



**GRANULAR-AGGREGATE RESOURCES
OF NTS MAP SHEET 13F/04
(Untitled)**

Open File 013F/04/0054
 MAP 2000 - 04

LEGEND

- Sample location
Location of field stops where descriptive notes were compiled but samples were not collected
(based on laboratory sieve analysis - see Table 1)
- Sample Definition**
- 973000 Commonly gravel or sand, having silt-clay content < 5 percent. Deposits are commonly graded and stratified. Example: 973104 - Location of sample 3104 taken in 1997, containing 0.1 percent silt-clay.
 - 973000 Commonly till, poorly graded and of variable grain size, having a silt-clay content (> 5 and < 15 percent) and stone size exceeding allowable limits for most geotechnical purposes (except subgrade uses) without processing (i.e., washing, screening or crushing); Example: 973118 - Location of sample 3118 taken in 1979, containing 10.0 percent silt-clay.
 - 973000 Commonly silty till, silt or clay clumps, having silt-clay content > 15 percent. Example: 973145 - Location of sample 3145 taken in 1997, containing 22.9 percent silt-clay.
- Multiple samples taken from the same site in different years, are listed in order from oldest to youngest. Multiple samples taken at the same site in the same year are listed in order, from the top of the exposure to bottom.

NOTE: This is a composite legend for all aggregate-resource maps. All aggregate zones and sample types shown in the legend may not appear on this map. Aggregate zone classification is based on airborne interpretation, field investigation and sieve analysis. Areas outside the numbered zones have no known potential for granular materials, however silt, clay, rock rubble suitable for fill, and bedrock suitable for aggregate, may be present. Classification criteria used on this map do not consider current or conflicting land uses, nor do they guarantee either access to, or the quality of, the material located within these zones.

ZONES OF AGGREGATE POTENTIAL

- 1** Contains granular materials; probability of locating economic deposits is moderate to high
 - 2** 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
 - 3** May contain granular materials but deposits are not substantiated by field investigation; probability of locating economic deposits is moderate to low
 - 4** Material of granular composition (e.g., sandy till or colluvium) that generally contains up to 8 percent silt-clay content, but could be improved for higher grade uses by washing or screening
 - 5** Contains sand-size granular materials; high potential for economic exploitation of sand; low to moderate potential for coarser granular materials
- >>> Eskers: sinuous ridges of granular materials; moderate to high potential for economic exploitation

In addition to this map data, a computerized aggregate database (Ricketts, 1993) produces cumulative curves for grain-size data and lists petrographic numbers for the available samples. The database provides information on more than 13,000 samples collected from 230, 1:50,000-scale maps in Newfoundland and Labrador.

This map was produced from airborne interpretation, and field work conducted in 1997 (Ricketts, 1998; 1999) and 1980 (Kirby et al., 1983); and from a compilation of other sources including surficial geology maps by Fulton and Hodgson (1979), and aggregate-resource data (Environmental Geology Section, 1983).

The location of roads added to topographic map base are approximate.

Elevation in feet above mean sea level. Contour interval 50 feet.

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Copies of this map may be obtained from the Geoscience Publication and Information Section, Geological Survey, Department of Mines and Energy, P.O. Box 8700, St. John's, Newfoundland, Canada, A1B 4X6.

This map is subject to review and revision. Comments to the author concerning errors or omissions are invited.

Base derived from maps published by Surveys and Mapping Branch, Department of Natural Resources, Ottawa, Canada.

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1999: Landforms and Surficial Geology of the Moun Rapids map sheet NTS 13E(01), Newfoundland Department of Mines and Energy, Geological Survey, Open File 013E(01)0060, Map 99-09.

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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 by sieving between 10 and 15 kg of material. A 500 to 1000 gm split of the < 75 µm material (sand-silt-clay) was retained for laboratory sieve analysis. Laboratory sieve analysis included the use of seven sieves with mesh openings of 5, 7.5, 10, 15, 20, 25, 4.75 and 0.075 mm. Samples were wet and 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 numbers (PN), grain-size percentages (based on percent retained on the 63 mm down to the .062 mm mesh sieves) and gravel, sand and silt-clay (SL-CL) content of sample material collected in NTS area 13F/04.

Sample	Exp	Dep	PN	Percent retained through sieve opening (millimetres)										Gravel	Sand	SL-CL			
				63	32	16	8	4.75	2.5	1.5	0.75	.6	.425				.3	.25	
791009	0.7	0.0	382	0.0	1.4	4.1	11.7	3.5	7.0	0.6	0.1	14.8	0.4	1.1	1.3	19.9	64.0	16.1	
791010	3.2	10.0	293	0.0	3.7	3.0	6.7	2.8	5.9	7.6	10.9	18.1	18.3	9.6	13.3	15.6	68.7	15.7	
791011	2.6	10.0	306	0.0	4.4	3.7	5.6	3.5	4.9	4.7	8.4	15.1	19.4	15.3	16.8	16.4	69.5	20.2	
791012	2.4	6.0	277	2.1	7.7	5.1	6.7	3.6	5.4	6.1	10.0	15.3	16.8	10.6	10.3	24.3	62.7	13.0	
791013	0.4	0.0	0.0	0.0	0.0	0.0	10.0	6.6	7.5	10.0	15.3	17.8	12.3	20.3	7.5	49.1	23.4	0.0	
791014	4.0	4.0	275	3.0	8.4	8.4	8.4	5.7	6.1	6.2	7.6	11.3	13.4	10.7	10.8	32.5	54.0	13.5	
791015	2.8	8.0	281	10.1	6.7	8.1	7.3	5.3	4.7	6.5	9.0	14.8	12.1	15.5	30.4	51.1	18.5	0.0	
791016	1.1	5.0	200	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	
791017	5.1	12.0	256	16.2	10.4	9.1	5.5	5.4	4.8	6.6	11.4	11.8	7.3	9.1	42.3	46.8	10.9	0.0	
791018	2.2	10.0	278	10.0	6.5	8.2	3.1	5.9	7.8	10.2	12.9	10.3	6.2	9.0	36.9	52.6	10.6	0.0	
791019	0.8	4.0	289	4.9	29.4	21.7	13.4	7.7	4.8	4.0	5.6	2.8	0.7	0.1	0.1	79.9	19.9	0.2	
791020	2.5	6.0	269	0.0	3.3	4.7	8.0	4.6	5.9	5.4	8.2	12.6	16.1	12.9	18.4	19.8	58.9	21.6	
791021	1.2	1.2	295	0.0	10.0	27.4	21.4	13.2	8.7	5.1	5.0	5.5	3.1	4.5	0.1	68.8	31.0	0.2	
791022	3.8	4.5	276	9.4	24.6	6.3	3.1	0.6	2.0	5.7	27.5	17.0	3.2	0.3	0.2	43.9	55.8	0.3	
791023	2.4	5.0	291	12.4	18.9	13.0	10.9	8.4	6.9	7.7	5.6	2.9	4.5	0.1	0.5	34.2	63.3	0.2	
791024	1.1	5.0	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	0.0	
791025	1.9	6.0	281	21.1	15.2	12.7	8.8	10.3	10.0	7.6	2.6	0.6	0.2	0.1	66.6	33.2	0.2		
791026	2.9	6.0	267	15.6	18.6	12.6	11.1	8.1	10.8	10.4	8.6	3.0	0.7	0.2	64.0	35.8	0.2		
791027	4.1	8.0	279	6.6	20.5	19.0	13.9	6.7	5.5	5.9	8.2	7.7	4.1	1.4	0.5	65.1	34.1	0.9	
791028	1.2	3.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	3.0	40.1	30.4	12.6	7.0	0.1	89.8	10.1	0.0	
791029	2.2	8.0	281	23.5	17.2	10.8	12.1	10.0	12.1	9.1	3.5	1.1	0.3	0.1	0.1	71.2	28.7	0.1	
791030	3.8	7.0	244	15.1	22.9	14.2	9.0	7.8	12.0	11.5	8.8	6.0	0.9	0.0	0.0	32.2	67.6	1.3	
791031	3.8	8.0	282	9.7	21.2	6.0	5.4	5.9	8.9	18.9	16.6	4.7	1.3	0.3	0.2	46.7	52.9	0.3	
791032	1.1	2.0	249	8.3	6.9	10.4	6.8	10.4	6.8	7.9	4.7	5.0	1.4	0.9	1.4	50.9	48.7	1.5	
791033	3.8	8.0	282	9.7	21.2	6.0	5.4	5.9	8.9	18.9	16.6	4.7	1.3	0.3	0.2	46.7	52.9	0.3	
791034	0.4	11.0	284	11.0	28.5	16.4	7.3	5.9	6.1	6.7	2.8	1.0	0.4	0.4	73.5	26.0	0.5		
791035	1.1	11.0	249	8.3	6.9	10.4	6.8	10.4	6.8	7.9	4.7	5.0	1.4	0.9	1.4	50.9	48.7	1.5	
791036	0.8	6.0	259	0.0	8.1	15.6	21.5	18.8	13.7	10.9	8.6	2.4	0.2	0.0	0.1	94.0	4.0	0.1	
791037	3.0	6.0	265	0.0	4.3	4.5	6.1	3.8	3.8	5.9	10.9	12.9	15.3	12.6	22.1	17.5	25.2	0.0	
791038	0.0	12.0	268	0.0	5.7	10.0	11.9	8.3	4.5	1.5	0.5	1.5	0.5	0.4	0.7	87.3	12.6	0.0	
791039	0.2	15.0	278	24.9	12.4	18.7	11.7	8.2	7.6	6.4	5.9	2.7	0.9	0.3	0.4	73.9	25.7	0.0	
791040	8.0	15.0	24.0	22.0	13.4	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	
791041	5.0	5.0	284	5.8	1.3	5.2	14.3	21.0	20.3	17.3	12.2	2.2	0.2	0.1	0.1	42.3	57.5	0.1	
791042	5.0	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	0.0	0.0	
791043	3.0	11.0	292	8.9	17.9	15.5	11.1	5.4	5.3	7.8	14.4	10.1	3.4	0.7	0.4	56.6	42.8	0.5	
791044	0.8	13.0	219	32.9	18.9	7.3	22.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	
791045	4.0	3.0	279	0.0	11.5	22.2	24.9	14.0	11.3	6.3	3.4	1.6	0.9	0.2	0.1	72.7	27.2	0.1	
791046	5.0	5.0	271	0.0	6.4	7.9	12.9	16.9	17.2	18.1	18.2	5.9	1.0	0.3	0.2	39.9	59.8	0.3	
791047	2.5	2.0	283	1.5	2.0	3.5	13.9	13.5	12.5	6.2	0.1	0.2	0.6	3.4	45.2	18.6	0.0	70.1	29.9
791048	2.5	0.5	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	0.0	
791049	0.5	0.5	283	0.0	32.3	15.6	5.6	3.1	1.5	1.6	2.3	1.1	0.3	0.1	88.6	11.2	0.2	0.0	
791050	0.5	1.0	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	0.0	
791051	0.5	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	0.0	0.0	
791052	0.5	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	0.0	0.0	
791053	1.6	0.0	362	10.0	13.1	5.6	8.7	10.6	17.4	18.6	8.8	5.7	1.3	0.2	0.1	84.1	15.9	0.1	
791054	1.6	0.0	362	10.0	13.1	5.6	8.7	10.6	17.4	18.6	8.8	5.7	1.3	0.2	0.1	84.1	15.9	0.1	
791055	0.6	9.0	244	6.3	38.4	16.9	10.6	7.4	8.3	5.5	1.2	0.2	0.1	0.1	76.0	23.8	0.2	0.0	
791056	1.0	12.0	244	6.3	38.4	16.9	10.6	7.4	8.3	5.5	1.2	0.2	0.1	0.1	76.0	23.8	0.2	0.0	
791057	1.0	0.0	239	0.0	7.5	10.0	13.1	20.2	18.7	10.6	12.6	6.7	0.7	0.0	0.0	45.7	54.3	0.0	
791058	1.2	0.0	284	0.0	22.4	18.9	14.3	10.5	8.4	3.8	2.0	1.0	0.1	0.1	61.1	38.9	0.0	0.1	
791059	1.2	0.0	284	0.0	22.4	18.9	14.3	10.5	8.4	3.8	2.0	1.0	0.1	0.1	61.1	38.9	0.0	0.1	
791060	1.2	0.0	284	0.0	22.4	18.9	14.3	10.5	8.4	3.8	2.0	1.0	0.1	0.1	61.1	38.9	0.0	0.1	
791061	1.2	0.0	284	0.0	22.4	18.9	14.3	10.5	8.4	3.8	2.0	1.0	0.1	0.1	61.1	38.9	0.0	0.1	
791062	1.2	0.0	284	0.0	22.4	18.9													