



THE DECLINATION OF THE COMPASS NEEDLE 1959

Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF MINES AND TECHNICAL SURVEYS, 1959, from a 1:50,000 scale map of 1951 to 1954.

Transverse Mercator Projection

Contour Interval 100 Feet below 1500 Feet
500 Feet above 1500 Feet
Elevations in Feet above Mean Sea Level
North American Datum 1927

Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa, at 25 cents each.

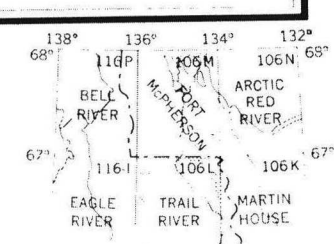
REFERENCE

Provincial boundary
Trail

REFERENCE

Stream
intermittent or dry
Stream in dry river bed

TRAIL RIVER
YUKON-NORTHWEST TERRITORIES



1041NC

106 L

fl. 2

A14133-14

020, 20° SE

Sandstone, non-calcareous, fine grained, massive, platy to flaggy, rusty weathering, also in angular chunks. Locally dark grey, fissile, argillaceous siltstone layers seen in some. No fossils, 1041NC1. Note current lineations on some bedding surfaces and sparse medium dark grey limestone concretions up to 10" diameter.

1042NC

106 L

f1. 2

A14133-6

050°, 45° NW (at Section 106L10)

Limestone, dark grey, fine crystalline, massive, nodular weathering, weathering to a mottled medium and light grey (spec.). This is the topmost bed of the Ollenellus-bearing limestone here in the core of Richardson Mtns. Actual contact is obscured by slope wash from the limestone but abundant dark grey, splintery shale occurs in the wash. Approximately 10' stratigraphically above the limestone, the shale is only slightly obscured by wash. The hill to the west is underlain by the brown, platy weathering, fine grained sandstone.

1059NC

106L

f1. 2

A14133-21

060, 05° SE

Sandstone, quartz, chert, light grey, fine grained to coarse grained, ripple marked in beds 0.1' to 3' thick, pale orange weathering; gently undulating with abundant angular debris as a result of a fresh slide. Grouve casting noted on many bedding surfaces. (spec. x 3). No macrofossils evident. Some beds very coarse grained to conglomeratic. Abundant fragments of plant axes observed on some bedding but none appear diagnostic. Could this be Mississippian? probably - c.f. rocks seen at 1062NC.

1060NC

106 L

f1. 4A

A13754-172

beds approx. flat

Shale, silty, dark grey, massive (1060NC1MF) with occasional interbed of medium greenish grey, fine grained, chert, quartz sandstone up to 0.2' thick (spec.). Many large concretions, some up to 3' maximum observed dimension, light olive grey weathering and occasionally with chunks of silicified tree trunk (1060NC1). Note black pitchy material with conchoidal fracture in same of the petrified wood (1060NC2). Outcrop is deeply weathered and badly slumped and would appear to have poor engineering properties for road or pipeline construction.

1062NC

106L

fl. 6

A13753-21

beds flat

Sandstone, conglomeratic, quartz, chert, light grey, coarse- very coarse grained in beds 0.2' to 3' thick weathering, into wavy plates, pale yellowish brown weathering, with occasional intervals containing dark grey shale chips and pebbles (2 spec.). Occasional interbed up to 0.3' thick of dark grey shale (1062NC1MF). Large ironstone concretions up to 0.5' maximum observed dimension. Many poor plant impressions but some as well preserved as those collected by O.L. Hughes. (1062NC1F) Mississippian.

1108NC

106 L

f1. 3A

A14133-101

no attitude - felsenmeer

Cambrian

Siltstone, calcareous, quartz, commonly laminated, medium and medium dark grey, the latter commonly standing out in relict weathered plates; pale yellowish brown weathering. Some pieces of very coarse grained sandstone also noted (2 spec.). This is the Cambrian clastic unit overlying the Lower Cambrian limestone and caps all the hills seen immediately to the north of this point.

1109NC

106 L

fl. 4A

A13754-161

no attitude - felsenmeer

Limestone, quartzose, brecciated, with disseminated galena (?), occurring as badly frost-heaved felsenmeer on top of the hill. Specimen.

1110NC

106 L

f1. 3A

A14133-113

325°, 20° NE

Interbedded shale and limestone:

shale, dark grey, silty, in beds 0.1' to 3' thick, with interbeds of pale yellowish grey weathering, dark grey, coarse crystalline biogenic limestone containing two-holed crinoids (1110NC + 1110NC1MF, C-27192 : DEm) in beds 0.1' to 1.5' thick, medium cross-bedded and containing unsorted subangular to subrounded clasts of black chert, pale yellowish grey siltstone, and black shale. Lower Devonian Prong Ck. ? No graptolites. Color photo VI-15

1111NC

106 L

f1. 3A

A14133-114

005°, 65° SE

Shale, medium light grey, commonly deeply weathered, with thin partings of yellow weathering bentonite (1111NC1MF). Interbeds are resistant, medium light grey, non-calcareous, quartzite, rusty weathering and with one impression of a plant axis seen in float. Spec. 1111NC1 of the quartzite. The quartzite is commonly in beds 0.1' to 1' thick and occurs in clusters of beds with the shale interbeds. Albian?

1112NC

106 L

f1. 4A

A13754-169

350°, 15° NE

Shales, medium light grey, rusty weathering with thin yellow partings of bentonite (1112NC1MF) with many pyrite nodules up to 1' maximum observed dimension, and with thin interbeds of faintly laminated medium and dark grey, non-calcareous, very fine grained sandstone, yellowish brown weathering.

1112NC1.

1112NC2 from ripple-marked quartz chert sandstone, suggestive of Mississippian.

1113NC

106 L

fl. 2

A14133-17

no attitude - felsenmeer

Sandstone, non-calcareous, medium grey, fine grained, weathering into brown plates 0.05' to 0.1' thick, grooved and load-casted, with micaceous (?) mineral glittering on some bedding surfaces. (1113NC1). Although not in place, there is abundant medium dark grey chippy shale in the scree suggesting a sequence of interbedded sandstone and shale. Imperial Formation.

1114NC

106L

fl. 4A

A13754-158

350°, 05° SW

Interbedded limestone and shale,

Limestone (65%) silty, medium grey, fine grained, well bedded and jointed, in beds 0.1' to 1' thick, weathering to a laminated pale brown and medium dark grey (1114NC1). Interbeds are shale, variably calcareous, dark grey to black, rusty weathering, in beds 0.1' to 0.6' thick (1114NC2). No macrofossils of any kind recovered. This should be part of the Road River Formation, perhaps near the base and suggestive of transitional lithologies between the unnamed brown clastics and the typical argillaceous limestone and chert of the Road River.

86NC

106 L

fl. 4A A13745-155

approx. N15° E, 15° SE

to Limestone, locally pelletal, medium grey, fine-crystalline, massive
weathering medium grey, mottled with yellowish orange. This is presum-
ably the Caribou. Note fresh granite erratics Cambrian?

87NC (85PF)

106 L

f1.4A Al375-156

approx. N30°E, 30° NW
(may be slumped a little)

Sandstone, limonitic, slightly calcareous, medium dark grey, medium-grained massive weathering into yellowish brown plates 0.01 to 0.3 feet thick. No fossils evident, but overlies medium grey unit with same platy weathering characteristic on next knob immediately to the south. Believe both of these units immediately overlie the Caribou of 86NC. Cambrian?

33NC (36PF)

106L

fl. 4A Al2745-158

aprox. N70°E, 15° NW

Limestone, dark grey, very fine-crystalline, in beds 0.5 feet to 1.0 feet thick, weathering to yellowish grey plates 0.05 feet to 0.1 feet thick; locally the limestone is medium-crystalline or medium-grained c (?) with possible clastic texture. No fossils. Ordovician?

89NC (87PF)

106L

fl. 4A* A13754-153

N20°W, 15° NE

Limestone, dark grey, very fine-crystalline, in beds 0.5 to 1.0 feet thick, weathering into yellowish grey and medium grey plates 0.05 feet to 0.1 feet thick. Lithology as in 88NC. Still no fossils. Fresh granite cobbles here. Ordovician?

90NC

106 L

Fl. 4A'

A12754-159

- Ordovician? limestone skeletal, medium light grey, massive (N05°W, 20° NE), weathering yellowish grey and forming a resistant capping to the hill (thickness therefore greater than 300 feet) Sparse trilobite fragments (Price: 33Pf1,2). Angular conformity
- 12' e Limestone pelletoid, dark grey, massive, weathering brownish grey faintly striped with medium grey (N30°W, 60° NE) 33PF3
- 12' Conglomerate, calcareous, massive, with subangular to subrounded pebbles of black and greenish grey chert, and white quartzite in gradational contact with unit below (33PF5)
- 140' Siltstone, and very fine grained sandstone, medium dark grey, yellowish brown weathering; weathering into platy fragments 0.1 feet plus or minus thick. (33Pf4)
- Unconformity
- Precambrian phyllite, greyish green, highly contorted and injected with pink feldspar. This must be the rock referred to by Perry near the headwaters of Caribou River. (33PF6.7)

92NC

106 L

fl. 4A A13754-161

No attitude

Siltstone, non-calcareous, laminated (color) dark grey, light grey and brownish grey; weathering into rusty brown plates 0.05 feet to 0.1 feet thick. No fossils but presume this to be the brown siltstone unit of

37NC. Granite ^{erratics}. Cambrian?

space

95NC (93PF)

106 L

fl. 2A A14133-112

N⁰⁰°E. 45° SE

Chert, black highly brecciated with the fractures mineralized with white quartz: in beds 0.1 feet to 2 feet thick locally with thin laminated interbeds of dark, brownish grey siltstone with black chert nodules and stringers: beds contorted and presumed face of the type Road River formation. Immediately upstream is massive, contorted chert breccia, with interstices filled with pale yellowish grey weathering, white quartz. Overall hue of outcrop is yellowish grey (Spec). Approx-106 feet stratigraphically above the black chert mentioned first: N05°E, 25° SE are siltstones, black platy weathering, with black chert interbeds up to 1.0 feet thick.

assay?

96NC

106 L

fl. 3A A14133-112

e Limestone, skeletal, medium grey, in beds 0.5 to 2 feet thick with scattered subangular pebbles of dark grey chert and lenses of silicified concentrations of organic debris, including solitary corals, brachiopods, crinoid columnals (94PF2F). Unit immediately overlies the Silurian? graptolite shales. Fresh granite erratics.

97NC

106 L

fl. 3 A

A14133-114

No attitude

Beds appear to dip into hill (i.e. eastwards) at approximately 10°. Siltstone limonitic, non-calcareous, olive grey, weathering into greenish grey plates 0.1 feet to 0.2 feet thick. Granite (fresh) erratics.

98NC

106 L

fl. 3A A4133-116

"Tuttle sandstone": conglomerate, mostly loosely consolidated with green and light grey quartzite and chert, and black chert pebbles, subangular to subrounded up to 1.5" maximum dimension. Locally contains plants stems 96PF1F. Fresh granite erratics. *Lepidodendropsis* - characteristically Mississippian GSC Loc 6606 Rept. Fl-12-1964-WAP
See GSC Paper 66-19, p. 15.

99NC (97PF)

106 L

fl. 22 AL4133-20

N05°W. 60° NE

Sandstone, limonitic slightly calcareous, medium grey, fine-grained, massive. weathering into sheets and blocks 0.1 to 1.0 feet thick, badly frost heaved.

Underlain by nearly 100 feet of covered interval with local occurrences of flaky to earthy weathering black siltstone

⊙ This in turn underlain by massive conglomerate forming the next resistant ridge immediately to the west - weathers into plates and sheets 0.1 to 2.0 thick and consists of subrounded to subangular chert pebbles up to 2 inches maximum dimension. Fresh granite erratics.

101NC

106 L

fl. 1A

A15773-77

Beds approximately flat

Siltstone, slightly calcareous, finely laminated medium and light grey, yellowish brown weathering, in plates 0.05 feet to 0.1 feet thick.

113NC

106 L

fl. 3A A14133-110

N30°W, 30° SW

Top of Cambrian siltstone unit -- appears like a gradational contact with Ordovician-Silurian Road River formation. The shales in the Cambrian are not limey; the Ordovician is basically argillaceous limestone; buff grey talus in the Cambria, light grey in the Road River.

114NC

106 L

fl. 2 A14133-16

N23°E 60° SE

Sandstone, non-calcareous, medium grey and pale yellowish grey, fine-grained, massive, weathering into sheets and blocks 0.1 to 1.0 feet thick; one bed of chert and quartzite pebble conglomerate massive, strongly frost heaved; with pebbles subangular to subrounded, possibly with some feldspar (?) well consolidated (unlike the Tuttle) and light grey on the fresh surface.

115NC

106 L

f1.2

A14133-19

N00°N, 25° E

"Tuttle" conglomerate - loosely consolidated chert and quartzite pebble conglomerate, typically orange weathering, thick bedded and locally weathering into plates 0.1 feet to 0.5 feet.