

016196

Swim Lakes  
relogs

SWIM 75-1  
75-2  
75-3  
75-4  
75 X 05

Geochem

75-X-03  
75-X-04

Lithologic Log

Code	From	To	Unit	Code	Description
L	10 14 16	20	22 23	25 27	
L	10 14 16	20	22 23	25 27	H <sub>2</sub> O + O <sub>3</sub>
L	116 15 0	407 5	02	3608	med musc chl + graph <sup>(tr)</sup> grey pelitic phyllite and light grey phyllite finely interbedded with 4 greenish granular gtz act chl layers general lack of sulphides - a few pd bearing gtz stringers but not many sections ~ 70% <sup>grey</sup> pelitic
L	407 5	413 5	03	368	brn greenish phyll in var gtz intx
L	413 5	158 1 5	04	368	abrupt change from above grey pelitic rich phyllites to light greenish very rich in act chl gtz bands and virtually devoid of graph
L	158 1 5	158 5	005	368	light green chloritic phyllite with whitish stringers - could be good for calculation
L	158 5 0	1616 0	006	3608	grey pelitic phyllite thinly interbedded along with greenish chl act gtz bands as above unit 1
L	1640 0	1699 0	007	3609	above but more carbonaceous
L	1699 0	1825 0	008	36089	<sup>shaly</sup> <sup>in carb</sup> grey to greenish grey pelitic phyllite thinly interbedded with greenish gtz chl act along sz essentially as above - a few sections of more pure <sup>green</sup> act gtz

S WVA 75-1  
11/1/78  
JPF  
1"=100'



4B

3G08 ± INTERBANDS QTE ACT CHL.  
(GREY)

= 3G8

3G8 (GREEN)

3G08

3G089

3G089

4C7

ACT P<sub>0</sub>  
interlayered with 3G089

= 3G0  
3G89

3G89

Lithologic Log

Logged By: \_\_\_\_\_

Code	From	To	Unit	Code	Description
1	10 14	16 20	22 23	25 27	
L	8250	91120	09	4C7	Sulphide bearing actinolite (chlorite?) gtzite interlayered with greenish grey chl musc pelitic phyllite (generally non carbonaceous), about 15% sulphides overall mostly po with a few short sections mixed with py minor cpy negligible. PbZn
L	91120	91220	10	3G0	grey pelitic phyllite thinly interlayered along s with lighter greenish grey to light grey chl gtz musc lithois similar to above unit but much less sulphides and some less siliceous as well as few po chl gtz stringers that could be veinlets (pre S <sub>2</sub> ) - darker colored than above because of increase in <sup>micaceous</sup> mica folia
L	9220	9240	11	3G8	light green chl phyll <sup>translates</sup> gtz <sup>contains</sup> act? scale sil
L	9240	10390	12	3G89	medium grey carb musc chl phyllite folia greenish chl musc gtz lithois. Markedly more micaceous than above (x and softer). Some gtz chl (act??) po layers but sparse. <1% po overall. Appears to be the grey/green finely bedded phyllite with more advanced $D_2$ recrystallization generally destroying bedding - po masses scattered throughout are doubtless some are po pseudomorphs in other holes but here generally in bedded masses 744-946 lt green chl phyll slightly thin (section fairly similar to ix at top of hole.)
		1039			E04

Lithologic Log

45-2

Core	From	To	Unit	Code	Description
	10 14 16 20	22 23 25 27			
L	10 0	11719 0	01	#	H <sub>2</sub> O + OR
L	11719 0	12070 0	012	5B0	Very limy lt grey phyllite with ss white folt grey lat bands and greenish gteact ± calcite bands - interlam with ~25% normal grey phyllite nowhere markedly carbonaceous
L	12070	13325 0	03	3D8	<sup>slightly</sup> limy phyllite very similar to above but with more greenish calc silicate bands and much less lime. - some sections very calcic - cis is in thinly lam layers <sup>15'</sup> , either rotated into S <sub>2</sub> or as <sup>~1"</sup> thick crinoid lithons - with phyllitic S <sub>2</sub> folia between lithons. Graphitic component again about 25% and is generally non to only slightly carbonaceous. Carbon content seems to increase slightly with depth grading into underlying unit. (color deepens at 330')
L	13325	13783 0	04	3G09	interlayered dk to med grey carb phyllite and med to lt grey non carb phyllite with many <sup>green</sup> chl (act?) gte po stringers and blotchy altered looking areas. Green component basically similar to the calc silicate bands above and may be same thing but is much more phyllitic and carbonaceous ex. Greenish lops seem to decrease or abt. downward.
L	13783	13950 0	05	4C7	Sulphid zone sulphide mostly po and average ~20% minor cpx to gal local wt. gte gangue. <sup>white</sup> gte is glassy like ball gte not like other gte in Lk. Bra textures common with white ball gte frags in <sup>graph</sup> + chl matrix - occurs at least pre D <sub>2</sub>

Lithologic Log

Code	From		To		Unit		Code		Description
	10	14	16	20	22	23	25	27	
	395		405		8			360	Gray to greenish gray phyllite with the usual greenish gte bearing laminae but subordinate ~20% - locally finely bedded - generally not particularly carbonaceous - gte broken - minor po
	405		409		7			3668	sulphide enriched. po + py in gte stringers in chloritoid gray phyllite
	409		411		8			3609	altered looking gray moderately carbonaceous phyllites with common gte chl stringers & blotches but little po - like rx above & below but for sulphides
	411		415		9			360	gray phyllite with greenish alt(?) & a few po in stringers
	415		415		10			360	gray phyllite with gte po chl stringers & chl blotches unsplit but otherwise not much different from 9 or 11
L	415		419		11			360	gray phyllite as above with minor po stringers
	419		442		12			3609	gray more to moderately carbonaceous phyllite basically as in unit 4 - these rx also have the greenish gte chl component (gte poor here <sup>as in #4</sup> ) but without much sulphide. Now the less the rx have definite affinities to the rx in the sulphide zone - These appear to be the rx that overly the bedded phyllites and underly the limy phyllites (unit 1 & part of 2) and correspond to the messy looking CS + grey phyllites in one of the summit blocks. Also have some affinities to the bedded phyllites as they are locally well bedded but compositionally are different. Problem basically revolves around the greenish component whether



Lithologic Log

Code	From		To		Unit		Code	Description
	10	14	16	20	22	23		
L	10	0	12	29	0	01	#1	H <sub>2</sub> O + OB
L	13	29	0	13	0	02	5B10	light grey <u>limy</u> phyllite and phyllitic lst
L	13	43	0	44	0	03	3D0	lt green granular calc silicate bed
L	13	44	0	45	0	04	5B8	lt green <u>limy</u> chl phyllite
L	13	45	0	48	0	05	5B0	lt grey <u>limy</u> phyl w <sup>green</sup> ss layers
L	13	48	0	49	5	06	5B8	lt green <u>limy</u> chl phyll
L	13	49	5	50	5	07	3D0	lt green calc sil
L	13	50	5	83	0	08	5B0	lt grey <u>limy</u> phyllite with several sections of <u>limy</u> chl phyllite with <sup>white</sup> calc sil
L	13	83	0	84	5	09	5B2	etc vein 5' <sup>dk</sup> carbonaceous grey phyllite
L	13	84	5	99	1	10	5B2	Carbonaceous dk grey phyllite with <sup>etc</sup> white to light greenish layers
L	13	99	0	113	0	11	5DE?	lt green calc silicate, <sup>5'</sup> siliceous <u>limstone</u>
L	14	13	0	40	0	12	5B2?	<sup>grey</sup> carb phyllites interbedded with light green calc silicates locally quite limy
L	14	40	0	74	5	13	5B6?	medium grey to light grey phyllites interbedded with considerable <sup>etc</sup> calc sil - not generally calcareous but locally st-ugly ss. minor <sup>lt grey</sup> chl phyll near top - locally grades to rx like #12 locally grades to v grey <sup>massive</sup> phyll w/8 ps in stringers - several late <sup>etc</sup> carb veins
L	14	74	5	81	0	14	5A3	highly carbonaceous dk grey phyllite grading to graphitic phyllite locally a graphitic lst limy throughout.

Lithologic Log

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Code	From	To	Unit	Code	Description
1	10 14 16	20 22 23	25 27		
L	14810	16730	15	5B2	highly variable unit of medium gray phyllite with gtz chl (act?) bands and local limy bands - some lt grey musc chl phyllites where chl (or act?) grows as porphs - minor light gray to white quartzite - grades locally into limy carb phyllite as above and below notably 663-665 615-616 510-513 546-548 Several late gtz carb chl po veins and scattered po occurring 6-lbed stringers veins or beds. Case has overall altered back to it
L	16730	16850	16	5A1E	black limy highly carb. phyllite to graphite 1st
L	168150	171990	17	3GJ	various grey phyllites with substantial sections of quartzite as unit 15 745-754 particularly light colored mic quartz many late veins & common bxa locally few % po in stringers and dissemin along bedding - the section looks like grey phyllite in incomplete alter.
L	171990	181060	18	3G8	lt grey musc chl gtz phy: with ghostly greenish layers, carrying minor po - bleached phy??
L	181060	181300	19	3G8	bleached looking grey phy with chl gtz and diss po few %
L	181300	183170	20	3GA	very grey partly bleached (?) phyllite. Musc gtz phyllite with coarse streaky chl rich layers few % po in stringers ~ same as 15

Lithologic Log

Logged By: \_\_\_\_\_

Code	From	To	Unit	Code	Description
1	10 14 16 20	22 23 25 27			
L	8137 0	8158 0	21	36A	As #20 but a little grayer 2-3% po in stringers
L	8158 0	8165 0	22	0Q10	1' of massive py apparently assoc with gte vein in bxa zone
L	8165 0	8172 5	23	36A	gray phy and bleached to chloritized light colored phyllite po dissemin in early lobe stringers
L	8172 5	8176 5	24	0Q10	po & minor py assoc with post B gte vein in bxa zone (as #22)
L	8176 5	9116 0	25	36A	Altered looking light gray phyllites with local po gte chl stringers
L	9116 0	9121 0	26	36A	Exactly as above but slightly richer in po stringers & splits - 1% old generation of stringers again pops up - also they sparse sulphide beds or veinlets
L	9121 0	9125 5	27	36A	altered looking phy as above but with sparse po stringers
L	9125 5	9133 6	28	4C7	Sulphide bearing gte with grey phyllite partings - looks a lot more like stratiform sulphides than elsewhere but has definite similarity to the sulphide overlying - several sections of 5" massive po. ~25% po overall minor cpy negligible PbZn
L	9133 6	9135 2	29	4B0	Sulphide poor gte - act chl gte & minor grey phyllite
L	9135 2	9169 5	30	4C7	Sulphide bearing gte as above <del>100%</del> ~20% sulph mostly po rest with ~4% py - minor cpy a few short massive sections - minor int.

Lithologic Log

Logged By: \_\_\_\_\_

Code	From		To		Unit		Code	Description
	10	14	16	20	22	23		
L	9.169	5	9.174	0	31		4B10	relatively sulphide free gneiss & minor grey phyllite
L	9.174	0	9.177	0	32		4C7	split sulphide gneiss with quartz veins and phyl parts ~10% po → 3JG6
L	9.177	0	9.818	0	33		4C7	unsplit grey phyllite and sulphide free & sulph bearing gneiss
L	9.818		10.11	0	34		4C7	po bearing phylite with about grey phyllite partings - getting back to the point where it had to tell if it just po stringers in grey and phyl - not much chl with gty po layers so doubt it. ~10% po
L	10.11	0	10.16	0	35		3G6	grey phyl with po gty stringers - about as above but unsplit - a little less po ~5% po
L	10.16	0	10.38	0	36		4C7	lt grey sulph bearing gneiss with phyl partings as above - ~10% sulph & some loss below 10.30'
L	10.38	0	10.94	5	37		3GJ	lt grey altered rocky phyllite and phyllite gneiss few % po <sup>spine</sup> in gty stringers and <1" massive sect.
L	10.94	5	11.50		38		01D10	droute ?
L	11.50	0	11.89	0	39		3G8	grey phyllite with greenish gneiss layers along E and a few green granular CS bands. Nul Sulph.





Lithologic Log

Logged By: \_\_\_\_\_

7400

Code	From		To		Unit		Code	Description
	10	14	16	20	22	23		
L		20	23	40	01		#	
L	23	40	23	70	02		3JO	white quartzite
L	23	70	28	11	03		3GO	normal grey phyllite good bedding non sil - very broken
L	28	15	28	90	04		3JG	off white granite & grey phyll
L	28	90	30	30	05		3DA	grey phyllite with c.s bands - a little limy.
L	30	30	32	80	06		3GP	"normal" bedded grey phy
L	32	80	31	61	07		3DA	variably limy cs phyllite
L	31	61	31	71	08		3GO	Normal grey bedded phyllite No lime generally non siliceous Non carb po
								altered looking grey phyllite
L	31	71	31	70	09		4GO	Sulphide bearing granite
L	31	70	31	70	10		0QO	Vein Qtz
L	31	70	31	22	11			sulph gty?





7505

Code	From		To		Unit		Code	Description
	10	14	16	20	22	23		
1		00	1911	00	01		#	OB
2	1911	00	2400	00	02	36	08	entire hole in varieties of <del>sch</del> bio > musc <sup>gtz</sup> and schist with lesser musc > bio qtz and sch. all non limy
								0-245 Brownish generally non carb Bio musc qtz and sch - and chloritized
								245-253 Green tinge due to chloritization probably retrograde alter of bio also bio and sch as above
								253-260 Buff musc > bio qtz and sch
								260-267 greenish chloritic assemblage as above - looks retrograde. Some Bio > musc qtz and sch
								267-279 Brown biotite qtz and sch a.a. local brownish tinge - local post S <sub>1</sub> and blades
								279-285 Buff musc > bio qtz and sch a.a. -
								285-298 green qtz chl musc minor bio - sch - only minor and porps
								294-323 Brown bio > musc <sup>sch</sup> qtz and sch a.a. <del>less chloritic</del>
								323-334 greenish chl > bio > musc qtz sch w schist and - chloritized ??
								Brown to greenish brown bio > musc sch qtz and sch some fairly coarse sections.