

MAP 2011-25
GOOSE BAY
NEWFOUNDLAND AND LABRADOR

GRANULAR-AGGREGATE RESOURCES OF THE GOOSE BAY MAP AREA (NTS 13F/08)

MAP 2011-25

LEGEND

- Sample types (based on laboratory sieve analysis - see Table 1)
- Commonly gravel or sand, having silt-clay content < 5 percent. Deposits are commonly graded and stratified
 - △ Commonly fill, poorly graded and of variable grain size, having a silt-clay content (L 5 and L 15 percent) and stone size exceeding allowable limits for most geotechnical purposes (except subgrade uses) without processing (i.e., washing, screening or crushing)
 - ⊕ Commonly silt fill, silt or clay samples, having silt-clay content > 15 percent

ZONES OF AGGREGATE POTENTIAL

- Contains granular materials; probability of locating economic deposits is moderate to high
- Contains thin (less than 2 m) or discontinuous granular materials; also includes areas where extent of thicker deposits could not be determined by field investigation; probability of locating economic deposits is moderate to low
- May contain granular materials but deposits are not substantiated by field investigation; probability of locating economic deposits is moderate to low
- Material of granular composition (e.g., sand, silt and colluvium) that generally contains up to 8 percent silt-clay, but could be improved for higher grade uses by washing or screening
- Contains sand-size granular materials; high potential for economic exploitation of sand; low to moderate potential for coarser granular materials
- Esikes; sinuous ridges of granular materials; moderate to high potential for economic exploitation
- Study area within the dashed outline

In addition to this map data, a granular-aggregate database is accessible in the Geoscience Atlas of Newfoundland and Labrador (<http://gis.govsn.gov.ca>) for all granular-aggregate maps and sample data. The database provides information on more than 13 000 samples collected from 230, 1:50 000-scale map areas in Newfoundland and Labrador.

This map was originally produced in a series of blue-line maps from airphoto interpretation and field work (Environmental Geology Section, 1983). In some map areas additional sample data was collected after the 1983 publication.

DIG (digital cartography) by T. Peltanavage.
The location of roads added to topographic map base are approximate.
Elevation in feet above mean sea level. Contour interval 50 feet.

Copies of this map may be obtained from the Geoscience Publications and Information Section, Geological Survey, Department of Natural Resources, Government of Newfoundland and Labrador, P.O. Box 8070, St. John's, NL, Canada, A1B-8X6.
This map is subject to review and revision. Comments to the author concerning errors or omissions are invited.

Base from maps published by Survey and Mapping Branch, Department of Natural Resources, Ottawa, Canada.
OPEN FILE 13F/08/080
This map supersedes Map 2010-36, Open File 13F/08/073
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Department: <http://www.nr.gov.nl.ca/>
Geological Survey: <http://www.gov.nl.ca/mines/geoscience/>
E-mail: pub@gov.nl.ca

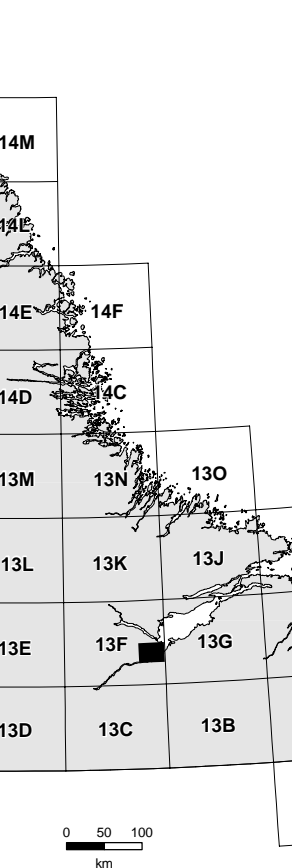
References
Environmental Geology Section
1983. 1:50 000-scale aggregate resource maps outlining zones of aggregate potential within a 6-km-wide corridor in Labrador. Newfoundland Department of Mines and Energy, Mineral Development Division, Map 82-225 and Map 82-227. Open File LAB/06/07.

Kirby, F.T., Ricketts, R.J. and Vanderveer, D.G.
1983. Inventory of aggregate resources in Newfoundland and Labrador. Information report and index maps. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 83-2. 36 pages.

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GRAIN-SIZE ANALYSES

Grain-size results from the 63, 32, 16 and 8 mm mesh sieves were obtained at the sample site location by sieving approximately 15 kg of material. A 500 to 1000 gm split of the < 63 mm material (sand-silt-clay) was retained for laboratory sieve analysis. Laboratory sieve analyses included the use of seven sieves with mesh openings of 4.75, 0.075, 0.15, 0.3, 0.6, 1.18, 2.0, 4.75, 9.5, 19, 37.5, 75, 150, 300, 600, 1180, 2500, 5000, 10000, and 20000 µm. Samples were wet and/or dry sieved (Kirby et al., 1983) depending on silt-clay content and consolidation of particles.

Table 1: Exposure thickness (Exp), estimated deposit thickness (Dep), petrographic number (PN), grain-size percentages (based on percent retained on the 63 mm down to the -0.062 mm mesh sieves) and gravel (Grv), sand and silt-clay (SL-CL) content of sample material collected in NTS area 13F/08.

Sample	Exp (m)	Dep (m)	PN	Percent retained through sieve opening (millimetres)																Grv (%)	Sand (%)	SL-CL (%)
				63	32	16	8	4.75	0.075	0.15	0.3	0.6	1.18	2.0	4.75	9.5	19	37.5				
70226	6.0	6.0	0.0	0.0	0.0	0.0	0.1	13.3	83.3	2.1	0.8	0.4	0.0	99.4	0.6							
70227	8.0	10.0	0.0	0.0	0.1	1.4	58.0	37.9	2.2	0.4	0.1	0.0	99.8	0.2								
70013	4.5	2.3	1.4	6.0	34.4	29.2	13.0	2.5	0.4	0.2	0.4	0.0	99.2	0.8								
70014	0.0	0.0	1.8	12.2	40.4	34.2	9.5	1.7	0.2	0.0	0.0	99.3	0.7									
70015	0.0	0.0	1.4	0.3	6.7	11.9	28.2	29.3	11.9	5.7	4.6	1.7	92.3	6.0								
70016	16.1	5.2	6.1	6.2	3.9	4.6	7.1	11.0	12.8	9.0	14.3	26.2	47.2	16.6								
70017	10.1	6.5	7.1	5.3	6.4	2.4	4.2	6.4	10.9	13.8	11.3	15.7	33.8	47.7	18.5							
70020	0.0	0.0	4.8	4.8	2.7	5.0	8.0	13.0	14.3	3.7	16.4	28.7	51.5	18.9								
70021	0.0	0.0	7.0	12.2	29.7	34.2	14.1	2.4	0.4	0.0	0.0	99.0	1.0									
70022	0.0	0.0	0.0	0.0	0.0	1.0	1.8	20.1	52.1	25.0	0.0	62.0	38.0									
70024	0.0	0.0	4.5	4.7	14.7	29.8	24.9	14.0	4.3	0.6	3.3	94.9	1.7									
70025	0.0	2.7	6.5	14.5	25.6	30.4	16.9	3.1	0.4	2.0	96.8	1.2										
70026	0.0	0.0	1.1	1.7	30.1	31.5	16.1	3.4	0.0	92.6	7.4											
70028	0.0	0.0	0.2	1.4	10.5	45.5	33.5	8.3	0.6	0.0	97.3	2.7										
70029	0.0	0.5	0.8	4.6	20.8	39.3	25.3	7.3	1.3	0.4	96.5	3.1										
70031	0.0	2.1	4.1	5.8	17.6	25.5	17.6	13.1	14.1	16.1	81.0	17.4										
70032	0.0	0.0	1.1	2.2	20.4	45.5	24.5	6.6	0.9	0.0	97.4	2.6										
70033	0.0	0.0	0.0	0.8	3.3	11.7	20.5	44.1	19.5	0.0	89.5	3.0										
70035	0.0	0.0	5.2	29.2	42.4	17.8	4.2	0.4	0.0	98.5	1.5											
70036	0.0	0.0	0.0	0.4	2.6	43.4	45.8	7.8	0.0	80.7	19.3											
70037	0.0	0.0	0.2	0.3	5.2	75.4	17.5	1.3	0.0	94.3	5.7											
70038	0.0	0.3	0.6	1.4	11.6	54.1	25.5	5.5	0.9	92.5	2.9											
70039	0.0	0.0	1.1	5.0	27.9	52.2	12.4	1.4	0.0	95.5	4.5											
70040	0.0	0.0	0.8	4.1	28.1	46.1	18.7	1.9	0.0	99.2	0.8											
70042	0.0	0.0	1.6	4.8	46.0	17.1	3.1	0.4	0.0	96.4	3.1											
70051	0.0	0.0	0.4	0.7	4.4	37.2	44.3	10.8	2.2	0.0	95.1	4.9										
70052	0.0	0.0	2.3	16.4	28.3	33.6	16.6	2.8	0.0	93.3	6.9											
70053	0.0	0.0	4.6	37.6	44.9	9.1	1.9	0.9	1.1	0.0	98.6	1.4										
70054	0.0	0.0	4.3	26.2	44.6	13.5	3.0	7.8	0.0	91.5	8.5											
70056	19.0	0.0	2.2	15.9	40.1	29.3	11.0	2.4	0.0	94.3	5.9											
70057	0.0	0.0	1.9	8.9	14.7	42.3	24.8	7.4	0.0	86.4	13.6											
70058	0.0	0.0	0.0	1.4	10.0	53.5	27.2	3.8	0.6	96.0	1.5											
70059	0.0	0.0	1.2	6.9	42.0	32.3	8.8	1.1	0.1	99.6	0.4											
70060	0.0	1.4	1.5	8.2	25.4	32.0	20.5	8.7	2.3	1.0	94.5	4.4										
79181	1.6	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
79182	1.1	20.0	0.0	0.0	0.1	2.3	72.5	19.9	2.4	0.0	98.5	1.5										
79186	1.8	20.0	0.0	0.1	0.1	0.1	13.9	78.7	6.6	0.0	97.9	2.1										
79187	0.1	20.0	0.0	0.0	0.9	2.4	45.2	40.0	49.3	2.2	0.0	94.3	14.5									
79188	1.7	20.0	0.0	0.0	0.3	5.5	33.7	37.6	18.5	6.4	0.0	89.4	10.6									
79189	1.8	20.0	0.0	0.0	0.3	2.1	10.6	26.8	37.0	16.2	3.1	2.0	2.5	94.8	2.7							
79190	0.8	20.0	0.0	0.8	0.6	0.9	6.1	24.3	46.0	16.3	6.0	0.6	89.5	9.5								
79194	3.7	20.0	0.0	0.0	0.4	10.9	74.0	13.5	1.2	0.0	99.7	0.3										
79195	2.8	25.0	0.0	0.0	0.4	2.5	36.9	52.9	14.6	2.5	0.8	96.0	1.5									
79196	1.3	25.0	0.0	0.0	0.5	12.7	66.8	18.4	1.6	0.0	98.6	0.4										
79197	4.2	25.0	0.0	0.0	0.0	1.0	73.2	22.3	3.2	0.3	98.9	1.1										
79198	3.3	25.0	0.0	0.0	0.1	1.1	39.5	51.6	7.1	0.7	0.0	94.3	5.2									
79199	20.0	25.0	0.0	0.4	2.5	22.0	43.3	25.1	5.8	0.9	97.7	2.3										
79199	1.3	20.0	0.0	0.0	0.2	0.9	6.3	24.7	40.0	22.9	0.0	85.9	3.1									
79199	1.5	10.0	0.0	0.0	0.1	1.0	39.5	51.6	7.1	0.7	0.0	97.5	2.5									
79199	1.2	20.0	0.0	0.1	0.3	1.8	4.9	22.4	54.5	14.9	1.4	0.1	94.8	5.1								
79199	2.3	10.0	0.0	0.1	1.1	8.0	32.9	34.6	23.7	3.4	0.2	0.1	98.8	3.9								
79199	9.5	12.0	0.0	0.8	6.6	13.3	29.1	31.9	8.5	0.7	0.0	92.5	0.2									
79199	8.6	12.0	0.0	0.0	6.0	3.2	10.0	43.0	34.5	2.9	0.2	0.0	4.5	95.4	0.1							
79199	6.3	12.0	0.0	0.0	1.5	2.0	6.6	29.1	37.3	23.5	0.0	87.2	32.8									
79199	6.4	6.4	0.0	0.0	2.3	44.1	45.6	7.2	0.8	0.0	97.4	2.6										
79199	6.3	12.0	22.1	0.0	0.0	1.4	10.6	10.3	15.8	23.7	11.0	3.0	0.3	0.1	19.8	80.0	0.2					
79199	6.8	12.0	266.0	0.0	0.0	4.2	7.7	3.5	5.7	13.1	39.8	27.8	6.9	0.4	0.1	14.5	85.3	0.2				
79199	5.3	10.0	0.0	0.0	7.3	7.1	14.5	31.1	32.5	6.3	0.9	0.9	0.2	5.5	94.1	0.5						
79199	10.5	12.0	0.0	0.0	1.0	1.2	9.0	37.6	28.1	16.3	6.8	0.0	89.1	10.9								
79199	8.4	14.0	264.0	0.0	2.5	10.7	8.1	8.8	19.8	19.6	7.6	1.6	0.6	28.8	71.6	1.0						
79200	9.0	9.0	0.0	0.0	0.0	0.0	1.0	27.7	54.1	17.7	2.5	0.0	93.8	6.2								
79205	5.0	5.0	0.0	0.0	0.5	5.5	52.5	39.1	1.6	0.2	99.4	0.6										
79206	10.0	10.0	0.0	0.0	0.0	0.3	7.3	34.8	34.4	19.0	4.2	0.0	91.0	9.0								
79208	16.0	16.0	0.0	0.0	0.4	4.9	28.1	47.8	17.2	1.3	0.3	0.0	99.4	0.6								
79209	16.0	16.0	0.0	4.8	4.6	8.1	8.9	24.1	22.7	5.6	0.4	0.4	89.3	1.8								
79211	18.0	18.0	0.0	0.0	0.1	0.2	4.2	57.9	31.5	5.4	0.6	0.0	88.0	2.0								
79212	2.0	20.0	0.0	0.8	4.7	21.4	48.1	22.8	2.0	0.2	0.1	0.5	99.4	0.1								
79213	10.0	25.0	0.0	0.0	0.1	0.1	0.6	43.4	48.2	7.0	0.											