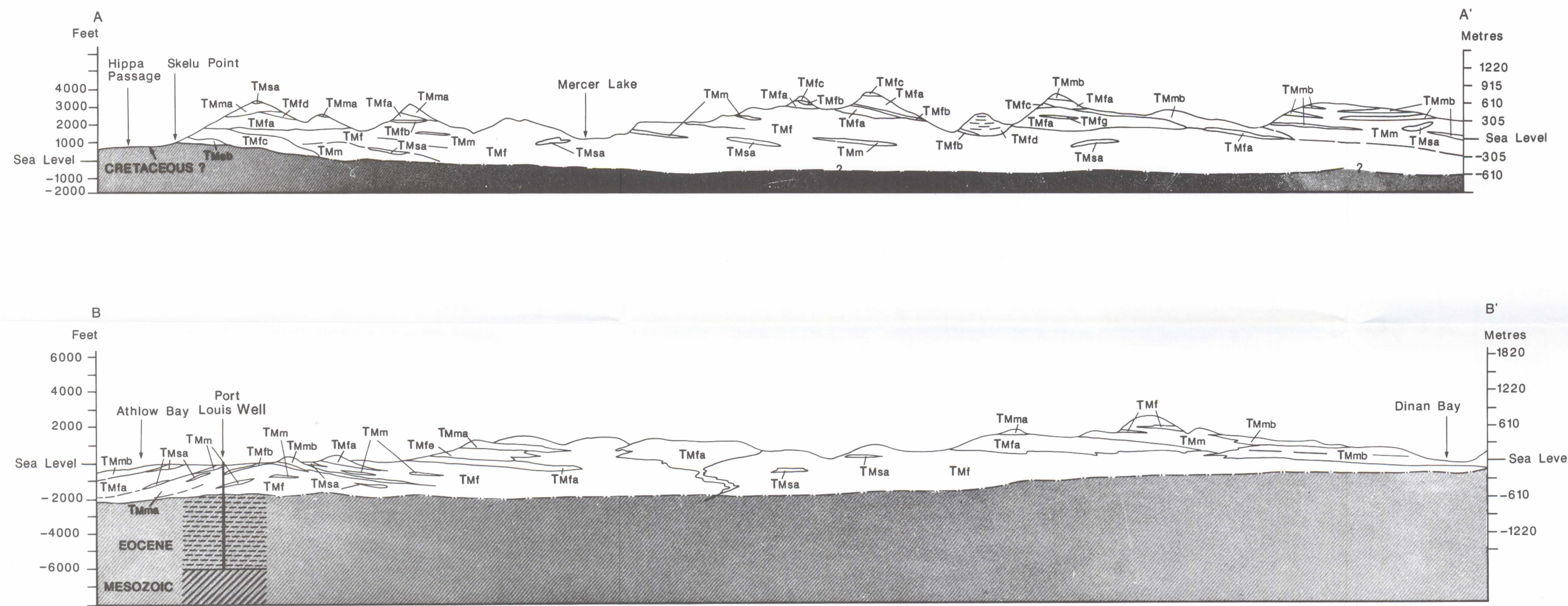


Sheet 2. Cross sections, isotopic dates, whole rock geochemical data and figures to accompany Map 7-1990, Geology, Awun Lake, British Columbia

Diagrammatic geological cross sections, Awun Lake, British Columbia



Scale 1 : 50 000

TABLE 1: COMPILATION OF K-Ar DATES FOR THE MASSET FORMATION,
OTHER TERTIARY VOLCANIC UNITS and TWO U-Pb DATES FROM
THE KANO PLUTONIC SUITE

No.	Rock Type	Date ² Ma ± 1σ	Lat. N	Long. W.	Sample No. ³	Data Source ⁴	NTS
1	*felsic ash flow	45.7 ± 3	54°10'17"	132°58'0"	GS-49-66	b	
2	*basalt	19.0 ± 0.7	54°06'5"	132°22'1"	TMW33	d	
3	*basalt	24.4 ± 1.3	54°09'33"	132°39'0"	GS-51-66	b	
4	*felsic ash flow	49.4 ± 2	54°09'33"	132°44'1"	GS-51-66	b	
5	*basalt	12 ± 3	54°03'53"	132°14'33"	GS-256-663	b	
6	*ol. basalt	36.1 ± 1.2	54°04'4"	131°47'7"	GS-29-66	b	
7	*ol. basalt	15 ± 5	54°04'4"	131°47'7"	GS-256-663	b	
8	*basalt	23.0 ± 0.8	53°56'1"	132°42'1"	BVT203	d	
9	*basalt	23.6 ± 0.8	53°56'1"	132°42'1"	BVT366A	d	
10	*basalt	21.8 ± 4	53°42'08"	132°49'17"	GS-39-66	b	103F/10
11	*basalt	23.6 ± 0.8	53°42'08"	132°49'17"	GS-39-66	b	103F/10
12	*dacite	18.9 ± 0.7	53°43'1"	132°30'9"	139/1815	d	103F/10
13	*basalt	24.4 ± 0.8	53°42'6"	132°29'7"	137/410	d	103F/09
14	*basalt	23.6 ± 0.7	53°42'6"	132°29'7"	137/410	d	103F/10
15	*basalt	26.4 ± 0.9	53°38'3"	132°41'2"	161/790	d	103F/10
16	*rhyolite	11.0 ± 0.7	53°34'8"	132°46'0"	70/2330	d	103F/10
17	*andesite	23.6 ± 0.8	53°34'8"	132°46'0"	70/2330	d	103F/09
18	*felsic ash flow	24.3 ± 0.8	53°30'6"	132°20'0"	MR 2	c	103F/09
19	*felsic ash flow	21 ± 2	53°31'68"	132°21'2"	SD-544-663	b	103F/09
20	*basalt	21.8 ± 0.7	53°32'8"	132°17'6"	342/1020	d	103F/09
21	*basalt	30.0 ± 0.7	53°32'8"	132°23'1"	AK 378	a	
22	bio. f.dmpg. porp.	64 ± 3	53°24'2"	132°23'1"	AK 378	a	
23	*basalt	20.4 ± 0.7	53°24'6"	131°55'0"	TMW61.5	d	
24	*basalt	40.0 ± 3.0	53°24'6"	131°55'0"	TMW61.5	d	
25	*ol. basalt	36 ± 3	53°25'1"	131°54'8"	SD-278-663	b	
26	*andesite	17 ± 1	53°06'8"	131°38'23"	SD-256-663	b	
27	*rhyolite	23.2 ± 0.8	52°49'6"	132°12'1"	TMW21	d	
28	*basalt	28.9 ± 1.1	52°48'3"	132°09'7"	TMW21	d	
29	*basalt	21 ± 1	52°41'4"	132°23'27"	SD-256-663	b	
30	*basalt	28 ± 1	52°41'4"	132°23'27"	SD-256-663	b	
31	*basalt	41.1 ± 1.4	52°33'0"	131°21'4"	TMW10	d	
32	*basalt	35.9 ± 1.4	52°33'2"	131°21'0"	TMW10	d	
33	*felsic Mtn. pln.	43 ± 3	53°37'1"	133°02'0"	GS-56-66	b	103K/03
34	*Langara pluton	26.8 ± 0.4	54°15'47"	133°02'80"	CR-87-56	b	103K/06

- 1 Number refers to plotted locations on Figure 1. Dates with an WTS listing are plotted on the appropriate map (Hickson, 1990b; Lewis and Hickson, 1990).
 - 2 Refer to original source for details of analyses; dates have been recalculated using new constants where applicable (R.L. Armstrong, pers. comm., 1989).
 - 3 Original sample number, obtained from sources below.
 - 4 Data sources:
 - a - Mathews, 1964
 - b - Young, 1981; unpublished data from Shell Development Corp., Houston, Texas and Pan-America Petroleum Corporation
 - c - Young, 1981; run at Geochron Laboratory, University of British Columbia
 - d - U.B.C. Geochron File. Samples collected by T. Hamilton and dated by J. Harkalal under contract to the G.S.C.
 - e - Dates from the University of Alberta (Anderson and Reichenbach, 1990).
 - * Starred samples are excluded from the Masset Formation on chemical, petrological and/or spatial grounds.
- These samples may have incorrect positions. Young (1981) plots them further north than Figures 1 and 2, consistent with his description of the location and with the present mapping.

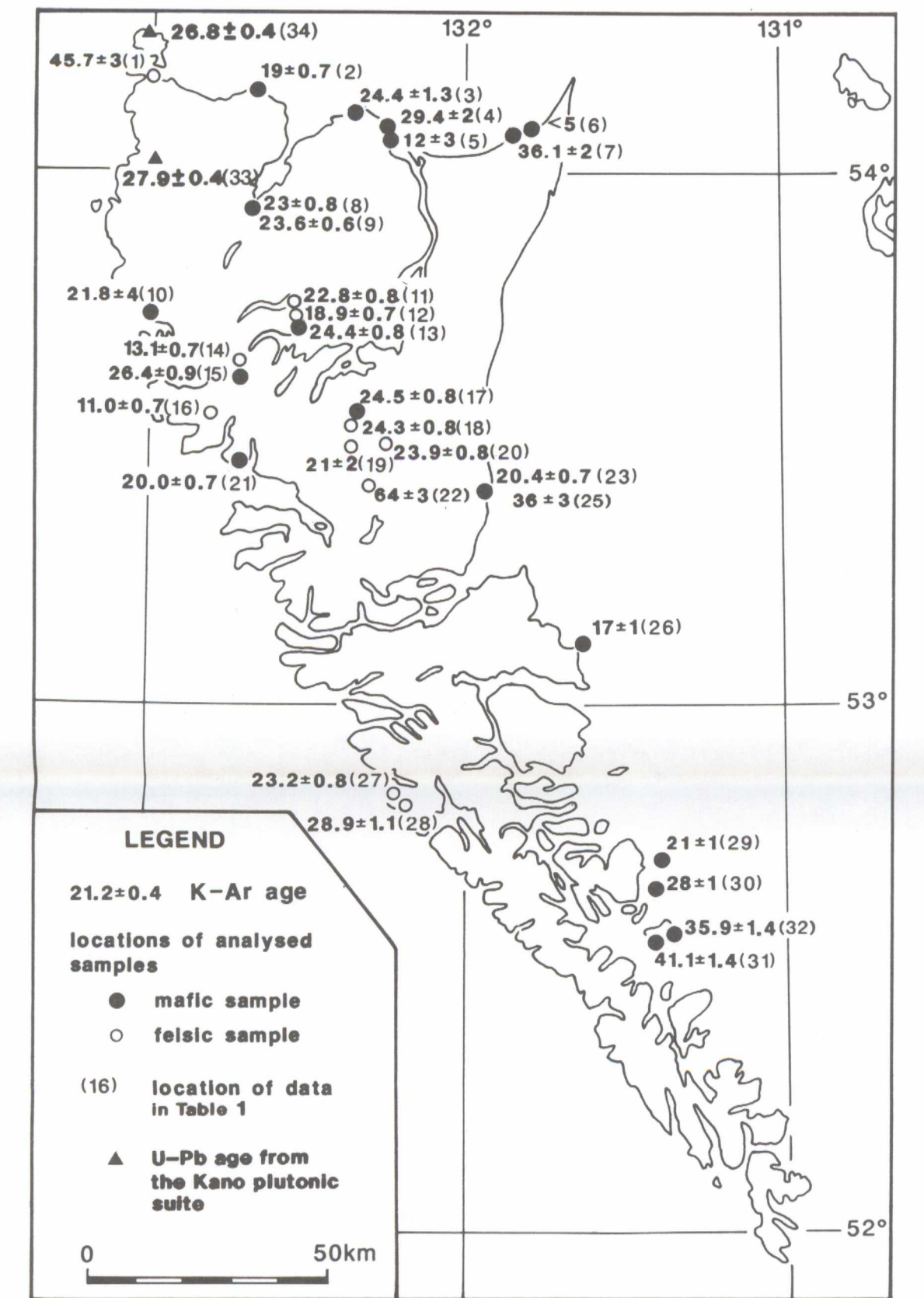


Figure 1

Table 2: Whole rock chemical data

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TABLE 2: KEY TO WHOLE ROCK CHEMICAL DATA

- 1 numbers refer to location of data point on accompanying maps (Hickson, 1990; Hickson and Lewis, 1990; Lewis and Hickson, 1990). NTS numbers are given if plotted data only.
- 2 BAS = basaltic andesite, BASAN = basaltic andesite, AND = andesite, TAN = trachy-andesite, TDAC = trachy-dacite, DAC = dacite, RHY = rhyolite. Refer Fig. 2 for compositional boundaries (Hickson and Lewis, 1990).
- 3 petrographic classification, for details see Table 2 (Hickson, 1990a).
- 4 FeO was determined by wet chemistry. FeO used in norm calculations was as

FIGURE CAPTIONS

- Fig. 1: Location of onshore K-Ar dates and two U-Pb dates from the Kano plutonic suite. Numbers refer to Table 1.
- Fig. 2: Plot of total alkali versus silica for samples from the Masset Formation. Diagram shows relationship between field classification and classification made on the basis of whole rock chemistry. Fields are from LeBas et al. (1986). See sheet 1 for map legend.
- Fig. 3: Distribution of the Masset Formation, exposed plutons of the Kano plutonic suite and locations where the contact between the Masset Formation and older strata is exposed. Also noted are the locations and compositions of whole rock chemical analyses from Fig. 2. Symbols are based on classification in Fig. 2. Details of the measured section are shown in Fig. 4.
- Fig. 4: Stratigraphic section exposed along the coastline between Tied Head and Beaver Point; location is shown in Figure 3. See sheet 1 for map units.

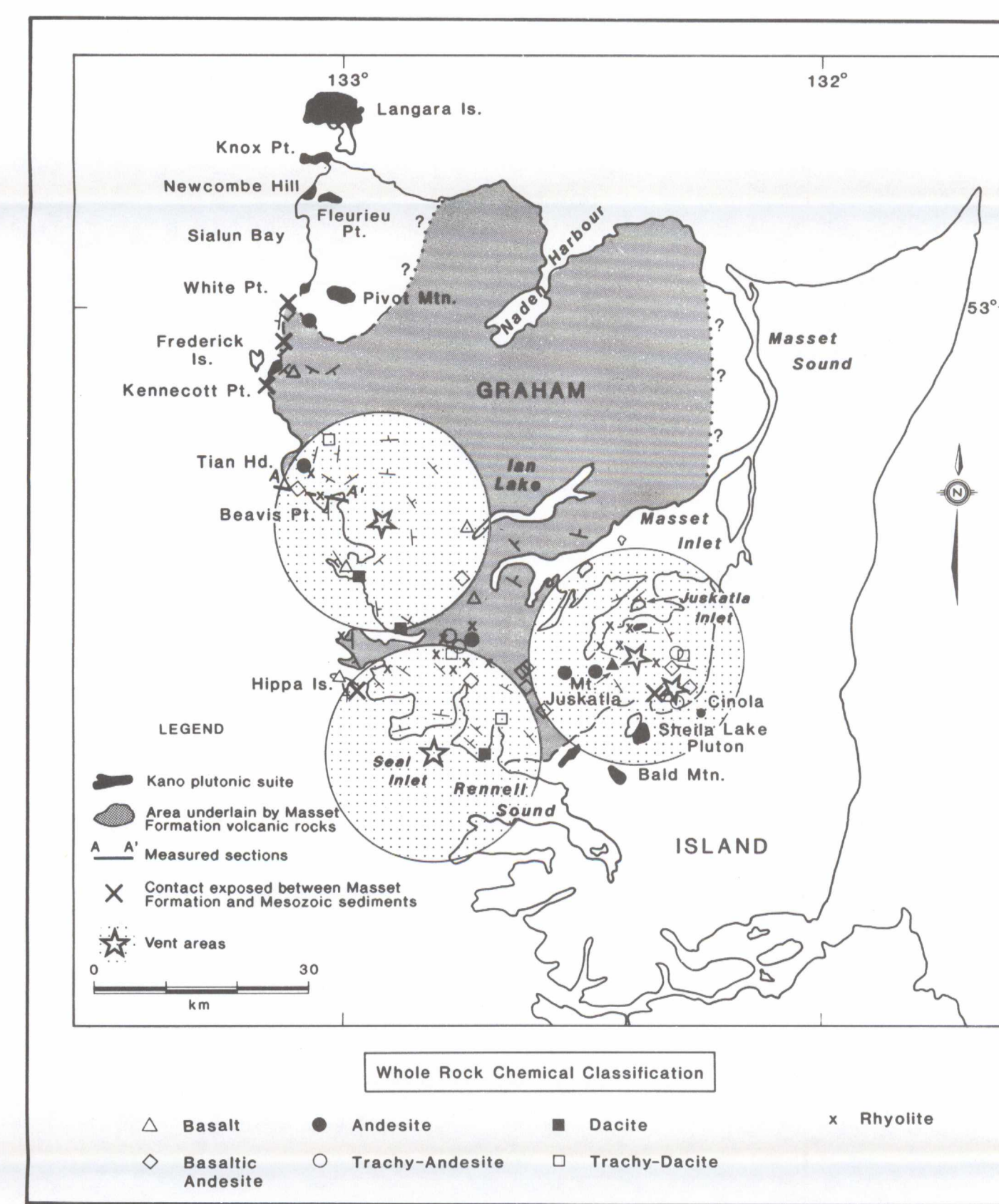


Figure 3

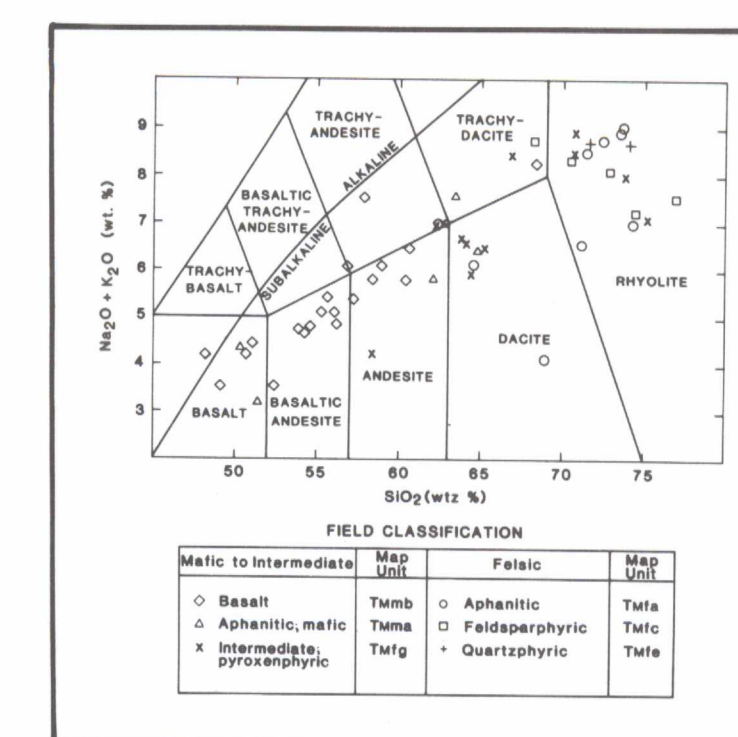


Figure 2

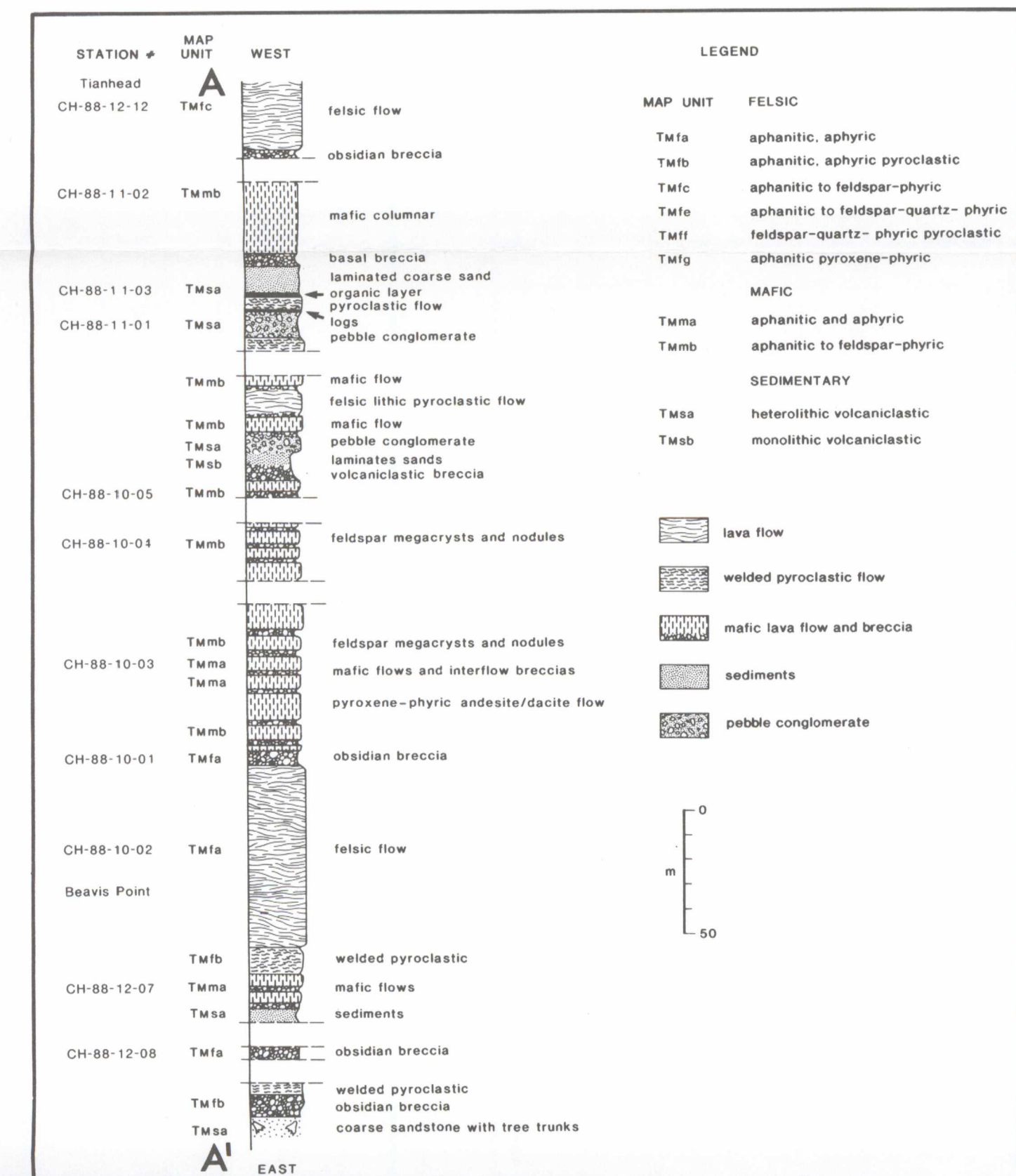


Figure 4

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