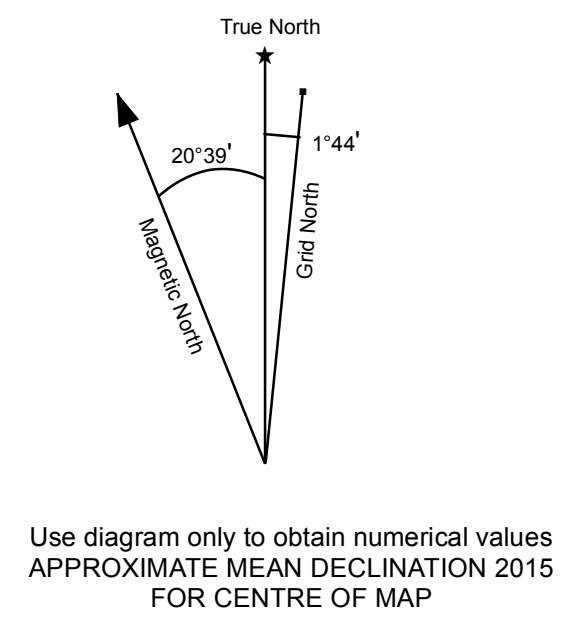
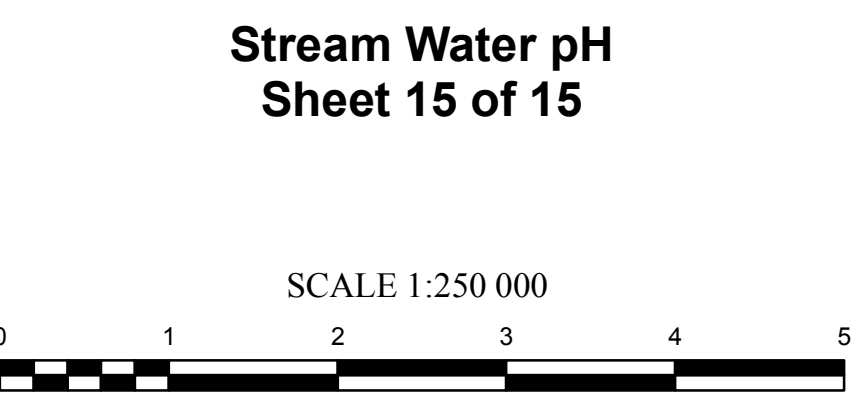


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ONE THOUSAND METRE GRID
Universal Transverse Mercator Projection
North American Datum 1983
Zone 9

CONTOUR INTERVAL 100 FEET
Elevations in metres above Mean Sea Level



105F	105G	105H
QUIET LAKE	FINLAYSON LAKE	FRANCES LAKE
105C	105B	105A
TESLIN	THIS MAP	WATSON LAKE
104N	104O	104P
ATLIN	JENNINGS RIVER	MCDAME

INTRODUCTION

New geochemical data from re-analysis of archived stream sediment samples have been assessed using weighted sums modeling (WSM) and catchment basin analysis as described in the methodology report that accompanies this map (Mackie et al., 2015). In addition to a series of maps displaying WSM results, a catchment map of stream water pH has also been constructed.

SAMPLING AND ANALYSIS PROGRAMS

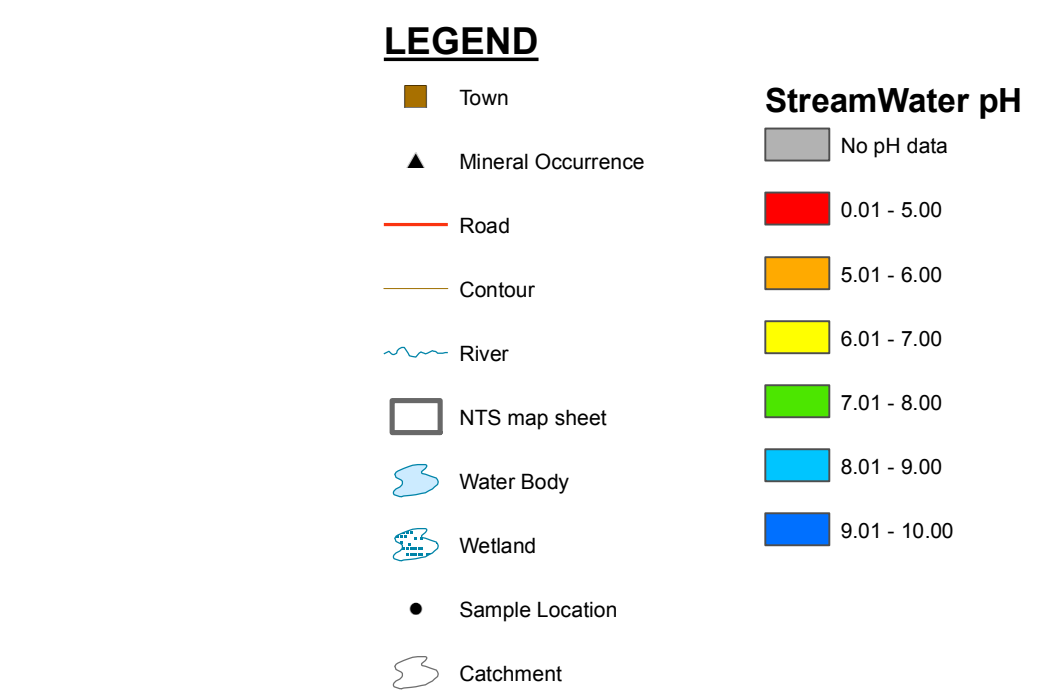
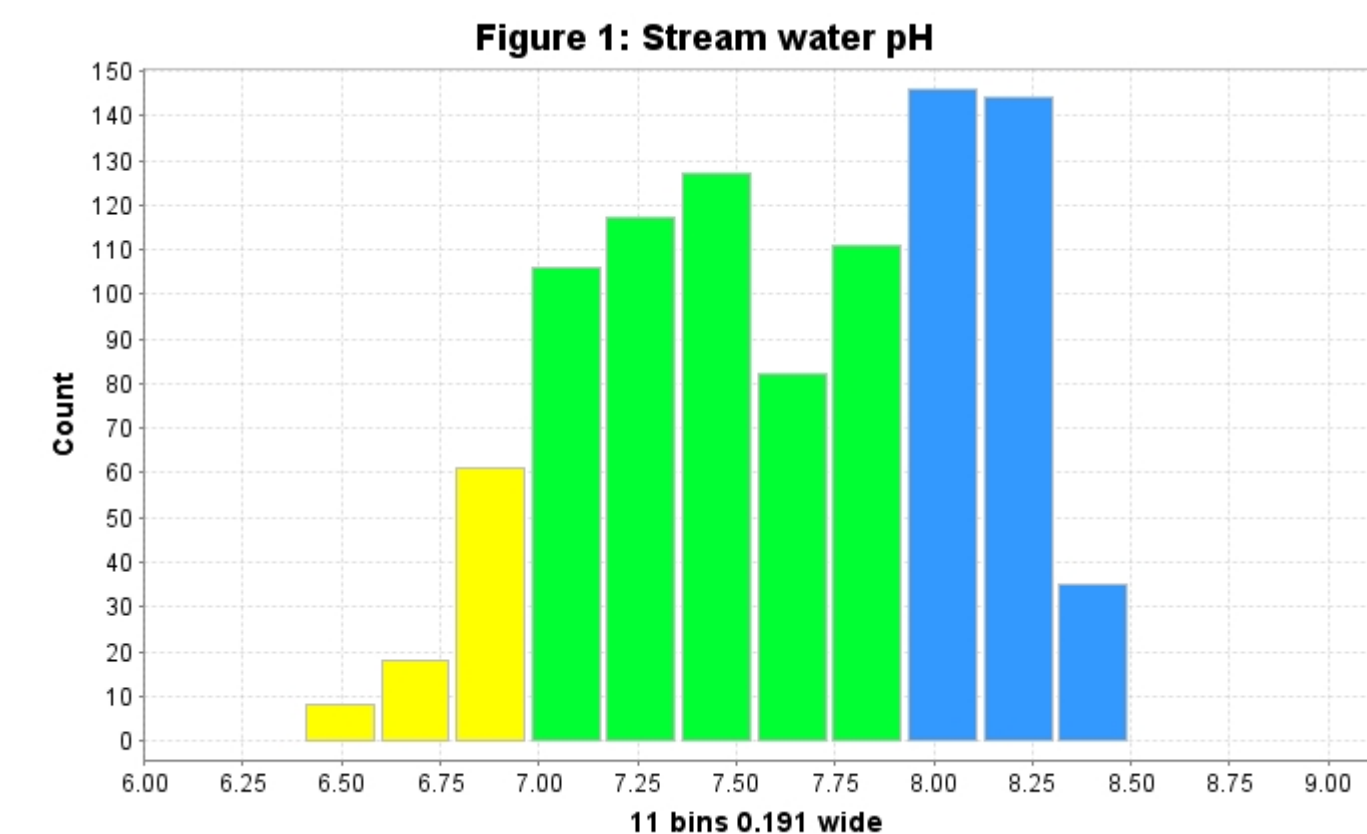
Stream sediment and water samples from the Wolf Lake area (NTS 105B) were collected at a reconnaissance scale in 1978 under the direction of the Geological Survey of Canada as part of the Federal Uranium Reconnaissance program (Geological Survey of Canada, 1986). The samples were analyzed in several stages and the geochemical data were originally released in Geological Survey of Canada (GSC) Open Files 563 and 1289 (Geological Survey of Canada, 1979 and 1986). A recent re-analysis program conducted by the Yukon Geological Survey (YGS) has generated new geochemical data from analysis of archived sample material as described in YGS Open File 2015-6 (Jackaman, 2015). The reader is referred to these reports for detailed descriptions of sampling techniques, analytical procedures and quality control measures.

MINERAL OCCURRENCES

The most significant mineral occurrences discovered within the Wolf Lake area have been classed as polymetallic Ag-Pb-Zn vein (e.g., Dale, Logjam and Logan deposits), porphyry W (e.g., Logtung deposit and Cordilleran prospect), Pb-Zn skarn (e.g., Atom and Bar prospects), Sn skarn (e.g., Partridge prospect) or Sn vein and greisen (e.g., Cusp prospect). Other deposit types represented in the map area include epithermal Au-Ag (e.g., Shootamook prospect), volcanogenic massive sulphide (e.g., Convert Prospect) and porphyry Cu-Mo (e.g., McPres prospect). Polymetallic Ag-Pb-Zn vein and manto-type prospects trend into the map sheet area to the south (104O), within British Columbia, supporting the prospectivity of the region for this type of mineralization.

STREAM WATER pH

As shown in the histogram of water pH in Figure 1, the vast majority of streams sampled are neutral to slightly alkaline (median = 7.6). Visual comparison of sample catchment outlines and mapped geology reveals that areas underlain by carbonate-rich sedimentary rocks generally have higher pH than those underlain by felsic intrusions. This is consistent with neutralization of rainwater by carbonate and acidification of groundwater by hydrolysis of silicates during weathering. Catchments containing mineral occurrences do not routinely coincide with acidic stream waters suggesting that any influence from the oxidation of near-surface sulphide mineralization has been diluted and is not distinguishable from regional trends related to lithologic variation.



REFERENCES

Geological Survey of Canada, 1979. Regional stream sediment and water geochemical reconnaissance data, Yukon Territory (105B). Geological Survey of Canada Open File 563, revised 1980.

Geological Survey of Canada, 1986. Regional stream sediment and water geochemical reconnaissance data, southern Yukon. NTS 105B. Geological Survey of Canada, Open File 1289.

Jackaman, W., 2015. Regional stream sediment geochemical data, Wolf Lake area, southern Yukon (NTS 105B). Yukon Geological Survey, Open File 2015-6.

Mackie, R., Arne, D. and Brown, O., 2015. Enhanced interpretation of regional stream sediment (RGS) geochemical data from Yukon: catchment basin analysis and weighted sums modeling. Yukon Geological Survey, Open File 2015-10.

Yukon MINFILE, 2015. Yukon MINFILE – A database of mineral occurrences. Yukon Geological Survey, www.data.geology.gov.yk.ca, accessed May 2015.

Number	Name	Type	Status	Commodities
105B 001	WILDCAT	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Gold, Lead, Silver, Zinc
105B 002	STERLING	Vein Polymetallic Ag-Pb-Zn	Showing	Copper, Gold, Silver, Zinc, Lead, Copper
105B 003	LUCK	Manto Polymetallic Ag-Pb-Zn	Prospect	Antimony, Tungsten, Zinc, Silver, Copper, Lead, Gold
105B 004	PROUDER	Skarn W	Showing	Copper, Silver, Zinc, Tungsten, Lead
105B 005	ARNE	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Zinc, Silver
105B 006	LENA	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Silver
105B 007	DALE	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Lead, Gold, Zinc, Silver, Copper
105B 008	HOLLEDAY	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Lead, Gold, Copper, Silver, Zinc
105B 009	TRIBE	Unknown	Unknown	
105B 010	TROY	Porphyry Cu-Mo	Anomaly	Copper
105B 011	CARLUK	Unknown	Showing	Antimony, Zinc, Arsenic, Silver, Gold
105B 012	SILVER BAY	Vein Polymetallic Ag-Pb-Zn	Showing	Silver
105B 013	KUBARK	Skarn Pb-Zn	Drilled Prospect	Lead, Zinc
105B 014	RANCHERIA	Unknown	Unknown	
105B 015	BLACKROCK	Unknown	Unknown	Copper, Silver, Lead, Zinc
105B 016	KUDJAW	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Copper, Zinc, Gold, Lead, Silver
105B 017	HARDYCK	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Lead, Silver, Zinc
105B 018	KERNIE	Vein Polymetallic Ag-Pb-Zn	Showing	Copper, Lead, Silver, Tungsten, Zinc
105B 019	BROCKHAGEN	Skarn W	Showing	Copper
105B 020	NIGHT	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Gold, Lead, Silver, Zinc, Copper, Tungsten, Uranium
105B 021	SILVER HART	Vein Polymetallic Ag-Pb-Zn	Unknown	Silver, Zinc, Lead
105B 022	AURORA	Skarn Pb-Zn	Prospect	Gold, Zinc, Tungsten, Silver, Molybdenum, Manganese, Lead
105B 023	SNOW	Unknown	Unknown	
105B 024	ALUMST	Unknown	Prospect	Copper, Silver, Tungsten
105B 025	HEDDEN	Skarn Pb-Zn	Anomaly	Copper, Gold, Lead, Silver, Zinc, Tungsten
105B 026	ATOM	Skarn Pb-Zn	Drilled Prospect	Barium, Zinc, Lead, Silver
105B 027	BAR	Skarn Pb-Zn	Drilled Prospect	Copper, Zinc, Silver, Lead, Gold
105B 028	BOM	Skarn Pb-Zn	Drilled Prospect	Gold, Lead, Silver, Tin, Zinc
105B 029	MARSON	Skarn Pb-Zn	Drilled Prospect	Lead, Silver, Tungsten, Zinc
105B 030	PARTRIDGE	Skarn Sn	Prospect	Lead, Zinc, Tin
105B 031	MCD	Skarn Pb-Zn	Showing	Lead, Zinc, Silver, Tungsten, Tin
105B 032	GEM	Gemstone Schist-hosted emerald	Anomaly	
105B 033	WESGEE	Unknown	Unknown	
105B 034	PLATE	Volcanogenic Sulphide - type not determined	Anomaly	Barium, Lead, Tin, Silver, Copper, Gold
105B 035	GODDARD	Skarn Pb-Zn	Drilled Prospect	Silver, Tin, Zinc
105B 036	SCHREY	Unknown	Prospect	Copper, Silver, Lead, Zinc, Tungsten
105B 037	SHART	Unknown	Deposit	Silver, Gold, Zinc, Lead
105B 038	LOGJAM	Vein Polymetallic Ag-Pb-Zn	Unknown	Molybdenum, Tungsten, Tungsten Trioxide, Barite
105B 039	LOGTUNG	Porphyry W	Drilled Prospect	Copper, Tin, Zinc, Silver
105B 040	JACK	Skarn Sn	Showing	Lead, Zinc, Silver
105B 041	POULIN	Vein Polymetallic Ag-Pb-Zn	Unknown	
105B 042	TRIOUT	Vein Barite-Fluorite	Showing	
105B 043	MANK	Unknown	Anomaly	Copper, Molybdenum
105B 044	RYVINE	Skarn Pb-Zn	Showing	Lead, Silver, Zinc
105B 045	SHOOTAMOOK	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Antimony, Silver, Gold
105B 046	TUNG	Skarn W	Showing	Molybdenum, Tungsten
105B 047	CANIN	Skarn W	Anomaly	Tungsten
105B 048	MCDONALD	Vein Polymetallic Ag-Pb-Zn	Showing	Copper, Gold, Silver, Copper
105B 049	DOCK	Unknown	Unknown	Copper
105B 050	GOLD	Unknown	Unknown	Copper, Gold, Silver
105B 051	RAINBOW	Vein Polymetallic Ag-Pb-Zn	Anomaly	Copper
105B 052	POPCUPPINE	Ultramafic-hosted asbestos	Showing	Asbestos, Copper, Zinc
105B 053	HOLDS	Unknown	Unknown	
105B 054	COLLETTE	Sediment-hosted Sedimentary Exhalative Zn-Pb-Ag (Sedex)	Drilled Prospect	Lead, Zinc, Silver
105B 055	POISSON	Unknown	Unknown	
105B 056	ZAK	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Copper, Zinc, Lead, Nickel
105B 057	ROCH	Vein Polymetallic Ag-Pb-Zn	Showing	Antimony, Lead, Gold, Silver, Zinc
105B 058	BINGY	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Silver, Zinc
105B 059	FAO	Vein Polymetallic Ag-Pb-Zn	Prospect	Lead, Zinc, Silver
105B 060	DALATH	Vein Polymetallic Ag-Pb-Zn	Unknown	Silver
105B 061	JUNKER	Unknown	Unknown	
105B 062	SHAWARD	Unknown	Unknown	
105B 063	LARGO	Unknown	Unknown	
105B 064	BOWEN	Unknown	Unknown	
105B 065	BOWEN	Unknown	Unknown	
105B 066	BOWEN	Unknown	Unknown	
105B 067	BOWEN	Unknown	Unknown	
105B 068	LOCK	Unknown	Unknown	
105B 069	LOCK	Unknown	Unknown	
105B 070	CAN	Skarn Sn	Drilled Prospect	Copper, Garnet, Gemstones, Silver, Tin
105B 071	TELEVISION	Unknown	Unknown	
105B 072	NAGRO	Unknown	Unknown	
105B 073	CURRENT	Skarn Sn	Prospect	Copper, Tin, Tungsten, Zinc
105B 074	PIKE	Porphyry W	Showing	Tungsten, Uranium
105B 075	HAKK	Unknown	Anomaly	
105B 076	INKIR	Unknown	Anomaly	
105B 077	PIKE	Vein Polymetallic Ag-Pb-Zn	Anomaly	Copper, Lead, Zinc, Silver
105B 078	VERLEY	Porphyry W	Showing	Copper, Silver, Molybdenum, Uranium, Tungsten, Tin, Thorium
105B 079	SINE	Vein and Greisens Sn	Showing	Tin
105B 080	SLOUCE	Skarn Sn	Showing	Copper, Tin, Zinc, Tungsten, Molybdenum
105B 081	DANAK	Skarn Sn	Showing	Tin
105B 082	PONT	Skarn Sn	Anomaly	Tin
105B 083	SN	Skarn Sn	Showing	Tin
105B 084	DAL	Vein and Greisens Sn	Showing	Tin
105B 085	TIN	Skarn Sn	Drilled Prospect	Tin, Tungsten
105B 086	CLIP	Vein and Greisens Sn	Drilled Prospect	Barite, Tin, Gemstones, Zinc, Tungsten
105B 087	MCPRES	Porphyry Cu-Mo	Prospect	Copper, Silver, Molybdenum
105B 088	SMITH	Skarn Sn	Drilled Prospect	Copper, Zinc, Silver, Tin
105B 089	STANBAGS	Skarn W	Showing	Molybdenum, Tungsten
105B 090	SWIFT	Skarn Mo	Unknown	Molybdenum
105B 091	HUMIT	Unknown	Unknown	
105B 092	SHERMAN	Skarn W	Unknown	
105B 093	RALES	Skarn W	Unknown	
105B 094	OLSSON	Unknown	Anomaly	
105B 095	TAT	Unknown	Showing	Uranium
105B 096	LUCK	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Silver, Zinc, Uranium
105B 097	URP	Skarn W	Showing	Copper, Fluorite, Molybdenum, Silver, Zinc, Tungsten, Lead
105B 098	LITTLE MOOSE	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Copper, Gold, Lead, Silver, Zinc
105B 099	LOGAN	Vein Polymetallic Ag-Pb-Zn	Deposit	Silver, Zinc, Tin, Lead, Copper
105B 100	PETER	Unknown	Anomaly	Uranium
105B 101	CORDELLERAN	Porphyry W	Drilled Prospect	Copper, Tungsten, Silver, Gold, Lead
105B 102	FRIEER	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Copper, Lead, Zinc, Silver, Gold
105B 103	THORALL	Porphyry Cu-Mo	Showing	Copper, Silver, Molybdenum
105B 104	TEAM	Skarn W	Showing	Tungsten, Zinc
105B 105	STOLLERY	Sediment-hosted Stratiform Barite	Showing	Barium
105B 106	URSUS	Skarn W	Showing	Tin, Tungsten
105B 107	MOOSE	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Zinc, Silver
105B 108	REGINALD	Porphyry Cu-Mo	Anomaly	Molybdenum, Tin, Tungsten
105B 109	OWKE	Vein Polymetallic Ag-Pb-Zn	Anomaly	Copper
105B 110	LEAF	Unknown	Unknown	
105B 111	DORSEY	Unknown	Anomaly	Tin
105B 112	HOLLISTER	Skarn Sn	Anomaly	Tungsten
105B 113	STEPHENS	Skarn Pb-Zn	Showing	Lead, Zinc, Silver
105B 114	MESTER RIVER	Manto Polymetallic Ag-Pb-Zn	Drilled Prospect	Lead, Silver, Zinc
105B 115	STONKAR	Unknown	Prospect	Tungsten, Zinc
105B 116	BRX	Unknown	Unknown	
105B 117	HICMANIK	Unknown	Unknown	
105B 118	PRETO	Unknown	Anomaly	
105B 119	CHRESCENT	Unknown	Unknown	
105B 120	KARTUNNA	Skarn Pb-Zn	Showing	Lead, Silver, Tin
105B 121	RAKE	Unknown	Unknown	
105B 122	ABROTT	Vein Polymetallic Ag-Pb-Zn	Showing	Copper, Zinc, Lead, Silver
105B 123	HEAD	Manto Polymetallic Ag-Pb-Zn	Anomaly	Gold, Lead, Silver
105B 124	SILVER CREEK	Vein Polymetallic Ag-Pb-Zn	Prospect	Lead, Zinc, Silver
105B 125	KARIMEN	Unknown	Anomaly	Lead, Silver, Zinc
105B 126	ELECTRICITY	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Rare Earths, Molybdenum, Uranium, Tungsten, Tantalum
105B 127	KORONKA	Manto Polymetallic Ag-Pb-Zn	Showing	Lead, Silver
105B 128	KR	Vein Polymetallic Ag-Pb-Zn	Showing	Lead, Silver, Zinc, Strontium, Manganese
105B 129	LOWEY	Vein Polymetallic Ag-Pb-Zn	Showing	Cadmium, Zinc, Silver, Gold, Lead
105B 130	TANAKA	Unknown	Unknown	
105B 131	ROD	Unknown	Staked - No Work Recorded	
105B 132	STICK	Unknown	Staked - No Work Recorded	
105B 133	SCHULLENBURG	Vein Polymetallic Ag-Pb-Zn	Drilled Prospect	Germanium, Lead, Silver
105B 134	GOAT LAKE	Unknown	Staked - No Work Recorded	
105B 135	GOLDEX	Vein Polymetallic Ag-Pb-Zn	Anomaly	Copper, Zinc, Molybdenum
105B 136	BREN	Unknown	Unknown	Gold
105B 137	SCURRY	Unknown	Unknown	
105B 138	HARSINE	Manto Polymetallic Ag-Pb-Zn	Showing	Gold, Zinc, Lead, Silver
105B 139	FARFIELD	Unknown	Showing	Lead, Zinc, Silver
105B 140	TIM	Unknown	Showing	Lead, Silver
105B 141	ISABLE	Unknown	Unknown	
105B 142	FOX	Unknown	Unknown	Gold
105B 143	CONVERT	Volcanogenic Massive Sulphide (VMS) Kurat Cu-Pb-Zn	Drilled Prospect	Copper, Silver, Zinc, Lead
105B 144	CANIN LAKE	Volcanogenic Sulphide - type not determined	Showing	

RECOMMENDED CITATION

MACKIE, R., ARNE, D. AND PENNIMPEDE, C., 2016. Stream water pH. In: Enhanced interpretation of stream sediment geochemical data for NTS 105B. Yukon Geological Survey, Open File 2015-8, scale 1:250 000, sheet 15 of 15.

Catchment basin polygons generated by the Yukon Geological Survey (J. O. Bruce).

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

Paper copies of this map and the accompanying report may be obtained from the Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, Room 102-300 Main St., Whitehorse, Yukon, Y1A 2B5. Ph. 867-667-3201, Email geology@gov.yk.ca.

A digital PDF (Portable Document File) file of this map may be downloaded free of charge from the Yukon Geological Survey website: <http://www.geology.gov.yk.ca>.

Yukon Geological Survey
Energy, Mines and Resources
Government of Yukon

Open File 2016-8

Stream Water pH (NTS 105B)
Sheet 15 of 15

by

Rob Mackie, Dennis Arne,
and Chris Pennimpede