Appendix II:

Mineralogy Report., Alexander, M.

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Analytical Services

Mineralogy Report

Analytical Methods: SEM-EDXA	**Analyst:** Malcolm Alexander
Job #: IL07-119	Date: 11 March 08 Date Received 15 Jan 08 # pages including cover page: 7
Client:Landore Resources Canada Inc. Contact:Jennifer Gignac	
Samples:project 180.04.94A 1:416109A 2:416111A 3:416113	

March 3rd, 2008

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Samples 416109A, 416111A and 416113 of project 180.04.94A were analyzed using a JEOL 5900 low vacuum scanning electron microscope (LV-SEM) with attached LINK ISIS 300 analytical system with incorporated Super ATW Light Element Detector (133 eV FwHm MnK) and energy dispersive X-ray spectrometer (EDS).

Magnesite and antigorite are the rock-forming minerals in all three samples. Magnesite, $MgCO_3$, forms euhedral-to-anhedral crystals, generally in the 0.2 mm range. Euhedral crystals are rhombohedral in shape, or derivatives of thereof (Fig. 1A). The composition of magnesite, as listed in Table 1, consists of nearly 5 wt. % of FeO, and trace (< 0.5 wt. %) SiO_2, CaO and MnO. There is brittle failure of some of the crystals; an example is given in Figure 1B.

TABLE 1: Representative analyses of magnesite.

Sample Analyses	416109A N = 5	416111A N = 4	416113 N = 6
MgO	43.41	44.18	43.59
Al_2O_3	0.20	-	-
SiO_2	0.12	-	0.21
MnO	-	-	0.22
FeO	5.23	4.78	4.79
CO_2	51.00	51.20	51.00
Total	99.96	100.16	99.81

Antigorite, $(Mg,Fe^{2+})_3Si_2O_5(OH)_4$, was the most abundant mineral in all three samples. The mineral forms interstitially (Fig. 1A, B). Representative compositions of all three samples are listed in Table 2, assuming all Fe is in its ferrous state, and H_2O wt. % equivalent to four OH^- ionic groups per formula unit. Minor (< 1.33 wt. %) Cr_2O_3 and Al_2O_3 are detected in most of the antigorite grains (Table 2).

Chromian spinel, $(Fe^{2+},Mg)(Cr,Al)O_4$, forms euhedral to anhedral ditetragonal dipyramid crystals (Fig. 1C). Minor amounts (between 0.9 – 2.2 wt. %) of ZnO_2 was consistently present. Trace (< 0.4 wt. %) Ti and Si are present in all analyses (Table 3). Chromian magnetite commonly mantles all spinel grain boundaries and fractures.

listed in Table 6, with Fe/Ni proportions averaging 0.5903. No impurities are detected within the pentlandite grains.

A nickel antimony sulphide mineral is present in sample 416109A. A possible formula for this mineral is $(Ni,Fe,Co)_5(Sb,As)S_4$. Although the calculated stoichiometry of this formula works, there is a problem with valancies. It is probable that one of the metal ion sites is in the trivalent state. The expanded formula is then, $(Ni,Fe,Co)^{3+}(Ni,Fe,Co)^{2+}{}_4(Sb,As)S_4$. The mineral occurs in trace concentrations and is often associated with iron nickel sulphides, as seen in Figure 1E. The composition of the nickel antimony sulphides includes minor (< 4.67 wt. %) Fe, Co and As.

TABLE 4: Representative analyses of chromian magnetite.

Sample	416109A	416109A	416113	416113	416113
Analyses	N = 3	N = 1	N = 1	N = 1	N = 2
Cr_2O_3	8.81	7.04	12.73	9.83	10.44
Fe_2O_3	59.40	61.50	55.60	58.90	57.70
FeO	30.90	31.00	31.00	31.20	31.20
Total	**99.11**	**99.54**	**99.33**	**99.93**	**99.34**

TABLE 5: Representative analyses of NiS.

Sample	416109A	416111A	416111A
Analyses	N = 3	N = 2	N = 1
S	35.13	34.72	35.21
Fe	1.13	1.30	1.29
Co	-	0.39	-
Ni	63.78	63.09	64.23
Total	**100.06**	**99.49**	**100.73**

The last of the nickel minerals is a nickel iron sulfide. As listed in Table 7, this mineral contains significant nickel (35.84-37.77 wt. %), some Fe (15.22-16.90 wt. %) and minor Co (4.29-6.36 wt. %). As mentioned above, this mineral is associated with the nickel antimony sulphides.

Cobaltite, (Co,Ni)AsS, was present in all three samples. In the case of project 180.04.94A, cobaltite is a nickel-bearing mineral, that is, it does not have one or more structural sites dominated by nickel. Co/Ni ratios varied considerably. As seen in Table 9, there was minor

(< 3.51 wt. %) amounts of iron. Cobaltite is commonly associated with chromian magnetite (Fig. 1F) and millerite.

In samples 416109A, 416111A and 416113 of project 180.04.94A, only the suphides, arsenic sulphides and antimony sulfides contain nickel. None of the silicate minerals contain nickel above detection limits.

TABLE 6: Representative analyses of pentlandite.

Sample Analyses	416109A N = 4	416111A N = 3	416113 N = 5
S	32.74	32.51	32.70
Fe	25.25	24.60	24.84
Ni	41.60	42.70	42.25
Total	**99.58**	**99.82**	**99.78**

TABLE 7: Representative analyses of iron nickel suphide.

Sample Analyses	416109A N = 3	416111A N = 4	416113 N = 3
S	42.13	41.79	41.22
Fe	16.30	15.22	16.90
Co	5.75	6.36	4.29
Ni	35.84	36.63	37.77
Total	**100.01**	**99.97**	**100.17**

TABLE 8: Representative analyses of nickel antimony sulphide.

Sample	416109A
Analyses	N = 4
S	24.25
Fe	4.67
Co	1.32
Ni	46.27
As	1.00
Sb	22.66
Total	**100.15**

TABLE 9: Representative analyses of cobaltite.

Sample	416109A	416111A	416111A	416113
Analyses	N = 3	N = 2	N = 3	N = 8
S	19.16	18.96	19.08	19.31
Fe	2.64	2.75	3.17	3.51
Co	26.15	25.56	19.73	21.18
Ni	8.31	9.18	14.45	12.57
As	44.34	44.16	44.31	43.94
Total	**100.60**	**100.60**	**100.40**	**100.51**

References

Carmichael, I.S.E., 1967. The iron-titanium oxides of salic volcanic rocks and their associated ferromagnesian silicates. Contributions to Mineralogy and Petrology 14 (1), 36–64.

January 14, 2008

Mr. A. Mackenzie
Lakehead University, Department of Geology
955 Oliver Road
Thunder Bay, ON. P7B 5E1

Dear Mr. A. Mackenzie:

This letter accompanies a package containing 3 cut drill core samples from a Ni Cu deposit held by Landore Resources Canada Inc., Project 180.04.94A. The sample sequences and analytical request follow:

SAMPLES		ANALYSES	
Project Number	**Sample Numbers**	**# Samples**	
180.04.94A	416109A, 416111A, 416113	3	SEM and polished thin section- Nickel Bearing Minerals and Settings
		3	

These samples are from NQ size drill core, and were intended to represent a nickel bearing ultramafic rock. Attached is a chart with sample locations and descriptions. Please prepare polished thin sections and associated SEM disks for the samples submitted.

We are interested in determining if the nickel is associated with the silicate minerals (olivine) or with sulphides, or in what proportion thereof. Please comment on which specific minerals the nickel is associated with, and other observations related to the nickel mineralization.

Please send (3) hardcopies and (1) digital, as well as the invoice (refer to Project No.) to the address below, and include photos of the pieces of core used, pertinent photomicrographs and SEM images.

Please email confirmation upon receiving the samples, and comment on whether or not you can provide the information we are seeking. Please do not hesitate to call or email.

Sincerely,

Jennifer Gignac

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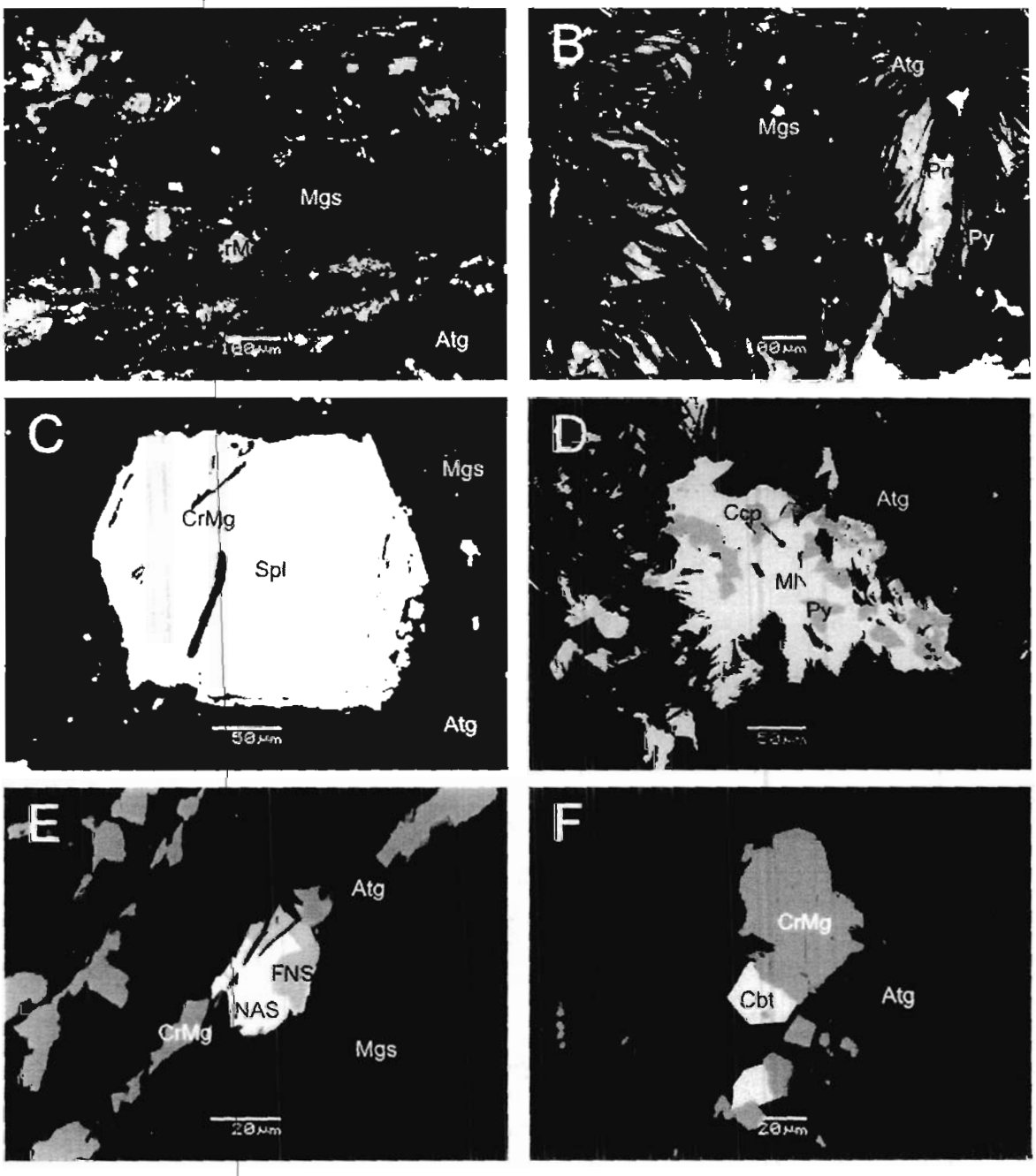
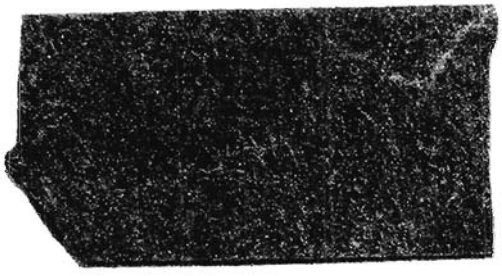


FIGURE 1: Various SEM images of project 180.04.94A mineralogy. A is euhedral magnesite (Mgs) containing chromian magnetite (CrMg) inclusions and enclosed by antigorite (Atg). B is magnesite, pyrite (Py) and pentlandite (Pn) grains that have undergone brittle failure. C is euhedral spinel (Spl) mantled by chromian magnetite in antigorite and magnesite. D is millerite (Ml), chalcopyrite (Ccp) and pyrite in antigorite. E is the nickel antimony sulphide (NAS) associated with the iron nickel sulphide (FNS) in antigorite. F is cobaltite (Cbt) and chromian magnetite in antigorite.

04_VW Zone Thin section sampling - 2007						
Drill core			Sample Name	Sample Description	Thin Section Rock Name	Comment
Sample No.	DDH	Depth (m)				
416109A	0407-151B	57	"1AF20 F22"	Slightly darker, blue-grey with potential for sulphides as fine-grained disseminations. Experimental samples on bluer-less altered ultramafics. More magnetite, ans sparse pyrrhotite and pyrite blebs, <0.5%. No Nickel Zap reactions.	"1AF20 F22"	
416111A	0407-151B	59	"1AF20 F22"		"1AF20 F22"	
416113A	0407-151B	61	"1AF20 F22"		"1AF20 F22"	
			Total:	5		

416 109A



416 111A

416 113A