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

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

Elevation: 1690 m ± 5 (from 1:5000 topo map)
Drilled: August 1970
Drilled by Arctic Drilling Ltd.
Relogged by L.B. Halferdahl 1983 12

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

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	Overburden
3.05-5.38	2.33	Latite porphyry, 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	Conglomerate, 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 ¼ 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	Chert and limestone sequence
		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 interribboned 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	Latite porphyry, 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	Chert and limestone sequence
		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
		20.30-28.60 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^{o} 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^{o} 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%, MoS_2 0.002%
		SAMPLE 3079 (IOE Ltd.) 58.52-61.57 m 3.05 m Cu 0.03%, MoS_2 0.002%
		SAMPLE 3080 (IOE Ltd.) 61.57-64.62 m 3.05 m Cu 0.03%, MoS_2 0.002%
		SAMPLE 3081 (IOE Ltd.) 64.62-67.67 m 3.05 m Cu 0.03%, MoS_2 0.002%
		SAMPLE 3082 (IOE Ltd.) 67.67-70.71 m 3.04 m Cu 0.03%, MoS_2 0.003%
		SAMPLE 3083 (IOE Ltd.) 70.71-73.76 m 3.05 m Cu 0.03%, MoS_2 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 22° 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	Latite porphyry, 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 ¼- to ½-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	Fault?, 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	Latite porphyry, 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 chalcopyrite?) 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 chalcopyrite? 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 chalcopyrite in aggregates to 5 mm not individual crystals

SAMPLE 3097 (IOE Ltd.) 111.56-114.60 m 3.04 m Cu 0.03%, MoS_2 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 (MoS_2?) coating, pyrite and chalcopyrite?

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 chalcopyrite?

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%, MoS_2 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	Cherty tuff
		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	Basic volcanic rock, dark-grey to lighter-greenish-grey in irregular areas, very fine grained, 2-3% pyrite along fractures and disseminated
		123.01-123.59 m chalcopyrite 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^{o} 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	Cherty tuff, 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	Basic volcanic rock, 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 10°-12° 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	Tuff and basic volcanic rock
		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	Fault gouge
		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	Basic volcanic rock, dark-grey grain size variable, interlocking texture, magnetic
		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 ¼-½ 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 1½ 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 chalcopyrite
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