

LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT
RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

Question IAAC-28b

Table of Contents

ABBREVIATIONS AND ACRONYMS II

QUESTION IAAC-28B..... 1

LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

Question IAAC-28b

Abbreviations and Acronyms

EIS	environmental impact statement
IAAC	Impact Assessment Agency of Canada
LMOC	Lake Manitoba outlet channel
m asl	metres above sea level
WRB	Water Resources Branch

LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

Question IAAC-28b

QUESTION IAAC-28B

EIS Guideline Reference: 7.1.4 Groundwater and Surface Water

EIS Reference: 6.4.2. Existing Conditions for Groundwater

Context and Rationale

Incorrect labelling of the wells in EIS.

Information Requests

- a) Clarify the discrepancy between the text in the EIS describing Manitoba Water Resources Branch Wells WRB122050 and WRB116766 and the information in Volume 2 Appendix 6B Figure 6.4B-3.

Response IAAC-28b

- a) **Errata** – The WRB well identification numbers were inadvertently mis-referenced in the EIS text.

Page 6.150 of the EIS should read:

“The aquifer pressure head varies seasonally as shown at two long term monitoring wells from the Province of Manitoba Water Resources Branch (WRB 122050 and WRB-116766). The upland well (WRB-~~122050~~-**116766**) piezometric head varies between 272 and 277 m asl (see Volume 2 Appendix 6B, Figure 6.4B-3), rising after spring snow melt and dropping over the winter, indicating that recharge is occurring in the uplands at elevation above 277 m asl.

LMOC

The carbonate aquifer in the area of the LMOC is overlain by 5 m to 18 m of till. The LMOC is located in the Birch Creek valley with the ground surface being at 246 m asl to 250 m asl. The piezometric head in this area, ranging from 249 m asl to 255 m asl, is higher than ground surface, or up to 5 m above ground level; because the bedrock aquifer is confined, it is entirely saturated. Seasonal variation in the area, as measured by the long-term monitoring well (WRB ~~116766~~ **122050**) shows that the piezometric head varies between 252 m asl and 256 m asl (Volume 2 Appendix 6B, Figure 6.4B-4). Typical seasonal piezometric head varies 2.5 m to 3 m per year in the aquifer in the area of the LMOC. The variation is consistent with the upland well (WRB ~~122050~~-**116766**) indicating the source of water for both is from the upland area.”