DD·227

DIAMOND DRILL LOGS

CLAIM SHEET 105-N-3 YEAR 1975

AREA Mount Armstrong Area

COMPANY Union Carbide Canada Mining Ltd.

NUMBER OF HOLES 1 FOOTAGE 1108 Feet

CLAIM DRILLED Y96087 Tongue No. 2

CORE STORAGE On property

NOTES & REMARKS:

091284

DD-226

RECEIVED
2 MAR 1976
MINING RECORDER
LAND AGENT
MAYO, Y.T.
I.A. & N.D.

Office Of The Supervising Mining Recorder
MAR 16 1976
WHITEHORSE
Yukon Territory

DRILL LOG

DIAMOND DRILL HOLE 4

MOUNT ARMSTRONG TUNGSTEN PROSPECT

NTS 105N/3

UNION CARBIDE EXPLORATION CORPORATION

091284

DD-227

Department of Indian Affairs & Northern Development
Northern Natural Resources
and
Environment Branch
JAN 27 1976
Mayo Mining District
Mining Recorder and Land Agent

DD-226

RECEIVED
2 MAR 1976
MINING RECORDER
LAND AGENT
MAYO, Y.T.
I.A. & N.D.

Office Of The Supervising Mining Recorder
MAR 16 1976
WHITEHORSE
Yukon Territory

DRILL LOG

DIAMOND DRILL HOLE 5

MOUNT ARMSTRONG TUNGSTEN PROSPECT

NTS 105N/3

UNION CARBIDE EXPLORATION CORPORATION

091284

DD-227

DRILL LOG FOR DIAMOND DRILL HOLE 1

MOUNT ARMSTRONG TUNGSTEN PROSPECT

UNION CARBIDE CANADA MINING LTD

REFER TO:

GROUPING CERTIFICATE NO. M-983

CERTIFICATES OF WORK NOS. Q64952 TO Q64954

LEGEND FOR GRAPHIC LOGS

1975 DIAMOND DRILLING PROGRAM

MOUNT ARMSTRONG PROSPECT

UNION CARBIDE CANADA MINING LTD.

- MOUNT ARMSTRONG INTRUSIVE; MOSTLY MEDIUM GRAINED BIOTITE QUARTZ MONZONITE AND/OR GRANODIORITE.
- INTRUSIVE SILLS.
- SCHISTOSE ROCKS; PRIMARILY BIOTITE-SERICITE-CHLORITE SCHIST/GNEISS.
- PHYLLITIC ROCKS AND METASILTSTONE.
- MICACEOUS QUARTZITE; GRITTY ARENACEOUS ARKOSIC WACKE; BUFF-COLOURED GRITTY SANDSTONE; LITHIC WACKE; SILTY QUARTZITE; LIMEY QUARTZITE.
- GREY MARBLE; USUALLY INTERCALATED WITH LIMEY QUARTZITE; OFTEN CONTAINS BANDS AND/OR PORPHYROBLASTS OF GARNET.
- GARNET $\pm$ IDOCRASE SKARN.
- SCHEELITE-SULPHIDE (CHALCOPYRITE-PYRRHOTITE) ROCK.

DD-227

DDH NUMBER 1

MOUNT ARMSTRONG PROSPECT

BEARING: 275°
INCLINATION: 70°
COLLAR ELEVATION: 6000'

DATE STARTED: JULY 10, 1975
DATE COMPLETED: JULY 16, 1975
HOLE DEPTH: 774 FEET

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	VISUAL PERCENT SCHEELITE
CASING							
14	38	24	20.3		1	MAINLY SPOTTED CHLORITIC-BIOTITE-SERICITE SCHIST/GNEISS; ∠ AT 23.6' = 45°; SOME SULPHIDES - MOSTLY PYRRHOTITE IN CLOTS AND PODS; FRACTURES FILLED WITH BLACK MINERAL (TOURMALINE ?) AT 45'; ∠ AT 90° TO FOLIATION	
38	48	10	9.9		2		
48	57.5	9.5	8.6				
57.5	67.0	9.5	9.5			SCHIST BECOMES MORE SCHISTOSE, FINER-GRAINED AND CHLORITE CLOTS ARE MORE FLATTENED	
67.0	77.5	10.5	10.4		3	∠ AT 77' = 48°	
77.5	88	10.5	10.5			4" THICK QUARTZ-FELDSPAR-MUSCOVITE-TOURMALINE SILL AT 78.4'; SCHIST FINER-GRAINED THAN ABOVE. AND MORE SILICEOUS	
88	98	10.0	9.4		4		
98	108	10.0	10.0			104.2 SECOND MARBLE-QUARTZITE UNIT - MOSTLY MARBLE WITH SOME GARNET BANDS (PORPHYROBLASTS; THIN (<1" THICK) BANDS OF QUARTZITE (METACHERT ?) INTERCALATED WITH MARBLE	
108	118	10.0	9.8		5		
118	128	10.0	10.0			START GETTING INTO FINER-GRAINED GREY MARBLE AT 123'	
128	138	10.0	9.8				
138	148	10.0	9.9		6	GETTING MORE QUARTZITIC; GETS BANDS OF QUARTZITE UP TO 1' THICK.	
148	158	10.0	10.0			MOSTLY QUARTZITE AND LIMEY QUARTZITE BUT WITH THIN (<6" THICK) BANDS OF MARBLE AND MINOR GARNET; 149.5-158 MOSTLY QUARTZITE	
158	168	10.0	10.0		7	MOSTLY MARBLE - DARK GREY AND MASSIVE FROM 158.5'-166' THEN QUARTZITE.	
168	178	10.0	10.0			MAINLY QUARTZITE AND LIMEY QUARTZITE; 170-171 GARNET SKARN; CALCITE FILLED FRACTURE AT 179.7' ∠ 25°	
178	188	10.0	10.0			QUARTZITE	
188	198	10.0	10.0		8	GET OCCASIONAL CALCITE ± TREMOLITE FILLED FRACTURES (<1" THICK)	
198	208	10.0	9.9			VERY SILICEOUS PHYLLITE; ∠ AT 199 = 50°; A FAIR AMOUNT OF PYRRHOTITE.	
208	218	10.0	9.8		9	MAINLY FINE GRAINED WHITE QUARTZITE INTERBANDED WITH THIN (<6" THICK) BANDS OF BI-SER SCHIST; 210.7'-211' 4" OF GARNET CALCITE SKARN; GET SOME DARK GREY PYRRHOTITIC GNEISSIC ROCK ALSO.	
218	228	10.0	10.0			218-222 MOSTLY WHITE QUARTZITE; ¼" THICK CALCITE VEINLET (∠ = 33°) WITH GOOD ALTERATION HALO AT 221.5'; 222-228 GREY GREEN, MASSIVE SILICEOUS MARBLE/LIMEY QUARTZITE.	
228	238	10.0	10.0		10	228-232 SILICEOUS MARBLE WITH MANY THIN (<¼" THICK) CALCITE STRINGERS; SOMEWHAT ROTTEN AT 232'; 232-236 BI-SER SCHIST/PHYLLITE WITH CLOTS OF BIOTITE; 236-238 LIGHT GREY PHYLLITE; ∠ AT 234 = 22°	
238	245	7.0	6.9			MAINLY CHLORITE-RICH LIMEY QUARTZITE WITH PODS OF BULL QUARTZ.	
245	248	3.0	3.0			LIMEY QUARTZITE WITH PODS OF BULL QUARTZ; LAST 4" OF RUN MUSC-TOURM-QTZ-FELDSPAR INTRUSIVE (SILL ?)	
248	258	10.0	9.8			248-254.3 QTZ-FELDS-MUSC-TOURM. INTRUSIVE; GET THIN (<4" THICK) ZONES THAT ARE CALCITE RICH; 254.3-258 BULL QUARTZ AND GREY-GREEN QUARTZITE.	
258	268	10.0	9.9		11	MAINLY WHITE QUARTZ (QUARTZITE ?)	
268	276	8.0	7.7			268-271.5 VERY GRITTY QUARTZITE/SANDSTONE WITH SOME INTERBANDED CHLORITE SCHIST. 271.5-276 EXTREMELY BROKEN ROCK - WATER LOSS - POSSIBLE FAULT; 275.5-276 QUARTZ-FELDSPAR-MUSCOVITE INTRUSIVE (SILL ?)	
276	277.5	1.5	1.4			276-277.5 EXTREMELY FRACTURED QUARTZITE	
277.5	285.5	8.0	7.0		12	EXTREMELY FRACTURED QUARTZITE AND CHLORITE-SERICITE SCHIST; SOME CLAY	
285.5	286.5	1.0	1.0				
286.5	298	11.5	10.7			286.5-294 FRACTURED DISTORTED CALCITE RICH ROCK; ALSO CLAY AND SOME RUSTY PATCHES. 294-298 FAIRLY MASSIVE, MEDIUM-GRAINED SILICEOUS MARBLE.	
298	308	10.0	10.0		13	298-306 MOSTLY SILICEOUS MARBLE BUT WITH A COUPLE OF BANDS (<1" THICK) OF BIOTITE SPOTTED PHYLLITE; 6" BAND OF PYRRHOTITE-RICH GARNET SKARN AT 299'; CONTAINS 0.5% SCHEELITE OVER 6". 298-308 SILICEOUS FINE-GRAINED CHL-SER-BI SCHIST/GNEISS ∠ AT 308' = 50°	0.5% OVER 6" AT 298'
308	318	10.0	9.9			FINE-GRAINED SILICEOUS BIOTITE SPOTTED SCHIST/GNEISS WITH OCCASIONAL BANDS (<1" THICK) OF COARSE BIOTITE	
318	327	9.0	9.0				

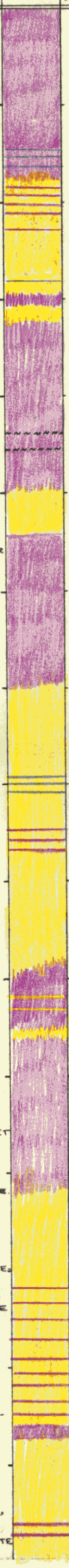
DD-227

DDH NUMBER 1

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION
						FINE-GRAINED SILICEOUS BIOTITE SPOTTED SCHIST/GNEISS; OCCASIONAL BANDS (<1" THICK) OF COARSE BIOTITE.
327	337.5	9.5	9.5	100	14	FINE-GRAINED QUARTZ-CHLORITE-BIOTITE-SERICITE SPOTTED SCHIST.
337.5	348	10.5	10.3			DITTO; ½"-1" THICK BIOTITE-CHLORITE RICH BANDS APPROXIMATELY EVERY 6 INCHES. 347'-348' START TO GET PINK PORPHYROBLASTS OF GARNET (?) IN THE SCHIST.
348	355	7.0	7.0	100		348.6-349.6 LIMEY SCHIST WITH 2" THICK QUARTZ BAND CONTAINING PYRITE CUBES. 349.6'-355 VERY BROKEN LIMEY SERICITE SCHIST/QUARTZITE.
355	365.5	10.5	10.3		15	FINE-GRAINED DARK HORNFELS/QUARTZITE INTERBEDDED WITH SPOTTED FINE-GRAINED SCHIST; SOME CALCITE STRINGERS.
365.5	376	10.5	10.0			365.5-375.5 DITTO; ∠ AT 366' = 43°; GRT 1" THICK BAND OF ALMOST PURE CHLORITE AT 366.5. 375.5'-376' FINE GRAINED SUGARY-TEXTURED HORNFELS.
376	386.5	10.5	10.1		16	376-378 LIMEY MICACEOUS QUARTZITE; 378-381 SPOTTED SCHIST; 381-383 MICACEOUS QUARTZITE. 383-386.5 MASSIVE BIOTITE-SERICITE SCHIST, OCCASIONALLY SPOTTED.
386.5	395	8.5	8.5	100		BIOTITE-SERICITE SCHIST, OCCASIONALLY SPOTTED.
395	398	3.0	2.8			DITTO
398	408	10.0	8.9		17	DITTO; 2" THICK SILL AT 401; ROCK BECOMES VERY BROKEN AT 407.5'.
408	418	10.0	10.0	100		408-411 ROCK EXTREMELY BROKEN AND ROTTEN WITH SOME CALCITE COATING. 411-412 SCHIST; 412-413 EXTREMELY ALTERED SCHIST. 413-415 FINE-GRAINED SCHIST (ALMOST HORNFELS). 415-416.5 ALTERED SCHIST. 416.5-418 FINE-GRAINED SPOTTED HORNFELS.
418	428	10.0	10.0	100	18	FINE-GRAINED MASSIVE, DARK AND SPOTTED HORNFELS. DISTINCTLY FOLDED (AXIAL PLANES NORMAL TO CORE AXIS); OCCASIONAL PODS OF PYRRHOTITE.
428	438	10.0	10.0	100		SPOTTED CHLORITIC SCHIST WITH OCCASIONAL THIN (<1" THICK) BANDS OF QUARTZ-MUSCOVITE-FELDSPAR INTRUSIVE (SILLS ?)
438	448	10.0	9.8	98		DITTO; ∠ AT 439 = 29°
448	458	10.0	10.0	100	19	DITTO; GET UP TO 1 FOOT THICK BANDS THAT ARE UNSPOTTED.
458	468	10.0	10.0	100		DITTO; 458.5-460 IS BUFF-COLOURED QUARTZITE; OCCASIONAL SILLS AND LENSES OF PEGMATITIC ROCK.
468	478	10.0	9.9	99	20	MASSIVE, PURPLE, SUGARY HORNFELS. SOME 'PATCHY' PYRRHOTITE STREAKED OUT ALONG WEAK FOLIATION
478	488	10.0	9.8	98		478-482.5 MAINLY SILICEOUS HORNFELS BUT WITH SOME LIMEY ZONES; ALSO SOME WHITE QUARTZITE. 482.5-488 MAINLY QUARTZITE; SOME ALTERATION ALONG FRACTURES.
488	498	10.0	10.0	100		488-495.5 HORNFELS, SCHIST, AND QUARTZITE; 495.5-498 GREY MICACEOUS QUARTZITE.
498	508	10.0	10.0	100	21	WELL-FRACTURED MICACEOUS QUARTZITE.
508	518	10.0	9.8	98		DITTO; GET IRREGULAR VEINLETS OF CHLORITE (?); PYRITE COATING ON SOME FRACTURES; FRACTURES OFTEN RUST COATED.
518	528	10.0	10.0	100	22	SILICEOUS CHLORITE SCHIST/PHYLLITE; DARK PURPLE, FINE-GRAINED HORNFELS/QUARTZITE AND SPOTTED CHLORITE-BIOTITE SCHIST
528	538	10.0	9.7	97		DITTO. 529-531 QUARTZITE
538	548	10.0	10.0	100	23	DITTO; GET BANDS OF QUARTZITE (<1' THICK) AND THIN, (<1/16" THICK) PYRITE-FILLED FRACTURES; ALSO SOME CALCITE-FILLED FRACTURES. ∠ AT 538' = 73°; GET 10" OF WHITE QUARTZ FROM 747.6'-548.5'; LOTS OF PYRITE/PYRRHOTITE SMEARED OUT ON FOLIATION PLANES
548	557	9.0	9.0	100		DITTO; NOT VERY MUCH QUARTZITE; GET ½" QUARTZ VEINLET WITH INDISTINCT CONTACT WITH SCHIST AT 352'
557	567.5	10.5	10.5	100	24	558'-559.5' DITTO; GET QUARTZITE AND QUARTZ VEINS AND MANY RUST-FILLED FRACTURES: 563-567.5 MAINLY MICACEOUS QUARTZITE AND PURPLE HORNFELS/QUARTZITE.
567.5	578	10.5	10.5	100		MASSIVE MICACEOUS QUARTZITE INTERBANDED WITH SLIGHTLY FOLIATED PURPLE HORNFELS/QUARTZITE.
578	598	20.0	20.0	100	25	INTERBANDED MICACEOUS SCHIST, PYRITIC CHLORITE-SERICITE-BIOTITE SCHIST, AND PURPLE HORNFELS/QUARTZITE; LOTS OF QUARTZ VEINING (<6" THICK) WHICH CUT FOLIATION AT VARIOUS ANGLES; ALSO THIN FRACTURES WITH CHLORITE (?) ALTERATION HALOS; QUARTZ VEINS CONTAIN SOME CHLORITE ALSO.
598	608	10.0	9.8	100		NOT AS QUARTZ VEINING AS IN LAST RUN; ROCKS ARE A LITTLE MORE SCHISTOSE.
608	618	10.0	9.9	99	26	608-612 SPOTTED BIOTITE SCHIST; 612-618 MICACEOUS GREY-GREEN QUARTZITE AND PURPLE HORNFELS/QUARTZITE.
618	628	10.0	9.7	97		MICACEOUS QUARTZITE; 619-622 QUARTZ VEIN DIPPING ALMOST PARALLEL TO CORE AXIS.
628	630	2.0	1.6			WELL-FRACTURED, MICACEOUS QUARTZITE WITH SOME SCHISTOSE, PYRITE-BEARING BANDS.
630	638	8.0	8.0	100	27	MICACEOUS QUARTZITE WITH MINOR DISSEMINATED PYRITE/PYRRHOTITE AND PYRITE-PYRRHOTITE SMEARED ALONG WEAK FOLIATION.
638	648	10.0	10.0	100		

GRAPHIC LOG



VISUAL PERCENT SCHEELITE

DD-227

DDH NUMBER 1

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
						DITTO; QUARTZ VEIN WITH CHLORITE FROM 641-643; 6" OF SPOTTED SCHIST WITH COARSE BIOTITE CLOTS AT 447'		
648	658	10.0	10.0	100		PYRITIFEROUS MICACEOUS QUARTZITE AND SILICEOUS MICACEOUS SCHIST; ∠ AT 652 = 37°		
					28			
658	668	10.0	10.0	100		DISTINCTLY SCHISTOSE MICACEOUS QUARTZITE; SOME QUARTZ VEINING.		
668	678	10.0	10.0	100		DITTO; SOME CHLORITE-RICH BANDS.		
678	688	10.0	10.0	100	29	GREY-GREEN QUARTZITE; MICACEOUS QUARTZITE; PURPLE BIOTITE HORNFELS/QUARTZITE; AND SILICEOUS MICACEOUS SCHIST.		
688	698	10.0	9.6	96		DITTO.		
698	708	10.0	9.8	98		MAINLY GREY, MASSIVE, MICACEOUS QUARTZITE		
					30			
708	718	10.0	9.8	98		DITTO; OCCASIONAL JOINTS FILLED WITH CALCITE; 1" THICK BAND OF QUARTZ-MUSCOVITE-FELDSPAR PEGMATITE AT 715.5.		
718	728	10.0	10.0	100		BANDED, PURPLE, MICACEOUS HORNFELS/QUARTZITE AND GREY-GREEN QUARTZITE; FOLIATION RATHER DISTORTED.		
					31			
728	733	5.0	5.0	100		GREY GREEN MICACEOUS QUARTZITE; SECTIONS UP TO 4" THICK OF WHITE, CRYPTOCRYSTALLINE QUARTZ. WELL-FRACTURED FROM 733-734		
734	738	4.0	4.0	100		DITTO		
738	748	10.0	10.0	100		LIMEY, PYRITIFEROUS, GREY QUARTZITE; SOME PYRITIFEROUS SPOTTED CHLORITE SCHIST; DARK MICACEOUS QUARTZITE.		
748	753	5.0	4.5	90	32	WELL-FRACTURED, LIMEY, PYRITIFEROUS GREY GREEN QUARTZITE; SECTIONS OF WHITE QUARTZ.		
753	758	5.0	4.8	96		GREEN LIMEY QUARTZITE OR SILICEOUS MARBLE; EXTREMELY FRACTURED.		
758	763.5	5.5	3.0			EXTREMELY FRACTURED, PYRITIFEROUS, GREEN, LIMEY QUARTZITE.		
763.5	765	1.5	0.8			ROUNDED PEBBLES OF PYRITE-RICH SPOTTED SCHIST.		
765	767	2.0	2.0	100		EXTREMELY BROKEN LIMEY QUARTZITE AND PURPLE HORNFELS/QUARTZITE.		
767	774	7.0	6.0			767-771 DITTO; 771-773 EXTREMELY ALTERED (CLAY AND SERICITE) QUARTZ-FELDSPAR-MUSCOVITE-TOURMALINE PEGMATITE (SILL?); 773-774 LIMEY QUARTZITE ∠ AT 773' = 65°		
					33			

DDH NUMBER 2

MOUNT ARMSTRONG PROSPECT

BEARING: 165°
INCLINATION: 51.5°
COLLAR ELEVATION: 6525'

DATE STARTED: JULY 24, 1975
DATE COMPLETED: AUGUST 4, 1975
HOLE DEPTH: 1108 FEET.

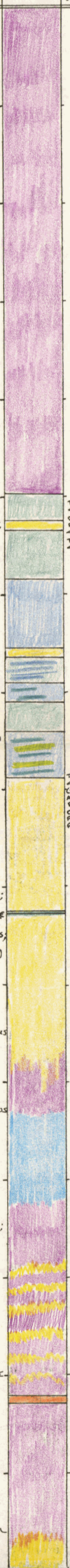
DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	VISUAL PERCENT SCHEELITE
CASING							
8	14	6.0	5.9		1	SPOTTED CHLORITE-BIOTITE-SERICITE SCHIST/GNEISS.	
14	18	4.0	3.5			DITTO; ∠ AT 14.5' = 60°	
18	28	10.0	10.0	100		DITTO.	
28	38	10.0	10.0	100	2	FAIRLY FINE-GRAINED SPOTTED SCHIST/GNEISS AND MICACEOUS GNEISS; LAST FOOT OF RUN FAIRLY RUSTY AND WEATHERED BUT NOT CRUMBLED.	
38	48	10.0	10.0	100		38-39.5 RUSTY AND PERHAPS A LITTLE LIMEY SCHIST/GNEISS; 39.5-48 QUARTZ-BIOTITE GNEISS AND SPOTTED CHLORITE SCHIST; GNEISS LOOKS ALMOST LIKE FOLIATED INTRUSIVE.	
48	58	10.0	10.0	100		DITTO; 53-55 FAIRLY LIMEY, WHITE-MICA RICH GREISENY LOOKING ROCK; 2" BAND OF EXTREMELY RUSTY ROCK AT 53.5'	
58	68	10.0	10.0	100	3	58-67 BIOTITE-CHLORITE SCHIST/GNEISS ∠ AT 62' = 62°; 67-68 GREY-GREEN MICACEOUS QUARTZITE WITH FRACTURES CUTTING THE FOLIATION FILLED WITH $CaCO_3$ AND PYRITE.	
68	78	10.0	9.9	99		VERY SILICEOUS BIOTITE-SERICITE SCHIST OR VERY MICACEOUS QUARTZITE (FAVOUR PREVIOUS); IN LAST FOOT FOLIATION IS STRONGLY CRENULATED WITH PYRITE AND SOME CHALCOPYRITE (?)	
78	88	10.0	10.0	100	4	VERY SILICEOUS FINE-GRAINED DARK PURPLE QUARTZITE/HORNFELS AND DARK, FAIRLY MASSIVE BIOTITE SCHIST; OCCASIONAL 1" THICK BANDS OF PEGMATITE (CONCORDANT)	
88	98	10.0	9.5	95		MAINLY MICACEOUS QUARTZITE; FOLIATION STRONGLY DISTORTED; SOME RUST-FILLED FRACTURES.	
98	108	10.0	10.0	100	5	98-99 MICACEOUS QUARTZITE; 99-104 DISTORTED AND FRACTURED (FILLED WITH CALCITE), PYRITE (CUBES)-PYRRHOTITE BEARING, FINE-GRAINED GREY-GREEN QUARTZITE; 104-108 VERY DENSE, BLACK, FINE-GRAINED ROCK WITH LOTS OF PYRITE; FOLIATION QUITE CONTORTED.	
108	117	9.0	8.9			108-109 PYRITE-BEARING QUARTZITE; 109-110 QUARTZ-FILLED FRACTURES WITH QUARTZ CRYSTALS AND MICA (FRACTURE OR FAULT); 116.5-117 HUNGED UP MICACEOUS QUARTZITE WITH PODS OF MICA AND QUARTZ (POSSIBLY WALL-ROCK ALTERATION FROM MAIN QUARTZ-FILLED FRACTURE)	
117	127	10.0	10.0	100		117-127 SPOTTED SCHIST/GNEISS, MICACEOUS QUARTZITE, AND SERICITE SCHIST.	
127	137	10.0	10.0	100	6	MOSTLY MICACEOUS QUARTZITE BUT SOME SCHISTOSE BANDS.	
137	148	11.0	10.5			MICACEOUS QUARTZITE WITH THIN (∠1") BANDS OF FOLIATED PURPLE QUARTZITE/HORNFELS; ∠ AT 138 = 60°	
148	153.5	5.5	4.4		7	148-151 DITTO; 151-153.5 DISTINCTLY BANDED DARK GREY QUARTZITE AND ALMOST WHITE QUARTZITE; BANDS ∠1" THICK; GET ½" THICK BAND CONTAINING A GREEN MASSIVE MINERAL (EPIDOTE ?) AT 151'; NO CALCIUM CARBONATE.	
153.5	158	4.5	4.1			153.5-158 THINNLY BANDED WHITE AND DARK QUARTZITE; SOME PYRITE AND PYRRHOTITE.	
158	168	10.0	9.3			158-168 WELL-FOLIATED DARK PURPLE/GREY, MICACEOUS QUARTZITE WITH LOTS OF PYRRHOTITE.	
168	178	10.0	9.8	98		DARK PURPLE/GREY, MICACEOUS QUARTZITE OR SILICEOUS GNEISS; ∠ AT 177 = 40°	
178	188	10.0	10.0	9.9	8	DITTO; OCCASIONAL SECTIONS SLIGHTLY LIMEY; ALSO SEVERAL THIN CALCITE-FILLED FRACTURES AND JOINTS FILLED WITH CALCITE.	
188	198	10.0	9.8	98		DITTO; 194-198 BANDS OF WHITE QUARTZITE (OCCASIONALLY LIMEY) UP TO 1 FOOT THICK WITH GRAINS OF A DARK GREEN MINERAL (DIOPSIDE ?) ORIENTED ALONG FOLIATION PLANES.	TRACE OVER 3" AT 193.3
198	208	10.0	9.4	94	9	WHITE SLIGHTLY LIMEY QUARTZITE; GET 3 INCHES OF GARNET AND WHITE FIBROUS MINERAL (TREMOLITE OR WOLLASTONITE) WITH NO CALCITE AT 206'.	
208	218	10.0	9.9	99		208-209 DITTO BUT NO SKARN; 209-215 BLACK, LIMEY, VERY SILICEOUS BIOTITE GNEISS; 215-216 BANDED, WHITE TO BLACK LIMEY QUARTZITE; 2" OF LIMEY GARNET SKARN AT 216'; MUCH PYRRHOTITE IN THE QUARTZITE; 216-217 IS A BRECCIA OF SKARNY QUARTZITE WITH A CLEAR QUARTZ MATRIX;	
218	228	10.0	9.9	99		217-218 IS PYRRHOTITE-RICH FINE-GRAINED QUARTZITE (ALMOST PHYLLITIC) 218-228 WHITE, GRITTY QUARTZITE/SANDSTONE.	
228	238	10.0	9.7	97	10	LIMEY, GRITTY, SLIGHTLY FOLIATED QUARTZITE; GREY-GREEN IN COLOUR; OCCASIONAL CALCITE-FILLED FRACTURES WITH DARK GREEN CRYSTALS (HORNBLENDE ?); 234.5-235 DENSE GARNET SKARN WITH TRACE PYRRHOTITE; GARNET OCCURS AS PALE BROWN PORPHYROBLASTS.	
238	248	10.0	9.8	98		238-248 VERY PALE GREEN GRITTY, PYRRHOTITE-BEARING QUARTZITE; APPROX 2 INCHES OF GARNET SKARN AT 244'; LAST FEW FEET OF RUN WELL-FOLIATED; ∠ AT 244 = 50°	
248	258	10.0	9.9	99	11	WHITE, GRITTY QUARTZITE AND DARK PURPLE, GRITTY HORNFELS/QUARTZITE; 4 INCHES OF FAIRLY MASSIVE GARNET AT 251'; THE GARNET BAND IS LIMEY.	
258	268	10.0	9.6	96		DITTO; GET 2 6 INCH BANDS OF GARNET SKARN FROM 264'-265.5' WITH 6" BAND OF QUARTZITE INBETWEEN; SKARN CONTAINS A WHITE FIBROUS MINERAL (TREMOLITE OR WOLLASTONITE) AND IS FAIRLY LIMEY; QUARTZITE CONTAINS SOME PYRRHOTITE; TRACE CHALCOPYRITE AT 262'	
268	278	10.0	10.0	100	12	DITTO; MUCH PYRRHOTITE (AT LEAST 5%) AFTER 270' AND DISSEMINATED CHALCOPYRITE (NO SCHEELITE) ESPECIALLY FROM 274-275; GET THIN SKARNY CALC-SILICATE BANDS WITH GARNET; GNEISSIC ROCK AT END OF RUN; 1" THICK QUARTZ VEIN WITH COARSE PYRRHOTITE AND CHALCOPYRITE AT 278'	TRACE OVER 1" AT 271' 0.3% OVER 4" AT 272.5'
278	288	10.0	10.0	100		278-288 SULPHIDE-RICH QUARTZITE; CHALCOPYRITE UP TO APPROX. 279'; BANDS OF FINE-GRAINED SKARNY-QUARTZITIC ROCK AT 281' (4" THICK) AND AT 283 (6" THICK); 284-285 PYRRHOTITE-RICH (UP TO 20%) BIOTITE GNEISS.	
288	298	10.0	10.0	100	13	QUARTZITE WITH LESS SULPHIDES; BIOTITE GNEISS CONTAINS MUCH MORE PYRRHOTITE (PERHAPS REFLECTING GREATER PERMEABILITY) 8 INCHES OF QUARTZ-FELDSPAR-MUSCOVITE PEGMATITE AT 294'; 295-298 MEDIUM-GRAINED BIOTITE-MUSCOVITE GRANITE.	
298	308	10.0	9.9	99		298-298.5 BIOTITE-MUSCOVITE GRANITE; 298.5-308 BIOTITE-SERICITE SCHIST/GNEISS WITH SOMEWHAT SPOTTED APPEARANCE; ∠ AT 308 = 30°	
308	318	10.0	9.8	98		308-312.5 BIOTITE-SERICITE SCHIST/GNEISS; 312.5-315.5 MEDIUM-GRAINED BIOTITE-MUSCOVITE GRANITE, COARSE QUARTZ-FELDSPAR-MUSCOVITE PEGMATITE, AND BULL QUARTZ WITH QUARTZ CRYSTALS; 315.5-318 PYRRHOTITE-RICH SCHIST/GNEISS.	

DD-227

DDH NUMBER 2

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	VISUAL PERCENT SCHEELITE	
318	328	10.0	10.0	100	14	318-320 VERY COARSE QUARTZ CRYSTALS AND SOME FELDSPAR CRYSTALS CUT FOLIATION ALMOST PARALLEL TO CORE AXIS; 320-328 MOSTLY BIOTITE SCHIST/GNEISS WITH OCCASIONAL QUARTZITE BANDS; 326.5-327 RUSTY AND ROTTEN SCHIST.		
328	338	10.0	10.0	100		328-338 SILICEOUS BIOTITE-SERICITE GNEISS; 2 INCHES OF MUSCOVITE GRANITE AT 337.		
338	348	10.0	9.3	93	15	DITTO; WITH OCCASIONAL THIN (LESS THAN 2" THICK) SECTIONS OF MUSCOVITE GRANITE AND PEGMATITE.		
348	358	10.0	9.8	98		DITTO; FOLIATION RATHER INDISTINCT		
358	368	10.0	9.8	98		DITTO; MORE SILICEOUS AND GNEISSIC THAN ABOVE.		
368	378	10.0	10.0	100	16	DITTO		
378	388	10.0	9.7	97		DITTO		
388	398	10.0	9.7	97	17	DITTO; SOMEWHAT FINER-GRAINED AND A LITTLE MORE SCHISTOSE BUT STILL DOES NOT FRACTURE ALONG A PREFERRED ORIENTATION.		
398	408	10.0	9.8	98		DITTO; ∠ AT 407.5' = 62°		
408	418	10.0	9.8	98	18	DITTO; MUCH FINER-GRAINED; OCCASIONAL CALCITE-FILLED JOINTS; OCCASIONAL LARGE PYRRHOTITE BLEBS (UP TO ½" ACROSS) WITH CHALCOPYRITE IN CORES.		
418	428	10.0	10.0	100		418-419.5 DITTO; STILL FINER-GRAINED. ∠ AT 419 = 80°; 419.5-428 MARBLE AND COARSE GARNET SKARN. 420-424 EXCELLENT COARSE GARNET-IDOCRASE SKARN; SOME WHITE, FIBROUS MINERAL; TRACE WO_3 AT 422; 0.1-0.2% WO_3 FROM 422-422.5; TRACE WO_3 AT 423; 424-425 SKARNIFIED MARBLE (GARNET PORPHYROBLASTS, WHITE, FIBROUS MINERAL, PLUS CALCITE). 425-427 GREY-GREEN QUARTZITE; 427-428 SKARNIFIED MARBLE OR GARNET-CALCITE SKARN; 428-437 COARSE GARNET SKARN AND SKARNIFIED MARBLE (CHANGES RAPIDLY) 437-451 MAINLY MASSIVE, GREY MARBLE, SILICEOUS MARBLE, WITH MINOR QUARTZITE.	TRACE AT 422' 0.1-0.2% FROM 422-422.5 TRACE AT 423	CHEMICAL ASSAY 422'-423.5': 0.05% W; 0.01% Cu
428	438	10.0	10.0	100				
438	448	10.0	9.9	99	19			
448	458	10.0	9.9	99		451-453 WHITE, GRITTY QUARTZITE. 453-458 SKARNIFIED MARBLE (GARNET PORPHYROBLASTS); SOME QUARTZITE.		
458	468	10.0	9.9	99	20	458-462 MOSTLY MARBLE WITH SOME SKARNIFIED MARBLE; 462-468 GARNET-WHITE, FIBROUS MINERAL SKARN AND SOME SKARNIFIED MARBLE.		
468	478	10.0	10.0	100		MOSTLY MARBLE BUT BANDS UP TO 4" THICK OF GARNET-SKARN AND SKARNIFIED MARBLE AND BANDS UP TO 6" THICK OF QUARTZITE		
478	488	10.0	9.9	99		MOSTLY WHITE TO PALE GREEN QUARTZITE; SECTIONS WITH LARGE BLEBS OF PYRRHOTITE; MINOR CHALCOPYRITE AT 478'	TRACE AT 477.7 (SMEARED ALONG FOLIATION OR POSSIBLY FRACTURE-FILLING)	
488	498	10.0	9.9	99	21	MOSTLY WHITE OR GREY QUARTZITE; A COUPLE OF LIMEY, SKARNY BANDS; A FEW SPECKS OF CHALCOPYRITE; BANDS UP TO 6" THICK OF PURPLE HORNFELS/QUARTZITE.		
498	508	10.0	10.0	100		MOSTLY MICACEOUS AND GREY QUARTZITE; LARGE CHALCOPYRITE BLEB AT 503.5'; ALSO LIMEY QUARTZITE; 500.5-501.5 BULL QUARTZ (VEIN OR QUARTZITE ?) 505-505.5 SILICEOUS GARNET SKARN; SOME CHALCOPYRITE AT 506		
508	518	10.0	10.0	100	22	MOSTLY VERY WHITE QUARTZITE WITH VERY LITTLE SULPHIDES; GET THIN BANDS (∠6" THICK) OF FOLIATED DARK PURPLE HORNFELS/QUARTZITE; 1 INCH THICK BAND OF TREMOLITE(?) AND CALCITE AT 517.5'; ∠ AT 516 = 62°		
518	528	10.0	10.0	100		DITTO		
528	538	10.0	10.0	100	23	528-529 DITTO; FROM 529 ON GET INTO DARKER, MORE MICACEOUS QUARTZITE WITH PYRRHOTITE.		
538	558	20.0	19.5	96		538-545 MOSTLY DARK BLACK, POORLY FOLIATED BIOTITE GNEISS OR VERY MICACEOUS QUARTZITE; 2 LESS THAN 3" THICK INTRUSIVE PODS; 545-558 DARK (BLACK), FINE-GRAINED METASILTSTONE WITH LOCALLY HIGH CONCENTRATIONS OF PYRRHOTITE; SOME GNEISS AND SOME QUARTZITE; ALSO SEVERAL CALCITE-FILLED MICRO-FRACTURES.		
558	568	10.0	9.9	99	24	DITTO; MORE SCHISTOSE AT END OF RUN (565-568)		
568	578	10.0	10.0	100		MOSTLY PURPLE HORNFELS/QUARTZITE AND BIOTITE GNEISS; ∠ AT 568 = 50°. OCCASIONAL THIN (∠1" THICK) BANDS OF MUSCOVITE-BEARING PEGMATITE.		
578	588	10.0	10.0	100	25	INTERBANDED BIOTITE SCHIST/GNEISS, DARK PURPLE HORNFELS/QUARTZITE, AND GREY-GREEN QUARTZITE.		
588	598	10.0	10.0	100		DITTO; PERHAPS MORE QUARTZITIC; OCCASIONAL CALCITE-FILLED FRACTURES.		
598	608	10.0	9.8	98	26	DITTO; BULL QUARTZ FROM 604-605.5 (PROBABLY A FRACTURE BUT MAY BE SEGREGATION PRODUCT FROM METAMORPHISM)		
608	618	10.0	9.8	98		MOSTLY SPOTTED SCHIST/GNEISS; OCCASIONAL CALCITE-RICH MUSCOVITE GRANITE SILLS (LESS THAN 2" THICK); BROKEN AND ALTERED SCHIST AT 618'.		
618	628	10.0	9.9	99		MOSTLY SPOTTED BIOTITE-SERICITE-CHLORITE SCHIST WITH GOOD FOLIATION; SOME PYRRHOTITE.		
628	648	20.0	20.0	100	27	DITTO; 634-643 MOSTLY PURPLE HORNFELS/QUARTZITE; CRUMBLY, RUSTY ALTERATION ZONE FROM 645-645.5; OCCASIONAL CALCITE AND PYRRHOTITE-PYRITE-FILLED FRACTURES.		



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DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
640								
648	653	5.0	5.0	100		A RATHER COMPLEX INTERMIXTURE OF BIOTITE-SERICITE-CHLORITE SCHIST, DARK PURPLE HORNFELS/QUARTZITE, AND BULL QUARTZ (651-652.5)		
653	658	5.0	4.2	84	28	MAINLY SILICEOUS, PURPLE BIOTITE GNEISS; OCCASIONAL THIN (LESS THAN 1" THICK) VEINLETS FILLED WITH A PALE BLUE-GREEN CRYPTOCRYSTALLINE MINERAL, QUARTZ, AND SOME PYRRHOTITE.		
658	668	10.0	10.0	100		658-668 BIOTITE GNEISS; MICACEOUS, PURPLE QUARTZITE, SOME PALE GREEN QUARTZITE; SCHISTOSE BANDS UP TO 1 FOOT THICK; ∠AT 667' = 35°		
668	678	10.0	9.2	92		DITTO; SOME PYRRHOTITE IN LARGE BLEBS; 674-678 IS DARKER AND FINER-GRAINED METASILTSTONE/QUARTZITE.		
678	688	10.0	10.0	100	29	GOOD, MASSIVE GREY TO PURPLE (MOSTLY) BIOTITE QUARTZITE; SOME PYRRHOTITE; ONE OR TWO SCHISTOSE BANDS (LESS THAN 6" THICK).		
688	698	10.0	9.8	98		688-691 DITTO; 691-698 BIOTITE-QUARTZ GNEISS; VERY SIMILAR MINERALOGY TO THE QUARTZITE EXCEPT MORE SCHISTOSE ie MORE BIOTITE, LESS QUARTZ.		
698	708	10.0	10.0	100	30	MASSIVE, GREY TO PURPLE MICACEOUS QUARTZITE; OCCASIONAL TRANSLUCENT AND/OR WHITE QUARTZ.		
708	718	10.0	9.9	99		DITTO.		
718	728	10.0	10.0	100		DITTO; 4 INCHES OF RUSTY MUSCOVITE GRANITE AT 726'		
728	738	10.0	10.0	100	31	DITTO; QUARTZ AND INTRUSIVE (GRANITE) IN THIN FRACTURES AND SILLS; 734-734.8 VERY BROKEN RUSTY QUARTZ		
738	748	10.0	10.0	100		738-741.6 DITTO; 741.6-748 MEDIUM-GRAINED BIOTITE-MUSCOVITE QUARTZ MONZONITE; HIGHLY ALTERED AND ROTTEN IN PLACES (e.g. 743.2-743.8); FELDSPAR IS OCCASIONALLY ALTERED TO A SOFT, GREEN MINERAL		
748	758	10.0	10.0	100	32	FAIRLY MASSIVE PURPLE TO GREY GREEN QUARTZITE OR QUARTZITE/HORNFELS; NUMEROUS THIN (LESS THAN ½" THICK) QUARTZ AND GRANITE-FILLED FRACTURES CUTTING THE QUARTZITE AT VARIOUS ANGLES; ALSO NUMEROUS RUST-FILLED FRACTURES.		
758	768	10.0	9.8	98		758-758.7 DITTO; 758.7-759.7 IS A QUARTZITE BRECCIA CEMENTED WITH QUARTZ; RUST PODS AND QUARTZ CRYSTALS IN OPEN SPACES; 759.7-768 GREY-GREEN TO PURPLE QUARTZITE WITH SCHISTOSE BANDS OF BIOTITE-QUARTZ SCHIST/GNEISS OR CHLORITE SCHIST; LAST 2" OF RUN BULL QUARTZ.		
768	773	5.0	5.0	100	33	FIRST 3" OF RUN A MIXTURE OF GLASSY QUARTZ AND CHLORITE THEN INTO FINE-GRAINED QUARTZITE		
773	778	5.0	4.8	96		GREY, SUGARY-TEXTURED QUARTZITE; OCCASIONAL CALCITE/PYRITE-FILLED FRACTURES.		
778	788	10.0	9.9	99		778-787.3 MOSTLY GREY QUARTZITE; TWO THIN PEGMATITE/GRANITE BANDS; ALSO CALCITE-FILLED FRACTURES; 787.3-788 EXTREMELY ALTERED BIOTITE QUARTZ MONZONITE; BIOTITE IS COMPLETELY CHLORITIZED AND FELDSPAR IS SERICITIZED (GREEN, SOFT).		
788	798	10.0	9.6	96		788-789.2 EXTREMELY ALTERED AND WEATHERED INTRUSIVE; QUARTZ IS THE ONLY UNALTERED MINERAL; 789.2-791 IS GREY QUARTZITE WITH 2" BRECCIA ZONE WITH QUARTZ MATRIX AT 790.4; 791-792.6 ALTERED INTRUSIVE (BIOTITE QUARTZ MONZONITE); 792.6-798 WELL-FRACTURED GREY QUARTZITE; MANY RUST-FILLED FRACTURES. 798-807.5 VERY TO EXTREMELY FRACTURED GREY QUARTZITE; MOST FRACTURES RUST-COATED.		
798	807.5	9.5	≈9.5	≈100	34			
807.5	818	10.5	10.5	100		FIRST 3' OF RUN VERY FRACTURED QUARTZITE; ¼" THICK CALCITE-FILLED FRACTURE APPROXIMATELY PARALLELING THE CORE AXIS FROM 812.5-816		
818	828	10.0	10.0	100	35	FAIRLY MASSIVE GREY QUARTZITE; MINOR PYRRHOTITE; QUARTZ-FILLED FRACTURES (ONE 2" THICK BUT MOST LESS THAN ½" THICK) AS WELL AS CALCITE/PYRITE-FILLED FRACTURES APPROXIMATELY PARALLEL TO THE CORE AXIS; THE THIN QUARTZ VEINLETS HAVE OPEN SPACES CONTAINING QUARTZ CRYSTALS.		
828	838	10.0	10.0	100		828-830 DITTO; 830-833 QUARTZITE BRECCIA CEMENTED WITH QUARTZ AND CALCITE (MOST); QUARTZ CRYSTALS AND CALCITE SCALENOHEDRA IN THIS MATRIX; 833-837.3 QUARTZITE-CHLORITE MIXTURE WITH SOME SCHISTOSE, COARSE MUSCOVITE; 837.3-838 ALTERED MUSCOVITE GRANITE.		
838	848	10.0	9.5	95	36	838-848 A COMPLEX INTERMIXTURE OF GREY QUARTZITE, MICACEOUS QUARTZITE; BIOTITE-SERICITE SCHIST/GNEISS, WHITE QUARTZ, AND GLASSY QUARTZ; OCCASIONALLY RICH IN PYRRHOTITE.		
848	858	10.0	10.0	100		MOSTLY GREY-GREEN MICACEOUS QUARTZITE AND PURPLE QUARTZITE; OCCASIONALLY VERY HIGH PYRITE CONTENT.		
858	868	10.0	10.0	100		GREY GREEN MICACEOUS QUARTZITE; OCCASIONAL CHLORITE SCHIST; ZONES OF HIGH PYRRHOTITE AND FRACTURES COATED WITH PYRITE; NEAR END OF RUN, GET NUMEROUS THIN (APPROX. ¼" THICK), CROSS-CUTTING VEINLETS OF BIOTITE QUARTZ MONZONITE OR GRANITE.		
868	878	10.0	10.0	100	37	DITTO; 879.3-880.7 IS Bi-msc PEGMATITE; FELDSPAR HAS A GREEN TINT; OCCASIONAL SCHISTOSE CHLORITE-RICH BANDS; ∠AT 888 = 47°		
878	888	10.0	10.0	100		DITTO		
888	898	10.0	10.0	100	38	DARK PURPLE, FINE-GRAINED, SLIGHTLY FOLIATED HORNFELS/QUARTZITE; MICACEOUS GREY-GREEN QUARTZITE, AND SPOTTED CHLORITE SCHIST INTERFOLIATED.		
898	908	10.0	9.3	93		DITTO; 905.5-906.7 MUSCOVITE PEGMATE; FELDSPAR HAS GREEN TINT		
908	918	10.0	10.0	100	39	DITTO		
918	928	10.0	10.0	100		DITTO; LAST FOOT OF RUN BROKEN WITH NUMEROUS THIN (LESS THAN ¼" THICK), CLOSE-SPACED QUARTZ VEINLETS IN ALMOST A BRECCIA; ∠AT 918 = 43°		
928	938	10.0	10.0	100		928-933.6 DITTO; 933.6-938 FAIRLY UNIFORM, MEDIUM-GRAINED BIOTITE-MUSCOVITE QUARTZ MONZONITE.		
938	948	10.0	9.8	98	40	938-945.6 GLASSY, GREY QUARTZITE; OCCASIONAL BANDS OF WHITE QUARTZ; PYRITE DISSEMINATED IN QUARTZITE, SMEARED ALONG FOLIATION PLANES, AND IN FRACTURES; 945.6-947 WHITE QUARTZ; 947-948 VERY SILICEOUS (50-60% QUARTZ) LEUCOCRATIC Bi-msc GRANITE; QUARTZ COARSELY CRYSTALLINE; FELDSPAR SHOWS GREEN ALTERATION;		
948	958	10.0	9.9	99		948-952 DITTO; 952-952.6 WHITE QUARTZ; 952.6-958 WELL-FOLIATED MICACEOUS QUARTZITE AND QUARTZ + BIOTITE SCHIST/GNEISS		

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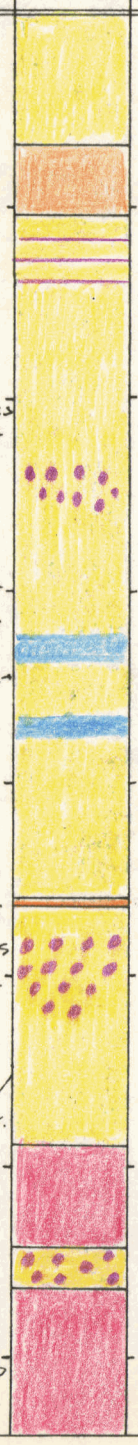
DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
958	968	10.0	9.9	99	41	958-960 WELL-FOLIATED QUARTZITE AND GNEISS; 960-961 WHITE QUARTZ; 961-968 FINE TO COARSE-GRAINED PURPLE TO LIGHT GREY QUARTZITE.		
968	978	10.0	9.9	99		968-973.7 DITTO; SOME DISSEMINATED PYRITE; 973.7-978 MEDIUM TO COARSE-GRAINED LEUCOCRATIC BI-MSC GRANITE OR QUARTZ MONZONITE; QUARTZ VERY COARSELY CRYSTALLINE (50-60% QUARTZ WITH GRAINS ~3mm ACROSS)		
978	988	10.0	10.0	100	42	978-980.8 DITTO; 980.8-987 BIOTITE-QUARTZ-CHLORITE GNEISS INTERFOLIATED WITH QUARTZITE AND WHITE QUARTZ; 987-988 WHITE QUARTZ.		
988	998	10.0	10.0	100		PURPLE TO LIGHT GREY, FINE TO COARSE-GRAINED, SUGARY TEXTURED QUARTZITE WITH SECTIONS OF WHITE OR GLASSY QUARTZ; SOME PYRITE IN FAIRLY COARSE BLEBS; 994-998 WHITE QUARTZ.		
998	1008	10.0	9.9	99	43	ALMOST PURE, OPAQUE, GLASSY QUARTZ WITH OCCASIONAL PODS OF GREY OR PURPLE QUARTZITE; 1005.5-1006.5 FRACTURES ALMOST PARALLEL TO THE CORE AXIS FILLED WITH PYRRHOTITE AND SOME CHALCOPYRITE; VERY VUGGY; ½"-¾" THICK AND IRREGULAR; MINOR PYRRHOTITE IN THE QUARTZ, ALSO.		
1008	1018	10.0	9.8	98		ALMOST PURE, OPAQUE GLASSY QUARTZ; OCCASIONAL PODS OR BLEBS OF QUARTZITE OR CHLORITE.		
1018	1028	10.0	10.0	100		FIRST 8" OF RUN WHITE QUARTZ THEN 8" OF PYRRHOTITE-RICH QUARTZITE; REMAINDER OF RUN A MIXTURE OF GLASSY QUARTZ AND FINE-GRAINED, GRANULAR QUARTZITE; 1024.3-1027 CHLORITE SCHIST; 1027-1028 QUARTZITE.		
1028	1038	10.0	10.0	100	44	MAINLY QUARTZITE; 1033.5-1034.5 BROKEN, DISTORTED CHLORITE-RICH ROCK WITH ½"-1" THICK IRREGULAR, WHITE QUARTZ VEINLETS		
1038	1048	10.0	9.8	98		FINE-GRAINED GREEN QUARTZITE; MINOR CHALCOPYRITE AT 1038.5 WITH PYRRHOTITE IN A FRACTURE; MINOR DISSEMINATED PYRRHOTITE THROUGHOUT.		
1048	1058	10.0	10.0	10.0	45	DITTO; 1052-1052.8 EXTREMELY ALTERED MSC-BI GRANITE OR PEGMATITE; FELDSPAR COMPLETELY ALTERED TO A GRASS-GREEN, SOFT MINERAL; BIOTITE STILL INTACT; SLIGHTLY LIMEY; REMAINDER OF RUN IS BROKEN, LIMEY, CHLORITE-BEARING QUARTZITE AND CHLORITE SCHIST; CALCITE AND PYRITE IN FRACTURES		
1058	1068	10.0	10.0	100		1058-1064 'MUNGED-UP', CHLORITE-BEARING LIMEY QUARTZITE; PYRITE/CALCITE-FILLED FRACTURES; 1064-1068 PURPLE AND GREY-GREEN, FINE-GRAINED QUARTZITE; 2" PEGMATITE SECTION AT 1061.5 (FELDSPAR ALTERED)		
1068	1078	10.0	10.0	100	46	1068-1075 DARK PURPLE QUARTZITE; SLIGHTLY LIMEY; 1075-1077.7 LIMEY GREY-GREEN QUARTZITE WITH THIN (⅛" THICK) CALCITE/PYRITE FILLED FRACTURES ALMOST PARALLEL TO THE CORE AXIS; LAST 0.3' IS VERY ALTERED INTRUSIVE ROCK; SLIGHTLY LIMEY.		
1078	1088	10.0	9.9	99		WELL-ALTERED MEDIUM-GRAINED BIOTITE QUARTZ MONZONITE; BIOTITE FAIRLY FRESH; FELDSPAR ALTERED TO A GREEN, SOFT MINERAL; FRACTURES ALMOST PARALLEL TO THE CORE AXIS FILLED WITH CALCITE AND MINOR PYRITE.		
1088	1098	10.0	10.0	100		1088.5-1092.7 'MUNGED-UP' QUARTZITE AND BIOTITE-QUARTZ SCHIST/GNEISS (XENOLITH?); 1092.7-1098 FAIRLY FRESH BIOTITE QUARTZ MONZONITE OR GRANODIORITE; ROTTEN IN PLACES.		
1098	1108	10.0	9.8	98	47	FAIRLY FRESH BIOTITE QUARTZ MONZONITE OR GRANODIORITE AND VERY ALTERED LEUCOCRATIC GRANITE (FELDSPAR ALTERED TO GREEN, SOFT MINERAL).		



LEGEND FOR GRAPHIC LOGS

1975 DIAMOND DRILLING PROGRAM

MOUNT ARMSTRONG PROSPECT

UNION CARBIDE CANADA MINING LTD.

- MOUNT ARMSTRONG INTRUSIVE; MOSTLY MEDIUM GRAINED BIOTITE QUARTZ MONZONITE AND/OR GRANODIORITE.
- INTRUSIVE SILLS.
- SCHISTOSE ROCKS; PRIMARILY BIOTITE-SERICITE-CHLORITE SCHIST/GNEISS.
- PHYLLITIC ROCKS AND METASILTSTONE.
- MICACEOUS QUARTZITE; GRITTY ARENACEOUS ARKOSIC WACKE; BUFF-COLOURED GRITTY SANDSTONE; LITHIC WACKE; SILTY QUARTZITE; LIMEY QUARTZITE.
- GREY MARBLE; USUALLY INTERCALATED WITH LIMEY QUARTZITE; OFTEN CONTAINS BANDS AND/OR PORPHYROBLASTS OF GARNET.
- GARNET $\pm$ IDOCRASE SKARN.
- SCHEELITE-SULPHIDE (CHALCOPYRITE-PYRRHOTITE) ROCK.

20.226

DDH NUMBER 4

MOUNT ARMSTRONG PROSPECT

BEARING: 80°
INCLINATION: 62.5°
COLLAR ELEVATION: 6160 FEET.

DATE STARTED: AUGUST 16, 1975
DATE COMPLETED: AUGUST 19, 1975
HOLE DEPTH: 858 FEET

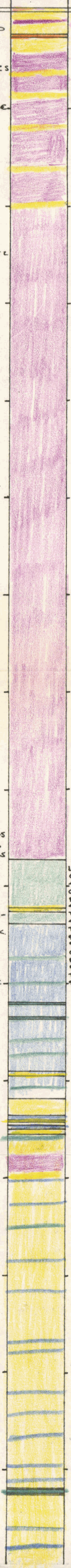
DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
18	37	19	≈19	100	1	VERY BROKEN LIGHT COLOURED QUARTZITE AND SILICEOUS CHLORITE-SERICITE PHYLLITE		
37	47	10.0	10.0	100	2	FINE GRAINED SILICEOUS BIOTITE SCHIST/GNEISS OR BANDED MICACEOUS QUARTZITE; ∠AT 39' = 60°		
47	57	10.0	9.4	94		DARK MICACEOUS QUARTZITE WITH SOME SCHIST/GNEISS; FOLIATION DEFORMED IN PLACES		
57	68	11.0	10.7		3	MOSTLY BIOTITE-CHLORITE SCHIST/GNEISS WITH SOME MICACEOUS QUARTZITE; 2" THICK ALTERED (KAOLIN) AND RUSTY PEGMATITE BAND AT 58'; OCCASIONAL BANDS OF RUSTY BROKEN ROCK		
68	77	9.0	8.7			DITTO; VERY BROKEN		
77	87	10.0	10.0	100		RUSTY, SILICEOUS PHYLLITE FOR MOST OF RUN; LAST 2' OF RUN RUSTY BROKEN QUARTZITE; 78.5-79.2 PECULIAR BLACK SULPHIDE-BEARING (MAGNETITE?) ROCK; NO SCHEELITE.		
87	96	9.0	≈9.0	100	4	WHITE, BANDED RUSTY QUARTZITE; SOME SCHIST/GNEISS; LAST FOOT EXTREMELY BROKEN		
96	102	6.0	≈6.0	100		BROKEN SCHIST/GNEISS; FOLIATION FOLDED ALMOST PARALLEL TO CORE AXIS AT 96'; LAST 2' OF RUN EXTREMELY BROKEN QUARTZITE; RUSTY, EARTHY BAND AT 100.5'		
102	108	6.0	≈6.0	100	5	102-105 EXTREMELY BROKEN, CRUMBLY; PECULIAR BLACK BRECCIATED LOOKING ROCK AT 104'; 105-108 FAIRLY SOLID SILICEOUS PHYLLITE.		
108	118	10.0	9.7	97		108-108.6 ROTTEN TOURMALINE PEGMATITE; 108.6-117 MOSTLY SPOTTED CHLORITE SCHIST/PHYLLITE; BANDS OF QUARTZITE UP TO 6" THICK AT 116'; 117-117.9 GARNET SKARN.		
118	128	10.0	10.0	100		MOSTLY WHITE QUARTZITE AND LIMEY QUARTZITE; ALSO SOME GREY MARBLE (120.5-121) AND SILICEOUS MARBLE (123-124.4); GARNET SKARN OR SKARNIFIED MARBLE 119.4-120.2, 121.1-121.4, AND 121.7-122.4	0.3-0.5% FROM 117-117.3' TRACE AT 117.9'	
128	138	10.0	10.0	10.0	6	MOSTLY WHITE, LIMEY QUARTZITE; 129.6-130.8 ALMOST PURE WHITE MARBLE BUT WITH A COUPLE OF THIN SCHISTOSE BANDS; GARNET SKARN 128.4-129 AND VERY SILICEOUS GARNET SKARN 130.9-131.1		
138	148	10.0	9.8	98		DITTO; 141-142 SILICEOUS MARBLE.		
148	158	10.0	≈10.0	100	7	DITTO; WITH A FEW THIN (LESS THAN 2" THICK) BANDS OF GREY MARBLE; LAST FOOT OF RUN VERY BROKEN; 155.5-158 GREY MARBLE.		
158	168	10.0	10.0	100		ALMOST ENTIRELY GREY MARBLE WITH A FEW THIN BANDS OF LIMEY QUARTZITE; 165.5-168 LIMEY QUARTZITE		
168	178	10.0	10.0	100		ALMOST WHITE QUARTZITE WITH A FEW LIMEY BANDS; SOME PYRRHOTITE IN QUARTZITE; 176.5-178 SILICEOUS MARBLE		
178	188	10.0	10.0	100	8	178-179.5 SILICEOUS MARBLE; 179.5-188 LIGHT GREY LIMEY QUARTZITE AND DARK SILTY QUARTZITE		
188	198	10.0	10.0	100		DITTO; 195.5-196 SILICEOUS MARBLE; 197.4-198 SILICEOUS MARBLE.		
198	208	10.0	10.0	100	9	LIMEY QUARTZITE WITH SEVERAL BANDS OF GREY SILICEOUS MARBLE UP TO 1" IN THICKNESS; OCCASIONAL VERY RUSTY BANDS OF LIMEY QUARTZITE.		
208	218	10.0	9.9	99		DITTO; 210.5-211.2, 216-216.5, AND 217.7-218 SILICEOUS MARBLE; 214-214.5 SILICEOUS GARNET SKARN.		
218	228	10.0	10.0	100	10	218-218.7 SILICEOUS LIMEY ROCK; 218.7-228 BANDED MICACEOUS PYRRHOTITE-BEARING QUARTZITE; OCCASIONAL LIMEY BANDS; ∠AT 220.4 = 76°		
228	238	10.0	10.0	100		GRITTY WHITE AND LIGHT GREY BANDED QUARTZITE WITH OCCASIONAL CALCITE-FILLED FRACTURES; MINOR PYRRHOTITE.		
238	248	10.0	10.0	100		DITTO; FAIRLY LIMEY FROM 242-245; 245-248 SPOTTED BIOTITE-CHLORITE SCHIST/GNEISS WITH CALCITE/RUST-FILLED FRACTURES		
248	253.5	5.5	≈5.5	100	11	SPOTTED BIOTITE-CHLORITE SCHIST/GNEISS; LAST 2'-3' OF RUN CRUMBLED RUSTY GRAVEL.		
253.5	258	4.5	4.0			SILICEOUS SPOTTED BIOTITE-CHLORITE SCHIST/GNEISS.		
258	268	10.0	10.0	100		DITTO; NUMEROUS THIN INTRUSIVE SILLS; 261.6-262.3 PEGMATITE; 266.9-267.6 MUSCOVITE GRANITE.		
268	274	6.0	6.0	100	12	DITTO; 269.8-270.4 AND 271.3-272.2 COARSE-GRAINED MUSCOVITE GRANITE; GARNETS IN SCHIST AT 273.5		
274	278	4.0	4.0	100		DITTO; THIN BANDS OF INTRUSIVE		
278	288	10.0	9.9	99		DITTO; 274.5-275.5 VERY BROKEN AND CRUMBLED MUSCOVITE GRANITE; FINER-GRAINED AT END OF RUN.		
288	298	10.0	10.0	100	13	VERY SILICEOUS BIOTITE-CHLORITE SCHIST/GNEISS; ∠AT 288 = 70°		
298	308	10.0	10.0	100		DITTO; BANDS THAT ARE ALMOST QUARTZITIC; 306.4-307 WEATHERED MUSCOVITE GRANITE.		
308	318	10.0	10.0	100	14	DITTO		

DD-226

DDH NUMBER 4:

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	VISUAL PERCENT SCHEELITE	
318	328	10.0	10.0	100	14	MICACEOUS QUARTZITE; SEVERAL RUST-FILLED FRACTURES AND RUST ALONG FOLIATION PLANES; 324.7-325.2 RUSTY AND ALTERED (KAOLIN?) BIOTITE-MUSCOVITE GRANITE; 326.6-328 RUSTY, PYRITE-BEARING SILICEOUS ROCK CONSISTING ALMOST ENTIRELY OF BULL QUARTZ. 328-329 PYRITE-BEARING SILICEOUS ROCK; GOSSAN-FILLED FRACTURES AT LOW ANGLE TO CORE AXIS AT 332; 329-338 MOSTLY CHLORITE SCHIST/GNEISS.		
328	338	10.0	10.0	100				
338	348	10.0	10.0	100	15	CHLORITE SCHIST/GNEISS WITH SOME QUARTZITE; MUCH PYRITE AT 339		
348	358	10.0	10.0	100		VERY SILICEOUS SCHIST/GNEISS OR CHLORITE-BEARING QUARTZITE; 2" THICK LIMEY, VUGGY LEACHED BAND AT 353.6		
358	368	10.0	10.0	100	16	SILICEOUS FINE-GRAINED CHLORITE SCHIST/GNEISS; ∠ AT 358.8 = 80°		
368	378	10.0	10.0	100		DITTO; LAST HALF OF RUN, SCHIST/GNEISS HAS WHITE QUARTZ CLOTS (EYES?) AND IS FAIRLY RUSTY		
378	388	10.0	10.0	100	17	DITTO; VERY FRACTURED IN PLACES.		
388	398	10.0	10.0	100		DITTO		
398	405	7.0	6.8			SPOTTED CHLORITE SCHIST/GNEISS.		
405	408	3.0	3.0	100	18	DITTO		
408	418	10.0	10.0	100		DITTO		
418	424.5	6.5	5.9			DITTO		
424.5	428	3.5	2.7			DITTO		
428	438	10.0	9.6	96	19	CHLORITE SCHIST/GNEISS; 430-431 BROKEN, RUSTY, AND LEACHED.		
438	448	10.0	9.9	99		DITTO		
448	458	10.0	10.0	100		DITTO; MORE FINE-GRAINED AND SILICEOUS		
458	468	10.0	10.0	100	20	DITTO; MORE SILICEOUS		
468	478	10.0	10.0	100		DITTO		
478	488	10.0	9.7	97	21	BIOTITE-CHLORITE SCHIST/GNEISS		
488	498	10.0	10.0	100		488-494.3 BIOTITE-CHLORITE SCHIST/GNEISS WITH NUMEROUS CALCITE-FILLED FRACTURES AND SOME IRREGULAR BANDS OF BIOTITE-MUSCOVITE GRANITE; 494.3-498 COARSE, SILICEOUS GARNET-IDOCRASE SKARN; MINOR SCHEELITE 496-498.		
498	508	10.0	9.7	97	22	498-504.4 COARSE, SILICEOUS GARNET-IDOCRASE SKARN; PODS OF QUARTZ WITHIN THIS SKARN; MINOR SCHEELITE 498-498.5 AND 502.9-503.2; 0.5-0.7% SCHEELITE 504-504.4; 504.4-505.3 LIMEY QUARTZITE AND MARBLE (TOP); 505.3-507.5 - GARNET-IDOCRASE-CALCITE SKARN; 507.5-508 WHITE/GREY MARBLE; ∠ AT 505 = 66°	LESS THAN 0.1% FROM 496.2-498 0.3-0.4% FROM 497.3-497.6. TRACE FROM 498-499 TRACE AT 502.2 AND 503. 0.5-0.7% FROM 504-504.4. TRACE AT 506.6	CHEMICAL ASSAY 496.2'-498': 0.01% W; 0.01% Cu
508	518	10.0	9.9	99		508-518 SKARNIFIED MARBLE; GARNET BANDS LESS THAN 1" THICK.		
518	528	10.0	10.0	100		SKARNIFIED WHITE MARBLE; SOME FIBROUS WHITE MINERAL (TREMOLITE OR WOLLASTONITE?); 523.9-524.2 GARNET SKARN; 527-527.4 FAIRLY MASSIVE GARNET		
528	538	10.0	10.0	100	23	SKARNIFIED WHITE MARBLE; LAST 2'-3' OF RUN DENSE WHITE QUARTZITE BANDS INTERFOLIATED; 528.9-529.2 PECULIAR LIGHT OLIVE-GREEN MINERAL (?) WITH NUMEROUS CRISS-CROSSING CALCITE-FILLED MICRO-FRACTURES.		
538	548	10.0	10.0	100		538-539.3 WHITE QUARTZITE; 539.3-543.5 MARBLE AND SKARNIFIED MARBLE; 543.5-546.7 WHITE QUARTZITE; 546.7-548 MARBLE AND SKARNIFIED MARBLE.		
548	558	10.0	9.9	99	24	548-548.4 LIMEY QUARTZITE; 548.4-549.2 GREY/WHITE MARBLE; 549.2-550 LIMEY QUARTZITE; 550-551.1 SILICEOUS GARNET SKARN; 551.1-558 LIMEY QUARTZITE.		
558	568	10.0	9.7	97		MOSTLY LIMEY QUARTZITE; 555-557 VERY SILICEOUS SERICITE-CHLORITE SCHIST/GNEISS.		
568	578	10.0	9.8	98	25	568-569 LIMEY CALC-SILICATE ROCK; 568.4-568.5 COARSE GARNET; 569-578 LIGHT GREEN LIMEY QUARTZITE; ∠ AT 568' = 77°		
578	588	10.0	9.9	99		MOSTLY SLIGHTLY LIMEY QUARTZITE WITH SEVERAL THIN (LESS THAN 2" THICK) MARBLE BANDS AND CALCITE-FILLED FRACTURES		
588	594	6.0	5.7			DITTO; 591.7-593 RUSTY QUARTZ VEIN.		
594	598	4.0	3.6		26	LIGHT GREEN LIMEY QUARTZITE.		
598	608	10.0	10.0	100		DITTO; NUMEROUS FRACTURES FILLED WITH CALCITE; ALSO SEVERAL LIMEY BANDS (LESS THAN 1" THICK)		
608	618	10.0	9.8	98		DITTO; 616.5-616.9 VERY LIMEY QUARTZITE; NUMEROUS CRISS-CROSSING CALCITE-FILLED FRACTURES.		
618	624	6.0	1.5			VERY LIMEY QUARTZITE; LAST 2" OF RUN SILICEOUS, BANDED GARNET-DIOPSIDE (?) SKARN; NOTE POOR CORE RECOVERY.		
624	628	4.0	3.9		27	DITTO; 624.8-625 BANDED LIMEY GARNET SKARN; MINOR GARNET AT 625.2; ∠ AT 625 = 81°		
628	638	10.0	9.9	99		628-638 SLIGHTLY LIMEY PALE GREEN QUARTZITE.		



DD-386

DDH NUMBER 4:

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
638	648	10.0	9.7	97		DITTO; LAST 3' OF RUN FINE-GRAINED CHLORITE GNEISS OR CHLORITIC QUARTZITE		
648	658	10.0	10.0	100	28	648-649.8 WHITE QUARTZITE; 649.8-658 INTERFOLIATED WHITE QUARTZITE AND DARK, SILTY QUARTZITE OR METASILTSTONE; BLEBS OF PYRRHOTITE THROUGHOUT.		
658	668	10.0	9.9	99		DITTO; MORE SILTY AND FINE-GRAINED.		
668	678	10.0	9.9	99	29	LIGHT GREY QUARTZITE; SILTY DARK PURPLE QUARTZITE; AND MINOR CHLORITE SCHIST/GNEISS; SEVERAL CALCITE-FILLED FRACTURES		
678	688	10.0	10.0	100		DITTO		
688	698	10.0	9.8	98		688-693 LIGHT GREEN QUARTZITE; 692-698 CHLORITE SCHIST/GNEISS; ∠AT 693=74°		
698	708	10.0	10.0	100	30	MOSTLY BIOTITE-CHLORITE SCHIST/GNEISS; 704.3-704.6 LIMEY QUARTZITE; NUMEROUS CALCITE-FILLED FRACTURES UP TO ½" THICK.		
708	718	10.0	10.0	100		DITTO; LAST FOOT OF RUN QUARTZITE; MANY CALCITE-FILLED FRACTURES		
718	728	10.0	10.0	100	31	BIOTITE-CHLORITE-SERICITE GNEISS; HAS APPEARANCE OF FOLIATED INTRUSIVE; 725.4-726.2 ¼" THICK PYRITE-QUARTZ VEINLET AT LOW ANGLE TO CORE AXIS; PYRITE HAS REPLACED GNEISS ALONG MARGINS OF THIS VEINLET.		
728	738	10.0	9.9	99		BIOTITE-CHLORITE SCHIST/GNEISS; 730.6-731 IRREGULAR 1" THICK QUARTZ-PYRITE-CHALCOPYRITE (MINOR) VEINLET.		
738	748	10.0	10.0	100		DITTO		
748	758	10.0	10.0	100	32	DITTO; RUST-FILLED JOINT ALMOST PARALLEL TO CORE AXIS 755-757		
758	768	10.0	10.0	100		DITTO BUT FINER-GRAINED; SEVERAL CALCITE-FILLED JOINTS; ∠AT 758.5'=81°		
768	778	10.0	10.0	100	33	DITTO; OCCASIONAL QUARTZ BANDS (VEINS) UP TO 6" THICK (777.7-778)		
778	788	10.0	10.0	100		FINE-GRAINED CHLORITE SCHIST/GNEISS; FAIRLY LIMEY (NUMEROUS CRISS-CROSSING CALCITE-FILLED FRACTURES) FROM 785-788; ALSO FAIRLY SILICEOUS (BANDS OF QUARTZITE UP TO 6" THICK)		
788	798	10.0	10.0	100	34	788-791.6 BRECCIATED ROCK CEMENTED WITH CALCITE; 791.6-792.6 CHLORITE SCHIST/GNEISS; ∠AT 792.6=20°; 792.6-798 MIXTURE OF LIGHT GREY PYRRHOTITE-BEARING QUARTZITE AND CHLORITE SCHIST/GNEISS.		
798	808	10.0	10.0	100		798-801 CHLORITE SCHIST AND QUARTZITE; 801-801.6 QUARTZ VEIN; 801.6-802.3 QUARTZITE; 802.3-802.7 MUSCOVITE GRANITE; 802.7-803.7 BIOTITE-CHLORITE SCHIST; 803.7-807 LEUCOCRATIC BIOTITE-MUSCOVITE GRANITE OR QUARTZ MONZONITE; 807-808 BIOTITE-CHLORITE SCHIST.		
808	818	10.0	10.0	100	35	808-818 CHLORITE SCHIST/GNEISS; SEVERAL CALCITE-FILLED JOINTS.		
818	828	10.0	10.0	100		DITTO; LAST 3' OF RUN IS QUARTZ VEIN; ∠AT 818.5=32°		
828	838	10.0	10.0	100		828-835 COMPLEX INTERMIXTURE OF QUARTZ VEIN MATERIAL AND CHLORITE SCHIST/GNEISS.		
838	848	10.0	10.0	100	36	PYRRHOTITE-BEARING CHLORITE SCHIST/GNEISS; 843.9-845.3 EXTREMELY ALTERED AND LEACHED MUSCOVITE GRANITE OR PEGMATITE		
848	858	10.0	10.0	100		848-849.4 SILICEOUS BIOTITE-CHLORITE SCHIST/GNEISS; 849.4-855.4 LEACHED AND CRUMBLY INTRUSIVE (MUSCOVITE GRANITE?) 855.4-858 WELL-FRACTURED, DARK, PYRRHOTITE-BEARING QUARTZITE.		

LEGEND FOR GRAPHIC LOGS

1975 DIAMOND DRILLING PROGRAM

MOUNT ARMSTRONG PROSPECT

UNION CARBIDE CANADA MINING LTD.

- MOUNT ARMSTRONG INTRUSIVE; MOSTLY MEDIUM GRAINED BIOTITE QUARTZ MONZONITE AND/OR GRANODIORITE.
- INTRUSIVE SILLS.
- SCHISTOSE ROCKS; PRIMARILY BIOTITE-SERICITE-CHLORITE SCHIST/GNEISS.
- PHYLLITIC ROCKS AND METASILTSTONE.
- MICACEOUS QUARTZITE; GRITTY ARENACEOUS ARKOSIC WACKE; BUFF-COLOURED GRITTY SANDSTONE; LITHIC WACKE; SILTY QUARTZITE; LIMEY QUARTZITE.
- GREY MARBLE; USUALLY INTERCALATED WITH LIMEY QUARTZITE; OFTEN CONTAINS BANDS AND/OR PORPHYROBLASTS OF GARNET.
- GARNET ± IDOCRASE SKARN.
- SCHEELITE-SULPHIDE (CHALCOPYRITE-PYRRHOTITE) ROCK.

DD-224

DDH NUMBER 5:

MOUNT ARMSTRONG PROSPECT

BEARING: 270°
INCLINATION: 55°
COLLAR ELEVATION: 6375'

DATE STARTED: AUGUST 22, 1975
DATE COMPLETED: AUGUST 28, 1975
HOLE DEPTH: 1058 FEET

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
42	48	6.0	24.5		1	FIRST HALF OF RUN EXTREMELY BROKEN (PEBBLY) CHLORITIC PHYLLITE AND BUFF QUARTZITE INTERFOLIATED; LAST HALF OF RUN BUFF TO LIGHT GREY GREEN QUARTZITE.		
48	58	10.0	9.7	97		ARENACEOUS, ARKOSIC WACKE; OCCASIONALLY WITH SMALL RUST PODS (49-51); 50.5-51 THESE RUST PODS ARE LARGER AND STILL CONTAIN REMNANT PYRITE AND PYRRHOTITE; OCCASIONAL THIN PHYLLITIC BANDS; ∠AT 51.5' = 48°		
58	68	10.0	8.4	84		DITTO BUT NOT MUCH PHYLLITE; 64.6-67.8 ¼"-½" THICK QUARTZ-FILLED FRACTURE ALMOST PARALLEL TO CORE AXIS; THIS FRACTURE IS COATED WITH SMALL QUARTZ CRYSTALS		
68	78	10.0	10.0	100	2	MICACEOUS QUARTZITE AND LIGHT GREY MASSIVE QUARTZITE.		
78	88	10.0	9.9	99		BANDED CHLORITE-BEARING QUARTZITE WITH BANDS OF PHYLLITIC ROCK UP TO 6" THICK; TOURMALINE FILLED JOINT (1/16" THICK) AT 84.9'; TOURMALINE VERY FINE-GRAINED.		
88	98	10.0	10.0	100	3	GRITTY ARENACEOUS, ARKOSIC WACKE WITH A LITTLE CHLORITE; ALSO LIGHT GREY TO DARK PURPLE QUARTZITE/SANDSTONE OR SILTY QUARTZITE/SANDSTONE; ALSO THIN BANDS OF PHYLLITE AND/OR METASILTSTONE.		
98	108	10.0	10.0	100		98-99.5 DITTO; 99.5-108 CHLORITIC PHYLLITE WITH OCCASIONAL THIN BANDS OF SANDSTONE.		
108	118	10.0	10.0	100		EQUAL PERCENT OF PHYLLITE AND SANDSTONE		
118	128	10.0	10.0	100	4	118-122 DITTO; 122-128 FINE-GRAINED DARK BROWN TO WHITE QUARTZITE/SANDSTONE; ∠AT 118.5 = 57°		
128	138	10.0	10.0	100		ALTERNATING FINE-GRAINED SANDSTONE AND GRITTY ARENACEOUS ARKOSIC WACKE (SOME WITH COARSE QUARTZ 'EYES')		
138	148	10.0	10.0	100	5	DITTO.		
148	158	10.0	9.8	98		148-153.8 DITTO; 153.8-156 ALTERNATING CHLORITE PHYLLITE AND SANDSTONE.		
158	168	10.0	10.0	100		MOSTLY BUFF SANDSTONE WITH A COUPLE OF BANDS (LESS THAN 6" THICK) OF PHYLLITE.		
168	178	10.0	9.9	99	6	MOSTLY BUFF-COLOURED, MEDIUM GRAINED SLIGHTLY GRITTY SANDSTONE WITH A FEW FOLIATED BANDS.		
178	188	10.0	10.0	100		SANDSTONE INTERBANDED WITH CHLORITIC PHYLLITE; 175-175.3 SANDSTONE IS VERY VUGGY (WEATHERED SULPHIDES?)		
188	198	10.0	9.9	99	7	MOSTLY SANDSTONE; MINOR PHYLLITE; ∠AT 188.5 = 63°		
198	208	10.0	9.9	99		DITTO; 203-204.5 BROKEN AND RUSTY PHYLLITE.		
208	218	10.0	10.0	100	8	208-214.9 MOSTLY SANDSTONE WITH MINOR PHYLLITE; 214.9-218 SPOTTED CHLORITIC PHYLLITE; SMALL, DISTINCT CLOTS OF CHLORITE UP TO 3mm ACROSS.		
218	228	10.0	10.0	100		218-222.2 MOSTLY SPOTTED CHLORITE PHYLLITE WITH A LITTLE SANDSTONE; 222.2-228 MOSTLY SANDSTONE WITH A LITTLE PHYLLITE.		
228	238	10.0	9.8	98		DITTO; SANDSTONE FINE-GRAINED IN PLACES AND ALMOST APPEARS TO BE QUARTZITE.		
238	248	10.0	9.8	98	9	LIGHT TO DARK FAIRLY WELL INDURATED SANDSTONE/QUARTZITE INTERFOLIATED WITH BANDS OF PHYLLITE; PHYLLITE OCCASIONALLY CONTAINS DARK FINE TO MEDIUM SIZED GRAINS OF (?)		
248	258	10.0	10.0	100		FINE GRAINED, DARK, FAIRLY MASSIVE BUT STRONGLY FOLIATED ROCK INTERFOLIATED WITH FINE-GRAINED SANDSTONE OR QUARTZITE; FOLIATED ROCK APPEARS ALMOST ARGILLACEOUS		
258	268	10.0	9.6	96	10	SPOTTED CHLORITIC PHYLLITE; ∠AT 268 = 59°		
268	278	10.0	10.0	100		DITTO		
278	288	10.0	10.0	100		DITTO		
288	298	10.0	10.0	100	11	DITTO		
298	308	10.0	10.0	100		DITTO		
308	318	10.0	9.8	98	12	MOSTLY CHLORITIC PHYLLITE BUT PERHAPS MORE SILICEOUS; OCCASIONALLY PYRRHOTITE-FILLED JOINTS		

DD-224

DDH NUMBER 5:

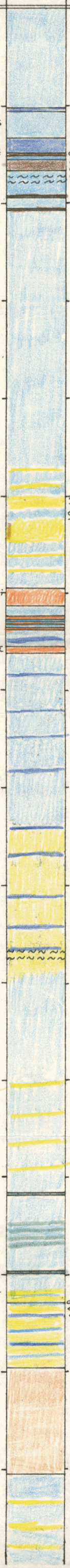
MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
318	328	10.0	10.0	100		318-322 DITTO; 322-328 BUFF TO DARK GREY COLOURED QUARTZITE WITH A FEW THIN FOLIATED BANDS.		
328	338	10.0	10.0	100	13	QUARTZITE AND CHLORITE PHYLLITE INTERFOLIATED; 328.5-329 ½" THICK VUGGY, TOURMALINE-FILLED FRACTURE AT 10° TO CORE AXIS; 335.8-336.7 ¼" THICK QUARTZ-TOURMALINE VEINLET ALMOST PARALLEL TO CORE AXIS.		
338	346	8.0	8.0	100		DITTO; ∠ AT 339 = 55°		
346	356	10.0	10.0	100		MOSTLY SPOTTED CHLORITE PHYLLITE WITH MINOR QUARTZITE/SANDSTONE.		
356	366.5	10.5	10.3		14	DITTO		
366.5	377	10.5	10.4			DITTO		
377	387.5	10.5	10.3		15	DITTO; 378.3-379.7 WHITE QUARTZITE		
387.5	398	10.5	10.4			DITTO		
398	402	4.0	3.4			MOSTLY CHLORITE PHYLLITE WITH SOME QUARTZITE		
402	408	6.0	6.0	100	16	DITTO; FOLIATION OCCASIONALLY DEFORMED AND AT 405' IS ALMOST PARALLEL TO CORE AXIS.		
408	418	10.0	9.9	99		DITTO; FOLIATION FAIRLY UNIFORM; ∠ AT 408.5 = 59°		
418	428	10.0	9.8	98		418-423.3 DITTO; 423.3-426.5 MASSIVE GREY QUARTZITE; 426.5-428 SPOTTED CHLORITE PHYLLITE.		
428	438	10.0	10.0	100	17	SPOTTED CHLORITE PHYLLITE; NO QUARTZITE.		
438	448	10.0	9.9	99		DITTO		
448	454	6.0	5.9		18	MOSTLY SPOTTED CHLORITE PHYLLITE WITH NARROW (LESS THAN 6" THICK) BANDS OF DARK QUARTZITE.		
454	458	4.0	3.9			DITTO		
458	468	10.0	9.7	97		458-461.6 GREY-GREEN QUARTZITE WITH A FEW BANDS OF WHITE QUARTZITE; 461.6-468 INTERFOLIATED CHLORITE PHYLLITE AND DARK GREY, OFTEN FOLIATED QUARTZITE.		
468	478	10.0	10.0	100	19	SPOTTED CHLORITE PHYLLITE; NUMEROUS LESS THAN ½" THICK QUARTZ-PYRRHOTITE-FILLED FRACTURES; 469.4-471 DARK GREY QUARTZITE.		
478	488	10.0	9.9	99		DITTO; 480.3-481.3 QUARTZ VEIN WITH SMALL VUGS; APPROX 1"-2" THICK; CUTS CORE AXIS AT 13° ANGLE; ½"-1" THICK QUARTZ VEIN AT 483.2; ∠ AT 488 = 45°		
488	498	10.0	9.9	99		SPOTTED CHLORITE PHYLLITE; OCCASIONAL THIN QUARTZ-PYRRHOTITE-FILLED FRACTURES AND NARROW BANDS OF QUARTZITE.		
498	508	10.0	9.9	99	20	SPOTTED CHLORITE PHYLLITE		
508	518	10.0	9.9	99		DITTO; 508-508.7 WHITE CHLORITIC SANDSTONE WITH DISSEMINATED PYRITE AND PYRRHOTITE.		
518	528	10.0	9.9	99	21	VERY SILICEOUS CHLORITE PHYLLITE WITH NUMEROUS THIN BANDS OF QUARTZITE/SANDSTONE		
528	538	10.0	9.9	99		DITTO.		
538	548	10.0	9.9	99		DITTO; 539-539.7 QUARTZ VEIN.		
548	558	10.0	10.0	100	22	548-555 DITTO; 555-558 FAULT ZONE - EXTREMELY BROKEN RUSTY ROCK AND MUD.		
558	566	8.0	8.0	100		FAULT ZONE; EXTREMELY FRACTURED AND CRUMBLY ROCK; MOSTLY RUSTY MUD (CLAY) BUT SOME LESS SHEARED SECTIONS (559-559.7) JOINTS COATED WITH CALCITE; ALSO THIN (LESS THAN ½" THICK) CALCITE-FILLED FRACTURES.		
566	576	10.0	10.0	100	23	566-570 FAULT ZONE; 570-576 SPOTTED CHLORITE PHYLLITE WITH OCCASIONAL CALCITE-FILLED JOINTS AND FRACTURES (LESS THAN ¼" THICK)		
576	578	2.0	2.0	100		SILICEOUS SPOTTED CHLORITE PHYLLITE.		
578	588	10.0	9.8	98		DITTO; 581-583 NUMEROUS SILICEOUS BANDS (VEINLETS (?)) LESS THAN 1" THICK; CLEAVAGE CRENULATION (?) AT 583'; CRENULATIONS ALMOST PARALLEL TO CORE AXIS; ∠ AT 588' = 59°		
588	598	10.0	9.8	98	24	MOSTLY SPOTTED CHLORITE PHYLLITE; LAST 4' OF RUN WITH MORE FINE-GRAINED PHYLLITIC SANDSTONE THINNLY INTERFOLIATED WITH WHITE QUARTZITE/SANDSTONE; ½" THICK CALCITE BAND AT 597'		
598	608	10.0	10.0	100		DITTO; 1" THICK CALCITE BAND AT 601'		
608	618	10.0	10.0	100	25	MOSTLY SILICEOUS PHYLLITE; OCCASIONALLY SPOTTED; 614.5-618 MOSTLY BUFF QUARTZITE/SANDSTONE WITH A LITTLE PHYLLITE.		
618	628	10.0	10.0	100		VERY SILICEOUS, FINE-GRAINED LIGHT COLOURED SPOTTED CHLORITE PHYLLITE WITH DISTINCT CHLORITE CLOTS; 1/16" THICK PYRRHOTITE-FILLED FRACTURE AT 628		
628	638	10.0	9.9	99		DITTO; IRREGULAR CALCITE-FILLED JOINTS SUB-PARALLEL TO CORE AXIS FROM 632-634.5.		

DDH NUMBER 5:

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	VISUAL PERCENT SCHEELITE	
638	648	10.0	10.0	100	26	638-644 DITTO; 644-648 GRADATIONAL CHANGE FROM SPOTTED PHYLLITE TO THINNLY LAMINATED CHLORITIC PHYLLITE OR PHYLLITIC METASILTSTONE; 1½" THICK BAND OF MASSIVE PYRRHOTITE AT 647'		
648	658	10.0	9.9	99		VERY SILICEOUS PHYLLITIC ROCK; OCCASIONALLY SPOTTED AND OCCASIONALLY WITH LESS THAN 1½" THICK QUARTZ VEINS.		
658	668	10.0	9.9	99	27	658-660.4 DITTO; 660.0-660.4 GREY, DIRTY MARBLE; 660.4-661.1 WHITE SKARNIFIED MARBLE WITH GARNET PORPHYROBLASTS AND WHITE, FIBROUS MINERAL; 661.1-666.5 SILICEOUS, THINNLY LAMINATED PHYLLITE OR PHYLLITIC METASILTSTONE; 666.5-669.6 SKARNIFIED MARBLE WITH A LITTLE SPOTTED, LIMEY PHYLLITE; 669.6-670.1 VERY COARSE PYRRHOTITE-PYRITE-CHALCOPYRITE ROCK WITH TRACE SCHEELITE; 670.1-670.95 SILICEOUS PHYLLITE; 670.95-673.5 LIMEY-PYRRHOTITE-CHALCOPYRITE BEARING ROCK; 0.1% SCHEELITE FROM 670.95-671.85; 673.5-678 THINNLY LAMINATED SILICEOUS PHYLLITE; 674.4-675.7 EXTREMELY BROKEN AND CRUMBLY.		
668	678	10.0	10.0	100			0.1% FROM 669.6-670.1 0.1% FROM 670.95-671.85	CHEMICAL ASSAY 669.6'-671.85': 0.13%W; 0.10% Cu
678	688	10.0	10.0	100	28	678-688 MOSTLY SILICEOUS THINNLY FOLIATED PHYLLITE; THIN SULPHIDE-BEARING BANDS 678.5-678.7 AND 681.1-681.2 (TRACE SCHEELITE IN SECOND BAND).		
688	698	10.0	10.0	100		688-698 DITTO BUT WITH SOME SPOTTED CHLORITE-PHYLLITE; EXTREMELY BROKEN 691-692; FRACTURES CALCITE-FILLED; ∠AT 698 = 40°		
698	708	10.0	9.9	99		DITTO		
708	718	10.0	10.0	100	29	DITTO		
718	728	10.0	9.9	99		DITTO		
728	738	10.0	9.7	97	30	DITTO; LAST HALF OF RUN VERY SILICEOUS WITH SOME DARK QUARTZITE WITH COARSE BLEBS OF PYRRHOTITE.		
738	748	10.0	9.9	99		INTERBANDED SILICEOUS PHYLLITE AND BUFF QUARTZITE/SANDSTONE; 738.8-739.5 LIMEY QUARTZITE; 739.5-741.3 LIMEY QUARTZITE SANDSTONE WITH DISSEMINATED PYRRHOTITE AND CHALCOPYRITE; 742.8-745.6 DITTO;	TRACE FROM 740.35-740.7 0.7% FROM 745.2-745.5	
748	758	10.0	10.0	100		748-748.9 LIMEY QUARTZITE; 748.9-758 MOSTLY THINNLY LAMINATED SILICEOUS PHYLLITE WITH A FEW THIN BANDS OF QUARTZITE		
758	768	10.0	9.9	99	31	758-758.8 DITTO; 758.8-762.4 MUSCOVITE-(BIOTITE) GRANITE; 762.4-768.6 SILICEOUS PHYLLITE; 768.6-769.3 MUSCOVITE-TOURMALINE GRANITE; 769.3-769.7 SILICEOUS PHYLLITE; 769.7-769.9 MUSCOVITE-TOURMALINE GRANITE; 769.9-766.3 SILICEOUS PHYLLITE; 766.3-766.9 MUSCOVITE-TOURMALINE GRANITE/PEGMATITE; 766.9-768 SILICEOUS PHYLLITE; 768-769.5 CHLORITIC PHYLLITE; 769.5-778 MOSTLY GREY QUARTZITE WITH MINOR SILICEOUS MARBLE; 771.2-772.3' GREENISH ALTERED, CALCITE BEARING MUSCOVITE PEGMATITE.		
768	769.5	1.5	0.8					
769.5	778	8.5	8.4					
778	788	10.0	10.0	100	32	MOSTLY LIMEY QUARTZITE WITH A LITTLE PYRRHOTITE		
788	798	10.0	5.0	50		WELL-FRACTURED LIMEY QUARTZITE.		
798	808	10.0	10.0	100		MOSTLY DISTINCTLY SPOTTED BIOTITE PHYLLITE; LAST 0.7' OF RUN LIMEY QUARTZITE; ∠AT 798' = 17°		
808	818	10.0	4.2	42	33	MOSTLY LIMEY QUARTZITE		
818	828	10.0	9.3	93		DITTO; WITH PYRRHOTITE-FILLED JOINTS AND OCCASIONAL DISSEMINATED PYRRHOTITE.		
828	837	9.0	8.4			DITTO; 833.5-835 EXTREMELY CRUMBLED LIMEY QUARTZITE.		
837	847.5	10.5	10.2		34	VERY SILICEOUS SPOTTED CHLORITIC GNEISSIC ROCK		
847.5	858	10.5	10.5	100		SPOTTED CHLORITE PHYLLITE; OCCASIONAL CALCITE-FILLED JOINTS AND FRACTURES.		
858	868	10.0	10.0	100	35	DITTO; GET VERY SILICEOUS BANDS		
868	878	10.0	10.0	100		DITTO		
878	888	10.0	8.1	81	36	878-883.3 DITTO; 883.3-883.8 GARNET-DIOPSIDE SKARN; 883.8-887.5 SILICEOUS MARBLE WITH BANDS OF GARNET AND CALC-SILICATE; 887.5-888 SKARNIFIED MARBLE.		
888	898	10.0	10.0	100		888-893.8 BANDED GARNET SKARN AND SILICEOUS MARBLE THINNLY INTERBANDED; RESPECTIVE BANDS OF SKARN AND MARBLE ARE LESS THAN 8" THICK AND LESS THAN 4" THICK; 893.8-898 MOSTLY SILICEOUS MARBLE.		
898	908	10.0	10.0	100		898-905.9 MOSTLY BANDED SILICEOUS MARBLE; BAND OF GARNET SKARN 899.3-899.7; PYRRHOTITE AND MINOR CHALCOPYRITE IN LIMEY QUARTZITE AT 904.2 AND AT 905.4; ∠AT 898 = 54°; 905.9-908 LIMEY QUARTZITE AND SILICEOUS PHYLLITE.	0.7% FROM 905.4'-905.55'	
908	918	10.0	9.7	97	37	MOSTLY LIMEY QUARTZITE BUT WITH SEVERAL PHYLLITIC BANDS; 908.3-910 QUARTZ VEIN WITH COARSE PYRITE AND MINOR CHALCOPYRITE.		
918	928	10.0	10.0	100		918-919.4 DITTO; 919.4-928 MEDIUM-GRAINED, FAIRLY UNIFORM MUSCOVITE ± BIOTITE GRANITE; STRONGLY ALTERED (CLAY AND CALCITE, AND GREENISH SOFT MINERAL) BUT SOME UNALTERED SECTIONS.		
928	938	10.0	10.0	100	38	DITTO		
938	948	10.0	10.0	100		938-940.7 DITTO; 940.7-948 WELL-SHEARED (BRECCIATED ?) ROCK; 947-947.6 WELL-SHEARED QUARTZ VEIN.		
948	958	10.0	10.0	100	39	948-952.8 DITTO; 952.8-958 DARK PURPLE, FINE-GRAINED METASILTSTONE/QUARTZITE; 957-957.2 MUSCOVITE GRANITE; ∠AT 958' = 80°		



DD-224

DDH NUMBER 5:

MOUNT ARMSTRONG PROSPECT

DEPTH FROM	DEPTH TO	INTERVAL	RECOVERY FEET	RECOVERY %	BOX NUMBER	DESCRIPTION	GRAPHIC LOG	VISUAL PERCENT SCHEELITE
958	968	10.0	10.0	100	39	958-963.5 DITTO; 963.5-968 SPOTTED CHLORITE SCHIST AND DARK, SILTY ROCK; OCCASIONAL CALCITE-FILLED JOINTS AND FRACTURES.		
968	978	10.0	10.0	100		DITTO; 969.7-971 HIGH PYRRHOTITE CONTENT BOTH IN FRACTURES AND AS COARSE BLEBS IN SCHIST; LAST 2.5' OF RUN GREY-GREEN MICACEOUS QUARTZITE.		
978	988	10.0	10.0	100	40	MOSTLY GREY-GREEN QUARTZITE WITH A LITTLE SPOTTED SCHIST AND WHITE QUARTZ.		
988	998	10.0	9.7	97		988-996 MOSTLY SPOTTED SCHIST; SOME QUARTZITE; 996-997.6 GREY GREEN QUARTZITE; 997.6-998 VERY SILICEOUS BRECCIATED ROCK.		
998	1007	9.0	8.0		41	MOSTLY SILICEOUS BRECCIA AND BRECCIA OF SCHIST FRAGMENTS; SOME WELL-FRACTURED SPOTTED CHLORITE SCHIST.		
1007	1017.5	10.5	10.5	100		1007-1015 DITTO; 1012.5-1013.9 MUSCOVITE GRANITE; 1013.9-1017 CHLORITE SCHIST.		
1017.5	1028	10.5	10.2		42	1017.5-1027 CHLORITE AND BIOTITE SILICEOUS SCHIST/GNEISS; SOME GREY-GREEN QUARTZITE; 1027-1028 QUARTZ VEIN WITH SOME CHLORITE.		
1028	1038	10.0	10.0	100		MOSTLY DARK GREY MICACEOUS QUARTZITE AND SOME SCHIST/GNEISS; 1032.4-1034 QUARTZ VEIN WITH SOME PYRRHOTITE AND TRACE SCHEELITE; CUT BY LATER-STAGE THIN (¼" THICK) PYRRHOTITE-RICH VEINLETS.		
1038	1048	10.0	10.0	100	43	DITTO BUT WITH SEVERAL LIMEY OR SULPHIDE-RICH (PYRRHOTITE AND CHALCOPYRITE) BANDS; SULPHIDE-RICH BANDS AT 1040.2-1040.4 AND ½" THICK BAND WITH TRACE SCHEELITE AT 1043.6; SEVERAL THINNLY LAMINATED LIGHT GREEN CALC-SILICATE BANDS (LESS THAN 1" THICK); ∠AT 1040.4 = 55°		TRACE AT 1043.6
1048	1058	10.0	9.6	96		1048-1058 VERY SILICEOUS SCHIST/GNEISS AND QUARTZITE AS WELL AS SOME THIN BANDS OF CALC-SILICATE (?)		