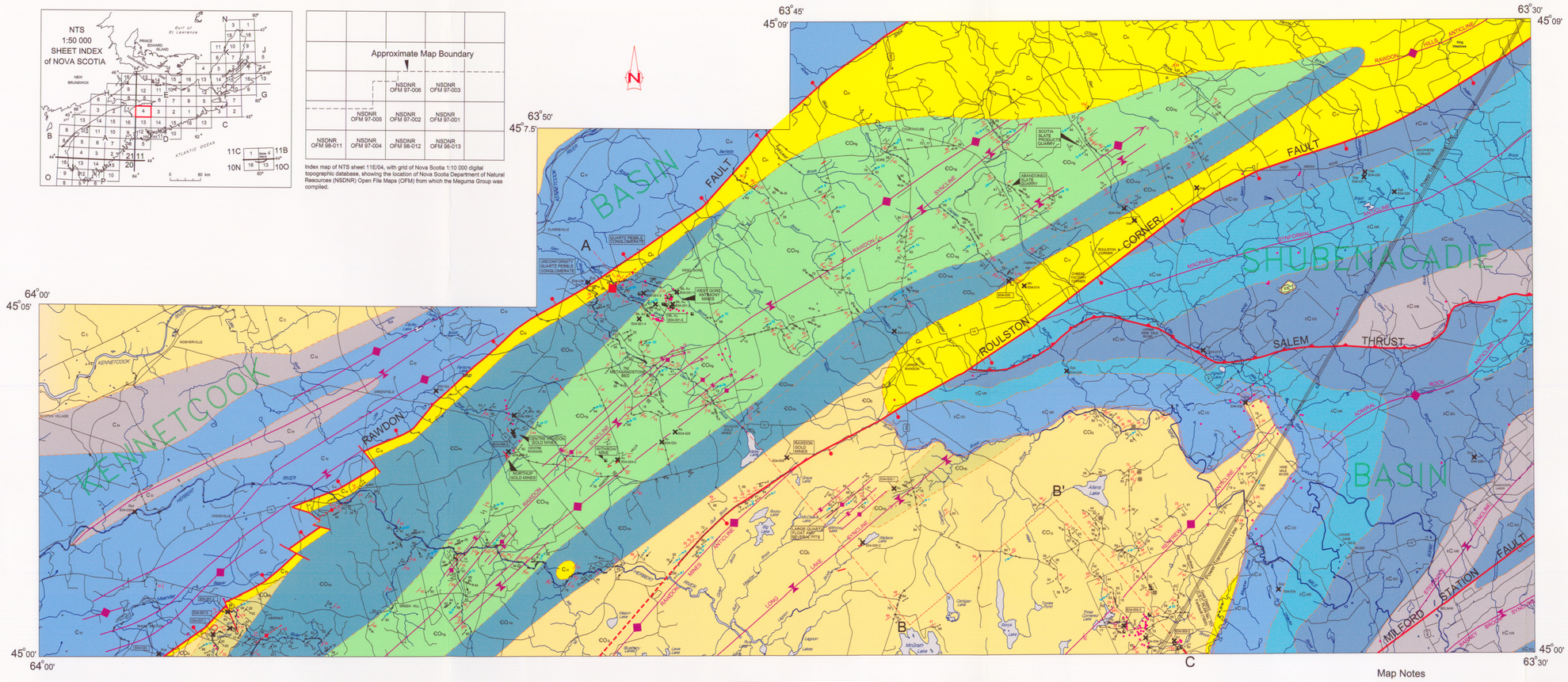
Index map of NTS sheet 11E/04, with grid of Nova Scotia 1:10 000 digital topographic database, showing the location of Nova Scotia Department of Natural Resources (NSDNR) Open File Maps (OFM) from which the Meguma Group was compiled.



Nova Scotia Department of Natural Resources
Minerals and Energy Branch

Map ME 2001 - 1

Geological map of the Meguma Group in the Rawdon Area
(Part of NTS 11E/04)
Hants County
Nova Scotia

R. J. Horne, L. A. MacDonald and M.S. King

Scale 1 : 50 000

km 1 0 1 2 3 4 km

3° Modified Transverse Mercator (MTM) projection, Central Meridan 64°30' West
AST 1977 Datum

Halifax, Nova Scotia
2001

NOVA SCOTIA
Natural Resources

Legend

KENNETCOOK BASIN (after Stevenson, 1959; Moore, 1989a, b, c)

SHUBENACADIE BASIN (After Giles and Boehner, 1982)

CRETACEOUS

εK clay, sand, silt and lignite

CARBONIFEROUS

CUMBERLAND GROUP

Cc undivided sandstone and mudrocks

MABOU (CANSO) GROUP

Cu undivided mudrocks and evaporites

εCWB *WATERING BROOK FORMATION* undivided mudrocks and evaporites

WINDSOR GROUP

Cw undivided evaporites, carbonates and mudrocks

εCGO *GREEN OAKS FORMATION* undivided mudrocks, carbonates and evaporites

~~~~~~ disconformity

εCMR *MACDONALD ROAD FORMATION* undivided evaporites, carbonates and mudrocks

~~~~~~ disconformity

εCCC *CARROLLS CORNER FORMATION* undivided anhydrite and gypsum

εCGR/MC *GAYS RIVER/MACUMBER FORMATION* undivided limestone and dolostone

HORTON GROUP

CH undivided conglomerate, sandstone, mudrocks

εCCB *COLDSTREAM FORMATION* undivided conglomerate, sandstone and mudrocks

angular unconformity

CAMBRIAN-ORDOVICIAN

MEGUMA GROUP

HALIFAX FORMATION

COHg Glen Brook unit: pale green and grey, banded, well-cleaved slate-metasiltstone; homogeneous unit with only very minor metasandstone near the base.

COHc Cunard unit: predominantly black, finely laminated slate with thin interbedded, planar to cross-bedded metasiltstone and metasandstone; generally sulphide-rich with significant coarse pyrite cubes and pyrrhotite; pyrrhotite occurs along cleavage.

COHcu Cunard subunit a: predominantly black, finely laminated slate with thin, interbedded, planar to crossbedded metasiltstone and metasandstone; generally only minor sulphide minerals.

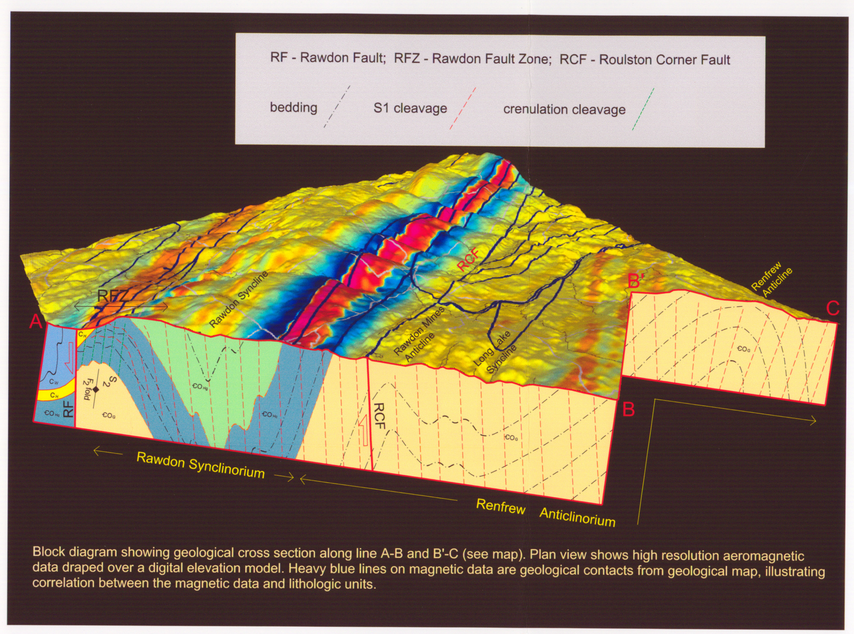
COHb Beaverbank unit: predominantly finely laminated, well cleaved slate and metasiltstone with minor metasandstone. Locally includes orange (carbonate?) laminations, manganese concretions, coticule layers and sulphide minerals.

GOLDENVILLE FORMATION

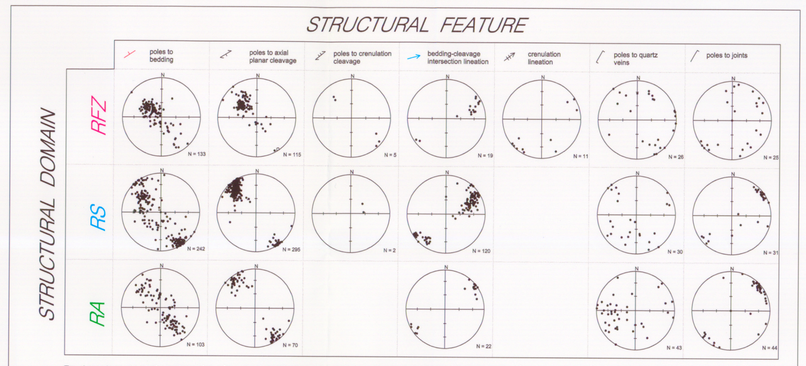
COs undivided metasandstone and minor slate

Symbols

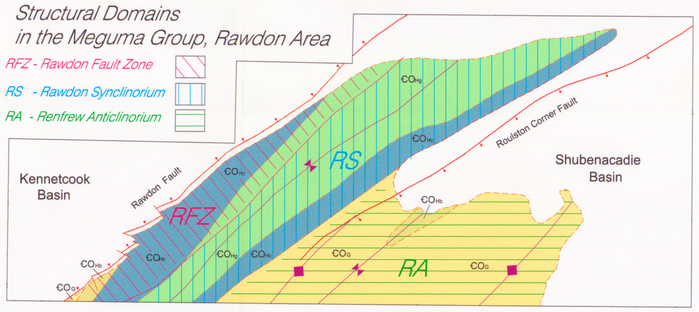
Outcrop, stream section
Bedding (inclined, vertical, overturned, tops unknown)
Cleavage (inclined, vertical)
Bedding-cleavage intersection lineation
Kink (sinistral, dextral, unknown, vertical; arrow=hinge)
Shear (normal, reverse, unknown)
Crenulation cleavage
Crenulation lineation
Minor s-fold hinge (1st generation, 2nd generation)
Parasitic F_3 fold (m-fold, s-fold, z-fold)
Trend and plunge of boudinage axis
Stretching lineation
Slickenstria
Axial plane of second generation fold
Vein (inclined, vertical)
Joint (inclined, vertical)
Cataclastic zone
Adit
Shaft
Trench
Quarry (active, abandoned)
Glacial striæ (ice flow direction unknown)
Mineral occurrence
(Number from Nova Scotia Department of Natural Resources mineral occurrence database)
Diamond-drill hole
Trend and plunge of fold hinge
Trace of F_3 anticline (approximate)
Trace of F_3 syncline (approximate)
Trace of F_2 anticline (approximate)
Geological contact (approximate or assumed)
Geological contact (gradational)
Steep fault (approximate. assumed), solid dot on downthrow side
Thrust fault (approximate), teeth in direction of dip
Quartz vein (from Faribault, 1908; Fletcher and Faribault, 1905, 1909)
Cross-section line A — — B



Block diagram showing geological cross section along line A-B and B'-C (see map). Plan view shows high resolution aeromagnetic data draped over a digital elevation model. Heavy blue lines on magnetic data are geological contacts from geological map, illustrating correlation between the magnetic data and lithologic units.



Equal area lower hemisphere stereoplots of structural data for three structural domains (see below) in the Meguma Group.



Map Notes

Geology of the Meguma Group compiled from Horne (1997a; 1997b; 1997c; 1997d; 1997e; 1997f; 1998) and Horne and Fox (1998a; 1998b). Source maps include additional geological information for the Meguma Group and dimond-drill hole numbers.

Geology of the Shubenacadie Basin from Giles and Boehner (1982).

Geology of the Kennetcook Basin modified from Moore (1989a; 1989b; 1989c) by R. Boehner.

Base data derived from the Nova Scotia Topographic Database (NSTDB). Copyright Her Majesty the Queen in Right of the Province of Nova Scotia.

Geological symbols generated by Fieldlog V3.0 (B. Brodaric, Geological Survey of Canada). Note: symbol orientation relative to grid north; approximately 1° east.
Approximate magnetic declination, 19° 25'

Locations of mineral occurrences and diamond-drill holes were adjusted from database location to locations indicated in source.

Data entry and field assistance: Steve King, Darcy Baker, Brian Creaser, Gayle Chapman, Lisa MacDonald, Paul Teniere, Pradeep Bhatnagar.

Digital Elevation Model generated from 1:10 000 base maps (by M.S. King).

Aeromagnetic data after King (1997).

Disclaimer: This map is a compilation of existing geological information, with some interpretation by the compilers. The Nova Scotia Department of Natural Resources does not assume any liability for errors that may occur. Users should verify critical information.

Partial funding provided by the Canada-Nova Scotia Cooperation Agreement on Mineral Development, 1992-1995.

Sources of Information

Faribault, E.R. 1900: Plan and sections, Renfrew Gold District, Hants Co. Nova Scotia. Geological Survey of Canada Map 701, scale 500 feet to the inch.
Faribault, E.R. 1908: Elmsdale sheet; Canada Department of Mines, Geological Survey Branch, Map 1005, scale 1:63 360.
Fletcher, H. and Faribault, E.R. 1905: Kennetcook sheet; Geological Survey of Canada, Map 878, scale 1:63 360.
Fletcher, H. and Faribault, E.R. 1909: Windsor sheet; Canada Department of Mines, Geological Survey Branch, Map 1037, scale 1:63 360.
Giles, P.S. and Boehner, R.C. 1982: Geological map of the Shubenacadie and Musquodoboit basins, central Nova Scotia; NSDME Map 82-4, scale 1:50 000.
Horne, R.J. 1997a: Geology of Upper Nine Mile River; NSDNR OFM 97-001, scale 1:10 000.
Horne, R.J. 1997b: Geology of Upper Rawdon; NSDNR OFM 97-002, scale 1:10 000.
Horne, R.J. 1997c: Geology of East Gore; NSDNR OFM 97-003, scale 1:10 000.
Horne, R.J. 1997d: Geology of Greenhill; NSDNR OFM 97-004, scale 1:10 000.
Horne, R.J. 1997e: Geology of Greenfield; NSDNR OFM 97-005, scale 1:10 000.
Horne, R.J. 1997f: Geology of Gore; NSDNR OFM 97-006, scale 1:10 000.
Horne, R.J. 1998: Geology of Woodville; NSDNR OFM 98-011, scale 1:10 000.
Horne, R.J. and Fox, D. 1998a: Geology of Bull Meadow Mountain; NSDNR OFM 98-012, scale 1:10 000.
Horne, R.J. and Fox, D. 1998b: Geology of Renfrew; NSDNR OFM 98-013, scale 1:10 000.
King, M.S. 1997: Enhanced aeromagnetic digital data, NTS 11E/04, Kennetcook; NSDNR OFM 97-016, scale 1:50 000.
Moore, R.G. 1989a: West Gore quadrangle; NSDME OFM 89-002, scale 1:10 000.
Moore, R.G. 1989b: Newport Corner quadrangle; NSDME OFM 89-3, scale 1:10 000.
Moore, R.G. 1989c: Centre Rawdon quadrangle; NSDME OFM 89-4, scale 1:10 000.
Stevenson, I.M. 1959: Geology of Kennetcook: Geological Survey of Canada Map 1075A, scale 1: 63 360.

NSDME - Nova Scotia Department of Mines and Energy
NSDNR - Nova Scotia Department of Natural Resources
OFM - Open File Map