DEPARTMENT OF MINES AND TECHNICAL SURVEYS SHEET 21 $\frac{J}{9}$ (West Half) PRELIMINARY SERIES 66° 30′ 20' LEGEND 46°45′ 12a Map-units 1 to 14 appear on Map 19-1960, "Hayesville" Map-units 2,9 to 12, and 15 to 17 appear on Map 20-1960, BLISSFIELD "McNamee" CARBONIFEROUS PENNSYLVANIAN Grey to green and brown sandstone; minor conglomerate, red and green siltstone 2b 16 Hard buff siltstone, sandstone, grit, and conglomerate MISSISSIPPIAN AND/OR PENNSYLVANIAN 11 Red calcareous conglomerate, grit, and sandstone; minor green and buff conglomerate at top DEVONIAN (?) 13 14 13. Pink and grey, coarse-grained biotite quartz monzonite and granodiorite 14. Pink and grey medium- to coarse-grained biotite-muscovite quartz monzonite and fine-grained alaskite; 14a, includes minor 17 pink miarolitic alaskite DEVONIAN OR(?) OLDER Hornblende diorite; 12a, probably includes sedimentary and 12 volcanic rocks Day Brook MIDDLE AND/OR UPPER SILURIAN Grey and green-grey, fine- to coarse-grained quartzose greywacke, grey and dark grey slate; 11a, includes grit 15 ×0 11 Green and grey-green slate and fine-grained greywacke, maroon slate Valentine L. LOWER (?) AND MIDDLE SILURIAN Grey fine-grained greywacke, coarse-grained lithic greywacke, grey and dark grey slate; 9a, includes grey and dark grey greywacke, grit, and fine pebble conglomerate; and grey and dark grey slate 9 MIDDLE OR UPPER ORDOVICIAN 8 Black carbonaceous slate Light grey to green-grey, medium- to coarse-grained quartzite, slate, laminated fine-grained quartzite, siltstone, and slate; 7a, metamorphosed equivalents: quartzite, siltstone, and slate with ovoid chlorite porphyroblasts Thin-bedded red, green, and minor grey argillite, slate, and 6 Chert, commonly with manganiferous carbonate nodules; 6a, metamorphosed equivalents: dark maroon and dark grey laminated argillite and chert, hornfelsic argillite and recrystallized chert MIDDLE ORDOVICIAN Thin-bedded dark grey and black graphitic slate, argillite, and D 0 chert with many tiny irregular quartz veinlets; 5a, meta-morphosed equivalents: black argillite and fine-grained hornfels, recrystallized chert 17 3. Thin-bedded and laminated, grey, fine- to medium-grained quartzite and argillite; 3a, metamorphosed equivalents: thin-bedded grey quartzite and brown hornfels 4. Brown greywacke-hornfels, thin-bedded brown, grey, and white hornfels; 4a, includes grit- and conglomerate-hornfels Grey and dark grey greywacke and slate; Za, green andesite breccia with quartz and chert fragments; 2b, metamorphosed equivalents: brown and grey greywacke-hornfels, fine-grained brown hornfels, dark grey argillite Brown and grey fine-grained hornfels and dark green altered basic volcanic rock A. Grey fine-grained diorite sill
B. Pink, buff, and grey fine-grained trachyte(?) sill Dark grey-green fine- to coarse-grained diabase sill; found only in rocks on map-unit 6 Geological boundary (defined, approximate)..... Bedding, direction of top unknown (inclined, 11 Lineation, fold with plunge of axis 17 (horizontal, inclined)..... 17 Glacial striae Esker and associated gravel and sand Geology by W.H. Poole, 1959 Cartography by the Geological Survey of Canada, 1960 Approximate magnetic declination, 22° 54' West 17 MOTHEONE In response to public demand for earlier publication, Preliminary Series maps are issued in this simplified form and will be clearer to read if all or some of the map-units are hand-coloured 17 17 17 66°30′ PUBLISHED, 1960
COPIES OF THIS MAP MAY BE OBTAINED FROM THE 25 PRINTED BY THE SURVEYS AND MAPPING BRANCH 66°15′ DIRECTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA MAP 20-1960 LEGEND TO ACCOMPANY PAPER 60-15 ISLAND OF GEOLOGY GULF OF ST. LAWRENCE McNAMEE NORTHUMBERLAND AND YORK COUNTIES **NEW BRUNSWICK** County boundary.... Parish boundary..... Scale: One Inch to One Mile = Air photographs covering this area may be

obtained through the National Air Photographic Library, Topographical Survey, Ottawa

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