

## LEGEND

### PLUTONIC ROCKS

Mid-Cretaceous, Hyland suite

### METAMORPHIC ZONES

Chlorite and lower zone

Staurolite zone

Andalusite zone

Sillimanite zone

Sillimanite + k-feldspar zone

Interpreted contact aureole

### MINERAL ASSEMBLAGES

St Sil+Crd  
And+St Sil+And  
And+St+Crd Sil+And+Crd  
And Sil+Kfs  
And+Crd Sil+Kfs+Crd  
Grt Sil+Kfs+And  
Sil Sil+Kfs+And+Crd

### REGIONAL METAMORPHIC ISOGRADS

Andalusite (approximate, inferred)..... And-in

Sillimanite (approximate, inferred)..... Sil-in

Alkali feldspar (approximate, inferred)..... Kfs-in

### SYMBOLS

geologic contacts  
(defined, approximate, inferred, covered).....

fault, movement not known  
(defined, approximate, inferred, covered).....

normal fault  
(defined, approximate, inferred, covered).....

anticline (upright, overturned).....

syncline (upright, overturned).....

### NOTES

Field work completed during the summer of 2017. Geology by C. Padgett with additional information from Moynihan, 2016 and Roots et al., 1966. Mineral abbreviations after Kretz, 1983.

This metamorphic map for the Anderson Lake area is based upon silicate minerals recording peak-metamorphic temperatures. Metamorphic zones are based on mineral assemblages in pelitic and semi-pelitic rocks. Mineral assemblages were identified from thin section petrography, hand samples, and field observations. Where K-feldspar (Kfs) is noted, the presence of myrmekite was also recorded as evidence of peak-metamorphic Kfs.

Cross sections with metamorphic isograds may be found on sheet 1. UTM grid on map corresponds to UTM coordinates given for samples in table to right.

### REFERENCES

Kretz, R., 1983. Symbols of rock-forming minerals. *American Mineralogist*, 68, 277–279.

MOYNIHAN, D., 2016. Bedrock Geology of the upper Hyland River area, NTS 105H/07, 105H/09, 105H/10, 106H/15, 105H/16, 105H/02, southeast Yukon. Yukon Geological Survey, Open File 2016-36, 1:50 000 scale.

ROOTS, E.F., GREEN, L.H., RODDICK, J.A. and BLUSSON, S.L., 1966. Geology, Frances Lake, Yukon Territory and district of Mackenzie. Geological Survey of Canada, Preliminary Map 6-1966, scale 1:253 440.

### RECOMMENDED CITATION

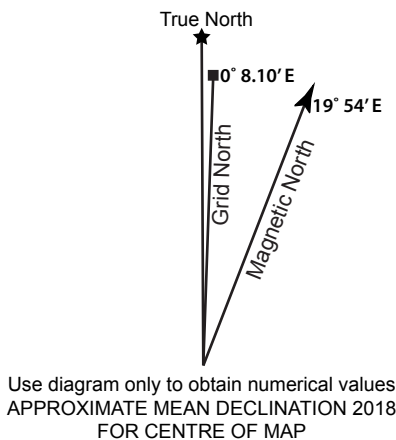
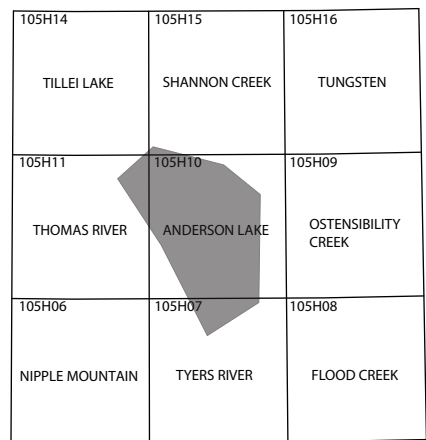
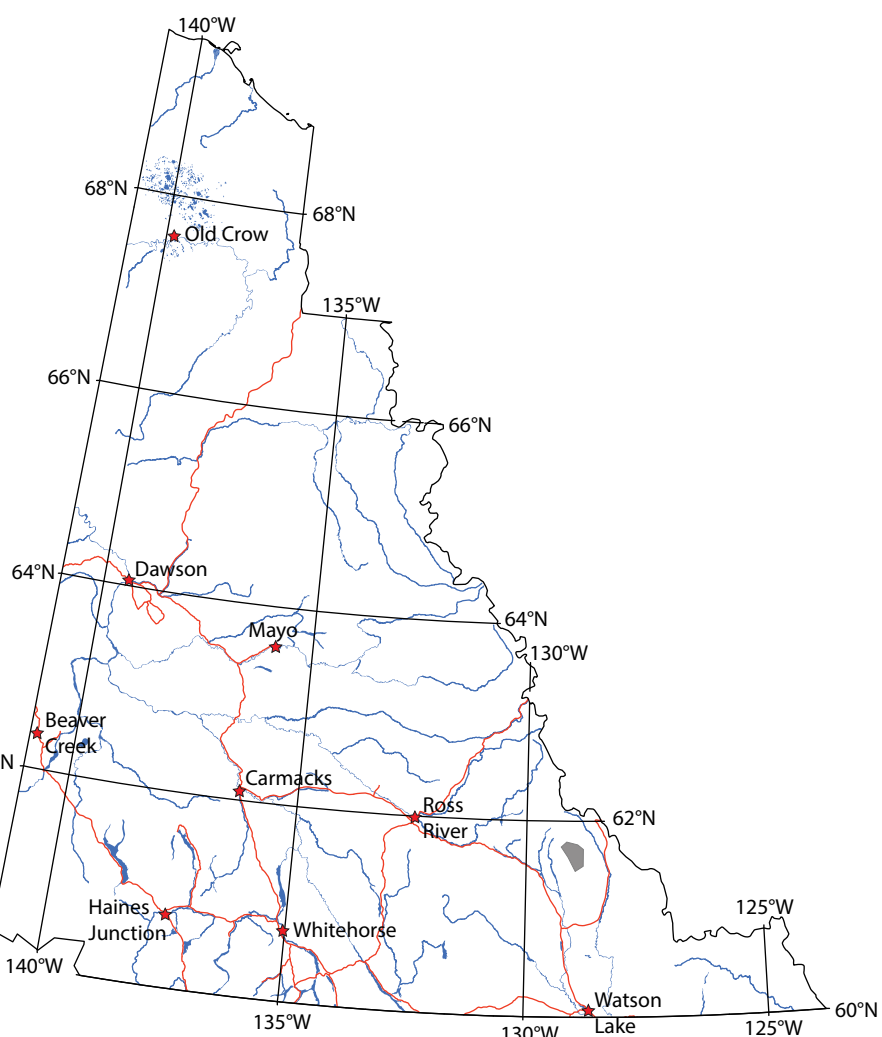
PADGETT, C., 2018. Bedrock geology and metamorphism of the Anderson Lake area, parts of NTS 105H/07, 105H/10, and 105H/11, southeastern Yukon. Yukon Geological Survey, Open File 2018-19, 2 sheets, scale 1:50 000.

Digital cartography and drafting by Colin Padgett, University of Calgary.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

A paper copy of this map may be obtained from the Yukon Geological Survey, Energy Mines and Resources, Government of Yukon, Room 102, 300 Main Street, Whitehorse, Yukon, Y1A 2B5. Phone 867-667-3201; Email: [geology@gov.yk.ca](mailto:geology@gov.yk.ca)

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1:50 000-scale topographic base data  
produced by  
CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA

ONE THOUSAND METRE GRID  
Universal Transverse Mercator Projection  
North American Datum 1983  
Zone 9

CONTOUR INTERVAL: 20 METRES  
Elevations in metres above Mean Sea Level

### Sample Locations and mineral assemblages from thin section

Sample #	UTM E	UTM N	Elev. (m)	Grt	Kfs	Sil	St	And	Crd	Bl	Chl	Ms	Qtz	Pl
17-CP-001	530406	6800702	1720	x	x	x				x			x	x
17-CP-002	530625	6800870	1774	x	x	x				x			x	x
17-CP-003	531190	6800533	1689	x	x	x				x			x	x
17-CP-004	529835	6800298	1985	x	x	x				x			x	x
17-CP-008	530703	6800545	1608	x	x	x				x			x	x
17-CP-010B	530965	6799775	1588	x	x	x				x			x	x
17-CP-014B	530226	6799322	1910			x	x			x			x	x
17-CP-018A	532685	6798455	1861		x	x	x			x			x	x
17-CP-025A	509763	6833459	1717			x	x			x			x	x
17-CP-029B	509473	6833387	1722			x	x			x			x	x
17-CP-031	510537	6833042	1546		x	x					R		x	x
17-CP-032B	511002	6832671	1735			x	x						x	x
17-CP-033	510881	6832576	1727		x	x	x			x			x	x
17-CP-034	510829	6832578	1752		x	x	x						x	x
17-CP-037	508463	6833314	1819			x	x			x			x	x
17-CP-039A	508056	6833027	1713		x	x	x			x			x	x
17-CP-040A	506584	6828238	1875		x	x	x			x			x	x
17-CP-041	506907	6828803	1982	x	x	x	x			x			x	x
17-CP-043	506596	6829271	1968		x	x	x			x			x	x
17-CP-044	506356	6830060	1852		x	x	x						x	x
17-CP-045A	506533	6830489	1782	x	x	x	x						x	x
17-CP-046	506311	6829540	1857		x	x	x						x	x
17-CP-048	512046	6828979	1820			x	x						x	x
17-CP-049	511732	6829077	1812	x	x	x	x		x	x	x		x	x
17-CP-050	511218	6829380	1896		x	x	x		x	x	x		x	x
17-CP-051	510270	6829393	1874			x	x		x	x	x		x	x
17-CP-053	509735	6829269	1914	x	x	x	x						x	x
17-CP-054	509178	6829180	1924			x	x		x	x	x		x	x
17-CP-055	508862	6829045	1966			x	x		x	x	x		x	x
17-CP-056	508165	6829248	2001		x	x	x						x	x
17-CP-057	507713	6829064	1838		x	x	x						x	x
17-CP-059	504903	6829275	1817		x	x	x						x	x
17-CP-060	504751	6829613	1875		x	x	x		x	x			x	x
17-CP-061	504500	6830169	1964		x	x	x		x	x			x	x
17-CP-062	503978	6830636	1893			x	x		x	x			x	x
17-CP-063	503304	6830961	1781	x	x	x	x						x	x
17-CP-064	502639	6830995	1751	x	x	x	x						x	x
17-CP-066	505525	6828166	1889		x	x	x						x	x
17-CP-067	505309	6828233	1952		x	x	x		x	x			x	x
17-CP-071	504377	6828041	1856			x	x						x	x
17-CP-072	503783	6827948	1965			x	x						x	x
17-CP-073	504833	6832616	1755			x	x	x		x			x	x
17-CP-074	504883	6832232	1790	x		x	x						x	x
17-CP-075	504886	6831801	1840			x	x	x		x			x	x
17-CP-076	504566	6831430	1860			x	x	x		x			x	x
17-CP-077	504265	6831057	1804			x	x	x					x	x
17-CP-078	507747	6829680	1795			x	x	x					x	x
17-CP-079	507593	6830528	1683			x	x	x					x	x
17-CP-080	507705	6830984	1717	x		x	x	x					x	x
17-CP-081	507791	6831537	1666			x	x	x					x	x
17-CP-088	506164	6826920	1838		x	x	x	x					x	x
17-CP-089	506517	6827107	1849			x	x	x					x	x
17-CP-091	495791	6837980	1582			x	x	x		x			x	x
17-CP-092	496040	6838140	1723			x	x	x					x	x
17-CP-093	496401	6838392	1845			x	x	x		x			x	x
17-CP-095	495494	6837010	1609		x	x	x	x					x	x
17-CP-096	495033	6836691	1591			x	x	x					x	x
17-CP-099	495745	6836516	1690	x		x	x	x					x	x
17-CP-102	496088	6836515	1708			x	x	x					x	x
17-CP-103	497130	6835576	1728			x	x	x					x	x
17-CP-104	497490	6838703	1832			x	x	x					x	x
17-CP-106	497861	6838323	1861			x	x	x					x	x
17-CP-107	498263	6838206	1899		x	x	x	x					x	x
17-CP-108	498564	6838147	1963			x	x	x					x	x
17-CP-109	498862	6837741	1809	x		x	x	x					x	x
17-CP-111	496434	6836650	1760			x	x	x					x	x
17-CP-112	496748	6836852	1831			x	x	x					x	x
17-CP-113	497090	6836907	1891			x	x	x					x	x
17-CP-114	497430	6837082	1960			x	x	x					x	x
17-CP-115	498138	6836927	1837	x		x	x	x					x	x
17-CP-118	496531	6835775	1454			x	x	x					x	x
17-CP-119	496420	6835901	1477			x	x	x					x	x
17-CP-121	501701	6828215	1630			x	x	x			R		x	x
17-CP-122	501564	6825593	1629			x	x	x					x	x
17-CP-123A	505415	6823592	1464			x	x	x		x			x	x
17-CP-123B	505415	6823592	1464			x	x	x					x	x
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17-CP-124B	505491	6823340	1630			x	x	x					x	x
17-CP-125	510036	6819065	1607			x	x	x		x			R	x
17-CP-126	510451	6818654	1544			x	x	x		x			R	x
17-CP-127	510971	6818593	1453			x	x	x					x	x
17-CP-129	511774	6818333	1704	x		x	x	x					x	x
17-CP-130	512041	6818385	1810			x	x	x					x	x
17-CP-131	509759	6819740	1705			x	x	x					x	x
17-CP-132	509592	6819822	1809			x	x	x					x	x
17-CP-133	509448	6819297	1826		x		x	x					x	x
17-CP-135	508781	6819717	1880			x	x	x		x			R	x
17-CP-136	509032	6819253	1944			x	x	x					x	x
17-CP-137	510176	6819507	1661			x	x	x		x			x	x
17-CP-138	510595	6819815	1649			x	x	x					x	x
17-CP-139	511770	6820558	1622			x	x	x					x	x
17-CP-144	510271	6820330	1804			x	x	x					x	x
17-CP-145	509781	6820603	1916			x	x	x					x	x
17-CP-146	509067	6820231	1647			x	x	x					x	x
17-CP-148	506291	6820708	1447			x	x	x					x	x
17-CP-149	508652	6820299	1498			x	x	x				R	x	x
17-CP-150A	506519	6821686	1720	x									R	x
17-CP-151	508097	6822057	1744			x	x	x		x			x	x
17-CP-152A	508390	6821984	1782	x			x	x		x			R	x
17-CP-152B1	508390	6821984	1782				x	x					x	x
17-CP-156A	514213	6812793	1966										x	x
17-CP-156B	514213	6812793	1966							x			x	x
17-CP-158	508286	6826563	2073			x	x	x					R	x
17-CP-159	508618	6826552	1986		x	x	x	x				R	x	x
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17-CP-162	509525	6826456	1712	x		x	x	x					x	x
17-CP-164	507736	6824852	1706			x	x	x					x	x
17-CP-166	507713	6823041	1607			x	x	x					x	x
17-CP-168	508645	6823764	1750			x	x	x					x	x
17-CP-169	509391	6824100	1918			x	x	x					x	x
17-CP-172	510607	6824126	1603			x	x	x					x	x
17-CP-173	511006	6824217	1852			x	x	x		x			x	x
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17-CP-175	511946	6825110	1648			x	x	x					R	x
17-CP-176	511457	6825387	1720	x	x	x				x			R	x