TABLE 3

Thickness of Formations: x = digit of unknown value, 0 = not deposited, > = eroded
(Thicknesses may vary as much as 50 per cent from figures specified)

R BAY AREA th Shore of Superior)		COPPER COUNTRY & BARAGA CO. (Formational and other names below are from U.S.G.S. Monographs, etc.)		MICHIGAMME to NEGAUNEE		NEGAUNEE to MARQUETTE		PALMER to REPUBLIC		
	xx		xx		xx		xx		xx	
	xx		xx		xx		xx		xx	
placement)	xxx		xxxx		xxx		xxx		???	
Ag, etc.		Ag, Cu, Ni		Ag, Ni		Ag, Cu		??		
	0		0		0		0		0	
	0		xx		0		0		0	
	0		100		0		0		0	
	0		} 200		0		0		0	
	0				0		0		0	
	0	ab	500		0	a	300		0	
	0	abc	3000		0	a	5		0	
a	1000	a	1000		0?		0?		0?	
bc	2000	bc	3000	b	xx	b	xxxx	b	xxx	
abc	100	ab	50		0		0		0	
a	xxxx	ab	xxxx	a	xxxx	a	xx	a	xxxx	
c	xxxx	c	xxxx	c	xxxx	c	xxx	c	xxxx	
Au, Be, Mo		Be, Mo		Au, Be, Mo, W		Au, etc.		Au, Be, Mo		
a	100		0		0		0		0	
	300		0		0		0		0	
	0	ab	xxx	a	xxxx	a	xxxx		0?	
	5		0		0		0		0	
abc	50		0		0		0		0	
	100		0		0		0		0	
	100		0		0		0		0	
	0	ab	2000	a	xxx	a	xx		0?	
	150		200		0		0		0	
	1-30		10		0		0		0	
ac(b)		b	50		0		0		0	
a(b)		ab	300	ab	100?		0	ab	xxx?	
c		c	10	c	x		0	c	x	
a(bc)	1000	bc	50	bc	50		0	c	xx	
ab(c)		bc	300	bc	xxx		0	bc	xxx	
a	xx	a	xxxx	ab	xxx	a	xxx	a	xxxx	
d	xx	cd	500	cd	1000		0	cd	xxx	
a(bc)	x	bc	20	b	10		0	bc	xx	
cd	40	f c e a	50	f c e a	50		0	f c e	xx	
ab										
a(bc)	10	bc	50	bc	20		0	bc	xx	
ac	20	a	1-50	a	100		0	a	50	
a	1-5	ab	1-20	ab	100		0	ab	1-20	
ac	xxx	c	xx	abc	xxxx	abc	xxx	a	xxxx	
a	x	b	0-10		0		0		0	
f		f		f				f		
cd	400	c e a	350	c e a	400	c e ab	400	cd e ab	400	
e										
ab										
a(bc)	xx	bc	200	bc	150	bc	150	bc	0-100	
ab(c)	0-xx	bc	100	bc	100	bc	100	bc	0-20	
ad(bc)	xxxx	d	x	d	x	cd	xx	d	xx	
a(bc)	x	bc	50	bc	x	b	xx	bc	xx	
a	20	b	x	b	x	b	x	b	xx	
a(bc)	x	bc	100	bc	xx	b	xx	bc	xx	
a	10	ac	100	ac	80	a	80	ac	50	
b	10	c	50	abc	50	a	50	c	xx	
a	2-10	ab	5	ab	x	a	1	ab	x-30	
with some acidic intrusives and probably granitization and mineralization in some places. (Algoman?)										
	>		>		>		100		b xx	
	>		>		>	a	200		abc xxx	
	>		>		>	a	40		b xx	
	>		>		>	a	40		ab xx	
	>?		>		>	c	50		cd xx	
c	xx	ac	>x		>	a	250		abc xxx	
b	xx	b	xx		>	a	60		ab xx	
c	xx	c	xx		>	ab	80		bc xx	
b	xx	b	xx		>	ab	100		b xx	
b	xxx	ab	xxx	ab	>x	a	300		ab xxx	
c	xx	c	xx	c	>x	ab	100		c xx	
ab	x	ab	x	b	>x	a	10		b x	
b?	x?	b	xx	b	xx	ac	50		b xx	
c?	xx?	c	xxx	bc	xxx	abc	300		c xx	
c?	xxx?	ac	xxx	ac	xxx	abc	300		c xxx	
b?	x?	ab	xx	ab	xx	a	10		b x	
a?	????	a?	xxx?	ab	xxxx	ab	xxx		a? xx?	
	???		xxx?		xxxx		xxxx		xx?	

Upper Huronian; Huronian; Upper Huronian; Middle Huronian; Siamo; Middle Huronian; Lower Huronian; Archean; Kitchi; Keewatin; "Keewenawan"; * "KEWEENAWAN"; Palmer Gneiss (Archean)

1 = North shore of Lake Superior
2 = Copper Country
3 = Marquette Range
4 = Crystal Falls, etc., districts
5 = Menominee Range
6 = Gogebic Range & northern Wis.
7 = Mesabi Range
8 = Vermilion, etc., Range
9 = East of Lake Superior
* = In parts of several districts

SOME OTHER TERMS USED in the REGION in places indicated by above numbers or symbol

Hermansville, Calciferous
2 Jacobsville, 2 Eastern, 3 Potsdam, 6 Croixan
2 Outer, Nonesuch, Freda, etc.
1 Logan
1 Osler
1 Osler

2 Chippewa, 3 Republic, 6 Presque Isle, 7 Giant's Range, Embarass,
* "Archean", "Laurentian", "Algoman",
* "Keweenawan", "Huronian", "Post-Huronian",
* Killarney, 3 "Southern Complex"

2 Mt. Bohemia gabbro, "Keweenawan"
3 "Archean" peridotite

* "Keweenawan", 2 South trap series
6 Bessemer traps, etc.
6 Barron, 9 Chelmsford (?)

6 Tyler, 7 Virginia
" "
" "
" " * "Keewatin"
" "

* "Keewatin", "Keweenawan"
" "

5 "Hanbury", 6 Tyler, 7 Virginia

3 Greenwood, 7 (part of?) Biwabik

6 Copps
6 Copps, 9 Lorraine
4 "Dynamic breccia", 6 Copps

3 "Clarksburg", * "Keewatin".

4, 5 Vulcan, 6 Ironwood, 7 Biwabik, 8, Soudan, Gunflint, * "Upper Huronian", * "Keewatin"

* "Keewatin",
4 "Goodrich",

8 Ely Greenstone, * "Keewatin".

4 "Negaunee", "Keewatin",
5 "Hanbury", * "Keewatin",
5 ", 6 Palms, 1 Kakabeka, 9 Gowganda, 7 Pokegama
6 Palms
5 "Hanbury" 1 Kakabeka

3 Wewe
4, 5 Randville, "Hanbury", 6 Bad River

4 "Hemlock" (in part)
* "Keewatin",
3 "Mesnard"

3 "Wewe"
4, 5 Sturgeon, 6 Sunday, 9 Missassagi
5 "Hanbury", * "Keewatin"
* "Keewatin"

* "Keewatin", "Archean",

* "Keewatin", "Archean",
9 Sudbury, Temiskaming,

* Archean, Laurentian

* Keewatin, 3 Mona.

TABLE 3
Thickness of Formations: x = digit
(Thicknesses may vary as m

GEOLOGICAL COLUMN — LAKE SUPERIOR REGION in GENERAL

By A. E. Seaman and W. A. Seaman

ERAS	PERIODS, etc.		Description of formations			THUNDER BAY AREA (& North Shore of Lake Superior)		COPPER COUNTRY & BARAGA CO. (Formational and
CENOZOIC	RECENT		Gravel (& conglomerate), sand, clay, etc.			xx		xx
		Post-Glacial Tilting						
	PLEISTOCENE		Glaciation. Wisconsin & earlier drift			xx		xx
	LARAMIDE(?)		Extensive post-Cambrian thrust faulting and mineralization (Silver, Copper, Nickel, Cobalt, etc.)			(Displacement) xxx Ag, etc.		xxxx Ag, Cu, Ni
MESOZOIC	CRETACEOUS		Conglomerate, etc.			0		0
PALEOZOIC	DEVONIAN		Limestone, dolomite etc.			0		xx
	SILURIAN		" " "			0		100
	ORDOVICIAN		" " "			0		200
	CAMBRIAN	OZARKIAN	Sandstone, dolomite, etc.			0		
		UPPER	*a*) Sandstone, *b*) shale, etc.	NIPIGON		0		*ab* 500
		KEWEENAWAN	*a*) Cong, *b*) sandstone, *c*) shale or (Partly contemporaneous) ophite, olivine diabase, etc. *a*) Sills, *b*) dikes and *c*) flows.		*a* *bc* *abc*	0 1000 2000 100	"Keweenawan"	*abc* 3000 *a* 1000 *bc* 3000 *ab* 50
			a) Conglomerate, *b*) sandstone, *c*) shale					
	SUPERIOR		Long erosion interval following great and widespread crustal movements with *a*) pegmatites, *b*) felsites, etc., *c*) granitization of older rocks & *d*) mineralization (Au, Be, Mo, W, etc.)		*a* *c* Au, Be, Mo	xxxx xxxx		*ab* xxxx *c* xxxx Be, Mo
PROTEROZOIC	SIBLEY	UPPER	*a*) Sandstone, *b*) shale, *c*) dolomite	SIBLEY	*a*	100		0
			Red fragmental rocks or (Contemporaneous) basic			300		0
			a) Intrusives, *b*) flows, etc.			0		*ab* xxx
			Thin chert and carbonate beds			5		0
			a) Cong, *b*) sandstone, or quartzite, *c*) shale, etc.		*abc*	50		0
		LOWER	*a*) Dolomite ± shale, etc.			100		0
			Red fragmental rocks or (Contemporaneous) basic			100		0
			a) Intrusives, *b*) flows, etc.			0		*ab* 2000
			Quartzite or sandstone			150		200
			Conglomerate			1-30		10
	MICHIGAMME	UPPER	*a*) Shale or *b*) slate or schist, *c*) carbonate beds	Rove	*ac(b)*		Huronian	*b* 50
			a) Graywacke or *b*) schist or gneiss		*a(b)*			*ab* 300
			Basic *a*) dikes, etc., *b*) tuffs or *c*) ash layers		*c*			*c* 10
			a) Shale or *b*) slate or *c*) schist ± carbonate		*a(bc)*	1000		*bc* 50
			a) Cong, *b*) grwke or *c*) schist or gneiss		*ab(c)*			*bc* 300
		CLARKSBURG	Basic *a*) intrusives, *b*) flows,		*a*	xx		*a* xxxx
			c) Tuffs or *d*) ash layers in grwke, etc.		*d*	xx		*cd* 500
	IRON	UPPER or BIJIKI-GOODRICH	*a*) Shale or *b*) slate or *c*) schist	MICHIGAMMIE	*a(bc)*	x	Upper	*bc* 20
			The Upper *f*) Magnetite, etc., rocks (*f*					*f*
			or Bijiki *c*) Ferrug. cherts, etc. *d*) "Taconyte"		*cd*	40		*c* 50
			Iron formation & Ore *e*) Grünerite rocks					*e*
			a) Chrty ankerite, etc. *b*) Greenalite		*ab*			*a*
			a) Shale or *b*) slate or *c*) schist		*a(bc)*	10		*bc* 50
			a) Qtzite or *b*) grwke or *c*) novaculite, etc.		*ac*	20		*a* 1-50
			a) Conglomerate or *b*) schist or gneiss		*a*	1-5		*ab* 1-20
		ISHPEMING	Basic *a*) intrusives, *b*) tuffs, *c*) ash layers	Gunflint	*ac*	xxx		*c* xx
		MIDDLE or NEGAUNEE	*a*) Shale, *b*) slate or *c*) schist		*a*	x	Huronian	*b* 0-10
			THE GREAT *f*) Magnetite, etc., rocks (*f*	Upper Cherty				*f*
			IRON *c*) Jaspilite, etc. *d*) "Taconyte"		*cd*	400		*c* 350
			FORMATION *e*) Grünerite rocks		*e*			*e*
			& ORE *a*) Chrty siderite, etc. *b*) Greenalite		*ab*			*a*
			a) Shale or *b*) slate or *c*) schist	Lower Shaly	*a(bc)*	xx		*bc* 200
			a) Cong, *b*) grwke or *c*) schist or gneiss		*ab(c)*	0-xx		*bc* 100
		HEMLOCK	Basic *a*) intrusives, *b*) flows, *c*) tuff or *d*) ash		*ad(bc)*	xxxx		*d* x
		LOWER or AJIBIK	*a*) Shale or *b*) slate or *c*) schist	Lower Cherty	*a(bc)*	x	Middle	*bc* 50
			a) Iron formation or *b*) ferrug. grwke, slate, etc.		*a*	20		*b* x
			a) Shale or *b*) slate or *c*) schist		*a(bc)*	x		*bc* 100
			a) Qtzite or *b*) grwke or *c*) gneiss or schist		*a*	10		*ac* 100
			a) Qtzitic slate or *b*) grwke or *c*) schist or gneiss		*b*	10		*c* 50
			a) Basal cong or *b*) schist or gneiss		*a*	2-10		*ab* 5
	CHAMPION		Long erosion interval following great and widespread crustal movements with some acidic intrusives and probably g					
EOZOIC	KONA	UPPER	*a*) Slate or *b*) schist with carbonate beds or lenses			>>>>>>		>>>>>>
			a) Dolomite or *b*) marble or *c*) schist or gneiss					
			a) Slate or *b*) schist					
			a) Dolomitic, etc., qtzite or *b*) schist or gneiss					
			Basic *a*) Intrusives or *b*) tuff or *c*) ash in slate, etc.			>?		
		LOWER	*a*) Chrty dolomite or *b*) marble or *c*) schist or gneiss		*c*	xx	Huronian	*ac* >x
			a) Chrty slate or *b*) schist, etc.		*b*	xx		*b* xx
			a) Thin cong, *b*) chrty, etc., qtzite, or *c*) gneiss, etc.		*c*	xx		*c* xx
	MESNARD		*a*) Slate, or *b*) schist, etc.	PRE-ANIMIKIE	*b*	xx	Lower	*b* xx
			a) Quartzite or *b*) granitic gneiss		*b*	xxx		*ab* xxx
			a) Graywacke, *b*) slate or *c*) schist or gneiss		*c*	xx		*c* xx
			a) Conglomerate or *b*) schist or gneiss		*ab*	x		*ab* x
			Rather deep erosion in some places following considerable crustal movement					
	KITCHI	UPPER	*a*) Slate or *b*) schist, *c*) chert, dolomite, etc.		*b*?	x?	Archean	*b* xx
			a) Quartzite, *b*) thick grwke or *c*) schist or gneiss		*c*?	xx?		*c* xxx
		LOWER	*a*) Great graywacke, *b*) slate or *c*) schist or gneiss		*c*?	xxx?		*ac* xxx
			a) Basal conglomerate or *b*) schist or gneiss		*b*?	x?		*ab* xx
AZOIC	LAURENTIAN?	MARQUETTE	*a*) Granite, *b*) Qtz porph, rhyolite, "aplite", etc.		*a*?	????		*a*? xxx?
	KEEWATIN?	MONA	Schists from basic lavas, tuffs, etc.			???		xxx?

TABLE 2

MINERAL DEPOSITS OF MARQUETTE IRON RANGE

Those that are CAPITALIZED have been commercially developed.

By W. A. Seaman

GEOLOGICAL COLUMN, MARQUETTE IRON RANGE

ERAS	PERIODS, etc.		GENERAL DESCRIPTION	WEST OF CHAMPION	CHAMPION TO ISHPEMING (North side of Range)	ISHPEMING TO MARQUETTE (North side of Range)	SOUTH SIDE OF THE RANGE
	RECENT	Post-Glacial Tilting	*a*) Gravel, *b*) sand, *c*) clay, etc.	*a*) GRAVEL,	*a*) GRAVEL, *b*) SAND	*a*) GRAVEL, *b*) SAND	*a*) GRAVEL, *b*) SAND
	PLEISTOCENE		Glaciation and *a*) Gravel, *b*) sand, etc.	*a*) GRAVEL,	*a*) GRAVEL, *b*) SAND	*a*) GRAVEL, *b*) SAND	*a*) GRAVEL, *b*) SAND
	LARAMIDE(?)		Faulting and mineralization (Silver, Copper, Nickel, Cobalt, etc.) as indicated in the formations listed below that are **marked #**				
PALEOZOIC	ORDOVICIAN, SILURIAN, etc.		Limestone or dolomite				Limestone
PALEOZOIC	CAMBRIAN	UPPER	Sandstone, etc.			BROWNSTONE	
PALEOZOIC	CAMBRIAN	KEWEENAWAN	Ophite, diabase, etc., dikes			Rough stone	
PROTEROZOIC	SUPERIOR		*a*) Pegmatites, *b*) granitization of the older rocks and *c*) mineralization with Gold, Beryllium, Copper, Molybdenum, Lead, Tin, Tungsten,	"KEWEENAWAN" *a*) Feldspar, Quartz, Mica, Andalusite Zinc, etc., as shown in the forma-	"KEWEENAWAN" *a*) Feldspar, Mica, Molybdenum tions listed below and	"KEWEENAWAN" **preceded by an** *	*a*) Feldspar, MICA, Beryl, Andalusite
PROTEROZOIC	SIBLEY	UPPER	Basic intrusives, *a*) gabbro, *b*) peridotite, etc.		* GOLD, Talc, "Asbestos" VERDE ANTIQUE	*b*# Silver	
PROTEROZOIC	SIBLEY	LOWER	Basic intrusives, *a*) gabbro, *b*) diabase, etc.	ROAD METAL		Rough stone	
PROTEROZOIC	MICHIGAMME		*a*) Slate or schist *a*) Graywacke or *b*) schist or gneiss	HURONIAN UPPER *a*) Roofing * *a, b, c*) Be, Mo, # *a*) Ag, Ni, * *b, c*) Be	UPPER Lacking	UPPER Lacking	UPPER Lacking
PROTEROZOIC	IRON	CLARKSBURG	Basic *a*) intrusives, *b*) tuff or *c*) ash layers		ROAD METAL and # Ag, Ni	ROUGH STONE	
PROTEROZOIC	IRON	UPPER	*a*) Slate or *b*) schist The Upper, or Bijiki Iron formation *a*) Slate or *b*) schist *a*) Conglomerate, *b*) qtzite or *c*) schist or gneiss	* Graphite IRON ORE, Yellow ochre, Manganese Vanadium * Graphite * Mica	* Graphite IRON ORE, Yellow ochre, Manganese Vanadium * Graphite * Mica		Iron ore, etc.
PROTEROZOIC	IRON	ISHPEMING	Basic *a*) intrusives, *b*) tuffs, or *c*) ash layers		ROAD METAL and	ROUGH STONE	
PROTEROZOIC	IRON	MIDDLE	*a*) Slate or *b*) schist THE GREAT or NEGAUNEE IRON FORMATION *a*) Graywacke, *b*) slate or *c*) gneiss or schist	MIDDLE * Graphite IRON ORE, Manganese Vanadium * Tungsten, Garnet *b*) * Graphite	MIDDLE IRON ORE, Manganese	IRON & MANGANESE ORE	IRON ORE Manganese * Tungsten
PROTEROZOIC	IRON	HEMLOCK	Basic *a*) intrusives, *b*) tuff or *c*) ash layers		Siamo * Au, Mo, W # Ag	* Au, Mo, W # Ag	
PROTEROZOIC	IRON	LOWER (OR AJIBIK)	*a*) Ferruginous slate or *b*) schist *a*) Graywacke, or *b*) schist or gneiss *a*) Quartzitic slate, *b*) qtzite or *c*) granitic gneiss *a*) Conglomerate or *b*) schist or gneiss	*b*) * Be, Mo *b*) * Be, Mo *c*) * Be, Mo	* Au, Mo, W # Ag * Au, Mo, W # Ag *b*) Road metal, Quartz	* Au, Mo, W # Ag * Au, Mo, W # Ag *b*) Road metal, Quartz	* Au, Mo, W
	CHAMPION		Long erosion interval following great and widespread crustal	movements with probably some	granitization and mineralization	of the older rocks in some	localities
EOZOIC	KONA	UPPER	*a*) Slate or *b*) schist ± carbonate lenses *a*) Dolomite or *b*) marble or *c*) schist or gneiss *a*) Qtzite, *b*) slate or *c*) gneiss or schist	HURONIAN LOWER Eroded " "	LOWER Eroded " "	LOWER Wewe Partly eroded " "	Magnesium, Terrazzo
EOZOIC	KONA	LOWER	Basic *a*) tuff or *b*) ash layers or *c*) schist *a*) Cherty dolomite or *b*) marble or *c*) schist or gneiss *a*) Quartzite, *b*) slate or *c*) schist or gneiss	Mostly eroded " " " "	Mostly eroded " "	Kona " " " " " "	Magnesium, Terrazzo
EOZOIC	MESNARD		*a*) Slate or *b*) schist *a*) Quartzite or *b*) granitic gneiss *a*) Cong, *b*) grwke, *c*) slate or *d*) schist or gneiss	Largely eroded " "	* Gold, Mo, W * GOLD, Mo, W, # Ag	Mesnard * *a*, Copper *a* Silica quartz * Gold	* Be, Mo * Be, Mo
EOZOIC	KITCHI		*a*) Quartzite, *b*) grwke, *c*) slate or *d*) schist or gneiss *a*) Conglomerate, *c*) graywacke, *c*) slate or *d*) schist or gneiss	ARCHEAN * Mo * Mo	KEEWATIN Kitchi * GOLD, Mo, W, # Ag * GOLD, Mo, W, # Ag	* Gold, etc. * Gold, etc.	* Be, Mo, Au * Be, Mo, Au
AZOIC		MARQUETTE	*a*) Granite, *b*) quartz porphyry, rhyolite, etc.		* (*b*) GOLD, Mo, W, # Ag		
AZOIC		MONA	Schists from basic lavas, tuffs, etc.		* GOLD, Mo, W, # Ag	Mona * Gold, etc.	

PALMER GNEISS

TABLE 4

TABULATION OF SAMPLES ACCORDING TO STRATIGRAPHIC OCCURENCE, LAKE MICHIGAMME AREA

By W. A. Seaman

Formations	Few if any dikes or veins:	Pegmatites cutting horizon indicated	Feldspar poor	Quartz veins	Basic dikes	Sheared dikes
Michigamme Schist and Graywacke & Clarksburg Tuff and Ash Layers	47-31-1 #1, 2, 3 48-29-32 #2, 3 48-30-28 #1, 1a, 4, 5, 6, 7, 9, 10, 11, 12 48-30-30 #1, 2, 3 48-30-33 #2, 4, 6, 8 48-30-34 #1, 2, 3, 5, 6, 8 48-31-25 #1	47-30-4 #1, 2	48-30-28 #2, 3, 8 48-30-33 #1, 5, 6 48-30-34 #6, 7, 10	48-29-32 #1, 1A 48-30-29 #1 48-30-30 #4 48-30-33 #3, 7 9 48-30-34 #1F, #4, 6, 7, 9, 10, 11, 12, 13, 14		
Basic Dikes	48-29-31 #26	47-29-6 #13, 14, 41	47-30-22 #4	47-29-6 #10		
Bijiki Slate	48-29-32 #4 48-29-35 #3					
Bijiki Iron Formation & Ore	48-29-29 #1, 2, 3, 4, 5, 6, 7, 8, 9 48-29-29 #1 48-29-35 #1, 2 48-30-26 #1, 2			47-29-5 #1, 2, 3, 4		
Goodrich Qtzite & Cg	48-29-31 #13, 15 48-29-32 #7, 8				48-29-32 #9	
Negaunee Iron Formation & Ore	47-30-30 #4, 5, 6 48-29-31 #8, 10, 11, 12, 15 19, 20, 21, 22 48-29-32 #5, 6, 10		48-29-31 #15	48-29-31 #15, 16	48-29-31 #7, 14, 15 48-29-32 #9, 11	48-30-20 #1
"Siamo" Graywacke and Slate	47-29-6 #15, 16 48-29-25 #2, 3 48-29-31 #17, 18, 23 48-30-20 #2 48-30-23 #14, 14a	48-29-31 #24, 25		48-29-25 #4, 5	48-30-23 #15	48-29-31 #17, 18 48-30-20 #3, 15a
Ajibik Quartzite	47-29-6 #1, 2, 5, 6, 17, 18 20, 21, 22, 42 47-30-20 #13 48-29-31 #1, 2, 3, 4, 5, 6, 9 48-30-20 #4	47-29-6 #4, 13, 14 30, 35, 41 47-30-1 #2 48-29-31 #1A		47-29-6 #10 47-30-1 #1 47-30-20 #2 48-29-25 #1	47-29-6 #11	47-29-6 #3, 7, 9, 12, 19, 23, 34 48-29-31 #6
Pre-Ajibik Complex including granitized Mesnard and Kitchi	47-29-6 #24, 25, 26, 27, 28, 36, 37 48-29-21 #2, 3, 4, 5, 7 48-29-27 #1 48-29-28 #1, 2, 4, 8, 9 48-30-20 #9, 11, 15, 17, 18 48-30-21 #1, 2, 3, 5 48-30-22 #1, 2, 3, 4 48-30-23 #3, 5, 6, 11 48-30-24 #1, 3, 5	47-29-6 #32, 38, 29, 40 47-29-5 #1 48-29-21 #1 48-29-27 #2 48-29-28 #3, 7 48-30-13 #2 48-30-20 #12 48-30-21 #1, 2, 3, 4, 6, 8, 9 48-30-23 #1, 2, 7, 10, 12, 18 49-30-26 #1, 2, 3, 4, 5	47-30-22 #4 48-29-28 #10 48-30-20 #13 48-30-21 #1	47-29-6 #29 47-30-22 #1, 2 48-30-13 #1 48-30-20 #14 48-30-21 #7 48-30-23 #9	47-29-6 #31 48-29-28 #5 48-30-20 #5, 6, 7 8, 15 48-30-23 #3, 8 48-30-24 #2	47-29-6 #33 47-30-22 #3 48-29-21 #6 48-29-28 #6 48-30-20 #10 48-30-23 #4, 5 48-30-24 #4

TABLE 5

STRATIGRAPHIC DISTRIBUTION OF ELEMENTS, LAKE MICHIGAMME AREA.

By W. A. Seaman

	Formations & number of samples analyzed		Ag	Be	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sn	V	Zn	B,Li,Sr	Blank
Pegmatites in	Michigamme schist & Clarksburg tuff, etc.	17	—	9	—	—	1	—	—	2	3	—	1	—	8	2
	Goodrich, Iron formation, "Siamo," etc.	3	—	1	—	—	1	—	2	—	—	—	—	—	—	0
	Ajibik	3	—	—	—	—	—	—	1	—	1	—	—	—	1	0
	Pre-Ajibik	18	1	—	—	—	—	—	2	—	5	—	—	—	3	10
Quartz Veins in	Michigamme-Clarksburg	17	—	2	—	1	1	—	1	1	—	—	—	—	1	12
	Bijiki-Goodrich	6	—	—	—	—	—	—	—	—	—	—	1	—	—	5
	Negaunee I. F.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
	"Siamo"	2	—	—	—	—	—	—	1	—	1	—	—	—	—	0
	Ajibik	4	—	—	—	—	1	—	—	1	2	—	—	—	—	2
	Pre-Ajibik	3	—	—	—	—	—	—	—	—	—	—	1	—	—	2
Formations without veins	Basic Dikes (Mostly sheared Clarksburg)	16	2	6	1	1	—	—	—	11	—	—	7	—	—	1
	Michigamme-Clarksburg	23	—	15	—	6	—	—	3	16	—	1	4	—	—	1
	Bijiki	6	—	1	—	—	—	1	—	3	1	—	—	1	—	1
	Goodrich	2	—	—	—	—	—	—	—	—	—	—	1	—	—	1
	Negaunee I. F.	8	—	—	—	—	—	3	—	—	—	1	1	—	—	5
	"Siamo"	8	—	2	—	—	1	—	2	2	1	—	3	—	1	1
	Ajibik	5	—	—	—	—	—	—	—	—	1	—	—	—	1	3
	Pre-Ajibik	5	—	3	—	—	—	—	1	—	—	—	—	—	—	1
	Totals	148	3	39	1	8	5	4	13	36	15	2	24	1	16	48