

Preliminary Surveillance Network Program Report for MV2020L2-0002, New Discovery Mines Ltd. for the Month of October, 2022.

This report according to Annex A- Surveillance Network Program for MV2020L2-0002 issued to New Discovery Mines Ltd. for the Mon Gold Project.

Summary

1. The effective date of this Surveillance Network Program is October 16, 2020.
2. No activity occurred on site until Jul 2021 and only support crews, set up, clean up and maintenance operations occurred with up to eight personnel on site.
3. The site was shutdown in October and no mining activities have occurred on site since then. Small crews have based exploration and surveying activities from camp. The water systems have not been activated.

Table 1. Summary of SNP Program activities

SNP STN	Date	Data	Collected
SNP-01			No discharge
SNP-02			No water
SNP-03a			No water
SNP-03b			No water
SNP-04			No water
SNP-05			No water
SNP-06a			Not drilled
SNP-06b			Not drilled
SNP-07			No water
SNP-08			No water
SNP-09			No water
SNP-09a			No water
SNP-09b			No water
SNP-09c			No water
SNP-10			No water
SNP-11			No Ore
SNP-12			No activities
SNP-12a			No activities
SNP-13			No activities
SNP-14			No activities
SNP-15			No activities
SNP-16			No activities
SNP-17			No activities
SNP-18			No activities
SNP-19			No activities
SNP-20			No activities

SNP-21			No water
SNP-22			No water

QA/QC

Sampled collected in September were received and are reported below. No samples were collected in October:

Bureau Veritas ID		BDA023	BDA024		BDA025		
Sampling Date		2022-09-26 18:15	2022-09-26 18:30		2022-09-26 18:45		
COC Number		C#667899-02-01	C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	SNP-10	EQC	SNP-12	RDL	CCME
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD			FIELD		
Dissolved Hardness (CaCO3)	mg/L	255	708		49.4	49.4	
Total Hardness (CaCO3)	mg/L	246	730		48.3	48.3	
Dissolved Nitrate (N)	mg/L	0.83	12				
Dissolved Nitrate (NO3)	mg/L	3.7	53				
Dissolved Nitrite (NO2)	mg/L	<0.033	0.50				
Demand Parameters							
Biochemical Oxygen Demand (inhib.)	mg/L	<2.6 (1)	<2.0 (1)				
Misc. Inorganics							
Field pH	pH	7.35	7.00	>6.0<9.5	7.15	N/A	>6.0<9.5
Field Temperature	Deg. C	11	11		13.6		
Free Cyanide (CN)	ug/L	3.9 (2)	3.6 (2)	1000 (2000)			5
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00125	0.00121				
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.00087	0.00076				
Reactive Silica	mg/L	4.0	15				
Alkalinity (Total as CaCO3)	mg/L	89.0	258				
Total Organic Carbon (C)	mg/L	20	16				
Alkalinity (PP as CaCO3)	mg/L	<0.50	<0.50				
Bicarbonate (HCO3)	mg/L	109	314				
Carbonate (CO3)	mg/L	<0.50	<0.50				
Hydroxide (OH)	mg/L	<0.50	<0.50				
Total Suspended Solids	mg/L	83 (3)	8.0	15 (30)			15 (30)
Anions							
Dissolved Fluoride (F)	mg/L	0.098	0.10				120
Dissolved Chloride (Cl)	mg/L	1.3	3.3				
Dissolved Sulphate (SO4)	mg/L	200	440				

Metals							
Nutrients							
Total Ammonia (N)	mg/L		0.10	5.9	0.016	0.015	Calculate 32.4
Orthophosphate (P)	mg/L	<0.0030	<0.0030				
Dissolved Nitrite (N)	mg/L	<0.010	0.15				
Dissolved Nitrate plus Nitrite (N)	mg/L	0.83	12				13 (550)
Physical Properties							
Conductivity	uS/cm	532	1280		113	1.0	
Physical Properties							
Turbidity	NTU	20	6.6	15 (30)			
Total Dissolved Solids	mg/L	353 (3)					

RDL = Reportable Detection Limit

N/A = Not Applicable

Table 2. Results for mercury by cold vapour, October 2022.

Bureau Veritas ID		BDA023	BDA024		BDA025		
Sampling Date		2022-09-26 18:15	2022-09-26 18:30		2022-09-26 18:45		
COC Number		C#667899-02-01	C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	SNP 10	EQC	SNP 12	RDL	CCME
Elements							
Dissolved Mercury (Hg)	ug/L	0.0021	<0.0019		<0.0019	0.0019	0.026
Total Mercury (Hg)	ug/L	<0.0019	<0.0019		<0.0019	0.0019	A754460

RDL = Reportable Detection Limit

Table 3. Atomic Absorption on water, October 2022.

Bureau Veritas ID		BDA023	BDA024		BDA025		
Sampling Date		2022-09-26 18:15	2022-09-26 18:30		2022-09-26 18:45		
COC Number		C#667899-02-01	C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	SNP 10	EQC	SNP 12	RDL	CCME
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	71.7	13.2		68.5	0.50	
Total Antimony (Sb)	ug/L	0.472	1.10		0.433	0.020	

Total Arsenic (As)	ug/L	35.0	19.0	500 (1,000)	1.12	0.020	5
Total Barium (Ba)	ug/L	32.4	53.8		8.03	0.020	
Total Beryllium (Be)	ug/L	0.019	<0.010		<0.010	0.010	
Total Bismuth (Bi)	ug/L	<0.010	0.0095		<0.0050	0.0050	
Total Boron (B)	ug/L	23	45		10	10	1,500 (29,000)
Total Cadmium (Cd)	ug/L	1.35	1.38		0.0212	0.0050	
Total Chromium (Cr)	ug/L	0.57	0.56		0.56	0.10	1
Total Cobalt (Co)	ug/L	16.6	6.16		0.109	0.0050	
Total Copper (Cu)	ug/L	5.61	4.17	300 (600)	1.43	0.050	300 (600)
Total Iron (Fe)	ug/L	4760	1360		112	1.0	300
Total Lead (Pb)	ug/L	0.209	1.47	200 (400)	0.419	0.0050	200 (400)
Total Lithium (Li)	ug/L	18.4	24.3		2.43	0.50	
Total Manganese (Mn)	ug/L	309	253		18.4	0.050	
Total Molybdenum (Mo)	ug/L	0.925	1.06		0.720	0.050	73
Total Nickel (Ni)	ug/L	272	122	500 (1,000)	1.67	0.020	500 (1,000)
Total Phosphorus (P)	ug/L	55.4	12.5		22.8	2.0	
Total Selenium (Se)	ug/L	0.133	0.318		<0.040	0.040	1
Total Silicon (Si)	ug/L	1810	7140		326	50	
Total Silver (Ag)	ug/L	<0.010	0.0125		<0.0050	0.0050	0.25
Total Strontium (Sr)	ug/L	121	412		33.3	0.050	
Total Thallium (Tl)	ug/L	0.0105	0.0174		0.0029	0.0020	0.8
Total Tin (Sn)	ug/L	<0.20	<0.20		<0.20	0.20	
Total Titanium (Ti)	ug/L	<2.0	0.53		3.21	0.50	
Total Uranium (U)	ug/L	0.413	3.61		0.103	0.0020	15 (33)
Total Vanadium (V)	ug/L	0.94	0.24		0.25	0.20	
Total Zinc (Zn)	ug/L	1900	1210	500 (1,000)	5.61	0.10	500 (1,000)
Total Zirconium (Zr)	ug/L	0.26	0.37		<0.10	0.10	
Total Calcium (Ca)	mg/L	53.7	181		11.9	0.050	
Total Magnesium (Mg)	mg/L	27.1	67.8		4.52	0.050	
Total Potassium (K)	mg/L	5.95	12.5		2.09	0.050	
Total Sodium (Na)	mg/L	6.59	15.2		2.93	0.050	
Total Sulphur (S)	mg/L	64.9	160		<3.0	3.0	

RDL = Reportable Detection
Limit

Additional parameters are pending.

c) Actions taken in response to any exceedances.

No mining or development activities have occurred since October 2021.

The total zinc levels in SNP-09 have exceeded the short-term sampling EQC mandated in the Water License. Longer-term sampling averages 1138 mg/L. A review of this site shows very low water levels in an algae-covered pond this year. A wooden pallet with galvanized nails had been placed into the pond to allow for better sampling in what was in October, ice-covered. Previous sampling has yielded 947 ug/l in August 2021 and 568 ug/L in October 2021. Activities on site that commenced in September 2021 and terminated October 2021 correlate with reduced zinc levels in the small pond. This will be discussed with the board and inspector and actions recommended from them will be executed.

d) Calibration and status of meters and devices referred to in Part B Condition 18 of this license.

Two personnel were on the ground for 12 days in September to monitor the site for leaks, thefts, and damage from wildlife. Three 20 litre water jugs typically used for camping were filled every other day for domestic use. These were carried by hand from SNP-11 to camp.

3) Coordinates of all SNP sites that were established including an updated map identifying all the SNP sites.

See Table 4. Location of all SNP sites, locations in WGS 84 (from Groundwater and Water Management Plan).

f) A tabular summary of cumulative water usage in cubic metres.

See

Table 5. Summary of monthly and cumulative water use for MV2020L2-0002 in cubic meters.

Appendixes

Table 4. Location of all SNP sites, locations in WGS 84 (from Groundwater and Water Management Plan).

Table 5. Summary of monthly and cumulative water use for MV2020L2-0002 in cubic meters.

Table 4. Location of all SNP sites, locations in WGS 84 (from Groundwater and Water Management Plan).

SNP	Longitude	Latitude	Description	Rationale
SNP-01	-114.328118	62.90041201	Sewage Treatment Plant Effluent	To monitor the quality and quantity of treated Sewage being disposed from the Sewage Treatment System
SNP-02	-114.328893	62.902666	Monitoring trench, immediately downstream of the Dry Stack Tailings Facility	To monitor the quality of Seepage and surface Water downstream of the Dry Stack Tailings Facility
SNP-03a	-114.333632	62.901903	Monitoring trench, down slope of Dry Stack Tailings Facility – First Narrows	To monitor the quality of Seepage and surface Water downstream of the Dry Stack Tailings Facility
SNP-03b	-114.333882	62.901928	Monitoring trench, down slope of Dry Stack Tailings Facility – Culvert	To monitor the quality of Seepage and surface Water downstream of the Dry Stack Tailings Facility
SNP-04	-114.32896	62.902658	Seepage from the Dry Stack Tailings Facility	To monitor the quality and quantity of Seepage from the Dry Stack Tailings Facility
SNP-05	-114.330769	62.903334	Background Well - Upgradient of the Dry Stack Tailings Facility	To establish background water quality before operation of the Dry Stack Tailings Facility and to monitor upgradient Water quality once the Dry Stack Tailings Facility is operational.
SNP-06a	-114.328789	62.902132	Monitoring Well – Downgradient of the Dry Stack Tailings Facility	To establish background water quality before and during operation of the Dry Stack Tailings Facility
SNP-06b	-114.32634	62.897838	Monitoring Well – Downgradient	To establish background water quality before and during

			of the Dry Stack Tailings Facility	operation of the Dry Stack Tailings Facility
SNP-07	TBD	TBD	Underground Minewater Sump(s)	To monitor the quantity and quality of groundwater and mine Water collected in the underground sump prior to discharge to the surface
SNP-08	-114.328055	62.898538	Minewater holding tank or pond	To monitor the quantity and quality of mine Water prior to discharge to the Receiving Environment
SNP-09	-114.32738	62.898724	Seepage from Waste rock pile(s)	To monitor the quality and quantity of Seepage from the Waste rock pile(s)
SNP-09a	-114.32634	62.897838	Seepage from Waste rock pile(s)	To monitor the quality and quantity of Seepage from the Waste rock pile(s)
SNP-09b	-114.32860	62.899741	Seepage from Waste rock pile(s)	To monitor the quality and quantity of Seepage from the Waste rock pile(s)
SNP-09c	-114.33083	62.899579	Seepage from Waste rock pile(s)	To monitor the quality and quantity of Seepage from the Waste rock pile(s)
SNP-10	-114.3269	62.898253	Seepage from ore stockpile(s)	To monitor the quality and quantity of Seepage from the ore stockpile(s)
SNP-11	-114.32543	62.897962	Freshwater in Discovery Lake	To monitor water use
SNP-12	-114.32551	62.898077	Discovery Lake	To monitor impacts of runoff and Discharge from the Project on Water quality in Discovery Lake
SNP-12a	-114.32551	62.898082	Discovery Lake	To monitor impacts of runoff and Discharge from the Project on Water quality in Discovery Lake
SNP-13	-114.2085	62.6270	Prosperous Lake	To monitor water use

SNP-14	-114.2732	62.8697	Sito Lake	To monitor water use
SNP-15	-114.2487	62.6890	Bluefish Lake	To monitor water use
SNP-16	-114.2877	62.7460	Quayta Lake	To monitor water use
SNP-17	-114.3250	62.879571	Lake A (T-Bone)	To monitor water use
SNP-18	-114.32264	62.879409	Lake B (Bone)	To monitor water use
SNP-19	-114.32247	62.883073	Lake C (565)	To monitor water use
SNP-20	-114.31183	62.880577	Lake D (SZ)	To monitor water use
SNP-21	-114.324449	62.896101	Explosives Mag	To monitor waters draining EM

Table 5. Summary of monthly and cumulative water use for MV2020L2-0002 in cubic meters.

Date	Water in Camp	Water in Mine	Other Water	comment	Total Water Used	Cumulative
Jan-22	0	0	80	Ice road	80	80
Feb-22	0	0	420	Ice road	420	500
Mar-22	0	0	0	inactive	0	500
April-22	0	0	0	Inactive	0	500
May-22	0	0	0	Inactive	0	500
Jun-22	0	0	0	Inactive	0	500
July-22	0	0	0	Inactive	0	500
Aug-22	0	0	0	inactive	0	500
Sept-22	0.6*	0	0	Exploration crew	0.6	500.6
Oct-22	0.3	0	0	Survey crew	0.3	500.9

*This was sampled daily when filling 20 litre (0.02 m³) jugs of water.