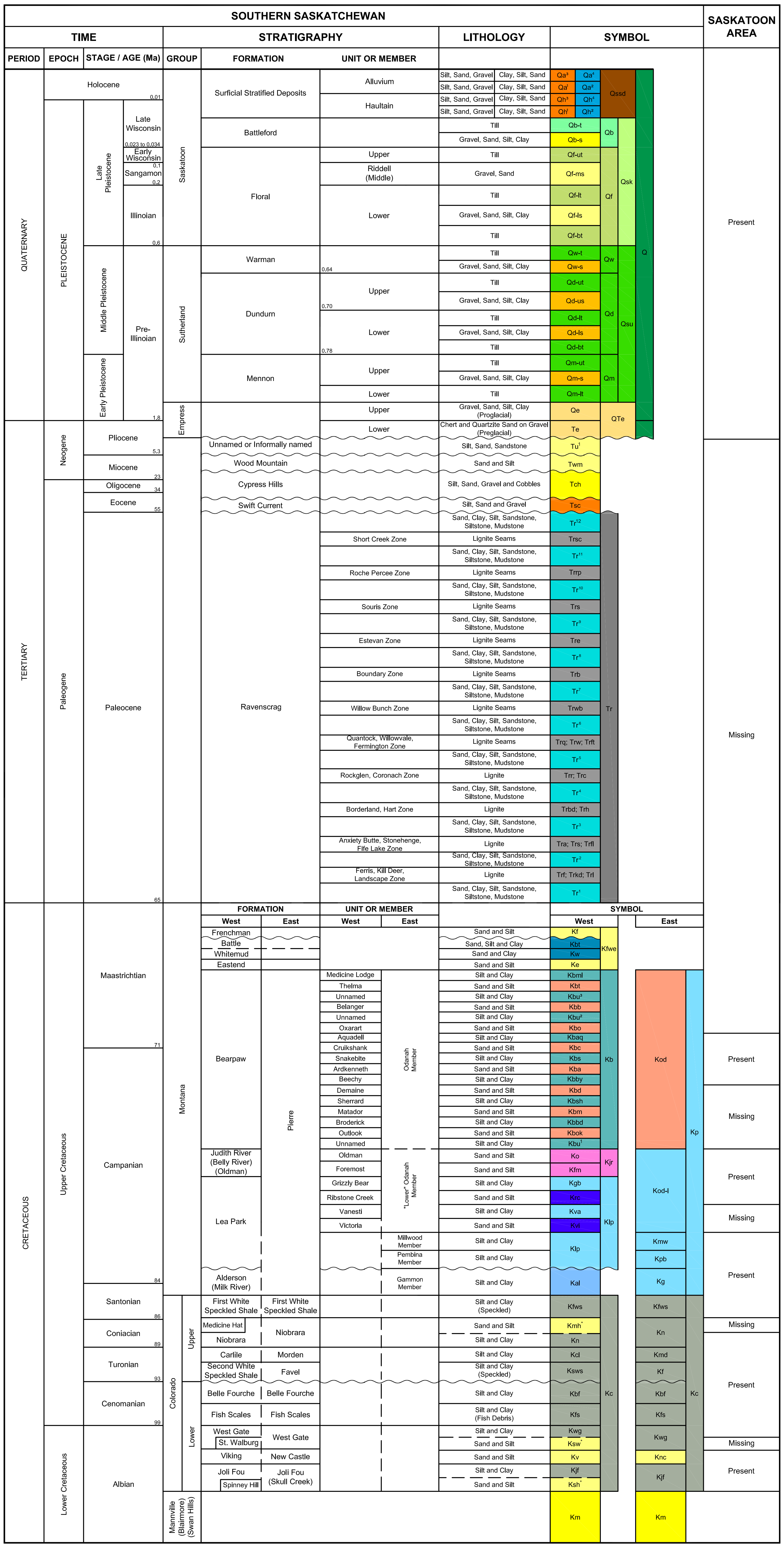
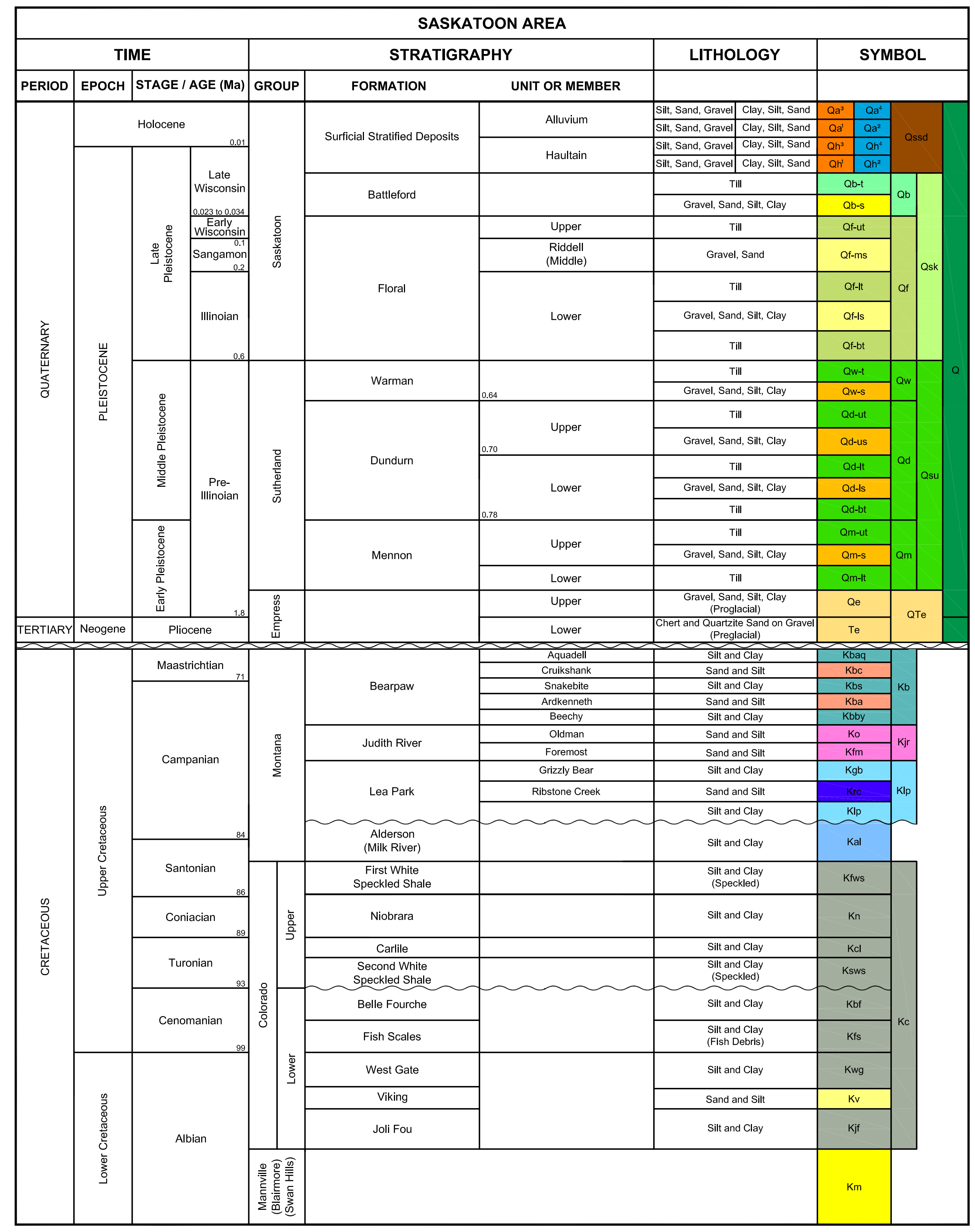
Appendix A
Stratigraphic Column



Major unconformity

* Spinney Hill Formation - Not interpreted in the PTRC database in the Saskatoon area



Major unconformity

REFERENCES

Caldwell, W.G.E. 1968. The Late Cretaceous Bearpaw Formation in the South Saskatchewan River Valley. Saskatchewan Research Council, Geological Division, Report No. 8.

Caldwell, W.G.E., ed. 1975. The Cretaceous System in the Western Interior of North America. Geological Association of Canada, Special Paper 13.

Caldwell, W.G.E. and McNeil, D.H. 1981. Cretaceous Rocks and Their Foraminifera in the Manitoba Escarpment. Geological Association of Canada, Special Paper 21.

Christiansen, E.A. 1967. Collapse structures near Saskatoon, Saskatchewan, Canada. Canadian Journal of Earth Sciences, v.4: pp.757–767.

Christiansen, E.A. 1968a. Pleistocene stratigraphy of the Saskatoon area, Saskatchewan, Canada. Canadian Journal of Earth Sciences, v.5: pp.1167–1173.

Christiansen, E.A. 1968b. A thin till in west–central Saskatchewan Canada: Canadian Journal of Earth Sciences, v.5: pp. 329–336.

Christiansen, E.A. 1977. Engineering properties of glacial deposits in southern Saskatchewan. Thirteenth Canadian Geotechnical Conference, Saskatoon, p. 30.

Christiansen, E.A. 1979. The Wisconsinan deglaciation of southern Saskatchewan and adjacent areas. Canadian Journal of Earth Sciences, v.16: pp. 913–938.

Christiansen, E.A. 1990. Geology, in Christensen, E.A., ed. Physical environment of Saskatoon, Canada. Saskatchewan Research Council in Cooperation the National Research Council of Canada, NRC Publication 11378, pp. 3–17.

Christiansen, E.A. 1992. Pleistocene stratigraphy of the Saskatoon area, Saskatchewan, Canada: an update. Canadian Journal of Earth Sciences, v.29: pp. 1767–1778.

Christiansen, E.A. and Sauer, E.K. 1994. Geotechnique of Saskatoon and surrounding area, Saskatchewan, Canada. Geological Association of Canada, Special Paper 42, pp. 117–145.

Christiansen, E.A. and Sauer, E.K. 1996. Geological Site Characterization Guidelines: a framework for Geohydrological and geotechnical applications in Saskatchewan. Saskatchewan Environment and Resource Management.

Christiansen, E.A. and Sauer, E.K. 2001. Stratigraphy and structure of a Late Wisconsinan salt collapse in the Saskatoon Low, south of Saskatoon, Saskatchewan, Canada: an update. Canadian journal of Earth Sciences, v.38: pp. 1601–1613.

Skwarawoolf, T. 1981. Biostratigraphy and paleoecology of Pleistocene deposits (Riddell Member, Floral Formation, late Rancholabrean). Canadian Journal of Earth Sciences, v.18: pp. 311–322.

McLean, J.R. 1971. Stratigraphy of the Upper Cretaceous Judith River Formation in the Canadian Great Plains. Saskatchewan Research Council, Geology Division, Report No. 11.

Whitaker, S.H., Irvine, J.A., Broughton, P.L., Cameron, A.R., and Sweet, A.R. 1978. Coal resources of southern Saskatchewan: a model for evaluation methodology: Geological Survey of Canada Economic Geology Report 30, Department of Mineral Resources 209, Saskatchewan Research Council Report 20.

Whitaker, S.H. and Christiansen, E.A. 1972. The Empress Group in Southern Saskatchewan. Canadian Journal of Earth Sciences, v.9: pp. 353–360.

Stratigraphic Correlation Chart, Saskatchewan Ministry of Energy and Resources, revised 16 Nov. 2004. <http://www.ir.gov.sk.ca/Default.aspx?DN=3966,3625,3384,2936,Documents>

LEGEND

Qf-ut : Q – Geological Period
f – Formation &/or Member
u – Stratigraphic descriptor (u–upper; m–middle; l–lower; b–basal)
t – Sediment descriptor (t–till; s–intertill stratified deposit)

NOTES:
1. Quaternary aged intertill deposits have been grouped in the formation of the overlaying till unit although the units actually straddle the formal divisions. (i.e. the formation break is within the intertill deposit)
2. Correlation of western to eastern stratigraphic units is not exact.
3. Tertiary and Cretaceous lithologies are written as silt and clay or silt and sand, actual sediments are combination of cemented, partially cemented, and highly overconsolidated uncemented sediments.

No.	REVISION	SCALE:		DATE
		GEOLOGY BY:	A. KARVONEN, M.Sc., P.Eng., P.Geo.	09–FEB–10
		DRAWN BY:	C. SCHMIDT / E. OVCINA	23–DEC–10
		APPROVED BY:	G. POTTER, M.Sc., P.Eng.	20–DEC–10

CLIENT: Saskatchewan Watershed Authority

PRODUCED BY: MDH ENGINEERED SOLUTIONS

TITLE: POTENTIAL STRATIGRAPHIC UNITS TO THE TOP OF THE MANNVILLE GROUP IN SASKATCHEWAN

PROJECT No. M1890–1030010 | APPENDIX A

DRAWING No. M1890–68–1 | REV.