## AGGREGATE RESOURCES INVENTORY SYSTEM

by

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The Environmental Geology Section has been collecting aggregate resource data since 1975. To this time, approximately 10,000 samples have been collected. The database management system selected for the manipulation of the data is the Scientific Information Retrieval (SIR) system. The end product is the Aggregate Resources Invenan interactive database System, designed for the storage and retrieval of aggregate and surficial geology data generated. This report is a brief description of the system as well as the type of data the system holds.

The system consists of a series of programs which permit the user to:

- (1) edit raw data collected by the geologists
- (2) correct any data which was coded incorrectly or omitted
- (3) produce cumulative curve plots of gravel, sand, silt-clay percentages for individual samples
- (4) produce various reports on paper or microfiche, e.g. master-file report, lithological analysis report, particle-size-analysis report
- (5) add, change or delete any data in the database
- (6) unload the database from disk to tape
- (7) reload the database from tape to disk
- (8) check the integrity of the database for any changes since the last time it was accessed

The data in the database can be roughly divided into two categories, information pertinent to a specific sample site or location, and information related to individual samples taken at the site. Of the sixteen record types defined for the database, records 1-6 hold site information and records 7-16 hold information related to a particular sample. This set-up gives the database a hierarchical structure, i.e. each site record has many sample records associated with it.

The record types which pertain to a specific site hold such information as:

- (1) general location of the site
- (2) the landform associated with the site
- (3) any ice movement indicators found at the site
- (4) a list of any photographs taken
- (5) general comments by a geologist concerning the site

The records which hold sample information report on:

- (1) a field description of the sample
- (2) field sieve analysis data
- (3) pebble analysis data
- (4) lithology data from the pebbles in the sample
- (5) laboratory sieve analysis data
- (6) general comments relating to the sample

Data are continually being added to the database, with emphasis being placed on data collected in 1980-1982. As of August 31, 1983, the database held information on approximately 4000 sites, with a total of approximately 20,000 records on file. These data were collected primarily from Insular Newfoundland; Labrador data were collected in 1983 and before 1980 and are not in the system. The 1983 data will be input as soon as possible.



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