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EDI Project No: 16Y0089

Assessment and Abandoned Mines Branch (AAM) K-149
Department of Energy, Mines and Resources, Yukon Government
Room 2C Royal Center, 4114-4th Avenue
PO 2703, Whitehorse, YT, Y1A 2C6

Attention: Emilie Hamm, Assistant Project Manager

RE: Mount Nansen Water Resources Investigations – Field Memo: July 4-6, 2016 - FINAL

The following memo is a brief field update from EDI's July 2016 trip to Mount Nansen; sampling conducted as part of the 2016/17 Water Resources Investigations. This memo provides a record of site conditions and tasks that were completed at each hydrometric station and water quality site (see tables below). A detailed monthly report on the data collected during the trip will be provided once the water quality lab results are received and all data has been checked for quality assurance/quality control.

Trip Dates:	July 4-6, 2016
EDI Field Staff:	Scott Dilling, Gabriel Rivest and Danny Skookum
Weather conditions during monitoring:	Conditions for the three days included air temperatures from 8 to 22°C, with sunny skies to thunderstorms with moderate rain.
Any changes to project scope, schedule or budget:	None. All sampling and monitoring was conducted within scope.
Additional Comments:	Site conditions were reflective of summer. Water levels were moderate to low and have dropped since the June 2016 trip. There was no snow and ice remaining around the Mount Nansen site and all watercourses were flowing.
Wildlife Sightings:	None
Site concerns (safety):	None

Table 1. Summary of hydrometric program tasks completed and station conditions during the July 2016 sampling event.

HYDROLOGY

Station	Hydrometric Measurement Type	Notes & Comments
ATM-VC5	None	Barometric logger downloaded.
H-DC-DX+105	Volumetric	Volumetric discharge measurement collected.
H-DC-D1b	Salt Tracer	Salt tracer discharge measurement was collected.
H-DC-B	Salt Tracer	Salt tracer discharge measurement was completed. Logger successfully downloaded.
H-DC-M-WP	Volumetric	Volumetric discharge measurement collected.
H-DC-R	Salt Tracer	Salt tracer discharge measurement completed. Logger successfully downloaded.
H-VC-U	ADV	Velocity-area discharge measurement completed using an ADV. Logger downloaded successfully.
H-BC	Salt Tracer	Salt tracer discharge measurement completed. Logger downloaded successfully.
H-VC-DBC	ADV	Velocity-area discharge measurement completed using an ADV. Logger downloaded successfully.
H-VC-UMN	ADV	Velocity-area discharge measurement completed using an ADV. Logger downloaded successfully.
H-VC-R+290	ADV	Velocity-area discharge measurement completed using an ADV. Logger downloaded successfully.
H-SEEP	Volumetric	Volumetric measurement collected in addition to reading the flow meter in the seepage pond shack.
H-TP	None	Water level remains low. Staff gauges not wetted.
H-PC-DSP	Volumetric	Volumetric discharge measurement collected. Placer mining activity upstream of site.

Table 2. Summary of water quality program tasks completed and site conditions during the July 2016 sampling event.

WATER QUALITY		
Site	**Sampled? (Yes/No)**	**Notes / Explanations**
WQ-SEEP	Yes	Moderate flow rate from pipe.
WQ-TP	Yes	Low water level in pond with lightly turbid water.
WQ-DC-DX	Yes	Moderate flow rate with lightly turbid water.
WQ-DC-DX+105	Yes	Moderate flow rate with lightly turbid water.
WQ-DC-D1b	Yes	Low flow rate with clear water.
WQ-DC-B	Yes	Low water level with lightly turbid water.
WQ-DC-U	Yes	Moderate flow with lightly turbid water.
WQ-DC-R	Yes	Moderate flow with lightly turbid water.
WQ-CH-P-13-01	Yes	Low flow with clear water.
WQ-BC	Yes	Moderate flow with highly turbid water.
WQ-VC-U	Yes	Moderate flow with clear water.
WQ-VC-DBC	Yes	Moderate flow with lightly turbid water. Back Creek contributing suspended sediment into Victoria Creek at confluence.
WQ-VC-UMN	Yes	Low flow with lightly turbid water.
WQ-VC-R	Yes	Sample collected at regular summer location upstream of culvert. Water level low with lightly turbid water.
WQ-PW	Yes	Moderate flow with clear water. Drinking water and bacteriological samples collected.
WQ-ADIT-SEEP	No	Site dry. No flow detected that was distinct from Pony creek.
WQ-PC-U	Yes	Low flow with moderately turbid water. Flows being controlled by upstream placer mining operations.
WQ-PC-D	Yes	Low flow with moderately turbid water.
WQ-MS-S-08	No	Site dry; no sample collected.
WQ-MS-S-03	Yes	Moderate flow and lightly turbid water.
WQ-NW-SEEP-02	No	Site dry; no sample collected.
Quality Assurance/Quality Control Samples		
Field Replicate 1	Yes	Collected at WQ-VC-DBC-r.
Field Replicate 2	Yes	Collected at WQ-DC-DX+105-r.
Field Blank	Yes	Sample bottles filled with deionized water supplied by ALS; samples were filtered and preserved as instructed. Collected at WQ-PW.
Travel Blank	Yes	Samples were provided by the lab and were transported to and from site.