

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 <sub>2</sub> 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 <sub>2</sub> and other sulfides
		SAMPLE 3001 (Imperial Oil Enterprises Ltd.) 4.57-7.62 m
		3.05 m Cu 0.21%, MoS <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub>
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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 74.05-74.65 m medium-light-grey matrix, sparse chalcopyrite, minor disseminated pyrite in lower part, minor MoS <sub>2</sub> 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 <sub>2</sub> 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 $\frac{1}{2}$ 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 <sub>2</sub> 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 $\frac{1}{2}$ -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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 0.001%
	90.77-90.98 m	0.21 m lost core
90.98	-	End of hole