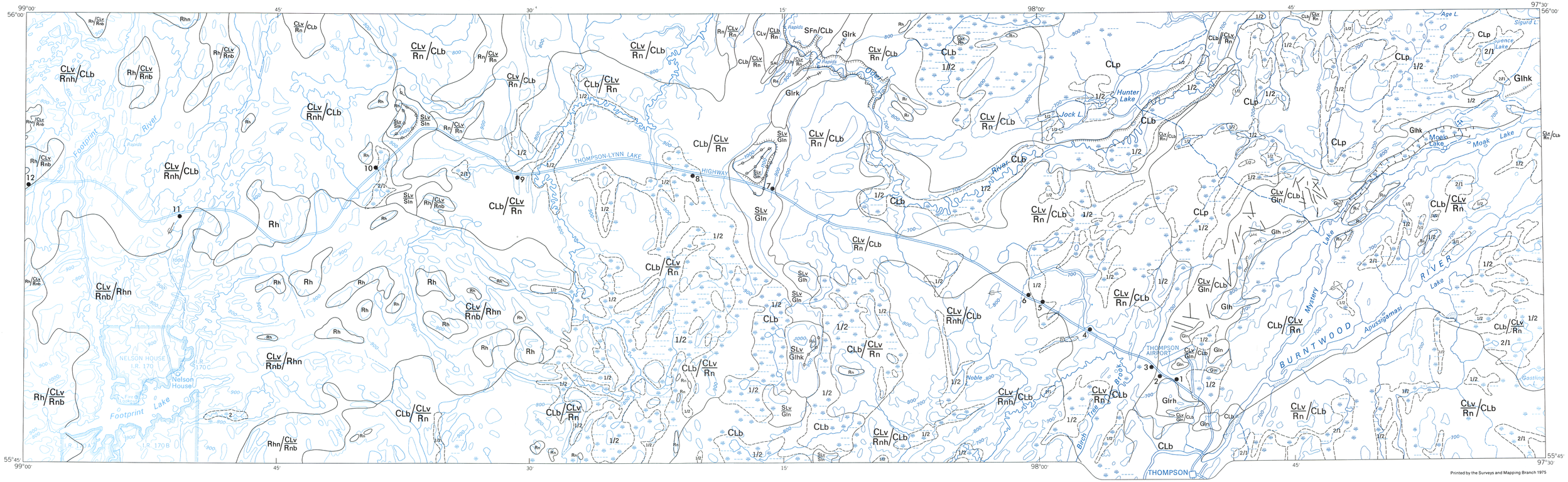
GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES



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LEGEND

GEOLOGIC MAP UNIT	MATERIAL	LANDFORM	
		ORIGIN	TOPOGRAPHY
SAt	Sand and silt	*Alluvial terrace*	*Nearly flat or gently irregular surface in places marked by abandoned channels; local relief up to 5 feet*
SFn		*Proglacial outwash*	*Broad rise or series of rises from 10 to 50 feet above adjacent terrain*
SFt	*Sand and silt*	*Proglacial outwash terrace*	*Gently irregular surfaces with less than 10 feet relief along the sides of main valleys; surfaces are separated from the adjacent plain and valley bottom by a break in slope; shallow, abandoned channels mark some terrace surfaces*
C,L (p,b)	*Clay, silt and sand*	*Glacial lake*	*Plains are extensive (tens of miles) nearly flat or gently irregular surfaces with 5 to 25 feet local relief which commonly are marked by scattered knolls of bedrock; basins are not as extensive (10 miles or less) and are associated with strongly irregular, bedrock controlled surfaces with local relief of more than 25 feet*
(C,S) Lv			*Surface reflects topography of underlying materials; commonly mantles bedrock and till knolls with local relief from 15 to 50 feet and bedrock hills from 50 to more than 100 feet relief*
(S,G) I (r,n,h,k)	*Sand, silt and gravel*	*Ice-contact outwash (kames and eskers)*	*Ridges, knolls and hills that occur as isolated landforms or as complexes along linear trends continuous for tens of miles; local relief is highly variable and ranges from low rises of 10 to 50 feet relief to prominent hills some 100 to 250 feet above adjacent terrain: some landforms are locally pitted and channelled with local surface relief from 10 to 100 feet*
R (b,r,n,h)	*Mostly Precambrian granitic rocks*	*Preglacial and glacial erosion*	*Basins are local low areas between bedrock knolls and hills where the drift cover appears to be thin; ridges, knolls and hills are gently irregular to strongly irregular surfaces with 25 to more than 100 feet local relief*

TEXTURAL (large capital letter)
G-*gravel and sand*
S-*sand and silt*
C-*silt and clay*
R-*bedrock*

GENERIC (small capital letter)
A-*alluvial*
L-*glaciolacustrine*
F-*glaciofluvial*
I-*ice-contact*

MORPHOLOGIC (lower case letter)
n-*knoll(s) (<50' relief)*
h-*hill(s) (>50' relief)*
r-*ridge(s)*
p-*plain*
b-*basin*
t-*terrace*
v-*veneer (commonly 2' to 10' thick)*
k-*kettles*

Complex Units:
A horizontal line ___ separating two units indicates a veneer (2 to 5 feet) unit overlying a thicker and morphologically dominant unit

Composite Units:
A single slash / or double slash // between two units is used to designate areas where two distinctive units (mineral or organic) occur but are mapped as one unit. The first unit indicated comprises more than 50 per cent (rough estimate) of the area; the second unit designated comprises from 25 to 50 per cent where separated by a single slash e.g. Clv/Rn/Clb or less than 25 per cent where separated by a double slash e.g. Clv/Rn//Clb

Organic Units:
Organic deposits designated as bog (1) and fen (2) cover the surficial sediments and bedrock in most of the low-lying poorly drained parts of the map-area. Bog is composed of peat material between 2 and 12 feet thick (mostly 5 to 9 feet) and commonly is several feet or more above the water table; permafrost commonly occurs at a depth of 1 to 4 feet depending upon local factors (tree cover, slope, drainage, etc.). Fen is peat covered by shallow water or water covered by a floating peat blanket; permafrost was not penetrated in fen areas and is at a depth greater than 10 feet or does not occur.

Boundaries (geologic, geologic and organic, organic)
Minor intersecting lineaments
Glacial striae showing ice direction
Esker
Abandoned beach
Partly buried channel
Spillway or meltwater channel (large, small)
Escarpment or steep bank
Site location and number 6●

Geology by R.W. Klassen, 1973

To accompany GSC Paper 75-19 by R.W. Klassen

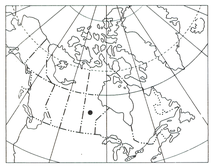
Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

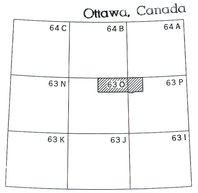
Road
Trail
Contours 1000

Base-map cartography by the Geological Survey of Canada from parts of 1/250,000 scale maps 63O and 63P published by the Surveys and Mapping Branch in 1965

Approximate magnetic declination 1975, 10°55' East, decreasing 4.5' annually. Elevations in feet above mean sea-level



INDEX MAP



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO GEOLOGICAL SURVEY OF CANADA MAPS

Figure 1. Surficial geology and locations of Sites 1-12 near Thompson and Nelson House, Manitoba.

Scale 1:125,000

Kilometres 3 0 3 6 9 Kilometres
Miles 2 0 2 4 Miles

Universal Transverse Mercator Projection

Figure 1