

GM 46106

REPORT ON 1987 SUMMER PROSPECTING, NEMISCAU PROJECT

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Énergie et Ressources
naturelles

Québec 

Westmin Resources Limited
Nemiscau Project
Report on 1987 Summer Prospecting

N.T.S. 33 O/11,12,14

Latitude 51⁰ 40'
Longitude 75⁰ 40'

Ministère de l'Énergie et des Ressources
Service de la Géoinformation
Date: 14 MAI 1988
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Louis Bernier, M.Sc.

Table of Contents

	Page
General Summary	4
Introduction	7
Location, Access and Topography	9
General Geology	13
Previous Work	14
Lac Sillimanite Property	17
Albanel Property	21
Lac de la Hutte Property	25
Grid H-1	25
Grid H-2	28
Grid H-3, H-3B	31
Lac du Crochet Property	37
Tie-Line H-3/H-3C	38
Main Lac du Crochet Property	39
References	41
 <u>Appendices</u>	
Appendix 1	42
Metallogeny of the Nemiscau Metamorphosed Volcano-Sedimentary Belt	
Appendix 2	50
Soil Geochemical Assay Data	
Appendix 3	69
Rock Geochemical Assay Data	

Nemiscau ProjectList of Maps (in pocket)

Lac Sillimanite Claim Block	Geology Map	(1:5000)
Lac Sillimanite Claim Block	VLF-EM16	(1:5000)
Lac Sillimanite Claim Block	Soil Samples	(1:5000)
Albanel Claim Block	Geology Map	(1:2500)
Albanel Claim Block	VLF-EM16 Survey	(1:2500)
Lac De La Hutte	Grid H-1 Geology Map	(1:2500)
Lac De La Hutte	Grid H-1 VLF-EM16 Survey	(1:2500)
Lac De La Hutte	Grid H-1 Soil Sample Survey	(1:2500)
Lac De La Hutte	Grid H-2 Geology Map	(1:2500)
Lac De La Hutte	Grid H-2 VLF-EM16 Survey	(1:2500)
Lac De La Hutte	Grid H-2 Soil Sample Survey	(1:2500)
Lac De La Hutte	Grid H-3 Geology Map	(1:2500)
Lac De La Hutte	Grid H-3 Soil Sample Survey	(1:2500)
Lac De La Hutte	Grid H-3B Geology Map	(1:1250)
Lac De La Hutte	Grid H-3B VLF-EM16 Survey	(1:1250)
Lac De La Hutte	Grid H-3B Soil Sample Survey	(1:1000)
Lac De La Hutte	Tie Line H-3C Geology Map	(1:2500)
Lac De La Hutte	Grid H-3 South VLF-EM16 Survey	(1:2500)
Lac De La Hutte	Grid H-3 North VLF-EM16 Survey	(1:2500)
Lac Du Crochet Claim Block	Geology Map	(1:2500)
Lac Du Crochet Claim Block	VLF-EM16 Survey	(1:2500)

General Summary

Five properties are currently held within the Nemiscau volcano-sedimentary belt, located in the James Bay Lowlands. Several precious and base metal sulfide mineral showings have been identified on the claim groups including near ore-grade gold (3.1g/t Au) hosted within a stratiform arsenopyrite-pyrrhotite-tourmaline-quartz rock on the Lac Sillimanite property. Local aluminous mineral hydrothermal alteration zones associated with sulfide accumulations have been identified in several areas. Similar aluminous rock alteration occurs with numerous Archean gold deposits including: Hemlo, Ontario; Madsen, Red Lake; Bousquet, Quebec; as well as in younger rocks at Montauban, Quebec and Hope Brook, Nfld. A recent Airborne electromagnetic and magnetic survey completed by Dighem (1987) for Westmin Resources Ltd., has outlined a number of "stacked" formational and short strike-length conductors at or near a major volcanic-sedimentary formational conductor. These conductors represent potential auriferous host rocks or key marker units.

A six-week program of linecutting, VLF-EM16 surveys, geological mapping and prospecting and soil geochemical sampling was completed during the 1987 field season. The properties within the Nemiscau Project include: Lac Sillimanite; Albanel; Lac de la Hutte, Grids H-1, H-2 and H-4; Lac du Crochet and Lac Noir. An additional sixty-five claims were staked during the program to acquire the major volcano-sedimentary contact coincident with the electromagnetic conductive trend in the Lac du Crochet area (figure 1). Fourteen drill targets of excellent quality were outlined on five properties, based on proximity to showings, hydrothermal alteration, conductive bedrock anomalies and elevated gold in soil geochemical samples.

Table of Proposed Priority 1 Diamond Drill HolesNemiscau Project

Hole Number	Bernier Hole Number	Location	Az	Dip	Depth	Purpose
<u>Lac Sillimanite Grid</u>						
(A)	S-1B-1	25+30E 0+55S	145	-45	170m	-Au showing and weak conductor S of it
(B)	S-1B-2	20+00E 1+60S	320	-45	70m	-15ppb Au soil anom. -VLF Amplitude (VLFA) 23
(C)	S-1B-5	7+65W 4+00N	170	-45	120m	-3 and 15ppb Au -1.0 and 1.8ppm Ag -VLFA 43
(D)	S-2-3	approx. 0+400W 0+00N (1984 grid)	215	-45	150m	-12ppb Au, -0.6ppm Ag -VLFA 22
<u>Lac Albanel Grid</u>						
(E)	A-1-8	18+00E 0+35N	150	-45	50m	-cord.-anth.-sil. altrn. -Ultra-mafic -VLFA 118
<u>Lac de la Hutte Grids</u>						
(a) <u>Grid H-1</u>						
(F)	H-1-2	5+00E 3+63N	160	-45	115m	-15ppb Au soil -210ppm Cu in soil
(G)	H-1-4	8+75E 4+08N	160	-45	70m	-42ppb Au, 0.4ppm Ag -VLFA 29

(b) Grid H-2

(H)	H-2-2	2+50N 2+80W 300 -45	150m	-45ppb Au -fault zone -sulfide in chert
(I)	H-2-3	2+50N 3+60W 300 -45	200m	-555ppb Au, -4ppm Ag -fault zone -Po-Cpy in chert
(J)	H-2-9	13+74N 6+08W 300 -45	100m	-99ppb Au -Py-Po-gph chert

(c) Grid H-3B

(K)	H-3B-3	16+20W 4+80S 335 -45	125m	-18ppb Au in soil -VLFA 117
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Lac Du Crochet

(L)	H-3C-2	50+00W 5+30S 335 -45	80m	-po-cpy chert -altered felsic -VLFA 77
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Lac Noir

(M)	(to be determined)	000 -45	80m	-51 mho Dighem Conductor Line 30010A
(N)	(to be determined)	000 -45	80m	-166 mho Dighem Conductor Line 3161A
Total:			1570m	(14 holes)

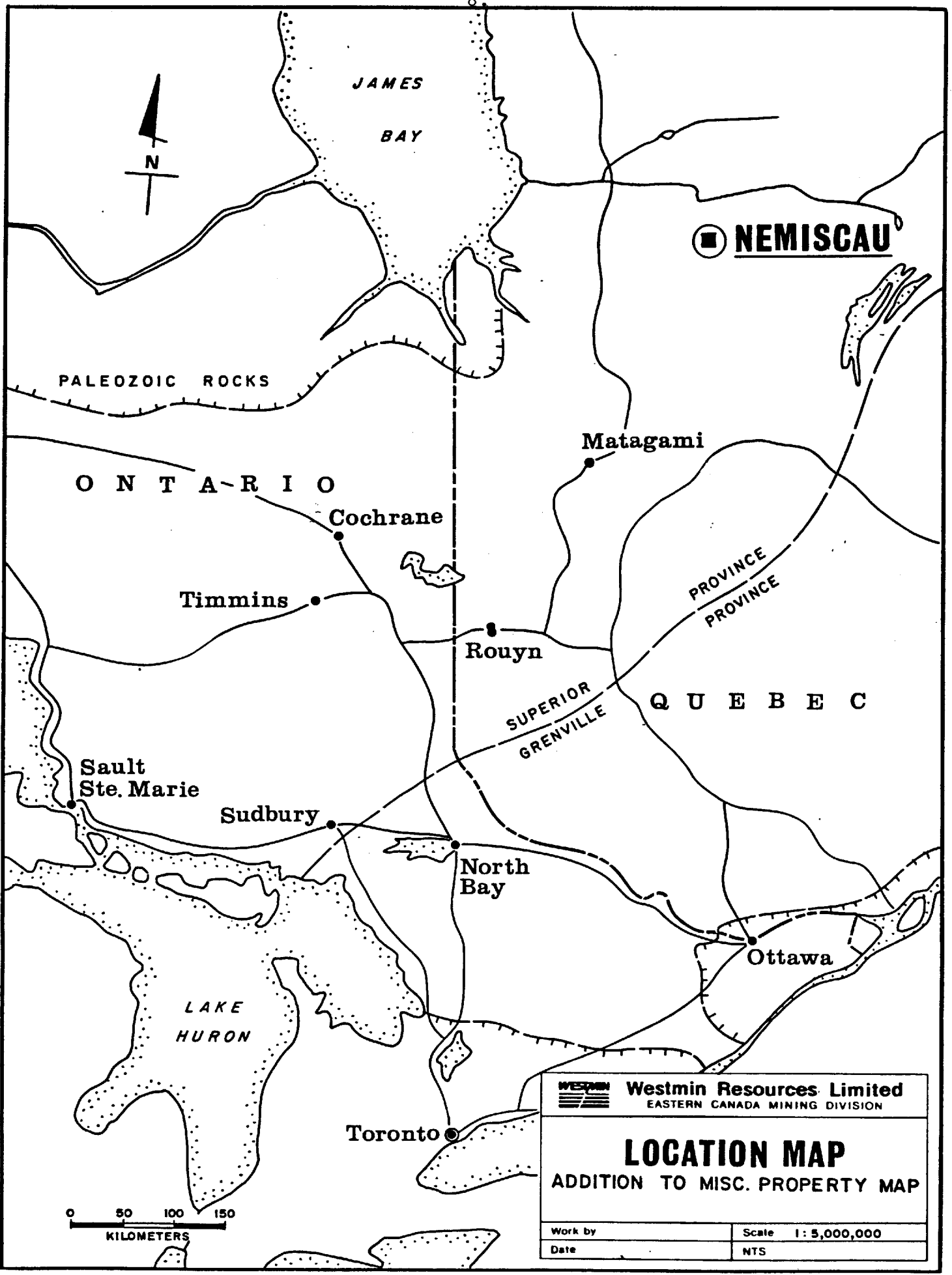
File Name: SR-NEM

Introduction

The Nemiscau volcano-sedimentary belt is situated within the James Bay Development Power Project. Two permanent sub-stations, Nemiscau and Albanel, have been constructed in the area by Hydro Quebec, along with permanent housing and restaurant facilities. Fuel and meals are available from Hydro by special arrangement. Prior to April 15, 1986 land restrictions have impeded mineral exploration at Nemiscau, caused by staking restrictions imposed by the Hydro Quebec power project. Staking restrictions have been removed across the western half of the belt, however the eastern half is within the Phase II development area and land restrictions are still imposed.

A total of 192 claims have been acquired within the Nemiscau volcano-sedimentary belt of Northeastern Quebec. The claims are held in 5 groups from east to west including: Lac Sillimanite; Lac Albanel; Lac de la Hutte; Lac Noir and Lac Crochet. Field programs by Westmin have confirmed positive indications for potential stratabound gold from favourable pathfinder minerals and a near ore-grade assay at Lac Sillimanite at 3.1g/t Au across 0.5 metres. Westmin's field examination focused on volcanic-sedimentary contacts with coincident electromagnetic conductors, reflecting semi-continuous sulfide-facies iron formation. Thin elongate slivers of quartz-sillimanite-sericite-fuchsite-pyrite rock are exposed at or near the volcanic/sedimentary contacts, and represent altered felsic tuffs and chemical sedimentary rocks. Examples of these units are exposed on the Lac Sillimanite and Lac de la Hutte claim blocks. A second lithology of interest for gold exploration consists of hydrothermally altered ultramafic lenses composed of talc, tremolite and carbonate minerals. Similar ultramafic rocks have been identified within the immediate gold mine lithologies of the Porcupine Camp in Timmins, Detour Lake, Ontario and most recently at Placer's Eastmain River Gold Deposit in Quebec, (Boldy et al., 1984).

In January 1987 a radar-controlled Dighem electromagnetic/resistivity/magnetic/VLF survey was flown across each of the 5 claim blocks and adjacent ground for Westmin Resources. Several elongate stratigraphic-related electromagnetic conductors have been defined by the survey and will be the focus of an upcoming field program. During the summer of 1987, a prospecting program was completed on the Lac Sillimanite, Lac Albanel, Lac du Crochet and Lac de la Hutte Properties and this work is the subject of this report.



■ NEMISCAU

PALEOZOIC ROCKS

O N T A R I O

Cochrane

Timmins

Rouyn

Matagami

PROVINCE
PROVINCE

SUPERIOR
GRENVILLE

Q U E B E C

Sault
Ste. Marie

Sudbury

North
Bay

Ottawa

LAKE
HURON

Toronto



Westmin Resources Limited
EASTERN CANADA MINING DIVISION

LOCATION MAP
ADDITION TO MISC. PROPERTY MAP

Work by	Scale 1: 5,000,000
Date	NTS

Location, Access and Topography

The Nemiscau Project is located 200km north of Matagami and 200km east of James Bay, Quebec (figure 1). Scheduled airline service is available on Twin Otter fixed wing service from Val d'Or to Nemiscau weekdays via Air Creebec. Road access is available via paved highway from Matagami to the Rupert River (approximately kilometre 293, figure 1), and east on an all-weather gravel road 115kms to Poste Nemiscau. The Lac Noir, Lac de la Hutte and Albanel claim blocks are easily accessed by road and boat, while Lac Sillimanite and Lac du Crochet claim blocks are accessible by fixed wing or helicopter from Matagami or Chibougamau, Quebec.

The terrain is undulating and locally quite hilly with intervening swampy ground. Outcrops are extremely sparse due to a thick mantle of glacial deposits including boulder-dominant eskers and sand.

TABLE 2

NEMISCAU PROJECT - PROPERTY STATUS

Equity: Ressources Westmin Limitee 75%
Senn D'Or Inc. 25%

Location: Canton 2020, 1917 and 1918, Ungava Mining
District, Quebec

N.T.S. 32 O/12,14

Lac Sillimanite Claim Group; Canton 2020, 32 O/14

Licence	Claims	(ha)	Annual Rent	Work/ year	Recording Date	Assessment Work Due	Surplus Credit
423583	2,3,4,5	64	\$48	\$640	20 Aug.1984	20 Aug.1988	\$ 421.58
423584	1,3,4,5	64	\$48	\$640	21 Aug.1984	21 Aug.1988	\$2,367.58
423585	1,2,3,4,5	80	\$60	\$800	22 Aug.1984	22 Aug.1988	\$6,804.97
423586	1,2,3	48	\$36	\$480	23 Aug.1984	23 Aug.1988	\$ 316.18
423593	1,2,3,4,5	80	\$60	\$800	20 Aug.1984	20 Aug.1988	\$ 773.97
423594	1,2,3,4	64	\$48	\$640	21 Aug.1984	21 Aug.1988	\$1,508.57
423595	1,2,3,4,5	80	\$60	\$800	22 Aug.1984	22 Aug.1988	\$1,136.97
423596	1,2	32	\$24	\$320	23 Aug.1984	23 Aug.1988	\$ 356.79
423597	1	16	\$12	\$160	24 Aug.1984	24 Aug.1988	\$ 551.39
3 Lic.	33 Clms.	528	\$396	\$5,280			\$14,238.00

ALBANEL CLAIM GROUP - PROPERTY STATUS (NEMISCAU)

Equity: Ressources Westmin Limitee 75%
 Senn D'Or Inc. 25%

Location: Canton 1918, Ungava Mining District, Quebec

N.T.S. 32 O/12
 Lat. 51 48'N
 Long. 75 35'W

Licence	Claims	Ha	Annual Rent	Required Work/yr.	Recording Date	Assessment Work Due	Excess Credit
450623	1,2,3,4,5	80	\$60	\$800	16 Aug.1986	16 Aug.1988	\$126.14
450624	1,2,3,4,5	80	\$60	\$800	15 Aug.1986	15 Aug.1988	\$126.14
450625	1,2,3,4,5	80	\$60	\$800	14 Aug.1986	14 Aug.1988	\$126.14
450626	1,2,3	48	\$36	\$480	14 Aug.1986	14 Aug.1988	\$ 75.68
4 Lic.	18 Clms.	288	\$216	\$2880			\$454.10

NEMISCAU PROJECT - LAC DU CROCHET/HUTTE
CLAIM GROUP - PROPERTY STATUS

Equity: Ressources Westmin Limitee 75%
 Senn D'Or Inc. 25%

Location: Canton 1917 and 1918, Ungava Mining District, Quebec

N.T.S. 32 O/12
 Lat. 51 38'N
 Long. 75 40'W

Lac Du Crochet/Hutte

Licence	Claims	Area (ha)	Annual Rental	Required Work/year	Assessment Work Due	Surplus Credit
435477	1,2,3,4,5	80	\$60.00	\$800.00	30 Jan.1988	\$510.60
438534	1,2	32	\$24.00	\$320.00	19 Jan.1988	\$ 43.34
438535	1,2,3,4,5	80	\$60.00	\$800.00	17 Jan.1988	\$108.33
438536	1,2,3,4,5	80	\$60.00	\$800.00	18 Jan.1988	\$108.33
438539	1,2,3,4,5	80	\$60.00	\$800.00	28 Jan.1988	\$510.60
438540	1,2,3,4,5	80	\$60.00	\$800.00	27 Jan.1988	\$510.60
438599	1,2,3,4,5	80	\$60.00	\$800.00	29 Jan.1988	\$510.60
438600	1,2,3,4,5	80	\$60.00	\$800.00	26 Jan.1988	\$510.60
438601	1,2,3,4,5	80	\$60.00	\$800.00	21 Jan.1988	\$510.60
438602	1,2,3,4,5	80	\$60.00	\$800.00	22 Jan.1988	\$510.60
438603	1,2,3,4,5	80	\$60.00	\$800.00	23 Jan.1988	\$510.60
438604	1,2,3,4,5	80	\$60.00	\$800.00	24 Jan.1988	\$510.60
438616	1,2,3	48	\$36.00	\$480.00	16 Jan.1988	\$306.36
450626-B	4,5	32	\$24.00	\$320.00	13 Aug.1988	\$204.24
460917	1,2,3,4,5	80	\$60.00	\$400.00	4 Aug.1988	Nil
460918	1,2,3,4,5	80	\$60.00	\$400.00	5 Aug.1988	Nil
460919	1,2,3,4,5	80	\$60.00	\$400.00	6 Aug.1988	Nil
460920	1,2,3,4,5	80	\$60.00	\$400.00	4 Aug.1988	Nil
460921	1,2,3,4,5	80	\$60.00	\$400.00	5 Aug.1988	Nil
440922	1,2,3,4,5	80	\$60.00	\$400.00	6 Aug.1988	Nil
460923	1,2,3,4,5	80	\$60.00	\$400.00	4 Aug.1988	Nil
460924	1,2,3,4,5	80	\$60.00	\$400.00	5 Aug.1988	Nil
460925	1,2,3,4,5	80	\$60.00	\$400.00	6 Aug.1988	Nil
460926	1,2,3,4,5	80	\$60.00	\$400.00	4 Aug.1988	Nil
460927	1,2,3,4,5	80	\$60.00	\$400.00	5 Aug.1988	Nil
460928	1,2,3,4,5	80	\$60.00	\$400.00	3 Aug.1988	Nil
464057	1,2,3,4,5	80	\$60.00	\$400.00	17 Aug.1988	Nil

27 Lic. 127 Clms. 2032 \$1524.00
 (ha)

\$5366.00

General Geology

Nemiscau [75° 15' to 75° 58' long. and 51° 50' to 51° to 35' lat.] is a NE-SW trending band (7.5km wide) of metasedimentary, metavolcanic and chemical sedimentary rocks metamorphosed to amphibolite facies rank (compilation map, back pocket). The belt is bounded north and south by Oligoclase Gneiss and Granite. Metasedimentary rocks composed of well laminated Biotite Schist predominate the succession and represent epiclastic to reworked volcanoclastic rocks. Aluminous mineral assemblages, believed to result from metamorphism of hydrothermally altered rock, have been documented in this unit including sillimanite, staurolite, andalusite and garnet. Mafic and Felsic volcanic rocks constitute subordinate but important stratigraphic intervals in the belt. Mafic volcanic rocks are thin, less than 500m wide lenticular units of massive and pillowed amphibolite. The mafic volcanic rocks are generally confined to the margins of the belt and face toward the centre of the belt. Felsic volcanic rocks are volumetrically very minor, except along the southeastern shore of Lac des Montagnes where a NNE trending unit extends for 10 - 15kms. These rocks are quartz-feldspar-sillimanite-sericite schists locally containing accessory garnet, andalusite, tourmaline and fuchsite. Numerous ultramafic lenses (100 x 1000m) outcrop in close spatial association with the amphibolites and coincidentally near the same stratigraphic interval as the iron formations. These are mono- and biminerallitic rocks composed of tremolite, chlorite, serpentine and amphibole. These rocks may represent volcanic derivatives that are key stratigraphic markers for gold exploration. Ultramafic rocks host or accompany several of the large gold mines in Timmins; Kerr Addison; Detour Lake; Kiena, Que.; and Eastmain, Que.

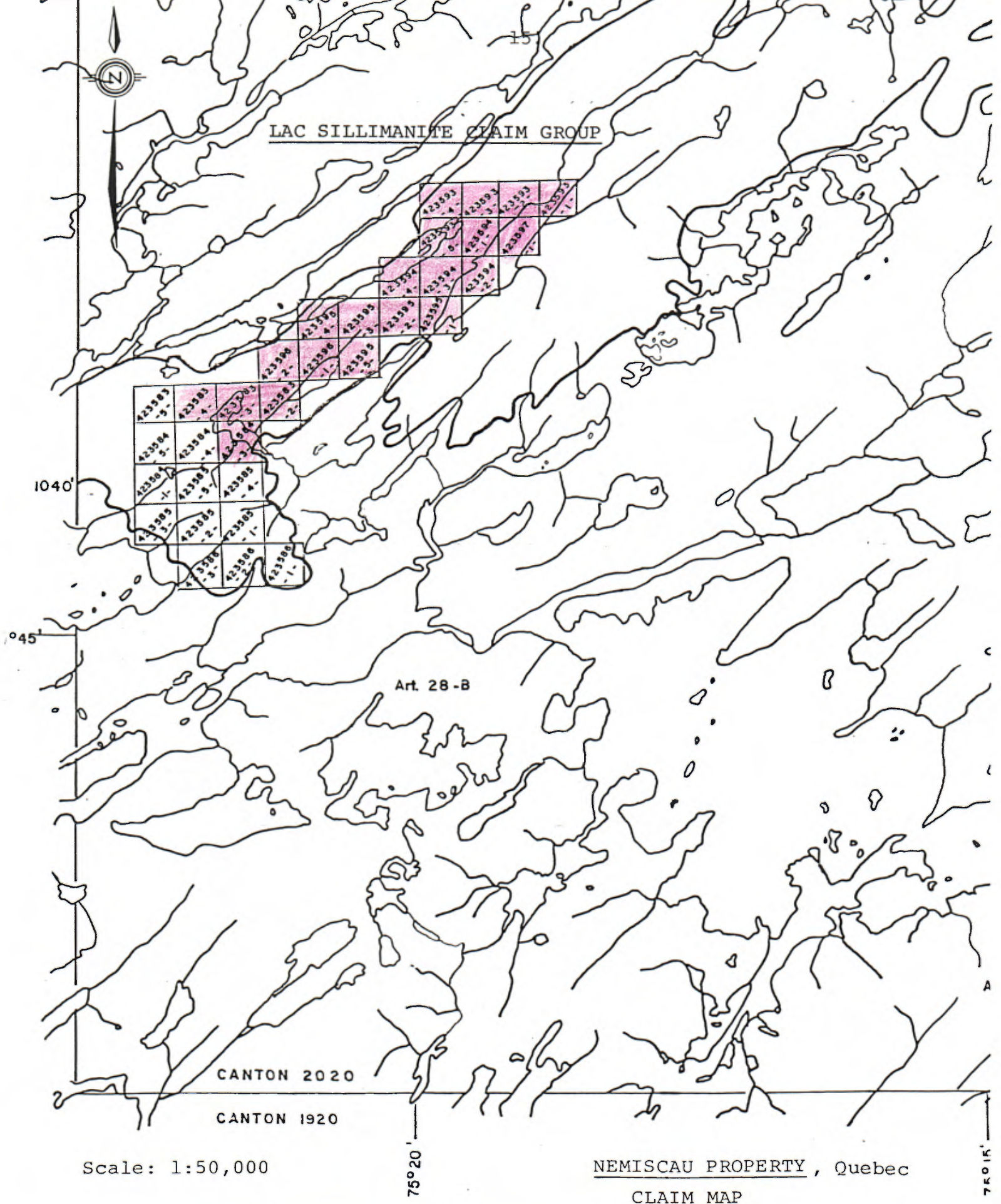
Westmin's Dighem Survey (1987) and the Input Survey completed by S.D.B.J. in 1981 has identified several isolated and formational electromagnetic conductors. Field examination of the project area has confirmed a sulfide source for these anomalies. Both regionally extensive iron formation, (sulfide-facies) and short strike-length sulfide accumulations are present and represent a potential host for gold. Other gold pathfinder minerals such as tourmaline and fuchsite coincide with these sulfide exposures locally.

Previous Work

The Nemiscau volcano-sedimentary belt was mapped in 1963 by Valiquette at a scale of 1 inch to 1/2 mile for the Quebec Dept. of Natural Resources (Valiquette, 1975). Mineral exploration for base metals and chrome has been conducted by Noranda, Inco and S.D.B.J. in overlapping areas of interest. In 1962 Noranda completed an Aeromagnetometer survey of the Nemiscau Belt, followed by surface mapping and prospecting of gossans. Diamond drill programs and trending was completed by both Noranda and Inco in the Lac Lemare-Lac Senay area where a stratiform band of cordierite-anthophyllite rocks host several chalcopyrite-pyrite-pyrrhotite occurrences (GM12635, GM12655, GM13414, GM16857, and GM34024). Chromite seams hosted within a small layered ultramafic complex has been tested by Noranda, Inco and S.D.B.J. located immediately southeast of Lac des Montagnes area (GM12655, GM13737, GM15631, GM16448, GM34024, GM37016, and GM37999).

In 1981 S.D.B.J. completed an INPUT survey over a portion of the Nemiscau belt followed by surface linecutting, geological mapping and Max-Min II Horizontal Loop surveys over several anomalies (GM38445). Surface conductors ranging from 14 to 67 mhos with coincident magnetic anomalies have been defined on 2 grids on the Lac Noir claim block. Surface electromagnetic anomalies ranging from 2 to 35 mhos were also defined on 2 grids within the Lac de la Hutte claim block. The conductors defined by S.D.B.J. on both Lac Noir and Lac de la Hutte claim blocks were attributed to sulfide and/or graphite sources and no diamond drilling was reported or evident in the field in these areas.

LAC SILLIMANITE CLAIM GROUP




Scale: 1:50,000

NEMISCAU PROPERTY, Quebec

CLAIM MAP

N.T.S. 32-0-14

 CLAIMS COVERED
 BY 1987 SURVEY

Microfilm

PAGE DE DIMENSION HORS STANDARD

MICROFILMÉE SUR 35 MM ET

POSITIONNÉE À LA SUITE DES

PRÉSENTES PAGES STANDARDS

Numérique

PAGE DE DIMENSION HORS STANDARD

NUMÉRISÉE ET POSITIONNÉE À LA

SUITE DES PRÉSENTES PAGES STANDARDS

LAC SILLIMANITE PROPERTYSummary - Lac Sillimanite Property

The Lac Sillimanite Claim Block is underlain by a 2400 metre long siliceous iron formation which is largely overburden covered. A small outcrop has exposed a showing which assayed 3.1g/t Au across 0.5 metres. Tourmaline, pyrite-pyrrhotite and arsenopyrite are associated with the gold showing (figures 1,2). Geological mapping, soil geochemical sampling (211 samples) and VLF-EM16 Surveys (9.5km) were completed during the 1987 field season on 16.8km of flagged grids spaced at 200 metres. Twenty-five kilometres of linecutting was completed in 1987 after the geophysical and geochemical surveys. In 1984, 137 soil samples were collected a flagged grid on the western part of the claim block and VLF-EM surveys undertaken down the claim lines. The property is underlain by metasedimentary rocks (Biotite Schist, Unit 4) and a semi-continuous siliceous iron formation (unit 5) which is best outlined by the 1987 Dighem Airborne Survey (figure 2). The southeast-trending conductor located at the western end of the property was previously trenched by Noranda, and no anomalous gold assays were detected. The Lac Sillimanite area is characterized by a linear magnetic high, parallel to and immediately north of the EM conductor. Discrete magnetic highs forming a linear pattern also coincide with the northeast trending EM anomaly (figure 2).

The effectiveness of surface geology and geochemistry is constrained by extensive overburden cover in the area. Five soil samples contain elevated Au (3 to 15ppb) and each anomalous site corresponds to the EM conductor.

General

The 1987 field work was done on a flagged grid, and the linecutting was done afterwards - consequently, the geophysical profiles should be repeated prior to drilling. The 1987 work was restricted to the eastern grid (S-1B). The drill hole locations recommended on the west grid (S-2) are based on work done in 1984.

Geology

The Lac Sillimanite property is characterized by the presence of a mineralized (Au-Aspy-To) massive to partly banded cherty exhalite of sulfide-facies with accessory minerals such as sillimanite, garnet, apatite, phengite, fuchsite, biotite, chlorite and epidote. This horizon is hosted to the south-east by small lenses of amphibolite that could represent metamorphosed mafic flows or silicate facies iron formation. These lithological units are part of a meta-sedimentary sequence (quartzite beds) interlayered with pelitic (cordierite-garnet-biotite) beds, probably the metamorphosed equivalents of turbidite sequences. No felsic volcanics have been observed in this part of the belt. A gold showing was outlined in the cherty exhalite during the 1984 survey (2m at 0.3 to 3.1g/t Au). Immediately north of this showing is an altered garnet amphibolite (sillimanite-tourmaline rich) that shows complex folding patterns. The cherty exhalite horizon appears to have been folded in the western part of the grid (see 1984 map) due to the late movement of a fault plane of NW trend.

The rocks hosting the mineralization are interpreted here as being metamorphosed equivalents of chemical sediments (exhalite and sulfide-facies iron formation) distal from the main hydrothermal center (Lac Voirdye) that have been deposited in a third order basin.

Geochemistry

No new gold showings were found during the 1987 survey. The known showing has re-assayed at 0.2 to 2.2g/t Au. A ridge (L2+00E, to 26+00E) has allowed the exposure of the chert (arsenopyrite-tourmaline) but no significant gold values resulted from the rock assays.

The 1987 and 1984 soil geochemical anomalies in Au-Ag-As-Cu-Zn outline the favourable horizon well. Although the gold values are low (<15ppb), they are considered significant due to the thick cover of fluvio-glacial sand deposits. The gold anomalies range from 3 to 15ppb, Ag from 0.4 to 1.8ppm, the Cu values are up to 110ppm, Zn are up to 150ppm and As up to 110ppm.

The soil geochemistry (137 samples) done in 1984 on the western part of the property where grid S-2 was cut this summer, indicate results such as: As up to 72ppm, Cu up to 210ppm, Zn up to 71ppm, Ag, ranging between 0.4-8ppm and Au ranging between 6 and 15ppb.

All these anomalies are located in the surrounding areas of the VLF conductors representing the target horizon (cherty exhalite).

Geophysics

Two main NE conductors have been outlined by the EM Dighem survey which were verified by a ground VLF-EM16 survey (see conductors A-a' and B'B' on VLF map). The precision of the location of the Dighem conductor is in the order of plus or minus 25m from the ones measured in the field. These 2 conductors are probably the same horizon that was displaced by a late fracture movement.

On the Western part of the property, 2 NW conductors (C-1 and C-2) were outlined in 1984. Noranda has trenched these conductors during the late 60's and the re-sampling of these trenches in 1984 lead to no significant gold anomalies.

Drill Target Recommendation

Eight drill holes are proposed on the basis of the previous geological, geochemical and geophysical information. Five holes are proposed along the 2 conductors on grid S-1B where the main gold showing occur. Three holes are proposed on the western part of the property (S-2) to test the C-1 C-2 conductors and soil anomalies.

Hole	Location	AZ.	Dip	Depth	Purpose(*)
S-1B-1	25+30E 0+55S	145	-45	170m	-Au showing and weak conductor S of it.
S-1B-2	20+00E 1+50S	320	-45	70m	-15ppb Au soil anom. -VLF Amplitude(VLFA) 23
S-1B-3	14+00E 0+00BL	140	-45	120m	-6ppb Au, 0.6ppm Ag -150ppm Zn, VLFA 11
S-1B-4	3+55E 1+40N	160	-45	120m	-Ag anom.(0.4-1.6ppm) -VLFA 66-32
S1B-5	7+65W 4+00N	170	-45	120m	-3 and 15 ppb Au -1.0 and 1.8ppm Ag -VLFA 43
S-2-1	See 1984 VLF map	215	-45	55m	-9ppb Au, 0.6ppm Ag -VLFA 43
S-2-2		215	-45	55m	-6-15ppb Au -VLFA 115
S-2-3		215	-45	55m	-12ppb Au, 0.6ppm Ag -VLFA 22
				Total	765m

(*) Test for the presence of disseminated sulfides (Po-Py-Aspy-cpy) in massive chert or partly banded with tourmaline, garnet, sillimanite, biotite as the main accessory minerals.

Albanel Property

Summary - Albanel Claim Block

The Albanel Claim Block is immediately south and east of the Albanel sub-station and near the all-weather gravel road. The property is along-strike of several Cu occurrences within cordierite-anthophyllite rock at Lac Voirdye-Lac Senay area (figures 1,3). A 200 to 300 metre wide section of northeast trending volcanic rocks and iron formation (units 2,3,5; figure 3) bisect the claim group and in turn are enveloped by sedimentary rocks.

The property was geologically mapped and prospected during the 1987 field season. A total of 8km of flagged grids spaced on 200 metre lines were completed in 1987. 5.6km of VLF-EM surveying was completed. The 1987 Dighem AEM Survey outlined a very strong conductive trend with a coincident high magnetic gradient, hosted within the band of volcanic rocks. Several exposures of sulfide iron formation were identified on the property which coincide with the conductive trends. Aluminous hydrothermal alteration minerals are locally abundant and could be related to stratabound gold mineralization. Soil geochemical sampling has not been undertaken to date on the property.

Geology and Mineralization

The Albabel grid covers a band of meta-volcanic rocks, ultramafic lense, with interlayered sulfide (Po-Py) bearing massive chert (exhalite) with monro felsic volcanics and sediments. Eighteen claims cover the property. In 1987, 8km of flagged grids spaced at 200 metres was completed on the property and 5.6km of VLF-EM surveying completed on the grid. These rocks have been subjected to late tourmaline bearing pegmatite injections along parallel to and crosscutting the schistosity and bedding. No base metal mineralization has been observed in the chert horizon and no significant gold values were obtained from the rock assays.

Stratabound alteration zones are the main features characterizing these meta-volcanic rocks (massive mafic flows and pillowed basalt and in some cases felsic horizons). These areas of stratabound alteration are usually found at the contact with the sulfide bearing chert.

Late quartz-tourmaline veins cross these altered basalts and do not show any gold values. One speck of molybdenite was observed in a pegmatoid vein.

The stratigraphy of this part of the Nemiscau belt is as follows: The base of the volcano-sedimentary pile is characterized by coarse grain massive amphibolite locally porphyritic to glomerophorphyritic (cluster of plagioclase phenocrysts or individual phenocrysts). Silicification of these mafic rocks was evident near the stratabound alteration were numerous small quartz veinlets are present and some "conduit structures" were observed. Actinolite rich pods are found in some of the mafic flows. Many lenses of sulfide bearing massive cherts are intercalated with these massive flows. Toward the northern part of the grid (stratigraphic top), pillowed basalts (fine grain dark green amphibolite) were mapped and top measurements are toward the north-west. These fine grain pillowed basalts are locally sheared and overlie coarse-grained hornblende (metapyroxenite?) which grades into a magnetite bearing ultramafic lens.

Thin horizons of meta-felsic rocks appear in the Northern part of the section more or less along the base line from line 8+00E to line 22+00E.

The numerous stacked sulfide bearing chert horizons indicates that breaks in the volcanic activity were frequent. Hydrothermal activity usually occurs during these breaks and is responsible for the transportation of base and precious metals and for the formation of exhalative ore deposits.

Geophysics

The VLF-EM 16 ground survey has allowed the identification of seven conductors which correspond to the outcropping sulfide bearing chert and magnetite (sulfide?) bearing ultramafic lens.

Drilling Program

Five priority holes are proposed to test favourable context for the presence of precious metal mineralization. These are identified by a star beside the hole number. Four other holes are also indicated but these constitute secondary targets. It is recommended that a soil survey program is done over the conductors in conjunction with a mag survey prior to the drilling of this property. This could help to better define the drill targets.

Hole #	Location	AZ.	Dip	Depth	Purpose(*)
A-1-1*	4+00E 0+70S	150	-45	45m	-Diss.sulfides in chert -Sericite schist -VLFA 56
A-1-2*	4+80E 1+40S	150	-45	65m	-2 chert horizons -cord.-ath.altern. -VLFA 67-87
A-1-3	8+00E 2+50S	150	-45	35m	-Py-Po chert -VLFA 160
A-1-4	9+95E 1+95S	150	-45	50m	-2 chert horizon -Cord.Ath.Sil.Altern. -VLFA 81
A-1-5*	10+00E 0+83S	150	-45	40m	-VLFA 126
A-1-6	14+00E 0+30S	150	-45	35m	-5-10 ppb Au in rock -VLFA 48
A-1-7	17+70E 0+65S	150	-45	60m	-2 chert horizons -Cord.Ath.To.Sil.Altrn. -VLFA 36
A-1-8*	18+00E 0+35N	150	-45	50m	-Cord.Ath.Sil.atlrn. -Mt Ultra-mafic -VLFA 118
A-1-9	21+00E 2+25N	150	-45	35m	-VLFA 37-21

(*) Test for the presence of sulfides in chert, alteration zones and carbonate alteration in Ultra-mafic (hole 8). This hole should be tested for the presence of platinoid minerals.

Lac De La Hutte PropertySummary - Lac de la Hutte Claim Block

Three grids (H-1, H-2 and H-3) have been established on the Lac de la Hutte Claim Block. The 1987 Dighem Airborne Survey confirmed two parallel northeasterly trending conductive horizons (figure 1).

(a) Grid H-1 - Summary

Grid H-1 (figure 4) straddles a volcanic/sedimentary rock contact which in turn is partially defined by an AEM conductor. The 1987 field program included geological mapping, prospecting, linecutting (9.1km), VLF-EM16 (1.8km) and soil sampling surveys (98 samples). Sulfide-chert iron formation exposures were identified coincident with the conductive stratum. Two areas of aluminous rock alteration were also recognized within the volcanic sequence. Chalcopyrite was observed in two areas on Grid H-1 as an accessory sulfide mineral, however gold was not detected in the rock assays. A major northeasterly trending fault is located immediately south of the property and outlined by a positive linear magnetic ridge (figure 4). The conductive horizons at Grid H-1 also coincide or immediately flank a high magnetic gradient, indicative of an iron formation source. Three soil samples from 98 collected contained anomalous gold concentrations (12 to 42ppb), and two sample locations were anomalous in copper (160 to 210ppm). Arsenic concentrations are elevated in the soil medium at Lac de la Hutte where 50% of the samples assayed >10ppm to 50ppm As.

(a) Grid H-1 - General Comment

This grid is an old SDBJ cut grid that was re-flagged during the summer of 1987. It covers Dighem EM anomalies in the southeast part of the property. Metasediments (biotite-quartzo-feldspathic gneiss) with mafic volcanics and minor felsic volcanics are the main rock types found on this grid. Two small magnetite bearing ultra-mafic bodies were mapped, one in the SE end of the grid and one in the SW end of the grid. White pegmatite sills and small intrusive bodies are present in the southern and central portion of the grid.

Geology

A green amphibolite (basaltic flow) contains a pyrrhotite and chalcopyrite bearing rusty horizon that could be a silicate-sulfide facies iron-formation. Small lenses of chert hosted by mafic volcanic are also present north of this main rusty horizon.

Geochemistry

An arsenic halo (10-190ppm) is surrounds the po-cpy rusty horizon in the amphibolite (2+50E to 12+00E, 400N). Three soil samples are anomalous in gold (12-42ppb) and two were anomalous in Cu (200, 210ppm) (5+00E, 3+50N). One sample is anomalous in silver (0.4ppm) close to the 42ppb Au anomaly on line 8+75E 4+00N.

Geophysics

Two VLF-EM16 conductors are present on the grid. One (A-A') corresponds to the cpy-po horizon in the amphibolite and another (B-B') 375m long, is probably a cherty iron formation that is not exposed (2+00E to 6+25E, 5+60N).

Drilling Program Proposed

A four hole program is proposed to test the Po-Cpy bearing horizon that coincides with the Au-Ag-Cu soil anomalies and the presence of a string VLF conductor hosted by mafic volcanics. Two other holes are proposed to test the B-B' conductor in the north part of the grid.

Hole #	Location	AZ.	Dip	Depth	Purpose
H-1-1	3+63E 3+47N	160	-45	50m	-Po-Cpy-py in amphibo.
H-1-2	5+00E 3+63N	160	-45	115m	-15 ppb Au soil -210 ppm Cu in soil
H-1-3	6+25E 3+88N	160	-45	70m	-12 ppb Au soil -VLFA 117
H-1-4	8+75E 4+08N	160	-45	70m	-42 ppb Au, 0.4ppm Ag -VLFA 29
H-1-5	5+00E 5+60N	160	-45	35m	-VLFA 60
H-1-6	2+50E 5+75N	160	-45	35m	-VLFA 21
				Total	375m

(b) Grid H-2 - Summary

The 1987 Dighem Survey outlined a crescent-shaped multiple electromagnetic conductor. This conductive trend is situated within a high magnetic gradient and appears to outline a package of felsic volcanic rocks, chert and sulfide-facies iron formation. A substantial portion of the area is underlain by Granite pegmatite in the form of an oval stock, east of the AEM trend.

Eleven soil samples from 197 samples collected on Grid H-2, contained anomalous gold (3 to 555ppb). Each of the gold soil anomalies coincide with the felsic tuff-iron formation stratigraphic package. Three samples assayed anomalous zinc values (100 to 150ppm). Twenty percent of the soil samples analyzed contained elevated arsenic concentrations (>10 to 60ppm). During 1987, a total of 15km of linecutting and on 4.7 km of VLF-EM surveying was completed on lines spaced at 125 metres.

LAC DE LA HUTTE PROPERTYGrid H-2 - General Comment

Lines are spaced at 125m except for lines 150E and 250E which are spaced 100 metres apart. In 1987, 197 soil samples were collected, and 4.7km of VLF-EM surveys completed.

Geology

Grid H-2 is located 1 km northwest of grid H-1 and is characterized by the predominance of meta-sediments with intercalated lenses of oxide and sulfide-facies iron formation (massive cherty exhalite) with local pods of calc-silicate rocks. These rocks pinch out in the north east part of the grid by a granite intrusive body. Minor chalcopryrite was observed in one chert lens between line 0+25W 3+75N and line 4+00W 4+25N. A fault zone (317 N) is believed to occur in the SW part of the grid. This hypothesis is corroborated by a shift in the resistivity contours where the fault plan trace passes by a magnetic low and by an apparent displacement of the conductors (Dighem survey sheets 2). The sense of movement could either be a shearing effect or a normal fault movement (Up and Down) or a combination of both. Due to a lack of outcrops, there is little evidence except the presence of a quartz-feldspar stockwork that is located along the proposed fault plane.

Geochemistry

The best gold anomalies in soils are found on this grid (6ppb to 555ppb Au). Arsenic is also anomaly in this area and the anomalies are more widespread than the gold ones like in the other grids. The gold anomalies seem to cluster where the fault zone intersects iron formation. One 99ppb Au anomaly is found close to a rusty zone that is poorly exposed (3+75N 6+10W). Two zinc anomalies (110 to 150ppm) were found north of an iron formation (0+25N 4+25-4+50W) and a 110ppm anomaly occurs on line 6+25N, 4+75W.

Geophysics

Two major ground VLF conductors were identified. They correspond to the iron formation outcropping on the property.

Proposed Drilling Program

Nine drilling sites are proposed on the basis of the presence of gold soil anomalies concentration and the fact that they overly conductors or the fault zone cross-cutting the iron formation.

Hole	Location	Az.	Dip	Depth	Purpose(*)
H-2-1	0+00 4+10W	300	-45	50m	-cpy-po in chert -calc-sil. pods
H-2-2	2+65N 2+93W	245	-45	50m	-45 ppb Au -fault zone -sulfide in chert
H-2-3	2+97N 3+50W	245	-45	180m	-555ppb Au, 4ppm Ag -fault zone -Po-Cpy in chert
H-2-4	3+10N 4+35W	300	-45	60m	-Po-cpy in chert -qtz-kspar veins -VLFA 40
H-2-5	2+50N 4+60W	300	-45	50m	-Po in chert -27 ppb Au
H-2-6	3+75N 5+38W	245	-45	50m	-Qtz-kspar veins -fault zone -Po in chert
H-2-7	6+25N 4+75W	300	-45	50m	-110 ppm Zn -15 ppb Au -VLFA 26
H-2-8	10+00N 4+75W	300	-45	50m	-VLFA 4
H-2-9	13+74N 6+08W	300	-45	100m	-99 ppb Au -Py-Po-gph chert
			Total	640m	

(c) Grid H-3, H-3B - Summary

Two parallel electromagnetic conductive horizons have been identified on Grid H-3. The EM trends coincide with volcanic rocks and iron formation alternating with sedimentary rocks composed of Biotite Schist. The property was geologically mapped and prospected, surveyed with VLF-EM 16 and soil sampled across the conductive trends. A major NNW trending diabase dyke crosscuts the western limit of the property. A ENE trending fault, Nemiscau Break, flanks the property on the south side. The diabase dyke and fault system are outlined by magnetic highs, as is the northern conductive trend.

During 1987, a total of 20.3km of linecutting was completed, with lines spaced at 200 metres. In addition, 12.3km of VLF-EM surveying was completed and a total of 253 soil samples were collected from Grid H-3 and subgrid H-3B. Prospecting on the northern half of the grid is hampered by limited rock exposure. Four soil samples broadly distributed along the northern conductive trend contain anomalous Au values (3 to 15ppb, figure 6). Soil sampling within the southern conductive trend has outlined a base and precious metal dispersion halo about a double short strike-length conductor. Seven samples contain anomalous Au (6 to 30ppb), and three samples immediately overlying an EM conductor contain anomalous Zn (150 to 280ppm) and Pb (92 to 210ppm).

Surface mapping along the southern conductive trend outlined several aluminous alteration zones and three sulfide exposures with visible base metals. Chalcopyrite and pyrrhotite was noted in two areas within the northern conductive trend (LO-300N).

Geology and Mineralization

This property is characterized by the predominance of mafic and felsic meta-volcanics with minor meta-sediments in the southern part of the grid and by the presence of meta-sediments in the northern part of grid H-3. Grid H-3B is the southwestern portion of grid H-3 (22W to 14W, 4+50S to 7+00S) where most of the mineralization was identified.

The southern part of grid H-3 is comprised of a sequence of mafic to felsic volcanic cycles with minor meta-sediments (medium to coarse grain biotite quartzo-feldspathic gneiss). Three volcanic cycles (mafic to felsic) and one incomplete cycle where only the mafic member is present were mapped. A thick sequence of meta-sediment overlies on top of these volcanic cycles with one major Iron formation at the end of the meta-sediment sequence (northern part of H-3). The cycles are identified on the maps as (cycle I,II,III,IV). Cycle one seems to be restricted on grid H-3 between line 22W and 10W, 900S-1000S. The felsic member is missing east of 10W. A horizon of fuchsite sulfide bearing cherty exhalite is present in the felsic member of cycle I. This could suggest that there has been a break in the volcanic activity and that cycle I may in fact be composed of more than one cycle. The felsic volcanic seems to interdigitate with the meta-sediments, which could be an indication that we are dealing with small rhyolite domes.

Most of the mineralization observed is associated with cycles II and III. This is also the case for Lac du Crochet grids.

All the base metal showings are restricted to an area within grid H-3B. Three types of mineralization were observed in the field. The first appearance of mineralization is at the top of the felsic member of cycle II where a mineralized chert (Po-Py-cpy-sph <5%) is outcropping (16W 5+75S). This constitutes type I mineralization.

Type II mineralization are quartz veins with minor amount of tourmaline, pyrite, pyrrhotite, arsenopyrite and in some cases chalcopyrite, that cross cut the mafic volcanics, the quartz in these veins is translucent.

Type III mineralization occur within the felsic member of volcanic cycle III and is a polymetallic vuggy milky-quartz vein often with brecciated host rock fragments. A massive sulfide bed (8cm thick) of sphalerite, pyrrhotite, galena and chalcopyrite was observed in the nose of a fold affecting the quartz vein. Some large crystals of sphalerite and galena were also observed in the quartz vein. This polymetallic quartz vein is outcropping along and within a graben structure that parallels the flagged tie-line 4+50S. It is possible to regard this as the result of a remobilization of the sulfides by a later hydrothermal fluid flowing into the fractures and responsible for the quartz vein formation. If this is the case, a massive sulfide body could occur at depth on top of the

felsic member of cycle III at the contact with the mafic member of cycle IV.

A horizon of pyrite-pyrrhotite bearing chert constitutes the southern graben wall between line 16W and 15+50W. The graben was offset during a late fault movement (17+50W).

An ultra-mafic lens was mapped in the west end of grid H-3 south of Tie Line 4+00S, line 26W. No mineralization was found but part of this body has been serpentinized.

Late intrusive bodies are abundant in this area. A dyke of coarse grained gabbro (diabase) transects all the stratigraphic units in the western end of the grid and is intersecting and offsetting a fault plane (015). Many pegmatite injections shoot along the bedding and schistosity and cross-cut the bedding with a N-S orientation.

Alteration

Type I mineralization is associated with altered felsic volcanics (garnet-sillimanite-phengite-cordierite rocks) that occur at the contact with the chert.

Type II mineralization shows no evidence of associated alteration.

Type III mineralization is hosted by a sericitized, silicified and epidotized felsic volcanic rocks.

The outcrops in the northern portion of H-3 are scarce. A sulfide bearing massive chert (po-py-cpy) outcrops on line 0, 2+50N. This iron formation is the continuation of the iron formation of grid H-2. Trace chalcopyrite was observed in subcrops of this iron formation at the west end of H-3 (20W 5+50N). Pink granite and pegmatites occurs north of this iron formation.

Geochemistry

No high gold values were obtained from the rock samples assayed. One sample (84688 H3B) assayed 135 ppb gold which was a galena rich sample from the quartz vein.

Soil samples taken on grid H-3B are anomalous in zinc (up to 280ppm), lead up to 210ppm) silver (up to 0.8ppm) As (up to 110ppm) and Au (3-30ppb). The zinc, lead and silver anomalies cluster around the main polymetallic quartz vein showing. The gold anomalies are further south of this showing and more or less parallel the cycle II-cycle III contact where a mineralized chert horizon occurs.

Soil samples from the northern part of H-3 are anomalous in Au-(3-15ppb), Ag (0.2-0.8ppm) and As (up to 26ppm). These anomalies overly the iron formation horizon expressed by a strong VLF conductor.

Geophysics

No major ground VLF conductors were found on grid H-3B except for a strong anomaly reflecting the presence of the sulfide bearing chert between lines 16W and 14W 4+75S. Another conductor appears in the NW corner of H-3B and seems to correspond to the western extension of the graben structure.

Two major ground VLF conductors occur in the northern part of H-3 and a minor one in the southeast part of the grid. The enhanced magnetic survey (Dighem) indicates that a low mag anomaly is coupled with a low conductance anomaly in the central part of the iron formation (conductor A-A'). This could indicate that the iron formation has been altered, thus leading to the disappearance of the sulfides which could be a prime target for the presence of gold mineralization in iron formation.

Drilling Program

Three main target areas can be outlined from the above geological information. Two targets are located on grid H-3B and are: A) the mineralized chert (type I) at the contact of cycle II and cycle III and B) the polymetallic quartz vein in the graben structures in the felsic member of cycle III. A total of seven holes are proposed to test these targets.

A third target area is the 2.2 km long conductor (iron formation) with minor chalcopyrite where six holes are proposed.

GRID H-3B

Hole #	Location	Az.	Dip	Depth	Purpose (*)
H-3B-1	16+00W 5+89S	335	-45	50m	-9 ppb Au soil -25 ppb qtz-asy vein -cpy-sph-po chert -altered felsic
H-3B-2	18+00W 5+98S	335	-45	60m	-po-cpy-asy vein -9 ppb Au soil -chert at maf.-fel.
H-3B-3	15+66W 4+78S	335	-45	75m	-sulfide chert -asy-cpy-po qtz vein -VLFA 117
H-3B-4	17+00W 4+73S	335	-45	75m	-brecciated-qtz vein with sph-gal-cpy
H-3B-5	17+95W 5+04S	335	-45	100m	-100-280 ppm Zn, 210 ppm Pb, 0.4-0.8ppm Ag -massive sph-cpy-gal in chert
H-3B-6	20+00W 5+41S	335	-45	65m	-160-100 ppm Zn soil -0.04-0.08 ppm Ag
H-3B-7	20+50W 4+73S	335	-45	50m	-po-cpy-asy chert -felsic mafic contact

(*) Test for the presence of disseminated sphalerite-chalcopyrite-pyrrhotite in chert.

Test for the presence of a massive sulfide body at the felsic-mafic contacts.

Test for visible gold in vuggy quartz vein with sphalerite-galena-chalcopyrite.

GRID H-3

Hole #	Location	Az.	Dip (o)	Depth	Purpose
H-3-1	0+00 3+70N	335	-45	55m	-0.2-0.4ppm Ag -VLFA 108
H-3-2	4+00W 3+70N	335	-45	45m	-0.4-0.8ppm Ag -VLFA 5
H-3-3	6+00W 2+63N	335	-45	70m	-15 ppb Au 20ppm As -VLFA 17
H-3-4	12+00W 2+80N	335	-45	55m	-3 ppb Au -VLFA 14
H-3-5	16+00W 3+75N	335	-45	70m	-9 ppb Au -VLFA 16
H-3-6	20+00W 5+50N	335	-45	55m	-po-cpy chert -3 ppb Au -VLFA 82

(*) Test for the presence of aspy-po-py-cpy in chert. Look for textural evidence of sulfides replacing the oxydes or vice-versa.

LAC DU CROCHET PROPERTYSummary - Lac du Crochet

The Lac du Crochet claim block straddles a composite set of formational and short strike-length conductors within a mixed volcanic-sedimentary rock sequence (figure 7). The claim group was prospected and geologically mapped during the 1987 field season. A total of 16.8km of linecutting was completed on lines spaced at 200 metres. VLF-EM surveys (total of 14.0km) was completed on the cut lines. Several northeast trending conductive horizons with coincident linear high magnetic anomalies transect the property. These strong formational anomalies have been identified previously by Valiquette as sulfide iron formation. Aluminous rock alteration including sillimanite, cordierite, anthophyllite, sericite and garnet has been identified on the claim group and is a prospective indicator for gold. One pyrite-chalcopyrite-sphalerite occurrence coincident with a weak EM conductor and aluminous alteration at L48W-400S reflects a diamond drill target.

LAC DU CROCHET PROPERTY(a) Tie-Line H-3/H-3C

This tie line area between Lac du Crochet and Lac de la Hutte Grids) links the Lac de la Hutte Property to the Lac du Crochet property between line 26+00W and 46+00W. It intersects an old SDBJ grid between lines 35+00W and 41+00W along the tie line. Only preliminary mapping was done in the area.

Geology

The reconnaissance mapping has allowed recognition of volcanic cycles II and III. It appears that a weak EM conductor south of line 30W is the mineralized chert (po-cpy-sph-py) at the top of cycle II. Outcrops of this chert are more precisely located between line 31W and 20W 6+90S.

Proposed Drilling Program

A two hole program is proposed to test the presence of precious metal in the mineralized chert at the top of cycle II and a cordierite-anthophyllite alteration at end of cycle III. Note that the location of hole TL-1 is measured from the coordinate of the map but that no lines were flagged nor cut.

Hole #	Location	Az.	Dip	Depth	Purpose
TL-1	30+18W 6+90S	335	-45	70m	-Po-Cpy-Sph chert
TL-2	29+00W 4+25S	335	-45	70m	-Cord.Ath altrn.

(b) Main Lac Du Crochet Property

Geology

The geology of the lac du Crochet property is characterized by the presence of volcanic cycles II and III and the reappearance of cycle IV at the western end of the grid.

A major fault zone (290) is present in the western part of the grid (line 69+00W to 61+00W 10+00S). This interpretation is based on the presence of a topographic valley, displacement of the EM conductors (Dighem survey sheet 1), the presence of magnetic low and resistivity low. The block of rock east of the fault is characterized by the presence of meta-sediments (biotite quartzo-feldspathic gneiss) at the base of cycle II and in the northern area of this block. The west block is characterized by the predominance of mafic volcanic rocks, gabbro sill and ultra mafic rocks. Pegmatite bodies are also present with minor pink granite.

The same mineralized chert horizon on top of cycle II has been mapped in the eastern part of the grid between lines 52+00W and 5+00S and 47+00W 5+50S.

Geochemistry

No high gold values were detected in the rock samples of this grid.

Geophysics

Five ground VLF conductors were identified on the property. Only the eastern portion of conductor B-B' is outcropping which corresponds to the mineralized chert at the end of cycle II. The other conductors are probably interflow sulfide facies chert exhalite. Conductors D-D' and E-E' are probably related to the presence of a chert horizon at a mafic-felsic contact close to an ultramafic body.

Proposed Drilling Program

A five hole program is proposed to test some of these conductors which present favourable geology for precious metal mineralization. A soil survey program should be useful to target other areas due to the scarcity of the outcrops on this grid.

Hole #	Location	Az.	Dip	Depth	Purpose
H-3C-1	48+00W 5+65S	335	-45	70m	-Po-cpy-sph chert -altered felsic -VLFA 77
H-3C-2	50+00W 5+30S	335	-45	80m	-po-cpy chert -altered felsic -VLFA 77
H-3C-3	64+00W 1+80S	335	-45	70m	-VLFA 94
H-3C-4	70+00W 0+85S	335	-45	70m	-cord.Ath altrn. -felsic-mafic cont. -VLFA 42
H-3C-5	72+75W 0+85S	335	-45	80m	-sulfide in chert -ultra mafic pod -VLFA 19

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A P P E N D I X 1

Metallogeny of the Nemiscau Metamorphosed
Volcano-Sedimentary Belt: Its potential for
finding base and precious metal deposits

Memorandum to: D. J. Robinson

From: L. Bernier

Subject: METALLOGENY OF THE NEMISCAU METAMORPHOSED
VOLCANO-SEDIMENTARY BELT: ITS POTENTIAL FOR
FINDING BASE AND PRECIOUS METAL DEPOSITS

The Nemiscau volcano-sedimentary belt is located in James Bay Area, Quebec (75 15' to 75 58' long. and 51 50' to 51 35' lat.) and has been metamorphosed to the upper amphibolite facies. It has a length of about 15km and a width varying from 2km in the northeast end to 8km in the southwest end. A thick sequence of metasediments (biotite quartzo-feldspathic gneiss, derived from grit and greywacke) occupy the central portion of the belt. A 1.5km thick sequence of mainly meta-felsic volcanic with minor mafic and chromite bearing podiform ultramafic flanks these metasediments in the NW part of the belt. This band is held by Muschoco Exploration Limited. Toward the Northeast end, amphibolite (massive and pillowed flows) with podiform ultramafic rocks formed lenses on a length of about 7km by 1/2km wide. The southern part of the belt (from Lac du Crochet to Lac Senay) is characterized by a sequence of predominantly meta-volcanic rocks (basalts, rhyolite, and ultramafic rocks) with interflow sulfide bearing massive chert and oxide-sulfide facies iron formation that are also occurs in the metasediments. Many stratiform alteration zones occur at different levels of the volcanic pile. These alteration zones are either observed within the felsic and within the mafic volcanics. Metamorphic aluminous minerals have replaced the primary hydrothermal assemblages (chlorite-sericite-talc and possibly pyrophyllite, carbonates, psilomelane etc.) which are known anthophyllite, cordierite, garnet, staurolite, fibrolitic sillimanite, fuchsite, phengite, tourmaline, etc.

A major stratiform alteration zone (coarse grained anthophyllite) was mapped by Valiquette (1975) in the Lac Voir dye, Lac Senay area where many chalcopyrite-quartz stringers have been found by Noranda during the late 50's. This zone coincides with the disappearance of the volcanic sequence toward Lac Sillimanite area where only minor amphibolite lenses occur.

Lenses of magnetite bearing ultramafic bodies, often serpentized, are also found in this volcanic sequence. They are podiform (100 * 1000m) and outcrop most of the time at the same stratigraphic level as the iron formation and mineralized chert. One of these sulfide bearing (Aspy-Po-Cpy) chert contains sub-ore grade gold concentrations (up to 3.1 g/t) and is located in the Lac Sillimanite claim block.

Three major fault zones transect the Nemiscau belt having NS to NW-SE trends (see modify compilation map). One of these fault crosscuts the Lac de la Hutte Break zone. These faults are responsible for the folding of the alteration zone (west end of Lac Voir dye) and for the folding of the sulfide bearing exhalite and associated rocks on the Lac Sillimanite property.

Many mineral exploration projects were conducted in the Nemiscau belt during the past 30 years, by companies including Noranda, Inco, SDBJ and Canex. No deposits were found but many base and some precious metal occurrences were reported. Podiform ultramafic bodies in the Lac Des Montagnes area contains chrome and minor Cu, Ni, Au, Pt mineralization. Lithium (spodumene) bearing pegmatites have also been reported by Valiquette, 1975.

Many Cu-Ni showings were examined at by Noranda and Inco in the Lac Voirdye and Lac Senay area and some were also the object of drilling. An important factor to underline here is that the chert horizons in this area were not the principal target; the alteration zone was the main target. We will see later that this may be of some interest in establishing a strategy for gold exploration in this belt. Other Cu-Ni showings were the object of trenching in the southwest part of the Lac Sillimanite areas by Noranda.

Westmin Resources Ltd. has conducted a preliminary survey on the Lac Sillimanite area which allowed the discovery of a gold occurrence in a tourmaline-sulfide bearing chert horizon also anomalous in Mn, Co, Ni, Cu, Ba. The 1987 surveys on four major claim blocks including Lac Sillimanite resulted in the discovery of many base metal (sphalerite-galena-chalcopyrite-pyrrhotite) showings in the Lac de la Hutte and Lac du Crochet claim blocks. No new gold showings were found but anomalous gold (up to 555ppb) and silver (up to 1.8ppm) values were obtained from soil samples on the H-1 H-2 grids on the Lac de la Hutte property. These base metal showings are found in sulfide bearing cherty exhalites interlayered in mafic and felsic volcanic cycles or in meta-sediments and in late quartz veins in altered felsic volcanic. These occurrences are a prime target for gold and base metal mineralizations. The presence of many interflow iron formations and cherty exhalites are indications of quiescence periods or "breaks" in the volcanic activity and reflects circulation of hydrothermal fluids carrying base and/or precious metals which could form massive sulfide deposits and precious metal exhalites.

A good summary of the characteristic of many gold mining camp in the Superior province of the Canadian Shield is made by Hodgson and MacGeehan (1982) and is quoted below:

"The dominant rock types underlying the mining camps are mafic, variolitic, tholeiitic volcanic rocks with a significant ultramafic component, and clastic and/or exhalative sedimentary rocks. Felsic volcanic rocks are generally subordinate. Most mining camps are located at or near the top of the mafic-ultramafic sequence, and generally there is a major sedimentary-volcanic contact present which may be 1) a stratigraphic superposition of volcanic and sedimentary units, 2) a rapid, along-strike gradation from dominantly volcanic to dominantly sedimentary units due to facies change, or to the formation of structurally controlled sedimentary basins during volcanism, or 3) a juxtaposition of sedimentary and volcanic sequences across a major fault zone or "break" which in many instances may represent a reactivated, syn-volcanic basin-margin fault. Ninety percent of the mine sites are close to a

felsic intrusive or extrusive that can be a subvolcanic intrusion or a volcanic vent environment. Quartz, carbonate minerals, arsenopyrite, scheelite, tourmaline and fuchsite are frequently associated with gold".

All the above characteristics apply to the Nemiscau belt. Examples of known precious and base metal deposits in highly metamorphosed volcano-sedimentary belts which may be regarded as targets from geological environments similar to Nemiscau follows:

1) Eastmain deposit, James Bay

A polymetallic (Au-Ag-Cu) deposit was found by Placer Development in the highly metamorphosed Waheman greenstone belt. This belt is 9km south of the Eastmain River and about 200km east of the Nemiscau belt. In 1982, 1 million tonnes at 11.7g/t Au, 14.38g/t Ag and 0.26% Cu were estimated. Two volcanic cycles composed the south flank of a large anticline with its core occupied by a granite intrusion. The gold mineralization is part of the lower volcanic cycle and is hosted by mainly mafic volcanic with minor ultramafic lenses, chert (10-30% po>py>cpy>>sph, tetrahedrite), altered basalts, mafic and felsic tuffs forms the mine sequence. Many lenses of cordierite-anthophyllite and sillimanite rich rocks were mapped in this band along the same stratigraphic level. Porphyritic and variolitic basalts serve as markers in the mine sequence. (Boldy et al., 1984).

2) Montauban North Gold Zone

The Montauban polymetallic deposit occurs in an Helikian volcano-sedimentary sequence metamorphosed to the upper amphibolite facies. A stratiform siliceous exhalite host the gold-silver mineralization with minor sulfides (Po>Sph>cpy>gal>>>aspy). Metamorphosed altered volcanics (felsic??) (cordierite-anthophyllite-staurolite and nodular sillimanite (kyanite) gneiss) host this gold bearing exhalite. A mined out polymetallic massive sulfide deposit hosted by calc-silicate rocks occurs along the same stratigraphic horizon, south of the actual north gold zone. A second gold zone south of the old massive sulfide site is currently being mined by Muscocho Exploration Limited (Bernier et al., In press).

3) Hemlo Gold Deposit

The recent discovery of the huge Hemlo gold deposit in was made in the Schreiber-White river section of the Wawa sub-province. It is a volcano-sedimentary belt metamorphosed to the upper-amphibolite, lower granulite facies. Minerals such as garnet, cordierite, staurolite, kyanite, fibrolitic sillimanite, anthophyllite are abundant in the host rocks which are metamorphosed altered intermediate volcanoclastic rocks. The main Hemlo deposits are in volcanoclastic sediments flanked by intermediate to felsic meta-volcanics and mafic meta-volcanics are present 1km apart of either side of the mine sequence. Other deposits are found in the same type of high grade environment close to the Wawa sub-province such as the Geco deposit and the Winston Lake deposit.

Examples of gold deposits in less metamorphosed sequence but similar to the above ones can also be referred to such as:

4) Gold Deposits of the Nubian Shield Red Sea Hills, Sudan

The Ariab district contains 8 polymetallic exhalative massive sulfide deposits. The deposits occur within an Upper Proterozoic volcano-sedimentary complex forming an extensive belt of the Arabian-Nubian Shield. The most important gold deposit is associated with a stratigraphic horizon of regional extent lying at the top of the volcanic pile and closely related to rhyolitic volcanic rocks. The various types of mineralization include predominantly pyritic massive and disseminated sulfides, locally enriched in primary iron oxides and base metals (Cu-Zn) as well as siliceous-baritic exhalite enclosing gold concentrations. Both types were formed by the same process involving sedimentary exhalative deposition (chloritites and carbonates) and intense hydrothermal alteration of the host rocks. The gold bearing horizons are mainly hosted by altered felsic volcanics (Cottard et al, 1986).

5) Cu-Au Upper Beaver Mine, Kirkland Lake district

This gold deposit is hosted in mafic volcanics close to sedimentary contact. The gold mineralization occurs in a chalcopyrite-pyrite-magnetite cherty interflow sediment and in gold-quartz veins. The veins were formed by remobilization during late hydrothermal metamorphogenic processes that have affected the volcanic pile and its primary exhalative mineralization (Roberts and Morns, 1982).

6) Red Lake and Dickenson Mines

The gold mineralization in the Campbell Red Lake and Dickenson Mines is believed to have been emplaced as syn-volcanic Au-As veins found in extensively altered rocks and as low grade chemical sedimentary ores and pyritic iron formation associated with rhyolitic extrusions. Secondary stage of superimposed metamorphogenic processes has contributed to the formation of the actual gold concentrations in the Red Lake district (MacGeehan and Hodgson, 1982).

As we can see from the above examples, the best targets for gold mineralization in volcano-sedimentary sequence are the mineralized cherty interflow sediments in close association with felsic extrusives and mafic volcanics. In most cases volcanic cycles are present closed to a major sedimentary contact. In the case of metamorphosed deposits, late hydrothermal processes during metamorphism could have contributed to generate secondary gold enrichment in favourable lithological units or structures. Equally of interest here is the recent discovery of ore grade gold concentrations (up to 6.7g/t Au) in silica-Zn-Ba precipitates hosted by basalts on sediment-starved spreading centers. Gold mineralization occurs at low concentration (200ppb) in Cu-Fe rich samples. Concentrations larger than 800ppb Au occurs in Zn-Ba-Si

precipitates and in Pb-Ag-As-Sb rich samples (Hannington et al, 1986). These authors consider the polymetallic sulfides within mature mounds as a preconcentrated source of Au. The remobilization of Au from early, high-T sulfides followed by a reconcentration of the Au in the cooler, outer portions of the mounds may be an important control on Au enrichment. This may explain the association of distal gold bearing exhalite found along the same horizon of massive sulfides that are closer to the hydrothermal center.

It is evident from this discussion that the Nemiscau belt offers many characteristics if not all, of known gold mining camps. One has to keep in mind that gold is one of the most difficult metals to prospect due to the complexity and diversity of the known deposits in Archean greenstone belt. There is no simplistic model that can be used and furthermore, most of the biggest gold deposits show NO GEOPHYSICAL SIGNATURES AT ALL. The best tool that we can use is geological mapping and model development combining field information with the knowledge acquired from known gold deposit studies.

GEOLOGY LEGEND

- 11 Diabase, Gabbro
- 10 a) Pegmatite (muscovite, tourmaline, garnet as accessories)
b) Pegmatite (quartz-feldspar only)
- 9 White and pink granite
- 8 Granite with hornblende and microcline phenocrysts
- 7 Ultramafic (pyroxenite, hornblendite, tremolite rich rocks)
- 6 a) Amphibolite (sediment)
b) Banded Iron Formation .1) sulfide facies .2) oxide facies
.3) silicate facies .4) carbonate facies
- 5 Cordierite-anthophyllite rock (metamorphosed altered volcanic)
- 4 Meta-sediment a) biotite quartzo-feldspathic gneiss
b) (Biotite-sillimanite)
c) (biotite-sillimanite-staurolite)
d) (biotite-garnet-sillimanite-phengite)
e) (biotite-phengite)
- 3 a) massive cherty exhalite (often sulfide bearing)
b) Altered felsic volcanic: fine grain quartz rich gneiss (ser.)
c) Altered with sillimanite-garnet-phengite
d) Altered with biotite-sillimanite-garnet + staurolite
e) Fresh felsic volcanic (fine grain quartz-feldspar rock)
- 2 Mafic volcanics a) amphibolite with pillow structures
b) massive amphibolite (+ garnet)
c) amphibolitic gneiss (intermediate volcanic)
- 1 Oligoclase gneiss.

MINERALS ABBREVIATIONS

Bi: biotite	Grt: garnet	Cord: cordierite
Ath: anthophyllite	Act: Actinolite	Trem: Tremolite
Sil: Sillimanite	Ser: sericite	Hb: hornblende
To(Tl):Tourmaline	St: Staurolite	Fus: fuchsite
Musc: muscovite	Ap: Apatite	Di: diopside
Gal: galena	Po: pyrrhotite	Py: Pyrite
Cpy: chalcopyrite	Mt: Magnetite	Hem: hematite
Aspy(Apy): arsenopyrite	Gph: Graphite	

OTHER SYMBOLS

Strike and Dip, bedding

S1 (Schistosity)

S2

Fractures, joints

Geological contacts, interpolated

Geological contacts observed

Outcrops limits

Blocks, sud-crop

Mineral lineation

Z and S minor folds with axis plunge

Fault zone

Trench

Flagged lines

Cut lines

VLF Conductors amplitude: 0-25
 25-50
 50-75
 >75

A P P E N D I X 2

Soil Geochemical Assay Data

WESTMIN RESOURCES (KAREN JERVIS/R.H.MCNILLAN) PROJ: NEMISCAU

WO NO: 87-1111

PAGE: 1

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
NKJ87-0001	1	<3	<.2	.6	3	36	2	<1	1.89
NKJ87-0002	2	<3	<.2	6.4	4	27	5	<1	6.05
NKJ87-0003	3	<3	<.2	4.2	4	21	4	<1	5.68
NKJ87-0004	4	6	<.2	.3	2	21	1	1	1.84
NKJ87-0005	5	<3	<.2	.4	1	24	1	<1	2.04
NKJ87-0006	6	<3	<.2	.7	5	22	1	<1	4.54
NKJ87-0007	7	<3	.6	1.2	11	150	8	<1	96.4
NKJ87-0008	8	<3	<.2	1.7	2	18	6	<1	2.36
NKJ87-0009	9	<3	.2	15.6	3	19	3	<1	2.69
NKJ87-0010	11	<3	.2	.5	1	18	5	<1	1.71
NKJ87-0011	12	<3	<.2	2.2	9	22	4	1	12.2
NKJ87-0012	13	<3	<.2	21.0	9	20	6	1	19.1
NKJ87-0013	14	<3	<.2	25.2	9	21	6	1	17.5
NKJ87-0014	15	<3	<.2	26.3	6	16	7	1	10.6
NKJ87-0015	16	<3	<.2	1.1	3	17	2	<1	2.27
NKJ87-0016	17	<3	.6	1.0	10	52	1	<1	95.0
NKJ87-0017	18	<3	.2	6.9	4	23	3	<1	6.85
NKJ87-0018	19	<3	.2	.7	3	20	1	<1	3.67
NKJ87-0019	21	<3	<.2	.6	3	19	1	<1	2.77
NKJ87-0020	22	<3	.2	2.6	6	27	1	<1	12.1
NKJ87-0021	23	<3	.6	2.6	16	40	5	<1	84.7
NKJ87-0022	24	<3	.2	.9	22	56	21	<1	38.8
NKJ87-0023	25	<3	.4	7.8	21	23	6	7	9.84
NKJ87-0024	26	<3	.4	5.8	17	22	5	7	8.95
NKJ87-0025	27	3	.4	60.1	4	21	11	1	6.31
NKJ87-0026	28	<3	.2	26.3	4	22	5	2	7.06
NKJ87-0027	29	<3	.4	22.8	4	20	5	2	4.42
NKJ87-0028	31	<3	<.2	22.8	3	19	2	1	4.37
NKJ87-0029	32	<3	.2	1.2	6	42	1	<1	91.9
NKJ87-0030	33	<3	<.2	1.2	3	36	6	<1	22.4
NKJ87-0031	34	<3	<.2	1.2	1	16	2	<1	3.38
NKJ87-0032	35	<3	1.6	6.7	50	41	8	<1	81.4
NKJ87-0033	36	<3	.2	2.5	6	23	3	<1	11.2
NKJ87-0034	37	<3	<.2	6.7	7	53	2	1	11.5
NKJ87-0035	38	<3	<.2	1.3	2	24	1	<1	11.2
NKJ87-0036	39	<3	<.2	18.0	8	19	5	3	13.0
NKJ87-0037	41	<3	<.2	4.9	8	16	7	2	12.3
NKJ87-0038	42	<3	1.0	1.5	9	72	4	1	90.7
NKJ87-0039	43	<3	<.2	23.9	8	23	4	1	4.00
NKJ87-0040	44	<3	.6	15.2	8	24	4	<1	3.69
NKJ87-0041	45	<3	<.2	1.4	4	15	5	<1	4.52
NKJ87-0042	46	<3	<.2	1.7	5	16	7	<1	5.36
NKJ87-0043	47	<3	<.2	15.2	7	19	3	1	12.4
NKJ87-0044	48	<3	.2	.6	13	45	1	2	8.97
NKJ87-0045	49	<3	.2	16.3	3	18	4	1	3.63

see heliumite

see stibnite

SAMPLE ID	SAMPNO	AU PPR	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
NKJ87-0046	51	<3	<.2	4.9	3	20	3	<1	7.82
NKJ87-0047	52	<3	<.2	20.6	5	22	3	1	3.64
NKJ87-0048	53	<3	<.2	22.8	5	24	3	1	4.07
NKJ87-0049	54	<3	<.2	.3	2	8	2	<1	2.01
NKJ87-0050	55	<3	.2	60.3	7	21	9	3	16.9
NKJ87-0051	56	<3	.4	44.2	8	26	4	1	36.4
NKJ87-0052	57	<3	<.2	42.8	9	24	4	1	45.6
NKJ87-0053	58	<3	.4	1.2	13	33	3	<1	77.0
NKJ87-0054	59	<3	<.2	1.0	2	12	1	<1	4.30
NKJ87-0055	61	<3	<.2	.3	3	12	2	<1	3.37
NKJ87-0056	62	<3	<.2	5.5	4	17	7	<1	15.4
NKJ87-0057	63	<3	<.2	5.5	4	15	7	1	5.60
NKJ87-0058	64	<3	.4	1.6	45	48	5	<1	67.8
NKJ87-0059	65	<3	.2	7.6	11	25	6	1	11.3
NKJ87-0060	66	<3	<.2	27.4	6	22	3	1	7.60
NKJ87-0061	67	<3	<.2	31.0	6	22	4	1	6.60
NKJ87-0062	68	<3	<.2	<.2	2	12	1	<1	2.12
NKJ87-0063	69	<3	<.2	23.9	7	17	6	1	13.5
NKJ87-0064	71	<3	<.2	17.3	6	17	6	1	12.8
NKJ87-0065	72	<3	<.2	3.4	9	38	5	2	67.1
NKJ87-0066	73	<3	.6	32.3	8	20	5	1	10.6
NKJ87-0067	74	<3	<.2	9.2	4	17	5	<1	6.63
NKJ87-0068	75	<3	.2	1.3	2	13	5	<1	3.45
NKJ87-0069	76	<3	<.2	1.4	3	15	5	<1	6.74
NKJ87-0070	77	<3	<.2	11.4	2	18	4	<1	4.11
NKJ87-0071	78	<3	.2	6.8	2	15	3	<1	4.24
NKJ87-0072	79	<3	<.2	7.3	6	20	6	1	12.4
NKJ87-0073	81	<3	.2	2.7	3	18	6	<1	6.42
NKJ87-0074	82	3 ✓	.2	2.7	4	23	8	1	14.9
NKJ87-0075	83	<3	.2	3.9	4	21	7	<1	14.4
NKJ87-0076	84	<3	.8	5.5	8	23	5	1	10.8
NKJ87-0077	85	<3	<.2	4.2	5	15	4	1	9.30
NKJ87-0078	86	<3	.4	5.8	9	25	7	3	12.5
NKJ87-0079	87	<3	.4	1.1	31	49	13	2	76.5
NKJ87-0080	88	<3	<.2	2.4	9	17	6	1	8.59
NKJ87-0081	89	<3	.4	.6	15	31	3	1	92.6
NKJ87-0082	91	<3	<.2	.9	39	20	5	1	44.4
NKJ87-0083	92	<3	<.2	.3	2	16	2	<1	2.52
NKJ87-0084	93	<3	<.2	2.5	5	23	6	<1	10.2
NKJ87-0085	94	<3	<.2	3.0	4	23	4	1	9.49
NKJ87-0086	95	15 ✓	.2	4.8	4	23	4	1	7.54
NKJ87-0087	96	<3	<.2	9.4	4	22	8	1	15.1
NKJ87-0088	97	<3	<.2	1.9	3	32	6	<1	8.74
NKJ87-0089	98	<3	<.2	3.9	4	24	6	<1	10.9
NKJ87-0090	99	<3	.2	4.5	7	21	6	1	12.7

see field notes

52.

see field notes

SAMPLE ID	SAMPNO	AU PFB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
NKJ87-0091	101	<3	<.2	3.5	2	15	4	<1	3.69
NKJ87-0092	102	<3	<.2	9.4	7	22	5	1	17.7
NKJ87-0093	103	<3	.4	11.8	5	20	5	1	15.7
NKJ87-0094	104	<3	<.2	4.2	5	18	4	1	9.85
NKJ87-0095	105	<3	<.2	3.1	2	15	5	<1	3.70
NKJ87-0096	106	<3	.4	21.8	6	18	6	1	15.1
NKJ87-0097	107	<3	<.2	6.9	8	46	4	<1	98.3
NKJ87-0098	108	<3	<.2	.5	3	15	5	<1	2.04
NKJ87-0099	109	<3	<.2	2.0	8	27	4	1	13.7
NKJ87-0100	111	<3	<.2	.3	4	20	3	<1	11.1
NKJ87-0101	112	<3	<.2	3.4	5	23	5	1	7.93
NKJ87-0102	113	<3	<.2	2.2	5	23	5	1	10.2
NKJ87-0103	114	<3	<.2	13.0	5	17	8	1	12.6
NKJ87-0104	115	<3	<.2	2.7	2	14	6	<1	4.01
NKJ87-0105	116	<3	<.2	.3	1	11	6	<1	2.23
NKJ87-0106	117	<3	<.2	6.6	11	19	6	1	15.4
NKJ87-0107	118	<3	.2	8.8	12	22	6	2	16.4
NKJ87-0108	119	<3	<.2	4.4	4	14	5	2	14.9
NKJ87-0109	121	<3	<.2	2.1	8	32	7	2	13.1
NKJ87-0110	122	<3	<.2	10.9	12	20	8	1	10.2
NKJ87-0111	123	<3	.2	2.3	12	21	7	1	10.7
NKJ87-0112	124	<3	.2	2.3	5	21	5	1	13.4
NKJ87-0113	125	<3	.2	2.2	6	19	5	1	11.1
NKJ87-0114	126	<3	<.2	1.8	4	21	5	1	9.55
NKJ87-0115	127	<3	<.2	4.4	6	18	5	2	13.1
NKJ87-0116	128	<3	<.2	4.0	6	19	6	1	14.9
NKJ87-0117	129	<3	<.2	.8	11	67	6	<1	97.8
N87TB-0001	131	<3	<.2	3.5	13	12	2	4	11.8
N87TB-0002	132	<3	.8	4.1	32	12	4	6	83.2
N87TB-0003	133	<3	<.2	1.2	4	9	1	3	97.3
N87TB-0004	134	<3	<.2	5.5	10	14	5	2	8.45
N87TB-0005	135	<3	<.2	15.0	4	17	4	<1	4.97
N87TB-0006	136	<3	<.2	9.6	10	19	7	1	9.92
N87TB-0007	137	<3	<.2	3.2	2	19	4	<1	3.73
N87TB-0008	138	<3	<.2	10.3	4	14	6	1	9.54
N87TB-0009	139	<3	.2	.4	4	7	2	<1	4.56
N87TB-0010	141	<3	<.2	1.3	8	10	4	<1	9.23
N87TB-0011	142	<3	<.2	2.1	5	9	4	<1	9.16
N87TB-0012	143	<3	<.2	3.9	3	14	7	<1	10.3
N87TB-0013	144	<3	<.2	.9	3	7	7	<1	6.43
N87TB-0014	145	<3	<.2	11.7	3	11	2	1	5.18
N87TB-0015	146	<3	<.2	3.3	2	8	5	<1	3.90
N87TB-0016	147	<3	.2	.6	2	6	4	<1	4.14
N87TB-0017	148	<3	<.2	.3	2	8	2	<1	4.47
N87TB-0018	149	<3	.4	3.6	2	9	6	<1	3.87

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SAMPLE ID	SAHPNO	AU PFB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87TB-0019	151	<3	<.2	5.3	4	13	4	<1	8.34
N87TB-0020	152	<3	<.2	8.3	2	10	7	<1	3.39
N87TB-0021	153	<3	.2	5.0	7	13	3	1	16.5
N87TB-0022	154	<3	<.2	10.3	5	16	5	1	10.7
N87TB-0023	155	<3	<.2	.6	2	11	4	1	6.76
N87TB-0024	156	<3	<.2	.6	3	9	4	<1	7.23
N87TB-0025	157	<3	.2	1.7	24	11	3	<1	48.1
N87TB-0026	158	<3	.2	3.2	59	10	7	1	35.3
N87TB-0027	159	<3	<.2	1.2	4	8	4	<1	10.6
N87TB-0028	161	<3	<.2	.9	2	6	6	<1	4.45
N87TB-0029	162	<3	<.2	3.7	55	17	7	<1	85.7
N87TB-0030	163	<3	<.2	1.1	3	5	6	<1	10.4
N87TB-0031	164	<3	<.2	3.6	6	8	5	1	15.5
N87TB-0032	165	<3	<.2	1.0	4	7	3	<1	19.6
N87TB-0033	166	<3	<.2	.7	3	8	3	<1	3.08
N87TB-0034	167	<3	<.2	.3	3	14	4	<1	3.19
N87TB-0035	168	<3	<.2	.9	2	7	2	<1	8.20
N87TB-0036	169	<3	<.2	2.3	4	11	6	1	16.0
N87TB-0037	171	<3	<.2	<.2	7	7	2	<1	5.20
N87TB-0038	172	<3	<.2	.9	3	8	2	<1	8.78
N87TB-0039	173	<3	<.2	.8	2	8	3	<1	5.51
N87TB-0040	174	<3	<.2	2.2	5	11	4	1	13.9
N87TB-0041	175	<3	<.2	4.1	6	8	1	<1	11.5
N87TB-0042	176	<3	<.2	3.6	2	9	4	<1	2.85
N87TB-0043	177	<3	<.2	.6	31	8	2	<1	89.3
N87TB-0044	178	<3	<.2	1.2	21	14	3	<1	58.1
N87LB-0001	179	<3	<.2	5.8	3	12	3	<1	4.15
N87LB-0002	181	<3	<.2	2.3	3	10	2	<1	2.98
N87LB-0003	182	<3	<.2	.5	3	8	1	<1	6.86
N87LB-0004	183	<3	<.2	.9	5	37	14	<1	96.2
N87LB-0005	184	12.4	1.8	28.3	110	43	1	4	7.31
N87LB-0006	185	<3	<.2	.3	2	7	1	<1	2.82
N87LB-0007	186	3	<.2	.8	5	8	7	<1	11.6
N87LB-0008	187	<3	<.2	5.8	48	15	5	<1	39.4
N87LB-0009	188	<3	1.0	1.7	16	51	69	<1	68.8
N87LB-0010	189	<3	<.2	.8	2	9	1	<1	2.91
N87LB-0011	191	<3	<.2	12.4	4	15	6	<1	8.21
N87LB-0012	192	<3	.2	10.7	6	18	6	<1	4.87
N87LB-0013	193	<3	<.2	5.3	5	17	7	<1	5.80
N87LB-0014	194	<3	<.2	13.0	6	18	7	1	9.41
N87LB-0015	195	<3	<.2	.8	11	31	3	<1	40.8
N87LB-0016	196	<3	<.2	.9	3	15	6	1	96.7
N87LB-0017	197	<3	.2	6.1	11	27	8	1	8.65
N87LB-0018	198	<3	<.2	1.5	4	18	5	<1	66.9
N87LB-0019	199	<3	.4	10.7	6	17	4	<1	4.17

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SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87LB-0020	201	<3	.4	9.6	8	17	4	1	9.89
N87LB-0021	202	<3	<.2	16.5	5	16	2	<1	3.83
N87LB-0022	203	<3	<.2	1.1	21	48	2	1	93.8
N87LB-0023	204	<3	<.2	1.3	7	33	1	1	10.4
N87LB-0024	205	<3	<.2	3.5	4	11	5	1	8.11
N87LB-0025	206	<3	<.2	3.5	3	12	5	1	2.64
N87LB-0026	207	<3	<.2	1.1	2	8	6	<1	4.30
N87LB-0027	208	<3	<.2	.7	3	8	5	1	10.4
N87LB-0028	209	<3	.2	5.1	4	16	6	1	10.3
N87LB-0029	211	<3	<.2	1.2	3	13	3	<1	5.82
N87LB-0030	212	<3	<.2	1.6	4	19	8	1	7.51
N87LB-0031	213	<3	<.2	.6	2	10	3	<1	2.83
N87LB-0032	214	<3	<.2	2.4	7	20	4	<1	11.3
N87LB-0033	215	<3	<.2	.8	2	28	5	<1	8.61
N87LB-0034	216	<3	<.2	2.4	5	12	4	<1	7.98
N87LB-0035	217	<3	<.2	1.2	2	9	3	<1	7.48
N87LB-0036	218	<3	<.2	2.7	2	8	4	<1	9.81
N87LB-0037	219	<3	<.2	.3	7	14	2	<1	34.8
N87LB-0038	221	<3	<.2	1.3	11	16	4	<1	38.5
N87LB-0039	222	<3	<.2	1.4	1	16	3	<1	2.20
N87LB-0040	223	<3	.6	2.7	26	38	2	1	78.5
N87LB-0041	224	<3	.2	.6	2	10	1	<1	4.42
N87LB-0042	225	<3	<.2	.6	2	8	4	<1	3.39
N87LB-0043	226	<3	<.2	2.4	3	13	3	1	17.5
N87LB-0044	227	<3	<.2	2.0	2	12	6	<1	12.0
N87LB-0045	228	<3	<.2	2.4	5	19	5	<1	11.4
N87LB-0046	229	<3	<.2	8.0	2	17	5	4	4.32
N87LB-0047	231	<3	<.2	3.3	1	17	6	<1	1.63
N87LB-0048	232	<3	<.2	3.9	1	12	6	1	2.75
N87LB-0049	233	<3	.2	28.1	5	31	5	<1	10.4
N87LB-0050	234	<3	<.2	1.7	4	15	4	1	11.6

See Selli worksheet

See Selli worksheet

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	FB PPM	MO PPM	LOI %
N87JF-0001	1	<3	<.2	4.4	9	20	9	1	6.86
N87JF-0002	2	<3	<.2	4.5	5	17	4	<1	4.51
N87JF-0003	3	<3	<.2	17.9	9	14	9	1	16.2
N87JF-0004	4	<3	<.2	32.2	9	32	7	1	3.80
N87JF-0005	5	<3	<.2	2.0	10	11	9	4	43.0
N87JF-0006	6	<3	<.2	27.1	32	30	21	1	74.4
N87JF-0007	7	<3	<.2	4.3	5	14	17	34	9.18
N87JF-0008	8	<3	<.2	2.0	37	10	17	2	29.7
N87JF-0009	9	<3	<.2	1.6	6	8	6	<1	35.7
N87JF-0010	11	<3	<.2	2.0	14	82	15	1	65.5
N87JF-0011	12	<3	<.2	1.0	11	150	8	2	86.8
N87JF-0012	13	<3	<.2	1.2	42	110	6	<1	94.6
N87JF-0013	14	<3	<.2	.3	4	59	1	<1	97.4
N87JF-0014	15	<3	<.2	12.4	8	47	6	1	10.8
N87JF-0015	16	<3	<.2	2.4	9	26	6	<1	9.71
N87JF-0016	17	<3	<.2	8.0	7	26	6	1	10.9
N87JF-0017	18	<3	<.2	35.1	21	54	8	2	6.05
N87JF-0018	19	<3	<.2	1.2	30	12	7	<1	93.1
N87JF-0019	21	<3	<.2	5.0	86	5	6	1	72.6
N87JF-0020	22	<3	<.2	19.0	27	27	5	8	5.45
N87JF-0021	23	<3	<.2	58.5	12	12	9	1	21.3
N87JF-0022	24	<3	<.2	1.7	37	8	14	2	84.9
N87JF-0023	25	12	<.2	.5	11	8	6	1	12.4
N87JF-0024	26	<3	<.2	1.2	33	9	16	1	34.6
N87JF-0025	27	<3	<.2	1.2	7	16	7	3	10.6
N87JF-0026	28	<3	<.2	7.7	6	11	8	1	6.83
N87JF-0027	29	<3	<.2	1.4	16	14	6	1	8.32
N87JF-0028	31	<3	<.2	31.3	10	19	6	5	14.8
N87JF-0029	32	<3	<.2	14.6	25	20	11	4	23.8
N87JF-0030	33	<3	<.2	2.0	4	5	6	1	11.4
N87JF-0031	34	<3	<.2	6.7	26	24	6	4	9.41
N87JF-0032	35	<3	<.2	1.9	19	7	7	2	23.6
N87JF-0033	36	45	<.2	3.5	7	22	7	1	6.01
N87JF-0034	37	<3	<.2	15.0	6	22	5	1	8.08
N87JF-0035	38	555	<.2	4.6	11	29	6	3	10.8
N87JF-0036	39	<3	<.2	13.0	57	37	1	1	6.23
N87JF-0037	41	<3	<.4	22.8	87	87	25	2	63.2
N87JF-0038	42	<3	<.2	4.3	47	70	6	1	65.2
N87JF-0039	43	27	<.2	2.4	37	11	7	3	45.7
N87JF-0040	44	<3	<.2	8.0	9	7	12	2	10.1
N87JF-0041	45	<3	<.2	2.9	40	38	7	7	56.7
N87JF-0042	46	<3	<.2	1.3	22	20	20	1	56.4
N87JF-0043	47	<3	<.2	3.2	5	25	17	5	23.3
N87JF-0044	48	<3	<.2	1.0	6	11	24	3	8.72
N87JF-0045	49	30	<.2	1.6	10	8	5	1	8.94

GRID H-2

56.

H-2

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF-0046	51	<3	<.2	3.1	11	10	8	1	6.66
N87JF-0047	52	<3	<.2	4.3	78	18	22	1	74.1
N87JF-0048	53	<3	<.2	17.3	12	26	6	1	8.17
N87JF-0049	54	<3	<.2	1.6	45	6	3	1	22.5
N87JF-0050	55	<3	<.2	.8	7	6	5	<1	9.06
N87JF-0051	56	<3	<.2	1.0	16	39	2	1	82.9
N87JF-0052	57	<3	<.2	.6	7	8	6	<1	43.8
N87JF-0053	58	<3	<.2	9.5	17	22	5	8	5.54
N87JF-0054	59	<3	<.2	7.2	7	11	7	1	11.1
N87JF-0055	61	<3	<.2	1.3	45	18	11	<1	84.9
N87JF-0056	62	<3	<.2	7.3	4	13	4	<1	5.45
N87JF-0057	63	<3	<.2	.8	24	28	13	<1	87.0
N87JF-0058	64	<3	<.2	9.0	17	22	9	3	14.0
N87JF-0059	65	<3	<.2	2.5	37	17	6	<1	89.8
N87JF-0060	66	<3	<.2	.6	13	19	9	<1	91.5
N87JF-0061	67	<3	<.2	6.2	6	12	6	1	14.5
N87JF-0062	68	<3	<.2	9.5	7	13	5	1	11.5
N87JF-0063	69	<3	<.2	9.5	9	20	4	1	8.52
N87JF-0064	71	<3	<.2	5.6	7	19	8	1	9.84
N87JF-0065	72	<3	<.2	11.1	7	16	6	2	9.05
N87JF-0066	73	<3	<.2	8.0	8	12	5	<1	8.87
N87JF-0067	74	<3	<.2	1.8	36	26	9	1	77.6
N87JF-0068	75	<3	<.2	15.0	7	7	11	1	30.5
N87JF-0069	76	<3	<.2	8.0	7	10	5	<1	13.6
N87JF-0070	77	<3	<.2	2.9	21	13	13	1	62.7
N87JF-0071	78	<3	<.2	12.6	7	11	5	1	11.4
N87JF-0072	79	<3	<.2	1.2	4	11	7	1	4.79
N87JF-0073	81	<3	<.2	7.2	6	13	9	1	13.3
N87JF-0074	82	<3	<.2	8.0	9	22	7	1	14.1
N87JF-0075	83	---	---	---	---	---	---	---	---
N87JF-0076	84	<3	<.2	1.2	40	8	5	<1	61.5
N87JF-0077	85	<3	<.2	1.0	2	5	11	<1	3.87
N87JF-0078	86	<3	<.2	10.3	7	12	6	1	8.47
N87JF-0079	87	<3	<.2	11.9	4	9	6	1	4.76
N87JF-0080	88	<3	<.2	11.1	28	22	8	2	18.3
N87JF-0081	89	<3	<.2	1.7	32	29	34	4	51.6
N87JF-0082	91	<3	<.2	.6	17	16	13	1	92.9
N87JF-0083	92	<3	<.2	22.0	10	12	6	2	8.74
N87JF-0084	93	<3	<.2	1.9	27	14	10	1	61.9
N87JF-0085	94	<3	<.2	1.3	5	5	6	<1	10.4
N87JF-0086	95	<3	<.2	1.4	30	15	22	<1	39.4
N87JF-0087	96	<3	<.2	1.4	11	7	6	<1	10.6
N87JF-0088	97	15	<.2	10.3	6	6	9	1	8.13
N87JF-0089	98	<3	<.2	2.4	28	12	12	2	33.3
N87JF-0090	99	<3	<.2	1.3	7	3	10	<1	13.1

H-2

H-2

57.

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ-0118	101	<3	<.2	.4	2	8	3	<1	2.27
N87KJ-0119	102	15	<.2	2.0	4	6	8	<1	3.51
N87KJ-0120	103	<3	<.2	.9	5	10	2	<1	3.53
N87KJ-0121	104	<3	<.2	1.3	3	15	2	<1	3.22
N87KJ-0122	105	<3	<.2	13.4	6	20	6	<1	7.38
N87KJ-0123	106	<3	<.2	13.4	10	24	7	1	17.3
N87KJ-0124	107	<3	<.2	13.4	10	27	6	1	15.0
N87KJ-0125	108	<3	<.2	15.7	8	22	9	1	10.5
N87KJ-0126	109	<3	<.2	2.3	21	62	13	<1	80.0
N87KJ-0127	111	<3	<.2	10.3	12	14	6	1	4.24
N87KJ-0128	112	<3	<.2	.6	2	8	10	<1	8.71
N87KJ-0129	113	<3	<.2	1.0	2	9	9	<1	7.27
N87KJ-0130	114	<3	<.2	8.7	35	21	3	1	15.2
N87KJ-0131	115	<3	<.2	1.1	20	90	6	<1	94.8
N87KJ-0132	116	<3	<.2	12.6	8	22	6	1	10.6
N87KJ-0133	117	<3	<.2	.7	3	7	1	<1	2.26
N87KJ-0134	118	<3	<.2	15.0	4	16	4	<1	4.33
N87KJ-0135	119	<3	<.2	1.6	7	11	2	<1	3.66
N87KJ-0136	121	<3	<.2	5.6	10	18	8	<1	3.87
N87KJ-0137	122	<3	<.2	.5	2	10	2	<1	2.85
N87KJ-0138	123	15	<.2	6.4	4	15	7	<1	3.49
N87KJ-0139	124	<3	<.2	<.2	2	10	1	<1	1.73
N87KJ-0140	125	<3	<.2	7.6	22	25	3	1	13.5
N87KJ-0141	126	<3	<.2	4.0	11	31	6	<1	4.62
N87KJ-0142	127	<3	<.2	1.3	7	110	32	<1	97.5
N87KJ-0143	128	<3	<.2	3.0	7	23	6	<1	4.16
N87KJ-0144	129	<3	<.2	9.5	8	20	5	<1	4.48
N87KJ-0145	131	<3	<.2	2.1	10	62	31	<1	95.1
N87KJ-0146	132	<3	<.2	6.6	17	16	5	<1	14.4
N87KJ-0147	133	<3	<.2	4.4	15	13	6	1	15.0
N87KJ-0148	134	<3	<.2	1.4	44	43	11	<1	78.5
N87KJ-0149	135	<3	<.2	.9	37	50	13	<1	57.4
N87KJ-0150	136	<3	<.2	1.3	10	85	11	<1	96.1
N87KJ-0151	137	<3	<.2	9.0	5	18	6	1	3.93
N87KJ-0152	138	<3	<.2	10.0	5	17	7	1	3.02
N87KJ-0153	139	<3	<.2	1.9	5	15	5	<1	4.81
N87KJ-0154	141	<3	<.2	6.8	6	20	6	<1	8.36
N87KJ-0155	142	<3	<.2	.8	15	32	10	2	76.8
N87KJ-0156	143	<3	<.2	.4	10	38	3	<1	97.1
N87KJ-0157	144	<3	<.2	11.0	12	20	5	1	7.74
N87KJ-0158	145	<3	<.2	.6	11	32	5	1	96.6
N87KJ-0159	146	9	<.2	6.8	12	21	4	1	4.35
N87KJ-0160	147	<3	<.2	6.0	14	24	3	1	5.81
N87KJ-0161	148	<3	<.2	6.2	18	19	8	3	13.0
N87KJ-0162	149	<3	<.2	1.6	16	64	31	<1	60.0

H-2

H-2

58.

SAMPLE ID	SAMPNO	AU PPB	AG PPH	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ-0163	151	<3	<.2	13.0	11	31	7	2	11.2
N87KJ-0164	152	<3	<.2	11.0	12	31	7	2	11.9
N87KJ-0165	153	<3	<.2	6.9	9	14	6	1	6.69
N87KJ-0166	154	<3	<.2	4.3	5	12	11	1	12.2
N87KJ-0167	155	<3	<.2	1.8	6	16	7	1	18.3
N87KJ-0168	156	<3	<.2	.4	5	26	3	<1	19.2
N87KJ-0169	157	<3	<.2	5.8	6	13	6	1	5.11
N87KJ-0170	158	<3	<.2	15.0	16	20	7	2	8.15
N87KJ-0171	159	<3	<.2	14.0	16	20	7	1	9.57
N87KJ-0172	161	<3	<.2	.4	7	11	1	<1	3.62
N87KJ-0173	162	<3	<.2	5.9	6	18	5	<1	7.38
N87KJ-0174	163	<3	<.2	6.8	7	20	6	<1	10.5
N87KJ-0175	164	<3	<.2	7.0	6	20	5	1	9.24
N87KJ-0176	165	<3	<.2	.4	5	11	6	<1	7.05
N87KJ-0177	166	<3	<.2	.4	5	11	4	<1	6.80
N87KJ-0178	167	<3	<.2	3.3	12	19	9	<1	6.64
N87KJ-0179	168	<3	<.2	2.6	14	20	5	<1	5.58
N87KJ-0180	169	<3	<.2	4.1	12	19	6	<1	6.03
N87KJ-0181	171	<3	<.2	1.7	17	32	10	2	18.4
N87KJ-0182	172	<3	<.2	.3	3	8	2	<1	4.50
N87KJ-0183	173	<3	<.2	6.1	7	13	3	<1	4.81
N87KJ-0184	174	<3	<.2	6.4	7	13	3	<1	4.89
N87KJ-0185	175	<3	<.2	6.1	6	13	4	<1	6.22
N87KJ-0186	176	<3	<.2	.5	3	8	10	<1	9.85
N87KJ-0187	177	6	<.2	6.2	8	12	3	<1	4.00
N87KJ-0188	178	<3	<.2	.6	12	67	3	<1	95.2
N87KJ-0189	179	<3	<.2	1.3	3	7	13	<1	10.2
N87KJ-0190	181	<3	<.2	.4	5	7	5	<1	6.91
N87KJ-0191	182	<3	<.2	.6	6	8	5	<1	7.46
N87KJ-0192	183	<3	<.2	10.5	8	15	7	1	7.77
N87KJ-0193	184	<3	<.2	10.5	7	12	8	1	6.10
N87KJ-0194	185	<3	<.2	.5	3	8	3	<1	1.93
N87KJ-0195	186	<3	<.2	.4	3	5	2	<1	1.40
N87KJ-0196	187	<3	<.2	8.8	6	20	8	1	7.89
N87KJ-0197	188	<3	<.2	.3	20	11	2	<1	20.7
N87KJ-0198	189	<3	<.2	8.8	4	11	5	<1	5.91
N87KJ-0199	191	<3	<.2	3.9	12	15	5	<1	3.45
N87KJ-0200	192	<3	<.2	3.3	9	15	4	<1	4.66
N87KJ-0201	193	<3	<.2	1.1	4	9	10	<1	9.22
N87KJ-0202	194	<3	<.2	1.2	5	78	15	<1	95.7
N87KJ-0203	195	<3	<.2	1.0	7	52	6	<1	95.7
N87KJ-0204	196	<3	<.2	2.8	26	22	16	1	23.9
N87KJ-0205	197	<3	<.2	3.6	34	22	22	1	43.9
N87KJ-0206	198	<3	<.2	1.3	5	14	7	<1	9.90
N87KJ-0207	199	<3	<.2	.7	6	15	9	<1	9.55

H-2

H-2

SAMPLE ID	SAMPNO	AU PFB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ-0208	201	<3	<.2	.3	2	7	3	<1	4.14
N87KJ-0209	202	<3	<.2	9.1	6	16	6	1	19.3
N87KJ-0210	203	<3	<.2	8.7	6	15	7	1	19.3
N87KJ-0211	204	<3	<.2	10.5	6	14	6	1	19.4
N87KJ-0212	205	<3	<.2	.8	3	12	7	<1	8.85
N87KJ-0213	206	<3	<.2	.7	3	10	6	<1	9.03
N87KJ-0214	207	<3	<.2	7.9	5	12	5	1	12.6
N87KJ-0215	208	<3	<.2	11.4	4	16	5	<1	6.79
N87KJ-0216	209	<3	<.2	5.0	5	17	5	<1	7.97
N87KJ-0217	211	<3	<.2	6.9	5	19	5	<1	8.86
N87KJ-0218	212	<3	<.2	6.4	4	15	5	<1	4.30
N87KJ-0219	213	<3	<.2	5.6	7	20	4	1	8.30
N87KJ-0220	214	<3	<.2	5.1	3	13	5	<1	3.03
N87KJ-0221	215	<3	<.2	8.8	10	22	9	<1	7.85
N87KJ-0222	216	<3	<.2	4.8	4	15	5	<1	4.07
N87KJ-0223	217	<3	<.2	1.7	8	53	41	<1	96.4
N87KJ-0224	218	<3	<.2	5.7	5	14	4	<1	4.72
N87JF-0004D	219	<3	<.2	10.5	11	38	5	1	4.19
N87JF-0021D	221	<3	<.2	38.9	12	13	8	1	25.0
N87JF-0034D	222	<3	<.2	10.5	6	22	5	1	7.32
N87JF-0054D	223	<3	<.2	4.7	7	11	5	<1	7.85
N87JF-0065D	224	<3	<.2	11.4	8	15	6	<1	8.38
N87JF-0080D	225	99	<.2	11.4	28	23	8	1	18.5
N87JF-0083D	226	<3	<.2	24.0	11	13	6	1	8.68

H-2
 H-2
 H-2
 H-2

60

SAMPLE ID	SAMPNO	AU PFB	AG PFM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ0248	251	<3	<.2	2.1	7	9	8	<1	9.13
N87KJ0249	252	<3	<.2	11.5	6	11	7	<1	7.12
N87KJ0250	253	<3	<.2	2.7	3	9	3	<1	4.55
N87KJ0251	254	<3	.4	1.0	30	23	5	<1	92.1
N87KJ0252	255	42	<.2	28.0	22	39	5	<1	3.34
N87KJ0253	256	<3	<.2	24.0	6	49	7	1	79.8
N87KJ0254	257	<3	<.2	34.0	5	16	5	<1	3.62
N87KJ0255	258	<3	<.2	34.0	10	18	5	1	11.0
N87KJ0256	259	<3	<.2	.5	3	6	2	<1	1.78
N87KJ0257	261	<3	<.2	15.2	10	21	4	<1	3.00
N87KJ0258	262	<3	<.2	50.8	58	48	7	<1	11.2
N87KJ0259	263	<3	<.2	1.7	14	48	25	<1	95.0
N87KJ0260	264	<3	<.2	15.2	8	19	<1	1	5.50
N87KJ0261	265	<3	<.2	3.4	9	68	61	<1	93.8
N87KJ0262	266	<3	<.2	.6	10	62	5	<1	96.6
N87KJ0263	267	<3	<.2	7.4	14	27	4	1	7.35
N87KJ0264	268	<3	<.2	1.7	2	12	4	<1	3.96
N87KJ0265	269	<3	<.2	.2	2	9	2	<1	2.66
N87KJ0266	271	<3	<.2	4.1	3	19	6	<1	4.08
N87KJ0267	272	<3	<.2	.9	3	16	6	<1	4.97
N87KJ0268	273	<3	.4	.7	3	9	6	<1	4.89
N87KJ0269	274	<3	.2	1.6	10	69	18	<1	95.5
N87KJ0270	275	<3	<.2	5.2	8	11	8	1	17.3
N87KJ0271	276	<3	<.2	5.2	10	12	8	1	15.3
N87KJ0272	277	<3	<.2	2.2	5	32	4	1	11.4
N87KJ0273	278	<3	<.2	8.9	9	33	6	1	9.53
N87KJ0274	279	<3	.8	1.8	10	53	18	<1	95.0
N87KJ0275	281	<3	.4	2.2	10	70	17	1	94.7
N87KJ0276	282	<3	<.2	10.0	6	21	5	<1	10.4
N87KJ0277	283	<3	<.2	12.0	6	24	5	<1	9.65
N87KJ0278	284	<3	<.2	1.6	17	30	7	1	94.0
N87KJ0279	285	<3	<.2	2.0	7	40	16	<1	97.7
N87KJ0280	286	<3	<.2	2.0	5	33	22	<1	96.3
N87KJ0281	287	<3	<.2	11.0	5	13	7	1	15.7
N87KJ0282	288	<3	<.2	4.9	6	14	7	<1	11.3
N87KJ0283	289	<3	<.2	6.7	5	11	5	<1	10.0
N87KJ0284	291	<3	<.2	2.1	7	61	16	1	95.6
N87KJ0285	292	<3	<.2	2.2	13	58	20	<1	93.3
N87KJ0286	293	<3	<.2	1.0	6	69	7	<1	97.2
N87KJ0287	294	<3	<.2	5.2	7	19	5	<1	6.43
N87KJ0288	295	<3	<.2	20.0	12	39	5	1	14.7
N87KJ0289	296	<3	<.2	1.6	4	36	27	<1	97.5
N87KJ0290	297	<3	<.2	1.3	5	35	18	<1	97.3
N87KJ0291	298	<3	<.2	1.4	3	59	17	<1	97.7
N87KJ0292	299	<3	<.2	2.5	6	57	23	<1	90.8

H-1

H-1

H-3

H-3

H-3B

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ0293	301	<3	<.2	18.0	6	24	6	1	2.54
N87KJ0294	302	<3	<.2	19.0	9	22	6	1	11.1
N87KJ0295	303	<3	<.2	1.9	7	30	10	<1	98.6
N87KJ0296	304	<3	<.2	1.1	17	50	4	<1	69.9
N87KJ0297	305	6	<.2	10.0	5	13	4	<1	3.95
N87KJ0298	306	<3	<.2	13.0	10	32	4	<1	5.49
N87KJ0299	307	<3	<.2	1.4	8	46	5	<1	95.0
N87KJ0300	308	NO SAMP	NO SAMP	NO SAMP	NO SAMP	NO SAMP	NO SAMP	NO SAMP	NO SAMP
N87KJ0301	309	<3	<.2	145	11	36	10	1	8.10
N87KJ0302	311	<3	<.2	3.5	4	17	2	<1	2.72
N87KJ0303	312	<3	<.2	10.5	5	22	4	1	6.95
N87KJ0304	313	<3	<.2	6.0	3	22	8	<1	7.79
N87KJ0305	314	<3	<.2	12.5	7	50	6	1	5.84
N87KJ0306	315	3	<.2	2.5	2	32	8	1	3.87
N87KJ0307	316	<3	<.2	2.9	2	21	8	1	1.92
N87KJ0308	317	<3	<.2	.6	5	73	3	<1	95.2
N87KJ0309	318	9	<.2	2.2	2	18	7	<1	3.06
N87KJ0310	319	<3	<.2	13.5	5	26	7	<1	7.93
N87KJ0311	321	<3	.4	1.1	24	100	20	<1	96.0
N87KJ0312	322	<3	<.2	2.1	3	16	15	<1	10.7
N87KJ0313	323	<3	.8	2.1	40	160	92	<1	89.0
N87KJ0314	324	<3	<.2	14.0	9	32	8	1	5.89
N87KJ0315	325	<3	.2	7.5	38	26	15	1	30.5
N87KJ0316	326	<3	<.2	27.0	5	43	2	<1	4.35
N87KJ0317	327	<3	<.2	41.0	5	37	5	1	4.33
N87KJ0318	328	<3	<.2	1.5	12	150	22	<1	88.8
N87KJ0319	329	<3	<.2	11.0	12	28	5	<1	3.16
N87KJ0320	331	9	<.2	1.3	3	10	6	<1	8.74
N87KJ0321	332	<3	<.2	1.7	4	11	6	<1	14.4
N87KJ0322	333	<3	<.2	6.2	8	29	5	<1	4.16
N87KJ0323	334	<3	<.2	3.4	3	29	7	<1	6.34
N87KJ0324	335	<3	.6	1.4	10	58	18	<1	94.9
N87KJ0325	336	<3	<.2	1.0	7	54	6	<1	97.5
N87KJ0326	337	<3	<.2	.5	7	46	5	<1	96.1
N87KJ0327	338	<3	<.2	1.0	8	16	5	1	19.9
N87KJ0328	339	<3	<.2	.4	4	7	6	<1	4.41
N87KJ0329	341	<3	<.2	5.4	15	51	14	1	4.42
N87KJ0330	342	<3	<.2	3.6	8	24	9	1	9.36
N87KJ0331	343	18	<.2	.4	6	6	6	<1	8.83
N87KJ0332	344	<3	<.2	.5	5	15	7	<1	5.83
N87KJ0333	345	<3	<.2	.4	3	5	5	<1	5.43
N87KJ0334	346	<3	<.2	6.8	10	19	6	<1	4.55
N87KJ0335	347	<3	<.2	.9	29	43	12	1	82.1
N87KJ0336	348	<3	<.2	.2	3	10	6	<1	5.07
N87KJ0337	349	<3	<.2	.2	1	16	3	<1	1.10

H-3B

H-3B

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87KJ0338	351	<3	<.2	.4	14	6	5	<1	16.6
N87KJ0339	352	<3	<.2	.3	3	4	5	<1	3.08
N87KJ0340	353	<3	<.2	.3	19	52	4	1	94.6
N87KJ0341	354	<3	<.2	.8	9	13	6	<1	7.91
N87KJ0342	355	<3	<.2	3.5	11	14	5	<1	3.07
N87KJ0343	356	<3	<.2	2.7	11	14	3	<1	2.90
N87KJ0344	357	<3	<.2	8.0	23	30	6	1	5.31
N87KJ0345	358	<3	<.2	.5	6	40	17	<1	97.3
N87KJ0346	359	<3	<.2	.7	6	60	5	<1	98.6
N87KJ0347	361	<3	<.2	2.4	6	55	17	<1	97.6
N87KJ0348	362	<3	<.2	.5	14	60	4	<1	97.1
N87KJ0349	363	<3	<.2	1.0	9	77	13	<1	96.0
N87KJ0350	364	<3	<.2	.5	2	8	5	<1	3.91
N87KJ0351	365	<3	<.2	.4	2	10	4	<1	7.90
N87KJ0352	366	6	<.2	.9	14	27	12	<1	10.4
N87KJ0353	367	<3	<.2	1.5	7	47	12	<1	96.2
N87KJ0354	368	<3	<.2	1.1	7	52	13	<1	97.1
N87KJ0355	369	<3	<.2	.8	8	32	9	1	87.9
N87KJ0356	371	<3	<.2	1.4	7	31	7	1	88.2
N87KJ0357	372	<3	<.2	2.3	8	22	3	<1	21.0
N87KJ0358	373	<3	<.2	.9	11	19	8	3	43.8
N87KJ0359	374	<3	<.2	<.2	2	7	2	<1	2.79
N87KJ0360	375	<3	<.2	1.6	2	5	3	<1	4.33
N87KJ0361	376	<3	<.2	.7	2	9	6	<1	4.10
N87KJ0362	377	<3	<.2	1.3	6	44	10	1	95.2
N87KJ0363	378	<3	<.2	1.1	3	5	8	<1	8.72
N87KJ0364	379	<3	<.2	3.7	11	14	5	<1	8.36
N87KJ0365	381	<3	<.2	3.2	11	11	4	<1	6.04
N87KJ0366	382	<3	<.2	4.1	6	13	6	<1	10.2
N87KJ0367	383	<3	<.2	1.0	7	38	17	<1	91.4
N87KJ0368	384	<3	<.2	3.3	5	14	8	<1	7.92
N87KJ0369	385	<3	<.2	.8	5	40	21	<1	93.1
N87KJ0370	386	<3	<.2	2.8	7	14	4	<1	7.51
N87KJ0371	387	<3	<.2	.4	2	5	5	<1	12.1
N87KJ0372	388	<3	<.2	.3	4	6	7	<1	14.9
N87KJ0373	389	<3	<.2	2.9	12	11	3	<1	4.20

H-3B
 H-3B
 H-3
 H-3

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF0091	1	<3	<.2	.8	5	12	6	<1	8.38
N87JF0092	2	<3	<.2	1.9	5	8	10	1	13.1
N87JF0093	3	<3	<.2	14.0	14	8	2	<1	8.79
N87JF0094	4	<3	<.2	18.0	6	37	7	1	5.40
N87JF0095	5	<3	<.2	7.1	7	14	7	1	6.85
N87JF0096	6	<3	<.2	1.5	7	12	7	1	16.2
N87JF0097	7	<3	<.2	3.5	6	13	7	1	8.36
N87JF0098	8	<3	<.2	3.6	7	14	6	1	7.52
N87JF0099	9	<3	<.2	7.0	8	20	6	1	4.74
N87JF0100	11	<3	<.2	.4	4	4	4	<1	5.13
N87JF0101	12	<3	<.2	3.5	10	7	6	<1	14.8
N87JF0102	13	<3	<.2	1.6	10	10	4	<1	21.2
N87JF0103	14	<3	<.2	4.5	5	10	4	<1	4.23
N87JF0104	15	<3	<.2	16.0	5	15	6	1	10.6
N87JF0105	16	<3	<.2	10.0	13	12	7	2	12.9
N87JF0106	17	<3	<.2	19.0	11	24	8	2	9.13
N87JF0107	18	<3	<.2	6.5	8	26	6	1	8.48
N87JF0108	19	<3	<.2	3.3	8	11	6	1	8.79
N87JF0109	21	<3	<.2	.9	20	11	4	<1	5.67
N87JF0110	22	9	<.2	5.0	6	5	5	<1	3.14
N87JF0111	23	<3	<.2	110	28	13	5	<1	11.9
N87JF0112	24	<3	<.2	90.0	25	13	4	<1	9.95
N87JF0113	25	<3	<.2	4.9	17	11	11	<1	16.0
N87JF0114	26	<3	<.2	8.0	5	12	9	1	11.1
N87JF0115	27	<3	<.2	8.0	9	11	5	<1	8.49
N87JF0116	28	<3	<.2	.5	11	8	4	<1	97.2
N87JF0117	29	<3	<.2	1.6	4	7	7	<1	7.05
N87JF0118	31	<3	<.2	2.9	16	5	4	<1	93.7
N87JF0119	32	<3	<.2	18.2	7	10	3	<1	9.89
N87JF0120	33	<3	<.2	13.6	7	9	5	1	9.93
N87JF0121	34	<3	<.2	1.1	12	14	5	<1	96.0
N87JF0122	35	<3	<.2	1.5	23	9	3	<1	97.9
N87JF0123	36	<3	<.2	1.5	19	29	7	<1	96.1
N87JF0124	37	<3	<.2	1.7	22	26	11	<1	85.1
N87JF0125	38	<3	<.2	18.2	10	28	7	1	12.8
N87JF0126	39	<3	<.2	19.0	10	13	6	1	13.2
N87JF0127	41	<3	<.2	1.0	15	5	11	<1	97.1
N87JF0128	42	<3	<.2	.6	6	13	1	<1	96.7
N87JF0129	43	<3	<.2	.7	73	45	5	1	87.0
N87JF0130	44	<3	<.2	10.0	4	12	5	1	6.52
N87JF0131	45	<3	<.2	.8	19	14	3	<1	89.3
N87JF0132	46	<3	.2	1.5	43	18	28	1	64.6
N87JF0133	47	<3	<.2	10.9	10	22	8	1	5.95
N87JF0134	48	<3	<.2	182	49	22	10	3	27.1
N87JF0135	49	<3	<.2	191	44	25	9	3	26.9

H-3B

H-3B

H-1

H-1

64.

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF0136	51	<3	<.2	5.2	4	14	17	1	6.29
N87JF0137	52	<3	<.2	15.5	68	67	7	6	12.1
N87JF0138	53	<3	<.2	47.8	42	37	5	2	10.3
N87JF0139	54	<3	<.2	42.4	11	27	5	2	13.4
N87JF0140	55	<3	<.2	1.0	6	12	1	<1	2.16
N87JF0141	56	<3	<.2	.9	8	4	1	<1	95.1
N87JF0142	57	<3	<.2	14.5	8	27	1	1	8.30
N87JF0143	58	<3	<.2	9.1	9	28	5	1	8.55
N87JF0144	59	<3	<.2	.6	8	10	3	<1	97.6
N87JF0145	61	<3	<.2	3.1	4	6	3	<1	8.97
N87JF0146	62	<3	<.2	1.3	40	17	7	1	89.0
N87JF0147	63	<3	<.2	21.0	16	23	3	1	14.0
N87JF0148	64	<3	<.2	22.8	16	23	3	1	12.2
N87JF0149	65	<3	<.2	.4	4	12	2	<1	6.77
N87JF0150	66	<3	<.2	3.1	22	20	10	2	50.9
N87JF0151	67	<3	<.2	26.6	33	38	6	1	7.55
N87JF0152	68	<3	<.2	1.9	3	13	5	<1	2.13
N87JF0153	69	<3	<.2	19.1	9	14	4	1	16.0
N87JF0154	71	<3	<.2	10.0	7	9	6	<1	8.90
N87JF0155	72	<3	<.2	18.0	6	18	6	1	6.77
N87JF0156	73	<3	<.2	20.0	5	14	5	1	5.09
N87JF0157	74	<3	<.2	9.1	5	24	2	<1	5.69
N87JF0158	75	<3	<.2	13.6	7	15	6	<1	8.60
N87JF0159	76	<3	<.2	9.1	6	17	6	1	6.35
N87JF0160	77	<3	<.2	4.0	6	13	11	1	7.65
N87JF0161	78	<3	<.2	.9	7	17	10	<1	13.3
N87JF0162	79	<3	<.2	.7	5	6	2	1	97.5
N87JF0163	81	<3	<.2	.6	2	7	3	<1	1.89
N87JF0164	82	<3	<.2	11.8	7	17	3	<1	7.98
N87JF0165	83	<3	<.2	15.5	5	24	5	<1	4.72
N87JF0166	84	<3	<.2	12.7	7	20	4	<1	5.59
N87JF0167	85	<3	<.2	10.9	7	13	2	<1	4.42
N87JF0168	86	<3	<.2	20.9	6	11	4	<1	6.48
N87JF0169	87	<3	<.2	1.3	3	8	7	<1	2.98
N87JF0170	88	<3	<.2	6.7	3	8	5	<1	13.8
N87JF0171	89	<3	<.2	9.1	4	9	7	<1	17.6
N87JF0172	91	<3	<.2	10.0	7	14	4	<1	4.62
N87JF0173	92	<3	<.2	10.9	8	17	4	<1	3.69
N87JF0174	93	<3	<.2	23.7	13	32	5	1	6.98
N87JF0175	94	<3	<.2	9.1	4	23	4	<1	6.18
N87JF0176	95	<3	<.2	.3	2	4	2	<1	3.85
N87JF0177	96	<3	<.2	.5	16	8	4	<1	97.3
N87JF0178	97	<3	<.2	.5	18	5	2	<1	97.0
N87JF0179	98	<3	<.2	1.0	40	26	6	1	93.4
N87JF0180	99	<3	<.2	6.3	8	23	6	<1	8.01

H-1

H-1

H-3

H-3

WESTMIN RESOURCES (T. BOYD/R.H. MCMILLAN) PROJ: NEMISCAU

WO NO: 87-1158

PAGE: 3

SAMPLE ID	SAMPNO	AU PPB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF0181	101	<3	<.2	7.0	8	23	5	1	7.22
N87JF0182	102	<3	<.2	1.3	2	6	5	1	11.1
N87JF0183	103	<3	<.2	.9	6	15	3	<1	96.0
N87JF0184	104	<3	<.2	.9	2	7	5	<1	7.50
N87JF0185	105	3	<.2	4.0	3	8	8	<1	10.7
N87JF0186	106	<3	.2	1.6	29	12	10	1	69.4
N87JF0187	107	<3	<.2	1.7	10	6	2	<1	94.0
N87JF0188	108	<3	<.2	1.7	9	5	4	<1	94.5
N87JF0189	109	<3	<.2	.4	5	9	2	<1	97.5
N87JF0190	111	<3	<.2	5.2	10	7	6	1	25.4
N87JF0191	112	<3	<.2	20.0	10	17	4	1	11.5
N87JF0192	113	<3	<.2	7.7	9	17	4	1	8.69
N87JF0193	114	15	<.2	.5	3	5	6	<1	10.0
N87JF0194	115	<3	<.2	1.6	8	13	7	<1	89.6
N87JF0195	116	<3	<.2	.3	10	9	1	<1	96.9
N87JF0196	117	<3	<.2	.9	14	32	13	2	44.1
N87JF0197	118	<3	<.2	.7	3	5	23	<1	7.29
N87JF0198	119	<3	<.2	12.7	10	35	7	1	5.11
N87JF0199	121	<3	<.2	6.8	6	15	13	1	7.02
N87JF0200	122	<3	<.2	2.8	4	18	8	<1	3.17
N87JF0201	123	<3	<.2	9.6	7	37	8	1	3.96
N87JF0202	124	<3	<.2	9.1	9	17	5	1	4.53
N87JF0203	125	<3	<.2	.9	3	11	4	<1	4.49
N87JF0204	126	<3	<.2	.5	9	17	5	2	25.7
N87JF0205	127	<3	<.2	5.8	6	27	3	1	4.77
N87JF0206	128	<3	<.2	23.7	12	19	5	1	5.29
N87JF0207	129	<3	.6	5.2	28	80	53	1	84.6
N87JF0208	131	<3	<.2	3.8	7	38	8	1	5.90
N87JF0209	132	<3	.4	1.6	16	95	26	1	86.3
N87JF0210	133	30	<.2	2.6	3	33	7	1	2.15
N87JF0211	134	<3	<.2	4.1	5	23	4	1	7.06
N87JF0212	135	<3	<.2	33.3	7	23	5	<1	4.60
N87JF0213	136	<3	<.2	34.3	7	27	7	1	5.03
N87JF0214	137	<3	<.2	13.6	8	22	5	1	5.50
N87JF0215	138	<3	.6	2.9	39	280	210	<1	87.3
N87JF0216	139	<3	<.2	1.5	4	17	5	<1	3.41
N87JF0217	141	<3	<.2	2.3	6	42	10	1	6.35
N87JF0218	142	<3	<.2	65.8	22	32	3	<1	3.27
N87JF0219	143	<3	.4	34.2	18	27	10	3	31.9
N87JF0220	144	<3	<.2	4.9	5	14	9	1	8.42
N87JF0221	145	<3	<.2	1.4	8	8	10	<1	5.32
N87JF0222	146	<3	<.2	23.8	17	85	9	1	2.82
N87JF0223	147	<3	.4	1.6	8	36	10	<1	94.7
N87JF0224	148	<3	<.2	3.3	9	13	3	<1	2.55
N87JF0225	149	<3	<.2	2.3	7	21	4	<1	4.40

H-3
H-3
H-3 B
H 3 B

SAMPLE ID	SAMPNO	AU PFB	AG PPM	AS PPM	CU PPM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF0226	151	<3	<.2	8.6	3	8	5	<1	5.23
N87JF0227	152	<3	<.2	13.6	4	15	5	<1	6.40
N87JF0228	153	<3	<.2	4.9	17	8	2	2	65.4
N87JF0229	154	<3	<.2	2.6	8	10	7	<1	24.8
N87JF0230	155	<3	<.2	2.7	2	8	4	<1	2.79
N87JF0231	156	<3	<.2	9.5	9	14	7	1	6.70
N87JF0232	157	<3	<.2	9.5	9	13	7	1	5.54
N87JF0233	158	<3	<.2	3.8	4	16	3	<1	4.95
N87JF0234	159	<3	<.2	25.6	8	33	3	<1	8.74
N87JF0235	161	<3	<.2	14.0	5	12	5	1	6.14
N87JF0236	162	<3	<.2	13.5	5	14	6	1	8.72
N87JF0237	163	<3	<.2	5.6	5	14	6	<1	6.82
N87JF0238	164	<3	<.2	5.9	9	23	5	1	5.42
N87JF0239	165	<3	<.2	3.5	8	14	6	<1	5.71
N87JF0240	166	<3	<.2	10.5	5	18	6	1	5.36
N87JF0241	167	<3	<.2	1.8	3	16	8	<1	2.29
N87JF0242	168	<3	<.2	3.4	12	8	5	<1	93.9
N87JF0243	169	<3	<.2	1.8	5	17	12	<1	95.5
N87JF0244	171	<3	<.2	.3	5	10	2	<1	97.3
N87JF0245	172	<3	<.2	2.8	12	16	10	1	11.7
N87JF0246	173	<3	<.2	<.2	5	22	10	<1	6.07
N87JF0247	174	<3	<.2	.8	24	15	13	<1	40.1
N87JF0248	175	<3	<.2	9.5	6	22	8	1	4.78
N87JF0249	176	<3	<.2	1.4	12	44	13	<1	94.7
N87JF0250	177	<3	<.2	5.6	5	19	10	<1	10.3
N87JF0251	178	<3	<.2	1.4	3	10	10	<1	5.04
N87JF0252	179	3	<.2	9.0	5	12	7	<1	12.7
N87JF0253	181	<3	<.2	6.3	6	14	4	<1	11.7
N87JF0254	182	<3	<.2	5.6	6	10	6	1	18.4
N87JF0255	183	<3	<.2	.7	3	7	6	<1	6.22
N87JF0256	184	<3	<.2	1.1	3	11	4	<1	4.23
N87JF0257	185	<3	<.2	4.0	22	5	10	2	85.0
N87JF0258	186	<3	<.2	2.6	27	18	15	<1	88.1
N87JF0259	187	<3	<.2	2.6	5	12	4	<1	6.89
N87JF0260	188	<3	<.2	.6	3	8	5	<1	7.37
N87JF0261	189	<3	<.2	3.9	4	13	6	<1	8.34
N87JF0262	191	<3	<.2	.6	3	8	7	<1	6.90
N87JF0263	192	<3	<.2	2.3	2	6	8	<1	6.22
N87JF0264	193	<3	<.2	.7	4	8	5	<1	10.3
N87JF0265	194	<3	<.2	2.5	40	13	21	<1	77.8
N87JF0266	195	<3	<.2	6.3	6	17	9	1	16.3
N87JF0267	196	<3	<.2	5.8	7	16	7	1	17.3
N87JF0268	197	<3	<.2	2.3	28	28	25	1	88.6
N87JF0269	198	<3	<.2	1.5	18	20	11	1	22.3
N87JF0270	199	9	<.2	.4	10	10	9	<1	28.1

H-3B

H-3

67.

H-3

SAMPLE ID	SAMPNO	AU PFB	AG PFM	AS PFM	CU PFM	ZN PPM	PB PPM	MO PPM	LOI %
N87JF0271	201	<3	<.2	.4	40	10	6	<1	23.8
N87JF0272	202	<3	<.2	10.5	9	11	4	1	17.4
N87JF0273	203	<3	<.2	.9	5	11	2	<1	93.5
N87JF0274	204	<3	<.2	1.2	6	17	5	<1	95.2
N87JF0275	205	<3	<.2	.3	4	6	1	<1	96.9
N87JF0276	206	<3	<.2	1.9	3	5	7	<1	9.88
N87JF0277	207	<3	<.2	4.1	5	15	6	<1	10.4
N87JF0278	208	<3	.4	1.7	33	19	17	<1	87.1
N87JF0279	209	<3	<.2	19.0	8	21	4	1	7.99
N87JF0280	211	<3	<.2	.8	25	12	1	1	93.3
N87JF0281	212	<3	<.2	1.1	8	22	5	<1	96.1
N87JF0282	213	<3	<.2	6.9	8	14	7	1	11.7
N87JF0283	214	<3	<.2	1.3	4	7	3	<1	7.47
N87JF0284	215	<3	<.2	1.5	10	8	10	1	15.0
N87JF0285	216	<3	<.2	6.1	12	16	4	1	9.36
N87JF0286	217	<3	<.2	1.5	3	10	5	<1	3.77
N87JF0287	218	<3	<.2	1.1	21	10	5	<1	58.1
N87JF0288	219	<3	<.2	.3	1	3	<1	<1	1.30
N87JF0289	221	<3	<.2	1.3	7	15	8	<1	8.85
N87JF0290	222	<3	<.2	13.0	6	15	3	<1	3.50
N87JF0291	223	<3	<.2	1.8	29	12	8	<1	66.0
N87JF0292	224	<3	<.2	23.0	8	22	5	1	8.29
N87KJ0225	225	<3	<.2	12.0	200	34	10	1	8.49
N87KJ0226	226	15	<.2	2.1	18	59	95	<1	81.2
N87KJ0227	227	<3	<.2	11.0	210	41	15	1	10.0
N87KJ0228	228	<3	<.2	15.0	160	34	12	1	7.41
N87KJ0229	229	<3	<.2	3.8	10	32	5	1	8.10
N87KJ0230	231	<3	<.2	36.0	12	32	6	1	9.60
N87KJ0231	232	<3	<.2	36.0	10	30	6	2	7.91
N87KJ0232	233	<3	<.2	49.8	11	30	9	1	19.6
N87KJ0233	234	<3	<.2	52.6	8	45	5	2	8.24
N87KJ0234	235	<3	<.2	26.0	8	18	3	1	18.9
N87KJ0235	236	<3	<.2	15.0	14	23	4	1	14.4
N87KJ0236	237	<3	<.2	2.6	2	9	6	<1	3.08
N87KJ0237	238	<3	<.2	4.6	3	13	6	<1	5.23
N87KJ0238	239	<3	<.2	64.4	14	34	6	1	5.85
N87KJ0239	241	<3	<.2	58.8	12	31	9	1	6.03
N87KJ0240	242	12	<.2	9.0	3	10	4	<1	4.76
N87KJ0241	243	<3	<.2	40.0	4	9	8	<1	10.4
N87KJ0242	244	<3	<.2	16.0	6	26	5	<1	4.49
N87KJ0243	245	<3	<.2	12.0	6	22	5	<1	3.27
N87KJ0244	246	<3	<.2	2.7	4	6	2	<1	3.62
N87KJ0245	247	<3	<.2	7.4	8	18	5	<1	2.68
N87KJ0246	248	<3	<.2	7.7	14	22	6	<1	9.67
N87KJ0247	249	<3	<.2	5.1	12	17	4	<1	5.46

H-3

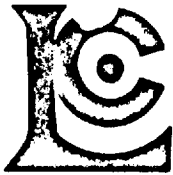
H-3

H-1

H-1

A P P E N D I X 3

Rock Geochemical Assay Data



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers
450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA,
ONTARIO, CANADA L4Z-1R5
PHONE (416) 890-0310

To WESTMIN RESOURCES LTD.

1400 - 25 ADELAIDE ST. EAST
TORONTO, ON
M5C 1Y2

A8726215

Comments: ATTN: R.H. McMILLAN CC: D. ROBINSON

CERTIFICATE A8726215

WESTMIN RESOURCES LTD.
PROJECT : NEMISCAU
P.O.# :

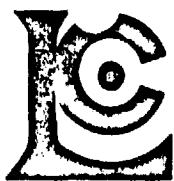
Samples submitted to our lab in Rouyn, PQ.
This report was printed on 26-NOV-87.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	36	Received sample as pulp
232	36	Total ICP digestion

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
554	36	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
556	36	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	36	Zn ppm: 24 element, rock & core	ICP-AES	1	10000
559	36	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	36	Pb ppm: 24 element, rock & core	ICP-AES	2	10000
561	36	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
562	36	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	36	Co ppm: 24 element, rock & core	ICP-AES	1	10000
564	36	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
565	36	Ba ppm: 24 element, rock & core	ICP-AES	1	10000
566	36	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
568	36	Mn ppm: 24 element, rock & core	ICP-AES	1	10000
569	36	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
570	36	Mg %: 24 element, rock & core	ICP-AES	0.01	25.0
572	36	V ppm: 24 element, rock & core	ICP-AES	1	10000
573	36	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
575	36	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
576	36	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
577	36	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
578	36	Ag ppm: 24 element, rock & core	AAS	0.5	500
579	36	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
582	36	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
583	36	Na %: 24 element, rock & core	ICP-AES	0.01	10.00
584	36	K %: 24 element, rock & core	ICP-AES	0.01	20.0



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 450 MATHESON BLVD. E., UNIT 34, MISSISSAUGA,
 ONTARIO, CANADA L4Z-1R5
 PHONE (416) 890-0310

To: ISTMIN RESOURCES LTD.

1400 - 25 ADELAIDE ST. EAST
 TORONTO, ON
 M5C 1Y2

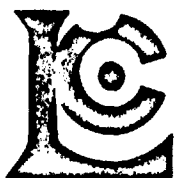
Project: NEMISCAU
 Comments: ATTN: R.H. McMILLAN CC: D. ROBINSON

Page No -A
 Tot. Pages 1
 Date: 26-NOV-87
 Invoice #: I-8726215
 P.O. # :

CERTIFICATE OF ANALYSIS A8726215

SAMPLE DESCRIPTION	PREP CODE	Mb ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Bi ppm (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Ni ppm (ICP)	Ba ppm (ICP)	Fe % (ICP)	Mn ppm (ICP)	Cr ppm (ICP)	Mg % (ICP)
H-2 84665-TB 0007	214 232	< 1	20	169	450	6	< 2	0.5	73	58	40	14.40	1580	46	3.67
H-2 84666 - 08	214 232	< 1	< 10	3	160	30	< 2	< 0.5	43	194	110	13.15	294	74	0.29
H-2 84667 - 09	214 232	< 1	< 10	17	320	24	< 2	< 0.5	15	131	120	11.00	1025	185	1.25
H-3 84670 - 12	214 232	< 1	< 10	93	90	16	< 2	< 0.5	20	41	30	12.10	7020	29	2.91
H-3 84673 - 15	214 232	< 1	< 10	114	220	4	< 2	1.0	27	100	50	6.30	2250	321	2.51
H-2 84678-LB 0011	214 232	< 1	< 10	24	1630	30	14	0.5	4	40	130	6.11	138	37	0.07
H-2 84679 - 012	214 232	5	< 10	8	1310	8	< 2	< 0.5	11	35	30	7.14	1265	42	0.54
H-2 84680 - 013	214 232	< 1	< 10	48	340	10	< 2	< 0.5	5	20	30	5.19	1005	19	0.37
H-3 84686 - 019	214 232	< 1	< 10	41	880	8	< 2	0.5	26	31	160	6.85	3090	57	1.23
H-3 84689 - 022	214 232	< 1	130	>10000	420	>10000	132	325	66	75	30	18.15	666	50	0.07
H-3 84690-LB 0023	214 232	< 1	80	>10000	190	4070	46	150.0	68	84	< 10	18.70	338	37	0.02
H-3 84691 - 24	214 232	1	< 10	>10000	70	958	26	42.5	4	28	< 10	2.60	175	42	< 0.01
H-3 84692 - 25	214 232	1	< 10	661	100	4330	38	1.0	5	23	130	3.07	123	58	0.12
H-3 84693 - 26	214 232	2	< 10	142	70	116	< 2	0.5	6	30	100	3.87	209	45	0.20
H-3 84694 - 27	214 232	5	< 10	211	60	202	2	0.5	4	32	150	2.54	116	38	0.10
H-3 84695-LB 0028	214 232	< 1	40	41	< 10	22	< 2	< 0.5	133	344	20	>25.0	328	27	0.75
H-3 84696 - 029	214 232	< 1	< 10	88	390	10	< 2	0.5	23	18	40	11.45	1740	6	2.08
H-3 84697 - 030	214 232	1	< 10	19	640	8	< 2	< 0.5	28	67	90	7.41	562	86	1.67
H-3 84698 - 031	214 232	14	< 10	3170	270	32	< 2	4.5	55	225	110	7.72	570	108	2.04
H-3 84700 - 033	214 232	11	150	524	260	22	< 2	1.0	21	122	90	10.30	1075	59	0.38
H-1 84704-TB 021	214 232	1	< 10	724	270	16	< 2	< 0.5	52	273	200	8.64	2480	261	1.98
H-1 84705 - 22	214 232	2	< 10	88	490	4	< 2	< 0.5	4	50	390	3.25	530	99	1.04
H-3 84707 - 24	214 232	< 1	< 10	170	220	22	< 2	0.5	46	270	130	7.10	1430	1585	3.76
H-3 84709 - 26	214 232	98	10	263	580	18	< 2	1.5	32	67	180	11.75	5670	82	2.21
H-3 84716-LB - 38	214 232	< 1	130	>10000	310	>10000	98	260	106	119	< 10	>25.0	478	20	0.04
H-3 84717-LB 039	214 232	< 1	40	513	560	76	< 2	0.5	17	34	100	22.6	6230	86	2.85
H-3 84724 - 045	214 232	2	10	153	810	16	< 2	0.5	12	26	170	8.53	1915	83	2.01
inlet 84768-TB 052	214 232	< 1	40	2420	280	48	< 2	5.0	24	51	250	9.12	386	88	0.67
inlet 84771-LB 050	214 232	< 1	< 10	251	540	20	< 2	0.5	52	517	160	7.49	1030	1615	8.63
inlet 84772 - 051	214 232	< 1	< 10	1030	270	30	< 2	0.5	26	165	150	7.51	1445	576	3.45
H-3 84773-LB 052	214 232	4	< 10	2020	310	16	< 2	2.5	63	106	30	5.95	563	202	1.92
H-3 84775 - 054	214 232	3	< 10	452	320	14	< 2	1.0	42	74	120	5.23	698	133	1.63
inlet 84778-AO 022	214 232	6	< 10	117	460	42	< 2	< 0.5	5	16	380	4.22	397	90	0.60
inlet 84782 - 026	214 232	8	< 10	168	210	64	< 2	0.5	50	60	600	4.86	305	72	0.73
inlet 84783 - 027	214 232	3	< 10	102	240	56	< 2	< 0.5	16	26	360	4.14	282	90	0.54
84784-AO 028	214 232	2	< 10	227	310	58	< 2	1.0	25	55	650	5.02	392	254	0.92

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 ONTARIO, CANADA L4Z-1R5
 PHONE (416) 890-0310

To: WESTMIN RESOURCES LTD.

1400 - 25 ADELAIDE ST. EAST
 TORONTO, ON
 M5C 1Y2

Project: NEMISCAU

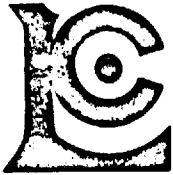
Comments: ATTN: R.H. McMILLAN CC: D. ROBINSON

Page No. -B
 Tot. Pages 1
 Date: 26-NOV-87
 Invoice #: I-8726215
 P.O. # :

CERTIFICATE OF ANALYSIS A8726215

SAMPLE DESCRIPTION	PREP CODE		V ppm (ICP)	Al % (ICP)	Be ppm (ICP)	Ca % (ICP)	Cu ppm (ICP)	Ag ppm AAS	Ti % (ICP)	Sr ppm (ICP)	Na % (ICP)	K % (ICP)				
	84665	214	232	279	5.27	< 0.5	3.85	1485	2.0	0.72	70	1.45	0.17			
84666	214	232	14	3.07	2.5	0.87	322	1.0	0.05	28	0.98	1.23				
84667	214	232	55	5.32	6.5	2.53	221	1.0	0.20	42	1.05	0.87				
84670	214	232	44	1.09	5.5	10.10	196	0.5	0.06	16	0.17	0.04				
84673	214	232	179	7.23	1.5	9.13	175	1.0	0.38	121	0.86	0.63				
84678	214	232	< 1	4.40	3.5	0.73	50	1.5	< 0.01	74	1.27	2.80				
84679	214	232	11	5.51	36.0	6.18	85	0.5	0.05	149	0.11	0.24				
84680	214	232	9	5.40	5.0	5.51	80	1.0	0.04	134	0.32	0.20				
84686	214	232	58	3.41	0.5	2.45	32	0.5	0.29	166	0.74	0.31				
84689	214	232	5	0.46	0.5	0.04	1025	70.0	0.01	6	0.10	0.18				
84690	214	232	< 1	0.10	< 0.5	0.02	1220	24.0	< 0.01	2	0.01	0.02				
84691	214	232	< 1	0.04	< 0.5	0.02	53	16.0	< 0.01	5	0.01	0.01				
84692	214	232	17	1.37	0.5	0.06	112	28.0	0.04	24	0.41	0.59				
84693	214	232	14	1.07	0.5	0.04	137	1.5	0.03	11	0.03	0.62				
84694	214	232	15	1.52	0.5	0.04	30	1.0	0.06	9	0.12	1.05				
84695	214	232	14	1.06	< 0.5	0.62	851	0.5	0.02	10	0.19	0.29				
84696	214	232	304	4.97	2.0	4.60	210	0.5	1.22	65	1.09	0.23				
84697	214	232	140	7.80	2.0	3.69	417	0.5	0.54	218	3.72	0.31				
84698	214	232	63	5.30	2.5	2.03	765	1.0	0.21	42	1.82	0.32				
84700	214	232	16	1.58	3.5	0.25	175	2.0	0.09	9	0.04	0.49				
84704	214	232	183	6.59	1.5	4.73	246	1.0	0.35	127	0.95	0.84				
84705	214	232	85	9.38	3.5	2.27	40	0.5	0.27	231	3.20	2.24				
84707	214	232	131	5.83	5.5	7.70	492	1.0	0.27	120	1.16	1.01				
84709	214	232	282	5.48	2.5	5.24	597	2.5	0.95	80	1.00	1.16				
84716	214	232	2	0.21	< 0.5	0.03	930	59.0	< 0.01	6	0.04	0.04				
84717	214	232	90	4.19	0.5	4.34	170	0.5	0.27	142	0.46	0.37				
84724	214	232	64	6.01	2.5	2.35	78	0.5	0.16	125	0.85	1.07				
84768	214	232	60	5.01	1.0	0.97	1310	1.5	0.23	94	2.38	0.57				
84771	214	232	104	4.96	1.0	2.68	79	1.0	0.11	172	1.14	0.35				
84772	214	232	110	4.49	2.0	5.53	138	0.5	0.39	70	0.24	1.01				
84773	214	232	120	5.96	1.5	4.19	564	0.5	0.20	190	0.92	0.15				
84775	214	232	78	4.87	1.0	4.64	202	0.5	0.22	110	0.72	0.48				
84778	214	232	107	8.11	1.5	3.44	511	1.0	0.44	167	2.90	0.93				
84782	214	232	64	5.60	1.0	1.56	764	0.5	0.25	97	1.55	3.23				
84783	214	232	42	6.21	1.5	2.77	1095	1.0	0.18	109	1.72	1.64				
84784	214	232	136	7.31	1.0	2.75	953	0.5	0.46	130	2.46	2.04				

72.



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450 MATHESON BLVD., E., UNIT 54, MISSISSAUGA,
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PHONE (416) 890-0310

To: WESTMIN RESOURCES LTD.

1400 - 25 ADELAIDE ST. EAST
TORONTO, ON
M5C 1Y2

A8722145

Comments: ATTN: R. H. McMILLAN CC: D. ROBINSON

CERTIFICATE A8722145

WESTMIN RESOURCES LTD.
PROJECT : NEMISCAU
P.O.# :

Samples submitted to our lab in Rouyn, PQ.
This report was printed on 25-SEP-87.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	23	Au ppb: Fuse 10 g sample	FA-AAS	5	10000

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
212	23	Geochem: Pulverize



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Project : NEMISCAU
Comments: ATTN: R.H. McMILLAN CC: D. ROBINSON

Page No. : 1
Tot. Pages: 1
Date : 25-SEP-87
Invoice #: I-872214
P.O. # :

CERTIFICATE OF ANALYSIS A8722145

SAMPLE DESCRIPTION		PREP CODE		Au ppb FA+AA										
H-1 crochet	84762 TB 046	212	---	<	5									
	84763 - 047	212	---	<	5									
	84764 - 048	212	---	<	5									
	84765 - 049	212	---	<	5									
	84766 - 050	212	---	<	5									
crochet	84767 TB 051	212	---	<	5									
	84768 - 052	212	---	<	5									
	84769 LB 048	212	---	<	5									
	84770 - 049	212	---	<	5									
	84771 - 050	212	---	<	5									
H-3 crochet	84772 LB 051	212	---	<	5									
	84773 - 052	212	---	<	5									
	84774 - 053	212	---	<	5									
	84775 - 054	212	---	<	5									
	84776 AD 020	212	---	<	5									74.
H-3 crochet	84777 AD 021	212	---	<	5									
	84778 - 022	212	---	<	5									
	84779 - 023	212	---	<	30									
	84780 - 024	212	---	<	5									
	84781 - 025	212	---	<	5									
H-3 crochet	84782 AD 026	212	---	<	5									
	84783 - 027	212	---	<	5									
	84784 - 028	212	---	<	5									

CERTIFICATION : Hart/Bichler



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WESTMIN RESOURCES LTD.

1400 - 25 ADELAIDE ST. EAST
TORONTO, ON
M5C 1Y2

A8721933

Comments: ATTN: R. H. McMILLAN CC: D. ROBINSON

CERTIFICATE A8721933

WESTMIN RESOURCES LTD.

PROJECT : NEMISCAU

P.O.# :

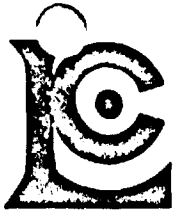
Samples submitted to our lab in Rouyn, PQ.
This report was printed on 22-SEP-87.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
212	49	Geochem: Pulverize

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	49	Au ppb: Fuse 10 g sample	FA-AAS	5	10000



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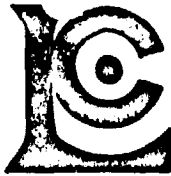
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Page N : 1
 Tot. Pages: 2
 Date : 22-SE
 Invoice # : I-877
 P.O. # :

CERTIFICATE OF ANALYSIS A8721933

SAMPLE DESCRIPTION		PREP CODE	Au ppb	FA+AA											
H-3	84713 LB -035	212	---	<	5										
H-3	84714 - 036	212	---	<	5										
H-3	84715 - 037	212	---	<	5										
	84716 - 038	212	---	<	5										
	84717 - 039	212	---	<	5										
	84718 LB 040	212	---	<	5										
Almond	84719 - 041	212	---	<	5										
Almond	84720 - 042	212	---	<	5										
	84721 - 043	212	---	<	5										
	84722 - 043 B	212	---	<	5										
	84723 LB 044	212	---	<	5										
	84724 - 045	212	---	<	5										
	84725 - 046	212	---	<	5										
	84726 - 047	212	---	<	5										
	84727 + B 030	212	---	<	5										
Almond	84728 TB 031	212	---	<	5										
Almond	84729 - 032	212	---	<	5										
H-3	84730 - 033	212	---	<	5										
H-3	84731 - 034	212	---	<	5										
Almond	84732 - 035	212	---	<	5										
Almond	84733 TB 036	212	---	<	5										
Almond	84734 - 037	212	---	<	5										
Almond	84735 - 038	212	---	<	5										
Almond	84736 - 039	212	---	<	5										
Almond	84737 - 040	212	---	<	5										
Almond	84738 TB-041	212	---	<	5										
Almond	84739 - 042	212	---	<	5										
Almond	84740 - 043	212	---	<	5										
Almond	84741 - 044	212	---	<	5										
Almond	84742 - 045	212	---	<	5										
H-3	84743 AO - 01	212	---	<	5										
H-3	84744 - 02	212	---	<	5										
	84745 - 03	212	---	<	5										
	84746 - 04	212	---	<	5										
Almond	84747 - 05	212	---	<	5										
	84748 AO 06	212	---	<	10										
	84749 - 07	212	---	<	5										
	84750 - 08	212	---	<	5										
	84751 - 09	212	---	<	5										
	84752 - 10	212	---	<	5										

76.



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TORONTO, ON
M5C 1Y2

Project : NEMISCAU
Comments: ATTN: R.H. McMILLAN CC: D. ROBINSON

Page No. : 2
Tot. Pages: 2
Date : 22-SEP-87
Invoice # : I-8721933
P.O. # :

CERTIFICATE OF ANALYSIS A8721933

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA																		
84753 A0 -11	212	---	<	5																
84754 - 12	212	---	<	5																
84755 - 13	212	---	<	5																
84756 - 14	212	---	<	5																
84757 - 15	212	---	<	5																
84758 A0 -16	212	---	<	5																
84759 - 17	212	---	<	5																
84760 - 18	212	---	<	5																
Abnormal - 84761 - 19	212	---	<	5																

Au

-----			1-----	2--
H-31	84694-LB	-027	yes	15.
H-32	84695-LB	-028	yes	<5.
H-33	84696-LB	-029	yes	25.
H-34	84697-LB	-030	yes	5.
H-35	84698-LB	-031	yes	<5.
H-36	84699-LB	-032	yes	<5.
H-37	84700-LB	-033	yes	<5.
H-38	84701-LB	-034	yes	<5.
H-19	84702-TB	-19	yes	<5.
H-110	84703-	20	yes	<5.
H-111	84704-	21	yes	<5.
H-112	84705-	22	yes	<5.
H-313	84706-	23	yes	<5.
H-314	84707-	24	yes	<5.
H-315	84708-	25	yes	<5.
H-316	84709-	26	yes	<5.
H-317	84710-	27	yes	<5.
H-318	84711-	28	yes	<5.
H-319	84712-TB	-29	yes	15.

**** No more

Project : NEMISCAU
 Comments : ATTN: R.H. MCMILLAN CC: D.ROBINSON
 =: data

				a8719527	pr212	Au	*
				1	2		
sil	1	N87	LB 84651-LB-02	yes		15.	
sil	2	N87	LB 84652-03	yes		10.	
sil	3	N87	LB 84653-04	yes		<5.	
sil	4	N87	LB 84654-05	yes		180.	
sil	5	N87	LB 84655-06	yes		920.	
sil	6	N87	LB 84656-07	yes		2150.	
sil	7	N87	LB 84657-08	yes		125.	
sil	8	N87	LB 84658-09	yes		<5.	
sil	9	N87	TB 84659TB-01	yes		10.	
sil	10	N87	TB 84660-02	yes		<5.	
sil	11	N87	TB 84661-03	yes		<5.	
sil	12	N87	TB 84662-04	yes		<5.	
sil	13	N87	TB 84663-05	yes		25.	
sil	14	N87	TB 84664-06	yes		60.	
sil	15	N87	TB 84665-07	yes		<5.	

**** No more samples ****

				a8720695	pr247	Au	pr238	Al	Ag	As	Ba
				1	2	3	4	5	6	7	
sil	1	N87	LB 84655R-06	yes	1.03	yes	1.46	0.2	>9999.	60.	
sil	2	N87	LB 84656R-07	yes	1.92	yes	0.57	0.2	>9999.	40.	

**** No more samples ****

		a8720897	pr212	Au	*
		----- 1-----		2--	
H-2	1	84666-TB-08	yes	<5.	
H-2	2	84667-09	yes	<5.	
H-2	3	84668-10	yes	<5.	
	4	84669-11	yes	<5.	
H-2	5	84670-12	yes	<5.	
	6	84671-13	yes	<5.	
	7	84672-14	yes	<5.	
H-3	8	84673-15	yes	<5.	
H-3	9	84674-16	yes	<5.	
H-3	10	84675-17	yes	<5.	
H-3	11	84676-TB-18	yes	<5.	
H-2	12	84677-LB-10	yes	<5.	
	13	84678-11	yes	<5.	
	14	84679-12	yes	<5.	
	15	84680-13	yes	<5.	
	16	84681-14	yes	<5.	
	17	84682-15	yes	<5.	
	18	84683-16	yes	<5.	
H-2	19	84684-LB-17	yes	<5.	
H-3	20	84685-LB-18	yes	<5.	
H-3	21	84686-19	yes	<5.	
	22	84687-20	yes	<5.	
H-3	23	84688-21	yes	135.	
	24	84689-22	yes	5.	
	25	84690-23	yes	5.	
	26	84691-24	yes	<5.	
H-3	27	84692-25	yes	<5.	
H-3	28	84693-LB-26	yes	<5.	
**** No more samples ****					