

Datashare 50:

*Detrital quartz sources in the Scotian Basin,
eastern Canada, using hot-cathode cathodoluminescence:
Availability of coarse-grained sand for reservoirs*

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Table S1. Bedrock Samples Used to Establish Cathodoluminescent Colors of Potential Source Rocks

Sample Number	Lithology	Sample Name	Rock Type	Locality	UTM (E and N) or Latitude and Longitude		Rock Unit	Initial CL* Color	Final CL Color
1	Granite	4685	Plutonic	Gamble Lake, Cobequid Highlands, NS	437,371	5,037,129	Devonian–Carboniferous Pleasant Hills Pluton, Avalon Terrane	Bright-medium to medium blue	Medium to medium-dark blue
2	Granite	4689	Plutonic	Gamble Lake, Cobequid Highlands, NS	437,371	5,037,132	Devonian–Carboniferous Pleasant Hills Pluton, Avalon Terrane	Bright-medium to medium blue	Medium to medium-dark blue
3	Granite (with mylonitic areas)	4701	Plutonic	Southwest of Economy Lake, Cobequid Highlands, NS	433,539	5,034,590	Devonian–Carboniferous Pleasant Hills Pluton, Avalon Terrane	Bright-medium blue to medium-dark blue	Medium-dark blue to dark blue
4	Granite	3119	Plutonic	Chiganois River, Cobequid Highlands, NS	472,958	5,039,406	Neoproterozoic Frog Lake Pluton, Avalon Terrane	Bright-medium to medium blue	Medium to dark blue
5	Pegmatitic granite	4190	Plutonic	Frog Lake Quarry, Cobequid Highlands, NS	468,842	5,039,285	Neoproterozoic Frog Lake Pluton, Avalon Terrane	Medium blue to medium-dark blue	Dark blue
6	Microgranite	2109	Hypabyssal	Powerlines at Henry Brook, Cobequid Highlands, NS	396,098	5,038,378	Minor Carboniferous intrusions north of Parrsboro, Avalon Terrane	Phenocrysts: bright to bright-medium blue; quartz in matrix: medium-dark blue to dark blue	Phenocrysts: medium blue; quartz in matrix: dark blue to very dark blue
7	Undeformed pegmatitic hornblende gabbro	2649b	Plutonic	Frog Lake Quarry, Cobequid Highlands, NS	468,842	5,039,285	Neoproterozoic Frog Lake Pluton, Avalon Terrane	Medium to medium-dark blue	Dark blue
14	Aplite	9811	Vein	Beechville overpass, Highway 103, Halifax, NS	44 38.110 N	63 39.861 W	Cuts the South Mountain Batholith	Either bright to bright-medium blue or very weak luminescence	Either medium-dark blue or very weak luminescence
15	Aplite	9812	Vein	Beechville overpass, Highway 103, Halifax, NS	44 38.110 N	63 39.861 W	Cuts the South Mountain Batholith	Either bright to bright-medium blue or very weak luminescence	Either medium-dark blue or very weak luminescence
16	Aplite	9813	Vein	Beechville overpass, Highway 103, Halifax, NS	44 38.110 N	63 39.861 W	Cuts the South Mountain Batholith	Either bright to bright-medium blue or very weak luminescence	Either medium-dark blue or very weak luminescence

17	Quartz vein	9814	Vein	Kearney Lake Road, Halifax, NS	44 43.727 N	63 42.738 W	Cuts Meguma Supergroup metasediments	Bright blue	Medium to medium-dark blue
18	Quartz vein	9815	Vein	Highway 101, Upper Sackville, NS	44 48.755 N	63 46.171 W	Cuts Meguma Supergroup metasediments	Bright blue	Medium to medium-dark blue
19	Quartz vein	8237	Vein	Gerrish Mountain magnetite mine	421,770	5,028,385	Cuts Triassic North Mountain Basalt, NS	Either light-medium olive green brown or bright to medium blue	Either medium olive green brown or dark blue
20	Quartz vein	8242	Vein	Gerrish Mountain magnetite mine, Economy, NS	421,770	5,028,385	Cuts Triassic North Mountain Basalt, NS	Either light-medium olive green brown or bright to medium blue	Either medium olive green brown or dark blue
21	Quartz vein	8053A	Vein	Boyd Brook, near Bass River of Five Islands, NS	412,852	5,031,870	Cuts Horton Group, Avalon Terrane, NS	Either not visibly luminescent or dark blue	Either not visibly luminescent or dark blue
22	Quartz vein in metabasalt	9804	Low-grade metamorphic	Lynn Road, Five Islands, NS	45 26.557 N	64 06.772 W	Cuts Jeffers Group, Avalon Terrane, NS	Quartz is not visibly luminescent	Quartz is not visibly luminescent
23	Quartzite	HG30	Medium- to high-grade metamorphic	Quarry south of Folly Lake, Cobequid Highlands, NS	45 31.35 N	63 32.37 W	Gamble Brook Schist, Avalon Terrane, NS	Medium to dark blue	Dark blue to very dark blue
24	Quartzite adjacent to gabbro intrusion	4066	Medium- to high-grade metamorphic	Frog Lake Quarry, Cobequid Highlands, NS	468,842	5,039,285	Gamble Brook Schist, Avalon Terrane	Dark reddish blue	Very dark reddish blue
25	Vein quartz in metapelite	GL115	Vein quartz	Grand Lake, NL	~48.6488 N	~57.9702 W	Breeches Pond Formation, Dunnage Terrane, NL	Dark blue to very dark blue	Very dark blue or not luminescent
26	Slate	SH08	Low-grade metamorphic	Gore, Hants Co., NS	45 05.09 N	63 42.63 W	Halifax Group, Meguma Terrane, NS	Medium to dark blue or dark blue/brown	Medium-dark blue to dark blue or brown
27	Quartzite	SH10	Low-grade metamorphic	Beaverbank Road, Upper Rawdon, Hants Co., NS	45 02.02 N	63 43.27 W	Goldenville Group, Meguma Terrane, NS	Medium blue to dark blue or brown	Medium-dark blue to dark blue, or brown
28	Leucocratic gneiss	CL 32-6	Medium- to high-grade metamorphic	Cormacks Lake, central Newfoundland	~48.2868 N	~57.9077 W	Cormacks Lake Complex, Central Gneiss Complex, Dashwoods subzone, NL	Bright blue to bright-medium blue	Medium blue to medium-dark blue
29	Garnetiferous tonalitic gneiss	VO-86-113-2	Medium- to high-grade metamorphic	Western Brook Pond, Gros Morne, Newfoundland	~49.94415 N	~57.51091 W	Grenville granitoids, Long Range, NL	Bright blue	Medium to medium-dark blue

*CL = cathodoluminescent.