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# **Report on Diamond Drilling**

**Completed by**

**North American Nickel Inc.**

## **Post Creek Property**

Aylmer, Rathbun, Fraleck, Parkin and Norman Townships, Ontario

Sudbury Mining District

NTS 041I15

Longitude 80°51'30"

Latitude 46°47'30"

**Prepared by:** Gerry Katchen

**Date:** June 26, 2019

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**Appendix 4 – Crone BHEM Report**

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**Appendix 6 – 2018 Drilling Vertical Sections ARCH\_C Size 18x24 1:1000**

**Appendix 7 – North American Nickel Lithological Legend**

**Appendix 8 – GDD Instrumentation BeepMat BM4+ Manual**

### ABBREVIATIONS

Expl	Exploration
Plugger	Plugger Drill
NAG	Magnetic
VLF	Very Low Frequency
QAQC	Quality Assurance Quality Control
Exp	Exploration
Au	Gold
Pt	Platinum
Pd	Palladium
Cu	Copper
Ni	Nickel
Co	Cobalt
S	Sulphur
Pb	Lead
Zn	Zinc
Ag	Silver
qtz	Quartz
MMI	Mobile Metal Ions
Grd	Ground
Surf	Surface
Anom	Anomalous
Dept	Department

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## INTRODUCTION

The Post Creek and Halcyon Properties are located approximately 35 km northeast of Sudbury (Figure 1) in Aylmer, Norman, Parkin, Fraleck and Rathbun Townships and consist of 126 contiguous unpatented mining claim cells covering an area of approximately 1,760 hectares and an additional isolated north-south string of 14 cell claims (Post Creek/Halcyon North) adding an additional 305 hectares (Figure 2). The properties are strategically located adjacent to the past producing Podolsky copper-nickel-platinum group metal deposit of KGHM International Ltd. (formerly Quadra-FNX Mining and the former producing Ni-Co Whistle Mine of Inco (now Vale). Seventeen claim cells (Post Creek West) lie outside the main Post Creek/Halcyon properties, occurring approximately 5km away in the Hutton Township for a total of 160 hectares.

In 2011, North American Nickel announced the discovery of a previously unrecognized quartz diorite embayment on Post Creek. The quartz diorite was discovered in the north-central portion of the Post Creek property, which is approximately 2.8 km north of the past producing Podolsky Mine. In 2016 the company located Sudbury Breccia during a prospecting program and reassessment of historical stripped areas on the Post Creek property. The discovery has now been extended to North American Nickel's southern claim boundary and is approximately 600m east of a stripped area on the KGHM project where similar lithologies have been exposed.

This report discusses the results of diamond drilling that were completed by North American Nickel between November 2018 and December 2018. These holes targeted the recently identified occurrences of quartz diorite and Sudbury Breccia at depth.

### 1.1 Location and Access

Post Creek property area is located dominantly in Norman Township; with contiguous claims extending into Aylmer, Parkin, and Rathbun Townships. The Halcyon property is dominantly contained in Parkin Township with fifteen contiguous claims extending into Aylmer Township and fourteen non-contiguous claims occurring in Fraleck/Parking Township. The properties are about 12 km northeast from the town of Capreol (Figure 1), or about 37 km from the City of Sudbury. Accessibility to the properties area is very good, via paved highway 545 from Capreol to the north for about 6 km, and then by a gravel road going east for about five kilometers towards the Podolsky mine site, and then another kilometer N-NE towards the Post Creek property. Gravel roads are well maintained year-round in the area and are used for the lumber and mining industries.

**Location:** Longitude 80°51'30", Latitude 46°47'30" UTM NAD83 Zone 17N 510,800mE, 5,182,000mN

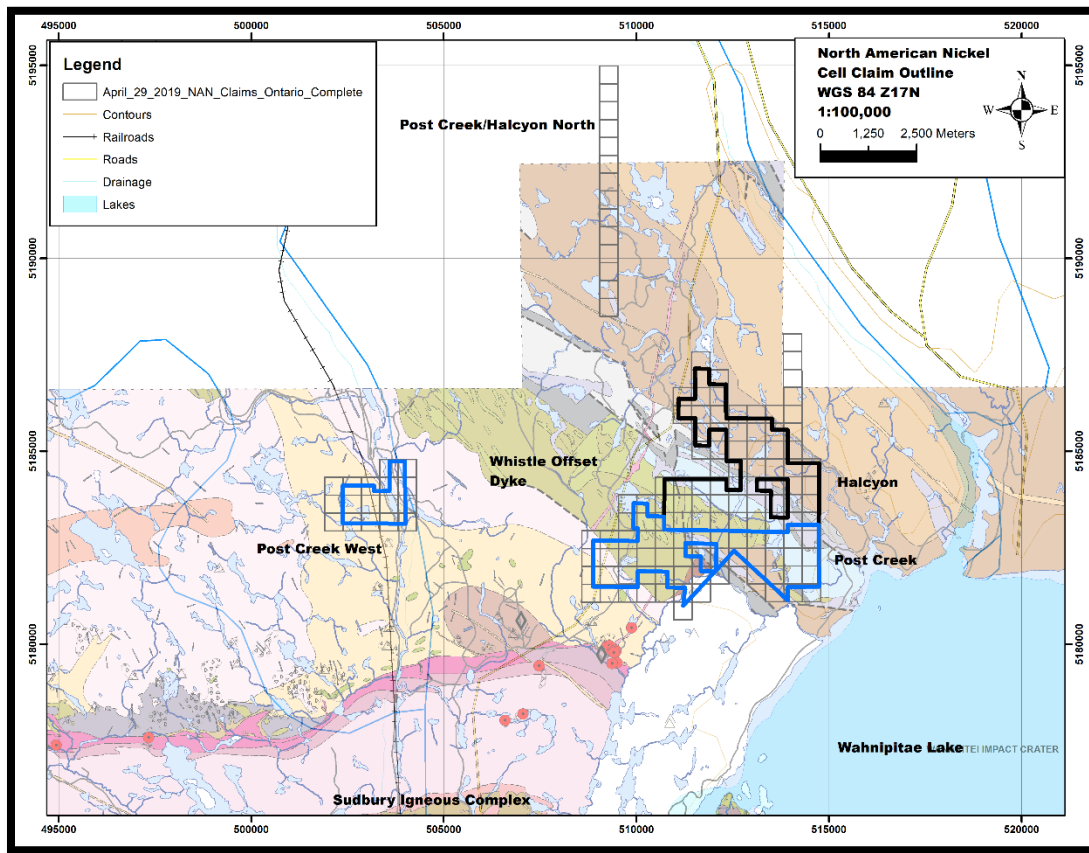


Figure 1 Generalized map illustrating the location of the Post Creek and Halcyon properties.

## 1.2 List of Claims

All claims and Reserve amounts are as of June 13, 2019

See Tables 1, 2, 3 and Figures 2,3,4

Table 1 Post Creek Property 56 Claims as of June 13, 2019

Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Status	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve
4267490	AYLMER	120088	2025-08-18	Active	200	1000	0	0	0
1117882	AYLMER,NORMAN, PARKIN,RATHBUN	219915	2025-08-18	Active	200	1000	0	0	0
4267490	AYLMER,PARKIN	148059	2025-08-18	Active	200	1000	0	0	0
1117881	NORMAN,PARKIN	106115	2025-01-25	Active	200	1000	0	0	0
1198500	NORMAN,PARKIN	183892	2025-07-21	Active	200	800	0	2179	2179



Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Status	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve
1117881	NORMAN,PARKIN	215397	2025-01-25	Active	200	1000	0	0	0
1117881	NORMAN,PARKIN	220561	2025-01-25	Active	200	1000	0	0	0
1244704	NORMAN,PARKIN	254671	2025-07-21	Active	200	800	0	21	21
1222817	NORMAN,PARKIN	254672	2025-07-21	Active	200	800	0	21	21
1198500	NORMAN,PARKIN	279189	2025-11-25	Active	200	1000	0	49588	49588
1244704	NORMAN,PARKIN	331096	2025-07-21	Active	200	800	0	21	21
1222896	NORMAN,RATHBUN	126590	2025-03-13	Active	200	1000	0	0	0
4267489	RATHBUN	345571	2025-08-18	Active	200	1200	0	0	0
4267489	AYLMER,RATHBUN	227869	2025-08-18	Active	400	2000	0	0	0
1094824	NORMAN	106860	2025-04-24	Active	200	1000	0	566	566
1094824	NORMAN	246042	2025-05-08	Active	200	1000	0	1624	1624
1094824	NORMAN	186081	2025-04-24	Active	400	2000	0	224	224
1094824	NORMAN	179307	2025-11-25	Active	400	2000	0	367	367
1094825	NORMAN	235266	2025-08-22	Active	200	1000	0	139	139
1094825	NORMAN	108466	2025-04-24	Active	200	1000	0	339	339
1094826	NORMAN	119836	2025-07-21	Active	200	800	0	20943	20943
1094826	NORMAN	119001	2025-11-25	Active	400	2000	0	3143	3143
1094834	NORMAN	107941	2025-08-22	Active	200	1000	0	0	0
1094834	NORMAN	201548	2025-04-24	Active	200	1000	0	1083	1083
1094835	NORMAN	141516	2025-08-22	Active	200	1000	0	57	57
1117878	NORMAN	189113	2025-03-13	Active	200	1000	0	0	0
1117879	NORMAN	273718	2025-01-25	Active	400	2000	0	0	0
1117880	NORMAN	118190	2025-03-13	Active	200	1000	0	0	0
1117880	NORMAN	344731	2025-01-25	Active	200	1000	0	0	0
1117880	NORMAN	293116	2025-01-25	Active	200	1000	0	0	0
1197766	NORMAN	256226	2025-08-22	Active	200	1000	0	0	0
1222817	NORMAN	216648	2025-08-22	Active	200	1000	0	333	333
1222817	NORMAN	344279	2025-03-13	Active	200	1200	0	0	0
1222896	NORMAN	106797	2025-03-13	Active	200	1000	0	0	0
854182	NORMAN	126568	2025-08-19	Active	200	1000	0	344	344
854182	NORMAN	281289	2025-11-25	Active	400	2000	0	150	150
854183	NORMAN	171109	2025-08-19	Active	400	2000	0	94	94
854183	NORMAN	165935	2025-08-19	Active	400	2000	0	1192	1192
854184	NORMAN	345548	2025-08-19	Active	200	1000	0	81	81
854184	NORMAN	293999	2025-08-19	Active	200	1000	0	81	81
854185	NORMAN	102308	2025-08-19	Active	400	2000	0	118	118
854185	NORMAN	102309	2025-08-19	Active	200	1000	0	808	808
854186	NORMAN	120746	2025-08-19	Active	400	2000	0	143	143
854573	NORMAN	224645	2025-11-25	Active	200	1000	0	524	524
894711	NORMAN	221144	2025-05-08	Active	200	1000	0	0	0
894711	NORMAN	162369	2025-05-08	Active	200	1000	0	1109	1109
894712	NORMAN	210319	2025-05-08	Active	200	1000	0	2376	2376
894713	NORMAN	179969	2025-05-08	Active	200	1000	0	839	839
894713	NORMAN	128041	2025-05-08	Active	200	1000	0	1075	1075
894746	NORMAN	253548	2025-05-08	Active	200	1000	0	1832	1832
854571	NORMAN,PARKIN	184856	2025-11-25	Active	200	1000	0	54589	54589
854571	NORMAN,PARKIN	252167	2025-11-25	Active	200	1000	0	413	413
1117878	NORMAN,RATHBUN	306616	2025-03-13	Active	400	2000	0	0	0
1117879	NORMAN,RATHBUN	155138	2025-01-25	Active	400	2000	0	0	0
4267489	RATHBUN	323143	2025-08-18	Active	400	2400	0	0	0
4267489	RATHBUN	105686	2025-08-18	Active	400	2400	0	0	0

Table 2 Halcyon Property 84 claims as of June 13, 2019

Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Percentage	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve	Project
1043485	AYLMER	231300	2025-01-16	100	200	1200	0	0	0	Halcyon
1117883	AYLMER,NORMAN, PARKIN,RATHBUN	139328	2025-01-25	100	200	1200	0	0	0	Halcyon
1043484	AYLMER,PARKIN	138710	2025-01-25	100	200	1200	0	0	0	Halcyon
1117883	NORMAN,PARKIN	174017	2025-01-25	100	200	1200	0	0	0	Halcyon
682110	NORMAN,PARKIN	175245	2025-03-14	100	200	1200	0	3299	3299	Halcyon
648547	NORMAN,PARKIN	186168	2025-03-04	100	200	1200	0	1080	1080	Halcyon
682281	NORMAN,PARKIN	192129	2025-03-14	100	200	1200	0	1235	1235	Halcyon
1117884	NORMAN,PARKIN	217441	2025-03-14	100	200	1200	0	0	0	Halcyon
648548	NORMAN,PARKIN	221171	2025-03-14	100	200	1200	0	4910	4910	Halcyon
648547	NORMAN,PARKIN	254876	2025-03-04	100	200	1200	0	1195	1195	Halcyon
682113	NORMAN,PARKIN	288425	2025-03-14	100	200	1200	0	21035	21035	Halcyon
1013217	PARKIN	120134	2025-01-26	100	200	1200	0	0	0	Halcyon
994725	PARKIN	143663	2025-12-23	100	200	1200	0	0	0	Halcyon
1013396	PARKIN	148094	2025-01-26	100	200	1200	0	0	0	Halcyon
994723	PARKIN	153000	2025-12-23	100	200	1200	0	0	0	Halcyon
894924	PARKIN	169633	2025-12-23	100	200	1200	0	0	0	Halcyon
1013217	PARKIN	228554	2025-01-30	100	200	1200	0	0	0	Halcyon
894924	PARKIN	319503	2025-06-12	100	200	1200	0	0	0	Halcyon
1042960	PARKIN	322482	2025-12-23	100	200	1200	0	0	0	Halcyon
994723	PARKIN	338812	2025-12-23	100	200	1200	0	0	0	Halcyon
994725	PARKIN	344897	2025-12-23	100	200	1200	0	0	0	Halcyon
1043485	AYLMER	310137	2025-01-16	100	400	2400	0	0	0	Halcyon
1043486	AYLMER	334932	2025-01-16	100	400	2400	0	0	0	Halcyon
1043490	AYLMER	228550	2025-01-16	100	400	2400	0	0	0	Halcyon
1043296	AYLMER,PARKIN	191286	2025-01-26	100	400	2400	0	0	0	Halcyon
1043296	AYLMER,PARKIN	299197	2025-01-30	100	400	2400	0	0	0	Halcyon
1043297	AYLMER,PARKIN	323118	2025-01-26	100	200	1200	0	0	0	Halcyon
1043484	AYLMER,PARKIN	190736	2025-01-16	100	200	1200	0	0	0	Halcyon
1043498	AYLMER,PARKIN	240290	2025-01-30	100	400	2400	0	0	0	Halcyon
1013217	PARKIN	221861	2025-01-26	100	400	2400	0	0	0	Halcyon
1013217	PARKIN	171809	2025-01-30	100	400	2400	0	0	0	Halcyon
1013393	PARKIN	104964	2025-01-26	100	400	2400	0	0	0	Halcyon
1013393	PARKIN	165836	2025-01-26	100	400	2400	0	0	0	Halcyon
1013395	PARKIN	146021	2025-01-30	100	400	2400	0	0	0	Halcyon
1013395	PARKIN	140088	2025-01-30	100	400	2400	0	0	0	Halcyon
1042958	PARKIN	127458	2025-12-12	100	200	1200	0	0	0	Halcyon
1042958	PARKIN	235773	2025-12-12	100	200	1200	0	0	0	Halcyon
1042959	PARKIN	105051	2025-12-23	100	200	1200	0	0	0	Halcyon
1042960	PARKIN	173981	2025-12-12	100	200	1200	0	0	0	Halcyon
1043292	PARKIN	177336	2025-01-26	100	200	1200	0	0	0	Halcyon
1043292	PARKIN	132110	2025-01-26	100	400	2400	0	0	0	Halcyon
1043293	PARKIN	199650	2025-05-27	100	200	1200	0	0	0	Halcyon
1043293	PARKIN	135462	2025-03-14	100	200	1200	0	0	0	Halcyon
1043294	PARKIN	128028	2025-01-26	100	400	2400	0	0	0	Halcyon
1043294	PARKIN	154535	2025-05-27	100	200	1200	0	0	0	Halcyon
1043492	PARKIN	282042	2025-01-26	100	200	1200	0	0	0	Halcyon
1043493	PARKIN	319429	2025-01-26	100	200	1200	0	0	0	Halcyon
1117883	PARKIN	174016	2025-05-27	100	200	1200	0	0	0	Halcyon
1117884	PARKIN	288517	2025-05-27	100	400	2400	0	0	0	Halcyon
1211386	PARKIN	342296	2025-05-27	100	200	1200	0	0	0	Halcyon
1211386	PARKIN	296612	2025-05-27	100	400	2400	0	0	0	Halcyon

Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Percentage	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve	Project
648539	PARKIN	281291	2025-03-04	100	200	1200	0	0	0	Halcyon
648539	PARKIN	340264	2025-03-04	100	200	1200	0	0	0	Halcyon
648540	PARKIN	164649	2025-03-04	100	400	2400	0	1080	1080	Halcyon
648540	PARKIN	318187	2025-03-04	100	200	1200	0	1595	1595	Halcyon
648548	PARKIN	119496	2025-03-14	100	400	2400	0	20007	20007	Halcyon
648699	PARKIN	226618	2025-03-14	100	200	1200	0	1705	1705	Halcyon
682111	PARKIN	238755	2025-03-14	100	200	1200	0	216	216	Halcyon
682112	PARKIN	162371	2025-03-14	100	400	2400	0	2425	2425	Halcyon
682113	PARKIN	295742	2025-03-14	100	400	2400	0	20338	20338	Halcyon
682279	PARKIN	140692	2025-03-14	100	400	2400	0	21	21	Halcyon
682280	PARKIN	162656	2025-03-14	100	400	2400	0	1738	1738	Halcyon
854571	PARKIN	301409	2025-11-25	100	200	1000	0	412	412	Halcyon
854571	PARKIN	252166	2025-11-25	100	200	1000	0	413	413	Halcyon
894924	PARKIN	122810	2025-06-12	100	200	1200	0	0	0	Halcyon
	AYLMER,PARKIN	535321	2025-11-22	100	400	2000	0	0	0	Halcyon Bridge Contiguous
	AYLMER,PARKIN	535322	2025-11-22	100	400	2000	0	0	0	Halcyon Bridge Contiguous
	AYLMER,PARKIN	535323	2025-11-22	100	400	2000	0	0	0	Halcyon Bridge Contiguous
	AYLMER,PARKIN	535324	2025-11-22	100	400	2000	0	0	0	Halcyon Bridge Contiguous
	AYLMER,PARKIN	535325	2025-11-22	100	400	2000	0	0	0	Halcyon Bridge Contiguous
	FRALECK	535327	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	FRALECK	535328	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	FRALECK	535329	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	FRALECK	535330	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	FRALECK	535331	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	FRALECK,PARKIN	535332	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535333	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated

Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Percentage	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve	Project
	PARKIN	535334	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535335	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535336	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535337	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535338	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535339	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated
	PARKIN	535340	2025-11-22	100	400	2000	0	0	0	Halcyon North Bridge Isolated

Table 3 Post Creek West Project 17 claims as of June 13, 2019

Legacy Claim Id	Township / Area	Tenure ID	Anniversary Date	Tenure Percentage	Work Required	Work Applied	Available Consultation Reserve	Available Exploration Reserve	Total Reserve
4267491	HUTTON	107114	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON,WISNER	242755	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON,PARKIN	299426	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON,PARKIN	244292	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON,PARKIN	132375	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON,NORMAN, PARKIN,WISNER	299427	2025-08-18	100	200	1200	0	0	0
4267491	HUTTON	222612	2025-08-18	100	400	2400	0	0	0
4267491	HUTTON	214408	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON,WISNER	309988	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON,WISNER	163839	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON,WISNER	146776	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON	250110	2025-08-18	100	400	2400	0	0	0
4267493	HUTTON	250109	2025-08-18	100	400	2400	0	0	0
4267493	HUTTON	163838	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON	146775	2025-08-18	100	400	2400	0	0	0
4267493	HUTTON	107116	2025-08-18	100	200	1200	0	0	0
4267493	HUTTON	107115	2025-08-18	100	200	1200	0	0	0

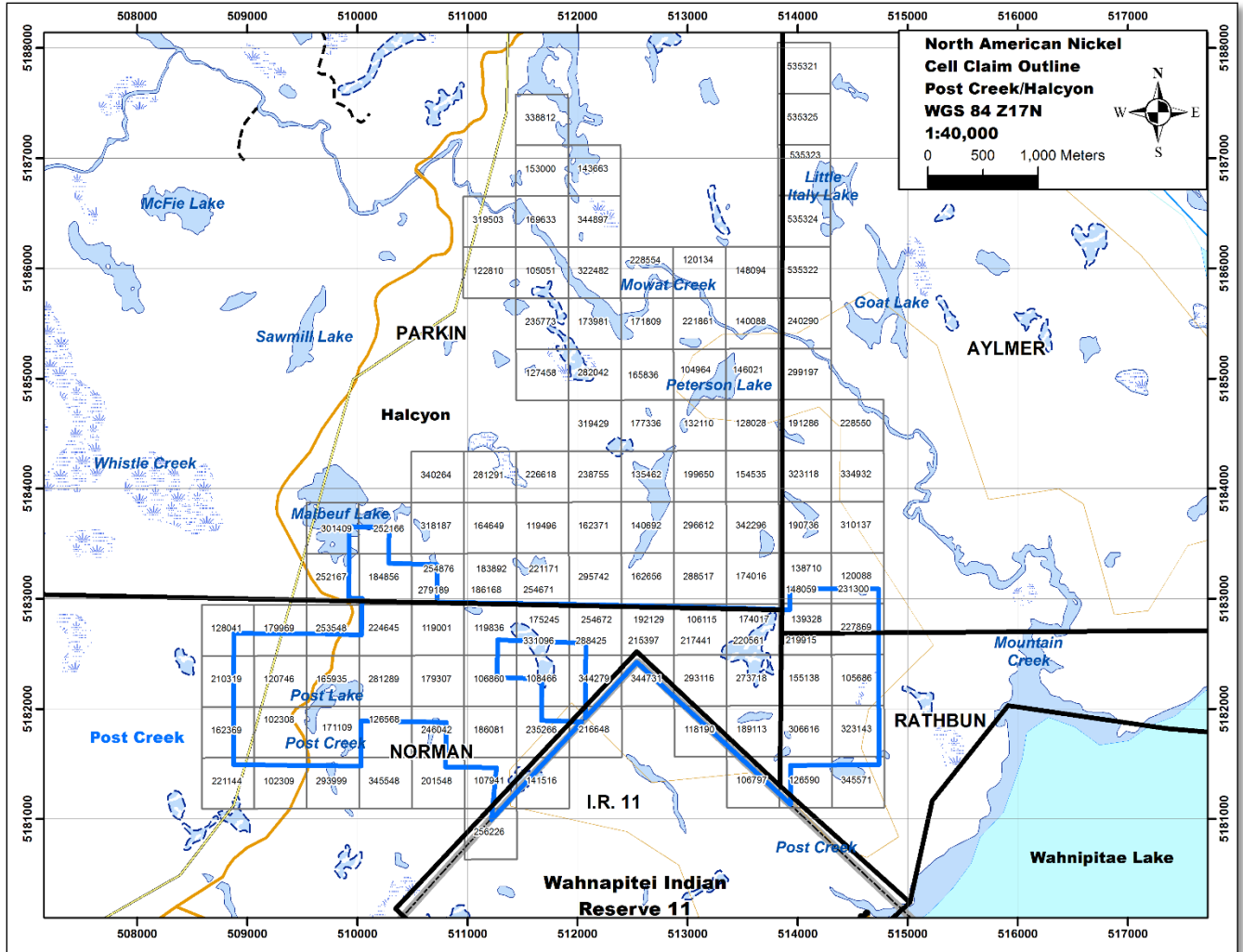


Figure 2 Overview of claims located in Post Creek/Halcyon.

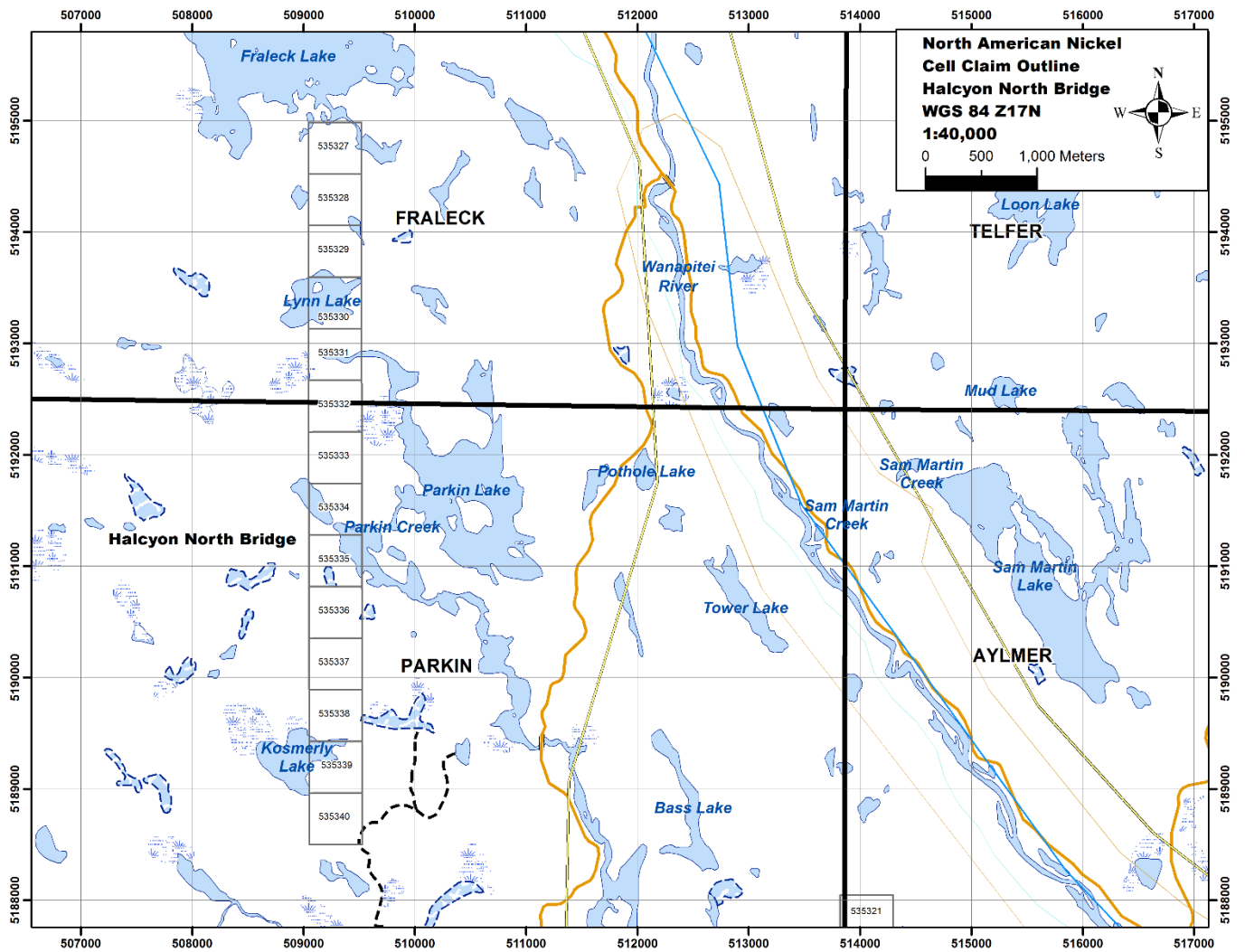


Figure 3 Overview of claims located in Halcyon North (Non-Contiguous Bridge)

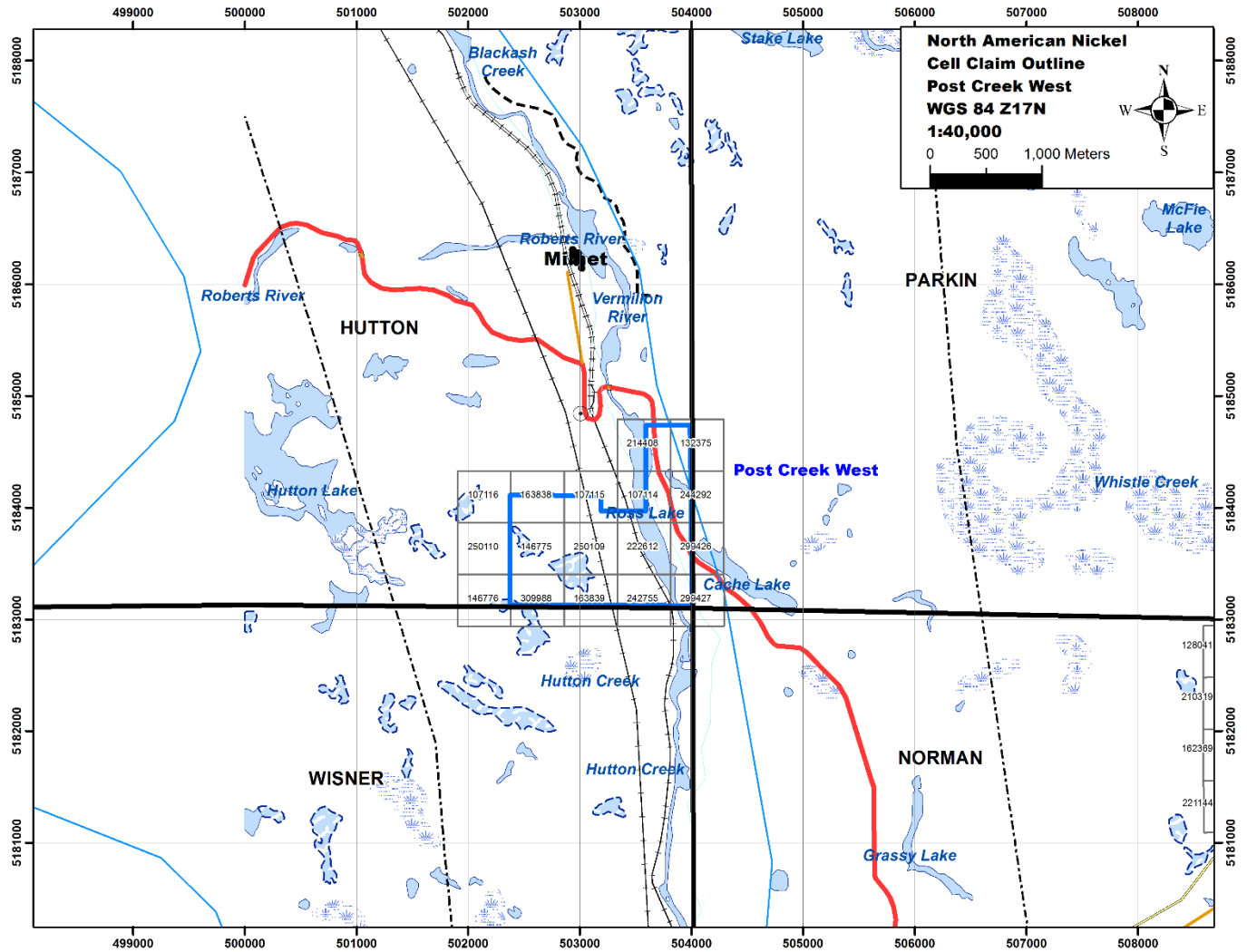


Figure 4 Overview of claims located in Post Creek West

### 1.3 Previous work

A comprehensive search of work on the property was completed and a table compiled for this report. See Table 4



Table 4 Historical Work on Post Creek/Halcyon.

Year	Company	Description of Work	Post Creek	Halcyon
1951	North Denison Mines Ltd	Geophysics Resistivity Survey (12,400 line feet estimate)		X
1952	North Denison Mines Ltd	Company Prospectus Filed		X
1953	New Alger Mines	Drilling 5 ddh (990.4') 300m		X
		Samples not well documented		
1953	Unknown-Simard & Knight	Geology Mapping		X
		Geophysics Magnetometer Survey (67,000 Feet)		X
1956	Unknown-F Smith	Drilling 2 DDH (359') 109m		X
1956	Cleveland Copper Corp	Geophysics on 'North Property' EM/MAG (Unknown feet)	X	
1957	RM Elliot	Drilling 3 DDH (221') 67m		X
		4 core samples		X
1962	IRONCO Mining and Smelt	Geology Mapping	X	
		Geophysics Magnetometer Survey (5.55 miles)	X	
1964	IRONCO Mining and Smelt	Drilling 2 DDH (417') 126m No Samples		X
1969	William Peacock	Trenching		X
1978	IKE Burns Expl Corp	Geophysics Magnetometer Airborne Survey (Est 50 Line Miles)		X
1983	John Brady	Trenching		X
		Geochem 52 Samples (2.6% Ni)		X
1983	John Brady	Geochem 41 Samples		X
1983	John Brady	Geochem 5 Samples		X
1983	John Brady	*Plugging Report for Samples		X
1984	Rudolph Larson	Gas Drill, Trench and Sampling	X	
1985	John Brady	Gas Drill, Trenching		X
1987	Imperial Metals Corp	Geophysics Magnetometer and VLF-EM Airborne Survey		X
1988	BP Resources Canada	Geophysics Heli Borne Magnetometer (8.4 line km)	X	
		VLF-EM Survey (8.4 line km)	X	
1989	Imperial Metals Corp	Geochemistry 772 B Horizon Soils		X
		Geochemistry 23 Rock Samples		X
1989	M Brady	Geology Mapping	X	
		Trenching	X	
		Geochemistry 3 Samples	X	

Year	Company	Description of Work	Post Creek	Halcyon
1990	D Bradley	Geochemistry 24 Rock Samples Up to 5.8% Copper	X	
		Geophysics_MAG_VLF Survey (20.875 line km)	X	
		Prospecting/Geology Mapping	X	
1991	E Jerome, R Charron, R Wasitis	*Report for D Bradley MAG_VLF Survey	X	
1992	Unknown	Prospecting	X	
		Stripping/Trenching (2 Trenches)	X	
		Sampling (7 samples)	X	
1992	J Brady	Geophysics-Total Field Magnetometer Survey 11.2 line km		X
		Geophysics-VLF-EM Survey 11.2 line km		X
		Geophysics-IP Survey 11.2 line km		X
1993	J Brady; M Brady	Trenching Map 3&5		X
		Geology Mapping Map 3&5		X
		Geochemical Assays Map 3&5 (16 Assays)		X
1993	J Brady	* Duplicate to above with invoices		
1995	WMC International	Geological Mapping Block 3	X	
		Geochemistry Rock Samples Block 3 (Est 77 Taken, not all assayed)	X	
		Geophysics DIGHEM Airborne Block 3 No Report??	X	
1996	J G Brady	Stripping/Trenching (13 Trenches)		X
		Geochemistry Assays (10 Samples)		X
1996	J Brady	Stripping/Trenching (Est. 22 Trenches)		X
		Geochem Assays (Est. 18 Samples)		X
1996	WMC International	Grid Cutting (Grid 5/5a) 4.8 line km plus loop 3.6 line km (8.4)	X	
		Lamontagne UTEM (Grid 5/5a) 4.8 line km	X	
1997	J Brady	Stripping		X
		Trenching 3+1 for 4 trenches total		X
		Geology Mapping		X
1997	John Brady	Stripping	X	X
		Trenching 2+5+1+2 (10 Estimated Count of trenches)	X	X
		Geology Mapping	X	X
		Assays 2+3+3+3+8 (Estimated 19 grabs)	X	X
		Chips 1 (6.62ppm Au) + 2 (Estimated 3 chip samples)	X	X
1998	Don Hopkins	Line Cutting (10.25 line km)	X	X
		Geophysics Magnetometer Survey (10.25 line km)	X	X

Year	Company	Description of Work	Post Creek	Halcyon
1999	John Gregory Brady	Prospecting	X	X
		Stripping and Trenching 7+2+5+5+1+3+2= Est 25 Trenches	X	X
		Assays 6+ 2+3+2+1= Est. 14 Grab samples	X	X
		Chip Samples 3+3+2 = Est 8 Chip Samples	X	X
		Geology Mapping	X	X
2001	John G Brady, Reg J Charron	Area G and C Beep Mat Traverse (1+ 1Traverse's)	X	X
		Grab Samples (5+5 Grabs)	X	X
2001	John G Brady, Reg J Charron	Aeroquest AeroTEM Mag and EM Survey Heli-Borne (126 line km)	X	
		for Crowflight Minerals with blackouts and maps black and white	X	
2002	John Brady, Champion Bear	Aeroquest AeroTEM Mag and EM Survey Heli-Borne (126 line km)	X	
2002	John Brady/Namex	Lashex Report on VLF EM and MAG Survey (26.8 Line km)	X	
2002	Champion Bear	Re-Interp of 2001 Aeroquest Survey	X	X
2003	John Brady_Namex	Drilling 3 DDH (1600') 485m	X	
		Geochemistry 156 Assays, 156 LithoGeochemistry	X	
2003	J. Brady, Reg J Charron, Flag Resources	Drilling 1 ddh (465') 141m No Samples	X	
2003	Champion Bear	Geochemistry MMI Halcyon Report (482 samples)		X
2003	Namex	Geochemistry MMI P. Creek Report (262 samples)	X	
2003	John Gregory Brady	Geophysics-Ground Mag (2.1 line km)	X	
		Geochemistry-MMI (45 samples)	X	
		Geology-Mapping/Prospecting	X	
		Trenching (3 Trenches)	X	
		Geochemistry-Rock LithoGeochemistry (7 samples)	X	
2003	Namex	Geophysics GEOTECH Heli Borne TDEM (113.9 Line KM)	X	
2004	Namex	Geochemistry MMI (745 samples)	X	
2004	Champion Bear	Geological Mapping (40 km of grid lines)		X
		Geophysics Ground MAG (45 line km)		X
		Geochemistry (MMI soils) (420 MMI soil samples)		X
		Geochemistry Grab Samples (28 samples collected)		X
2004	Champion Bear	RECCE Geological Mapping		X

Year	Company	Description of Work	Post Creek	Halcyon
		Geochemistry-Grab Samples (47 Grab samples)		X
2004	Namex	Geophysics-IP/Res Survey 27.5 line km	X	
		Geophysics-Mag Survey 22.3 line km	X	
2005	Namex	Diamond Drilling: (PC04-XX) 11 DDH (8199 feet) 2,485m	X	
		Geochemistry: 162 core samples	X	
2005	Champion Bear	Diamond Drilling: (HAL04-XX) 10 ddh (2,171.6m)		X
		Geochemistry: 784 Core samples Gold and Trace Elements		X
2005	Namex	Matrix Geotech Interp Report on 2004 IP, Gradient and Pole-Dipole	X	
2005	Namex	Lashex Report on Mag Survey Post Creek	X	
2006	Namex	Geochemistry-MMI-M Soil Survey (245 samples)	X	
2007	Namex	Drilling PC12-06, PC13-06 (2546.3 feet) (776.32m)	X	
		Geochemistry (6 core samples)	X	

The summarized information provided below comes from reports by Fitchett (2012), Peredery (2010) and Dunbar (2005 & 2004). Recent work completed on the property includes:

### ***Halcyon property***

In Alymer Township, between 1996 and 1997, trenching uncovered a sheared, carbonatized, quartz veined quartzite (claim 1043484), which returned 6.62 g Au/t across 1.5 m.

Prospecting by John Brady in 1997 resulted in a sample of quartz stock-work returned 1.65 g Au/t (claim 682281) and a trench containing iron formation returned between 4.92 to 5.45 g Au/t over a 1.5 m sample width (claim 682113).

In 1998, trenching by John Brady continued, uncovering mineralized brecciated volcanic rock with 1-3% pyrite and trace amounts of chalcopyrite and pyrrhotite. Gold assays were low with anomalous values of 56 ppm Cu, 231 ppm Zn and 0.09 g Au/t. Sulphide mineralized iron formations were found to contain elevated gold concentrations, for example, one formation located on claim 682113 returned 4.75 g Au/t.

In 2003, a reconnaissance exploration program was conducted by WGM for Champion Bear Resources Ltd. Areas where gold showings were previously reported were examined and sampled. The old excavator access trail to the property was surveyed and the exposed geology mapped. Follow-up work by Champion Bear Resources Ltd. (2003) included: (i) a magnetics survey by Matrix GeoTechnologies

Ltd., (ii) an induced polarization (IP) survey by Matrix GeoTechnologies Ltd., and (iii) a Mobile Metal Ions soil geochemical survey by Mount Morgan Resources Ltd.

In 2004, Champion Bear diamond drilled numerous areas outlined as anomalous for a total of 10 DDH totalling 2,172 metres, testing various coinciding soil MMI and IP anomalies.

In 2007, Champion Bear drilled two diamond drill holes totaling 461.6 metres to follow-up anomalous nickel mineralization intersected in previous drilling.

### ***Post Creek property***

In 2002, Lashex geophysical exploration company carried out magnetic and VLF surveys, which included 26.8 km of line cutting, and collected readings every 25m on grid lines. Several magnetic and VLF-EM anomalies were identified, which showed a NW to SE trends in the rocks and a distinct but weaker NE trend.

In the period between 2002 and 2006, Namex Explorations Inc., established three exploration grids, and conducted prospecting, airborne magnetic TDEM, IP surveys, MMI soil geochemical surveys, trenching, and three diamond drilling programs. Namex carried out a preliminary diamond drilling program (2002) and geochemical survey over the property area. Three diamond drill holes were drilled on claim 894748.

- DDH PC-1: intersected andesitic and felsic volcanics with minor pyritic sulphide mineralization.
- DDH PC-2: intersected a gabbroic weakly mineralized rock with disseminated pyrrhotite and chalcopyrite.
- DDH PC-3: intersected felsic and mafic volcanics, a gabbroic dyke rock and Sudbury Breccia

In 2003, Namex followed-up the drilling results of 2002, with a more extensive program of MMI soil geochemistry.

In 2004, Namex carried out a second, more extensive, phase of diamond drilling, which is summarized in table 5 below.

*Table 5 2004 DDH Namex Exploration Ltd.*

<b>DDH</b>	<b>Azimuth</b>	<b>Dip</b>	<b>Depth</b>	<b>Sample #</b>
<b>PC-04-1</b>	90	-45	230	93901-09
<b>PC-04-2</b>	90	-45	132	93910-18
<b>PC-04-3</b>	100	-55	128	93951-68
<b>PC-04-4</b>	100	-55	128	93969-75
<b>PC-04-5</b>	100	-55	189	93976-86
<b>PC-04-6</b>	100	-55	196	93987-90
<b>PC-04-7</b>	270	-60	285	57951
<b>PC-04-8</b>	270	-60	345	57952-69
<b>PC-04-9</b>	270	-45	279	57970-77
<b>PC-04-10</b>	270	-45	306	57978-99
<b>PC-04-11</b>	270	-45	279	99701-09

Another MMI survey over the Whistle Offset target was carried out in 2004, and was followed-up by an IP/resistivity survey carried out by Matrix GeoTechnologies Ltd.

In 2006, Namex drill two additional DDH to continue the follow-up to the 2004 MMI survey, which is summarized below in Table 6.

*Table 6 2006 DDH Namex Exploration Ltd.*

<b>DDH</b>	<b>Azimuth</b>	<b>Dip</b>	<b>Depth</b>
<b>PC-12-06</b>	105	-50	451
<b>PC-13-06</b>	105	-50	325

In 2011, North American Nickel Inc. (NAN) conducted an extensive exploration program over the Post Creek and Halcyon properties. A complete review of the historical Namex Exploration Inc. data was completed and reassessment of the helicopter-borne time domain electromagnetic survey from 2003.

This compilation work lead to the company contracting Abitibi Geophysics to conduct a ground B-field InfiniTEM II survey, and Larder Geophysics Ltd. to conduct a 40 km walking MAG VLF survey over a portion of the projects. Follow-up prospecting to investigate anomalies was conducted throughout 2011, resulting in the discovery of a new quartz diorite embayment (CJ Quartz Diorite) in the north-central portion of the Post Creek property. Continued prospecting has extended the embayment east onto the Halcyon property. This discovery resulted in extensive trenching, sampling and geological mapping between July 2011 and November 2011. Numerous thin sections were collected from various lithologies within the trenches to document and understand the relationships between the SIC related lithologies and footwall rocks. Petrography by NAN consultants has identified the presence of quartz diorite and re-enforced the concept of this being an embayment structure.

The embayment was drilled in late 2011. Seven diamond drill holes were completed for a total of 1,533m; with the deepest hole extending to a vertical depth of 301 m. The drilling program further extended the interpreted margins of the embayment and increased the volume of the structure. The drilling program failed to intersect the transient crater wall, and therefore the base of the embayment which typically hosts Cu-PGE deposits has not been tested.

In 2015, the company pulled several historic holes previously drilled by NAMEX and NAN from the Capreol storage facility, transported to Sudbury and re-logged the core, updating of new lithologies occurred within North American Nickel's database. The re-logged holes were HAL04-010; PC-04-04; PC-04-06; PC-04-08; PC-04-09 and PC-04-11

On April 29, 2016 an exploration permit (PR-16-10828) was granted to North American Nickel Inc. to carry out prospecting, stripping and diamond drilling on selected targets within the Post Creek – Halcyon property. This permit is in effect for three years and can be amended to make changes to exploration activities, type of activity or location and scale of work by following the amendment process and contact the MNM for further direction.

From May 9 to May 31, 2016 the company completed numerous traverses throughout the Post Creek property and the southern portion of Halcyon property. 102 stations were observed during the month with 20 samples collected for assays, with particular interest in PGM and base metal mineralization as

well as 5 samples collected for whole rock analysis and thin section description to quantify mineralogy and host affinity. ALS Global completed the analytical work and Vancouver Petrographic has completed the thin section (petrography) work. See earlier 2018 Assessment Report on Post Creek for data and Tables.

During the month of June, six days were attributed to trenching, washing and channel sampling. Twelve channel samples, one grab and two qaqc samples were sent to the assay lab for multi-element ore grade four acid digestion and PGM analysis.

Trench Mapping by John Fedorowich was completed over 3 days, beginning Oct 24<sup>th</sup> and ending Oct 27<sup>th</sup>.

During 2017, final data was received from Vancouver Petrographic on the 5 trench samples taken during the mapping program of 2016. A summary report was compiled by John Fedorowich on Feb. 27. See 2017 Assessment summary report and Vancouver Petrographic Report. See Table 7 below.

*Table 7 2010-17 North American Nickel Work.*

Year	Company	Description of Work	Post Creek	Halcyon
2010	NAN	Peredery 43_101 Report for NAN plus Petrography Report (Andy Bite)	X	
2010	NAN	Geochemical Results of MMI-M soil survey-Post Creek (25 MMI soils)	X	
2010	NAN	Geology-Report on 2010 Exp work-Thomas Hart	X	
		Geophysics-Beep Mat Survey	X	
		Geology-Trenching, prospecting, mapping	X	
		Geochemistry- (64 grab samples, 1 channel) fire assay and multi-element	X	
		Geology- Petrography samples from trenches	X	
2011	NAN	Geophysics-Abitibi Ground B-Field InfiniTEM II Survey (33.85km)	X	X
2011	NAN	Geophysics-Larder Magnetometer and VLF EM (40.4 line km)		
2011	NAN	Drilling PC-14->PC-20 (7 ddh; 1532.5m)	X	X
		Geochemistry - Core Samples (507 samples)	X	X
2012	NAN	Geophysics- Report UTEM 4 BHEM Lamontagne Geophysics (5 ddh)	X	X
2012	NAN	Report on 2011/2012 Work Craig Fitchett	X	X
		Geology-Mapping, Prospecting, Trenching x 5	X	X
		Petrography (56 thin sections)	X	X
		Geochemistry Grab Samples (197 Grabs)	X	X
2015	NAN	Relogging of NAMEX ddh	X	X
2016	NAN	Geochemistry- (20 grab samples) fire assay and multi-element	X	X
	NAN	Geochemistry- (5 grab samples) Whole Rock; LithoGeochem and Thin Section Work	X	X
	NAN	Geochemistry- (12 channel and 1 grab samples) fire assay and multi-element	X	X
	NAN	Geology - Trenching, washing and mapping program	X	

Year	Company	Description of Work	Post Creek	Halcyon
2017	NAN	Geology - Thin Section Work received and summary report completed.	X	

## 1.4 2018 Work

From Nov 11 to Dec 14, 2018 the company drilled two drillholes totalling 969 metres on its Post Creek property, NQ diameter Drillhole PC-18-021 (474m, 219 assays plus 28 certified reference material; 7 reject duplicates and 8 pulp duplicates (external lab check-sent to SGS) were completed on cell claims 185856 and 279189. NQ diameter PC-18-022 (495m, 75 assays plus 9 certified reference material; 5 reject duplicates and 4 pulp duplicates (external lab check-sent to SGS) were completed on cell claim 246042.

In addition, relogging of drill core took place during Dec 12<sup>th</sup> to 14<sup>th</sup>. Hole relogged were PC-15 (Cell claim #'s 279189 and 184856) and PC-16 (cell claim 184856).

An ongoing NSERC Master's Thesis is currently underway on Post Creek area geology by Mr. Thomas Baechler in association with the University of Western Ontario, supervisor is Dr. Gordon Osinski.

## 1.5 2018 Personnel

Gerry Katchen (Senior Geologist NAN)

Days Worked: 20 billable days throughout (Nov. 11- Dec. 14)

Qualifications: P.Geol.

Kalevi Hannila (Sudbury Core Logging Geologist)

Days Worked: 18 days invoiced through November 21-28 and December 1-13

Cecil Johnson (Prospector)

Days Worked: 28 days invoiced through October 30 to December 13

Walter McGregor (Labourer/Helper from Wahnipitae First Nation Community)

Days Worked: 24 days invoiced through October 30 to December 13



## 2.0 GENERAL GEOLOGY

### 2.1 Regional Geology

Geology of the Alymer-Rathbun-Norman-Parkin Twps. has been described by Dressler (1978), Meyn (1970) and Muir et al. (1980). The oldest rocks are Archean metavolcanic rocks consisting mafic and felsic metavolcanic rocks and iron formation, which are part of the Benny Greenstone Belt. The volcanic stratigraphy commonly contains Zn-Cu-Pb sulfide mineralization, or Cu-Au sulfides. The volcanic belt has been intruded by granitic rocks (Cartier Batholith) of quartz monzonite to granodiorite composition. Within the Cartier Batholith there are segments of the Levack Gneiss Complex (2.7 – 2.64 Ga) (Ames *et al.*, 2005). These are reported to be a mixture of paragneiss, and migmatite. The Archean rocks are intruded by the northwest trending Matachewan dyke swarm (2.45 Ga). Unconformably overlaying the Archean volcanic stratigraphy and granitic intrusion are the Huronian (Proterozoic) metasedimentary rocks. The Huronian Supergroup can be sub-divided into the following litho-stratigraphic formations: Mississagi, Bruce, Espanola, Serpent, Gowganda, and Lorrain. The foregoing rocks are intruded by dykes/sills of the Nipissing-type diabase (2.2 Ga), and olivine diabase (1.2 Ga). See Table 8 and Figure 5 below.

On a regional scale the Sudbury Structure is superimposed on the Archean and Proterozoic rocks. The Sudbury Structure is considered to be the product of a meteorite impact that occurred at 1.85 Ga. The Sudbury Structure is defined as consisting of several elements (see also *The Geology and Ore Deposits of the Sudbury Structure*, OGS Special Volume 1, Eds. E.G. Pye, A.J. Naldrett, and P.E. Giblin, 1984, 604p.):

1. Sudbury Basin and all the rocks within it, especially the Sudbury Igneous Complex (SIC), the associated mineralized Sublayer, and the mineralized Sudbury breccias;
2. Offset Dykes stemming in a radial fashion and concentrically around the Sudbury Basin;
3. Shatter cone structures in the basement rocks and in the overlying Huronian Supergroup; and
4. Sudbury Breccia which occurs peripherally to the Sudbury Basin, and in concentric rings around the Basin.

Myen (1970) in Parkin Twp. observed that folding is well-developed in the metavolcanic stratigraphy. The lenses of iron formation in these rock serve as excellent marker zones, indicating that folding has taken place about an axis trending N50°W by which the whole volcanic pile was folded into a vertical position. Subsequent folding about an axis trending about N30°E has caused the iron formation to be folded into its present position. Folds in the Huronian rocks are difficult to determine, although there is a change from near vertical strata in the south to shallowly dipping strata in the northern part of the township.

Table 8 Lithological units that underlay the Post Creek and Halcyon properties, based on OGS and GSC maps and reports.

<b>Cenozoic</b>	
<b>Recent</b>	Fluvial clays and silts, and swamp deposit
<b>Pleistocene</b>	Clay, sand, gravel and till
----- Unconformity	
<b>Precambrian</b>	
<b>Proterozoic</b>	
	<b>Olivine diabase (1.235 Ga.)</b>
----- Intrusive Contact	
	<b>Sudbury Igneous Complex (1.85 Ga.)</b>
----- Intrusive Contact	
	<b>Nipissing Gabbroic Intrusion (2.21 Ga.)</b>
----- Intrusive Contact	
	<b>Huronian Supergroup (&lt;2.48 to &gt;2.22 Ga.)</b>
	Cobalt Group
	Lorrain Formation
	Gowganda Formation
----- Local unconformity	
	Quirke Lake Group
	Serpent Formation
	Espanola Formation
	Bruce Formation
	Hough Lake Group
	Mississagi Formation
	Pecors Formation
	Ramsey Lake Formation
----- Unconformity	
<b>Paleoproterozoic</b>	
	<b>Matachewan Dyke Swarm (2.4 Ga.)</b>
----- Intrusive Contact	
<b>Neoarchean</b>	
	<b>Cartier Batholith (2.64 Ga.)</b>
----- Intrusive Contact	
	<b>Benny Greenstone Belt</b>
	Metasediments (wacke, chert, and iron-formation)
	Felsic metavolcanic rocks (flows and pyroclastic)
	Mafic metavolcanic rocks (massive, pillowed, and pyroclastic)
----- Unconformity	
	<b>Levack Gneiss Complex (2.7 - 2.64 Ga.)</b>



Post Creek is located within 2 km of the northeastern edge of the SIC, near the past producing Podolsky copper-nickel-PGM mine of KGHM International Ltd. The claims are dominantly underlain by a belt of Archean volcanic rocks, which trend in a north westerly direction and are complexly deformed. The volcanic stratigraphy commonly contains numerous discontinuous lenses of iron formation. The western portion of the property is covered by the same sequence of Huronian sedimentary rocks observed on the Halcyon property. The southwestern corner of the property covers a complex of Archean granite/gneiss.

The following section documents the characteristics used to discriminate between the different lithologies within the project area, and any significant structural features or textures observed. The description of units is based on hand sample characteristics and the separation of units is based on a minimum mappable unit size. The lithologies are listed in order of oldest to youngest based on publications and inferred crosscutting relationships.

#### **Amphibolite (Mafic Metavolcanics and Volcaniclastic Rocks)**

A dark green unit that is very fine- to fine-grained, with a moderate foliation defined by the alignment of chlorite and amphibole grains and elongated felsic wisps (quartz-albite). Dominantly composed of amphibole, biotite, chlorite, epidote and plagioclase, the mafic volcanic rocks are typically moderately altered by chlorite +/- carbonate, which forms layers or bands up to 1 cm wide and commonly contains minor amounts of pyrrhotite. Patchy bands of epidote-albite +/- carbonate alteration are dominantly controlled by fractures and commonly contain a pyrrhotite and chalcopyrite assemblage. Silica +/- albite haloes are observed around fractures and late quartz veins.

#### **Metarhyolite (Rhyolite Flow and Felsic Volcaniclastic Rocks)**

A light pink gray coloured rock that is massive with trace disseminated chalcopyrite-pyrrhotite, which is mainly fracture controlled. The unit is very fine-grained, aphyric, aphanitic, massive with a very siliceous texture. Numerous hairline fractures filled with chlorite and a few quartz-carbonate veins. Occasionally, there is a porphyritic texture that is defined by fine- to medium-grained, euhedral to subhedral, block plagioclase phenocrysts.

#### **Interbedded Sandstone and Siltstone (Undetermined Formation)**

These sedimentary rocks are composed of rhythmically interbedded siltstone-mudstone layers with very fine- to fine-grained sandstone (plagioclase-quartz arenite). Overall, the unit contains approximately 65% sandstone beds, but locally these sediments can be composed completely of thinly laminated siltstone. The siltstone-mudstone layers are thinly to thickly laminated and enriched in biotite with a lamination parallel foliation. The sandstones are thinly to thickly bedded, and occasionally the beds are graded. This unit is black in colour with minor amounts of late fractures filled with quartz veins surrounded by a pale green sericite alteration halo. Between some of the layering are elongated pods remobilized of sulfides (pyrrhotite-chalcopyrite). The weathered surface is a beige colour.

#### **Gabbro (possibly Nipissing)**

The margins of the intrusive bodies are very fine-grained with an increase in grain size towards the center to a coarse-grained gabbro. Associated with this textural variation is a change in colour from black at the margin to salt & pepper in the center. As well there is an increase in the plagioclase concentration in the center of the intrusion. It is common to observe magmatic sulfides disseminated within this unit. The gabbros are relatively unaltered, with numerous small late carbonate-filled fractures and rare chlorite altered fractures. Overall, the gabbros are massive, non-foliated, relatively

homogeneous in composition with a sub-ophitic texture, and mineralogically comprised of pyroxene, amphibole, plagioclase, and oxides. Occasionally, there are gabbroic pegmatitic pods or veins cutting the medium-grained gabbro phase. It is assumed that these different phases are related.

#### **Meta-breccia or Sudbury Breccia**

The unit is part of the "sudbury breccia" of fragmental rocks underlying the Sublayer and often mixed with offset dyke phases. It is generally defined as a fine-grained light-coloured groundmass enclosing more mafic clasts. This is often a very good host for mineralization especially enriched in PGE's. Two small zones are in the outcrop area near and surrounding quartz diorite lenses. Generally meta-breccia is considered to be the product of metamorphosis of Sudbury breccia. The SUBX also has hosts a significant amount of granitic and granodiorite porphyry and older gneissic blocks.

#### **Felsic Partial Melt**

A light gray coloured matrix that contains approximately 60% inclusions of subrounded quartz fragments, mafic volcanic and plastically deformed felsic volcanic rocks. The contacts are typically sharp and well defined with a slight fining in grain size over 1cm at the contact, which is marked by a change in colour. The inclusions range in size from 5 mm to 30 cm in diameter, and their margins are sharp, irregular in shape, and at various angles to the core axis. The groundmass of the melt is very fine- to fine-grained, aphanitic, siliceous and porphyritic. There are spherulites in the felsic partial melt that are fine- to medium-grained, oval shaped, comprise up to 45% of the melt locally, and result in the typical "mushroom" texture. These spherulites have a dark massive core that is mantled by a cloudy, felsic halo of radiating grains (unknown composition). Similar textures are present in the granite breccias (partial melts of the North Range footwall) and are the result of in situ metamorphism of wall-rocks underlying the S.I.C.

#### **Quartz Diorite**

Massive quartz diorite that is light gray in colour and contains subrounded fragments of felsic country rock, locally up to 5%. The matrix is very fine- to fine-grained, massive, phaneritic with laths of plagioclase that appear to be intergrown with quartz and acicular amphibole grains. As well there are plagioclase spherulites with radiating acicular amphibole needles. No disseminated sulfides or alteration, but pyrite along fractures. Numerous later thin quartz-carbonate filled fractures.

## **2.3 Exploration Targets**

Four distinctive types of mineralization are present on the property. These include:

1. Ni-Cu-PGE mineralization associated with disseminated to massive sulfide zones within the CJ Quartz Diorite Embayment or the Sudbury Breccia unit.
2. Gold within sulphide-bearing iron formation hosted in mafic volcanoclastic rocks
3. Gold within highly sheared and carbonatized shear zones in association with mafic intrusive rocks.
4. Volcanogenic massive sulphide-type zinc-copper base metal mineralization ("VMS"; example Maki Base Metal Prospect) within the Benny volcanic assemblage.

### 3.0 SUMMARY OF WORK 2018

Cecil Johnson's prospecting coupled with Thomas Baechler's master's thesis on geological (Regional and Trench) mapping, with geochemistry and thin section work within the Post Creek area has identified a large surficial Sudbury breccia area with anomalous copper mineralization as well as localized quartz diorite. Currently, the NSERC Master's Thesis is ongoing.

NAN considered to drill two drillholes in 2018 targeted on historic mapping, preliminary results from Thomas Baechler's Thesis, surficial grab/channel samples and surficial geophysics.

#### 3.1 Prospecting and Beep Mat Survey

Cecil Johnson, owner of Johnson Mineral Exploration and Walter McGregor, Community member from Wahnipetei First Nations conducted a reconnaissance prospecting over selected areas on the Post Creek properties.

The Beep Mat-Tool was a INSTRUMENTATION GDD Inc. Model: BM4Plus

The prospecting/beep-mat work was planned to follow-up on historic targets consisting of historical grab samples, ground - airborne EM anomalies and Induced Polarization chargeability and Mag anomalies. There were no noted cultural features within the project area that may have interfered with the measurements.

The Beep Mat is a simple and efficient electromagnetic prospecting instrument adapted to the search of outcrops and/or boulders containing conductive and/or magnetic minerals. It basically consists of a sleigh-shaped short probe and a reading unit. For prospecting, you pull the probe on the ground to be explored. The Beep Mat takes continuous readings while you walk and sends out a distinctive audible signal when detecting a conductive or a magnetic object in a radius of up to 3 meters.

The Beep Mat directly detects and signals the presence of ores, even slightly conductive, containing chalcopyrite, galena, pentlandite, bornite and chalcocine. It also detects native metals (copper, silver, gold) as well as generally barren conductive bodies (pyrite, graphite and pyrrhotite), but which may contain precious ores such as gold or zinc (sphalerite), which are themselves nonconductive. Besides detecting conductors, the Beep Mat measures their intrinsic conductivity and their magnetic susceptibility (magnetite content). This helps geologists and geophysicists better interpret others geophysical and geological surveys. See *gddinstrumentation* (2006)

Unfortunately, tool itself was not downloaded at the end of the day, simple notes were made if the tool made reference to a possible source of local conductance. The tool noted conductance within an area previously referred to as 'Chalcopyrite Mountain'. Previous work in the area has returned channel samples with values of up to 1.47% Cu with 0.359 ppm Au.

**Daily logs (Cecil Johnson + Walter McGregor):**

***PROSPECTING and BEEP-MAT SURVEY***

30-10-2019 & 08-11-2019 – Prospecting, traversed 9.2 km and documented 60 field stations. See Figure 6 & Table 9 for waypoints details and tracks.

Table 9: Waypoints and Lithologies noted from Prospecting and Beep Mat Work

Easting	Northing	Elevation	NAN_Litho_Legend	Litho_Desc	Comments
510809	5181968	328	BXR	Breccia	
511345	5182063	325	BXR	Breccia	<b>BeepMat Conductance Noted</b>
510169	5182058	338	V1	Felsic Volcanics	
510107	5182271	346	I3A	Gabbro	
510485	5181987	340	I3A	Gabbro	with V3 Mafic Volcanics
511103	5182814	316	I3A	Gabbro	
511097	5181742	320	M1	Gneiss	
510870	5181927	324	I1B	Granite	
511023	5181915	335	I1C	Granodiorite	
510982	5181918	332	I1B	Granite	
511084	5182034	335	I1B	Granite	
510981	5182096	330	I1B	Granite	
510762	5181807	324	I1B	Granite	
511010	5182208	337	I1GS	Granite	Brecciated
510851	5181899	326	I1C	Granodiorite	
510848	5181794	323	S9	Iron Formation	
510858	5182209	334	S9	Iron Formation	Float
510733	5182380	341	S9	Iron Formation	Magnetic
510111	5182274	340	V3	Mafic Volcanics	
510772	5182306	329	V3	Mafic Volcanics	Brecciated
510506	5181968	338	V3	Mafic Volcanics	with V1 Felsic Volcanics
510121	5182202	339	V3	Mafic Volcanics	
510620	5182160	334	V3	Mafic Volcanics	
510803	5182209	334	V3	Mafic Volcanics	
510841	5182743	334	V3	Mafic Volcanics	
510113	5182158	333	V3	Mafic Volcanics	
510871	5182775	329	V3	Mafic Volcanics	
510285	5181947	351	V3	Mafic Volcanics	
511200	5182738	317	V3	Mafic Volcanics	
510459	5181963	345	V3	Mafic Volcanics	
511281	5182562	328	V3	Mafic Volcanics	
511006	5182456	330	V3	Mafic Volcanics	
511238	5182472	329	V3	Mafic Volcanics	
510727	5182515	344	V3	Mafic Volcanics	
511207	5182460	337	V3	Mafic Volcanics	
510730	5182377	346	V3	Mafic Volcanics	
511156	5182364	351	V3	Mafic Volcanics	
510714	5182330	340	V3	Mafic Volcanics	
510753	5182037	335	V3	Mafic Volcanics	
510652	5182206	335	V3	Mafic Volcanics	
510819	5181787	321	V3	Mafic Volcanics	Brecciated
510872	5181849	328	ROAD ACCESS	ROAD ACCESS	
510846	5181870	325	ROAD ACCESS	ROAD ACCESS	
510770	5182036	330	ROAD ACCESS	ROAD ACCESS	
510822	5181892	324	ROAD ACCESS	ROAD ACCESS	
510759	5181949	323	SUDBX	Sudbury Breccia	
511210	5181794	320	SUDBX	Sudbury Breccia	
510950	5182209	344	SUDBX	Sudbury Breccia	
511144	5181773	322	SUDBX	Sudbury Breccia	
510804	5182694	335	SUDBX	Sudbury Breccia	
511162	5181791	322	SUDBX	Sudbury Breccia	
510903	5181986	328	SUDBX	Sudbury Breccia	
511289	5182040	334	SUDBX	Sudbury Breccia	<b>BeepMat Conductance Noted</b>
510844	5181872	325	SUDBX	Sudbury Breccia	
510722	5182480	342	SUDBX	Sudbury Breccia	
511012	5181947	339	SUDBX	Sudbury Breccia	
510838	5182007	335	Swamp	Swamp	Swamp Pit
510840	5182005	326	Swamp	Swamp	Swamp Pit
510486	5181988	343	Trench	Trench Historic	Old Trench



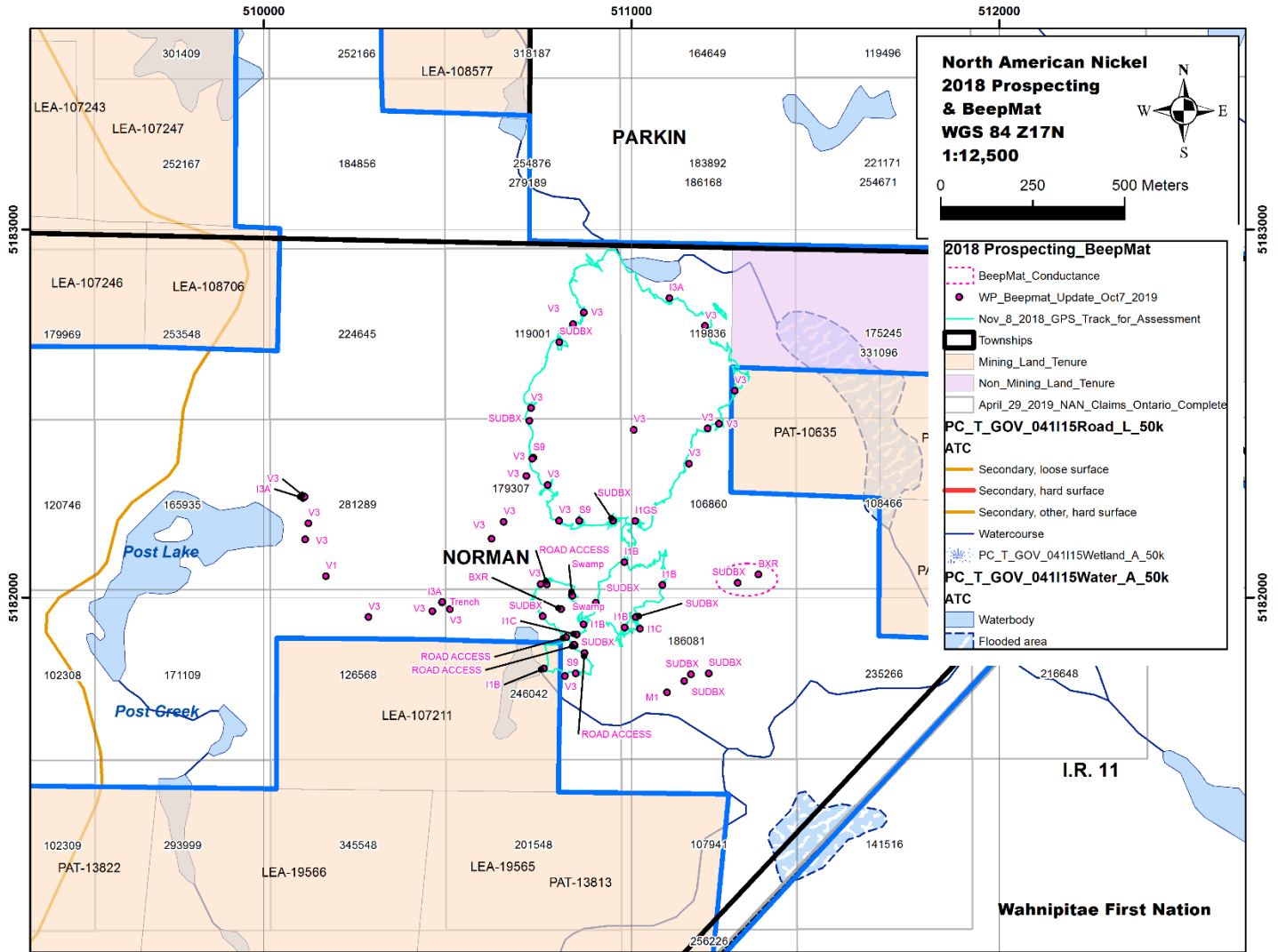


Figure 6 Nov 8, 2018 Prospecting and Beep Mat Traverses with Notes on Waypoints

### 3.2 Diamond Drilling

Forage M3 Drilling of Hawkesbury Ontario mobilized to site and began access work on November 15<sup>th</sup>. Two NQ diameter diamond drillholes were completed depths of 474m and 495m. All core logging and sampling was completed in the Sudbury Core Shack. See Figure 7

Cecil Johnson of Johnson Exploration Consulting completed geotechnical logging that included Core Orientation, From-To's and Orientation of Core in the core tray and provided general assistance in the core shack and in the field.

Walter McGregor assisted with the geotechnical logging assistance as described above, as well as, saw and package the drill core samples. Wally also provided assistance both in the core shack and out in the

field particularly when meeting with Wahnipitei First Nations and completing end of hole environmental clean-up/sign off.

Kalevi Hannila P.Geo logged the drill core (Litho, Structure, Alteration and Mineralization) utilizing North American Nickel's GEM's Logger software and marked as well as provided a description for each sample. Kalevi also inserted the required QAQC into each sample batch.

Gerry Katchen P.Geo Project Manager: Managed the drill program and ensured NAN's procedures were being followed. Gerry was also responsible for interaction daily with drill crew, borehole EM crew and with First Nations.

**Daily logs (Cecil Johnson):**

***Drilling and Field Related***

12-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
13-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
14-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
15-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
16-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
19-11-2019 – Core Shack Prep, Geotech  
20-11-2019 – Core Shack Prep, Geotech  
21-11-2019 – Core Shack Prep, Geotech  
22-11-2019 – Core Shack Prep, Geotech  
23-11-2019 – Core Shack Prep, Geotech  
24-11-2019 – Core Shack Prep, Geotech  
25-11-2019 – Core Shack Prep, Geotech  
26-11-2019 – Core Shack Prep, Geotech  
27-11-2019 – Core Shack Prep, Geotech  
29-11-2019 – (1/2 Day) Core Shack Prep, Geotech  
30-11-2019 – Core Shack Prep, Geotech  
01-12-2019 – Core Shack Prep, Geotech  
02-12-2019 – Core Shack Prep, Geotech  
03-12-2019 – Core Shack Prep, Geotech  
04-12-2019 – Core Shack Prep, Geotech  
05-12-2019 – Core Shack Prep, Geotech  
06-12-2019 – Core Shack Prep, Geotech  
07-12-2019 – Core Shack Prep, Geotech  
08-12-2019 – Core Shack Prep, Geotech  
10-12-2019 – Core Shack Prep, Geotech, Retrieval of historic core  
11-12-2019 – Core Shack Prep, Geotech, Retrieval of historic core  
13-12-2019 – (Half Day) Core Shack Prep, Geotech

**Daily logs (Walter McGregor):**

***Drilling and Field Related***

16-11-2019 – Sample Collection, Drillhole Spotting, Drill Crew Support, Core Shack Prep  
19-11-2019 – Core Sample Sawing, Sample Prep, Geotech

20-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
21-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
22-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
23-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
24-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
25-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
26-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
27-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
29-11-2019 – (1/2 Day) Core Sample Sawing, Sample Prep, Geotech  
30-11-2019 – Core Sample Sawing, Sample Prep, Geotech  
01-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
02-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
03-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
04-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
05-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
06-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
07-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
08-12-2019 – Core Sample Sawing, Sample Prep, Geotech  
10-12-2019 – Core Sample Sawing, Sample Prep, Geotech, Retrieval of historic core  
11-12-2019 – Core Sample Sawing, Sample Prep, Geotech, Retrieval of historic core  
13-12-2019 – (1/2 Day) Core Sample Sawing, Sample Prep, Geotech

**Daily logs (Kalevi Hannila):**

***Drilling and Field Related***

21-11-2019 – Core Logging and Sampling  
22-11-2019 – Core Logging and Sampling  
23-11-2019 – Core Logging and Sampling  
24-11-2019 – Core Logging and Sampling  
25-11-2019 – (1/2 Day) Core Logging and Sampling  
26-11-2019 – Core Logging and Sampling  
27-11-2019 – Core Logging and Sampling  
28-11-2019 – Core Logging and Sampling  
01-12-2019 – Core Logging and Sampling  
02-12-2019 – Core Logging and Sampling  
03-12-2019 – Core Logging and Sampling  
04-12-2019 – Core Logging and Sampling  
05-12-2019 – Core Logging and Sampling  
06-12-2019 – Core Logging and Sampling  
07-12-2019 – Core Logging and Sampling  
08-12-2019 – Core Logging and Sampling  
10-12-2019 – Core Re-Logging and Sampling  
11-12-2019 – Core Re-Logging and Sampling  
13-12-2019 – (1/2 Day) Core Re-Logging and Sampling

**Daily logs (Gerry Katchen):**

***Drilling and Field Related***

11-11-2019 – Teleconference with Wahnipitei First Nations  
12-11-2019 – Wahnipitei Program Review, Site Inspection, Drillhole Spotting  
13-11-2019 – Site Inspection, Drillhole Spotting with Wahnipitei Personnel, Wahnipitei Water Sample  
14-11-2019 – Met with Transport Float Driver, escort him to site  
15-11-2019 – Show Forage M3 personnel around and discuss drillsites  
20-11-2019 – Drilling Management  
21-11-2019 – Drilling Management  
22-11-2019 – Drilling Management  
25-11-2019 – Drilling Management  
27-11-2019 – Drilling Management  
28-11-2019 – Drilling Management  
29-11-2019 – Drilling Management  
01-12-2019 – Drilling Management  
02-12-2019 – Drilling Management  
07-12-2019 – Drilling Management, Wahnipitei Environmental assessment of site PC18-021, 022 Post Drilling  
08-12-2019 – Drilling Management  
09-12-2019 – Drilling Management  
12-12-2019 – Drilling Management  
13-12-2019 – Drilling Management, Wahnipitei Program Debrief and discussion  
14-12-2019 – Drilling Management

The first drillhole named “PC-18-021” was planned as a deep evaluation of the prospectivity related to anomalous copper values associated with the CJ Quartz Diorite and Sudbury breccia related fabrics exposed at a surface in a trench at surface. The drillhole was drilled from southwest to northeast and positioned to run down plunge of the surficial interpreted quartz diorite dip plane. The objective of drilling down-plunge was to evaluate via borehole EM a larger volume of host rock at depth. This trench lies in the Northwest portion of the Post Creek property within claim cells 184856 and 279189.

Hole PC-18-021 failed to intercept any quartz diorite at depth and only intercepted a minor unit of Sudbury related lithology as a ‘Felsic Partial Melt’. The hole was primarily cored mafic volcanics and hit a lengthy sphalerite rich VMS intercept that returning values of 3.55% Zinc, 0.05% Cu and 0.82 g/t Ag over 7.5m (See Press Release Feb 12, 2019 Appendix 1 and Appendix 2 for 2018 Drill Logs, Appendix 6 has the vertical sections at 1:1000 scale 18 x 24 Arch C size.

Plan and section views of the drilling and modeled borehole EM (BHEM) plates are shown in Figures 8 and 9 and Table 9 for the Lithological Legend.

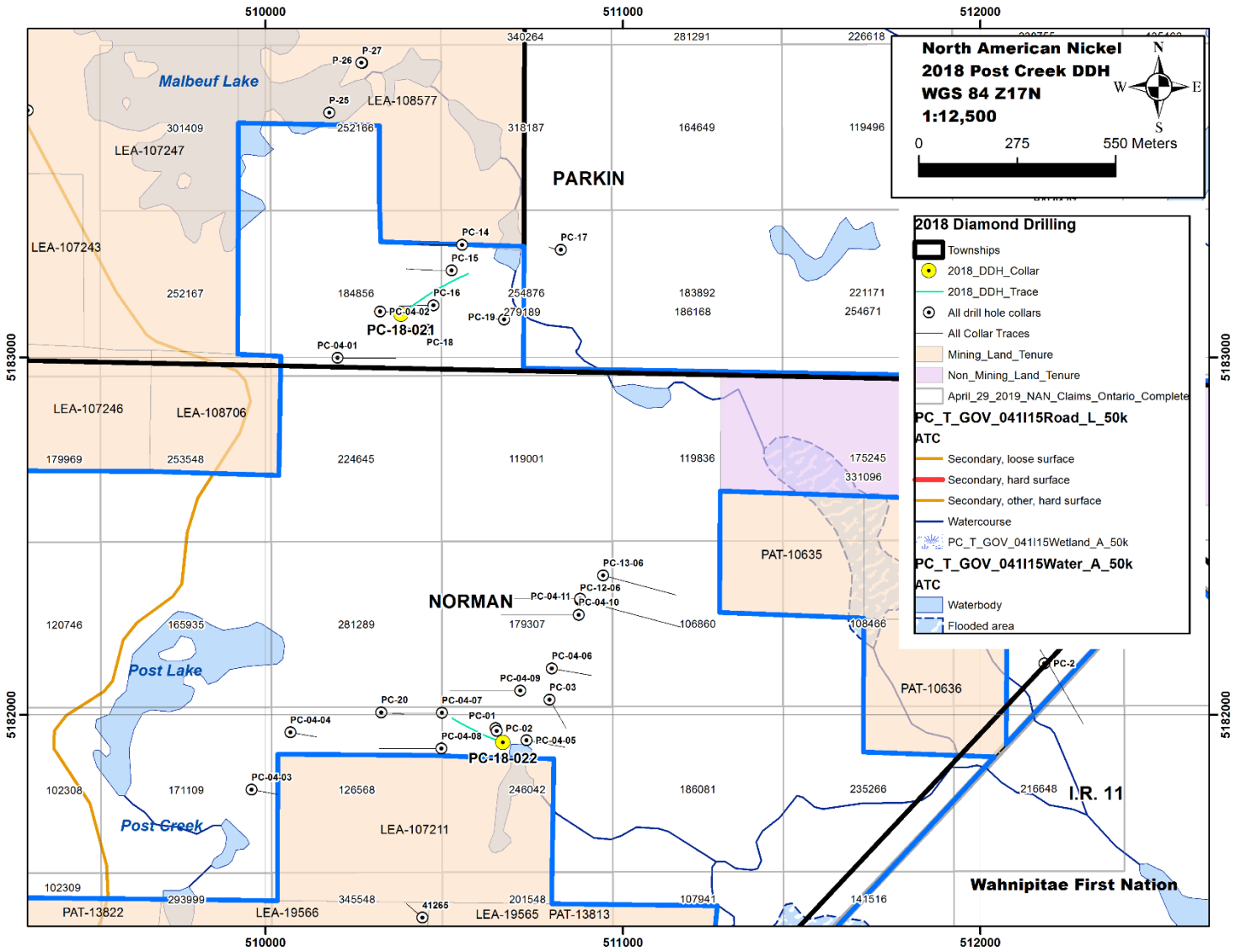


Figure 7 2018 DDH Locations with ddh trace projected to surface

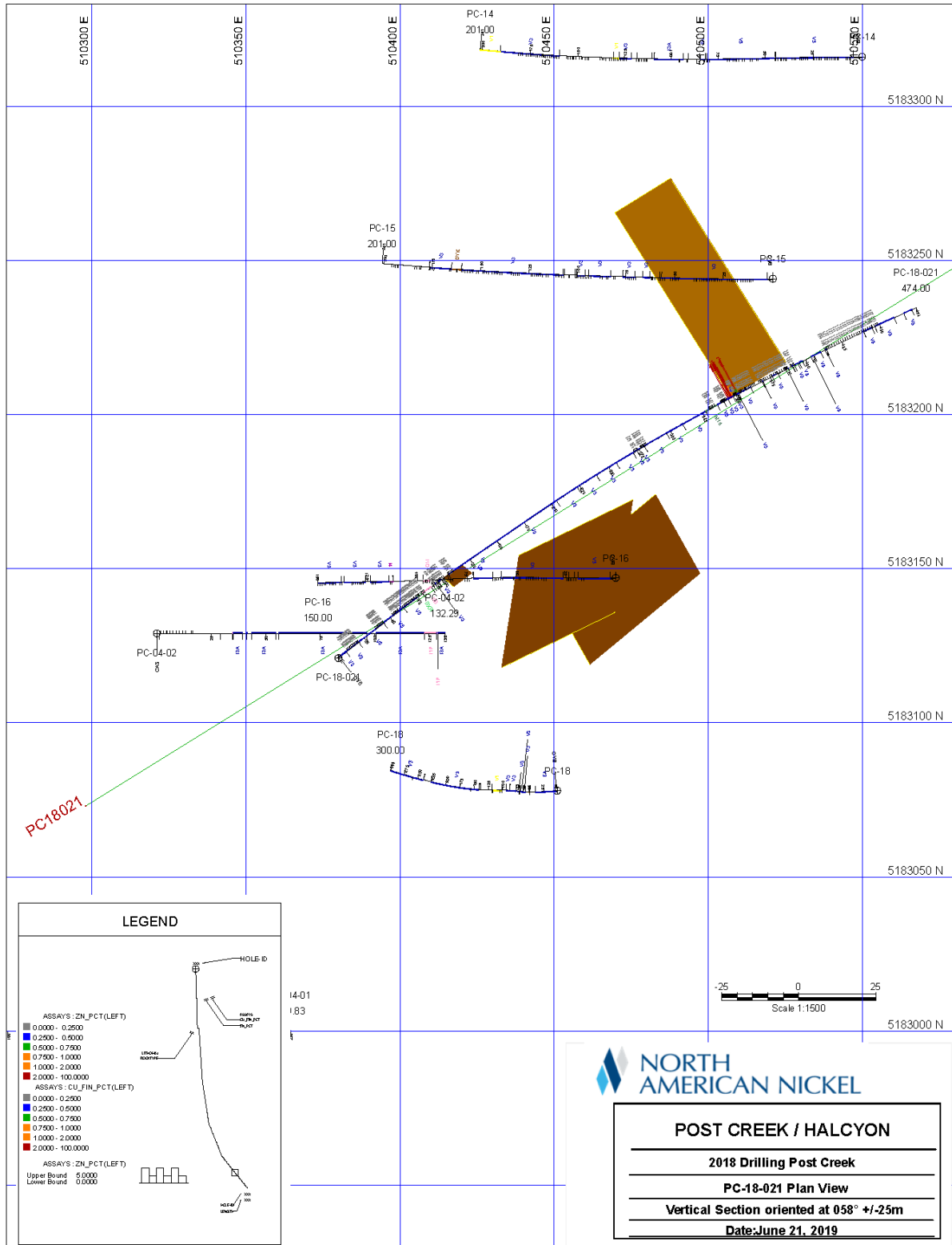
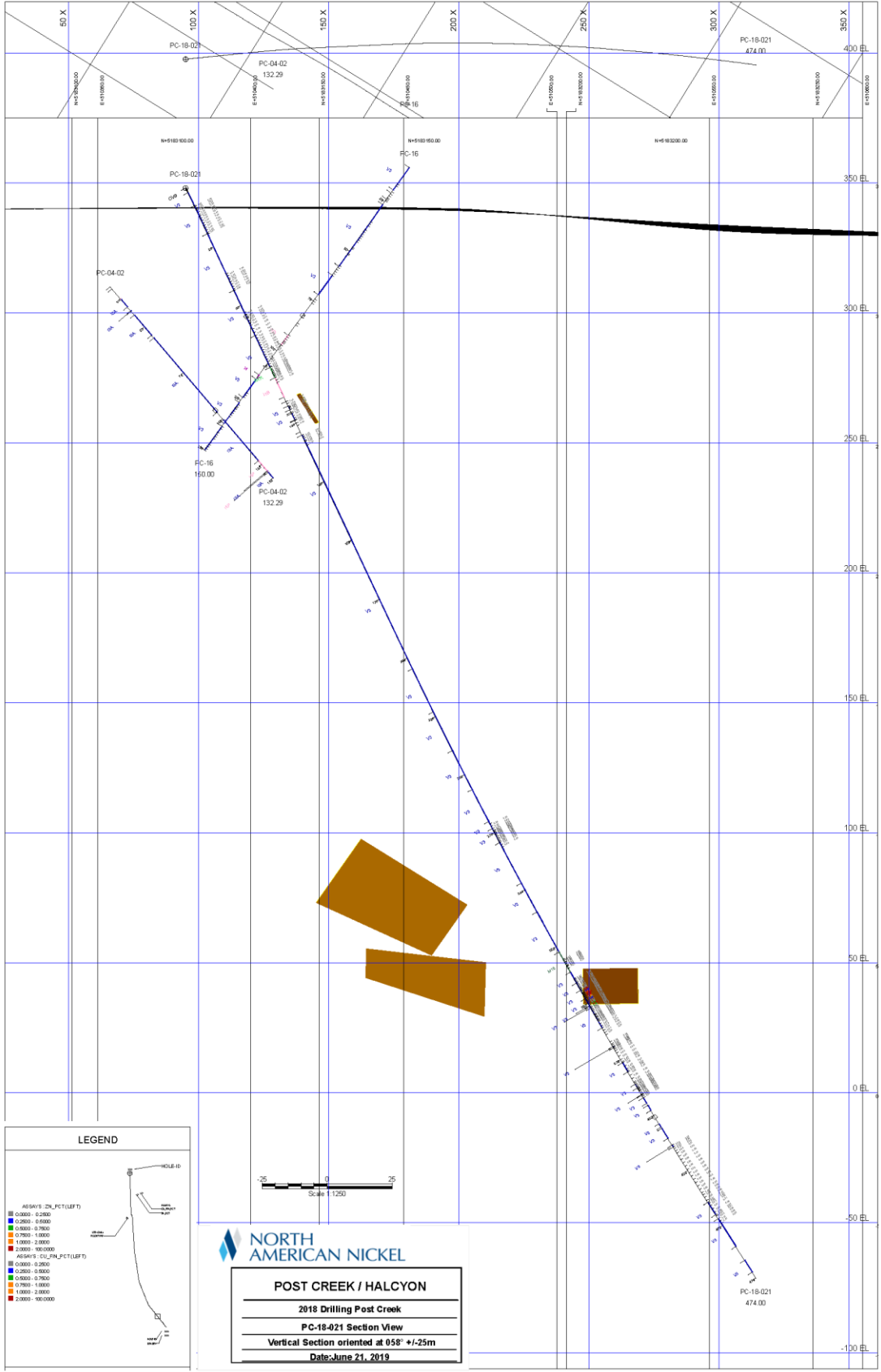


Figure 8 PC-18-021 Plan View



*Figure 9: PC-18-021 Section View*

The second drillhole named “PC-18-022” was planned to evaluate a ground magnetic high associated with surface grabs samples that contained values ranging from 1.05% Copper to 1.93% Copper. This particular area is aligned along strike of the Whistle Offset Dyke.

PC19-022 failed to intercept any quartz diorite or other Sudbury Impact related lithologies, remaining in highly altered mafic volcanics for almost the entire hole. The high magnetic feature was explained by a highly altered, strongly magnetic ultramafic unit. The surficial copper values may have been explained by a chalcopyrite rich vein set that was intercepted from 413.10m to 413.40m, returning a 0.3m interval of 1.85% Cu and 3.7 g/t Ag (See Press Release Feb 12, 2019 Appendix 1 and Appendix 2 for 2018 Drill Logs).

Plan and section views of the drilling and modeled borehole EM (BHEM) plates are shown in Figures 10 and 11 and Table 10/Appendix 7 for the Lithological Legend.

In addition, Relogging of cores from two hole took place during Dec 12<sup>th</sup> to 14<sup>th</sup>. Relogging of PC-15 (Cell claim #'s 279189 and 184856) and PC-16 cell claim 184856. No samples were taken. Please see Appendix 3 for original logs and new logs.



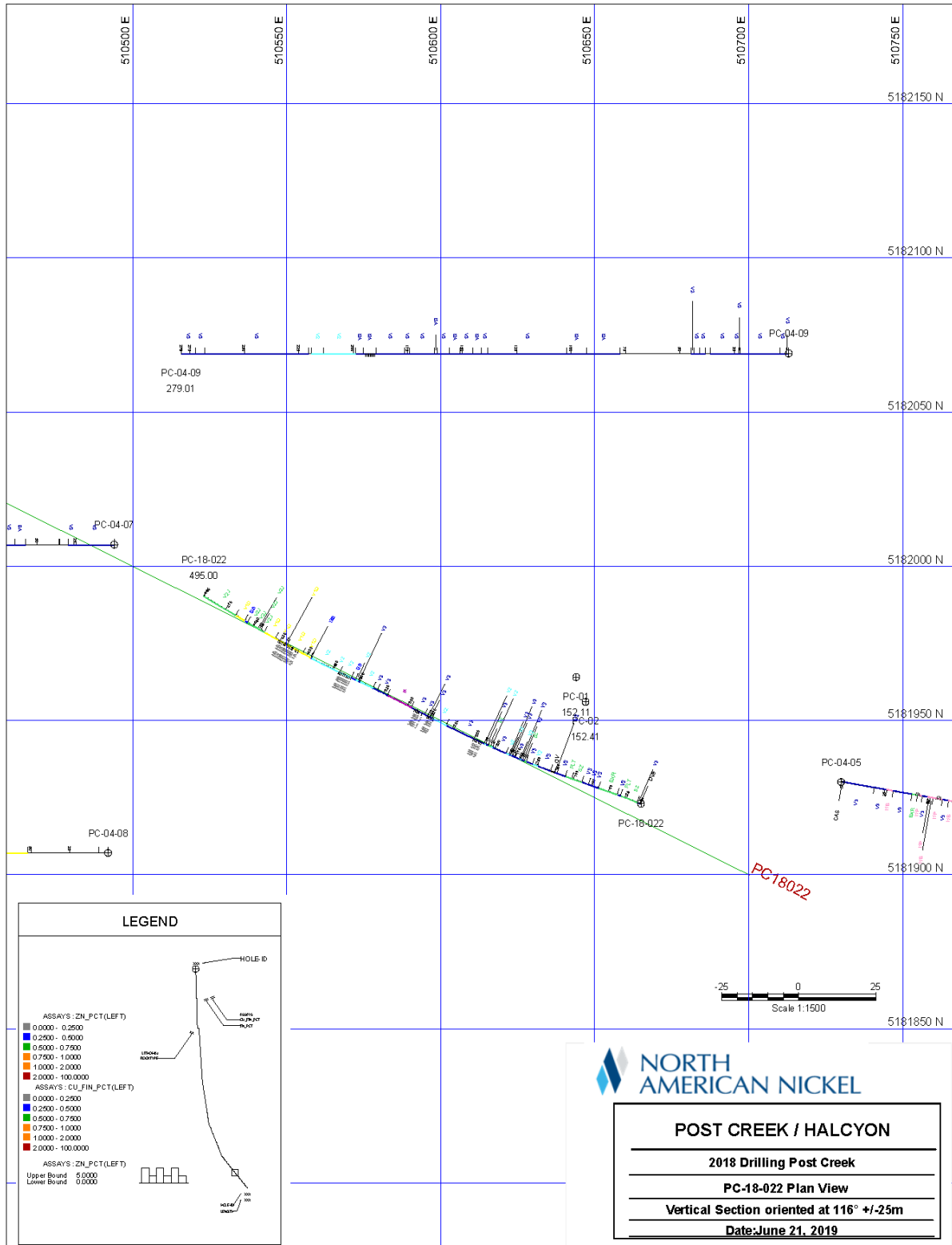


Figure 10: PC-18-022 Plan View

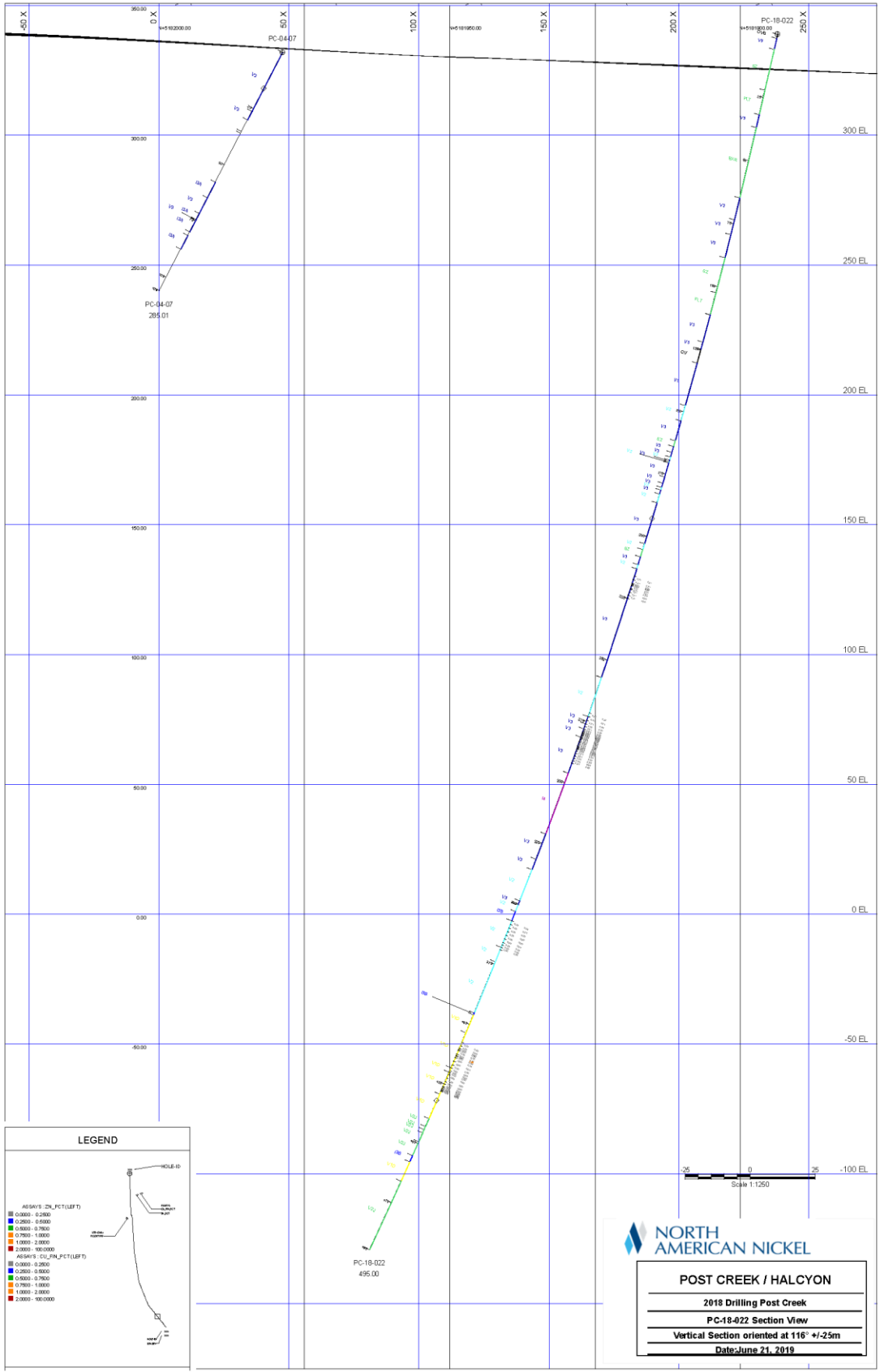


Figure 11: PC-18-022 Section View

Table 10 North American Nickel Lithological Legend

IGNEOUS ROCKS			SEDIMENTARY ROCKS			MIXED CLASTIC ROCKS				
Felsic Composition			Undifferentiated Seds			Mudrock				
Effusive Rocks			S1 Sandstone			S6A Siltstone				
I1 Felsic intr. Rocks	V1 Felsic volcanic rocks	S18 Feldspathic sandstone	S1C Arkose	S6D Mudstone	VS1 Volcanosedimentary	VS2 VS of felsic compos.	VS3 VS of intermediate c	VS4 VS of mafic comp.		
I1B Granite	V1B Rhyolite	S1D Arkosic sandstone	S7 Limestone	S7A Calcilite (clay)	QUALIFYING SUFFIXES					
I1C Granodiorite	V1C Rhodacite	S1E Lithic sandstone	S7B Calcilite (silt)	T1BF Rhyolitic fine tuff						
I1D Tonalite	V1D Diacite	S2 Arenite	S7C Calcarenite (sand)	T1BC Rhyolitic coarse tuff						
I1F Aplite		S2A Quartzitic arenite	S7D Calcilite (pebble)	T1BL Rhyolitic lapilli tuff						
I1G Pegmatite		S2B Feldspathic arenite	S8 Dolomite	T1BF-C Rhyolitic fine to coarse tuff						
I1GS Peg Stockwork/Breccia		S2C Arkose	S8A Dololite	T1BF-L Rhyolitic fine to lapilli tuff						
I1H Granophyre		S2E Lithic arenite	S8B Dolosiltite	T1BCL Rhyolitic coarse to lapilli tuff						
I1P Felsic porphyry		S2F Wacke	S8C Dolarenite	T.X crystal tuff						
Intermediate Composition			S3A Quartzitic wacke	S8D Dolosiltite	TCHT cherty tuff					
I2 Intermediate (undef.)	V2 Intermediate volc. rocks	S3B Feldspathic wacke	S9 Iron formation	PYROCLASTIC ROCKS						
I2C Quartz syenite	V2C Quartz trachyte	S3C Arkose	S9B Oxide iron formation	T Undetermined/mixed						
I2D Syenite	V2D Trachyte	S3D Arkosic wacke	S9C Carbonate iron formation	T1 felsic						
I2E Quartz monzonite	V2E Quartz latite	S3E Lithic wacke	S9D Silicate iron formation	T1B Rhyolitic tuff						
I2F Monzonite	V2F Latite	S4 Conglomerate	S9E Sulphide iron formation	T1C Rhyolitic tuff						
I2G Quartz monzodiorite	V2J Andesite	S4A Monogenic conglom.	S10 Chert	T1D Diacite tuff						
I2H Monzodiorite		S4B Mono 'clast supp' cong	S10A Oxide chert	T2 Intermediate						
I2I Quartz Diorite		S4C Mono 'matrix sup' cong	S10B Carbonate chert	T3 Mafic						
I2J Diorite		S4D Monogenic breccia	S10C Silicate chert	T4 Ultramafic/ultrabasic						
I2K Monzonite		S5B Mono 'clast supp' brec	S10D Sulphide chert	OTHER						
I2P Intern. Porphyry		S5C Mono 'matrix sup' brec	S10E Carbon/graphitic chert	If Sulphides occur at intended Target Depth Log all as Major Unit.						
Mafic Composition			S5D Polygenic breccia	S10F Chert ferruginous	Sulphide Texture Non-enclatura overides % Sulphide					
Effusive Rocks			S5E Poly 'clast supp' breccia	S11 E-shalte	MS Massive Sulphides (>75% Sulphides) (Major Unit. If <1m then is a Minor unit)					
I3 Mafic intrusive rocks	V3 Mafic volcanic rocks	METAMORPHIC & TECTONIC			SMBXSUL Semi-Massive Breccia Sulphides (25-75% sulphides) (Major Unit. If <1m then is a Minor unit)					
I3A Gabbro	V3A Andesitic Basalt	M1 Metamorphictectonic				BXSUL Breccia Sulphides (10-25% Sulphides) (Major Unit. If <1m then is a Minor unit)				
I3B Diabase	V3B Basalt	M2 Banded gneiss				NET Net-textured Sulphides (15-30% Sulphides) (Minor Unit)				
I3C Monzogabbro	V3C Basalt with quartz	M3 Orthogneiss	(Intermediate Gneiss)			DIS Disseminated Sulphides (5-15%) (If >6m thick, can be logged as Major Unit otherwise, Minor unit)				
I3D Ferrogabbro	V3D Trachyte/basalt	M4 Paragneiss				STVN Stringer vein Sulphides (Minor unit)				
I3E Gabbro with quartz	V3E Basalt with olivine	M5 Quartzfeldtic gneiss				SSG Sulphide/Silicate Globules (Minor unit)				
I3F Diabase with quartz	V3F Magnesian basalt	M6 Granitic gneiss				VN Dominant <<veining material>>				
I3G Anorthosite	V3G Pictite	M7 Granulite	(Felsic Gneiss)			CAS Casing				
I3H Gabbroic anorthosite		M8 Schist				OVB Overburden				
I3I Leucogabbro		M9 Amphibole Schist				LC Lost Core				
I3J Norite		M10 Orthoschist				GC Ground Core				
I3L Leuconorite		M11 Parapschist				ARC Arc cutting for wedge				
I3M Inclusion Bearing Norite		M12 Quartzite				ATZ Alteration Zone				
I3N Norite		M13 Marble				SZ Shear Zone				
I3O Gabbro with olivine		M14 Calc Silicate / Skarn				FLT Fault				
I3P Norite with olivine		M15 Metasomatic rock				BXR Breccia Zone				
I3Q Mafic lamprophyre		M16 Amphibolite				HBX Hydrothermal Breccia				
I3R Mafic porphyry		M17 Edgipite				SWK Stockwork Zone				
I3T Troctolite		M18 Hornfels				MCS Mud Seam				
Ultramafic/Ultrabasic Composition			M19 Mafic Gneiss				DVK Dike			
I4 Ultramafic/ultrabasic	V4 Volcanic	M20 Metatextite				QV Quartz Vein				
I4A Hornblende	V4A Komatite	M21 Diatexite				GOS Gossan				
I4B Pyroxenite	V4B Pyroxenitic komatite	M22 Migmatite				QAQC STANDARDS BLANKS				
I4C Clinopyroxenite	V4C Peridotitic komatite	M23 Tectonic breccia				STANDARDS				
I4E Orthopyroxenite	V4D Dunitic komatite	M24 Cataclaste				CFRM - 100 0.30% Ni 0.35% Cu				
I4F Clinopyrox w olivine		M25 Mylonite				CFRM - 101 1.18% Ni 0.88% Cu				
I4H Orthopyrox w olivine		M26 Impure Quartzite (feldspathic)				CFRM - 102 2.45% Ni 1.69% Cu				
I4I Peridotite		M27 Sulphidic Metasediment				OPEAS - 482 1447ppm Nb 25.7ppm Ta				
I4M Dunitic		M28 Pelite				REE - 1 4050ppm Nb 1.91% Zr				
I4N Serpentinite		M29 Metamorphic Intrusive Contact Hybrid				TAN - 1 0.236% Ta				
I4O Ultramafic lamproph.		MICH				BLANKS				
I4P Kimberlite						Blank Field Blank Finnfield Gneiss				
I4Q Carbonatite						BLANK PULP CFRM - 900 Prepackaged Blank Material				
Carbonatite			Sudbury Rocks			Ni Blank 1 AMS-0289 0.005% Ni 1.96 ppm Au				
RCB-REE REE Carbonatite		CO Quartz Diorite	InQD / IOQ Incl. Bearing Quartz Diorite			Ni Blank 2 OPEAS-214 0.014% Ni 3.03 ppm Au				
WFG Weakly Fertilized Gneiss		INQD / IOQ								
SFG Strongly Fertilized Gneiss		PM								
FCB Ferrocarbonatite		SudBX / SDBX								
BGL Brown Glimmerite		MetaBX / MBX								
UFEN Ultramafic Fenite										
MFEN Mafic Fenite										
FFEN Felsic Fenite										
SCV Scoria										
DCB Dolomite Carbonatite										
OSOV Olivine Sovite										
OMR Olivine Magnetic Rock										

### 3.3 Borehole Electromagnetics

Immediately following the hole completion, PC-18-021 and PC-18-022 were surveyed by Crone Geophysics using their 3 component Pulse EM system using an inductive coil sensor. The survey time base was 50ms and data were collected at a 10m interval with 5m detail in anomalous areas. Additional survey specifications, loop location maps and profiles of the survey results can be found in the logistics report provided by Crone Geophysics (See Appendix 4).

Upon delivery of the data, preliminary interpretation of the results was carried out, including plate modeling if applicable. Modeling of data was accomplished through the use of Maxwell, a commercially available modeling software package available from Electromagnetic Technologies (EMIT) of Australia. This software uses thin and thick plates to approximate conductive sources.

The results in PC-18-021 show two distinct areas of off-hole responses (Figure 12). The uppermost off-hole anomaly occurs at 90m and correlates to a strongly sulphidic interval in a breccia zone intersected between 78.0 and 80.7m. The off-hole anomaly was modeled using a 4m x 13m, 1696S plate, dipping 59°NE and located above and sub-parallel to the drill hole, less than 5m from the drill hole. The sulphides are barren and the plate is small, and therefore, this plate is not a drill target. The second area of anomalous responses occurs between 290 and 350m and was modeled using three off-hole plates: 48m x 50m, 271S and 47m x 54m, 279S located to the south and a 21m x 83m, 488S plate located to the north. The south plates are located 25 to 30m from the hole and the north plate is located within 5m of the drill hole. All plates dip eastward. These plates correlate to an unusually thick interval of sphalerite mineralization that includes 7.50m @ 3.55% zinc and 0.82ppm silver from 344.2m to 347.9m. These three off-hole plates are drill targets for a future VMS exploration program. See Figure 12 for Plate locations and bhem response.

There are no anomalous responses in PC-18-022.

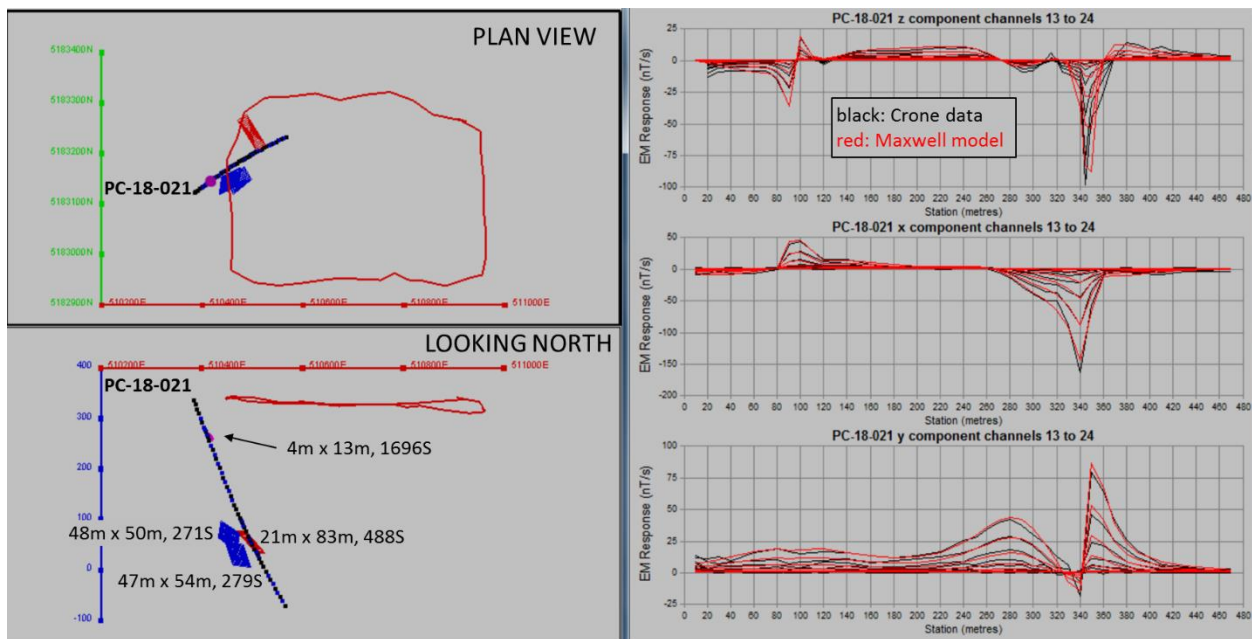


Figure 12: PC-18-021 BHEM results

### 3.4 Assaying/Geochemistry

A total of 294 diamond drill core assays with 37 Certified Reference Standards; 12 Reject (Prep) duplicates were completed using ALS Canada Inc. In addition, twelve pulp duplicates were split from the master pulps and sent to an external lab (SGS) as checks. See Table 11 for units and associated detection

limits of ALS Canada Inc. See Appendix 5 for ALS Certificates on holes PC-18-021; 022 and QAQC Certificates

All samples were crushed to 70% less than 2mm, riffle split off 250g and pulverized to better than 85% passing through a 75 micron mesh. (Prep 31 in ALS Catalogue).

Samples were analyzed for gold, platinum and palladium by fire assay with ICP-AES finish (PGM-ICP23 in ALS Catalogue).

Silver analysis was carried out on all samples using a trace level detection aqua regia digestion with AAS finish (Ag-AA45 in ALS Catalogue).

Base Metals and related elements plus Sulphur were analysed utilizing the Sodium Peroxide Fusion and ICP-AES finish. (ME-ICP81 in ALS Catalogue).

*Table 11: ALS Elements with Detection Limits*

<b>Element</b>	<b>Units Reported</b>	<b>Lower Detection Limit</b>	<b>Upper Detection Limit</b>	<b>Analytical Method</b>
Copper	Cu_%	0.002	30	ME-ICP81
Cobalt	Co_%	0.002	30	ME-ICP81
Nickel	Ni_%	0.002	30	ME-ICP81
Lead	Pb_%	0.01	30	ME-ICP81
Zinc	Zn_%	0.002	30	ME-ICP81
Chrome	Cr_%	0.01	30	ME-ICP81
Sulphur	S_%	0.01	60	ME-ICP81
Arsenic	As_%	0.01	10	ME-ICP81
Calcium	CaO_%	0.05	50	ME-ICP81
Iron	Fe_% and Fe2O3_%	0.05	70	ME-ICP81
Potassium	K_%	0.1	30	ME-ICP81
Magnesium	MgO_%	0.01	30	ME-ICP81
Manganese	MnO_%	0.01	50	ME-ICP81
Silica	SiO2_%	0.1	50	ME-ICP81
Titanium	TiO2_%	0.01	30	ME-ICP81
Gold	Au_PPM	0.001	10	PGM-ICP23
Platinum	Pt_PPM	0.005	10	PGM-ICP23
Palladium	Pd_PPM	0.001	10	PGM-ICP23
Silver	Ag_PPM	0.2	100	Ag-AA45

## PC-18-021

Drillhole PC-18-021 (474m, 219 assays plus 28 QAQC; 7 reject duplicates and 8 pulp duplicates to act as an external lab check) were completed on cell claims 185856 and 279189.

CFRM-900 (Pulverised Silica Blank): Hole PC-18-021 had eight CFRM-900 pulverized blank material as one of the blank materials that were inserted at intervals of 1 for every 20 samples. All eight samples passed the in house pre-determined limit of 300ppm for the base metals.

Crushed Feldspar Blank Material: Hole PC-18-021 had six blank material comprised of homogenized crushed feldspar that represented one of the blank materials that were inserted at intervals of 1 for every 20 samples. As above, all six samples passed the in house pre-determined limit of 300ppm for the base metals.

CFRM-100 (Low grade Cu/Ni/Co Sulphide): Hole PC-18-021 had eight CFRM-100 low grade Copper (0.35%), Nickel (0.30%), Cobalt (0.018%) material that represented one of the certified reference materials that were inserted at intervals of 1 for every 20 samples. All eight samples passed within the 3<sup>rd</sup> standard deviation limits of the QAQC, in fact all passed within the 2<sup>nd</sup> standard deviation with exception of low grade cobalt value in sample S124090 (returned a value of 0.22% Co vs a 2<sup>nd</sup> Std. Dev set value of 0.21%). There was no elevated base metal mineralization within an envelope of +/- 20 samples. This qaqc was deemed admissible and the batch passed.

CFRM-101 (Med grade Cu/Ni/Co Sulphide): Hole PC-18-021 had six CFRM-101 moderate grade Copper (0.88%), Nickel (1.19%), Cobalt (0.036%) material that represented the other certified reference material that was inserted at intervals of 1 for every 20 samples. All six samples passed within the 2<sup>nd</sup> standard deviation limits of the QAQC, with exception of a gold value within sample S124430 (returned a value of 0.193ppm vs a 2<sup>nd</sup> Std. Dev set value of 0.189ppm). There was no elevated base metal or pgm mineralization within an envelope of +/- 20 samples. As above, this qaqc sample was deemed admissible and the batch passed.

One sample within the seven Reject Prep Duplicates returned a value with a greater than 10% difference from the average value within the two samples. Sample S124399 returned an original value of 0.722% Zn with the reject duplicate returning a value of 0.384% Zn. The sample batch also had a higher Zn duplicate which passed within 10%. Sample S124399 was accepted into the database and the anomaly noted.

All pulp duplicates (8 samples/SGS External Lab Checks) exhibited good correlation and were within 10% of the average between original ALS Chemex assay and its master split that was analysed at SGS.

## PC-18-022

PC-18-022 (495m, 75 assays plus 9 QAQC & 5 reject duplicates and 4 pulp duplicates as external lab checks) were completed on cell claim 246042.

All analysis for Gold, Platinum and Palladium were rerun after the original analysis failed multiple PGM QAQC specifications by being elevated above certified standard deviations.

An investigation into the incident by the lab noted that this batch was run after the Christmas break and it was postulated that due to ventilation shut off, that it possibly allowed airborne particulate matter to settle onto surfaces. This airborne matter influenced the baseline issue for gold in particular. The lab re-analyzed all of the samples from batch SD18318129 for PGM-ICP23.

CFRM-900 (Pulverised Silica Blank): Hole PC-18-022 had three CFRM-900 pulverized blank material as one of the blank materials that were inserted at intervals of 1 for every 20 samples. All three samples passed the in house pre-determined limit of 300ppm for the base metals and once re-analysed for PGM's, all PGM's passed.

Crushed Feldspar Blank Material: Hole PC-18-022 had two of the blank material comprised of homogenized crushed feldspar which represented the other blank material that was inserted at intervals of 1 for every 20 samples. As above, all two samples passed the in house pre-determined limit of 300ppm for the base metals and once re-analysed for PGM's, all PGM's passed.

CFRM-100 (Low grade Cu/Ni/Co Sulphide): Hole PC-18-022 had four CFRM-100 low grade Copper (0.35%), Nickel (0.30%), Cobalt (0.018%) material that represented the only certified reference materials in this hole that were inserted at intervals of 1 for every 20 samples.

Once re-analysed for PGM-ICP23, three of the four certified reference materials passed with one sample (260730) returning values that were below the negative 3<sup>rd</sup> std dev. value (assayed value of 0.217ppm Pt vs. 3<sup>rd</sup> std dev of 0.235ppm Pt; assayed value of 0.25ppm Pd vs. 3<sup>rd</sup> std dev of 0.278ppm Pd; assayed value of 0.111ppm Au vs. 3<sup>rd</sup> std dev of 0.144ppm Au). There was no PGM or Base Metal mineralization noted in 20 samples above and/or below so this standard and its samples in close vicinity were allowed into the database. Regardless, follow-up with the lab occurred on this failure and it was speculated that it may be due to an unspotted lead spill or fluxing issue during the fusion process on the re-assay.

One sample within the five Reject Prep Duplicates returned a value with a greater than 10% difference from the average value within the two samples. Sample S260760 returned an original value of 1.85 % Cu and 1.56ppm Au with the reject duplicate returning a value of 2.29% Cu and 2.7ppm Au. As the original reported sample was the lower of the two sample splits, Sample S260760 was accepted into the database at the time and the Feb 12, 2019 press release generated.

Three of the four pulp duplicates (SGS External Lab Checks) exhibited good correlation and were within 10% of the average between original ALS Chemex assay and its master split that was analysed at SGS. The one sample that appeared to be out of range was the same sample noted to have an issue as above. Sample S260760 returned an original ALS Chemex value of 1.85 % Cu with the SGS Pulp duplicate returning a value of 2.33% Cu (much similar to the reject duplicate run at ALS Chemex as noted above). Sample S260760 also returned an original Chemex value of 1.55ppm Au vs. a returned SGS value of 3.06ppm Au.

As noted above, the problem here appears to the original assay on sample S260760 on both the PGM-ICP23 and ME-ICP81 analysis. These original values are lower in comparison and are what appears on the press release due to timing of the external lab checks. The database now reflects the values for sample S260760 Pulp Duplicate Chemex assay as these values were validated by the external lab check

processes by SGS. The Copper and Gold value increase is not considered to be of a material change in the project, a retraction of the press release is not recommended.

## 4.0 OBSERVATIONS

### 4.1 Mineralization

Mineralization in this section refers to the occurrence of sulfide minerals or sulfide-bearing quartz veins. It does not imply that these features are enriched in metals or precious metals. Samples of each type of mineralization have been sent to ALS Global to determine the metal content and establish whether there is any economic significance for these styles of sulfide occurrences. Mineralization has been grouped into four separate styles based on the lithologies in which they are occurring or on the inferred timing relationships.

#### A. Volcanic – Mafic and Felsic

Within the various occurrence of sulphide mineralization have been observed and sampled. The most common form of sulphide is pyrite, which generally occurs as euhedral to subhedral shaped, fine- to medium-grained crystals that form bands or layers parallel to the foliation. Chalcopyrite and sphalerite are less common and typically only occur in trace amounts to high as 5% locally. These bands are generally discontinuous forming lenses of sulphide-bearing metavolcanics that locally can contain up to 15% sulphide. The location of this style of mineralization appears to be erratic and is concentrated near the southwest boundary and near the Maki – FalMac zinc showing. PC-18-021 is an excellent sphalerite rich example of this mineralization, occurring in the NW corner of the Post Creek Project.

#### B. Archean Deformation-Related Quartz Veins

Numerous small (less than 30 cm wide) shear zones that commonly contain quartz-sulfide veins are common in wall-rock lithologies. The most common sulfide associated with these structures is pyrite, which is observed to occur in the quartz veins along with chalcopyrite and within the surrounding sheared lithologies. These shear zones are typically small discrete zones of deformation surrounded by strongly foliated metavolcanic rocks. These deformation zones typically are marked by locally-developed chlorite and silica alteration. Larger alteration haloes have not been observed. However, mapping in the North CJ1 trench has revealed a larger shear zone that obtains widths of approximate one meter. This zone contains quartz veins that form an interconnected structure that appears to be infilling a dilatational site with brecciated fragments of the wall-rock that are altered a silica-epidote assemblage. The veins are composed of quartz – chalcopyrite – pyrite, which are surrounded by sheared mafic metavolcanic rock. PC-18-022 in the southern area of the Post Creek project is a great example of a quartz rich chalcopyrite vein, most likely extending from the drill intercept to surface.

#### C. Magmatic Sulfide in Gabbro

In the southeast corner of the main CJ#1 trench is a large Nipissing gabbro body that contains trace amounts of disseminated sulfide blebs. The morphology of the blebs is general rounded to oval shaped with sharp contacts between the silicate-sulfide assemblages and no evidence of alteration haloes. The sulfide blebs are dominantly pyrrhotite with a thin crescent-shaped domain of chalcopyrite along one side of the bleb. The mineralization is spatially restricted to the southern margin of the mapped gabbro



body, although mineralogically and texturally the gabbro body is generally homogeneous. Texturally, the blebs are interpreted to be magmatic in origin resulting from exsolution of immiscible sulfide liquid from a silicate melt, followed by the exsolution of chalcopyrite from a mono-sulfide solid solution.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

Exploration work to date and current interpretation of data suggests the main CJ Quartz Diorite showing has either limited depth extent or dips shallower to the East. PC-18-021, drilled from the northeast at 052° and down dip to the interpreted dip of the quartz diorite failed to intersect quartz diorite and returned no significant BHEM plates associated with copper/nickel sulphide related to the quartz diorite at surface.

The presence of quartz diorite in the general area represented within local trenches could represent remnants of very large airborne ejecta from the 1.8Ga Sudbury event, thus are depth limited or they are related to a dyke system that possibly dips more shallower to the east than interpreted

Drilling in the North West area of Post Creek on hole PC-18-021 has outlined a moderately significant sphalerite rich intercept related to VMS mineralization within the Benny Greenstone Belt. Three distinct BHEM plates remain untested and related to the mineralization. Additional historic VMS-type mineralization is known on the property approximately 1.1km to the south, known as the Maki Showing. VMS mineralization remains a valid target within the volcanics at Post Creek/Halcyon.

PC-18-022 encountered significant intervals of highly sheared/silicified mafic volcanics that are common within Post Creek. The copper surficial grab sample may have been related to the qtz/chalcopyrite vein intercepted at 413.1m. The magnetic anomaly was explained by a 25m interval of strongly altered highly magnetic ultramafic unit.

### 5.2 Recommendations

Sulphidic inclusion bearing quartz diorite has to date not been located along the perceived strike of the Whistle Offset. A combination of EM (airborne/ground) and IP has been completed on the Post Creek Project with no significant anomalies lying directly along strike of the Whistle Offset Dyke. The presence of a large zone of Sudbury breccia lying along strike is not fully understood, perhaps it is the very basal surface of a radiating dyke that erosion has now exposed at surface? Future exploration on Post Creek/Halcyon properties would include investigating the possibility that a concentric style dyke crosses through either project. Concentric offset dykes within the Sudbury Igneous Complex are known to host the Frood-Stobie Mine.

Soon, the Post Creek property will benefit from the completion of Thomas Baechler's master's thesis on the geological mapping with geochemistry/thin section work. It is recommended that the Halcyon

property be re-mapped geologically and structurally as recent work on the geology of Halcyon does not exist.

A review of current data highlights twelve areas that are suggesting for stripping/trenching if exposure is poor. This 'Phase I' pass of exploration would evaluate areas that either exhibit anomalous magnetic highs and/or EM anomalies that maybe correlated with geology of interest and surface samples. See Table 12 and Figures 13,14,15,16

Phase II would be to diamond drill any of the trenches that appear to be of interest.

*Table 12. Recommendations for Future Work*

<b>Trench</b>	<b>Soils_MMI</b>	<b>Grd_Geophy</b>	<b>AirBorne</b>	<b>Surf_Assay</b>	<b>Comments</b>
Trench A	No soils	Discrete Mag Anomaly in north part_North has high charge and low Resistivity	VTEM anomaly_No Aerotem coverage_	Need to explain anomaly_Partial Melt noted in waypoints	Partial Melt noted in Northern Portion.
Trench B	No soils	Discrete High Mag on side of lake along main Parkin offset structure	VTEM is chaotic_Aerotem is flat	Need to explain high Mag_Granite in waypoint to south (*Could be large clast of SubBx) Mafic Volcanic waypoint to north	Prospect-Trenching is low priority
Trench C	No Soils	Discrete high Mag close to interpreted Parkin Offset Structure	VTEM is chaotic_Aerotem is Flat	Need to explain high Mag_Granite and Mafic volcanic noted in waypoints	Prospect-Trenching is low priority.
Trench D	No Soils	Moderate Discrete Mag with high charge and low Resist	VTEM_Aerotem is flat	Waypoints of Partial Melt and Thomas-OVB	Partial Melt noted on Western Side. Apply for Trench from Central Mag High to eastern High Charge, low resistivity
Trench E	Anom. Copper in Soils	High broad Mag_Large North South Charge_with Low Resistivity	No Airborne	No ground waypoints.	Holes HAL04-010 and 09 intercepted Sediments and local Maf Volcanics. No significant results in drilling. Trenching would be low priority
Trench F			VTEM Mag High	Anomalous surficial copper/gold grabs within Sudbury Breccia outline	Vale has ground on main mag anomaly.

Trench	Soils_MMI	Grd_Geophy	AirBorne	Surf_Assay	Comments
Trench G			VTEM Mag High		Verification of location and results from drilling PC04-06,010,011
Trench H		Interesting High Chargeability noted in Ground IP		Anomalous surficial copper grabs	
Trench I			VTEM Mag High		
Trench J			VTEM Mag High		
Trench K	No Coverage	No Coverage	No Coverage	Anomalous surficial copper grabs	Verification of location and results from Check drilling PC04-06,010,011

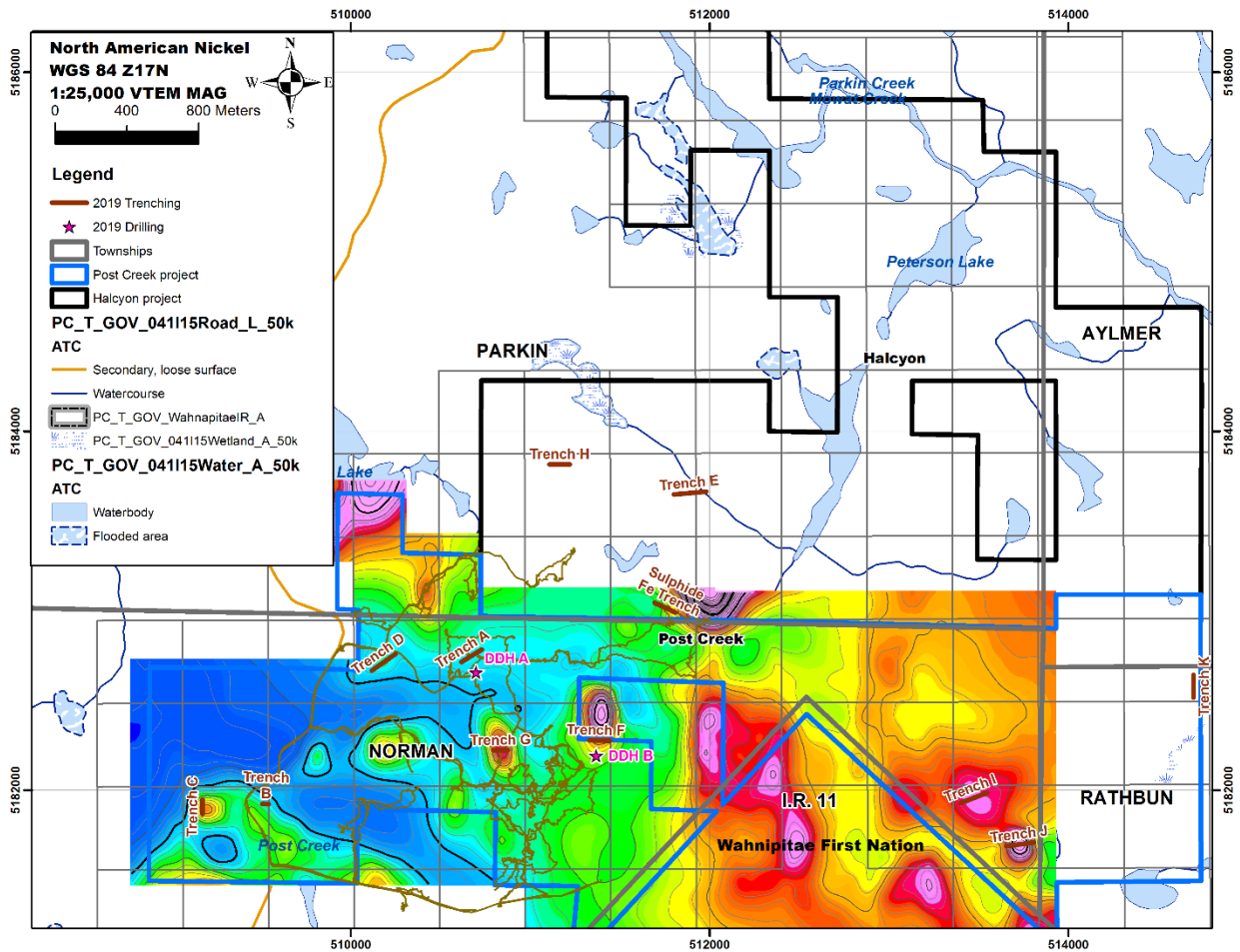


Figure 13 Post Creek with VTEM Mag as Background

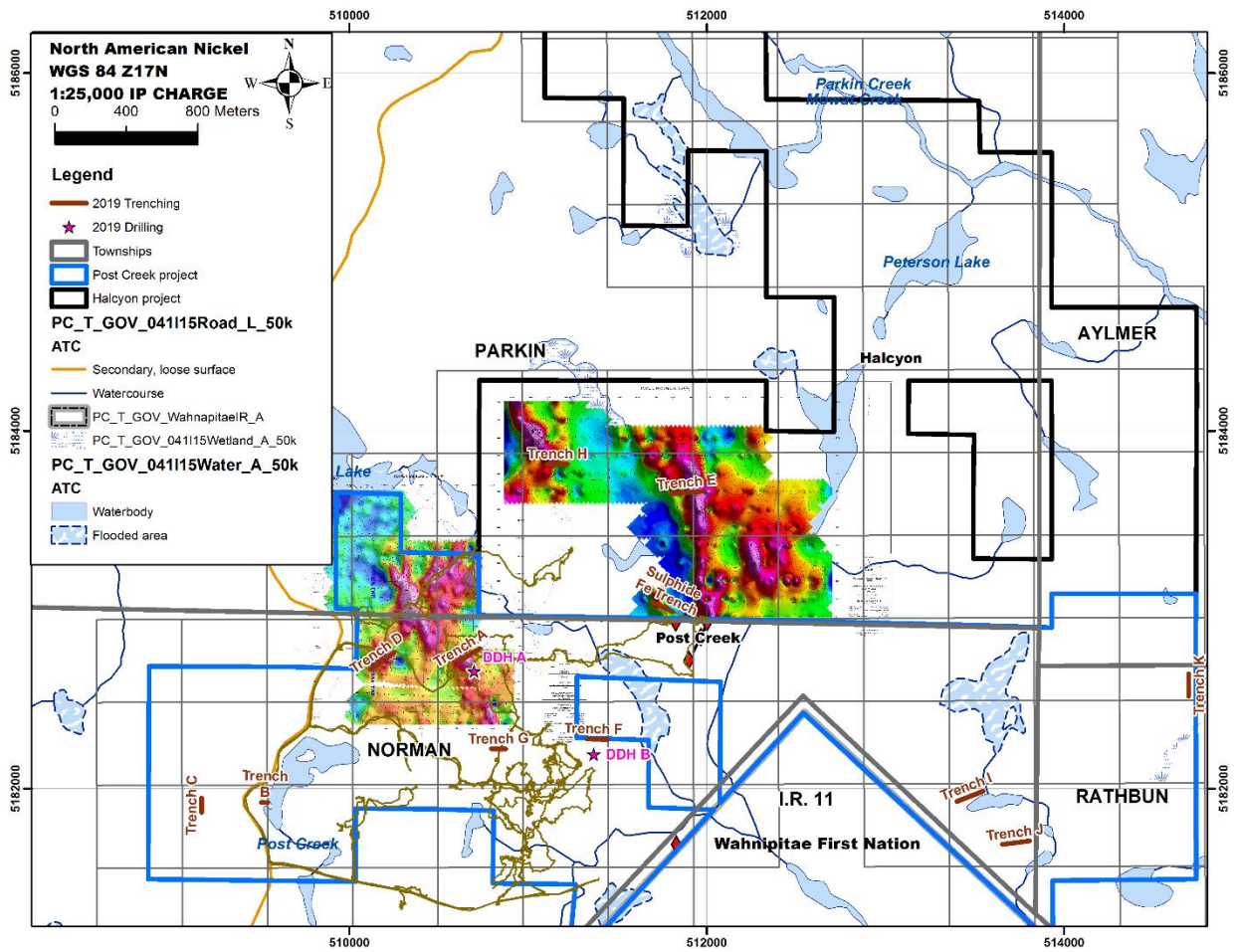


Figure 14 Post Creek/Halcyon with IP Charge as Background

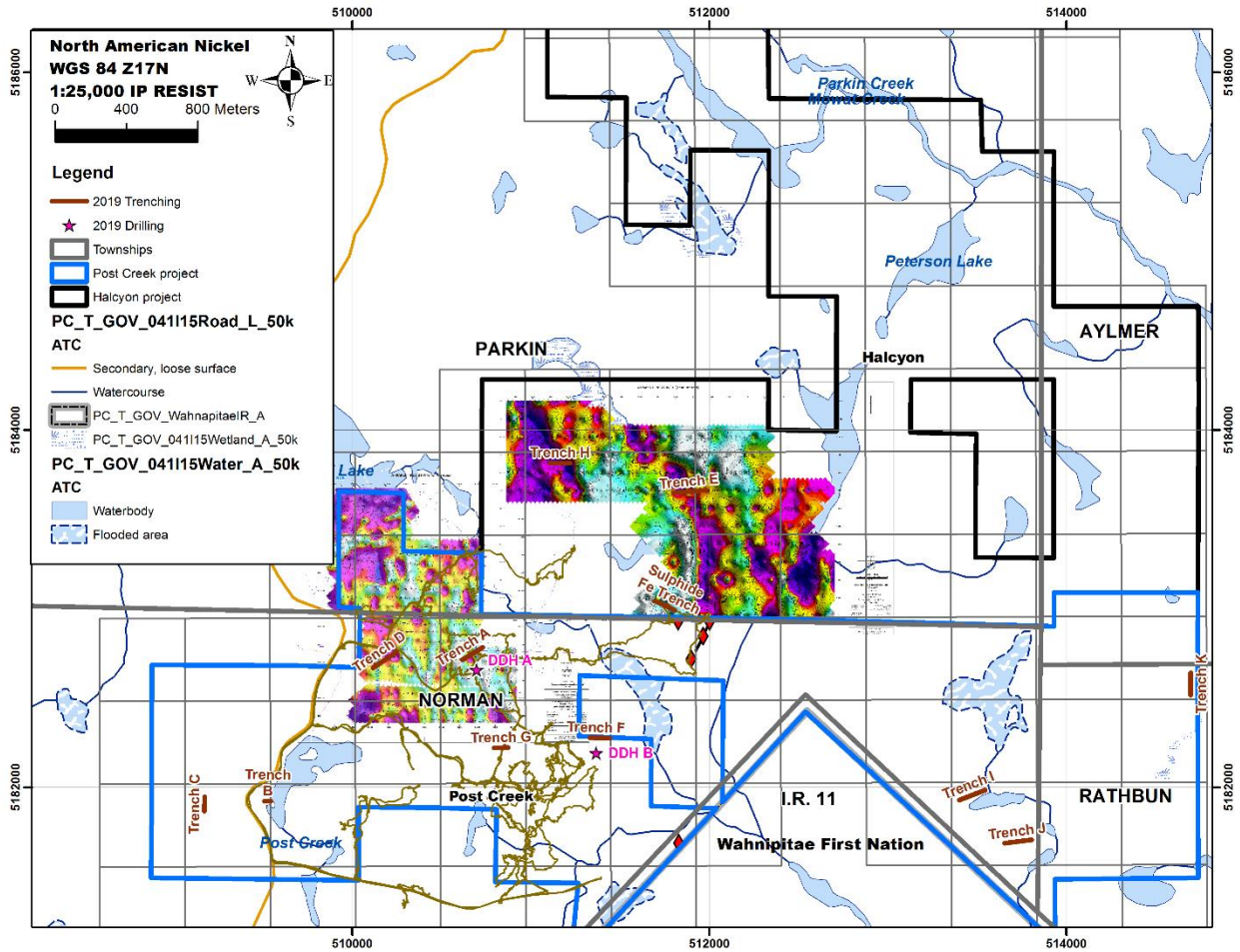


Figure 15 Post Creek/Halcyon with IP Resistivity as Background

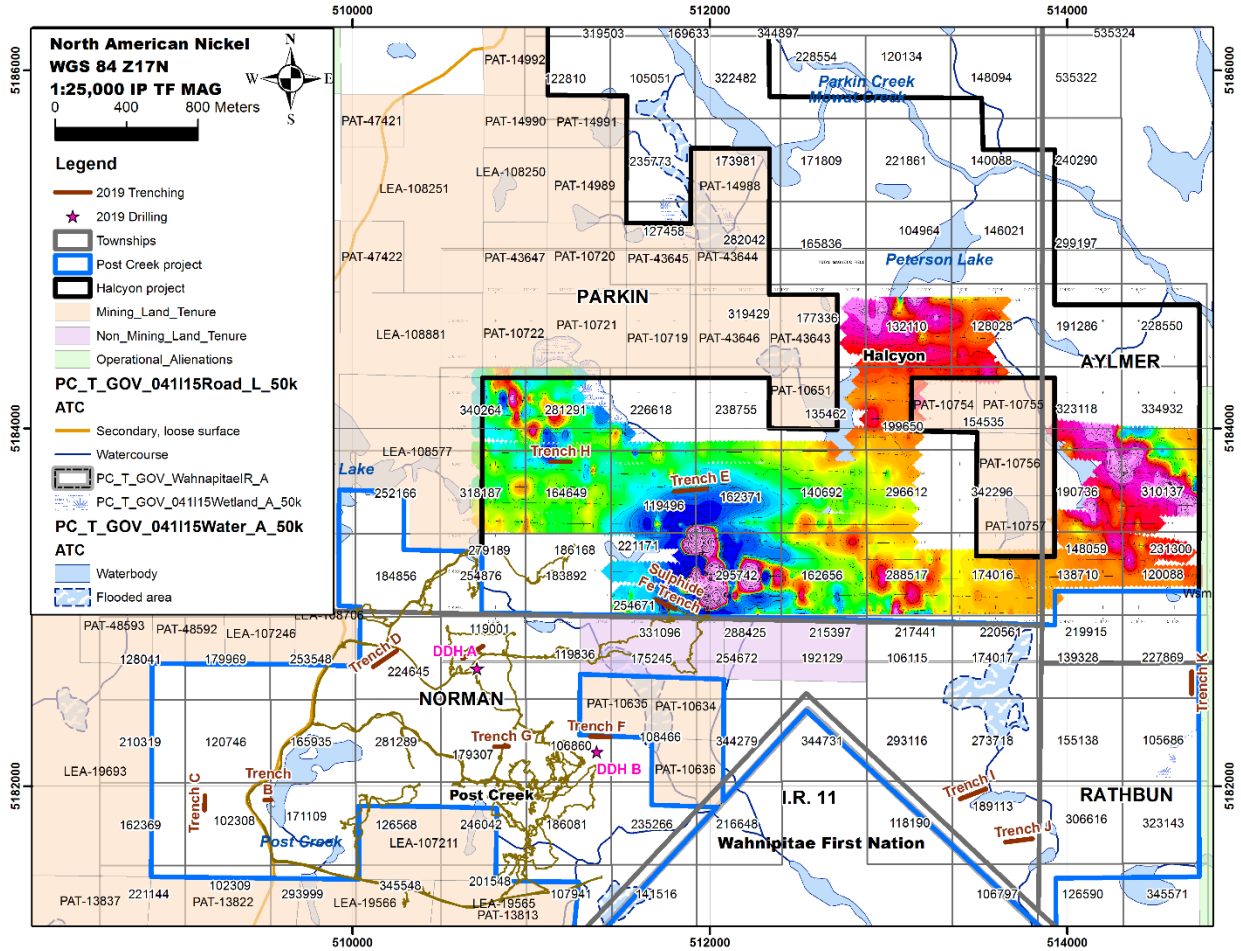


Figure 16 Halcyon with Total Field Magnetics as Background

## 6.0 REFERENCES

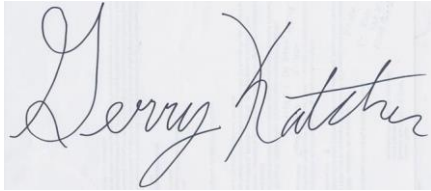
- Ames, D.E., Davidson, A., Buckle, J.L., and Card, K.D., 2005. Geology, Sudbury bedrock compilation, Ontario. Geological Survey of Canada, Open File 4570, scale 1:50,000.
- Dunbar, P., 2005. Report on the Post Creek, Golden Pine, and Woods Creek Properties, Sudbury, Ontario for Namex Explorations Inc., Internal Document prepared by Watts, Griffis and McQuat Limited Consulting Geologists and Engineers.
- Dunbar, P., 2004. Report on the Halcyon Reconnaissance Exploration Program, Parkin Township, Ontario for Champion Bear Resources Ltd., Internal Document prepared by Watts, Griffis and McQuat Limited Consulting Geologists and Engineers.
- GDDInstrumentation, (2006). Prospecting Manual BEEP MAT Model\_BM4+. Manual Version 6-0E
- Katchen G., Richardson N, 2018. Report on Prospecting, Trenching and Geological Mapping Completed by North American Nickel Inc. Post Creek and Halcyon Properties. Assessment Report.
- Meyn H.D. (1970). Geology of Hutton and Parkin Townships. Ont. Dept of Mines, Geol. Rept. 80.
- Muir T.L., Rebic, Ziala, & Dressler B.O., 1980. Capreol Area (Eastern Part), District of Sudbury. Ontario Geological Survey, Preliminary Map P.2378.
- Naldrett A.J., 1984. Mineralogy and composition of the Sudbury ores, Chapter 13, p.309-326. In “The Geology and Ore Deposits of the Sudbury Structure”, Eds. E.G. Pye, A.J. Naldrett, P.E. Giblin, O.G.S. Special Volume 1, 604p.
- Peredery, W.V., 2011. Report on Post Creek Property in Norman and Parkin Townships, Sudbury Mining District. NI 43-101 Report prepared for North American Nickel Inc.

## 7.0 STATEMENT OF QUALIFICATIONS

I, Gerry Katchen, of the city of Thunder Bay, in the province of Ontario, do hereby certify that:

1. I have worked as a geologist for a total of 20 years
2. I graduated with a degree of B.Sc. (4 year Spec.) in Geology from Brandon University of Brandon Manitoba, in 1999.
3. I am currently professionally registered in Ontario to practise as a Geologist. APGO # 1322
4. I have been and, currently am full time employee of North American Nickel since January 2015.
5. I am responsible for the statements made within this assessment report.

Signed By:

A handwritten signature in black ink on a light blue background. The signature reads "Gerry Katchen" in a cursive script.

Gerry Katchen, P.Geo #1322 (APGO)





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## **North American Nickel Announces Results from Post Creek Drill Program, Sudbury, Ontario**

**Vancouver, British Columbia, February 12, 2019 – North American Nickel Inc. (TSX VENTURE: NAN) (OTCBB: WSCRF) (CUSIP: 65704T 108)** (the “Company”) is pleased to report that assays have been received from two drill holes completed at its Post Creek nickel-copper-PGE sulphide project in Sudbury Ontario.

The Post Creek Property is located in the footwall stratigraphy to the northeast of the Sudbury Igneous Complex. Geological mapping has previously identified a north-south trending discontinuous body of quartz diorite which is believed to represent a segmented radial Offset Dyke within a corridor of partially melted and brecciated country rocks that extends from the Whistle embayment structure (Figure 1). Figures may be viewed using the link provided at the end of this release.

The 2018 exploration program was designed to test the corridor containing the quartz diorite and brecciated country rocks and consisted of drilling, BHEM surveys, trench mapping, petrography, geochemistry studies, mapping and prospecting. Two holes totalling 969 meters of diamond drilling were completed and designed to provide a platform for BHEM survey work.

One hole was drilled beneath an outcrop of quartz diorite and was designed to establish whether the dyke extended to depth and to provide a platform for a borehole geophysical survey. The second hole was designed to test the breccia belt immediately to the north of the trend of the Whistle Offset Dyke (Figure 2).

NAN CEO, Keith Morrison, commented: “Post Creek has been held as a NAN asset since 2010 because of its prospective location along the projection of the metallo genetically-significant Whistle Offset Structure. We have been exploring the project with a combination of prospecting, trenching, mapping and our recent drill program. The new discovery of previously unrecognized drill-indicated base metal massive sulphide-type copper, gold, silver and strongly-elevated zinc mineralization substantiates our focused exploration in this area. The results from the 2018 program have significantly expanded our understanding of the signature of the subsurface and the complexity of the geology on the property. These results integrated with historic data will assist us in determining the next steps in evaluating the Post Creek property.”

Both drill holes encountered a thick sequence of mafic volcanic rocks, but no intervals of quartz diorite or partially melted country rocks were encountered. Footwall style mineralization which typically carries elevated abundances of copper, nickel, and precious metals was also absent.

However hole PC-18-21 did intersect an unusually thick interval of sphalerite mineralization which is a new discovery of volcanogenic massive sulphide-type mineralization. The mineralized intervals include:

- 7.50m @ 3.55% zinc and 0.82ppm silver including
  - 3.70m @ 4.66% zinc and 0.58ppm silver and
  - 0.8m @ 10.96% zinc and 3.05ppm silver

A borehole electromagnetic (BHEM) survey detected multiple anomalies occurring north and south of the mineralization associated with PC-18-021 and are potential drill targets.

Hole PC-18-022 was designed to assess the possible strike extension of the Whistle Offset in a broad corridor of Sudbury Breccia. The hole was collared in an area with anomalous copper values in outcrop within a well-defined ground magnetic anomaly. A thick sequence of mafic volcanic rocks overprinted with locally developed shear and breccia zones were intersected. One of the shear zones hosted vein-type chalcopyrite mineralization. A strongly magnetic, highly altered ultramafic unit is responsible for the observed magnetic anomaly.

Drill collar information and assay results are summarized in Table 1 and 2, respectively.

**Table 1: Drill Collar Information**

Hole Number	UTM East	UTM North	Elevation (m)	Length (m)	Azimuth	Dip	Target
PC-18-021	510380	5183121	348	474	52	-64	CJ Quartz Diorite
PC-18-022	510665	5181923	339	495	294	-77	Mag High w Copper Grabs

*Note: Collar coordinates in UTM*

**Table 2: Assay Results**

Hole Number	From (m)	To (m)	Length (m)	Cu %	Zn %	S %	Au g/t	Ag g/t
<b>PC-18-021</b>	344.20	351.70	7.50	0.05	3.55	4.76	0.06	0.82
Incl	344.20	347.90	3.70	0.06	4.66	5.11	0.06	0.58
and	350.90	351.70	0.80	0.14	10.96	18.55	0.26	3.05
<b>PC-18-022</b>	412.50	413.40	0.90	0.70	0.00	0.87	0.64	1.37
Incl	413.10	413.40	0.30	1.85	0.00	2.28	1.56	3.70

*Note: Intervals represent core lengths, not necessarily true widths.*

*No anomalous values intercepted for Pb, Ni, Co, Pt and Pd.*

Further exploration on Post Creek is planned. The newly discovered zinc-rich base metal massive sulphide-type mineralization and a radiating belt of Sudbury Breccia with anomalous copper and gold assays situated in the southern portion of the property will be the focus of trenching, prospecting, geological mapping, geochemical and geophysical surveys. Exploration will define the limits of the Sudbury breccia and assess its potential to host footwall-vein type mineralization.

Engagement and ongoing dialogue with the Wanapitei First Nation will occur as the 2019 scope of work is formalized.

"Technical Information; Qualified Person"

The Company is not aware of any legal, political, environmental or other risks that could materially affect the potential development of the project other than those set out in its annual information form filed on [www.sedar.com](http://www.sedar.com). Please see below under the heading "Cautionary Note Regarding Forward-looking Statements" for further details regarding risks facing the Company.

All technical information in this release has been reviewed and approved by Peter C. Lightfoot, Ph.D., P.Geo. (Consulting Chief Geologist), who is the Qualified Person for the Company.

## *About North American Nickel*

North American Nickel is a mineral exploration company with 100% owned properties in Maniitsoq, Greenland and Sudbury, Ontario.

The Maniitsoq property in Greenland is a Camp scale permitted exploration project comprising 2,985 square km covering numerous high-grade nickel-copper + cobalt sulphide occurrences associated with norite and other mafic-ultramafic intrusions of the Greenland Norite Belt (GNB). The >75km-long belt is situated along, and near, the southwest coast of Greenland accessible from the existing Seqi deep water port with an all year-round shipping season and hydroelectric power potential from a quantified watershed.

The Post Creek/Halcyon property in Sudbury is strategically located adjacent to the past producing Podolsky copper-nickel-platinum group metal deposit of KGHM International Ltd. The property lies along the extension of the Whistle Offset dyke structure. Such geological structures host major Ni-Cu-PGM deposits and producing mines within the Sudbury Camp.

### **Cautionary Note Regarding Forward-looking Statements**

This press release contains certain "forward-looking statements" and "forward-looking information" under applicable securities laws concerning the business, operations and financial performance and condition of the Company. Forward-looking statements and forward-looking information include, but are not limited to, statements with respect to the success of exploration activities; impact of mineralogy, estimation of mineral resources at mineral projects of the Company; the future economics of minerals including nickel and copper; synergies and financial impact facilities; the benefits of the development potential of the properties of the Company and currency exchange rate fluctuations. Except for statements of historical fact relating to the Company, certain information contained herein constitutes forward-looking statements. Forward-looking statements are frequently characterized by words such as "plan," "expect," "project," "intend," "believe," "anticipate," "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are based on a number of assumptions and subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. Many of these assumptions are based on factors and events that are not within the control of the Company and there is no assurance they will prove to be correct.

Factors that could cause actual results to vary materially from results anticipated by such forward-looking statements include variations in metal grades, changes in market conditions, variations in recovery rates, risks relating to international operations, fluctuating metal prices and currency exchange rates, and other risks of the mining industry, including but not limited to the failure of plant, equipment or processes to operate as anticipated. The Company cautions that the foregoing list of important factors is not exhaustive. Investors and others who base themselves on forward-looking statements should carefully consider the above factors as well as the uncertainties they represent and the risk they entail. The Company believes that the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this press release should not be unduly relied upon. These statements speak only as of the date of this press release. The Company undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by applicable securities laws.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be anticipated, estimated or intended. Statements concerning mineral reserve and resource estimates may also be deemed to constitute forward-looking statements to the extent they involve estimates of the mineralization that will be encountered if the property is developed.

Statements about the Company's future expectations and all other statements in this press release other than historical facts are "forward looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and as that term defined in the Private

Litigation Reform Act of 1995. The Company intends that such forward-looking statements be subject to the safe harbours created thereby. Since these statements involve risks and uncertainties and are subject to change at any time, the Company's actual results may differ materially from the expected results. For further information on the project, please see National Instrument 43-101 (NI 43-101) technical report prepared by SRK Consulting (Canada) Inc. (SRK) dated effective March 17<sup>th</sup>, 2017, titled "Updated Independent Technical Report for the Maniitsoq Nickel-Copper-Cobalt-PGM Project, Greenland", available under the Company's profile at [www.sedar.com](http://www.sedar.com) or at [www.northamericannickel.com](http://www.northamericannickel.com).

**ON BEHALF OF THE BOARD OF DIRECTORS**

Mark Fedikow  
President  
North American Nickel Inc.

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Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the Exchange) accepts responsibility for the adequacy or accuracy of this release.

Figure 1: Location of Post Creek Project and Sudbury Breccia Zone.

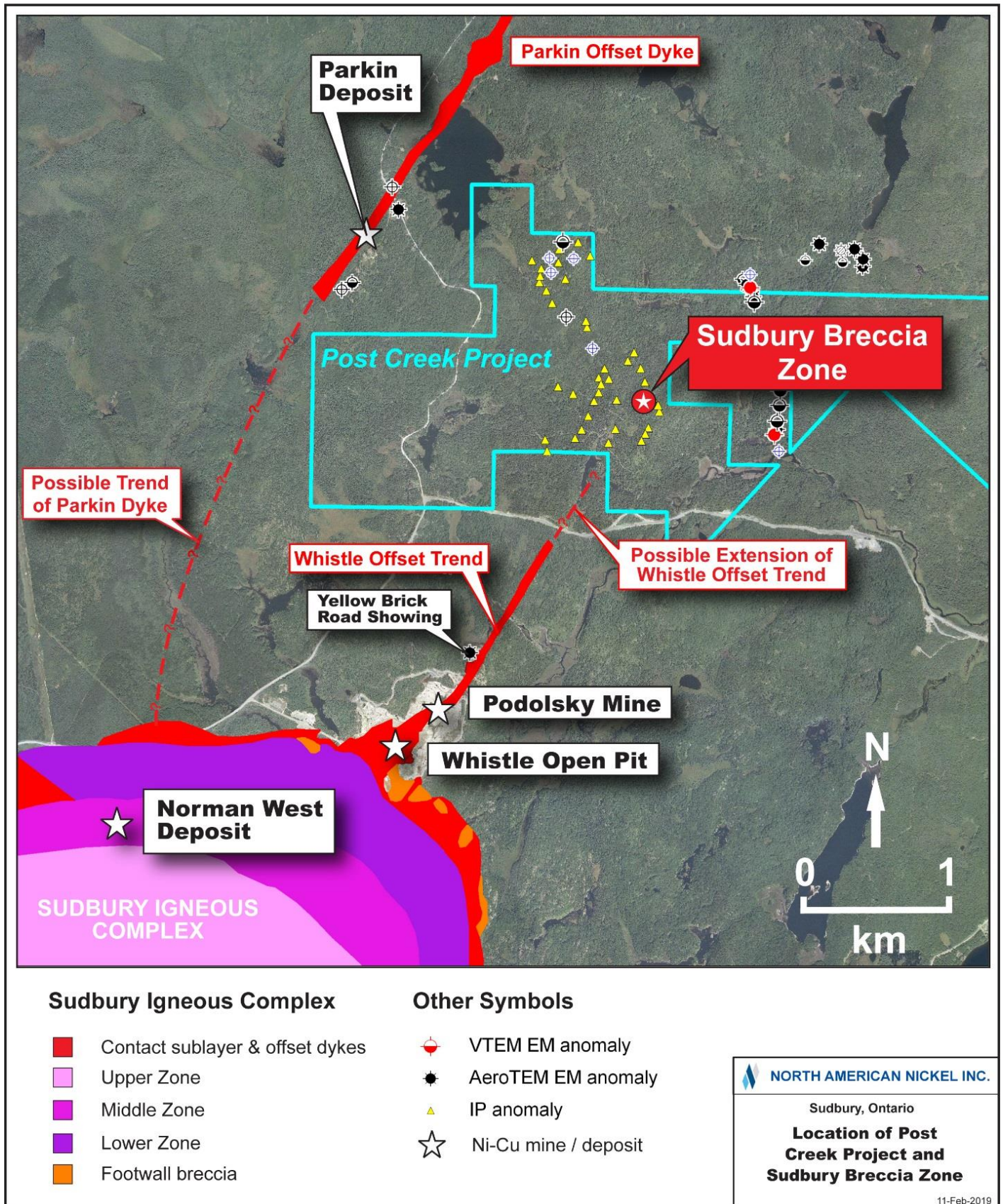
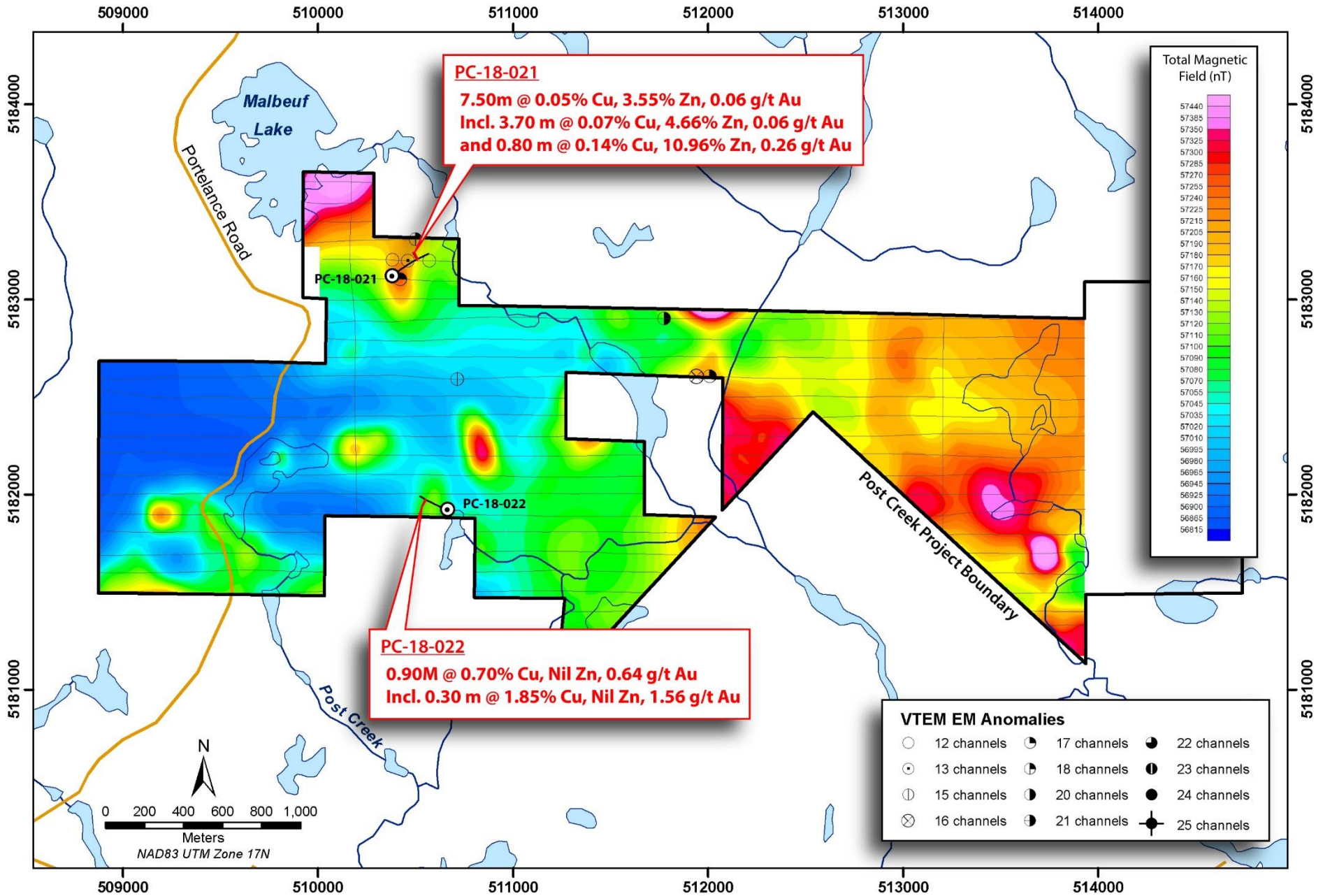


Figure 2: Plan map showing Post Creek VTEM magnetic and electromagnetic (EM) anomalies, 2018 drill holes and significant assay results.



## DRILL HOLE REPORT

 Hole Number **PC-18-021**

 Project: **NORTH AMERICAN NICKEL**

 Project Number: **1**

<b>Drilling</b>	<b>Casing</b>	<b>Core</b>	<b>Location</b>	<b>Other</b>
<b>Azimuth:</b> 52	<b>Length:</b> 2	<b>Dimension:</b> NQ2	<b>Township:</b> PARKIN	<b>Logged by:</b> Kalevi Hannila
<b>Dip:</b> -64	<b>Pulled:</b> no	<b>Storage:</b> Scrappys Me	<b>Claim No.:</b> 184856/2791	<b>Relog by:</b>
<b>Length:</b> 474	<b>Capped:</b> yes	<b>Section:</b>	<b>NTS:</b> 41115	<b>Contractor:</b> Forage M3
<b>Started:</b> 17-Nov-18	<b>Cemented:</b> no	<b>Hole Type</b> DDH	<b>Hole:</b> SURFACE	<b>Spotted by:</b> Gerry Katchen
<b>Completed:</b> 30-Nov-18				<b>Surveyed:</b>
<b>Logged:</b> 21-Nov-18				<b>Surveyed by:</b>
<b>Comment:</b> Hole was drilled to a depth of 474m. Drillhole encountered a few very small partial melt units which were broken out. Drillhole did not encounter any Quartz Diorite. Hole was pulsed.			<b>Coordinate - Gemcom</b>	<b>Geophysics:</b> BHPM
			<b>East:</b> 510380	<b>Coordinate - UTM</b>
			<b>North:</b> 5183121	<b>East:</b> 510380
			<b>Elev.:</b> 348	<b>North:</b> 5183121
				<b>Elev.:</b> 348
				<b>Zone:</b> UTM_WG <b>NAD:</b> WGS84
				<b>Geophysic Contractor:</b> Crone
				<b>Left in hole:</b> Casing and Casin
				<b>Making water:</b> no
				<b>Multi shot survey:</b> yes

### Deviation Tests

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
0.00	52.00	-64.00	C	<input checked="" type="checkbox"/>	
20.00	52.74	-65.11	RAD	<input checked="" type="checkbox"/>	
30.00	52.57	-64.93	RAD	<input checked="" type="checkbox"/>	
40.00	52.13	-64.78	RAD	<input checked="" type="checkbox"/>	
90.00	53.74	-64.71	RAD	<input checked="" type="checkbox"/>	
100.00	55.07	-64.69	RAD	<input checked="" type="checkbox"/>	
120.00	55.32	-64.72	RAD	<input checked="" type="checkbox"/>	
140.00	55.74	-64.74	RAD	<input checked="" type="checkbox"/>	
160.00	55.62	-64.81	RAD	<input checked="" type="checkbox"/>	
180.00	55.75	-64.80	RAD	<input checked="" type="checkbox"/>	
200.00	56.20	-64.53	RAD	<input checked="" type="checkbox"/>	
220.00	57.10	-63.97	RAD	<input checked="" type="checkbox"/>	
240.00	58.08	-63.43	RAD	<input checked="" type="checkbox"/>	

### Deviation Tests

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
250.00	58.57	-63.11	RAD	<input checked="" type="checkbox"/>	
260.00	59.15	-62.82	RAD	<input checked="" type="checkbox"/>	
270.00	59.04	-62.51	RAD	<input checked="" type="checkbox"/>	
280.00	59.59	-62.19	RAD	<input checked="" type="checkbox"/>	
290.00	59.77	-61.93	RAD	<input checked="" type="checkbox"/>	
300.00	60.42	-61.65	RAD	<input checked="" type="checkbox"/>	
310.00	61.15	-61.32	RAD	<input checked="" type="checkbox"/>	
320.00	61.03	-61.02	RAD	<input checked="" type="checkbox"/>	
330.00	61.05	-60.73	RAD	<input checked="" type="checkbox"/>	
340.00	61.41	-60.45	RAD	<input checked="" type="checkbox"/>	
350.00	61.94	-60.25	RAD	<input checked="" type="checkbox"/>	
360.00	63.30	-59.89	RAD	<input checked="" type="checkbox"/>	
370.00	62.93	-59.58	RAD	<input checked="" type="checkbox"/>	

Hole Number **PC-18-021**Project: **NORTH AMERICAN NICKEL**Project Number: **1****Deviation Tests**

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
380.00	63.14	-59.26	RAD	<input checked="" type="checkbox"/>	
390.00	63.22	-59.02	RAD	<input checked="" type="checkbox"/>	
410.00	63.92	-58.37	RAD	<input checked="" type="checkbox"/>	
430.00	64.83	-57.77	RAD	<input checked="" type="checkbox"/>	
450.00	65.46	-57.35	RAD	<input checked="" type="checkbox"/>	
470.00	65.73	-57.11	RAD	<input checked="" type="checkbox"/>	



## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
0.00	2.00	<b>OVB</b> <b>Overburden/detritus</b>									
2.00	7.60	<b>V3</b> <b>Mafic volcanic rocks</b> Light grey to light greenish grey, fine grained massive. Fine < 1 mm to medium 3 mm quartz carbonate veining. Quartz carbonate veining white to light red with minor hematization. Quartz carbonate veining increasing to lower unit. Top of bedrock 2 to 3.5 moderately fractured with gossan on fracture surfaces.  <b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 2.00 - 7.60      Py FF 1      Pyrite as fracture filling narrow to 3 - 4 mm.  <b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 2.00 - 7.60      Bre 50      Short sections of breccia infilled with quartz carbonate veining.									
7.60	19.50	<b>V3</b> <b>Mafic volcanic rocks</b> Light grey with light pinkish orange granite segregations. Fine grained with weak to moderate local shearing. Irregular granitic segregations throughout.  <b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 7.60 - 19.50      EP FF WM      Weak to moderate epidote locally.  <b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 7.60 - 19.50      Po F 1      Pyrrhotite as coarse segregations related to shear planes.  <b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 7.60 - 19.50      SZ 30      Weak shearing at 30 to 50 degrees locally moderate.	S124301	7.60	8.00	0.40	0.03	0.00	20	0.08	0.25
			S124302	8.00	9.00	1.00	0.01	0.01	10	0.54	1.00
			S124303	9.00	9.40	0.40	0.01	0.01	40	0.50	3.50
			S124304	9.40	10.40	1.00	0.01	0.01	10	0.25	0.50
			S124305	10.40	11.40	1.00	0.02	0.01	10	0.33	1.00
			S124306	11.40	12.00	0.60	0.01	0.03	70	0.66	1.00
			S124307	12.00	13.00	1.00	0.01	0.01	30	0.31	1.00
			S124308	13.00	14.00	1.00	0.01	0.01	10	0.12	1.00
			S124309	14.00	15.00	1.00	0.01	0.01	10	0.10	1.00

## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
			S124311	15.00	16.00	1.00	0.02	0.03	20	0.70	1.50
			S124312	16.00	17.00	1.00	0.01	0.01	10	0.69	1.50
			S124313	17.00	18.00	1.00	0.01	0.03	50	1.78	2.00
			S124314	18.00	19.00	1.00	0.01	0.03	40	0.41	2.00
			S124316	19.00	19.50	0.50	0.02	0.00	10	0.08	0.50
19.50	43.60	<b>V3 Mafic volcanic rocks</b>	S124317	36.50	37.50	1.00	0.04	0.00	30	0.01	0.50
		Light grey to light greenish grey, fine grained massive with local moderate to strong quartz carbonate veining. Quartz carbonate veining sub vertical to 50 degrees. Granitic segregations locally.	S124318	37.50	38.50	1.00	0.02	0.00	10	0.04	0.50
		<b>Alteration Maj:</b>	S124319	38.50	39.00	0.50	0.01	0.03	60	0.64	2.50
		<b>Type/Style/Intensity</b>	S124320	39.00	40.00	1.00	0.00	0.00	40	0.13	1.00
		19.50 - 43.60 CHL FF WM Chloritic alteration weak associated with local shearing.	S124321	40.00	41.00	1.00	0.01	0.03	30	0.07	0.50
		<b>Mineralization Maj. :</b>	S124322	41.00	42.00	1.00	0.01	0.00	20	0.01	0.50
		<b>Type/Style/%Mineral</b>	S124323	42.00	43.00	1.00	0.01	0.01	20	0.38	2.00
		19.50 - 43.60 Cp FF 1 Minor chalcopyrite at 40.4 associated with quartz carbonate veining.	S124324	43.00	43.60	0.60	0.00	0.01	20	0.10	0.50
		19.50 - 43.60 Po FF 1 Pyrrhotite as coarse segregations associated with minor shearing and quartz carbonate veining.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		19.50 - 43.60 B 50 Short brecciated sections infilled wih quartz caronate veining.									

## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
43.60	62.80	<b>V3 Mafic volcanic rocks</b> Light grey to grey, very fine grained massive with narrow to coarse quartz carbonate veins. Contains short recrystallized inclusions, strongly silicified. Scattered intervals of minor pyrrhotite and very minor pyrite. 55.0 to 55.4, 3 to 5% pyrrhotite.	S124325	53.00	54.00	1.00	0.02	0.01	20	0.32	1.50
			S124326	54.00	55.00	1.00	0.02	0.01	40	0.38	1.00
			S124327	55.00	55.50	0.50	0.01	0.02	60	1.00	4.00
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
43.60 - 62.80		BIO P MS		55.50	56.50	1.00	0.02	0.01	30	0.58	1.50
				56.50	57.50	1.00	0.01	0.01	30	0.50	1.50
				57.50	58.50	1.00	0.01	0.01	40	0.75	2.00
43.60 - 62.80		SA F W		58.50	60.00	1.50	0.02	0.02	20	0.45	1.00
				60.00	61.50	1.50	0.01	0.01	20	0.45	1.00
43.60 - 62.80		BL P W		61.50	62.80	1.30	0.02	0.02	10	0.86	1.50
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
		<b>Comment</b>									
43.60 - 62.80		Po F 1									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
43.60 - 62.80		Bre 30									
62.80	76.30	<b>V3 Mafic volcanic rocks</b> Grey to dark grey, fg massive. Moderate to strong epidote alteration occurs locally throughout unit. Weak quartz carbonate veining throughout. Weak to moderate brecciation increasing toward lower contact. Breccias host quartzitic or strongly silicified clasts, clasts range in size from 1 cm to 20 cm. Pyrrhotite predominantly and lesser pyrite occur locally throughout unit. Lower contact at 20 degrees tca (to core axis) with 3 to 4 mm quartz carbonate vein along contact.	S124336	62.80	64.00	1.20	0.01	0.02	20	1.35	3.00
			S124337	64.00	65.00	1.00	0.00	0.03	10	3.32	5.00
			S124338	65.00	66.00	1.00	0.00	0.01	10	0.62	1.50
			S124339	66.00	67.00	1.00	0.00	0.00	10	0.31	1.00
			S124340	67.00	68.00	1.00	0.00	0.01	10	1.57	2.00
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
62.80 - 76.30		CHL F W		68.00	69.00	1.00	0.00	0.03	40	4.94	6.00
				69.00	70.00	1.00	0.00	0.02	10	2.63	5.00
62.80 - 76.30		EP PCH MS		70.00	71.00	1.00	0.00	0.02	10	2.49	3.00
				71.00	72.00	1.00	0.00	0.01	30	1.64	2.00
62.80 - 76.30		Carb FF W		72.00	73.00	1.00	0.00	0.01	10	2.26	4.00

**LITHOLOGY REPORT  
- Detailed -**
Hole Number **PC-18-021**Project: **NORTH AMERICAN NICKEL**Project Number: **1**

<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
		<b>Mineralization Maj. :</b> <i>Type/Style/%Mineral</i> <b>Comment</b>	S124346	73.00	74.00	1.00	0.00	0.02	30	2.34	2.50
		62.80 - 76.30 Py F 1 Py is fracture controlled.	S124347	74.00	75.00	1.00	0.00	0.02	10	2.52	2.00
		62.80 - 76.30 Po F 2.5 Po is fracture controlled.	S124348	75.00	76.00	1.00	0.00	0.01	30	2.32	2.50
		<b>Structure Maj.:</b> <i>Type/Core Angle</i> <b>Comment</b>	S124349	76.00	76.30	0.30	0.00	0.00	10	0.48	1.00
76.30	80.70	<b>BXR Breccia Zone</b>	S124451	76.30	77.00	0.70	0.01	0.01	20	1.97	3.00
		Dark green to grey, fg chloritic matrix with quartzitic or strongly silicified clasts. Chlorite is pervasive in the matrix and as narrow veins. Po is ubiquitous with local concentrations 78.8 to 79.3 30 to 40% upper contact of zone is at 40 degrees tca lower contact of zone is not discernible. Lower contact at 10 degrees tca.	S124452	77.00	77.50	0.50	0.00	0.01	80	3.30	3.00
			S124453	77.50	78.00	0.50	0.00	0.01	10	2.38	5.00
			S124454	78.00	78.40	0.40	0.00	0.01	70	4.74	5.00
		<b>Alteration Maj:</b> <i>Type/Style/Intensity</i> <b>Comment</b>	S124456	78.40	78.80	0.40	0.00	0.02	10	3.30	2.00
		76.30 - 80.70 CHL P WM Chlorite is pervasive in the matrix and as veins.	S124457	78.80	79.25	0.45	0.00	0.02	120	15.90	35.00
		<b>Mineralization Maj. :</b> <i>Type/Style/%Mineral</i> <b>Comment</b>	S124458	79.25	79.75	0.50	0.01	0.02	110	8.30	7.00
		76.30 - 80.70 Po BX 12 Local concentrations 30 to 40%.	S124459	79.75	80.10	0.35	0.00	0.01	40	6.65	5.00
			S124460	80.10	80.70	0.60	0.00	0.01	10	4.51	10.00
		<b>Structure Maj.:</b> <i>Type/Core Angle</i> <b>Comment</b>									
		76.30 - 80.70 B 20 Healed breccia, chloritic and siliceous.									
80.70	88.90	<b>I1B Granite</b>	S124461	80.70	81.70	1.00	0.00	0.01	10	0.19	0.10
		Light grey to light pinkish grey, fine grained, massive recrystallized. Narrow quartz carbonate veins throughout. No visible sulphides. Lower contact at 40 degrees tca.	S124462	81.70	82.70	1.00	0.00	0.00	10	0.07	0.10
		<b>Alteration Maj:</b> <i>Type/Style/Intensity</i> <b>Comment</b>									
		80.70 - 88.90 Carb FF W Narrow quartz carbonate veins throughout.									

## LITHOLOGY REPORT

### - Detailed -

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
88.90	90.80	<b>T3BL</b> <b>Mafic (basaltic) lapilli tuff</b> Lapilli Tuff, light brownish grey, fg matrix with rounded to subrounded quartz clasts 2 mm to 5 mm. No visible sulphides.									
90.80	92.70	<b>T3BL</b> <b>Mafic (basaltic) lapilli tuff</b> Lapilli Tuff, light grey to grey, fg matrix with rounded to subrounded quartz clasts 2 mm to 3 mm. No visible sulphides. Lower contact at 40 degrees tca.	S124463	90.80	91.70	0.90	0.01	0.01	50	0.06	0.10
			S124464	91.70	92.70	1.00	0.01	0.00	10	0.06	0.10
92.70	94.30	<b>V3</b> <b>Mafic volcanic rocks</b> Light greenish grey to light grey, fg with quartz carbonate veining throughout, approximately 20%. Weakly fractured locally. Po mineralization 2 to 3%. Lower contact at 60 degrees tca.	S124465	92.70	93.10	0.40	0.02	0.01	50	0.69	2.00
			S124466	93.10	93.40	0.30	0.01	0.02	10	0.49	3.00
			S124467	93.40	93.80	0.40	0.01	0.01	20	0.32	2.00
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 92.70 - 94.30 Carb F WM White and pink quartz carbonate veins occur throughout.	S124468	93.80	94.30	0.50	0.01	0.01	20	0.24	2.00
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 92.70 - 94.30 Po F 2.5 Po occurs as fracture controlled veins.									
94.30	95.40	<b>T3BL</b> <b>Mafic (basaltic) lapilli tuff</b> Lapilli Tuff, light grey to grey, fg matrix with occasional rounded to subrounded quartz clasts 1 mm to 3 mm. No visible sulphides. Lower contact is irregular.	S124469	94.30	95.40	1.10	0.00	0.00	10	0.07	0.10

## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
95.40	95.90	<b>PM</b> <i>Partial Melt</i> Light grey to grey, very fine grained, banded displaying mineral segregation, unit contains partially digested 6 cm clast. Displays similar composition as over lying granite unit. Contains rare pyrite specks. Lower contact at 30 degrees ca.	S124471	95.40	95.90	0.50	0.01	0.00	40	0.05	0.10
95.90	98.60	<b>V3</b> <i>Mafic volcanic rocks</i> Greenish grey to grey, fg with randomly oriented white and pink carbonate veining, hairline chlorite infilled fractures occur throughout. Lower contact at 40 degrees tca. No visible sulphides.	S124472	95.90	96.90	1.00	0.02	0.00	30	0.01	0.10
			S124473	96.90	97.90	1.00	0.02	0.01	10	0.01	0.10
			S124474	97.90	98.60	0.70	0.02	0.00	10	0.01	0.10
98.60	98.85	<b>PM</b> <i>Partial Melt</i> Light grey to grey, fg with a botryoidal appearance. Felsic composition. Competent with minor quartz carbonate infilled fractures. No visible sulphides.	S124476	98.60	98.85	0.25	0.00	0.01	10	0.13	0.10
		<b>Alteration Maj:</b> <i>Type/Style/Intensity</i> <b>Comment</b>									
		98.60 - 98.85 Carb FF W Minor quartz carbonate infilled fractures.									

## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
98.85	103.70	<b>T3BL</b> <i>Mafic (basaltic) lapilli tuff</i> Greenish grey to grey, fg matrix with occasional 1 mm clasts. Unit has been possibly recrystallized. Weak to moderate fracturing at 20 degrees and sub vertically tca. No visible sulphides. Lower contact at 50 degrees tca.	S124477	98.85	100.00	1.15	0.01	0.01	10	0.10	0.10
			S124478	100.00	101.00	1.00	0.00	0.01	10	0.14	0.10
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		98.85 - 103.70	Frc 20	Weak to moderate fracturing sub vertical and at 20 degrees tca.							
103.70	105.10	<b>M12</b> <i>Quartzite</i> light grey, fg bedded. Moderately fractured. No visible sulphides. Lower contact at 50 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		103.70 - 105.10	Carb FF W	White quartz carbonate veining							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		103.70 - 105.10	Frc 5	Weak subvertical fracturing							
105.10	149.80	<b>V3</b> <i>Mafic volcanic rocks</i> Light greenish grey to light grey, fg massive with randomly oriented quartz carbonate infilled fractures. Quartz carbonate vein from 144.7 to 144.8 at 20 degrees tca. Quartz carbonate vein from 146.0 to 146.3 at 30 degrees tca. Po is <1 % overall, locally to 1%. Minor py is present locally.	S124479	105.10	105.80	0.70	0.02	0.00	20	0.07	1.00
			S124480	105.80	106.50	0.70	0.02	0.00	10	0.02	0.10
			S124481	106.50	107.50	1.00	0.02	0.00	20	0.03	0.10
			S124482	107.50	107.80	0.30	0.02	0.01	60	0.21	2.00
			S124483	107.80	108.80	1.00	0.02	0.01	30	0.04	0.50
			S124484	108.80	109.50	0.70	0.02	0.00	10	0.11	1.00
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		105.10 - 149.80	EP P M	Epidote alteration is moderate from 149.8 to 183.0							
		105.10 - 149.80	Carb FF WM	Quartz carbonate veining throughout as fracture filling.							

## LITHOLOGY REPORT - Detailed -

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Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
		<b>Structure Maj.:</b>									
		105.10 - 149.80									
		<b>Type/Core Angle</b>									
		Frc 50									
		<b>Comment</b>									
		Weakly fractured at 50, 40 and 20 degrees tca.									
149.80	204.60	<b>V3 Mafic volcanic rocks</b>									
		Light greenish yellow to light greenish grey, fg massive. 154.6 to 155.1 healed breccia, with quartz carbonate and epidote infilling. Moderate epidote alteration from 149.8 to 204.6.									
		<b>Alteration Maj:</b>									
		149.80 - 204.60									
		CHL FF WM									
		149.80 - 204.60									
		EP PCH WM									
		Epidote alteration is pervasive throughout unit.									
		<b>Structure Maj.:</b>									
		149.80 - 204.60									
		Frc 40									
		149.80 - 204.60									
		Frc 30									
		185.2 to 185.3 Moderately fractured, hematite and clay along fractures.									
		149.80 - 204.60									
		Bre 20									
		Healed breccia 178.8 to 182.9 with moderate to strong epidote alteration.									
		149.80 - 204.60									
		Flt 40									
		Fault gouge 166.8 at 40 degrees tca. Interval is moderately fractured with hematite along fractures.									
204.60	223.00	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive with quartz carbonate veining throughout and lesser epidote. Pyrite mineralization < 1% overall. Lower contact sharp at 30 degrees tca.									
		<b>Alteration Maj:</b>									
		204.60 - 223.00									
		Carb FF W									
		White quartz carbonate veining as fracture filling.									
		<b>Mineralization Maj. :</b>									
		204.60 - 223.00									
		Py F 1									
		Pyrite as specks and along fractures.									



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Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		204.60 - 223.00	Frc 50	fractures at 50, 60 and 30 degrees tca.							
223.00	239.60	<b>V3 Mafic volcanic rocks</b> Light greenish yellow, fg with healed fractures infilled with chlorite and quartz carbonate. Moderate to moderate to strong epidote alteration. Unit is competent, lower contact is gradational.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		223.00 - 239.60	Carb FF W	White quartz carbonate as fracture filling.							
		223.00 - 239.60	EP P MS	Epidote is ubiquitous.							
		223.00 - 239.60	HE FF W	Hematite as fracture filling associated with quartz carbonate.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		223.00 - 239.60	Py F 1	Pyrite along fractures and as specks.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		223.00 - 239.60	Frc 40	Minor fracturing at 40, 30 and 50 degrees tca.							
239.60	256.40	<b>V3 Mafic volcanic rocks</b> Light greenish yellow, fg with healed fractures infilled with chlorite and quartz carbonate. Weak to moderate epidote alteration. Unit is competent, lower contact is gradational.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		239.60 - 256.40	Carb FF W	White quartz carbonate as fracture filling.							
		239.60 - 256.40	EP P WM	Epidote is ubiquitous.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		239.60 - 256.40	Po F 1	Pyrrhotite along fractures and as specks.							

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
		<b>Structure Maj.:</b>									
		239.60 - 256.40									
		<b>Type/Core Angle</b>									
		Frc 30									
		<b>Comment</b>									
		Minor fracturing at 30, 40 and 60 degrees tca.									
256.40	270.30	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive. Weak quartz carbonate, epidote and biotite alteration. Weakly fractured, lower contact is gradational.									
		<b>Alteration Maj:</b>									
		256.40 - 270.30									
		EP MO W									
		256.40 - 270.30									
		Carb FF W									
		256.40 - 270.30									
		BIO P WM									
		262.4 to 263.3 weak biotite alteration.									
		<b>Mineralization Maj. :</b>									
		256.40 - 270.30									
		Po F 1									
		Minor Po mineralization along fractures and as specks.									
		<b>Structure Maj.:</b>									
		256.40 - 270.30									
		Frc 30									
		Weak fracturing at 30 and 40 degrees tca.									
		256.40 - 270.30									
		Flt 30									
		257.6 to 257.7 fault at 30 degrees tca. 1 cm weakly hematitic gouge.									
270.30	273.30	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive. Weak to moderate epidote alteration. Unit is competent. No visible sulphides. Lower contact 273.15 to 273.3 quartz carbonate veining at 45 degrees tca.									
		<b>Alteration Maj:</b>									
		270.30 - 273.30									
		Carb FF W									
		Quartz carbonate veining along fractures.									
		270.30 - 273.30									
		EP FF WM									
		Epidote grading from hairline fracture filling to pervasive.									
		S124485	271.30	272.30	1.00	0.01	0.03	10	0.08	0.10	
		S124486	272.30	273.30	1.00	0.01	0.02	10	0.23	0.10	

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
		<b>Structure Maj.:</b> 270.30 - 273.30									
		<b>Type/Core Angle</b> Frc 30									
		<b>Comment</b> fractures at 30, 40 and 60 degrees tca.									
273.30	279.40	<b>V3 Mafic volcanic rocks</b> Light grey to grey, vfg massive. Moderate to strong silicification. Predominantly Po with lesser Py 2 to 3%.	S124487	273.30	274.10	0.80	0.00	0.00	10	0.02	0.10
			S124488	274.10	274.40	0.30	0.00	0.03	10	1.65	3.00
		<b>Alteration Maj.:</b> 273.30 - 279.40									
		<b>Type/Style/Intensity</b> Sil P MS									
		<b>Comment</b> Moderate to strong silicification throughout.	S124489	274.40	274.80	0.40	0.00	0.02	30	2.91	4.00
			S124491	274.80	275.10	0.30	0.01	0.02	150	15.45	7.00
		<b>Mineralization Maj. :</b> 273.30 - 279.40									
		<b>Type/Style/%Mineral</b> Po DIS 2									
		<b>Comment</b> Po as disseminations and as blebs. 2%, locally 5 to 7%.	S124492	275.10	275.40	0.30	0.01	0.02	110	8.71	4.00
			S124493	275.40	275.70	0.30	0.01	0.04	50	4.16	4.00
			S124494	275.70	276.00	0.30	0.00	0.02	10	2.15	4.00
		<b>Structure Maj.:</b> 273.30 - 279.40									
		<b>Type/Core Angle</b> Frc 30									
		<b>Comment</b> Fractures at 30 and 40 degrees tca.	S124496	276.00	276.50	0.50	0.00	0.00	10	0.29	0.10
			S124497	276.50	277.00	0.50	0.00	0.00	10	0.13	0.10
			S124498	277.00	277.50	0.50	0.00	0.00	10	0.09	0.10
			S124499	277.50	277.90	0.40	0.00	0.02	10	1.04	3.00
			S124500	277.90	278.40	0.50	0.00	0.02	10	0.76	2.00
			S124351	278.40	278.90	0.50	0.00	0.00	10	0.04	0.10
			S124352	278.90	279.40	0.50	0.00	0.00	10	0.02	0.10
279.40	297.10	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Quartz carbonate and epidote alteration along fractures .No visible sulphides. Lower contact is gradational.	S124353	279.40	280.40	1.00	0.01	0.02	50	0.15	0.10
			S124354	280.40	281.40	1.00	0.01	0.01	50	0.22	0.10
		<b>Alteration Maj.:</b> 279.40 - 297.10									
		<b>Type/Style/Intensity</b> Carb FF M									
		<b>Comment</b> Quartz carbonate vein 290.2 to 290.4 at 30 degrees tca.									
		279.40 - 297.10									
		<b>Type/Style/Intensity</b> Carb FF M									
		<b>Comment</b> Quartz carbonate vein 281.1 to 281.4 at 10 degrees tca.									
		279.40 - 297.10									
		<b>Type/Style/Intensity</b> EP FF M									
		<b>Comment</b> Epidote veining at 20 and 40 degrees tca.									

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		<b>Structure Maj.:</b>									
		279.40 - 297.10									
		<b>Type/Core Angle</b>									
		Frc 50									
		<b>Comment</b>									
		Fracturing at 50, 20 and 60 degrees tca.									
297.10	309.70	<b>V3 Mafic volcanic rocks</b>									
		Greenish grey to dark greenish grey, fg with weak to moderate quartz carbonate and epidote veining. Minor pyrite , 1%. Lower contact at 40 degrees tca.									
		<b>Alteration Maj:</b>									
		297.10 - 309.70									
		EP FF WM									
		297.10 - 309.70									
		Carb FF WM									
		297.10 - 309.70									
		BIO P M									
		moderate biotite alteration locally.									
		<b>Mineralization Maj. :</b>									
		297.10 - 309.70									
		Py BL 1									
		Pyrite blebs , 1%									
		<b>Structure Maj.:</b>									
		297.10 - 309.70									
		Frc 5									
		299.5 to 300.3 moderately fractured.									
309.70	327.30	<b>V3 Mafic volcanic rocks</b>									
		Greenish grey, fg massive with quartz carbonate veining decreasing toward lower contact.									
		<b>Alteration Maj:</b>									
		309.70 - 327.30									
		EP FF W									
		309.70 - 327.30									
		Carb FF WM									
		Quartz carbonate veing throughout.									
		<b>Mineralization Maj. :</b>									
		309.70 - 327.30									
		Py BL 1									
		Pyrite , 1% as blebs and lesser along fractures.									

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<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
327.30	336.20	<b>M16</b> <b>Amphibolite</b> Light greenish grey to light grey, fg massive. Competent to weakly fractured. Minor chalcopyrite mineralization. Lower contact is gradational over 30 centimetres.	S124356	330.50	331.00	0.50	0.06	0.00	20	0.01	0.10
			S124357	331.00	331.65	0.65	0.06	0.00	10	0.01	0.10
			S124358	331.65	331.90	0.25	0.06	0.00	30	0.02	0.50
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>	S124359	331.90	332.50	0.60	0.05	0.00	40	0.01	0.10
		327.30 - 336.20      Carb FF W      Minor quartz carbonate veining as fracture filling.	S124361	332.50	333.10	0.60	0.06	0.01	30	0.03	0.10
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b>	S124362	333.10	333.35	0.25	0.07	0.10	80	0.14	3.00
		327.30 - 336.20      Cp F 2      Single Cp speck at 331.77, 2 % Cp at 333.25.	S124363	333.35	333.60	0.25	0.07	0.01	50	0.03	0.10
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b>	S124364	333.60	334.50	0.90	0.06	0.01	60	0.03	0.10
		327.30 - 336.20      Frc 40      Weak fracturing at 40, 50 and 20 degrees tca.									
336.20	341.00	<b>V3</b> <b>Mafic volcanic rocks</b> Light grey to grey, fg massive. Weak quartz carbonate veining. Minor Py mineralization. Lower contact is gradational.	S124366	339.00	339.50	0.50	0.03	0.02	20	0.31	0.10
			S124367	339.50	340.00	0.50	0.03	0.01	10	0.08	2.00
			S124368	340.00	340.50	0.50	0.03	0.00	40	0.04	0.10
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b>	S124369	340.50	341.00	0.50	0.03	0.00	30	0.07	0.10
		336.20 - 341.00      Carb FF W      Quartz carbonate veining as fracture filling.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b>									
		336.20 - 341.00      Py DIS 3      339.5 to 339.7 pyrite mineralization to 3 %.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b>									
		336.20 - 341.00      Frc 40      Fractures at 40, 50 and 30 degrees to tca.									

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)		
341.00	344.20	<b>V3 Mafic volcanic rocks</b> Grey to light grey, fg with weak banding and segregation locally. Weak to moderate silicification and weak chlorite alteration. Sulphide mineralization is predominantly pyrite with lesser pyrrhotite. Lower contact defined by the introduction of hematite.	S124370	341.00	341.50	0.50	0.03	0.01	30	0.51	2.00		
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>									
	341.00 - 344.20	CHL F W		Chlorite as fracture filling and as segregations in banded section.	S124371	341.50	342.00	0.50	0.02	0.01	70	2.40	4.00
	341.00 - 344.20	Sil P WM		Unit is silicified hroughout.	S124372	342.00	342.50	0.50	0.01	0.01	10	4.69	5.00
	341.00 - 344.20	Py DIS 6		Pyrite 70 % and pyrrhotite 30 %.	S124373	342.50	343.00	0.50	0.00	0.03	20	5.33	4.00
	341.00 - 344.20	Gn 30		banding at 30 degrees tca.	S124374	343.00	343.30	0.30	0.00	0.03	10	2.53	2.00
	341.00 - 344.20	Frc 30		fractures at 30 and 60 degrees tca.	S124376	343.30	343.60	0.30	0.01	0.12	10	5.32	5.00
					S124377	343.60	343.90	0.30	0.00	0.01	10	1.74	4.00
					S124378	343.90	344.20	0.30	0.01	0.03	10	4.21	5.00
344.20	347.90	<b>V3 Mafic volcanic rocks</b> Greenish grey to reddish grey, fg massive with local banding and segregation. Hematized and chloritic locally. The unit is competent. Pyrite, pyrrhotite and sphalerite mineralization.	S124379	344.20	344.60	0.40	0.00	0.03	10	5.00	5.00		
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>									
	344.20 - 347.90	CHL P W		Chlorite patched locally.	S124380	344.60	345.00	0.40	0.00	0.01	10	2.02	2.00
	344.20 - 347.90	HE PCH WM		Hematite as patches and fracture controlled.	S124381	345.00	345.30	0.30	0.00	0.02	10	1.44	4.00
	344.20 - 347.90	Sil P WM		Silicification is pervasive throughout unit.	S124382	345.30	345.60	0.30	0.01	0.03	20	2.06	3.00
	344.20 - 347.90	Sp F 2		Sphalerite as disseminations and fracture filling.	S124383	345.60	345.90	0.30	0.00	0.02	10	1.60	4.00
	344.20 - 347.90	Po F 6		Pyrrhotite as disseminations and fracture filling.	S124384	345.90	346.20	0.30	0.00	0.16	20	2.43	3.00
	344.20 - 347.90	Py F 2		Pyrite as disseminations and fracture filling.	S124385	346.20	346.50	0.30	0.01	0.22	80	10.05	4.00
					S124386	346.50	346.80	0.30	0.01	0.04	50	7.50	3.00
					S124387	346.80	347.20	0.40	0.01	0.11	30	7.71	4.00
					S124388	347.20	347.60	0.40	0.01	0.06	80	8.79	8.00
					S124389	347.60	347.90	0.30	0.01	0.06	30	6.63	10.00

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From (m)	To (m)	Lithology	Sample #	From	To	Length	Final Ni (PCT)	Final Cu (PCT)	Final Co (PPM)	Final S (PCT)	Est SUL
		<b>Structure Maj.:</b>									
		344.20 - 347.90									
		<b>Type/Core Angle</b>									
		Frc 30									
		<b>Comment</b>									
		Weak fracturing at 30 and 60 degrees tca.									
347.90	350.90	<b>V3 Mafic volcanic rocks</b>	S124391	347.90	348.50	0.60	0.01	0.01	10	1.00	4.00
		Light grey to grey with local reddish grey sections, fg massive. Silica and biotite alteration. Predominantly pyrite with lesser pyrrhotite and sphalerite. Lower contact is gradational to hematized section.	S124392	348.50	349.00	0.50	0.01	0.02	30	1.79	0.10
			S124393	349.00	349.50	0.50	0.01	0.00	60	0.13	0.10
		<b>Alteration Maj:</b>									
		347.90 - 350.90									
		<b>Type/Style/Intensity</b>									
		BIO PCH W									
		<b>Comment</b>									
		Biotite alteration as patches.									
		347.90 - 350.90									
		<b>Type/Style/Intensity</b>									
		Sil P WM									
		<b>Comment</b>									
		Silica is pervasive throughout unit.									
		<b>Mineralization Maj. :</b>									
		347.90 - 350.90									
		<b>Type/Style/%Mineral</b>									
		Sp DIS 1									
		<b>Comment</b>									
		Sphalerite as patchy disseminations.									
		347.90 - 350.90									
		<b>Type/Style/%Mineral</b>									
		Po DIS 2									
		<b>Comment</b>									
		Pyrrhotite as patchy disseminations.									
		347.90 - 350.90									
		<b>Type/Style/%Mineral</b>									
		Py DIS 2									
		<b>Comment</b>									
		Pyrite as patchy disseminations.									
		<b>Structure Maj.:</b>									
		347.90 - 350.90									
		<b>Type/Core Angle</b>									
		Frc 40									
		<b>Comment</b>									
		Competent with very minor fracturing.									
350.90	351.30	<b>V3 Mafic volcanic rocks</b>	S124398	350.90	351.30	0.40	0.02	0.25	220	22.30	15.00
		Dk reddish grey, fg massive. Moderate to strong hematization. Predominantly pyrite and lesser sphalerite. Unit is competent. Lower contact is gradational									
		<b>Alteration Maj:</b>									
		350.90 - 351.30									
		<b>Type/Style/Intensity</b>									
		HE P MS									
		<b>Comment</b>									
		Hematite is pervasive moderate to strong.									
		<b>Mineralization Maj. :</b>									
		350.90 - 351.30									
		<b>Type/Style/%Mineral</b>									
		Sp DIS 1									
		<b>Comment</b>									
		Sphalerite as fine disseminations.									

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	350.90 - 351.30	Py DIS 8 Pyrite as coarse disseminations.									
351.30	352.10	<b>V3 Mafic volcanic rocks</b> Light to grey, fg massive. Weak to moderate silicification. Pyrite mineralization 30%. Unit is competent. Lower contact is gradational.	S124399	351.30	351.70	0.40	0.01	0.03	120	14.80	15.00
			S124401	351.70	352.10	0.40	0.02	0.04	130	22.30	30.00
		<b>Alteration Maj: Type/Style/Intensity Comment</b>									
	351.30 - 352.10	Sil P WM Pervasive silicification.									
		<b>Mineralization Maj. : Type/Style/%Mineral Comment</b>									
	351.30 - 352.10	Py DIS 30 Pyrite as coarse disseminations.									
352.10	360.90	<b>V3 Mafic volcanic rocks</b> Light grey to grey with light green epidote patches. Moderate to strong silicification and weak epidote. Pyrrhotite and lesser pyrite.	S124402	352.10	352.50	0.40	0.01	0.04	80	12.30	12.00
			S124403	352.50	352.95	0.45	0.01	0.03	40	6.04	8.00
			S124404	352.95	353.40	0.45	0.01	0.02	10	2.86	4.00
		<b>Alteration Maj: Type/Style/Intensity Comment</b>									
	352.10 - 360.90	EP PCH WM Epidote as patchy sections.	S124405	353.40	354.00	0.60	0.00	0.02	10	2.22	4.00
			S124406	354.00	354.70	0.70	0.00	0.01	20	2.10	3.00
	352.10 - 360.90	Sil P MS Pervasive silicification.	S124407	354.70	355.00	0.30	0.01	0.02	20	3.54	7.00
		<b>Mineralization Maj. : Type/Style/%Mineral Comment</b>									
	352.10 - 360.90	Py DIS 2 Pyrite disseminated predominantly at start of unit transitioning to Pyrrhotite.	S124408	355.00	355.30	0.30	0.01	0.02	30	3.14	8.00
			S124409	355.30	355.80	0.50	0.01	0.01	30	0.82	1.00
	352.10 - 360.90	Po DIS 6 Pyrrhotite disseminated decreasing toward lower contact.	S124411	355.80	356.10	0.30	0.01	0.01	40	2.03	4.00
			S124412	356.10	356.40	0.30	0.00	0.00	30	0.29	1.00
		<b>Structure Maj.: Type/Core Angle Comment</b>									
	352.10 - 360.90	Frc 50 fracturing at 50, 30 and 20 degrees tca.	S124413	356.40	356.90	0.50	0.01	0.03	10	4.96	12.00
			S124414	356.90	357.30	0.40	0.01	0.01	30	0.90	3.00
			S124416	357.30	357.60	0.30	0.01	0.01	40	1.39	4.00



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<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
			S124417	357.60	358.00	0.40	0.01	0.01	30	1.91	3.00
			S124418	358.00	359.00	1.00	0.01	0.01	10	2.09	4.00
			S124419	359.00	360.00	1.00	0.00	0.01	10	1.94	3.00
			S124420	360.00	360.90	0.90	0.00	0.01	10	1.27	2.00
360.90	369.10	<b>T1B Rhyolitic tuff</b> Light brownish grey to light greenish grey, vfg with chloritic banding and occasional inclusions, possibly layered tuff? Unit is very siliceous with chloritic veining throughout. Weak pyrite and lesser pyrrhotite mineralization < 1% overall. Lower contact is sharp at 50 degrees tca.	S124421	360.90	361.90	1.00	0.00	0.00	10	0.06	0.50
			S124422	361.90	362.90	1.00	0.00	0.00	10	0.12	1.00
			S124423	362.90	363.90	1.00	0.00	0.01	10	0.25	1.00
			S124424	367.00	368.00	1.00	0.00	0.00	10	0.04	0.10
			S124425	368.00	368.50	0.50	0.00	0.00	10	0.01	0.10
			S124426	368.50	369.10	0.60	0.00	0.00	10	0.10	0.10
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		360.90 - 369.10	CHL FF WM	Chloritic veining occurs throughout unit.							
		360.90 - 369.10	Sil P MS	Unit is very siliceous throughout.							
		360.90 - 369.10	Carb FF W	Minor quartz carbonate veining occurs locally.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		360.90 - 369.10	Py BL 0.1	Pyrite as occasional blebs.							
		360.90 - 369.10	Po BL 0.5	Pyrrhotite as blebs and fracture filling.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		360.90 - 369.10	Frc 30	Fracturing at 30 and 50 degrees tca.							
369.10	369.70	<b>V3 Mafic volcanic rocks</b> Greenish grey to grey, fg massive. Quartz carbonate veining throughout unit. Cubic pyrite occurs as blebs and along fractures 1%, minor pyrrhotite. Upper contact is weakly sheared with pyrite and pyrrhotite at 50 degrees tca, lower contact at 40 degrees tca.	S124427	369.10	369.40	0.30	0.01	0.00	60	0.85	2.00
			S124428	369.40	369.70	0.30	0.02	0.00	90	1.33	2.00
				<b>Alteration Maj:</b>							
				<b>Type/Style/Intensity</b>							
				<b>Comment</b>							
		369.10 - 369.70	Carb FF W	Quartz carbonate veining throughout unit.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		369.10 - 369.70	Po BL 0.1	Pyrrhotite a blebs.							

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
	369.10 - 369.70	Py BL 1 Pyrite as blebs and along fractures.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
	369.10 - 369.70	Frc 30 fracturing at 30 and 50 degrees tca.									
	369.10 - 369.70	Shr vn 50 Sheared contact 369.1 at 50 degrees tca.									
369.70	376.40	<b>T1BF-L Rhyolitic fine to lapilli tuff</b> Light yellowish grey to light greenish grey mottled, vfg with chloritic banding and phenocryst bearing inclusions, possibly lapilli /agglomerate tuff? Unit is very siliceous with weak chloritic veining throughout. Weak pyrite and lesser pyrrhotite mineralization < 1% overall. Lower contact is sharp at 30 degrees tca.	S124429	369.70	370.20	0.50	0.00	0.01	10	0.40	1.00
			S124431	370.20	371.00	0.80	0.00	0.00	10	0.45	1.00
			S124432	371.00	372.00	1.00	0.00	0.00	10	0.29	1.00
		<b>Alteration Maj.:</b>	S124433	372.00	373.50	1.50	0.00	0.00	10	0.54	0.50
		<b>Type/Style/Intensity</b>	S124434	373.50	375.00	1.50	0.00	0.01	10	0.19	0.10
	369.70 - 376.40	CHL F W Weak chloritic veining as veins.	S124436	375.00	376.00	1.00	0.00	0.04	10	0.08	0.10
	369.70 - 376.40	Sil P MS Silicification is pervasive.	S124437	376.00	376.40	0.40	0.00	0.03	10	0.09	1.00
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
	369.70 - 376.40	Py DIS 1 Pyrite as fine disseminations and along fractures.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
	369.70 - 376.40	Frc 50 fracturing at 50 and 30 degrees tca.									
376.40	380.50	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Weak quartz carbonate veining throughout. Weakly fractured. Pyrite < 2%.	S124438	376.40	377.90	1.50	0.02	0.00	60	0.21	2.00
			S124439	377.90	379.30	1.40	0.02	0.01	60	0.26	1.00
			S124440	379.30	380.00	0.70	0.02	0.01	100	0.48	3.00
		<b>Alteration Maj.:</b>	S124441	380.00	380.50	0.50	0.02	0.00	10	0.04	0.10
		<b>Type/Style/Intensity</b>									
	376.40 - 380.50	CHL VN W Chlorite as veins and as segregations.									
	376.40 - 380.50	Carb FF W Quartz carbonate veining as fracture filling.									

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		376.40 - 380.50	Py BL 1.5	Pyrite predominantly as blebs and along fractures.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		376.40 - 380.50	Frc 50	Fracturing at 50, 30 and 10 degrees tca.							
380.50	386.00	<b>T1B Rhyolitic tuff</b>									
		Light grey to light pinkish grey, fg very siliceous matrix with felsic clasts and partially absorbed mafic volcanics. Chlorite veining occurs throughout unit. Minor quartz carbonate veining. Pyrite mineralization is , 1% overall. Lower contact is sharp at 50 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		380.50 - 386.00	Sil P MS	Silicification is pervasive throughout unit.							
		380.50 - 386.00	CHL VN WM	Chlorite veining occurs throughout.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		380.50 - 386.00	Py BL 1	Cubic pyrite as blebs and along fractures.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		380.50 - 386.00	Frc 50	Fracturing at 50 and 30 degrees tca.							
386.00	387.70	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish, fg massive. Weak quartz carbonate veining. Pyrite mineralization < 1%. Lower contact at 30 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		386.00 - 387.70	Carb FF W	Quartz carbonate as fracture filling.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		386.00 - 387.70	Py DIS 0.1	Pyrite mineralization as minor disseminations.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		386.00 - 387.70	Frc 50	Fracture filling at 50 and 30 degrees tca.							

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
387.70	390.70	<b>T1BF-L</b> <i>Rhyolitic fine to lapilli tuff</i> Light yellowish grey to light pinkish grey, fg healed breccia. Lapilli to agglomerate size clasts are creamy white in colour, rounded to sub rounded with quartz eye inclusions. Breccia is healed with silica and chlorite. Clasts are also fractured and veined with silica. Unit is moderately to strongly silicified. Chlorite veining occurs 389.9. 389.9 to 390.7 fractures infilled with clay minerals. Pyrite mineralization as veins and as clast replacement. Lower contact is sharp at 60 degrees tca.	S124068	387.70	388.00	0.30	0.00	0.00	10	0.86	4.00
			S124069	388.00	388.30	0.30	0.01	0.01	20	2.40	1.50
			S124071	388.30	388.60	0.30	0.00	0.00	10	0.73	2.50
			S124072	388.60	388.90	0.30	0.00	0.01	10	1.15	1.00
			S124073	388.90	389.20	0.30	0.01	0.02	10	1.81	2.00
			S124074	389.20	389.80	0.60	0.00	0.00	10	0.54	3.00
			S124076	389.80	390.40	0.60	0.01	0.01	20	2.86	2.00
			S124077	390.40	390.70	0.30	0.00	0.01	10	0.11	2.00
		<b>Alteration Maj:</b> <i>Type/Style/Intensity</i> <b>Comment</b>									
		387.70 - 390.70	CHL VN WM	Chlorite as veins to 389.9.							
		387.70 - 390.70	Sil P MS	Moderate to strong silica is pervasive.							
		387.70 - 390.70	TLC VN WM	389 to 389.9 clay minerals infilling fractures.							
		<b>Mineralization Maj. :</b> <i>Type/Style/%Mineral</i> <b>Comment</b>									
		387.70 - 390.70	Py FF 4	Pyrite as fracture filling and as clast replacement.							
		<b>Structure Maj.:</b> <i>Type/Core Angle</i> <b>Comment</b>									
		387.70 - 390.70	Frc 40	389.9 to 390.3 Fractures infilled with clay minerals at 30 to 50 degrees tca.							
390.70	390.95	<b>V3</b> <i>Mafic volcanic rocks</i> Light greenish grey to greenish grey, fg massive. Weak quartz carbonate veining. 390.8 slickensides and weak fracturing. Pyrite mineralization 2%. Lower contact sharp at 50 degrees tca.	S124078	390.70	390.95	0.25	0.02	0.05	60	0.39	1.00
		<b>Alteration Maj:</b> <i>Type/Style/Intensity</i> <b>Comment</b>									
		390.70 - 390.95	Carb FF W	Quartz carbonate alteration as fracture filling and at lower contact.							
		<b>Mineralization Maj. :</b> <i>Type/Style/%Mineral</i> <b>Comment</b>									
		390.70 - 390.95	Py BL 2	Pyrite as blebs							

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		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>									
		390.70 - 390.95	Frc 30	Fracturing at 30 degrees tca.									
		390.70 - 390.95	Slick 60	Slickensides at 390.8									
390.95	392.10	<b>T1B Rhyolitic tuff</b>											
		Light yellowish grey to light pinkish grey, fg clast poor. Moderate to strong silicification with chlorite veining infilling fractures. Weakly fractured. Pyrite < 1%. Lower contact chilled at 40 degrees tca.			S124079	390.95	391.50	0.55	0.01	0.01	20	0.13	0.50
					S124080	391.50	392.10	0.60	0.00	0.01	10	0.04	0.10
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>									
		390.95 - 392.10	Sil P MS	Silicification is pervasive.									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>									
		390.95 - 392.10	Py BL 2	Pyrite as blebs.									
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>									
		390.95 - 392.10	Frc 30	Weak fracturing.									
		<b>Minor Interval:</b>											
		391.10 - 391.20	V3	<i>Mafic volcanic rocks</i>									
		As for 390.7 to 390.95. Pyrite 2 % over interval. Upper contact at 45 degrees and lower contact at 30 degrees tca.											
392.10	394.60	<b>V3 Mafic volcanic rocks</b>											
		Greenish grey, fg massive. Weak quartz carbonate veining. Weakly fractured. Pyrite mineralization < 1%. Lower contact at 20 degrees tca.											
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>									
		392.10 - 394.60	Carb FF W	Quartz carbonate veining									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>									
		392.10 - 394.60	Py BL 0.1	Pyrite as very occasional bleb.									

**LITHOLOGY REPORT  
- Detailed -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		392.10 - 394.60	Frc 5	Fractures at 5 and 40 degrees tca.							
394.60	395.50	<b>T1B Rhyolitic tuff</b> Light yellowish grey to light greenish grey, fg healed breccia. Moderate to strong silicification with chloritic veining. Pyrite mineralization < 1%. Weakly fractured. Lower contact at 15 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		394.60 - 395.50	CHL F W	Chlorite along fractures and as patches.							
		394.60 - 395.50	Sil P MS	Silicification is pervasive.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		394.60 - 395.50	Py BL 0.1	Pyrite as very occasional blebs.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		394.60 - 395.50	Frc 60	Weakly fractured at 60 degrees tca.							
395.50	397.80	<b>V3 Mafic volcanic rocks</b> Greenish grey, fg massive. Weak quartz carbonate alteration. Weakly fractured. Pyrite mineralization < 1%. Lower contact at 50 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		395.50 - 397.80	Carb FF W	Weak quartz carbonate alteration as fracture filling.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		395.50 - 397.80	Py BL 0.1	Minor pyrite mineralization < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		395.50 - 397.80	Frc 30	Fracturing at 30 and 50 degrees tca.							

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>SUL</b>
397.80	403.80	<b>T1B Rhyolitic tuff</b> Light grey to light yellowish grey, vfg healed breccia. Moderate to strong siliification, moderate chloritization and patchy pottasic alteration. Weakly fractured. Pyrite mineralization 1 to 2%. Lower contact at 30 degrees tca.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 397.80 - 403.80      CHL VN WM      Chloritic veins throughout unit and cutting fragments 397.80 - 403.80      Sil P MS      Silicification is pervasive. 397.80 - 403.80      Carb FF W      Quartz carbonate veining along fractures.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 397.80 - 403.80      Py BL 1.5      Pyrite as blebs.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 397.80 - 403.80      Frc 60      Fractured at 60 and 10 degrees tca.									
403.80	405.30	<b>V3 Mafic volcanic rocks</b> Greenish grey fg massive. Weak quartz carbonate veining. Pyrite mineralization 1%. Lower contact at 20 degrees tca.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 403.80 - 405.30      Carb FF W      Weak quartz carbonate veinin.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 403.80 - 405.30      Py BL 1      Pyrite as occasional blebs.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 403.80 - 405.30      Frc 30      Fracturing at 30, 40 and 50 degrees tca.									
405.30	405.85	<b>T1B Rhyolitic tuff</b> Light yellowish grey to light greenish grey, vfg healed breccia. Moderate to strong silicification, chlorite									

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		veining is weak to moderate. Unit is competent. No visible sulphides.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		405.30 - 405.85	CHL	VN	W						
		405.30 - 405.85	Sil	P	MS						
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		405.30 - 405.85	Frc	60							
405.85	410.40	<b>V3</b> <b>Mafic volcanic rocks</b>									
		Greenish grey, fg massive. Quartz carbonate veining 2 to 3 mm crosscut by 1 mm quartz carbonate veining. Patchy epidote alteration. Weakly fractured. Pyrite mineralization 1 to 2%. Hematized lower contact at 20 degrees tca.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		405.85 - 410.40	Carb	FF	W						
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
		<b>Comment</b>									
		405.85 - 410.40	Py	BL	1.5						
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		405.85 - 410.40	Frc	30							
410.40	413.40	<b>T1B</b> <b>Rhyolitic tuff</b>									
		Light yellowish grey to light greenish grey, vfg healed breccia. Moderate to strong silicification, chlorite veining is weak to moderate. Unit is competent to weakly fractured. Pyrite mineralization is 1 to 2%. Lower contact at 30 degrees tca.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		410.40 - 413.40	CHL	VN	WM						



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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
	410.40 - 413.40	Sil P MS Sicilicification is pervasive.									
	410.40 - 413.40	EP PCH WM Local patchy epidote alteration.									
	<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>								
	410.40 - 413.40	Py BL 1.5	Pyrite as blebs and as fracture controlled.								
	<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>								
	410.40 - 413.40	Frc 40	Weak fracturing at 40 degrees tca.								
413.40	414.30	<b>V3 Mafic volcanic rocks</b>	S124081	413.40	414.30	0.90	0.02	0.00	50	0.03	0.10
		Greenish grey, fg massive. Weak quartz carbonate alteration. Pyrite mineralization < 1%.Weakly fractured. Lower contact at 30 degrees tca.									
	<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>								
	413.40 - 414.30	Carb FF W	Weak quartz carbonate alteration.								
	<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>								
	413.40 - 414.30	Py BL 0.1	Pyrite as occasional blebs.								
	<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>								
	413.40 - 414.30	Frc 45	weak fracturing at 45 and 40 degrees tca.								

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)
414.30	439.40	<b>T1B Rhyolitic tuff</b> Light greenish grey to light grey to reddish grey, vfg healed breccia. Moderate to strong silicification, moderate chlorite as veins and patches, local potassic and hematitic alteration and minor epidote locally. Pyrite mineralization 2 to 3%. Unit is competent with minor fracturing. Lower contact at 30 degrees tca.	S124082	414.30	415.00	0.70	0.00	0.00	10	0.15	0.50
			S124083	415.00	416.00	1.00	0.01	0.00	40	0.60	4.00
			S124084	416.00	417.00	1.00	0.00	0.01	50	1.46	4.00
		<b>Alteration Maj:</b>	S124085	417.00	418.50	1.50	0.01	0.00	30	0.21	1.50
		<b>Type/Style/Intensity</b>	S124086	418.50	420.00	1.50	0.00	0.00	10	0.06	0.10
		<b>Comment</b>	S124087	420.00	421.50	1.50	0.00	0.01	10	0.22	1.00
414.30 - 439.40		CHL VN M Chlorite as veins and patches.	S124088	421.50	423.00	1.50	0.00	0.00	10	0.23	0.20
414.30 - 439.40		Sil P MS Silicification is pervasive.	S124089	423.00	424.50	1.50	0.01	0.00	10	0.11	0.10
414.30 - 439.40		EP F WM 436.8 to 437.1 interstitial to fragments.	S124091	424.50	426.00	1.50	0.00	0.00	10	0.17	2.00
414.30 - 439.40		K PCH WM Patches throughout unit.	S124092	426.00	427.50	1.50	0.00	0.00	20	0.33	0.10
414.30 - 439.40		HE PCH M 435.9 to 437.1 hematite as patches.	S124093	427.50	429.00	1.50	0.00	0.00	10	0.31	1.00
		<b>Mineralization Maj. :</b>	S124094	429.00	430.50	1.50	0.00	0.00	30	0.44	3.00
		<b>Type/Style/%Mineral</b>	S124096	430.50	432.00	1.50	0.00	0.00	10	0.55	3.00
		<b>Comment</b>	S124097	432.00	433.50	1.50	0.00	0.00	10	0.51	1.50
414.30 - 439.40		Py F 2.5 Pyrite predominantly as fracture filling and lesser blebs.	S124098	433.50	435.00	1.50	0.01	0.00	10	0.30	0.10
		<b>Structure Maj.:</b>	S124099	435.00	436.00	1.00	0.00	0.00	30	0.35	0.50
		<b>Type/Core Angle</b>	S124100	436.00	437.10	1.10	0.00	0.00	10	0.19	0.10
		<b>Comment</b>	S124105	437.10	438.50	1.40	0.00	0.00	40	0.36	0.50
		Frc 50 Weakly fractured at 50 , 30 and 40 degrees tca.	S124106	438.50	439.40	0.90	0.01	0.01	120	2.82	6.00
439.40	445.10	<b>V3 Mafic volcanic rocks</b> Grey to dark grey with light yellowish green epidote giving a mottled appearance, fg massive. Weak to moderate epidote alteration to 443.2. Quartz carbonate alteration throughout unit. Sulphide mineralization < 1%. Lower contact at 35 degrees tca.	S124107	439.40	440.00	0.60	0.00	0.00	140	0.87	0.10
			S124108	440.00	441.00	1.00	0.01	0.00	60	0.30	0.50
			S124109	441.00	442.50	1.50	0.00	0.01	10	0.44	0.50
		<b>Alteration Maj:</b>	S124111	442.50	444.00	1.50	0.01	0.00	40	0.23	1.50
		<b>Type/Style/Intensity</b>	S124112	444.00	445.10	1.10	0.00	0.00	20	0.15	0.50
		<b>Comment</b>									
439.40 - 445.10		Carb FF W Quartz carbonate veining throughout.									
439.40 - 445.10		EP MO WM Epidote alteration to 443.2									
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
439.40 - 445.10		Py BL 0.1 Pyrite as occasional blebs.									

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
		<b>Structure Maj.:</b>									
		439.40 - 445.10									
		<b>Type/Core Angle</b>									
		Frc 50									
		<b>Comment</b>									
		Fracturing at 50 and 30 degrees tca.									
445.10	446.90	<b>T1B Rhyolitic tuff</b>	S124113	445.10	445.60	0.50	0.01	0.01	90	2.29	1.00
		Light grey to light pinkish grey, vfg weak healed breccia. Pottasic and epidote alteration locally. Chlorite veining occurs throughout. Pyrite 1%. Lower contact at 40 degrees tca.	S124114	445.60	446.90	1.30	0.01	0.00	30	0.30	1.00
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		445.10 - 446.90									
		EP F M									
		445.10 - 446.90									
		K P WM									
		445.10 - 446.90									
		Sil P MS									
		445.10 - 446.90									
		CHL FF WM									
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
		445.10 - 446.90									
		Py BL 1									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		445.10 - 446.90									
		Frc 40									
		<b>Comment</b>									
		Fracturing at 40 and 50 degrees tca.									
446.90	459.60	<b>V3 Mafic volcanic rocks</b>	S124116	446.90	448.00	1.10	0.03	0.00	60	1.48	1.50
		Dark greenish grey to dark grey, fg massive. Moderately chloritic with weak quartz carbonate veining, moderate locally. Weak fault at 452.9 at 30 degrees tca. Pyrite mineralization < 1%. Lower contact is irregular.	S124117	448.00	449.00	1.00	0.07	0.00	60	0.40	0.10
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		446.90 - 459.60									
		Carb FF WM									
		446.90 - 459.60									
		CHL P M									
		<b>Comment</b>									
		Quartz carbonate mineralization as fracture filling.									
		Chlorite alteration is pervasive.									

## LITHOLOGY REPORT - Detailed -

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est (SUL)</i>
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		446.90 - 459.60	Py BL 0.5	Pyrite as blebs.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		446.90 - 459.60	Flt 30	Weak fault at 30 degrees tca, with mud seam and quartz acarbonate vining.							
459.60	465.90	<b>T1B Rhyolitic tuff</b> Light grey to light greenish grey, vfg healed breccia. Chloritic veining throughout. Quartz carbonate is pervasive and lesser veining. Wispy sillimanite locally from 464.1 464.5. Weakly fractured. Pyrite mineralization < 1%. Lower contact gradational.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		459.60 - 465.90	Carb INT WM	Quartz carbonate veining interstitial to fragments.							
		459.60 - 465.90	CHL VN WM	Chlorite veining throughout.							
		459.60 - 465.90	Sil P MS	Silicification is pervasive.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		459.60 - 465.90	Py BL 1	Pyrite as blebs along fractures.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		459.60 - 465.90	Frc 50	Fractured at 50, 30 and 60 degrees tca.							
465.90	471.30	<b>V3 Mafic volcanic rocks</b> Greenish grey to grey, fg massive. Moderately chloritic throughout. Moderate epidote veining locally. Weak quartz carbonate veining. Competent to weakly fractured. Pyrite < 1%. Lower contact irregular.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		465.90 - 471.30	Carb INT WM	Quartz carbonate interstitial and veining.							
		465.90 - 471.30	CHL P M	Chlorite as veins throughout.							

## LITHOLOGY REPORT - Detailed -

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>SUL</b>
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		465.90 - 471.30	Py BL 0.5	Pyrite as blebs.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		465.90 - 471.30	Frc 20	Fracture at 20 degrees tca.							
471.30	474.00	<b>T1B Rhyolitic tuff</b> Light grey to light yellowish grey, vfg massive. Chloritic veining throughout. Moderately silicified. Weak quartz carbonate veining. No visible sulphides. Competent to very weakly fractured. 474.0 EOH.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		471.30 - 474.00	Sil P M	Silicification is pervasive.							
		471.30 - 474.00	CHL VN M	Chlorite veining throughout.							
		471.30 - 474.00	Carb FF W	Occasional quartz carbonate veins.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		471.30 - 474.00	Frc 20	Fractures at 20 and 40 degrees tca.							

### FULL ANALYTICAL REPORT

#### - Assay -

 Hole Number **PC-18-021**

 Project: **NORTH AMERICAN NICKEL**

 Project Number: **1**
**Assay Report (part 1 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)	<i>Ni</i> (100)	<i>Ag</i> (ppm)	<i>Au</i> (ppm)	<i>Au</i> (ppb)	<i>Pd</i> (ppm)	<i>Pd</i> (ppb)	<i>Pt</i> (ppm)	<i>Pt</i> (ppb)	<i>Pulp</i> (SG)	<i>Sgrav</i> (CORE)	<i>Rock oglithm</i> (CODE)	<i>Pb</i> (%)	<i>Zn</i> (%)	
7.60	8.00	0.40	S124301	ALS	SD18309948	24-Dec-18	0.03	0.00	20	0.08	0.25	-	0	0.001	-	0.007	-	0.003	-	-	-	-	NE	0.01	0.01
8.00	9.00	1.00	S124302	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.54	1.00	-	0	0.026	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.01
9.00	9.40	0.40	S124303	ALS	SD18309948	24-Dec-18	0.01	0.01	40	0.50	3.50	-	0	0.001	-	0.010	-	0.008	-	-	-	-	NE	0.01	0.01
9.40	10.40	1.00	S124304	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.25	0.50	-	0	0.042	-	0.011	-	0.011	-	-	-	-	NE	0.01	0.01
10.40	11.40	1.00	S124305	ALS	SD18309948	24-Dec-18	0.02	0.01	10	0.33	1.00	-	0	0.019	-	0.011	-	0.009	-	-	-	-	NE	0.01	0.01
11.40	12.00	0.60	S124306	ALS	SD18309948	24-Dec-18	0.01	0.03	70	0.66	1.00	-	0	0.012	-	0.009	-	0.009	-	-	-	-	NE	0.01	0.01
12.00	13.00	1.00	S124307	ALS	SD18309948	24-Dec-18	0.01	0.01	30	0.31	1.00	-	0	0.012	-	0.010	-	0.009	-	-	-	-	NE	0.01	0.01
13.00	14.00	1.00	S124308	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.12	1.00	-	0	0.020	-	0.008	-	0.008	-	-	-	-	NE	0.01	0.01
14.00	15.00	1.00	S124309	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.10	1.00	-	0	0.013	-	0.009	-	0.009	-	-	-	-	NE	0.01	0.01
15.00	16.00	1.00	S124311	ALS	SD18309948	24-Dec-18	0.02	0.03	20	0.70	1.50	-	0	0.014	-	0.010	-	0.010	-	-	-	-	NE	0.01	0.01
16.00	17.00	1.00	S124312	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.69	1.50	-	0	0.031	-	0.009	-	0.009	-	-	-	-	NE	0.01	0.01
17.00	18.00	1.00	S124313	ALS	SD18309948	24-Dec-18	0.01	0.03	50	1.78	2.00	-	0	0.015	-	0.008	-	0.008	-	-	-	-	NE	0.01	0.01
18.00	19.00	1.00	S124314	ALS	SD18309948	24-Dec-18	0.01	0.03	40	0.41	2.00	-	0	0.009	-	0.010	-	0.010	-	-	-	-	NE	0.01	0.01
19.00	19.50	0.50	S124316	ALS	SD18309948	24-Dec-18	0.02	0.00	10	0.08	0.50	-	0	0.004	-	0.008	-	0.006	-	-	-	-	NE	0.01	0.01
36.50	37.50	1.00	S124317	ALS	SD18309948	24-Dec-18	0.04	0.00	30	0.01	0.50	-	0	0.002	-	0.006	-	0.003	-	-	-	-	NE	0.01	0.01
37.50	38.50	1.00	S124318	ALS	SD18309948	24-Dec-18	0.02	0.00	10	0.04	0.50	-	0	0.030	-	0.007	-	0.006	-	-	-	-	NE	0.01	0.01
38.50	39.00	0.50	S124319	ALS	SD18309948	24-Dec-18	0.01	0.03	60	0.64	2.50	-	0	0.053	-	0.009	-	0.008	-	-	-	-	NE	0.01	0.01
39.00	40.00	1.00	S124320	ALS	SD18309948	24-Dec-18	0.00	0.00	40	0.13	1.00	-	0	0.010	-	0.009	-	0.006	-	-	-	-	NE	0.01	0.01
40.00	41.00	1.00	S124321	ALS	SD18309948	24-Dec-18	0.01	0.03	30	0.07	0.50	-	0	0.003	-	0.009	-	0.006	-	-	-	-	NE	0.01	0.01
41.00	42.00	1.00	S124322	ALS	SD18309948	24-Dec-18	0.01	0.00	20	0.01	0.50	-	0	0.001	-	0.008	-	0.005	-	-	-	-	NE	0.01	0.01
42.00	43.00	1.00	S124323	ALS	SD18309948	24-Dec-18	0.01	0.01	20	0.38	2.00	-	0	0.002	-	0.008	-	0.009	-	-	-	-	NE	0.01	0.01
43.00	43.60	0.60	S124324	ALS	SD18309948	24-Dec-18	0.00	0.01	20	0.10	0.50	-	0	0.002	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.00
53.00	54.00	1.00	S124325	ALS	SD18309948	24-Dec-18	0.02	0.01	20	0.32	1.50	-	0	0.001	-	0.006	-	0.005	-	-	-	-	NE	0.01	0.01
54.00	55.00	1.00	S124326	ALS	SD18309948	24-Dec-18	0.02	0.01	40	0.38	1.00	-	0	0.001	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.01
55.00	55.50	0.50	S124327	ALS	SD18309948	24-Dec-18	0.01	0.02	60	1.00	4.00	-	0	0.024	-	0.004	-	0.003	-	-	-	-	NE	0.01	0.01
55.50	56.50	1.00	S124328	ALS	SD18309948	24-Dec-18	0.02	0.01	30	0.58	1.50	-	0	0.009	-	0.008	-	0.006	-	-	-	-	NE	0.01	0.01
56.50	57.50	1.00	S124329	ALS	SD18309948	24-Dec-18	0.01	0.01	30	0.50	1.50	-	0	0.014	-	0.008	-	0.006	-	-	-	-	NE	0.01	0.01
57.50	58.50	1.00	S124331	ALS	SD18309948	24-Dec-18	0.01	0.01	40	0.75	2.00	-	0	0.002	-	0.008	-	0.003	-	-	-	-	NE	0.01	0.00
58.50	60.00	1.50	S124332	ALS	SD18309948	24-Dec-18	0.02	0.02	20	0.45	1.00	-	0	0.007	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.00
60.00	61.50	1.50	S124333	ALS	SD18309948	24-Dec-18	0.01	0.01	20	0.45	1.00	-	0	0.001	-	0.007	-	0.005	-	-	-	-	NE	0.01	0.00

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 1 of 1)**

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Final Ni (PCT)	Final Cu (PCT)	Final Co (PPM)	Final S (PCT)	Est (SUL)	Ni (100)	Ag (ppm)	Au (ppm)	Au (ppb)	Pd (ppm)	Pd (ppb)	Pt (ppm)	Pt (ppb)	Pulp (SG)	Sgrav (CORE)	Rock (CODE)	oglitnm	Pb (%)	Zn (%)
61.50	62.80	1.30	S124334	ALS	SD18309948	24-Dec-18	0.02	0.02	10	0.86	1.50	-	0	0.006	-	0.009	-	0.008	-	-	-	-	NE	0.01	0.01
62.80	64.00	1.20	S124336	ALS	SD18309948	24-Dec-18	0.01	0.02	20	1.35	3.00	-	0	0.001	-	0.007	-	0.005	-	-	-	-	NE	0.01	0.01
64.00	65.00	1.00	S124337	ALS	SD18309948	24-Dec-18	0.00	0.03	10	3.32	5.00	-	0	0.002	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
65.00	66.00	1.00	S124338	ALS	SD18309948	24-Dec-18	0.00	0.01	10	0.62	1.50	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
66.00	67.00	1.00	S124339	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.31	1.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
67.00	68.00	1.00	S124340	ALS	SD18309948	24-Dec-18	0.00	0.01	10	1.57	2.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
68.00	69.00	1.00	S124341	ALS	SD18309948	24-Dec-18	0.00	0.03	40	4.94	6.00	-	0	0.019	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
69.00	70.00	1.00	S124342	ALS	SD18309948	24-Dec-18	0.00	0.02	10	2.63	5.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
70.00	71.00	1.00	S124343	ALS	SD18309948	24-Dec-18	0.00	0.02	10	2.49	3.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
71.00	72.00	1.00	S124344	ALS	SD18309948	24-Dec-18	0.00	0.01	30	1.64	2.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
72.00	73.00	1.00	S124345	ALS	SD18309948	24-Dec-18	0.00	0.01	10	2.26	4.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
73.00	74.00	1.00	S124346	ALS	SD18309948	24-Dec-18	0.00	0.02	30	2.34	2.50	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
74.00	75.00	1.00	S124347	ALS	SD18309948	24-Dec-18	0.00	0.02	10	2.52	2.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
75.00	76.00	1.00	S124348	ALS	SD18309948	24-Dec-18	0.00	0.01	30	2.32	2.50	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
76.00	76.30	0.30	S124349	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.48	1.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
76.30	77.00	0.70	S124451	ALS	SD18309948	24-Dec-18	0.01	0.01	20	1.97	3.00	-	0	0.002	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.04
77.00	77.50	0.50	S124452	ALS	SD18309948	24-Dec-18	0.00	0.01	80	3.30	3.00	-	0	0.012	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
77.50	78.00	0.50	S124453	ALS	SD18309948	24-Dec-18	0.00	0.01	10	2.38	5.00	-	0	0.030	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
78.00	78.40	0.40	S124454	ALS	SD18309948	24-Dec-18	0.00	0.01	70	4.74	5.00	-	0	0.094	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
78.40	78.80	0.40	S124456	ALS	SD18309948	24-Dec-18	0.00	0.02	10	3.30	2.00	-	0	0.011	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
78.80	79.25	0.45	S124457	ALS	SD18309948	24-Dec-18	0.00	0.02	120	15.90	35.00	-	0	0.065	-	0.004	-	0.003	-	-	-	-	NE	0.01	0.00
79.25	79.75	0.50	S124458	ALS	SD18309948	24-Dec-18	0.01	0.02	110	8.30	7.00	-	0	0.042	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
79.75	80.10	0.35	S124459	ALS	SD18309948	24-Dec-18	0.00	0.01	40	6.65	5.00	-	0	0.168	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
80.10	80.70	0.60	S124460	ALS	SD18309948	24-Dec-18	0.00	0.01	10	4.51	10.00	-	0	0.015	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
80.70	81.70	1.00	S124461	ALS	SD18309948	24-Dec-18	0.00	0.01	10	0.19	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
81.70	82.70	1.00	S124462	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.07	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
90.80	91.70	0.90	S124463	ALS	SD18309948	24-Dec-18	0.01	0.01	50	0.06	0.10	-	0	0.007	-	0.028	-	0.024	-	-	-	-	NE	0.01	0.01
91.70	92.70	1.00	S124464	ALS	SD18309948	24-Dec-18	0.01	0.00	10	0.06	0.10	-	0	0.001	-	0.007	-	0.003	-	-	-	-	NE	0.01	0.00
92.70	93.10	0.40	S124465	ALS	SD18309948	24-Dec-18	0.02	0.01	50	0.69	2.00	-	0	0.002	-	0.009	-	0.006	-	-	-	-	NE	0.01	0.01
93.10	93.40	0.30	S124466	ALS	SD18309948	24-Dec-18	0.01	0.02	10	0.49	3.00	-	1	0.071	-	0.010	-	0.006	-	-	-	-	NE	0.01	0.00

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

***Assay Report (part 1 of 1)***

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Final Ni (PCT)	Final Cu (PCT)	Final Co (PPM)	Final S (PCT)	Est (SUL)	Ni (100)	Ag (ppm)	Au (ppm)	Au (ppb)	Pd (ppm)	Pd (ppb)	Pt (ppm)	Pt (ppb)	Pulp (SG)	Sgrav (CORE)	Rock (CODE)	og lithm. (%)	Pb (%)	Zn (%)
93.40	93.80	0.40	S124467	ALS	SD18309948	24-Dec-18	0.01	0.01	20	0.32	2.00	-	0	0.001	-	0.007	-	0.005	-	-	-	-	NE	0.01	0.03
93.80	94.30	0.50	S124468	ALS	SD18309948	24-Dec-18	0.01	0.01	20	0.24	2.00	-	0	0.001	-	0.007	-	0.003	-	-	-	-	NE	0.01	0.00
94.30	95.40	1.10	S124469	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.07	0.10	-	0	0.001	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.00
95.40	95.90	0.50	S124471	ALS	SD18309948	24-Dec-18	0.01	0.00	40	0.05	0.10	-	0	0.006	-	0.004	-	0.003	-	-	-	-	NE	0.01	0.00
95.90	96.90	1.00	S124472	ALS	SD18309948	24-Dec-18	0.02	0.00	30	0.01	0.10	-	0	0.001	-	0.012	-	0.008	-	-	-	-	NE	0.01	0.01
96.90	97.90	1.00	S124473	ALS	SD18309948	24-Dec-18	0.02	0.01	10	0.01	0.10	-	0	0.001	-	0.012	-	0.007	-	-	-	-	NE	0.01	0.01
97.90	98.60	0.70	S124474	ALS	SD18309948	24-Dec-18	0.02	0.00	10	0.01	0.10	-	0	0.001	-	0.012	-	0.007	-	-	-	-	NE	0.01	0.01
98.60	98.85	0.25	S124476	ALS	SD18309948	24-Dec-18	0.00	0.01	10	0.13	0.10	-	0	0.002	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
98.85	100.00	1.15	S124477	ALS	SD18309948	24-Dec-18	0.01	0.01	10	0.10	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
100.00	101.00	1.00	S124478	ALS	SD18309948	24-Dec-18	0.00	0.01	10	0.14	0.10	-	0	0.004	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
105.10	105.80	0.70	S124479	ALS	SD18309948	24-Dec-18	0.02	0.00	20	0.07	1.00	-	0	0.001	-	0.008	-	0.003	-	-	-	-	NE	0.01	0.01
105.80	106.50	0.70	S124480	ALS	SD18309948	24-Dec-18	0.02	0.00	10	0.02	0.10	-	0	0.001	-	0.008	-	0.005	-	-	-	-	NE	0.01	0.01
106.50	107.50	1.00	S124481	ALS	SD18309948	24-Dec-18	0.02	0.00	20	0.03	0.10	-	0	0.001	-	0.010	-	0.005	-	-	-	-	NE	0.01	0.01
107.50	107.80	0.30	S124482	ALS	SD18309948	24-Dec-18	0.02	0.01	60	0.21	2.00	-	0	0.007	-	0.009	-	0.005	-	-	-	-	NE	0.01	0.01
107.80	108.80	1.00	S124483	ALS	SD18309948	24-Dec-18	0.02	0.01	30	0.04	0.50	-	0	0.001	-	0.009	-	0.005	-	-	-	-	NE	0.01	0.01
108.80	109.50	0.70	S124484	ALS	SD18309948	24-Dec-18	0.02	0.00	10	0.11	1.00	-	0	0.001	-	0.009	-	0.005	-	-	-	-	NE	0.01	0.01
271.30	272.30	1.00	S124485	ALS	SD18309948	24-Dec-18	0.01	0.03	10	0.08	0.10	-	0	0.009	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.02
272.30	273.30	1.00	S124486	ALS	SD18309948	24-Dec-18	0.01	0.02	10	0.23	0.10	-	0	0.006	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.03
273.30	274.10	0.80	S124487	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.02	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
274.10	274.40	0.30	S124488	ALS	SD18309948	24-Dec-18	0.00	0.03	10	1.65	3.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.07
274.40	274.80	0.40	S124489	ALS	SD18309948	24-Dec-18	0.00	0.02	30	2.91	4.00	-	0	0.016	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.05
274.80	275.10	0.30	S124491	ALS	SD18309948	24-Dec-18	0.01	0.02	150	15.45	7.00	-	0	0.071	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01
275.10	275.40	0.30	S124492	ALS	SD18309948	24-Dec-18	0.01	0.02	110	8.71	4.00	-	0	0.040	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.02
275.40	275.70	0.30	S124493	ALS	SD18309948	24-Dec-18	0.01	0.04	50	4.16	4.00	-	0	0.008	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.05
275.70	276.00	0.30	S124494	ALS	SD18309948	24-Dec-18	0.00	0.02	10	2.15	4.00	-	0	0.005	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.10
276.00	276.50	0.50	S124496	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.29	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.02
276.50	277.00	0.50	S124497	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.13	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
277.00	277.50	0.50	S124498	ALS	SD18309948	24-Dec-18	0.00	0.00	10	0.09	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
277.50	277.90	0.40	S124499	ALS	SD18309948	24-Dec-18	0.00	0.02	10	1.04	3.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.02
277.90	278.40	0.50	S124500	ALS	SD18309948	24-Dec-18	0.00	0.02	10	0.76	2.00	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.02











**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 1 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)	<i>Ni</i> (100)	<i>Ag</i> (ppm)	<i>Au</i> (ppm)	<i>Au</i> (ppb)	<i>Pd</i> (ppm)	<i>Pd</i> (ppb)	<i>Pt</i> (ppm)	<i>Pt</i> (ppb)	<i>Pulp</i> (SG)	<i>Sgrav</i> (CORE)	<i>Rock og lithm.</i> (CODE)	<i>Pb</i> (%)	<i>Zn</i> (%)	
439.40	440.00	0.60	S124107	ALS	SD18309948	24-Dec-18	0.00	0.00	140	0.87	0.10	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.02
440.00	441.00	1.00	S124108	ALS	SD18309948	24-Dec-18	0.01	0.00	60	0.30	0.50	-	0	0.001	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.03
441.00	442.50	1.50	S124109	ALS	SD18309948	24-Dec-18	0.00	0.01	10	0.44	0.50	-	0	0.012	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.01
442.50	444.00	1.50	S124111	ALS	SD18309948	24-Dec-18	0.01	0.00	40	0.23	1.50	-	0	0.003	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
444.00	445.10	1.10	S124112	ALS	SD18309948	24-Dec-18	0.00	0.00	20	0.15	0.50	-	0	0.004	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
445.10	445.60	0.50	S124113	ALS	SD18309948	24-Dec-18	0.01	0.01	90	2.29	1.00	-	0	0.061	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.00
445.60	446.90	1.30	S124114	ALS	SD18309948	24-Dec-18	0.01	0.00	30	0.30	1.00	-	0	0.009	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
446.90	448.00	1.10	S124116	ALS	SD18309948	24-Dec-18	0.03	0.00	60	1.48	1.50	-	0	0.009	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.01
448.00	449.00	1.00	S124117	ALS	SD18309948	24-Dec-18	0.07	0.00	60	0.40	0.10	-	0	0.002	-	0.004	-	0.006	-	-	-	-	NE	0.01	0.01

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<b>From</b> (m)	<b>To</b> (m)	<b>Length</b> (m)	<b>Sample #</b>	<b>Lab</b>	<b>Certificate #</b>	<b>Date of Certificate</b>	<b>Cu</b> (ppm)	<b>Ni</b> (ppm)	<b>Cu</b> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<b>Ni</b>	<b>S</b>	<b>S</b>	<b>S</b>
7.60	8.00	0.40	S124301	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
8.00	9.00	1.00	S124302	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
9.00	9.40	0.40	S124303	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
9.40	10.40	1.00	S124304	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
10.40	11.40	1.00	S124305	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
11.40	12.00	0.60	S124306	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
12.00	13.00	1.00	S124307	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
13.00	14.00	1.00	S124308	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
14.00	15.00	1.00	S124309	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
15.00	16.00	1.00	S124311	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
16.00	17.00	1.00	S124312	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
17.00	18.00	1.00	S124313	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
18.00	19.00	1.00	S124314	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
19.00	19.50	0.50	S124316	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
36.50	37.50	1.00	S124317	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
37.50	38.50	1.00	S124318	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
38.50	39.00	0.50	S124319	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
39.00	40.00	1.00	S124320	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
40.00	41.00	1.00	S124321	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
41.00	42.00	1.00	S124322	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
42.00	43.00	1.00	S124323	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
43.00	43.60	0.60	S124324	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
53.00	54.00	1.00	S124325	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
54.00	55.00	1.00	S124326	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
55.00	55.50	0.50	S124327	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
55.50	56.50	1.00	S124328	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
56.50	57.50	1.00	S124329	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
57.50	58.50	1.00	S124331	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
58.50	60.00	1.50	S124332	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i>	<i>To</i>	<i>Length</i>	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i>	<i>Ni</i>	<i>Cu</i>	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
<i>(m)</i>	<i>(m)</i>	<i>(m)</i>					<i>(ppm)</i>	<i>(ppm)</i>	<i>OG_PCTOG_PCTICP_PCTDG1_PC</i>	<i>OG_PCTOG_PCTICP_PCTDG2_PC</i>			
60.00	61.50	1.50	S124333	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
61.50	62.80	1.30	S124334	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
62.80	64.00	1.20	S124336	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
64.00	65.00	1.00	S124337	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
65.00	66.00	1.00	S124338	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
66.00	67.00	1.00	S124339	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
67.00	68.00	1.00	S124340	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
68.00	69.00	1.00	S124341	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
69.00	70.00	1.00	S124342	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
70.00	71.00	1.00	S124343	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
71.00	72.00	1.00	S124344	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
72.00	73.00	1.00	S124345	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
73.00	74.00	1.00	S124346	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
74.00	75.00	1.00	S124347	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
75.00	76.00	1.00	S124348	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
76.00	76.30	0.30	S124349	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
76.30	77.00	0.70	S124451	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
77.00	77.50	0.50	S124452	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
77.50	78.00	0.50	S124453	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
78.00	78.40	0.40	S124454	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
78.40	78.80	0.40	S124456	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
78.80	79.25	0.45	S124457	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
79.25	79.75	0.50	S124458	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
79.75	80.10	0.35	S124459	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
80.10	80.70	0.60	S124460	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
80.70	81.70	1.00	S124461	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
81.70	82.70	1.00	S124462	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
90.80	91.70	0.90	S124463	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
91.70	92.70	1.00	S124464	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
92.70	93.10	0.40	S124465	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i> (ppm)	<i>Ni</i> (ppm)	<i>Cu</i> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
93.10	93.40	0.30	S124466	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
93.40	93.80	0.40	S124467	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
93.80	94.30	0.50	S124468	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
94.30	95.40	1.10	S124469	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
95.40	95.90	0.50	S124471	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
95.90	96.90	1.00	S124472	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
96.90	97.90	1.00	S124473	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
97.90	98.60	0.70	S124474	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
98.60	98.85	0.25	S124476	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
98.85	100.00	1.15	S124477	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
100.00	101.00	1.00	S124478	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
105.10	105.80	0.70	S124479	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
105.80	106.50	0.70	S124480	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
106.50	107.50	1.00	S124481	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
107.50	107.80	0.30	S124482	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
107.80	108.80	1.00	S124483	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
108.80	109.50	0.70	S124484	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
271.30	272.30	1.00	S124485	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
272.30	273.30	1.00	S124486	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
273.30	274.10	0.80	S124487	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
274.10	274.40	0.30	S124488	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
274.40	274.80	0.40	S124489	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
274.80	275.10	0.30	S124491	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
275.10	275.40	0.30	S124492	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
275.40	275.70	0.30	S124493	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
275.70	276.00	0.30	S124494	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
276.00	276.50	0.50	S124496	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
276.50	277.00	0.50	S124497	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
277.00	277.50	0.50	S124498	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
277.50	277.90	0.40	S124499	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-



**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i>	<i>To</i>	<i>Length</i>	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i>	<i>Ni</i>	<i>Cu</i>	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
<i>(m)</i>	<i>(m)</i>	<i>(m)</i>					<i>(ppm)</i>	<i>(ppm)</i>	<i>'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'</i>				
277.90	278.40	0.50	S124500	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
278.40	278.90	0.50	S124351	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
278.90	279.40	0.50	S124352	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
279.40	280.40	1.00	S124353	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
280.40	281.40	1.00	S124354	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
330.50	331.00	0.50	S124356	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
331.00	331.65	0.65	S124357	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
331.65	331.90	0.25	S124358	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
331.90	332.50	0.60	S124359	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
332.50	333.10	0.60	S124361	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
333.10	333.35	0.25	S124362	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
333.35	333.60	0.25	S124363	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
333.60	334.50	0.90	S124364	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
339.00	339.50	0.50	S124366	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
339.50	340.00	0.50	S124367	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
340.00	340.50	0.50	S124368	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
340.50	341.00	0.50	S124369	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
341.00	341.50	0.50	S124370	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
341.50	342.00	0.50	S124371	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
342.00	342.50	0.50	S124372	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
342.50	343.00	0.50	S124373	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
343.00	343.30	0.30	S124374	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
343.30	343.60	0.30	S124376	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
343.60	343.90	0.30	S124377	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
343.90	344.20	0.30	S124378	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
344.20	344.60	0.40	S124379	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
344.60	345.00	0.40	S124380	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
345.00	345.30	0.30	S124381	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
345.30	345.60	0.30	S124382	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
345.60	345.90	0.30	S124383	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT  
- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i> (ppm)	<i>Ni</i> (ppm)	<i>Cu</i> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
345.90	346.20	0.30	S124384	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
346.20	346.50	0.30	S124385	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
346.50	346.80	0.30	S124386	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
346.80	347.20	0.40	S124387	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
347.20	347.60	0.40	S124388	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
347.60	347.90	0.30	S124389	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
347.90	348.50	0.60	S124391	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
348.50	349.00	0.50	S124392	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
349.00	349.50	0.50	S124393	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
349.50	350.00	0.50	S124394	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
350.00	350.50	0.50	S124396	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
350.50	350.90	0.40	S124397	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
350.90	351.30	0.40	S124398	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
351.30	351.70	0.40	S124399	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
351.70	352.10	0.40	S124401	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
352.10	352.50	0.40	S124402	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
352.50	352.95	0.45	S124403	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
352.95	353.40	0.45	S124404	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
353.40	354.00	0.60	S124405	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
354.00	354.70	0.70	S124406	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
354.70	355.00	0.30	S124407	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
355.00	355.30	0.30	S124408	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
355.30	355.80	0.50	S124409	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
355.80	356.10	0.30	S124411	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
356.10	356.40	0.30	S124412	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
356.40	356.90	0.50	S124413	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
356.90	357.30	0.40	S124414	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
357.30	357.60	0.30	S124416	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
357.60	358.00	0.40	S124417	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
358.00	359.00	1.00	S124418	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i> (ppm)	<i>Ni</i> (ppm)	<i>Cu</i> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
359.00	360.00	1.00	S124419	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
360.00	360.90	0.90	S124420	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
360.90	361.90	1.00	S124421	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
361.90	362.90	1.00	S124422	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
362.90	363.90	1.00	S124423	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
367.00	368.00	1.00	S124424	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
368.00	368.50	0.50	S124425	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
368.50	369.10	0.60	S124426	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
369.10	369.40	0.30	S124427	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
369.40	369.70	0.30	S124428	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
369.70	370.20	0.50	S124429	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
370.20	371.00	0.80	S124431	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
371.00	372.00	1.00	S124432	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
372.00	373.50	1.50	S124433	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
373.50	375.00	1.50	S124434	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
375.00	376.00	1.00	S124436	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
376.00	376.40	0.40	S124437	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
376.40	377.90	1.50	S124438	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
377.90	379.30	1.40	S124439	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
379.30	380.00	0.70	S124440	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
380.00	380.50	0.50	S124441	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
380.50	382.00	1.50	S124442	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
382.00	383.50	1.50	S124443	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
383.50	385.00	1.50	S124444	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
385.00	385.50	0.50	S124445	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
385.50	386.00	0.50	S124446	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
386.00	386.50	0.50	S124447	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
386.50	387.00	0.50	S124448	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
387.00	387.40	0.40	S124449	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
387.40	387.70	0.30	S124067	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i>	<i>To</i>	<i>Length</i>	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i>	<i>Ni</i>	<i>Cu</i>	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
<i>(m)</i>	<i>(m)</i>	<i>(m)</i>					<i>(ppm)</i>	<i>(ppm)</i>	<i>'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'</i>				
387.70	388.00	0.30	S124068	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
388.00	388.30	0.30	S124069	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
388.30	388.60	0.30	S124071	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
388.60	388.90	0.30	S124072	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
388.90	389.20	0.30	S124073	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
389.20	389.80	0.60	S124074	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
389.80	390.40	0.60	S124076	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
390.40	390.70	0.30	S124077	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
390.70	390.95	0.25	S124078	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
390.95	391.50	0.55	S124079	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
391.50	392.10	0.60	S124080	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
413.40	414.30	0.90	S124081	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
414.30	415.00	0.70	S124082	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
415.00	416.00	1.00	S124083	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
416.00	417.00	1.00	S124084	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
417.00	418.50	1.50	S124085	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
418.50	420.00	1.50	S124086	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
420.00	421.50	1.50	S124087	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
421.50	423.00	1.50	S124088	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
423.00	424.50	1.50	S124089	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
424.50	426.00	1.50	S124091	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
426.00	427.50	1.50	S124092	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
427.50	429.00	1.50	S124093	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
429.00	430.50	1.50	S124094	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
430.50	432.00	1.50	S124096	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
432.00	433.50	1.50	S124097	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
433.50	435.00	1.50	S124098	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
435.00	436.00	1.00	S124099	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
436.00	437.10	1.10	S124100	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
437.10	438.50	1.40	S124105	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

**FULL ANALYTICAL REPORT  
- Assay -**

Hole Number **PC-18-021**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i> (ppm)	<i>Ni</i> (ppm)	<i>Cu</i> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
438.50	439.40	0.90	S124106	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
439.40	440.00	0.60	S124107	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
440.00	441.00	1.00	S124108	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
441.00	442.50	1.50	S124109	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
442.50	444.00	1.50	S124111	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
444.00	445.10	1.10	S124112	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
445.10	445.60	0.50	S124113	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
445.60	446.90	1.30	S124114	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
446.90	448.00	1.10	S124116	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-
448.00	449.00	1.00	S124117	ALS	SD18309948	24-Dec-18	-	-	-	-	-	-	-

## DRILL HOLE REPORT

 Hole Number **PC-18-022**

 Project: **NORTH AMERICAN NICKEL**

 Project Number: **1**

<b>Drilling</b>	<b>Casing</b>	<b>Core</b>	<b>Location</b>	<b>Other</b>
<b>Azimuth:</b> 294	<b>Length:</b> 1.5	<b>Dimension:</b> NQ2	<b>Township:</b> PARKIN	<b>Logged by:</b> Kalevi Hannila
<b>Dip:</b> -77	<b>Pulled:</b> no	<b>Storage:</b> Sudbury Cor	<b>Claim No.:</b> 894758/2460	<b>Relog by:</b>
<b>Length:</b> 495	<b>Capped:</b> yes	<b>Section:</b>	<b>NTS:</b> 41115	<b>Contractor:</b> Forage M3
<b>Started:</b> 29-Nov-18	<b>Cemented:</b> no	<b>Hole Type</b> DDH	<b>Hole:</b> SURFACE	<b>Spotted by:</b> Gerry Katchen
<b>Completed:</b> 08-Dec-18				<b>Surveyed:</b>
<b>Logged:</b> 02-Dec-18				<b>Surveyed by:</b>
<b>Comment:</b> Magnetic High explaining by a strongly magnetic, strongly altered ultramafic unit (Talc alteration, v soft). Possible explanation for high Copper grab to the north of mag is an intercepted Chalcopyrite vein from 413.1-413.3m Entre drillhole has multiple episodes of deformation and alteration. Interesting rocks for Au or VMS.			<b>Coordinate - Gemcom</b>	<b>Geophysics:</b> BHPM
			<b>East:</b> 510665	<b>Geophysic Contractor:</b> Crone
			<b>North:</b> 5181923	<b>Left in hole:</b> Casing and Casin
			<b>Elev.:</b> 339	<b>Making water:</b> no
			<b>Zone:</b> 17N	<b>Multi shot survey:</b> yes
			<b>NAD:</b> WGS84	

**Deviation Tests**

**Deviation Tests**

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
0.00	294.00	-77.00	C	☑	
15.00	292.00	-77.00	E	☑	Reflex EZ-Trac Multi-Shot
24.00	290.30	-77.00	E	☑	Reflex EZ-Trac Multi-Shot
33.00	290.20	-77.00	E	☑	Reflex EZ-Trac Multi-Shot
42.00	289.30	-76.80	E	☑	Reflex EZ-Trac Multi-Shot
51.00	289.50	-76.70	E	☑	Reflex EZ-Trac Multi-Shot
60.00	289.50	-76.60	E	☑	Reflex EZ-Trac Multi-Shot
69.00	289.80	-76.30	E	☑	Reflex EZ-Trac Multi-Shot
78.00	289.70	-76.00	E	☑	Reflex EZ-Trac Multi-Shot
87.00	289.20	-75.70	E	☑	Reflex EZ-Trac Multi-Shot
96.00	288.90	-75.50	E	☑	Reflex EZ-Trac Multi-Shot
105.00	289.80	-75.20	E	☑	Reflex EZ-Trac Multi-Shot
114.00	289.90	-75.00	E	☑	Reflex EZ-Trac Multi-Shot

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
123.00	290.30	-74.70	E	☑	Reflex EZ-Trac Multi-Shot
132.00	290.90	-74.50	E	☑	Reflex EZ-Trac Multi-Shot
141.00	290.20	-74.30	E	☑	Reflex EZ-Trac Multi-Shot
150.00	291.30	-74.10	E	☑	Reflex EZ-Trac Multi-Shot
159.00	291.90	-73.90	E	☑	Reflex EZ-Trac Multi-Shot
168.00	292.00	-73.70	E	☑	Reflex EZ-Trac Multi-Shot
177.00	292.30	-73.60	E	☑	Reflex EZ-Trac Multi-Shot
186.00	293.10	-73.30	E	☑	Reflex EZ-Trac Multi-Shot
195.00	293.60	-73.10	E	☑	Reflex EZ-Trac Multi-Shot
204.00	294.40	-72.80	E	☑	Reflex EZ-Trac Multi-Shot
213.00	294.80	-72.50	E	☑	Reflex EZ-Trac Multi-Shot
222.00	295.10	-72.30	E	☑	Reflex EZ-Trac Multi-Shot
231.00	295.50	-72.10	E	☑	Reflex EZ-Trac Multi-Shot

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Deviation Tests**

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comments</i>
240.00	295.70	-71.90	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
249.00	296.00	-71.70	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
258.00	296.60	-71.40	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
267.00	296.80	-71.20	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
276.00	296.90	-70.90	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
285.00	297.40	-70.60	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
330.00	296.80	-68.90	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
339.00	295.30	-68.70	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
375.00	295.30	-67.90	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
384.00	296.50	-67.60	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
393.00	298.40	-67.40	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
402.00	298.60	-67.20	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
411.00	298.90	-67.00	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
420.00	298.90	-66.80	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
429.00	298.90	-66.50	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
438.00	299.30	-66.30	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
447.00	300.50	-66.00	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
456.00	300.20	-65.90	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
465.00	300.70	-65.60	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
474.00	301.10	-65.40	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
483.00	300.60	-65.20	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot
492.00	302.10	-65.00	E	<input checked="" type="checkbox"/>	Reflex EZ-Trac Multi-Shot

## LITHOLOGY REPORT

- Detailed -

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <i>Ni</i> (PCT)	<i>Final</i> <i>Cu</i> (PCT)	<i>Final</i> <i>Co</i> (PPM)	<i>Final</i> <i>S</i> (PCT)	<i>Est</i> <i>SUL</i>
0.00	1.60	<b>OVB</b> <b>Overburden/detritus</b>									
1.60	6.00	<b>V3</b> <b>Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Chloritic alteration is pervasive. Weak quartz carbonate veining throughout. Granitic veining locally. Weakly fractured. Pyrite mineralization < 1%. Lower contact is gradational to underlying shear zone.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		1.60 - 6.00	Carb VN W	Weak quartz carbonate alteration occurs throughout as 2 to 4 mm white veins.							
		1.60 - 6.00	CHL P W	Pervasive chlorite alteration is weak.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		1.60 - 6.00	Py BL 0.1	Pyrite mineralization is < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		1.60 - 6.00	Frc 50	Fractures at 50, 60 and 40 degrees tca.							
6.00	22.10	<b>SZ</b> <b>Shear Zone</b> Light greenish grey to greenish grey, fg massive. Chloritic alteration is pervasive. Weak quartz carbonate veining throughout. Weakly sheared throughout interval. Weakly sheared at 20 degrees tca. Weakly fractured. Pyrite mineralization < 1%. Lower contact is gradational to fault/fracture zone.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		6.00 - 22.10	Carb VN WM	Quartz carbonate veins occur throughout.							
		6.00 - 22.10	CHL P W	Weak chlorite alteration is pervasive.							



## LITHOLOGY REPORT

### - Detailed -

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni (PCT)</i>	<i>Final Cu (PCT)</i>	<i>Final Co (PPM)</i>	<i>Final S (PCT)</i>	<i>Est Sul (SUL)</i>
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		6.00 - 22.10	Py BL 0.1	Minor pyrite mineralization is < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		6.00 - 22.10	Frc 20	Fractured at 20 and 40 degrees tca.							
		6.00 - 22.10	SZ 20	Weakly sheared over interval.							
22.10	31.80	<b>FLT      Fault</b>		Light greenish grey to greenish grey, fg strongly fractured and healed breccias. Chloritic throughout. Quartz carbonate veining occurs as veins and interstitial to fragments. Pyrite mineralization is < 1%. Lower contact is gradational to a more competent unit.							
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		22.10 - 31.80	CHL P W	Chlorite is pervasive throughout unit.							
		22.10 - 31.80	Carb VN W	Quartz carbonate predominantly as veins, 1 to 10 mm and interstitial to fragments.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		22.10 - 31.80	Py BL 0.1	Pyrite mineralization is < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		22.10 - 31.80	Frc 50	Fracturing at 50, 40 and 10 degrees tca.							
		22.10 - 31.80	Ftb 10	Shearing at 10 degrees tca.							
31.80	36.90	<b>V3      Mafic volcanic rocks</b>		Light greenish grey to greenish grey, fg with weak shearing locally. Quartz carbonate veining throughout. Chlorite is pervasive. Hematite associated with quartz carbonate veining. Weak to moderate fracturing. Pyrite mineralization is < 1%. Lower contact quartz carbonate veined at 40 degrees tca.							
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>Sul</b> (SUL)
	31.80 - 36.90	CHL P W									
	31.80 - 36.90	Carb VN WM									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	31.80 - 36.90	Py BL 0.1		Pyrite is < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	31.80 - 36.90	Frc 50		Fracturing at 50 and 30 degrees tca.							
36.90	64.70	<b>BXR Breccia Zone</b>									
		Light grey to grey, fg healed breccia. Chlorite throughout unit. Quartz carbonate veining throughout. Narrow hematized granitic veining to 10 cm. Minor epidote locally. Weakly fractured with extensive intervals of healed breccia cemented with quartz carbonate. Mafic volcanic partially absorbed in strong in intervals of quartz carbonate alteration. Pyrite mineralization < 1%. Lower contact is gradation into more competent rock.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	36.90 - 64.70	EP PCH W		Minor epidote locally.							
	36.90 - 64.70	HE PCH W		Hematite alteration is weak associated with granitic veining and quartz carbonate fractures.							
	36.90 - 64.70	Carb VN WM		Quartz carbonate veining throughout, locally moderate to strong.							
	36.90 - 64.70	CHL P W		Chlorite throughout unit.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	36.90 - 64.70	Py BL 0.1		Pyrite mineralization < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	36.90 - 64.70	Frc 50		Fracturing at 50, 30 and 40 degrees tca.							
	36.90 - 64.70	B 10		Mafic volcanic fragments cemented with quartz carbonate.							

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64.70	73.40	<b>V3 Mafic volcanic rocks</b> Light greenish grey to light grey, fg massive. Weak chlorite veining. Weak to moderate quartz carbonate veining. Weakly fractured. Pyrite mineralization < 1%. Lower contact gradational to underlying fracture zone.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 64.70 - 73.40      Carb VN W      Quartz carbonate veining 2 mm to 20 cm. 64.70 - 73.40      CHL P W      Weakly chloritic veining.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 64.70 - 73.40      Py BL 0.1      Pyrite mineralization < 1%.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 64.70 - 73.40      Frc 50      Fracturing at 50 and 40 degrees tca.									
73.40	79.30	<b>V3 Mafic volcanic rocks</b> Light greenish grey to light grey, fg massive. Chlorite as veins throughout. Quartz carbonate veining is weak. Granitic veining locally. Weak local shearing. Moderately fractured overall with local strong fracturing. Lower contact gradational to more competent rocks.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 73.40 - 79.30      Carb VN W      Quartz carbonate veins as fracture filling. 73.40 - 79.30      CHL VN WM      Chlorite as veins throughout.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 73.40 - 79.30      Py BL 0.1      Pyrite mineralization < 1%.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 73.40 - 79.30      Frc 50      Fracturing at 50, 40 and 25 degrees tca. 73.4 to 75.0 strongly fractured.									

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79.30	88.50	<b>V3 Mafic volcanic rocks</b> Light greenish grey to light grey, fg with a weak shear fabric. Chlorite veining occurs along shear planes. Weak quartz carbonate veining throughout. Unit displays a weak shear fabric at 20 to 30 degrees tca. Pyrite mineralization is < 1%. Lower contact is gradational.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 79.30 - 88.50      Carb VN W      Weak quartz carbonate veining as fracture filling. 79.30 - 88.50      CHL VN WM      Chlorite along shear planes and along fractures.									
		<b>Mineralization Maj. :</b> <b>Type/Style/%Mineral</b> <b>Comment</b> 79.30 - 88.50      Py BL 0.1      Blebby pyrite < 1%.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 79.30 - 88.50      Frc 50      Fracturing at 50, 40 and 20 degrees tca. 79.30 - 88.50      SZ 15      Weakly sheared at 10 to 20 degrees tca.									
88.50	102.40	<b>SZ Shear Zone</b> Light greenish grey to light grey, fg sheared. Quartz carbonate veined, chlorite veined and silicified. Weakly sheared and weakly fractured, strong fracturing locally. No visible sulphides. Lower contact is gradational.									
		<b>Alteration Maj:</b> <b>Type/Style/Intensity</b> <b>Comment</b> 88.50 - 102.40      Sil P W      Silicification is pervasive throughout unit. 88.50 - 102.40      CHL VN W      As veins conforming to shearing and lesser fracture filling. 88.50 - 102.40      Carb FF M      Two quartz carbonate veining events. White carbonate veins 2 mm to 10 cm. Light yellowish brown limonitic quartz carbonate veins are shear related.									
		<b>Structure Maj.:</b> <b>Type/Core Angle</b> <b>Comment</b> 88.50 - 102.40      Frc 30      Fracturing at 30, 50 and 70 degrees tca.									

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	88.50 - 102.40	SZ 30				weak to moderate shearing at 20 to 40 degrees tca.					
102.40	111.20	<b>FLT</b> <b>Fault</b> Predominantly pinkish grey and lesser greenish grey mottled. Fine grained, sheared, brecciated and gouged. Granitic veining intrudes the mafic volcanic throughout. Chlorite, quartz carbonate and hematite veining occur throughout. Unit displays fault gouge, healed breccias, strong fracturing and shearing. Pyrite mineralization < 1%. Lower contact is quartz carbonate veined at 30 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	102.40 - 111.20	HE	VN W	Hematite as fracture filling and as staining of the quartz carbonate veins.							
	102.40 - 111.20	Sil	P W	Weak silica is pervasive.							
	102.40 - 111.20	Carb	VN W	Quartz carbonate veining 1 mm to 20 centimetres. Quartz carbonate veining displays displacement.							
	102.40 - 111.20	CHL	VN WM	Chlorite veining is pervasive throughout.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	102.40 - 111.20	Py	BL 0.1	Blebbly pyrite mineralization is < 1%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	102.40 - 111.20	Frc	40	Fracturing at 40, 30 and 70 degrees tca.							
	102.40 - 111.20	Frc	40	108.1 to 108.9 strongly fractured.							
	102.40 - 111.20	Ftg	40	108.9 Fault gouge							
	102.40 - 111.20	Ftg	40	105.2 Fault gouge							
	102.40 - 111.20	SZ	35	102.4 to 106.3 Shearing at 20 to 50 degrees tca.							
	102.40 - 111.20	B	40	Healed breccias occur locally.							
111.20	122.10	<b>V3</b> <b>Mafic volcanic rocks</b> Light greenish grey to grey, fg healed breccia. Predominantly chlorite veining with lesser quartz carbonate veining. Epidote alteration occurs locally. Unit is characterized by healed breccias and strong fracturing. Pyrite mineralization is < 1%. Lower contact to competent underlying rocks.									

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		<b><i>Alteration Maj:</i></b>	<b><i>Type/Style/Intensity</i></b>			<b><i>Comment</i></b>					
		111.20 - 122.10	EP P WM			120 to 122.1 Epidote is pervasive.					
		111.20 - 122.10	Carb VN W			Quartz carbonate veining 1 mm to 12 centimetres.					
		111.20 - 122.10	CHL VN WM			Chlorite as veining along fractures and interstitial to fragments.					
		<b><i>Mineralization Maj. :</i></b>	<b><i>Type/Style/%Mineral</i></b>			<b><i>Comment</i></b>					
		111.20 - 122.10	Py BL 0.1			Blebbly pyrite is < 1%.					
		<b><i>Structure Maj.:</i></b>	<b><i>Type/Core Angle</i></b>			<b><i>Comment</i></b>					
		111.20 - 122.10	Frc 30			Fracturing at 30, 50 and 40 degrees tca.					
		111.20 - 122.10	Frc 30			1118 to 119 strongly fractured, 121 to 122.1 moderately to strongly fractured.					
		111.20 - 122.10	B 30			Healed breccia, chlorite veining interstitial to fragments.					
122.10	125.25	<b>V3</b>	<b><i>Mafic volcanic rocks</i></b>			Light greenish grey to greenish grey, fg massive. Quartz carbonate veining occur throughout unit. Epidote as patches and veins. Chlorite as veins and spots. Unit is competent to weakly fractured. No visible sulphides. Lowr contact is sharp at 50 degrees tca.					
		<b><i>Alteration Maj:</i></b>	<b><i>Type/Style/Intensity</i></b>			<b><i>Comment</i></b>					
		122.10 - 125.25	Carb VN W			Quartz carbonate veining occurs throughout.					
		122.10 - 125.25	CHL VN WM			Chlorite veining throughout.					
		122.10 - 125.25	EP PCH W			Epidote as patches and veins. 124.65 to 124.95 epidote veining rimmed by quartz carbonate.					
		<b><i>Mineralization Maj. :</i></b>	<b><i>Type/Style/%Mineral</i></b>			<b><i>Comment</i></b>					
		122.10 - 125.25	Py BL 0.1			Pyrite mineralization < 1%.					
		<b><i>Structure Maj.:</i></b>	<b><i>Type/Core Angle</i></b>			<b><i>Comment</i></b>					
		122.10 - 125.25	Frc 30			Fracturing at 30, 40 and 60 degrees tca.					

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125.25	130.50	<b>QV          Quartz Vein</b> Light pinkish grey, vfg massive with partially absorbed mafic volcanics. Epidote alteration as localized patches. Chlorite veining occurs throughout. Minor quartz carbonate veining. Weakly fractured. No visible sulphides. Lower contact sharp at 40 degrees tca.  <b>Alteration Maj:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><i>Type/Style/Intensity</i></th> <th style="text-align: left;"><i>Comment</i></th> </tr> </thead> <tbody> <tr> <td>125.25 - 130.50      Carb   VN   W</td> <td>Weak quartz carbonate veining occurs throughout.</td> </tr> <tr> <td>125.25 - 130.50      CHL   VN   W</td> <td>Chlorite veining occurs throughout.</td> </tr> <tr> <td>125.25 - 130.50      EP   PCH   W</td> <td>Weak epidote alteration at top of unit.</td> </tr> </tbody> </table> <b>Structure Maj.:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><i>Type/Core Angle</i></th> <th style="text-align: left;"><i>Comment</i></th> </tr> </thead> <tbody> <tr> <td>125.25 - 130.50      Frc   50</td> <td>Fracturing at 50, 40 and 30 degrees tca.</td> </tr> </tbody> </table>	<i>Type/Style/Intensity</i>	<i>Comment</i>	125.25 - 130.50      Carb   VN   W	Weak quartz carbonate veining occurs throughout.	125.25 - 130.50      CHL   VN   W	Chlorite veining occurs throughout.	125.25 - 130.50      EP   PCH   W	Weak epidote alteration at top of unit.	<i>Type/Core Angle</i>	<i>Comment</i>	125.25 - 130.50      Frc   50	Fracturing at 50, 40 and 30 degrees tca.									
<i>Type/Style/Intensity</i>	<i>Comment</i>																						
125.25 - 130.50      Carb   VN   W	Weak quartz carbonate veining occurs throughout.																						
125.25 - 130.50      CHL   VN   W	Chlorite veining occurs throughout.																						
125.25 - 130.50      EP   PCH   W	Weak epidote alteration at top of unit.																						
<i>Type/Core Angle</i>	<i>Comment</i>																						
125.25 - 130.50      Frc   50	Fracturing at 50, 40 and 30 degrees tca.																						
130.50	147.50	<b>V3          Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive cut by quartz carbonate veins. Chlorite veining throughout. Epidote as patches. Quartz carbonate veining throughout. Hematite as minor veins. Unit is competent with weak fracturing at end of unit. No visible sulphides. Lower contact is gradational. Weakly MAGNETIC from 134 to 146.  <b>Alteration Maj:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><i>Type/Style/Intensity</i></th> <th style="text-align: left;"><i>Comment</i></th> </tr> </thead> <tbody> <tr> <td>130.50 - 147.50      HE   VN   W</td> <td>140.9 to 141.4 magnetic hematized vein with quartz carbonate and epidote.</td> </tr> <tr> <td>130.50 - 147.50      Carb   VN   W</td> <td>Quartz carbonate veining throughout.</td> </tr> <tr> <td>130.50 - 147.50      EP   PCH   WM</td> <td>136.7 to 145.8 epidote as patches.</td> </tr> <tr> <td>130.50 - 147.50      CHL   VN   WM</td> <td>Chlorite occurs as veins throughout.</td> </tr> </tbody> </table>	<i>Type/Style/Intensity</i>	<i>Comment</i>	130.50 - 147.50      HE   VN   W	140.9 to 141.4 magnetic hematized vein with quartz carbonate and epidote.	130.50 - 147.50      Carb   VN   W	Quartz carbonate veining throughout.	130.50 - 147.50      EP   PCH   WM	136.7 to 145.8 epidote as patches.	130.50 - 147.50      CHL   VN   WM	Chlorite occurs as veins throughout.											
<i>Type/Style/Intensity</i>	<i>Comment</i>																						
130.50 - 147.50      HE   VN   W	140.9 to 141.4 magnetic hematized vein with quartz carbonate and epidote.																						
130.50 - 147.50      Carb   VN   W	Quartz carbonate veining throughout.																						
130.50 - 147.50      EP   PCH   WM	136.7 to 145.8 epidote as patches.																						
130.50 - 147.50      CHL   VN   WM	Chlorite occurs as veins throughout.																						

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		<b>Structure Maj.:</b> 130.50 - 147.50									
		<b>Type/Core Angle</b> Frc 60									
		<b>Comment</b> Fracturing at 60, 30 and 40 degrees tca.									
147.50	153.60	<b>V2 Intermediate volc. rocks</b> Light pinkish grey to light grey, vfg massive. Light pinkish orange quartz carbonate veining. Chlorite veining occurs throughout. Weak fracturing locally strong. No visible sulphides. Lower contact sharp at 20 degrees tca.									
		<b>Alteration Maj.:</b> 147.50 - 153.60									
		<b>Type/Style/Intensity</b> CHL VN W									
		<b>Comment</b> Chlorite veining occurs throughout.									
		147.50 - 153.60									
		<b>Type/Style/Intensity</b> Carb VN W									
		<b>Comment</b> Hematitic quartz carbonate veining throughout.									
		<b>Structure Maj.:</b> 147.50 - 153.60									
		<b>Type/Core Angle</b> Frc 50									
		<b>Comment</b> 151.8 to 152.4 strongly fractured 50 to 70 degrees tca.									
		147.50 - 153.60									
		<b>Type/Core Angle</b> Frc 40									
		<b>Comment</b> Fracturing at 40, 30 and 70 degrees tca.									
153.60	161.60	<b>V3 Mafic volcanic rocks</b> Light greenish grey to grey, fg mottled appearance from fractures healed with chlorite and epidote. Chlorite and epidote are pervasive. Unit is competent to weakly fractured. Pyrite at 155.5 2 cm pyrite patch, patch is about 40% pyrite. Lower contact is gradational to underlying unit.									
		<b>Alteration Maj.:</b> 153.60 - 161.60									
		<b>Type/Style/Intensity</b> Carb VN W									
		<b>Comment</b> Quartz carbonate veins and hematitic quartz carbonate veins occur throughout.									
		153.60 - 161.60									
		<b>Type/Style/Intensity</b> CHL VN W									
		<b>Comment</b> Chlorite as veining locally.									
		153.60 - 161.60									
		<b>Type/Style/Intensity</b> EP VN MS									
		<b>Comment</b> Epidote as fracture filling and patches engulfing mafic volcanic fragments.									
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
		<b>Comment</b>									



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		153.60 - 161.60									
		Py F 0.1									
		Pyrite mineralization overall. 2 cm pyrite patch at 155.5.									
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		153.60 - 161.60	Frc 50	Fracturing at 50, 70 and 30 degrees tca.							
161.60	163.90	<b>SZ</b>	<b>Shear Zone</b>								
		Light greenish grey to greenish grey, fg sheared. Weakly chloritic and weak quartz carbonate veining. Unit is sheared throughout predominantly at 50 degrees tca. No visible sulphides. Lower contact is sharp at 40 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		161.60 - 163.90	Carb VN W	Quartz carbonate as veining.							
		161.60 - 163.90	CHL P W	Chlorite is pervasive.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		161.60 - 163.90	SZ 50	Sheared at 40 to 60 degrees tca.							
163.90	166.20	<b>V3</b>	<b>Mafic volcanic rocks</b>								
		Light orange grey to light greenish grey, vfg to fg massive with remnant mafic volcanic fragments and intervals. Moderate to strong pottasic alteration throughout. Weak quartz carbonate veining. Epidote alteration very localized at 164.6. Unit is weakly fractured. Lower contact is sharp at 50 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		163.90 - 166.20	EP PCH W	Epidote patch at 164.6							
		163.90 - 166.20	Carb VN W	Quartz carbonate veining is late and weak.							
		163.90 - 166.20	K P MS	Pottasic alteration is moderate to strong replacing the mafic volcanic.							

## LITHOLOGY REPORT - Detailed -

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		163.90 - 166.20	Frc 40	Fractures at 40 and 60 degrees tca.							
166.20	168.10	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Narrow quartz carbonate veins rimmed by pottasic alteration. Competent to weakly fractured. No visible sulphides. Lower contact sheared at 40 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		166.20 - 168.10	Carb VN W	Weak quartz carbonate veining.							
		166.20 - 168.10	K F W	Pottasic alteration rimming quartz carbonate veins.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		166.20 - 168.10	Frc 30	Fracturing at 30 and 70 degrees tca.							
168.10	169.30	<b>V2 Intermediate volc. rocks</b> Light orange brown with black bands. Fine grained gneiss with moderate segregation and weak crenulations. Weak quartz carbonate veining. Competent with gneissic banding at 40 degrees tca. No visible sulphides. Lower contact at sharp at 60 degrees tca.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		168.10 - 169.30	Carb VN W	Randomly oriented quartz carbonate veining.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		168.10 - 169.30	Gn 40	Gneissic banding well developed.							
169.30	170.00	<b>V3 Mafic volcanic rocks</b>									

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		Light greenish grey to greenish grey, fg massive. Weak quartz carbonate veining. Weakly fractured. Lower contact sharp at 60 degrees tca.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		169.30 - 170.00									
		Carb VN W									
		Weak quartz carbonat veining.									
		<b>Mineralization Maj. :</b>									
		<b>Type/Style/%Mineral</b>									
		<b>Comment</b>									
		169.30 - 170.00									
		Py BL 0.1									
		Blebby pyrite at 169.77									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		169.30 - 170.00									
		Frc 60									
		Fracturing at 60 and 20 degrees tca.									
170.00	170.50	<b>V2 Intermediate volc. rocks</b>									
		Light pinkish orange and black, fg with poorly developed gneissosity. Minor quartz carbonate veining. Competent, no visible sulphides. Lower contact is gradational.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		170.00 - 170.50									
		Carb VN W									
		Quartz carbonate veining is weak.									
170.50	176.10	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive with narrow intervals of intermediate volcanic. Quartz carbonate veining throughout associated hematite locally. Weakly fractured. No visible sulphides. Lower contact to fractured underlying mafic volcanics.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		170.50 - 176.10									
		EP PCH W									
		Epidote as patches and veins.									
		170.50 - 176.10									
		Carb VN W									
		Quartz carbonate veining throughout.									
		170.50 - 176.10									
		CHL VN W									
		Chlorite as veins and spots.									

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		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		170.50 - 176.10	Frc 70	Fracturing at 70, 30 and 40 degrees tca.							
		<b>Minor Interval:</b>									
		171.30 - 171.50	V2	<i>Intermediate volc. rocks</i> Dark red and dark grey mottled. Weak quartz carbonate veining. Upper contact at 40 degrees tca, lower contact fractured.							
176.10	178.60	<b>V3 Mafic volcanic rocks</b>		Greenish grey to grey, fg massive. Quartz carbonate veining with associated hematite staining. Moderately fractured. No visible sulphides. Lower contact to competent rocks.							
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		176.10 - 178.60	Carb VN W	Quartz carbonate veining with hematite staining.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		176.10 - 178.60	Frc 50	Fractured at 50, 30 and 20 degrees tca.							
		176.10 - 178.60	Frc 50	Moderately fractured with local strongly fractured sections.							
178.60	180.30	<b>V3 Mafic volcanic rocks</b>		Light greenish grey to greenish grey, fg massive with 1 mm altered phenocrysts. Phenocrysts are possibly saussurite after plagioclase. Weak quartz carbonate veining. Weakly fractured. No visible sulphides. Lower contact sharp at 60 degrees tca.							
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		178.60 - 180.30	Carb VN W	Weak quartz carbonate veining randomly oriented.							
		178.60 - 180.30	SA SP M	Saussuritized plagioclase phenocrysts.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							

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180.30	181.35	<b>V2 Intermediate volc. rocks</b> Light pinkish orange and dark green, fg massive. Weak quartz carbonate veining. Weakly fractured. No visible sulphides. Lower contact sharp at 70 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		180.30 - 181.35	Carb VN W	Weak quartz carbonate veining.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		180.30 - 181.35	Frc 60	Fracturing at 60 and 40 degrees tca.							
181.35	183.00	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Weak quartz carbonate veining with minor hematite staining. Moderately fractured. Rare pyrite specks and blebs. Lower contact irregular.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		181.35 - 183.00	Carb VN W	Weak quartz carbonate veining.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		181.35 - 183.00	Py BL 0.1	Pyrite as specks and blebs.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		181.35 - 183.00	Frc 20	Fracturing at 20 and 60 degrees tca.							
183.00	186.50	<b>V2 Intermediate volc. rocks</b> Light pinkish orange and dark green, fg massive. Weak quartz carbonate veining and hematite staining. Weak to moderately fractured. No visible sulphides. Lower contact sharp at 50 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							

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	183.00 - 186.50	HE PCH W									
	183.00 - 186.50	Carb VN W									
		<b>Structure Maj.:</b>									
	183.00 - 186.50	Frc 50									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		Weak to moderate fracturing at 50, 30 and 60 degrees tca.									
186.50	203.00	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive. Weak quartz carbonate veining. Competent to weakly fractured. Cubic pyrite mineralization as occasional blebs and along fractures. Lower contact irregular.									
		<b>Alteration Maj.:</b>									
	186.50 - 203.00	Carb VN W									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		Quartz carbonate veining weak and occasionally hosting pyrite.									
		<b>Mineralization Maj. :</b>									
	186.50 - 203.00	Py BL 0.5									
		<b>Type/Style/%Mineral</b>									
		<b>Comment</b>									
		Pyrite as occasional blebs and along quartz carbonate veins.									
		<b>Structure Maj.:</b>									
	186.50 - 203.00	Frc 60									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		Fracturing at 60, 30 and 50 degrees tca.									
203.00	205.30	<b>V2 Intermediate volc. rocks</b>									
		Light pinkish orange and dark green, fg with a weak shear fabric. Quartz carbonate veining with hematite staining. Weakly fractured. No visible sulphides. Lower contact at 60 degrees tca.									
		<b>Alteration Maj.:</b>									
	203.00 - 205.30	HE F W									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		Weak hematite staining moderate locally.									
	203.00 - 205.30	Carb VN W									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		Randomly oriented quartz carbonate veins.									

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		<b>Structure Maj.:</b>									
		203.00 - 205.30									
		<b>Type/Core Angle</b>									
		Frc 70									
		<b>Comment</b>									
		Fractured at 70, 30 and 50 degrees tca.									
205.30	208.30	<b>SZ Shear Zone</b>									
		Light greenish grey, fg sheared. Weak quartz carbonate veining. Weak to moderate shearing. Rare to occasional pyrite specks. Lower contact at 60 degrees tca.									
208.30	211.40	<b>V3 Mafic volcanic rocks</b>									
		Light greenish grey to greenish grey, fg massive. Weak randomly oriented quartz carbonate veining. Patchy epidote is weak, weak hematite staining locally. Weakly fractured. Minor pyrite mineralization. Lower contact at 60 degrees tca.									
		<b>Alteration Maj:</b>									
		208.30 - 211.40									
		HE F W									
		208.30 - 211.40									
		EP F W									
		208.30 - 211.40									
		Carb VN W									
		<b>Mineralization Maj. :</b>									
		208.30 - 211.40									
		Py BL 0.5									
		<b>Structure Maj.:</b>									
		208.30 - 211.40									
		Frc 60									
		<b>Comment</b>									
		Fracturing at 60 and 40 degrees tca.									
211.40	213.10	<b>V2 Intermediate volc. rocks</b>									

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		Light pinkish orange, fg very weakly segregated. Fine to coarse chloritic veining. Quartz carbonate veins 1 mm to 4 mm. Weakly fractured. No visible sulphides. Lower contact at 40 degrees tca.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		211.40 - 213.10 Carb VN W Quartz carbonate veining throughout.									
		211.40 - 213.10 CHL VN W Chlorite veining throughout.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		211.40 - 213.10 Frc 30 Fractured at 30, 50 and 70 degrees tca.									
213.10	257.10	<b>V3 Mafic volcanic rocks</b>	260682	216.00	217.50	1.50	0.02	0.01	30	0.02	0.10
		Light greenish grey to grey, fg sheared. Randomly oriented quartz carbonate veining 1 mm to 2 cm occur throughout. Weak to moderate shearing throughout. Lower contact at 60 degrees tca.	260683	217.50	219.00	1.50	0.03	0.01	80	0.02	0.10
		<b>Alteration Maj:</b>	260684	219.00	219.30	0.30	0.07	0.01	80	0.24	2.00
		<b>Type/Style/Intensity</b>	260685	219.30	219.60	0.30	0.05	0.01	70	0.36	3.00
		<b>Comment</b>	260686	219.60	219.90	0.30	0.02	0.00	30	0.07	0.20
		213.10 - 257.10 CHL VN W Chlorite veining is commonly weak with moderate locally. Chlorite typically along shear planes.	260687	219.90	221.00	1.10	0.03	0.01	60	0.47	3.00
		213.10 - 257.10 Carb VN WM Randomly oriented quartz carbonate veins throughout.	260688	221.00	221.40	0.40	0.03	0.01	50	0.25	2.00
		<b>Mineralization Maj. :</b>	260689	221.40	222.50	1.10	0.03	0.00	70	0.06	0.50
		<b>Type/Style/%Mineral</b>	260691	222.50	223.80	1.30	0.03	0.00	60	0.03	0.10
		<b>Comment</b>	260692	223.80	225.00	1.20	0.03	0.00	60	0.01	0.10
		213.10 - 257.10 Py BL 0.1 Pyrite 0.1 % overall. Pyrite mineralization 2 to 3 % from 219.3 to 221.4.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		213.10 - 257.10 SZ 30 Shearing at 10 to 40 degrees tca. Shearing is undulating locally.									
		<b>Minor Interval:</b>									
		252.50 252.70 V2 <i>Intermediate volc. rocks</i>									
		Pinkish orange, fg massive. Weak chlorite and quartz carbonate veining. No visible sulphides.									



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257.10	273.00	<b>V2 Intermediate volc. rocks</b> Light brownish grey and greenish grey mottled. Fine grained sheared. Chlorite along shear planes. Quartz carbonate veining throughout. Weakly sheared overall, with local sections very weakly and moderately sheared. Unit contains occasional pyrite bleb. Lower contact is sharp at 70 degrees tca.	260693	271.50	273.00	1.50	0.00	0.00	20	0.01	0.10
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		257.10 - 273.00	Carb VN W	Quartz carbonate as narrow veins with local areas of 5 to 10 cm veins.							
		257.10 - 273.00	CHL VN WM	Chlorite along shear planes and as coarse segregations.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		257.10 - 273.00	Py BL 0.1	Unit contains occasional pyrite blebs.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		257.10 - 273.00	Frc 50	Fracturing at 50, 60 and 40 degrees tca.							
		257.10 - 273.00	SZ 50	Shearing at 40 to 60 degrees tca.							
273.00	276.00	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg sheared. Quartz carbonate veining throughout. Chlorite veining along shear planes. Unit is weakly to moderately sheared throughout. No visible sulphides. Lower contact is gradational to underlying massive mafic volcanic.	260694	273.00	274.50	1.50	0.05	0.01	50	0.26	0.10
			260696	274.50	276.00	1.50	0.03	0.04	90	0.50	0.10
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		273.00 - 276.00	Carb VN WM	Randomly oriented quartz carbonate veins throughout.							
		273.00 - 276.00	CHL VN WM	Chlorite veining along shear planes.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		273.00 - 276.00	SZ 50	Shearing at 40 to 60 degrees tca. Shearing is typically weak with moderately sheared sections.							

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276.00	278.00	<b>V3 Mafic volcanic rocks</b> Light greenish grey to greenish grey, fg massive. Chlorite veining occurs throughout unit. Minor quartz carbonate veining. Weakly fractured. Pyrite mineralization is < 1%. Lower contact is irregular to flow top of underlying unit.	260697	276.00	277.00	1.00	0.04	0.03	60	0.21	3.00
			260698	277.00	278.00	1.00	0.04	0.00	80	0.01	0.10
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		276.00 - 278.00	Carb VN W	Minor quartz carbonate veining.							
		276.00 - 278.00	CHL VN W	Chlorite veining occurs throughout unit.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		276.00 - 278.00	Py BL 0.1	Pyrite mineralization as blebs at top of unit.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		276.00 - 278.00	Frc 40	Fractured at 40 and 60 degrees tca.							
278.00	281.40	<b>V3 Mafic volcanic rocks</b> Light grey to grey, fg matrix amygdaloidal. Amygdules are typically 1 mm in size and replaced by pyrite. Chlorite veining throughout. Minor quartz carbonate veining. Unit is competent to weakly fractured. Pyrite mineralization is 3 to 5%. Lower contact is sheared at 40 degrees tca.	260699	278.00	278.50	0.50	0.09	0.01	50	0.01	5.00
			260700	278.50	279.00	0.50	0.11	0.00	50	0.01	1.00
			260716	279.00	279.40	0.40	0.11	0.00	40	0.02	1.00
			260717	279.40	279.70	0.30	0.12	0.00	100	0.53	5.00
			260718	279.70	280.00	0.30	0.10	0.00	70	0.63	4.00
			260719	280.00	280.30	0.30	0.11	0.00	40	0.50	2.00
			260720	280.30	280.60	0.30	0.11	0.00	50	0.88	4.00
			260721	280.60	281.00	0.40	0.12	0.00	60	0.70	7.00
			260722	281.00	281.40	0.40	0.10	0.00	80	0.47	3.00
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		278.00 - 281.40	Sil P M	Unit is moderately silicified throughout.							
		278.00 - 281.40	Carb VN W	Minor quartz carbonate veining.							
		278.00 - 281.40	CHL VN WM	Weak chlorite veining locally moderate.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		278.00 - 281.40	Py Amyg 4	Pyrite mineralization 3 to 5%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		278.00 - 281.40	Frc 50	Fractured at 50, 30 and 60 degrees tca.							

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281.40	296.10	<b>V3 Mafic volcanic rocks</b> Greenish grey to dark greenish grey, fg massive. Weak to moderate silicification. Weak quartz carbonate veining throughout with locally moderate to strong. Chlorite is pervasive throughout unit with local moderate veining. Unit is competent to very weakly fractured. Pyrite mineralization is < 1%. Intermediate volcanic fragments at 285 to 285.4. Lower contact is gradational to magnetic underlying mafic volcanic.	260723	281.40	281.70	0.30	0.05	0.01	30	1.02	2.00	
			260724	281.70	282.00	0.30	0.04	0.02	50	0.62	1.00	
			260725	282.00	282.50	0.50	0.05	0.01	40	0.35	2.00	
			260726	282.50	283.00	0.50	0.02	0.01	10	0.04	2.00	
		<b>Alteration Maj:</b>										
		<b>Type/Style/Intensity</b>	<b>Comment</b>									
		281.40 - 296.10 Sil P WM	Unit is silicified throughout.	260727	283.00	283.35	0.35	0.04	0.02	30	0.43	0.20
		281.40 - 296.10 CHL P W	Chlorite is pervasive throughout unit.	260728	283.35	284.00	0.65	0.04	0.00	50	0.19	0.10
		281.40 - 296.10 Carb VN W	Quartz carbonate veining is weak throughout unit. 283.3 to 285 moderate to strong.	260729	284.00	284.50	0.50	0.02	0.00	30	0.17	0.10
				260731	284.50	285.00	0.50	0.04	0.01	30	0.28	1.00
				260732	285.00	285.40	0.40	0.04	0.01	30	0.48	2.00
		<b>Mineralization Maj. :</b>	<b>Comment</b>	260733	285.40	285.70	0.30	0.03	0.01	40	0.81	1.00
		<b>Type/Style/%Mineral</b>		260734	285.70	286.00	0.30	0.03	0.01	50	0.60	2.00
		281.40 - 296.10 Py BL 0.2	Pyrite mineralization is < 1% with local concentrations.	260736	286.00	286.35	0.35	0.03	0.01	20	0.64	3.00
		<b>Structure Maj.:</b>	<b>Comment</b>	260737	286.35	287.00	0.65	0.01	0.01	20	0.32	2.00
		<b>Type/Core Angle</b>		260738	287.00	288.00	1.00	0.02	0.01	30	0.27	0.50
		281.40 - 296.10 Frc 40	Fracturing at 40, 50 and 70 degrees tca.	260739	288.00	289.00	1.00	0.03	0.01	10	0.36	0.50
		281.40 - 296.10 Dyk	288.6 to 289.1 Irregular subvertical felsic dyke contact.	260740	288.00	289.00	1.00	0.03	0.01	10	0.36	0.50
		281.40 - 296.10 B	286.5 to 287.2 Intermediate volcanic fragments in a mafic volcanic matrix.	260741	289.00	290.00	1.00	0.05	0.00	30	0.32	0.10
		281.40 - 296.10 B	285 to 285.4 Intermediate volcanic fragments in a mafic volcanic matrix.	260742	290.00	291.00	1.00	0.05	0.00	10	0.16	0.10
				260742	291.00	292.00	1.00	0.05	0.00	30	0.06	0.10
296.10	321.10	<b>I4 Ultramafic/ultrabasic</b> Unit is weak to moderately magnetic. Grey to dark grey, fg massive. Unit is weakly to moderately altered to talc and serpentine. Weak quartz carbonate veining occurs throughout with local areas to moderate. Unit is weakly fractured throughout. Magnetite as very fine grains. Unit contains rare to occasional pyrite specks. Lower contact is sharp at 50 degrees tca.										
		<b>Alteration Maj:</b>	<b>Comment</b>									
		<b>Type/Style/Intensity</b>										
		296.10 - 321.10 Carb VN WM	Quartz carbonate veining occurs throughout unit.									

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	296.10 - 321.10	SERP P WM									
	296.10 - 321.10	TLC P WM									
	<b>Mineralization Maj. :</b>										
	296.10 - 321.10	Mt FG 0.2									
	296.10 - 321.10	Py BL 0.1									
	<b>Structure Maj.:</b>										
	296.10 - 321.10	Frc 60									
321.10	331.50	<b>V3 Mafic volcanic rocks</b>									
	Light greenish grey to greenish grey, fg massive. Weakly chloritic and weak quartz carbonate veining. Unit is competent to weakly fractured. No visible sulphides. Lower contact is gradational.										
	<b>Alteration Maj:</b>										
	321.10 - 331.50	Carb VN W									
	321.10 - 331.50	CHL P WM									
	<b>Structure Maj.:</b>										
	321.10 - 331.50	Frc 60									
331.50	335.80	<b>V3 Mafic volcanic rocks</b>									
	Recrystallize dmafic volcanic. Light grey to grey, fg massive. Plagioclase moderately to strongly altered to clay minerals. Weak to moderate quartz carbonate veining throughout unit. Unit is competent to weakly fractured. Pyrite mineralization is < 1%. Lower contact is gradational.										
	<b>Alteration Maj:</b>										
	331.50 - 335.80	Carb VN WM									

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	331.50 - 335.80	Alb P MS Plagioclase is completely altered to clay minerals.									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	331.50 - 335.80	Py BL 0.1		Minor blebby pyrite.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	331.50 - 335.80	Frc 30		Fracturing at 30 and 50 degrees tca.							
335.80	348.70	<b>V2 Intermediate volc. rocks</b> Light pinkish grey to reddish grey mottled, fg massive. Weak to moderate silicification. Weak hematization. Minor chlorite veining. Competent to weakly fractured. No visible sulphides. Lower contact gradational over 10 cm's.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	335.80 - 348.70	Carb VN WM		Quartz carbonate veining infilling hairline fractures.							
	335.80 - 348.70	HE P WM		Hematite is pervasive throughout unit.							
348.70	350.40	<b>V3 Mafic volcanic rocks</b> Recrystallized mafic volcanic. Light greenish grey to greenish grey, fg massive. Plagioclase altered to clay minerals. Weakly chloritic and weak quartz carbonate veining. Moderately fractured. No visible sulphides. Lower contact irregular.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	348.70 - 350.40	CHL P W		Chlorite is pervasive throughout unit.							
	348.70 - 350.40	Carb VN W		Quartz carbonate infilling hairline fractures.							
	348.70 - 350.40	Alb P M		Plagioclase altered to clay minerals.							

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		<b>Structure Maj.:</b> 348.70 - 350.40									
		<b>Type/Core Angle</b> Frc 30									
		<b>Comment</b> Fractured at 30 and 20 degrees tca.									
350.40	353.10	<b>V2 Intermediate volc. rocks</b> Light pinkish grey to reddish grey, vfg massive. Quartz carbonate veining occurs throughout. Weakly fractured. Pyrite mineralization along fracture									
353.10	357.00	<b>I3B Diabase</b> Diabase with partially absorbed felsic volcanics. Light greenish grey to light pinkish grey, fine to medium grained massive. Plagioclase altered to saussurite. Moderately silicified. Weak quartz carbonate veining. Competent to weakly fractured. No visible sulphides. Lower contact at 65 degrees tca.									
		<b>Alteration Maj.:</b>									
		353.10 - 357.00	<b>Type/Style/Intensity</b> Carb VN W								
		353.10 - 357.00	Sil P M								
		353.10 - 357.00	SA P M								
		<b>Comment</b> Minor quartz carbonate veining.									
		<b>Comment</b> Moderately silicified throughout.									
		<b>Comment</b> Plagioclase altered to saussurite.									
		<b>Structure Maj.:</b> 353.10 - 357.00									
		<b>Type/Core Angle</b> Frc 70									
		<b>Comment</b> Fractured at 70 and 60 degrees tca.									

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357.00	368.00	<b>V2 Intermediate volc. rocks</b> Reddish grey with dark green grey fragments giving a mottled appearance. Fine grained matrix with dark green grey fragments. Fragments are recrystallized and display reaction rims. Unit is siliceous with quartz carbonate veining. Chlorite veining occurs locally. Weakly hematitic around fractures. Weakly fractured with intensity increasing toward lower contact. Pyrite mineralization occurs in both the matrix and fragments at 1 to 3%, locally to 5%. Lower contact is gradational.	260743	357.00	358.50	1.50	0.00	0.02	10	0.10	2.00
			260744	358.50	360.00	1.50	0.00	0.01	10	0.06	1.00
			260745	360.00	361.50	1.50	0.00	0.00	10	0.14	2.00
			260746	361.50	363.00	1.50	0.00	0.00	20	0.10	1.00
			260747	363.00	364.50	1.50	0.00	0.00	10	0.01	0.50
			260748	364.50	366.00	1.50	0.00	0.01	20	0.06	0.10
			260749	366.00	367.00	1.00	0.00	0.01	10	0.06	0.50
			260751	367.00	368.00	1.00	0.00	0.02	10	0.04	2.00
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		357.00 - 368.00	HE F W	Hematization along fractures.							
		357.00 - 368.00	Carb VN W	Quartz carbonate veining 1 to 5 mm.							
		357.00 - 368.00	CHL VN WM	Chlorite veining is typically weak with local areas moderate.							
		357.00 - 368.00	Sil P M	Unit is siliceous throughout.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		357.00 - 368.00	Py DIS 2	Pyrite occurs in both matrix and fragments and appears to be a later feature.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		357.00 - 368.00	Frc 40	Weakly fractured to 364.5, moderately fractured 364.5 to 368.							
		357.00 - 368.00	Frc 40	Fractured at 40, 60 and 70 degrees tca.							
368.00	374.00	<b>V2 Intermediate volc. rocks</b> Dacite or Andesite? Grey to dark grey with reddish grey sections. Very fine to fine grained matrix with dark coloured aphanitic fragments similar to overlying unit. Moderately siliceous. Hairline quartz carbonate veining throughout. Hematite staining locally. Weakly fractured decreasing with depth. Pyrite and chalcopyrite 1 % combined. Lower contact gradational.	260752	368.00	369.00	1.00	0.00	0.02	10	0.07	1.00
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		368.00 - 374.00	HE F W	Local hematite staining.							

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	368.00 - 374.00	Carb VN WM									
	368.00 - 374.00	Sil P M									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	368.00 - 374.00	Cp F 0.5		Chalcopyrite blebs along fracture.							
	368.00 - 374.00	Py BL 1		Blebby pyrite along fractures and lesser disseminations.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	368.00 - 374.00	Frc 70		Fracturing at 70, 40 and 60 degrees tca.							
374.00	395.30	<b>V2 Intermediate volc. rocks</b>									
		Light reddish grey with dark grey sections mottled. Similar to overlying units without the fragments. Very fine grained massive with mafic rich sections. Quartz carbonate veining, predominantly hairline fractures at the top of unit. Unit is moderately silicified throughout. Chlorite veining increasing with depth. Weakly fractured. No visible sulphides. Lower contact is sharp at 40 degrees tca.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	374.00 - 395.30	CHL VN W		Chloritic veining increasing with depth.							
	374.00 - 395.30	Carb VN WM		Quartz carbonate veining predominantly hairline fractures at top of unit.							
	374.00 - 395.30	Sil P M		Unit is moderately silicified throughout.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	374.00 - 395.30	Frc 40		Fracturing at 40, 60 and 50 degrees tca.							
395.30	396.10	<b>I3B Diabase</b>									
		Greenish grey, fg massive with sub vertical quartz veining. Quartz veining occurs sub vertically and is									



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		devoid of carbonate. Weakly chloritic. Weakly fractured. No visible sulphides. Lower contact is sub vertical.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		395.30 - 396.10									
		CHL P W									
		395.30 - 396.10									
		Qtz VN W									
		Quartz veining notably absent of carbonate.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		395.30 - 396.10									
		Frc 20									
		Weakly fractured, Upper contact at 40 degrees tca and lower contact at 10 degrees tca.									
396.10	403.60	<b>V1D Dacite</b>									
		Light pinkish grey to light reddish grey with light grey sections, very fine grained massive. Moderately to strongly silicified throughout, weak hematization associated with silicification. Patchy depletion of mafic minerals related to silicification. Weak chloritic veining is localized. Quartz veining is weak and occurs throughout unit. Weakly fractured decreasing with depth. Rare pyrite specks along quartz vein. Lower contact is gradational to underlying unit.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		396.10 - 403.60									
		Qtz VN W									
		Hairline to 1 cm quartz veining is occurs throughout.									
		396.10 - 403.60									
		CHL VN W									
		Chloritic veining is localized.									
		396.10 - 403.60									
		HE P W									
		Weak hematization associated with silicification giving the unit a light pink to light reddish colour.									
		396.10 - 403.60									
		Sil P MS									
		Moderate to strong silicification is pervasive.									
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		396.10 - 403.60									
		Frc 50									
		Fractured at 50, 60 and 40 degrees tca.									

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403.60	418.20	<b>V1D Dacite</b> Grey with reddish grey sections. Unit is similar to overlying unit but has a higher mafic content. Moderately silicified. Quartz carbonate veining occurs throughout. Weak hematization fracture related. Competent to weakly fractured. 413.1 to 413.4 Disseminated chalcopyrite 10%. Pyrite mineralization < 1% overall. Lower contact gradational.	260753	407.50	409.00	1.50	0.00	0.00	10	0.03	0.10
			260754	409.00	410.10	1.10	0.00	0.00	10	0.01	0.50
			260756	410.10	410.60	0.50	0.00	0.00	10	0.01	2.00
			260757	410.60	411.00	0.40	0.00	0.02	10	0.08	0.10
		<b>Alteration Maj:</b>									
		<i>Type/Style/Intensity</i>	<i>Comment</i>								
		403.60 - 418.20 HE PCH W	Patchy hematization fracture related.	260758	411.00	412.50	1.50	0.00	0.01	10	0.02
		403.60 - 418.20 Carb VN W	Quartz carbonate veining hairline to 1 cm throughout	260759	412.50	413.10	0.60	0.00	0.13	10	0.17
		403.60 - 418.20 Sil P M	Moderately silicified throughout.	260760	413.10	413.40	0.30	0.01	1.85	90	2.28
				260761	413.40	414.00	0.60	0.00	0.06	10	0.10
				260762	414.00	415.50	1.50	0.00	0.01	10	0.01
		<b>Mineralization Maj. :</b>	<i>Comment</i>								
		<i>Type/Style/%Mineral</i>		260763	415.50	417.00	1.50	0.00	0.01	20	0.28
		403.60 - 418.20 Py BL 0.5	Blebby pyrite < 1%. Locally to 2%.	260764	417.00	418.20	1.20	0.00	0.00	10	0.03
		403.60 - 418.20 Cp DIS 10	413.1 to 413.4 Disseminated chalcopyrite 10%.								
		<b>Structure Maj.:</b>	<i>Comment</i>								
		<i>Type/Core Angle</i>									
		403.60 - 418.20 Frc 50	Fractured at 50, 70 and 40 degrees tca.								
418.20	420.10	<b>V1D Dacite</b> Dark greenish grey to reddish grey with light green saussuritized plagioclase phenocrysts. Unit is silicified throughout. Patchy hematite fracture related. Minor quartz carbonate veining. Unit is competent to weakly fractured. No visible sulphides. Lower contact is gradational.	260765	418.20	419.50	1.30	0.01	0.00	10	0.01	0.10
			260766	419.50	420.10	0.60	0.00	0.00	30	0.06	0.10
		<b>Alteration Maj:</b>	<i>Comment</i>								
		<i>Type/Style/Intensity</i>									
		418.20 - 420.10 Carb VN W	Minor quartz carbonate veining.								
		418.20 - 420.10 HE PCH W	Patchy hematite fracture related.								
		418.20 - 420.10 SA P M	Plagioclase moderately saussuritized.								
		418.20 - 420.10 Sil P M	Moderately silicified throughout.								

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		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		418.20 - 420.10	Frc 70	Fractured at 70 and 60 degrees tca.							
420.10	429.30	<b>V1D Dacite</b>		260767	420.10	421.00	0.90	0.00	0.00	20	0.01 0.10
		Grey with reddish grey hematized sections. Fine grained massive. Similar to overlying units but rich in mafic minerals. Silicified throughout, hematization fracture related. Moderate epidote locally. Minor quartz carbonate veining. Weakly fractured. Pyrite < 1% overall with local concentrations to 2%. Lower contact gradational.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		420.10 - 429.30	EP PCH M	Moderate epidote locally.							
		420.10 - 429.30	Carb VN W	Minor quartz carbonate veining.							
		420.10 - 429.30	HE F W	Weak patchy hematite fracture related.							
		420.10 - 429.30	Sil P M	Unit is silicified throughout.							
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
		420.10 - 429.30	Py BL 0.2	Pyrite < 1% overall locally to 2%.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		420.10 - 429.30	Frc 40	Fractured at 40, 50 and 60 degrees tca.							
429.30	439.60	<b>V1D Dacite</b>									
		Light reddish grey to reddish grey with dark greenish grey mafic rich sections, vfg massive. Moderately silicified, weak quartz veining, lesser quartz carbonate veining and weak hematization fracture related. Moderate epidote alteration locally. Chlorite veining locally. Unit is competent to weakly fractured. Pyrite mineralization < 1%, locally to 1%. Lower contact gradational to mafic rich unit.									
		<b>Alteration Maj.:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							

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Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>SUL</b>
	429.30 - 439.60	HE F W									
	429.30 - 439.60	EP PCH M									
	429.30 - 439.60	Carb VN W									
	429.30 - 439.60	Qtz VN W									
	429.30 - 439.60	Sil P M									
		<b>Mineralization Maj. :</b>	<b>Type/Style/%Mineral</b>	<b>Comment</b>							
	429.30 - 439.60	Py BL 0.1		Pyrite fracture related, locally 1%.							
	429.30 - 439.60	Cp BL 0.01		Chalcopyrite speck.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	429.30 - 439.60	B 50		438.35 to 438.5 Strongly fractured, fractures infilled with quartz veining.							
	429.30 - 439.60	Frc 50		Fracturing at 50, 40 and 60 degrees tca.							
439.60	442.90	<b>V2J Andesite</b>		Grey to dark grey with light reddish patches. Fine grained massive. Moderately silicified. Weak quartz carbonate veining. Weakly fractured locally moderate. No visible sulphides. Lower contact gradational to epidote altered unit.							
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
	439.60 - 442.90	Carb VN W		Weak quartz carbonate veining.							
	439.60 - 442.90	Sil P M		Unit is silicified throughout.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
	439.60 - 442.90	Frc 40		Fractured at 40 and 60 degrees tca.							
442.90	444.20	<b>V2J Andesite</b>									

## LITHOLOGY REPORT

### - Detailed -

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>SUL</b>
		Light reddish grey and grey with light green epidote altered plagioclase, fg massive. Epidote alteration throughout with moderate to strongly altered section. Weak quartz carbonate veining. Unit is competent to very weakly fractured. No visible sulphides. Lower contact sharp at 30 degrees tca.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		442.90 - 444.20	EP SP WM								
		442.90 - 444.20	Carb VN W								
		442.90 - 444.20	Sil P M								
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		442.90 - 444.20	Frc 40								
444.20	445.60	<b>V2J Andesite</b>									
		Reddish grey with light green spotted epidote altered intervals. Fine grained healed fracture zone. Moderate to strong silicification. Hematized around healed fractures. Epidote altered fragments, along fracture and spotted plagioclase altered section toward lower contact. Quartz carbonate veining occurs throughout. Unit is competent with quartz carbonate along healing fractures. No visible sulphides. Lower contact is gradational to lower epidote altered unit.									
		<b>Alteration Maj:</b>									
		<b>Type/Style/Intensity</b>									
		<b>Comment</b>									
		444.20 - 445.60	Carb VN W								
		444.20 - 445.60	HE P M								
		444.20 - 445.60	Sil P MS								
		<b>Structure Maj.:</b>									
		<b>Type/Core Angle</b>									
		<b>Comment</b>									
		444.20 - 445.60	Frc 60								

## LITHOLOGY REPORT

### - Detailed -

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Project: **NORTH AMERICAN NICKEL**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final</i> <b>Ni</b> (PCT)	<i>Final</i> <b>Cu</b> (PCT)	<i>Final</i> <b>Co</b> (PPM)	<i>Final</i> <b>S</b> (PCT)	<i>Est</i> <b>S</b> (SUL)
445.60	449.30	<b>V2J</b> <b>Andesite</b>									
449.30	455.20	<b>V2J</b> <b>Andesite</b> Light reddish brown and dark green with light green spotted and patchy epidote alteration. Epidote throughout as patches and spotted epidote altered plagioclase. Moderate to strong silicification. Weak quartz carbonate veining. 449.15 to 449.3 recrystallized with segregated felsics and mafics and epidote altered patches. Weakly fractured. No visible sulphides. Lower contact is recrystallized with segregated felsics and mafics.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		449.30 - 455.20	Carb VN W	Minor to weak quartz carbonate veining.							
		449.30 - 455.20	EP SP WM	Predominantly spotted epidote altered plagioclase and lesser patchy epidote.							
		449.30 - 455.20	Sil P MS	Pervasive moderate to strong pervasive silicification.							
		<b>Structure Maj.:</b>	<b>Type/Core Angle</b>	<b>Comment</b>							
		449.30 - 455.20	Frc 40	Fractured at 40, 30 and 50 degrees tca.							
455.20	457.80	<b>I3B</b> <b>Diabase</b> Greenish grey to dark greenish grey, vfg massive. Weak quartz carbonate veining throughout. Weakly fractured. No visible sulphides. Lower contact recrystallized dacite.									
		<b>Alteration Maj:</b>	<b>Type/Style/Intensity</b>	<b>Comment</b>							
		455.20 - 457.80	Carb VN W	Weak quartz carbonate veining.							

## LITHOLOGY REPORT - Detailed -

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		<b>Structure Maj.:</b>									
		455.20 - 457.80									
		<b>Type/Core Angle</b>									
		Frc 5									
		<b>Comment</b>									
		Fractured at 5 and 40 degrees tca.									
457.80	466.00	<b>V1D Dacite</b>									
		Light pinkish grey to reddish grey, vfg massive. Weak to moderate hematization at top of unit adjacent to diabase dyke. Quartz carbonate veining throughout. No visible sulphides. Lower contact is gradational to underlying more mafic unit.									
		<b>Alteration Maj.:</b>									
		457.80 - 466.00									
		457.80 - 466.00									
		<b>Type/Style/Intensity</b>									
		Carb VN WM									
		457.80 - 466.00									
		HE P WM									
		<b>Comment</b>									
		Hematization is moderate to strong at top of unit.									
		<b>Structure Maj.:</b>									
		457.80 - 466.00									
		<b>Type/Core Angle</b>									
		Frc 10									
		<b>Comment</b>									
		Fractured at 10, 50 and 40 degrees tca.									
466.00	495.00	<b>V2J Andesite</b>									
		Light greenish grey to light reddish grey, fg massive. Moderately silicified. Weak hematization fracture related. Epidote alteration of plagioclase. Competent to weakly fractured. No visible sulphides. Unit contains narrow diabase dyklets. 495.0 EOH.									
		<b>Alteration Maj.:</b>									
		466.00 - 495.00									
		466.00 - 495.00									
		466.00 - 495.00									
		466.00 - 495.00									
		<b>Type/Style/Intensity</b>									
		EP SP WM									
		466.00 - 495.00									
		Carb VN W									
		466.00 - 495.00									
		HE F W									
		466.00 - 495.00									
		Sil P M									
		466.00 - 495.00									
		<b>Comment</b>									
		Epidote alteration of plagioclase giving spotted appearance and occasional patches.									
		Weak quartz carbonate veining occurs throughout.									
		Hematization is restricted to fractured sections.									
		Unit is moderately silicified throughout.									

**LITHOLOGY REPORT  
- Detailed -**

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Final Est</i> (SUL)
		<b>Structure Maj.:</b>									
		466.00 - 495.00									
		<b>Type/Core Angle</b>									
		Frc 40									
		<b>Comment</b>									
		Fractured at 40, 50 and 20 degrees tca.									



**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**
**Assay Report (part 1 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)	<i>Ni</i> (100)	<i>Ag</i> (ppm)	<i>Au</i> (ppm)	<i>Au</i> (ppb)	<i>Pd</i> (ppm)	<i>Pd</i> (ppb)	<i>Pt</i> (ppm)	<i>Pt</i> (ppb)	<i>Pulp</i> (SG)	<i>Sgrav</i> (CORE)	<i>Rock</i> (CODE)	<i>og</i> (%)	<i>lithm</i> (%)	<i>Pb</i> (%)	<i>Zn</i> (%)
216.00	217.50	1.50	260682	ALS	SD18318129	02-Jan-19	0.02	0.01	30	0.02	0.10	-	0	0.017	-	0.003	-	0.005	-	-	-	-	NE	0.01	0.01	
217.50	219.00	1.50	260683	ALS	SD18318129	02-Jan-19	0.03	0.01	80	0.02	0.10	-	0	0.025	-	0.003	-	0.005	-	-	-	-	NE	0.01	0.01	
219.00	219.30	0.30	260684	ALS	SD18318129	02-Jan-19	0.07	0.01	80	0.24	2.00	-	0	0.021	-	0.002	-	0.005	-	-	-	-	NE	0.01	0.01	
219.30	219.60	0.30	260685	ALS	SD18318129	02-Jan-19	0.05	0.01	70	0.36	3.00	-	0	0.030	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.02	
219.60	219.90	0.30	260686	ALS	SD18318129	02-Jan-19	0.02	0.00	30	0.07	0.20	-	0	0.020	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.01	
219.90	221.00	1.10	260687	ALS	SD18318129	02-Jan-19	0.03	0.01	60	0.47	3.00	-	0	0.015	-	0.003	-	0.006	-	-	-	-	NE	0.01	0.01	
221.00	221.40	0.40	260688	ALS	SD18318129	02-Jan-19	0.03	0.01	50	0.25	2.00	-	0	0.001	-	0.003	-	0.006	-	-	-	-	NE	0.01	0.01	
221.40	222.50	1.10	260689	ALS	SD18318129	02-Jan-19	0.03	0.00	70	0.06	0.50	-	0	0.001	-	0.002	-	0.006	-	-	-	-	NE	0.01	0.01	
222.50	223.80	1.30	260691	ALS	SD18318129	02-Jan-19	0.03	0.00	60	0.03	0.10	-	0	0.022	-	0.003	-	0.005	-	-	-	-	NE	0.01	0.01	
223.80	225.00	1.20	260692	ALS	SD18318129	02-Jan-19	0.03	0.00	60	0.01	0.10	-	0	0.023	-	0.003	-	0.006	-	-	-	-	NE	0.01	0.01	
271.50	273.00	1.50	260693	ALS	SD18318129	02-Jan-19	0.00	0.00	20	0.01	0.10	-	0	0.020	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00	
273.00	274.50	1.50	260694	ALS	SD18318129	02-Jan-19	0.05	0.01	50	0.26	0.10	-	0	0.025	-	0.006	-	0.006	-	-	-	-	NE	0.01	0.01	
274.50	276.00	1.50	260696	ALS	SD18318129	02-Jan-19	0.03	0.04	90	0.50	0.10	-	0	0.036	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.01	
276.00	277.00	1.00	260697	ALS	SD18318129	02-Jan-19	0.04	0.03	60	0.21	3.00	-	0	0.028	-	0.006	-	0.006	-	-	-	-	NE	0.01	0.02	
277.00	278.00	1.00	260698	ALS	SD18318129	02-Jan-19	0.04	0.00	80	0.01	0.10	-	0	0.018	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.02	
278.00	278.50	0.50	260699	ALS	SD18318129	02-Jan-19	0.09	0.01	50	0.01	5.00	-	0	0.025	-	0.005	-	0.006	-	-	-	-	NE	0.01	0.01	
278.50	279.00	0.50	260700	ALS	SD18318129	02-Jan-19	0.11	0.00	50	0.01	1.00	-	0	0.024	-	0.003	-	0.005	-	-	-	-	NE	0.01	0.01	
279.00	279.40	0.40	260716	ALS	SD18318129	02-Jan-19	0.11	0.00	40	0.02	1.00	-	0	0.047	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
279.40	279.70	0.30	260717	ALS	SD18318129	02-Jan-19	0.12	0.00	100	0.53	5.00	-	0	0.022	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
279.70	280.00	0.30	260718	ALS	SD18318129	02-Jan-19	0.10	0.00	70	0.63	4.00	-	0	0.025	-	0.004	-	0.003	-	-	-	-	NE	0.01	0.01	
280.00	280.30	0.30	260719	ALS	SD18318129	02-Jan-19	0.11	0.00	40	0.50	2.00	-	0	0.023	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
280.30	280.60	0.30	260720	ALS	SD18318129	02-Jan-19	0.11	0.00	50	0.88	4.00	-	0	0.021	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
280.60	281.00	0.40	260721	ALS	SD18318129	02-Jan-19	0.12	0.00	60	0.70	7.00	-	0	0.025	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
281.00	281.40	0.40	260722	ALS	SD18318129	02-Jan-19	0.10	0.00	80	0.47	3.00	-	0	0.028	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01	
281.40	281.70	0.30	260723	ALS	SD18318129	02-Jan-19	0.05	0.01	30	1.02	2.00	-	0	0.036	-	0.008	-	0.006	-	-	-	-	NE	0.01	0.01	
281.70	282.00	0.30	260724	ALS	SD18318129	02-Jan-19	0.04	0.02	50	0.62	1.00	-	0	0.028	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.01	
282.00	282.50	0.50	260725	ALS	SD18318129	02-Jan-19	0.05	0.01	40	0.35	2.00	-	0	0.017	-	0.006	-	0.005	-	-	-	-	NE	0.01	0.01	
282.50	283.00	0.50	260726	ALS	SD18318129	02-Jan-19	0.02	0.01	10	0.04	2.00	-	0	0.023	-	0.007	-	0.006	-	-	-	-	NE	0.01	0.01	
283.00	283.35	0.35	260727	ALS	SD18318129	02-Jan-19	0.04	0.02	30	0.43	0.20	-	0	0.020	-	0.008	-	0.007	-	-	-	-	NE	0.01	0.01	
283.35	284.00	0.65	260728	ALS	SD18318129	02-Jan-19	0.04	0.00	50	0.19	0.10	-	0	0.035	-	0.006	-	0.007	-	-	-	-	NE	0.01	0.01	

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 1 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)	<i>Ni</i> (100)	<i>Ag</i> (ppm)	<i>Au</i> (ppm)	<i>Au</i> (ppb)	<i>Pd</i> (ppm)	<i>Pd</i> (ppb)	<i>Pt</i> (ppm)	<i>Pt</i> (ppb)	<i>Pulp</i> (SG)	<i>Sgrav</i> (CORE)	<i>Rock ogolithm</i> (CODE)	<i>Pb</i> (%)	<i>Zn</i> (%)	
284.00	284.50	0.50	260729	ALS	SD18318129	02-Jan-19	0.02	0.00	30	0.17	0.10	-	0	0.026	-	0.005	-	0.003	-	-	-	-	NE	0.01	0.01
284.50	285.00	0.50	260731	ALS	SD18318129	02-Jan-19	0.04	0.01	30	0.28	1.00	-	0	0.018	-	0.007	-	0.003	-	-	-	-	NE	0.01	0.01
285.00	285.40	0.40	260732	ALS	SD18318129	02-Jan-19	0.04	0.01	30	0.48	2.00	-	0	0.037	-	0.009	-	0.007	-	-	-	-	NE	0.01	0.02
285.40	285.70	0.30	260733	ALS	SD18318129	02-Jan-19	0.03	0.01	40	0.81	1.00	-	0	0.032	-	0.010	-	0.006	-	-	-	-	NE	0.01	0.02
285.70	286.00	0.30	260734	ALS	SD18318129	02-Jan-19	0.03	0.01	50	0.60	2.00	-	0	0.032	-	0.013	-	0.011	-	-	-	-	NE	0.01	0.02
286.00	286.35	0.35	260736	ALS	SD18318129	02-Jan-19	0.03	0.01	20	0.64	3.00	-	0	0.033	-	0.009	-	0.007	-	-	-	-	NE	0.01	0.02
286.35	287.00	0.65	260737	ALS	SD18318129	02-Jan-19	0.01	0.01	20	0.32	2.00	-	0	0.035	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.01
287.00	288.00	1.00	260738	ALS	SD18318129	02-Jan-19	0.02	0.01	30	0.27	0.50	-	0	0.033	-	0.004	-	0.005	-	-	-	-	NE	0.01	0.01
288.00	289.00	1.00	260739	ALS	SD18318129	02-Jan-19	0.03	0.01	10	0.36	0.50	-	0	0.040	-	0.003	-	0.003	-	-	-	-	NE	0.01	0.01
289.00	290.00	1.00	260740	ALS	SD18318129	02-Jan-19	0.05	0.00	30	0.32	0.10	-	0	0.040	-	0.006	-	0.003	-	-	-	-	NE	0.01	0.01
290.00	291.00	1.00	260741	ALS	SD18318129	02-Jan-19	0.05	0.00	10	0.16	0.10	-	0	0.031	-	0.007	-	0.006	-	-	-	-	NE	0.01	0.01
291.00	292.00	1.00	260742	ALS	SD18318129	02-Jan-19	0.05	0.00	30	0.06	0.10	-	0	0.030	-	0.006	-	0.007	-	-	-	-	NE	0.01	0.01
357.00	358.50	1.50	260743	ALS	SD18318129	02-Jan-19	0.00	0.02	10	0.10	2.00	-	0	0.058	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
358.50	360.00	1.50	260744	ALS	SD18318129	02-Jan-19	0.00	0.01	10	0.06	1.00	-	0	0.046	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
360.00	361.50	1.50	260745	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.14	2.00	-	0	0.033	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
361.50	363.00	1.50	260746	ALS	SD18318129	02-Jan-19	0.00	0.00	20	0.10	1.00	-	0	0.042	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
363.00	364.50	1.50	260747	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	0.50	-	0	0.009	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
364.50	366.00	1.50	260748	ALS	SD18318129	02-Jan-19	0.00	0.01	20	0.06	0.10	-	0	0.055	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
366.00	367.00	1.00	260749	ALS	SD18318129	02-Jan-19	0.00	0.01	10	0.06	0.50	-	0	0.060	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
367.00	368.00	1.00	260751	ALS	SD18318129	02-Jan-19	0.00	0.02	10	0.04	2.00	-	0	0.042	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
368.00	369.00	1.00	260752	ALS	SD18318129	02-Jan-19	0.00	0.02	10	0.07	1.00	-	0	0.037	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
407.50	409.00	1.50	260753	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.03	0.10	-	0	0.024	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
409.00	410.10	1.10	260754	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	0.50	-	0	0.024	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
410.10	410.60	0.50	260756	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	2.00	-	0	0.024	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
410.60	411.00	0.40	260757	ALS	SD18318129	02-Jan-19	0.00	0.02	10	0.08	0.10	-	0	0.043	-	0.002	-	0.003	-	-	-	-	NE	0.01	0.00
411.00	412.50	1.50	260758	ALS	SD18318129	02-Jan-19	0.00	0.01	10	0.02	0.10	-	0	0.022	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
412.50	413.10	0.60	260759	ALS	SD18318129	02-Jan-19	0.00	0.13	10	0.17	0.50	-	0	0.306	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
413.10	413.40	0.30	260760	ALS	SD18318129	02-Jan-19	0.01	1.85	90	2.28	10.00	-	4	1.535	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
413.40	414.00	0.60	260761	ALS	SD18318129	02-Jan-19	0.00	0.06	10	0.10	0.10	-	0	0.036	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
414.00	415.50	1.50	260762	ALS	SD18318129	02-Jan-19	0.00	0.01	10	0.01	0.20	-	0	0.035	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 1 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Final Ni</i> (PCT)	<i>Final Cu</i> (PCT)	<i>Final Co</i> (PPM)	<i>Final S</i> (PCT)	<i>Est</i> (SUL)	<i>Ni</i> (100)	<i>Ag</i> (ppm)	<i>Au</i> (ppm)	<i>Au</i> (ppb)	<i>Pd</i> (ppm)	<i>Pd</i> (ppb)	<i>Pt</i> (ppm)	<i>Pt</i> (ppb)	<i>Pulp</i> (SG)	<i>Sgrav</i> (CORE)	<i>Rock og lithm.</i> (CODE)	<i>Pb</i> (%)	<i>Zn</i> (%)	
415.50	417.00	1.50	260763	ALS	SD18318129	02-Jan-19	0.00	0.01	20	0.28	0.10	-	0	0.038	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
417.00	418.20	1.20	260764	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.03	0.10	-	0	0.026	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
418.20	419.50	1.30	260765	ALS	SD18318129	02-Jan-19	0.01	0.00	10	0.01	0.10	-	0	0.027	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
419.50	420.10	0.60	260766	ALS	SD18318129	02-Jan-19	0.00	0.00	30	0.06	0.10	-	0	0.025	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
420.10	421.00	0.90	260767	ALS	SD18318129	02-Jan-19	0.00	0.00	20	0.01	0.10	-	0	0.022	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
421.00	422.50	1.50	260768	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	0.10	-	0	0.013	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
422.50	424.00	1.50	260769	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	0.30	-	0	0.021	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
424.00	425.00	1.00	260771	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.01	0.10	-	0	0.019	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
425.00	426.00	1.00	260772	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.06	0.10	-	0	0.036	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
426.00	426.30	0.30	260773	ALS	SD18318129	02-Jan-19	0.00	0.01	20	0.30	3.00	-	0	0.055	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
426.30	426.80	0.50	260774	ALS	SD18318129	02-Jan-19	0.00	0.00	20	0.08	0.10	-	0	0.034	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
426.80	427.20	0.40	260776	ALS	SD18318129	02-Jan-19	0.00	0.00	20	0.32	0.20	-	0	0.033	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
427.20	427.50	0.30	260777	ALS	SD18318129	02-Jan-19	0.00	0.00	10	0.12	2.00	-	0	0.030	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
427.50	427.80	0.30	260778	ALS	SD18318129	02-Jan-19	0.00	0.00	70	0.39	0.10	-	0	0.100	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00
427.80	428.10	0.30	260779	ALS	SD18318129	02-Jan-19	0.02	0.00	20	0.02	0.10	-	0	0.029	-	0.001	-	0.003	-	-	-	-	NE	0.01	0.00

**FULL ANALYTICAL REPORT**  
**- Assay -**

Hole Number **PC-18-022**

Project: **NORTH AMERICAN NICKEL**

Project Number: **1**

**Assay Report (part 2 of 1)**

<i>From</i> (m)	<i>To</i> (m)	<i>Length</i> (m)	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i> (ppm)	<i>Ni</i> (ppm)	<i>Cu</i> 'OG_PCTOG_PCTICP_PCTDG1_PC'DG2_PC'	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
216.00	217.50	1.50	260682	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
217.50	219.00	1.50	260683	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
219.00	219.30	0.30	260684	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
219.30	219.60	0.30	260685	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
219.60	219.90	0.30	260686	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
219.90	221.00	1.10	260687	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
221.00	221.40	0.40	260688	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
221.40	222.50	1.10	260689	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
222.50	223.80	1.30	260691	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
223.80	225.00	1.20	260692	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
271.50	273.00	1.50	260693	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
273.00	274.50	1.50	260694	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
274.50	276.00	1.50	260696	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
276.00	277.00	1.00	260697	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
277.00	278.00	1.00	260698	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
278.00	278.50	0.50	260699	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
278.50	279.00	0.50	260700	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
279.00	279.40	0.40	260716	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
279.40	279.70	0.30	260717	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
279.70	280.00	0.30	260718	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
280.00	280.30	0.30	260719	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
280.30	280.60	0.30	260720	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
280.60	281.00	0.40	260721	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
281.00	281.40	0.40	260722	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
281.40	281.70	0.30	260723	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
281.70	282.00	0.30	260724	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
282.00	282.50	0.50	260725	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
282.50	283.00	0.50	260726	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
283.00	283.35	0.35	260727	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-

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**Assay Report (part 2 of 1)**

<i>From</i>	<i>To</i>	<i>Length</i>	<i>Sample #</i>	<i>Lab</i>	<i>Certificate #</i>	<i>Date of Certificate</i>	<i>Cu</i>	<i>Ni</i>	<i>Cu</i>	<i>Ni</i>	<i>S</i>	<i>S</i>	<i>S</i>
<i>(m)</i>	<i>(m)</i>	<i>(m)</i>					<i>(ppm)</i>	<i>(ppm)</i>	<i>OG_PCTOG_PCTICP_PCTDG1_PC</i>	<i>OG_PCTOG_PCTICP_PCTDG2_PC</i>			
283.35	284.00	0.65	260728	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
284.00	284.50	0.50	260729	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
284.50	285.00	0.50	260731	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
285.00	285.40	0.40	260732	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
285.40	285.70	0.30	260733	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
285.70	286.00	0.30	260734	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
286.00	286.35	0.35	260736	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
286.35	287.00	0.65	260737	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
287.00	288.00	1.00	260738	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
288.00	289.00	1.00	260739	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
289.00	290.00	1.00	260740	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
290.00	291.00	1.00	260741	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
291.00	292.00	1.00	260742	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
357.00	358.50	1.50	260743	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
358.50	360.00	1.50	260744	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
360.00	361.50	1.50	260745	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
361.50	363.00	1.50	260746	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
363.00	364.50	1.50	260747	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
364.50	366.00	1.50	260748	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
366.00	367.00	1.00	260749	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
367.00	368.00	1.00	260751	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
368.00	369.00	1.00	260752	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
407.50	409.00	1.50	260753	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
409.00	410.10	1.10	260754	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
410.10	410.60	0.50	260756	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
410.60	411.00	0.40	260757	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
411.00	412.50	1.50	260758	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
412.50	413.10	0.60	260759	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
413.10	413.40	0.30	260760	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
413.40	414.00	0.60	260761	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-

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414.00	415.50	1.50	260762	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
415.50	417.00	1.50	260763	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
417.00	418.20	1.20	260764	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
418.20	419.50	1.30	260765	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
419.50	420.10	0.60	260766	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
420.10	421.00	0.90	260767	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
421.00	422.50	1.50	260768	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
422.50	424.00	1.50	260769	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
424.00	425.00	1.00	260771	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
425.00	426.00	1.00	260772	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
426.00	426.30	0.30	260773	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
426.30	426.80	0.50	260774	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
426.80	427.20	0.40	260776	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
427.20	427.50	0.30	260777	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
427.50	427.80	0.30	260778	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-
427.80	428.10	0.30	260779	ALS	SD18318129	02-Jan-19	-	-	-	-	-	-	-



crone

## Crone Pulse-EM Survey

North American Nickel  
Post Creek Property

*Geophysical Survey & Logistics Report  
November 26 – December 9, 2018*



Conducted by:  
Crone Geophysics & Exploration Ltd.



crone



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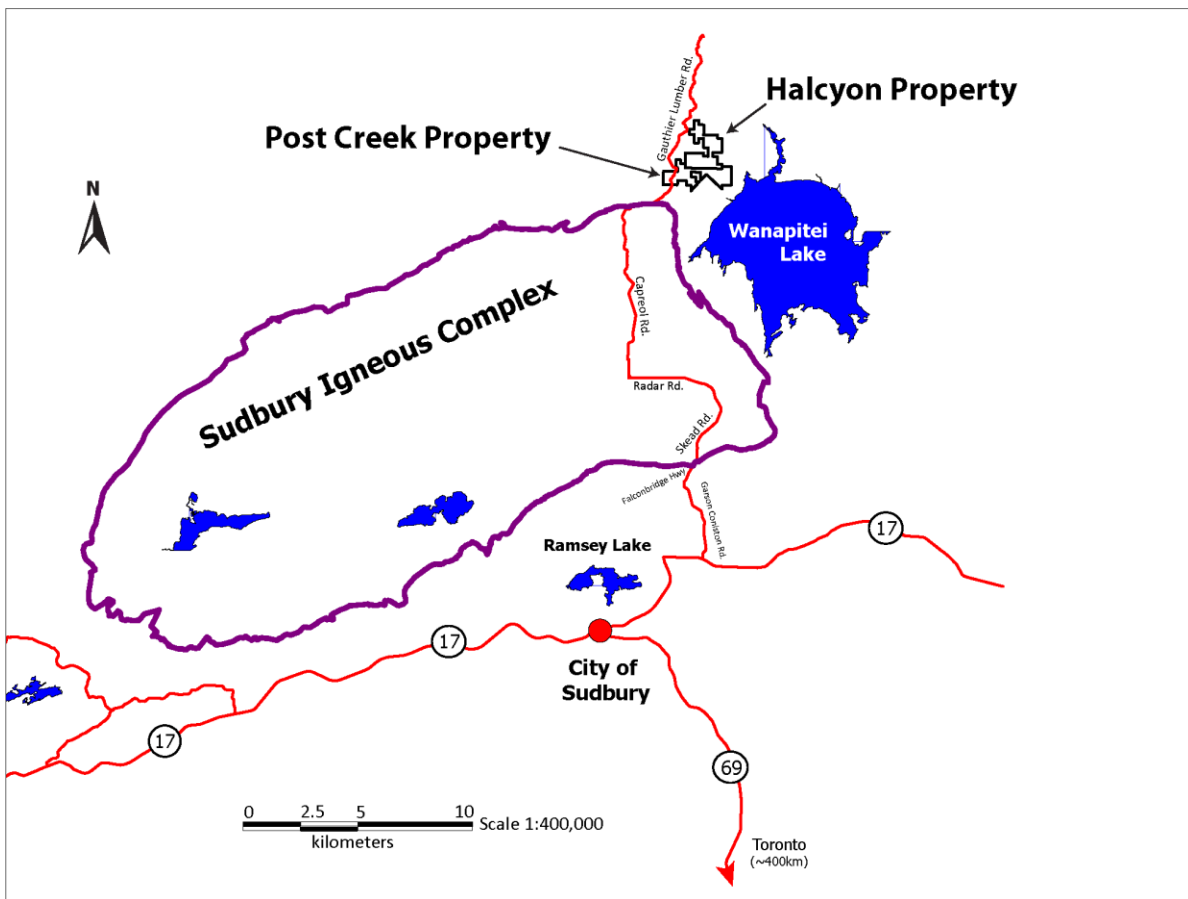


## INTRODUCTION

Crone Geophysics & Exploration Limited was contracted by North American Nickel to conduct borehole electromagnetic surveys on its Post Creek property located in Sudbury ON, Canada. This report summarizes the geophysical work carried out through November 26 – December 9, 2018.

Two (2) holes utilizing two (2) transmitter loops were surveyed during this period. The appendices to this report contain page size plan maps, section maps, linear scale data profiles, logarithmic scale data profiles, and step response profiles.

Figure 1 provides a general location map of the project property.



**Figure 1:** Generalized map of the Sudbury area illustrating the location of the Post Creek and Halcyon properties and the road network utilized to access the claims.

**FIGURE 1: LOCATION MAP FOR THE POST CREEK PROPERTY, SUDBURY ON, CANADA.**

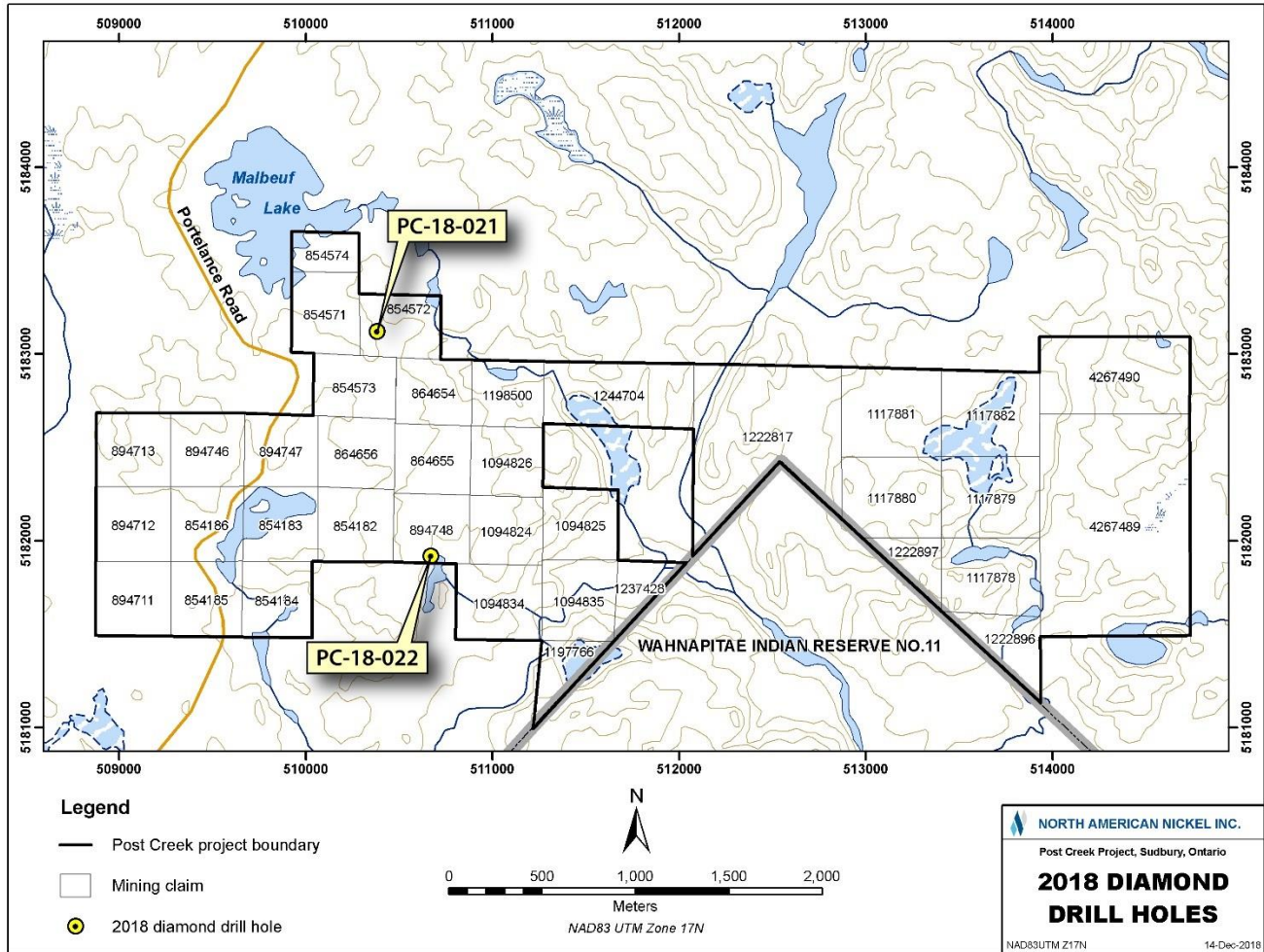


FIGURE 2: BOREHOLE LOCATION MAP FOR THE HOLES SURVEYED AT THE POST CREEK PROPERTY, SUDBURY ON, CANADA.

## PERSONNEL

The personnel involved in this project during the reporting period include:

Survey Operator: Keith Falardeau

Data Processing: Mark Hunter

Report: Keith Falardeau



## EQUIPMENT



### Pulse-EM Transmitter

- 4.8kW for up to 30 amps in single or 60 amps in dual modes
- Timebases: 8.33ms to 2000ms
- Ramp Settings: Fast Ramp, 0.5ms, 1.0ms or 1.5ms
- Powered by standard motor generator
- Current control and monitoring with optional loop damping
- Auto Shutdown and grounded case for safety



### Pulse-EM CDR3 Receiver

- 24-Bit full waveform sampling
- 3-Component simultaneous acquisition
- High resolution rugged color LCD touchscreen
- Driven by Windows© programmable software
- Crone *Smartstacking* algorithm
- Sampling rate: 100K samples/second
- Next generation precision clock synchronization



### Pulse-EM Induction Coil Probes

- Measures dB/dt in 3 Components
- Ferrite Cored Induction Sensor
- Pressure tested to 2800m
- Radtool Orientation with 3 Axis Magnetometer and 3 Axis Accelerometer

## SURVEY METHODS

Crone Pulse-EM is a time domain electromagnetic method in which a precise pulse of current with a controlled linear shut off is transmitted through a large loop of wire on the ground and the rate of decay (dB/dt) of the induced secondary field is measured across a series of time windows during the off-time. The electromotive force (EMF) created by the sudden turn-off of the current induces eddy currents in nearby conductive material, generating a





secondary electromagnetic field. When the primary field is terminated, this electromagnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the quality and size of the conductor.

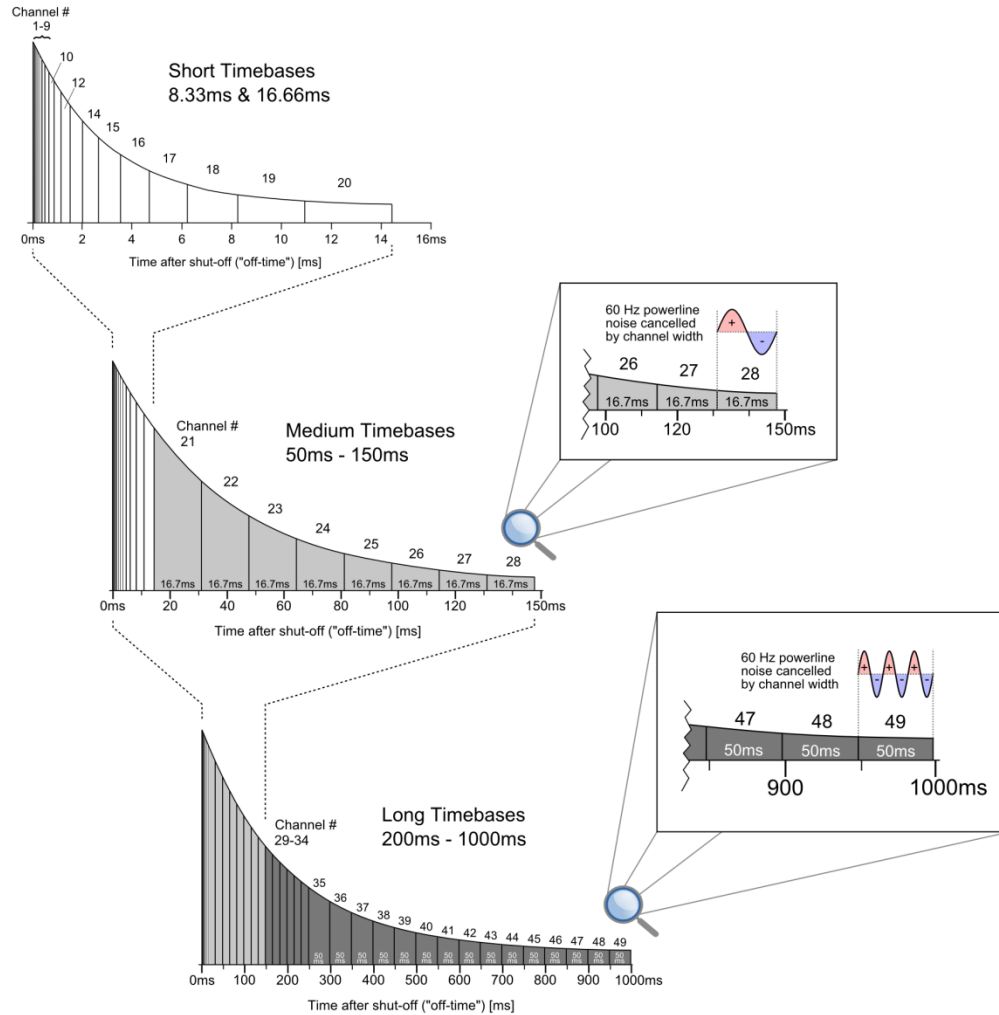


FIGURE 3: STANDARD CHANNEL CONFIGURATIONS.

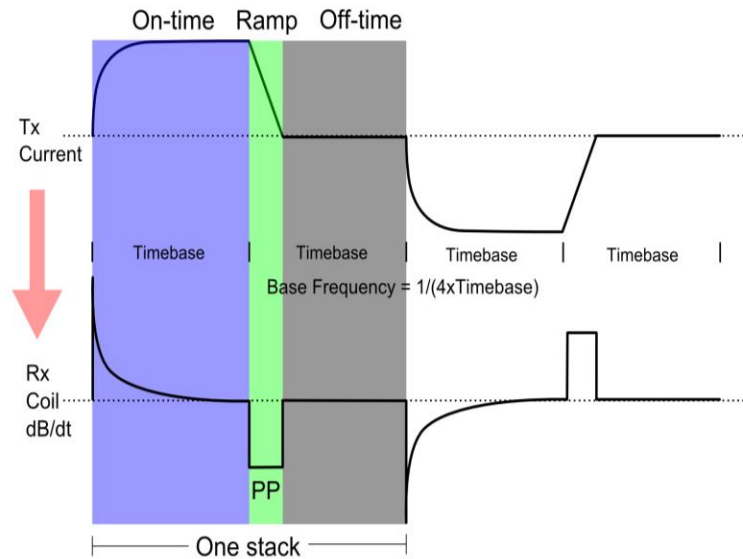


FIGURE 4: STANDARD CRONE PULSE-EM WAVEFORM.

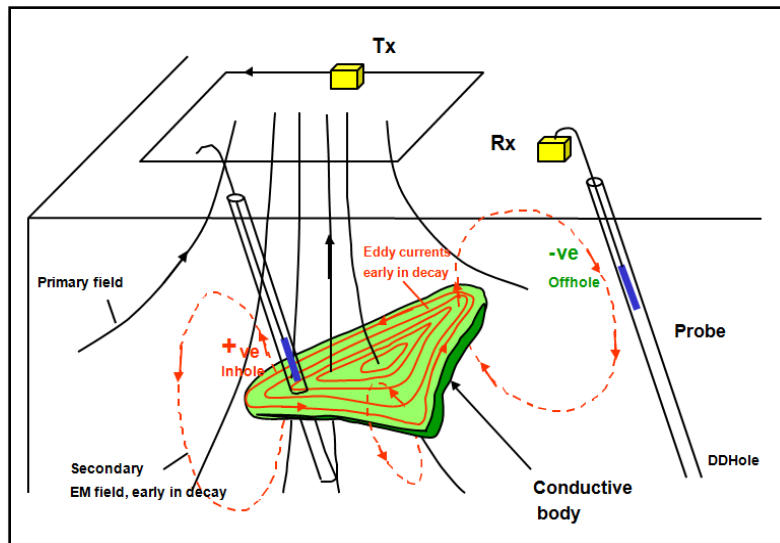


FIGURE 5: REPRESENTATION OF FUNDAMENTAL EM THEORY OF A BOREHOLE SURVEY.

A 3D borehole Pulse-EM system was assembled in which the axial component (Z) and cross component (XY) of the induced secondary field were measured with a Crone borehole induction coil probe. The Z component detects any in-hole or off-hole anomalies and gives information on size, conductivity, and distances to the edge of conductors. The XY components measure two orthogonal components of the EM field in a plane orientated at right angles to the borehole. These results give directional information to the center of the conductive body. Data is usually collected at a nominal sample interval of 10m. Data units are nT/s.

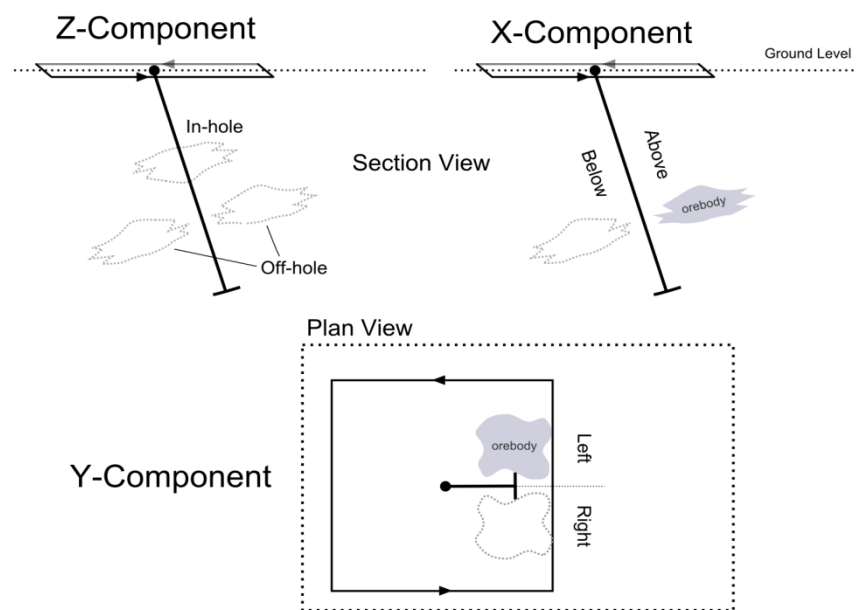


FIGURE 6: REPRESENTATION OF THE SPATIAL COMPONENTS MEASURED BY THE 3D BOREHOLE PULSE EM PROBE.

In addition to measuring the standard Primary Pulse channel in the Tx shut-off ramp and the off-time channels, the Step Response was also calculated. Step Response requires accurate geometrical control in which the loop position and the hole geometry are accurately determined. Positional information was collected using a sub-meter capable GPS and is provided in the Nad83 datum utilizing the UTM Zone 17N projection. Borehole geometry was determined by the Crone Rad-tool. The Step Response is widely regarded as a very important tool in the search for high conductance massive sulphides.

The calculated Step Response values are binned into an S1 channel (from 0.5T to T, where T is the time base), an S2 channel (from 0.25T to 0.5T), an S3 channel (from 0.125T to 0.25T) and an S4 channel (from 0.0625T to 0.125T). The S1 channel is normalized to the theoretical primary field, while S2, S3 and S4 are normalized to S1. The S1 value is used to identify responses from highly conductive sources. In the absence of any conductors, the primary field should equal the theoretical field for a given component. In the case of generally resistive host rock and poor conductors, the S1 value will be very close or equal to the theoretical field for a given component.



## DATA ACQUISITION PARAMETERS

**TABLE 1: BOREHOLE SURVEY TRANSMITTER LOOP COVERAGE.**

Tx Loop	Property / Target	Size (m)	Corner Coordinates UTM Zone 17N, Nad83
LP-PC21	Post Creek	350x500	510457E, 5182968N 510955E, 5182959N 510951E, 5183244N 510482E, 5183281N
LP-PC22	Post Creek	300x400	510600E, 5182157N 510186E, 5182175N 510207E, 5181896N 510607E, 5181885N

**TABLE 2: BOREHOLE SURVEY COVERAGE**

Hole	Zone	Tx Loop	Time base (ms)	Off Time Channels	Ramp (ms)	Current (A)	Station		Length (m)	Comp
							From	To		
PC-18-021	Post Creek	LP-PC21	50	22	1.5	25	10	470	460	XYZ
PC-18-022	Post Creek	LP-PC22	50	22	1.5	25	80	490	410	XYZ



TABLE 3: CHANNEL CONFIGURATION FOR THE 50.00 MS TIMEBASE USING 22 CHANNELS.

Channel	Start (ms)	Finish (ms)	Channel	Start (ms)	Finish (ms)
PP	-0.200	-0.100			
1	0.050	0.060	2	0.060	0.080
3	0.080	0.110	4	0.110	0.150
5	0.150	0.200	6	0.200	0.270
7	0.270	0.360	8	0.360	0.480
9	0.480	0.640	10	0.640	0.850
11	0.850	1.130	12	1.130	1.500
13	1.500	1.990	14	1.990	2.640
15	2.640	3.510	16	3.510	4.660
17	4.660	6.190	18	6.190	8.220
19	8.220	10.920	20	10.920	14.400
21	14.400	31.060	22	31.060	47.730

## PRODUCTION SUMMARY

TABLE 4: PRODUCTION SUMMARY.

Date	Type of Day	Comments
Nov 26, 2018	Mob	Mob from Mississauga to Sudbury
Nov 27, 2018	Survey	Laid loop LP-PC21
Nov 28, 2018	Survey	GPS'd loop LP-PC21, surveyed xyz PC-18-021 during evening/night
Nov 29, 2018	Standby	Standby from late survey the night before
Nov 30, 2018	Testing	Equipment testing for the office
Dec 1, 2018	Looping/demob	Picked up loop LP-PC21 and demob from Sudbury to Mississauga
Dec 6, 2018	Mob	Mob from Mississauga to Sudbury
Dec 7, 2018	Looping	Laid and GPS'd loop LP-PC22
Dec 8, 2018	Survey	Surveyed xyz PC-18-022
Dec 9, 2018	Looping	Picked up loop LP-PC22
Dec 10, 2018	Demob	Demob from Sudbury to Mississauga

Respectfully submitted,

**Keith Falardeau, B.Sc.**

Geophysical Technician

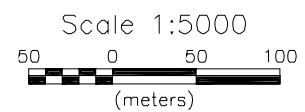
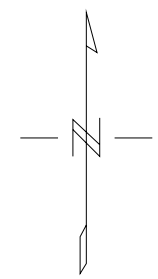
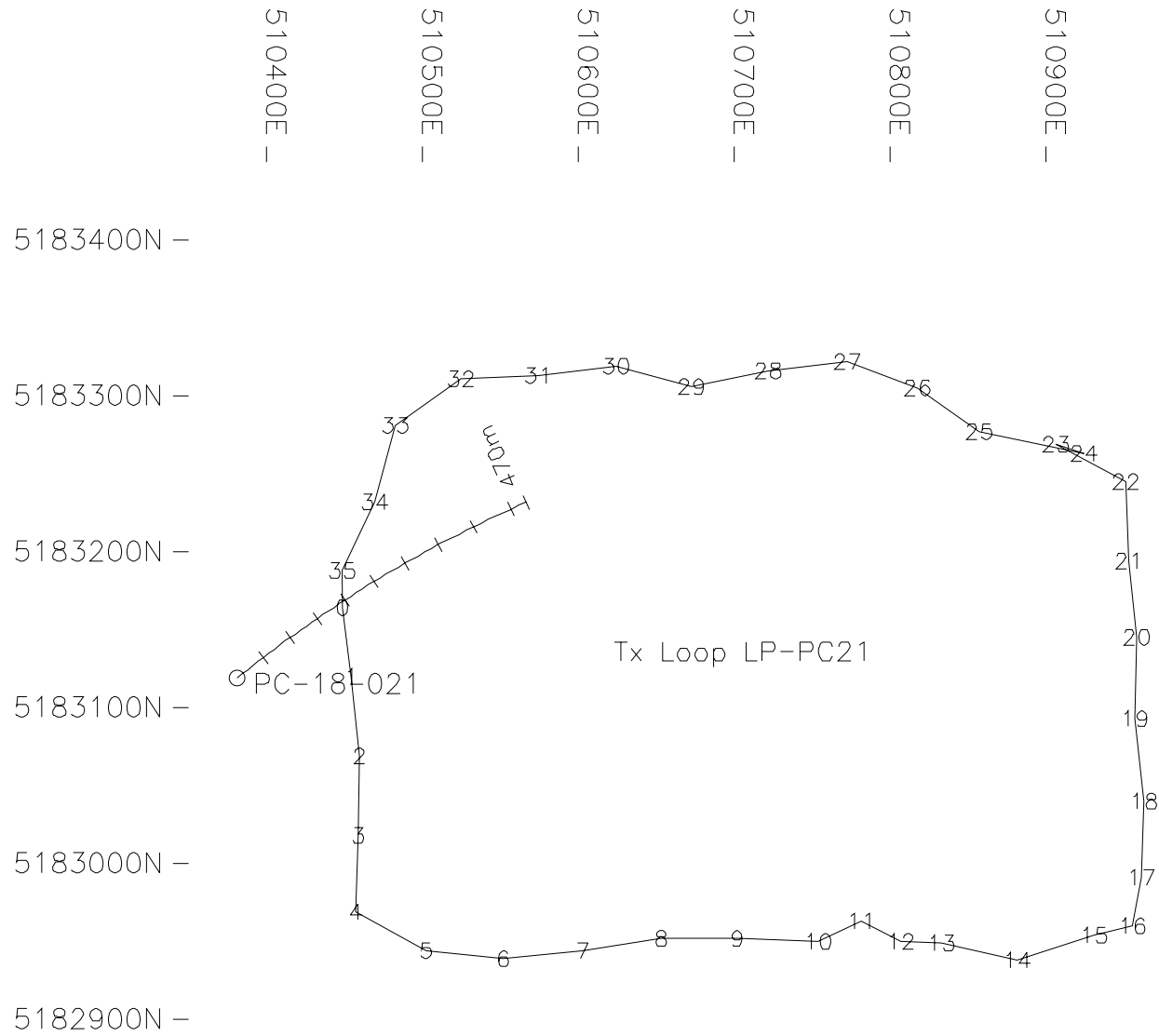
Crone Geophysics & Exploration Ltd.





APPENDIX 1: PLAN AND SECTION MAPS





*North American Nickel*  
Post Creek

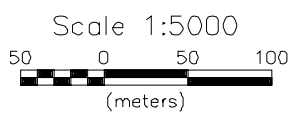
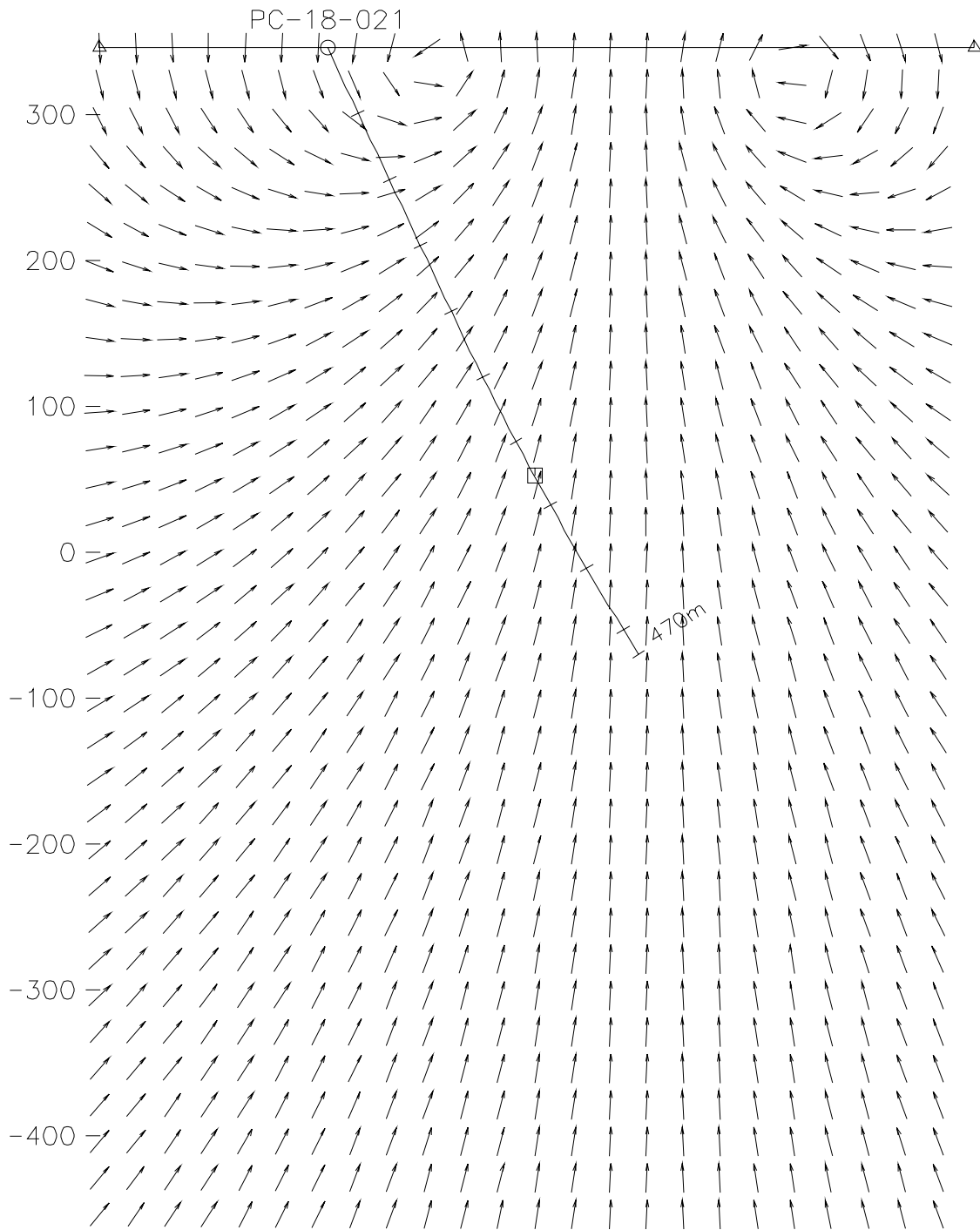
3-D Borehole Pulse EM Survey  
Borehole & Loop Location Map

Hole: PC-18-021  
Survey Date: November 28, 2018

*Crone Geophysics & Exploration Ltd.*

510278E, 5183000N

510725E, 5183400N

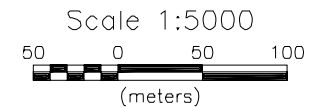
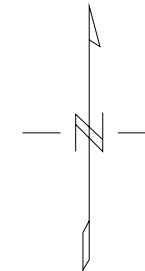
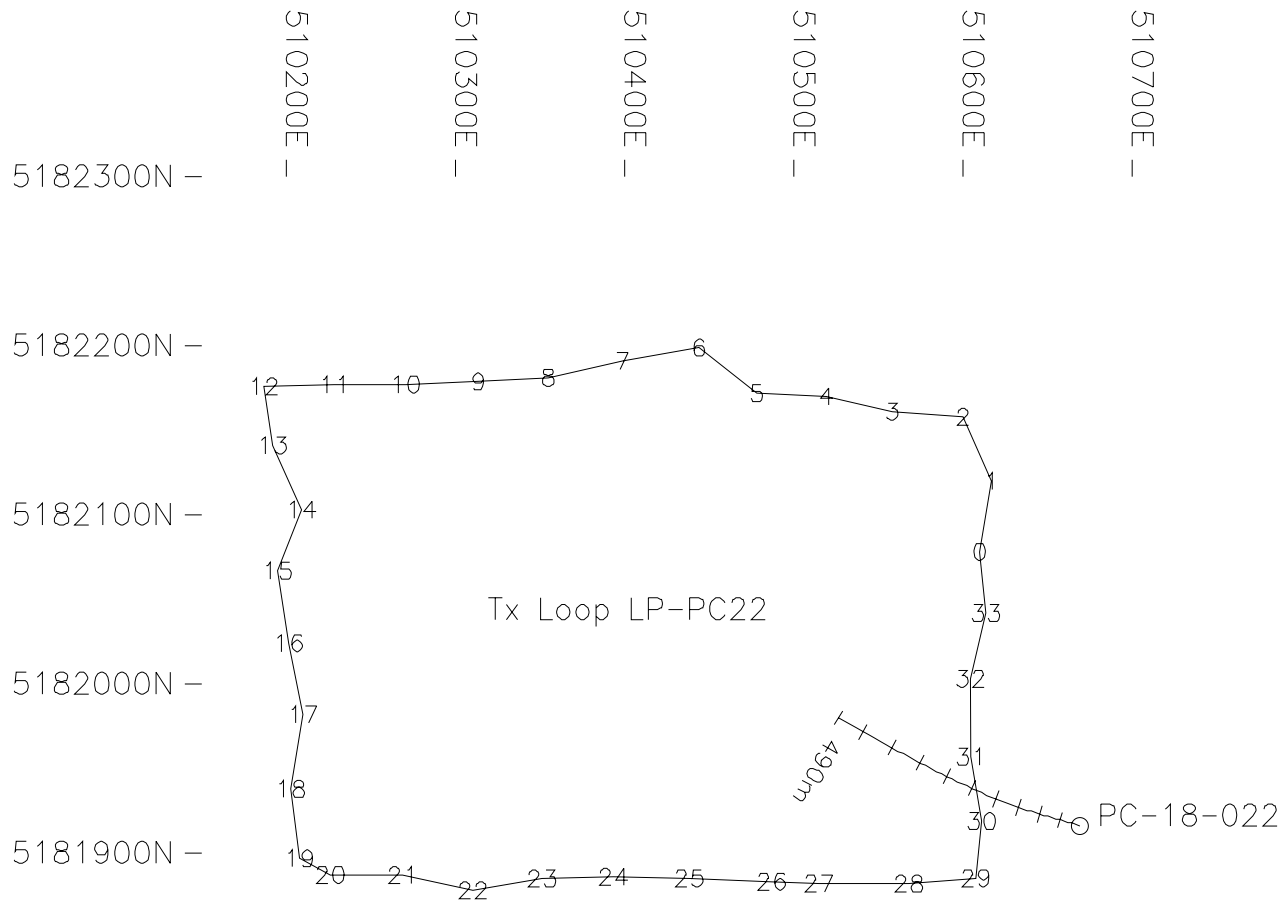


*North American Nickel*  
Post Creek

3-D Borehole Pulse EM Survey  
Hole Section with Primary Field

Hole: PC-18-021      Loop: LP-PC21  
Survey Date: November 28, 2018

*Crone Geophysics & Exploration Ltd.*

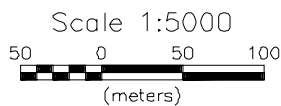
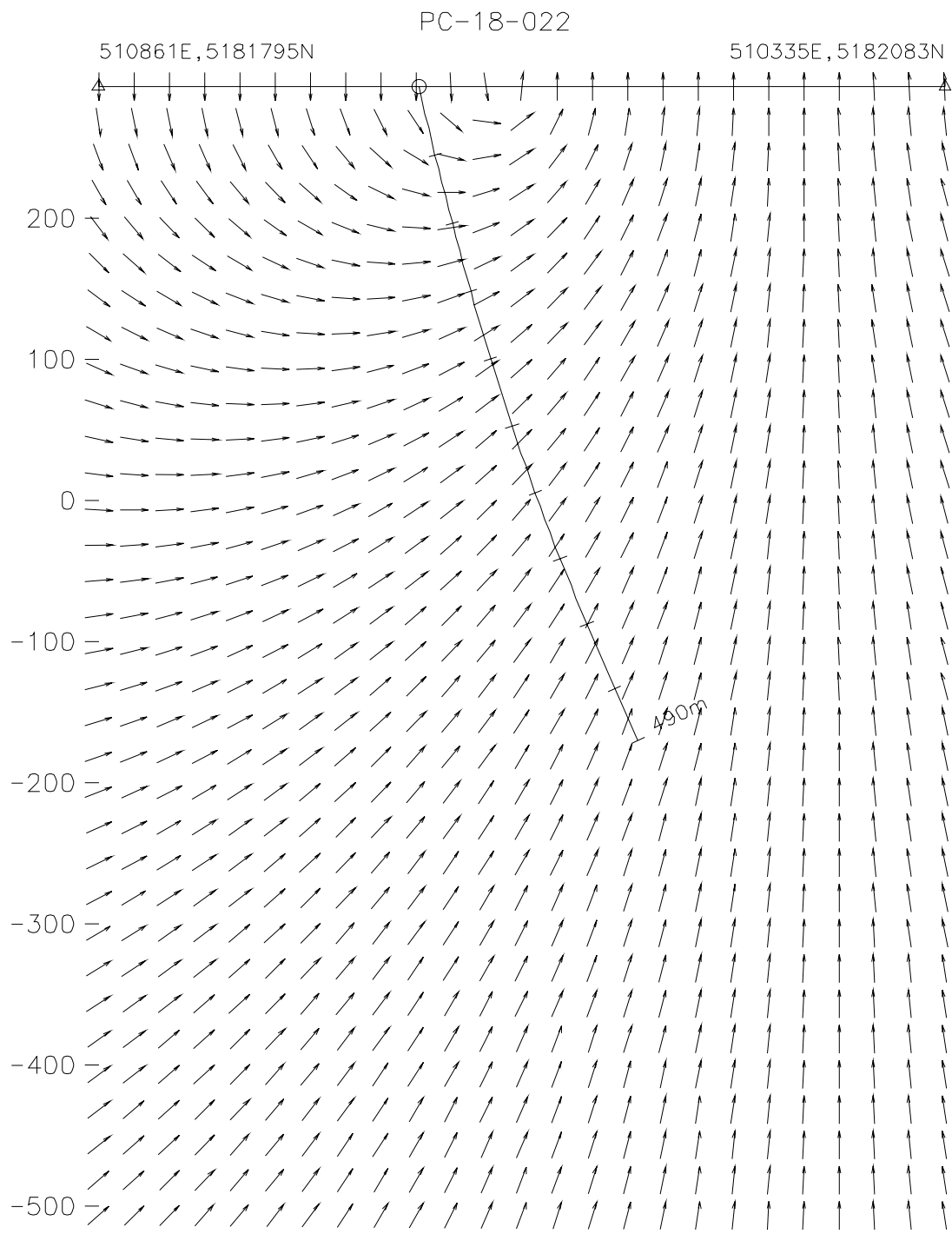


*North American Nickel  
Post Creek*

3-D Borehole Pulse EM Survey  
Borehole & Loop Location Map

Hole: PC-18-022  
Survey Date: December 8, 2018

*Crone Geophysics & Exploration Ltd.*



*North American Nickel  
Post Creek*

3-D Borehole Pulse EM Survey  
Hole Section with Primary Field

Hole: PC-18-022, Loop: LP-PC22

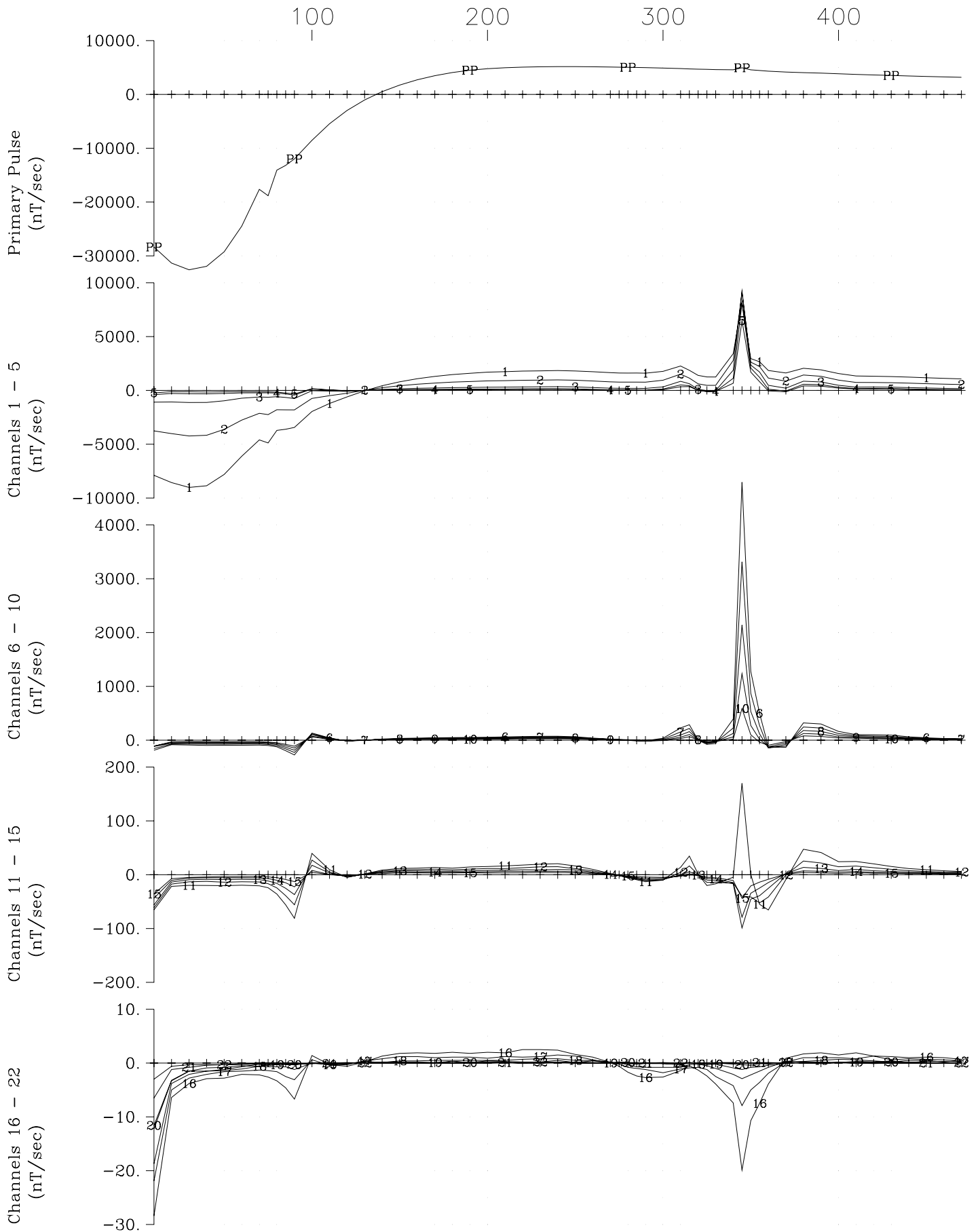
Survey Date: December 8, 2018

*Crone Geophysics & Exploration Ltd.*

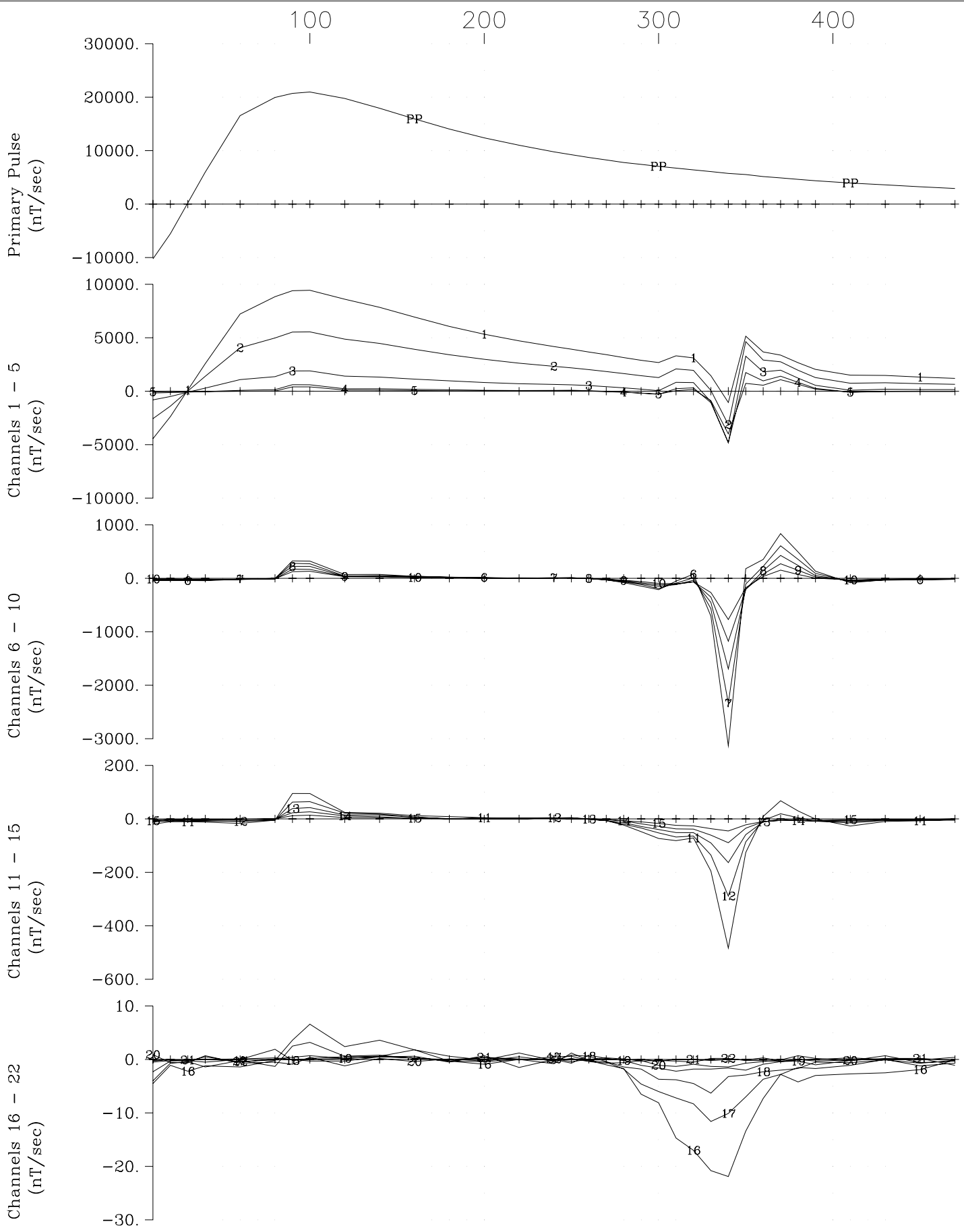


APPENDIX 2: LINEAR-SCALE PULSE-EM DATA PROFILES



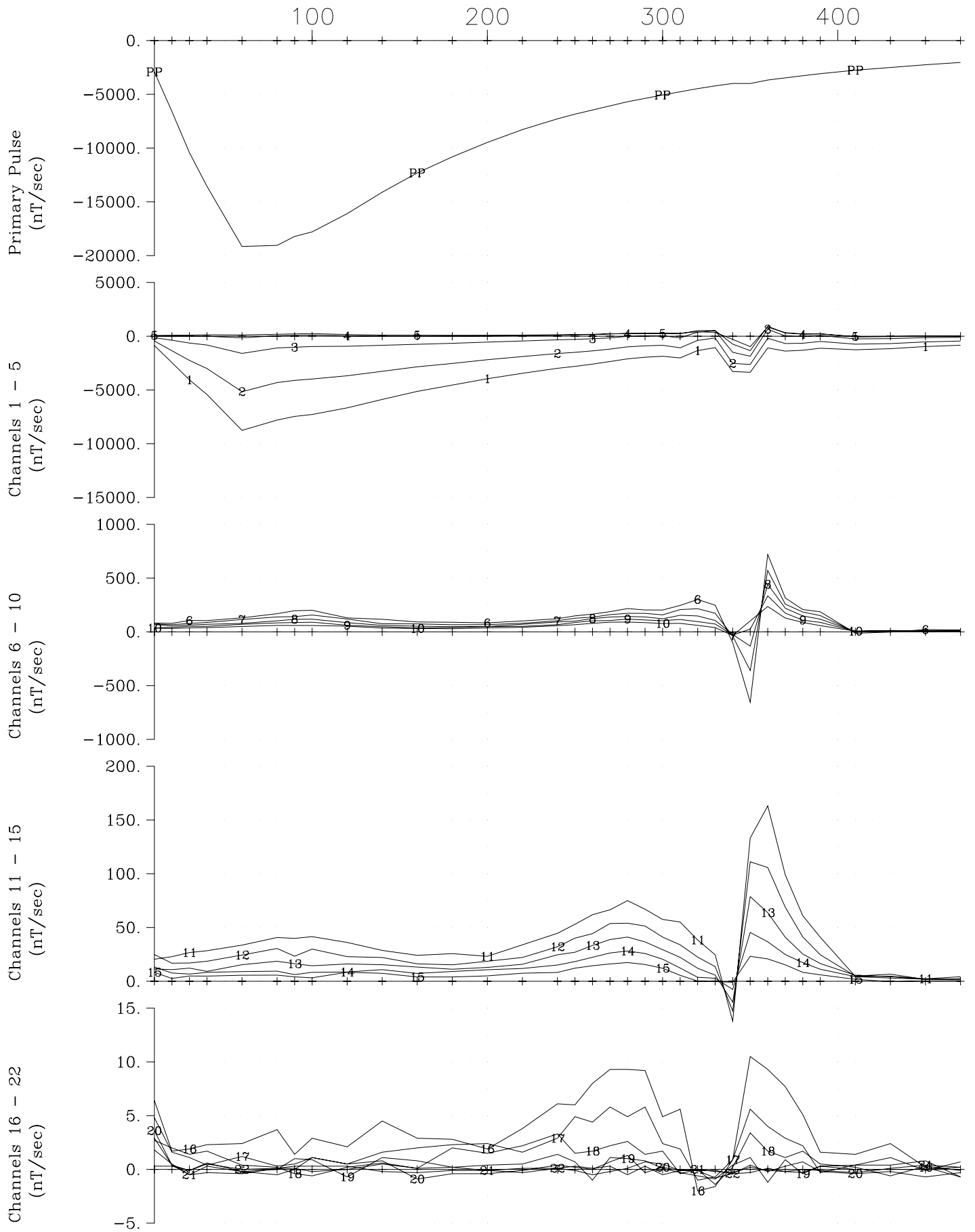


North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 Z Component  
 Crone Geophysics & Exploration Ltd.

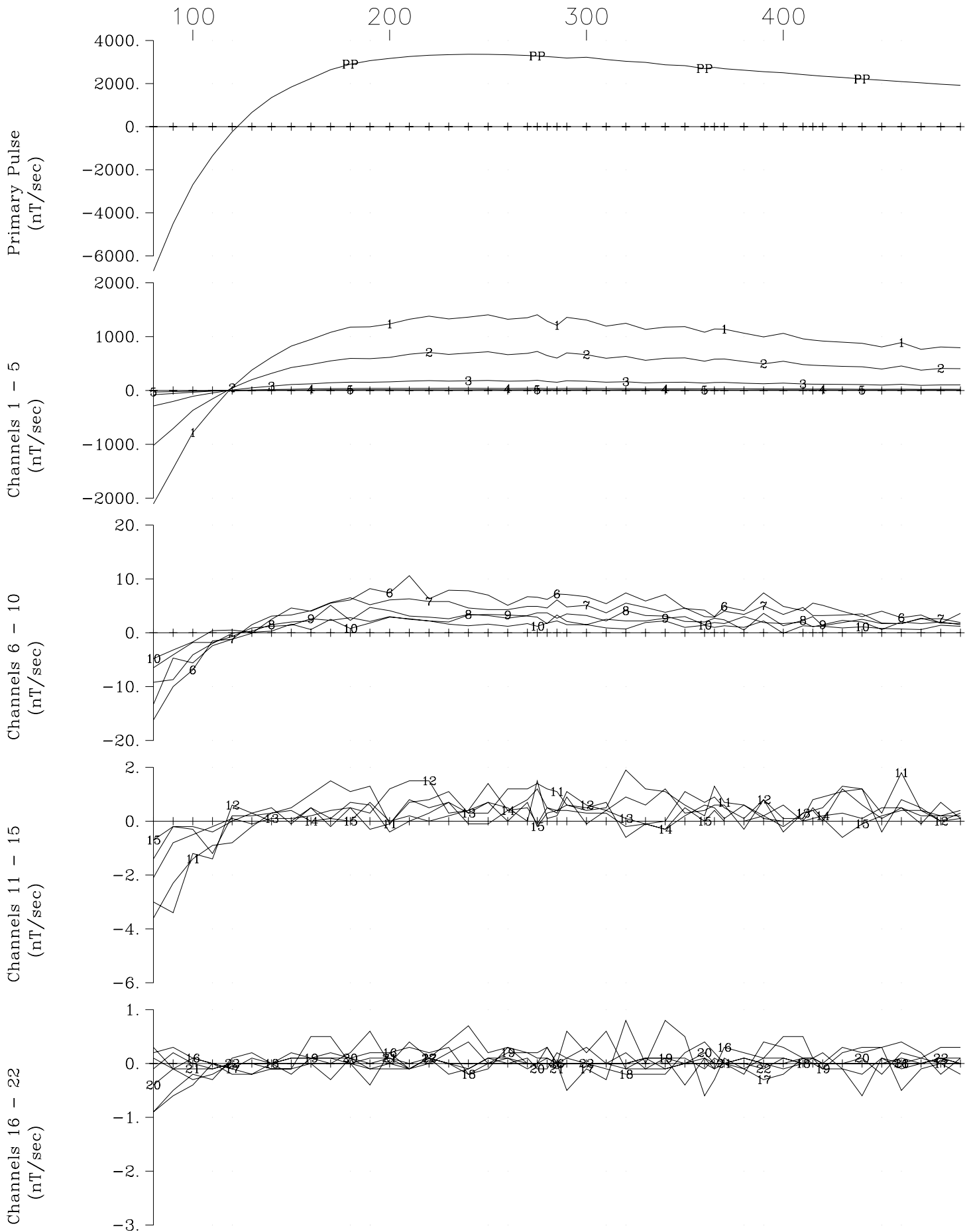


North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 X Component  
 Crone Geophysics & Exploration Ltd.

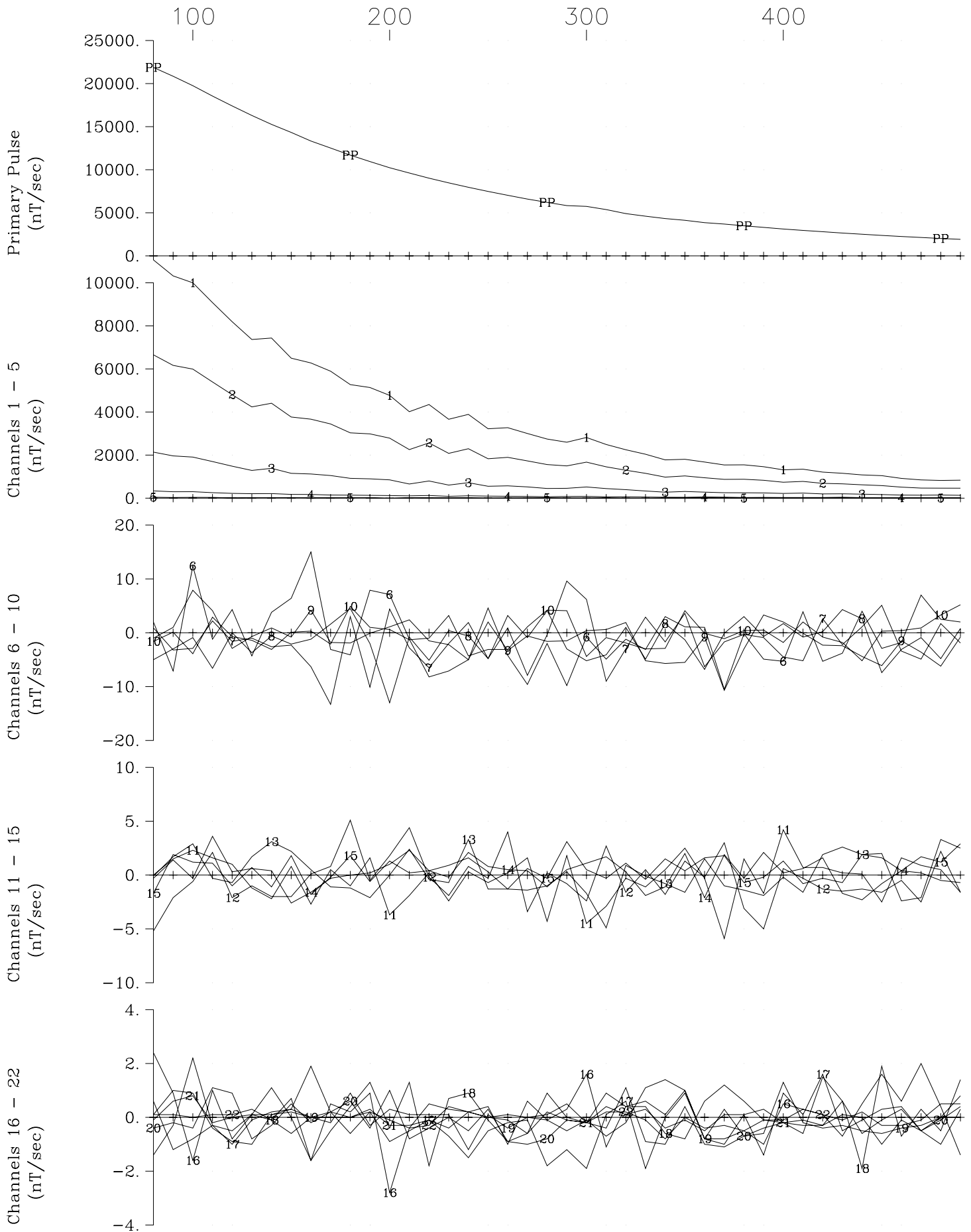




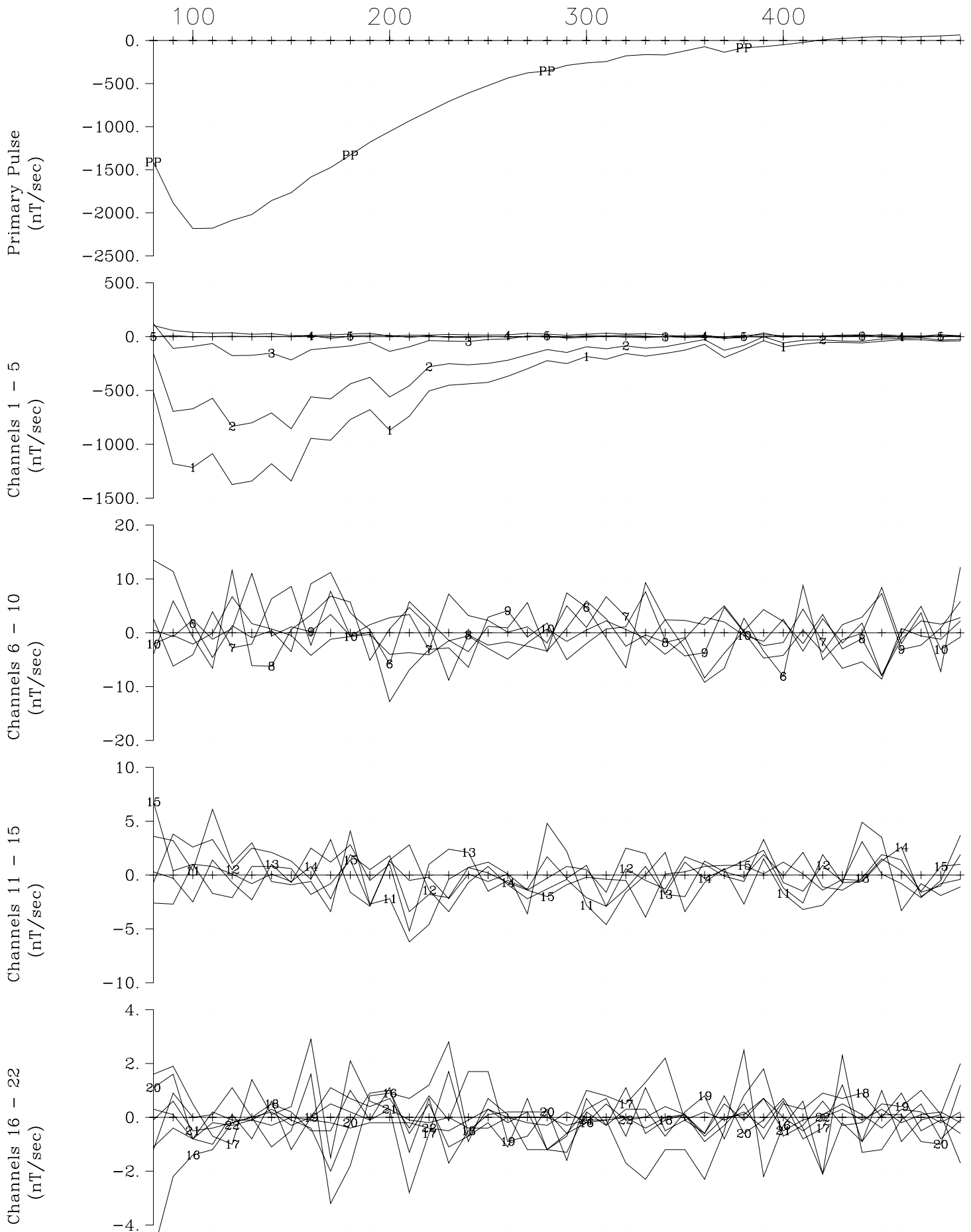
North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 Y Component  
 Crone Geophysics & Exploration Ltd.



North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 Z Component  
 Crone Geophysics & Exploration Ltd.



North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 X Component  
 Crone Geophysics & Exploration Ltd.



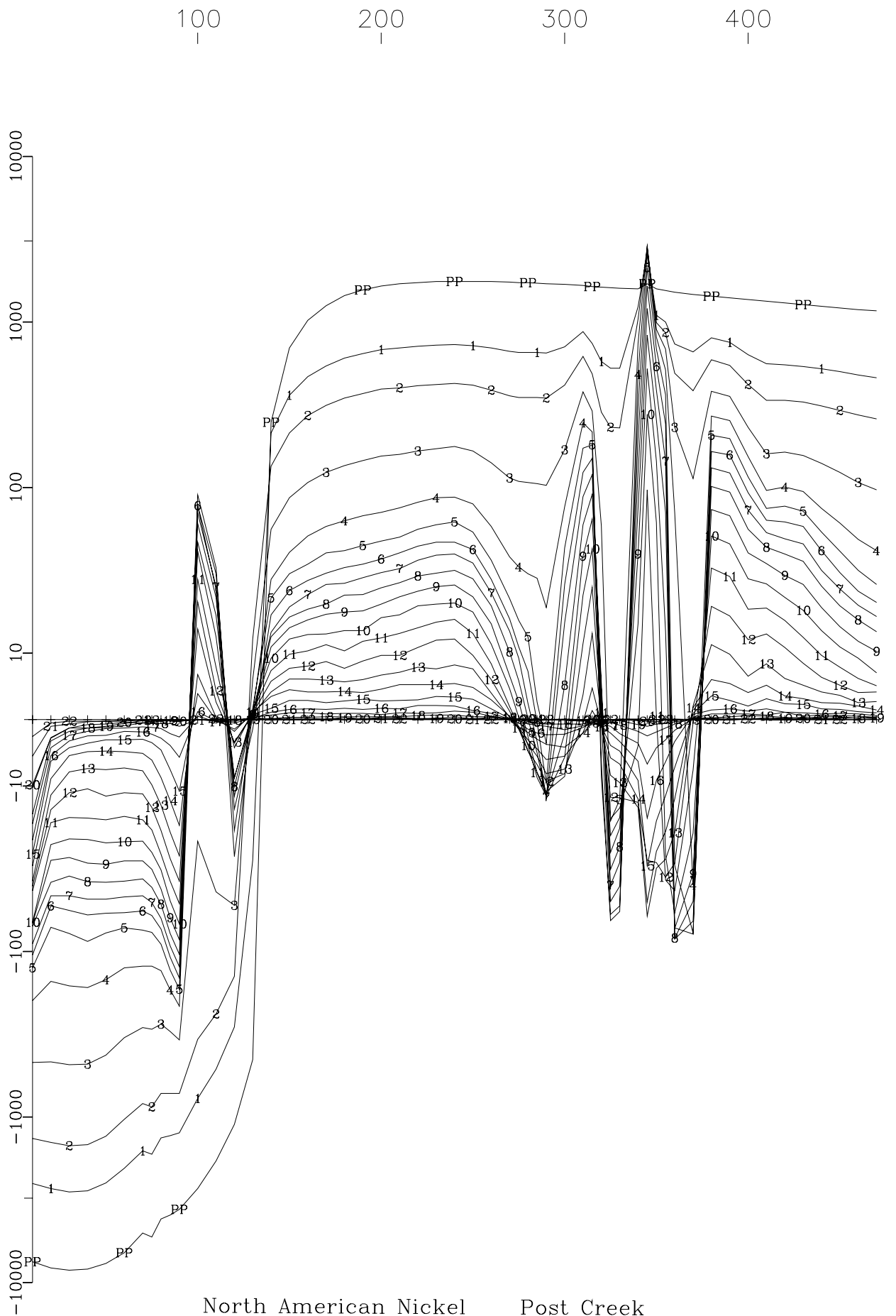
North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 Y Component  
 Crone Geophysics & Exploration Ltd.



APPENDIX 3: LOGARITHMIC-SCALE PULSE-EM DATA PROFILES

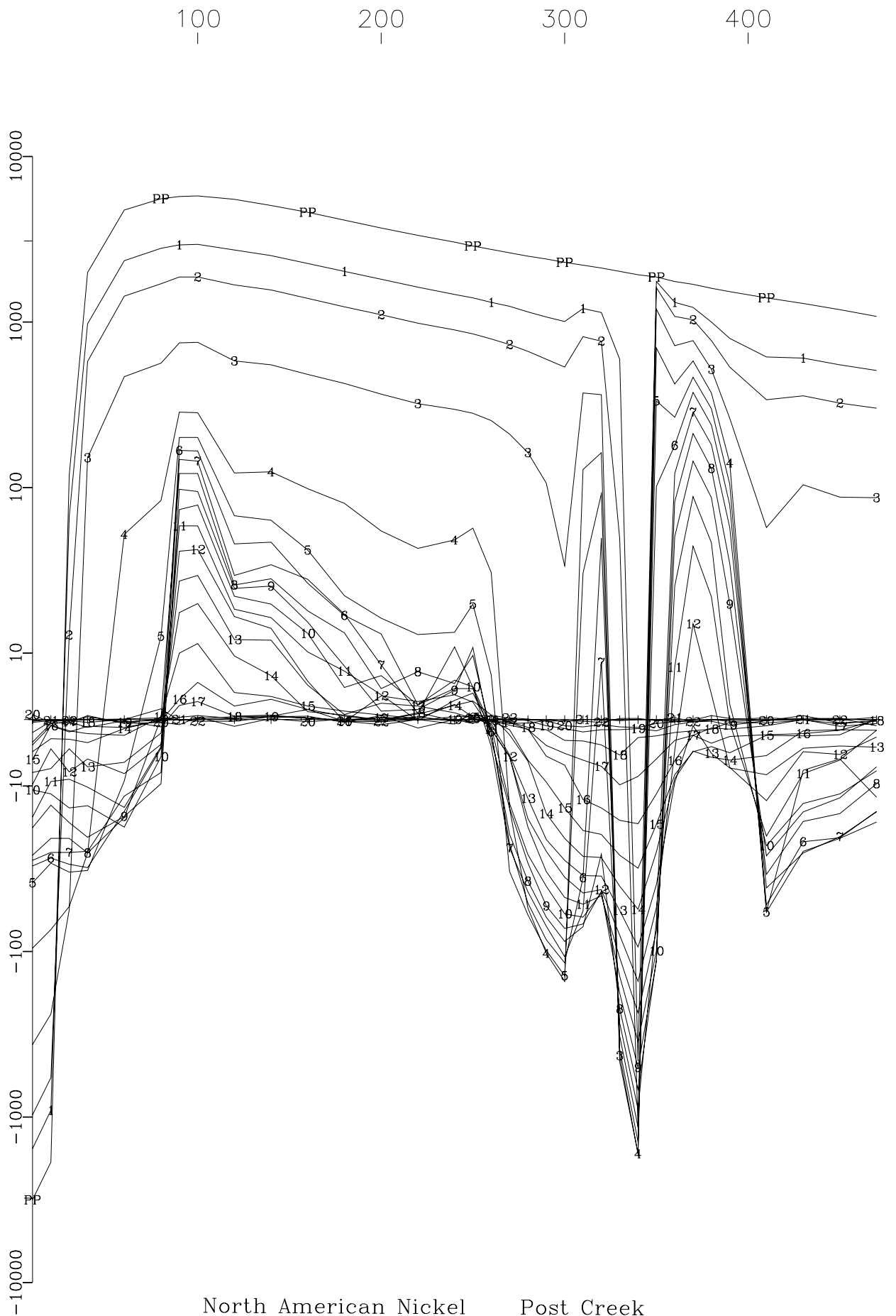


Primary Pulse and 22 Off-time Channels  
(nT/sec)



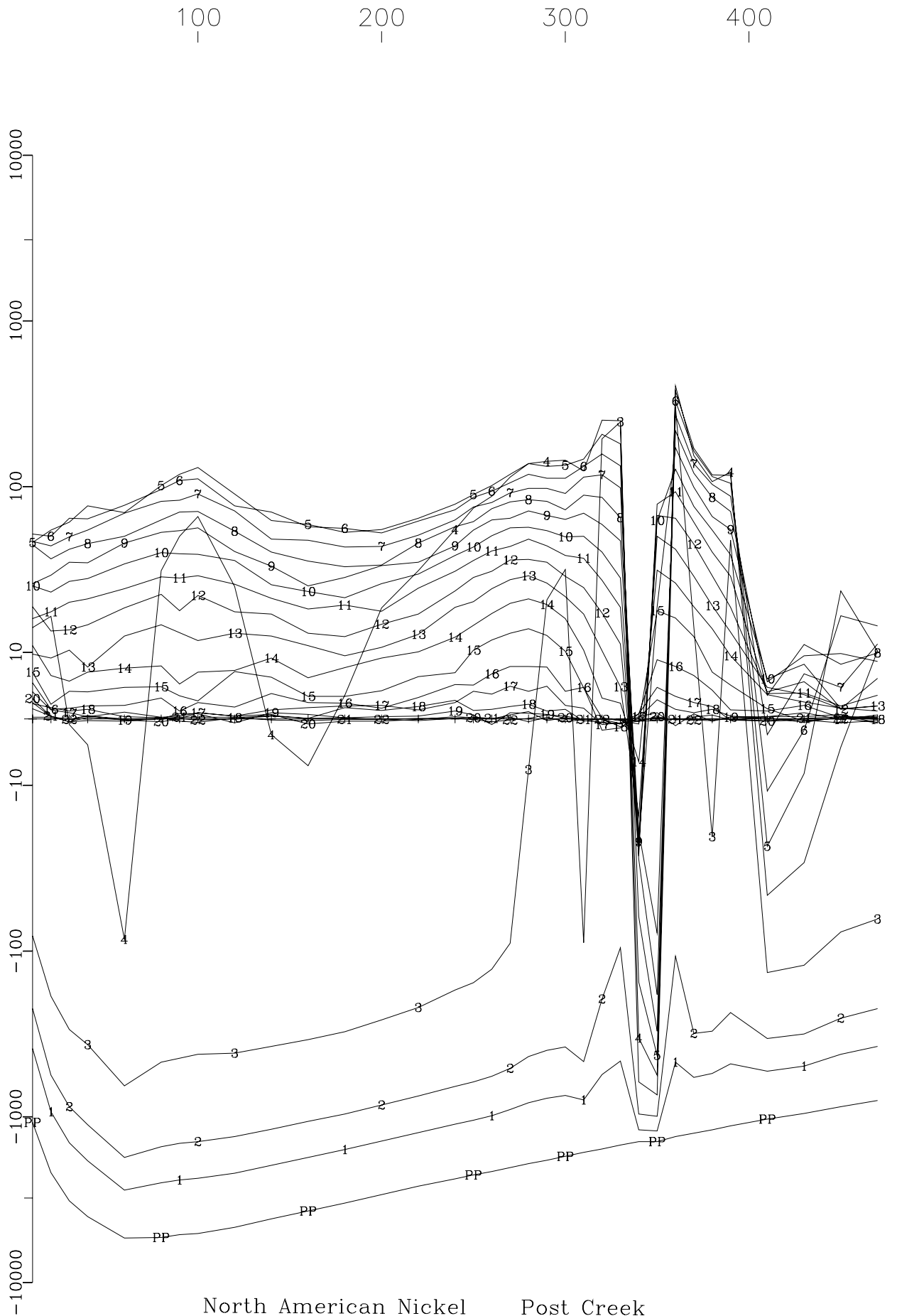
North American Nickel Post Creek  
Loop LP-PC21, Hole PC-18-021 Z Component  
Crone Geophysics & Exploration Ltd.

Primary Pulse and 22 Off-time Channels  
(nT/sec)



North American Nickel Post Creek  
Loop LP-PC21, Hole PC-18-021 X Component  
Crone Geophysics & Exploration Ltd.

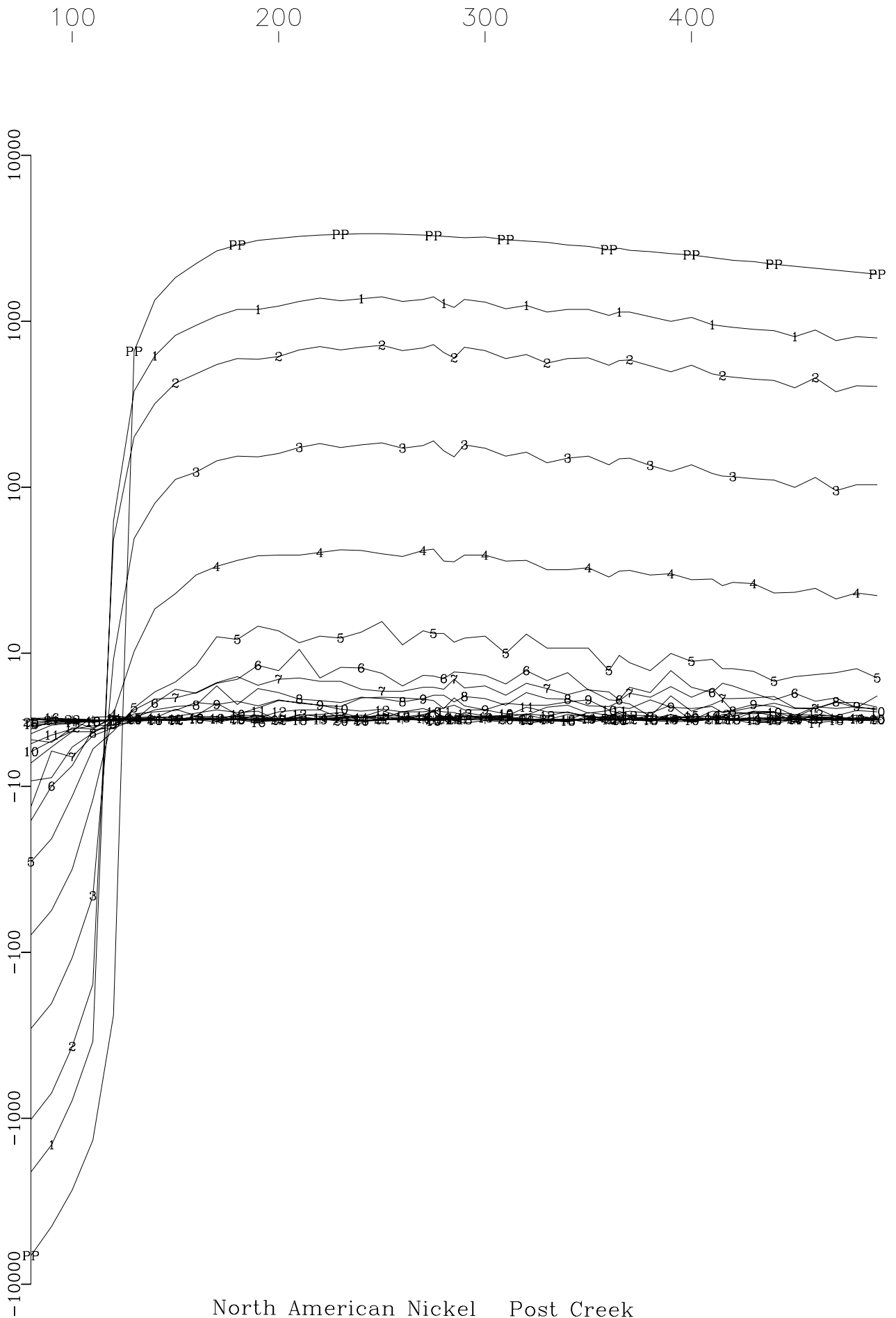
Primary Pulse and 22 Off-time Channels  
(nT/sec)



North American Nickel Post Creek  
Loop LP-PC21, Hole PC-18-021 Y Component  
Crone Geophysics & Exploration Ltd.

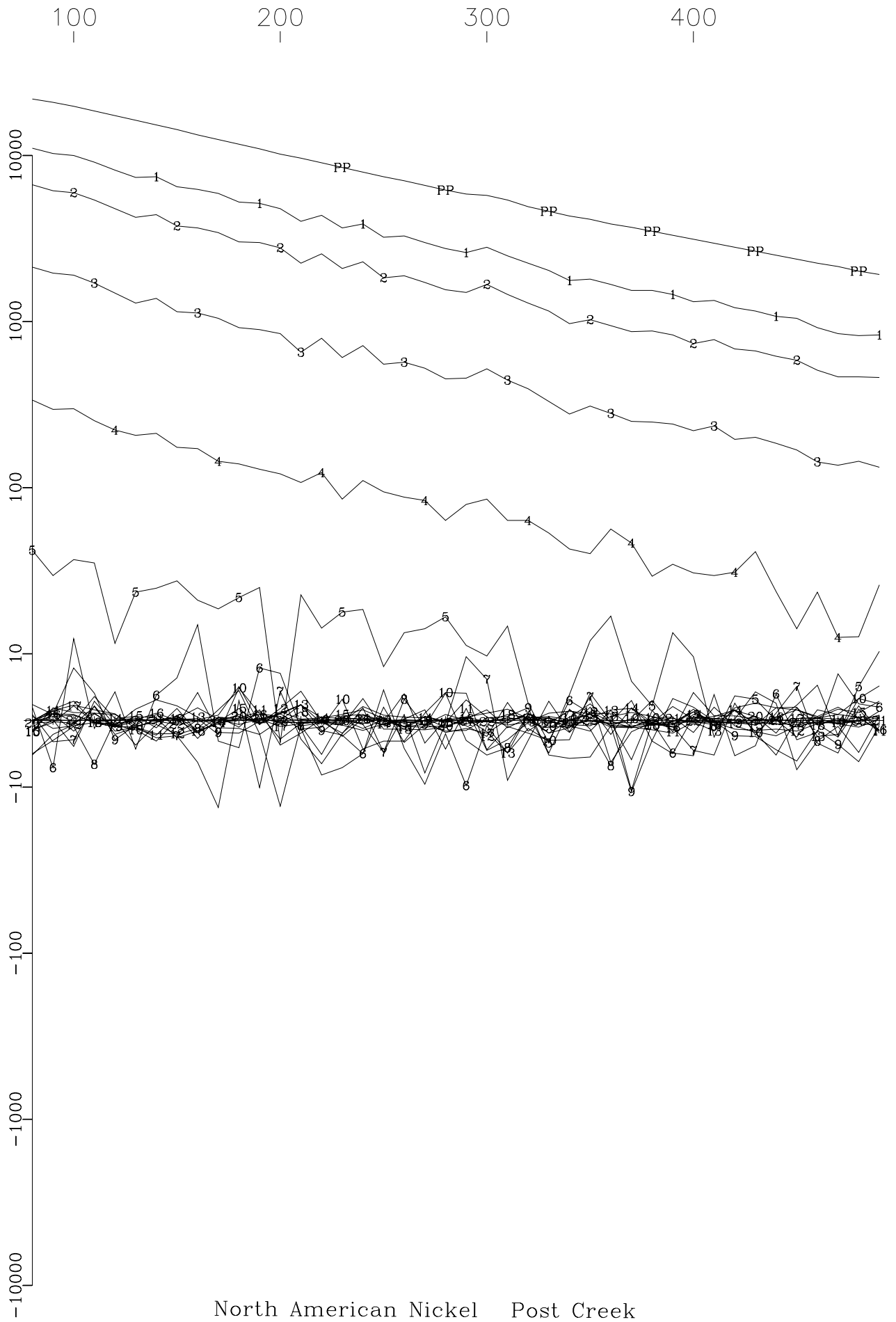


Primary Pulse and 22 Off-time Channels  
(nT/sec)



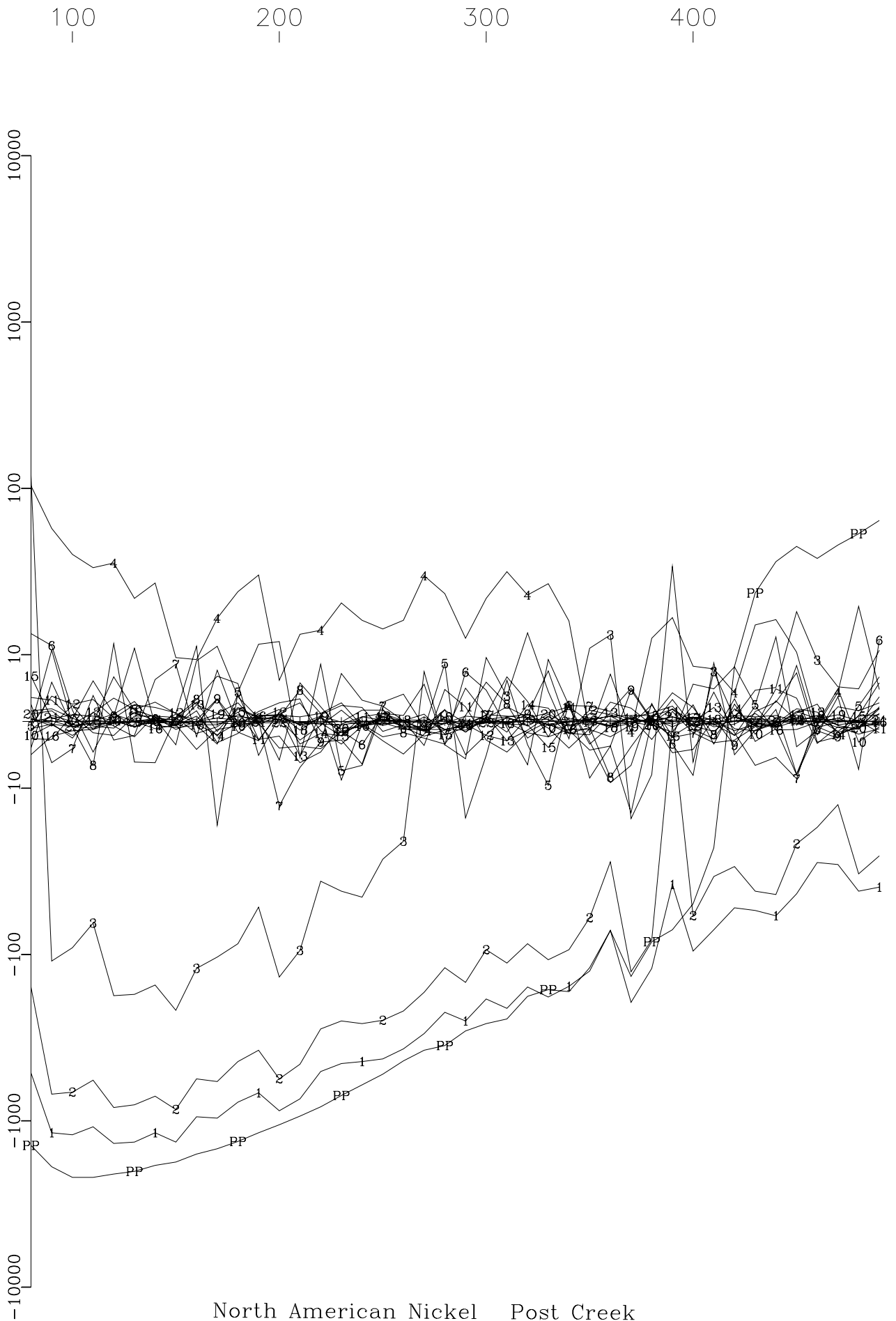
North American Nickel Post Creek  
Loop LP-PC22, Hole PC-18-022 Z Component  
Crone Geophysics & Exploration Ltd.

Primary Pulse and 22 Off-time Channels  
(nT/sec)



North American Nickel Post Creek  
Loop LP-PC22, Hole PC-18-022 X Component  
Crone Geophysics & Exploration Ltd.

Primary Pulse and 22 Off-time Channels  
(nT/sec)



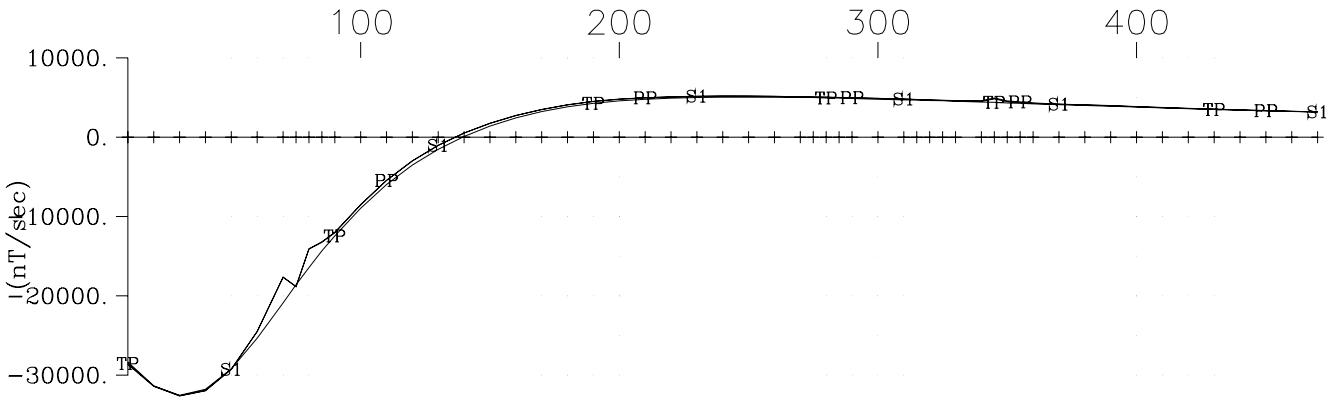
North American Nickel Post Creek  
Loop LP-PC22, Hole PC-18-022 Y Component  
Crone Geophysics & Exploration Ltd.



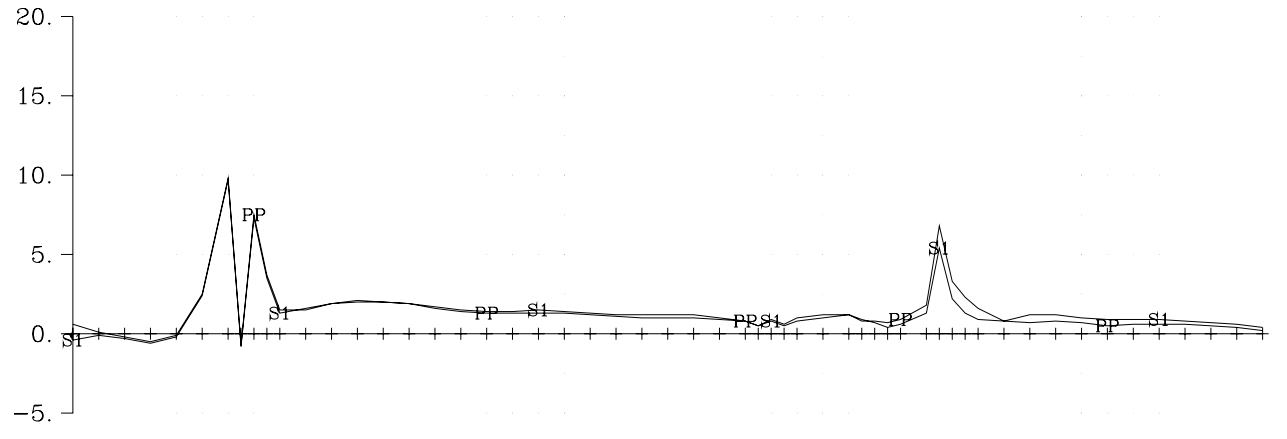
APPENDIX 4: STEP RESPONSE DATA PROFILES



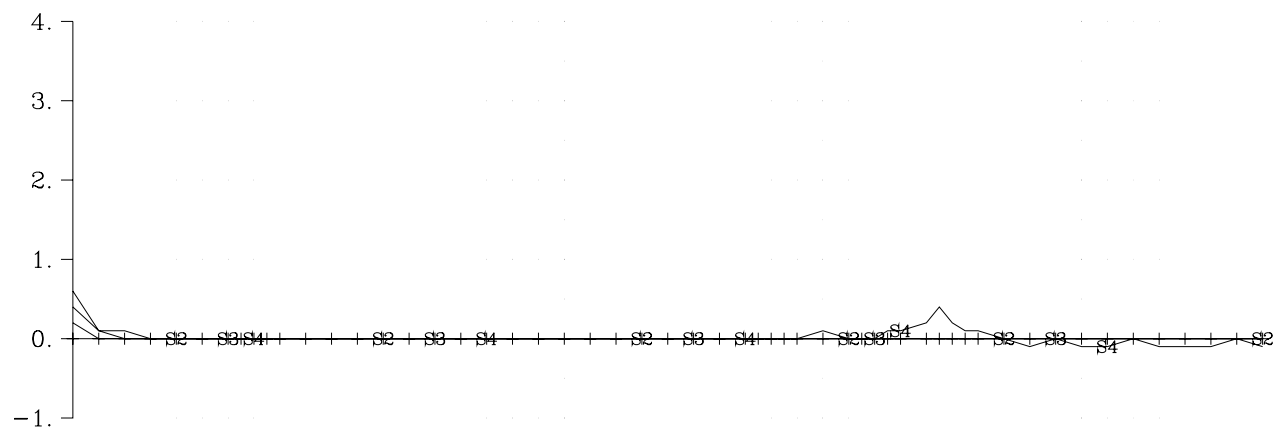
TP = Theoretical Primary  
 PP = Last Ramp Channel  
 S1 = Calculated Step Ch.1



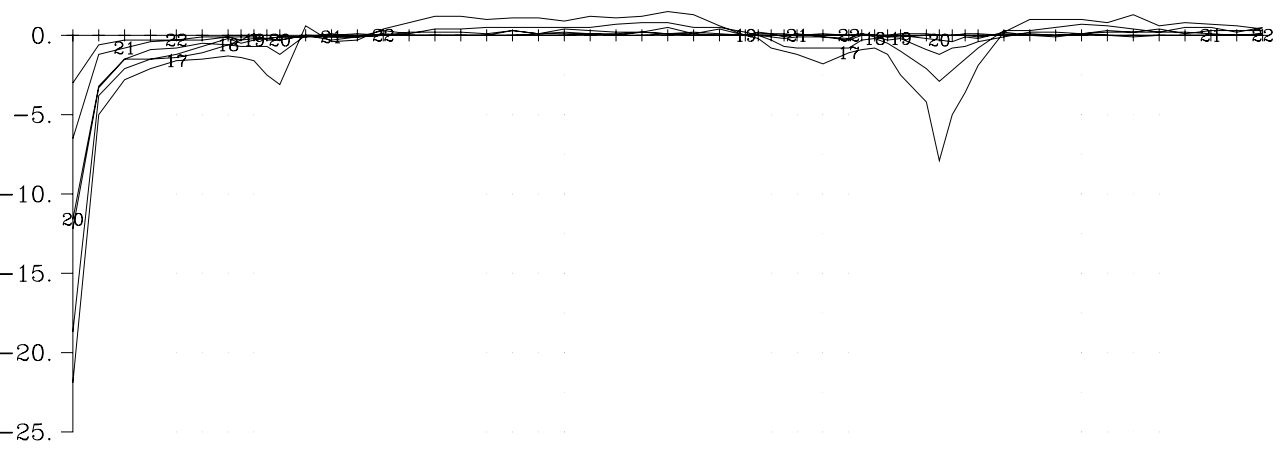
Deviation from TP.  
 (% Total Theoretical)



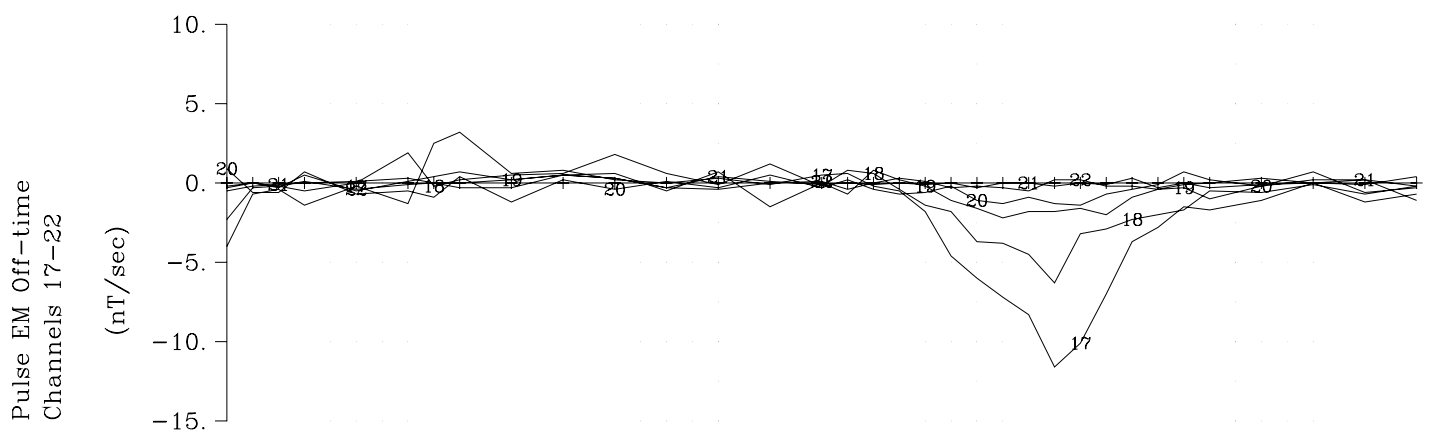
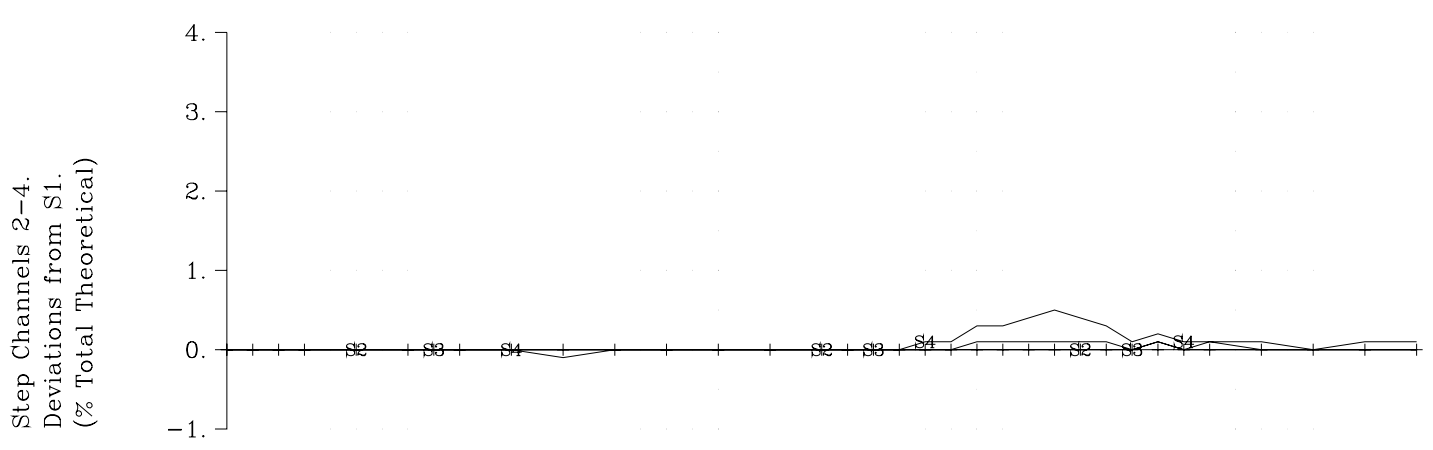
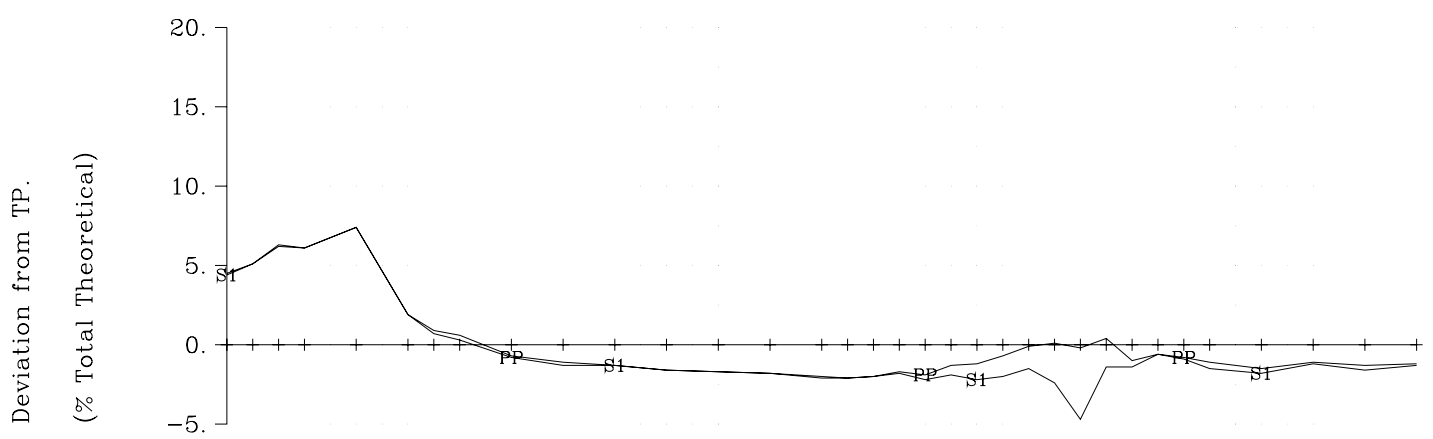
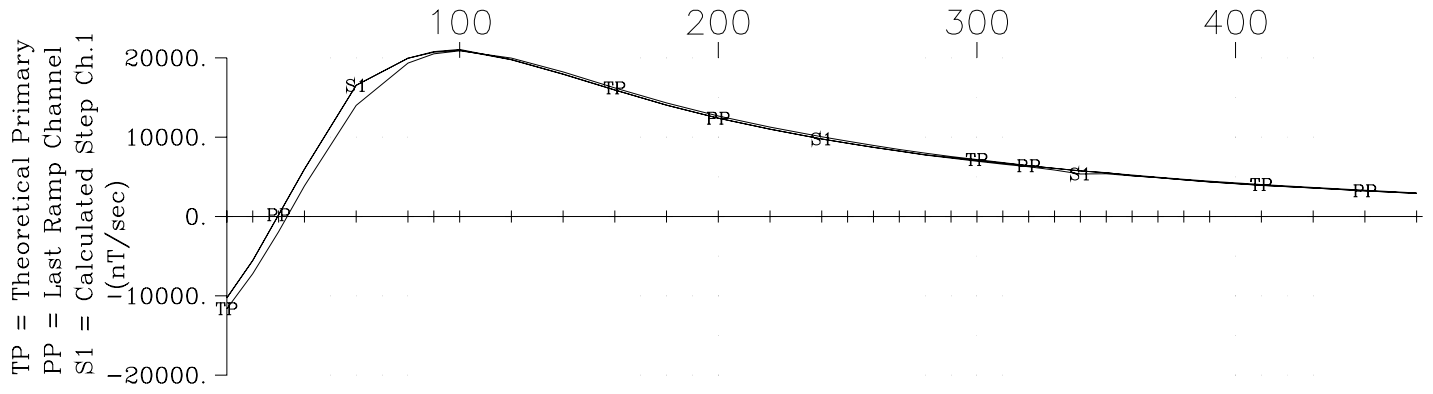
Step Channels 2-4.  
 Deviations from S1.  
 (% Total Theoretical)



Pulse EM Off-time  
 Channels 17-22  
 (nT/sec)

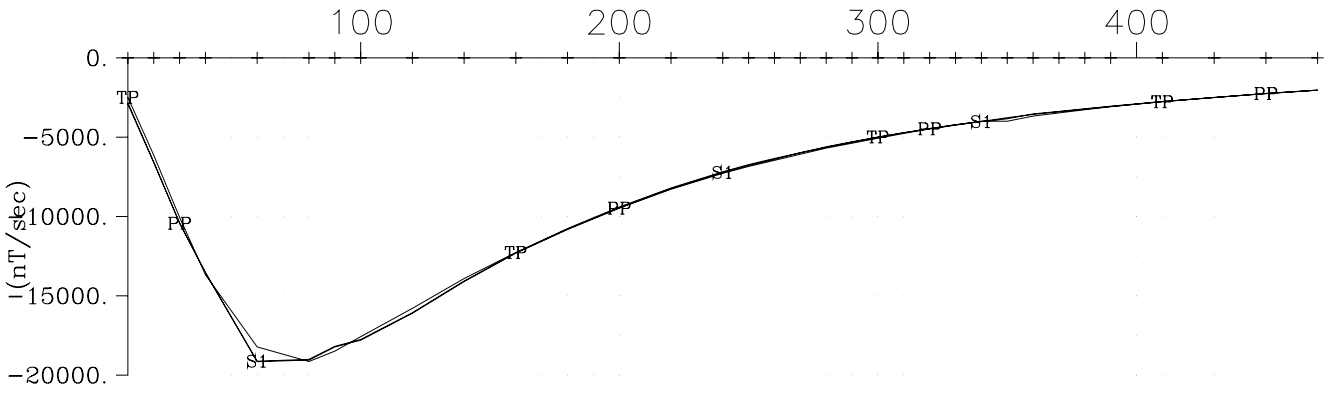


North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 Z Component  
 Crone Geophysics & Exploration Ltd.

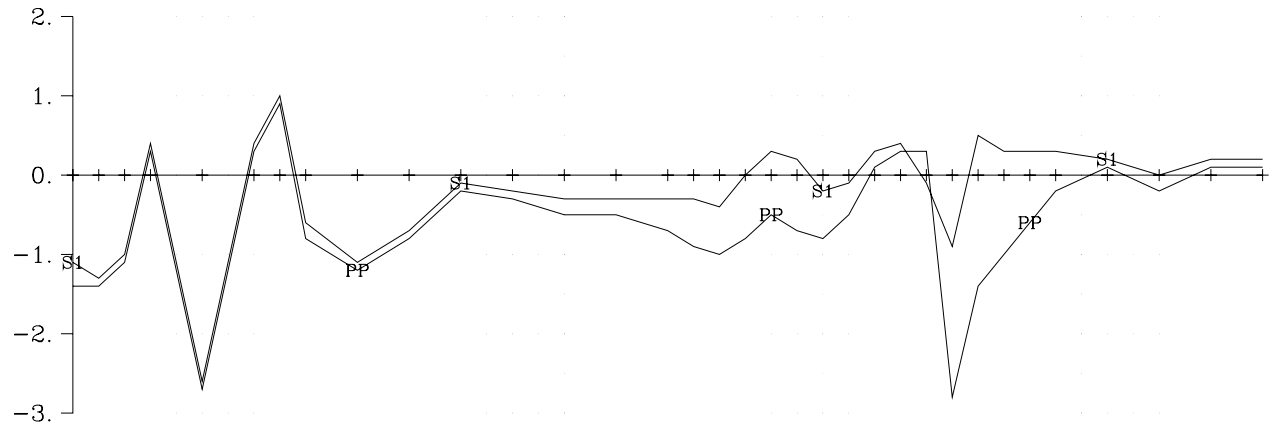


North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 X Component  
 Crone Geophysics & Exploration Ltd.

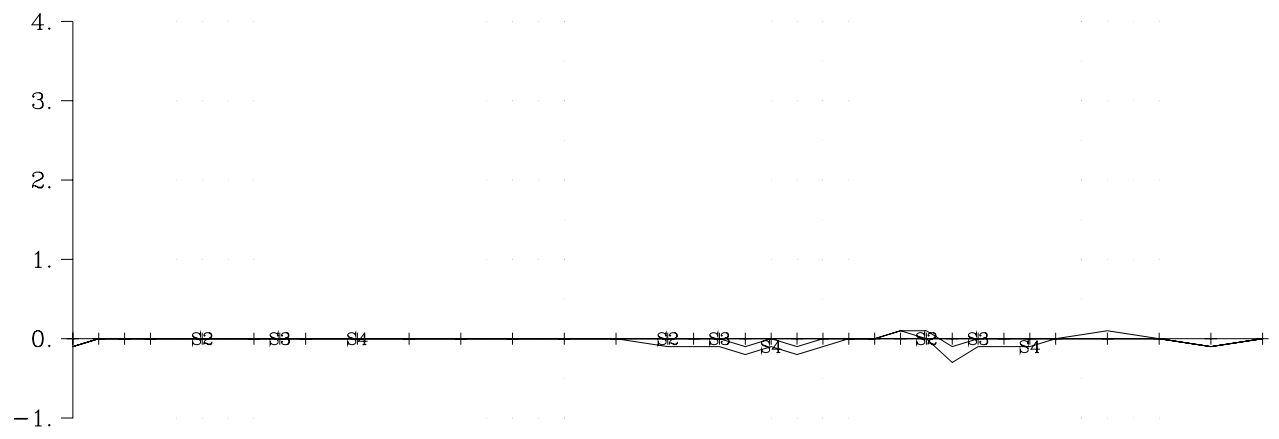
TP = Theoretical Primary  
 PP = Last Ramp Channel  
 S1 = Calculated Step Ch.1



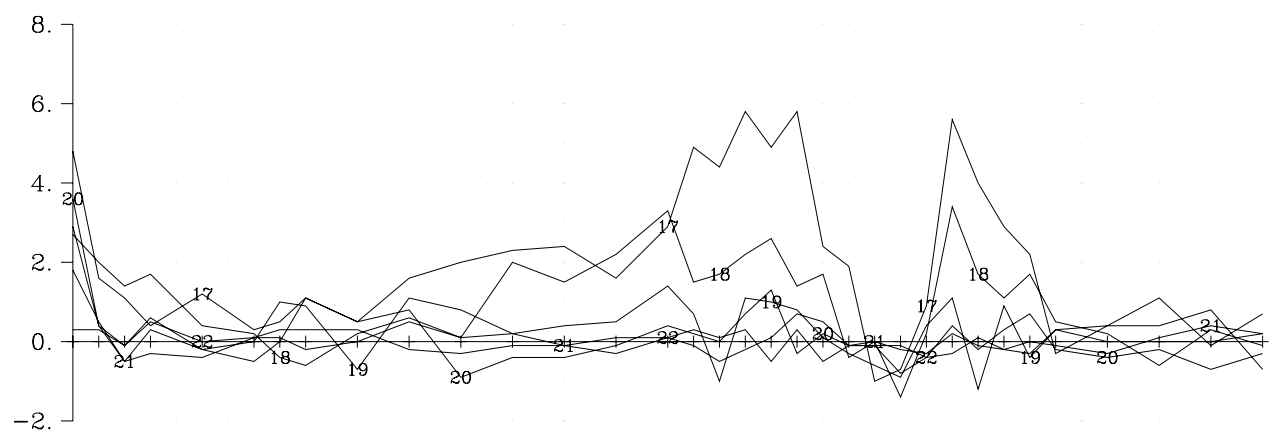
Deviation from TP.  
 (% Total Theoretical)



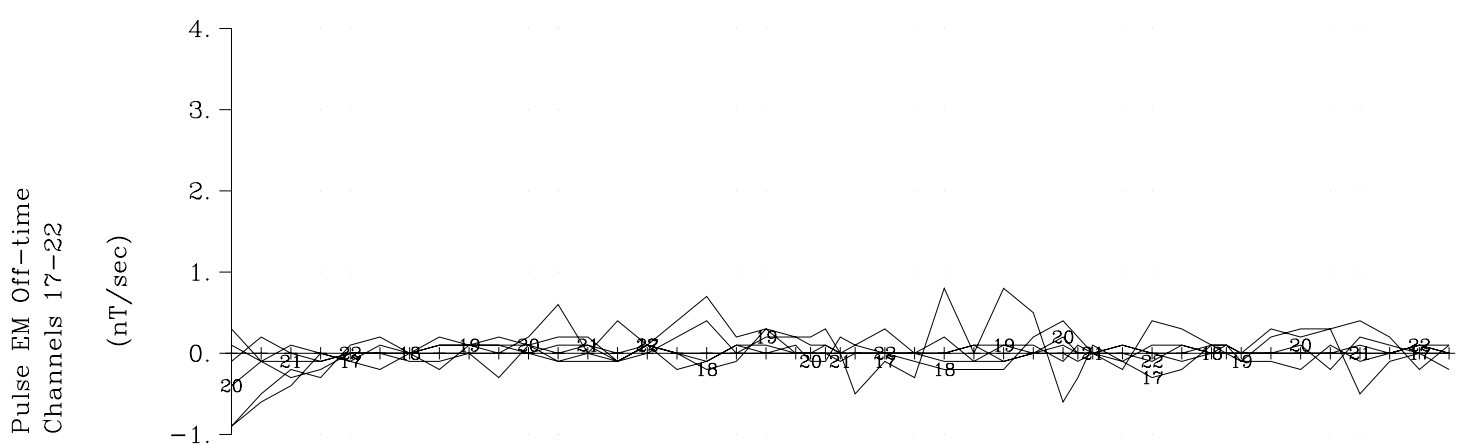
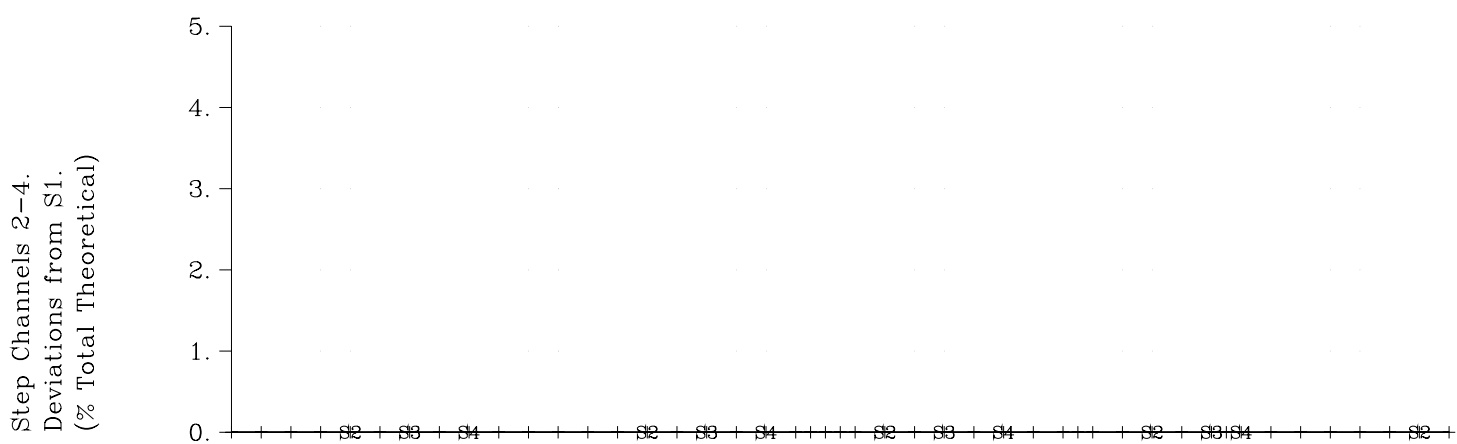
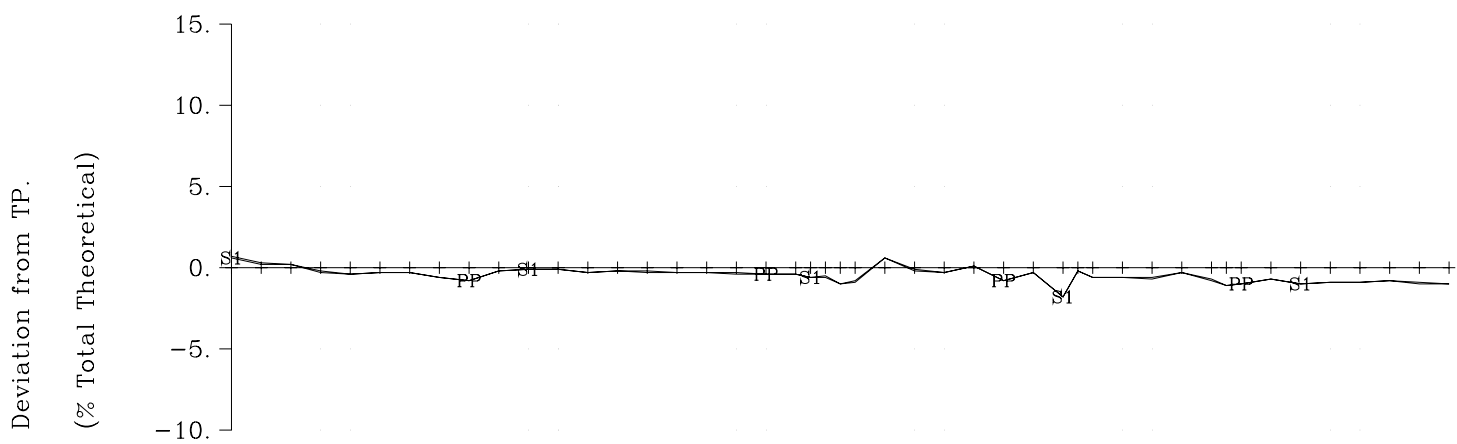
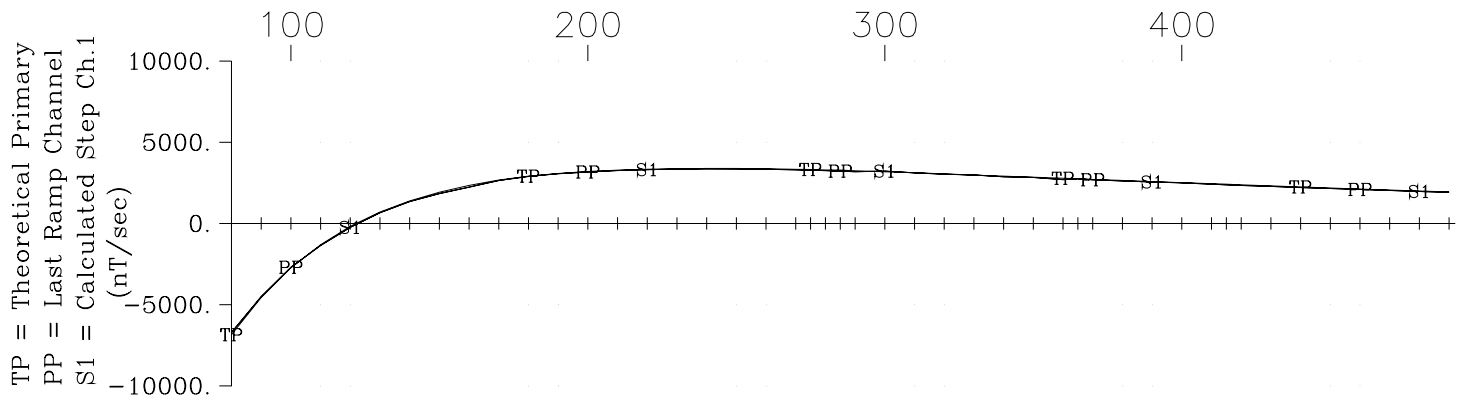
Step Channels 2-4.  
 Deviations from S1.  
 (% Total Theoretical)



Pulse EM Off-time  
 Channels 17-22  
 (nT/sec)

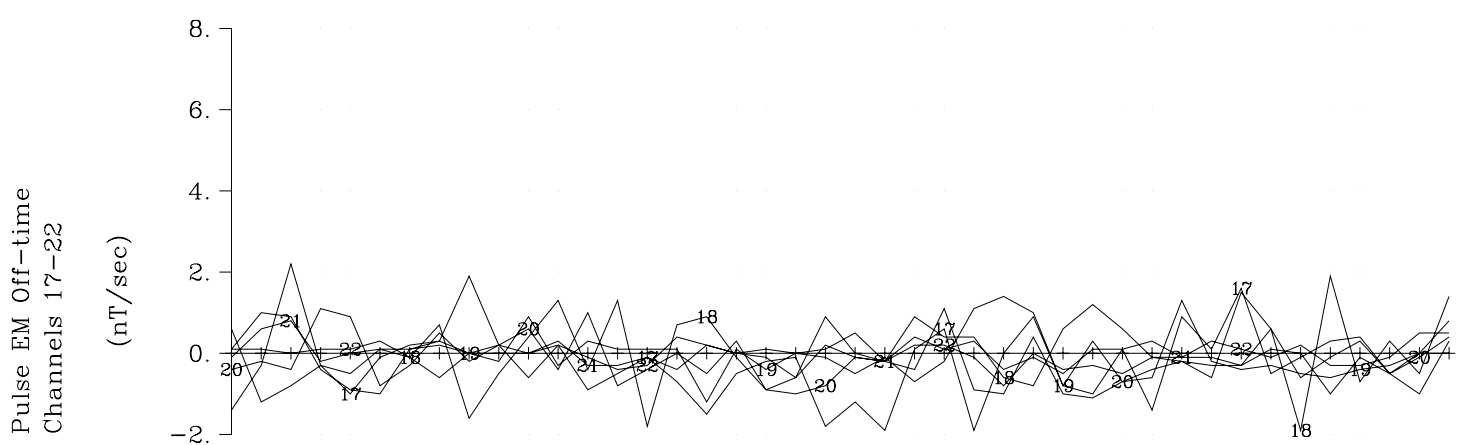
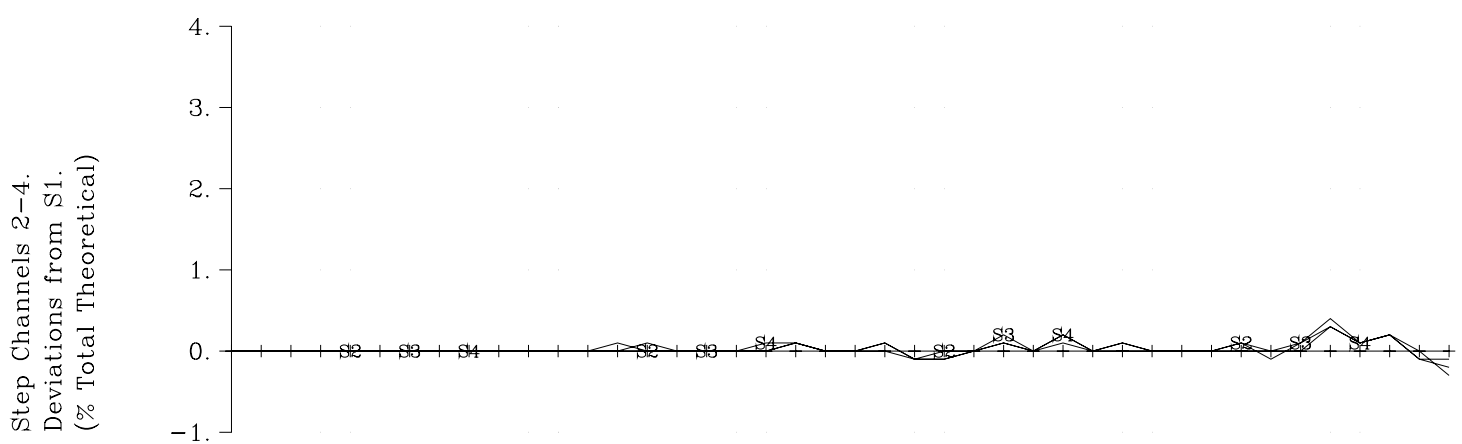
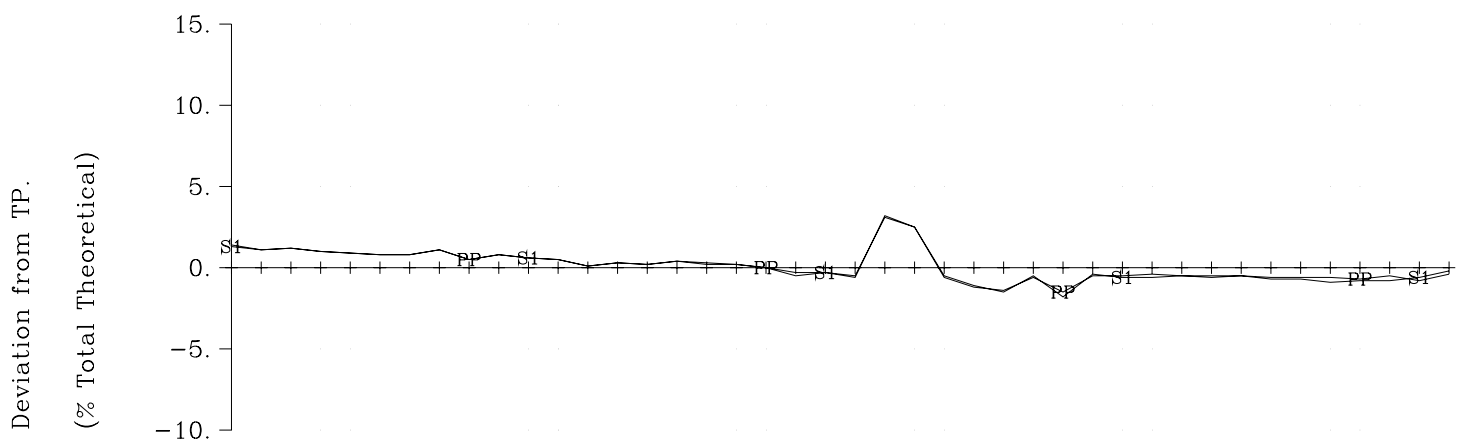
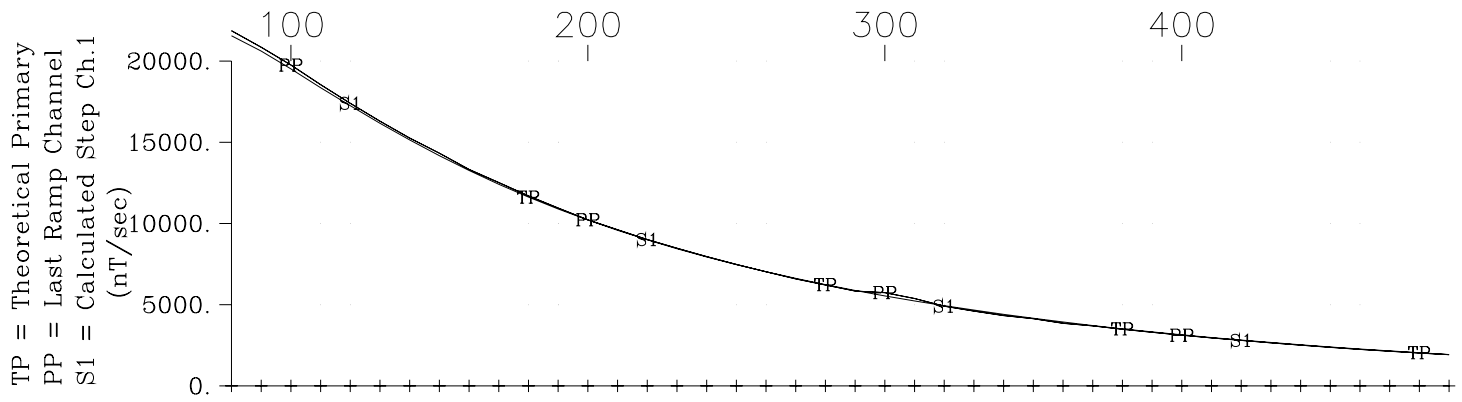


North American Nickel Post Creek  
 Loop LP-PC21, Hole PC-18-021 Y Component  
 Crone Geophysics & Exploration Ltd.

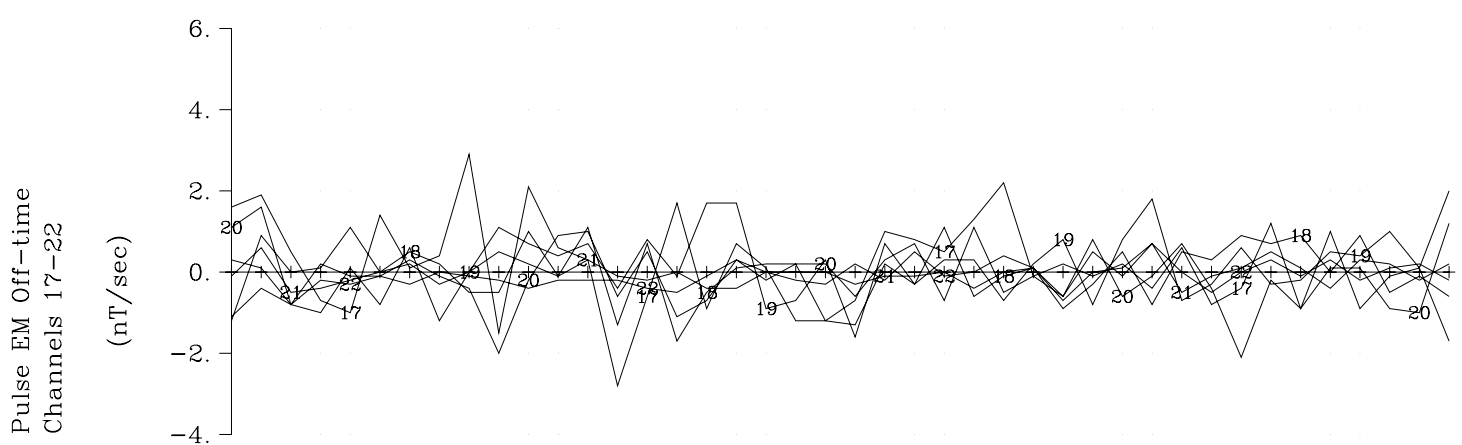
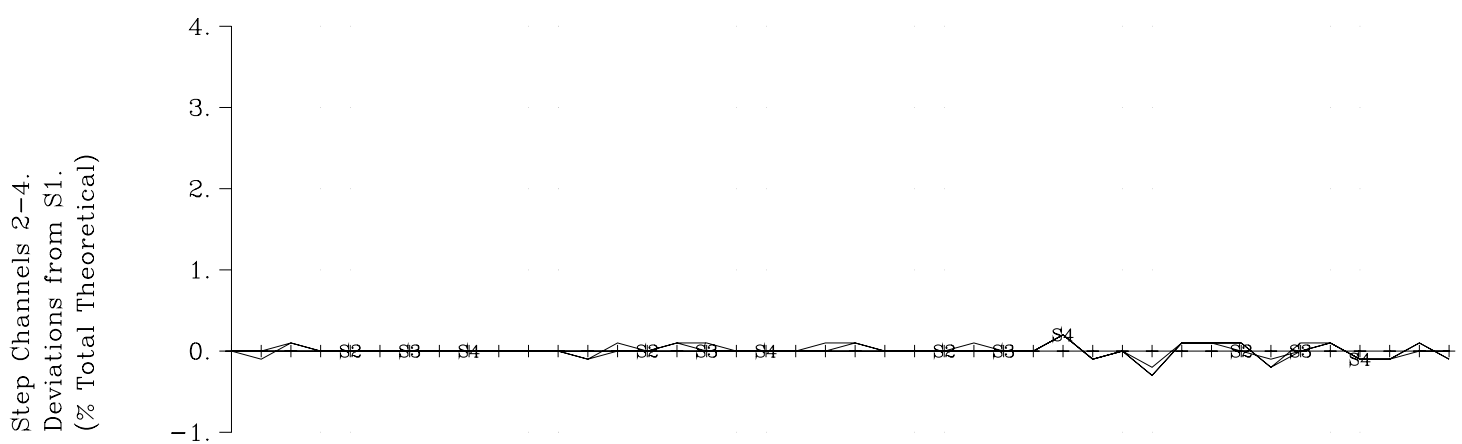
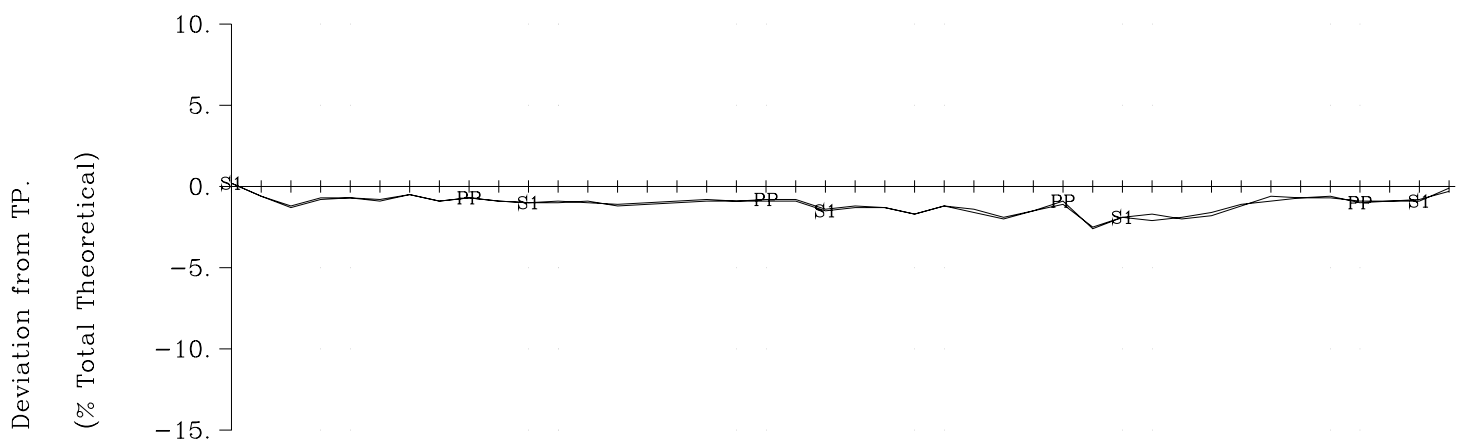
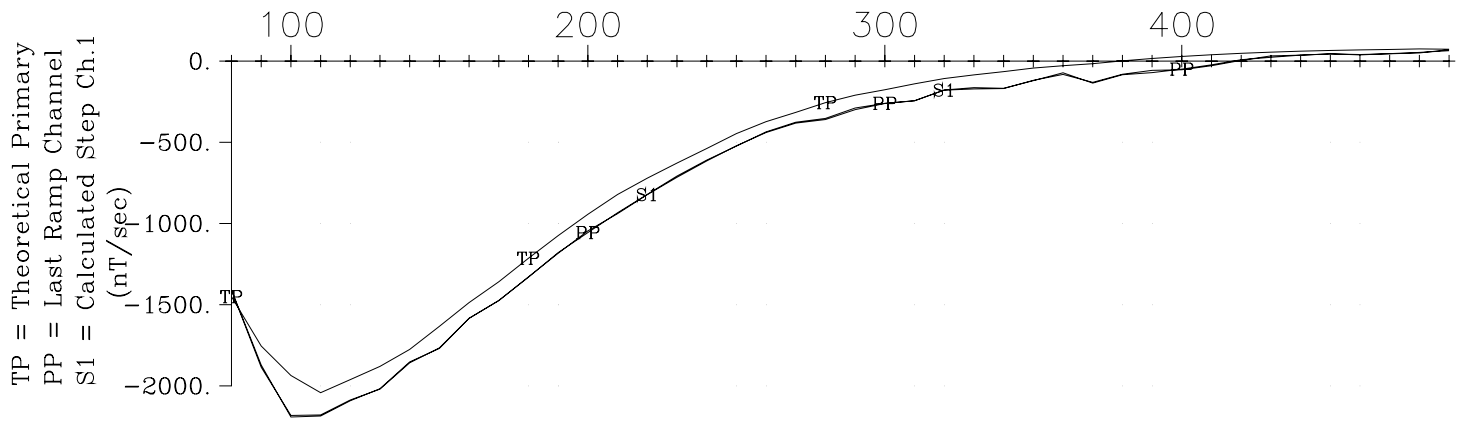


North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 Z Component  
 Crone Geophysics & Exploration Ltd.





North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 X Component  
 Crone Geophysics & Exploration Ltd.



North American Nickel Post Creek  
 Loop LP-PC22, Hole PC-18-022 Y Component  
 Crone Geophysics & Exploration Ltd.



**REFERENCE MATERIAL  
CERTIFICATE OF ANALYSIS**

**CFRM - 100**

Low Grade  
Sudbury Ni-Cu-PGE Sulphide Ore

**Certified Values:**

<b>ELEMENT</b>	<b>UNIT</b>	<b>CERTIFIED VALUE</b>	<b>1 SD</b>	<b>METHOD</b>
Ni	%	<b>0.2985</b>	0.0152	4-Acid Digestion
Cu	%	<b>0.3494</b>	0.0132	4-Acid Digestion
Co	%	<b>0.0184</b>	0.0011	4-Acid Digestion
Au	ppm	<b>0.1666</b>	0.0077	Fire Assay
Pt	ppm	<b>0.3218</b>	0.0291	Fire Assay
Pd	ppm	<b>0.3561</b>	0.0259	Fire Assay

# **CFRM-100**

## **Provisional Values:**

<b>ELEMENT</b>	<b>UNIT</b>	<b>PROVISIONAL VALUE</b>	<b>1 SD</b>	<b>METHOD</b>
Ni	%	<b>0.3114</b>	0.0058	Fusion
Cu	%	<b>0.3423</b>	0.0112	Fusion
Co	%	<b>0.0197</b>	0.0017	Fusion

**Note:** Provisional Values are based on 80 analyses for Ni and Cu, and 60 analyses for Co and cannot be used to determine accuracy with a high degree of certainty.

## **Prepared By:**

Standard **CFRM-100** is prepared and certified by CF Reference Materials Inc. of Sudbury, Ontario.

**Date of Certification: November 17, 2011**

## **Method of Preparation:**

The Candidate Material was crushed, then milled to 100% <75 microns with 90% <35 microns using a vibratory rod-mill. The product was homogenized with a "V"-blender then packaged in vacuum-sealed, foil-lined mylar pouches (65g/pouch).

## **Source of the Candidate Material:**

The source of the Candidate Material used to produce this Standard was derived from a gabbroic-hosted copper-nickel sulphide deposit containing platinum group elements and gold located in the Sudbury area. Mineralization occurs as (approximately) 5% disseminated to locally net-textured to blebby textured magmatic sulphides of pyrrhotite, chalcopyrite, and pentlandite.

Whole Rock Geochemistry (for informational purposes):

SiO <sub>2</sub> (%)	47.7	MgO (%)	7.08
TiO <sub>2</sub> (%)	0.77	CaO (%)	7.51
Al <sub>2</sub> O <sub>3</sub> (%)	12.7	Na <sub>2</sub> O (%)	1.83
Fe <sub>2</sub> O <sub>3</sub> (%)	15.5	K <sub>2</sub> O (%)	0.82
MnO (%)	0.16	S (%)	1.67

# **CFRM-100**

## **Assay and Statistical Procedures:**

Ten accredited commercial laboratories participated in the round-robin procedure. Each laboratory was sent 10 randomly selected samples (65g each); one blank was inserted into each batch. Analytical methods used by the laboratories included: Fire Assay (Pb-collection with ICP-OES or ICP-MS or ICP-AES); Four-Acid Digestion (ICP-OES or ICP-MS or ICP-AES); and Sodium-Peroxide Fusion (ICP-AES or ICP-OES).

The Certified Values were established after first calculating the mean of the laboratory means using all values from each data set. The Certified Values were calculated by applying a weighted value to the mean value and mean standard deviation values for each laboratory. The limits were determined by incorporating the mean of the weighted error value and the mean of the weighted value.

## **Participating Laboratories:**

Accurassay Laboratories, Thunder Bay, ON, Canada  
Acme Analytical Laboratories, Vancouver, BC, Canada  
Activation Laboratories, Ancaster, ON, Canada  
Activation Laboratories, Thunder Bay, ON, Canada  
ALS, North Vancouver, BC, Canada  
Eco Tech Laboratory, Kamloops, BC, Canada  
OMAC Laboratories, Galway, Ireland  
SGS Minerals, Toronto, ON, Canada  
SGS Minerals, Vancouver, BC, Canada  
TSL Laboratories, Saskatoon, SK, Canada

## **Legal Notice:**

CF Reference Material has prepared this reference material and statistically evaluated the analytical data with due care and attention. The purchaser, by receipt hereof, releases and indemnifies CF Reference Materials from and against all liability from the use of this material and information.



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Rob Foy, Geologist, B.Sc., P.Geo.  
CFRM Principal



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Chris Caron, Geochemist, B.Sc.  
CFRM Principal

# CFRM-100

## Values for Informational Purposes Only

GEOCHEMICAL (4-ACID DIGESTION)			SODIUM PEROXIDE FUSION		
	Value	n		Value	n
Ag (ppm)	2.4	90	Ag (ppm)	5.8	20
Cr (ppm)	269	70	Cr (ppm)	310	60
Mo (ppm)	6	80	Mo (ppm)	6	40
Pb (ppm)	16	80	Pb (ppm)	40	60
Sb (ppm)	8	80	Sb (ppm)	14	40
Zn (ppm)	96	80	Zn (ppm)	168	60
S (%)	1.67	50	S (%)	1.52	60
Al (%)	6.74	70	Al (%)	6.37	60
As (ppm)	77	80	As (ppm)	169	60
Ba (ppm)	209	70	Ba (ppm)	202	40
Ca (%)	4.79	80	Ca (%)	5.37	60
Cd (ppm)	3	80	Cd (ppm)	3	40
Fe (%)	10.3	80	Fe (%)	11.1	60
K (%)	0.63	70	K (%)	0.71	60
Li (ppm)	15	60	Li (ppm)	21	50
Mg (%)	3.83	80	Mg (%)	4.32	60
Mn (%)	0.11	80	Mn (%)	0.13	60
Na (%)	1.39	60			
Nb (ppm)	10	50	Nb (ppm)	8	20
P (%)	0.11	60	P (%)	0.11	40
			Si (%)	23.2	20
Ta (ppm)	0.5	40	Ta (ppm)	1.9	20
Ti (%)	0.41	50	Ti (%)	0.46	60
U (ppm)	6.0	50	U (ppm)	1.5	20
V (ppm)	267	70	V (ppm)	283	40
W (ppm)	5.4	70	W (ppm)	13.0	40
Zr (ppm)	80.4	50			



**REFERENCE MATERIAL  
CERTIFICATE OF ANALYSIS**

**CFRM - 101**

Medium-Grade  
Ni-Cu-PGE Sulphide Ore

**Certified Values:**

<b>ELEMENT</b>	<b>UNIT</b>	<b>CERTIFIED VALUE</b>	<b>1 SD</b>	<b>METHOD</b>
Ni	%	<b>1.1906</b>	0.0352	Fusion <sup>2</sup>
Cu	%	<b>0.8807</b>	0.0308	Fusion <sup>2</sup>
Co <sup>1</sup>	%	<b>0.0358</b>	0.0046	Fusion <sup>2</sup>
Au	ppm	<b>0.1710</b>	0.0090	Fire Assay
Pt	ppm	<b>0.5361</b>	0.0321	Fire Assay
Pd	ppm	<b>0.5925</b>	0.0194	Fire Assay

<sup>1</sup> Provisional Value

<sup>2</sup> Sodium-Peroxide Fusion

# **CFRM-101**

## **Geochemical Values** (for informational purposes):

<b>ELEMENT</b>	<b>UNIT</b>	<b>VALUE</b>	<b>1 SD</b>	<b>METHOD</b>
Ni	%	<b>1.1652</b>	0.0646	4-Acid Digestion
Cu	%	<b>0.9149</b>	0.0198	4-Acid Digestion
Co	%	<b>0.0341</b>	0.0006	4-Acid Digestion

## **Prepared By:**

Standard **CFRM-101** is prepared and certified by CF Reference Materials Inc. of Sudbury, Ontario.

**Date of Certification: December 10, 2011**

## **Method of Preparation:**

The Candidate Material was crushed, then milled to 100% <75 microns with 90% <35 microns using a vibratory rod-mill. The product was homogenized with a "V"-blender then packaged in vacuum-sealed, foil-lined mylar pouches (65g/pouch).

## **Source of the Candidate Material:**

The source of the Candidate Material used to produce this Standard was derived from blending two similar materials of different grade. Material 1 (75%): is derived from a gabbroic-hosted copper-nickel sulphide deposit containing platinum group elements and gold located in the Sudbury area. Mineralization occurs as (approximately) 5% disseminated to locally net-textured to blebby textured magmatic sulphides of pyrrhotite, chalcopyrite, and pentlandite. Material 2 (25%): is derived from a norite breccia-hosted copper-nickel sulphide deposit containing platinum group elements and gold located within the Sudbury Mining Camp. Mineralization occurs as semi-massive and massive breccia sulphides of pyrrhotite, pentlandite, and chalcopyrite.

## **Whole Rock Geochemistry** (for informational purposes):

SiO <sub>2</sub> (%)	41.0	MgO (%)	5.73
TiO <sub>2</sub> (%)	0.64	CaO (%)	5.79
Al <sub>2</sub> O <sub>3</sub> (%)	10.9	Na <sub>2</sub> O (%)	1.60
Fe <sub>2</sub> O <sub>3</sub> (%)	25.2	K <sub>2</sub> O (%)	0.78
MnO (%)	0.15	S (%)	7.03



# **CFRM-101**

## **Assay and Statistical Procedures:**

Ten accredited commercial laboratories participated in the round-robin procedure. Each laboratory was sent 10 randomly selected samples (65g each); one blank was inserted into each batch. Analytical methods used by the laboratories included: Fire Assay (Pb-collection with ICP-OES or ICP-MS or ICP-AES); Sodium-Peroxide Fusion (ICP-AES or ICP-OES); and Four-Acid Digestion (ICP-OES or ICP-MS or ICP-AES).

The Certified Values were established after first calculating the mean of the laboratory means using all values from each data set. The Certified Values were calculated by applying a weighted value to the mean value and mean standard deviation values for each laboratory. The limits were determined by incorporating the mean of the weighted error value and the mean of the weighted value.

## **Participating Laboratories:**

Accurassay Laboratories, Thunder Bay, ON, Canada  
Acme Analytical Laboratories, Vancouver, BC, Canada  
Activation Laboratories, Ancaster, ON, Canada  
Activation Laboratories, Thunder Bay, ON, Canada  
AGAT Laboratories, Toronto, ON, Canada  
ALS, North Vancouver, BC, Canada  
Eco Tech Laboratory, Kamloops, BC, Canada  
OMAC Laboratories, Galway, Ireland  
SGS Minerals, Toronto, ON, Canada  
SGS Minerals, Vancouver, BC, Canada

## **Legal Notice:**

CF Reference Material has prepared this reference material and statistically evaluated the analytical data with due care and attention. The purchaser, by receipt hereof, releases and indemnifies CF Reference Materials from and against all liability from the use of this material and information.



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Rob Foy, Geologist, B.Sc., P.Geo.  
CFRM Principal



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Chris Caron, Geochemist, B.Sc.  
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Plus Appendix Pages  
Finalized Date: 24-DEC-2018  
Account: NRAMNI

**CERTIFICATE SD18309948**

Project: SUD-18-001

This report is for 262 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 4-DEC-2018.

The following have access to data associated with this certificate:

GERRY KATCHEN

PETER LIGHTFOOT

JIM SPARLING

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
SPL-21d	Split sample - duplicate
SPL-34	Pulp Splitting Charge
LOG-21d	Sample logging - ClientBarCode Dup
PUL-31d	Pulverize Split - duplicate
PUL-QC	Pulverizing QC Test
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:

Colin Ramshaw, Vancouver Laboratory Manager





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**CERTIFICATE OF ANALYSIS SD18309948**

Sample Description	Method	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
	Analyte	Ni	Pb	S	SiO2	TiO2	Zn	Ag	Pass2mm	Pass75um
	Units	%	%	%	%	%	%	ppm	%	%
	LOD	0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124301		0.027	<0.01	0.08	50.1	1.00	0.011	<0.2	78.3	91.4
S124302		0.014	<0.01	0.54	53.5	1.14	0.006	<0.2		87.5
S124303		0.009	<0.01	0.50	49.6	1.12	0.006	<0.2		
S124304		0.010	<0.01	0.25	50.3	1.25	0.007	<0.2		
S124305		0.016	<0.01	0.33	49.2	1.20	0.009	<0.2		
S124306		0.012	<0.01	0.66	44.9	1.05	0.011	0.3		
S124307		0.012	<0.01	0.31	46.0	1.10	0.008	<0.2		
S124308		0.009	<0.01	0.12	50.9	1.03	0.005	0.2		
S124309		0.008	<0.01	0.10	49.8	1.14	0.005	<0.2		
S124310		0.304	<0.01	1.71	46.4	0.74	0.009	2.2		
S124311		0.016	<0.01	0.70	46.2	1.11	0.007	0.2		
S124312		0.013	<0.01	0.69	45.6	1.01	0.005	<0.2		
S124313		0.014	<0.01	1.78	39.6	0.91	0.008	<0.2		
S124314		0.014	<0.01	0.41	43.4	1.07	0.010	0.2		
S124315		<0.002	<0.01	0.03	91.6	0.09	<0.002	<0.2		
S124316		0.022	<0.01	0.08	49.4	1.01	0.006	<0.2		
S124317		0.035	<0.01	<0.01	50.3	0.99	0.009	<0.2		
S124318		0.023	<0.01	0.04	50.1	1.10	0.008	<0.2		
S124319		0.012	<0.01	0.64	48.3	1.10	0.005	0.3		
S124320		0.004	<0.01	0.13	48.3	0.94	0.007	<0.2		
S124321		0.007	<0.01	0.07	47.1	0.95	0.008	<0.2		
S124322		0.005	<0.01	<0.01	47.1	0.87	0.008	<0.2		
S124323		0.013	<0.01	0.38	47.9	1.07	0.006	<0.2		
S124324		0.003	<0.01	0.10	67.8	0.66	0.003	<0.2		
S124325		0.021	<0.01	0.32	56.5	0.76	0.006	<0.2		
S124326		0.016	<0.01	0.38	46.8	1.04	0.007	<0.2		
S124327		0.010	<0.01	1.00	52.8	0.91	0.005	<0.2		
S124328		0.016	<0.01	0.58	52.2	1.04	0.005	<0.2		
S124329		0.014	<0.01	0.50	51.1	1.10	0.005	<0.2		
S124330		1.205	<0.01	7.15	40.9	0.64	0.014	3.5		
S124331		0.013	<0.01	0.75	55.0	0.84	0.004	<0.2		
S124332		0.016	<0.01	0.45	53.9	0.92	0.004	<0.2		
S124333		0.012	<0.01	0.45	56.5	0.89	0.004	<0.2		
S124334		0.017	<0.01	0.86	47.5	1.12	0.005	<0.2		
S124335		<0.002	<0.01	0.01	72.7	0.04	<0.002	<0.2		
S124336		0.013	<0.01	1.35	46.8	0.82	0.008	<0.2		
S124337		0.002	<0.01	3.32	44.7	0.15	0.005	0.2		
S124338		0.003	<0.01	0.62	32.9	0.26	0.006	<0.2		
S124339		0.004	<0.01	0.31	32.1	0.25	0.005	<0.2		
S124340		0.003	<0.01	1.57	33.8	0.19	0.003	<0.2	84.0	90.8





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**CERTIFICATE OF ANALYSIS SD18309948**

Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124341		0.003	<0.01	4.94	44.7	0.18	0.006	<0.2		99.2
S124342		0.004	<0.01	2.63	46.2	0.20	0.005	<0.2		97.4
S124343		0.004	<0.01	2.49	43.4	0.20	0.006	<0.2		
S124344		0.004	<0.01	1.64	49.2	0.22	0.004	<0.2		
S124345		<0.002	<0.01	2.26	57.3	0.22	0.002	<0.2		
S124346		<0.002	<0.01	2.34	53.3	0.21	0.003	<0.2		
S124347		0.003	<0.01	2.52	50.1	0.21	0.003	<0.2		
S124348		0.003	<0.01	2.32	51.8	0.25	0.006	<0.2		
S124349		0.004	<0.01	0.48	37.6	0.27	0.007	<0.2		
S124350		0.311	<0.01	1.75	46.4	0.72	0.008	2.3		
S124451		0.005	0.01	1.97	50.9	0.20	0.036	<0.2		
S124452		0.002	0.01	3.30	52.8	0.22	0.005	<0.2		
S124453		<0.002	<0.01	2.38	57.3	0.22	0.003	<0.2		
S124453-SP		0.003	<0.01	2.62	59.3	0.23	0.004	<0.2		
S124454		0.004	<0.01	4.74	52.8	0.20	0.004	<0.2		
S124455		0.002	<0.01	0.03	99.3	0.10	<0.002	<0.2		
S124456		0.003	<0.01	3.30	59.0	0.18	0.004	<0.2		
S124457		0.004	<0.01	15.90	29.5	0.05	0.003	<0.2		
S124457-SP		0.009	<0.01	17.55	28.5	0.05	0.003	<0.2		
S124458		0.006	<0.01	8.30	44.9	0.11	0.005	<0.2		
S124458-PD										
S124459		0.002	<0.01	6.65	53.7	0.11	0.007	<0.2		
S124460		0.003	<0.01	4.51	47.7	0.24	0.008	<0.2		
S124460-PD										
S124461		<0.002	<0.01	0.19	65.5	0.45	<0.002	0.2		
S124462		<0.002	<0.01	0.07	60.5	0.42	<0.002	<0.2		
S124463		0.013	<0.01	0.06	49.6	0.54	0.006	<0.2		
S124464		0.007	<0.01	0.06	67.0	0.46	0.003	<0.2		
S124465		0.016	<0.01	0.69	49.4	1.06	0.005	<0.2		
S124466		0.011	<0.01	0.49	51.1	0.99	0.003	0.6		
S124467		0.013	0.01	0.32	58.0	0.89	0.025	<0.2		
S124468		0.011	<0.01	0.24	56.9	0.87	0.003	<0.2		
S124469		0.004	<0.01	0.07	68.7	0.42	0.002	<0.2		
S124470		1.180	<0.01	6.66	38.9	0.62	0.011	3.6		
S124471		0.008	<0.01	0.05	75.1	0.36	0.002	<0.2		
S124472		0.023	<0.01	<0.01	45.6	0.68	0.008	<0.2		
S124473		0.024	<0.01	0.01	45.8	0.73	0.007	<0.2		
S124474		0.024	<0.01	0.01	47.1	0.68	0.007	<0.2		
S124475		<0.002	<0.01	<0.01	70.2	0.03	<0.002	<0.2		
S124476		0.004	<0.01	0.13	73.8	0.38	0.002	<0.2	67.8	89.7





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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124477		0.005	<0.01	0.10	65.5	0.56	<0.002	<0.2		
S124478		0.004	<0.01	0.14	65.2	0.58	<0.002	<0.2		
S124479		0.015	<0.01	0.07	50.5	0.67	0.007	<0.2		
S124480		0.016	<0.01	0.02	46.8	0.64	0.006	<0.2		
S124481		0.017	<0.01	0.03	44.9	0.64	0.008	<0.2	82.6	
S124482		0.022	<0.01	0.21	44.1	0.65	0.009	<0.2		
S124483		0.016	<0.01	0.04	48.6	0.67	0.007	<0.2		
S124484		0.016	<0.01	0.11	43.4	0.60	0.009	<0.2		
S124485		0.009	<0.01	0.08	41.5	1.01	0.016	<0.2		
S124486		0.007	<0.01	0.23	43.9	0.92	0.027	0.2		
S124487		0.004	<0.01	0.02	72.5	0.20	0.006	<0.2		
S124488		0.004	<0.01	1.65	68.7	0.36	0.069	<0.2		
S124489		0.003	<0.01	2.91	58.4	0.59	0.053	0.2		
S124490		0.315	<0.01	1.70	46.4	0.74	0.007	2.1		
S124491		0.008	0.01	15.45	41.5	0.58	0.013	0.4		
S124491-SP		0.010	<0.01	15.50	40.6	0.56	0.012	0.5		
S124492		0.006	<0.01	8.71	52.6	0.54	0.017	0.2		
S124493		0.008	<0.01	4.16	53.9	0.60	0.051	0.4		
S124493-PD										
S124494		0.003	<0.01	2.15	69.7	0.25	0.095	<0.2		
S124495		0.003	<0.01	<0.01	92.6	0.09	<0.002	<0.2		
S124496		<0.002	<0.01	0.29	67.6	0.31	0.021	<0.2		
S124497		0.002	<0.01	0.13	71.4	0.28	0.009	<0.2		
S124498		<0.002	<0.01	0.09	71.9	0.28	0.012	<0.2		
S124499		<0.002	<0.01	1.04	64.4	0.27	0.016	<0.2	60.4	
S124500		0.003	<0.01	0.76	62.5	0.30	0.021	<0.2		
S124351		0.003	<0.01	0.04	66.3	0.37	0.009	<0.2		
S124352		<0.002	<0.01	0.02	67.8	0.27	0.007	<0.2	80.1	
S124353		0.007	<0.01	0.15	48.3	1.12	0.032	<0.2		
S124354		0.006	<0.01	0.22	51.6	0.99	0.021	<0.2		
S124355		<0.002	<0.01	0.04	71.9	0.03	<0.002	<0.2		
S124356		0.064	<0.01	<0.01	46.0	0.55	0.026	0.2		
S124357		0.061	<0.01	<0.01	45.6	0.55	0.027	<0.2		
S124358		0.056	<0.01	0.02	46.0	0.64	0.027	<0.2		
S124359		0.051	<0.01	<0.01	47.3	0.70	0.026	<0.2		
S124360		0.312	<0.01	1.81	46.8	0.73	0.008	1.9		
S124361		0.060	0.01	0.03	46.6	0.58	0.026	<0.2		
S124362		0.074	<0.01	0.14	44.3	0.46	0.028	<0.2		
S124363		0.067	<0.01	0.03	45.8	0.53	0.026	<0.2		
S124364		0.059	<0.01	0.03	45.6	0.54	0.027	<0.2	95.4	86.8







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**CERTIFICATE OF ANALYSIS SD18309948**

Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124365		<0.002	<0.01	0.04	91.8	0.10	<0.002	<0.2		
S124366		0.025	0.01	0.31	48.8	0.85	0.066	<0.2	85.3	92.9
S124367		0.026	0.01	0.08	50.5	0.73	0.037	0.2		91.1
S124368		0.028	<0.01	0.04	49.6	0.72	0.035	<0.2		
S124369		0.032	<0.01	0.07	50.9	0.71	0.119	<0.2		
S124370		0.032	<0.01	0.51	50.5	0.70	0.082	<0.2		
S124371		0.017	<0.01	2.40	56.0	0.55	0.114	0.3		
S124372		0.006	<0.01	4.69	66.3	0.27	0.036	0.3		
S124373		0.003	<0.01	5.33	76.6	0.07	0.019	0.3		
S124374		0.002	<0.01	2.53	74.9	0.12	0.015	0.3		
S124375		0.003	<0.01	0.02	90.3	0.09	<0.002	<0.2		
S124376		0.005	<0.01	5.32	61.8	0.08	0.021	0.3		
S124376-PD										
S124377		<0.002	<0.01	1.74	81.7	0.11	0.013	<0.2		
S124378		0.006	<0.01	4.21	70.4	0.14	0.081	<0.2		
S124378-SP		0.005	<0.01	4.18	68.0	0.15	0.074	0.2		
S124379		0.003	<0.01	5.00	50.1	0.11	7.21	0.2		
S124380		<0.002	0.01	2.02	77.0	0.11	2.17	0.3		
S124381		0.002	<0.01	1.44	67.6	0.19	0.306	0.2	70.9	
S124382		0.009	<0.01	2.06	55.6	0.35	0.325	<0.2		
S124383		0.003	<0.01	1.60	60.3	0.17	0.896	0.2		
S124384		0.004	<0.01	2.43	52.8	0.47	2.69	0.5		
S124385		0.007	<0.01	10.05	40.6	0.54	13.0	1.3		
S124386		0.005	<0.01	7.50	52.8	0.25	8.50	0.4		
S124387		0.005	0.01	7.71	53.9	0.37	8.85	0.9		
S124388		0.010	0.02	8.79	55.0	0.33	4.41	1.2		
S124388-SP		0.011	0.01	8.27	55.8	0.33	4.23	1.2		
S124389		0.011	0.02	6.63	46.8	0.41	1.545	1.0		
S124389-PD										
S124390		0.310	<0.01	1.81	45.8	0.71	0.010	2.0		
S124391		0.006	<0.01	1.00	61.0	0.36	0.132	0.2		
S124392		0.006	<0.01	1.79	46.0	0.41	0.283	<0.2		
S124393		0.010	0.02	0.13	46.8	0.68	0.080	0.6		
S124394		0.010	0.03	0.09	44.7	0.67	0.061	1.0		
S124395		0.002	<0.01	0.02	71.2	0.04	0.002	<0.2		
S124396		0.012	0.02	0.19	43.6	0.66	0.145	0.8		
S124397		0.009	0.01	0.61	50.7	0.63	0.703	0.4		
S124398		0.018	0.02	22.3	27.0	0.19	21.2	4.8		
S124399		0.014	0.01	14.80	44.7	0.25	0.722	1.3		
S124399-SP		0.012	0.02	14.25	49.4	0.26	0.384	1.0		





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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124400		0.306	<0.01	1.80	45.6	0.72	0.010	2.0		
S124401		0.015	0.02	22.3	40.9	0.15	0.034	1.0	77.5	92.4
S124401-PD										
S124402		0.013	0.02	12.30	59.3	0.14	0.038	1.3		
S124403		0.007	0.02	6.04	50.5	0.54	0.058	0.8		
S124404		0.005	<0.01	2.86	60.3	0.45	0.034	0.3		
S124405		0.003	0.01	2.22	62.5	0.22	0.028	<0.2		
S124406		0.003	<0.01	2.10	59.9	0.29	0.026	0.2		
S124407		0.008	<0.01	3.54	57.5	0.32	0.023	<0.2		
S124408		0.010	<0.01	3.14	58.0	0.30	0.019	<0.2		
S124408-PD										
S124409		0.005	<0.01	0.82	61.4	0.27	0.017	<0.2		
S124410		1.245	0.01	7.12	40.9	0.64	0.015	3.4		
S124411		0.010	<0.01	2.03	62.5	0.38	0.017	0.2		
S124412		0.004	0.01	0.29	59.9	0.45	0.025	<0.2		
S124413		0.007	<0.01	4.96	48.6	0.26	0.032	<0.2		
S124413-SP		0.007	<0.01	4.65	46.6	0.26	0.031	<0.2		
S124414		0.005	<0.01	0.90	63.1	0.36	0.021	<0.2		
S124415		0.006	<0.01	0.07	90.7	0.09	<0.002	<0.2		
S124416		0.008	<0.01	1.39	52.4	0.44	0.032	<0.2		
S124417		0.008	<0.01	1.91	51.3	0.45	0.030	<0.2		
S124418		0.006	<0.01	2.09	55.8	0.30	0.023	<0.2		
S124419		<0.002	<0.01	1.94	54.8	0.34	0.022	<0.2		
S124420		0.004	<0.01	1.27	61.4	0.28	0.016	<0.2		
S124421		<0.002	<0.01	0.06	67.0	0.27	0.006	<0.2		
S124422		<0.002	<0.01	0.12	69.5	0.26	0.006	0.2		
S124423		<0.002	<0.01	0.25	70.8	0.30	0.006	<0.2		
S124424		<0.002	<0.01	0.04	67.8	0.30	0.003	<0.2		
S124425		<0.002	<0.01	0.01	71.4	0.28	0.002	<0.2		
S124426		0.002	<0.01	0.10	71.0	0.28	0.008	<0.2		
S124427		0.014	0.02	0.85	41.7	0.84	0.031	0.6		
S124428		0.023	0.01	1.33	37.2	0.76	0.036	0.3		
S124429		0.004	<0.01	0.40	70.8	0.24	0.007	<0.2		
S124430		1.220	0.01	7.00	40.2	0.63	0.014	3.3		
S124431		<0.002	<0.01	0.45	68.9	0.27	0.006	<0.2		
S124432		<0.002	<0.01	0.29	69.7	0.25	<0.002	<0.2		
S124433		0.003	<0.01	0.54	68.7	0.27	<0.002	<0.2		
S124434		<0.002	<0.01	0.19	71.7	0.28	0.004	<0.2		
S124435		<0.002	<0.01	0.01	71.7	0.03	<0.002	<0.2		
S124436		0.002	<0.01	0.08	69.3	0.29	0.004	0.4	72.7	96.0





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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124437		<0.002	<0.01	0.09	70.4	0.28	0.008	0.2		
S124438		0.016	<0.01	0.21	49.4	0.81	0.020	<0.2		
S124439		0.016	<0.01	0.26	45.4	0.85	0.022	<0.2		
S124440		0.019	<0.01	0.48	44.7	0.65	0.022	<0.2		
S124441		0.015	<0.01	0.04	45.6	0.82	0.020	<0.2		
S124442		<0.002	<0.01	0.25	67.2	0.33	0.049	<0.2		
S124443		<0.002	<0.01	0.13	69.5	0.28	0.003	<0.2		
S124444		0.002	<0.01	0.18	69.5	0.29	0.002	<0.2		
S124445		<0.002	<0.01	0.27	72.1	0.27	0.003	<0.2	79.0	
S124446		0.002	<0.01	0.62	65.5	0.29	0.014	<0.2		
S124447		0.013	<0.01	0.24	49.4	0.74	0.015	<0.2		
S124448		0.020	<0.01	0.07	47.7	0.80	0.016	<0.2		
S124449		0.018	<0.01	0.15	48.6	0.79	0.015	<0.2		
S124450		0.313	<0.01	1.76	46.0	0.73	0.009	1.9		
S124067		0.016	<0.01	0.21	49.6	0.69	0.015	<0.2		99.0
S124068		0.002	<0.01	0.86	69.5	0.28	<0.002	0.2		99.2
S124069		0.007	<0.01	2.40	65.7	0.31	0.002	<0.2		
S124070		1.190	<0.01	6.80	38.9	0.61	0.013	3.3		
S124071		0.004	<0.01	0.73	68.7	0.29	0.002	0.4		
S124072		0.004	<0.01	1.15	70.2	0.27	0.005	<0.2		
S124073		0.006	<0.01	1.81	70.8	0.25	0.007	<0.2		
S124074		<0.002	<0.01	0.54	71.9	0.26	0.035	<0.2		
S124075		0.002	<0.01	0.02	92.0	0.09	<0.002	<0.2		
S124076		0.006	<0.01	2.86	66.5	0.27	0.004	0.3		
S124077		0.003	<0.01	0.11	62.7	0.37	0.003	<0.2		
S124078		0.021	<0.01	0.39	42.1	0.70	0.029	0.4		
S124079		0.006	<0.01	0.13	61.4	0.44	0.012	<0.2		
S124080		0.004	<0.01	0.04	64.2	0.35	0.006	<0.2		
S124081		0.018	<0.01	0.03	50.1	0.61	0.022	<0.2		
S124082		0.003	<0.01	0.15	67.0	0.27	0.003	<0.2		
S124083		0.006	<0.01	0.60	65.5	0.31	0.005	<0.2		
S124084		0.003	<0.01	1.46	68.9	0.26	0.004	<0.2		
S124085		0.005	<0.01	0.21	70.6	0.28	0.004	<0.2		
S124086		0.003	<0.01	0.06	68.2	0.30	0.002	<0.2		
S124087		0.003	<0.01	0.22	66.5	0.27	0.002	<0.2		
S124088		0.004	<0.01	0.23	70.0	0.28	<0.002	0.2		
S124089		0.005	<0.01	0.11	69.7	0.27	0.002	<0.2		
S124090		0.311	<0.01	1.78	46.2	0.73	0.009	2.2		
S124091		<0.002	<0.01	0.17	73.2	0.26	<0.002	<0.2		
S124092		0.002	<0.01	0.33	68.5	0.32	0.004	<0.2	79.4	99.1



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Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr %	Cu %	Fe %	Fe2O3 %	K %	MgO %	MnO %
		0.02	0.001	0.005	0.001	0.01	0.01	0.05	0.002	0.01	0.002	0.05	0.05	0.1	0.01	0.01
S124093		3.57	0.005	<0.005	<0.001	14.05	0.01	0.60	<0.002	0.01	0.002	1.77	2.53	2.0	1.14	0.03
S124094		3.53	0.016	<0.005	<0.001	14.55	0.01	0.76	0.003	0.01	0.002	2.00	2.86	2.5	1.27	0.04
S124095		0.59	<0.001	<0.005	<0.001	15.20	0.02	1.15	<0.002	0.01	<0.002	0.60	0.86	4.4	0.10	0.01
S124096		3.78	0.014	<0.005	<0.001	14.75	0.01	1.13	<0.002	0.01	0.002	1.59	2.27	2.4	0.75	0.03
S124097		3.86	0.005	<0.005	<0.001	15.30	0.01	1.85	<0.002	0.01	<0.002	2.19	3.13	2.9	1.30	0.04
S124098		3.86	0.003	<0.005	<0.001	14.65	0.01	1.09	<0.002	0.01	0.002	1.52	2.17	2.5	0.87	0.03
S124099		2.48	0.002	<0.005	<0.001	14.05	<0.01	1.44	0.003	0.01	0.002	1.67	2.39	2.6	0.91	0.03
S124100		2.83	0.002	<0.005	<0.001	14.50	0.01	1.90	<0.002	0.01	0.003	1.53	2.19	2.1	0.71	0.03
S124105		3.38	0.001	<0.005	<0.001	13.75	0.01	2.90	0.004	0.01	0.002	1.94	2.77	2.5	1.10	0.04
S124106		2.51	0.029	<0.005	<0.001	11.40	0.01	3.90	0.012	0.01	0.007	3.87	5.53	1.5	1.16	0.05
S124106-PD		<0.02														
S124107		1.48	0.001	<0.005	0.001	12.80	<0.01	11.65	0.014	0.02	0.004	6.35	9.08	1.2	5.43	0.21
S124108		2.80	0.001	<0.005	<0.001	14.10	0.01	7.89	0.006	0.03	0.004	8.48	12.10	2.2	7.51	0.24
S124109		4.02	0.012	<0.005	0.001	13.40	<0.01	5.85	<0.002	0.02	0.011	4.31	6.16	1.8	2.73	0.11
S124110		0.06	0.173	0.542	0.594	10.30	0.01	5.78	0.034	0.03	0.889	18.00	25.7	0.6	5.57	0.14
S124111		3.85	0.003	<0.005	<0.001	14.30	0.01	5.33	0.004	0.02	0.002	3.63	5.19	2.8	2.17	0.09
S124112		3.02	0.004	<0.005	<0.001	14.10	<0.01	2.36	0.002	0.01	<0.002	2.38	3.40	2.8	1.58	0.05
S124113		1.23	0.061	<0.005	0.003	15.75	<0.01	7.86	0.009	0.02	0.005	5.99	8.56	2.5	1.68	0.08
S124114		3.14	0.009	<0.005	0.001	14.70	0.01	0.98	0.003	0.01	0.002	2.10	3.00	1.9	1.85	0.03
S124115		0.07	<0.001	<0.005	0.001	2.85	0.01	0.07	<0.002	0.01	0.003	1.04	1.49	0.4	0.13	0.01
S124116		2.80	0.009	<0.005	0.005	11.50	<0.01	4.69	0.006	0.07	0.002	6.48	9.26	1.2	11.10	0.18
S124117		2.61	0.002	0.006	0.004	7.31	0.01	7.96	0.006	0.14	<0.002	6.24	8.92	0.5	16.20	0.23



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Sample Description	Method Analyte Units LOD	ME-ICP81 Ni %	ME-ICP81 Pb %	ME-ICP81 S %	ME-ICP81 SiO2 %	ME-ICP81 TiO2 %	ME-ICP81 Zn %	Ag-AA45 Ag ppm	CRU-QC Pass2mm %	PUL-QC Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
S124093		0.004	<0.01	0.31	68.7	0.27	0.002	<0.2		
S124094		0.004	<0.01	0.44	66.3	0.29	0.002	<0.2		
S124095		0.002	<0.01	0.05	70.2	0.03	<0.002	<0.2		
S124096		0.002	<0.01	0.55	68.2	0.28	<0.002	<0.2		
S124097		0.003	<0.01	0.51	63.7	0.28	0.002	<0.2		
S124098		0.006	<0.01	0.30	68.5	0.28	<0.002	<0.2		
S124099		0.004	<0.01	0.35	69.5	0.27	<0.002	<0.2		
S124100		0.002	<0.01	0.19	71.4	0.27	<0.002	<0.2		
S124105		0.002	<0.01	0.36	68.2	0.27	<0.002	<0.2		
S124106		0.008	<0.01	2.82	64.8	0.23	0.007	0.2		
S124106-PD										
S124107		0.004	<0.01	0.87	46.0	0.96	0.018	0.2		
S124108		0.006	<0.01	0.30	45.1	0.92	0.031	<0.2		
S124109		0.004	<0.01	0.44	60.3	0.43	0.011	<0.2		
S124110		1.195	<0.01	6.92	39.4	0.60	0.014	3.5		
S124111		0.007	<0.01	0.23	61.4	0.39	0.004	<0.2		
S124112		0.004	<0.01	0.15	67.6	0.30	0.002	<0.2		
S124113		0.010	<0.01	2.29	50.5	0.70	0.002	<0.2		
S124114		0.006	<0.01	0.30	67.4	0.38	0.002	<0.2		
S124115		0.007	<0.01	0.09	89.2	0.09	<0.002	<0.2		
S124116		0.025	<0.01	1.48	47.5	0.59	0.012	0.4		
S124117		0.065	<0.01	0.40	41.1	0.45	0.014	<0.2		





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Account: NRAMNI

Project: SUD-18-001

**CERTIFICATE OF ANALYSIS SD18309948**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.		
	CRU-31	CRU-QC	LOG-21d
	LOG-23	PUL-31	PUL-31d
	SPL-21	SPL-21d	SPL-34
			LOG-22
			PUL-QC
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	Ag-AA45	ME-ICP81	PGM-ICP23



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**CERTIFICATE SD18318129**

Project: SUD-18-002

This report is for 93 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 13-DEC-2018.

The following have access to data associated with this certificate:

GERRY KATCHEN

PETER LIGHTFOOT

JIM SPARLING

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
LOG-24	Pulp Login - Rcd w/o Barcode
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:

Colin Ramshaw, Vancouver Laboratory Manager





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Project: SUD-18-002

**CERTIFICATE OF ANALYSIS SD18318129**

Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45
		MgO %	MnO %	Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm
		0.01	0.01	0.002	0.01	0.01	0.2	0.01	0.002	0.2
260682		11.45	0.26	0.023	<0.01	0.02	34.7	0.85	0.012	<0.2
260683		11.20	0.23	0.033	<0.01	0.02	42.6	1.23	0.013	<0.2
260684		8.99	0.19	0.065	<0.01	0.24	47.3	1.18	0.013	<0.2
260685		6.42	0.15	0.046	<0.01	0.36	54.1	1.14	0.017	0.2
260686		4.78	0.10	0.016	<0.01	0.07	60.3	0.55	0.009	<0.2
260687		4.10	0.09	0.026	<0.01	0.47	62.5	1.14	0.010	<0.2
260688		8.52	0.18	0.034	<0.01	0.25	48.1	1.38	0.013	<0.2
260689		11.60	0.26	0.034	<0.01	0.06	37.2	1.14	0.014	<0.2
260690		7.02	0.16	0.309	<0.01	1.68	47.1	0.73	0.009	2.1
260691		10.40	0.23	0.033	<0.01	0.03	40.9	1.28	0.012	<0.2
260692		11.25	0.24	0.030	<0.01	<0.01	36.2	1.18	0.013	<0.2
260693		2.26	0.04	0.002	<0.01	0.01	66.3	0.43	0.003	<0.2
260694		11.80	0.22	0.045	<0.01	0.26	42.1	0.58	0.010	<0.2
260695		0.13	0.01	<0.002	<0.01	<0.01	93.5	0.10	<0.002	<0.2
260696		13.80	0.26	0.034	<0.01	0.50	32.3	0.46	0.012	<0.2
260697		18.60	0.22	0.042	<0.01	0.21	40.0	0.67	0.016	0.2
260698		21.9	0.19	0.044	<0.01	<0.01	39.8	0.77	0.015	<0.2
260699		22.6	0.14	0.092	<0.01	<0.01	44.1	0.56	0.010	<0.2
260699-SP		22.3	0.15	0.087	<0.01	0.01	43.6	0.56	0.011	<0.2
260700		22.8	0.14	0.105	<0.01	0.01	50.3	0.38	0.009	<0.2
260715		0.28	0.01	0.004	<0.01	0.02	72.7	0.04	<0.002	<0.2
260716		22.9	0.13	0.109	<0.01	0.02	50.5	0.37	0.007	<0.2
260717		22.8	0.13	0.118	<0.01	0.53	47.7	0.44	0.008	<0.2
260717-SP		22.7	0.13	0.117	<0.01	0.53	47.7	0.43	0.008	<0.2
260718		22.4	0.13	0.095	<0.01	0.63	50.7	0.37	0.006	<0.2
260718-PD										
260719		23.8	0.12	0.105	<0.01	0.50	51.3	0.42	0.007	<0.2
260720		24.0	0.11	0.112	<0.01	0.88	52.0	0.36	0.007	<0.2
260720-PD										
260721		23.3	0.12	0.115	<0.01	0.70	52.2	0.34	0.007	<0.2
260721-SP		23.3	0.12	0.113	<0.01	0.64	52.2	0.33	0.007	<0.2
260722		22.5	0.17	0.103	<0.01	0.47	51.3	0.37	0.008	<0.2
260723		17.75	0.17	0.051	<0.01	1.02	45.6	0.72	0.013	<0.2
260724		11.00	0.17	0.042	<0.01	0.62	45.6	0.70	0.011	<0.2
260725		12.10	0.20	0.048	<0.01	0.35	45.4	0.65	0.012	<0.2
260726		11.60	0.20	0.015	<0.01	0.04	45.8	0.64	0.011	<0.2
260727		12.60	0.20	0.038	<0.01	0.43	47.1	0.77	0.013	<0.2
260728		9.39	0.23	0.035	<0.01	0.19	36.2	0.58	0.010	<0.2
260729		7.61	0.28	0.018	<0.01	0.17	29.1	0.43	0.009	<0.2
260730		7.05	0.16	0.304	<0.01	1.71	49.2	0.73	0.008	2.1





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Project: SUD-18-002

<b>CERTIFICATE OF ANALYSIS</b>	<b>SD18318129</b>
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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45
		MgO %	MnO %	Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm
		0.01	0.01	0.002	0.01	0.01	0.2	0.01	0.002	0.2
260731		8.84	0.22	0.040	<0.01	0.28	41.9	0.61	0.011	<0.2
260732		10.20	0.17	0.037	<0.01	0.48	50.1	0.81	0.015	<0.2
260733		11.95	0.20	0.034	<0.01	0.81	46.4	0.77	0.017	<0.2
260734		11.85	0.20	0.028	<0.01	0.60	47.1	0.67	0.017	<0.2
260735		0.13	0.01	<0.002	<0.01	<0.01	96.1	0.09	<0.002	<0.2
260736		11.80	0.20	0.032	<0.01	0.64	47.5	0.78	0.016	<0.2
260736-PD										
260737		6.86	0.12	0.010	<0.01	0.32	58.8	0.57	0.007	<0.2
260738		10.90	0.17	0.020	<0.01	0.27	49.6	0.75	0.010	<0.2
260739		11.00	0.15	0.025	<0.01	0.36	50.9	0.91	0.009	<0.2
260740		15.40	0.20	0.047	<0.01	0.32	47.1	0.82	0.011	<0.2
260741		15.60	0.20	0.047	<0.01	0.16	46.6	0.85	0.012	<0.2
260742		15.70	0.20	0.045	<0.01	0.06	46.8	0.77	0.011	<0.2
260743		2.18	0.06	<0.002	<0.01	0.10	62.5	0.52	<0.002	<0.2
260744		2.28	0.05	<0.002	<0.01	0.06	68.2	0.57	0.003	<0.2
260745		1.94	0.05	0.003	<0.01	0.14	64.8	0.53	0.002	<0.2
260746		1.87	0.05	0.002	<0.01	0.10	64.4	0.52	0.002	<0.2
260747		2.32	0.04	0.002	<0.01	0.01	66.3	0.54	0.003	<0.2
260748		1.70	0.04	0.002	<0.01	0.06	65.2	0.53	0.002	<0.2
260749		1.60	0.04	<0.002	<0.01	0.06	66.3	0.54	<0.002	<0.2
260750		7.02	0.16	0.306	<0.01	1.73	49.2	0.73	0.009	2.0
260751		1.54	0.04	0.002	<0.01	0.04	64.2	0.52	<0.002	<0.2
260752		2.29	0.05	0.004	<0.01	0.07	64.6	0.53	0.002	<0.2
260753		2.06	0.04	0.003	<0.01	0.03	64.0	0.52	<0.002	<0.2
260754		1.92	0.04	0.002	<0.01	0.01	64.8	0.51	<0.002	<0.2
260755		0.08	<0.01	<0.002	<0.01	<0.01	73.8	0.02	<0.002	<0.2
260756		1.96	0.04	<0.002	<0.01	0.01	65.0	0.50	<0.002	<0.2
260757		2.57	0.08	0.002	<0.01	0.08	58.6	0.70	<0.002	<0.2
260758		1.97	0.05	0.004	<0.01	0.02	64.6	0.52	<0.002	<0.2
260759		1.69	0.05	<0.002	<0.01	0.17	63.5	0.50	<0.002	0.2
260760		1.49	0.06	0.007	<0.01	2.28	56.9	0.34	0.003	3.7
260760-SP		1.44	0.06	0.006	<0.01	2.99	54.5	0.32	0.003	4.7
260760-PD										
260761		2.26	0.05	0.004	<0.01	0.10	63.1	0.47	0.002	0.3
260762		2.14	0.05	0.003	<0.01	0.01	64.2	0.50	<0.002	<0.2
260763		1.56	0.05	0.004	<0.01	0.28	64.4	0.46	<0.002	<0.2
260764		1.96	0.05	0.002	<0.01	0.03	64.0	0.49	<0.002	<0.2
260765		1.99	0.05	0.006	<0.01	<0.01	64.8	0.52	<0.002	<0.2
260766		1.86	0.04	0.002	<0.01	0.06	66.3	0.49	<0.002	<0.2
260767		1.97	0.05	<0.002	<0.01	0.01	64.6	0.50	<0.002	<0.2



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**CERTIFICATE OF ANALYSIS SD18318129**

Sample Description	Method Analyte Units LOD	WEI-21	CRU-QC	PUL-QC	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	
		Recvd Wt. kg	Pass2mm %	Pass75um %	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr %	Cu %	Fe %	Fe2O3 %	K %
		0.02	0.01	0.01	0.001	0.005	0.001	0.01	0.01	0.05	0.002	0.01	0.002	0.05	0.05	0.1
260768		3.64			0.013	<0.005	0.001	14.50	0.01	3.04	<0.002	0.01	<0.002	3.02	4.32	1.9
260769		3.44			0.021	<0.005	0.001	14.55	0.01	3.18	<0.002	0.01	<0.002	2.82	4.04	2.0
260770		0.07			0.191	0.311	0.353	12.25	0.01	7.51	0.019	0.04	0.345	11.15	15.90	0.6
260771		2.52			0.019	<0.005	0.001	14.80	0.01	2.41	<0.002	0.01	<0.002	3.15	4.50	1.6
260772		2.22			0.036	<0.005	0.001	14.25	0.01	3.20	<0.002	0.01	<0.002	3.05	4.36	1.9
260773		0.64			0.055	<0.005	<0.001	13.50	0.02	3.12	0.002	0.01	0.009	3.74	5.35	1.7
260773-SP		<0.02			0.046	<0.005	<0.001	13.40	0.01	3.13	<0.002	0.01	0.009	3.41	4.87	1.7
260774		1.41			0.034	<0.005	0.001	14.15	<0.01	3.13	0.002	0.01	0.002	3.04	4.35	1.8
260775		0.07			0.020	<0.005	0.001	2.85	0.01	0.08	<0.002	0.01	<0.002	1.02	1.46	0.4
260776		0.85			0.033	<0.005	<0.001	14.00	<0.01	4.17	0.002	0.01	<0.002	3.20	4.57	2.0
260777		0.70			0.030	<0.005	0.001	14.00	0.01	3.54	<0.002	0.01	<0.002	2.73	3.91	1.8
260778		0.79			0.100	<0.005	<0.001	12.95	0.01	7.86	0.007	0.01	0.002	5.31	7.59	1.9
260779		0.88			0.029	<0.005	0.001	10.65	0.01	8.68	0.002	0.04	<0.002	5.61	8.02	3.2



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CERTIFICATE OF ANALYSIS SD18318129
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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45
		MgO %	MnO %	Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm
		0.01	0.01	0.002	0.01	0.01	0.2	0.01	0.002	0.2
260768		1.97	0.05	0.002	<0.01	<0.01	65.0	0.51	<0.002	<0.2
260769		1.79	0.04	0.002	<0.01	0.01	64.6	0.48	<0.002	<0.2
260770		7.25	0.16	0.308	<0.01	1.71	47.9	0.74	0.008	2.0
260771		2.01	0.04	<0.002	<0.01	<0.01	64.6	0.51	<0.002	<0.2
260772		1.72	0.04	0.002	<0.01	0.06	64.2	0.47	<0.002	<0.2
260773		1.38	0.04	0.004	<0.01	0.30	65.7	0.43	<0.002	<0.2
260773-SP		1.36	0.04	0.005	<0.01	0.31	64.8	0.44	<0.002	<0.2
260774		1.56	0.04	0.004	<0.01	0.08	64.8	0.47	<0.002	<0.2
260775		0.12	0.01	<0.002	<0.01	0.01	93.5	0.09	<0.002	<0.2
260776		1.38	0.05	0.004	<0.01	0.32	63.7	0.48	<0.002	<0.2
260777		1.29	0.04	0.003	<0.01	0.12	64.6	0.46	<0.002	<0.2
260778		1.23	0.06	0.004	<0.01	0.39	58.4	0.42	<0.002	<0.2
260779		6.28	0.13	0.018	<0.01	0.02	50.7	0.40	0.004	<0.2

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*





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**CERTIFICATE OF ANALYSIS SD18318129**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.		
	CRU-31	CRU-QC	LOG-21d
	LOG-24	PUL-31	PUL-31d
	SPL-21	SPL-21d	SPL-34
			LOG-22
			PUL-QC
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	Ag-AA45	ME-ICP81	PGM-ICP23

(IV)

## ANALYSES OF LORRAIN QUARTZITE, WHITEFISH FALLS AREA

Sample	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	TiO <sub>2</sub>	Na <sub>2</sub> O	K <sub>2</sub> O
59-4.....	98.86	0.51	0.08	0.02	0.03	0.04	0.16	<0.50
59-5.....	98.78	0.64	0.10	0.02	0.02	0.04	0.10	<0.50
59-7.....	98.35	1.04	0.09	0.03	0.02	0.05	0.12	<0.50
76-2A.....	97.67	1.77	0.05	0.01	0.02	0.08	0.10	<0.50
76-2B.....	98.13	1.34	0.05	0.01	0.02	0.07	0.08	<0.50
76-6.....	97.74	1.73	0.05	0.01	0.02	0.06	0.09	<0.50
76-7.....	97.67	1.81	0.06	0.02	0.02	0.05	0.07	<0.50

Sample 59-4 is a composite chip sample taken as representative of the material at the east end of the first bench at the Lawson quarry.

Sample 59-5 is a composite chip sample representing the quartzite in the muckpile at the west end of the first bench, Lawson quarry.

Sample 59-7 is a composite chip sample taken on the second bench near the chute, Lawson quarry.

Sample 76-2A is a composite chip sample of quartzite taken in a north-south direction across-strike over a length of 100 feet on the east end of the firetower hill at Willisville, Curtin township.

Sample 76-2B is a second analysis of Sample 76-2A, indicating the magnitude of sampling error in this case.

Sample 76-6 is a composite chip sample of quartzite taken across-strike over a length of 3,000 feet at the west end of the firetower hill at Willisville, Curtin township.

Sample 76-7 is a composite chip sample of quartzite taken across-strike over a length of 300 feet on the quartzite ridge in Block A, Concession II, Mongowin township,  $\frac{1}{4}$  mile west of highway No. 68.







## Prospecting Manual

# ***BEEP MAT***

**Model BM4+**



**INSTRUMENTATION**

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# Preface

With the *Beep Mat*, you can drastically reduce the cost of sampling and assaying the numerous near-surface conductors detected by airborne surveys in the many areas where the overburden is shallow. The *Beep Mat* has also been very successful in discovering new floats of ore and in the follow-up of conductive floats of ore to their source. Finally, the *Beep Mat* has discovered rich showings of gold and base metals that had not responded to airborne EM and even to any geophysical methods, as it can detect even small veinlets in an otherwise non-conductive body.

Under the moss, the *Beep Mat* also detects conductive and magnetic boulders. It is therefore possible to map the scattering of a trail of floats and find its source.

Moreover, the *Beep Mat* is the only instrument capable of detecting sulfide veinlets in suboutcropping ores that would otherwise respond weakly or not at all to geophysics. For example, the *Beep Mat* detected small chalcopyrite and pyrite veinlets in suboutcropping ores of Silidor and New Pascalis mines. Similar mines could be inexpensively discovered by a prospector dragging a *Beep Mat* in the woods and sampling every conductive vein detected.

Not only is the *Beep Mat* a new tool for prospecting, but it is also a whole new way of looking at prospecting!

GDD is convinced that the large-scale use of *Beep Mats* will bring new life to exploration of base and precious metals throughout Canada, just as the large-scale use of the scintillometer did for uranium exploration in Saskatchewan.

***How to use the Beep Mat***

- A) Connect the probe (*Beep Mat*) to the back of the reading unit.
- B) Press and hold [ON] until the first sound signal stops, then release it. "Standby" will then appear on the display indicating that the probe is connected and warming up. If possible, it is recommended to warm up the instrument at least half an hour before beginning the survey. It is possible to use the *Beep Mat* without warming it. However, the probe won't be stable and once in a while, false signals will probably occur. To avoid confusion in this case, and to confirm the presence of a real conductor, the user will have to re-initialize the *Beep Mat* (see C) and put the probe on the ground over the area where it might have a conductor. If it beeps, there is a real conductor, if not, the probe has given a false signal because it hasn't been warmed up properly (standby).
- C) To begin the survey, you have to put the probe away from any conductive material by lifting it vertically above your head so as to avoid ground effects. To do that, initialize the reading unit by pressing quickly on the [ON] key (pump it once). Until this moment, you will have 4 seconds to put the probe above your head. A Beep will be heard for each of the first 4 seconds. The actual initialization occurs when the two consecutive beeps are heard at the fifth second. The 5-second delay will give the operator the opportunity to pick the probe with his two hands, so as to secure a better grip.
- D) After every 15 minutes of use, the instrument will signal by a repetitive beep and a visual message ("Please re-initialize") that the instrument needs to be reinitialized. The reinitialization procedure is done in order to always achieve maximum efficiency. Repeat step C before continuing the survey. It is necessary to re-initialize the *Beep Mat* periodically. The default reinitialization time is 15 minutes. However, in some special conditions, it may be more practical to increase the re-initialization time to 30 minutes, for example when surveying with an ATV or a snowmobile. To increase the re-initialization time to 30 minutes, press on the [MODE] key twice. The following message will appear on the screen: *15 minutes*. Use either [↑] or [↓] to change the re-initialization time from 15 to 30 minutes, and vice versa. When the 30-minute re-initialization time is chosen, the initialization time will automatically increase from 5 sec. to 20 sec. This delay during the initialization will allow the operator to move behind the ATV or snowmobile, to lift the probe or sleight vertically in the air with his two hands before the two beeps are heard.
- E) To shut off the instrument, press and hold [ON] until OFF appears on the display (about 5 sec.), then release it.



NOTE: If the instrument is not used during two hours, it will automatically turn itself off.

- F) The instrument should be recharged every night from a 110 -V socket or a 12 -V battery (depending of the model). Full charge takes between 4 to 6 hours. When not in use for a long period, do not keep the instrument on charge. The charger is to be connected to the same outlet as the cable of the probe. On demand, GDD can modify the charger to be able to plug it on a 220-V.
- G) [X] key  
This key will neutralize the sound signal of the unit for a period of up to 5 minutes. The sound signal will come back if you press this key again , if any other key is pressed or if the 5-minute period is over. NOTE: To indicate that the sound signal has been neutralized, a black rectangle will appear on the display, in the right corner.
- H) The default alarm levels for the *Beep Mat* when you first turn it on are: LFR: 2 Hz, HFR: 4 Hz, MAG: 400 Hz and M.C. 99%. These default parameters should not be changed unless you are an experienced user (If you still need to change them, see section I below). Be aware that if for example one increase the HFR alarm level, it will reduce substantially the depth at which the *Beep Mat* is able to detect a conductor.
- I) To change the value of any parameter, press on [LEVEL] until you see the value you want to change. Once there, press on the arrow keys, [↑] or [↓], to increase or decrease the value of each parameter.  
NOTE: If at any time you become confused with those values, just turn the instrument off , then on again to reset all default values.
- J) If the batteries become too weak after a 8 to 10 hours of full work, the reading unit will emit an alarm signal and display the message "Low battery". Shortly afterwards, the readings become meaningless. Charge the batteries the same day.
- K) [MODE] key  
This key is used to change the reinitialization time and to adjust the auto -recording time (3,000 readings capacity with the BM4+).
- L) [□] and [■] keys  
These two keys are used to adjust the display brightness by pumping them several times.

### ***Basic Beep Mat signal interpretation***

**LFR and HFR** are respectively the Low frequency and the High frequency response. They increase near a conductor. The strength or sulphurs' concentration will be proportional to the HFR/LFR response. On a conductive horizon, the user will prefer to sample where the HFR/LFR values are the highest.

The high frequency (HFR) is always displayed. The low frequency (LFR) is displayed as long as there isn't magnetite. If there is magnetite, the instrument will display MAG instead of LFR.

**MAG** is the magnetic value and increases in presence of magnetite (its value is negative). As an example, a MAG value of  $-1,000 = 1\%$  of magnetite (approximately) and a MAG value of  $-10,000 = 10\%$  of magnetite.

**Rt** is the Ratio value. Rt is unaffected by the amount of conductive material present and qualifies the conductor (intrinsic conductivity) from 0% (poor conductor) to 100% (excellent conductor). See the annexed graph representing an equivalent of the Rt in Mhos/m at the end of the quick user's guide.

NOTE: The Rt is calculated only if no magnetite is present and if HFR is at least 10 Hz. If magnetite is present,  $Rt = ***$  will appear on the display.

### ***Beep Mat used with an ATV or snowmobile***

The reading unit has been modified so that an optional buzzer can be snapped to the operator's collar. Being located close to the ear, the operator will hear the alarm when a conductor is detected. Action could take place immediately. One can use an optional 12 - 18 foot cable to connect the probe to the reading module. This set up allows the *Beep Mat* to be pulled at up to 20-30 km per hour.

If the user prefers to use a visual signal, the "graph" option will allow to visualize on a graphic the conductive anomaly (peak toward the top of the display) or the magnetic anomaly (peak toward the bottom of the display). To change the display view from the normal view to the graph view, use the horizontal arrows. Take note that if there isn't any magnetic or conductive anomaly, there will be no peak in consequence and it is normal that there will be no graph. The user can settle the speed at which the graph moves from right to left: at each 0,1 or 0,2 or 0,3... to 10 seconds (graph time). This option will allow the snowmobile driver, as an example, to settle his display on different frequency depending of the snowmobile speed.

Make sure that the probe is not next to any metal parts, such as the ATV, the snowmobile or, in some case, the sleigh. To do so, either put the probe in a sleigh made only of wood/plastic, or drag it behind as far as possible from the vehicle. Limit the speed of the vehicle to 20-30 km/h for such a survey.

A new reading module, the BM7+, is now available. It allows the use of an incorporated GPS and an optional MAG. This combination allows to cover large areas, to localize conductors even when travelling at high speeds and to record their position and their intensity within its 400,000 -reading memory (up to 10 times a second). A conductivity and susceptibility map could then be produced from the data recorded. In a second step, one can plan a field trip to explain the nature of the conductor(s) found knowing exactly where they are located.

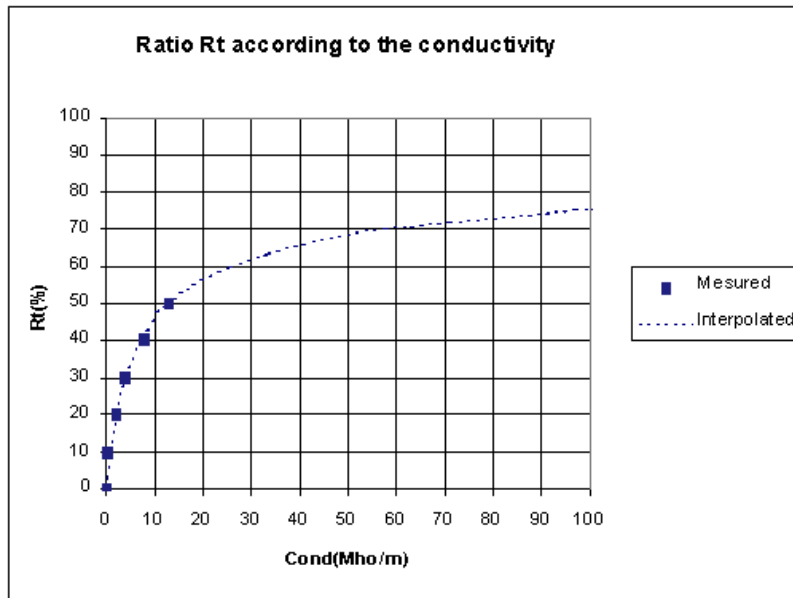
### ***In case of a Beep Mat breakdown***

Connect the probe to the reading unit and initialize the *Beep Mat* far away from any conductive material (step C). If the display indicates "NO HI FREQ. " (No High Frequency) or "NO LO FREQ. " (No Low Frequency), replace the cable. If the unit is still not working, refer to section 3.9: Troubleshooting.

If the instrument is equipped with the new reset fuse, disconnect the cable for 30 seconds then reconnect it and initialize the *Beep Mat* as usual. The fuse is chemical and it takes back its properties. It allows to protect the instrument against static and electric shock but not against mechanical breaking.

If you don't see anything but you hear sounds when you initialize the instrument, you may have to adjust the display brightness ([□] and [■] keys) (see L).

This table and graph show the correlation between the conductivity of a large vat of increasing salt water measured with an IP dipole and the RT ratio measured with a standard model BM 4+.



Ratio (%)	Interpolated (Mhos/m)
0	0.00
10	0.40
20	2.00
30	4.00
40	8.00
50	13.00
60	25.64*
70	57.79*
80	174.02*
90	1105.38*
95	6951.18*
100	∞

\* The values with an asterisk were interpolated.

Please note that the conductivity thickness of a conductor rises with the width of the conductor. Also, the measure of the conductivity is only valid in the absence of magnetite as a MaxMin survey.

*Typical profiles of the Beep Mat*

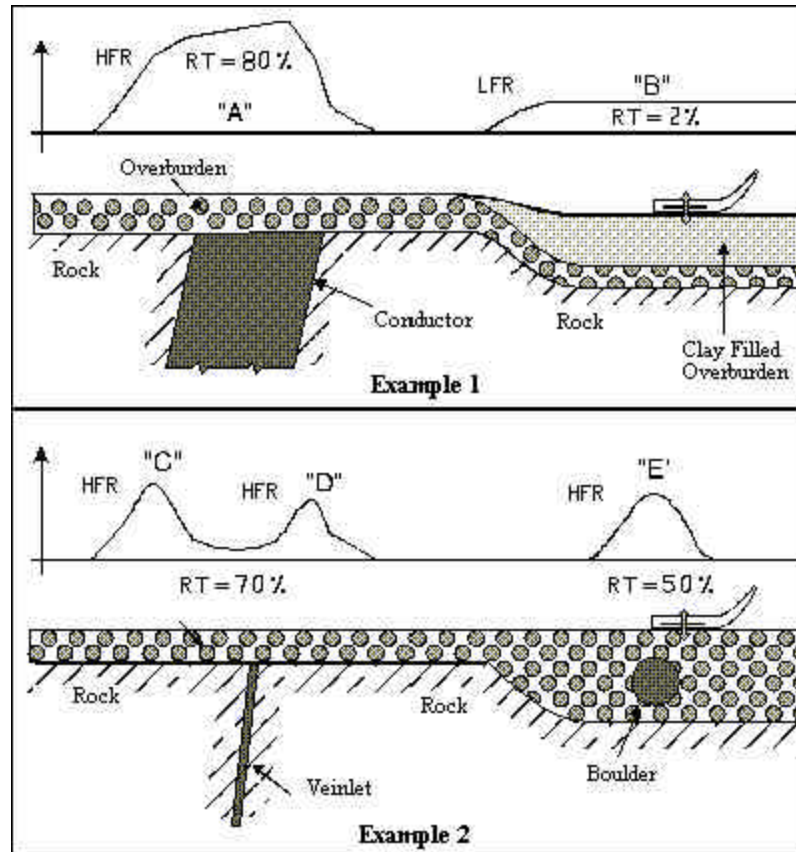


Illustration 10: Examples of typical profiles of the *Beep Mat*

Here is how to interpret illustration 10.

- Anomaly "A" is strong and wide, and the ratio (Rt) is high. It indicates the presence of a **good wide conductor**.
- Anomaly "B", however, is weak and uniform, and the ratio (Rt) is low; it is a typical sign of the effect of a **clayey ground**.
- Examine anomalies "C" and "D" of example 2 above. These two anomalies forming a doublet are both caused by the effect of an almost vertical veinlet. Compare with cases "a" and "b" of illustration 11. There are no anomaly above the **veinlet** because the induction lines (see chapter 4) do not cross it (illustration 11, case "b"). For more explanations, see also illustration 14, at section 7.3.
- Anomaly "E" is rather narrow and reacts mostly in HFR. In this example, it is due to the presence of a **boulder** in the till.



**EXAMPLE ON WHAT TO RECORD IN THE FIELD:  
Record to photocopy for field work**

<http://www.gdd.ca>

# Échantillon - *Sample #* : \_\_\_\_\_  
 Projet - *Project* : \_\_\_\_\_ Date - *Date* : \_\_\_\_\_  
 Opérateur(s) - *Operator(s)* : \_\_\_\_\_

**LOCALISATION AVEC GPS - LOCALIZATION BY GPS**

NAD 83  EST - *EAST* : \_\_\_\_\_ m.  
 27  NORD - *NORTH* : \_\_\_\_\_ m.

Zone \_\_\_\_\_

**LECTURES DU BM - BM READINGS**

	HFR / LFR	MAG	% RATIO
• Sur la neige : • <i>On top of snow</i> :	_____	_____	_____
• Sol original : • <i>On the surface</i> :	_____	_____	_____
• Sur le roc : • <i>On the conductor</i> :	_____	_____	_____

Profondeur conducteur : \_\_\_\_\_ m. terre + \_\_\_\_\_ m. neige  
*Depth cond. buried* : \_\_\_\_\_ m. soil + \_\_\_\_\_ m. snow

Dimension conducteur : \_\_\_\_\_ m. long X \_\_\_\_\_ m. large  
*Size of conductor* : \_\_\_\_\_ m. long X \_\_\_\_\_ m. wide

Site échantillonné : Erratique  Affleurement   
*Site sampled* : Boulder  Outcrop

Si foré : # de trous \_\_\_\_\_ Longueur totale \_\_\_\_\_ m.  
*If drilled* : # of holes \_\_\_\_\_ Total length \_\_\_\_\_ m.

Comment échantillonné (cliquez sur la case appropriée) :  
*Type of sample (tick one appropriate square)* :

- |                                      |   |  |
|--------------------------------------|---|--|
| 1) au marteau :<br><i>hammered</i> : | aléatoire <input type="checkbox"/><br><i>random</i> | choisi <input type="checkbox"/><br><i>grab</i> |
| 2) dynamite :<br><i>blasted</i> :    | aléatoire <input type="checkbox"/><br><i>random</i> | choisi <input type="checkbox"/><br><i>grab</i> |
| 3) poussières de forages             | <i>drill cuttings</i> <input type="checkbox"/>      |  |

Si affleurement lité : Azimut \_\_\_\_\_ Plongée \_\_\_\_\_  
*If outcrop layered* : Azimuth : \_\_\_\_\_ Y Dip : \_\_\_\_\_ Y

Description du site et de la géologie - *Site and geology description* :

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## 1. INTRODUCTION

This manual is intended for geologists and prospectors. It concerns the *Beep Mat*, model BM4+. However, the general theory of the *Beep Mat* can be used to better understand any previous model.

### 1.1 *Brief Description of the Beep Mat*

The *Beep Mat* is a simple and efficient electromagnetic prospecting instrument adapted to the search of outcrops and/or boulders containing conductive and/or magnetic minerals. It basically consists of a sleigh-shaped short probe and a reading unit. For prospecting, you pull the probe on the ground to be explored. The *Beep Mat* takes continuous readings while you walk and sends out a distinctive audible signal when detecting a conductive or a magnetic object in a radius of up to 3 meters. The *Beep Mat* directly detects and signals the presence of ores, even slightly conductive, containing chalcopyrite, galena, pentlandite, bornite and chalcocine. It also detects native metals (copper, silver, gold) as well as generally barren conductive bodies (pyrite, graphite and pyrrhotite), but which may contain precious ores such as gold or zinc (sphalerite), which are themselves non-conductive. Besides detecting conductors, the *Beep Mat* measures their intrinsic conductivity and their magnetic susceptibility (magnetite content). This helps geologists and geophysicists better interpret others geophysical and geological surveys.

### 1.2 *Beep Mat Components*

When you receive your *Beep Mat*, make sure that it contains all components shown on illustration 1. If not, please contact *Instrumentation GDD Inc.* Pay special attention to the terminology used on illustration 1 since it will be used throughout this manual.

The following optional components may also be included:

- a dumping cable;
- an external beeper;
- a protective plate under the shell;
- a 17-foot cable for winter.

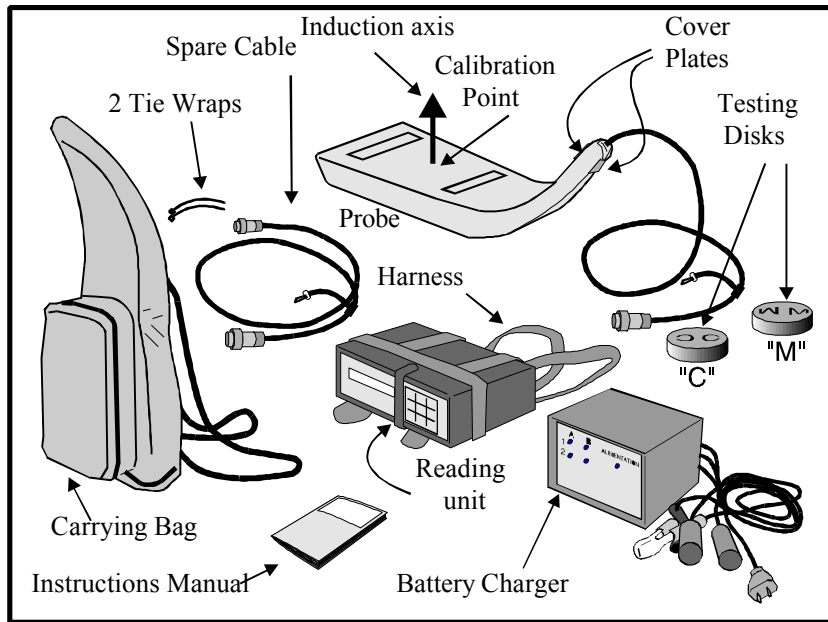


Illustration 1: *Beep Mat* components

### 1.3 Specifications

<b>Power supply:</b>	2 rechargeable 6-V batteries
<b>Daily autonomy:</b>	up to 10 hours
<b>Memory capacity:</b>	3,300 readings
<b>Weight:</b>	Reading unit: 1.9 kg
	Probe: 3.8 kg
<b>Size:</b>	Reading unit: 18 x 20 x 6.4 cm
	Probe: 30 x 91 x 7.6 cm
<b>Operating temperature:</b>	from $-20^{\circ}\text{C}$ to $40^{\circ}\text{C}$
<b>Humidity:</b>	can be operated on rainy, foggy or snowy days

## 2. INSTRUMENT TESTING

Upon delivery of the *Beep Mat*, always check if the batteries are charged.

### 2.1 Charging the Batteries

It is recommended to keep the instrument on charge when not in use. The charger (see below) can operate either from a 110 -V socket or a 12 -V battery (ex: car or truck battery).

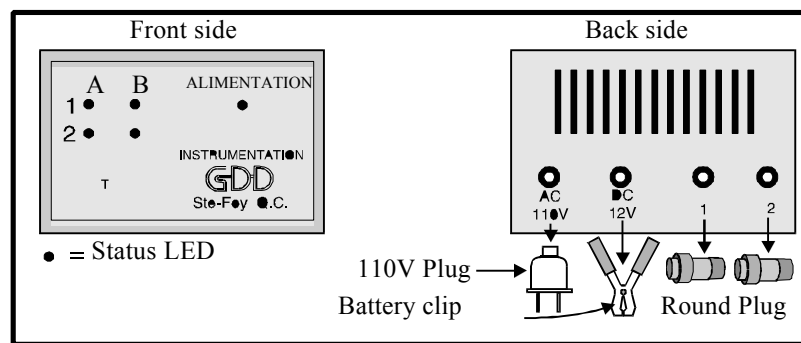


Illustration 2: Battery charger

To charge the *Beep Mat*, connect **one** of the round plugs of the charger to the corresponding round jack at the back of the reading unit (see i llustration 4). Connect the 110-V plug to a socket, or connect the battery clips to the terminal of a 12 -V battery. CAUTION: the red clip must touch only the positive terminal (+) of the battery.

If the ALIMENTATION light does not come on, the power source might be defective or the supply cable might have been cut. Each *Beep Mat* has two batteries, identified "A" and "B". The charger can accommodate two *Beep Mats* on its connectors identified "1" and "2". The corresponding lights on the front of the charger indicate that the batteries are indeed being charged. When the batteries are completely charged, the corresponding lights go out. Disconnect the round plug. The *Beep Mat* is now ready to be used in the field.

**IMPORTANT:** Never turn on the reading unit when it is connected to the charger as it may damage the charger.

## 2.2 Detecting Functions and Testing

Connect the probe cable to the round jack at the back of the reading unit. Put the probe in a metal-free environment; for example, place the probe on a **wooden** table or a cardboard box. Ideally, avoid any kind of metal in a radius of 3 meters. On the reading unit, press the [ON] key. An initialization message will be displayed, then the following display will appear:

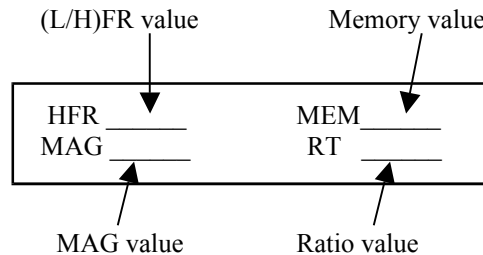


Illustration 3: Typical display on the BM4+ reading unit

The lines "\_\_\_\_\_" indicate the place where numbers will appear. You might hear one or two sounds coming from the buzzers.

Bring a metal piece close to the probe (ex.: keys or a can). The (L/H)FR value should be positive, and the CONDUCTOR status light (see illustration 4) should light up and you should hear a low-pitched sound. The ratio value should be near 100%, indicating an excellent conductor.

Take away the metal piece from the probe, then place the red testing disk "C" (conductor) in the middle of the testing point (the first "D" of GDD on the probe). The (L/H)FR value should rise while the MAG value should stay near zero. The Rt value should indicate a value around 40%. You should hear the high-pitched sound and the red CONDUCTOR status light should light up.

The displayed values should correspond, by 20%, to the values marked on the red disk "C".

Then take away the red disk "C" and place the blue testing disk "M" (magnetic) in the middle of the testing point. The (L/H)FR value should remain near zero and the MAG value should increase. You should hear a high-pitched sound, and finally, the Rt value should indicate \*\*\* (due to the presence of magnetite).

The displayed values should correspond, by 20%, to the values marked on the blue disk "M".

Now, place the red disk on the blue disk in the middle of the testing point. The (L/H)FR value and the MAG value should increase and the Rt value should be \*\*\*. You should also hear the high-pitched and low-pitched sounds and the red CONDUCTOR status light should light up.

The displayed values should correspond, by 20%, to the values marked on the red disk "C".

If the *Beep Mat* reacts as described previously, it means that it works well. Otherwise, refer to section 3.9 (Troubleshooting). Repeat that test when you are not sure if the instrument is working well.

Those 3 tests are basic examples of the *Beep Mat* response in the field, so try to become very familiar with them.

- The reaction to the red disk is the typical reaction of the *Beep Mat* when you pass over a conductor in a non-magnetic environment.
- The reaction to the blue disk is the typical reaction of the *Beep Mat* when you pass over a magnetic body or a magnetic environment.
- The reaction to the red and blue disks is the typical reaction of the *Beep Mat* when you pass over a conductor in a magnetic environment.

### 3. READING UNIT

This chapter describes the various physical and functional components of the reading unit as well as instructions on how to use them.

#### 3.1 Reading Unit Elements

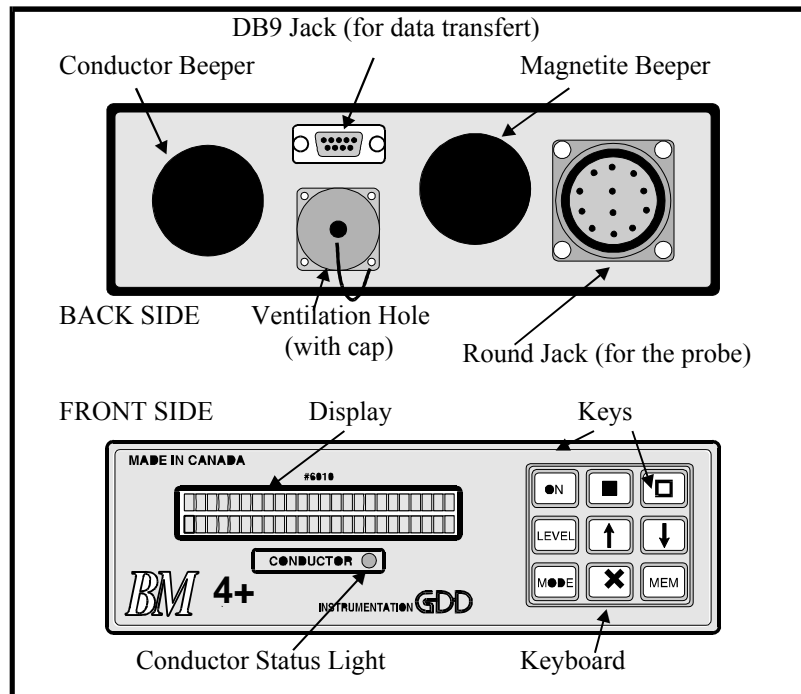


Illustration 4: Reading unit

Illustration 4 shows the various visible parts of the reading unit. Here is a short description of the function of each one.

- The **display** has two lines of 24 characters each. Values, parameters or messages generated by the *Beep Mat* can be read on it.
- The **conductor status light** lights up when the (L/H)FR value exceeds a specified threshold due to the presence of a conductor.
- The **conductor beeper** (low-pitched sound) is activated when the (L/H)FR value exceeds a specified threshold due to the presence of a conductor.
- The **magnetite beeper** (high-pitched sound) is activated when the MAG value exceeds a specified threshold. **N.B.:** the buzzers and the conductor status light react quicker than the display.
- The **round jack** links the reading unit to the probe or to the battery charger.

- The **ventilation cap** covers the ventilation hole. After having worked in rain or any other conditions where there was a high level of humidity, open the cap while the batteries are charging to let humidity out. If possible, do it in a warm and dry place.
- The **DB9 jack** links the reading unit to a computer for the transfer of memorized data.
- The **keys** on the **keyboard** are used to access the various functions of the *Beep Mat*, each key being identified at its center. In this manual, a word or a symbol in brackets represents the key so identified: for example, [ON] or [■], or [↓]. Here are their specific functions:
  - [ON] = To turn on the *Beep Mat* or change its *state*.
  - [□] or [■] = To increase or decrease the display brightness.
  - [LEVEL] = To activate the display of an *operating parameter*.
  - [MODE] = To change the initialization time from 15 to 30 minutes or to adjust the *auto-recording* time.
  - [X] = To neutralize the sound.
  - [MEM] = To store the data or to activate the *auto-recording*.
  - [↑] or [↓] = To increase or reduce the value of the displayed parameters.

The expressions in *bold-italic* as well as the [X], [MODE] and [MEM] keys will be explained in the next sections.

### 3.2 *Beep Mat States*

The reading unit can be in one of the following four states:

*Off*

*Standby (or preheating)*

*Initialization*

*On (in reading process)*

- **Off:** The *Beep Mat* stops all functions.
- **Standby:** The *Beep Mat* warms up to stabilize its frequency. The minimal preheating period suggested before beginning a survey is 30 minutes. If possible, preheating should be done under the same temperature conditions expected during the survey.
- **Initialization:** During initialization, the *Beep Mat* adjusts its signals in order to display zero values when there are no conductors. Initialization automatically ends two seconds after [ON] has been pressed.
- **On:** The *Beep Mat* measures the probe reactions, interprets them in terms of values, then displays these values every second. However, the buzzers react instantly, in less than 0.15 second. Therefore, the buzzer might signal something while the reading unit does not display anything. When the *Beep Mat* is *on*, a



message on the display and a sound signal remind the operator to reinitialize the *Beep Mat* at every 15 or 30 minutes.

### 3.3 How to Pass From One State to the Other With [ON]

[ON] is not only used to turn the *Beep Mat* on; it is also used to put the *Beep Mat* in one of the states described at 3.2. By connecting the probe to the reading unit, the *Beep Mat* is *off*. Every time you momentarily press [ON], the *Beep Mat* passes to *initialization*. After 2 seconds, it passes to *on*. If the key board is not used during more than two hours, the *Beep Mat* automatically passes to *off*.

If you keep [ON] pressed longer, the display indicates the following available states in this order (a few seconds per choice):

<b>Initialization:</b>	(sound signal)	2 seconds
<b>Standby:</b>	(silence)	3 seconds
<b>Off:</b>	(second sound signal)	5 seconds

The *Beep Mat* will put itself in the displayed state if you release [ON] at the precise moment when the state you selected is displayed.

### 3.4 Operating Parameters and Their Thresholds

The operating parameters of the *Beep Mat* as well as their thresholds when you turn the instrument on are:

	Threshold	Scale
<b>LFR</b> (conductivity)	2 Hz	1-2-4-8-15-20-40-80-150-200-...20,000 Hz
<b>HFR</b> (conductivity)	4 Hz	1-2-4-8-15-20-40-80-150-200-...20,000 Hz
<b>MAG</b> (magnetite)	400 Hz	1-2... 40-80-150-200- <b>400</b> -800-...20,000 Hz
<b>M.C.</b> (magnetite coefficient)	99%	103-102-101-100- <b>99</b> -98-97-96-94-...70%

To display one of these parameters, press on [LEVEL]. The parameter is only displayed a few seconds, then the display returns to the normal operating mode. By pressing [LEVEL] again during these few seconds, the next parameter is displayed, according to a cyclic sequence. It is possible to modify the displayed parameter with the help of the [↑] and [↓] keys.

It is important to remind that when a value exceeds its threshold, an alarm (sound signal) will go off. By reducing the threshold of a value, the sensitivity of the *Beep Mat* will increase, but also the number of false alarms. On the opposite, by increasing the threshold of a value, the sensitivity of the *Beep Mat* will diminish, as

well as the number of false alarms. Usually, it is not recommended to increase the thresholds because fewer conductors might be found in a day.

Table 1 shows the readings variations of a *Beep Mat* versus the depth of a conductor located under the probe. With this table, you are now able to evaluate what may result from the modification of the thresholds.

**Table 1: (L/H)FR value versus depth for a pyrrhotite boulder of 15 cm in diameter**

Depth in cm	(L/H)FR Value (conductor)	MAG Value (magnetite)
30	68	0
25	124	0
20	240	0
15	530	0
10	1,329	0
5	3,312	0
0	9,233	0

### M.C. Parameter

The M.C. parameter stands for Magnetic Coefficient. It is a correction coefficient for the effect of magnetite that enables the *Beep Mat* to adjust the effect of magnetite versus the effect of a conductor. If you reduce that coefficient, the LFR value will be diminished by the presence of magnetite. The LFR value would therefore become non significant with a too small magnetite coefficient. For this reason, one must be very experienced before modifying that coefficient. The magnetite coefficient must normally be at 99% or 100%. It is sometimes possible to reduce it slightly (ex.: 96%) if the ground is highly magnetic and irregular and if, at 100%, it causes several false alarms.

Generally speaking, it is strongly recommended not to modify the operating parameters unless there are false alarms in repetition. For 95% of the field surveys, the *Beep Mat* will work just fine with all the default parameters preset by GDD.

Remember that if you modify too many thresholds and get confuse with all the values, you can always turn the *Beep Mat* off then turn on again. This will reset all default parameters.

### 3.5 *Sound Control*

As mentioned at section 3.4, when the thresholds for (L/H)FR or MAG are reached by the *Beep Mat*, an alarm goes off. Sometimes, when you investigate the same conductor longer, the alarm may become bothersome. It is possible to neutralise the alarm with the [X] key. Press the [X] key and a black rectangle will appear at the bottom right of the display to indicate that the alarm has been neutralized. By pressing the [X] key again, the black rectangle will disappear and the alarm will be reactivated. Note that by pressing on [MODE], [LEVEL] or [MEM], the alarm will be automatically reactivated. Also, if you forgot to reactivate the alarm, it will automatically go off after a lapse of 5 minutes.

### 3.6 *Reinitialization Time*

It is necessary to reinitialize the *Beep Mat* periodically. The default reinitialization time is 15 minutes. However, in some special conditions, it may be more practical to increase the reinitialization time. It is possible, but generally not recommended to do so.

To increase the reinitialization time to 30 minutes, press on the [MODE] key twice. The following message will appear on the display: *15 minutes*. Use either [↑] or [↓] to change the reinitialization time from 15 to 30 minutes, and vice versa.

### 3.7 *Record Data*

With the BM4+, it is possible to store the values shown on the display. Those values can be stored either manually (Manual recording) or automatically (Auto-recording).

#### **Auto-recording time**

By pressing on [MODE], the message *memory time: 0 sec* will be displayed. With the [↑] and [↓] keys, you can modify the time to the value wanted. The 0 time is selected for Manual recording of data while any other values should be selected to allow the Auto-recording.

- **Manual recording** (memory time: 0 sec)

To store the current displayed values, simply press on [MEM].

- **Auto-recording** (memory time: X sec)

The time selected at *memory time* determines the time interval at which the BM4+ will record data automatically. To activate the Auto-recording, press on [MEM]. The # symbol will thus appear at the top right of the display to indicate that the *Beep Mat* is actually storing values automatically at every X sec. To stop the Auto-recording, simply press on [MEM] again (the # symbol will disappear).

Every time the *Beep Mat* stores a value, a number briefly appears beside MEM on the display to indicate the corresponding memory number. Take note that the maximum number of readings that can be stored is 3,300. In your field book, note that number and the conditions in which the reading was taken (see section 5.4 for an example of a typical field book entry). You can later transfer those data to a computer in order to draw a map of the discovered showings or for a geophysical survey (see chapter 10 - Data Transfer).

### 3.8 *Clear Memory*

It is necessary to do a Clear Memory if one of the following messages appears on the display: *Memory full* or *Memory corrupted*.

If you want, you can erase ALL the memory in the *Beep Mat* while in the field. To do so, press and hold [MEM] and [ON] simultaneously until the message *please wait 15 sec* appears on the display. After 15 seconds, the *Beep Mat* will turn itself off and the memory will be completely empty.

### 3.9 *Troubleshooting*

If the instrument does not display anything, first check the display brightness with [□] and [■]. Then, turn off the reading unit, then turn it on (to reset all default parameters).

If the *Beep Mat* is incoherent or if the reading unit indicates a problem such as *Low Battery*, *NO HI FREQ.* (No High Frequency) or *NO LO FREQ.* (No Low Frequency), one of the following components might be defective:

- probe cable
- battery charger
- reading unit
- batteries
- probe

In order to try to solve the above problems, first check if the probe cable is correctly screwed on to the reading unit. Then check if the batteries are correctly charged by using either the other cylindrical connector of the charger or another charger (see section 2.1 for a description of the charger). If the instrument is still not working, try a Clear Memory (section 3.8). If the problem persists, replace the probe cable, it may be damaged inside. To replace it, unscrew the screws of the cover plates (see illustration 1). Then, unscrew the connector located there with a pair of pliers and cut the tie wraps if necessary. Connect the spare cable to the same hole where the defective cable was and test it. If it works, put the tie wraps back (it is essential), then put the cover plates back in place. The *Beep Mat* may also display the presence of a problem such as a low battery or non-working elements.

If you are not sure what the problem is, repeat the test described at section 2.2. If the *Beep Mat* still does not work, call *Instrumentation GDD Inc.* so that arrangements can be taken to ship you another unit as soon as possible while the instrument is under repair. Always return the complete instrument with all its components in its carrying bag to GDD.

#### 4. OPERATING PRINCIPLE

The probe contains an inductive coil within its shell. When the probe is in normal position on the ground, as shown on illustration 5, the induction axis sent by the coil is in vertical position.

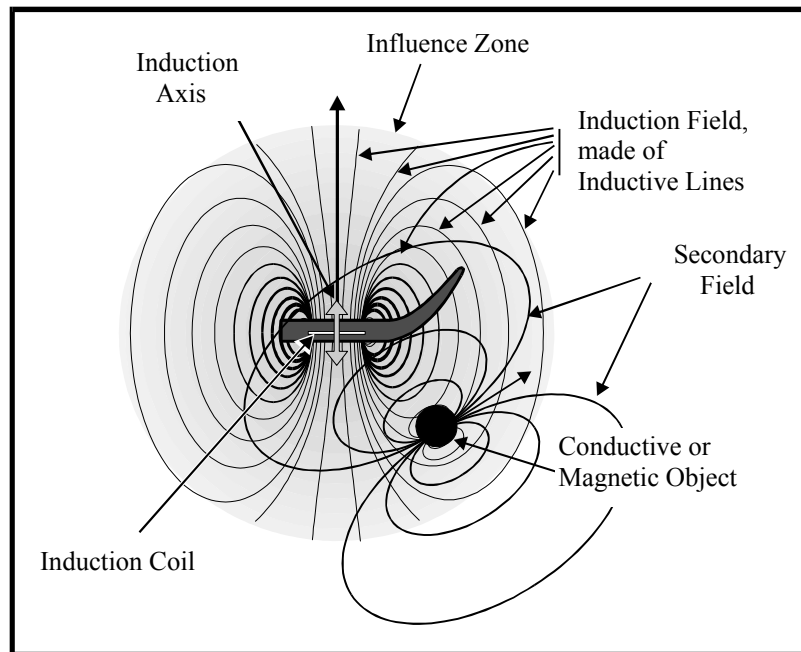


Illustration 5: Operating principle

The influence zone of its induction field has an average radius (called "range") of about 3 meters. This field is similar to the field of a magnet. Any conductive or magnetic object within the zone reacts by sending out again a secondary field (or "induced field") which is weaker and has distinctive features. The probe reacts on the part of this field that goes through its inductive coil. This reaction is then displayed on the reading unit in terms of LFR, HFR, MAG and Rt values.

Picture the inductive field as being composed of several induction lines crossing the inductive coil and which density increases towards the center of the coil. To illustrate that, only a few induction lines are presented on illustration 5. Therefore, the greater the number of lines that cross the conductive or magnetic object, the higher the displayed values will be. For further details, refer to chapter 6.

Following is the meaning of **LFR**, **HFR**, **MAG** and **Rt** values:

- The **LFR** value (Low Frequency Response ) represents a specific reaction of the low frequency, in hertz, to the presence of a conductor near the probe.
- The **HFR** value (High Frequency Response) represents a specific reaction of the high frequency, in hertz, to the presence of a conductor near the probe.
- The **MAG** value (Magnetite) represents a specific reaction of the probe, in hertz, to the presence of a magnetic body, in particular one containing magnetite (relative susceptibility).
- The **Rt** value (Ratio) indicates the quality of the conductor (intrinsic conductivity) and is independent of the quantity of present material. For the ratio value to be calculated by the unit, there are two conditions:
  - the HFR must be of at least 10 Hz ;
  - no magnetite must be present (MAG = 0).

In presence of magnetite, the Rt value is altered and  $Rt = ***$  will be displayed. When HFR is below 10 Hz, the Rt value is not precise enough and  $Rt = 0\%$  will be displayed.

To help you better interpret those values, a practical example is given on illustration 10 (section 6.2).

## 5. USE IN THE FIELD

This chapter describes a typical sequence for a *Beep Mat* survey.

### 5.1 Getting Ready

Prepare all the necessary field gear: *Beep Mat*, a GPS if possible to localize yourself and maybe a VLF (EM -16) electro magnetometer to localize airborne conductors, radio, field books, sample bags, small shovel, hammer, flag tape, maps, photos, dynamiting kit, marker, compass, etc.

Make sure that the batteries are charged. If possible, at least 30 minutes before beginning a *Beep Mat* survey, connect the probe cable to the round jack on the reading unit, then put the instrument in *standby* by keeping [ON] pressed until the end of the first sound signal (3 seconds). The message STANDBY will appear. You can carry the instrument while in *standby*, but it is better to keep the probe at least 6 inches away from any large metallic surfaces (i.e., the floor of a truck). In such a situation, it is recommended to put the probe upside down.

It is better that the probe be preheated before beginning a survey. However, even if the probe has not been sufficiently preheated, you can start the survey anyway, but once in the field, you will probably have to reinitialize the *Beep Mat* more often during the first hour of use. Put the probe on the ground, strap the reading unit to yourself and attach the strain relief ribbon to the leather case as shown on illustration 6. You can then initialize the *Beep Mat* (see section 5.2).

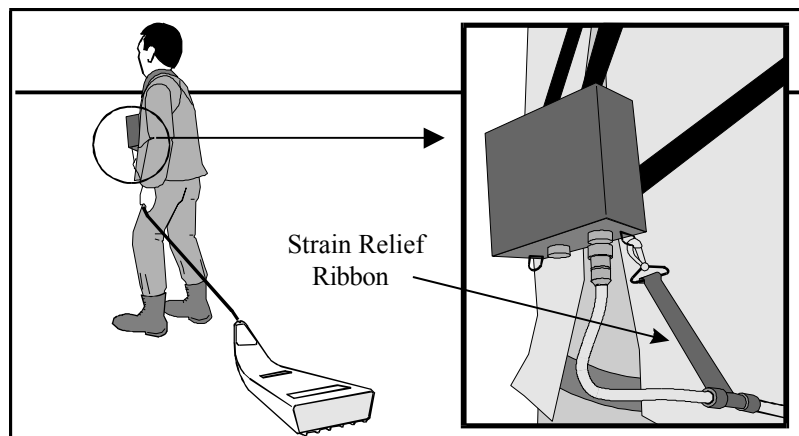


Illustration 6: Typical use of the *Beep Mat*

## 5.2 Initialization

First, make sure you are not wearing a metal helmet. Lift the probe vertically above your head, as shown on illustration 7, so that it is not affected by the ground, and initialize the *Beep Mat* by pressing on [ON]. Wait until the initialization is over (about 2 sec.), then put the probe on the ground. You can now pull it again. Remember that every 15 minutes, the *Beep Mat* will signal to the operator that it needs to be initialized again. It is possible to initialize the *Beep Mat* anytime by lifting the probe vertically in the air (see illustration 7).

## 5.3 Exploration

Cover all grounds that you think may offer an interesting potential of discovery. A distinctive signal will indicate that you just passed near a conductor or a magnetite concentration. Stop and confirm the signal position. Mark that position immediately with flag tape, posts or branches. Before digging, reinitialize the probe in the air, then use the *Beep Mat* to delimit the nearby surface giving abnormal readings. Dig at the place where the readings are the highest, that is where there seem to be the most sulfides in the rock. Make sure that it is not caused by scrap metal, such as cans or metal casing (near a former drilling site for example). Dig with a shovel and examine the samples. Try to find the geological cause. You can also use the *Beep Mat* to delimit a conductive or magnetic outcrop.

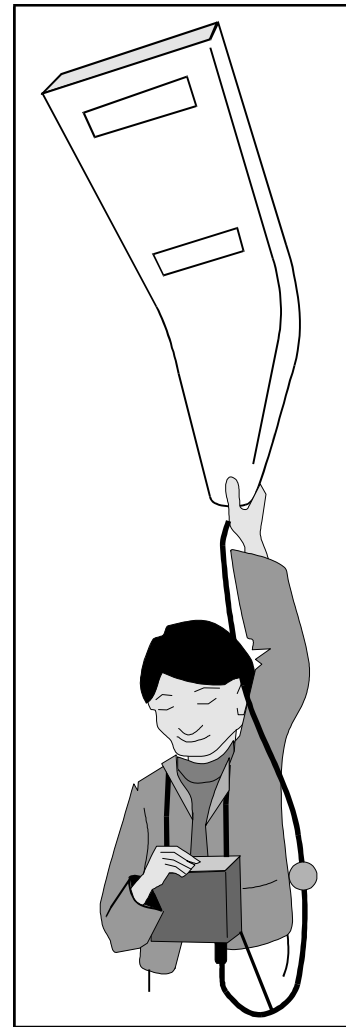


Illustration 7:  
*Beep Mat* initialization

Such exploration helps making discoveries, but in order to increase chances of success, it is recommended to elaborate a strategy and use different tactics. This aspect will be treated further in this manual.



## 5.4 Example of Notebook

With the *Beep Mat*, you will find a lot of conductors. For a good evaluation of each conductor found, it is important to take proper notes in your notebook. Here is an example of a typical notebook and at the bottom, once transferred in an Excel format

http://www.gdd.ca

# Échantillon - Sample #: \_\_\_\_\_  
 Projet - Project : \_\_\_\_\_ Date - Date : \_\_\_\_\_  
 Opérateur(s) - Operator(s) : \_\_\_\_\_

**LOCALISATION AVEC GPS - LOCALIZATION BY GPS**

NAD  83 EST - EAST : \_\_\_\_\_ m.  
 27 NORD - NORTH : \_\_\_\_\_ m.  
 Zone \_\_\_\_\_

**LECTURES DU BM - BM READINGS**

	HFR / LFR	MAG	% RATIO
• Sur la neige : • On top of snow :	_____	_____	_____
• Sol original : • On the surface :	_____	_____	_____
• Sur le roc : • On the conductor :	_____	_____	_____

Profondeur conducteur : \_\_\_\_\_ m. terre + \_\_\_\_\_ m. neige  
 Depth cond. buried : \_\_\_\_\_ m. soil + \_\_\_\_\_ m. snow  
 Dimension conducteur : \_\_\_\_\_ m. long X \_\_\_\_\_ m. large  
 Size of conductor : \_\_\_\_\_ m. long X \_\_\_\_\_ m. wide

Site échantillonné : Erratique  Affleurement   
 Site sampled : Boulder Outcrop

Si foré : # de trous \_\_\_\_\_ Longueur totale \_\_\_\_\_ m.  
 If drilled : # of holes \_\_\_\_\_ Total length \_\_\_\_\_ m.

Comment échantillonné (cliquez sur la case appropriée) :  
 Type of sample (tick one appropriate square) :

1) au marteau : aléatoire  choisi   
 hammered : random grab  
 2) dynamite : aléatoire  choisi   
 blasted : random grab  
 3) poussières de forages  drill cuttings

Si affleurement lité : Azimut \_\_\_\_\_ Plongée \_\_\_\_\_  
 If outcrop layered : Azimuth \_\_\_\_\_ Dip \_\_\_\_\_

Description du site et de la géologie - Site and geology description : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Chemical Assays  
(will be obtained later)

A	B	C	D	E	F	G	H	I	J	K	L	Au (ppb)	Cu (ppm)	Ni (ppm)
#	pros	B/O	HFR before	HFR after	MAG	Rt %	Area	Orient.	UTM m.N.	UTM m.E.	Comments			
201	LG	B	9,500	45000	3,000 3%	***	0.5 m, round	-	4,986,452	717,540	about 30% of pyrrhotine	>5	34	13
202	EG	O	2,000	4,000	0	55	30 m x 1.5 m	90 N	4,987,022	717,870	lots of small parallel veinlets. Cpy 10%	8,980	5,340	450
203	GD	B	1,200	3,000	2,000 2%	***	0.6 m x 0.4 m	-	4,986,110	716,983	look like quartz with dark impurities.	>5	14	12
301	EG	B	70	1,500	2,500 2.5%	***	0.3 m, round	-	4,984,440	718,393	5% Po and 2% Cu	67	2,300	45
302	EG	O	80	6,000	0	54	25 m x 1 m	60 N	4,984,350	718,408	many stripes of conductors about 1 m apart, over 25 m.	550	670	550

- |   |  |
|---|--|
| A: Sample number  | G: Ratio read over the conductor                               |
| B: Initials of the person who found the sample, for further reference   | H: Area over which the <i>Beep Mat</i> responds (beeps)        |
| C: The conductor is a boulder (B) or an outcrop (O)                     | I: Conductor orientation, useful for geological interpretation |
| D: Maximum value (HFR) obtained from the <i>Beep Mat</i> before digging | J-K: Localization of the discovery (here from a GPS in UTM)    |
| E: Maximum value (HFR) obtained from the <i>Beep Mat</i> after digging  | L: Other useful info, if possible, ore content                 |
| F: MAG value  |  |

## 6. INTERPRETATION OF READINGS

This chapter explains how to interpret the values on a target and the profiles of these values.

### 6.1 Data on a Target

The (L/H)FR and MAG values are influenced by the conductivity of an object and its magnetite content. A LFR value indicates that the object is more magnetic than conductive, while a HFR value indicates the opposite. A conductive and magnetic rock could give a (L/H)FR value according to the proportion of those elements. The bigger the object is or the closer it is to the probe, the higher the value. The presence of humidity in the ground causes the addition of an offset of 0 to -100 to the MAG value (see illustration 8). For that reason, in the absence of conductors, the readings are generally LFR.

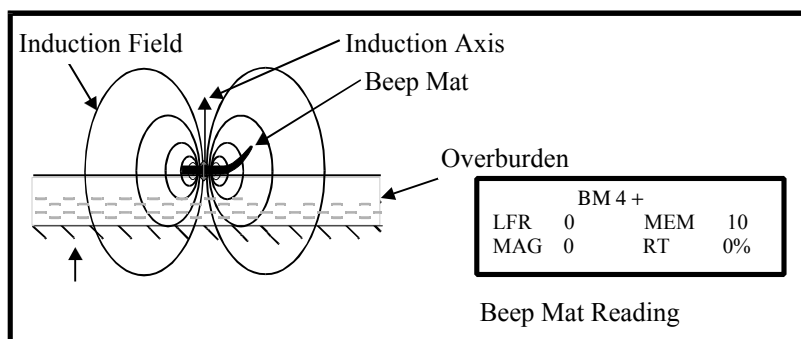


Illustration 8: Typical reading without any anomaly

The HFR corresponds to the variation of the high frequency and the LFR corresponds to the reaction of the low frequency. When approaching a magnetite rich sample (for example, a vein), the low frequency reacts more than the high frequency, so the LFR value should appear and stay at zero or very low. The MAG value increases in negative value (see illustration 9, case "b"). When approaching a conductive sulfide sample, the HFR reacts more than the LFR. Therefore, the HFR value should appear and increase while the MAG value should remain low (see illustration 9, case "a"). If the HFR value is high and the MAG value is low, it means that the conductivity of the sample is high and that the body could turn out to be metal.

Note the similarity of these reactions with those observed during the instrument testing (chapter 2). The weaker the block conductivity is, the weaker the HFR value will be. By approaching a conductive block that also contains magnetite, the LFR will increase and the MAG will diminish in negative value (see illustration 9, case "c").

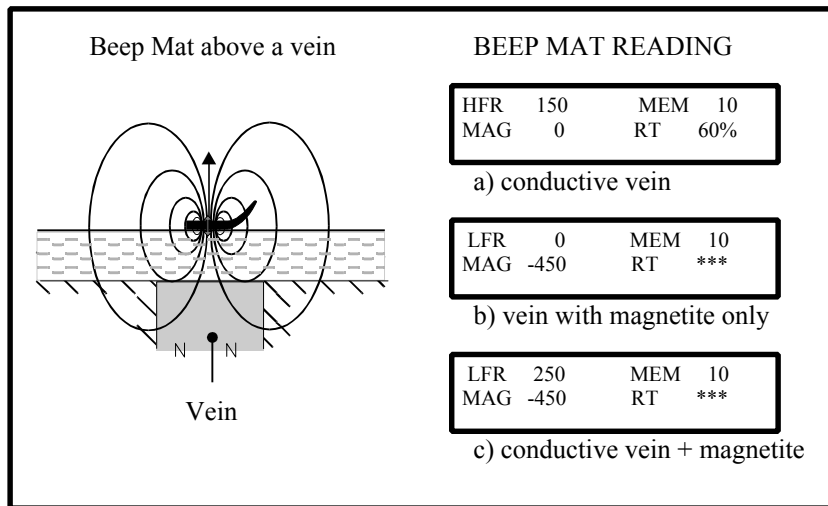


Illustration 9: Examples of *Beep Mat* readings in presence of:  
a) a conductor, b) magnetite, c) a conductive body containing magnetite.

## 6.2 Profiles on Targets

It is possible to draw a profile of the values displayed by the *Beep Mat* along a traverse, but it is rather suggested to just make an image of it in your mind.

Illustration 10 shows two simplified but typical examples. Compare it to illustrations 8, 9 and 11. By studying these illustrations, you should be able to interpret the profiles.

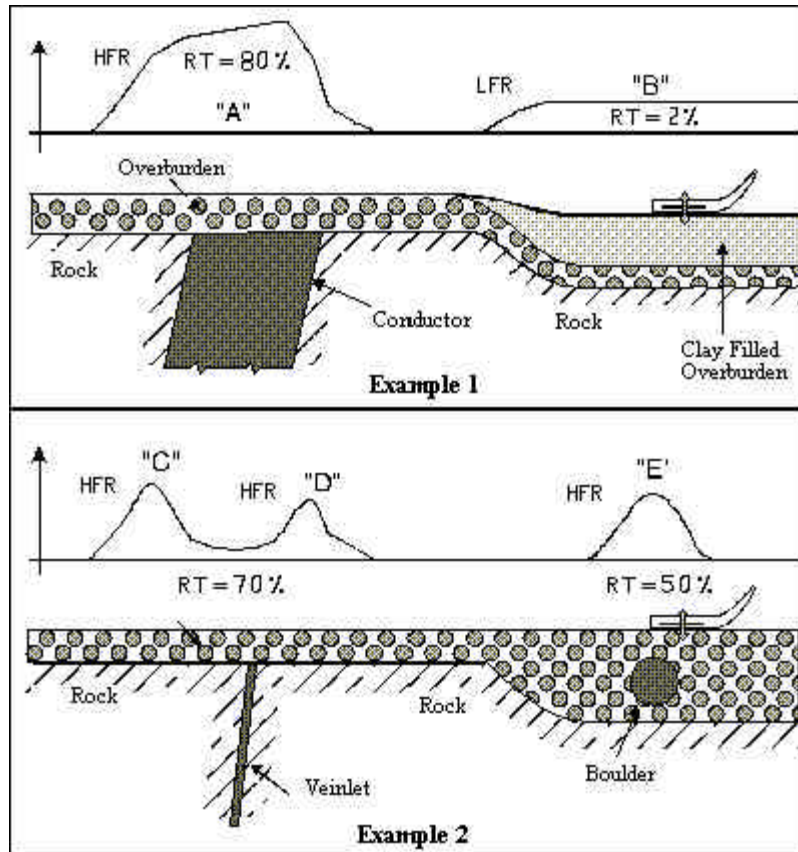


Illustration 10: Examples of typical profiles of the *Beep Mat*

Here is how to interpret illustration 10:

- Anomaly "A" is strong and wide, and the ratio (Rt) is high. It indicates the presence of a good wide conductor. Compare with illustration 9.
- Anomaly "B", however, is weak and uniform, and the ratio (Rt) is low; it is a typical sign of the effect of a clayey ground.
- Examine anomalies "C" and "D" of example 2 above. These two anomalies forming a doublet are both caused by the effect of an almost vertical veinlet. Compare with cases "a" and "b" of illustration 11. There are no anomaly above the veinlet because the induction lines (see chapter 4) do not cross it (illustration 11, case "b"). For more explanations, see also illustration 14, at section 7.3.
- Anomaly "E" is rather narrow and reacts mostly in HFR. In this example, it is due to the presence of a boulder in the till.

Do not attach too much importance to the exact shape of these profiles. When you will pull the *Beep Mat* again, the profile should change in its details. This is due to one or several of the following factors:

- the probe has not been pulled exactly on the same line;
- the surface is bumpy;
- the surface condition has changed (for example, before and after rain).

The *Beep Mat* is adapted for quick jobs. Experience will make you able to visualize these profiles by memory while delimiting an interesting target. It is faster and more efficient to pass the *Beep Mat* again and delimit the target with flag tape, then dig and sample, than to draw a survey profile on paper once back at the office.

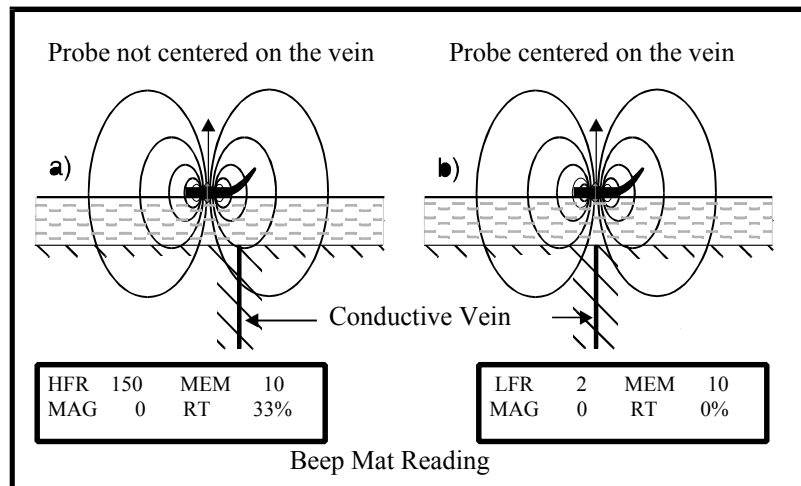


Illustration 11: Explanation of typical *Beep Mat* anomalies

## 7. PRACTICAL APPLICATIONS

As mentioned previously, it is essential, before doing a *Beep Mat* survey, to elaborate a strategy in order to maximize the chances of making a discovery. When a *Beep Mat* anomaly appears in the field, you must then use appropriate tactics.

### 7.1 Strategy

Look for a favourable ground for a *Beep Mat* survey, such as an area where the overburden is not very deep (less than 2 meters) and contains, if possible, electromagnetic anomalies. Use the following published maps:

- Overburden maps (M.R.N. in Quebec)
- Quaternary geology maps (Geological Survey of Canada)
- Geology maps for outcrops
- Electromagnetic and magnetic airborne survey maps
- Topographic maps (at 1:20,000 or 1:50,000)
- Aerial photos
- Compilations of previous works

Prepare a strategic map for your survey, similar to the one shown on illustration 12. You can use the overburden map as a starting point. Report all pertinent information on that strategic map. Mark all outcrops, boulders, conductors (electromagnetic anomalies) and/or magnetite concentrations (not very deep magnetic anomalies), known geological directions, areas where the overburden is less than two meters thick, areas covered with till rather than with river deposits (sand, clay), etc. Make sure that the elements coordinates are as precise as possible. Finally, delimit target areas to be explored and estimate the direction of the survey lines.

Former prospectors have taught us that lake shores and swamp edges (former lakes) very often represent favourable areas for prospecting because waves have washed the till and bare rocks are often hidden just under a thin layer of moss.

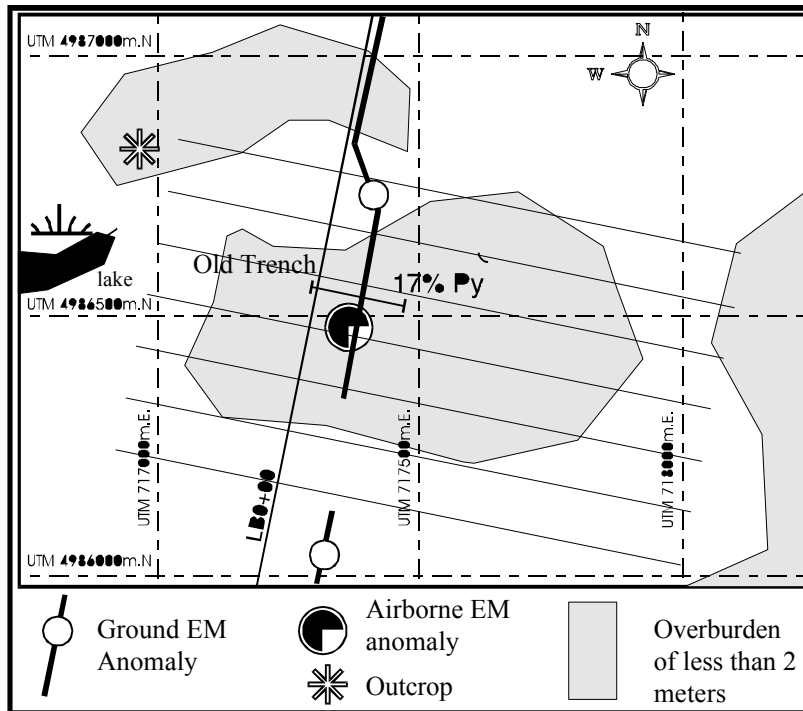


Illustration 12: Simplified example of a strategic map

Once in the field, at the beginning of the survey, try to evaluate the operating parameters of the *Beep Mat*. Modify them if you find it appropriate. You may also want to modify these parameters in order to reduce the alarms frequency. Cover target areas according to your strategic map. Use the *Beep Mat* to localize known conductors, discover new conductors or detect mineralized boulders.

## 7.2 Advanced Tactics

If you detect an anomaly, reinitialize the *Beep Mat* and pass it again on this anomaly, it should beep again. With a post, flag tape, etc., mark the spot where the highest value was obtained. Keep that value in mind. Zigzag around the spot taking into account the conductor's direction or the geological direction (see illustration 13). With colored flag tape, delimit the anomaly contour, its size and other spots having high values. Check if this anomaly appears again farther in the same geological direction. If you do not find the conductor, you can use a MAG VLF to localize its axis, then zigzag with the *Beep Mat* over the known *Beep Mat* axis to find where the conductor comes closer to the surface. But remember that any conductor that a *Beep Mat* detects may lead to the discovery of a mine, even if the VLF had not reacted to it! So maximize your time by pulling the *Beep Mat* instead of running a VLF survey.

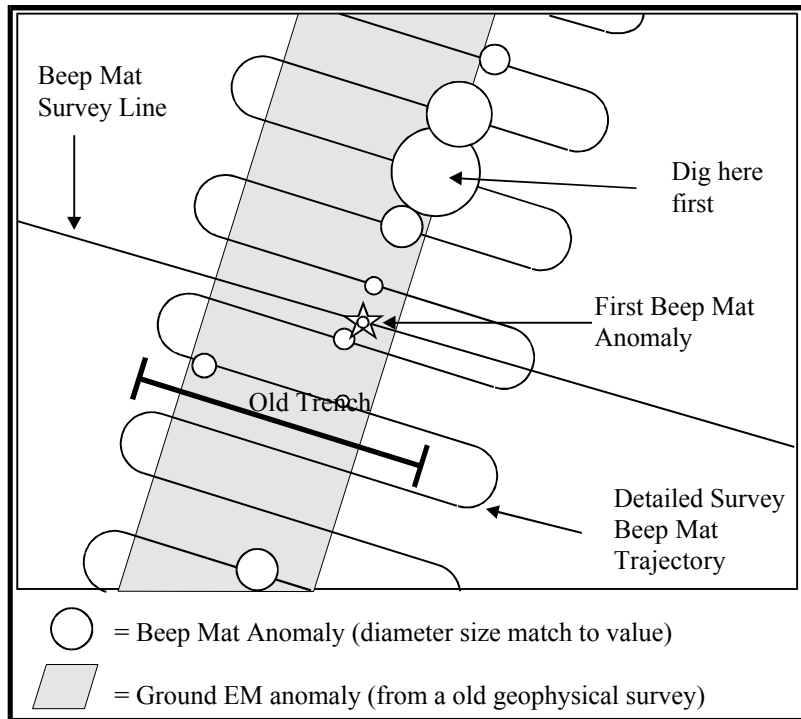


Illustration 13: Practical approach with a *Beep Mat* to localize a conductor

By concentrating your efforts on the areas which give the highest values, you will not have to dig too much since a high value means that the conductor is closer to the surface. Dig until you can identify the source of the anomaly (graphite, sulfite or even native metal). If the conductor seems to be deep, dig and check if the readings increase when you insert the probe into the hole. If the readings increase, it means that you are really getting closer to the conductor. Take samples containing sulfides for assays (Cu, Zn, Pb, Au, Ag, Ni, etc.).

Repeat these steps for each conductor discovered with the *Beep Mat*.

### 7.3 Case of Anomalies Forming a Doublet

If you find two *Beep Mat* anomalies along your route and they are in a doublet (about 1 meter apart), it is possible that you may be dealing with only one veinlet located in the middle rather than with two (see illustration 10, anomalies "C" and "D"). Determine the conductor axis, then grab the probe and hold it on its side as shown on illustration 14. Its induction axis should therefore be horizontal and perpendicular to the geological orientation. Cross the anomalies with the probe thus oriented. You might find only one anomaly in the middle. That is where you must dig. If both anomalies persist, dig at both places.



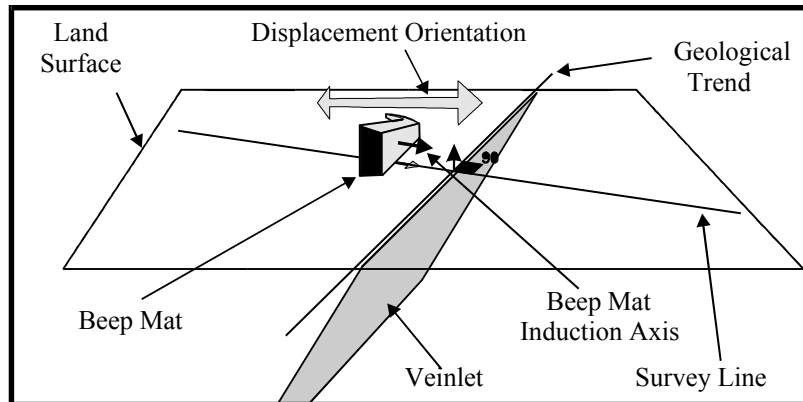


Illustration 14: Confirming double anomalies

#### 7.4 Sampling

On a given long conductor, it is suggested to take a sample at every 300 or 400 meters (and send them for assays) since even a barren pyrrhotite horizon can turn out to be, for example, a rich ore (ex.: Thompson Mine in Manitoba). However, on parallel horizons, it is suggested to sample whenever the conductor's nature changes (graphite to pyrite) and wherever the geological environment is favourable (fine pyrite in quartz veinlets). By cleverly choosing their sampling sites, *Beep Mat* users will make more discoveries. Thanks to the *Beep Mat*, a massive sphalerite horizon was once discovered about 10 meters from a sterile pyrite trench.

#### 7.5 Clayey Grounds

On a weak and uniform target, if you suspect that the ground is particularly conductive (clayey ground), you can dig if you feel like it a 30 -cm deep trench that is big enough to insert the probe in it. Put the probe into the hole and rotate it to find out from what direction the strongest signal is coming. If the displayed values do not vary much, it is due to the clayey nature of the ground. But if the values increase, it means that the conductive rock is hidden deeper. If the values keep increasing while the probe is in the hole, keep digging up to one and a half meter. Usually, clayey grounds are uniformly flat and give a relatively uniform LFR value (between +25 and +80) on a large surface. The ratio (Rt) value should be very low on clayey ground, indicating a poor conductor.

## **8. TRUE AND FALSE SIGNALS**

Here are a few examples of true and false signals that you will learn to recognize by experience.

### **8.1 *Probe Frequency Drift***

When the probe frequency drifts, as during the preheating period, the (L/H)FR value may well increase and the alarm will go off. Before digging, reinitialize the probe in the air to correct the drift. If the alarm stops once the probe is back on the ground, continue your survey, it was a false alarm caused by the drift of the probe. But if the *Beep Mat* still beeps, it means that it is a true signal and you can dig.

### **8.2 *Drifting and Ground Proximity***

If the probe has started to drift and is on humid ground, the water effect may prevent it from beeping. However, as soon as the probe moves away from the ground (ex: when passing over a log), the reading unit will beep. Lift the probe in the air and if it still beeps, reinitialize it. In both cases, pass the probe again at the place where it beeped to check if there really was a conductor at that place.

### **8.3 *How to Interpret Beep Mat Signals in Clayey Areas***

Clay layers deposited in brackish waters during one of the ice -age periods are sometimes somewhat conductive. On these clay layers charged with water, the (L/H)FR value displayed by the probe laid on the ground will be close to zero, the effect of clay conductivity being cancelled by the effect of water, and the reading unit will probably not beep. However, if you pass over a log lying on the ground while walking with the probe, the probe will leave the ground. The effect of water will rapidly diminish, but the clay conductivity, which slowly diminishes with distance, will make the LFR value rise to 80, and the *Beep Mat* will signal a conductor. Remember that on clayey ground, the conductor value LFR does not vary because this type of ground is not very conductive.

### **8.4 *Salt in the Ground***

Salt water is highly conductive. You might detect conductors caused by salt next to roads on which de-icing salt has been spread during winter.

## 9. INTERPRETATION OF VALUES

The *Beep Mat* gives a quantitative measure of the apparent conductivity and/or the average magnetite content of the underlying rock. It also gives an estimate of the intrinsic conductivity thanks to the ratio value (Rt).

### 9.1 Magnetite Content

The magnetite content is measured on a  $1\text{-m}^3$  volume under the probe. Our testing indicates that a MAG value of  $-1,000$  corresponds to 1% magnetite under the probe, which is equivalent to about  $-1,000$  gammas for a volume of a few meters cubes. This equivalence exists up to a magnetic value of  $-20,000$ , which is equivalent to 20,000 gammas, or 20% magnetite.

### 9.2 Apparent Conductivity

Up to now, the apparent conductivity has been calibrated only in the absence of magnetite. The graph presented on illustration 15 (curve "a") shows the apparent conductivity according to the (L/H)FR value and in the absence of magnetite. Caution! A veinlet or a coin will suggest a bad conductivity, because the instrument measures the average conductivity of the area surrounding the probe. However, the instrument gives a real measure of the conductivity of a clay layer. The closeness of water creates a negative signal. The estimate of the conductivity of a clay layer full of water is slightly more real if one lifts the probe 10 cm above the ground because the influence of water, just as the influence of magnetite, diminishes more rapidly than the effect of the conductor (see curves "b" and "c" of illustration 15).

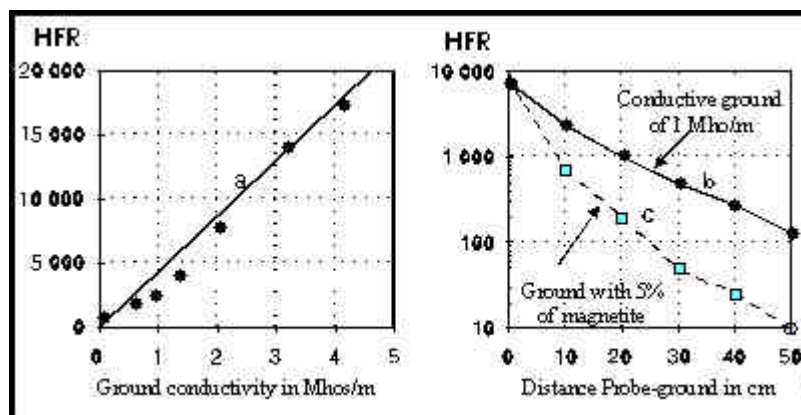


Illustration 15: Factors influencing the HFR value

### **9.3 *Intrinsic Conductivity***

In the absence of magnetite (verify with a magnet), the Rt (ratio) gives a measure of the intrinsic conductivity of the conductor and this ratio is not influenced by the size of the conductor. Therefore, a coin placed on the testing point (the first "D" of "GDD") will give HFR values ranging from +70 to +80, while a typical Abitibi clay layer will also give a HFR value of +80, and therefore a Rt close to 0%. Remember that the ratio value will be calculated only if the HFR is at least 10 and if no magnetite is present (MAG = 0).

### **9.4 *Variation of Sulfides Conductivity***

As mentioned before, galena and compact massive pyrite are not always conductive. One does not know why these variations exist, but since these sulfides are semiconductors, it could depend on the impurities incorporated in the crystals structure, as for transistors! Fortunately for the *Beep Mat* and prospectors, pyrite veinlets, which are often present in gold-bearing quartz veins, are generally good conductors. This has been noticed in particular on gold-bearing quartz veins that do not react to any other geophysical instrument and that can be discovered under moss only by the *Beep Mat* or a trench.

## 10. DATA TRANSFER

To better understand this chapter, one must be familiar with microcomputers (in particular PC compatibles), communication softwares and serial ports (or modems).

Connect the reading unit to a computer as shown below.

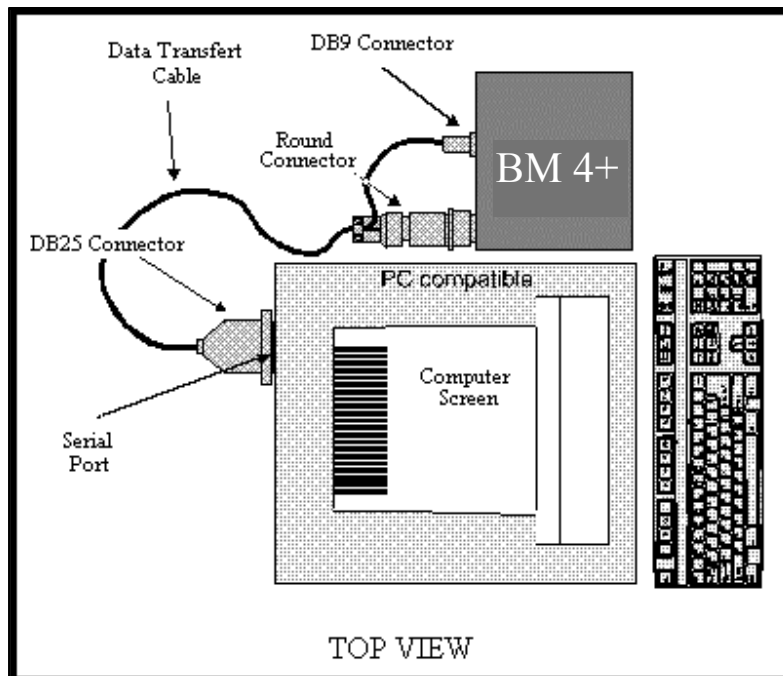


Illustration 16: Connections for a data transfer

Turn your communication software on and press [ON]. Note the instructions on the BM4+ display. Here is an example:

Baud = 4,800    Parity = N    MEM  
Length = 8    Stop bit = 1    12

Make sure that the communication software be according to the instructions on the screen of your computer and verify the serial port used (ex.: COM1). The [carriage return] (CR character) must be added by the communication software. Press on "**Enter**" or "**CR**" depending on the type of keyboard you use. The message shown on illustration 17 should appear on the screen of the computer:

```
BM4+ by Instrumentation GDD Inc.

MENU ->  DUMP(memory_start, memory_end)
          Set your software in capture mode,
          then send the DUMP command

          CLEAR
          Clear all memory of the BM4+

GDD >
```

Illustration 17: Message of a data dump displayed on the computer

This menu presents two choices: data transfer (**DUMP** command) and memory clearing of the *Beep Mat* (**CLEAR** command). Characters in **bold** indicate the ones you must type on your keyboard. Note that there is no spacing between the typed characters.

If you want to transfer the data, put the communication software on "capture", then type:

**DUMP(0,12)** and press on "**Enter**" or "**CR**"

A message similar to the one shown on illustration 18 should appear on the screen. In the example presented on illustration 18, you have stored 12 readings including initializations, so a sequence of 13 data are transferred (data #0 to #12).

On illustration 18, the first column indicates the memory number. As you can see, that number increases by one, from one row to the other. The other three columns are respectively (L/H)FR, MAG and Rt. Note the following points:

- In the field, Rt was \*\*\*. Once dumped, it is replaced by -1 (memories 0, 1, 2, 9 and 11).
- Memories 7, 8 and 10 are missing since they correspond to initializations.
- The last memory (12) contains only zeroes, indicating an empty memory.

GDD> <b>DUMP(0,12)</b>			
Memory	(L/H)FR	MAG	Rt
0	7	-5	-1
1	25	-5	-1
2	28	-5	-1
3	141	0	50
4	132	0	41
5	45	0	22
6	48	0	92
9	141	-53	-1
11	3	-2	-1
12	0	0	0

Illustration 18: Typical display following a data dump

After the data transfer, you will eventually want to clear the BM4+ memory to leave space for other readings. In order to do so, type **CLEAR** to see the display shown on illustration 19. This will clear the 3300 memory space of the *Beep Mat*, so next time you use the *Beep Mat*, the MEM value should be at 0 or 1.

```

GDD > CLEAR

WARNING !!!  ALL DATA WILL BE LOST...
              CONFIRM WITH (9999) ? 9999

PLEASE WAIT...
CLEAR MEMORY COMPLETED...
GDD >

```

Illustration 19: Display for the memory clearing of the BM4+

## **Beep Mat, model BM4+**

### **Trademark**

Beep Mat is a trademark by *Instrumentation GDD Inc.*

### **Copyright**

Considering GDD's interest in promoting the *Beep Mat*, any person interested in duplicating this manual is authorized to do so.

### **Warranty**

Duration of warranty: One year. All repairs will be done free of charge at our office in Québec (taxes, transportation and customs fees are extra). The warranty is void if the instrument has been the object of an abusive use, has been opened or modified without authorization, or if the serial number of the instrument has been altered, erased or removed.

*Instrumentation GDD Inc.* is not responsible for any eventual damages and/or losses that may occur during transportation or use of the *Beep Mat*.

### **Repairs**

Should the *Beep Mat* require repairs, please contact *Instrumentation GDD Inc.* at the numbers below in order to receive proper instructions for shipping.

- Tel.: 418-877-4249
- Fax.: 418-877-4054
- E-mail: [gdd@gddinstrumentation.com](mailto:gdd@gddinstrumentation.com)



## **Report on First Nation Consultation**

**Completed by**

**North American Nickel Inc.**

## **Post Creek/Halcyon Property**

Aylmer, Rathbun, Fraleck, Parkin and Norman Townships, Ontario

Sudbury Mining District

Longitude 80°51'30"

Latitude 46°47'30"

**Prepared by:** Gerry Katchen

**Date:** June 26, 2019

This report summaries the periods of consultation with Wahnipitei First Nations community. Meeting dates with personnel, costs and a summary will be noted.

1. On February 26<sup>th</sup> to 28<sup>th</sup>, Gerry Katchen (Senior Geologist for North American Nickel) travelled to Sudbury from Thunder Bay to present and review a general update of North American Nickel's Post Creek Project. The Meeting/Presentation was held in Sudbury at the Holiday Inn on Regent Street. Attending the meeting were:
  - a. Peter Lightfoot (Acting Chief Geologist/NAN);
  - b. Hannah Burke (Resources Coordinate for Wahnipitei First Nation Community);
  - c. Cecil Johnson (Prospector for North American Nickel);
  - d. Walter McGregor (Prospector for North American Nickel).
  - e. Gerry Katchen (Sen. Geol/NAN)

A Powerpoint presentation was run through along with North American Nickel's general update and forecast plans for the project in 2018. Hanna Burke was fine with the update and would get back to North American Nickel if the community in general would like an update.

2. Later on in the spring, Hannah Burke requested the North American Nickel to provide a project update to the Wahnipitei community members held out at the Wahnipitei Band Office. The timing was not suitable for Gerry Katchen to travel to Sudbury. Mark Fedikow (President of NAN) travelled to the Wahnipitei Community from his home in SaltSpring Island B.C. on May 18<sup>th</sup> to May 21<sup>st</sup> to present the earlier presentation and respond to a question and answer period. Lunch was also provided and paid for by North American Nickel.
3. Multiple Meetings/Teleconference were held between November 11, 2018 and December 13, 2018 that involved Gerry Katchen, Walter McGregor, Hannah Burke (Wahnipitei Community) and on occasion Mr. Craig Tyson (Wahnipitei Community). These meetings/teleconferences all had to do with drilling and site prep, reclamation working around any concerns that Wahnipitei may have. See Table as Appendix 1

# **Summary of 2018 Wahnipitei First Nation Consultations**

**Completed by**

**North American Nickel Inc.**

## **Post Creek/Halcyon Ni-Cu Property**

Aylmer, Rathbun, Fraleck, Parkin and Norman Townships, Ontario

Sudbury Mining District

NTS 041I15

Longitude 80°51'30"

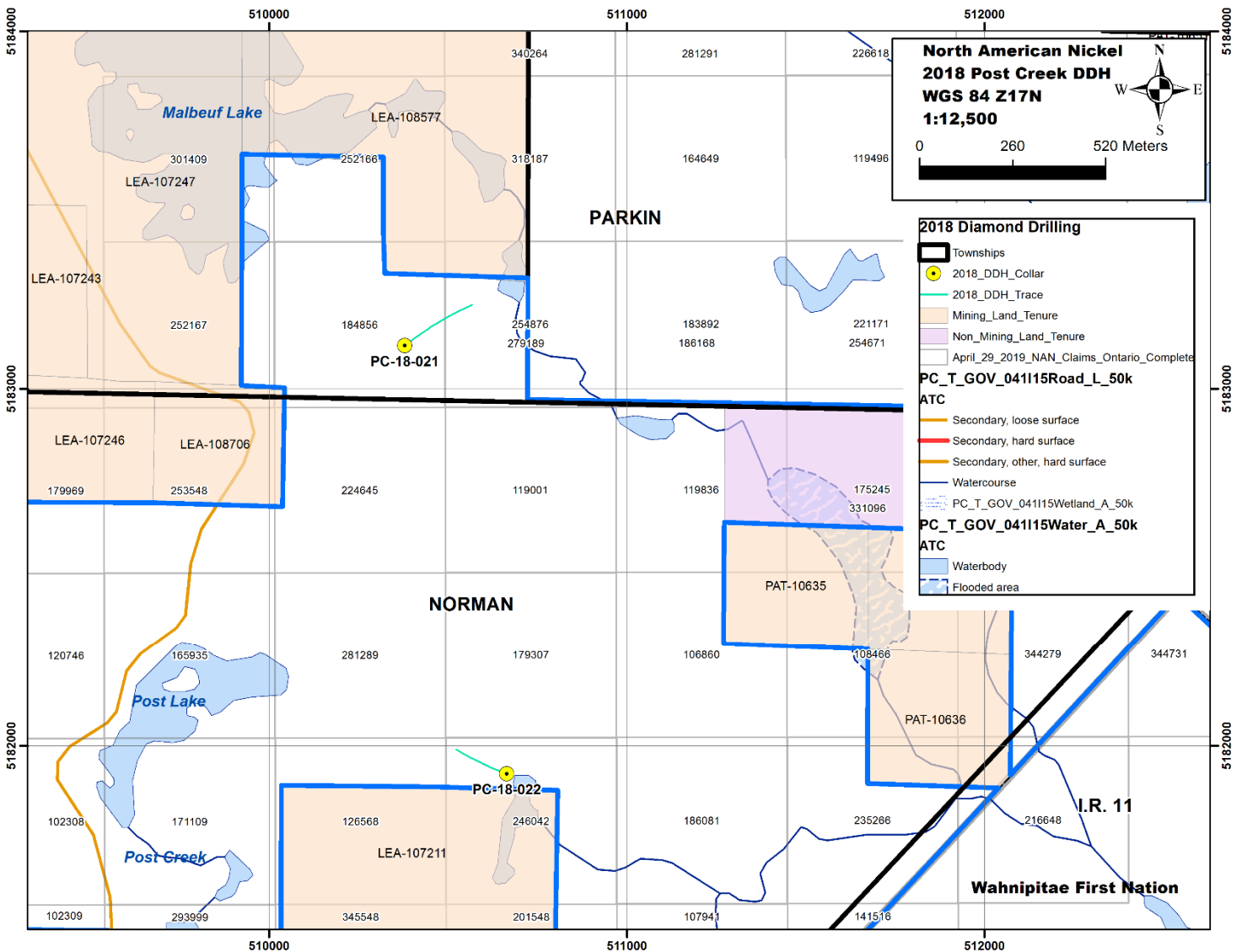
Latitude 46°47'30"

**Prepared by:** Gerry Katchen

**Date:** Oct 9, 2019

This report summarizes the meetings held between Wahnipitei First Nations and North American Nickel. The meetings are meant to build a relationship between the two parties as North American Nickel's Post Creek/Halcyon Project lies directly north of the Wahnipitei community.

In 2018, North American Nickel wished to test two possible nickel/copper targets on the Post Creek Project. Two diamond drill holes were designed with a maximum depth of 500m. The first of the two drillholes were collared on cell claim 184856, drilled North East and terminated on claims 279189/254876. The second drillhole was collared and drilled fully on cell claim 246042. See Map Below.



Consultation with Wahnipitei on these matters began in late February of 2018 with a power point presentation to the Resources Coordinator and again to the Wahnipitei community in Mid-May, followed by a lunch put on by Wahnipitei.

Questions arose revolving the duration of time that the drilling would take place and to be mindful of tree resources. The drilling would only take roughly a month and it was flexible so as to work around any special time of seasonal trapping. In regards to trees, if any were needed to be cut down, it was requested that they be harvested and pulled out to main road for further use by community. Both meetings went well and North American Nickel was thanked for its willingness to consult and listen to the community's concerns as well as hire locals from the community for the project.

Prior to the commencement of drilling, North American Nickel personnel (Gerry Katchen) and Resources Coordinator from Wahnipitei discussed the project a couple times via teleconference and a meeting in person at the North American Nickel core shack in Sudbury.

A preliminary field tour of the proposed drill sites were completed by Gerry Katchen, Hannah Burke and Walter MacGregor (local community member). Hannah obtained a local water sample from the second site as there was a small flowing creek and beaver dam nearby. The two proposed sites were agreed upon and discussions of how to contain drilling water was agreed upon and also document the volume of water used. Once results from the water samples were received, they were passed on to North American Nickel.

Once drilling was completed on each hole and the site reclaimed, a follow up field tour was taken by North American Nickel personnel (Gerry Katchen), Walter MacGregor and Hannah Burke. Clean up and reclamation was reviewed and discussed with recommendations followed up on immediately (found some absorbent matting on the second hole that was quickly cleaned up).

A final debrief meeting was held in mid-December between Hannah Burke and North American Nickel personnel (Gerry Katchen). Discussions revolved around the drill program with positive feedback from Wahnipitei.

One minor issue that was agreed upon for both parties to be aware of is the water volume used during drilling and to try to keep it to a minimum. Wahnipitei wished for North American Nickel to document the water volume drawn from the local watershed for its drilling project. North American Nickel was unaware of this as it is not common in Northern Ontario. North American Nickel was able to find and install a water volume meter on its second drill hole and provide feedback on the volume to Hannah Burke.

Hannah also mentioned the community is appreciative of North American Nickel to consult and involve Wahnipitei First Nations in its plans, both early stage, during and following. It was a very positive meeting and has laid the foundation for a 2019 drilling and trenching program, with consultations ongoing and remaining positive.

Gerry Katchen

Senior Geologist

North American Nickel

Oct 9, 2019