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KEVIN J. D. RIDLEY, P.Geol.

Hydrogeologist

YEAR OF BIRTH: 1950.

EDUCATION: Ph.D. Civil Engineering Specializing in Water Resources and Sanitary/Environmental Engineering, successful defense, anticipate formal granting of degree in 1984 pending review of revisions, University of Windsor, Windsor, Ontario.
Doctoral Studies Geology Specializing in Hydrogeology, University of Alberta, Edmonton, Alberta, 1975-1977.
M.Sc. Geology Specializing in Geochemistry, University of Windsor, Windsor, Ontario, 1975.
B.Sc. (Honours) Geology, McMaster University, Hamilton, Ontario, 1973.

EXPERIENCE: A range of activities related to ground and surface water resources including groundwater development, protection and amelioration; dewatering and drainage; and environmental impact of industrial development on ground and surface water bodies.

1984 to date: Hydrogeologist, Resources Department.
Hydrogeological input to environmental study for a thermal generating station involving effects of ash storage/disposal on local surface and groundwaters in Chatham, New Brunswick. Baseline hydrogeological investigation of a mining lease in New Brunswick prior to pit development. This involved defining the effect of the pit and diversion of a small river on the groundwater flow pattern and groundwater quality as well as defining the feasibility of flooding upon completion of mining and its effect on groundwater flow and quality. Technical review of material submitted to regional government for expansion of the Burlington Landfill Site.

1983 - 1984: Acres Consulting Services Limited, Niagara Falls, Ontario - Geohydrologist. Analysis of pumping test data for mine dewatering, Wabush, Labrador. Review of geohydrological data from abandoned toxic waste site, Niagara Falls, New York. Technical review of legal settlement. Field investigation of a hydrocarbon leak in fractured bedrock/till, New Brunswick. Compilation and analysis of geohydrological data, Saudi Arabia.

- 1979 - 1982: Department of Civil Engineering, University of Windsor and Industrial Research Institute, University of Windsor, Windsor, Ontario. Sessional Instructor and Research Assistant: supervision of sanitary/environmental laboratories, lecturing in senior undergraduate courses in environmental engineering, conducted research towards dissertation, supervised senior undergraduate research projects.
- Consultant: pilot plant studies, analysis of wastewater and sludge, BOD and COD analyses, analysis of groundwater for total and fecal coliform, and general analytical work. Technical support to contest location of industrial landfill site near Tilbury, Ontario.
- 1978 - 1979: Visiting Assistant Professor, Department of Geology, University of Windsor, Windsor, Ontario. Lecturer in geology and geochemistry.
- 1977 - 1978: Project Hydrologist, Mining Geotechnical Group, EBA Engineering Consultants Ltd., Edmonton, Alberta. Hydrological input for engineering projects which included a large open-pit coal mine involving design and installation of deep piezometers for slope stability in working pit, area groundwater survey in virgin coal lease for design of dewatering system, supervision of field personnel, sampling of wells for chemical analysis, pumping tests, mapping and development of conceptual model; dewatering system for excavation and construction of a sewage lift station involving supervision of field personnel, installation of pneumatic piezometers, pumping test and design of dewatering system; investigation of leakage of a saturated brine from a clay-lined storage lagoon involving sampling existing observation wells and use of geophysical techniques to delineate plume migration; groundwater pollution studies; groundwater supply; feasibility studies for landfill sites.
- 1975 - 1977: Teaching and Research Assistant, University of Alberta, Edmonton, Alberta. Teaching and research assistant for graduate and undergraduate courses.

- 1976 (Summer): Hydrogeologist, Hydrogeological Consultants Ltd., Edmonton, Alberta. Baseline groundwater survey prior to the spray irrigation of treated sour gas refinery wastes; rural groundwater supply; study to define areas that contain suitable quality and quantity of groundwater for future growth and development of City of Edmonton.
- 1973 - 1975 Teaching Assistant, University of Windsor, Windsor, Ontario. Teaching assistant for graduate and undergraduate course.
- 1973 - 1975: Engineering Geologist, Acres Consulting Services, (Summers) Niagara Falls, Ontario. Investigation of groundwater conditions at a lead-zinc mine in Newfoundland; preliminary investigation study of the stability of a cliff face above a power station at Niagara Falls; hydrogeochemical study of a rural area prior to reservoir impounding; feasibility study for location of a shipyard in Korea; feasibility study for the economic potential of sand and gravel deposits in Halifax Harbour; measuring and mapping of cracks in a tunnel at Thorold, Ontario.
- PROFESSIONAL The Association of Professional Engineers, MEMBERSHIPS: Geologists and Geophysicists of Alberta.
- PAPERS "Impact of Brine on the Behaviour of Compacted Fine Grained Soil." K.J.D. Ridley, J.K. Bewtra and J.A. McCorquodale. Proceedings, Municipal Environment PUBLISHED: Division of the 1983 CSCE Annual Conference, Ottawa, Canada, 1983.
- "Breakthrough of Brine Through Compacted Fine Grained Soils." K.J.D. Ridley and J.K. Bewtra. Proceedings of the 38th Annual Purdue Industrial Waste Conference, Purdue University, Indiana, USA, 1983.
- "Behaviour of Compacted Fine-Grained Soil in a Brine Environment." K.J.D. Ridley, J.K. Bewtra and J.A. McCorquodale. Canadian Journal of Civil Engineering, 1984 (in press June).

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PAPERS
PUBLISHED:
(Cont'd)

"The Variability of Chemical Analyses as a Function of Sample Heterogeneity and the Implications to the Analyses of Rock Standards." K.J.D. Ridley, A. Turek and C. Riddle. Geochim. Cosmochim. Acta, 40, pp 1375-1379, 1976.