DIAMOND DRILL LOG
Hecla Mining Co, of Canada Ltd.

J-1 to J-4-70

1970

105-K-5,6

DD-169


CLAIM SHEETS 105K-5&6
DD-169
HECLA MINING CO. OF CANADA LTD
DRILL HOLE LOCATIONS
091232
J-4-70 -90° 506'
J-3-70 -90° 999'
J-2-70 -45° 997'
J-1-70 -90° 506'
CORE RACKS
JOE
RUST
FUBAR
HILL
LEE
CROWN ROSE
HECK
CREEK
DA
JO

DD-169

RILL HOLE RECORD

CLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar	−90°	
506'		

PROPERTY Hill Rust.
Location Faro, Y.T.
Elevation 4,575' Theoretical Overburden.
Coordinates 13+00 N
L.132 W E

Length 506'
Hor. Comp. / Vert. Comp.
Bearing
Begun 2/6/70 / Completed 20/6/70
Core size BQ / Recovery 97.5 %

HOLE No. F-1-70
Sheet 1 of 4
Logged by G.D. House.
Sampled by J. Morris.

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION
0	14'				Overburden.
14'	17'				Casing.
27'	27'	10'	4.2'		Amphibolite, banded, green. brown, 3% sulfides - pyrrhotite, banding at 55-60° to core axis
27'	36'	9'	6.9'		heavily oxidized calcareous quartzite, contorted banding, sericitic joints and shear planes at 30° to core axis. 32'-34' - breccia, quartz cement.
36'	61'	25'	29.2'		Skarn, phyllite bands, skarn zones, banding at 70° to core axis, contorted tight folding, wispy phyllite biotite bands, recemented shear zones, slightly calcareous, sulfides 5-10%. chiefly pyrrhotite with minor sphalerite, galena and chalcopyrite. 37.5', 49.5'-50', 52.2', 54.4', 55.5', 56', 56.3', 56.7', 57', 60.5'- galena and sphalerite in skarn, garnet-idocrase skarn, disseminated crystals. 45.6-46'- shear zone, 80° to core axis, oxidized joints at 45° to core axis.
61'	78'	17'	16'		Skarn, phyllite bands, contorted banding and folded planes at 70° to core axis, broken ground oxidized and altered, calcareous, sulfides, alteration. 72'-73'- sphalerite crystals in calcareous skarn
78'	118'	40'	37.5'		Skarn, decreased phyllite content, finely banded with contorted banding, tuffaceous bands, minor sulfides, less than 3%, generally light green colouration, wispy phyllite decreasing. 92'-93'- altered chlorite amphibolite, greenstone band. 93'-96'- tuffaceous band, slumped, minor pyrite. 113'- qtz. cemented shear at 40° to core axes., purplish colour.
118'	136'	18'	17.5'		Phyllitic calcareous quartzite, banded, banding at 60° to core axis, sulfides to ~ 5%, alteration, shearing 126'-127' - slip, cemented calcite, at 25° to core axis. 133'-136' - contorted banding, folding, brecciated with alteration, pyrite, kaolin - shears at 25° to core axis. red hematitic, iron oxides.
136'	144.5'	8.5'	8.0'		Greenstone agglomerate, brecciated and altered, increased sulfides as alteration products. 138'-138.5'- carbonate cemented breccia, kaolinised ~20% sulfides-pyrite 138.5'- shear, clay gouge, at 25° to core axis. 141'-143'- calcite veins, slips at 20° to core axis, kaolin alteration. 143'-144.5'- kaolinised, brecciated with quartz carbonate veining at 30° to core axis, pyrite veins, iron oxides.

SAMPLES No.	From	To	Width	ASSAYS Pb%	Zn%	Cu%	Ag oz/t
52001	20'	30'	10'				
52002	30'	40'	10'				
52003	40'	50'	10'				
52009	50'	60'	10'				
52005	60'	70'	10'				
52006	70'	80'	10'				
52007	80'	90'	10'				
52008	90'	100'	10'				
52009	100'	110'	10'				
52010	110'	120'	10'				
52011	120'	130'	10'				
52012	130'	140'	10'				
52013	140'	150'	10'				

DD-169

RILL HOLE RECORD

CLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar	− 90°	
506'		

PROPERTY Hill Rust.
Location Faro Y.T.
Elevation 4,575' Theoretical, Overburden.
Coordinates 13+00 N
L.132W E

Length 506'
Hor. Comp. / Vert. Comp.
Bearing
Begun 2/6/70 / Completed 20/6/70
Core size BQ / Recovery 97.5 %

HOLE No. F-1-70
Sheet 1 of 4
Logged by G.D. House.
Sampled by J. Morris.

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION
0	14'				Overburden.
14'	17'				Casing.
27'	27'	10'	4.2'		Amphibolite, banded, green. brown, 3% sulfides - pyrrhotite, banding at 55-60° to core axis
27'	36'	9'	6.9'		Heavily oxidized calcareous quartzite, contorted banding, series joints and shear planes at 30° to core axis. 32'-34' - breccia, quartz cement
36'	61'	25'	24.2'		Skarn, phyllite bands, skarn zones, banding at 70° to core axis, contorted tight folding, wispy phyllite biotite bands, recemented shear zones, slightly calcareous, sulfides 5-10%. chiefly pyrrhotite with minor sphalerite, galena and chalcopyrite. 37.5', 49.5'-50', 52.2', 54.4', 55.5', 56', 56.3', 56.7', 57', 60.5'- galena and sphalerite in skarn, garnet-idocrase skarn, disseminated crystals. 45.6-46'- shear zone, 80° to core axis, oxidized joints at 45° to core axis,
61'	78'	17'	16'		Skarn, phyllite bands, contorted banding and folded planes at 70° to core axis, broken ground oxidized and altered, calcareous, sulfides, alteration. 72'-73'- sphalerite crystals in calcareous skarn.
78'	118'	40'	37.5'		Skarn, decreased phyllite content, finely banded with contorted banding, tuffaceous bands, minor sulfides, less than 3%, generally light green colouration, wispy phyllite decreasing. 92'-93'- altered chlorite amphibolite, greenstone band. 93'-96'- tuffaceous band, slumped, minor pyrite. 113'- qtz. cemented shear at 40° to core axis., purplish colour.
118'	136'	18'	17.5'		Phyllitic calcareous quartzite, banded, banding at 60° to core axis, sulfides to ~5%, alteration, shearing 126'-127' - slip, cemented calcite, at 25° to core axis. 133'-136' - contorted banding, folding, brecciated with alteration, pyrite, kaolin - shears at 25° to core axis. red hematitic, iron oxides.
136'	144.5'	8.5'	8.0'		Greenstone agglomerate, brecciated and altered, increased sulfides as alteration products. 138'-138.5' - carbonate cemented breccia, kaolinised ~20% sulfides-pyrite 138.5'- shear, clay gouge, at 25° to core axis. 141'-143' - calcite veins, slips at 20° to core axis, kaolin alteration. 143'-144.5'- kaolinised, brecciated with quartz carbonate veining at 30° to core axis, pyrite veins, iron oxides.

SAMPLES No.	From	To	Width	ASSAYS Pb%	Zn%	Cu%	Ag oz/t
52001	20'	30'	10'				
52002	30'	40'	10'				
52003	40'	50'	10'				
52004	50'	60'	10'				
52005	60'	70'	10'				
52006	70'	80'	10'				
52007	80'	90'	10'				
52008	90'	100'	10'				
52009	100'	110'	10'				
52010	110'	120'	10'				
52011	120'	130'	10'				
52012	130'	140'	10'				
52013	140'	150'	10'				

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

DD-169

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates N
E

Length
Hor. Comp. / Vert. Comp.
Bearing
Begun / Completed
Core size / Recovery %

HOLE NO. J-1-70
Sheet 2 of 4
Logged by
Sampled by

FOOTAGE From	To	RECOV'Y Run	Core	GRAPHIC	DESCRIPTION
155'	170'	15'	14.7'		Phyllitic quartzite, banded dark grey green, banding at 30°-60° to core axis, relatively uncontorted, disseminated sulfides, pyrrhotite, pyrite and chalcopyrite in veins and blebs upto 40%, generally 20-25%. minor shear bands, garnet. dense rock type.
170'	207.5'	37'	36'		Phyllitic quartzite, dark grey green brown banded, bands at 40°-50° to core axis, calcareous in part, open folds, shear zones, 20-25% sulfides, garnet skarn bands. 170'-172' - shear, carbonate, kaolin, 30% pyrite/chalcopyrite. 176'-181' - slip/shear, 5-10° to core axis, broken ground, sulfides, pyrite, pyrrhotite, chalcopyrite, galena & sphalerite in minor amounts. 190'-190.5' - shear, at 30° to core axis, crystalline idocrase, pyrrhotite to 10%. 196'-197' - breccia zone, recemented quartz, skarn, pyrrhotite with pyrite and chalcopyrite to 40%.
207.5'	230.5'	22.5'	22'		Intrusive, dark green crystalline quartz diorite, chloritic alteration, part kaolinised sulfides to 5% associated with veins. 207.5'-210' marginal contact zone, contact at 55°-60° to core axis, finer grained siliceous. 218'-223' kaolinisation associated calcite veins, at 30° to core axis, minor pyrrhotite. 229.5'-230.5' - contact zone at 40° to core axis, siliceous idocrase garnet skarn bands with minor pyrrhotite, pyrite and chalcopyrite.
230.5'	260'	29.5'	27.4'		dark green brown Phyllitic Quartzite, thin banded, 70:30 phyllite: quartzose bands, at 45° to 50° to core axis, some broken ground, sulfides, intrusive sills. garnet skarn bands. 238'-231.5' - garnet bands, associated ~5% sulfides, pyrrhotite and chalcopyrite. 237.5'-238' - intrusive quartz diorite sill, highly altered, parallels banding 50% sulfides in 1" vein at 50° to core axis. 253'-258'. contorted banding, thin fold axes at 50° to core axis, sulfides to 10% in contorted areas where idocrase/chlorite alteration occurs
260'	269'	4'	4'		Contorted skarn, light green pink qtz veining, contact at 30° to core axis, lower contact at 70° to core axis, skarn bands contorted on both sides, idocrase - garnet - quartz, vein sulfides.
269'	276'	12'	11.5'		dark brown Phyllitic Quartzite, banding at 55° to core axis, 80:20 phyllite to quartzose layers, minor sulfides. 273'-274' - quartz carbonate cemented shear zone, contorted banding at 50° to core axis, minor <5% sulfides. schistose foliation in phyllite layers, subparallel to banding.

SAMPLES No.	From	To	Width	ASSAYS Pb%	Zn%	Cu%	Ag g/ton
52014	150'	160'	10'				
52015	160'	170'	10'				
52016	170'	180'	10'				
52017	180'	190'	10'				
52018	190'	200'	10'				
52019	200'	210'	10'				
52020	210'	220'	10'				
52021	220'	230'	10'				
52022	230'	240'	10'				
52023	240'	250'	10'				
52024	250'	260'	10'				
52025	260'	270'	10'				
52026	270'	280'	10'				
52027	280'	290'	10'				

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates N
E

Length
Hor. Comp. / Vert. Comp.
Bearing
Begun / Completed
Core size / Recovery %

HOLE No. J-1-70
Sheet 3 of 4
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	SAMPLES From	SAMPLES To	SAMPLES Width	ASSAYS Pb%	ASSAYS Zn%	ASSAYS Cu%	ASSAYS Ag o/t
276'	325'	49'	48.2'		Skarn, dark brown and light green banded, contorted banding, planes at 55° to 65° to core axis. wispy biotite and phyllite layers, phyllite bands increasing in thickness, but becoming sub-equal to quartzose layers, breccia and shear zones, minor sulfides 5-10%.	52028	290'	300'	10'				
					276'-300' - increase in skarn, contorted layering, ~3% sulfides.	52029	300'	310'	10'				
					304'-308' - breccia bands, recemented quartz-idocrase, generally at 50° to core axis, highly contorted layering ~5% sulfides.	52030	310'	320'	10'				
					disseminated pyrrhotite to 5% in phyllitic layers.	52031	320'	330'	10'				
325'	334'	9'	8.5'		BRECCIA ZONE - highly altered phyllite quartzite, broken, kaolinised, minor sulfides.	52032	330'	340'	10'				
					328'-332' - clayey kaolinised brecciated qtzite, schistose at 60° to core axis, sulfides pyrrhotite, pyrite to 10%.	52033	340'	350'	10'				
					332'-333.7' - massive quartz vein, included skarn bands, sulfides 15% in bands. and on margins.	52034	350'	360'	10'				
						52035	360'	370'	10'				
334'	390'	56'	54.9'		Skarn, light green brown banded, banding at 60° to 65° to core axis., phyllite layers increasing from 10% to 50%, disseminated pyrrhotite associated biotite in phyllitic layers. minor sulfides in skarn - quartz - idocrase - diopsaid garnet.	52036	370'	380'	10'				
					357'-369' - increasing contortion and garnet skarn content, biotite layers wispy, 10-15% sulfides, pyrrhotite chalcopyrite	52037	380'	390'	10'				
					362' - ½" garnet skarn with speck galena.	52038	390'	400'	10'				
					375.5' - idocrase skarn, several specks galena.	52039	400'	410'	10'				
					386'-388' - quartz stringers at 30° to core axis, vein pyrrhotite ½" at 60° to core axis, minor sulfides ~10%.	52040	410'	420'	10'				
390'	411'	21'	20'		dark brown green Phyllite, 25% quartzose layers, banding and foliation at 60°-70° to core axis, minor quartz carbonate veining.	52041	420'	430'	10'				
					410'-411' altered broken phyllite.	52042	430'	440'	10'				
						52043	440'	450'	10'				
411'	420'	9'	8.7'		Intrusive, porphyritic Quartz diorite, chloritic with disseminated pyrrhotite, jointed at 60° to core axis, zoned alteration of mafics.								
					419.3' skarn vein, skarning extending 5mm into intrusive.								
					420' contact at 70° to core axis.								
420'	442'	22'	21.2'		dark brown green Phyllitic Quartzite, subequal dark and light colored bands at 65°-70° to core axis. quartz-carbonate veining, disseminated pyrrhotite, chalcopyrite								
					420.5' - speck Sphalerite 1mm in thin Calcite vein at 15° to core axis.								
					429'-434' - fractures, with calcite veining, at 5° and 20° to core axis, biotite bands with 10% sulfides, pyrrhotite and minor chalcopyrite.								
					439.3', 439.6' - vein pyrrhotite in garnet-skarn zone at 15° to core axis								

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

DD-169

	Inclination	Bearing	PROPERTY
Collar			Location
			Elevation
			Coordinates

	Length	HOLE NO. J-1-70
	Hor. Comp. / Vert. Comp.	Sheet 4 of 4
	Bearing	Logged by
N	Begun / Completed	Sampled by
E	Core size / Recovery %	

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION
442'	473'	31'	30.2'		dark grey green unbanded Amphibolite, faint foliation or layering at 70° to core axis, fine grained, cryptocline mature, chloritic, widely disseminated pyrrhotite and chalcopyrite - subequal amounts.
					444' - 448' - veins and layers pyrrhotite paralleling foliation, to ½" across.
					454' - disseminated iron oxides in part.
					463' - joint at 30° to core axis, calcite vein, phyllitic parting.
473'	506'	33'	32'		dark green brown banded Phyllitic Quartzite, thin banded, bands at 75° to core axis, disseminated pyrrhotite and chalcopyrite.
					481' - quartz carbonate vein at 50° to core axis, biotite in phyllitic bands to 5mm, 50% pyrrhotite.
					487'-500' - increased biotite phyllitic bands, sulfides pyrrhotite and chalcopyrite to 10-15%.
					500'-506' - thicker phyllitic layers becoming wispy, discontinuous, speckled appearance due sulfides, pyrrhotite & chalcopyrite, and iron oxides.
					END OF HOLE.

SAMPLES No.	From	To	Width	ASSAYS
52044	450'	460'	10'	
52045	460'	470'	10'	
52046	470'	480'	10'	
52047	480'	490'	10'	
52048	490'	500'	10'	
52049	500'	506'	6'	

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar	−45°	035°

PROPERTY Hill Rust.
Location Faro, Yukon
Elevation 4,810' Theoretical, Overland.
Coordinates 10+00 N
140+00 W E

Length 997'
Hor. Comp. / Vert. Comp.
Bearing 035°
Begun 20/6/'70 / Completed 1/7/'70
Core size BQ. / Recovery 92 %

HOLE No. J-2-70
Sheet 1 of 6
Logged by Gordon D. House
Sampled by J. Morris

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
0	17'				Overburden.					
17'	25'	8'	4.5'		broken oxidized ground, altered phyllitic quartzite, schistose with planes at 70° to core axis. Brecciated, sericitic, fractured at 40° to core axis, odd speck pyrite.	52050	20'	30'	10'	
						52051	30'	40'	10'	
25'	110'	85'	75'		Intrusive, dark grey green Quartz Diorite, slightly porphyritic part chloritic amphiboles, relict biotite and feldspars, heavily fractured, kaolinized and oxidized, accessory pyrite.	52052	40'	50'	10'	
						52053	50'	60'	10'	
					25'-37'- siliceous, altered marginal facies, kaolinised, chloritic, oxidized fractures with quartz carbonate veining - generally at 40° to core axis from 55' on pyrite noted, accessory to chloritic alteration of biotite and mafics.	52054	60'	70'	10'	
						52055	70'	80'	10'	
					68.5'-59.2' fracture, quartz carbonate veins at 40° to core axis, Kaolinised, calcareous and oxidized.	52056	80'	90'	10'	
					62'-64'- Kaolinised fractures at 30° to core axis, oxidized.	52057	90'	100'	10'	
					69'-74'- breccia zone, quartz carbonate veining and fractures at 20°-30° to core axis, kaolinised, brecciated and oxidized - inclusions of intrusive in breccia zone.	52058	100'	110'	10'	
					76'-84'- fractured, altered, kaolinised intrusive, fracturing at 40°-50° to core axis.	52059	110'	120'	10'	
					89'-90' fracture with 1" Kaolin at 75° to core axis.					
					100'-110'- brecciated, fractured, kaolinised, at 20° to core axis, and 50° to core axis, quartz carbonate veining with slickensliding.	52060	120'	130'	10'	
						52061	130'	140'	10'	
110'	113.5'	3.5'	3.3'		Contact zone, intrusive Quartz Diorite to Skarned phyllitic and calcareous quartzite. Contact at 40° to core axis, oxidized indurated kaolinised phyllitic quartzite, thin banded included quartzite has contact of 70° to core axis, lower contact is at 45° to core axis. brecciated quartzite, min oxides.	52062	140'	150'	10'	
						52063	150'	160'	10'	
113.5'	122'	85'	8'		Skarn, light to dark green and brown skarn, faintly banded at 70° to the axis, mina garnet skarn, fractured, quartz carbonate veining, slightly calcareous.					
					113'-117'- bands garnet skarn, mina pyrrhotite and chalcopyrite disseminations					
					119'-121'- breccia zone system quartz carbonate veins with crystalline idocrase at 10°-25° to core axis, mina <5% pyrrhotite and chalcopyrite					
					120.7'- speck Galena in 1 mm quartz carbonate vein at 10° to core axis.					
122'	157'	35'	33'		light to dark green and brown phyllitic Quartzite, banded at 75° to core axis, oxidised in part, fracturing, some contorted banding with some skarn formation, mina sulfides, shearing or fault zone.					
					138'-147' skarny, wispy phyllitic bands, mina pyrrhotite,					
					147'-151'- SHEAR-FAULT-Zone brecciated phyllitic, quartz veining at 15° to core axis. calcite-quartz-idocrase.					
					151-156'- phyllitic brecciated, pyrite, sericite					

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates N
E

Length
Hor. Comp. / Vert. Comp.
Bearing
Begun / Completed
Core size / Recovery %

HOLE No. J-2-70
Sheet 2. of 6
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION
122'	157'				(continued) 156'-157'- shear at 60° to core axis, brecciated, quartz veining at 60°-75° to core axis, pyrite and chalcopyrite with limonite in breccia, specks sphalerite and galena associated veining
157'	176'	19'	18.5'		Skarn, light to medium green and buff brown banded skarn, calcareous in part, quartz veining, sulfides to 20% in part, including pyrite, pyrrhotite, chalcopyrite, sphalerite, galena. becoming heavily altered brecciated to contact with intrusive at 176'.
					164'-166'- brecciated qtz-idocrase skarn, calcareous, disseminated pyrrhotite, sulfides to 20% with specks sphalerite and galena, tetrahedrite suspected but fine grained crystallization, chalcopyrite also.
					171'-173'- brecciated skarn, quartz veining, kaolin, pyritic black muddy gouge - very dark amphibole? also in veins.
					173'-176'- bedrock skarn and quartz diorite intrusive in highly altered dark zone, quartz carbonate veining, pyritic limonite gouge, fractures at 30°-45° to core axis, wholly oxidized.
176'	179'	3'	2.8'		altered Intrusive Quartz diorite, brecciated oxidized, fractured at 40°-50° to core axis, quartz stringers, in whole altered to porcellaneous clay like matrix with relict crystals. - kaolin.
179'	201'	22'	19'		Skarn, altered and brecciated, with phyllite and phyllitic quartzite altered - kaolinisation, calcareous in part, qtz carbonate stringers, sphalerite and galena in part, pyritic. banded at 50° to core axis.
					179'-182' - garnet skarn.
					182'-186'- recemented shear zone, breccia, qtz. carbonate veining and black pyritic argillite mud veins & bands, oxidized fractures.
					186.7'-188.3' - coarser grained lighter coloured skarn, disseminated pyrite galena and sphalerite, 20% sulfides, Pb-Zn-3%.
					188'-201'- banded phyllite, minor quartzose bands, sericite, oxidized, fractures at low angles, banding at 80° to core axis
201'	306'	105'	99.5'		Intrusive quartz diorite, slightly altered in part near margins, fracturing with kaolinisation and oxidation, quartz carbonate veining, pyritic in part changing to pyrrhotite.
					201'- contact at 20° to core axis.
					-207'- heavily fractured, 45° + 60° to core axis, kaolin, oxidized, pyritic.
					-220'- qtz carbonate veining, oxidized, pyritic but changing to pyrrhotite dissemination.
					233'-237'- breccia and fracture zone, 35°-40° to core axis kaolinised.
					261'-267'- breccia, fractures at 25° to core axis, qtz. veining and kaolin.
					280' on - increased sulfide dissemination, pyrrhotite, pyrite, chalcopyrite
					295'-306'- increased alteration, decreased pyrrhotite, pyrite fractured.
					306'- ragged contact at 30° to core axis, qtz. carbonate veins with
					[illegible] at 20° to core axis to 306' down 295

SAMPLES No.	From	To	Width	ASSAYS
52064	160'	170'	10'	
52065	170'	180'	10'	
52066	180'	190'	10'	
52067	190'	200'	10'	
52068	200'	210'	10'	
52069	210'	220'	10'	
52070	220'	230'	10'	
52071	230'	240'	10'	
52072	240'	250'	10'	
52073	250'	260'	10'	
52074	260'	270'	10'	
52075	270'	280'	10'	
52076	280'	290'	10'	
52077	290'	300'	10'	
52078	300'	310'	10'	

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates N
E

Length
Hor. Comp. / Vert. Comp.
Bearing
Begun / Completed
Core size / Recovery %

HOLE No. J-2-70
Sheet 3 of 6
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
306'	370'	64'	62.3		Phyllitic quartzite, banded, dark grey-green-brown, siliceous, banding at 70° to core axis, thin banded, light green qtz-se layers, biotite bands becoming thicker, quartz-carbonate veining, disseminated pyrrhotite, pyrite and chalcopyrite, shearing of qtzose layers in part.	52078	310'	320'	10'	
						52080	320'	330'	10'	
					308', 313', 317' - qtz-carbonate veins at 30° to core axis.	52081	330'	340'	10'	
					321.5' - qtz stringer, crystalline galena associated diopside qtz bands. increasing chalcopyrite to 328'.	52082	340'	350'	10'	
					345-351' - dark green unbanded quartzite,	52083	350'	360'	10'	
					351'-355' - calcareous banded marble, altered - kaolinised, qtz-carbonate stringers.	52084	360'	370'	10'	
					357.5'-368' - light green banded skarn, diopside-qtz-idocrase, minor garnet bands, pyrrhotite/pyrite associated contorted banding.	52085	370'	380'	10'	
370'	399'	29'	28'		Skarn, med-dk green/brown, banded, diopside idocrase qtz with garnet bands, minor sulfides, altered zones, banding at 70° to core axis but contorted in part,	52086	380'	390'	10'	
					371' - Kaolin breccia	52087	390'	400'	10'	
					377.5'-378' - quartz carbonate veins at 70° to core axis, kaolin alteration.	52088	400'	410'	10'	
					383', 388'-390', 398' - clayey kaolin zones, brecciated, with qtz-carbonate veining.	52089	410'	420'	10'	
					390'-394' - darker green, decreased biotite, increased garnet skarn.	52090	420'	430'	10'	
399'	452'	53'	49'		major shear/breccia/fault zone, highly altered kaolinised, veined, from quartzite to relatively unbanded light green quartzite.	52091	430'	440'	10'	
					399'-418' - altered, dark banded quartzite, kaolinised, calcareous with carbonate veins, pyrite, clayey gouge zones at 403', 404'-405'	52092	440'	450'	10'	
					418'-436' - less brecciated, phyllitic planes at 70° to core axis, sericite, pyrite. Clayey gouge at 425'-427.5', very contorted brecciated altered calcareous, thin bedded to 436'.	52093	450'	460'	10'	
					440'-441.5' - breccia zones, brecciated quartzite with quartz and calcite veins.	52094	460'	470'	10'	
					444'-446' - veins 1" calcite veins at 30° to core axis in chloritic talcose material.	52095	470'	480'	10'	
					447'-452' - siliceous, dark green idocrase, altered quartzite, slightly calcareous, no sulfides.	52096	480'	490'	10'	
						52097	490'	500'	10'	
452'	495'	43'	40.3		medium to dark green banded phyllitic quartzite, contorted banding in part, banding generally at 60° to 70° to core axis, quartz-carbonate veins, chloritic alteration, breccia zones, minor sulphides - pyrrhotite.					
					452'-464' - dark green banded, chloritic qtzite, partly kaolinised.					
					464'-466' - light green diopside skarn, minor garnet bands.					
					466'-469' - light brown biotite phyllitic bands, contorted tight folding					

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates

Length
Hor. Comp. / Vert. Comp.
Bearing
N
Begun / Completed
E
Core size / Recovery %

HOLE No. J-2-70
Sheet 4 of 6
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
452'	495'				(continued) 469'-476'- contorted bands dark green idocrase, chlorite, brown biotite, relatively siliceous, minor qtzose bands, qtz-carbonate bands at 471+472' at 30° to core axis.					
					476'-487'- medium green and dark brown skarn, subequal bands brown purple phyllite and skarned qtzose bands, contorted tight folding with wispy discontinuous biotite bands, minor buff garnets.	52098	500'	510'	10'	
					487-489' dark green idocrase chlorite bands, porcellaneous texture.	52099	510'	520'	10'	
						52100	520'	530'	10'	
						52101	530'	540'	10'	
495'	527'	32'	30.1'		dark green and brown to black phyllitic qtzite, skarn bands, contorted banding - broad folding. Banding and axial planes at 70°-80° to core axis, increasing minor sulfides, pyrrhotite, pyrite, chalcopyrite.	52102	540'	550'	10'	
					495'-503' - skarn, light to medium green, garnet bands - buff colored, siliceous, wispy biotite.	52103	550'	560'	10'	
					503'-511'- dark to medium green phyllitic qtzite, banded, contorted, qtz-carbonate veins, thin subequal banding.	52104	560'	570'	10'	
					511'-527'- light to medium green skarn, contorted banding, increased garnet banding, ~5% disseminated sulfides, also qtz carbonate veins with sulfides.	52105	570'	580'	10'	
						52106	580'	590'	10'	
527'	538'	11'	9'		altered kaolinised breccia zone, calcareous, highly contorted banding, gouge zones with slips/shears at 40°-50° to core axis, minor sulfides.	52107	590'	600'	10'	
					527-528', 529'-530', 535.5'-536' - gouge	52108	600'	610'	10'	
					531.5'-533' qtz carbonate veins at 40°-50° to core axis.	52109	610'	620'	10'	
538'	558'	20'	19'		phyllite quartzite, contorted banding, phyllite bands chlorite and sericite - banding at 75° to core axis, ~1-3% disseminated sulfides in phyllite, minor pyrite and pyrrhotite in some qtzose layers.	52110	620'	630'	10'	
						52111	630'	640'	10'	
558'	591'	33'	31.6'		dark brown-green phyllite quartzite, banded - banding at 65°-70° to core axis, skarn from 585' on, fractures, shears, quartz-carbonate veins	52112	640'	650'	10'	
					558'-581'- biotite phyllite bands 80-20, sulfides increase from 558. 568'- sphalerite - disseminated specks in qtz-diopside layers up to 15% sulfides, pyrrhotite, pyrite, chalcopyrite, some sphalerite	52113	650'	660'	10'	
						52114	660'	670'	10'	
					581'-583'- increased qtzose skarn layers, brecciation on small scale in banding.	52115	670'	680'	10'	
					583'-591'- skarny, <5% sulfides, increased skarn bands, qtz-diopside					
591'	646'	49'	47.4'		dark medium brown and green banded phyllite quartzite, skarn zones, minor sulfides, qtz carbonate veining, altered with carbonates					
					591'-596'- skarn, garnet banding					
					596-604.5' - thin banded phyllite bands - to 1"					
					604.5'-608'- pale green skarn, qtz-diopside, skarn zone with qtz-carbonate vein at 15° to core axes at 604.5'-605'					
					605'-608'- brecciation with qtz carbonate veins at 0-10° to core axis.					

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates N / E

Length
Hor. Comp. / Vert. Comp.
Bearing
Begun / Completed
Core size / Recovery %

HOLE No. J-2-70
Sheet 5 of 6
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
591'	640'	—			(continued). 608'-618'- phyllite 80%, minor sulfides 620'-624'- pale green skarn, some garnets, 624'-634'- phyllitic quartzite, 60% pale green qtz-rich layers-skarn. 634'-639'- slip, qtz. carbonate vein at 5° to core axis.	52116	680'	690'	10'	
						52117	690'	700'	10'	
640'	670'	30'	29.2		medium brown green banded phyllitic quartzite, skarn bands, increased sulfides, breccia zones, qtz. carbonate veining, banding at 65°-70° to core axis. 641'-641.6'- skarn, contorted banding ~30% sulfides- pyrrhotite, pyrite and chalcopyrite, garnets., calcareous 647'-648'- skarn, ~20% sulfides. 648'-649'- recemented shear at 20° to core axis, 652.3'- qtz. carbonate vein at 40° to core axis, brecciated wall rock. 657'-663'- skarn, increased qtz. veining, relict banding at 25° to core axis, minor disseminated sulfides, pyrrhotite and chalcopyrite.	52118	700'	710'	10'	
						52119	710'	720'	10'	
						52120	720'	730'	10'	
						52121	730'	740'	10'	
						52122	740'	750'	10'	
670'	705'	35'	33.8'		dark grey green phyllitic quartzite, thin banded at 75° to core axis. 15-20% disseminated sulfides- pyrrhotite and chalcopyrite. 674'-675'- slips at 45° to core axis, broken ground. from 685' on - increased qtz core bands, thickening 687.5'- qtz. carbonate vein at 45° to core axis, layered deposition, vugs. slightly calcareous wall rock.	52123	750'	760'	10'	
						52124	760'	770'	10'	
						52125	770'	780'	10'	
						52126	780'	790'	10'	
705'	756'	51'	48.7		dark brown and light green banded phyllitic quartzite, course banding- at 70° to core axis, skarn zones,- some garnet. 705'-720'- phyllitic qtzite 5-10% pyrite disseminated in phyllitic, 720'-721.5'- breccia zone, qtz. idocrase, at 30° to core axis, 730'-750'- increased phyllitic bands, 70:30 to skarny bands, wispy biotite, generally foliated + thin bedded. 730'-740' lenses brecciated skarn, 5-10% sulfides. 754'-754.2'- shears at 30° to core axis, altered, light green talcose. 755.5'- fracture/shear at 45° to core axis, carbonate + light green talc. pyrite crystals to 2mm.	52127	790'	800'	10'	
						52128	800'	810'	10'	
						52129	810'	820'	10'	
						52130	820'	830'	10'	
						52131	830'	840'	10'	
756'	794'	38'	36.4		dark brown light green phyllitic qtzite, phyllite to 80%, in thin layers, shear zones with kaolin and talc, disseminated pyrite to ~5%. 756'-760'- talcose layers with quartzose material. 762', 763', 769'- fractures, 30-50° to core axis, carbonate. 772.5-774'- breccia zone, shear, at 35°-40° to core axis, kaolinized wall rock 775'-790'- dark brown qtzite, broken ground. 777'- fracture, 50° to core axis, rubbly gouge	52132	840'	850'	10'	
794'	850'	56'	54.9		medium brown - light green phyllitic qtzite, skarn zones, brecciated shear zones, banding at 70°-75° to core axis, minor ≤5% pyrrhotite in phyllitic bands.					

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY
Location
Elevation
Coordinates

	Length
	Hor. Comp. / Vert. Comp.
	Bearing
N	Begun / Completed
E	Core size / Recovery %

HOLE No. J-2-70
Sheet 6 of 6
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC
794'	850'			
850'	858'	8'	7.8'	
858'	895'	37'	34.3'	
895'	921'	26'	25.2'	
921'	930'	9'	1.5'	
930'	939'	9'	9.2'	
939'	974'	35'	34.2'	
974'	997'	23'	21.8'	

DESCRIPTION

(continued) 794'-805' - medium green skarn, garnet bands, wispy biotite
817'-819' - shear zone, kaolinised, at 30° to core axis at 817.5'.
842'-847' - light green skarn, garnet bands.

brown phyllitic qtzite, 60-70% biotite phyllite,
853'-854' - massive barren quartz vein at 50° to core axis.

altered brecciated gouge/shear zone in basically phyllitic qtzite, some mineralised sections associated alteration, carbonate, kaolin and talc, with pyrrhotite, chalcopyrite and pyrite, banding at 70° to core axis.
859'-862' - calcareous light green kaolinized qtzite, sulfide bands - disseminated sphalerite, galena, pyrite, chalcopyrite at 859'-861.5', ~5%.
864'-868' - much altered brecciated sheared qtzite, planes at 30° to core axis
868'-870' - altered brecciated kaolinised idocrase zone, dark green.
871'-875' - minor garnets in talcose altered skarn, light green.
875'-876.5' - shear, altered kaolinised light green rubbly shear, talc.
891'-894' - kaolinised breccia zone, clay gouge, shear planes at 30° ± 10° to core axis.

medium brown phyllitic qtzite, subequal banding at 70° to core axis, skarn with minor garnet, talc, ~5% sulfides
916'-921' - skarn, wispy biotite
altered broken ground, kaolinised, clay gouge, light green, qtzite pebbles in breccia, talcose
brecciated qtzite, kaolinised, to skarny qtzite, fractures at 35° to core axis

skarn, phyllitic qtzite, minor sulfides, banding at 70° to core axis.
939'-948' - skarn, qtz. idocrase. garnet,
948'-966' - 60% phyllite with skarny qtz zone layers.
966'-974' - 20% phyllite, wispy, skarn.

dark green brown thin banded phyllitic qtzite, banding at 70° to core axis, contorted, sulfides to ~10%. Calcareous in part.
980'-987' - contorted banding, pyrite, wispy biotite.
987'-997' - thin banded qtzite, 5% sulfides, siliceous chevron folding in contortions, biotite partly chloritized to ~30%.
990.5' - dark green idocrase band, fairly massive pyrrhotite band to 3-5 mm.

-997'

END OF HOLE.

SAMPLES No.	From	To	Width
52133	850'	860'	10'
52134	860'	870'	10'
52135	870'	880'	10'
52136	880'	890'	10'
52137	890'	900'	10'
52138	900'	910'	10'
52139	910'	920'	10'
52140	920'	930'	10'
52141	930'	940'	10'
52142	940'	950'	10'
52143	950'	960'	10'
52144	960'	970'	10'
52145	970'	980'	10'
52146	980'	990'	10'
52147	990'	997'	7'

ASSAYS

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar	-90°	-

PROPERTY Hill Rust
Location Faro Y.T.
Elevation
Coordinates 20+00 N
163+00 W E

Length 999'
Hor. Comp. / Vert. Comp.
Bearing -
Begun 3/7/70 / Completed 12/7/70
Core size BQ / Recovery 91 %

HOLE No. J-3-70
Sheet 1 of 4
Logged by G.D. House
Sampled by J. Morris

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
0	4'				Over burden.					
5'	18'	13'	11.5'		dark green banded phyllite, tuffaceous, banding at 70° to core axis.	52148	10'	20'	10'	
18'	40'	22'	21'		banded dark brown light green phyllitic qtzite, thin banded, minor pyrrhotite.	52149	20'	30'	10'	
						52150	30'	40'	10'	
40'	80'	40'	39.2'		medium to dark green and dark brown phyllitic qtzite, thicker phyllite, contorted banding, breccia zones, skarn?	52151	40'	50'	10'	
					51.5'-52.6' - breccia, kaolinised,	52152	50'	60'	10'	
					67.5'-68.2' - massive qtz. vein at 90° to core axis.					
					77'-79' - contorted, minor skarn with garnets.	52153	60'	70'	10'	
80'	136.5'	56.5'	55.0'		medium brown and green phyllitic qtzite, breccia zone, skarn, increased pyrrhotite in phyllite, sulfides in alteration zones.	52154	70'	80'	10'	
					84'-84.5' - brecciated, kaolin,	52155	80'	90'	10'	
					88'-97' - skarn, no garnets,					
					97'-115' - phyllitic qtzite, contorted banding.	52156	90'	100'	10'	
					120.7'-121.5' - shear zone at 60°-65° to core axis, qtz-carbonate-kaolin and idocrase, sphalerite and galena associated idocrase-diopside vein of vein fshear.	52157	100'	110'	10'	
					129.5'-130.7' - skarned contorted banding	52158	110'	120'	10'	
					134.5' - shear, kaolin + sericite, at 65° to core axis.					
136.5'	167'	30.5'	29.7'		dark brown phyllite to phyllitic qtzite, breccia, skarn.	52159	120'	130'	10'	
					136.5'-153' - dark brown phyllitic, sericite in foliation.	52160	130'	140'	10'	
					155'-157' - garnet idocrase skarn,					
					157'-165' - skarn, with breccia zones, alteration planes at 65° to core axis	52161	140'	150'	10'	
					167' - shear, 3" wide, qtz. carbonate cemented breccia at 30° to core axis.					
167'	187'	20'	19.5'		dark green banded silicified greenstone, faint banding at 75° to core axis, disseminated pyrrhotite.	52162	150'	160'	10'	
						52163	160'	170'	10'	
187'	210'	23'	22'		dark brown phyllitic qtzite, 80% phyllite, disseminated pyrrhotite, breccia zones, alteration.	52164	170'	180'	10'	
					189' - breccia zone, sericite	52165	180'	190'	10'	
					195.5'-196' - slip, sericite and wk chlorite layers.					
					200'-205' - contorted, increased light green qtz layers to 30%	52166	190'	200'	10'	
210'	248'	38'	37'		Skarn, light to medium green, siliceous, dense, skarn, qtz, -diopside - garnet, banding at 75°-80° to core axis, calcareous marble section, disseminated sphalerite.	52167	200'	210'	10'	
					210'-226' - diopside-qtz-garnet skarn, slightly calcareous, minor disseminated red brown sphalerite, 2% from 221'-223'.	52168	210'	220'	10'	
					226'-248' - calcareous qtzite, darker green, increased idocrase from 232'.	52169	220'	235'	15'	
					227'-244.5' - dark green calcareous skarn, qtzite, disseminated galena					

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY		Length	HOLE No. J-3-70
Location		Hor. Comp. / Vert. Comp.	Sheet 2. of 4.
Elevation		Bearing	Logged by
Coordinates	N	Begun / Completed	Sampled by
	E	Core size / Recovery %	

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
210'	248'				(continued) 229'- vein skarny material, medium green, ~ 5% sphalerite, galena and tetrahedrite?					
					235.3'-236'- 15%-20% massive sulfides, sphalerite, galena, tetrahedrite.	52170	235'	230'	5'	
						52171	230'	235'	5'	
248'	284.5'	6.5'	5.2'		zone qtz veining and brecciation, fault/shear zone, major plunge at 70° to core axis, minor fractures at 30°-35° to core axis. Kaolinized and chloritic.	52172	235'	240'	5'	
284.5'	271'	16.5'	15.7'		dark grey brown phyllitic qtzite, slightly calcareous, phyllite 65%, sericitic layers ~ foliation in phyllite.	52173	240'	245'	5'	
					269'-271'- thin banded, slightly skarned.	52174	245'	250'	5'	
271'	283'	12'	11.7'		medium grey banded marble, banding at 70°-75° to core axis, very thin bands. medium to coarse grained.	52175	250'	260'	10'	
					281'-283'- coarser recrystallized marble, 'felted' calcite on vein at 282' at 20° to core axis	52176	260'	270'	10'	
						52177	270'	280'	10'	
283'	289'	6'	5.7'		slightly calcareous skarny phyllitic qtzite, brecciated with kaolin at 289'.	52178	280'	290'	10'	
289'	311'	22'	18.3'		dark green calcareous qtzite, phyllitic, altered breccia zone, minor pyrrhotite, skarn.	52179	290'	300'	10'	
					289'-294'- breccia, qtz carbonate veining at 30° to core axis, kaolin, pyrite	52180	300'	310'	10'	
					294'-303'- phyllitic, sericitic, banding at 75° to core axis	52181	310'	320'	10'	
					300-303 - qtz-idocrase-carbonate skarn?, ~5% disseminated sphalerite and galena in idocrase in calcareous qtzite.	52182	320'	330'	10'	
					307'-311'- skarny, banding at 60° to core axis.	52183	330'	340'	10'	
311'	369'	58'	56'		light green medium brown banded phyllitic qtzite, banding at 60° to core axis, wispy phyllite and skarn layers, alteration and brecciation	52184	340'	350'	10'	
					324'-326' - shear zone, kaolin, gouge, at 30° to core axis.	52185	350'	360'	10'	
					361'-363' - skarn, garnets, breccia	52186	360'	370'	10'	
					365'-367'- quartz veins and brecciation at 30-40° to core axis	52187	370'	380'	10'	
369'	379'	10'	9'		shear/fault zone, in phyllitic qtzite, skarn, banding at 55°-60° to core axis, altered	52188	380'	390'	10'	
					370'-376' - brecciated, altered, sericitic with clayey kaolin gouge, qtz veins ~ shear at 70° to core axis.	52189	390'	400'	10'	
379'	521'	142'	137'		dark grey green thin banded phyllitic qtzite, biotite to chlorite in part, banding 65°-70° to core axis, calcareous in part, veining, folding plunges, disseminated pyrrhotite to 20%, thin green stone.	52190	400'	410'	10'	
					416'-418' breccia, shear, calcite wispy vein, chlorite.	52191	410'	420'	10'	
					427'-440' - thinner banding.	52192	420'	430'	10'	
					457'-473' - skarn, light green, wispy phyllite.					
					481'-483' - breccia, carbonate veining at 10-15° to core axis.					
					500'-521'- contorted banding, skarning minor breccia.					

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DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing	PROPERTY		Length	HOLE No. J-3-70
Collar			Location		Hor. Comp. / Vert. Comp.	Sheet 3 of 4
			Elevation		Bearing	Logged by
			Coordinates	N	Begun / Completed	Sampled by
				E	Core size / Recovery %	

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	From	To	Width	ASSAYS
521'	596'	75'	72.5'		dark grey green thin banded phyllitic qtzite to faintly banded, banding at 75° to core axis, brecciation and alteration, skarn.					
					534'-547' - skarn, garnet,	52193	430'	440'	10'	
					549'-550' - breccia, altered, gouge	52194	440'	450'	10	
					554.3'-556.5' - clay gouge zone, calcareous, kaolin + chlorite, pyrite, shear at 35-48° to core axis	52195	450'	460'	10'	
					572'-573' - muddy gouge, 30° to core axis. Kaolin alteration both sides	52196	460'	470'	10'	
596'	700'	104'	101'		light grey green light brown purple skarn, phyllite wispy, contorted banding, bands and axial planes of folding at 70° to 80° to core axis, shear zones, breccia, garnet, minor pyrrhotite in phyllite.	52197	470'	480'	10'	
					607' - fracture, at 85° to core axis, kaolin.	52198	480'	490'	10'	
					612'-613.5' - garnet skarn, contorted banding, speck sphalerite.	52199	490'	500'	10'	
					653'-658' - calcareous skarn, idocrase, white to dark green. minor garnet skarn.	52200	500'	510'	10'	
					676'-688' - breccia, pyrite, sphalerite, siliceous, clayey gouge at 681' and 684', heavy kaolin gouge,	52201	510'	520'	10'	
					688'-700' - banding at 85° to core axis, dark green crystalline bands, increased pyrrhotite content to ~ 10%.	52202	520'	530'	10'	
700'	770'	70'	68.5'		dark grey green phyllitic qtzite, banded - at 75° to 80° to core axis, alteration, brecciation, greenstone.	52203	530'	540'	10'	
					710'-716' - breccia, sericite + pyrite, chlorite, zones at 35° to core axis.	52204	540'	550'	10'	
					723'-726' - greenstone, chloritic, 70° contact.					
					745'-757' - very fine banding, crystals lineated at 75° to core axis.	52205	550'	560'	10'	
					758'-770' - plastic style deformation and contortion of phyllite bands					
					762' - low angles to core axis for banding	52206	560'	570'	10'	
					770' - 80° to core axis for banding, contorted.					
770'	999'	229'	222'		Skarn, light brown medium green to light green, and white, banded skarn, garnet, alteration, brecciation + fracturing, calcareous zones, banding at 75° to core axis, marble.	52207	570'	580'	10'	
					782'-783' - idocrase-garnet skarn band, fracture at 5° to core axis, blebs sphalerite, trace galena.	52208	580'	590'	10'	
					798'-809' - biotite idocrase skarn, white to dark green idocrase, garnet bands, light green diopside.	52209	590'	600'	10'	
					825'-826' - coarsely crystalline marble, idocrase and garnet.	52210	600'	610'	10'	
					827'-835' - similar marble, garnet bands.	52211	610'	620'	10'	
					847'-860' - marble, coarsely crystalline buff brown, pyrite	52212	620'	630'	10'	
					865'-866' - breccia, veined calcite and qtz at 75° to core axis.	52213	630'	640'	10'	
					874'-877' - marble, coarsely crystalline, garnet bands.	52214	640'	650'	10'	
					884'-891' - breccia, shear/fault zone, altered, calcareous and with kaolin, at 60° to core axis,	52215	650'	660'	10'	
					892'-909' - brecciated shear zone, heavily kaolinized and chloritized,					
					904.5'-909' - marble, brecciated, altered, at 25°-35° to core axis,					
					909.9'- marble, skarn, garnet bands.					

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY		
Location		
Elevation		
Coordinates	N	
	E	

Length	
Hor. Comp.	/ Vert. Comp.
Bearing	
Begun	/ Completed
Core size	/ Recovery %

HOLE No. J-3-70-
Sheet 4 of 4
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC
770	999'	—		

DESCRIPTION

(continued) 926'-933'- garnets in light colcareous,
955'-979'- series garnet bands to 2" in medium green colcareous,
987'-989'- breccia, fracturing at 55°-60° to core axis, Rock is
989'-999' increasing phyllite bands, garnet, slightly
calcareous, appearance of marble.

-999' END OF HOLE

SAMPLES No.	From	To	Width
52216	660'	670'	10'
52217	670'	680'	10'
52218	680'	690'	10'
52219	690'	700'	10'
52220	700'	710'	10'
52221	710'	720'	10'
52222	720'	730'	10'
52223	730'	740'	10'
52224	740'	750'	10'
52225	750'	760'	10'
52226	760'	770'	10'
52227	770'	780'	10'
52228	780'	790'	10'
52229	750'	800'	10'
52230	800'	810'	10'
52231	810'	820'	10'
52232	820'	830'	10'
52233	840'	840'	10'

ASSAYS

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar	-90°	—

PROPERTY	Hill Rust
Location	Faro Y.T.
Elevation	
Coordinates	66+00 N
	146+75 W E

Length	506'
Hor. Comp.	/ Vert. Comp.
Bearing	
Begun	20/7/70 / Completed 25/7/70
Core size	BQ. / Recovery 94 %

HOLE No.	J-9-70
Sheet	1 of 3
Logged by	G.D. House
Sampled by	

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	SAMPLES From	SAMPLES To	SAMPLES Width	ASSAYS
0	12'	—			Overburden, casing.					
12'	24.5'	12.5'	11.2'		phyllite, biotite rich, minor thin qtzose layers, contorted, banding generally at 65° to core axis.					
24.5'	48.5'	29'	21.5'		light to dark green phyllitic qtzite, part skarned greenstone, contorted, sheared. 24.5'-26' - chloritic tuff, greenstone. 39.5'-48.5' - foliated tuffaceous greenstone, sericite + chloritic.					
48.5'	82'	33.5'	31'		Phyllite, some phyllitic qtzite, varying qtzose layers, generally thin, contorted, minor pyrrhotite, galena - very minor. 55'-58' - skarn, mobilised diopside-qtz., 56.2' - isolated speck galena, 2 mm across in diopside-qtz. skarn band. 74'-77' - breccia, shear, 5-10° to core axis, kaolin.					
82'	109'	27'	25.1'		phyllitic qtzite, silicified, part altered, breccia, granite veins, banding at 65°-70° to core axis. 89'-89.7' - qtz. rich granite vein, coarsely crystalline, almost pegmatitic. 101'-103.5' - carbonate cemented breccia to 15-20° to core axis.					
109'	155'	46'	43.5'		phyllite, phyllitic qtzite, thin banded at 55°-65° to core axis, contorted, minor pyrrhotite. 109'-130' - phyllite, 115', 116', 123' - breccia zones, kaolin, 45° to core axis. 130'-155' - phyllitic qtzite, slightly skarned - light green diopside, tuff zones chloritic from 140'-153'.					
155'	170'	15'	13'		intrusive, qtz. rich granite, feldspars to kaolin, altered, hornblende pheno dyke. 159'-160', 165'-167' - phyllitic qtzite, banded.					
170'	224'	54'	51'		phyllitic qtzite, relatively thin banded, skarned qtzose layers, fracture and breccia zones, banding at 70° to core axis. 189'-192' - breccia, kaolin, carbonate veins at 30° to core axis. 213'-224' - increased phyllite layering.					
224'	240'	16'	13.5'		phyllitic qtzite, altered, qtz. veining paralleling banding at 65°-70° to core axis, breccia, oxidation. 224'-227' - brecciated. 228'-236' - kaolinised, soft clayey.					
240'	274'	34'	29'		Intrusive, qtz. rich granite, fine grained, very minor mafics, minor qtzite banded inclusions. 242.5'-244' - banded qtzite, kaolinised. 250'-266' - coarse grained qtz. rich granite. upper contact 70° lower contact 35° to core axis. 259'-261' - breccia, kaolin clay gouge at 20° to core axis.					

DD-169

DRILL HOLE RECORD

HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY		
Location		
Elevation		
Coordinates	N	
	E	

Length	
Hor. Comp.	/ Vert. Comp.
Bearing	
Begun	/ Completed
Core size	/ Recovery %

HOLE No. J-4-70
Sheet 2 of 3
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	SAMPLES From	SAMPLES To	SAMPLES Width	ASSAYS
240'	274'	—			(continued) 266'-271.5'- skarn,					
274'	290'	16'	15'		Skarn, calcareous phyllitic qtzite, fractures with qtz-carbonate, thick banded, garnet band, 65°-70° to core axis. 284-285' recemented breccia, at 70° to core axis,					
290'	320'	30'	28'		banded phyllitic qtzite, calcareous in part, skarn, thin banded					
320'	331'	11'	10'		intrusive granite, lineated dark green greenstone bands, 320'-322.8'. intrusive granite, 322.8'-330' - dark green fine grained greenstone, lineated, banding at from 20° to 70° to core axis - higher angles from 323'.					
331'	390'	59'	57.5'		skarn, light brown light grey green banded skarn, banding at 65-70° to core axis. calcareous zones - marble with garnets, very minor galena, sphalerite, minor pyrrhotite and chalcopyrite. 333'-336' - marble, garnet bands, minor galena in banding at 334', suspected sphalerite at 335' 338'-358' 'normal' thick banded phyllitic qtzite, with 35% skarny qtz zone layers to 350', then phyllitic decreases. 358'-368'- skarn, garnet-diopside-idocrase-qtz., marble with garnets from 365'-368', 388.2'-389'- intrusive granite.					
390'	408'	18'	17.5'		dark brown phyllitic qtzite, banding at 70° to core axis, 404'-405'- skarn, light green diopside skarn.					
408'	431'	23'	22'		light green to grey medium banded marble, minor phyllite, 408'-411'- diopside skarn, minor garnet. 411'-421'- grey brown medium garnet marble, faintly banded at 70° to core axis. incipient garnets in part 425-431- thin banded marble					
431'	462'	31'	30'		light green dark brown banded skarn, garnets, minor 'veins' intrusive granite, minor greenstone. 445.5'-446'- qtz. vein, at 90° to core axis 481'-453.5', 455'-455.5'- intrusive granite 'veins' 70° contact. 457'-461'- diopside-garnet skarn					
462'	506'	36'	35'		dark brown and light green skarn, diopside-idocrase-qtz-garnet skarn, intrusive granite, qtz. veining, brecciation, alteration, relatively thin banded at 65-70° to core axis 463'-466'- intrusive granite, coarsely crystalline. 486'-487'- qtz. veining, idocrase, kaolin alteration. 487'-490'- qtz. carbonate veins, vuggy, to 40-50° to core axis. 491.7'-492.5', 493'-493.5'- qtz. veins, vuggy, minor pyrite associated with idocrase in veins.					

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DRILL HOLE RECORD

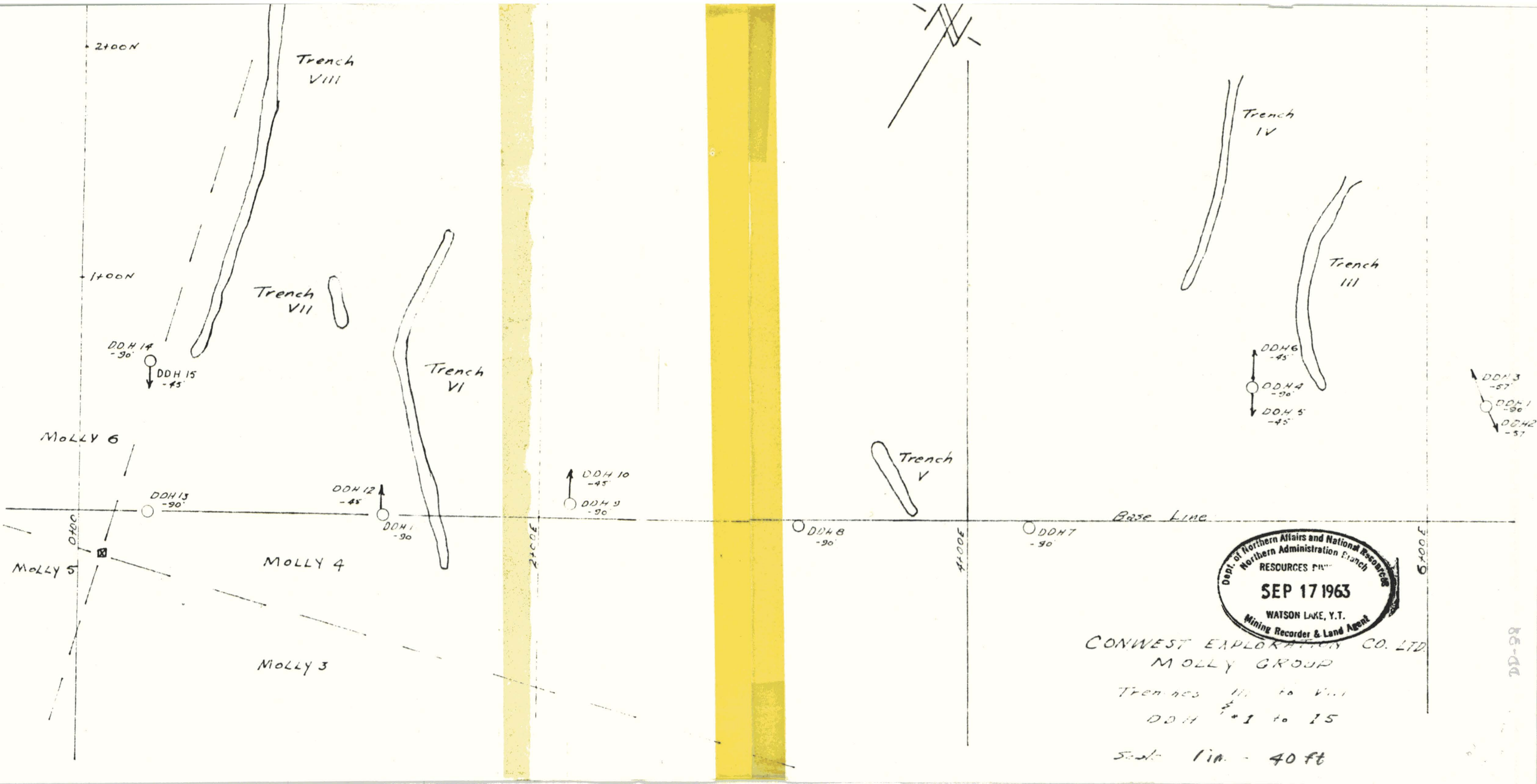
HECLA Mining Company of Canada Ltd.

	Inclination	Bearing
Collar		

PROPERTY		Length
Location		Hor. Comp. / Vert. Comp.
Elevation		Bearing
Coordinates	N	Begun / Completed
	E	Core size / Recovery %

HOLE No. J-4-70.
Sheet 3 of 3
Logged by
Sampled by

FOOTAGE From	FOOTAGE To	RECOV'Y Run	RECOV'Y Core	GRAPHIC	DESCRIPTION	SAMPLES No.	SAMPLES From	SAMPLES To	SAMPLES Width	ASSAYS
462'	506'	—			(continued) 497'-498'- series qtz. veins at 50° to core axis. 499.5'-500' - qtz-ido-cave veins, carbonate, at 80° to core axis pyrrhotite and minor pyrite. 504'-505'- oxidized qtz. carbonate vein at 10° to core axis, transgressive + irregular across core. -506' END OF HOLE.					



CONWEST EXPLORATION CO. LTD.

MOLLY GROUP

Trenches III to VIII

DDH #1 to 15

Scale 1 in. - 40 ft

DD-38