

EXPLANATION
MAP

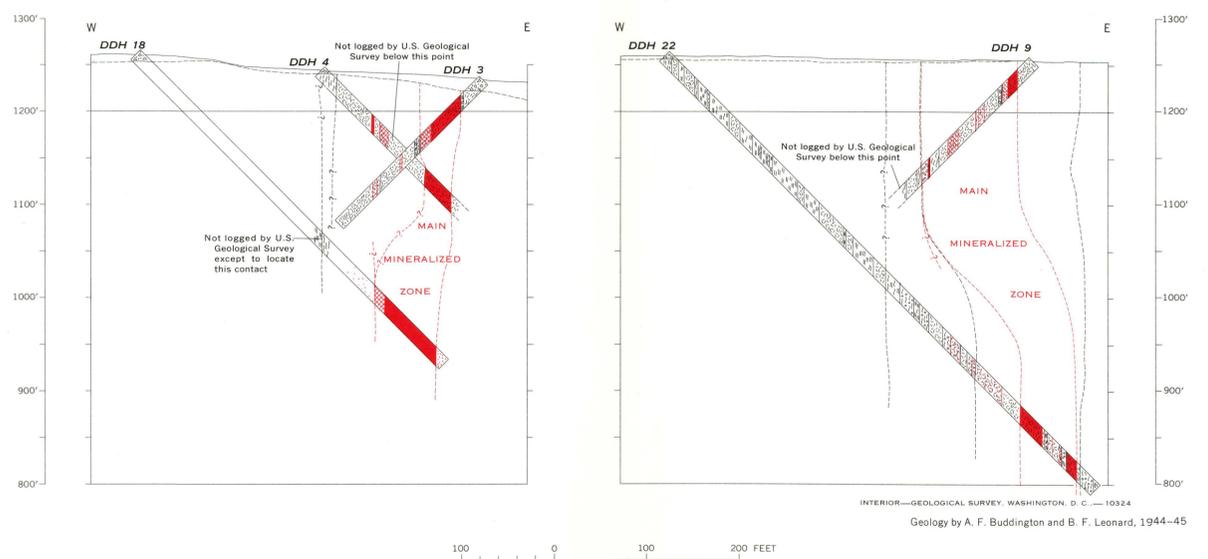
- Individual ore-bearing zones, true thickness 5 feet or more
Grade commonly 24-40 percent total Fe. Magnetite, hematite, or both minerals are present, generally accompanied by aggregates of quartz, potassic feldspar, spessartite, fluorite, barite, or combinations of these minerals.
 - Microcline granite and granite gneiss
Locally aplitic or pegmatitic, with sporadic relics of metasedimentary gneiss. Varietal minerals in the heterogeneous rock are sillimanite, biotite, a little garnet, or combinations of these minerals. Much of the material in and close to mineralized zones is partly replaced by quartz, potassic feldspar, spessartite, fluorite, and barite. Disseminated grains of iron oxides, and sporadic thin layers rich in iron oxides, are present.
 - Biotite gneiss, in part migmatitic, locally garnetiferous (msbg) or sillimanitic (msbs)
Contains sporadic thin layers of pyroxene gneiss, biotite-microcline granite gneiss, and granite pegmatite.
 - Pyroxene gneiss, in part migmatitic, locally with considerable brown biotite (mspb)
Contains sporadic thin layers of pyroxene-microcline granite gneiss, granite pegmatite, pyroxene skarn, biotite gneiss, and calcitic marble.
- Limits of main mineralized zone**
Weighted average grade 21.7 percent total Fe
Queried where inferred
- Concealed contact**
Horizontal projection of its subcrop, Queried where inferred
- Strike and dip of vertical foliation**
DDH 18 Elev 1260 (45°)
Showing horizontal projection, elevation, and inclination
- Diamond-drill hole**
DDH 14 Elev 1254 (45°)
Showing direction and inclination
- Diamond-drill holes logged in whole or in part by U.S. Geological Survey**
- Dip-needle isoclinal contours**
Contour interval 10°
- Grid system, position and orientation of drill holes, and magnetic map from M. A. Hanna Co.
Datum is mean sea level, as taken by M. A. Hanna Co.

SECTIONS

- Ore
Grade commonly 24-40 percent total Fe. Magnetite, hematite, or both minerals are present, generally accompanied by aggregates of quartz, potassic feldspar, spessartite, fluorite, barite, or combinations of these materials.
 - Subore
Grade commonly about 12-20 percent total Fe. Iron oxides may or may not be accompanied by gangue minerals listed above.
 - Mineralized rock
Grade commonly about 8-12 percent total Fe. Iron oxides usually replace the country rock directly. Many weakly mineralized zones omitted.
 - Granite pegmatite
Locally syenitic, generally slightly contaminated.
 - Microcline granite and granite gneiss
Locally aplitic or pegmatitic, with sporadic relics of metasedimentary gneiss. Varietal minerals in the heterogeneous rock are sillimanite, biotite, a little garnet, or combinations of these minerals. Much of the material in and close to mineralized zones is partly replaced by quartz, potassic feldspar, spessartite, fluorite, and barite. Disseminated grains of iron oxides, and sporadic thin layers rich in iron oxides are present.
 - Biotite gneiss, in part migmatitic
Contains sporadic thin layers of biotite-microcline granite gneiss and granite pegmatite.
 - Garnet-biotite gneiss
Locally slightly sillimanitic.
 - Sillimanite-biotite gneiss
Locally slightly garnetiferous.
 - Biotite gneiss
Contains sporadic thin layers of pyroxene gneiss.
 - Pyroxene gneiss, in part migmatitic
Contains sporadic thin layers of pyroxene-microcline granite gneiss, granite pegmatite, and pyroxene skarn.
 - Pyroxene gneiss
Contains sporadic layers of calcitic marble.
 - Pyroxene gneiss
Locally biotitic, or pyroxene gneiss containing sporadic layers of biotite gneiss.
- Inferred limits of main mineralized zone**
Alternative correlation where queried
- Inferred contact**

Core-foliation angles were not measured; core had already been split in 1944. Inferred angles shown indicate the predominant vertical dip.

Topographic profiles and top of bedrock are inferred for all sections.



BEDROCK GEOLOGIC AND MAGNETIC MAP AND GEOLOGIC SECTIONS, PARISH DEPOSIT, WEST-CENTRAL RECTANGLE
STARK QUADRANGLE, ST. LAWRENCE COUNTY, NEW YORK