BEDROCK TOPOGRAPHY Bedrock topography in the Selkirk map area (Insert D) shows considerable irregularity with sharply defined highs and lows. Using seismic reflection data obtained in the Lake Winnipeg study, Bezys (1996) identifies the Lower Paleozoic section (Winnipeg and Red River formations) as a prominent escarpment, approximately 20 m high within Lake

To the west of Lake Winnipeg, within the Paleozoic outcrop belt, local bedrock relief is associated with the soft, easily eroded shales of the Gunn Member of the Stony Mountain Formation. The overlying Gunton Member forms the Gunton Escarpment, which is evident in outcrop in the west central portion of the map sheet (Insert D). The escarpment trends (approximately) north-south, parallel to the 240 and 260 m contour intervals. Areas of thin overburden (elevated bedrock topography) (Insert E) occur in the Stonewall, Rockwood, Gunton, Stony Mountain, East Selkirk and Stoney Point - Brokenhead areas.

PRECAMBRIAN UNCONFORMITY Deeply eroded Precambrian rocks are unconformably overlain by basal Paleozoic sands and shales of the Middle Ordovician Winnipeg Formation. Available data show that the weathered Precambrian surface was extremely flat. However, immediately east of the present erosional edge of the Paleozoic strata, in the Green Oak area, granite outcrops are encountered at an elevation considerably higher than would be expected, based on extrapolation of regional dips from Paleozoic strata from the west (Bezys, 1996; McCabe, 1983). Furthermore, these Precambrian granites show no sign of weathering, indicating that a considerable thickness of weathered material must have been removed by glacial and/or pre-glacial erosion. This suggests that the present Paleozoic/Precambrian contact

may in part be structurally controlled, rather than a purely erosional feature. PALEOZOIC REGIONAL STRUCTURAL GEOLOGY

Regional strike of the sedimentary strata is approximately north-south, and regional dip increases gradually and uniformly from about 2.6 m/km in the eastern part of the map sheet to 4.2 m/km in the western part. Despite the regional structural dip to the west, isopachs of the Red River and Winnipeg formations all trend east-west (Inserts F3 and F4), and thicken to the south at up to 0.3 m/km. This indicates a major change in tectonic framework subsequent to early Paleozoic time. The present north-south structural trend probably developed during the late Paleozoic to early Mesozoic, due to uplift with associated erosion and eventual exposure of Precambrian bedrock in southeastern Manitoba. New evidence from the Lake Winnipeg Project (Bezys, 1996) has shifted the Precambrian/Paleozoic boundary in Lake Winnipeg to the west and placed the outcrops at Grand and Victoria beaches as outliers. ORDOVICIAN

Winnipeg Formation The Winnipeg Formation consists of a complex sequence of interbedded sands and shales. Regionally, the formation thins and becomes increasingly sandy to the north (McCabe, 1978). The sand is poorly consolidated, medium grained, mature, well rounded and quartzose; the shales commonly are light olive-grey, kaolinitic, with variable sand and silt content. Pyritic and/or limonitic concretions and oolites are common in some zones. The normal sequence consists of a thin basal sandstone overlain by interbedded sand and shale, with the shale content increasing upward. The maximum thickness of the Winnipeg Formation in NTS 62I is 36 m.

Red River Formation Winnipeg Formation sandstones and shales are overlain conformably and transitionally by mottled dolomitic limestones of the Red River Formation, 145 - 150 m in thickness (Insert F3). The transition zone consists of a thin sequence of interbedded limestones and shales, termed the "Hecla Beds" (Porter and Fuller, 1959). The Red River Formation consists of two principal subunits, the lower Red River and upper Red River strata. In the Lake Winnipeg outcrop area, the lower Red River (approximately equivalent to the Yeoman Formation in Saskatchewan) can be subdivided into three mappable members: a lower Dog Head Member, a medial Cat Head Member, and an upper Selkirk Member. Lower Red River strata consist of light grey to yellowish- and brownish-buff, prominently mottled, fossiliferous, commonly cherty, dolomitic limestones (95-100 m). The darker brownish mottles consist of almost pure, finely crystalline, granular dolomite, whereas the lighter grey to buff patches are a fossiliferous limestone (wackestone). Large, well preserved corals, gastropods, and cephalopods are common. Portions of the upper part of the unit (i.e. Selkirk Member) are quarried for building and decorative stone - the well known

"Tyndall Stone" - in the Garson area. The upper Red River strata consist of 33-50 m of dolomite and argillaceous cherty dolomite, designated as the Fort Garry Member. These beds are approximately equivalent to the Herald Formation in Saskatchewan. The lower 25 m of the unit consists of extremely fine grained sublithographic dolomite that is light brownish buff to slightly reddish and faintly laminated. Two thin arcillaceous breccia zones occur near the top of the lower unit and are believed to represent zones where evaporite beds have been dissolved by subsurface solution. The upper 25 m of the formation consists of a relatively coarse grained, granular, cherty dolomite. A thin, high calcium limestone bed occurs locally at the top of the Fort Garry Member, and a second limestone bed occurs sporadically near its

Stony Mountain Formation shaly beds of the Stony Mountain Formation. In NTS 62I the Stony Mountain Formation ranges in thickness from 28-38 m (Insert F2). It has been subdivided into four members, in ascending order: the Gunn, Penitentiary, Gunton and Williams. However, standardized correlations established for the new Atlas of the Western Canada Sedimentary Basin (Norford et al., 1994) placed the contact at the base of the Williams Member, thereby including the Williams in the overlying Stonewall Formation rather than in the Stony Mountain as originally defined (Smith, 1963; 1964). This revised usage is followed in Manitoba for this and subsequent maps.

The basal Gunn Member consists of greyish-red to purplish- and reddish-grey, fossiliferous, calcareous shale with interbeds of relatively clean, fossiliferous limestone and in NTS 62I ranges in thickness between 12-25 m. It is overlain by yellowish- to reddish-grey, fossiliferous, argillaceous dolomite of the Penitentiary Member. These two units together comprise the lower Stony Mountain (equivalent to the Stoughton Member in askatchewan), which maintains a relatively uniform thickness. However, the individual Gunn and Penitentiary members show marked variations in thickness, and are complete lateral or lithofacies equivalents. The Penitentiary Member represents a northern, shelfward, dolomitic and less argillaceous facies, whereas the Gunn Member represents a southern, more basinal limestone-shale facies. The Penitentiary Member ranges between 2 and 28 m in thickness in NTS 62I.

The Gunton Member consists of a buff, finely crystalline, sparsely fossiliferous, nodularbedded dolomite that is relatively uniform in thickness and lithology throughout the map area. It ranges between 9 and 21 m in thickness, in NTS 62I and it is extensively used for crushed stone, extracted from quarries in the Stonewall area. ORDOVICIAN/LOWER SILURIAN

Stonewall Formation The Williams Member, herein placed as the basal unit of the Stonewall Formation, represents the oldest of a series of so-called "para-time-stratigraphic" markers; thin sandy and/or argillaceous beds that can be traced for many hundreds of kilometres, throughout most of the Williston Basin area. These marker beds provide the primary means for stratigraphic subdivision of Upper Ordovician and Silurian strata and probably represent deposits related to brief periods of shoaling or even slight uplift and erosion (i.e. nonsequences) (Porter and Fuller, 1959).

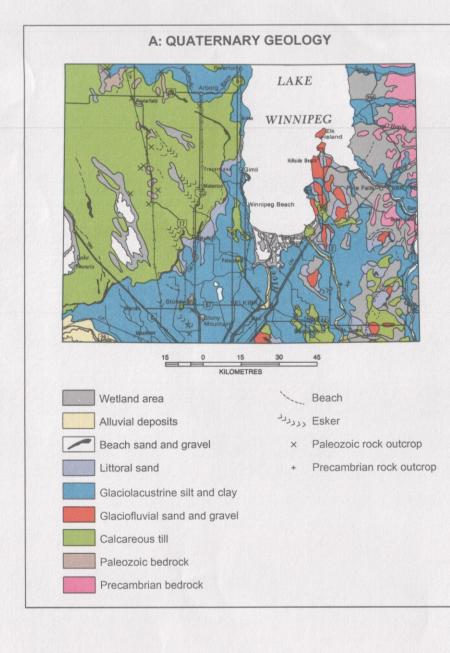
The lower Stonewall beds, above the Williams Member, consist of 7 m of pale yellowishgrey to yellowish-brown, faintly mottled, medium- to thin-bedded, finely crystalline dolomite with sparse, poorly preserved fossils. These beds are separated by a sandy argillaceous marker bed, the "T-zone", from the upper Stonewall Formation (Porter and Fuller, 1959). The upper Stonewall beds consist of 6 m of light brown to grey, laminated to thin bedded, sparsely fossiliferous microcrystalline dolomite. In NTS 62I, the Stonewall Formation can reach a thickness of ±20 m (Insert F1). The Ordovician/Silurian boundary occurs within the upper part of the Stonewall sequence, associated with the "T-zone" (Bezys, 1991; Haidl, SILURIAN

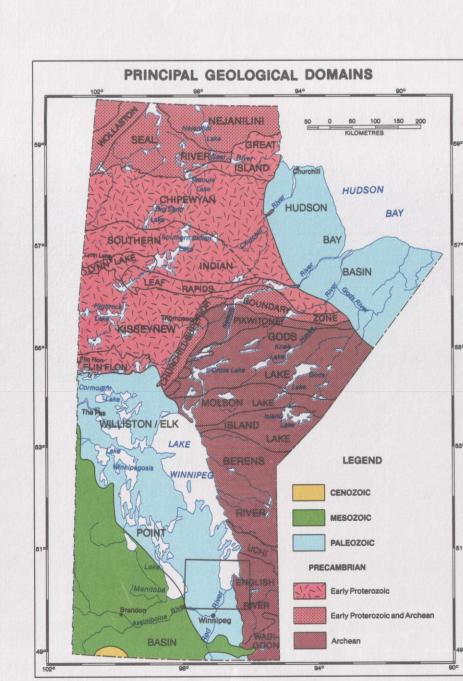
The Interlake Group in southern Manitoba comprises a 35-60 m sequence of dolomite, ranging from variably fossiliferous and stromatolitic to predominantly finely crystalline and dense to sublithographic. Minor lithologic variations, along with the occurrence of several thin sandy, argillaceous marker beds, are used to subdivide the Interlake Group north of latitude 52° (Stearn, 1956). However, lack of sufficient outcrop or core holes in NTS 62I precludes the possibility of consistently subdividing Silurian strata with confidence in this DEVONIAN

Interlake Group

Ashern Formation

Devonian rocks occur only as a thin erosional wedge in the southwestern corner of NTS 621. The basal Ashern Formation consists of 3-10 m of red to grey argillaceous dolomite and dolomitic shales that unconformably overlie eroded Interlake strata. Regional data indicate that the entire Upper Interlake Group is missing in southern Manitoba, suggesting erosion of as much as 50-100 m of Upper Interlake Group strata. The Ashern Formation is overlain, with a possible slight disconformity, by carbonates of the Elm Point Formation or dolomites of the Winnipegosis Formation. These two formations are facies equivalents, and the Elm Point Formation outcrops on the east side of NTS 62I at Oak Point (a mottled limestone).





Every possible effort has been made to ensure that the information presented on this map is accurate. However, the Province of Manitoba and Manitoba Energy and Mines do not assume liability for any errors that may occur. References are included for users wishing to verify critical information.

The present day landscape in the region (NTS 62I) is the result of multiple glacial advances and inundation by glacial Lake Agassiz. Late Wisconsinan glaciation began with an advance of the Rainy Lobe from the northeast, depositing the Senkiw Formation (not exposed in NTS 62I). Subsequently, the Red River Lobe, advancing from the northwest, posited the Roseau, Whitemouth Lake and the Marchland formations in the area south and east of Lake Winnipeg and the Inwood and Komarno tills in the Interlake. The Belair and Milner Ridge interlobate moraines, comprising in excess of 100 m of glacial drift, were deposited between these two ice lobes early in Late Wisconsinan time.

Assiniboine spillway, forming the Assiniboine delta (NTS 62G) that extended eastward far The Belair and Milner Ridge interlobate moraines became islands early in the history of Lake Agassiz. The fluted till plain in the Interlake, is attributed to a late glacial surge into Lake Agassiz. The interlobate moraines, rising 80 m above the till plain, formed a nunatak within this very thin lobe of ice. Final glacial retreat was rapid, as this thin ice mass broke into large icebergs that scoured much of the lake bottom.

About 13 000 years BP, as glacial ice retreated, numerous ice-marginal lakes merged to

form Lake Agassiz. Large quantities of silt and clay were deposited in the deeper part of

the Lake Agassiz basin, and sand and gravel was deposited at the mouth of the

The final phases of Lake Agassiz, the Emerson and the Nipigon, began around 9 900 years RP as the level of Lake Agassiz rose to the Norcross strandline. Large sand and gravel spits and littoral sand bodies formed along the flanks of the interlobate moraines. The final drainage of Lake Agassiz from the area was about 8 500 years BP. Post-glacial alluvium of the Assiniboine and Red rivers, organics such as developed in poorly drained areas, and eolian deposits complete the present day landscape (Insert A).

Aggregate: In NTS 62I, there are numerous sand and gravel pits and crushed stone quarries that supply the City of Winnipeg and surrounding towns and municipalities with construction aggregate. Individual sand and gravel pits are not shown on this map, but they annually contribute significant quantities of production toward Manitoba's mineral

Sources of crushed stone in this region include: 1) Precambrian granitic rocks that are exposed along the eastern margin of the map area (Lac du Bonnet, Great Falls, Powerview, Prov. Road 304, and O'Hanly); and 2) the Paleozoic limestone and dolomite that outcrop north of Winnipeg (Garson-Tyndall, East Selkirk, Oak Hammock, Lilyfield, tony Mountain, Stonewall East, Gunton, Winnipeg Beach, Inwood, Poplarfield). The most important of these sources is the Rockwood area, a few kilometres to the east of

In the Rockwood area, there are seven crushed stone producers operating at nine sites. From 1992 to 1994, they produced over \$5 million worth of stone averaging \$5 per tonne, and 1994 production was slightly under 2 million tonnes. Based upon 1994 production values, the annual net contribution of crushed stone from the Stonewall East area to the Manitoba Gross Domestic Product is about \$16 million (Bamburak and Bezys, 1996). Clay: Lake Agassiz silty clays from Ladywood were used by I-XL Industries Ltd. in their Red River Brick and Tile plant (at Lockport) in the 1970s. The clay was used in the manufacture of bricks, after mixing with other Manitoba clays.

Dimension stone: Precambrian and Paleozoic rocks are also sources for dimension stone in NTS 621. Cold Spring Granite (Canada) Ltd. operates a dimension stone quarry. outhwest of the town of Lac du Bonnet. The rock was first quarried in 1933 for tombstones, but since 1959 has been used for monumental and construction purposes. The pink-red, fine- to medium-grained stone takes a smooth, tight polish and has become popular for interior residential use because its warm colour compliments wood (Schmidtke,

In the Garson area, there is one active dimension stone producer, Gillis Quarries Ltd. Over the past 100 years, Tyndall stone has been used in over 50 major buildings across Canada, such as: the interior of the Parliament Buildings in Ottawa; the Manitoba and Saskatchewan legislative buildings; and the Canadian Museum of Civilization in Hull. In 993, Gillis Quarries produced 37, 174 tonnes of dimension stone averaging over \$60 per tonne (Bamburak and Bezys, 1996). Lime: Pareozoic limestone and dolomite have been used in the past to produce lime and dolime, respectively. Lime kilns were built adjacent to the quarries at Garson, Stonewall,

Stonewall East, Gunton, Inwood and Poplarfield. Their remains can still be seen at most

Lime was produced in the immediate vicinity of Stonewall from the late 1800s to the mid 1960s from several producers. Annual production of Winnipeg Supply and Fuel Company in the late 1940s averaged about 30 000 tonnes of lime. Dolomite reserves were depleted in 1965. Stonewall Quarry Park has a visitors centre, which depicts the historical importance of the local lime industry to Stonewall. Magnesium: In 1991, Manitoba Energy and Mines defined a 67 million tonne geological

reserve of high purity Silurian dolomite, averaging 21.6 MgO with less than 1% impurities, located 3 km northwest of Sandridge. The property was acquired by Gossan Resources Ltd. in 1995 and company reports (Jim Campbell, pers com, September 5, 1997) indicate that a recovery of 94% magnesium metal with 99.2% purity has been achieved with this dolomite from test samples submitted to Hazen Research Inc. of Colorado. Additional work is being carried out to prove up mining reserves. Peat Moss: The Evergreen and North Julius peat bogs, operated by Sun Gro Horticultural Canada Ltd., have been in production since 1973. More than 90% of the plant output has been for use in horticulture. Bannatyne (1980) estimated a total area of 4.6 km² for both

bogs containing over 10 000 000 m³ of sphagnum moss in place, equivalent to about 1 000 000 tonnes of product (25 000 000 bales). Silica sand: From 1906 through to the 1970s, silica sand was quarried from a Pleistocene delta deposit in Beausejour. The sand, largely derived from the underlying Winnipeg Formation, was used by various companies to make glass containers, bricks and Portland

Bedrock fracture orientations Major lineaments including fractures, faults, and belts of concentrated planar structures in the Precambrian basement within NTS 62I have been interpreted from aeromagnetic maps (McRitchie, 1996). The principal fractures trend NE, E, NW and N, in decreasing importance. Fracture orientations (joints, faults, etc.) were also measured at surface and near surface bedrock exposures, usually in quarries. Fractures in the Stony Mountain and Stonewall regions exhibit a high degree of preferred orientation, those at Stonewall (120°, 40° and 180°, in order of dominance) being prominently mineralized with thin, black, nodular (2-4 mm) films of pyrite (McRitchie,

Basement fracture orientations and those in the overlying carbonates may have provided flow pathways for deep brines. These fracture sets likely influenced/determined the pattern of karstic erosion during the pre-Jurassic period and the orientation of channels/gorges subsequently filled with Cretaceous silica sand/kaolin (McRitchie, 1996). The economic potential of these occurrences has yet to be tested, but their presence also poses engineering concerns for building foundations in NTS 62I. According to Gascoyne et al. (1997), reactivation of fracture systems, in the upper 200 m of the Lac du Bonnet Batholith, occurred during the Pleistocene probably due to glacial and interglacial stress changes. More study is required to determine the implications of

these more recent fractures in resource assessment of the Phanerozoic.

B: PRECAMBRIAN GEOLOGY

Granite; LG - Lac du Bonnet Assumed contact Granodiorite to tonalite; largely ____ Assumed fault granodiorite Tonalite to tonalitic gneiss ——— Precambrian outcrop edge

Granodiorite gneiss probably mixed with supracrustal rocks

•••• Domain boundary Ultramafic to mafic rocks Precambrian outcrop Diorite to gabbro Undifferentiated metavolcanic to metasedimentary rocks

Stratigraphic/mineral exploration core hole Oil well

Quartz monzonite, quartz monzodiorite Granodiorite gneiss ± supracrustal rocks and tonalite to tonalite gneiss

The Precambrian rocks that underlie the Selkirk map area (NTS 62I) are part of the Archean Superior Province and outcrop in the eastern part of NTS 621. In this area, the Superior Province rocks are subdivided into the English River Subprovince and the Winnipeg River Subprovince. Description of the Precambrian rocks is based on the exposed portion in NTS 62I, supplemented by extending information westward from NTS 52L (Manitoba and Ontario). The covered portion has been interpreted from aeromagnetic data (Insert C) and data from approximately 90 drill holes. This information has been used to interpret the likely extension of the subprovinces below the Paleozoic cover (Insert B). Rocks of the English River Subprovince outcrop in the northeastern portion of the map area NTS 621. They comprise gneisses derived mainly from metasedimentary rocks, granitoid plutonic rocks and migmatites, and derived gneisses. In Manitoba, the English River gneiss belt has been subdivided from north to south, into: 1) the Manigotagan gneiss

belt; 2) the Pine Falls plutonic complex; 3) Bird River greenstone belt; and 4) the Lac du

Bonnet batholith (LG) belt (McRitchie, 1971; Manitoba Energy and Mines, 1987). The

Winnipeg River Subprovince comprises mainly granitoid plutonic rocks and derived The northern part of the English River Subprovince in map area 62l comprises metasedimentary gneisses and migmatites. These rocks form the western extension of the Manigotagan gneiss belt in NTS 52L (Manitoba Energy and Mines, 1987). Mineral assemblages indicate Abukuma-type middle to upper amphibolite facies condition in the 2663 ± 7 Ma (Turek et al., 1987) for a granitic unit in the Black Lake area (within the Manigotagan gneiss belt) in NTS 52L suggests that this pluton intruded during the peak of Kenoran metamorphism. In northwestern Ontario, the peak metamorphism is bracketed by 2692 Ma and 2660 ± 20 Ma (Breaks, 1991).

The southern portion of the subprovince is dominated by granitoid rocks. A narrow unit of metavolcanic rocks along the northern contact of the Lac du Bonnet batholith (LG) represent the most western (exposed) portion of the Bird River greenstone belt. The large magnetic and gravity anomaly in the Selkirk area (refer to insert) may also be the expression of a subPaleozoic extension of the Bird River belt. Two holes drilled in 1997 intersected ultramafic rock and silicate-iron formation similar to those in the Bird River belt. A zircon age of 2779 ± 35 Ma (Timmins et al., 1985) for a tonalitic batholith that intrudes greenstones of the Bird River greenstone belt (see Manitoba Energy and Mines, 1987) suggests that this is a syn-volcanic intrusion. Greenstones of the Bird River belt have yielded U-Pb zircon ages ranging from 2745 to 2715 Ma (see Manitoba Energy and Mines,

The granitoid rocks in the southern part of the map area NTS 62I are part of the Winnipeg River Subprovince. The contact with the English River Subprovince coincides with the southern limit of the Bird River greenstone belt. In NTS 62I this contact has been stitched by the large ca. 2.67 Ga Lac du Bonnet batholith (LG).

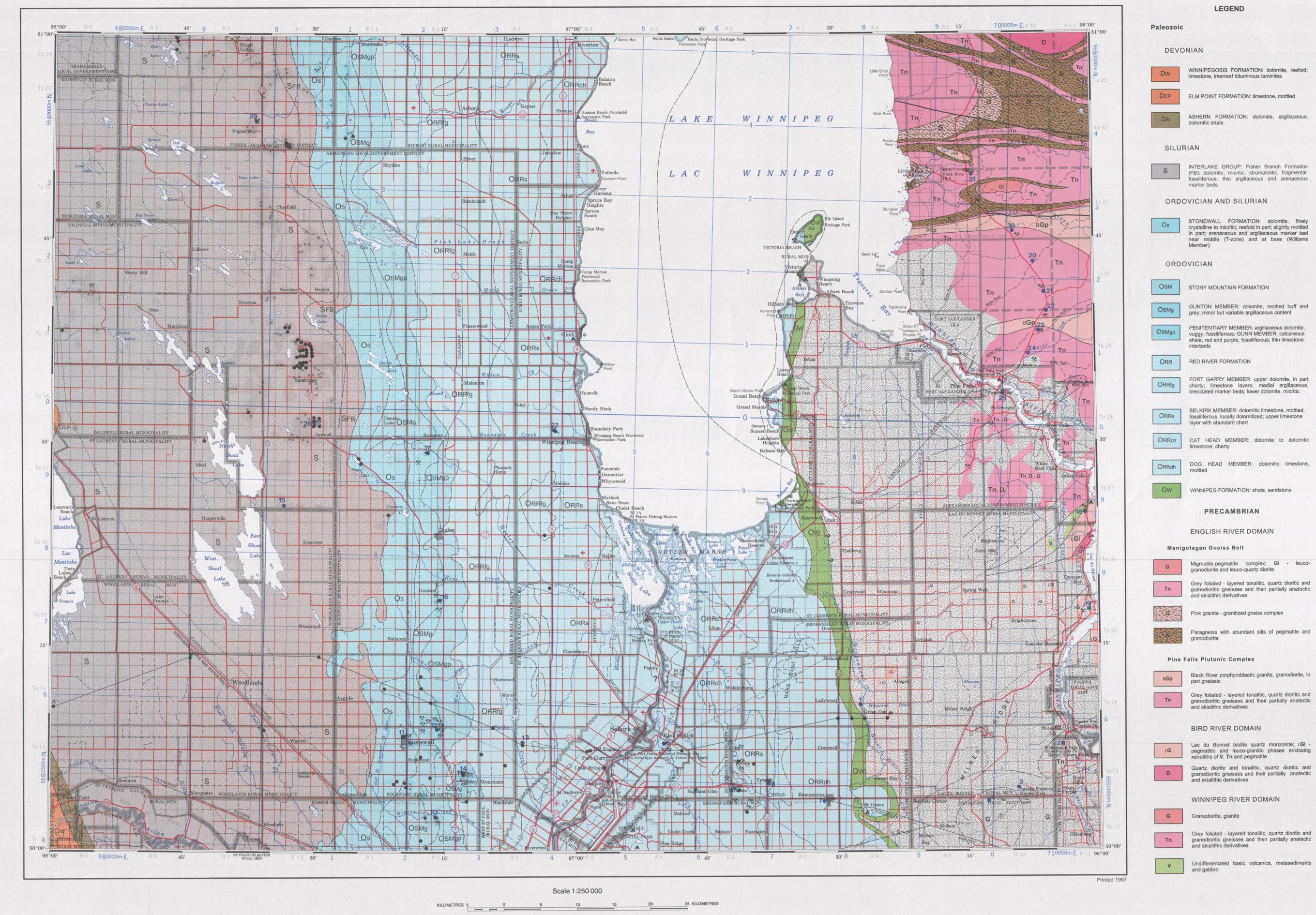
The Winnipeg River Subprovince consists dominantly of granitoid plutonic and gneissic rocks. In the Kenora area of northwestern Ontario, two main groups of plutonic rock have been separated based upon U-Pb geochronology (Beakhouse, 1991): 1) 2.83-3.17 Ga tonalitic gneisses and plutons with inclusions of (older) supracrustal rocks; and 2) 2.66-2.71 Ga granodioritic to granitic plutons and minor intermediate to mafic intrusions. The older granitoid suite has been interpreted to be the result of partial melting of tholeiitic basalt at lower crustal or upper mantle depths, whereas the younger suite is interpreted to have originated by partial melting of metatonalites in tectonically thickened crust during high grade metamorphism (Beakhouse, 1991). The Aeromagnetic Shaded Relief Map (Insert C) clearly illustrates the principal characteristics used for the subdivision of the Precambrian basement. The migmatitic

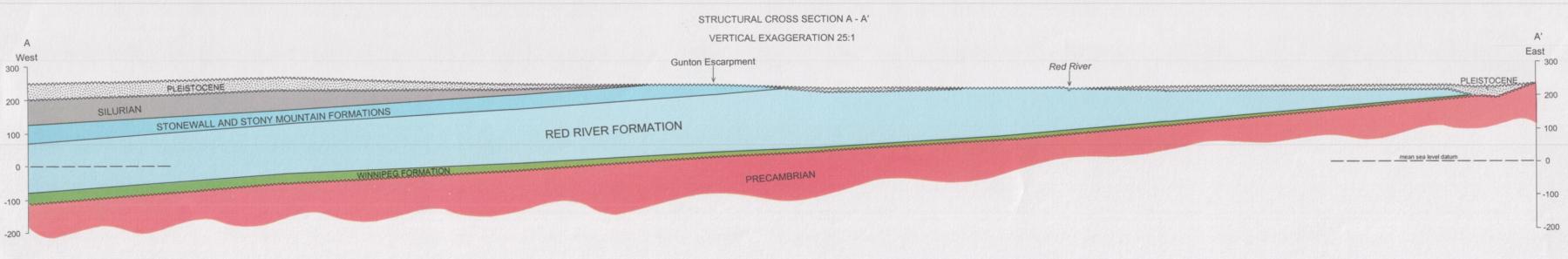
gneiss of the English River gneissic belt produces a characteristic pattern of moderately low to low magnetic signatures (N, Tn). Within the tonalite are several small bodies of monzodiorite (with fairly broad signatures slightly higher than that of gneissic tonalite) (Z) and northeast-southwest trending inclusions of metavolcanic/metasedimentary rocks (with a series of small concentric magnetic high anomalies) (V). The English River Subprovince is cut by a number of major northeast-southwest trending faults (as inferred from the aeromagnetic map). The Winnipeg River batholithic belt is represented in the aeromagnetic map as a large northeast-southwest trending body of moderate to high, fairly broad magnetic signatures that is attributed to the Lac du Bonnet batholith. An aeromagnetic anomaly occurs along the suture between the English River Subprovince and the Winnipeg River Subprovince, in the Selkirk area, beneath Paleozoic cover. The anomaly is a large (24x11 kms) feature that has a signature typical of an ultramafic/gabbroic intrusive complex. A gravity anomaly coincident with the magnetic pattern indicates a large coherent feature and/or much more dense materials (such as base metal sulphides or metallic oxides) as the source (ProAm Profile, 1996).

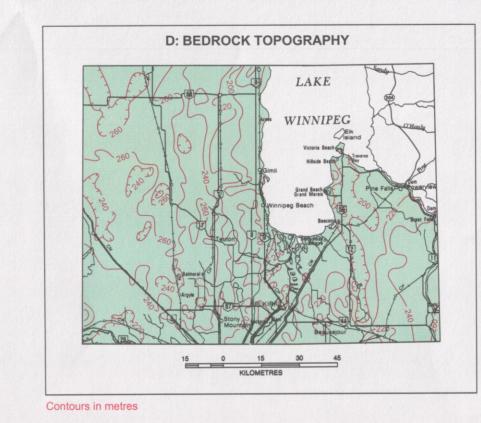
Considerable detailed structural work has been conducted in the Lac du Bonnet area as part of studies related to the disposal of nuclear waste by the Atomic Energy of Canada .imited (AECL) Underground Research Laboratory (URL) (Brown et al., 1995). The studies oncentrated on the Lac du Bonnet batholith (LG) and its country rocks. The Lac du Bonnet batholith is regarded as a mesozonal syn- to late orogenic pluton whose present surface crystallized at a depth of about 10-12 km. A U-Pb zircon age of 2665 ± 20 Ma was determined for the batholith in the Lac du Bonnet area (in NTS 62l; Krogh et al., 1976). The batholith's initial cooling and uplift rates were slow and resulted in erosion levels similar to the present at 2 Ga ago. Two prominent subvertical fault zones over 50 km in length have been documented; one striking north-northwest and the other east-northeast. They transect the batholith as well as its host rocks and have a long history of ductile and brittle deformation since the Late

Tectonic Synthesis A recent tectonic model suggests that the English River Subprovince is a fore-arc basin to an island arc system represented by the Uchi Subprovince to the north of the English River Subprovince (Langford and Morin, 1976). Evidence from Ontario suggests that metasedimentary rocks of the English River Subprovince unconformably overlie 2714 Ma metavolcanic rocks, but possibly are as old as 2760 Ma and as young as 2698 Ma

(Breaks, 1991). The Winnipeg River Subprovince contains remnants of some of the oldest parts of the Superior Province. These rocks comprise supracrustal rocks and younger 2.83-3.17 Ga tonalitic rocks interpreted to have been derived by partial melting of tholeiitic basalt at lower crustal or upper mantle depths. Granitoid plutons intruded during high grade metamorphism at between 2.66 and 2.71 Ga probably as a result of crustal thickening (Beakhouse, 1991).







E: OVERBURDEN THICKNESS

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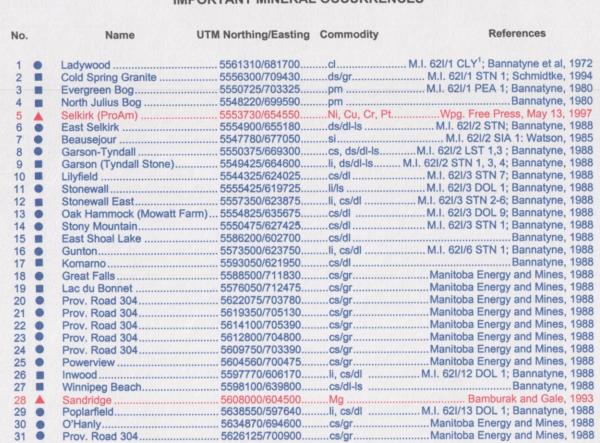
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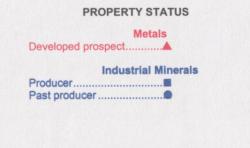
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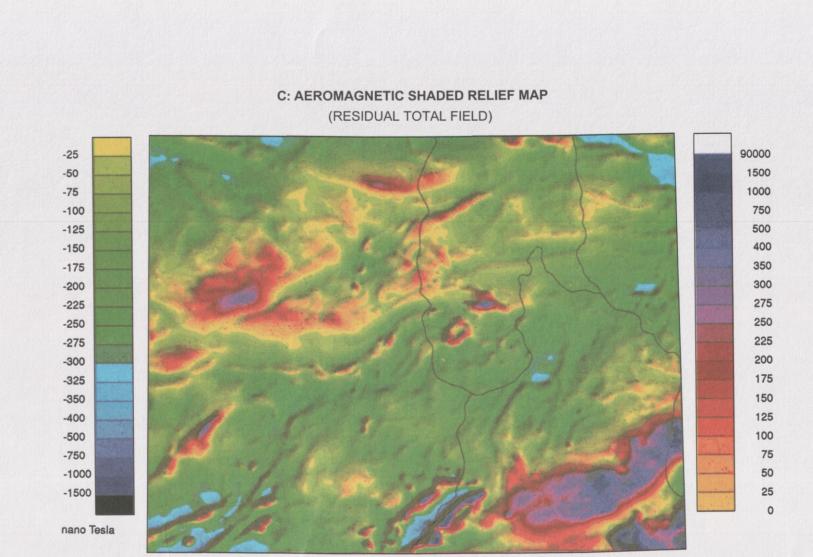
IMPORTANT MINERAL OCCURRENCES





COMMODITIES Industrial Minerals .. crushed stone ... Copper ... dolomitedimension stone Mg MagnesiumNickelgranite ...Platinum limestone pm..... peat moss (sphagnum) silica sand

Mineral Inventory card, Manitoba Energy and Mines



F3: RED RIVER FORMATION

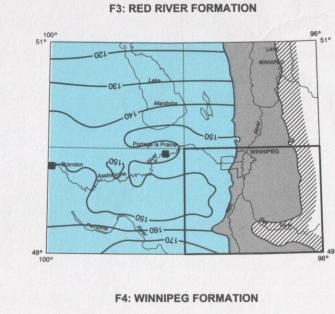
F: ISOPACH MAPS

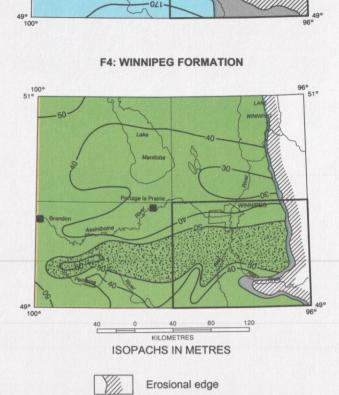
F1: STONEWALL FORMATION

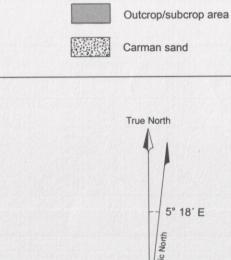
F2: STONY MOUNTAIN FORMATION

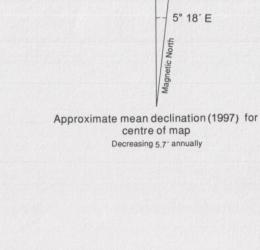
LEGEND

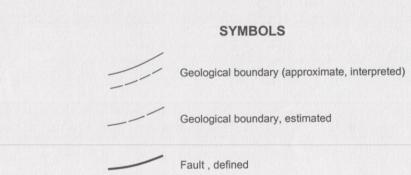
PRECAMBRIAN











Area of sparse or no Precambrian outcrop Area of sparse or no Paleozoic outcrop Near surface Paleozoic outcrop (overburden less han 3 m)

Paleozoic outcrop Structural cross-section

 Stratigraphic/Mineral exploration core hole Oil well: petrographic (chips; core); reports

Synoptic geology by R. Bezys, J. Bamburak, W.D. McRitchie, W. Weber and C.R. McGregor Compilation by D. Lindal Cartography by T. Franceschet

Suggested reference to this publication: Manitoba Energy and Mines, 1997; Bedrock Geology Compilation Map Series, Selkirk, NTS 62I; 1 250 000.

BEDROCK GEOLOGY COMPILATION MAP SERIES **SELKIRK** NTS 62 I

