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CANADA

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

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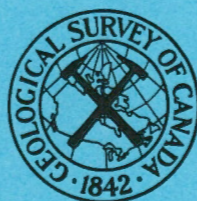
TOPICAL REPORT NO. 89

68

COORDINATION OF ARDA SUPPORTED GROUNDWATER
RESEARCH PROJECTS ON THE PRAIRIES

COMPILED BY

E. A. CHRISTIANSEN, D. J. GENDZWILL AND I. C. BROWN



OTTAWA

1964

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A meeting was called by the Geological Survey of Canada at the request of ARDA to work out, at the technical level, a means of coordination of groundwater research programs on the prairies for which ARDA financial support will be requested. At the kind invitation of Dr. T.E. Warren, Director, S.R.C., the meeting was held in the Conference Room of the Saskatchewan Research Council on Monday, April 27th, 1964.

Dr. I.C. Brown (G.S.C.),
Chairman.

The following were present:

Dr. I.C. Brown, GSC	Mr. F. McCallum, PFRA
Dr. E.A. Christiansen, SRC	Mr. R. McIntyre, ARDA
Dr. F. Durrant, PFRA	Dr. T.P. Pepper, SRC
Dr. K.W. Geiger, RCA	Mr. T. Rey, Sask. Dept. Agr.
Mr. D.J. Gendzwill, SRC	Mr. A. Rutherford, SRC
Mr. L. Gray, Man. Dept. Agr.	Dr. J.R. Smith, SRC
Mr. W.H.W. Husband, SRC	Dr. A. Vandenberg, RCA
Mr. W.M. Kloeble, SRC	Dr. T.E. Warren, SRC
Mr. D. Lennox, RCA	

Agenda

1. Introductory remarks by Dr. T.E. Warren
2. Statement of general policy by ARDA
3. Statement of position of Geological Survey
4. Discussion of method of coordination of requests for ARDA support
 - (a) Timing of application
 - (b) Need of meetings and location
 - (c) Other administrative problems
5. Presentation of programs by provinces
 - (a) ARDA supported programs completed or in progress
 - (b) Programs for which ARDA support is requested
 - (c) Summary of other programs
6. Summary of Geological Survey program
7. Discussion and coordination of programs for which ARDA support is requested
8. Discussion of other programs and possible coordination
9. Other business
10. Summary by chairman

Introduction

The delegates were welcomed by Dr. T.E. Warren, Director, Saskatchewan Research Council. Mr. McIntyre outlined the general position and intent of the ARDA program with reference to groundwater investigations and emphasized that their interest was primarily in research projects that would provide information of use in their broader programs.

Dr. I.C. Brown pointed out that the Geological Survey of Canada will act in a scientific advisory capacity with reference to ARDA supported groundwater programs but will not act in the fields of policy, allocation of funds, administration, or control.

Coordination Procedure

The delegates agreed to meet in the latter half of April to coordinate proposed ARDA supported programs prior to submission of Provincial Budgets (for example, the meeting in 1964 coordinated the tentative 1965 program). Submissions to ARDA could then be sent through the regular channels in time to have funds approved prior to detailed planning of the following summer's field program.

Provincial agencies will submit outlines of proposed ARDA supported programs to the Geological Survey of Canada on request approximately one month before each April meeting. The submitted outlines will be appended to the agenda which will be compiled and circulated by the Geological Survey of Canada.

The 1965 meeting will be held at the Research Council of Alberta at their invitation. Meetings will be held at prairie centres to be decided the previous year and will be held annually only if justified by new program submissions.

Summary of Programs

ARDA Project Number	Name of Project	Submitted and approved 1964	Proposed Submissions 1965
Man. 7051	Experimental well development	x	x
Man. 7057	Groundwater irrigation potential, southwestern Manitoba.	x	x
---	Groundwater chemistry (salt water encroachment)		x
---	Conservation of water in flowing artesian areas		x
Sask. 8026	Groundwater exploration, southern Saskatchewan.	x	x
Sask. 8045	Surface water conservation	x	x
Sask. 8049	Groundwater research	x	x
	1. Geology and groundwater resources of Saskatoon areas.		
	2. Inventory of groundwater resources of southern Sask.		
	3. Geophysical prospecting associated with groundwater programs of S.R.C.		
	4. Geophysical prospecting research and educational program for water well drilling in Sask.		
	5. Experimental program for groundwater prospecting in Sask.		
	6. Assessment of water resources through chemistry (isotope studies, pesticide studies).		
	7. Purification of brackish and saline waters by natural freezing.		
Alta. 9022	Groundwater Research and obs. well network, Sask. R. Headwaters	x	x

ARDA Project Number	Name of Project	Submitted and approved 1964	Proposed Submissions 1965
Alta. 9023	Groundwater exploration and aquifer evaluation in Alberta Plains	x	x
Alta. 9024	Groundwater data processing	x	x
—	Groundwater chemical studies (chemical mapping, base exchange studies, membrane action in aquifers and aquicludes)		x

It was agreed at the meeting that no duplication exists in the ARDA sponsored programs approved in 1964 or proposed for 1965 submission. Also there is no duplication with G.S.C. projects.

General Discussion

The following points were raised for consideration:

1. Standardization of symbols, nomenclature, presentation of data and chemical analyses would be a desirable, though probably not completely attainable, goal. This might be approached by using the presently proposed international standards (A Legend for Hydrogeological Maps. Publication No. 60, I.A.S.H., Braamstraat 61, (Rue Des Ronies) Gentbrugge, Belgique, 1960).
2. Chemical analyses, and possibly other well data, should be compiled in proper form for computer analysis.
3. Meetings should provide an opportunity for technical discussions. Possibly in future only the morning would be required for coordination of ARDA submissions and the afternoon and evening left free for discussion of other programs and technical problems.