Catalogue Number	Fossil	Age	Easting, Northing (NAD83)	Report
C-029996	spores	Lower Devonian	416969, 7370510	WWB 1974
C-029998	spores	Lower Devonian	430059, 7366250	WWB 1974
C-432278	spores	Famennian	423982, 7365437	JU-2006-06
C-432281	spores	Not determined	417856, 7349455	JU-2006-06
C-432282	spores	Not determined	418178, 7349925	JU-2006-06
C-432283	spores	Visean	418558, 7350230	JU-2006-06
C-432285	spores	Visean	422464, 7358004	JU-2006-06
C-432286	spores	Visean	422395, 7359349	JU-2006-06
C-432288	spores	Famennian	423969, 7364760	JU-2006-06
C-486312	spores	Tournaisian	429810,7365235	DOLBY-2011
C-486351	spores	Famennian	416862, 7373934	DOLBY-2011
C-486426	spores	Visean	413587, 7365266	DOLBY-2011
C-491813	spores	Visean	422581, 7359150	DOLBY-2011
C-046794	spores	Barren	423098, 7362270	FI-7-1976-DCM
C-092524	spores	Strunian	423959, 7364730	FI-3-1983-DCM
C-092525	spores	Early to middle Visean	422519,7359120	JU-3-1982
V-000389	conodonts	Visean	417825, 7349449	20-MJO-2009

Table 1. Fossil Localities.

UWID	FULL NAME	SPUD DATE	TD(m)	SURFACE LOCATION EASTING, NORTHING (NAD83)
300N056630136450	S. TUTTLE YT N -05	1965-02-18	3413.4	420742, 7367186

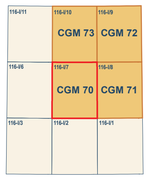
Table 2. Wells Table.

Abstract

This map is dominated by a single broad structure, the Tuttle anticline, developed in shale and coarse clastic rocks of the uppermost Imperial and Tuttle formations and Ford Lake Shale. A limited expanse of Hart River Formation is preserved in the southwest. Biostratigraphic ages vary from Famennian (Late Devonian) in the Imperial Formation in the north, to Viséan or Serpukhovian (Early Carboniferous) in the Hart River Formation in the southwest. Similar to the adjacent Mount Joyal map area to the north, the sandstone and conglomerate of the Tuttle Formation display rapid lateral variations in thickness and facies. This is reflected in the delineation of four mappable lithofacies with no specific stratigraphic order. Although poor exposure precludes a definitive explanation, a channellized depositional system is inferred. The trace of the Tuttle anticline deflects abruptly eastward in the map area. The fold axis appears to be localized where both the lowest and highest thick sandstone-dominated units of the Tuttle Formation thin abruptly eastward. At depth, the Tuttle anticline is poorly resolved in a short seismic reflection profile. However, farther north, seismic images show that the anticline is accommodated at the level of the Ogilvie Formation (limestone) by steep reverse faults.

Résumé

La présente carte porte l'empreinte prédominante d'une seule structure de grande envergure, l'anticlinal de Tuttle, qui s'est formée dans le shale et les roches détritiques à grain grossier de la partie sommitale de la Formation d'Imperial, de la Formation de Tuttle et du Shale de Ford Lake. Une étendue limitée de la Formation de Hart River est conservée au sud-ouest. Les âges biostratigraphiques varient du Famennien (Dévonien tardif) dans la Formation d'Imperial, au nord, au Viséen ou au Serpukhovien (Carbonifère précoce) dans la Formation de Hart River, au sud-ouest. De façon semblable à ce que l'on peut observer dans la région cartographique adjacente de Mount Joyal au nord, les grès et conglomérats de la Formation de Tuttle affichent des variations rapides d'épaisseur et de faciès latéralement. Ceci est reflété par la délimitation sur carte de quatre lithofaciès sans ordre stratigraphique particulier. Bien que le peu d'affleurements ne permette de l'affirmer sans ambiguïté, on croit qu'il s'agit d'un système sédimentaire chenalisé. La trace de l'anticlinal de Tuttle s'incurve abruptement vers l'est au sein de la région cartographique. L'axe de pli semble se situer là où la plus basse et la plus haute des épaisses unités à prédominance gréseuse de la Formation de Tuttle s'amincissent abruptement vers l'est. En profondeur, l'anticlinal de Tuttle est mal défini dans une courte coupe de sismique-réflexion. Toutefois, plus au nord, l'imagerie sismique montre que l'arrangement de l'anticlinal au niveau de la Formation Ogilvie (calcaire) est assuré par des failles inverses fortement inclinées.



National Topographic System reference and Index to adjoining published Geological Survey of Canada maps

Cover illustration
Aerial view southwestward toward the Dempster Highway's Eagle River bridge (foreground). Near this historic site, the famed Mad Trapper of Rat River, Albert Johnson, was killed in February 1932, after eluding capture for more than a month. Beyond the highway is an abandoned quarry formerly used for roadbed aggregate. On the skyline is a long ridge underlain by sandstone of the Tuttle Formation. Rectangular light patch in the distance marks the location of the Socony Mobil WM S.Tuttle YT N-05 exploration well, completed in July 1965 at a total depth of 3513 m. Photograph by L.S. Lane, July 2009. 2012-149

Catalogue No. M183-1/70-2012E-PDF
ISBN 978-1-100-20274-7
doi:10.4095/290065

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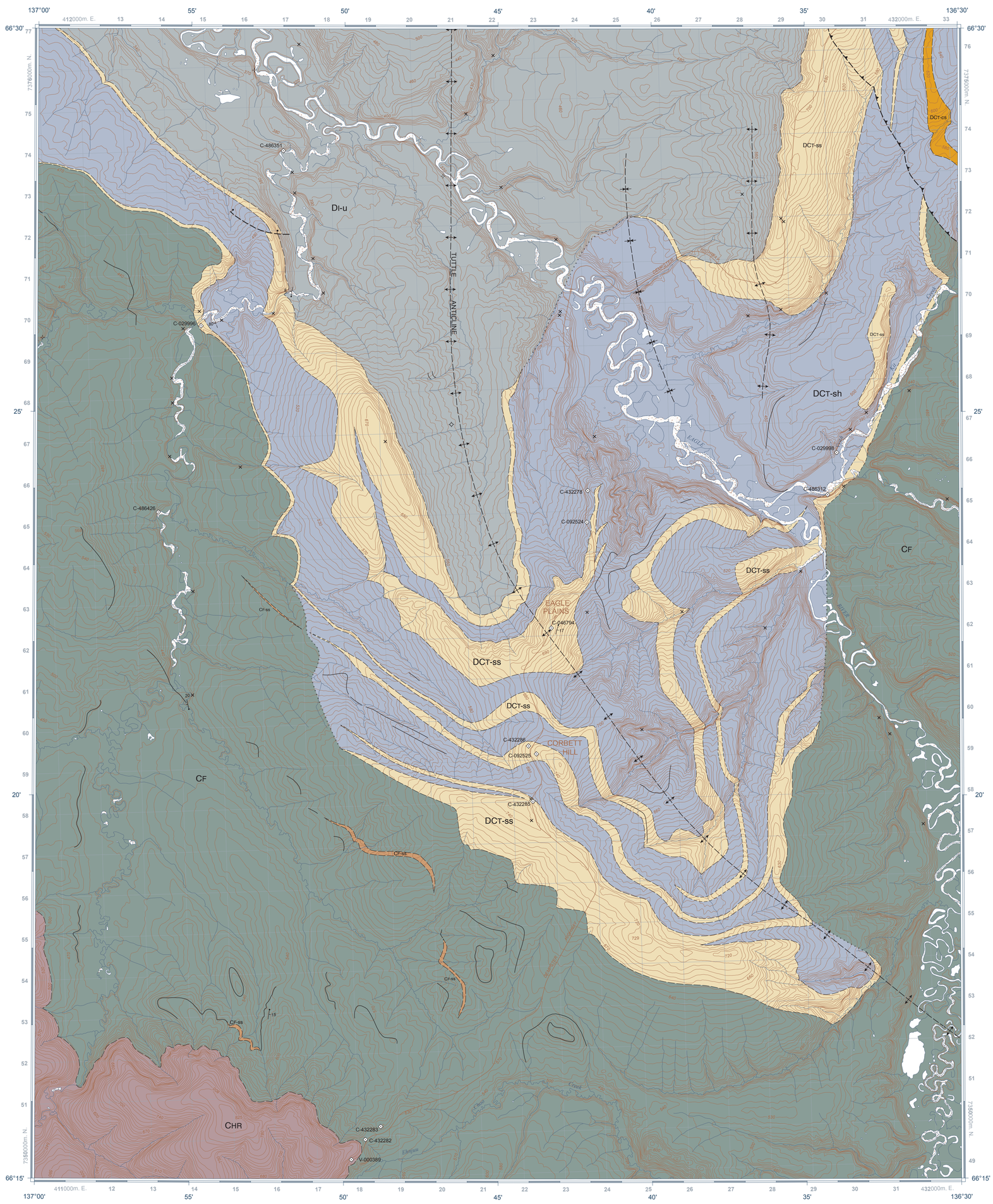
CANADIAN GEOSCIENCE MAP 70
GEOLOGY
CORBETT HILL
Yukon
1:50 000



CARBONIFEROUS

CHR — **Hart River Formation:** Limestone; dolostone; chert; brown-weathering; marine. May include Canol Formation locality.

Ford Lake Shale

CF — **Shale:** calcareous, pyritic; marine. May be Upper Devonian in part.

CF-ss — Sandstone rib.

DEVONIAN AND CARBONIFEROUS

Tuttle Formation

DCT-sh — **Shale unit:** Shale-dominated lithofacies.

DCT-ss — **Sandstone unit:** Sandstone-dominated lithofacies.

DCT-cs — **Sandstone and conglomerate unit:** Sandstone and conglomerate-dominated lithofacies.

DEVONIAN

Imperial Formation

DI-u — **Upper member:** Shale, dark grey laminated; weathers medium grey; siltstone, dark grey; minor sandstone, pyritic.

Contacts
Approximate
Inferred

Faults
Normal fault, approximate
Thrust fault, approximate

Folds
Anticline, upright, approximate
Syncline, upright, approximate

Traces
Marker bed

Geological Unit Construct
Nomenclature change

Station
Station

Bedding
Horizontal, estimated remotely
Upright, measured at station
Upright, estimated remotely

Fossil Locality
C-029996 Fossil

Well
Petroleum well, dry and abandoned

Recommended citation
Lane, L.S., 2013, Geology, Corbett Hill, Yukon; Geological Survey of Canada, Canadian Geoscience Map 70 (preliminary), scale 1:50 000. doi:10.4095/290065

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Canadian Geoscience Maps

Canada

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Geology by L.S. Lane in 2011–2012, based on new mapping by L.S. Lane in 2009 and 2010; evaluation of archival field data and fossil localities from Operation Porcupine (1962–1976); new palynology by G. Dolby (2011); interpretation of public domain seismic reflection data; and analysis of air photos and satellite imagery (2008–2012)

Geomatics and cartography by A. Farineau, L. Landon-Roy, and L. Macdonald

Initiative of the Geological Survey of Canada, conducted under the auspices of the Yukon Sedimentary Basins project as part of Natural Resources Canada's Geo-mapping for Energy and Minerals (GEM) program.

Map projection Universal Transverse Mercator, zone 8.
North American Datum 1983.

GEOLOGY
CORBETT HILL
Yukon
1:50 000

1 0 1 2 3 4 km

Base map at the scale of 1:50 000 from Natural Resources Canada, with modifications.
Elevations in metres above mean sea level.

Magnetic declination 2013, 23°24' E, decreasing 29.0' annually.

Data may include additional observations not portrayed on this map. See documentation accompanying the data.

This publication is available for free download through GEOSCAN (http://geoscan.ess.nrcan.gc.ca/).

Preliminary publications in this series have not been scientifically edited.

CANADIAN GEOSCIENCE MAP 70
GEOLOGY
CORBETT HILL
Yukon