
17.98-18.44 (59'-60½')	0.27	less than half normal core in recovered length, three pieces to 4 cm, rest rubble, larger pieces previously split
18.44-19.05 (60½'-62½')	0.67	more than half normal core in recovered length, max. 7 cm but mostly small fragments, larger pieces previously split
19.05-19.51 (62½'-64')	0.16	less than half normal core in recovered length, max. 5 cm
19.51-19.89 (64'-65¼')	0.22	less than half normal core in recovered length, one 4-cm piece at bottom, rest rubble
19.89-20.19 (65¼'-66¼')	0.23	only about half normal core in recovered length, max. 5 cm, previously split
20.19-21.03 (66¼'-69')	0.42	less than half normal core in recovered length, max. 8 cm
21.03-21.26 (69'-69 3/4')	0.19	only about half normal core in recovered length, max. 6 cm at top, rest smaller
21.26-21.56 (69 3/4'-70 3/4')	0.26	less than half normal core in recovered length, max. 2 cm
21.56-22.10 (70 3/4'-72½')	0.14	less than half normal core in recovered length, all rubble
	5.27	

DRILL RUNS FOR DRILLHOLE 70-2 (CONT.)

Run	Recovery (m)	Character
Box 2 22.25-33.53 m (73'-110')	H.S. Bostock C.L.N. 4164 (000708), Section 3C	
22.10-22.86 (72½'-75')	0.30	less than half normal core in recovered length, previously split
22.86-23.62 (75'-77½')	0.50	only about half normal core in recovered length, previously split
23.62-24.54 (77½'-80½')	0.17	only about half normal core in recovered length, max. 3 cm for single piece, previously split
24.54-25.30 (80½'-83')	0.39	only about half normal core in recovered length, max. 7 cm, previously split
25.30-26.06 (83'-85½')	0.12	less than half normal core in recovered length, all angular fragments to 2 cm max.
26.06-26.97 (85½'-88½')	0.32	angular pieces to 6 cm, no fits
26.97-28.19 (88½'-92½')	0.00	driller's block labelled sand
28.19-28.50 (92½'-93½')	0.13	angular pieces to 4½ cm, no fits
28.50-29.11 (93½'-95½')	0.28	two pieces each 8 cm long, rest angular rubble
29.11-29.72 (95½'-97½')	0.48	max. 7 cm long with about half ends fitting
29.72-31.24 (97½'-102½')	0.17	all rubble, lower half previously sampled
31.24-31.55 (102½'-103½')	0.23	only about half normal core in recovered length, pieces to 3 cm max. with some marks of previous splitting, all previously sampled
31.55-31.70 (103½'-104')	0.07	only about half normal core in recovered length, max. 3 cm, all previously sampled
31.70-32.16 (104'-105½')	0.31	only about half normal core for 31.70-31.88 m, then all normal core for 31.88-32.01 m, max. 7 cm, upper 13 cm previously split
32.16-32.92 (105½'-108')	0.60	max. 5 cm, rest angular rubble, no fits
32.92-33.22 (108'-109')	0.30	angular pieces to 5-6 cm, no fits
33.22-33.53 (109'-110')	0.09	angular fragments to 5 cm, no fits
	4.46	

DRILL RUNS FOR DRILLHOLE 70-2 (CONT.)

Run	Recovery (m)	Character
Box 3 33.53-42.67 m (110'-140')	H.S. Bostock C.L.N. 4165 (000709), Section 3C	
33.53-34.59 (110'-113½')	0.57	max 13 cm for single piece, 33.53-33.89 m - all fit except ground end at 33.77 m, below rubble and pieces to 5 cm with no fits
34.59-35.66 (113½'-117')	0.51	max 10 cm, few fits
35.66-36.27 (117'-119')	0.31	only about half normal core in recovered length, all rubble
36.27-36.73 (119'-120½')	0.38	max 9 cm, mostly rubble, no fits
36.73-37.64 (120½'-123½')	0.36	max 7 cm, mostly rubble, no fits
37.64-38.10 (123½'-125')	0.10	max 5 cm, mostly rubble, no fits
38.10-38.56 (125'-126½')	0.18	all rubble
38.56-39.47 (126½'-129½')	0.63	max 11 cm, angular pieces, no fits
39.47-40.39 (129½'-132½')	0.64	max 13 cm, 39.47-39.93 m - all fit, below - angular pieces to 8 cm with no fits
40.39-40.69 (132½'-133½')	0.16	whole core with pieces to 7 cm, all fit except one piece at top with ground end
40.69-41.76 (133½'-137')	0.45	40.69-41.01 m - pieces to 10 cm, all fit, below pieces to 5 cm and rubble with no fits
41.76-42.06 (137'-138')	0.19	max 7 cm, all rubble, no fits
42.06-42.52 (138'-139½')	0.31	max 9 cm, mostly rubble, no fits
	4.79	

Box 4 42.67-49.23 m (140'-161½')	H.S. Bostock C.L.N. 4166 (000710), Section 3C	
42.52-43.59 (139½'-143')	1.09	42.52-42.70 m - pieces to 6 cm with few fits; rest - pieces to 16 cm, all fit
43.59-44.20 (143'-145')	0.71	max 18 cm, for single piece, almost all fit except rubble in top 3 cm
44.20-45.57 (145'-149½')	1.18	max 41 cm, 44.20-45.17 m - most fit, rubble below
45.57-46.18 (149½'-151½')	0.61	max 7 cm, mostly rubble with no fits
46.18-47.09 (151½'-154½')	0.86	max 19 cm, all fit except rubble 46.48-46.77 m
47.09-47.40 (154½'-155½')	0.23	max 9 cm, about half fit
47.40-47.55 (155½'-156')	0.23	max 9 cm, all fit
47.55-48.31 (156'-158½')	0.65	max 17 cm, most fit
48.31-48.92 (158½'-160½')	0.57	max 9 cm, all rubble
48.92-49.38 (160½'-162')	0.40	max 12 cm, about half fit
	6.53	

Box 5 49.23-56.85 m (161½'-186½')	H.S. Bostock C.L.N. 4167 (000711), Section 3C	
49.38-49.99 (162'-164')	0.66	max 18 cm for single pieces, all fit
49.99-51.05 (164'-167½')	1.06	max 26 cm, all fit
51.05-52.58 (167½'-172½')	1.54	max 37 cm, all fit
52.58-53.64 (172½'-176')	1.08	max 27 cm, all fit
53.64-55.32 (176'-181½')	0.96	max 13 cm, most fit except rubble in lowest 9 cm
55.32-55.93 (181½'-183½')	0.28	max 8 cm, no fits, rubble in lowest 8 cm
55.93-56.85 (183½'-186½')	0.97	max 18 cm, all fit except rubble in top 4 cm
	6.55	

DRILL RUNS FOR DRILLHOLE 70-2 (CONT.)

Run	Recovery (m)	Character
Box 6 56.85-63.40 m (186½'-208')	H.S. Bostock C.L.N. 4168 (000712), Section 3C	
56.85-58.29 (186½'-191¼')	1.45	max 20 cm for single pieces, all fit
58.29-59.13 (191¼'-194')	0.92	max 18 cm, almost all fit
59.13-60.20 (194'-197½')	0.93	max 18 cm, most fit except rubble from 59.91-59.97 m
60.20-60.66 (197½'-199')	0.48	max 10 cm, 60.20-60.37 m - mostly rubble with no fits, balance all fit
60.66-61.11 (199'-200½')	0.33	max 8 cm, no fits, 60.96-61.11 m - previously split
61.11-61.26 (200½'-201')	0.14	all rubble, previously split
61.26-61.87 (201'-203')	0.48	previously split
61.87-63.40 (203'-208')	1.54	61.87-62.63 m - previously split, 62.63- 63.41 m - max 18 cm, all fit
	6.27	
Box 7 63.40-71.17 m (208'-233½')	H.S. Bostock C.L.N. 4169 (000713), Section 3C	
63.40-64.16 (208'-210½')	0.72	max 8 cm for single piece, 63.65-63.92 m - all fit, balance - no fits
64.16-64.77 (210½'-212½')	0.67	max 10 cm, all fit
64.77-65.84 (212½'-216')	0.97	max 19 cm, all fit
65.84-66.75 (216'-219')	0.90	max 15 cm, all fit
66.75-67.97 (219'-223')	1.35	max 16 cm, all fit
67.97-69.49 (223'-228')	0.09	max 5 cm, rubble, no fits
69.49-69.95 (228'-229½')	0.23	max 6 cm, mostly rubble, no fits
69.95-70.71 (229½'-232')	0.76	max 12 cm, all fit except rubble from 69.95-70.06 m
70.71-71.17 (232'-233½')	0.30	max 7 cm, mostly rubble, no fits
	5.99	
Box 8 71.17-77.72 m (233'-255')	H.S. Bostock C.L.N. 4170 (000714), Section 3C	
71.17-72.69 (233½'-238½')	1.33	max 18 cm for single piece, all fit except rubble 71.31-71.48 m in altered zone with part fits
72.69-73.99 (238½'-242 3/4')	1.26	max 13 cm, all fit
73.99-75.13 (242 3/4'-246½')	0.99	max 14 cm, all fit
75.13-76.05 (246½'-249½')	0.62	max 10 cm, almost no fits
76.05-76.81 (249½'-252')	0.85	max 17 cm, 76.05-76.13 m - rubble, 76.33- 76.90 m - all fit
76.81-78.33 (252'-257')	1.51	max 21 cm, all fit except for rubble from 77.26-77.30 m
	6.56	

DRILL RUNS FOR DRILLHOLE 70-2 (CONT.)

Run	Recovery (m)	Character
<u>Box 9 77.72-84.58 m (255'-277½')</u> H.S. Bostock C.L.N. 4171 (000715), Section 3C		
78.33-79.86 (257'-262')	1.55	max 21 cm for single piece, all fit
79.86-81.38 (262'-267')	1.54	max 25 cm, all fit
81.38-82.60 (267'-271')	0.94	max 19 cm, all fit to 82.16 m, balance earthy rusty rubble
82.60-83.52 (271'-274')	0.90	max 10 cm, 82.60-82.82 m - reasonable pieces with no fits, 82.82-82.89 m - rubble, balance - half fit
83.52-84.58 (274'-277½')	0.94	max 8 cm, 83.79-84.35 m - reasonably sized pieces with some fits, balance - rubble or no fits
	5.87	
<u>Box 10 84.58-91.14 m (277½'-299')</u> H.S. Bostock C.L.N. 4172 (000716), Section 3C		
84.58-85.19 (277½'-279½')	0.65	84.58-84.80m-max 9 cm for single piece, reasonably good core, half fit, 84.80- 85.23 m - only about half normal core in recovered length, previously split
85.19-86.11 (279½'-282½')	0.90	only about half normal core in recovered length, previously split
86.11-86.72 (282½'-284½')	0.55	only about half normal core in recovered length, max 10½ cm, previously split
86.72-87.33 (284½'-286½')	0.44	only about half normal core in recovered length, max 9 cm, previously split
87.33-88.85 (286½'-291½')	1.52	only about half normal core in recovered length, max 11 cm, previously split
88.85-90.07 (291½'-295½')	1.01	only about half normal core in recovered length, max 10 cm, previously split
90.07-90.68 (295½'-297½')	0.55	only about half normal core in recovered length, max 10 cm, previously split
	5.62	
<u>Box 11 91.14-100.13 m (299'-328½')</u> H.S. Bostock C.L.N. 4173 (000717), Section 3C		
90.68-92.20 (297½'-302½')	1.46	only about half normal core in recovered length, max 11 cm for single piece, previously split
92.20-93.88 (302½'-308')	0.64	only about half normal core in recovered length, previously split
93.88-94.64 (308'-310½')	0.12	only about half normal core in recovered length, max 4 cm, previously split
94.64-95.55 (310½'-313½')	0.46	94.64-94.79 m - only about half normal core in recovered length, previously split; 94.79- 95.10 m - max 7 cm, all rubble, no fits
95.55-96.32 (313½'-316')	0.62	max 17 cm, 95.55-95.92 m - all fit, rubble below
96.32-97.99 (316'-321½')	1.45	max 27 cm, all fit except for 97.00-97.02 m
97.99-98.22 (321½'-322¼')	0.26	max 10 cm, 97.99-98.07 m - rubble, rest all fit
98.22-99.52 (322¼'-326½')	1.19	max 34 cm, all fit
99.52-99.97 (326½'-328')	0.37	max 13 cm, no fits in rubble of upper half, all fit below
	6.57	

DRILL RUNS FOR DRILLHOLE 70-2 (CONT.)

Run	Recovery (m)	Character
Box 12 100.13-103.94 (328½'-341')		H.S. Bostock C.L.N. 4174 (000718), Section 3C
99.97-101.50 (328'-333')	1.58	28 cm for single piece, all fit
101.50-102.41 (333'-336')	0.93	max 20 cm, all fit
102.41-103.94 (336'-341')	1.36	max 21 cm, all fit except for rubble 103.02-103.12 m
	3.87	

95.41 (313') 68.35

$$\text{Recovery} = \frac{68.35}{95.41} \times 100 = 71.6\%$$

DRILL RUNS FOR DRILLHOLE 70-3

Run	Recovery (m)	Character
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Note: All the core from drillhole 70-3 was previously split and sampled by Imperial Oil Enterprises Ltd. Recoveries reported here were obtained by spreading the remaining half along the core box. Where only the length of the largest piece is given, all core now consists of split cylinders.

Box 1 5.49-22.86 m (18'-75') H.S. Bostock Core Library Number 4175 (000719), Section 3C

5.49-7.16	(18'-23½')	0.31	rubble
7.16-8.84	(23½'-29')	0.33	rubble mostly, max 9 cm for single piece at bottom
8.84-9.45	(29'-31')	0.16	rubble
9.45-10.21	(31'-33½')	0.05	rubble
10.21-10.52	(33½'-34½')	0.13	rubble
10.52-10.82	(34½'-35½')	0.17	rubble mostly, max 5 cm as cylindrical core
10.82-10.97	(35½'-36')	0.21	rubble
10.97-11.05	(36'-36¼')	0.14	rubble, max 3 cm
11.05-11.43	(36¼'-37½')	0.21	rubble
11.43-12.65	(37½'-41½')	0.19	rubble, max 5 cm
12.65-13.26	(41½'-43½')	0.08	rubble
13.26-14.33	(43½'-47')	0.27	rubble except for 5 cm piece at bottom
14.33-14.78	(47'-48½')	0.13	rubble
14.78-15.09	(48½'-49½')	0.38	mostly rubble but few split pieces to 6 cm
15.09-15.54	(49½'-51')	0.23	rubble except for two split pieces, max 5 cm
15.54-16.31	(51'-53½')	0.15	rubble except one 8-cm piece at bottom
16.31-16.76	(53½'-55')	0.09	rubble
16.76-18.29	(55'-60')	0.21	rubble, max 5 cm
18.29-18.90	(60'-62')	0.14	rubble
18.90-19.35	(62'-63½')	0.23	rubble with 6-cm piece at bottom
19.35-20.27	(63½'-66½')	0.09	rubble
20.27-21.64	(66½'-71')	0.13	rubble
21.64-22.40	(71'-73½')	0.13	rubble with 4-cm piece at bottom
22.40-22.86	(73½'-75')	0.15	rubble, max 4 cm
		4.31	

Box 2 22.86-32.54 m (75'-106'9") H.S. Bostock C.L.N. 4176 (000720), Section 3C

22.86-23.47	(75'-77')	0.20	rubble
23.47-24.69	(77'-81')	0.26	rubble
24.69-25.76	(81'-84½')	-	
25.76-26.21	(84½'-86')	0.04	rubble
26.21-26.67	(86'-87½')	0.40	rubble
26.67-27.28	(87½'-89½')	0.37	rubble, max 6 cm for single piece
27.28-27.89	(89½'-91½')	0.60	27.28-27.70 m - split core max 6 cm; rounded rubble below
27.89-28.50	(91½'-93½')	0.60	rubble
28.50-28.96	(93½'-95')	0.48	rubble and earthy material
28.96-29.57	(95'-97')	0.60	28.96-29.44 m - reasonable lengths, max 8 cm, small rubble below
29.57-30.78	(97'-101')	0.49	29.57-29.82 m - split pieces to 10 cm, rubble below
30.78-30.94	(101'-101½')	0.11	max 7 cm
30.94-31.39	(101½'-103')	0.38	max 8 cm
31.39-32.46	(103'-106½')	0.23	rubble
32.46-32.54	(106½'-106'9")	0.11	rubble
		4.87	

DRILL RUNS FOR DRILLHOLE 70-3 (CONT.)

Run	Recovery (m)	Character
Box 3 32.54-42.98 m (106'9"-141') H.S. Bostock C.L.N. 4177 (000721), Section 3C		
32.54-33.22	(106'9"-109')	0.51 rubble, few hard fragments in top 3-4 cm; earthy material below
33.22-34.59	(109'-113½')	0.08 rubble
34.59-35.13	(113½'-115¼')	0.11 rubble
35.13-35.66	(115¼'-117')	0.24 rubble
35.66-36.58	(117'-120')	0.12 rubble
36.58-37.64	(120'-123½')	0.29 rubble
37.64-38.25	(123½'-125½')	0.32 rubble
38.25-38.40	(125½'-126')	0.09 rubble
38.40-38.86	(126'-127½')	0.33 max 8 cm for single piece
38.86-40.08	(127½'-131½')	0.53 max 8 cm
40.08-40.54	(131½'-133')	0.26 rubble and split core, max 7 cm
40.54-41.30	(133'-135½')	0.31 rubble and split core, max 8 cm
41.30-42.37	(135½'-139')	0.78 max 10 cm
42.37-42.98	(139'-141')	0.25 rubble
		4.22

Box 4 42.98-51.36 m (141'-168½') H.S. Bostock C.L.N. 4178 (000722), Section 3C		
42.98-43.28	(141'-142')	0.20 angular fragments
43.28-43.74	(142'-143½')	0.45 max 11 cm for single piece
43.74-44.12	(143½'-144'9")	0.34 max 8 cm
44.12-44.65	(144'9"-146½')	0.48 max 6 cm
44.65-45.11	(146½'-148')	0.40 max 12 cm
45.11-46.33	(148'-152')	0.90 max 11 cm
46.33-46.79	(152'-153½')	0.35 max 5 cm
46.79-46.94	(153½'-154')	0.08 angular fragments
46.94-48.16	(154'-158')	0.35 max 6 cm
48.16-48.62	(158'-159½')	0.37 max 7 cm, split core and angular rubble
48.62-49.38	(159½'-162')	0.40 max 6 cm
49.38-49.83	(162'-163½')	0.26 max 9 cm
49.83-50.60	(163½'-166')	0.36 max 8 cm
50.60-50.90	(166'-167')	0.05 rubble
50.90-51.36	(167'-168½')	0.11 rounded rubble
		5.10

DRILL RUNS FOR DRILLHOLE 70-3 (CONT.)

Run	Recovery (m)	Character
Box 5 51.36-61.57m (168½'-202') H.S. Bostock C.L.N. 4179 (000723), Section 3C		
51.36-52.88 (168½'-173½')	0.33	angular rubble, max 6 cm for single piece
52.88-54.56 (173½'-179')	0.24	split core and rounded rubble, max 6 cm for single piece
54.56-55.78 (179'-183')	0.10	rubble with one 8-cm piece at bottom
55.78-56.39 (183'-185')	0.38	rubble
56.39-57.00 (185'-187')	0.72	split core and rubble, max 7 cm
57.00-57.15 (187'-187½')	0.12	rubble
57.15-57.45 (187½'-188½')	0.26	angular fragments and split core, max 5 cm
57.45-57.76 (188½'-189½')	0.22	max 6 cm
57.76-58.37 (189½'-191½')	0.45	max 7 cm
58.37-58.83 (191½'-193')	0.14	rubble
58.83-59.13 (193'-194')	0.18	rubble
59.13-59.59 (194'-195½')	0.23	rubble and split core, max 5 cm
59.59-59.89 (195½'-196½')	0.30	angular rubble
59.89-60.35 (196½'-198')	0.25	rubble
60.35-60.66 (198'-199')	0.24	angular fragments, max 6 cm
60.66-61.11 (199'-200½')	0.12	angular rubble
61.11-61.57 (200½'-202')	0.27	angular fragments
	4.55	

Box 6 61.57-72.54m (202'-238') H.S. Bostock C.L.N. 4180 (000724), Section 3C		
61.57-62.03 (202'-203½')	0.26	angular fragments
62.03-62.48 (203½'-205')	0.45	angular fragments
62.48-62.94 (205'-206½')	0.40	angular fragments
62.94-63.25 (206½'-207½')	0.19	angular fragments
63.25-63.70 (207½'-209')	0.23	angular fragments
63.70-64.16 (209'-210½')	0.28	angular fragments, max 6 cm for single piece
64.16-65.07 (210½'-213½')	0.41	max 8 cm
65.07-65.53 (213½'-215')	0.11	rounded rubble
65.53-67.06 (215'-220')	0.39	rounded rubble
67.06-67.51 (220'-221½')	0.14	rounded rubble
67.51-68.12 (221½'-223½')	0.20	rounded rubble
68.12-69.34 (223½'-227½')	0.17	rounded rubble
69.34-69.65 (227½'-228½')	0.25	angular and rounded rubble
69.65-70.56 (228½'-231½')	0.30	angular rubble
70.56-71.02 (231½'-233')	0.30	angular rubble
71.02-72.24 (233'-237')	0.24	angular fragments and split core
72.24-72.54 (237'-238')	0.10	rounded rubble
	4.42	

DRILL RUNS FOR DRILLHOLE 70-3 (CONT.)

Run	Recovery (m)	Character
Box 7 72.54-74.37 m (238'-244')	H.S. Bostock C.L.N. 4181 (000725), Section 3C	
72.54-72.85 (238'-239')	0.20	split core and angular fragments, max 5 cm for single piece
72.85-73.46 (239'-241')	0.11	max 11 cm
73.46-74.37 (241'-244')	0.45	split core and rounded rubble, max 5 cm
	<u>0.76</u>	

68.89	(226')	28.23
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$$\text{Recovery} = \frac{28.23}{68.89} \times 100 = 41.0\%$$

DRILL RUNS FOR DRILLHOLE 70-4

Run	Recovery (m)	Character
<u>Box 1 1.83-5.49 m (6'-18')</u> H.S. Bostock Core Library Number 4182 (000726), Section 3C		
1.83-2.44 (6'-8')	0.22	previously sampled, less than half core remaining, recovery obtained by spreading core along core box, all rubble
2.44-3.35 (8'-11')	0.70	previously split, recovery obtained by spreading remaining half along core box, max 11 cm for single piece, rounded rubble in top half, good lengths below
3.35-3.51 (11'-11½')	0.04	previously sampled, all rubble
3.51-3.96 (11½'-13')	0.02	previously sampled, all rubble
3.96-4.57 (13'-15')	0.20	previously split, max 3 cm
4.57-5.79 (15'-19')	1.20	previously split, max 10 cm
	2.38	
<u>Box 2 5.49-8.23 m (18'-27')</u> H.S. Bostock C.L.N. 4183 (000727), Section 3C		
5.79-6.25 (19'-20½')	0.45	previously split, recovery obtained by spreading remaining half along core box, max 8 cm for single piece
6.25-6.40 (20½'-21')	0.15	previously split, max 5 cm
6.40-7.01 (21'-23')	0.60	previously split, max 8 cm
7.01-8.53 (23'-28')	1.52	previously split, max 11 cm
	2.72	
<u>Box 3 8.23-13.72 m (27'-45')</u> H.S. Bostock C.L.N. 4184 (000728), Section 3C		
8.53-10.21 (28'-33½')	0.68	previously split, recovery obtained by spreading remaining half along core box, max 10 cm for single piece; 8.53-8.90 m - good core; rounded and angular rubble below
10.21-10.52 (33½'-34½')	0.20	previously split, max 11 cm, small angular fragments in upper part
10.52-10.97 (34½'-36')	0.28	previously split, max 8½ cm
10.97-11.28 (36'-37')	0.17	previously split, all angular fragments to 2 cm max
11.28-11.73 (37'-38½')	0.40	previously split, max 5 cm
11.73-12.19 (38½'-40')	0.20	previously split, max 5 cm
12.19-13.26 (40'-43½')	0.20	previously split, all rounded rubble
13.26-13.87 (43½'-45½')	0.60	previously split, max 10 cm, all good lengths
	2.73	

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 4 13.72-19.51 m (45'-64')</u> H.S. Bostock C.L.N. 4185 (000729), Section 3C		
13.87-14.48 (45½'-47½')	0.60	previously split, recovery obtained by spreading remaining half along core box, max 9½ cm for single piece
14.48-15.54 (47½'-51')	0.76	previously split, max 10 cm
15.54-16.31 (51'-53½')	0.50	previously split, max 10 cm
16.31-16.76 (53½'-55')	0.15	previously split, max 6 cm
16.76-17.07 (55'-56')	0.36	previously split, max 8 cm
17.07-17.83 (56'-58½')	0.62	previously split, max 8 cm
17.83-19.35 (58½'-63½')	1.10	previously split, max 11 cm
	4.09	
<u>Box 5 19.51-27.43 m (64'-90')</u> H.S. Bostock C.L.N. 4186 (000730), Section 3C		
19.35-20.27 (63½'-66½')	0.41	previously split, recovery obtained by spreading remaining half along core box, max 8 cm for single piece
20.27-20.42 (66½'-67')	0.38	previously split, max 10 cm
20.42-20.73 (67'-68')	0.14	previously split, max 11 cm
20.73-21.34 (68'-70')	0.66	previously split, max 9 cm
21.34-21.95 (70'-72')	0.40	previously split, max 10 cm
21.95-22.40 (72'-73½')	0.22	previously split, max 6 cm
22.40-23.47 (73½'-77')	0.44	previously split, max 7 cm
23.47-24.23 (77'-79½')	0.42	previously split, max 4½ cm, mostly rubble
24.23-25.45 (79½'-83½')	0.20	previously split, max 5 cm, mostly rubble
25.45-26.21 (83½'-86')	0.46	previously split, max 5 cm, mostly rubble
26.21-27.13 (86'-89')	0.50	previously split, max 8½ cm, mostly rubble
27.13-27.43 (89'-90')	0.20	previously split, max 5 cm, mostly rubble
	4.43	
<u>Box 6 27.43-34.44 m (90'-113')</u> H.S. Bostock C.L.N. 4187 (000731), Section 3C		
27.43-28.19 (90'-92½')	0.61	previously split, recovery obtained by spreading remaining half along core box, max 6 cm for single piece
29.19-28.96 (92½'-95')	0.42	previously split, max 8 cm, mostly rubble
28.96-29.87 (95'-98')	0.38	previously split, max 7 cm, mostly rubble
29.87-31.09 (98'-102')	0.50	previously split, max 9 cm
31.09-32.00 (102'-105')	0.68	previously split, max 10 cm, 31.09-31.20 m - all rubble, below mostly good lengths
32.00-32.16 (105'-105½')	0.15	previously split, max 10 cm
32.16-32.46 (105½'-106½')	0.30	previously split, max 8 cm
32.46-34.29 (106½'-112½')	1.20	previously split, max 12 cm, mostly good lengths
	4.24	

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
Box 7 34.44-40.84 m (113'-134')	H.S. Bostock C.L.N. 4188 (000732), Section 3C	
34.29-35.81 (112½'-117½')	0.24	previously split, recovery obtained by spreading remaining half along core box, max 5 cm for single piece
35.81-36.27 (117½'-119')	0.24	previously split, max 9½ cm, rubble in centre third
36.27-36.42 (119'-119½')	0.11	previously split, all rubble
36.42-38.10 (119½'-125')	0.73	previously split, max 11 cm
38.10-38.40 (125'-126')	0.30	previously split, max 5 cm, mostly rubble
38.40-38.86 (126'-127½')	0.69	previously split, max 13 cm
38.86-39.32 (127½'-129')	0.29	previously split, max 5 cm, all rubble
39.32-39.62 (129'-130')	0.31	previously split, max 4 cm, mostly rounded rubble
39.62-39.78 (130'-130½')	0.13	previously split, max 8 cm, good lengths
39.78-40.69 (130½'-133½')	0.71	previously split, max 8 cm, partly rubble and partly good lengths
40.69-40.84 (133½'-134')	0.08	previously split, all rubble
	3.83	
Box 8 40.84-49.38 m (134'-162')	H.S. Bostock C.L.N. 4189 (000733), Section 3C	
40.84-41.22 (134'-135½')	0.00	
41.22-41.76 (135½'-137')	0.64	previously split, recovery obtained by spreading remaining half along core box, max 10 cm for single piece, all good lengths
41.76-42.21 (134'-138½')	0.26	previously split, max 7 cm, good lengths
42.21-42.82 (138½'-140½')	0.01	previously split, all rubble
42.82-43.74 (140½'-143½')	0.16	previously split, max 7 cm, rubble in upper two-thirds, good lengths below
43.74-44.81 (143½'-147')	0.35	previously split, max 4 cm, mostly rounded rubble
44.81-45.11 (147'-148')	0.16	previously split, max 6 cm, good lengths
45.11-46.02 (148'-151')	0.24	previously split, max 8 cm, mostly good lengths
46.02-46.33 (151'-152')	0.10	previously split, all rounded rubble
46.33-46.79 (152'-153½')	0.14	previously split, max 6 cm, angular pieces
46.79-47.40 (153½'-155½')	0.60	previously split, max 10 cm, good lengths
47.40-49.38 (155½'-162')	1.62	previously split, max 11 cm, good lengths except rounded rubble in lowest 10 cm
	4.28	
Box 9 49.38-56.69 m (162'-186')	H.S. Bostock C.L.N. 4190 (000734), Section 31	
49.38-49.83 (162'-163½')	0.12	previously split, recovery obtained by spreading remaining half along core box, max 5 cm for single piece, all rubble
49.83-53.34 (163½'-175'*)	2.86	previously split, max 11 cm
53.34-53.64 (175'-176')	0.11	previously split, all rubble
53.64-54.56 (176'-179')	0.27	previously split, max 9 cm
54.56-56.69 (179'-186')	1.39	previously split, max 15 cm
	4.75	

* Footage markers missing between 163½' and 175'.

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 10 56.69-63.40m(186'-208')</u> H.S. Bostock C.L.N. 4191 (000735), Section 31		
56.69-58.37 (186'-191½')	1.33	previously split recovery obtained by spreading remaining half along core box, max 10 cm for single piece
58.37-59.13 (191½'-194')	0.66	previously split, max 11 cm
59.13-59.59 (194'-195½')	0.35	previously split, max 10 cm
59.59-60.20 (195½'-197½')	0.40	previously split, max 9 cm
60.20-60.81 (197½'-199½')	0.45	previously split, max 7 cm
60.81-61.42 (199½'-201½')	0.60	previously split, max 8 cm
61.42-62.03 (201½'-203½')	0.42	previously split, max 7 cm
62.03-62.79 (203½'-206')	0.70	previously split, max 11 cm
62.79-63.40 (206'-208'*)	0.60	previously split, max 10 cm
5.51		
<u>Box 11 63.40-83.21 m (208'-273')</u> H.S. Bostock C.L.N. 4192 (000736), Section 31		
This box was discarded some time ago because the core in it was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.		
<u>Box 12 83.21-90.07 m (273'-295½')</u> H.S. Bostock C.L.N. 4193 (000737), Section 31		
83.21-83.67 (273'**-274½')	0.22	max 6 cm for single piece, no cylinder of complete core, rubble of rounded fragments with no fits
83.67-84.05 (274½'-275'9")	0.11	max 6 cm, no cylinder of complete core, rubble of rounded fragments, no fits
84.05-84.58 (275'9"-277½')	0.40	max 6 cm, no cylinder of complete core, all angular fragments, no fits
84.58-85.04 (277½'-279')	0.20	max 6 cm, no cylinder of complete core, all angular rubble, no fits
85.04-85.50 (279'-280½')	0.40	max 14 cm as nearly whole core cylinder, all angular fragments with few fits
85.50-85.95 (280½'-282')	0.40	max 10 cm, no cylinder of complete core, all angular fragments, no fits
85.95-86.41 (282'-283½')	0.32	max 10 cm as whole cylindrical core, about half fit, rest angular fragments
86.41-87.17 (283½'-286')	0.65	max 19 cm as whole cylindrical core, all fit except 86.81-86.89 m and at 87.01 m
87.17-87.93 (286'-288½')	0.50	max 14 cm as whole cylindrical core, 87.17-87.43 m - angular fragments and clay, fit below
87.93-88.24 (288½'-289½')	0.20	max 6½ cm as whole cylindrical core, all angular fragments with no fits
88.24-89.15 (289½'-292½')	0.91	max 20 cm, mostly cylindrical core, few fits, mostly angular fragments
89.15-89.69 (292½'-294¼')	0.36	max 8 cm, no cylinder of complete core, all angular fragments, no fits
89.69-90.07 (294¼'-295½')	0.33	max 10 cm, half cylindrical core, half fit, rest angular fragments
5.00		

* No marker at 208': end of Box 10 with Box 11 missing.

** No marker at 273': start of Box 12 with Box 11 missing.

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 13 90.07-97.13 m (295½'-318'8")</u> H.S. Bostock C.L.N. 4194 (000738), Section 31		
90.07-90.53 (295½'-297')	0.89	max 19 cm for single piece of cylindrical core, 90.07-90.39 m - all fit, below - angular fragments with no fits
90.53-91.14 (297'-299')	0.50	previously split, recovery obtained by spreading remaining half along core box, max 6 cm
91.14-92.05 (299'-302')	0.90	previously split, max 14 cm
92.05-92.35 (302'-303')	0.30	previously split, max 8 cm
92.35-92.96 (303'-305')	0.48	previously split, max 11 cm
92.96-93.42 (305'-306½')	0.35	previously split, max 9 cm
93.42-94.18 (306½'-309')	0.41	previously split, max 8 cm
94.18-94.59 (309-310'4")	0.20	previously split, max 11 cm
94.59-95.71 (310'4"-314")	0.36	previously split, max 8 cm
95.71-96.82 (314'-317'8")	0.76	max 17 cm as whole cylindrical core; 95.71-96.16 m - large angular fragments with no fits, 96.16-96.47 m - two pieces with no fits, ground end at 96.30 m
96.82-97.13 (317'8"-318'8")	0.29	max 9 cm, most fit
	5.44	
<u>Box 14 97.13-107.42 m (318'8"-352'5")</u> H.S. Bostock C.L.N. 4195 (000739), Section 31		
97.13-97.59 (318'8"-320'2")	0.33	max 8 cm for single piece of cylindrical core, max 10 cm not as cylinder
97.59-98.60 (320'2"-323½')	0.79	max 17 cm as cylindrical core, all fit except for angular fragments 97.59-97.66 m and at 98.09 m
98.60-99.67 (323½'-327')	0.66	max 16 cm as cylindrical core; 98.60-98.76 m - one piece; 98.83-99.22 m - all fit; rest - angular fragments with no fits
99.67-100.20 (327'-328'9")	0.28	max 11 cm as cylindrical core, mostly angular and drill-rounded fragments, no fits
100.20-100.71 (328'9"-330'5")	0.24	max 7 cm as cylindrical core, all angular fragments, no fits
100.71-101.19 (330'5"-332')	0.15	max 6 cm as cylindrical core, all angular fragments, no fits
101.19-103.35 (332'-339'1")	0.24	all rounded fragments, no fits
103.35-104.70 (339'1"-342½')	0.58	max 10 cm as cylindrical core, all rounded fragments except 10-cm piece at bottom, no fits
104.70-105.56 (343½'-346'4")	0.16	max 7 cm, no cylinder of complete core, all angular fragments, no fits
105.56-106.07 (346'4"-348')	0.45	max 9 cm as cylindrical core, max 11 cm not as cylindrical core, all angular fragments
106.07-107.42 (348'-352'5")	0.55	max 14 cm as cylindrical core, angular fragments, no fits
	4.43	

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
Box 15 107.42-114.00 m (352'5"-374')		H.S. Bostock C.L.N. 4196 (000740), Section 31
107.42-107.75 (352'5"-353½')	0.29	max 13 cm for single piece not cylindrical, all large angular fragments, no fits
107.75-108.25 (353½'-355'2")	0.43	max 10 cm as cylindrical core, most fit
108.25-108.51 (355'2"-356')	0.17	max 10 cm not as cylindrical core, all angular fragments, no fits
108.51-108.97 (356'-357½')	0.17	max 6 cm not as cylindrical core, all angular fragments, no fits
108.97-109.42 (357½'-359')	0.26	max 6 cm as cylindrical core, angular and rounded fragments, no fits
109.42-109.73 (359'-360')	0.12	max 7 cm as cylindrical core, all angular fragments, no fits
109.73-110.03 (360'-361')	0.16	max 11 cm not as cylindrical core, all angular fragments, no fits
110.03-110.79 (361'-363½')	0.51	max 10 cm as cylindrical core; 110.03-110.52 m - all fit; rest - no fits
110.79-111.18 (363½'-364'9")	0.16	max 9 cm as cylindrical core, angular fragments, no fits
111.18-111.76 (364'9"-366'8")	0.71	max 14 cm as cylindrical core; 111.40-111.78 m - all fit; rest - angular fragments with no fits
111.76-111.91 (366'8"-367'2")	0.04	max 4 cm not as cylindrical core
111.91-112.06 (367'2"-367'8")	0.13	max 11 cm as cylindrical core, no fits
112.06-112.32 (367'8"-368½')	0.28	max 11 cm as cylindrical core; 112.06-112.28 - all fit; no fits below
112.32-113.28 (368½'-371'8")	0.48	max 8 cm as cylindrical core, one piece split, rest fit
113.28-113.77 (371'8"-373¼')	0.13	max 4 cm not as cylindrical core, all angular and rounded fragments, no fits
	4.04	

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
Box 16 114.00-122.12 m (374'-400'8")	H.S. Bostock C.L.N. 4197 (000741), Section 31	
113.77-114.81 (373¼'-376'8")	0.54	max 15 cm for single piece as cylindrical core; 113.77-113.92 m - all fit; below - angular fragments with no fits
114.81-115.24 (376'8"-378'1")	0.16	all angular fragments to 5 cm, no fits
115.24-115.47 (378'1"-378'10")	0.16	max 6 cm as cylindrical core, few fits
115.47-116.74 (378'10"-383')	0.36	max 11 cm as cylindrical core; 115.47-115.49 m - rubble; 115.49-115.92 m - all fit; 115.92-116.03 m - angular fragments with no fits
116.74-117.42 (383'-385¼')	0.13	max 5 cm not as cylindrical core, all angular and rounded fragments, no fits
117.42-117.55 (385¼'-385'8")	0.13	max 5 cm not as cylindrical core, all rounded fragments, no fits
117.55-118.06 (385'8"-387'4")	0.12	max 6 cm as cylindrical core, mostly angular fragments, no fits
118.06-118.57 (387'4"-389')	0.15	max 5 cm not as cylindrical core, all angular and rounded fragments, no fits
118.57-118.95 (389'-390¼')	0.17	max 5 cm not as cylindrical core, all angular fragments, no fits
118.95-119.25 (390¼'-391¼')	0.18	max 6 cm as cylindrical core, mostly angular fragments with no fits
119.25-119.74 (391¼'-392'10")	0.13	max 5 cm not as cylindrical core
119.74-120.57 (392'10"-395'7")	0.49	max 8 cm as cylindrical core; 119.79-119.93 m and 120.06-120.23 m - all fit; rest - angular rubble with no fits
120.57-121.23 (395'7"-397'9")	0.42	max 20 cm as cylindrical core; 120.57-120.91 m all fit; below - no fits
121.23-122.12 (397'9"-400'8")	0.53	previously split recovery obtained by spreading remaining half along core box, max 12 cm
	3.67	

100.48* (329'8"*) 61.54

$$\text{Recovery} = \frac{61.54}{100.48} \times 100 = 61.2\%* \quad \text{or} \quad \frac{61.54}{120.29} \times 100 = 51.2\% \text{ if Box 11 is included with zero recovery}$$

* Excluding 19.81 m (65') for core in missing Box 11.

DRILL RUNS FOR DRILLHOLE 70-5

Run	Recovery (m)	Character
Box 1 3.05-12.78 m (10'-41'11") H.S. Bostock Core Library Number 4198 (000742), Section 24		
3.05-4.44 (10'-14'7")	0.88	only about half normal core in recovered length, max 8 cm for single piece, rounded rubble, no fits
4.44-4.98 (14'7"-16'4")	0.27	only about half normal core in recovered length, max 5 cm, rounded rubble, no fits
4.98-5.44 (16'4"-17'10")	0.66	only about half normal core in recovered length, max 8 cm, no fits
5.44-5.89 (17'10"-19'4")	0.55	max 12 cm, 5.44-5.87 m - all fit, no fits below
5.89-6.55 (19'4"-21'½')	0.38	max 9 cm; 5.89-6.13 m - 3 pieces about 9 cm each, rounded rubble below
6.55-7.32 (21'½'-24')	0.40	max 11 cm, no fits, 6.55-6.75 m - all rubble
7.32-8.23 (24'-27')	0.64	max 19 cm, 7.32-7.76 m - all fit, rubble below
8.23-8.84 (27'-29')	0.20	all rubble
8.84-9.14 (29'-30')	0.20	all rubble
9.14-9.45 (30'-31')	0.15	all rubble
9.45-9.75 (31'-32')	0.04	all rubble
9.75-10.16 (32'-33'4")	0.04	all rubble
10.16-10.46 (33'4"-34'4")	0.01	one 1-cm fragment only
10.46-11.25 (34'4"-36'11")	0.15	max 7 cm, almost all rubble
11.25-11.73 (36'11"-38'½')	0.08	all rubble
11.73-12.55 (38'½'-41'2")	0.15	all rubble
	4.80	

Box 2 12.78-20.73 m (41'11"-68') H.S. Bostock C.L.N. 4199 (000743), Section 24		
12.55-13.21 (41'2"-43'4")	0.08	all rubble
13.21-13.56 (43'4"-44'½')	0.10	max 6 cm for single piece, no fits, all rubble
13.56-13.64 (44'½'-44'9")	0.04	two pieces that do not fit
13.64-13.94 (44'9"-45'9")	0.10	all rubble
13.94-14.33 (45'9"-47')	0.08	all rubble
14.33-14.48 (47'-47'½')	0.05	all rubble
14.48-14.94 (47'½'-49')	0.09	all rubble
14.94-15.85 (49'-52')	0.14	all rubble
15.85-16.23 (52'-53'3")	0.33	max 14 cm, most fit
16.23-16.84 (53'3"-55'3")	0.33	max 9 cm, no fits, some rubble
16.84-17.12 (55'3"-56'2")	0.16	max 5 cm, all rubble
17.12-17.27 (56'2"-56'8")	0.10	max 8 cm
17.27-17.48 (56'8"-57'4")	0.08	all rubble
17.48-18.14 (57'4"-59'½')	0.50	max 9 cm, no fits; 17.48-17.83 m - 5 pieces 5-9 cm each, rubble below
18.14-18.75 (59'½'-61'½')	0.61	max 12 cm, most fit
18.75-19.20 (61'½'-63')	0.28	max 8 cm, no fits
19.20-20.42 (63'-67')	0.90	max 9 cm; 19.20-19.26 m - small rubble, 19.26-19.40 m - two 7-cm pieces, 19.40-19.81 m - all fit, 19.81-20.00 m - rubble, 20.00-20.10 m - one piece
20.42-20.73 (67'-68')	0.25	max 9 cm, 20.42-20.51 m - mostly rubble, 20.51-20.67 m - all fit
	4.22	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
Box 3 20.73-27.05 m (68'-88'9") H.S. Bostock C.L.N. 4200 (000744), Section 24		
20.73-21.34 (68'-70')	0.29	max 17 cm for single piece, two fitting pieces with some rubble from fracture at low angle to core axis
21.34-22.71 (70'-74½')	1.37	max 27 cm, all fit except rubble 21.34-21.41 m and 22.34-22.39 m
22.71-23.16 (74½'-76')	0.22	max 9 cm, all angular rubble which probably could be fitted
23.16-23.47 (76'-77')	0.14	max 5 cm, all angular rubble
23.47-23.62 (77'-77½')	0.05	all angular rubble
23.62-24.38 (77½'-80')	0.75	max 12 cm, 23.62-24.32 m - most fit, rubble below
24.38-24.84 (80'-81½')	0.32	max 16 cm, 24.38-24.62 m - all fit, balance rubble
24.84-25.53 (81½'-83'9")	0.25	max 6 cm, all rubble
25.53-25.83 (83'9"-84'9")	0.25	max 11 cm, large angular pieces that probably could be fitted
25.83-26.44 (84'9"-86'9")	0.32	max 12 cm, no fits
26.44-27.51 (86'9"-90'3")	1.02	max 25 cm, 26.44-27.11 m - all fit, angular rubble below that probably could be fitted
	4.98	
Box 4 27.05-33.07 m (88'9"-108½') H.S. Bostock C.L.N. 4201 (000745), Section 24		
27.51-28.30 (90'3"-92'10")	0.42	max 14 cm for single piece, almost all angular rubble that could be fitted
28.30-28.88 (92'10"-94'9")	0.30	max 6 cm, no fits
28.88-29.29 (94'9"-96'1")	0.25	max 7 cm, all angular rubble with no fits
29.29-29.74 (96'1"-97'7")	0.43	max 8 cm, all angular rubble with no fits
29.74-30.78 (97'7"-101')	0.89	max 18 cm, all fit except at 29.89 m
30.78-32.00 (101'-105')	0.99	max 16 cm, almost all fit except at 31.69 m
32.00-32.39 (105'-106'3")	0.30	max 10 cm, few fits but angular fragments probably could be fitted
32.39-33.07 (106'3"-108½')	0.62	max 18 cm, most fit
	4.20	
Box 5 33.07-39.32 m (108½'-129') H.S. Bostock C.L.N. 4202 (000746), Section 24		
33.07-33.38 (108½'-109½')	0.21	max 13 cm for single piece, all fit
33.38-34.06 (109½'-111'9")	0.69	max 13 cm, all fit
34.06-34.39 (111'9"-112'10")	0.56	max 13 cm, all fit
34.39-35.81 (112'10"-117½')	1.25	max 18 cm, all fit
35.81-36.88 (117½'-121')	0.86	max 14 cm, all fit
36.88-37.34 (121'-122½')	0.49	max 20 cm, all fit
37.34-38.56 (122½'-126½')	1.27	max 21 cm, all fit
38.56-39.01 (126½'-128')	0.23	max 10 cm, no fits - 9 and 10-cm pieces at top and bottom with rubble between
39.01-39.32 (128'-129')	0.17	max 11 cm, no fits - all rubble except one 11-cm piece
	5.73	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 6 39.32-48.77 m (129'-160'*)</u> H.S. Bostock C.L.N. 4203 (000747), Section 24		
39.32-39.52 (129'-129'8")	0.10	all rubble
39.52-40.23 (129'8"-132')	0.37	max 16 cm for single piece; 39.52-39.60 m - angular rubble, 39.60-39.89 m - all fit
40.23-41.30 (132'-135½')	0.62	max 25 cm, all fit
41.30-42.21 (135½'-138½')	0.55	max 10 cm, no fits
42.21-43.74 (138½'-143½')	0.05	max 5 cm, no fits, all rounded rubble
43.74-44.20 (143½'-145')	0.18	one 9 cm piece at bottom, rest rubble
44.20-44.42 (145'-145'9")	0.10	all rubble
44.42-44.60 (145'9"-146'4")	0.10	max 6 cm, no fits, mostly rubble
44.60-44.75 (146'4"-146'10")	0.14	max 8 cm, no fits, mostly rubble
44.75-44.91 (146'10"-147'4")	0.12	max 4 cm, no fits
44.91-45.06 (147'4"-147'10")	0.09	one 5 cm piece at bottom, rest rubble
45.06-45.26 (147'10"-148½')	0.14	max 6 cm at bottom; 45.06-45.10 m - rubble, rest fit
45.26-45.64 (148½'-149'9")	0.15	max 6 cm, no fits, all angular rubble
45.64-45.95 (149'9"-150'9")	0.15	all rounded rubble
45.95-46.48 (150'9"-152½')	0.15	max 5 cm, all rubble
46.48-46.94 (152½'-154')	0.15	one 10-cm piece at top, rest rubble
46.94-48.46 (154'-159')	0.11	all rounded rubble
48.46-48.77** (159'-160'**)	0.13	all rounded rubble

3.40

Boxes 7, 8, and 9 48.77-73.61 m (160'-241½') H.S. Bostock C.L.N. 4204 (000748), 4205 (000749), 4206 (000750), Section 24

These three boxes were discarded some time ago because core in them was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.

<u>Box 10 73.61-80.01 m (241½'-262½')</u> H.S. Bostock C.L.N. 4207 (000751), Section 24		
73.61-74.22 (241½'-243½')	0.57	previously split; recovery obtained by spreading remaining half along core box, max 10 cm for single piece
74.22-75.82 (243½'-248'9")	1.70	previously split, max 11 cm
75.82-76.20 (248'9"-250')	0.60	previously split, max 10 cm
76.20-77.77 (250'-255'2")	1.67	previously split, max 13 cm
77.77-79.37 (255'2"-260'5")	1.29	previously split, max 9 cm, 78.92-79.06 m - rubble

5.83

* Marked 161' on box but Box 7 is missing so footage cannot be checked.

** No marker at 160': end of Box 6 with Box 7 missing.

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 11 80.01-86.89 m (262½'-285'1")</u> H.S. Bostock C.L.N. 4208 (000752), Section 24		
79.37-80.98 (260'5"-265'8")	0.93	79.37-79.68 m - not split, rest previously split, max 11 cm for single piece
80.98-82.50 (265'8"-270'8")	1.24	previously split, max 13 cm
82.50-83.53 (270'8"-274'½")	0.83	previously split, max 7 cm
83.53-85.19 (274'½"-279½')	1.30	previously split, max 9 cm
85.19-86.18 (279½'-282'9")	1.16	previously split, max 10 cm
86.18-86.89 (282'9"-285'1")	0.81	previously split, max 11 cm
	6.27	
<u>Box 12 86.89-94.87 m (285'1"-311¼')</u> H.S. Bostock C.L.N. 4209 (000753), Section 24		
86.89-88.49 (285'1"-290'4")	1.66	previously split; recovery obtained by spreading remaining half along core box, max 10 cm for single piece
88.49-90.04 (290'4"-295'5")	1.12	previously split, max 12 cm, 89.38-89.61 m - rubble
90.04-91.64 (295'5"-300'8")	0.70	previously split, max 10 cm, 90.04-90.50 m - reasonable pieces, balance rubble
91.64-92.30 (300'8"-302'10")	0.40	previously split, all rubble
92.30-92.86 (302'10"-304'8")	0.40	previously split, 92.30-92.54 m - reasonable pieces, max 10 cm, rest rubble
92.86-94.03 (304'8"-308½')	0.53	previously split, max 6 cm, mostly rubble
	4.81	
<u>Box 13 94.87-100.58 m (311¼'-330')</u> H.S. Bostock C.L.N. 4210 (000754), Section 24		
94.03-95.55 (308½'-313½')	0.42	previously split: recovery obtained by spreading remaining half along core box, max 9 cm for single piece, almost all rubble
95.55-96.19 (313½'-315'7")	0.55	previously split, max 7 cm, some reasonable pieces, about half rubble
96.19-97.38 (315'7"-319½')	0.78	previously split, max 8 cm
97.38-97.84 (319½'-321')	0.35	previously split, max 7 cm, mostly rubble
97.84-98.15 (321'-322')	0.45	previously split, max 7 cm
98.15-98.45 (322'-323')	0.25	previously split, max 8 cm
98.45-99.06 (323'-325')	0.47	previously split, max 11 cm
99.06-99.82 (325'-327½')	0.50	previously split, max 9 cm
99.82-100.58 (327½'-330')	0.75	previously split, max 7 cm, mostly rubble
	4.52	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 14 100.58-108.51 m (330'-356') H.S. Bostock C.L.N. 4211 (000755), Section 24</u>		
100.58-101.04 (330'-331½')	0.35	previously split: recovery obtained by spreading remaining half along core box, max 9 cm for single piece, mostly rubble
101.04-102.03 (331½'-334'9")	1.01	previously split, max 10 cm
102.03-102.72 (334'9"-337')	0.72	previously split, max 10 cm, all reasonable pieces - no rubble
102.72-103.94 (337'-341')	0.45	previously split, max 8 cm
103.94-105.16 (341'-345')	0.40	previously split, max 8 cm
105.16-105.77 (345'-347')	0.38	previously split, max 6 cm, mostly rubble
105.77-106.38 (347'-349')	0.60	previously split, max 9 cm, mostly rubble
106.38-107.14 (349'-351½')	0.58	previously split, max 7 cm
107.14-108.51 (351½'-356')	0.30	previously split, max 8 cm
	4.79	
<u>Box 15 108.51-114.00 m (356'-374') H.S. Bostock C.L.N. 4212 (000756), Section 24</u>		
108.51-108.81 (356'-357')	0.30	previously split: recovery obtained by spreading remaining half along core box; max 7 cm for single piece
108.81-109.73 (357'-360')	0.66	previously split, max 7 cm
109.73-110.19 (360'-361½')	0.45	previously split, max 10 cm
110.19-110.72 (361½'-363¼')	0.40	previously split, max 8 cm
110.72-111.40 (363¼'-365½')	0.50	previously split, max 7 cm
111.40-112.47 (365½'-369')	1.08	previously split, max 14 cm
112.47-113.84 (369'-373½')	1.33	previously split, max 10 cm
	4.72	
<u>Box 16 114.00-122.99 m (374'-403½') H.S. Bostock C.L.N. 4213 (000757), Section 24</u>		
113.84-115.21 (373½'-378')	1.04	previously split: recovery obtained by spreading remaining half along core box, max 11 cm for single piece
115.21-115.67 (378'-379½')	0.40	previously split, max 6 cm
115.67-117.14 (379½'-384'4")	1.52	previously split, max 12 cm
117.14-118.26 (384'4"-388')	0.90	previously split, max 12 cm
118.26-119.18 (388'-391')	0.30	previously split, all rubble
119.18-119.49 (391'-392'½")	0.08	previously split, all rubble
119.49-120.40 (392'½"-395')	0.19	previously split, all rubble except one 8-cm piece
120.40-121.01 (395'-397')	0.13	previously split, all rubble except one 6-cm piece
121.01-121.46 (397'-398½')	0.21	previously split, all rubble
121.46-121.92 (398½'-400')	0.24	previously split, all rubble
121.92-122.48 (400'-401'10")	0.09	previously split, all rubble
122.48-122.99 (401'10"-403½')	0.24	previously split, max 6 cm, balance rubble
	5.34	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 17 122.99-128.63 m (403½'-422')</u> H.S. Bostock C.L.N. 4214 (000758), Section 24		
122.99-123.62 (403½'-405'7")	0.60	max 16 cm for single piece, most fit but lack of fits at 123.14 and 123.46 m suggests the possibility of uncertainty of order of core in box
123.62-124.97 (405'7"-410')	1.25	max 18 cm, all fit except at 124.22 m
124.97-125.43 (410'-411½')	0.45	max 14 cm, no fits
125.43-125.93 (411½'-413'2")	0.40	max 18 cm, few fits - rubble at top
125.93-127.20 (413'2"-417'4")	1.17	max 19 cm, all fit
127.20-128.27 (417'4"-420'10")	0.75	max 19 cm; 127.20-127.84 m - all fit, rubble below
	4.62	
<u>Box 18 128.63-133.81 m (422'-439')</u> H.S. Bostock C.L.N. 4215 (000759), Section 24		
128.27-129.08 (420'10"-423½')	0.50	max 7 cm for single piece, no fits, all rubble
129.08-129.84 (423½'-426')	0.60	max 10 cm, no fits, mostly angular rubble
129.84-131.06 (426'-430')	1.20	max 10 cm, no fits, angular rubble with many pieces to 7-8 cm
131.06-131.22 (430'-430½')	0.08	all rubble
131.22-131.98 (430½'-433')	0.75	max 16 cm, none fitted but relatively large angular fragments probably could be fitted
131.98-132.13 (433'-433½')	0.03	all rubble
132.13-132.44 (433½'-434½')	0.42	max 20 cm, all fit
132.44-132.94 (434½'-436'2")	0.27	max 6 cm, few fits
132.94-133.81 (436'2"-439')	0.90	max 8 cm, some fits in upper part; gabbroic lower part - all fit
	4.75	
<u>Box 19 133.81-139.83 m (439'-458'9")</u> H.S. Bostock C.L.N. 4216 (000760), Section 24		
133.81-134.42 (439'-441')	0.89	max 15 cm for single piece, rounded at top, rest fit except 134.55-134.70 m
134.42-135.51 (441'-444'7")	0.84	max 19 cm, 134.42-134.52 m - angular fragments with no fits, rest nearly all fit
135.51-136.25 (444'7"-447')	0.86	max 21 cm, angular pieces of good size mostly do not fit; 135.75-136.04 m - all fit
136.25-137.85 (447'-452¼')	1.57	max 17 cm, all fit except at 136.89 m
137.85-139.50 (452¼'-457'8")	1.57	max 31 cm, all fit
	5.73	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
Box 20 139.83-146.15 m (458'9"-479½')		H.S. Bostock C.L.N. 4217 (000761), Section 24
139.50-140.89 (457'8"-462¼')	1.42	32 cm for single piece, all fit
140.89-141.12 (462¼'-463')	0.30	max 12 cm, all fit
141.12-142.19 (463'-466½')	0.93	max 14 cm, 141.12-141.62 m - all fit, 141.62-141.81 m - angular pieces without fits, 141.81-142.02 m - all fit
142.19-142.95 (466½'-469')	0.70	max 16 cm, 142.19 m - ground end, 142.19-142.44 m - all fit, 142.44-142.48 m - angular fragments, 142.48-142.84 m - all fit, 142.84-142.89 m - angular fragments
142.95-143.71 (469'-471½')	0.45	max 13 cm, mostly angular fragments, only one 7-cm piece of complete core
143.71-144.32 (471½'-473½')	0.32	all angular fragments to max 5½ cm, no fits
144.32-144.81 (473½'-475'1")	0.32	max 20 cm, almost all fit except at top and bottom
144.81-145.62 (475'1"-477'9")	0.84	max 30 cm, 144.81-145.14 m - large angular fragments that probably can be fitted, below - 2 pieces that fit
145.62-146.15 (477'9"-479½')	0.39	max 16 cm, few fits - mostly angular fragments that could be fitted
	5.67	

Box 21 146.15-152.70 m (479½'-501')		H.S. Bostock C.L.N. 4218 (000762), Section 24
146.15-146.46 (479½'-480½')	0.20	max 14 cm for single piece, large angular fragments with no fits
146.46-147.37 (480½'-483½')	0.45	angular fragments 1-9 cm in size with no fits
147.37-148.03 (483½'-485'8")	0.20	angular fragments ½-10 cm in size with no fits
148.03-148.59 (485'8"-487½')	0.20	max 12 cm, angular fragments with no fits
148.59-149.05 (487½'-489')	0.35	max 18 cm, all fit
149.05-149.43 (489'-490¼')	0.20	max 6 cm, all rubble with no fits
149.43-150.27 (490¼'-493')	0.53	max 14 cm, angular fragments with few fits
150.27-150.95 (493'-495¼')	0.82	max 36 cm, 150.27-150.29 m - no fits, rest all fit
150.95-151.99 (495¼'-498'8")	1.12	max 25 cm, all fit
151.99-152.30 (498'8"-499'8")	0.30	max 8 cm, angular fragments with no fits
152.30-152.60 (499'8"-500'8")	0.28	max 7 cm, angular fragments with no fits
152.60-152.70 (500'8"-501')	0.18	max 7½ cm, angular fragments with no fits
	4.83	

124.81* (409½'*) 89.21

Recovery = $\frac{89.21}{124.81} \times 100 = 71.5\%*$ or $\frac{89.21}{149.65} \times 100 = 59.6\%$ if Boxes 7, 8, and 9 are included with zero recovery each.

* Excluding 24.84 m (81½') for core in missing Boxes 7, 8, and 9.

DRILL RUNS FOR DRILLHOLE 70-6

Run	Recovery (m)	Character
Box 1 5.18-13.87 m (17'-45½')	H.S. Bostock Core Library Number 4219 (000763), Section 24	

Note: Almost all core in Box 1 is a jumble of angular fragments with sections of only 30 cm or so fitting together. No effort was made to fit most of it together, so that core recoveries and their intervals are only rough estimates.

5.18-6.71	(17'-22')	0.71	maximum length 12 cm for single piece
6.71-7.92	(22'-26')	1.10	max 16 cm
7.92-9.14	(26'-30')	1.11	max 8 cm
9.14-10.52	(30'-34½')	0.94	max 10 cm
10.52-11.58	(34½'-38')	0.24	max 4 cm, mostly rounded rubble
11.58-12.50	(38'-41')	0.45	max 9 cm, no fits
12.50-13.26	(41'-43½')	0.53	max 9 cm, no fits
13.26-13.87	(43½'-45½')	0.52	max 12 cm, no fits
		5.60	

Box 2 13.87-20.73 m (45½'-68') H.S. Bostock C.L.N. 4220 (000764), Section 24

13.87-14.63	(45½'-48')	0.36	max 8 cm for single piece, fit in lowest 17 cm
14.63-15.39	(48'-50½')	0.70	max 6½ cm, no fits
15.39-16.15	(50½'-53')	0.70	max 9 cm, no fits
16.15-16.46	(53'-54')	0.22	max 7 cm, no fits
16.46-16.61	(54'-54½')	0.04	max 4 cm, no fits
16.61-17.07	(54½'-56')	0.45	max 8 cm, no fits
17.07-17.22	(56'-56½')	0.16	max 8 cm, no fits
17.22-18.75	(56½'-61½')	1.52	max 22 cm, most fit
18.75-20.42	(61½'-67')	1.52	max 16 cm, almost all fit
		5.67	

Box 3 20.73-28.04 m (68'-92') H.S. Bostock C.L.N. 4221 (000765), Section 24

20.42-21.95	(67'-72')	1.52	max 23 cm for single piece, most fit except for highest 25 cm
21.95-23.16	(72'-76')	1.09	max 15 cm, all fit
23.16-24.08	(76'-79')	0.77	max 12 cm, fit only in highest 20 cm
24.08-24.38	(79'-80')	0.29	max 11 cm, all fit
24.38-25.45	(80'-83½')	0.80	max 12 cm, very few fit
25.45-26.06	(83½'-85½')	0.44	max 10 cm, no fits
26.06-26.82	(85½'-88')	0.75	max 11 cm, 26.33-26.70 m - all fit; rest - rubble
26.82-28.04	(88'-92')	0.90	max 12 cm
		6.56	

DRILL RUNS FOR DRILLHOLE 70-6 (CONT.)

Run	Recovery (m)	Character
Box 4 28.04-34.44 m (92'-113') H.S. Bostock C.L.N. 4222 (000766), Section 24		
28.04-29.11 (92'-95½')	1.10	max 14 cm for single piece, rubble in top 18 cm, most fit below
29.11-32.16 (95½'-105½')	2.89	max 25 cm, 29.11-29.69 m - earthy rubble; rest fit
32.16-32.61 (105½'-107')	0.45	max 8 cm, few fit
32.61-34.14 (107'-112')	1.53	max 22 cm, about half fit
34.14-34.44 (112'-113'*)	0.30	max 12 cm, no fits
	6.27	
Box 5 34.44-42.21 m (113'-138½') H.S. Bostock C.L.N. - (000767), Section 24		
This box was discarded some time ago because the core in it was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.		
Box 6 42.21-51.51 m (138½'-169') H.S. Bostock C.L.N. 4223 (000768), Section 24		
42.21-43.59 (138½'-143')	0.08	max 5 cm for single piece, no fits
43.59-46.33 (143'-152')	0.94	max 9 cm, fit only in lowest 26 cm
46.33-47.85 (152'-157')	1.36	max 25 cm, all fit
47.85-48.16 (157'-158')	0.13	max 6½ cm, no fits
48.16-50.14 (158'-164½')	1.78	max 11 cm, 48.40-49.75 m - all fit; none elsewhere
50.14-50.44 (164½'-165½')	0.29	max 6 cm, most fit
50.44-50.60 (165½'-166')	0.27	max 11 cm, no fits
50.60-50.90 (166'-167')	0.25	max 10 cm, most fit
	5.10	
Box 7 51.51-58.37 m (169'-191½') H.S. Bostock C.L.N. 4224 (000769), Section 24		
50.90-51.97 (167'-170½')	1.06	max 17 cm for single piece, 50.90-51.20 m - all fit; rest fine angular and earthy rubble
51.97-52.27 (170½'-171½')	0.29	max 7½ cm, coarse angular pieces which could be fitted together
52.27-53.64 (171½'-176')	1.35	max 23 cm, all fit
53.64-55.32 (176'-181½')	1.63	max 19 cm, all fit
55.32-56.69 (181½'-186')	1.34	max 25 cm, all fit except 55.32-55.37 m, 55.60-55.73 m, 56.07-56.19 m, and 56.44-56.48 m
56.69-58.37 (186'-191½')	1.60	max 16 cm, all fit except 57.55-57.78 and 58.16-58.29 m
	7.27	

* No marker at 113': end of Box 4 with Box 5 missing.

DRILL RUNS FOR DRILLHOLE 70-6 (CONT.)

Run	Recovery (m)	Character
<u>Box 8 58.37-65.23 m (191½'-214')</u> H.S. Bostock C.L.N. 4225 (000770), Section 24		
58.37-59.74 (191½'-196')	1.39	max 32 cm for single piece, all fit except 58.37-58.45 m
59.74-61.26 (196'-201')	1.58	max 32 cm, all fit to 60.91 m; below angular fragments with no fits
61.26-62.94 (201'-206½')	1.60	max 30 cm, all fit; 61.26-61.43 m - angular fragments to 7 cm max
62.94-64.62 (206½'-212')	1.58	max 28 cm, all fit
64.62-66.14 (212'-217')	1.60	max 20 cm, all fit
	7.75	
<u>Box 9 65.23-72.24 m (214'-237')</u> H.S. Bostock C.L.N. 4226 (000771), Section 24		
66.14-67.67 (217'-222')	1.55	max 24 cm for single piece, all fit
67.67-69.19 (222'-227')	1.55	max 22 cm, all fit except 68.75-68.88 m - rubble of angular fragments
69.19-71.02 (227'-233')	1.60	max 18 cm, all fit except at 70.00 m; 69.19-69.41 m - angular pieces, 70.00-70.13 m - angular pieces, 5 cm max
71.02-72.69 (233'-237')	1.12	max 38 cm, 71.02-71.25 m, about half fit; rest - all fit
(237'-238½')	0.47	previously split, recovery obtained by spreading remaining half along core box, max 9 cm
	6.29	
<u>Box 10 72.24-79.25 m (237'-260')</u> H.S. Bostock C.L.N. 4227 (000772), Section 24		
72.69-74.22 (238½'-243½')	1.35	previously split, recovery obtained by spreading remaining half along core box, max 9 cm for single piece
74.22-74.68 (243½'-245')	0.70	previously split, max 7 cm
74.68-75.59 (245'-248')	0.40	previously split, max 9 cm
75.59-76.35 (248'-250½')	0.51	previously split, max 6 cm
76.35-77.11 (250½'-253')	0.76	previously split, max 14 cm
77.11-78.64 (253'-258')	1.50	previously split, max 19 cm
78.64-79.25 (258'-260'*)	0.60	previously split, max 9 cm
	5.82	

Boxes 11, 12 and 13 79.25-99.06 m (260'-325') H.S. Bostock C.L.N. 4228 (000773), 4229 (000774), 4230 (000775)

These three boxes were discarded some time ago because core in them was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.

* No marker at 260': end of Box 10 with Box 11 missing.

DRILL RUNS FOR DRILLHOLE 70-6 (CONT.)

Run		Recovery (m)	Character
<u>Box 14</u> 99.06-109.12 m (325'-358') H.S. Bostock C.L.N. 4233 (000777), Section 24			
This box is erroneously labelled as from drillhole 70-7.			
99.06-99.97	(325'-328')	0.90	previously split, recovery obtained by spreading remaining half along core box, max 11 cm for single piece
99.97-100.43	(328'-329½')	0.45	previously split, max 9 cm
100.43-101.19	(329½'-332')	0.65	previously split, max 12 cm
101.19-101.96	(332'-334½')	0.60	previously split, max 14 cm
101.96-102.11	(334½'-335')	0.03	previously split, all rubble
102.11-103.02	(335'-338'))		
103.02-103.78	(338'-340½'))	0.21	previously split, all rubble
103.78-104.24	(340½'-342'))		
104.24-104.70	(342'-343½')	0.25	previously split, all rubble
104.70-105.00	(343½'-344½')	0.18	previously split, max 8 cm
105.00-105.16	(344½'-345')	0.15	previously split, all rubble
105.16-105.77	(345'-347')	0.06	previously split, all rubble
105.77-106.07	(347'-348')	0.12	previously split, all rubble
106.07-106.38	(348'-349')	0.13	previously split, all rubble
106.38-106.98	(349'-351')	0.13	previously split, all rubble
106.98-108.05	(351'-354½')	0.92	previously split, max 15 cm
108.05-109.12	(354½'-358'**))	0.95	previously split, max 13 cm
		5.73	

Box 15 H.S. Bostock, C.L.N. 4232

Box 15 was discarded some time ago because core in it was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.

Boxes 16 and 17, if they ever existed, were not assigned numbers.

76.36*** 250½'***) 62.06

Recovery to bottom of Box 14 at 109.12 m = $\frac{62.06}{76.36} \times 100 = 81.3\%***$ or

$\frac{62.06}{103.94} \times 100 = 59.7\%$ if Boxes 5, 11, 12 and 13 are included with zero recovery each.

* No marker at 325': beginning of Box 14 with Box 13 missing.

** No marker at 358': end of Box 14 with Box 15 missing.

*** Excluding 27.58 m (90½') for core in missing Boxes 5, 11, 12, and 13.



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CERTIFICATE OF ANALYSIS

TO : HALFERDAHL & ASSOC. LTD.,
DEPT. 18,
10509 - 81ST AVE.,
EDMONTON, ALTA.
T6E 1X7

CERT. # : A8316869-001-A
INVOICE # : I8316869
DATE : 22-DEC-83
P.O. # : NONE

Sample description	Prep code	Cu ppm	Mo ppm	Pb ppm	Zn ppm		
4291	207	291	20	5	35	--	--
4292	207	256	16	7	30	--	--
4293	207	950	16	10	31	--	--
4294	207	480	26	5	32	--	--
4295	207	350	21	12	35	--	--
4296	207	780	40	12	45	--	--



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EDMONTON, ALTA.
T6E 1X7

CERT. # : A8316869-001-A
INVOICE # : 18316869
DATE : 22-DEC-83
P.O. # : NONE

Sample description	Prep code	Ag FA oz/T	Au FA oz/T				
4291	207	0.05	0.003	--	--	--	--
4292	207	0.08	<0.003	--	--	--	--
4293	207	0.04	0.008	--	--	--	--
4294	207	0.08	0.010	--	--	--	--
4295	207	0.06	0.003	--	--	--	--
4296	207	0.10	0.003	--	--	--	--



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T6E 1X7

CERT. # : A8316948-001-A
INVOICE # : I8316948
DATE : 3-JAN-84
P.O. # : NONE

Sample description	Prep code	Cu ppm	Mo ppm	Pb ppm	Zn ppm		
4401	207	780	49	9	34	--	--



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T6E 1X7

CERT. # : A8316948-001-A
INVOICE # : I8316948
DATE : 3-JAN-84
P.O. # : NONE

Sample description	Prep code	Ag FA oz/T	Au FA oz/T				
4401	207	0.12	<0.003	--	--	--	--



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T6E 1X7

CERT. # : A8316868-001-A
INVOICE # : I8316868
DATE : 5-JAN-84
P.O. # : NONE

Sample	Prep	Cu	Mo	Pb	Zn	Au	NAA	
description	code	ppm	ppm	ppm	ppm	ppb		
3947	205	245	18	16	38	115		--
3948	205	230	28	10	49	60		--
3949	205	295	30	5	53	55		--
3950	205	208	25	1	41	45		--
4126	205	210	10	1	49	66		--
4127	205	175	21	1	45	59		--
4128	205	153	61	1	42	13		--
4129	205	95	21	1	36	14		--
4130	205	163	24	1	33	18		--
4131	205	153	12	1	40	20		--
4132	205	148	19	1	31	14		--
4133	205	120	13	2	27	25		--
4134	205	126	23	1	26	40		--
4135	205	172	21	2	29	27		--
4136	205	515	43	1	34	235		--
4137	205	153	30	1	27	16		--
4138	205	275	59	1	29	48		--
4139	205	780	12	2	70	220		--
4140	205	155	45	4	53	105		--
4141	205	112	85	1	26	30		--
4142	205	95	85	1	22	31		--
4143	205	153	34	1	33	34		--
4144	205	390	51	1	50	65		--
4145	205	410	175	1	52	235		--
4146	205	298	115	1	43	47		--
4147	205	313	235	4	40	31		--
4148	205	285	88	1	37	50		--
4149	205	60	16	1	30	25		--
4150	205	325	39	6	38	25		--
4182	205	260	45	1	33	43		--
4183	205	200	64	1	45	72		--
4184	205	1000	77	1	45	72		--
4185	205	1150	92	1	50	265		--
4186	205	225	16	1	38	56		--
4187	205	173	7	3	37	56		--
4188	205	130	5	8	42	2140		--
4189	205	22	7	6	39	2745		--
4190	205	18	8	5	36	575		--
4191	205	18	7	5	39	195		--
4192	205	37	14	4	30	150		--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : HALFERDAHL & ASSOC. LTD.,
DEPT. 18,
10509 - 81ST AVE.,
EDMONTON, ALTA.
T6E 1X7

CERT. # : A8316868-002-A
INVOICE # : 18316868
DATE : 5-JAN-84
P.O. # : NONE

Sample	Prep	Cu	Mo	Pb	Zn	Au	NAA
description	code	ppm	ppm	ppm	ppm	ppb	
4193	205	45	18	3	36	35	--
4194	205	470	40	1	30	200	--
4195	205	395	55	1	35	205	--
4196	205	555	47	1	34	35	--
4197	205	530	220	1	58	220	--
4198	205	98	24	1	25	37	--
4199	205	200	28	1	29	95	--
4200	205	320	21	1	65	25	--
4285	205	2650	67	1	130	175	--
4286	205	660	65	1	39	45	--
4287	205	750	67	1	36	120	--
4288	205	770	54	1	70	90	--
4289	205	560	19	1	100	53	--
4290	205	465	32	1	80	35	--
4297	205	850	55	1	44	95	--
4298	205	425	27	1	43	20	--
4299	205	435	32	1	46	23	--



MEMBER
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212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : HALFERDAHL & ASSOC. LTD.,
DEPT. 18,
10509 - 81ST AVE.,
EDMONTON, ALTA.
T6E 1X7

CERT. # : A8316947-001-A
INVOICE # : 18316947
DATE : 12-JAN-84
P.O. # : NONE

Sample description	Prep code	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ni ppm	Au NAA ppb
4300	205	2280	33	1	104	242	25
4308	205	200	20	1	34	48	75
4309	205	92	21	1	20	33	24
4310	205	103	17	1	26	30	38
4311	205	155	74	1	26	31	33
4312	205	150	41	1	23	36	29
4313	205	160	21	1	23	30	33
4314	205	135	21	1	22	30	25
4315	205	132	37	12	110	20	43
4316	205	123	36	1	20	25	41
4317	205	100	28	1	24	32	40
4318	205	110	37	1	27	35	80
4319	205	142	30	1	27	33	100
4320	205	235	18	1	22	40	29
4321	205	360	20	1	19	42	85
4322	205	272	23	1	22	46	110
4323	205	1900	44	1	42	108	510
4324	205	220	13	1	21	42	41
4325	205	178	10	1	18	40	26
4351	205	232	15	17	31	41	185
4352	205	210	10	1	19	30	54
4353	205	280	10	1	29	51	170
4354	205	218	27	1	23	88	23
4355	205	325	31	1	19	106	35
4356	205	325	10	1	22	135	32
4357	205	203	8	1	22	95	16
4358	205	190	8	1	20	98	11
4359	205	192	14	1	20	80	75
4360	205	435	19	1	25	125	33
4361	205	200	14	1	25	115	20
4362	205	148	28	1	26	95	105
4363	205	155	4	1	21	107	24
4364	205	100	7	1	22	120	14
4365	205	203	20	1	24	114	18
4366	205	335	14	1	22	90	45
4367	205	880	28	1	25	137	100
4368	205	705	180	1	23	110	100
4369	205	520	24	14	25	84	130
4370	205	380	51	1	25	100	215
4371	205	175	18	1	19	70	45



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Heidi Bickler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : HALFERDAHL & ASSOC. LTD.,
DEPT. 18,
10509 - 81ST AVE.,
EDMONTON, ALTA.
T6E 1X7

CERT. # : A8316947-002-A
INVOICE # : I8316947
DATE : 12-JAN-84
P.O. # : NONE

Sample description	Prep code	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ni ppm	Au NAA ppb
4372	205	217	18	1	20	94	55
4373	205	310	115	1	27	87	360
4374	205	1530	53	1	28	97	>10000
4375	205	282	14	1	24	88	145
4376	205	238	15	1	29	97	41
4377	205	3300	29	1	28	100	230
4378	205	33	4	5	42	12	42
4379	205	22	4	5	41	17	<1
4380	205	25	4	2	122	48	3
4381	205	870	2	8	210	15	37
4382	205	20	2	7	218	6	32
4383	205	33	1	5	213	7	14
4384	205	31	2	8	670	7	7
4385	205	8	1	4	32	7	40
4386	205	32	1	5	210	6	16
4387	205	20	4	17	2050	10	22
4388	205	64	16	4	263	37	10
4389	205	87	9	8	100	34	17
4390	205	680	15	4	73	26	13
4391	205	445	7	2	120	96	17
4392	205	133	3	4	60	74	16
4393	205	150	3	9	90	74	9
4394	205	98	2	7	52	85	5
4395	205	120	8	20	67	83	4
4396	205	157	9	1	53	54	5
4397	205	303	6	3	68	68	7
4398	205	547	8	28	102	69	15
4399	205	278	5	34	145	80	17
4400	205	360	5	14	82	74	9
4402	205	293	39	1	24	91	30
4403	205	465	38	1	22	76	31
4404	205	205	21	1	23	56	24
4405	205	270	20	1	30	54	42
4406	205	388	33	4	20	9	42



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO : HALFERDAHL & ASSOC. LTD.,
DEPT. 18,
10509 - 81ST AVE.,
EDMONTON, ALTA.
T6E 1X7

CERT. # : A8410121-001-A
INVOICE # : I8410121
DATE : 13-JAN-84
P.O. # : NONE

Sample description	Prep code	Au FA oz/T					
4374	214	0.796	--	--	--	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

.....
Registered Assayer, Province of British Columbia

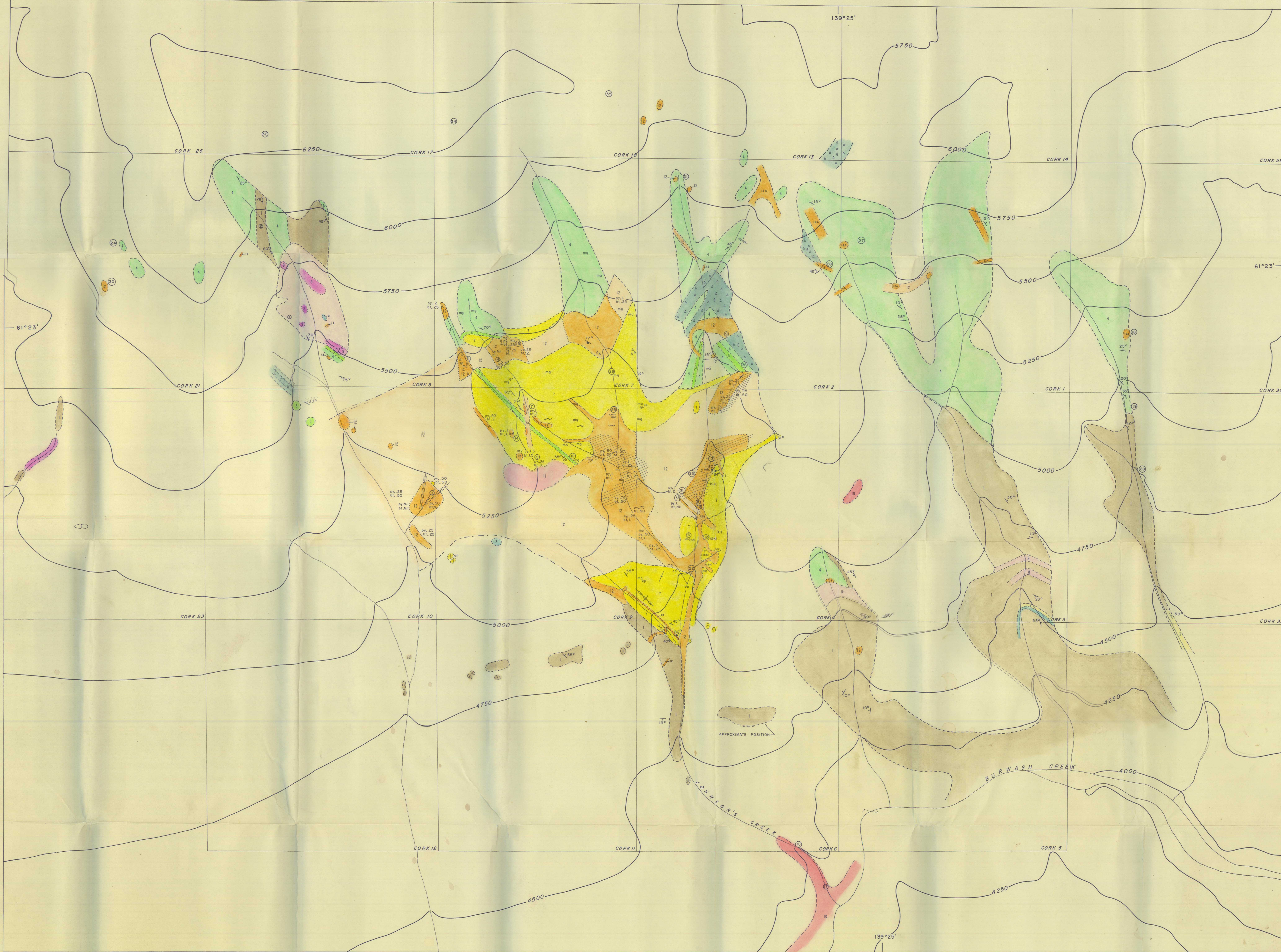
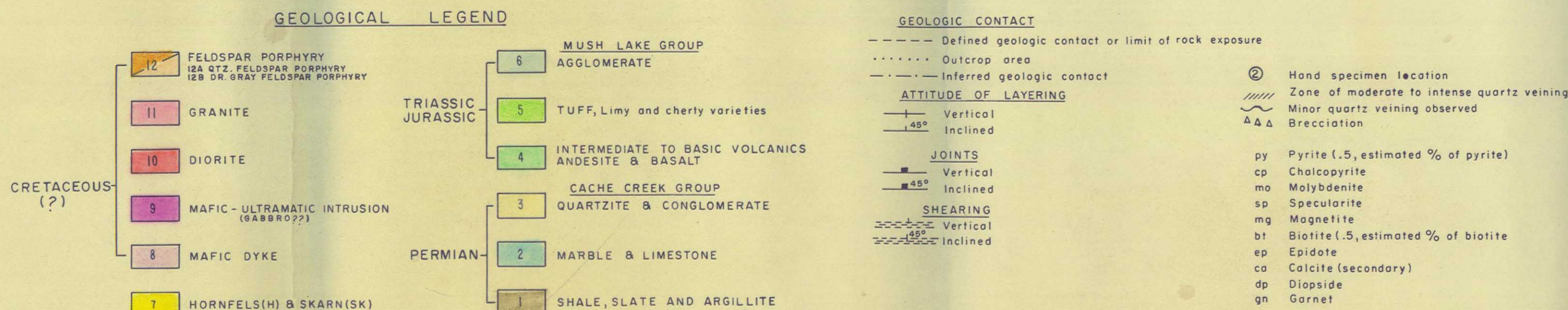


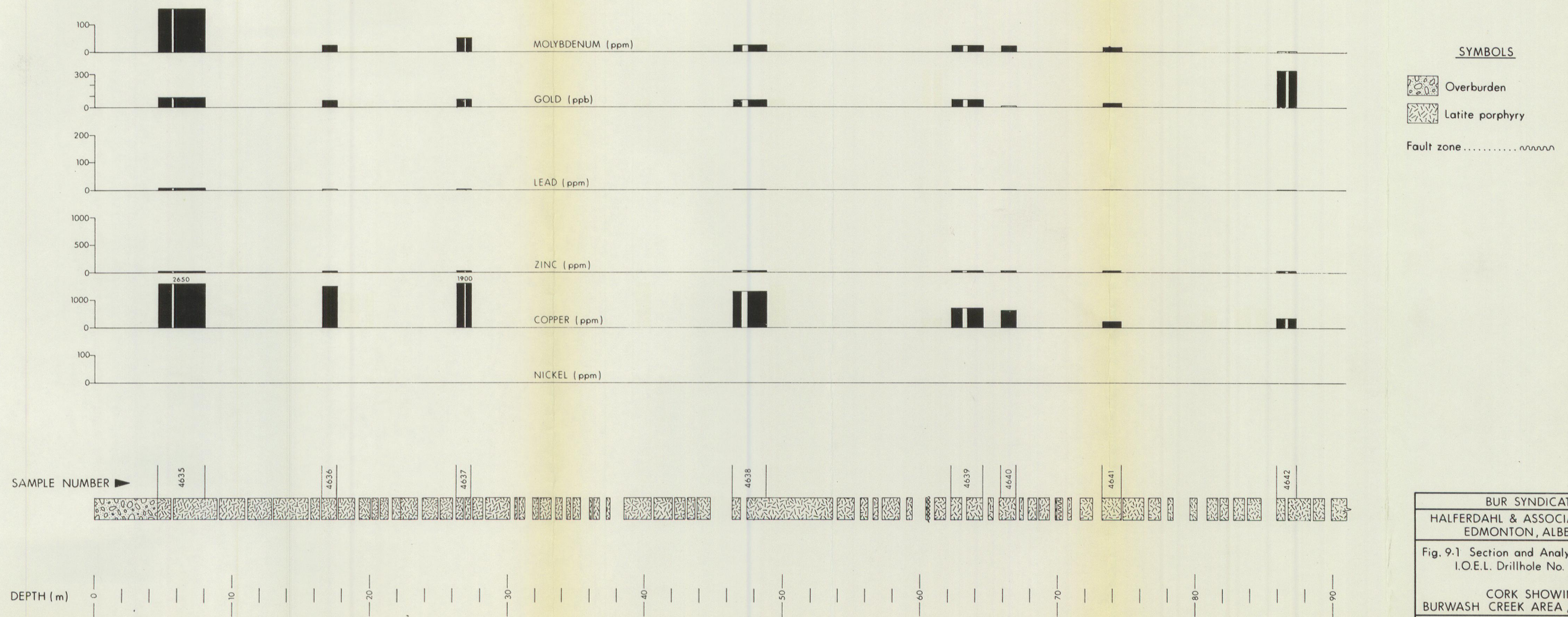
FIGURE 1

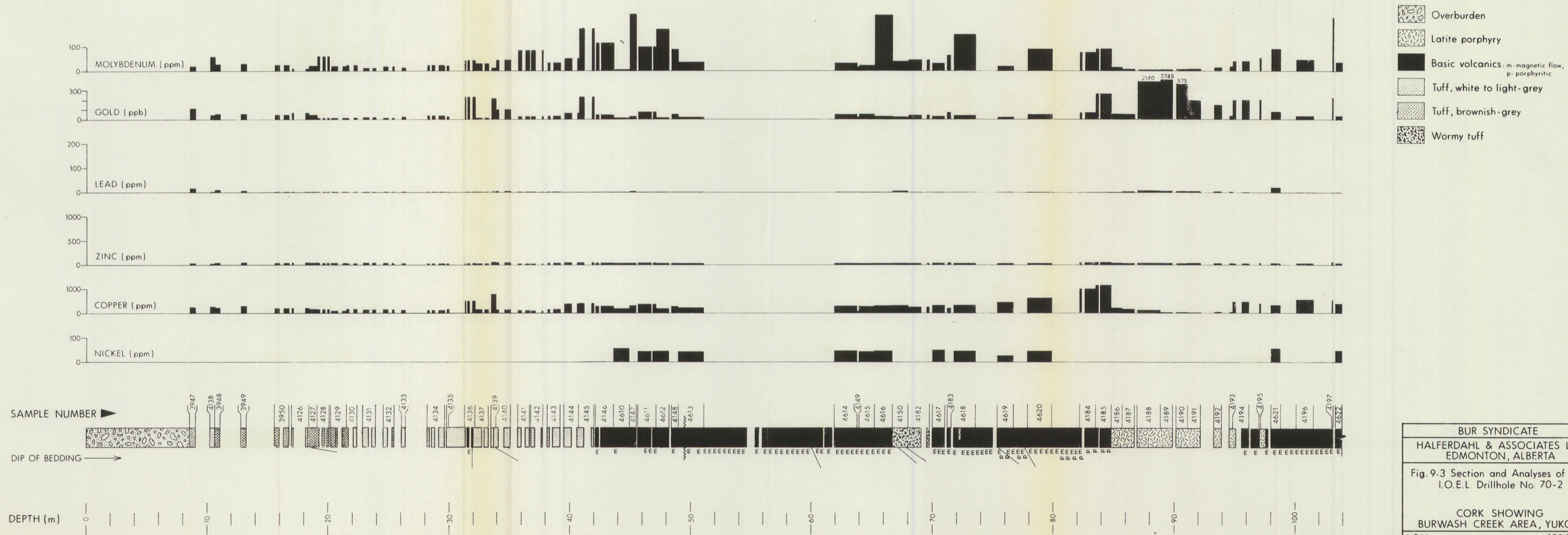


**CORK CLAIMS GROUP
WHITEHORSE MINING DIVISION
GEOLOGICAL MAP**

(APPROXIMATELY 139°25' LONG, 61°23' LAT.)
SCALE 1" = 200'

—4250— SURFACE ELEVATION CONTOURS IN FEET



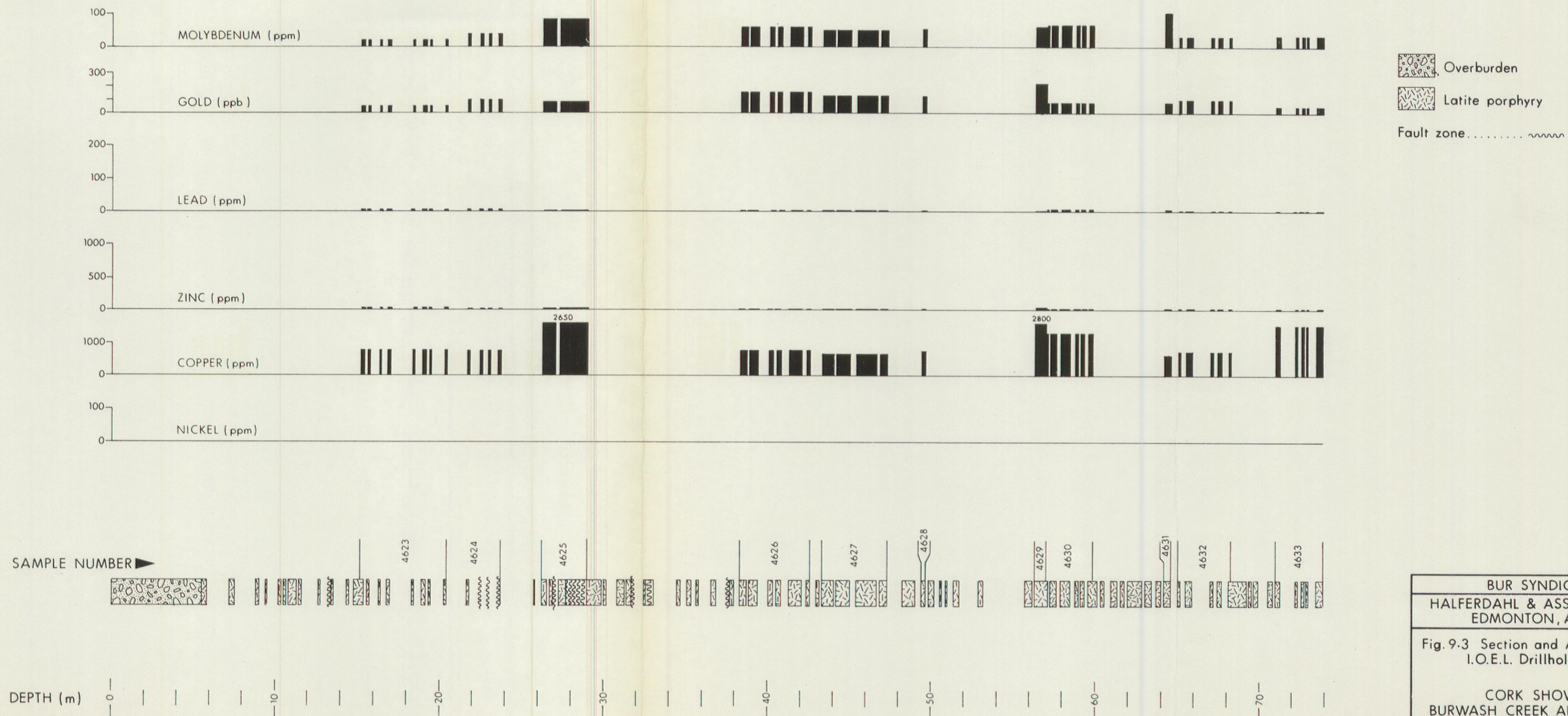


BUR SYNDICATE
 HALFERDAHL & ASSOCIATES LTD.
 EDMONTON, ALBERTA

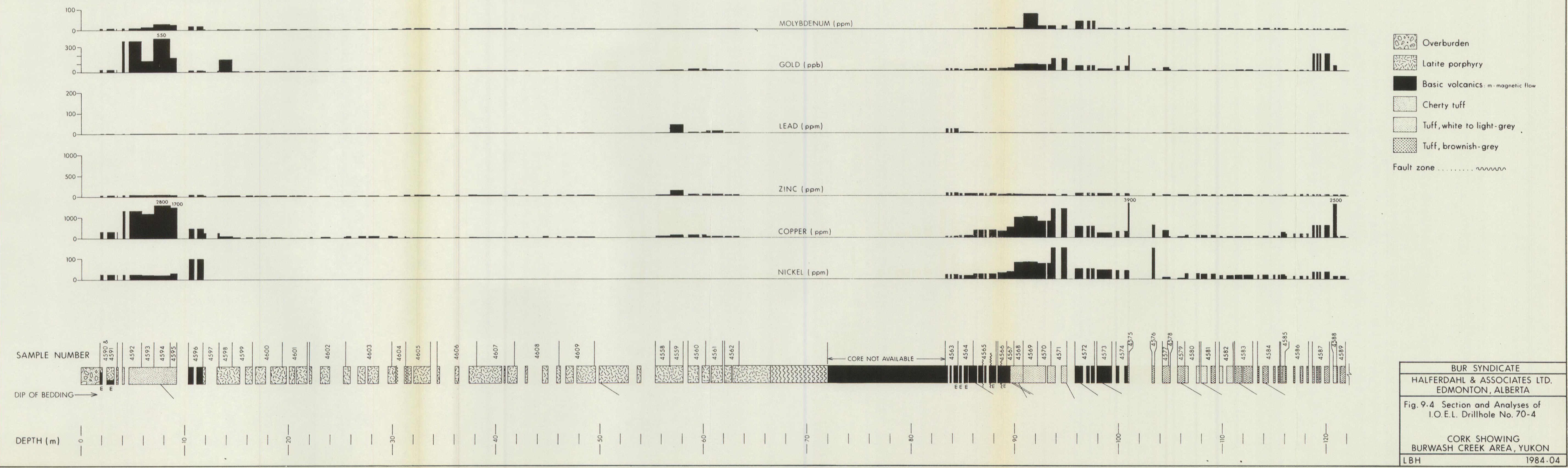
Fig. 9.3 Section and Analyses of
 I.O.E.L. Drillhole No. 70-2

CORK SHOWING
 BURWASH CREEK AREA, YUKON

LBH 1984.04



BUR SYNDICATE	
HALFERDAHL & ASSOCIATES LTD. EDMONTON, ALBERTA	
Fig. 9.3 Section and Analyses of I.O.E.L. Drillhole No. 70-3	
CORK SHOWING BURWASH CREEK AREA, YUKON	
LBH	1984.04

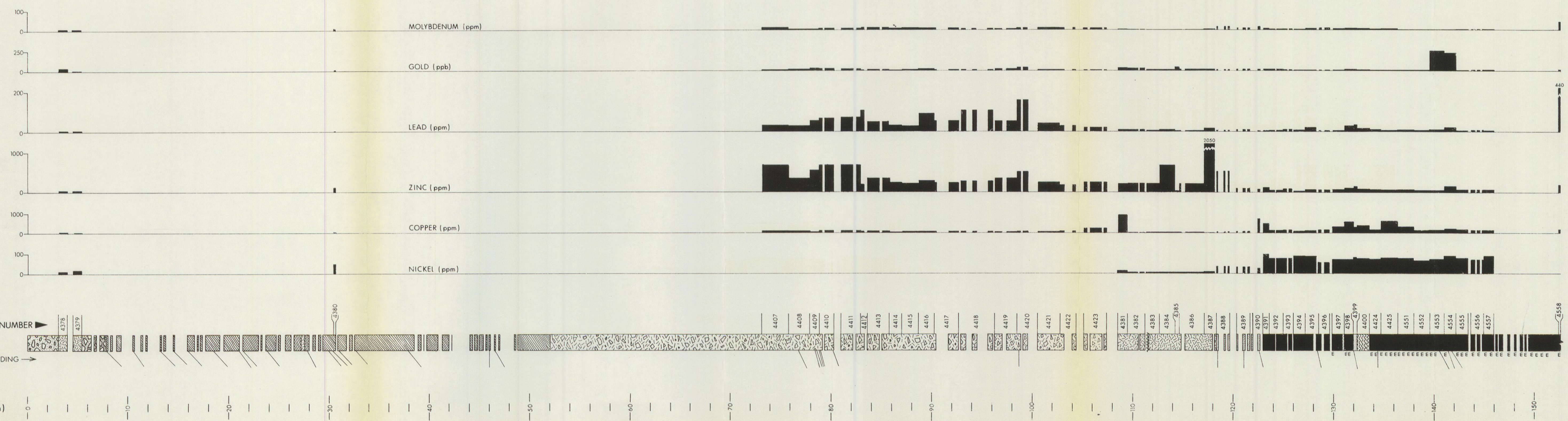


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EDMONTON, ALBERTA

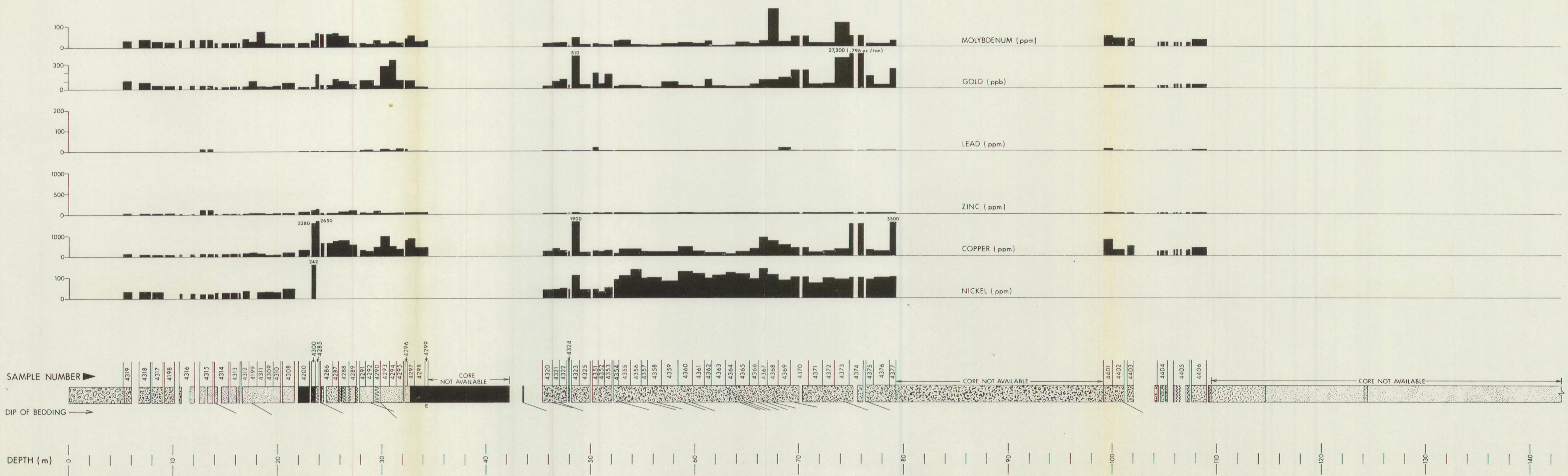
Fig. 9.4 Section and Analyses of
I.O.E.L. Drillhole No. 70-4

CORK SHOWING
BURWASH CREEK AREA, YUKON

LBH 1984.04



- Overburden
- Latite porphyry
- Latite porphyry with xenoliths
- Chert and Limestone
- Cherty tuff
- Conglomerate
- Basic volcanics: m - magnetic flow
- Fault zone



- Overburden
- Latite porphyry
- Basic volcanics - m - magnetic flow
- Cherty tuff
- Wormy tuff
- Fault zone