

**Geological Survey of Canada of the Earth Sciences Sector of the Department of Natural Resources Canada - U.S. Geological Survey Project Annex No. 6**

**Title:** Hydraulic properties of the sedimentary rock aquifer system in the Carboniferous Basin in Maritimes, Canada

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**Responsible Senior Managers:** USGS - P. Patrick Leahy, Associate Director for Geology (703) 648-6600; GSC - Dr. Jan Boon, Director General, Sedimentary and Marine Geoscience Branch (613) 995-2340.

**Scope:** This Project Annex (PA) is intended to expand and enhance the understanding of the regional hydrogeology in the fractured sedimentary rock aquifers in the Carboniferous Basin and to characterize the hydraulic properties using geophysical logging along selected bore holes, in different hydrogeologic formations (Boss Point, Richibucto and Hillsborough formations), in selected sectors of the aquifer system. This cooperation will be conducted between USGS and GSC ("Party" or "Parties").

**Work Plan:**

- 1) USGS will provide the expertise of Dr. Roger H. Morin and one technician, the service of geophysical logging for a period of 1 week between mid-July and mid-August of 2001, and advice in log analysis and interpretation techniques.
- 2) GSC will provide complementary information on the geology and the stratigraphy of the Carboniferous Basin in order to identify and characterize the aquifer formations.
- 3) GSC will be responsible for ensuring that any permits and/or authorizations required for the entry of the geophysical logging equipment to Canada are processed.
- 4) USGS will provide GSC with a report on the characterization of hydraulic/hydrogeologic properties using geophysical logging. The report will be provided in both hard and digital format.

**Funding Arrangements:** GSC will provide funding for accommodations and for travel expenses incurred by Dr. Morin and one technician up to a maximum of US\$3,000.

USGS shall submit to GSC, to the attention of Dr. Yves Michaud, original invoices with the Canadian federal government travel claims for the reimbursement of expenditures.

USGS's final invoice shall be marked "Final" and submitted to GSC not later than October 31, 2001.

**Intellectual Property:** As per the "Agreement on the Allocation of Intellectual Property Rights, Interests and Royalties for Intellectual Property Created or Furnished under Certain Scientific and Technological Cooperative Research Activities" between the Government of Canada and the Government of the United States of February 4, 1997, Parties to this PA shall retain existing intellectual property that they bring to the Project. Intellectual property arising as a result of this project shall be owned in equal parts by the GSC and USGS.

**Duration and Termination:** This PA will become effective upon both Parties signing and shall terminate upon the earlier of: (a) March 31, 2002, this being the anticipated completion date of the Project, unless such date is extended by mutual written agreement of the Parties; or (b) one month subsequent to the receipt of written Notice of Intent to Terminate from one Party to the other, provided that the Memorandum of Cooperation between the Department of Natural Resources Canada and USGS signed April 9, 1999, remains in force.

Either Party may, by giving the other Party thirty (30) days written notice, terminate this Agreement. Either Party shall immediately upon termination, return the other Party's papers, materials or other property held for the purpose of carrying out the Project. In the event of termination of this Agreement, any expenses and costs incurred by USGS in support of the Project and costs for non-cancelable commitments outstanding as of the date of termination shall be paid for by GSC.

FOR THE U.S. GEOLOGICAL SURVEY  
OF THE DEPARTMENT OF INTERIOR  
OF THE UNITED STATES OF AMERICA:

FOR THE GEOLOGICAL SURVEY OF  
CANADA OF THE EARTH SCIENCES  
SECTOR OF THE DEPARTMENT OF  
NATURAL RESOURCES CANADA:

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United States Geological Survey

Jan Boon  
Director General  
Sedimentary and Marine Geoscience Branch  
Geological Survey of Canada  
Natural Resources Canada

Date: 7/19/01

Date: 7/23/01



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 Commission géologique du Canada  
 CGC-Québec

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 Earth Sciences Sector  
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 GSC-Quebec



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