

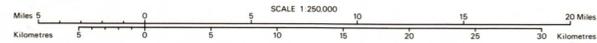


Base maps provided by the Surveys and Mapping Branch,
Department of Energy, Mines and Resources, Ottawa
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Cartographic editing: A.R. Campbell and R. Green

- Bedrock contours:
 defined 2000
 approximate 1500
- Surface contours:
 elevation 1000
 depression 2500
- Data control point
- Highway 2
- Railway
- Section line
- Township line

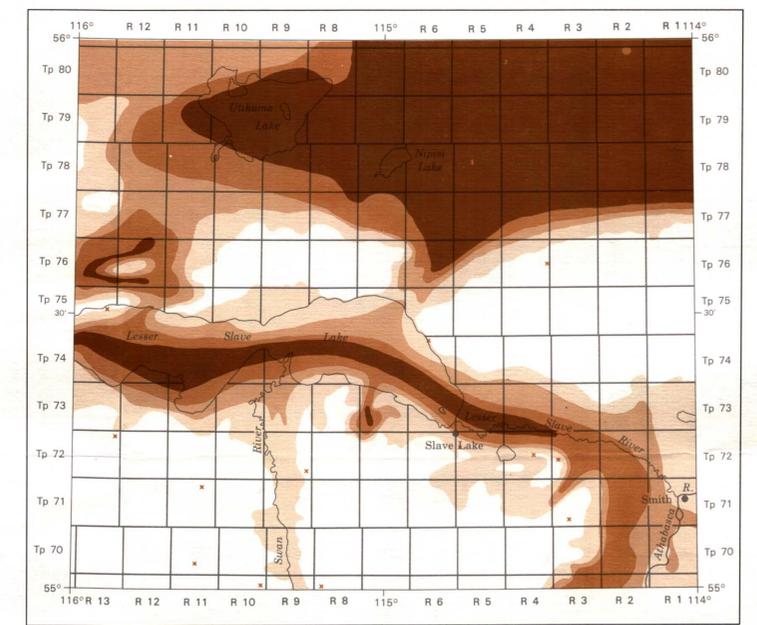
BEDROCK TOPOGRAPHY OF THE LESSER SLAVE LAKE MAP AREA, NTS 830, ALBERTA

WEST OF FIFTH MERIDIAN



BEDROCK TOPOGRAPHY BY R.I.J. VOGWILL, 1976

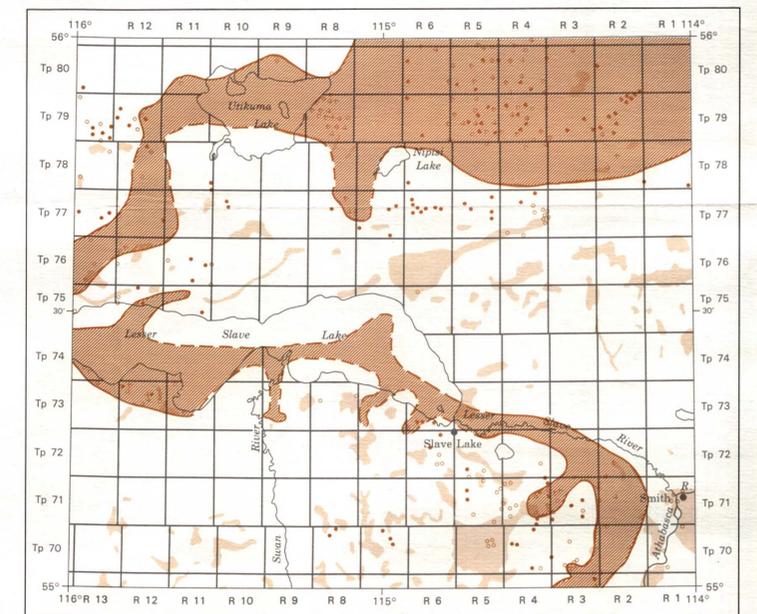
ACKNOWLEDGMENTS
 The following companies supplied electric logs and/or lithology used in the compilation of this map and their cooperation is gratefully acknowledged: Amoco Canada Petroleum Co. Ltd.; Manalta Coal Ltd.; and Lunan Explorations Ltd. The Alberta Energy Resources Conservation Board supplied data for the northeast portion of the map area. Seismic shothole data was supplied by the following petroleum companies: Atlantic Richfield Company; Chevron Standard Ltd.; Gulf Oil Canada Ltd.; Home Oil Company Ltd.; Hudson's Bay Oil and Gas Company Ltd.; Mobil Oil Canada Ltd.; Sun Oil Ltd.; Union Oil Company of Canada Ltd. J. Warehime completed an exploration drilling program.



Drift Thickness

Thickness of drift in feet:
 less than 50
 51 to 150
 151 to 250
 251 to 350
 greater than 350

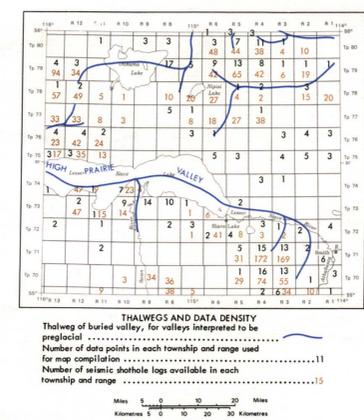
selected bedrock outcrop



SAND AND/OR GRAVEL DEPOSITS

Sand and/or gravel deposits greater than 10 feet thick and lying at or within 10 feet of the surface:
 area within which these deposits are common
 point locality of these deposits

Buried sand and/or gravel deposits of depths greater than 10 feet from the surface, lying principally in buried preglacial valleys:
 area within which these deposits are common:
 known
 inferred
 point locality of these deposits



NOTES

COMPILATION
 As shown on the data density and thalwegs map, information is generally scarce. The main sources of information are coal exploration holes, petroleum exploration wells, seismic shotholes, and water wells.

DISCUSSION
 Preglacial topography and drainage generally conform to existing patterns except that:
 (1) preglacial relief was greater, and
 (2) drainage in the Lesser Slave Lake depression was to the west.

The main preglacial features of the area are the buried valleys underlying Lesser Slave Lake which drain westward, and a series of valleys in the northern one-third of the map area which drain northwards and form the headwaters of a major buried valley running north through Loon Lake. Jones (1966) described the existence of a buried valley at High Prairie which is probably the continuation of the valley that underlies Lesser Slave Lake.

REFERENCE
 Jones, J.F. (1966): Geology and groundwater resources of the Peace River district, northwestern Alberta, Research Council of Alberta Bulletin 16, 143 pages.