

ENVIRONMENT BRANCH
GROUNDWATER AND GEOLOGY
PUBLICATIONS AND MAPS

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- Yorkton Aquifer Management Plan: Observation Well Construction and Water Quality Survey - South Well Field - H. Maathuis (2000) 10419-1E01
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- Geology and Hydrostratigraphy of the Wynyard Area (72P), Saskatchewan - M.A. Simpson (2000) 10416-1C00.
- Development of a Float System for Long-Term Water Level Monitoring in 5.08 cm PVC Casings - Jaworski, E., Zlipko, D. (2000) 10427-1E99
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- Geology and Groundwater Resources in the upper Assiniboine River Basin - H. Maathuis (1999) 10421-1E99
- Yorkton Aquifer Management Plan: Aquifer Vulnerability Mapping and EM-47 Exploration - H. Maathuis (1999) 10419-1E98
- Geology and Hydrostratigraphy of the Rosetown area (72O) Saskatchewan- M.A. Simpson (1998) 10416-2C98 (Limited Report)
- Geology and groundwater resources of the Swift Current area (72J) Saskatchewan - M.J. Millard (1998) 10416-1C98 (Limited Report)
- Geology and groundwater resources of the Pasquia Hills area (63E,F) Saskatchewan. - M.J. Millard (1997) R-1510-2-E-97
- Geology and Groundwater Resources of the Waterhen River Area (73K), Saskatchewan - M.A. Simpson, M.J. Millard (1997) R-1510-6-E-97.
- Geology and groundwater resources of the Hudson Bay area (63C,D) Saskatchewan. - M.J. Millard (1996) R-1510-3-E-96
- Quaternary stratigraphic framework for the Virden area (62F). - B.Schreiner, M.J.Millard (1995) R-1210-8-E-95
- Aquifer vulnerability in the Rosetown Area (Map Sheet 72O), Saskatchewan. Report prepared for the Sustainable Water Program Committee, under the Canada-Sask. Agriculture Green Plan Agreement. - D.R. Van Stempvoort (1995) R-1220-5-E-95

- 1994 Monitoring of groundwater in the Forestry Farm Aquifer beneath the Silverspring Subdivision, City of Saskatoon. Report prepared for City of Saskatoon, Engineering Dept. - D.R. Van Stempvoort and D.A. Zlipko (1995) R-1220-1-E-95
- Kimberlite indicator minerals in the Meadow Lake area, Saskatchewan. - M.J. Millard (1994) R-1210-1-E-94
- Migration of methane into groundwater from leaking production wells near Lloydminster. Report prepared for the Canadian Association of Petroleum Producers, Calgary, Alberta.- D.R. Van Stempvoort and E.J. Jaworski (1994) R-1220-13-E-94
- Gas migration research -working toward risk-based management. Proceedings on the 4th Annual Symposium on Groundwater & Soil Remediation, Sept. 22-23, 1994 - R. Schmitz, D.R. Van Stempvoort, and B. Erno (1994)
- Field study of a long and very narrow contaminant plume. -G.van der Kamp, L.D. Luba, J.A. Cherry, and H. Maathuis (1994) in Ground Water Vol.32, No.6, p.1008-1016
- Geology and groundwater resources of the Shellbrook area (73G) Saskatchewan. - M.J. Millard (1994) R-1210-9-E-94
- Guidelines for groundwater monitoring at potash mine sites in Saskatchewan. -H. Maathuis (1994) R-1220-3-E-94 Prepared for Saskatchewan Potash Producers Association
- Study of the relationship between the Condie and Regina Aquifers. - D. Van Stempvoort, J. Campbell and H. Maathuis (1994) R-1220-4-E-94 Prepared for the Regina Aquifer Technical Committee
- 1993 monitoring of groundwater in the Forestry Farm Aquifer beneath the Silverspring Subdivision, City of Saskatoon. - D. Van Stempvoort, D. Zlipko (1993) R-1220-8-E-93 Prepared for the Engineering Dept. City of Saskatoon.
- Groundwater monitoring techniques related to waste disposal facilities. - H. Maathuis (1993)
- Characterization of Cretaceous "shales" in southern Saskatchewan: a preliminary review. - H. Maathuis, E.K. Sauer, and M.D. Haug (1993)
- Geology and groundwater resources of the Willowbunch area (72H) Saskatchewan. - M.J. Millard (1993) R-1210-1-E-93
- Geology and groundwater resources of the Weyburn/Virden area (62E/F) Saskatchewan. - M.A. Simpson (1993) R-1210-3-E-93

- Field study of a long narrow sewage contaminant plume. - Larry D. Luba, Garth van der Kamp, John A. Cherry and Harm Maathuis (1993) To be presented at joint CSCE-ASCE National Conference on environmental engineering.
- Aquifer vulnerability index: A GIS-compatible method for groundwater vulnerability mapping. -D. Van Stempvoort, L.Ewert, and L. Wassenaar (1993 Vol. 18 No.1 Canadian Water Resources Journal)
- Geology and groundwater resources of the Yorkton Area (62M,N), Saskatchewan. - M.J. Millard (1992) R-1210-1-E-92
- Slug tests with storage due to entrapped air. - C.K. Keller and G. van der Kamp (1990), Ground Water (1992) Vol. 30, No. 1, pp 2-7.
- Quaternary geology of the Amisk Lake area (63L/9 and part of 63K/12). - J.E. Campbell (1993) R-1210-20-E-92
- Kimberlite indicator minerals in southwestern Saskatchewan. - M.A. Simpson (1991) R-1210-8-E-91
- Evaluation of the groundwater resources in the Yorkton area. Interim Report. - H. Maathuis (1991) R-1220-7-B-91
- City of Yorkton production wells - construction, water quality, water level and monthly withdrawal data. - H. Maathuis and D. Zlipko (1991) R-1220-7-B-91
- Hydrographs for piezometers and wells in the Yorkton study area. - H. Maathuis and D. Zlipko (1991) R-1220-7-B-91
- Evaluation of the groundwater resources in the Yorkton area - Cross sections and maps. - H. Maathuis (1991) R-1220-7-B-91
- Groundwater quality in Saskatchewan: Hydrogeology, quality concerns, management. - C. Pupp, H. Maathuis, G. Grove (1991) Environment Canada
- Groundwater levels and climatic change. -H. Maathuis and G. van der Kamp (1991) Proceedings of NHRI Symposium No.8, April 1991.
- Hydrogeochemistry of a clayey till, I. Spatial variability. - C.K. Keller, G. van der Kamp and J.A. Cherry -Water Resources Research, Vol. 27, No. 10, pp. 2543-2554, October 1991
- Hydrogeochemistry of a clayey till, II. Sources of CO₂. - C.K. Keller and G. van der Kamp -Water Resources Research, Vol. 27, No.10, pp. 2555-2564, October 1991

- Annual fluctuations of groundwater levels as a result of loading by surface moisture. - G van der Kamp and H. Maathuis (1990) R-844-8-A-89, Journal of Hydrology, 127 (1991), Nos.1-4, pp 137-152.
- Lithostratigraphic correlation of Saskatchewan tills. A mirror image of Cretaceous bedrock. - B.T. Schreiner (1990) R-1210-3-E-90
- Availability and markets of structural industrial minerals in Saskatchewan. - M.A. Simpson (1990) R-1210-1-B-90
- Geological and remote sensing investigations of the Prince Albert - Shellbrook area, Saskatchewan. - M.A. Simpson, M.J. Millard and D. Bedard (1990) R-1200-2-E-90
- Geology and groundwater resources of the Prelate Area (72K), Saskatchewan. - M.J. Millard (1990) R-1210-12-E-90
- Geology and groundwater resources of the Cypress Lake Area (72F), Saskatchewan. - M.J. Millard (1990) R-1210-11-E-90
- Geology and groundwater resources of the Wood Mountain Area (72G), Saskatchewan. - M.J. Millard (1990) R-1210-10-E-90
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- Geology and groundwater resources of the Prince Albert Area (73H), Saskatchewan. - M.J. Millard (1990) R-1210-8-E-90
- Geology and groundwater resources of the St. Walburg Area (73F), Saskatchewan. - M.J. Millard (1990) R-1210-7-E-90
- Geology and groundwater resources of the Melfort Area (73A), Saskatchewan. - M.J. Millard (1990) R-1210-6-E-90
- Geology and groundwater resources of the Battleford Area (73C), Saskatchewan. - M.J. Millard (1990) R-1210-5-E-90
- Near surface mineral potential on the plains of Western Canada, with special reference to Saskatchewan. - M.J. Millard, M.A. Simpson, B.T. Schreiner and W.A.D. Edwards (1990) R-1210-10-D-89
- Quaternary geology and its implications to gold exploration in the La Ronge and Flin Flon domains, Saskatchewan. - J.E. Campbell and B.T. Schreiner (1989)

- Hydrology and hydrochemistry of an aquifer-aquitard system within the glacial drift, Saskatchewan, Canada. - G. Fortin, G. van der Kamp, and J. Cherry (1989) R-844-4-A-89. Journal of Hydrology, Volume 126, No.3-4, pp. 265-292.
- Monitoring and control of subsurface migration of saline fluids in the vicinity of a potash waste disposal basin near Vanscoy, Saskatchewan. - H. Maathuis (1989)
- A concept for hazardous waste disposal in Southern Saskatchewan by burial in thick clayey glacial till. - J.A. Cherry, G. van der Kamp, C.K. Keller (1989) R-844-6-D-89
- The water and salt balance of prairie wetlands in relation to groundwater flow. -G. van der Kamp (1989)
- Groundwater Quality in the Prairies: Can it change with time? - G. van der Kamp, in Proceedings of the 10th Western Nutrition Conference, Saskatoon, September 1989, p. 105-111. SRC Publication No. R-1220-4-D-89
- Preliminary report - Quaternary geology and till geochemistry - East Amisk Lake Area. - J.E. Campbell (1988) R-842-59-E-88
- The sedimentology and stratigraphy of a gravelly meander lobe in the Saskatchewan River, near Nipawin, Saskatchewan. - J.E. Campbell (1988) R-842-57-E-88
- Region 13, Western Glaciated Plains. - D.H. Lennox, H. Maathuis and D. Pederson (1988)
- Taung Phamong rural development project, Lesotho. - H. Maathuis and R. Schalm (1988) R-844-16-E-88
- Calculation of constant-rate drawdowns from stepped-rate pumping tests. - G. van der Kamp (1988) R-844-10-A-88
- Comprehensive evaluation of groundwater resources in the Regina area - H. Maathuis and G. van der Kamp (1988) R-844-1-B-88
- Anatomy of a gravelly meander lobe in the Saskatchewan River, near Nipawin, Canada. - J.E. Campbell and H.H. Hendry (1987) R-842-8-A-87
- Quaternary geology and till geochemistry of the Sulphide-Hebden Lakes area applied to prospecting for gold. - J.E. Campbell (1987) R-842-4-E-87
- Drift prospecting for gold in Saskatchewan - Use of heavy mineral concentrates in tills. - V.J. Sopuck, B.T. Schreiner and S. Averill (1986) R-842-1-D-87
- Drift prospecting for gold in the southeastern Shield of Saskatchewan, Canada. - V.J. Sopuck, B.T. Schreiner and S. Averill (1986) R-842-2-D-87

- Hydrogeology of two Saskatchewan tills: II. Occurrence of sulfate and implications for soil salinity. - C.K. Keller, G. van der Kamp (1987)
- Hydrogeology of two Saskatchewan tills: I. Fractures, bulk permeability and spatial variability of downward flow. - C.K. Keller, G. van der Kamp and J.A. Cherry (1987)
- A multi-scale study of the permeability of a thick clayey till. - C.K. Keller, G. van der Kamp and J.A. Cherry (1987)
- Use of dimensional analysis in the study of thermal effects of various hydrogeological regimes. - G. van der Kamp and S. Bachu (1987)
- Permeability of thick clayey deposit near Warman, Saskatchewan. - C.K. Keller, G. van der Kamp and J.A. Cherry (1987) R-844-5-D-87
- Quaternary geology of the Waddy Lake area applied to prospecting for gold. - J.E. Campbell (1986) R-842-1-E-86
- Quaternary geology as a guide to mineral exploration in the southeastern Shield Saskatchewan. - B.T. Schreiner (1986) R-842-6-B-86
- Bulk permeability of a thick till overlying a buried-valley aquifer near Weyburn, Saskatchewan. - G. van der Kamp, H. Maathuis and W.A. Meneley (1986) R-844-2-D-86
- The groundwater resources of Saskatchewan's deep buried-valley aquifers. - G. van der Kamp (1986) R-844-4-D-86
- Groundwater level observation well network in Saskatchewan, Canada. - H. Maathuis and G. van der Kamp (1986) R-844-5-D-86
- Fracture permeability and groundwater flow in a clayey till near Saskatoon, Saskatchewan. - C.K. Keller, G. van der Kamp and J.A. Cherry (1986) R-844-7-A-85
- Theory of groundwater flow in the vicinity of brine ponds and salt tailings piles. - H. Maathuis and G. van der Kamp (revised 1986) R-774-2-B-84
- SRC Observation Wells in Saskatchewan, Median Monthly Water Levels (updated yearly)

(BEDROCK) GEOLOGY AND GROUNDWATER MAPS

Maps available from SRC

(1:250,000)

Weyburn Area	62E,F
Melville Area	62K,L (out of print)
Yorkton Area	62M,N
Hudson Bay Area	63C,D
Cypress Area	72F
Wood Mountain Area	72G
Willow Bunch Area	72H (out of print)
Regina Area	72I
Swift Current Area	72J
Prelate Area	72K
Kindersley Area	72N
Rosetown Area	72O
Wynyard Area	72P
Melfort Area	73A (out of print)
Saskatoon Area	73B (out of print)
Battleford Area	73C (out of print)
St. Walburg Area	73F
Shellbrook Area	73G
Prince Albert Area	73H
Waterhen River Area	73K

**** Please note all maps are available for a charge of \$20.00.

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Maps available from SRC

(1:250,000)

Weyburn Area	62E,F
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Hudson Bay Area	63C,D
Pasquia Hills Area	63E,F
Cypress Area	72F
Wood Mountain Area	72G
Willow Bunch Area	72H
Regina Area	72I
Swift Current Area	72J
Prelate Area	72K
Kindersley Area	72N
Rosetown Area	72O
Wynyard Area	72P
Melfort Area	73A
Saskatoon Area	73B
Battleford Area	73C
St. Walburg Area	73F (out of print)
Shellbrook Area	73G
Prince Albert Area	73H
Wapaweeaka	73I
Green Lake	73J
Waterhen River	73K
Buffalo Narrows	73N
Ile a La Crosse	73O
La Loche	74C

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AGGREGATE RESOURCES POTENTIAL MAPS

Maps available from SRC

(1:250,000)

Weyburn Area	62E,F
Melville Area	62K,L
Yorkton Area	62M,N
Hudson Bay Area	63C,D
Pasquia Hills Area	63E,F
Cypress Area	72F
Wood Mountain Area	72G
Willow Bunch Area	72H
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Swift Current Area	72J
Prelate Area	72K
Kindersley Area	72N
Rosetown Area	72O
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Saskatoon Area	73B
Battleford Area	73C
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Prince Albert Area	73H

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Groundwater and Geology Resources of Saskatchewan

Geology and groundwater maps prepared by the Saskatchewan Research Council's Environment Division provide expanded and up-to-date information on groundwater sources. Water bearing zones are outlined on a series of maps and cross sections for different levels in the subsurface. This information will benefit water users searching for new sources of supply as well as planners and developers concerned about groundwater. Site location data includes: surface elevation, depth to aquifer, thickness of aquifer, and cross sections showing geology and aquifers in the subsurface

Older format (blueprints):

* Prince Albert	73H	* Wood Mountain	72G
* St. Walburg	73F	* Cypress	72F
* North Battleford	73C	* Kindersley	72N
* Melfort	73A	* Prelate	72K
* Yorkton	62M,N	* Willowbunch	72H
* Weyburn/Virden	62E,F	* Shellbrook (1:250,000)	73G

- * \$200.00 / report that accompanies maps (whole NTS area at 1:200,000 scale (or 1:250000)) and cross sections (28-40) for each NTS area

Newer format (colour print):

* Hudson Bay	63C,D	*Waterhen	73K
* Pasqua Hills	63E,F	*Rosetown	72O
* Swift Current	72J	*Melville	62L,K
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