

008710

A ZONE

24

Code	From	To	Unit	Code	Description
1	10	14	16	20	22 23 25 27
	3107	3175	111		<p>less finely banded pyritic massive sulph generally Pb Zn poor - quartz gangue. Pb Zn goes with $\frac{1}{2}$ rich zones. massive py commonly with mt lam - minor imp stibite layers 300'-310' essentially 1" to 5" thick massive py interlaminated with 1" to several inch thick bands with 10-50% py covering the minor base metals</p>
	3175	3185	112		<p>massive to heavily disse py ^{white} gangue interlaminated with ^{grey} graphite stibite</p>
	3185	4125	113		<p>massive py ^{mt} interlaminated with white sulphide bearing stibite with with 10-50 % py - very much like unit 11 but with more Pb Zn still not too much (ore grade) (very similar to Lake zone but with more sulphide)</p>
	4125	4135	114		<p>conc missing met test</p>
	4135	41725	115		<p>more finely banded baritic massive sulphides marcell with good Pb-Zn just like unit 9 (nothing like this in lake zone!)</p>
	41715	41753	116		<p>more phyl of sulph stibite - 3' conc loss marcell</p>
	41715	51091	117		<p>grey carbon phyllite with scattered stibite + sulph stringers as below but sparse</p>
	51019	51115	118		<p>ribbon banded graph stibite with several % py sp. & lesser sphal in white stibite stringers con. ph. nucleus of massive</p>
	51115	51312	119		<p>graphitic stibite with only minor white py & sphal stringers - other wise similar to 18-20 - also like graph stibite in road to swim ct.</p>

Lithologic Log

Code	From	To	Unit	Code	Description
1	10 14	16 20	22 23	25 27	
	10	21 S	1		UB
	12 S	21 16	2		graphitic phyllite gtz graphitic phyllite and graphitic gtzite - minor sulphides along S ₂ Flr but overall practically none.
	21 16	21 18 S	3		buff <u>below to near</u> <u>feuchite(?)</u> phyllite - this is the rock on the road to the drilling area near cleared area with dks (#15)
	21 18 S	21 21 S	4		as #2
	21 21 S	21 43	5		^{medium} buff to light green brown chl phyllite - as #3 just and flzgs readily generally locally light brown granular but will not flzgy - <u>ledeberthe?</u>
	21 43	21 44	6		as #2
	21 44	21 46	7		as #5
	21 46	21 49 S	8		as #2
	21 49 L	21 55 S	9		as #5
	21 55 S	21 75	10		graphitic phyllite redt broken core poor recovery
	21 75	21 83	11		part zone with graph ph ^{6x2} brown s'cond veining & halting
	21 83	31 03	12		graphitic phyllite to graphitic gtzite #2 - good cut
	31 03	31 25 S	13		Medium grey buff phyllite with many sections of phyllite let over seen - several samples for micro fossils

A7

Code	From				To				Unit	Code	Description
	10	14	16	20	22	23	25	27			
		10		19				11			OB
		19		1555				12			medium ^{mic ch} grey phyllite "normal" non limy - non siliceous not markedly carbonaceous if at all - just enough for the grey color. good silvery green fln surfaces.
		1555		167				13			light green chl phyllite with minor po stringers light olive green to greyish green fln surfaces - non limy
		167		171							as #2
		171		1785							as #3
		1785		1725							medium grey "normal" phyllite as above starts becoming calcareous by 175' and is very limy by 190'
		175		1190							slight. limy med grey phyllite - ~ 15% limy bands can't be distinguished from overlying non limy phyl. by color
		1190		1226							Very limy phyllite with several phyllite lst bands several samples for consideration.
		1226		1258							Darker, less limy and more carbonaceous phyllite
		1258		1266							very carbonaceous phyl. and dark phyllite lst - good samples for con.
		1266		1276							Generally non limy graphitic phyllite bearing bands and sulph.
		1276		1299							highly carbonaceous limy phyllite with common interbeds of phyllitic limestone.

A8

~ 48' in A8 is same level as Fresh ch/mals in 75-01
 ~ 215 in A7
 ~ 215 in A7

AS

Code	From		To		Unit		Code	Description
	10	14 16	20	22 23	25	27		
	1299		1322					gts graph phy & graph stote
	1322		1335					grey moderately carbonaceous phyllite slightly limy
	1328		1356 S					dk grey limy graph phy & graph lst 3 samples for cons.
	1356 S		1390					medium grey limy phyllite locally carb generally st.
	1390		1399					moderately carbonaceous med-dk grey limy ph & graph lst
	1399		1401					lt grey phyllitic lst 1 sample for cons.
	1401		1403					dk grey phyllitic lst "
	1403		1486					graph phy - gts graph phyll & graph stote - slightly limy - minor Fe sulph in gts stringers - texturally similar to ribbon banded but not as ^{richly} perfect with gts stringers and not as sulphide rich - no base metal sulphide seen. Becomes a little limy toward base but no good lst - lime seems to be with sulph in gts stringers & in 1/8" thick very limy layers // fl
	1486		1490 3					lt green very limy chl phyll
	1490 3		1492					gts graph phyll
	1492		1494					lt grey to white waste phyll at top remainder lt green limy chl phyll as above.
			1494					FOH

7.11

Code	From		To		Unit		Code		Description
	10	14	16	20	22	23	25	27	
		10		17					003
		17		50					gray to greenish gray very weakly calc. generally non limy phyllite non siliceous very broken & rusty hard to separate from underlying unit into which it grades (arbitrary & variable contact)
		50		105					light greenish gray / gray ^{thinly} interbedded phyllites - very similar to the sum of bedded unit but perhaps more greenish layers generally non limy 89-96 chloritic stains v light green to offwhite to calcite grades locally into Eg 14 green chl phyllite
		105		248					14 green chloritic unit much variation 105-142 medium green & unbedded coarse than average chl phyll. locally with calc. stringers commonly quite broken with quite a bit of fracturing by qtz - some py in a ...
									112-113 very broken with calc. stringers - gummy chloritic ex. as above & even qtz.
									113-199 v light green ^{Eg} chl phyllite probably laticaceous common to with minor po in stringers
									199-203 a little interbedded greenish chloritic material
									203-218 Eg 14 green chl phyllite 210-220 bleached base to light green with po qtz - chl stringers rare
		248		FINP ~320					medium gray (light gray very weakly carbonaceous) phyllite non limy non siliceous "Normal" very minor thin grey glassy layers - largely generally transp into D ₂ but locally fine bedded grey bedding preserved a few remnant PO is - like bedded phyllite unit

Code	From		To		Unit		Code		Description
	10	14	16	20	22	23	25	27	
		10		28					Disorder
		28		73					Strongly to moderately graphitic phyllite generally medium to dark grey
		173		202					mass gte phyllite & mass gte quartzite with only minor sulphides - local short sections of massive sulphide & some of sulphides in gte layers - could be veins(?) 196-199 graphitic phyllite as above
		202		231					< 1' of core recovery a few slugs of weakly banded pyritic massive sulphides.
		231		42					banded banded massive sulphides py-ant layers alternating with Ba Pb Zn Py layers banding on fine scale generally less than 1" with a few py-ant layers up to a couple of inches
		242		435					py dolo massive sulph - barren
		2435		525					banded py-ant / ba Pb Zn Py massive sulphides, some very thick py-ant bands
		2525		572					py dolo facies minor base metals
		2572		765					mass phy - mass gte minor py - b. RR to common subord
		2765		813					mass to dark grey carbon mass chl phyll

Code	From		To		Unit		Code		Description
	10	14	16	20	22	23	25	27	
	4013		4107		11				lt greenish crevice musc chl phyll with 403-405-5 short sections of high grade banded Pb PbZn massive sulphides with py limt layers - probably stratiform sulphides not a vein
	4107		4115		12				med carb med grey musc chl phyll
	4115		438		13				lt grey micaceous bleached musc chl (=trough?) phyllite
	438		455	5	14				Med carb musc chl phyll med - dk grey common gty stringers with or w/out similar to RBGQ but not much sulph
	455	5	456		15				ribbon banded graph gty to matrix 1" bands of v. hg sphal
	456		458		16				buff musc gtyite with massive to heavy dissem py layers
	458		477		17				core loc but no core in it sulphide heavy
	477		495		18				ribbon banded graph gtyite massive sphal & gty equal except short v. hg bands a few musc gtyite layers (?) core locally broken due to splinter, i had to work out structures
	495		518		19				med grey carbon musc chl phyll

Lithologic Log

Code	From		To		Unit		Code	Description
	10	14	16	20	22	23		
L		00		300		1	#	
L		300		440		2	2E,1	Pyrite Silica massive to 50% diss sulfides, qtz gangue minor base metals, v poor rec (ie 50% or less chips, etc)
L		440		1015		3	1D,4	White Mica Envelope; sulfide deficient; short sections <4" sulfide bearing Qtzites; base metal poor
L		1015		1210		4	1C,0	Sulfide Bearing Qtzite; sulfides mostly py.; some po. over short sections (<1'); generally base metal poor; locally cupiferous espec where po-rich; chalc in post D ₂ veinlets; sulfides: 10-15%
L		1210		1250		5	2A,0	Ribbon Banded Graphitic Qtzite; 2" spherulite band
L		1250		1339		6	2C,0	Sulfide Bearing Qtzite; sulfides mainly py, minor galena very lt grey qtz interbands -D ₂ A; locally grades into massive sulfides 6"-1'; total sulfides: 30%
L		1339		1470		7		Interbanded Sequence of muscovite Qtzites and chloritic phyllite w/muscovite (very lt. green); possibly insip bleached
L		1470		1512		8	2C,0	Pyritic Qtzites; as unit 6; total sulfides 15%
L		1512		1650		9	2B,6	Interbanded Sequence of py bearing Qtzites (base metal poor) and chlor phyllite and normal grey phyllite as unit 7
L		1650		1690		10	2A,0	Ribbon banded Graphitic Qtzite; sulfides: py, w/minor galena and sphal, base metal def.
L		1690		1730		11	2C,0	Py rich; base metal deficient Qtzite; py rich; total sulfides 10%
L		1730		1750		12	2A,0	Ribbon banded Graphitic Qtzite; pyritic, vlt base metals
L		1750		2067		13	2C,0	Py bearing Qtzite; muscovitic; py 10%; several 1-2" massive py. bands; mag rich towards base
L		2067		2130		14	2C,8	Py ≈ Mag Qtzites → massive sulfides, minor po., → 2E8; total sulfides: 70%
L		2130		2155		15	2C,0	gradational contact; Py Qtzites; total py 15-20% good po - mag
L		2155		3528		16	1D,4	White mica envelope; <5% sulfides in stringers; mainly pyrochlore w/some pyrite.
L		3528		3663		17	2B,7	Po - Musc Rich Qtzites; w/40% total sulfides as thin diss. bands to massive bands up to 2"
L		3663		3796		18	1D,4	miscellaneous.
L		3796		3834		19	2C,7	Py and/or Po bearing Qtzite; total sulfides 30% chalc in post D ₂ veinlets; poor base metals

Code	From	To	Unit	Code	Description
1	10	14 16	20	22 23 25 27	
L	1, 1, 1, 0	1, 1, 3, 0	0	1	#
L	1, 1, 3, 0	1, 1, 3, 4	5	2	Carb. musc-chlorophyll, non calcareous, biotitic??
L	1, 1, 3, 4	1, 1, 3, 6	5	3	1, D, 4 WME.
L	1, 1, 3, 6	1, 1, 6, 4	5	4	2, E, 4 Cstly banded massive pyrite w/sphal-gal-mag-bands magnetite, baritic; → 2E4 & 16; minor carbonates randomly scattered; total sulfides ~80%
L	1, 1, 6, 4	1, 1, 6, 6	0	5	2, E, 0 Massive Pyritic Sulfides w/ 70% beige white carbonate in which pyrite occurs as stringers and blobs
L	1, 1, 6, 6	1, 1, 6, 8	6	6	2, E, 4 as unit 4
L	1, 1, 6, 8	1, 1, 7, 1	5	7	2, E, 0 as unit 5
L	1, 1, 7, 1	1, 1, 9, 7	5	8	2, G, E Massive Sulfides/Sulphates, sub-equal portions massive pyrite - massive barite; → 2GE8, thin to laminarly banded, magnetite.
L	1, 1, 9, 7	1, 1, 9, 9	4	9	2, E, 0 Massive Pyrite w/salmon weathered ankerite; total sulfides > 80%
L	1, 1, 9, 9	1, 2, 0, 9	0	10	Chlor Musc Phyll w/thin interbanded quartz laminae total sulfides < 5%
L	1, 2, 0, 9	1, 2, 3, 1	0	11	2, E, 8 Massive pyritic Sulfides w/ approx 5-10% ankerite blobs + magnetite
L	1, 2, 3, 1	1, 2, 3, 1	4	12	2, G, 0 approx 40% pyrite; interval 100% sulphates/sulfides
L	1, 2, 3, 1	1, 2, 3, 3	0	13	2, E, 8 Massive Py.; laminarly banded w/minor ankerite blobs, minor barite, minor Pb-Zn; total sulfides/ sulfates; 100%; magnetite ≤ 5%
L	1, 2, 3, 3	1, 2, 3, 9	3	14	2, G, 3 → 2G38 Baritic pyritic magnetite
L	1, 2, 3, 9	1, 2, 4, 0	3	15	2, B, 4 total sulfides 15%
L	1, 2, 4, 0	1, 2, 4, 0	7	16	2, G, 3 → 2G34
L	1, 2, 4, 0	1, 2, 4, 3	6	17	2, B, 4 total sulfides 15%
L	1, 2, 4, 3	1, 2, 4, 8	0	18	2, A, 0 Rib ban graph quartzites → 2A4 good base metals
L	1, 2, 4, 8	1, 2, 9, 3	4	19	2, C, 8 Pyritic-base metal deficient quartzites, minor magnetite Numerous low grade musc-chlor-quartzite interbands Total sulfides variable averaging 25%
L	1, 2, 9, 3	1, 2, 9, 8	6	20	1, D, 4 no base metal sulfides over interval White Mica Envelope
L	1, 2, 9, 8	1, 3, 2, 0	0	21	Interbanded 1D4 and 2C0; approx 50% oxid Lithology thin interbanded
L	1, 3, 2, 0	1, 3, 2, 3	5	22	1, D, 4 as unit 20
L	1, 3, 2, 3	1, 3, 2, 9	0	23	2, B, 4 2B48 w/ silica blobs

Lithologic Log

Logged By: _____

Code	From	To	Unit	Code	Description
	10 14	16 20	22 23	25 27	
	10	11.5P	1		OB
	11.5P	12.16.5	2		mass ch grey phyllite with scattered ^{white} quartz bands and scattered quartz lenses along fl. Minor lime 14 lenses - good grey sheen on fl surface - generally <u>more to only</u> <u>very slightly carbonaceous</u> - quartz
	12.16.5	12.40	3		Buff to light green ch mass phyllite phyllite itself is generally <u>more lime</u> but many cases shell seams Top $\frac{1}{2}$ of unit tends to be buff bottom + greenish - greenish buff fl sub at top greenish to greenish grey in bottom
	12.40	13.67	4		mass ch 26-42 grey phyllite as above - good shiny grey fl surface - many calcite veins above 298' but not generally conspicuous
					308.5-310 - 314.5-315 317 318 317-5 322-323 324.5-326 329-330 333.5
					thin grey ^{phyllite} "list" bands - some small ^{fl} for conspicuous
					340-345 limy green calc silicates ✓
					Below 298' the phyllite is slightly limy but normally more grey phyllite alternating with the above noted list Below ~ 340' with Buff S. folia
	13.67	13.80			very broken core 10' core loss lot of core.

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Core	From			To			Unit			Code			Description
	10	14	16	20	22	23	25	27					
		0		20									OB
		1210		1145									grey phyllite - generally no stringers except above 50' where core badly oxidized 20-28 somewhat bleached?
		1145		1197									Transition zone few to no stringers
		1197		1219									Buff phyllite with no stringers
		1219		1228									Transition zone - few to no stringers
		1228		1442									Greenish Phyllite - generally without stringers
		1442		1452									Bleached Phyllite - Buff
		1454		1485									Sulphide zone Benetic at Base
		1485		1513									Spongy grey phyllite locally buff locally graphite
		1513		1525									Ribbon banded gray gneiss - Fe sulph
		1525		1537									Buff Phyllite
		1537		1699									Greenish Phyllite few to no stringers