



MAP 2000-03
PINUS RIVER
NEWFOUNDLAND
Scale 1:50 000

GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Mines and Energy
Geological Survey



GRANULAR-AGGREGATE RESOURCES OF THE PINUS RIVER MAP SHEET (NTS 13F/03)

Open File 013F/03/0053
MAP 2000 - 03

LEGEND

- Sample location
 - Location of field stops where descriptive notes were compiled but samples were not collected
 - Sample types (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: 973021 - Location of sample 973021 taken in 1997, containing 96.3 percent silt-clay
 - 973001 Commonly silt, poorly graded and of variable grain size, having a silt-clay content (> 5 and < 15 percent) and stone size exceeding allowable limits for most geomaterial purposes (except aggregate uses) without processing, i.e., washing, screening or crushing. Example: 973016 - Location of sample 1506 taken in 1979, containing 96 percent silt-clay
 - 973002 Commonly silt, silt or clay clays, having silt-clay content > 15 percent. Example: 973033 - Location of sample 3053 taken in 1997, containing 96.3 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 of aggregate zones have no known potential for granular materials, however silt, silt, 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 tills and 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 comprehensive aggregate database (Ricketts, 1993) produces cumulative curves for grain-size data and lists photometric numbers for the available samples. The database provides information on more than 13 000 samples collected from 236, 150 000-waltz-map areas in Newfoundland and Labrador.

This map was produced from airborne interpretation; and field work conducted in 1997 (Ricketts, 1998; 1999) and 1990 (Kirby et al., 1983); and from a compilation of other sources including surficial geology maps by Fulton and Hodgson (1970), 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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Digital Cartography by T.J. Sears, Geological Survey, Department of Mines and Energy, Government of Newfoundland and Labrador.

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.

PUBLISHED 2000

REFERENCES

Environmental Geology Section
1983: Site data and 1:50,000 scale maps. Field maps for all surficial and glacial mapping and aggregate resource mapping projects. Newfoundland Department of Mines and Energy, Mineral Development Division, Open File NFDL1267.

Fulton, R.J. and Hodgson, D.
1970: Surficial geology (uncontrolled mosaic; 1:50 000 scale). Geological Survey of Canada, Project 090043, Open File 59.

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.

Ricketts, M.J.
1993: Aggregate resource program (GrpA-V1). Newfoundland Department of Mines and Energy, Geological Survey, Open File NFDL2276, 6 pages, 3 ditches.

1998: Aggregate and surficial geology mapping in NTS map areas 13E/1, 13F/3 and 13F/4, Labrador. Newfoundland Department of Mines and Energy, Geological Survey, Report 98-1, pages 9-20.

1999: Landforms and Surficial Geology of the Mount Rapids map sheet (NTS 13E/01). Newfoundland Department of Mines and Energy, Geological Survey, Open File 013E/01/0066, Map 99-09.

Recommended citation:
Ricketts, M.J.
1999: Granular aggregate resources of the Pinus River map sheet (NTS 13F/03). Newfoundland Department of Mines and Energy, Geological Survey, Map 2000-03, Open File 013F/03/0053.

GRAIN-SIZE ANALYSES

Grain-size results from the 63, 32, 16 and 8 mm mesh sieves were obtained at the sample locations by sieving between 10 and 15 kg of material. A 500 to 1000 gm split of the < 8 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, 7.5, 15, 30, 60, 105 and 200 mm. 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), photometric numbers (PN), grain-size percentages (based on percent retained on the 63 mm sieve) and the 60% mean mesh sieves and gravel, sand and silt-clay (S+Cl) content of sample material collected in NTS area 13F/03.

Sample	Exp	Dep	PN	Percent retained through sieve opening (millimetres)										Gravel	Sand	S+Cl	
				4.75	7.5	15	30	60	105	200	4.75	7.5	15				30
760153	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
760154	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
760155	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
760156	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
760157	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
760158	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
760159	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
760160	5.7	7.9	2.8	5.1	4.0	4.6	11.4	14.1	12.9	12.2	8.1	11.2	24.5	62.3	13.2		
760161	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
760162	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
760163	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
760164	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
760165	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
760166	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
760167	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
760168	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
760169	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
760170	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
760171	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
760172	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
760173	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
760174	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
760175	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
760176	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
760177	5.1	6.6	3.1	3.1	1.8	3.5	3.7	6.5	11.9	19.6	16.9	18.4	19.2	58.2	22.6		
760178	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
760179	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
760180	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
760181	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
760182	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
760183	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
760184	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
760185	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
760186	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
760187	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
760188	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
760189	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
760190	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
760191	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
760192	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
760193	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
760194	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
760195	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
760196	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
760197	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
760198	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
760199	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
760200	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
760201	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
760202	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
760203	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
760204	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
760205	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
760206	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
760207	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
760208	11.4	6.0	5.4	6.5	6.4	4.3	6.0	9.6	13.7	13.1	8.4	9.2	34.1	54.6	11.3		
760209	9.7	7.7	4.8	3.9	6.7	4.8	3.8	2.1	3.7	4.8	1.5	1.2	14.8	25.2	4.4		
760210	43.7	16.8	12.4	8.8	4.1	3.5	5.3	4.7	1.8	0.5	0.2	0.1	82.8	17.0	0.1		
760211	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
760212	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
760213	14.9	1.1	15.1	4.1	2.7	4.1	0.0	6.2	6.1	8.7	2.9	0.0	63.5	25.8	0.7		
760214	15.0	15.4	8.0	5.2	2.9	4.3	10.9	18.3	4.8	11.3	0.3	0.0	57.6	38.5	0.6		
760215	15.1	15.4	8.0	5.2	2.9	4.3	10.9	18.3	4.8	11.3	0.3	0.0	57.6	38.5	0.6		
760216	0.0	6.4	3.5	4.9	5.9	0.0	6.										