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The data is also available in digital form. For further information please contact

The Director Computer Science Centre Department of Energy, Mines and Resources Ottawa, Ontario K1A 0E4

Elevation in feet above mean sea level Mean magnetic declination 1978, 32017.7' East, decreasing 3.1' annually. Readings vary from 32^o03.6' in the SE corner to 32^o30.6' in the NW corner of the map INDEX MAP Ce document est le produit d'une This document was produced numérisation par balayage by scanning the original publication. de la publication originale.

BARIUM (ppm)

Base-map at the same scale published by the **OPEN FILE 564** Mapping and Charting Establishment, Department of NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 44-1978 National Defence, 1977 URANIUM RECONNAISSANCE PROGRAM

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY SOUTHERN YUKON TERRITORY 1978

Scale 1:250,000 Universal Transverse Mercator Projection © Crown Copyrights reserved

O.F. 564 N.G.R. 44-1978:: O.F. 563 N.G.R. 43-1978 N. T. S. REFERENCE

105 F

BARIUM (ppm)

OPEN FILE 564 SOUTHERN YUKON TERRITORY 1978

LEGEND

OHATEDNADY	ΛD	TEDTIA

16 | Basalt and basalt breccia (QTvb)

TERTIARY

105 F

Sandstone, conglomerate and shale (Tscg); 15a, Buff weathering white rhyolite (Tqfp)

CRETACEOUS Quartz-feldspar porphyry dykes (KTqfp); 14a, biotite quartz monzonite (Kqm); 14b, porphyritic biotite quartz monzonite (Kpqm)

TRIASSIC AND JURASSIC Dark grey buff weathering bioclastic limestone (uksc); 13a, dark green volcaniclastic sandstone (uliv)

Thin-bedded interlaminated buff to yellowish siltstone and brown argillite ___(Cs1); 12a, thin-bedded chert and cherty tuff (Mt); 12b, green and

maroon tuff and volcanic breccia (Mv); 12c, rusty, black, white and orange weathering lapilli and sand sized tuff, volcanic breccia and flow rocks (Mva); 12d, equigranular syenite and trachyte (My) CARBONIFEROUS AND PERMIAN

Amphibolite, greenstone and altered basalt (CPAv); lla, dunite, peridotite and pyroxenite (CPAub); 11b, serpentinite (CPAs); 11c, gasper-red and apple-green chert and cherty tuff (CPAt); 11d, recrystallized crinoidal limestone (Pc)

DEVONIAN AND MISSISSIPPIAN

Chert granule grit and chert pebble conglomerate (uDMcg); 10a, black siliceous slate with interbedded chert granule grit and greywacke

DEVONIAN (UPPER)

Basalt, basaltic tuff and breccia; calcareous calcrinite (Dvc); 9a, fetid crinoidal limestone with minor interbedded slate (Dc)

SILURIAN AND LOWER DEVONIAN

Dolomite, sandy dolomite and dolomitic sandstone (SDdq); 8a, dolomitized 8 laminated mudstone to sucrose dolomite and dolomitized calcarenite (SDd); 8b, coarsely sucrose dolomite and sandy dolomite (SDd1); 8c, crinoidal limestone and dolomite (SDc); 8d, calcareous siltstone and calcareous orthoquartzite (SDsq)

Dolomitic siltstone and silty dolomite (Ss); 7a, lapilli tuff and volcanic breccia with interbedded bioclastic dolomite (Sv); 7b, algal laminate and sparry dolomite, orthoquartzite and sandy dolomite (Sdq); 7c, medium-grained mature orthoquartzite (Sq); 7d, laminated to sucrose dolomite (Sd); 7e, thinly laminated white and green hornfels (Sshf)

ORDOVICIAN, SILURIAN AND DEVONIAN

Dark grey to black "sooty" limey or dolomitic graphitic siltstone __and fine grained inpure quartzite with interbedded graphitic silty shale (OSĎqc)

ORDOVICIAN AND SILURIAN

Black, locally calcareous fissile graptolitic slate; includes thin sills or flows of dark green basalt (OSs1); 5a, quartz biotite and quartz chlorite schist and chlorite amphibolite (OSslv); 5b, black graphitic siliceous and pyritic slate (OSslq); 5c, black calcareous graphitic "sooty" slate and silty slate (OSslc)

CAMBRIAN AND ORDOVICIAN

Grey chlorite muscovite quartz phyllite containing lenses of green-」stone (u€Oslv); 4a, grey chlorite muscovite quartz phyllite and slaty phyllite (u€0s1); 4b, calcareous shale and silty limestone (u€0c); 4c, ankeritic shale, slate and phyllitic slate (u€0c2); 4d, olive green tuff and tuffaceous slate (€0v); 4e, massive dark green and maroon amygdaloidal basalt (£0vb); 4f, massive saussuritized dark green diabase or diorite sills (£b); 4g, medium to dark grey calcareous shale, siltstone and argillaceous limestone (€OSDs1)

LOWER CAMBRIAN Coarsely crystalline dolomite (1€d); 3a, grey calcareous argillite, limestone and calcareous siltstone; locally includes biotite schist and quartz tremolite diopside skarn (1 \pm c); 3b, grey limestone and argillaceous limestone (1 \pm cl); 3c, marble, recrystallized lime mud and bioclastic limestone (1€c2)

PROTEROZOIC AND/OR LOWER CAMBRIAN

Muscovite biotite granodiorite gneiss (Pns); 2a, muscovite biotite granodiorite gneiss and augen gneiss (Pn); 2b, injection migmatite consisting of muscovite biotite gneiss, augen gneiss and schist with sills and plugs of biotite granite, biotite quartz monzonite, aplite and pegmetite (Pn+); 2c, silty slate and shaly quartzite (Pl£qs); 2d, muscovite biotite schist, garnet mica quartz schist and micaceous quartzite with minor amphibolite (Pl€s); 2e, silty slate with some interbedded greywacke (Pl€sg); 2f, banded hornfels (Pl€hf)

AGE UNKNOWN (KLONDIKE SCHIST)

Tlight grey weathering marble (Mc); la, muscovite quartz blastomylonite, __muscovite quartz schist and muscovite quartzite (PPk1); lb, black siliceous phyllite and amphibole chlorite phyllite (PPk2), lc, klondike schist undivided (PPk)

Geological boundary.....

No analytical result.....

Fault.....

This legend was modified and the geology derived for this geochemical map from Geological Survey of Canada, Open File 468

Geological Survey of Canada Resource Geophysics and Geochemistry Division

CONTRACTORS

Sample collection by BEMA Ltd Sample preparation by Golder Associates Uranium in sediment chemical analyses by Atomic Energy of Canada Ltd Other sediment chemical analyses by Chemex Labs Ltd Water chemical analyses by Barringer Magenta Ltd

This map forms one of a series of 45 maps released by the Geological Survey of Canada, Open Files 563, 564 and 565. Each Open File consists of maps for 12 elements for stream sediments, I element for stream waters, and I each for sample site location and water pH

BARIUM (ppm)

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