

**Northern Gold Mining Inc**

**Assessment Report**

Dundonald Township  
Unpatented Mining Claims

4201244  
4207908  
4207909  
4207910  
4207911  
4207912  
4211784  
4211786  
4220041  
4220041

**NTS 42A/10**

**Mobile Metal Ions Process  
Geochemical Survey**

2 • 3 7 6 6 6

**April 07, 2008**

**Ken Rattee**



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**SOIL SAMPLING PLANS**

MMI Au (ppb) Contour  
 MMI Ag (ppb) Contour  
 MMI Cu (ppb) Contour  
 MMI Zn (ppb) Contour  
 FH2008\_Au  
 FH2008\_Ag  
 FH2008\_Ni  
 FH2008\_Pd  
 FH2008\_Cu  
 FH2008\_Pb  
 FH2008\_Zn  
 FH2008\_Te

## **Introduction:**

Between June 1st, 2008 and September 30th, 2008 Pat Culhane with the assistance of G Matheson & K Culhane completed an artificial lake bottom soil geochemical survey for Northern Gold Mining Inc on unpatented mining claims in Dundonald Townships. The claims are owned 50% by D. Meunier and 50% by Chris Pegg and are currently under option to Northern Gold Mining Inc. The following is a list of claims that were covered under the current work program: (see Figure 1)

4201244  
4207908 to 4207912(inclusive)  
4211784  
4211786  
4220041 & 4220042

The property is located within The Porcupine Mining Division, northeastern Ontario, approximately 31 kms. north east of the city of Timmins (see Figure 2). The property is readily accessible by Highway 610 and Highway 67 and covers the southeastern portion of Frederick House Lake (see Figure 3).

Damming of the Frederick House River in the early part of the past century essentially led to the creation of an artificial lake known today as Frederick House Lake. The operation of the concrete dam controls the level of the water in both the Frederick House Lake and the Night Hawk Lake. The water level can vary as much as 4 meters from mid February to early May.

The lake sediment sampling program extracted sample media from below the surface of this drowned land using GPS control.

Hydro electric power, road and rail transportation are readily available and a skilled labor force with all necessary support facilities can be found in the nearby City of Timmins

## **History:**

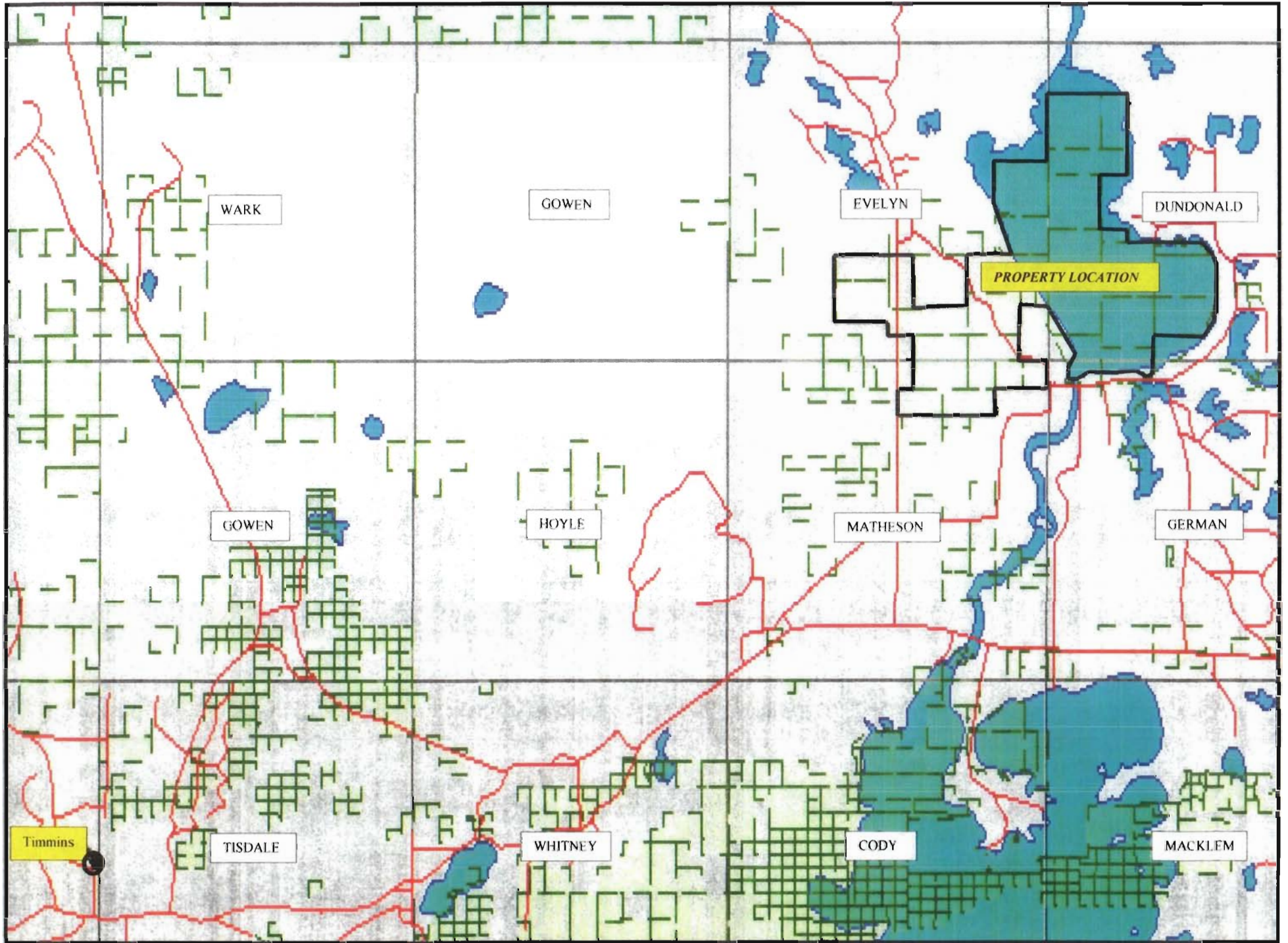
Since 1954 the area covered in the current program has received considerable attention by various Mining & Exploration companies, undertaking a variety of exploration work. This work is outlined chronologically below.

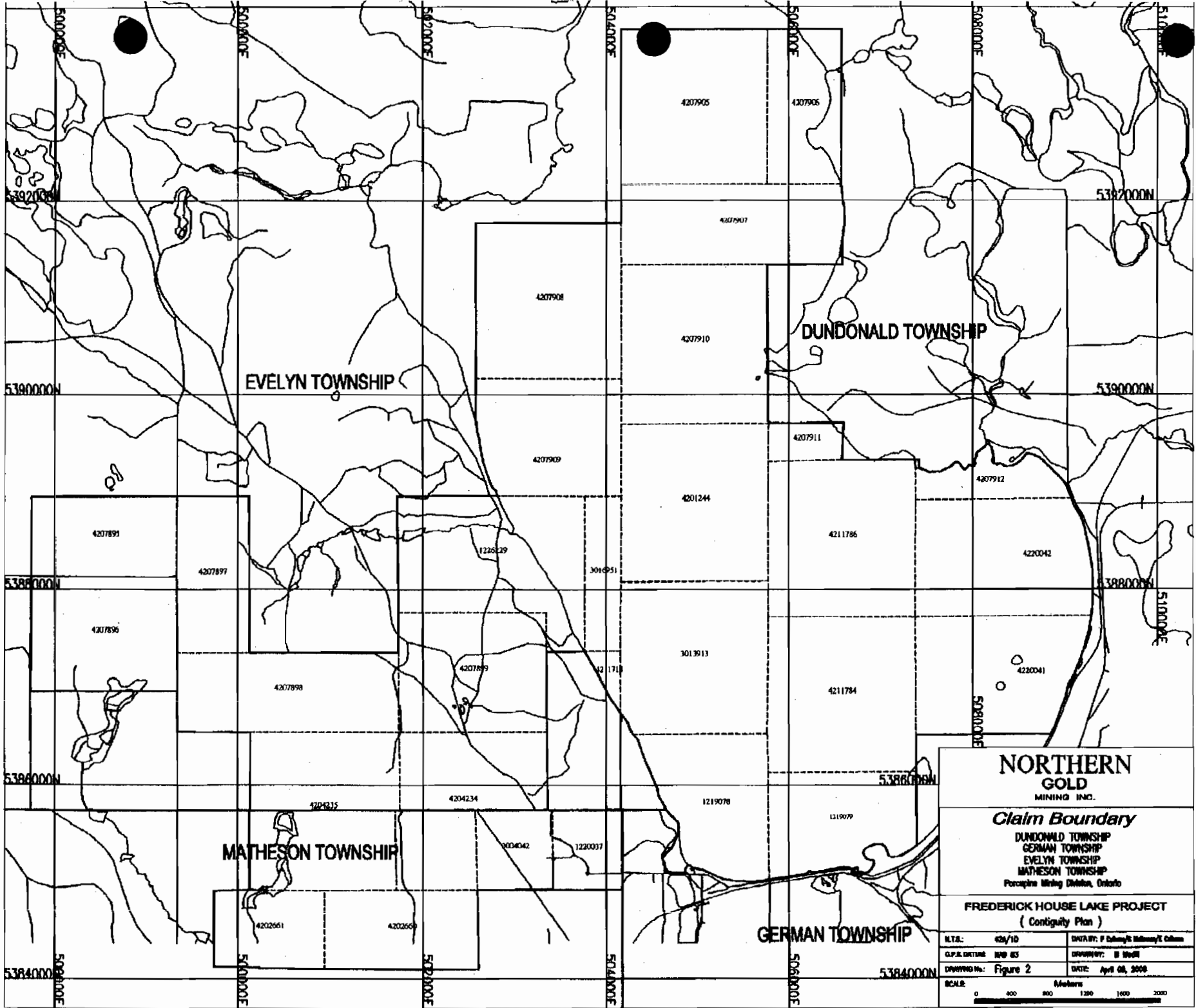
### **1954 Dominion Gulf Company Ltd.**

Completed a ground Magnetometer Survey that revealed several small easterly trending magnetic anomalies.

### **1964 O. Kangas Property**

Completed one diamond drill hole totaling 1455 feet. The hole located in Lot 5, N1/2, Concession 6 intersected numerous quartz carbonate veinlets with 4 - 5 % pyrite mineralization. A section was sampled and was reported to have assayed 0.17 oz / ton over 5 feet

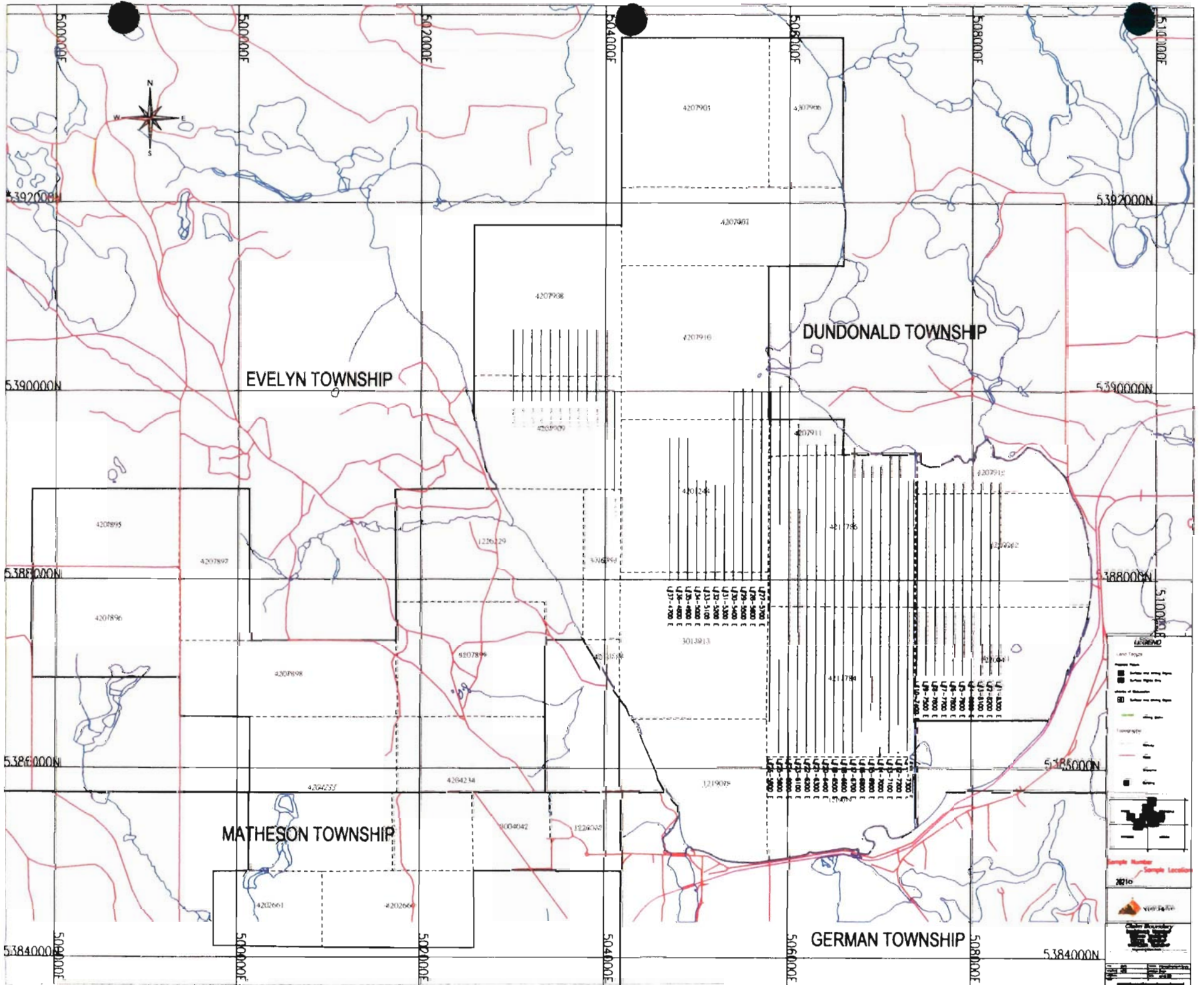




**NORTHERN GOLD MINING INC.**  
**Claim Boundary**  
DUNDONALD TOWNSHIP  
GERMAN TOWNSHIP  
EVELYN TOWNSHIP  
MATHESON TOWNSHIP  
Perceptive Mining Division, Ontario

**FREDERICK HOUSE LAKE PROJECT  
( Contiguity Plan )**

BLT#:	026/10	DRAWN BY:	F. Dubois/ S. McIntyre/ E. Colman
CLP.#:	0108	DRAWN BY:	B. Smith
DRAWING No.:	Figure 2	DATE:	April 08, 2008
SCALE:	Meters 0 400 800 1200 1600 2000		



EVELYN TOWNSHIP

DUNDONALD TOWNSHIP

MATHESON TOWNSHIP

GERMAN TOWNSHIP



**Legend**

- Land Types
  - Water
  - Forest
  - Grassland
  - Urban
  - Other
- Boundary Types
  - Property
  - Water
  - Other
- Other Symbols
  - Sample Number
  - Sample Location
  - 2010
  - Year 2010
  - Other Symbols

4207901

4207961

4207908

4207916

4207909

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4207912

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4207896

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**1963 Hollinger Mines Limited**

to

**1971** Carried out a major exploration program for nickel. The program was centered around a nickel deposit discovered on an island named Swiss Cheese Island. This island is located approximately 1.2 km north of the south shore of Frederick House Lake. A total of 73 diamond drill holes totaling 9679 meters were completed in the vicinity of this island. In early 1963, an extensive geophysical program involving magnetic, horizontal loop EM and JEM surveys were carried out. Several conductors were outlined.

In March of 1965 a Turam electromagnetic survey was conducted on three separate areas of the property. Eight conductors were outlined

In 1963, 1964, 1965 and briefly in 1967 a winter diamond drill program totaling 18000 feet was completed. This program failed to give economic values from a base metal perspective, however interesting gold values were encountered in two diamond drill holes. In 1965 Hole D-35 totaling 922 ft. intersected a section of dacite with quartz carbonate stringers and specks of sphalerite and pyrrhotite. This zone returned an assay of 0.39 oz / ton gold over a 1 foot interval. The hole drilled, to intersect a Turam EM conductor also intersected rhyolite, peridotite, brecciated dacite and gabbro. A section from 535 – 540 feet intersected 25 – 40% sulfides with quartz stringers and graphite present in a dacite breccia. The core was not assayed for gold. In 1964 Hole D-14 totaling 808.5 feet intersected a 40 – 80% quartz carbonate stringer zone in a dacite – rhyolite breccia. The following assays were reported 0.01 oz/ton over 3 ft., 0.04 oz/ton over 5 ft., 0.04 oz/ton over 2 ft.

In 1967 three diamond drill holes on the northeast side of Swiss Cheese Island yielded some significant nickel values.

In 1968 , 8000 feet of FH series holes were drilled, yielding up to 1% nickel due to pentlandite in the core. Swiss Cheese Island was mapped at a scale of 1" = 50'

In 1969 three diamond drill holes totaling 1600 feet were completed near Swiss Cheese Island. Magnetometer, HEM and VLEM surveys were completed.

**1971 Falconbridge Nickel Ltd.**

Completed an IP and EM survey. Ten diamond drill holes totaling 3211 feet were completed in the vicinity of Swiss Cheese Island. The drill core was not assayed for gold

The open pit reserve of nickel mineralization on Swiss Cheese Island was calculated at 185,000 tons at a grade of 0.46% nickel. This was found to be

contained in altered volcanics and intrusive ultramafic rocks and extended to a depth of 300 feet.

#### **1985 Angela Developments Ltd.**

An airborne Magnetic and VLF Survey was flown over the Kangeld Resources Property in Evelyn, Dundonald and German Townships. The survey was carried out in conjunction with several companies. Six northwest trending anomalies were interpreted to be due to magnetite in ultramafic rocks. A roughly northwest trending fault was postulated to cross through the southwestern portion of Frederickhouse Lake. This was believed to be the western extension of the Pipestone Fault.

#### **1986 Kangeld Resources Ltd.**

to

**1988** In February three diamond drill holes were drilled to test a northwest trending VLF anomaly to the northeast of Swiss Cheese Island. A total of 1840 feet were drilled. The holes intersected rhyolite, tuff, diorite, gabbro and peridotite. Hole K-3 was abandoned in 356 feet of overburden. Hole K-2 was abandoned at 471 feet in peridotite. Hole K-1 reached a total depth of 1087 feet and intersected a 17 foot section of massive sulfides. Gold values reported were nil. This hole was drilled in the vicinity of the Hollinger Hole D-35 which intersected 0.39 oz/ ton Au over a 1 foot interval.

In April a limited exploration program of line cutting, vertical loop EM and a magnetometer survey were carried out for Kangeld Resources Ltd. The purpose of the survey was to provide more detail over certain magnetic features on Frederick House Lake. The results of the survey indicated that there was a recognizable contact with more magnetic ultramafics to the north, as outlined by the airborne survey (Kangeld Resources Ltd., 1985). A weak vertical loop EM anomaly was also located coincident with this magnetic contact

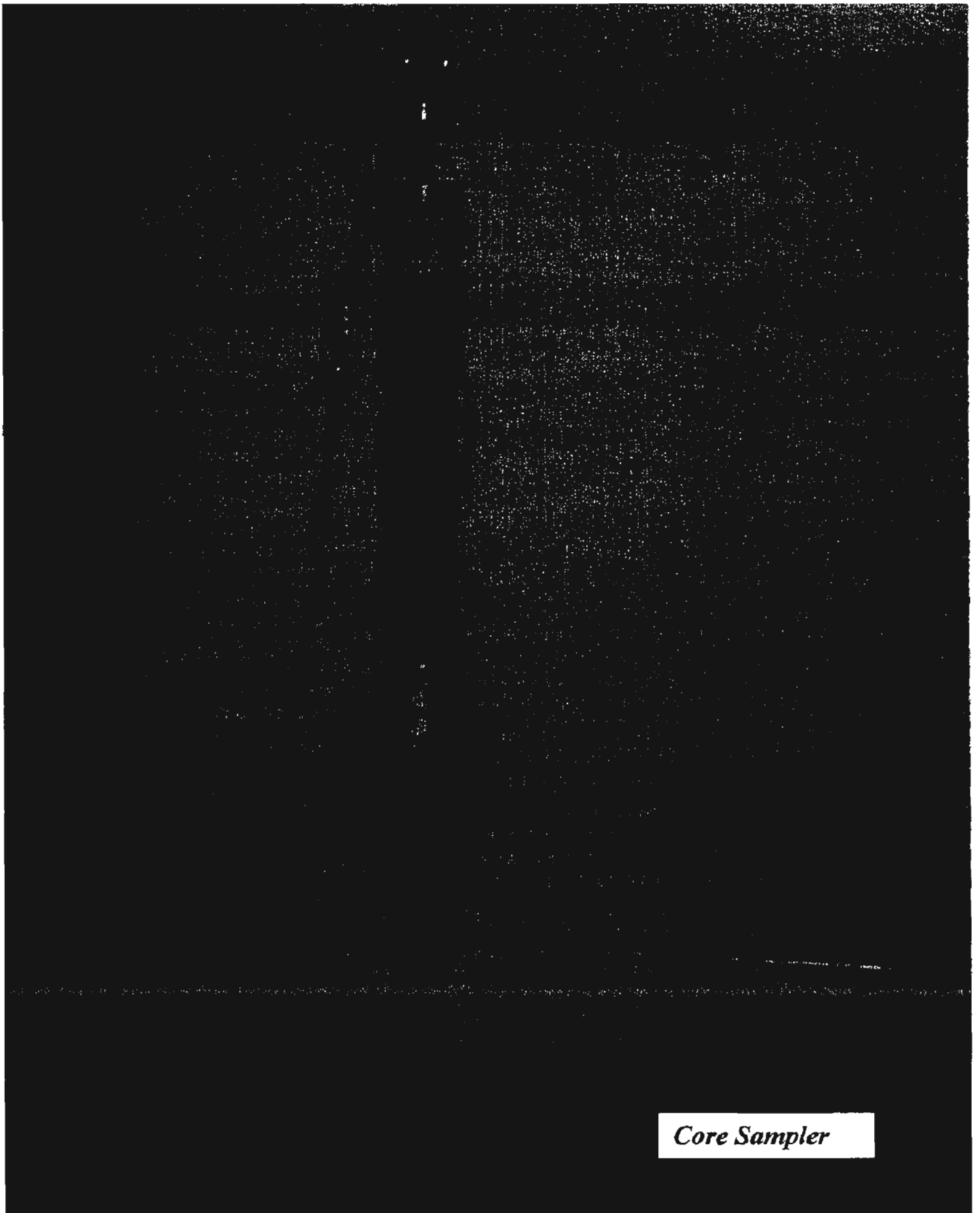
In January / February 1987 a 9 hole diamond drill program was completed on Frederick House Lake. Metasediments, ultramafic rocks and carbonate alteration were encountered, however but no anomalous gold was found.

In 1988 a reconnaissance reverse circulation drill program was planned. Poor ice conditions restricted the drilling mainly to the shoreline as the majority of the property was underlain by Frederick House Lake.

#### **1988 to Present**

The immediate Project area has seen little to no work since, other than that currently being carried out by current mining claim holders.





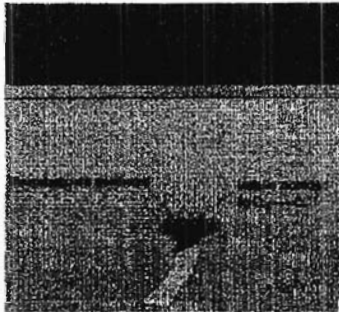
*Core Sampler*

Figure 4

### Mobile Metal Ions in the Weathering Zone

Mobile Metal Ions is a term used to describe ions which have moved in the weathering zone and that are only weakly or loosely attached to surface soil particles. It is a widely held belief that these Mobile Metal Ions are transported from deeply-buried ore bodies to the surface. Scientists from around the world have been studying this phenomenon for many years.

No-one is completely clear on exactly how the metal ions migrate to the surface. However, research and case studies over known ore-bodies have shown that mobile metal ions accumulate in surface soils above mineralization, indicating that the metals are derived from the mineralization source. The diagram below demonstrates a hypothetical model by which mobile ions are released from ore bodies, migrate vertically and accumulate in surface soils.



As the ions reach the surface, they attach themselves weakly to the soil particles. These are the ions that are measured by the MMI Technique to find mineralization at depths. The weakly attached ions are at very low concentrations. Because the ions have recently arrived to the surface they provide a precise 'signal' on where the ore-bodies are.

When the mobile metal ions have arrived at the surface they have a limited lifetime as 'mobile' ions. At the surface the ions are subject to weathering and are bound up by soil forming processes (i.e. they become part of the soil). The diagram below demonstrates this process. Note that bound ions (yellow) are subject to lateral movement away from the mineralization. The mobile ions (blue), however, do not move away from the source (mineralization) because they have a limited lifetime before they are converted to a bound form.



By only measuring the mobile metal ions in the surface soils, MMI Geochemistry will produce very sharp responses (anomalies) directly over the source of mobile ions. This source is ore-bodies at depth, which emit metal ions, which make up that ore-body. For example a Cu, Pb, Zn base metal deposit will emit (release) Cu, Pb and Zn ions.

Figure 5

## **Results:**

### **Gold:** Detection Limit = 0.1 ppb

Of the 1565 samples collected for analysis Au showed the greatest variability with individual assays ranging from a high of 109 ppb to a low of <0.1 ppb. 825 samples returned assays greater than or equal to 20.0 ppb and 119 samples returned calculated response ratios greater than 20 with background being calculated at 2.06 ppb. The high gold MMI results are primarily concentrated over two large areas with the long axis of these anomalous area being roughly north-south. The western anomaly as defined by response ratios greater than 15 occurs over an approximate 800 metre by 400 metre area centred around UTM 505900E, 5388500N. Within this broad area 14 individual samples returned assays greater than 50 ppb. The eastern anomaly as defined by response ratios greater than 15 cover a wider area than the western anomaly being 1500 metres by 800 metres though individual response ratios and individual sample results are generally weaker than the western anomaly. This eastern anomaly is centred around UTM 508000E, 5388000N. Within this broad area 4 individual samples returned assays greater than 50 ppb. Approximately 1 km along the east-west direction separates the two broad anomalies. Numerous individual sample assays  $\geq 20$ ppb are found as a halo adjacent to the western anomaly, much noticeably less so around the eastern anomaly and especially noticeable for 1.5 kms south of the western anomaly. The highest individual sample result 109 ppb is found south of the main western anomaly. The two broad main anomalies described above presents an obvious target for large tonnage Au mineralization and will be drill tested at the first available opportunity.

### **Silver:** Detection Limit = 1 ppb

Of the 1565 samples collected for analysis Ag showed only a moderate variability with individual assays ranging from a high of 57 ppb to a low of <0.1 ppb. 71 samples returned assays greater than or equal to 20.0 ppb and 17 samples returned calculated response ratios greater than 20 with background being calculated at 1.52 ppb. The majority of anomalous Ag values are found west of the western Au anomaly with the most notable clustering of anomalous Ag occurs over an 800 metre by 400 metre area centered around UTM 504800E, 5388500N with 15 individual samples assaying greater than 20 ppb including the single highest Ag value of 57 ppb. A small cluster of 5 anomalous Ag values  $>20$  ppb centred at UTM 505500E, 5388300N lies immediately west of the western Au anomaly. There is only a very weakly anomalous Ag association with the broad Au anomalies described above with Ag response ratios generally between 1-10 in the areas of the Au anomalies.

### **Copper:** Detection Limit = 10 ppb

Of the 1565 samples collected for analysis Cu showed only a moderate variability with individual assays ranging from a high of 10200 ppb to a low of 20 ppb. 8 samples returned assays greater than or equal to 7500 ppb and 3 samples returned calculated

response ratios greater than 10 with background being calculated at 876.6 ppb. The high Cu values are concentrated in the same area as the anomalous Ag centred around UTM 504800E, 5388500N possibly indicative of a Cu-Ag relationship in this area. Cu values are very slightly anomalous over the eastern Au anomaly with response ratios between 1-6. There does not appear to be any correlation with anomalous Cu and the western Au anomaly.

**Nickel:** Detection Limit = 5 ppb

Of the 1565 samples collected for analysis Ni showed only a slight variability with individual assays ranging from a high of 1950 ppb to a low of 39 ppb. 12 samples returned assays greater than or equal to 1750 ppb and 5 samples returned calculated response ratios greater than or equal to 8 with background being calculated at 231.4 ppb. A small clustering of two Ni values >1800 ppb centred around UTM 505800E, 5386900N is the most notable weak Ni anomaly. This lies significantly south of the western Au anomaly. There appears to be no correlation of Ni with the two Au anomalies or Ag anomaly. Generally weakly anomalous Ni values appears randomly distributed throughout the sampled area with no obvious pattern developed.

**Lead:** Detection Limit = 10 ppb

Of the 1565 samples collected for analysis Pb showed only a moderate variability with individual assays ranging from a high of 5080 ppb to a low of 20 ppb though only 4 samples returned values greater than 1000 ppb. 21 samples returned calculated response ratios greater than or equal to 8 with background being calculated at 71.3 ppb. The only highly anomalous Pb value of 5080 ppb which resulted in a response ratio of 71.2 over 3½ times the response ratio of the next highest Pb value stands alone as a singular value on the northeastern edge of the eastern Au anomaly at UTM 507900E, 5388425N. A weak Pb concentration with 8 samples showing response ratios from 4-9 lies along line 505900E just south of the western Au anomaly.

**Zinc:** Detection Limit = 20 ppb

Of the 1565 samples collected for analysis Zn showed a high variability with individual assays ranging from a high of 4310 ppb to a low of 10 ppb. 105 samples returned assays greater than or equal to 1500 ppb and 137 samples returned calculated response ratios greater than or equal to 20 with background being calculated at 69.6 ppb. The strongest clustering of anomalous zinc values with 7 values greater than 2000 ppb with these values resulting in response ratios greater than 30 occurs over a 700 metre by 300 metre area centered around UTM 507000E, 5386600N and corresponds with a weak Ag anomaly in the same area. The highest Zn value 4310 ppb (61.9 response ratio) occurs as a singular anomalous value at UTM 504700E, 5388300N which corresponds again with the main Ag anomaly. Generally the anomalous Zn values appears randomly scattered throughout the sample area with no obvious patterns or continuity developed. There does not appear to be any correlation with the anomalous Zn and the large Au anomalies.

**Palladium:** Detection Limit = 1 ppb

Of the 1565 samples collected only 3 samples returned values above the detection limit of 1 ppb. The highest Pd value returned 16 ppb occurs at UTM 507500E, 5389050N and does not correspond with any anomaly from the sampled elements.

**Tellurium:** Detection Limit = 10 ppb

Of the 1565 samples collected only 1 sample returned a value (20 ppb) above the detection limit of 10 ppb.

### **Recommendations:**

The two large Au anomalies will be followed up with a phase 1 drill program initially scheduled for the winter of 2008 but subsequently rescheduled for the summer of 2008 drill availability pending. This initial broadly spaced program will have the goal of identifying potential economic mineralization over a wide area. Successful results will result in a phase 2 program where drilling becomes focused on the areas of successful results from the phase 1 program. Though the majority of the drill program will concentrate on testing the Au anomalies consideration will be given to testing the notable Ag and Zn anomalies. To test for reproducibility of the MMI results selected areas will be chosen to resample for MMI analysis.

## REFERENCES

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Geology of Murphy and Wark Townships, District of Cochrane; Ontario Geological Survey, Open File Report 5994, 64p.

Grant, J.C., November 1997

Geophysical Report for Pentland Firth Ventures Ltd. on the Prosser, Wark Properties, Assessment File

Morley, L.W., Ed., 1967

Mining and Groundwater Geophysics, 1967, Proceedings of the Canadian Centennial Conference on Mining and Groundwater Geophysics

Pegg, R., August 1999

Compilation Report on the Wark/Prosser Project, Private Report, Pegg Geological Consultants Ltd.

## **CERTIFICATE OF AUTHOR**

I, Ken Rattee, of the town of Kirkland Lake, Ontario hereby certify:

- 1) I am a graduate from the University of Toronto, Toronto, Ontario having received a Bachelor of Science degree, Geology Major in 1980.
- 2) I have worked for 28 years as a Professional Geologist, predominately in the north-eastern Ontario area, as a production, exploration and consultant geologist.
- 3) I am currently employed as Vice-President Exploration for Northern Gold Mining Inc.
- 4) I have made use of the records of the Ontario Geological Survey as well as field observations and personal knowledge of the area in the preparation of this report.

Dated April 7, 2008



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Ken Rattee, BSc

# APPENDIX



Line#	Easting	Northing	Sample #	Cu-PPB	Cu-RR	Pb-PPB	Pb-RR	Zn-PPB	Zn-RR	Au-PPB	Au-RR	Ni-PPB	Ni-RR	Te-PPB	Te-RR	Pd-PPB	Pd-RR	Ag-PPB	Ag-RR	
Line#1-8300E	508300	5387000	2826	1360	1.6	160	2.2	360	5.2	3.2	1.6	421	1.8	<10	<1			2	1.3	
	508300	5387075	2827	1290	1.5	110	1.5	250	3.6	2.8	1.4	238	1.0	<10	<1			2	1.3	
	508300	5387150	2828	1490	1.7	220	3.1	1580	22.7	32.9	16.0	778	3.4	<10	<1			3	2.0	
	508300	5387225	2829	3510	4.0	140	2.0	500	7.2	26.1	12.7	948	4.1	<10	<1			3	2.0	
	508300	5387300	2830	2320	2.6	240	3.4	650	9.3	36.5	17.7	1210	5.2	<10	<1			2	1.3	
	508300	5387375	2831	3430	3.9	330	4.6	890	12.8	40.7	19.8	1320	5.7	<10	<1			6	3.9	
	508300	5387450	2832	1640	1.9	100	1.4	220	3.2	3.3	1.6	347	1.5	<10	<1			2	1.3	
	508300	5387525	2833	2760	3.1	170	2.4	1880	27.0	27.3	13.3	997	4.3	<10	<1			9	5.9	
	508300	5387600	2834	3930	4.5	280	3.9	750	10.8	39.8	19.3	1420	6.1	<10	<1			5	3.3	
	508300	5387675	2835	4790	5.5	130	1.8	1180	17.0	38	18.4	990	4.3	<10	<1			0.5	0.3	
	508300	5387750	2836	2810	3.2	160	2.2	1220	17.5	24.6	11.9	948	4.1	<10	<1			7	4.6	
	508300	5387825	2837	1710	2.0	160	2.2	1640	23.6	38.1	18.5	1100	4.8	<10	<1			6	3.9	
	508300	5387900	2838	1680	1.9	110	1.5	920	13.2	17.8	8.7	773	3.3	<10	<1			5	3.3	
	508300	5387975	2839	5450	6.2	220	3.1	580	8.3	26.5	12.9	1250	5.4	<10	<1			9	5.9	
	508300	5388050	2840	4360	5.0	200	2.8	250	3.6	25.3	12.3	1040	4.5	<10	<1			3	2.0	
	508300	5388125	2841	3770	4.3	180	2.5	590	8.5	21.8	10.6	859	3.7	<10	<1			6	3.9	
	508300	5388200	2842	4210	4.8	240	3.4	290	4.2	33	13.0	1360	5.9	<10	<1			5	3.3	
	508300	5388275	2843	2280	2.6	160	2.2	1320	19.0	30.1	14.6	974	4.2	<10	<1			7	4.6	
	508300	5388350	2844	2970	3.4	200	2.8	980	14.1	41.7	20.2	1310	5.7	<10	<1			9	5.9	
	508300	5388425	2845	3400	3.9	180	2.5	780	11.2	29	14.1	1130	4.9	<10	<1			8	5.3	
	508300	5388500	2846	4430	5.1	180	2.5	340	4.9	29.9	14.5	1320	5.7	<10	<1			8	5.3	
	508300	5388575	2847	3460	3.9	170	2.4	300	4.3	23.1	11.2	1010	4.4	<10	<1			3	2.0	
	508300	5388650	2848	2130	2.4	140	2.0	180	2.6	24.5	11.9	946	4.1	<10	<1			1	0.7	
	508300	5388725	2849	2760	3.1	150	2.1	830	11.9	10	4.9	477	2.1	<10	<1			8	5.3	
	508300	5388800	2850	3690	4.2	270	3.8	530	7.6	34.5	16.7	1020	4.4	<10	<1			6	3.9	
	508300	5388875	2851	4520	5.2	180	2.5	1310	18.8	18.1	8.8	753	3.3	<10	<1			6	3.9	
	508300	5388950	2852	3770	4.3	210	2.9	1460	21.0	24.3	11.8	857	3.7	<10	<1			8	5.3	
	508300	5389025	2853	1550	1.8	230	3.2	590	8.5	27.8	13.5	807	3.5	<10	<1			2	1.3	
	Line#2-8200E	508200	5387000	2854	3360	3.8	130	1.8	1160	16.7	7.5	3.8	449	1.9	<10	<1			6	3.9
		508200	5387075	2855	3760	4.3	260	3.6	710	10.2	38.8	18.8	995	4.3	<10	<1			2	1.3
508200		5387150	856	2130	2.4	230	3.2	760	10.9	29.5	14.3	946	4.1	<10	<1			2	1.3	
508200		5387225	857	2530	2.9	360	5.0	700	10.1	34.6	16.8	1120	4.8	<10	<1			4	2.6	
508200		5387300	858	1400	1.6	130	1.8	290	2.9	10.8	5.2	373	1.6	<10	<1			2	1.3	
508200		5387375	859	2980	3.4	310	4.3	790	11.4	35.8	17.4	1330	5.7	<10	<1			2	1.3	
508200		5387450	860	2220	2.5	260	3.6	1190	17.1	33.3	16.2	1260	5.4	<10	<1			4	2.6	
508200		5387525	861	3110	3.1	390	5.5	830	11.9	37.9	18.4	1200	5.2	<10	<1			5	3.3	
508200		5387600	862	1660	1.9	130	1.8	70	1.0	1.9	0.9	342	1.5	<10	<1			3	2.0	
508200		5387675	863	510	0.6	200	2.8	1000	14.4	37	16.0	1110	4.8	<10	<1			2	1.3	
508200		5387750	864	2860	3.3	260	3.6	350	5.0	22.5	10.9	965	4.2	<10	<1			2	1.3	
508200		5387825	865	5500	6.3	270	3.8	420	6.0	35.2	17.1	1610	7.0	<10	<1			5	3.3	
508200		5387900	866	2040	2.3	170	2.4	800	11.5	12.1	5.9	728	3.1	<10	<1			6	3.9	
508200		5387975	867	3740	4.3	140	2.0	1220	17.5	19	6.2	933	4.0	<10	<1			6	3.9	
508200		5388050	868	1400	1.6	180	2.5	390	5.6	35	17.0	1160	5.0	<10	<1			3	2.0	
508200		5388125	869	2510	2.9	140	2.0	1350	19.4	24.5	11.9	1130	4.9	<10	<1			6	3.9	
508200		5388200	870	1770	2.0	140	2.0	270	3.9	4.5	2.2	336	1.5	<10	<1			3	2.0	
508200		5388275	871	3800	4.3	220	3.1	330	4.7	23.3	11.3	971	4.2	<10	<1			5	3.3	
508200		5388350	872	3330	3.8	200	2.8	640	9.2	30.8	15.0	1020	5.6	<10	<1			6	3.9	
508200		5388425	873	3600	4.1	80	1.1	1120	16.1	26.6	12.9	1100	4.8	<10	<1			13	8.6	
508200		5388500	874	2520	2.9	100	1.4	380	5.5	2.3	1.1	342	1.5	<10	<1			6	3.9	
508200		5388575	875	840	1.0	220	3.1	230	3.3	31.1	15.1	1010	4.4	<10	<1			2	1.3	
508200		5388650	876	1380	1.6	110	1.5	100	1.4	8.3	4.0	309	1.3	<10	<1			2	1.3	
508200		5388725	877	1250	1.4	120	1.7	40	0.6	3.5	1.7	206	0.9	<10	<1			2	1.3	
508200		5388800	878	1550	1.8	160	2.2	200	2.9	10.2	5.0	446	1.9	<10	<1			2	1.3	
508200		5388875	879	1710	2.0	130	1.8	140	2.0	3.7	1.8	315	1.4	<10	<1			3	2.0	
508200		5388950	880	1220	1.4	200	2.8	550	7.9	24.1	11.7	714	3.1	<10	<1			1	0.7	
508200		5389025	881	1710	2.0	140	2.0	370	5.3	5	2.4	315	1.4	<10	<1			2	1.3	
Line#3-8100E		508100	5387000	882	1460	1.7	130	1.8	80	1.1	2.7	1.3	241	1.0	<10	<1			2	1.3
		508100	5387075	883	1570	1.8	310	4.3	900	12.9	35.8	17.4	985	4.3	<10	<1			4	2.6
	508100	5387150	884	1830	2.1	130	1.8	1280	18.4	23.8	11.8	921	4.0	<10	<1			6	3.9	
	508100	5387225	885	1080	1.2	130	1.8	1380	19.8	25.1	12.2	1010	4.4	<10	<1			4	2.6	
	508100	5387300	886	1740	2.0	170	2.4	1240	17.8	23.7	11.5	806	3.5	<10	<1			5	3.3	
	508100	5387375	887	640	0.7	170	2.4	1250	18.0	31.7	15.4	1020	4.4	<10	<1			2	1.3	
	508100	5387450	888	3090	3.5	220	3.1	1370	19.7	27.5	13.3	1140	4.9	<10	<1			6	3.9	
	508100	5387525	889	5890	6.7	270	3.8	380	5.5	32.6	15.8	1480	6.4	<10	<1			8	5.3	
	508100	5387600	890	2130	2.4	170	2.4	1070	15.4	30.5	14.8	1240	5.4	<10	<1			6	3.9	
	508100	5387675	891	3110	3.5	220	3.1	1120	16.1	31.2	15.1	1370	5.9	<10	<1			9	5.9	
	508100	5387750	892	1910	2.2	250	3.5	1060	15.2	40.4	19.6	1310	5.7	<10	<1			4	2.6	
	508100	5387825	893																	

Line#5-7900E

508000	5389025	937	1630	1.9	270	3.8	1000	14.4	27.1	13.2	893	3.9	<10	<1	2	1.3
507900	5387000	938	2700	3.1	90	1.3	1570	22.6	11.1	5.4	558	2.4	<10	<1	2	1.3
507900	5387075	939	1590	1.8	110	1.5	70	1.0	0.6	0.3	207	0.9	<10	<1	2	1.3
507900	5387150	940	4250	4.8	480	6.7	1880	27.0	40.3	19.6	1310	5.7	<10	<1	9	5.9
507900	5387225	941	2470	2.8	200	2.8	330	4.7	8	3.9	872	3.8	<10	<1	3	2.0
507900	5387300	942	750	0.9	200	2.8	1220	17.5	36.9	17.9	1290	5.6	<10	<1	2	1.3
507900	5387375	943	4270	4.9	360	5.0	710	10.2	37.5	18.2	1590	6.9	<10	<1	5	3.3
507900	5387450	944	6420	7.3	400	5.6	560	8.0	40.8	19.8	1650	7.1	<10	<1	8	5.3
507900	5387525	945	2480	2.8	270	3.8	1730	24.9	42.1	20.4	1560	6.6	<10	<1	5	3.3
507900	5387600	946	5050	5.8	320	4.5	1330	19.1	36.8	17.9	1530	6.5	<10	<1	8	5.3
507900	5387675	947	7040	8.0	320	4.5	550	7.9	35.1	17.0	1480	6.4	<10	<1	5	3.3
507900	5387750	948	6520	7.4	320	4.5	790	11.4	36.5	17.7	1670	7.2	<10	<1	6	3.9
507900	5387825	949	3960	4.5	280	3.9	480	6.9	37.3	18.1	1540	6.7	<10	<1	5	3.3
507900	5387900	950	6210	7.1	210	2.9	320	4.6	27.5	13.3	1610	7.0	<10	<1	7	4.6
507900	5387975	951	1960	2.2	140	2.0	1210	17.4	28.6	13.9	1220	5.3	<10	<1	5	3.3
507900	5388050	952	2050	2.3	200	2.8	920	13.2	38.9	18.9	1490	6.4	<10	<1	4	2.6
507900	5388125	953	2580	2.9	260	3.6	1270	18.2	23.9	11.6	1160	5.0	<10	<1	5	3.3
507900	5388200	954	980	1.1	160	2.2	1160	16.7	33.4	16.2	1360	5.9	<10	<1	4	2.6
507900	5388275	955	4280	4.8	220	3.1	420	6.0	32.1	15.6	1480	6.4	<10	<1	7	4.6
507900	5388350	956	2180	2.5	140	2.0	1470	21.1	28.9	14.0	1190	5.1	<10	<1	7	4.6
507900	5388425	957	4530	5.2	5080	71.2	410	5.9	23.1	11.2	1510	6.5	<10	<1	3	2.0
507900	5388500	958	5150	5.9	180	2.5	1420	20.4	29.9	14.5	1750	7.6	<10	<1	9	5.9
507900	5388575	959	1370	1.6	130	1.8	1320	19.0	27.6	13.4	1110	4.8	<10	<1	4	2.6
507900	5388650	960	1770	2.0	200	2.8	990	14.2	33.6	16.3	1310	5.7	<10	<1	3	2.0
507900	5388725	961	2290	2.6	180	2.5	1560	22.4	34.5	16.7	1470	6.4	<10	<1	4	2.6
507900	5388800	962	2170	2.5	180	2.5	920	13.2	33.8	15.4	1410	6.1	<10	<1	5	3.3
507900	5388875	963	3590	4.1	210	2.9	1290	18.5	12.5	6.1	730	3.2	<10	<1	7	4.6
507900	5388950	964	6390	7.3	170	2.4	1540	22.1	21.2	10.3	1140	4.9	<10	<1	11	7.2
507900	5389025	965	1000	1.1	190	2.7	830	11.9	29.4	14.3	848	3.7	<10	<1	2	1.3

Line#6-7800E

507800	5387000	966	7130	8.1	130	1.8	1680	24.1	13.1	3.4	791	3.4	<10	<1	17	11.2
507800	5387075	967	1770	2.0	120	1.7	40	0.6	0.5	0.2	277	1.2	<10	<1	3	2.0
507800	5387150	968	5980	6.8	260	3.6	1640	23.6	23.9	11.8	959	4.1	<10	<1	12	7.9
507800	5387225	969	2250	2.6	160	2.2	50	0.7	0.4	0.2	358	1.5	<10	<1	3	2.0
507800	5387300	970	3170	3.6	310	4.3	1590	22.8	34	13.5	1190	5.1	<10	<1	5	3.3
507800	5387375	971	1680	1.9	270	3.8	750	10.8	41.4	20.1	1490	6.4	<10	<1	2	1.3
507800	5387450	972	5430	6.2	330	4.6	620	8.9	36.6	17.8	1550	6.7	<10	<1	3	2.0
507800	5387525	973	650	0.7	280	3.9	1100	15.8	43.2	21.0	1380	6.0	<10	<1	2	1.3
507800	5387600	974	1090	1.2	150	2.1	730	10.5	28.8	14.0	994	4.3	<10	<1	3	2.0
507800	5387675	975	2980	3.4	280	3.9	1310	18.8	28.7	13.9	928	4.0	<10	<1	7	4.6
507800	5387750	976	1560	1.8	150	2.1	1240	17.8	28.3	13.7	1090	4.7	<10	<1	3	2.0
507800	5387825	977	1130	1.3	140	2.0	1370	19.7	30.8	15.0	1240	5.4	<10	<1	4	2.6
507800	5387900	978	3360	3.8	210	2.9	910	13.1	32.7	13.9	1510	6.5	<10	<1	3	2.0
507800	5387975	979	2480	2.8	150	2.1	1780	25.6	25.8	12.5	1320	5.7	<10	<1	6	3.9
507800	5388050	980	860	1.0	270	3.8	500	7.2	19.8	9.8	645	2.8	<10	<1	0.5	0.3
507800	5388125	981	6830	7.8	270	3.8	540	7.8	38.1	18.5	1620	7.0	<10	<1	6	3.9
507800	5388200	982	3590	4.1	110	1.5	110	1.6	7.4	3.6	288	1.2	<10	<1	2	1.3
507800	5388275	983	2660	3.0	170	2.4	790	11.4	17.6	8.5	904	3.5	<10	<1	5	3.3
507800	5388350	984	1510	1.7	200	2.8	1410	20.3	38.8	18.8	1440	6.2	<10	<1	4	2.6
507800	5388425	985	1780	2.0	220	3.1	460	6.6	36.5	17.7	1590	6.9	<10	<1	4	2.6
507800	5388500	986	1770	2.0	140	2.0	1170	16.8	34.7	16.8	1450	6.3	<10	<1	7	4.6
507800	5388575	987	1200	1.4	180	2.5	790	11.4	30.6	14.9	1170	5.1	<10	<1	1	0.7
507800	5388650	988	4620	5.3	310	4.3	560	8.0	40.6	19.7	1590	6.9	<10	<1	2	1.3
507800	5388725	989	1060	1.2	240	3.4	540	7.8	31.2	15.1	1140	4.9	<10	<1	2	1.3
507800	5388800	990	4030	4.6	180	2.5	1490	21.4	34.5	16.7	1860	8.0	<10	<1	1	0.7
507800	5388875	991	5720	6.5	260	3.6	410	5.9	28.5	13.8	1250	5.4	<10	<1	5	3.3
507800	5388950	992	4080	4.7	250	3.5	460	6.6	26.7	13.0	1140	4.9	<10	<1	5	3.3
507800	5389025	993	4070	4.6	220	3.1	390	5.6	26.7	13.0	1650	7.1	<10	<1	3	2.0

Line#7-7700E

507700	5387000	994	6160	7.0	260	3.6	1570	22.6	17.5	8.5	1220	5.3	<10	<1	12	7.9
507700	5387075	995	1840	2.1	130	1.8	200	2.9	0.4	0.2	286	1.2	<10	<1	2	1.3
507700	5387150	996	3870	4.4	300	4.2	1080	15.5	9.5	4.6	643	2.8	<10	<1	4	2.6
507700	5387225	997	8300	9.5	150	2.1	1900	27.3	15.5	7.5	991	4.3	<10	<1	26	17.1
507700	5387300	998	4160	4.7	220	3.1	660	9.5	10.2	5.0	700	3.0	<10	<1	10	6.6
507700	5387375	999	1270	1.4	370	5.2	580	8.0	42.2	20.5	1560	6.7	<10	<1	2	1.3
507700	5387450	1000	6260	7.1	330	4.6	460	6.6	41.9	20.3	1780	7.7	<10	<1	5	3.3
507700	5387525	1001	3900	4.4	580	8.1	640	9.2	38.1	18.5	1500	6.5	<10	<1	4	2.6
507700	5387600	1002	1830	2.1	180	2.5	1470	21.1	33.1	16.1	1240	5.4	<10	<1	6	3.9
507700	5387675	1003	1100	1.3	290	4.1	1080	15.7	51.9	25.7	1650	7.1	<10	<1	14	9.2
507700	5387750	1004	1240	1.4	110	1.5	240	3.4	7.8	3.8	487	2.1	<10	<1	0.5	0.3
507700	5387825	1005	6870	7.8	310	4.3	430	6.2	39.6	19.2	1540	6.7	<10	<1	15	9.2
507700	5387900	1006	950	1.1	260	3.6	970	13.9	38.2	18.5	1200	5.2	<10	<1	4	2.6
507700	5387975	1007	5100	5.8	310	4.3	430	6.2	40.5	19.7	1640	7.7	<10	<1	7	4.6
507700	5388050	1008	5760	6.6	260	3.6	980	14.1	39.9	19.4	1810	7.8	<10	<1	6	3.9
507700	5388125	1009	5930	6.8	280	3.9	1420	20.4	47.9	23.3	1340	5.8	<10	<1	4	2.6
507700	5388200	1010	3470	4.0	250	3.5	850	12.2	36.9	17.9	1570	6.8	<10	<1	4	2.6
507700	5388275	1011	3090	3.5	210	2.9	1090	15.7	30.5	14.8	1090	4.7	<10	<1	7	4.6
507700	5388350	1012	5100	5.8	210	2.9	470	6.8	36.7	17.8	1780	7.7	<10	<1	5	3.3
507700	5388425	1013	2000	2.3	290	4.1	700	10.1	36	16.4	1510	6.5	<10	<1	4	2.6
507700	5388500	1014	2140	2.4	290	4.1	400	5.7	38.1	18.5	1610	7.0	<10	<1	7	4.6
507700	5388575	1015	4150	4.7	280	3.9	330	4.7	37.2	18.1	1770	7.6	<10	<1	4	2.6
507700	5388650	1016	2820	3.2	220	3.1	930	13.4	45.6	22.1	1550	6.7	<10	<1	9	5.9
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Line#9-7500E	507600	5389025	1049	3450	3.9	310	4.3	870	12.5	32.8	15.9	1330	5.7 <10	<1	4	2.6
	507500	5387000	1050	2510	2.9	110	1.5	650	9.3	8.3	4.0	391	1.7 <10	<1	3	2.0
	507500	5387050	1051	2210	2.5	130	1.8	340	4.9	4.7	2.3	361	1.6 <10	<1	2	1.3
	507500	5387100	1052	3910	4.5	180	2.5	1120	16.1	28.6	13.9	884	3.8 <10	<1	2	1.3
	507500	5387150	1053	550	0.6	210	2.9	1200	17.2	37.1	18.0	1140	4.9 <10	<1	2	1.3
	507500	5387200	1054	3160	3.6	270	3.8	380	5.5	23.8	11.6	904	3.9 <10	<1	2	1.3
	507500	5387250	1055	3280	3.7	240	3.4	1530	22.0	37	18.0	1180	5.1 <10	<1	8	5.3
	507500	5387300	1056	1750	2.0	110	1.5	40	0.6	1.4	0.7	343	1.5 <10	<1	2	1.3
	507500	5387350	1057	850	1.0	230	3.2	1310	18.8	42.4	20.6	1180	5.1 <10	<1	3	2.0
	507500	5387400	1058	1870	2.1	220	3.1	390	5.6	9.7	4.7	596	2.6 <10	<1	3	2.0
	507500	5387450	1059	2560	2.9	180	2.5	120	1.7	1.7	0.8	338	1.5 <10	<1	5	3.3
	507500	5387500	1060	1840	2.1	100	1.4	100	1.4	3.2	1.6	317	1.4 <10	<1	3	2.0
	507500	5387550	1061	2780	3.2	70	1.0	220	3.2	4.6	2.2	424	1.8 <10	<1	3	2.0
	507500	5387600	1062	2870	3.3	140	2.0	90	1.3	0.8	0.4	370	1.6 <10	<1	11	7.2
	507500	5387650	1063	5780	6.6	390	5.5	790	11.4	53.3	28.9	1570	6.8 <10	<1	5	3.3
	507500	5387700	1064	2410	2.7	200	2.8	710	10.2	16.6	8.1	719	3.1 <10	<1	11	7.2
	507500	5387750	1065	1910	2.2	170	2.4	120	1.7	7.8	3.8	525	2.3 <10	<1	2	1.3
	507500	5387800	1066	2610	3.0	250	3.5	1030	14.8	40.9	18.9	1360	5.9 <10	<1	4	2.6
	507500	5387850	1067	2270	2.6	160	2.2	590	8.5	15.8	7.7	630	2.7 <10	<1	4	2.6
	507500	5387900	1068	2230	2.5	210	2.9	60	0.9	3.5	1.7	328	1.4 <10	<1	4	2.6
	507500	5387950	1069	1810	2.1	186	2.5	160	2.3	4.1	2.0	400	1.7 <10	<1	4	2.6
	507500	5388000	1070	3930	4.5	299	4.1	530	7.6	40.1	19.5	1250	5.4 <10	<1	8	3.9
	507500	5388050	1071	2760	3.1	246	3.4	480	6.9	13.5	8.6	501	2.2 <10	<1	6	3.9
	507500	5388100	1072	2030	2.3	180	2.5	20	0.3	0.7	3.5	239	1.0 <10	<1	4	2.6
	507500	5388150	1073	2440	2.8	180	2.5	60	0.9	1	0.5	288	1.2 <10	<1	6	3.9
	507500	5388200	1074	1810	2.1	200	2.8	20	0.3	1.3	0.6	295	1.3 <10	<1	4	2.6
	507500	5388250	1075	5110	5.8	250	3.5	1270	18.2	29.3	14.2	932	4.0 <10	<1	16	10.5
	507500	5388300	1076	2250	2.6	150	2.1	50	0.7	0.7	0.3	338	1.5 <10	<1	5	3.3
	507500	5388350	1077	2540	2.9	180	2.5	120	1.7	3.3	1.6	377	1.6 <10	<1	5	3.3
	507500	5388400	1078	1820	2.1	200	2.8	80	1.1	1.7	0.8	309	1.3 <10	<1	4	2.6
	507500	5388450	1079	3620	4.1	200	2.8	760	10.9	10.3	6.0	579	2.5 <10	<1	12	7.9
	507500	5388500	1080	3930	4.5	290	4.1	740	10.6	38	18.4	1400	6.1 <10	<1	2	1.3
	507500	5388550	1081	4180	4.8	180	2.5	1100	15.8	36.6	17.8	1320	5.7 <10	<1	8	5.3
	507500	5388600	1082	2280	2.6	170	2.4	100	1.4	1.3	0.6	288	1.2 <10	<1	5	3.3
	507500	5388675	1083	1180	1.3	170	2.4	1510	21.7	29.9	14.5	1090	4.7 <10	<1	4	2.6
	507500	5388750	1084	1080	1.2	240	3.4	820	11.8	45.2	21.9	1190	5.1 <10	<1	3	2.0
	507500	5388825	1085	2970	3.4	170	2.4	1090	15.7	33.2	16.1	1150	5.0 <10	<1	9	5.9
	507500	5388900	1086	3700	4.2	220	3.1	700	10.1	36	17.5	1210	5.2 <10	<1	7	4.6
	507500	5388975	1087	4750	5.4	130	1.8	1190	17.1	21.9	10.6	1000	4.3 <10	<1	17	11.2
	507500	5389050	1088	2770	3.2	170	2.4	280	4.0	17	8.3	745	3.2 <10	<1	7	4.6
Line#10-7400E	507400	5387000	1089 / 787	1490	1.7	110	1.5	60	0.9	1.7	0.8	321	1.4 <10	<1	3	2.0
	507400	5387050	1090 / 788	980	1.1	110	1.5	150	2.2	2.6	1.3	217	0.9 <10	<1	2	1.3
	507400	5387100	1091 / 789	1270	1.4	110	1.5	50	1.9	5.7	2.8	339	1.5 <10	<1	3	2.0
	507400	5387150	1092 / 790	2470	2.8	190	2.3	820	11.8	7.5	3.5	379	1.6 <10	<1	6	3.9
	507400	5387200	1093 / 791	160	0.2	100	1.4	1230	17.7	36.3	17.6	855	4.1 <10	<1	1	0.7
	507400	5387250	1094 / 792	3250	3.7	140	2.0	700	10.1	52.9	25.7	1860	8.0 <10	<1	4	2.6
	507400	5387300	1095 / 793	2080	2.4	70	1.0	250	3.6	5.5	2.7	351	1.5 <10	<1	3	2.0
	507400	5387350	1096 / 794	1660	1.9	50	0.7	190	2.7	14.8	7.2	471	2.0 <10	<1	3	2.0
	507400	5387400	1097 / 795	90	0.1	90	1.3	820	11.8	38.2	17.6	751	3.2 <10	<1	1	0.7
	507400	5387450	1098 / 796	2680	3.1	190	2.7	580	8.3	45	21.8	1230	5.3 <10	<1	3	2.0
	507400	5387500	1099 / 797	990	1.1	90	1.3	1400	20.1	29.7	14.4	1000	4.3 <10	<1	4	2.6
	507400	5387550	1100 / 798	70	0.1	100	1.4	870	12.5	34.1	16.6	757	3.3 <10	<1	1	0.7
	507400	5387600	1101 / 799	40	0.0	100	1.4	700	10.1	38.3	18.6	1010	4.4 <10	<1	0.5	0.3
	507400	5387650	1102 / 800	3020	3.4	170	2.4	390	5.6	37.1	18.0	917	4.0 <10	<1	2	1.3
	507400	5387700	1103 / 801	1200	1.4	150	2.1	260	3.7	24.2	11.7	506	2.2 <10	<1	2	1.3
	507400	5387750	1104 / 802	1490	1.7	90	1.3	1620	23.3	29.8	14.5	1290	5.6 <10	<1	4	2.6
	507400	5387800	1105 / 803	1380	1.6	70	1.0	20	0.3	0.05	0.0	170	0.7 <10	<1	2	1.3
	507400	5387850	1106 / 804	1440	1.6	160	2.2	70	1.0	0.8	0.4	297	1.3 <10	<1	3	2.0
	507400	5387900	1107 / 805	2240	2.6	130	1.8	300	4.3	6.9	3.3	394	1.7 <10	<1	3	2.0
	507400	5387950	1108 / 806	1690	1.9	160	2.2	450	6.5	31.3	15.2	1050	4.5 <10	<1	2	1.3
	507400	5388000	1109 / 807	2010	2.3	160	2.2	870	12.5	38.3	18.5	1080	4.7 <10	<1	3	2.0
	507400	5388050	1110 / 808	400	0.5	140	2.0	840	12.1	50.9	24.7	1350	5.8 <10	<1	2	1.3
	507400	5388100	1111 / 809	2860	3.3	250	3.5	820	11.8	45.1	21.9	1300	5.6 <10	<1	4	2.6
	507400	5388150	1112 / 810	870	1.0	140	2.0	740	10.6	27.9	13.5	812	3.5 <10	<1	2	1.3
	507400	5388200	1113 / 811	1800	2.1	100	1.4	550	7.9	10.3	5.0	430	1.9 <10	<1	3	2.0
	507400	5388250	1114 / 812	1950	2.2	60	0.8	60	0.9	0.5	0.2	315	1.4 <10	<1	4	2.6
	507400	5388300	1115 / 813	820	0.9	80	1.1	1010	14.5	34.5	16.7	1100	4.8 <10	<1	3	2.0
	507400	5388350	1116 / 814	330	0.4	120	1.7	1050	15.1	37.6	18.3	996	4.3 <10	<1	2	1.3
	507400	5388400	1117 / 815	2210	2.5	80	1.1	20	0.3	0.5	0.2	194	0.8 <10	<1	3	2.0
	507400	5388450	1118 / 816	2060	2.3	90	1.3	90	1.3	1.5	0.7	277	1.2 <10	<1	4	2.6
	507400	5388500	1119 / 817	1920	2.2	130	1.8	810	11.6	43.5	21.1	887	3.8 <10	<1	2	1.3
	507400	5388550	1120 / 818	1880	2.1	70	1.0	40	0.6	1.4	0.7	238	1.0 <10	<1	3	2.0
	507400	5388600	1121 / 819	1590	1.8	90	1.3	40	0.6	0.4	0.2	228	1.0 <10	<1	2	1.3
	507400	5388675	1122 / 820	1270	1.4	70	1.0	30	0.4	0.9	0.4	260	1.1 <10	<1	2	1.3
	507400	5388750	1123 / 821	1870	2.1	100	1.4	30	0.4	0.2	0.1	224	1.0 <10	<1	3	2.0
	507400	5388825	1124 / 822	790	0.9	140	2.0	660	9.5	33.3	16.2	781	3.4 <10	<1	2	1.3
	507400	5388900	1125 / 823	1540	1.8	120	1.7	1160	16.7	37.2	18.1	871	3.8 <10	<1	3	2.0
	507400	5388975	1126 / 824	1940	2.2	70	1.0	40	0.6	1.1	0.5	213	0.9 <10	<1	3	2.0
	507400	5389050	1127 / 825	1750	2.0	80	0.8	30	0.4	0.05	0.0	185	0.8 <10	<1	3	2.0
Line#11-7300E	507300	5386200	1334	1770	2.0	130	1.8	470	6.8	3.1	1.5	172	0.7 <10	<1	8	5.3
	507300	5386300	1335	3240	3.7	170	2.4	1400	20.1	6.9						

507300	5388050	1140 / 838	1310	1.5	120	1.7	30	0.4	0.3	0.1	251	1.1 <10	<1	2	1.3	
507300	5388100	1141 / 839	2580	2.9	140	2.0	30	0.4	0.05	0.0	225	1.0 <10	<1	5	3.3	
507300	5388150	1142 / 840	3860	4.4	130	1.8	320	4.6	8.8	4.3	516	2.2 <10	<1	5	3.3	
507300	5388200	1143 / 841	3400	3.9	120	1.7	740	10.8	19	9.2	599	2.6 <10	<1	7	4.6	
507300	5388250	1144 / 842	2080	2.4	150	2.1	50	0.7	0.5	0.2	254	1.1 <10	<1	3	2.0	
507300	5388300	1145 / 843	3920	4.5	130	1.8	1000	14.4	18.9	9.2	657	2.8 <10	<1	8	5.3	
507300	5388350	1146 / 844	1520	1.7	90	1.3	30	0.4	0.3	0.1	189	0.8 <10	<1	4	2.6	
507300	5388400	1147 / 845	2200	2.5	130	1.8	60	0.9	0.3	0.1	261	1.1 <10	<1	4	2.6	
507300	5388450	1148 / 846	1710	2.0	140	2.0	40	0.6	0.6	0.3	281	1.2 <10	<1	3	2.0	
507300	5388500	1149 / 847	1860	2.1	70	1.0	10	0.1	0.2	0.1	255	1.1 <10	<1	3	2.0	
507300	5388550	1150 / 848	1570	1.8	100	1.4	30	0.4	0.05	0.0	238	1.0 <10	<1	2	1.3	
507300	5388600	1151 / 849	1680	1.9	110	1.5	30	0.4	0.3	0.1	334	1.4 <10	<1	5	3.3	
507300	5388675	1152 / 850	820	0.9	60	0.8	30	0.4	0.1	0.0	210	0.9 <10	<1	2	1.3	
507300	5388750	1153 / 851	3470	4.0	90	1.3	1260	18.1	31	15.0	1020	4.4 <10	<1	7	4.6	
507300	5388825	1154 / 852	2440	2.8	100	1.4	980	14.1	30.9	15.0	1130	4.9 <10	<1	7	4.6	
507300	5388900	1155 / 853	550	0.6	150	2.1	960	13.8	39.8	19.3	1060	4.8 <10	<1	2	1.3	
507300	5388975	1156 / 854	1150	1.3	110	1.5	750	10.8	61.9	30.0	1210	5.2 <10	<1	1	0.7	
507300	5389050	1157 / 855	1940	2.2	103	1.4	240	3.4	4.9	2.4	350	1.5 <10	<1	4	2.6	
Line#12-7200E	507200	5386175	1456	49.30	5.6	139	1.8	1900	27.3	8.5	4.1	603	2.6 <10	<1	16	10.5
	507200	5386475	1455	35.40	4.0	103	1.4	1430	20.5	7.4	3.8	455	2.0 <10	<1	10	6.6
	507200	5386625	1454	58.10	6.6	230	3.2	2910	41.8	14.9	7.2	944	4.1 <10	<1	18	11.8
	507200	5386775	1453	21.00	2.4	90	1.3	770	11.1	7.9	3.8	395	1.7 <10	<1	5	3.3
	507200	5386850	1452	48.30	5.1	130	1.8	1310	18.8	7.3	3.9	589	3.1 <10	<1	15	10.5
	507200	5386925	1451	64.80	7.4	260	3.6	2410	34.6	22.1	10.7	1220	5.3 <10	<1	24	15.8
	507200	5387000	1158	2070	2.4	200	2.8	60	0.9	0.4	0.2	384	1.7 <10	<1	4	2.6
	507200	5387050	1159	2250	2.6	180	2.5	150	2.2	3.2	1.6	470	2.0 <10	<1	3	2.0
	507200	5387100	1160	1950	2.2	150	2.1	30	0.4	0.2	0.1	294	1.3 <10	<1	3	2.0
	507200	5387150	1161	2700	3.1	150	2.1	30	0.4	1.3	0.6	312	1.3 <10	<1	6	3.9
	507200	5387200	1162	1890	2.2	210	2.9	30	0.4	0.5	0.2	430	1.9 <10	<1	4	2.6
	507200	5387250	1163	1370	1.6	110	1.5	60	0.9	5.5	2.7	264	1.1 <10	<1	3	2.0
	507200	5387300	1164	2070	2.4	140	2.0	50	0.7	2	1.0	311	1.3 <10	<1	3	2.0
	507200	5387350	1165	1930	2.2	160	2.2	60	0.9	1.1	0.5	266	1.1 <10	<1	3	2.0
	507200	5387400	1166	2960	3.4	160	2.2	160	2.3	1.6	0.8	370	1.6 <10	<1	6	3.9
	507200	5387450	1167	2550	2.9	160	2.2	20	0.3	0.1	0.0	262	1.1 <10	<1	5	3.3
	507200	5387500	1168	3050	3.5	220	3.1	20	0.3	0.3	0.1	341	1.5 <10	<1	8	5.3
	507200	5387550	1169	2530	2.9	270	3.8	10	0.1	0.6	0.3	406	1.8 <10	<1	5	3.3
	507200	5387600	1170	2320	2.6	260	3.6	30	0.4	0.3	0.1	296	1.3 <10	<1	4	2.6
	507200	5387650	1171	2950	3.4	170	2.4	290	4.2	12.2	5.9	552	2.4 <10	<1	6	3.9
	507200	5387700	1172	2720	3.1	190	2.7	200	2.9	10.3	5.0	527	2.3 <10	<1	4	2.6
	507200	5387750	1173	2960	3.4	210	2.9	60	0.9	2.8	1.4	398	1.7 <10	<1	5	3.3
	507200	5387800	1174	3650	4.2	130	1.8	870	12.5	10.7	5.2	624	2.7 <10	<1	5	3.3
	507200	5387850	1175	3840	4.4	190	2.7	530	7.6	5.9	2.9	589	3.5 <10	<1	10	6.6
	507200	5387900	1176	5590	6.4	230	3.2	940	13.5	9.3	4.5	788	3.4 <10	<1	17	11.2
	507200	5387925	310	1340	1.5	70	1.0	70	1.0	0.8	0.4	161	0.7 <10	<1	2	1.3
	507200	5387981	309	2420	2.8	80	1.1	340	4.9	9	4.4	320	1.4 <10	<1	4	2.6
	507200	5388026	308	1810	2.1	60	0.8	190	2.7	4.4	2.1	285	1.2 <10	<1	3	2.0
	507200	5388075	307	1860	2.1	40	0.6	150	2.2	3.1	1.5	278	1.2 <10	<1	3	2.0
	507200	5388124	306	1760	2.0	40	0.6	250	3.6	4.5	2.2	283	1.2 <10	<1	3	2.0
	507200	5388177	305	930	1.1	40	0.6	60	0.9	0.9	0.4	170	0.7 <10	<1	2	1.3
	507200	5388229	304	1190	1.4	50	0.7	80	1.1	4.9	2.4	261	1.1 <10	<1	1	0.7
	507200	5388279	303	1270	1.4	60	0.8	390	5.6	24.7	12.0	519	2.2 <10	<1	2	1.3
	507200	5388325	302	550	0.6	50	0.7	110	1.6	6	2.9	215	0.9 <10	<1	0.5	0.3
	507200	5388376	301	1230	1.4	70	1.0	150	2.2	7.5	3.6	252	1.1 <10	<1	1	0.7
	507200	5388430	300	930	1.1	50	0.7	340	4.9	7.8	3.8	366	1.6 <10	<1	1	0.7
	507200	5388485	299	3400	3.9	110	1.5	520	7.5	34.6	13.8	898	3.9 <10	<1	5	3.3
	507200	5388527	298	780	0.9	80	1.1	30	0.4	0.8	3.4	132	0.6 <10	<1	0.5	0.3
	507200	5388577	297	760	0.9	70	1.0	560	8.0	27.8	13.5	613	2.6 <10	<1	2	1.3
	507200	5388650	296	2890	3.3	60	0.8	330	4.7	28.4	13.8	704	3.0 <10	<1	2	1.3
	507200	5388726	295	1240	1.4	50	0.7	150	2.2	10	4.9	320	1.4 <10	<1	1	0.7
	507200	5388801	294	1720	2.0	90	1.3	400	5.7	11.5	5.8	415	1.8 <10	<1	2	1.3
	507200	5388876	293	1090	1.2	60	0.8	60	0.9	2.7	1.3	193	0.8 <10	<1	0.5	0.3
	507200	5388950	292	1910	2.2	60	0.8	470	6.8	20.7	10.0	548	2.4 <10	<1	3	2.0
	507200	5389025	291	2400	2.7	100	1.4	160	2.3	17.5	8.5	593	2.6 <10	<1	3	2.0
	507200	5389104	290	1930	2.2	70	1.0	570	8.2	17.4	8.4	436	1.9 <10	<1	4	2.6
	507200	5389180	289	1420	1.6	80	1.1	530	7.6	13.6	6.6	362	1.6 <10	<1	3	2.0
	507200	5389260	288	1040	1.2	300	4.2	140	2.0	14.5	7.0	325	1.4 <10	<1	1	0.7
	507200	5389330	287	3190	3.6	90	1.3	260	3.7	4.2	2.0	306	1.3 <10	<1	5	3.3
Line#13-7100E	507100	5386175	1461	5670	6.5	310	4.3	2760	39.7	15.1	7.3	885	3.8 <10	<1	23	15.1
	507100	5386250	1462	5550	6.3	220	3.1	1970	28.3	13.8	6.7	782	3.4 <10	<1	14	9.2
	507100	5386325	1463	2180	2.5	80	1.1	400	5.7	2.3	1.1	329	1.4 <10	<1	10	6.6
	507100	5386475	1464	2020	2.3	70	1.0	110	1.6	1	0.5	248	1.1 <10	<1	8	5.3
	507100	5386550	1465	2920	3.3	90	1.3	910	13.1	5.7	2.8	359	1.6 <10	<1	10	6.6
	507100	5386700	1466	3750	4.3	260	3.6	1440	20.7	16	7.8	688	3.0 <10	<1	7	4.6
	507100	5386775	1467	4570	5.2	200	2.8	1700	24.4	22	10.7	899	3.9 <10	<1	11	7.2
	507100	5386850	1468	4780	5.5	300	4.2	1120	16.1	31	16.0	1370	5.9 <10	<1	8	5.3
	507100	5386925	1469	5950	6.8	290	4.1	1970	28.3	23.6	11.5	1140	4.9 <10	<1	13	8.6
	507100	5387010	245	1440	1.6	70	1.0	70	1.0	1.4	0.7	214	0.9 <10	<1	2	1.3
	507100	5387066	246	1360	1.6	90	1.3	160	2.3	4	1.9	302	1.3 <10	<1	3	2.0
	507100	5387113	247	2480	2.8	50	0.7	350	5.0	5.3	2.6	311	1.3 <10	<1	3	2.0
	507100	5387154	248	3850	4.4	50	0.7	720	10.3	9.1	4.4	474	2.0 <10	<1	7	4.6
	507100	5387211	249	2520	2.9	70	1.0	280	4.0	7.1	3.4	345	1.5 <10	<1	3	2.0
	507100	5387266	250	2570	2.9	60	0.8	530	7.8	8	3.9	335	1.4 <10	<1	4	2.6
	507100	5387317	251	2580	2.9	30	0.4	330	4.7	3.9	1					

Line#14-7000E

507100	5389005	281	1390	1.6	90	1.3	120	1.7	16.3	7.9	481	2.1	<10	<1	2	1.3
507100	5389080	282	2040	2.3	30	0.4	900	12.9	12.3	6.0	463	2.0	<10	<1	6	3.9
507100	5389149	283	3440	3.9	60	0.8	290	4.2	29.5	14.3	779	3.4	<10	<1	3	2.0
507100	5389225	284	1410	1.6	110	1.5	90	1.3	15.1	7.3	363	1.6	<10	<1	1	0.7
507100	5389305	285	2370	2.7	130	1.8	100	1.4	12.5	6.1	432	1.9	<10	<1	3	2.0
507000	5386150	1473	3100	3.5	70	1.0	1250	18.0	6.7	3.3	368	1.6	<10	<1	8	5.3
507000	5386225	1472	4590	5.2	180	2.1	2080	29.9	8.9	4.3	512	2.2	<10	<1	15	9.9
507000	5386525	1471	4030	4.6	110	1.5	1650	23.7	6	2.9	548	2.4	<10	<1	10	6.6
507000	5386600	1470	2120	2.4	100	1.4	30	0.4	0.3	0.1	276	1.2	<10	<1	6	3.9
507000	5386650	1347	4210	4.8	210	2.9	1480	21.3	9.9	4.8	586	2.5	<10	<1	16	10.5
507000	5386700	1346	2910	3.3	190	2.7	630	9.1	20.8	10.1	469	2.0	<10	<1	3	2.0
507000	5386750	1345	1470	1.7	140	2.0	90	1.3	2.4	1.2	198	0.9	<10	<1	2	1.3
507000	5386800	1344	1580	1.8	140	2.0	190	2.7	4.9	2.4	260	1.1	<10	<1	2	1.3
507000	5386850	1343	2070	2.4	140	2.0	690	9.9	11.2	5.4	460	2.0	<10	<1	3	2.0
507000	5386900	1342	3180	3.6	230	3.2	270	3.9	31.6	15.3	798	3.4	<10	<1	2	1.3
507000	5386950	1341	480	0.5	230	3.2	1110	15.9	36.2	17.6	881	3.8	<10	<1	2	1.3
507000	5387000	244	2410	2.7	60	0.8	190	2.7	14.1	6.8	506	2.2	<10	<1	2	1.3
507000	5387050	243	1390	1.6	60	0.8	60	0.9	1	0.5	186	0.8	<10	<1	2	1.3
507000	5387100	242	2510	2.9	60	0.8	580	8.3	7.1	3.4	331	1.4	<10	<1	2	1.3
507000	5387150	241	1290	1.5	100	1.4	20	0.3	0.5	0.2	124	0.5	<10	<1	2	1.3
507000	5387200	240	2270	2.6	50	0.7	470	6.8	6.4	3.1	273	1.2	<10	<1	4	2.6
507000	5387250	239	4330	4.9	50	0.7	790	11.4	14.9	7.2	539	2.3	<10	<1	7	4.6
507000	5387300	238	1230	1.4	50	1.3	100	1.4	2.7	1.3	246	1.1	<10	<1	2	1.3
507000	5387350	237	1800	2.1	60	0.8	180	2.6	6.2	3.0	249	1.1	<10	<1	2	1.3
507000	5387400	236	1060	1.2	70	1.0	50	0.7	0.6	0.3	144	0.6	<10	<1	2	1.3
507000	5387450	235	3450	3.9	60	0.8	570	8.2	9.4	4.6	390	1.7	<10	<1	6	3.9
507000	5387500	234	1280	1.5	60	0.8	40	0.6	0.9	0.4	166	0.7	<10	<1	2	1.3
507000	5387550	233	1350	1.5	60	0.8	30	0.4	0.4	0.2	128	0.6	<10	<1	2	1.3
507000	5387600	232	1590	1.8	90	1.3	70	1.0	1.5	0.7	242	1.0	<10	<1	3	2.0
507000	5387650	231	2000	2.3	30	0.4	320	4.6	15.9	7.7	394	1.7	<10	<1	1	0.7
507000	5387700	230	1830	2.1	60	0.8	50	0.7	1.1	0.5	203	0.9	<10	<1	3	2.0
507000	5387750	229	3720	4.2	60	0.8	530	7.6	22.2	10.8	639	2.8	<10	<1	6	3.9
507000	5387800	228	3570	4.1	140	2.0	480	6.9	6.9	3.3	274	1.2	<10	<1	13	8.6
507000	5387850	227	2770	3.2	100	1.4	290	4.2	4.1	2.0	316	1.4	<10	<1	7	4.6
507000	5387900	226	1890	2.2	70	1.0	200	2.9	1.7	0.8	230	1.0	<10	<1	3	2.0
507000	5387950	225	1810	2.1	50	0.7	350	5.0	9.7	4.7	325	1.4	<10	<1	2	1.3
507000	5388000	224	1650	1.9	50	0.7	280	4.0	12.7	6.2	280	1.2	<10	<1	2	1.3
507000	5388050	223	2480	2.8	50	0.7	350	5.0	17.3	8.4	523	2.3	<10	<1	3	2.0
507000	5388100	222	1050	1.2	60	0.8	30	0.4	0.8	0.4	201	0.9	<10	<1	1	0.7
507000	5388150	221	820	0.9	60	0.8	20	0.3	0.5	0.2	176	0.8	<10	<1	1	0.7
507000	5388200	220	1630	1.9	30	0.4	150	1.9	4.7	2.3	326	1.4	<10	<1	2	1.3
507000	5388250	219	1480	1.7	50	0.7	50	0.7	0.5	0.2	217	0.9	<10	<1	3	2.0
507000	5388300	218	1350	1.5	30	0.4	30	0.4	0.5	0.2	209	0.9	<10	<1	2	1.3
507000	5388350	217	1630	1.9	60	0.8	90	1.3	3.4	1.7	317	1.4	<10	<1	2	1.3
507000	5388400	216	3020	3.4	80	0.8	960	13.8	26.6	12.9	908	3.9	<10	<1	8	5.3
507000	5388450	215	2050	2.3	40	0.6	110	1.6	1.4	0.7	228	1.0	<10	<1	3	2.0
507000	5388500	214	3700	4.2	70	1.0	300	4.3	31.7	15.4	850	3.7	<10	<1	3	2.0
507000	5388550	213	1740	2.0	30	0.4	70	1.0	1.8	0.9	251	1.1	<10	<1	2	1.3
507000	5388600	212	4030	4.6	70	1.0	360	5.2	33.6	16.3	917	4.0	<10	<1	3	2.0
507000	5388675	211	4330	4.9	90	1.3	200	2.9	31.2	15.1	1050	4.5	<10	<1	5	3.3
507000	5388750	210	2840	3.2	60	0.8	120	1.7	21.4	10.4	797	3.4	<10	<1	3	2.0
507000	5388825	209	2810	3.2	60	0.8	170	2.4	23.8	11.6	781	3.4	<10	<1	3	2.0
507000	5388900	208	3330	3.8	60	0.8	220	3.2	30.9	15.0	1140	4.9	<10	<1	4	2.6
507000	5388975	207	2490	2.8	30	0.4	180	2.6	3	1.5	373	1.6	<10	<1	6	3.9
507000	5389050	206	1760	2.0	60	0.8	730	10.5	22.5	10.9	576	2.5	<10	<1	4	2.6
507000	5389120	205	4770	5.4	70	1.0	230	3.3	30	14.6	1260	5.4	<10	<1	5	3.3
507000	5389200	204	1760	2.0	50	0.7	560	8.0	27.7	13.4	734	3.2	<10	<1	3	2.0
506900	5386625	1457	6530	7.4	320	4.5	3180	45.7	21.2	10.3	1200	5.2	<10	<1	19	12.5
506900	5386775	1458	1850	2.1	100	1.4	1150	16.5	9.9	4.8	271	1.2	<10	<1	5	3.3
506900	5386850	1459	1060	1.2	170	2.4	1300	18.7	28.1	13.6	1250	5.4	<10	<1	4	2.6
506900	5386925	1460	4910	5.6	260	3.6	560	8.0	31.7	15.4	1320	5.7	<10	<1	3	2.0
506900	5387000	163	2870	3.3	70	1.0	220	3.2	26	12.6	531	2.3	<10	<1	3	2.0
506900	5387050	164	2160	2.5	70	1.0	850	12.2	33.6	16.3	860	3.7	<10	<1	3	2.0
506900	5387100	165	2380	2.7	70	1.0	500	7.2	9	4.4	363	1.6	<10	<1	3	2.0
506900	5387150	166	2780	3.2	90	1.3	510	7.3	14.1	6.8	551	2.4	<10	<1	4	2.6
506900	5387200	167	2490	2.8	60	0.8	160	2.3	5.2	2.5	338	1.5	<10	<1	3	2.0
506900	5387250	168	4170	4.8	110	1.5	580	8.3	11.6	5.6	501	2.2	<10	<1	9	5.9
506900	5387300	169	2110	2.4	90	1.3	50	0.7	0.9	0.4	299	1.3	<10	<1	4	2.6
506900	5387350	170	2150	2.5	50	0.7	100	1.4	1.2	0.6	208	0.9	<10	<1	3	2.0
506900	5387400	171	2370	2.7	70	1.0	150	2.2	1.1	0.5	241	1.0	<10	<1	4	2.6
506900	5387450	172	1920	2.2	70	1.0	50	0.7	1.1	0.5	321	1.4	<10	<1	3	2.0
506900	5387500	173	2170	2.5	90	1.3	220	3.2	0.9	0.4	217	0.9	<10	<1	4	2.6
506900	5387550	174	2030	2.3	90	1.3	40	0.6	0.7	0.3	246	1.1	<10	<1	3	2.0
506900	5387600	175	5100	5.8	90	1.3	100	1.4	0.5	0.2	105	0.5	<10	<1	10	6.6
506900	5387650	176	3550	4.0	90	1.3	540	7.8	10	4.9	387	1.7	<10	<1	7	4.6
506900	5387700	177	3590	4.1	80	1.1	1140	16.4	19.3	9.4	566	2.4	<10	<1	6	3.9
506900	5387750	178	3720	4.2	130	1.8	770	11.1	23.3	11.3	719	3.1	<10	<1	6	3.9
506900	5387800	179	2530	2.9	80	1.1	50	0.7	0.8	0.4	367	1.6	<10	<1	7	4.6
506900	5387850	180	1920	2.2	60	0.8	30	0.4	1.3	0.6	228	1.0	<10	<1	2	1.3
506900	5387900	181	660	0.8	80	1.1	960	13.8	30.8	15.0	845	3.7	<10	<1	2	1.3
506900	5387950	182	2150	2.5	90	1.3	80	1.1	0.5	0.2	204	0.9	<10	<1	3	2.0
506900	5388000	183	1380	1.6	90	1.3	80	1.1	10.1	4.9	233	1.0	<10	<1	2	1.3
506900	5388050	184	2850	3.3	90	1.3	880	12.6	41.8	20.3	1040	4.5	<10	<1	4	2.6

506800	5387100	160	2430	2.8	50	0.7	400	5.7	7.3	3.5	354	1.5	<10	<1	3	2.0
506800	5387150	159	3060	3.5	70	1.0	750	10.8	18.5	9.0	691	3.0	<10	<1	6	3.9
506800	5387200	158	2040	2.3	60	0.8	270	3.9	5.2	2.5	269	1.2	<10	<1	4	2.6
506800	5387250	157	3800	4.3	110	1.5	950	13.6	31.2	15.1	892	3.9	<10	<1	7	4.6
506800	5387300	156	2540	2.9	120	1.7	860	12.4	39.7	19.3	1090	4.7	<10	<1	5	3.3
506800	5387350	155	1930	2.2	60	0.8	200	2.9	9.4	4.6	328	1.4	<10	<1	6	3.9
506800	5387400	154	2440	2.8	110	1.5	790	11.4	32.8	15.8	919	4.0	<10	<1	5	3.3
506800	5387450	153	4920	5.6	50	0.7	880	12.6	13.1	6.4	626	2.7	<10	<1	16	10.5
506800	5387500	152	1940	2.2	80	1.1	320	4.6	6.1	3.0	312	1.3	<10	<1	2	1.3
506800	5387550	151	1510	1.7	60	0.8	380	5.5	4.3	2.1	347	1.5	<10	<1	3	2.0
506800	5387600	150	1800	2.1	110	1.5	10	0.1	0.5	0.2	264	1.1	<10	<1	5	3.3
506800	5387650	149	1990	2.3	80	1.1	230	3.3	2.2	1.1	263	1.1	<10	<1	4	2.6
506800	5387700	148	4650	5.3	220	3.1	90	1.3	0.7	0.3	92	0.4	<10	<1	7	4.6
506800	5387750	147	1920	2.2	90	1.3	120	1.7	7.6	3.7	466	2.0	<10	<1	3	2.0
506800	5387800	146	1570	1.8	80	1.1	30	0.4	.	0.5	277	1.2	<10	<1	2	1.3
506800	5387850	145	1620	1.8	80	1.1	10	0.1	2	1.0	257	1.1	<10	<1	3	2.0
506800	5387900	144	1920	2.2	80	1.1	50	0.7	2.1	1.0	281	1.2	<10	<1	3	2.0
506800	5387950	143	1690	1.9	110	1.5	70	1.0	11.2	5.4	347	1.5	<10	<1	3	2.0
506800	5388000	142	2100	2.4	90	1.3	310	4.5	2.4	1.2	291	1.3	<10	<1	5	3.3
506800	5388050	141	1870	2.1	60	0.8	60	0.9	1.2	0.6	276	1.2	<10	<1	4	2.6
506800	5388100	140	2200	2.5	70	1.0	130	1.9	6.7	3.3	351	1.5	<10	<1	3	2.0
506800	5388150	139	2330	2.7	80	1.1	60	0.9	3.8	1.8	435	1.9	<10	<1	3	2.0
506800	5388200	137	1960	2.2	120	1.7	370	5.3	41	19.9	1140	4.9	<10	<1	4	2.6
506800	5388250	136A	3630	4.1	70	1.0	990	14.2	33	16.0	855	3.7	<10	<1	9	5.9
506800	5388300	135	2110	2.4	100	1.4	50	0.7	2.2	1.1	272	1.2	<10	<1	3	2.0
506800	5388350	134	1800	2.1	60	0.8	60	0.9	4.1	2.0	304	1.3	<10	<1	3	2.0
506800	5388400	133	1370	1.6	50	0.7	30	0.4	2.7	1.3	207	0.9	<10	<1	2	1.3
506800	5388450	132	1690	1.9	80	1.1	70	1.0	4.6	2.2	247	1.1	<10	<1	2	1.0
506800	5388500	131	1850	2.1	120	1.7	590	8.5	45.9	22.3	1310	5.7	<10	<1	5	3.3
506800	5388550	130	1620	1.8	70	1.0	120	1.7	6.8	3.3	264	1.1	<10	<1	3	2.0
506800	5388600	129	2650	3.0	80	1.1	290	4.2	38.1	18.5	871	3.8	<10	<1	2	1.3
506800	5388675	128	1330	1.5	90	1.3	1150	16.5	27.9	13.5	931	4.0	<10	<1	5	3.3
506800	5388750	127	3200	3.7	120	1.7	310	4.5	8.6	4.2	514	2.2	<10	<1	6	3.9
506800	5388825	126	3090	3.5	90	1.3	970	13.9	20.9	10.1	747	3.2	<10	<1	9	5.9
506800	5388900	125	1760	2.0	100	1.4	110	1.6	2.9	1.4	297	1.3	<10	<1	3	2.0
506800	5388975	124	2040	2.3	100	1.4	240	3.4	15.6	7.6	524	2.3	<10	<1	3	2.0
506800	5389050	123	3310	3.8	120	1.7	400	5.7	33.4	16.2	1040	4.5	<10	<1	3	2.0
506800	5389130	122	3880	4.4	140	2.0	200	2.9	32.5	15.8	1110	4.8	<10	<1	4	2.6
506800	5389200	121	2380	2.7	120	1.7	640	9.2	26.2	12.7	748	3.2	<10	<1	5	3.3
506800	5389277	120	2920	3.3	260	3.6	760	10.9	30.9	15.0	876	3.8	<10	<1	5	3.3
506700	5386175	1482	6190	7.1	186	2.5	3660	52.6	12.6	8.1	644	2.8	<10	<1	27	13.8
506700	5386250	1483	1610	1.8	90	1.3	20	0.3	0.6	0.3	220	1.0	<10	<1	4	2.6
506700	5386525	1484	3270	3.7	90	1.3	1230	17.7	4.6	2.2	381	1.6	<10	<1	11	7.2
506700	5386400	1485	3260	3.7	130	1.8	1290	18.5	9.8	4.8	473	2.0	<10	<1	9	5.9
506700	5386550	1486	1790	2.0	90	1.3	30	0.4	0.3	0.1	227	1.0	<10	<1	5	3.3
506700	5386625	1487	4750	5.4	180	2.5	1320	19.0	13	6.3	748	3.2	<10	<1	13	8.6
506700	5386700	1488	1710	2.0	80	1.1	30	0.4	0.5	0.2	208	0.9	<10	<1	4	2.6
506700	5386775	1489	2060	2.3	90	1.3	230	3.3	1.1	0.5	279	1.2	<10	<1	6	3.9
506700	5386825	1490	2430	2.8	120	1.7	240	3.4	9.9	4.8	381	1.6	<10	<1	4	2.6
506700	5387000	89	830	0.9	150	2.1	450	6.5	26.2	12.7	612	2.6	<10	<1	2	1.3
506700	5387050	90	1050	1.2	180	2.5	190	2.7	31	15.0	594	2.6	<10	<1	2	1.3
506700	5387100	91	1060	1.2	120	1.7	430	6.2	25.3	12.3	548	2.4	<10	<1	1	0.7
506700	5387150	92	1400	1.6	70	1.0	40	0.6	1.1	0.5	168	0.7	<10	<1	2	1.3
506700	5387200	93	900	1.0	130	1.8	710	10.2	24.3	11.8	723	3.1	<10	<1	2	1.3
506700	5387250	94	1320	1.5	120	1.7	350	5.0	20.2	9.8	429	1.9	<10	<1	2	1.3
506700	5387300	95	1130	1.3	90	1.3	70	1.0	8.5	4.1	155	0.7	<10	<1	1	0.7
506700	5387350	96	1360	1.6	130	1.8	400	5.7	25.9	12.6	666	2.9	<10	<1	2	1.3
506700	5387400	97	1780	2.0	120	1.7	420	6.0	23.4	11.4	595	2.6	<10	<1	1	0.7
506700	5387450	98	1220	1.4	110	1.5	550	7.9	18	8.7	564	2.4	<10	<1	2	1.3
506700	5387500	99	1430	1.6	100	1.4	70	1.0	5.1	2.5	205	0.9	<10	<1	1	0.7
506700	5387550	100	1730	2.0	100	1.4	110	1.6	13.1	6.4	309	1.3	<10	<1	2	1.3
506700	5387600	101	730	0.8	100	1.4	750	10.8	55.5	26.9	1140	4.9	<10	<1	0.5	0.3
506700	5387650	102	770	0.9	90	1.3	260	3.7	6.2	3.0	230	1.0	<10	<1	1	0.7
506700	5387700	103	1470	1.7	160	2.2	60	0.9	0.7	0.3	169	0.7	<10	<1	2	1.3
506700	5387750	104	1930	2.2	130	1.8	430	6.2	10.8	5.2	340	1.5	<10	<1	2	1.3
506700	5387800	105	1090	1.2	290	4.1	400	5.7	35.3	17.1	842	3.6	<10	<1	3	2.0
506700	5387850	106	1250	1.4	100	1.4	50	0.7	8.5	4.1	223	1.0	<10	<1	1	0.7
506700	5387900	107	760	0.9	120	1.7	30	0.4	1.9	0.9	160	0.7	<10	<1	0.5	0.3
506700	5387950	108	1090	1.2	150	2.1	90	1.3	5.1	2.5	275	1.2	<10	<1	0.5	0.3
506700	5388000	109	920	1.0	130	1.8	160	2.3	10.3	5.0	352	1.5	<10	<1	2	1.3
506700	5388050	110	1110	1.3	160	2.2	80	1.1	3.6	1.7	360	1.6	<10	<1	2	1.3
506700	5388100	1177	5740	6.5	280	3.9	1970	28.3	34.5	16.7	1430	6.2	<10	<1	14	9.2
506700	5388150	1178	3330	3.8	250	3.5	400	5.7	36	17.5	1260	5.4	<10	<1	4	2.6
506700	5388200	1179	3020	3.4	160	2.2	200	2.9	17.9	8.7	592	2.6	<10	<1	4	2.6
506700	5388250	1180	2160	2.5	190	2.7	190	2.7	7.2	3.5	432	1.9	<10	<1	4	2.6
506700	5388300	1181	3480	4.0	260	3.6	450	6.5	14.9	7.2	577	2.5	<10	<1	4	2.6
506700	5388350	1182	1990	2.3	200	2.8	1080	15.5	46	22.3	1000	4.3	<10	<1	5	3.3
506700	5388400	1183	2890	3.3	130	1.8	60	0.9	2	1.0	489	2.0	<10	<1	5	3.3
506700	5388450	1184	3100	3.5	170	2.4	200	2.9	9.6	4.7	648	2.8	<10	<1	5	3.3
506700	5388500	1185	6410	7.3	260	3.6	470	6.8	41.3	20.0	1780	7.7	<10	<1	6	3.9
506700	5388550	1186	2500	2.9	180	2.5	20	0.3	1.2	0.6	345	1.5	<10	<1	4	2.6
506700	5388600	1187	1140	1.3	200	2.8	750	10.8	39.4	19.1	1310	5.7	<10	<1	4	2.6
506700	5388675	1188	3990	4.6	310	4.3	490	7.0	34.9	16.9	1420	6.1	<10	<1	6	3.9
506700	53887															

506600	5387400	64	1070	1.2	240	3.4	310	4.5	30.4	14.8	705	3.0 <10	<1	2	1.3
506600	5387450	65	1710	2.0	90	1.3	320	4.6	24.7	72.0	353	1.5 <10	<1	1	0.7
506600	5387500	66	1150	1.3	90	1.3	40	0.6	1.6	0.8	140	0.6 <10	<1	2	1.3
506600	5387550	67	1240	1.4	160	2.2	440	6.3	23.8	71.6	666	2.9 <10	<1	2	1.3
506600	5387600	68	170	0.2	70	1.0	60	0.9	5	2.4	167	0.7 <10	<1	0.5	0.3
506600	5387650	69	2230	2.5	120	1.7	410	5.9	15.1	7.3	357	1.5 <10	<1	3	2.0
506600	5387700	70	2950	3.4	140	2.0	830	11.9	17.5	5.1	481	2.1 <10	<1	6	3.9
506600	5387750	71	1130	1.3	90	1.3	580	6.3	21.3	10.3	492	2.1 <10	<1	2	1.3
506600	5387800	72	950	1.1	80	0.8	100	1.4	14.5	7.0	241	1.0 <10	<1	1	0.7
506600	5387850	73	930	1.1	100	1.4	50	0.7	1.7	0.8	165	0.7 <10	<1	4	2.6
506600	5387900	74	1470	1.7	130	1.8	20	0.3	0.5	0.2	200	0.9 <10	<1	3	2.0
506600	5387950	75	690	0.8	180	2.5	620	8.9	27.2	13.2	782	3.4 <10	<1	4	2.6
506600	5388000	76	1540	1.8	140	2.0	280	4.0	17.8	8.6	461	2.0 <10	<1	2	1.3
506600	5388050	77	1030	1.2	100	1.4	50	0.7	1.8	0.9	182	0.8 <10	<1	1	0.7
506600	5388100	78	1540	1.8	140	2.0	400	5.7	25.2	12.2	589	2.5 <10	<1	4	2.6
506600	5388150	79	1090	1.2	90	1.3	50	0.7	1	0.5	169	0.7 <10	<1	2	1.3
506600	5388200	80	890	1.0	80	1.1	50	0.7	10	4.9	145	0.6 <10	<1	2	1.3
506600	5388250	81	1830	2.1	140	2.0	730	10.5	20.6	10.0	541	2.3 <10	<1	4	2.6
506600	5388300	82	970	1.1	90	1.3	30	0.4	3.1	1.5	200	0.9 <10	<1	3	2.0
506600	5388350	83	1070	1.2	70	1.0	60	0.9	12.1	5.9	247	1.1 <10	<1	1	0.7
506600	5388400	84	570	0.7	200	2.8	290	4.2	27	13.1	709	3.1 <10	<1	2	1.3
506600	5388450	85	1500	1.7	120	1.7	550	7.9	20.8	10.1	476	2.1 <10	<1	3	2.0
506600	5388500	86	1520	1.7	120	1.7	100	1.4	3.8	1.8	223	1.0 <10	<1	2	1.3
506600	5388550	87	1230	1.4	130	1.5	60	0.9	3.1	1.5	250	1.1 <10	<1	2	1.3
506600	5388600	88	1780	2.0	120	1.7	140	2.0	27.3	13.3	654	2.8 <10	<1	2	1.3
506600	5388650	55	1010	1.2	90	1.3	240	3.4	10.6	5.1	347	1.5 <10	<1	0.5	0.3
506600	5388720	54	1540	1.8	110	1.5	110	1.6	17.1	8.3	533	2.3 <10	<1	1	0.7
506600	5388796	53	2720	3.1	170	2.4	190	2.7	30.2	14.7	866	3.7 <10	<1	2	1.3
506600	5388867	52	1290	1.5	80	1.1	90	1.3	7.6	3.7	247	1.1 <10	<1	1	0.7
506600	5388948	51	1810	2.1	120	1.7	250	3.6	24.4	11.8	668	2.9 <10	<1	2	1.3
506600	5389023	50	470	0.5	80	1.1	430	6.2	18	8.7	477	2.1 <10	<1	1	0.7
506600	5389100	49	1800	2.1	150	2.1	180	2.6	23.6	11.5	714	3.1 <10	<1	1	0.7
506600	5389168	48	1810	2.1	80	1.1	560	8.0	13.5	6.6	474	2.0 <10	<1	4	2.6
506600	5389245	47	680	0.8	160	2.2	120	1.7	12.5	6.1	370	1.6 <10	<1	1	0.7
506600	5389323	46	1170	1.3	190	2.7	380	5.5	22.7	11.0	640	2.8 <10	<1	3	2.0
506600	5389392	45	1090	1.2	140	2.0	420	6.0	13.2	6.4	476	2.1 <10	<1	4	2.6
506600	5386175	1502	5410	6.2	250	3.5	2190	31.5	11.6	5.6	858	3.7 <10	<1	23	15.1
506600	5386250	1503	1650	1.9	90	1.3	110	1.6	1.3	0.6	256	1.1 <10	<1	3	2.0
506600	5386325	1504	4950	5.6	160	2.2	2390	34.3	16.5	8.0	855	3.7 <10	<1	18	11.8
506600	5386400	1505	2150	2.5	120	1.7	260	3.7	4.1	2.0	355	1.5 <10	<1	5	3.3
506600	5386475	1506	1840	2.1	120	1.7	860	12.4	17.4	8.4	270	1.2 <10	<1	4	2.6
506600	5386550	1507	5330	6.1	260	3.6	1770	25.4	27.5	13.3	950	4.1 <10	<1	10	6.6
506600	5386625	1508	1550	1.8	180	2.2	820	11.8	40.2	19.5	916	4.0 <10	<1	5	3.3
506600	5386700	1509	3450	3.9	190	2.7	2070	29.7	23.8	11.6	1180	5.1 <10	<1	13	8.6
506600	5386775	1510	3880	4.4	200	2.8	1220	17.5	39.2	19.0	661	2.9 <10	<1	10	6.6
506600	5386850	1511	2710	3.1	100	1.4	710	10.2	4	1.9	333	1.4 <10	<1	11	7.2
506600	5386925	1512	5150	5.9	230	3.2	1600	23.0	32.3	15.7	1210	5.2 <10	<1	17	11.2
506600	5387000	1	830	0.9	150	2.1	450	6.5	33.6	16.3	831	2.7 <10	<1	1	0.7
506600	5387050	2	2120	2.4	150	2.1	640	9.2	28.7	13.9	551	2.4 <10	<1	3	2.0
506600	5387100	3	4660	5.3	190	2.7	1170	16.8	34.1	16.6	967	4.2 <10	<1	7	4.6
506600	5387150	4	2710	3.1	100	1.4	660	9.5	25	12.1	679	2.9 <10	<1	5	3.3
506600	5387200	5	2510	2.9	140	2.0	710	10.2	24.7	12.0	647	2.8 <10	<1	4	2.6
506600	5387250	6	1190	1.4	110	1.5	600	8.6	18.8	9.1	424	1.8 <10	<1	2	1.3
506600	5387300	7	1480	1.7	220	3.1	440	6.3	46.3	22.5	584	2.5 <10	<1	2	1.3
506600	5387350	8	900	1.0	110	1.5	270	3.9	4.2	2.0	112	0.5 <10	<1	1	0.7
506600	5387400	9	1200	1.4	110	1.5	50	0.7	1.6	0.8	151	0.7 <10	<1	2	1.3
506600	5387450	10	1220	1.4	90	1.3	50	0.7	1.9	0.9	151	0.7 <10	<1	2	1.3
506600	5387500	11	1090	1.2	120	1.7	790	11.4	23.2	11.3	580	2.5 <10	<1	3	2.0
506600	5387550	12	3270	3.7	170	2.4	450	6.5	7.9	3.8	290	1.3 <10	<1	6	3.9
506600	5387600	13	2080	2.4	220	3.1	50	0.7	4.2	2.0	255	1.1 <10	<1	4	2.6
506600	5387650	14	3190	3.6	90	1.3	830	11.9	19.1	9.3	637	2.8 <10	<1	8	5.3
506600	5387700	15	1160	1.3	190	2.7	550	7.9	27	13.1	699	3.0 <10	<1	3	2.0
506600	5387750	16	1470	1.7	80	1.1	380	5.5	10.5	5.1	266	1.1 <10	<1	1	0.7
506600	5387800	17	1630	1.9	100	1.4	100	1.4	22.4	10.9	330	1.4 <10	<1	0.5	0.3
506600	5387850	18	1720	2.0	80	1.1	100	1.4	13.3	6.5	306	1.3 <10	<1	2	1.3
506600	5387900	19	1020	1.2	90	1.3	450	6.5	20	9.7	600	2.6 <10	<1	1	0.7
506600	5387950	20	2170	2.5	190	2.7	190	2.7	33.3	16.2	836	3.6 <10	<1	3	2.0
506600	5388000	21	1000	1.1	60	0.8	60	0.9	11.1	6.4	140	0.6 <10	<1	1	0.7
506600	5388050	22	2170	2.5	200	2.8	410	5.9	29.8	14.5	778	3.4 <10	<1	4	2.6
506600	5388100	23	1100	1.3	90	1.3	260	3.7	4.9	2.4	190	0.8 <10	<1	2	1.3
506600	5388150	24	1420	1.6	100	1.4	320	4.6	16	7.8	403	1.7 <10	<1	2	1.3
506600	5388200	25	640	0.7	170	2.4	450	6.5	34.8	16.9	973	4.2 <10	<1	4	2.6
506600	5388250	26	1170	1.3	70	1.0	220	3.2	16.5	8.0	338	1.5 <10	<1	0.5	0.3
506600	5388300	27	1090	1.2	80	1.1	60	0.9	1.1	0.5	163	0.7 <10	<1	1	0.7
506600	5388350	28	180	0.2	60	0.8	190	2.7	16.7	8.1	332	1.4 <10	<1	0.5	0.3
506600	5388400	29	1240	1.4	100	1.4	170	2.4	22.2	10.8	548	2.4 <10	<1	1	0.7
506600	5388483	30	2300	2.6	120	1.7	410	5.9	26	12.6	688	3.0 <10	<1	3	2.0
506600	5388558	31	1170	1.3	100	1.4	120	1.7	15.2	7.4	351	1.5 <10	<1	1	0.7
506600	5388633	32	1270	1.4	80	1.1	450	6.5	13.6	6.6	359	1.6 <10	<1	2	1.3
506600	5388717	33	630	0.7	90	1.3	270	3.9	19.3	9.4	453	2.0 <10	<1	0.5	0.3
506600	5388778	34	1050	1.2	150	2.1	240	3.4	26.7	13.0	604	3.5 <10	<1	2	1.3
506600	5388862	35	1670	1.9	90	1.3	130	1.9	10.1	4.9	316	1.4 <10	<1	2	1.3
506600	5388933	36	1100	1.3	80	1.1	90	1.3	1.1	0.5	171	0.7 <10	<1	1	0.7
506600	5389011	37	1160	1.3	200	2.8	710	10.2	17.3	8.4	979	4.2 <10	<1	3	2.0
506600	5389081	38	2250	2.6	90	1.3	230	3.3	24.7	12.0	622	2.7 <10	<1	0.5	0.3
506600	5389155	39	1910	2.2	80	1.1	180	2.6	22.1	10.7	605	2.6			

506400	5387500	330	1570	1.8	130	1.8	110	1.6	35.6	17.3	513	2.2 <10	<1	2	1.3
506400	5387550	331	1160	1.3	110	1.5	110	1.6	3	1.5	139	0.6 <10	<1	3	1.3
506400	5387600	332	3150	3.8	350	4.9	80	0.3	0.1	45	0.2 <10	<1	6	3.0	
506400	5387650	333	1480	1.7	140	2.0	90	1.3	15.9	7.7	178	0.8 <10	<1	2	1.3
506400	5387700	334	1590	1.8	110	1.5	80	1.1	26.9	13.1	208	0.9 <10	<1	2	1.3
506400	5387750	335	1030	1.2	110	1.5	70	1.0	3.9	1.9	134	0.6 <10	<1	2	1.3
506400	5387800	336	830	0.9	80	1.1	100	1.4	10	4.9	302	1.3 <10	<1	0.5	0.3
506400	5387850	337	1680	1.9	140	2.0	80	1.1	1.8	0.9	187	0.8 <10	<1	3	2.0
506400	5387900	338	2210	2.5	120	1.7	240	3.4	12.2	5.9	275	1.2 <10	<1	3	2.0
506400	5387950	339	990	1.1	110	1.5	110	1.6	24.6	11.9	373	1.6 <10	<1	1	0.7
506400	5388000	340	1140	1.3	100	1.4	130	1.9	3.5	1.7	154	0.7 <10	<1	3	2.0
506400	5388050	341	1550	1.8	80	0.8	500	7.2	14.2	6.9	351	1.5 <10	<1	4	2.6
506400	5388100	342	580	0.7	100	1.4	100	1.4	30.7	14.9	501	2.2 <10	<1	0.5	0.3
506400	5388150	343	1170	1.3	80	1.1	90	1.3	25	12.1	331	1.4 <10	<1	1	0.7
506400	5388200	344	330	0.4	50	0.7	50	0.7	6.8	3.3	164	0.7 <10	<1	0.5	0.3
506400	5388250	345	1800	2.1	80	1.1	70	1.0	1.5	0.7	239	1.0 <10	<1	3	2.0
506400	5388300	346	1390	1.6	80	1.1	60	0.9	1.5	0.7	200	0.9 <10	<1	2	1.3
506400	5388350	347	1030	1.2	100	1.4	430	6.2	20.3	9.9	476	2.1 <10	<1	2	1.3
506400	5388400	348	340	0.4	120	1.7	260	3.7	50.6	24.6	999	4.3 <10	<1	0.5	0.3
506400	5388450	349	620	0.7	100	1.4	210	3.0	32.8	15.9	763	3.3 <10	<1	2	1.3
506400	5388500	350	1450	1.7	100	1.4	370	3.9	22.4	10.9	472	2.0 <10	<1	2	1.3
506400	5388550	351	1780	2.0	80	1.1	120	1.7	19.4	9.4	424	1.8 <10	<1	2	1.3
506400	5388600	352	800	0.9	90	1.3	70	1.0	4	1.9	170	0.7 <10	<1	1	0.7
506400	5388686	353	1290	1.5	70	1.0	120	1.7	10	4.9	253	1.1 <10	<1	1	0.7
506400	5388757	354	890	1.0	80	1.1	80	1.1	10.7	5.2	240	1.0 <10	<1	0.5	0.3
506400	5388832	355	170	0.2	150	2	290	4.2	31.1	15.1	581	2.5 <10	<1	1	0.7
506400	5388902	356	480	0.5	40	0.6	40	0.6	0.5	0.2	144	0.6 <10	<1	2	1.3
506400	5388977	357	330	0.4	190	2.7	150	2.2	29.7	14.4	641	2.8 <10	<1	1	0.7
506400	5389056	358	1170	1.3	60	0.8	310	4.5	1.5	0.7	208	0.9 <10	<1	1	0.7
506400	5389129	359	760	0.9	40	0.6	50	0.7	0.5	0.2	171	0.7 <10	<1	0.5	0.3
506400	5389199	360	1070	1.2	100	1.4	170	2.4	8.6	4.2	295	1.3 <10	<1	1	0.7
506400	5389280	361	1220	1.4	180	2.5	180	2.6	37.2	18.1	814	3.5 <10	<1	1	0.7
506400	5389355	362	760	0.9	120	1.7	550	7.9	17.3	8.4	563	2.4 <10	<1	4	2.6
506400	5389429	363	310	0.4	160	2.2	160	2.3	27.8	13.5	654	2.8 <10	<1	1	0.7
506300	5386175	1524	5270	6.0	320	4.5	2170	31.2	21.1	10.2	848	3.7 <10	<1	17	11.2
506300	5386250	1525	5980	6.8	180	2.5	1660	23.9	20.5	10.0	970	4.2 <10	<1	15	9.9
506300	5386325	1526	3630	4.1	310	4.3	1140	16.4	28.9	14.0	670	2.9 <10	<1	9	5.9
506300	5386400	1527	2560	2.9	160	2.2	120	1.7	20.8	10.1	318	1.4 <10	<1	3	2.0
506300	5386475	1528	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<1	0.0	0.0
506300	5386550	1529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<1	0.0	0.0
506300	5386525	1530	2610	3.0	230	3.2	290	4.2	15.8	7.7	687	3.0 <10	<1	5	3.3
506300	5386700	1531	1490	1.7	140	2.0	80	1.1	8.2	4.0	238	1.0 <10	<1	3	2.0
506300	5386775	1532	3910	4.5	320	4.5	60	0.9	8.6	4.2	220	1.0 <10	<1	9	5.9
506300	5386850	1533	3230	3.7	460	6.5	310	4.5	67.3	32.7	665	2.9 <10	<1	4	2.6
506300	5386925	1534	2050	2.3	110	1.5	120	1.7	7.1	3.4	246	1.1 <10	<1	2	1.3
506300	5387000	1194	6730	7.7	500	7.0	120	1.7	0.4	0.2	200	0.9 <10	<1	14	9.2
506300	5387050	1195	3530	4.0	300	4.2	150	2.2	29.1	14.1	427	1.8 <10	<1	5	3.3
506300	5387100	1196	3310	3.8	250	3.5	50	0.7	0.4	0.2	377	1.6 <10	<1	10	6.6
506300	5387150	1197	3490	4.0	370	5.2	40	0.6	2.5	1.2	364	1.6 <10	<1	9	5.9
506300	5387200	1198	4600	5.2	410	5.8	410	5.9	16.8	8.2	586	2.5 <10	<1	10	6.6
506300	5387250	1199	5490	6.3	390	5.5	40	0.6	0.4	0.2	122	0.5 <10	<1	9	5.9
506300	5387300	1200	5920	6.8	430	6.0	120	1.7	0.3	0.1	107	0.5 <10	<1	15	9.9
506300	5387350	1201	5020	5.7	280	3.9	260	3.7	22.3	10.8	623	2.7 <10	<1	10	6.6
506300	5387400	1202	6260	7.1	270	3.8	1370	19.7	36.3	17.6	1380	6.0 <10	<1	14	9.2
506300	5387450	1203	5070	5.8	190	2.7	940	13.5	37.7	18.3	1570	6.8 <10	<1	12	7.9
506300	5387500	1204	4330	4.9	240	3.4	70	1.0	0.6	0.3	137	0.6 <10	<1	11	7.2
506300	5387550	1205	4420	5.0	190	2.7	690	9.9	20.4	9.9	786	3.4 <10	<1	12	7.9
506300	5387600	395	1620	1.8	140	2.0	230	3.3	5.6	2.7	229	1.0 <10	<1	7	4.6
506300	5387650	394	710	0.8	130	1.8	240	3.4	4.3	20.9	369	1.6 <10	<1	7	4.6
506300	5387700	393	110	0.1	50	0.7	250	3.6	35	17.0	485	2.1 <10	<1	2	1.3
506300	5387750	392	140	0.2	120	1.7	190	2.7	25.6	12.4	369	1.6 <10	<1	0.5	0.3
506300	5387800	391	80	0.1	140	2.0	240	3.4	34.3	16.7	493	2.1 <10	<1	0.5	0.3
506300	5387850	390	30	0.0	60	0.8	200	2.9	29.3	14.2	384	1.7 <10	<1	0.5	0.3
506300	5387900	389	820	0.9	80	1.1	80	1.1	32.3	15.7	192	0.8 <10	<1	2	1.3
506300	5387950	388	1070	1.2	70	1.0	90	1.3	2.1	1.0	215	0.9 <10	<1	1	0.7
506300	5388000	387	870	1.0	90	1.3	60	0.9	5.5	2.7	139	0.6 <10	<1	3	2.0
506300	5388050	386	70	0.1	60	0.8	530	7.6	27	13.1	527	2.3 <10	<1	3	2.0
506300	5388100	385	1390	1.6	80	1.1	130	1.9	16.5	8.0	357	1.5 <10	<1	6	3.9
506300	5388150	384	1510	1.7	80	1.1	190	2.7	8.6	4.2	347	1.5 <10	<1	13	8.6
506300	5388200	383	40	0.0	60	0.8	260	3.7	30.7	14.9	563	2.4 <10	<1	2	1.3
506300	5388250	382	40	0.0	70	1.0	520	7.5	29.7	14.4	457	2.0 <10	<1	0.5	0.3
506300	5388300	381	40	0.0	50	0.7	160	2.3	24	11.7	380	1.6 <10	<1	0.5	0.3
506300	5388350	380	210	0.2	160	2.2	2170	31.2	26.9	13.1	475	2.1 <10	<1	6	3.9
506300	5388400	379	720	0.8	80	0.8	50	0.7	0.9	0.4	177	0.8 <10	<1	1	0.7
506300	5388450	378	170	0.2	100	1.4	570	8.2	26.4	12.8	550	2.4 <10	<1	1	0.7
506300	5388500	377	380	0.4	80	1.1	150	2.2	32.7	15.9	475	2.1 <10	<1	0.5	0.3
506300	5388600	376	50	0.1	70	1.0	340	4.9	30.6	14.9	547	2.4 <10	<1	0.5	0.3
506300	5388676	374	280	0.3	80	1.1	110	1.6	12.2	5.9	295	1.3 <10	<1	0.5	0.3
506300	5388758	373	70	0.1	70	1.0	140	2.0	38.6	18.7	746	3.2 <10	<1	0.5	0.3
506300	5388826	372	190	0.2	100	1.4	460	6.6	29.4	14.3	693	3.0 <10	<1	1	0.7
506300	5388905	371	80	0.1	50	0.7	330	4.7	30	14.6	514	2.2 <10	<1	1	0.7
506300	5388976	370	520	0.6	90	1.3	90	1.3	8.4	4.1	242	1.0 <10	<1	1	0.7
506300	5389051	369	980	1.1	110	1.5	120	1.7	6.8	3.3	354	1.5 <10	<1	3	2.0
506300	5389125	368	860	1.0	70	1.0	180	2.6	9.5	4.6	344	1.5 <10	<1	5	3.3
506300	5389196	367	140	0.2	60	0.8	460	6.6	40.9	19.9	842	3.6 <10	<1	0.5	0.3
506300	5389277	366	170	0.2	80	1.1	320	4							







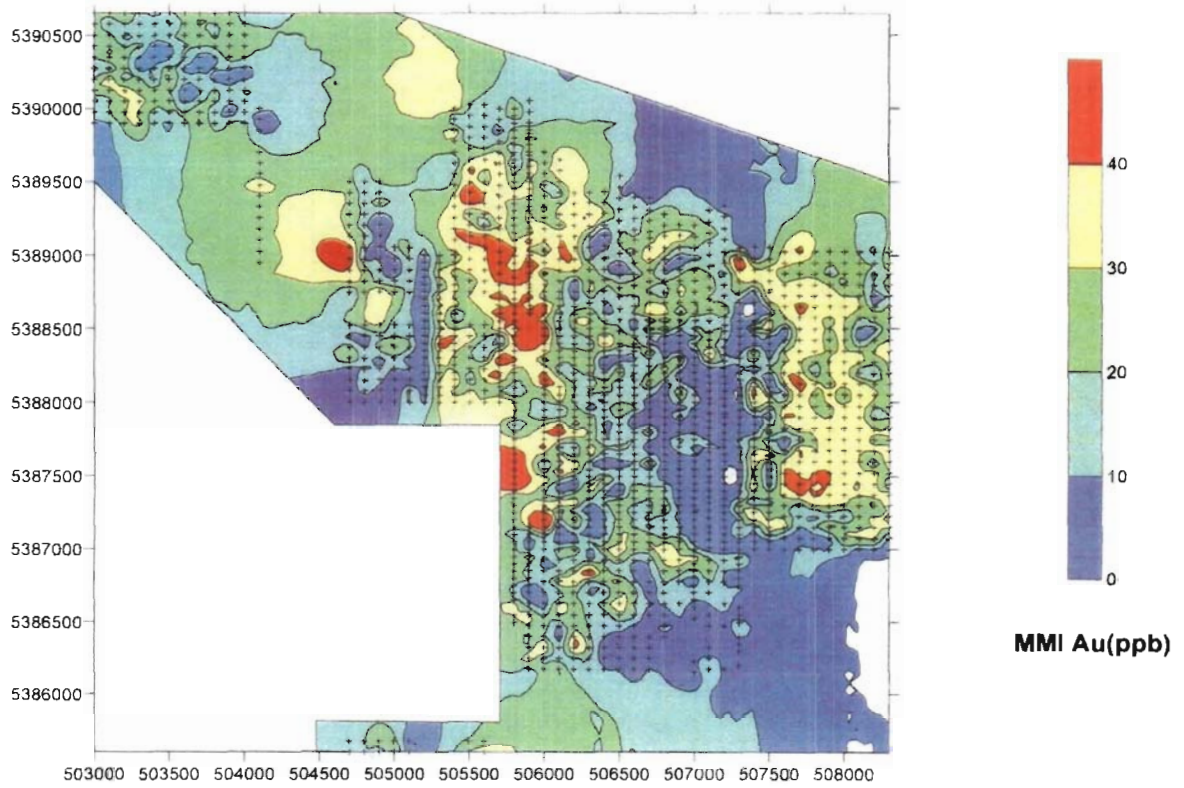




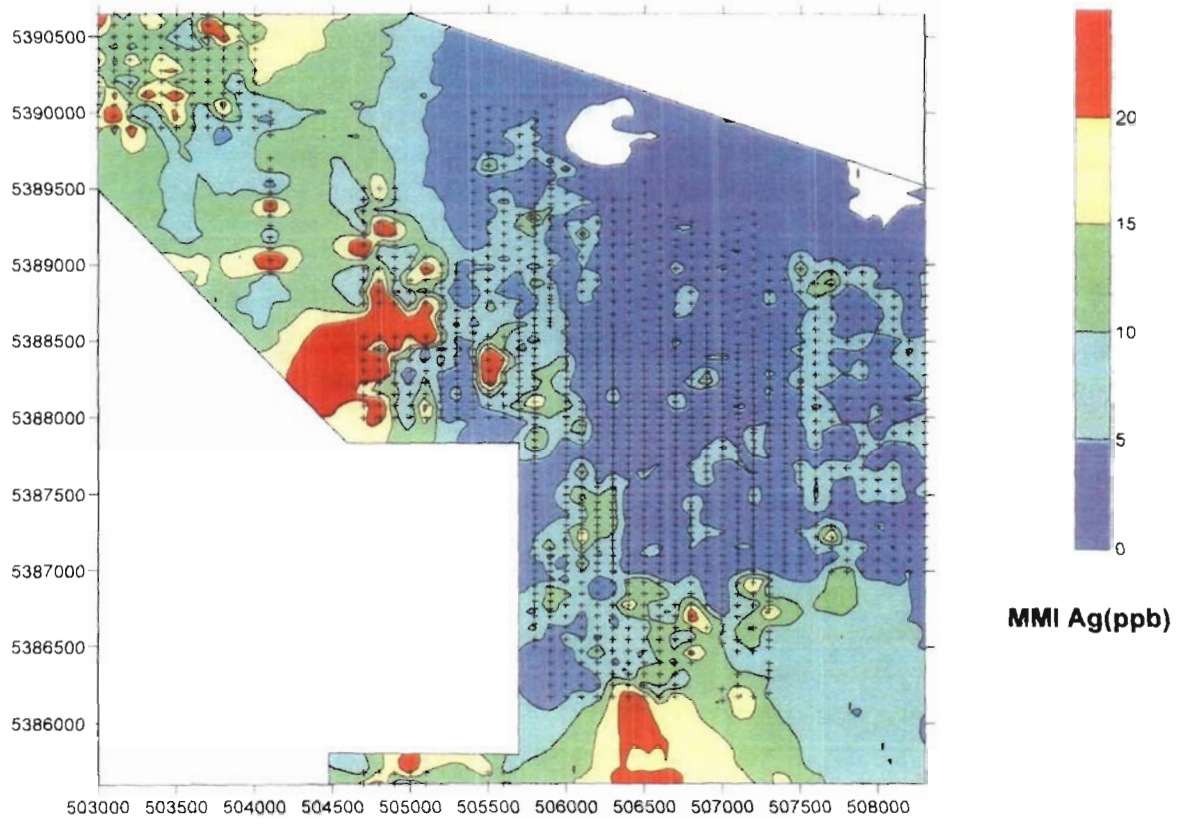




# Northern Gold Frederickhouse Lake

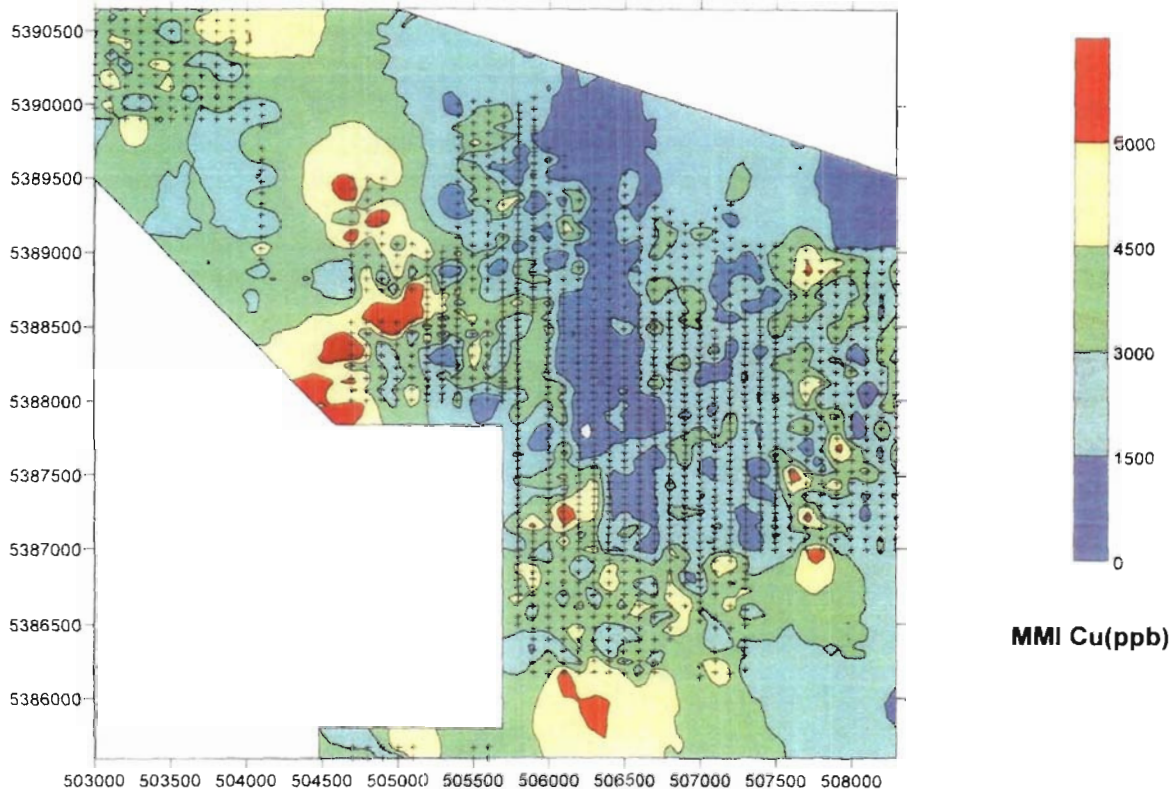


Northern Gold  
Frederick House Lake Prospect

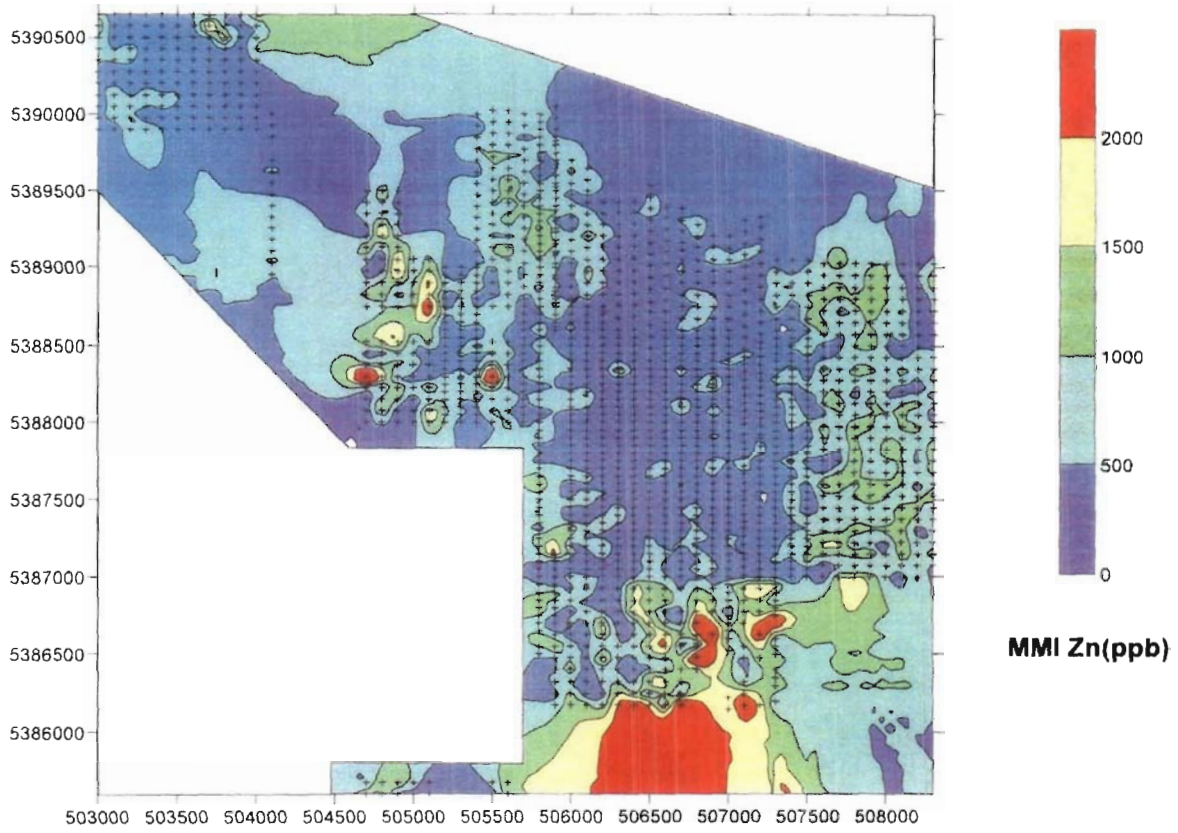


**Northern Gold  
Frederick House Lake Prospect**

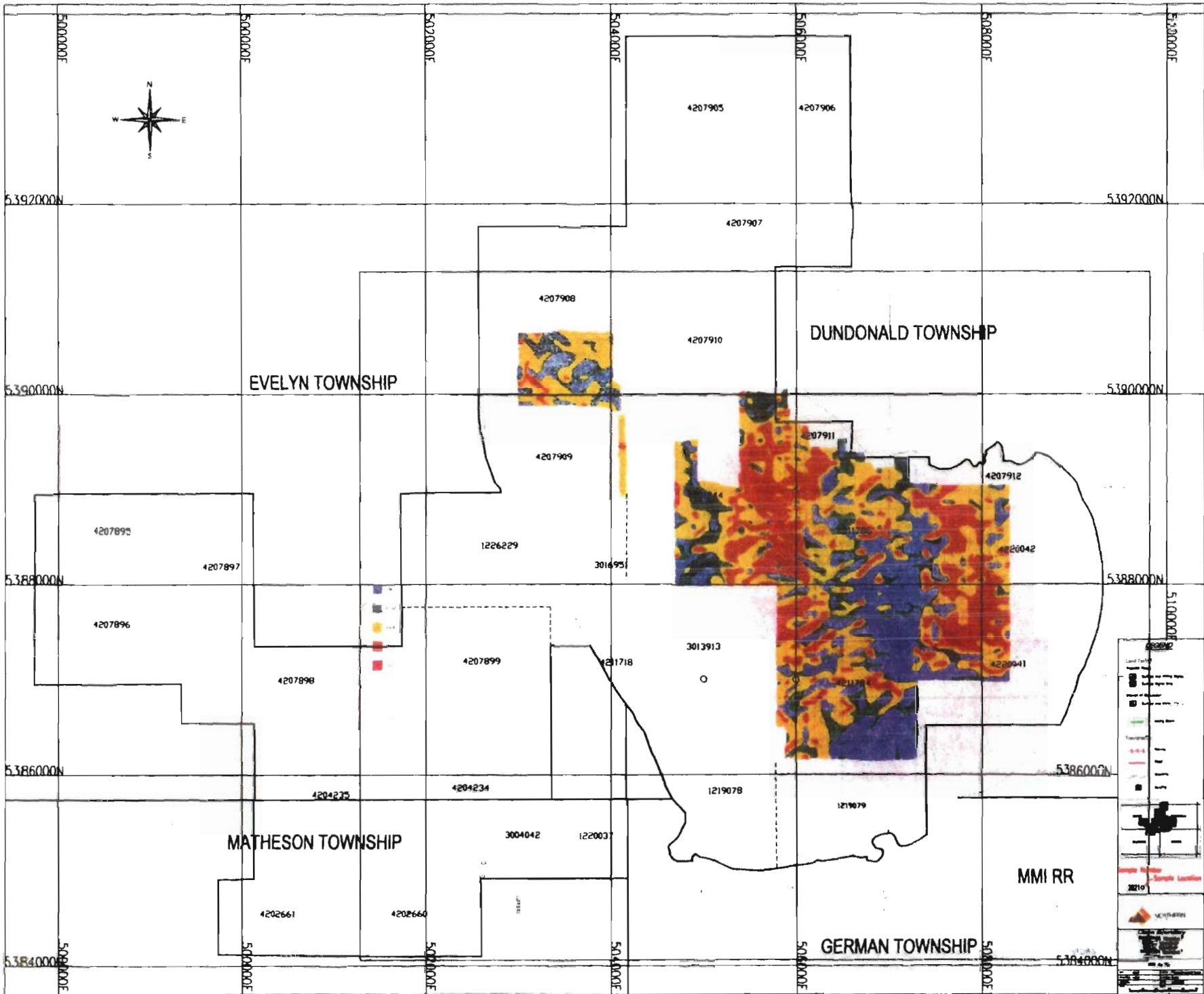


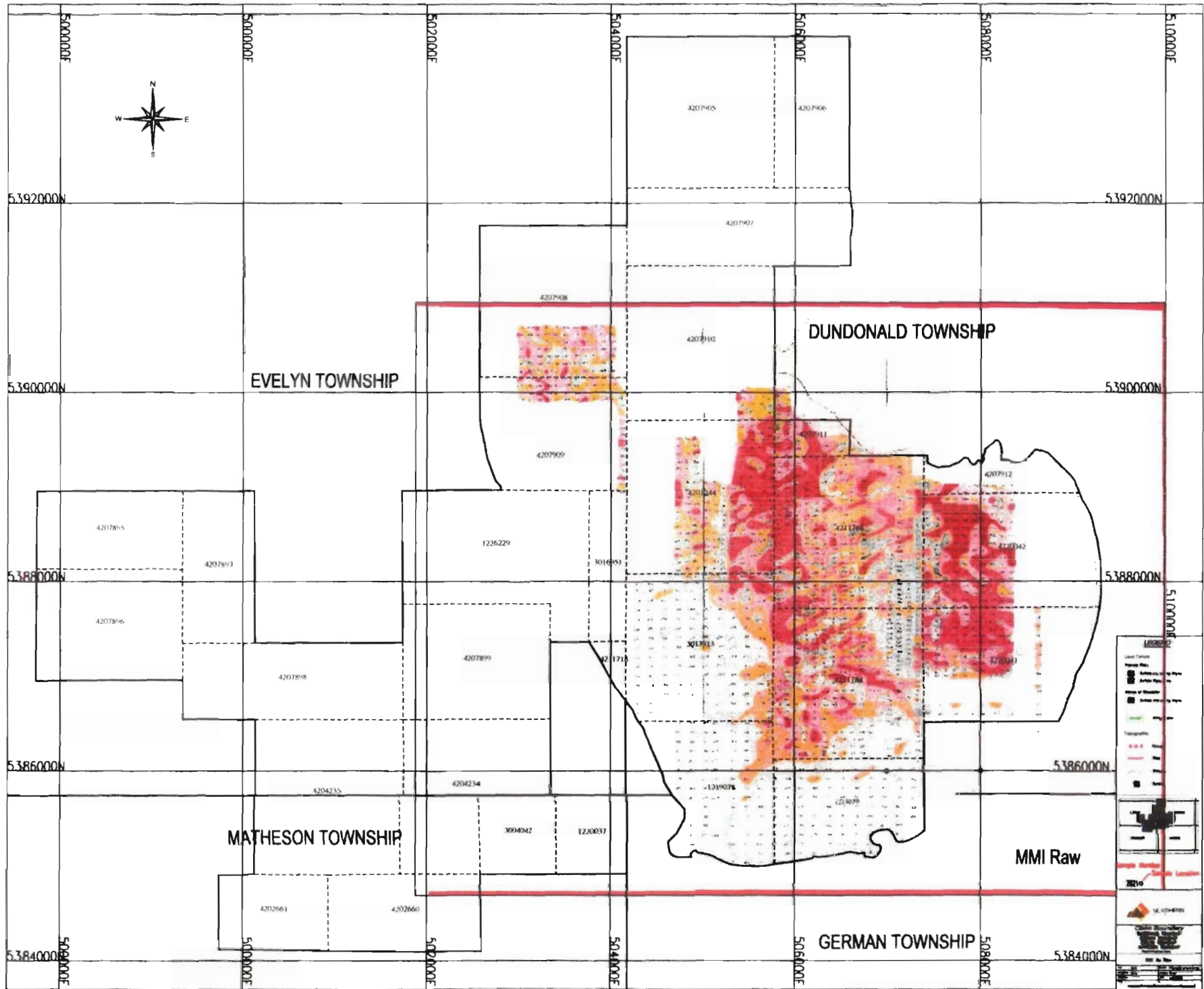


**Northern Gold  
Frederick House Lake Prospect**



**Northern Gold  
Frederick House Lake Prospect**







## Certificate of Analysis

Work Order: 093730

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Jul 16, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples : 110  
Date Submitted : Jun 25, 2007  
Report Comprises : Pages 1 to 4  
(Inclusive of Cover Sheet)

### Distribution of unused material:

110 Soils

Certified By : \_\_\_\_\_

Operations Manager

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 [www.sgs.ca](http://www.sgs.ca)

Member of the SGS Group (Société Générale de Surveillance)



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1	830	150	450	33.6	631	<10	<1	1
2	2120	150	640	28.7	551	<10	<1	3
3	4660	190	1170	34.1	967	<10	<1	7
4	2710	100	660	25.0	679	<10	<1	5
5	2510	140	710	24.7	647	<10	<1	4
6	1190	110	600	18.8	424	<10	<1	2
7	1480	220	440	46.3	584	<10	<1	2
8	900	110	270	4.2	112	<10	<1	1
9	1200	110	50	1.6	151	<10	<1	2
10	1220	90	50	1.9	151	<10	<1	2
11	1090	120	790	23.2	580	<10	<1	3
12	3270	170	450	7.9	290	<10	<1	6
13	2080	220	50	4.2	255	<10	<1	4
14	3190	90	830	19.1	637	<10	<1	8
15	1160	190	550	27.0	699	<10	<1	3
16	1470	80	380	10.5	266	<10	<1	1
17	1630	100	100	22.4	330	<10	<1	<1
18	1720	80	100	13.3	306	<10	<1	2
19	1020	90	450	20.0	600	<10	<1	1
20	2170	190	190	33.3	836	<10	<1	3
21	1000	60	60	11.1	140	<10	<1	1
22	2170	200	410	29.8	778	<10	<1	4
23	1100	90	260	4.9	190	<10	<1	2
24	1420	100	320	16.0	403	<10	<1	2
25	640	170	450	34.8	973	<10	<1	4
26	1170	70	220	16.5	338	<10	<1	<1
27	1090	80	60	1.1	163	<10	<1	1
28	180	60	190	16.7	332	<10	<1	<1
29	1240	100	170	22.2	548	<10	<1	1
30	2300	120	410	26.0	689	<10	<1	3
31	1170	100	120	15.2	351	<10	<1	1
32	1270	80	450	13.6	359	<10	<1	2
33	630	90	270	19.3	453	<10	<1	<1
34	1050	150	240	26.7	804	<10	<1	2
35	1670	90	130	10.1	316	<10	<1	2
36	1100	80	90	1.0	171	<10	<1	1
37	1160	200	710	17.3	979	<10	<1	3
38	2250	90	230	24.7	622	<10	<1	<1
39	1910	80	180	22.1	605	<10	<1	1
40	2570	90	140	17.4	596	<10	<1	2
41	1290	80	520	15.6	552	<10	<1	3
42	2630	110	620	7.3	403	<10	<1	5
43	2060	80	640	9.6	319	<10	<1	3
44	1600	120	280	15.6	456	<10	<1	2
45	1090	140	420	13.2	476	<10	<1	4
46	1170	190	380	22.7	640	<10	<1	3
47	680	160	120	12.5	370	<10	<1	1
48	1810	80	560	13.5	474	<10	<1	4

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Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
49	1800	150	180	23.6	714	<10	<1	1
50	470	80	430	18.0	477	<10	<1	1
51	1810	120	250	24.4	668	<10	<1	2
52	1290	80	90	7.6	247	<10	<1	1
53	2720	170	190	30.2	866	<10	<1	2
54	1540	110	110	17.1	533	<10	<1	1
55	1010	90	240	10.6	347	<10	<1	<1
56	1080	110	510	29.4	706	<10	<1	1
57	1410	90	420	24.3	550	<10	<1	1
58	2030	110	290	31.1	523	<10	<1	4
59	4040	100	1030	14.5	570	<10	<1	9
60	250	110	340	26.6	500	<10	<1	<1
61	1080	140	50	0.6	129	<10	<1	2
62	1730	110	190	22.9	374	<10	<1	1
63	260	80	210	24.2	374	<10	<1	<1
64	1070	240	310	30.4	705	<10	<1	2
65	1710	90	320	24.7	353	<10	<1	1
66	1150	90	40	1.6	140	<10	<1	2
67	1240	160	440	23.8	666	<10	<1	2
68	170	70	60	5.0	167	<10	<1	<1
69	2230	120	410	15.1	357	<10	<1	3
70	2950	140	830	17.5	481	<10	<1	6
71	1130	90	580	21.3	492	<10	<1	2
72	950	60	100	14.5	241	<10	<1	1
73	930	100	50	1.7	165	<10	<1	4
74	1470	130	20	0.5	200	<10	<1	3
75	690	180	620	27.2	782	<10	<1	4
76	1540	140	280	17.8	461	<10	<1	2
77	1030	100	50	1.8	182	<10	<1	1
78	1540	140	400	25.2	589	<10	<1	4
79	1090	90	50	1.0	169	<10	<1	2
80	890	80	50	10.0	145	<10	<1	2
81	1830	140	730	20.6	541	<10	<1	4
82	970	90	30	3.1	200	<10	<1	3
83	1070	70	60	12.1	247	<10	<1	1
84	570	200	290	27.0	709	<10	<1	2
85	1500	120	550	20.8	476	<10	<1	3
86	1520	120	100	3.8	223	<10	<1	2
87	1230	110	60	3.1	250	<10	<1	2
88	1780	120	140	27.3	654	<10	<1	2
89	830	150	450	26.2	612	<10	<1	2
90	1050	180	190	31.0	594	<10	<1	2
91	1060	120	430	25.3	548	<10	<1	1
92	1400	70	40	1.1	168	<10	<1	2
93	900	130	710	24.3	723	<10	<1	2
94	1320	120	350	20.2	429	<10	<1	2
95	1130	90	70	8.5	155	<10	<1	1
96	1360	130	400	25.9	666	<10	<1	2

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Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
97	1780	120	420	23.4	595	<10	<1	1
98	1220	110	550	18.0	564	<10	<1	2
99	1430	100	70	5.1	205	<10	<1	1
100	1730	100	110	13.1	309	<10	<1	2
101	730	100	750	55.5	1140	<10	<1	<1
102	770	90	260	6.2	230	<10	<1	1
103	1470	160	60	0.7	169	<10	<1	2
104	1930	130	430	10.8	340	<10	<1	2
105	1090	290	400	35.3	842	<10	<1	3
106	1250	100	50	8.5	223	<10	<1	1
107	760	120	30	1.9	160	<10	<1	<1
108	1090	150	90	5.1	275	<10	<1	<1
109	920	130	160	10.3	352	<10	<1	2
110	1110	160	80	3.6	360	<10	<1	2
*Dup 1	1130	190	680	25.3	656	<10	<1	3
*Dup 13	2400	190	50	4.2	314	<10	<1	5
*Dup 25	680	220	340	32.0	753	<10	<1	2
*Dup 37	1640	210	740	24.4	769	<10	<1	4
*Dup 49	1620	160	220	18.6	553	<10	<1	2
*Dup 61	1670	180	50	0.8	171	<10	<1	4
*Dup 73	850	130	70	1.4	263	<10	<1	4
*Dup 85	1010	200	640	14.3	380	<10	<1	4
*Dup 97	2230	170	570	27.0	747	<10	<1	2
*Dup 109	1430	130	160	9.2	367	<10	<1	4
*Std MMISRM14	810	110	360	45.7	316	<10	46	19
*Std MMISRM14	630	90	290	35.9	219	<10	43	17
*Std MMISRM14	640	100	290	36.9	229	<10	42	17
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.





## Certificate of Analysis

Work Order: 093955

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Jul 25, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 102  
Date Submitted Jul 09, 2007  
Report Comprises Pages 1 to 4  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

102 Soils

Certified By :

Operations Manager

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method  
*M* after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 [www.sgs.ca](http://www.sgs.ca)

Member of the SGS Group (Société Générale de Surveillance)



Final: 093955 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
115	2560	90	130	21.1	677	<10	<1	2
116	2830	100	270	27.8	773	<10	<1	3
117	3480	130	260	28.4	901	<10	<1	6
118	2110	160	640	16.9	647	<10	<1	3
119	1200	140	50	1.1	233	<10	<1	3
120	2920	260	760	30.9	876	<10	<1	5
121	2380	120	640	26.2	748	<10	<1	5
122	3880	140	200	32.5	1110	<10	<1	4
123	3310	120	400	33.4	1040	<10	<1	3
124	2040	100	240	15.6	524	<10	<1	3
125	1760	100	110	2.9	297	<10	<1	3
126	3090	90	970	20.9	747	<10	<1	9
127	3200	120	310	8.6	514	<10	<1	6
128	1330	90	1150	27.9	931	<10	<1	5
129	2650	80	290	38.1	871	<10	<1	2
130	1620	70	120	6.8	264	<10	<1	3
131	1850	120	590	45.9	1310	<10	<1	5
132	1690	80	70	4.6	247	<10	<1	3
133	1370	50	30	2.7	207	<10	<1	2
134	1800	60	60	4.1	304	<10	<1	3
135	2110	100	50	2.2	272	<10	<1	3
136	2780	90	210	18.9	505	<10	<1	3
137	1960	120	370	41.0	1140	<10	<1	4
138	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
139	2330	80	60	3.8	435	<10	<1	3
140	2200	70	130	6.7	351	<10	<1	3
141	1870	60	60	1.2	276	<10	<1	4
142	2100	90	310	2.4	291	<10	<1	5
143	1690	110	70	11.2	347	<10	<1	3
144	1920	80	50	2.1	281	<10	<1	3
145	1620	80	<20	2.0	257	<10	<1	3
146	1570	80	30	1.0	277	<10	<1	2
147	1920	90	120	7.6	426	<10	<1	3
148	4650	220	90	0.7	92	<10	<1	7
149	1990	80	230	2.2	263	<10	<1	4
150	1800	110	<20	0.5	264	<10	<1	5
151	1510	60	380	4.3	347	<10	<1	3
152	1940	80	320	6.1	312	<10	<1	2
153	4920	50	880	13.1	626	<10	<1	16
154	2440	110	790	32.6	919	<10	<1	5
155	1930	60	200	9.4	328	<10	<1	3
156	2540	120	860	39.7	1090	<10	<1	5
157	3800	110	950	31.2	892	<10	<1	7
158	2040	60	270	5.2	269	<10	<1	4
159	3060	70	750	18.5	691	<10	<1	6
160	2430	50	400	7.3	354	<10	<1	3
161	1820	50	960	28.7	756	<10	<1	4
162	4780	110	280	41.1	970	<10	<1	4

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Final : 093955 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
163	2870	70	220	26.0	531	<10	<1	3
164	2160	70	850	33.6	860	<10	<1	3
165	2380	70	500	9.0	363	<10	<1	3
166	2780	90	510	14.1	551	<10	<1	4
167	2490	60	160	5.2	338	<10	<1	3
168	4170	110	580	11.6	501	<10	<1	9
169	2110	90	50	0.9	299	<10	<1	4
170	2150	50	100	1.2	208	<10	<1	3
171	2370	70	150	1.1	241	<10	<1	4
172	1920	70	50	1.1	321	<10	<1	3
173	2170	90	220	0.9	217	<10	<1	4
174	2030	90	40	0.7	246	<10	<1	3
175	5100	90	100	0.5	105	<10	<1	10
176	3550	90	540	10.0	387	<10	<1	7
177	3590	80	1140	19.3	566	<10	<1	6
178	3720	130	770	23.3	719	<10	<1	6
179	2530	80	50	0.8	367	<10	<1	7
180	1920	60	30	1.3	228	<10	<1	2
181	660	80	960	30.8	845	<10	<1	2
182	2150	90	80	0.5	204	<10	<1	3
183	1360	90	80	10.1	233	<10	<1	2
184	2850	90	880	41.8	1040	<10	<1	4
185	2890	70	1020	22.2	580	<10	<1	6
186	1910	60	70	3.6	369	<10	<1	3
187	1830	40	140	1.9	247	<10	<1	3
188	5520	100	1950	22.6	776	<10	<1	21
189	3070	100	850	41.7	1010	<10	<1	7
190	2010	20	140	1.5	258	<10	<1	3
191	3070	40	530	5.5	394	<10	<1	6
192	1600	40	110	4.2	312	<10	<1	2
193	1910	70	170	8.9	321	<10	<1	4
194	5300	90	300	40.3	1220	<10	<1	5
195	2130	40	320	2.9	298	<10	<1	4
196	3420	80	170	22.2	690	<10	<1	4
197	3730	70	730	38.2	1080	<10	<1	2
198	1430	50	530	27.1	797	<10	<1	3
199	2920	50	170	13.8	529	<10	<1	3
200	2010	40	60	1.0	310	<10	<1	4
201	2070	110	870	18.7	472	<10	<1	4
202	2590	60	590	39.9	1310	<10	<1	3
203	2750	110	130	19.4	686	<10	<1	3
204	1760	50	560	27.7	734	<10	<1	3
205	4770	70	230	30.0	1260	<10	<1	5
206	1760	60	730	22.5	576	<10	<1	4
207	2490	30	180	3.0	373	<10	<1	6
208	3330	60	220	30.9	1140	<10	<1	4
209	2810	60	170	23.8	781	<10	<1	3
210	2840	60	120	21.4	797	<10	<1	3

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Final: 093955 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
211	4330	90	200	31.2	1050	<10	<1	5
212	4030	70	360	33.6	917	<10	<1	3
213	1740	30	70	1.8	251	<10	<1	2
214	3700	70	300	31.7	850	<10	<1	3
215	2050	40	110	1.4	228	<10	<1	3
136A	3630	70	990	33.0	855	<10	<1	9
*Dup 115	3390	80	230	27.1	965	<10	<1	3
*Dup 127	3230	90	340	10.8	537	<10	<1	5
*Dup 139	1770	60	50	3.0	272	<10	<1	3
*Dup 151	1410	70	280	3.9	296	<10	<1	3
*Dup 163	4350	70	330	30.8	646	<10	<1	4
*Dup 175	3600	80	110	0.7	103	<10	<1	8
*Dup 187	2050	30	180	2.2	277	<10	<1	4
*Dup 199	2460	50	140	10.5	429	<10	<1	2
*Dup 211	2660	70	270	23.5	752	<10	<1	3
*Std MMISRM14	770	100	300	45.2	271	<10	49	17
*Std MMISRM14	810	110	340	47.7	283	<10	49	17
*Std MMISRM14	830	110	340	47.5	282	<10	50	17
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	0.1	<5	<10	<1	<1

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## Certificate of Analysis

Work Order: 093956

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Aug 03, 2007

P.O. No. : Northern Gold Mining  
Project No. : DEFAULT  
No. Of Samples 95  
Date Submitted Jul 09, 2007  
Report Comprises Pages 1 to 4  
(Inclusive of Cover Sheet)

### Distribution of unused material:

STORE: 95 Soils

### Comments:

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By :  \_\_\_\_\_  
Operations Manager

14-7-8

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Final: 093956 Order: Northern Gold Mining

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
216	3020	60	960	26.6	908	<10	<1	8
217	1630	60	90	3.4	317	<10	<1	2
218	1350	30	30	0.5	209	<10	<1	2
219	1480	50	50	0.5	217	<10	<1	3
220	1630	30	130	4.7	326	<10	<1	2
221	820	60	20	0.5	176	<10	<1	1
222	1050	60	30	0.8	201	<10	<1	1
223	2480	50	350	17.3	523	<10	<1	3
224	1650	50	280	12.7	280	<10	<1	2
225	1810	50	350	9.7	325	<10	<1	2
226	1890	70	200	1.7	230	<10	<1	3
227	2770	100	290	4.1	316	<10	<1	7
228	3570	140	480	6.9	274	<10	<1	13
229	3720	60	530	22.2	639	<10	<1	6
230	1830	60	50	1.1	203	<10	<1	3
231	2000	30	320	15.9	394	<10	<1	1
232	1590	90	70	1.5	242	<10	<1	3
233	1350	60	30	0.4	128	<10	<1	2
234	1280	60	40	0.9	166	<10	<1	2
235	3450	60	570	9.4	390	<10	<1	6
236	1060	70	50	0.6	144	<10	<1	2
237	1800	60	180	6.2	249	<10	<1	2
238	1230	90	100	2.7	246	<10	<1	2
239	4330	50	790	14.9	539	<10	<1	7
240	2270	50	470	6.4	273	<10	<1	4
241	1290	100	20	0.5	124	<10	<1	2
242	2510	60	580	7.1	331	<10	<1	5
243	1390	60	60	1.0	186	<10	<1	2
244	2410	60	190	14.1	506	<10	<1	2
245	1440	70	70	1.4	214	<10	<1	2
246	1360	90	160	4.0	302	<10	<1	3
247	2450	50	350	5.3	311	<10	<1	3
248	3850	50	720	9.1	474	<10	<1	7
249	2520	70	280	7.1	345	<10	<1	3
250	2570	60	530	8.0	335	<10	<1	4
251	2580	30	330	3.9	293	<10	<1	3
252	1610	80	210	3.0	276	<10	<1	3
253	1680	30	230	6.7	346	<10	<1	1
254	1260	40	60	3.4	183	<10	<1	2
255	1350	50	50	1.0	154	<10	<1	2
256	1320	60	<20	0.6	188	<10	<1	1
257	1600	120	130	1.1	114	<10	<1	4
258	1640	80	70	1.0	183	<10	<1	3
259	4210	60	1180	18.7	563	<10	<1	7
260	2110	40	190	2.0	260	<10	<1	3
261	2680	60	260	4.1	359	<10	<1	5
262	1090	70	30	0.4	151	<10	<1	1
263	1420	50	50	2.0	206	<10	<1	4

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
264	1240	60	<20	0.3	178	<10	<1	2
265	2080	40	260	7.1	358	<10	<1	3
266	3780	60	520	11.3	467	<10	<1	8
267	1300	50	40	0.5	209	<10	<1	3
268	1230	50	30	0.5	189	<10	<1	2
269	1050	40	30	4.1	195	<10	<1	1
270	2160	60	190	27.7	445	<10	<1	1
271	4720	120	450	55.0	1130	<10	<1	3
272	2650	60	130	19.9	529	<10	<1	2
273	1890	80	1010	30.0	760	<10	<1	6
274	2520	90	220	21.2	538	<10	<1	3
275	1200	70	50	9.5	246	<10	<1	2
276	1470	80	380	23.1	613	<10	<1	2
277	960	70	120	16.1	448	<10	<1	1
278	620	50	660	29.0	719	<10	<1	3
279	1350	60	240	28.1	674	<10	<1	2
280	1290	60	130	6.7	272	<10	<1	2
281	1390	90	120	16.3	481	<10	<1	2
282	2040	30	900	12.3	463	<10	<1	6
283	3440	60	290	29.5	779	<10	<1	3
284	1410	110	90	15.1	363	<10	<1	1
285	2370	130	100	12.5	432	<10	<1	3
286	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
287	3190	90	260	4.2	306	<10	<1	5
288	1040	300	140	14.5	325	<10	<1	1
289	1420	80	530	13.6	362	<10	<1	3
290	1930	70	570	17.4	436	<10	<1	4
291	2400	100	160	17.5	593	<10	<1	3
292	1910	60	470	20.7	548	<10	<1	3
293	1090	60	60	2.7	193	<10	<1	<1
294	1720	90	400	11.5	415	<10	<1	2
295	1240	50	150	10.0	320	<10	<1	1
296	2890	60	330	28.4	704	<10	<1	2
297	760	70	560	27.8	613	<10	<1	2
298	780	80	30	0.8	132	<10	<1	<1
299	3400	110	520	34.6	898	<10	<1	5
300	930	50	340	7.8	366	<10	<1	1
301	1230	70	150	7.5	252	<10	<1	1
302	550	50	110	6.0	215	<10	<1	<1
303	1270	60	390	24.7	519	<10	<1	2
304	1190	50	80	4.9	261	<10	<1	1
305	930	40	60	0.9	170	<10	<1	2
306	1760	40	250	4.5	283	<10	<1	3
307	1860	40	150	3.1	278	<10	<1	3
308	1810	60	190	4.4	285	<10	<1	3
309	2420	80	340	9.0	320	<10	<1	4
310	1340	70	70	0.8	161	<10	<1	2
*Dup 216	2670	50	670	18.2	623	<10	<1	7

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Final: 093956 Order: Northern Gold Mining

Page 4 of 4

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
*Dup 228	4410	90	660	9.4	430	<10	<1	12
*Dup 240	2910	50	500	8.0	326	<10	<1	6
*Dup 252	1180	120	240	1.1	190	<10	<1	2
*Dup 264	1070	40	<20	0.3	161	<10	<1	1
*Dup 276	1720	60	310	33.4	914	<10	<1	2
*Dup 288	880	260	150	10.9	199	<10	<1	1
*Dup 300	1100	60	400	13.4	435	<10	<1	3
*Std MMISRM14	690	60	290	51.0	249	<10	49	18
*Std MMISRM14	680	90	280	49.9	245	<10	48	17
*Std MMISRM14	650	90	270	50.2	238	<10	46	17
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.





311-1178

# Certificate of Analysis

Work Order: 094235

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Aug 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples : 118  
Date Submitted : Jul 23, 2007  
Report Comprises : Pages 1 to 4  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 118 Soils

Certified By :   
Operations Manager

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result

\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Final : 094235 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
311	1070	120	60	1.0	168	<10	<1	2
312	1100	110	70	2.7	188	<10	<1	2
313	1050	170	910	23.7	585	<10	<1	3
314	1080	110	500	26.4	634	<10	<1	2
315	1380	90	110	4.2	156	<10	<1	2
316	940	140	370	26.0	660	<10	<1	2
317	1730	130	230	37.0	606	<10	<1	1
318	1540	140	140	4.8	290	<10	<1	2
319	1890	110	310	10.5	399	<10	<1	3
320	820	90	250	34.9	595	<10	<1	1
321	1730	120	100	14.2	158	<10	<1	2
322	1450	120	220	3.0	174	<10	<1	3
323	1300	200	50	9.0	206	<10	<1	2
324	1470	100	120	8.6	221	<10	<1	2
325	1270	30	70	2.1	232	<10	<1	2
326	1910	100	530	27.0	238	<10	<1	4
327	1310	140	60	14.7	131	<10	<1	2
328	1100	90	50	1.1	137	<10	<1	2
329	450	70	120	35.3	443	<10	<1	<1
330	1570	130	110	35.6	513	<10	<1	2
331	1160	110	110	3.0	139	<10	<1	3
332	3150	350	80	0.3	45	<10	<1	6
333	1480	140	90	15.9	178	<10	<1	2
334	1590	110	80	26.9	208	<10	<1	2
335	1030	110	70	3.9	134	<10	<1	2
336	830	80	100	10.0	302	<10	<1	<1
337	1680	140	80	1.8	187	<10	<1	3
338	2210	120	240	12.2	275	<10	<1	3
339	990	110	110	24.6	373	<10	<1	1
340	1140	100	130	3.5	154	<10	<1	3
341	1550	60	500	14.2	351	<10	<1	4
342	580	100	100	30.7	501	<10	<1	<1
343	1170	80	90	25.0	331	<10	<1	1
344	330	50	50	6.8	164	<10	<1	<1
345	1800	80	70	1.5	239	<10	<1	3
346	1390	80	60	1.5	200	<10	<1	2
347	1030	100	430	20.3	476	<10	<1	2
348	340	120	260	50.6	999	<10	<1	<1
349	620	100	210	32.8	763	<10	<1	2
350	1450	100	270	22.4	472	<10	<1	2
351	1780	80	120	19.4	424	<10	<1	2
352	800	90	70	4.0	170	<10	<1	1
353	1290	70	120	10.1	253	<10	<1	1
354	890	80	80	10.7	240	<10	<1	<1
355	170	150	290	31.1	581	<10	<1	1
356	480	40	40	0.5	144	<10	<1	2
357	330	190	150	29.7	641	<10	<1	1
358	1170	60	310	1.5	208	<10	<1	1

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Final: 094235 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
359	760	40	50	0.5	171	<10	<1	<1
360	1070	100	170	8.6	295	<10	<1	1
361	1220	180	180	37.2	814	<10	<1	1
362	760	120	550	17.3	563	<10	<1	4
363	310	160	160	27.8	654	<10	<1	1
364	130	90	330	23.9	517	<10	<1	<1
365	680	160	240	31.3	800	<10	<1	1
366	170	80	320	40.4	917	<10	<1	<1
367	140	60	460	40.9	842	<10	<1	<1
368	860	70	180	9.5	344	<10	<1	5
369	980	110	120	6.8	354	<10	<1	3
370	520	90	90	8.4	242	<10	<1	1
371	80	50	330	30.0	514	<10	<1	1
372	190	100	460	29.4	693	<10	<1	1
373	70	70	140	38.6	746	<10	<1	<1
374	280	80	110	12.2	295	<10	<1	<1
375	50	70	340	30.6	547	<10	<1	<1
376	380	80	150	32.7	475	<10	<1	<1
377	70	60	330	29.5	539	<10	<1	2
378	170	100	570	26.4	550	<10	<1	1
379	720	60	50	0.9	177	<10	<1	1
380	210	160	2170	26.9	475	<10	<1	6
381	40	50	160	24.0	380	<10	<1	<1
382	40	70	520	29.7	457	<10	<1	<1
383	40	60	260	30.7	563	<10	<1	2
384	1510	80	190	8.6	347	<10	<1	13
385	1390	80	130	16.5	357	<10	<1	6
386	70	60	530	27.0	527	<10	<1	3
387	870	90	60	5.5	139	<10	<1	3
388	1070	70	90	2.1	215	<10	<1	1
389	820	80	80	32.3	192	<10	<1	2
390	30	60	200	29.3	384	<10	<1	<1
391	80	140	240	34.3	493	<10	<1	<1
392	140	120	190	25.6	369	<10	<1	<1
393	110	50	250	35.0	485	<10	<1	2
394	710	130	240	43.0	369	<10	<1	5
395	1620	140	230	5.6	229	<10	<1	7
396	1270	70	120	43.6	213	<10	<1	3
397	1450	140	100	7.2	167	<10	<1	4
398	1440	80	50	5.0	185	<10	<1	2
399	60	60	150	26.9	463	<10	<1	<1
400	60	60	170	40.5	530	<10	<1	1
401	430	100	90	8.0	189	<10	<1	2
402	160	110	110	29.8	403	<10	<1	<1
403	160	80	310	28.3	466	<10	<1	1
404	450	120	110	14.7	174	<10	<1	1
405	1310	80	100	15.3	176	<10	<1	2
406	580	60	70	22.6	191	<10	<1	<1

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Final : 094235 Order:

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
407	80	80	180	18.1	283	<10	<1	1
408	400	70	120	5.3	191	<10	<1	<1
409	30	50	180	27.6	413	<10	<1	<1
410	1230	160	220	19.1	322	<10	<1	2
411	180	90	110	24.3	310	<10	<1	1
412	20	40	80	17.9	354	<10	<1	<1
413	40	50	100	8.0	168	<10	<1	1
414	70	60	270	26.7	540	<10	<1	<1
415	90	120	150	31.6	494	<10	<1	<1
416	30	80	190	26.0	386	<10	<1	<1
417	230	180	210	13.4	359	<10	<1	1
418	160	110	130	5.7	189	<10	<1	<1
419	40	110	330	24.8	369	<10	<1	<1
420	60	130	130	26.4	463	<10	<1	<1
421	660	80	40	3.7	159	<10	<1	<1
422	400	90	350	9.0	407	<10	<1	1
423	400	140	140	12.2	315	<10	<1	1
424	460	80	60	16.4	160	<10	<1	<1
425	440	70	70	22.1	153	<10	<1	2
426	100	80	100	32.4	232	<10	<1	2
427	230	80	110	7.6	243	<10	<1	1
428	380	170	1270	20.4	392	<10	<1	2
*Dup 311	1640	140	200	8.8	207	<10	<1	2
*Dup 323	1440	220	180	29.9	253	<10	<1	3
*Dup 335	1490	210	90	19.1	176	<10	<1	2
*Dup 347	470	180	200	15.0	326	<10	<1	1
*Dup 359	340	150	70	3.0	222	<10	<1	<1
*Dup 371	80	180	290	40.1	755	<10	<1	<1
*Dup 383	90	100	280	34.3	700	<10	<1	<1
*Dup 395	1090	150	140	2.1	149	<10	<1	5
*Dup 407	820	90	130	2.4	213	<10	<1	2
*Dup 419	40	70	170	29.4	466	<10	<1	<1
*Std MMISRM14	720	110	330	41.8	297	<10	51	17
*Std MMISRM14	730	110	330	41.4	297	<10	52	17
*Std MMISRM14	720	110	340	42.0	294	<10	52	17
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095376

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 05, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 63  
Date Submitted Sep 04, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 63 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
500	2230	170	70	0.8	511	<10	<1	6
501	2070	170	350	15.8	472	<10	<1	3
502	3780	180	750	42.7	1140	<10	<1	1
503	4380	150	1080	20.3	714	<10	<1	10
504	3250	110	680	6.5	506	<10	<1	7
505	1970	100	40	0.9	330	<10	<1	3
506	430	140	980	41.5	1200	<10	<1	1
507	1970	140	150	8.8	401	<10	<1	3
508	390	110	830	42.7	1160	<10	<1	<1
509	820	130	860	38.8	949	<10	<1	<1
510	2090	70	1320	22.8	937	<10	<1	6
511	2670	180	520	32.5	1230	<10	<1	3
512	1830	220	720	22.2	671	<10	<1	2
513	3300	210	800	9.3	477	<10	<1	2
514	4940	180	400	47.3	1430	<10	<1	<1
515	2370	120	60	1.1	417	<10	<1	6
516	3250	80	700	8.8	598	<10	<1	9
517	1730	110	70	5.9	301	<10	<1	2
518	2500	130	80	8.9	438	<10	<1	6
519	3910	50	1500	24.0	954	<10	<1	17
520	3110	130	430	46.1	1060	<10	<1	1
521	4850	130	470	39.5	1130	<10	<1	5
522	520	90	900	40.4	1210	<10	<1	3
523	890	120	1240	44.5	1230	<10	<1	3
524	2350	180	480	13.8	482	<10	<1	5
525	5930	160	40	0.8	114	<10	<1	16
526	1770	120	60	10.1	229	<10	<1	2
527	6500	70	1620	9.5	497	<10	<1	27
528	5510	130	1910	16.1	586	<10	<1	10
529	5000	120	1180	15.0	510	<10	<1	5
530	2410	120	510	26.7	514	<10	<1	1
531	3150	90	2110	12.7	606	<10	<1	3
532	2820	180	2180	20.9	518	<10	<1	3
533	7630	380	<20	0.4	311	<10	<1	18
534	4690	230	570	2.6	195	<10	<1	14
535	4310	360	500	37.2	895	<10	<1	4
536	2790	120	1650	23.1	591	<10	<1	3
537	1650	130	100	13.5	306	<10	<1	2
538	3570	140	220	19.0	774	<10	<1	2
539	2470	220	1090	27.6	586	<10	<1	2
540	3280	100	1950	12.7	572	<10	<1	2
541	3500	200	520	28.8	514	<10	<1	3
542	3270	170	1120	29.2	499	<10	<1	3
544	4920	170	1130	36.4	631	<10	<1	5
545	5890	440	70	0.6	39	<10	<1	15
546	1200	180	1300	30.8	647	<10	<1	1
547	4080	160	1400	20.7	698	<10	<1	6
548	4660	250	1080	29.8	880	<10	<1	7

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Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
549	4800	210	1010	27.5	818	<10	<1	7
550	4340	360	560	17.8	361	<10	<1	6
551	2400	230	80	22.9	206	<10	<1	2
552	2130	230	70	27.7	304	<10	<1	2
553	2840	120	600	8.6	286	<10	<1	4
554	4760	120	810	26.9	598	<10	<1	7
555	3660	160	960	22.8	523	<10	<1	5
556	2880	240	1810	28.0	691	<10	<1	6
557	2680	110	90	22.4	356	<10	<1	3
558	2040	120	190	13.4	264	<10	<1	2
559	2330	190	1670	31.6	746	<10	<1	2
560	3620	160	550	66.0	624	<10	<1	4
561	3220	140	340	71.2	623	<10	<1	3
562	920	100	1230	34.9	895	<10	<1	3
563	2650	100	1340	61.4	1150	<10	<1	3
*Dup 500	2000	140	40	1.0	434	<10	<1	4
*Dup 512	2130	170	500	18.6	551	<10	<1	3
*Dup 524	3170	120	590	20.5	623	<10	<1	5
*Dup 536	3650	100	1390	21.4	668	<10	<1	5
*Dup 549	5660	260	1400	26.7	775	<10	<1	9
*Dup 561	2810	110	290	51.9	498	<10	<1	3
*Std MMISRM14	710	130	350	41.9	267	<10	43	15
*Std MMISRM14	710	120	350	41.1	260	<10	43	15
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

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## Certificate of Analysis

Work Order: 095377

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 10, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 96  
Date Submitted Sep 04, 2007  
Report Comprises Pages 1 to 4  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 96 Soils

Certified By :

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca





Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
564	880	110	1070	46.9	1010	<10	<1	3
565	1890	100	930	38.9	931	<10	<1	4
566	2220	110	110	33.8	215	<10	<1	3
567	1430	130	780	23.8	773	<10	<1	5
568	3290	90	<20	0.6	375	<10	<1	15
569	4030	80	1190	34.2	1040	<10	<1	16
570	4120	80	1080	28.3	984	<10	<1	14
571	1840	100	790	37.8	1090	<10	<1	6
572	3040	220	150	14.5	332	<10	<1	9
573	2220	240	30	1.7	246	<10	<1	8
574	4670	60	1830	35.9	1550	<10	<1	27
575	2940	110	140	2.6	328	<10	<1	12
576	4260	170	190	44.6	911	<10	<1	7
577	4070	90	1040	41.5	754	<10	<1	10
578	4100	90	360	34.0	1330	<10	<1	12
579	3580	40	590	42.4	889	<10	<1	8
580	2000	50	460	46.4	1520	<10	<1	4
581	1780	80	1050	30.2	982	<10	<1	9
582	940	60	230	45.3	1220	<10	<1	3
583	2860	70	1160	48.2	1170	<10	<1	5
584	6090	100	270	41.8	1370	<10	<1	8
585	4820	80	430	37.2	1160	<10	<1	12
586	1490	80	550	31.5	963	<10	<1	5
587	880	60	900	35.2	1170	<10	<1	4
588	4760	100	240	60.5	1440	<10	<1	3
589	4060	80	460	31.7	1320	<10	<1	9
590	3410	40	1520	25.1	965	<10	<1	18
591	750	60	690	40.5	1410	<10	<1	4
592	230	30	990	43.1	1400	<10	<1	2
593	1840	30	1400	23.5	917	<10	<1	11
594	2180	90	1220	28.8	790	<10	<1	6
595	1360	60	1120	27.4	864	<10	<1	6
596	2270	30	2070	23.2	1150	<10	<1	15
597	550	50	990	24.0	847	<10	<1	3
598	6160	30	1620	15.0	812	<10	<1	34
599	4080	100	280	43.8	1400	<10	<1	3
600	830	30	1400	35.5	1250	<10	<1	6
601	1270	60	730	7.9	452	<10	<1	2
602	540	100	670	27.8	793	<10	<1	2
603	1280	100	150	5.3	429	<10	<1	2
604	1660	80	60	3.2	417	<10	<1	4
605	450	90	950	28.1	924	<10	<1	3
606	1920	100	120	5.6	349	<10	<1	4
607	3430	370	690	31.6	670	<10	<1	8
608	1200	290	470	29.8	685	<10	<1	3
609	3060	110	770	6.1	322	<10	<1	10
610	1100	320	510	31.2	416	<10	<1	2
611	2340	220	650	28.8	599	<10	<1	8

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
612	2400	280	70	15.6	382	<10	<1	3
613	2890	140	90	37.3	450	<10	<1	5
614	2670	190	1710	36.0	691	<10	<1	4
615	2210	100	600	9.4	493	<10	<1	3
616	4190	300	70	2.1	109	<10	<1	7
617	5090	500	320	0.2	72	<10	<1	13
618	6250	80	930	31.5	607	<10	<1	15
619	3680	340	440	6.4	214	<10	<1	9
620	6200	140	1840	22.6	740	<10	<1	13
621	1290	110	60	38.6	276	<10	<1	2
622	3530	210	70	2.2	114	<10	<1	7
623	4080	170	50	2.8	137	<10	<1	6
624	3000	110	70	11.5	310	<10	<1	2
625	7160	230	2480	32.3	907	<10	<1	17
626	4770	420	100	<0.1	134	<10	<1	15
627	4080	500	110	<0.1	106	<10	<1	13
628	2710	210	100	<0.1	194	<10	<1	13
629	5670	490	110	<0.1	143	<10	<1	18
630	4880	410	120	<0.1	143	<10	<1	17
631	5090	450	80	<0.1	80	<10	<1	15
632	5030	400	130	<0.1	171	<10	<1	17
633	4360	240	140	<0.1	399	<10	<1	20
634	4220	120	100	0.2	453	<10	<1	19
635	3360	240	140	<0.1	297	<10	<1	18
636	3040	260	120	<0.1	151	<10	<1	15
637	2690	200	140	<0.1	185	<10	<1	13
638	3420	210	130	<0.1	227	<10	<1	16
639	940	120	70	0.1	135	<10	<1	8
640	2270	240	130	0.1	194	<10	<1	14
641	3480	250	120	0.2	232	<10	<1	17
642	3310	250	140	0.1	193	<10	<1	19
643	3440	280	100	0.2	165	<10	<1	14
644	2900	320	120	0.1	192	<10	<1	14
645	3210	260	120	0.1	186	<10	<1	17
646	4260	480	80	0.1	161	<10	<1	14
647	2840	270	130	<0.1	187	<10	<1	16
648	5450	630	90	0.2	224	<10	<1	17
649	5470	620	90	0.3	245	<10	<1	17
650	4140	480	80	0.2	167	<10	<1	15
651	4580	340	330	0.1	180	<10	<1	17
652	4240	500	80	0.1	453	<10	<1	14
653	5430	510	100	0.2	254	<10	<1	17
654	2850	100	300	43.5	1320	<10	<1	7
655	2310	150	830	63.2	1190	<10	<1	5
656	1090	50	1240	32.2	976	<10	<1	8
657	4630	130	630	55.1	1030	<10	<1	5
658	4130	140	510	51.7	1330	<10	<1	6
659	330	90	890	38.0	864	<10	<1	3

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
*Dup 564	700	90	1280	46.7	1080	<10	<1	3
*Dup 576	3780	140	260	59.6	1250	<10	<1	6
*Dup 588	3640	140	360	53.1	1270	<10	<1	5
*Dup 600	1350	40	1160	39.3	1180	<10	<1	9
*Dup 612	2690	220	90	18.6	513	<10	<1	6
*Dup 624	3170	140	100	15.9	394	<10	<1	5
*Dup 636	4130	270	160	0.2	221	<10	<1	20
*Dup 648	5250	640	90	<0.1	228	<10	<1	17
*Std MMISRM14	720	90	340	37.6	276	<10	40	18
*Std MMISRM14	710	140	350	46.2	304	<10	45	18
*Std MMISRM14	690	130	330	45.7	274	<10	45	19
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095378

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 18, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 80  
Date Submitted Sep 04, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 80 Soils

Certified By : 

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.

SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
700	1890	140	210	31.9	782	<10	<1	7
701	690	100	1200	20.6	813	<10	<1	10
702	3180	110	780	34.3	1090	<10	<1	4
703	380	140	150	29.3	837	<10	<1	2
704	330	40	1250	21.2	919	<10	<1	3
705	1050	190	770	31.6	833	<10	<1	16
706	3720	120	970	26.6	792	<10	<1	12
707	3460	110	760	33.2	1210	<10	<1	8
708	1550	220	510	33.6	997	<10	<1	4
709	540	80	1260	24.1	874	<10	<1	20
710	4780	90	560	49.4	1500	<10	<1	2
711	2520	140	140	14.9	616	<10	<1	2
712	2000	170	540	14.4	490	<10	<1	2
713	1640	140	380	12.7	704	<10	<1	2
714	2720	250	480	22.0	478	<10	<1	4
715	3110	220	310	11.2	362	<10	<1	5
716	2810	280	720	19.4	510	<10	<1	5
717	1960	50	1100	19.9	744	<10	<1	5
718	350	70	710	32.0	977	<10	<1	2
719	50	30	740	32.9	1040	<10	<1	<1
720	750	100	760	35.8	1270	<10	<1	3
721	2520	90	530	41.3	1450	<10	<1	5
722	3390	90	420	38.0	1470	<10	<1	6
723	3630	140	250	34.4	1280	<10	<1	3
724	5860	100	1130	10.4	677	<10	<1	7
725	4040	90	280	34.6	1370	<10	<1	6
726	920	60	1000	24.7	934	<10	<1	4
727	340	90	470	28.9	1010	<10	<1	2
728	4060	120	260	34.9	1290	<10	<1	4
729	4760	70	170	30.7	1400	<10	<1	7
730	4590	50	1060	25.2	1190	<10	<1	4
731	150	100	580	37.6	974	<10	<1	2
732	6250	580	50	0.4	191	<10	<1	14
733	2940	160	190	18.5	367	<10	<1	3
734	3100	50	1570	25.3	1100	<10	<1	6
735	5150	80	190	42.0	1290	<10	<1	6
736	910	80	310	35.3	1090	<10	<1	1
737	1560	80	260	31.2	866	<10	<1	3
738	1950	110	930	27.3	795	<10	<1	5
739	560	40	1050	24.4	912	<10	<1	2
740	1440	80	100	28.5	519	<10	<1	1
741	4610	90	780	55.7	1640	<10	<1	2
742	3330	200	220	20.5	458	<10	<1	3
743	2540	110	510	28.2	1060	<10	<1	5
744	4540	70	300	39.3	1550	<10	<1	2
745	850	110	220	35.4	996	<10	<1	1
746	2380	80	780	32.1	1180	<10	<1	6
747	270	100	530	35.7	919	<10	<1	2

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
748	3590	130	260	37.1	817	<10	<1	4
749	4090	80	1400	16.0	757	<10	<1	10
750	260	80	820	33.2	899	<10	<1	4
751	1050	70	310	36.6	1420	<10	<1	4
752	340	120	620	32.2	888	<10	<1	1
753	4350	160	270	50.6	619	<10	<1	6
754	220	80	720	34.8	1010	<10	<1	3
755	6190	110	350	28.1	1360	<10	<1	7
756	350	60	470	33.6	1250	<10	<1	3
757	5600	140	240	46.5	1140	<10	<1	6
758	4160	40	1120	22.4	932	<10	<1	13
759	6850	180	310	49.3	1100	<10	<1	6
760	1990	70	1790	25.4	1010	<10	<1	8
761	2810	60	170	16.9	353	<10	<1	3
762	560	50	1050	33.3	1190	<10	<1	2
763	240	70	880	35.0	1050	<10	<1	1
764	4900	140	130	22.9	560	<10	<1	7
765	2220	110	210	26.7	560	<10	<1	2
766	2840	130	920	4.9	424	<10	<1	5
767	2970	120	880	5.2	352	<10	<1	3
768	2770	90	1400	5.0	421	<10	<1	3
769	3880	100	690	2.9	394	<10	<1	6
770	1800	90	790	3.5	293	<10	<1	2
771	1570	100	460	2.1	431	<10	<1	6
772	1440	100	690	3.3	295	<10	<1	2
773	2120	110	410	1.4	325	<10	<1	3
774	5810	570	70	<0.1	96	<10	<1	13
775	5730	190	330	0.6	264	<10	<1	13
776	1180	100	200	0.7	504	<10	<1	1
777	5860	720	80	<0.1	106	<10	<1	14
778	5870	630	70	<0.1	80	<10	<1	13
779	4200	460	120	0.1	199	<10	<1	10
*Dup 700	2190	150	150	29.7	640	<10	<1	5
*Dup 712	2530	120	610	12.5	367	<10	<1	3
*Dup 724	4630	130	950	14.3	672	<10	<1	6
*Dup 736	1120	110	250	37.6	1100	<10	<1	2
*Dup 748	2970	150	280	31.8	1040	<10	<1	2
*Dup 760	1530	110	1590	26.4	726	<10	<1	6
*Dup 772	1550	160	810	5.3	427	<10	<1	4
*Std MMISRM14	770	110	360	40.1	319	<10	66	18
*Std MMISRM14	770	110	350	40.4	310	<10	65	17
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095379

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 18, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 80  
Date Submitted Sep 04, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 80 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
780	4580	150	710	3.4	549	<10	<1	4
781	5120	610	60	<0.1	81	<10	<1	13
782	5890	700	70	<0.1	86	<10	<1	14
783	5730	230	310	0.6	264	<10	<1	12
784	2450	120	1210	5.1	441	<10	<1	3
785	5910	760	70	<0.1	99	<10	<1	14
786	5750	540	90	<0.1	80	<10	<1	16
787	1490	110	60	1.7	321	<10	<1	3
788	980	110	150	2.6	217	<10	<1	2
789	1270	110	130	5.7	339	<10	<1	3
790	2470	90	820	7.5	379	<10	<1	6
791	160	100	1230	36.3	955	<10	<1	1
792	3250	140	700	52.9	1860	<10	<1	4
793	2080	70	250	5.5	351	<10	<1	3
794	1660	50	190	14.8	471	<10	<1	3
795	90	90	820	36.2	751	<10	<1	1
796	2680	190	580	45.0	1230	<10	<1	3
797	990	90	1400	29.7	1000	<10	<1	4
798	70	100	870	34.1	757	<10	<1	1
799	40	100	700	38.3	1010	<10	<1	<1
800	3020	170	390	37.1	917	<10	<1	2
801	1200	150	260	24.2	506	<10	<1	2
802	1490	90	1620	29.8	1290	<10	<1	4
803	1380	70	20	<0.1	170	<10	<1	2
804	1440	160	70	0.8	297	<10	<1	3
805	2240	130	300	6.9	394	<10	<1	3
806	1690	160	450	31.3	1050	<10	<1	2
807	2010	180	870	38.3	1080	<10	<1	3
808	400	140	840	50.9	1350	<10	<1	2
809	2860	250	820	45.1	1300	<10	<1	4
810	870	140	740	27.9	812	<10	<1	2
811	1800	100	550	10.3	430	<10	<1	3
812	1950	60	60	0.5	315	<10	<1	4
813	820	80	1010	34.5	1100	<10	<1	3
814	330	120	1050	37.6	996	<10	<1	2
815	2210	80	20	0.5	194	<10	<1	3
816	2060	90	90	1.5	277	<10	<1	4
817	1920	130	810	43.5	887	<10	<1	2
818	1880	70	40	1.4	238	<10	<1	3
819	1590	90	40	0.4	228	<10	<1	2
820	1270	70	30	0.9	260	<10	<1	2
821	1870	100	30	0.2	224	<10	<1	3
822	790	140	660	33.3	781	<10	<1	2
823	1540	120	1160	37.2	871	<10	<1	3
824	1840	70	40	1.1	213	<10	<1	3
825	1750	60	30	<0.1	185	<10	<1	3
826	1060	70	100	0.5	166	<10	<1	2
827	2120	130	40	0.2	235	<10	<1	4

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
828	1440	150	80	1.8	337	<10	<1	3
829	1700	120	140	2.2	278	<10	<1	2
830	2850	120	590	8.5	442	<10	<1	5
831	1610	100	40	0.3	225	<10	<1	3
832	3170	180	480	14.4	637	<10	<1	6
833	1850	80	50	2.7	231	<10	<1	4
834	1610	120	40	0.2	204	<10	<1	2
835	1470	160	<20	0.3	217	<10	<1	3
836	2300	80	430	4.0	292	<10	<1	5
837	2620	110	80	0.9	352	<10	<1	8
838	1310	120	30	0.3	251	<10	<1	2
839	2580	140	30	<0.1	225	<10	<1	5
840	3860	130	320	8.8	516	<10	<1	5
841	3400	120	740	19.0	599	<10	<1	7
842	2080	150	50	0.5	254	<10	<1	3
843	3920	130	1000	18.9	657	<10	<1	8
844	2030	90	30	0.3	189	<10	<1	4
845	2200	130	60	0.3	281	<10	<1	4
846	1710	140	40	0.6	281	<10	<1	3
847	1860	70	<20	0.2	255	<10	<1	3
848	1570	100	30	<0.1	238	<10	<1	2
849	1680	110	30	0.3	334	<10	<1	5
850	620	80	30	0.1	210	<10	<1	2
851	3470	90	1260	31.0	1020	<10	<1	7
852	2440	100	980	30.9	1130	<10	<1	7
853	550	150	980	39.8	1060	<10	<1	2
854	1150	110	750	61.9	1210	<10	<1	1
855	1940	100	240	4.9	350	<10	<1	4
2710	1750	70	1150	28.0	780	<10	<1	2
2711	4560	120	560	40.1	1060	<10	<1	5
2712	590	30	120	<0.1	173	<10	<1	2
2713	1230	90	670	42.2	1290	<10	<1	4
*Dup 780	3320	110	1030	4.8	456	<10	<1	3
*Dup 792	2880	130	850	54.3	1340	<10	<1	1
*Dup 804	1930	160	60	1.0	337	<10	<1	4
*Dup 816	1290	60	40	2.2	170	<10	<1	2
*Dup 828	1480	140	70	0.4	218	<10	<1	2
*Dup 840	3200	120	310	7.0	405	<10	<1	3
*Dup 852	1960	90	880	23.7	726	<10	<1	4
*Std MMISRM14	670	100	320	42.1	227	<10	38	17
*Std MMISRM14	750	120	340	45.1	275	<10	43	18
*BIK BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*BIK BLANK	<10	<10	<20	<0.1	<5	<10	<1	1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095995

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 23, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 80  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 80 Soils

Certified By :

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable - = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
856	2130	230	760	29.5	946	<10	<1	2
857	2530	360	700	34.6	1120	<10	<1	4
858	1400	130	200	10.8	373	<10	<1	2
859	2980	310	790	35.8	1330	<10	<1	2
860	2220	260	1190	33.3	1260	<10	<1	5
861	2730	390	830	37.9	1200	<10	<1	4
862	1660	130	70	1.9	342	<10	<1	3
863	510	200	1000	37.0	1110	<10	<1	2
864	2860	260	350	22.5	965	<10	<1	2
865	5500	270	420	35.2	1610	<10	<1	5
866	2040	170	800	12.1	728	<10	<1	6
867	3740	140	1220	19.0	933	<10	<1	6
868	1400	180	390	35.0	1160	<10	<1	3
869	2510	140	1350	24.5	1130	<10	<1	6
870	1770	140	270	4.5	336	<10	<1	3
871	3800	220	330	23.3	971	<10	<1	5
872	3330	200	640	30.8	1290	<10	<1	6
873	3600	80	1120	26.6	1100	<10	<1	13
874	2520	100	380	2.3	342	<10	<1	6
875	840	220	230	31.1	1010	<10	<1	2
876	1380	110	100	8.3	309	<10	<1	2
877	1250	120	40	3.5	206	<10	<1	2
878	1550	160	200	10.2	446	<10	<1	2
879	1710	130	140	3.7	315	<10	<1	3
880	1220	200	550	24.1	714	<10	<1	1
881	1710	140	370	5.0	315	<10	<1	2
882	1460	130	80	2.7	241	<10	<1	3
883	1570	310	900	35.8	985	<10	<1	4
884	1830	130	1280	23.8	921	<10	<1	6
885	1080	130	1380	25.1	1010	<10	<1	4
886	1740	170	1240	23.7	806	<10	<1	5
887	640	170	1250	31.7	1020	<10	<1	2
888	3090	220	1370	27.5	1140	<10	<1	6
889	5890	270	380	32.6	1480	<10	<1	8
890	2130	170	1070	30.5	1240	<10	<1	6
891	3110	220	1120	31.2	1370	<10	<1	9
892	1910	250	1060	40.4	1310	<10	<1	4
893	860	200	980	36.3	997	<10	<1	3
894	2530	150	880	36.0	1420	<10	<1	9
895	900	170	1090	36.1	1080	<10	<1	4
896	480	170	1040	39.3	1090	<10	<1	2
897	1410	210	1110	40.4	1290	<10	<1	5
898	1760	160	180	4.8	300	<10	<1	4
899	630	170	840	38.7	1270	<10	<1	2
900	1970	160	1410	30.3	1170	<10	<1	5
901	2120	100	100	0.9	319	<10	<1	6
902	1320	120	230	5.3	416	<10	<1	2
903	4240	110	910	20.8	908	<10	<1	10

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
904	2430	250	620	33.0	1320	<10	<1	6
905	3710	120	1210	29.3	1180	<10	<1	11
906	3250	120	580	24.4	1080	<10	<1	7
907	3170	310	770	31.2	1220	<10	<1	4
908	3900	270	420	23.4	1190	<10	<1	3
909	1240	170	160	18.0	198	<10	<1	2
910	2950	130	580	16.6	419	<10	<1	5
911	3280	230	770	30.4	838	<10	<1	3
912	2860	280	330	31.8	1090	<10	<1	1
913	1530	110	50	0.7	221	<10	<1	3
914	2010	200	1480	33.0	1040	<10	<1	7
915	3180	260	280	30.3	1090	<10	<1	2
916	1470	220	940	32.5	1190	<10	<1	4
917	3950	240	850	31.9	1180	<10	<1	7
918	3660	190	1410	32.8	1250	<10	<1	8
919	4960	240	480	34.0	1400	<10	<1	3
920	830	280	760	36.5	1080	<10	<1	2
921	1570	130	1540	32.1	1210	<10	<1	7
922	500	170	1070	38.7	1120	<10	<1	2
923	3220	190	380	34.7	1300	<10	<1	4
924	2280	110	1210	14.7	831	<10	<1	7
925	1580	200	440	38.0	1410	<10	<1	3
926	5510	240	390	33.0	1490	<10	<1	5
927	340	210	800	36.5	980	<10	<1	1
928	1230	210	280	28.1	974	<10	<1	2
929	1790	220	810	36.2	1210	<10	<1	4
930	2560	270	360	32.1	1200	<10	<1	2
931	4520	260	460	31.7	1310	<10	<1	6
932	3860	300	380	35.4	1410	<10	<1	3
933	1870	250	710	30.0	1000	<10	<1	3
934	3030	170	1080	13.0	795	<10	<1	7
935	2810	190	930	24.5	1080	<10	<1	3
*Dup 856	2340	240	1060	31.0	747	<10	<1	2
*Dup 868	1750	180	410	33.8	1110	<10	<1	3
*Dup 880	1530	300	480	25.3	781	<10	<1	1
*Dup 892	2020	250	1120	40.5	1350	<10	<1	6
*Dup 904	3100	220	650	35.7	1130	<10	<1	5
*Dup 916	1890	200	1220	29.4	1180	<10	<1	6
*Dup 928	1910	210	410	28.9	1020	<10	<1	3
*Std MMISRM14	670	90	300	38.8	254	<10	41	16
*Std MMISRM14	710	110	310	40.5	276	<10	43	18
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095996

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

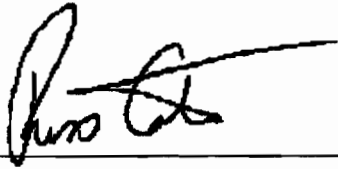
Date: Oct 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 80  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 80 Soils

Certified By : \_\_\_\_\_

  
Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
936	4030	150	1090	24.4	1350	<10	<1	6
937	1630	270	1000	27.1	893	<10	<1	2
938	2700	90	1570	11.1	558	<10	<1	2
939	1590	110	70	0.6	207	<10	<1	2
940	4250	480	1880	40.3	1310	<10	<1	9
941	2470	200	330	8.0	872	<10	<1	3
942	750	200	1220	36.9	1290	<10	<1	2
943	4270	360	710	37.5	1590	<10	<1	5
944	6420	400	560	40.8	1650	<10	<1	5
945	2480	270	1730	42.1	1560	<10	<1	8
946	5050	320	1330	36.8	1530	<10	<1	8
947	7040	320	550	35.1	1480	<10	<1	5
948	6520	320	790	36.5	1670	<10	<1	6
949	3960	280	480	37.3	1540	<10	<1	5
950	6210	210	320	27.5	1610	<10	<1	7
951	1960	140	1210	28.6	1220	<10	<1	5
952	2050	200	920	38.9	1490	<10	<1	4
953	2580	260	1270	23.9	1160	<10	<1	5
954	980	160	1160	33.4	1360	<10	<1	4
955	4280	220	420	32.1	1480	<10	<1	7
956	2180	140	1470	28.9	1190	<10	<1	7
957	4530	5080	410	23.1	1510	<10	<1	3
958	5150	180	1420	29.9	1750	<10	<1	9
959	1370	130	1320	27.6	1110	<10	<1	4
960	1770	200	990	33.6	1310	<10	<1	3
961	2290	180	1560	34.5	1470	<10	<1	5
962	2170	180	920	33.8	1410	<10	<1	4
963	3590	210	1290	12.5	730	<10	<1	7
964	6390	170	1540	21.2	1140	<10	<1	11
965	1000	190	830	29.4	848	<10	<1	2
966	7130	130	1680	13.1	791	<10	<1	17
967	1770	120	40	0.5	277	<10	<1	3
968	5980	260	1640	23.9	959	<10	<1	12
969	2250	160	50	0.4	356	<10	<1	3
970	3170	310	1590	34.0	1190	<10	<1	5
971	1680	270	750	41.4	1490	<10	<1	2
972	5430	330	620	36.6	1550	<10	<1	3
973	650	280	1100	43.2	1380	<10	<1	2
974	1090	150	730	28.8	994	<10	<1	3
975	2980	280	1310	28.7	928	<10	<1	7
976	1560	150	1240	28.3	1090	<10	<1	3
977	1130	140	1370	30.8	1240	<10	<1	4
978	3360	210	910	32.7	1510	<10	<1	3
979	2480	150	1780	25.8	1320	<10	<1	6
980	860	270	500	19.8	645	<10	<1	<1
981	6830	270	540	38.1	1620	<10	<1	6
982	1470	110	110	7.4	289	<10	<1	2
983	2660	170	790	17.6	804	<10	<1	5

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.

Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
984	1510	200	1410	38.8	1440	<10	<1	4
985	1780	220	460	36.5	1590	<10	<1	4
986	1770	140	1170	34.7	1450	<10	<1	7
987	1200	180	790	30.6	1170	<10	<1	1
988	4620	310	560	40.6	1590	<10	<1	2
989	1060	240	540	31.2	1140	<10	<1	2
990	4030	180	1490	34.5	1860	<10	<1	1
991	5720	260	410	28.5	1250	<10	<1	5
992	4080	250	460	26.7	1140	<10	<1	5
993	4070	220	390	26.7	1650	<10	<1	3
994	6160	260	1570	17.5	1220	<10	<1	12
995	1840	130	200	0.4	286	<10	<1	2
996	3870	300	1080	9.5	643	<10	<1	4
997	8300	150	1900	15.5	991	<10	<1	26
998	4160	220	660	10.2	700	<10	<1	10
999	1270	370	560	42.2	1560	<10	<1	2
1000	6260	330	460	41.9	1780	<10	<1	5
1001	3900	580	640	38.1	1500	<10	<1	4
1002	1830	180	1470	33.1	1240	<10	<1	6
1003	1100	290	1090	51.9	1650	<10	<1	14
1004	1240	110	240	7.8	487	<10	<1	<1
1005	6870	310	430	39.6	1540	<10	<1	4
1006	950	260	970	38.2	1200	<10	<1	2
1007	5100	310	430	40.5	1640	<10	<1	7
1008	5760	260	980	39.9	1810	<10	<1	6
1009	5930	280	1420	47.9	1340	<10	<1	4
1010	3470	250	850	36.9	1570	<10	<1	4
1011	3090	210	1090	30.5	1090	<10	<1	7
1012	5100	210	470	36.7	1780	<10	<1	5
1013	2000	290	700	38.0	1510	<10	<1	4
1014	2140	290	400	38.1	1610	<10	<1	7
1015	4150	280	330	37.2	1770	<10	<1	4
*Dup 936	2630	220	1360	31.2	1510	<10	<1	4
*Dup 948	5680	330	600	36.0	1520	<10	<1	4
*Dup 960	1300	230	800	33.2	1370	<10	<1	2
*Dup 972	4580	270	400	26.3	982	<10	<1	2
*Dup 984	1210	220	1020	41.2	1430	<10	<1	1
*Dup 996	4880	300	1290	11.0	785	<10	<1	7
*Dup 1008	4650	210	1010	36.1	1730	<10	<1	9
*Std MMISRM14	800	90	340	40.6	310	<10	47	18
*Std MMISRM14	850	90	350	42.2	340	<10	50	18
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

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## Certificate of Analysis

Work Order: 095997

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 23, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 73  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 73 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com





Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1016	2820	220	930	45.6	1550	<10	<1	9
1017	4480	240	240	30.8	1170	<10	<1	5
1018	5640	360	720	46.1	1490	<10	<1	4
1019	6290	160	1630	18.0	968	<10	<1	20
1020	6130	240	220	27.9	1380	<10	<1	12
1021	5380	350	1730	45.5	1420	<10	<1	6
1022	1810	120	20	0.5	272	<10	<1	2
1023	2250	180	40	1.2	397	<10	<1	5
1024	3370	330	1310	38.3	1230	<10	<1	7
1025	2130	150	1640	28.2	1060	<10	<1	8
1026	3250	220	820	19.7	732	<10	<1	5
1027	4820	290	450	33.4	1160	<10	<1	4
1028	6030	340	800	42.1	1480	<10	<1	11
1029	7320	380	650	42.3	1540	<10	<1	11
1030	3010	210	1970	38.2	1280	<10	<1	10
1031	1960	180	50	3.5	520	<10	<1	3
1032	1760	190	80	2.3	375	<10	<1	3
1033	3650	280	1090	21.1	929	<10	<1	8
1034	1980	300	1010	42.8	1370	<10	<1	5
1035	2600	170	1460	32.6	1090	<10	<1	10
1036	1950	120	30	1.7	312	<10	<1	3
1037	2920	220	1150	32.4	997	<10	<1	8
1038	3500	200	920	41.6	1580	<10	<1	4
1039	3730	280	750	26.3	876	<10	<1	7
1040	2220	210	1610	31.3	1190	<10	<1	8
1041	2560	190	150	4.9	415	<10	<1	6
1042	2460	140	30	0.9	325	<10	<1	6
1043	3100	190	1390	35.9	1490	<10	<1	6
1044	4570	210	1020	33.1	1250	<10	<1	10
1045	1230	180	820	39.4	1440	<10	<1	4
1046	4880	140	1330	32.3	1290	<10	<1	13
1047	3790	240	880	17.8	933	<10	<1	11
1048	3790	280	860	36.5	1370	<10	<1	6
1049	3450	310	870	32.8	1330	<10	<1	4
1050	2510	110	650	8.3	391	<10	<1	3
1051	2210	130	340	4.7	361	<10	<1	2
1052	3910	180	1120	28.6	884	<10	<1	2
1053	550	210	1200	37.1	1140	<10	<1	2
1054	3160	270	380	23.8	904	<10	<1	2
1055	3280	240	1530	37.0	1180	<10	<1	8
1056	1750	110	40	1.4	343	<10	<1	2
1057	850	230	1310	42.4	1180	<10	<1	3
1058	1870	220	390	9.7	596	<10	<1	3
1059	2560	180	120	1.7	338	<10	<1	5
1060	1840	100	100	3.2	317	<10	<1	3
1061	2780	70	220	4.6	424	<10	<1	3
1062	2870	140	90	0.8	370	<10	<1	11
1063	5780	390	790	53.3	1570	<10	<1	5

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1064	2410	200	710	16.6	719	<10	<1	11
1065	1910	170	120	7.8	525	<10	<1	2
1066	2610	250	1030	40.9	1360	<10	<1	4
1067	2270	160	590	15.8	630	<10	<1	4
1068	2230	210	60	3.5	328	<10	<1	4
1069	1810	180	160	4.1	400	<10	<1	4
1070	3930	290	530	40.1	1250	<10	<1	6
1071	2760	240	480	13.5	501	<10	<1	6
1072	2030	180	20	0.7	239	<10	<1	4
1073	2440	180	60	1.0	288	<10	<1	6
1074	1810	200	20	1.3	295	<10	<1	4
1075	5110	250	1270	29.3	932	<10	<1	16
1076	2250	150	50	0.7	338	<10	<1	5
1077	2540	180	120	3.3	377	<10	<1	5
1078	1820	200	80	1.7	309	<10	<1	4
1079	3620	200	760	10.3	579	<10	<1	12
1080	3930	290	740	38.0	1400	<10	<1	2
1081	4180	180	1100	36.6	1320	<10	<1	8
1082	2280	170	100	1.3	288	<10	<1	5
1083	1180	170	1510	29.9	1090	<10	<1	4
1084	1080	240	820	45.2	1190	<10	<1	3
1085	2970	170	1090	33.2	1150	<10	<1	9
1086	3700	220	700	36.0	1210	<10	<1	7
1087	4750	130	1190	21.9	1000	<10	<1	17
1088	2770	170	280	17.1	745	<10	16	7
*Dup 1016	3180	160	1050	31.8	1350	<10	<1	11
*Dup 1028	4710	260	990	42.8	1500	<10	<1	7
*Dup 1040	1540	280	1170	47.9	1450	<10	<1	6
*Dup 1052	3250	150	980	21.1	628	<10	<1	2
*Dup 1064	2870	190	620	16.6	742	<10	<1	11
*Dup 1076	2070	180	70	0.5	317	<10	<1	4
*Dup 1088	2130	160	190	15.4	690	<10	<1	5
*Std MMISRM14	780	130	330	50.7	286	<10	50	18
*Std MMISRM14	710	130	340	46.8	262	<10	45	16
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*001 1052	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*002 1052	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*001 1064	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*002 1064	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*001 1088	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*002 1088	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*Std MMISRM14	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*Bik BLANK	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096434

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Dec 04, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 69  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 69 Soils

**Comments:**

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1089	4270	370	1050	32.3	1360	<10	<1	9
1090	4370	320	790	24.3	1380	<10	<1	8
1091	2270	220	1070	24.4	943	<10	<1	7
1092	510	200	1130	32.0	1030	<10	<1	3
1093	1990	100	60	1.1	248	<10	<1	4
1094	1110	180	1250	32.4	1220	<10	<1	4
1095	1900	380	550	37.8	1290	<10	<1	4
1096	2730	340	1120	34.9	1180	<10	<1	7
1097	1470	350	930	38.2	1150	<10	<1	4
1098	2500	240	490	8.0	432	<10	<1	6
1099	1700	210	100	7.5	351	<10	<1	3
1100	3210	240	320	13.9	630	<10	<1	5
1101	2230	140	170	6.0	426	<10	<1	4
1102	3550	240	210	19.0	675	<10	<1	5
1103	4890	320	710	36.5	1290	<10	<1	6
1104	3080	180	130	0.8	366	<10	<1	11
1105	2160	170	50	2.3	315	<10	<1	6
1106	2870	240	20	0.4	332	<10	<1	9
1107	3090	180	280	3.0	388	<10	<1	9
1108	410	280	820	52.5	1570	<10	<1	2
1109	2900	220	110	3.4	427	<10	<1	8
1110	4880	170	950	10.9	924	<10	<1	16
1111	1920	220	240	5.8	421	<10	<1	6
1112	2920	140	60	0.5	354	<10	<1	10
1113	1780	210	<20	1.1	295	<10	<1	4
1114	6420	180	1120	16.9	874	<10	<1	25
1115	2980	210	110	1.0	382	<10	<1	9
1116	2700	170	170	3.6	403	<10	<1	8
1117	2610	160	90	1.7	437	<10	<1	8
1118	3090	220	240	8.4	486	<10	<1	8
1119	3300	250	850	21.9	814	<10	<1	10
1120	2190	140	50	0.5	351	<10	<1	7
1121	2880	230	650	5.9	552	<10	<1	10
1122	1180	190	60	2.8	472	<10	<1	3
1123	2700	340	470	32.5	1110	<10	<1	2
1124	1570	290	880	37.2	1190	<10	<1	5
1125	2510	320	390	34.5	1480	<10	<1	5
1126	1730	310	500	31.6	1190	<10	<1	4
1127	3250	230	890	30.0	1340	<10	<1	10
1128	2140	150	30	1.5	278	<10	<1	5
1129	2000	260	70	2.0	312	<10	<1	4
1130	1780	280	<20	0.6	267	<10	<1	4
1131	3950	310	830	12.0	624	<10	<1	8
1132	2160	240	590	3.7	384	<10	<1	5
1133	3130	220	190	2.2	367	<10	<1	9
1134	3290	170	340	4.6	508	<10	<1	10
1135	3110	170	30	0.4	306	<10	<1	13
1136	2710	190	50	0.4	311	<10	<1	11

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1137	2940	210	80	0.4	294	<10	<1	10
1138	2470	200	20	0.3	245	<10	<1	8
1139	2960	180	50	0.9	294	<10	<1	9
1140	3260	190	360	2.9	477	<10	<1	12
1141	6460	200	1300	16.2	878	<10	<1	25
1142	2060	130	110	0.5	350	<10	<1	5
1143	3410	130	510	4.3	529	<10	<1	11
1144	3410	130	530	3.8	473	<10	<1	12
1145	4990	240	1440	15.3	732	<10	<1	21
1146	750	210	880	38.1	1250	<10	<1	2
1147	4510	330	530	41.4	1560	<10	<1	4
1148	3070	150	110	1.3	443	<10	<1	9
1149	3580	180	680	25.5	1190	<10	<1	6
1150	2510	140	50	0.9	363	<10	<1	8
1151	2720	430	850	41.8	1330	<10	<1	2
1152	2620	150	50	1.9	484	<10	<1	8
1153	2200	210	220	7.1	472	<10	<1	7
1154	2310	140	1570	24.7	1310	<10	<1	10
1155	3660	270	680	29.6	1260	<10	<1	9
1156	1450	280	1400	33.5	1260	<10	<1	5
1157	2160	300	930	31.0	1290	<10	<1	5
*Dup 1089	2900	320	1250	32.7	1170	<10	<1	5
*Dup 1101	3050	210	820	16.5	857	<10	<1	8
*Dup 1113	2200	150	40	1.2	338	<10	<1	5
*Dup 1125	2040	310	530	31.7	1430	<10	<1	5
*Dup 1137	2570	240	50	0.6	322	<10	<1	7
*Dup 1149	2760	290	990	35.1	1320	<10	<1	7
*Std MMISRM14	790	100	380	40.4	240	<10	44	22
*Std MMISRM14	840	100	380	41.5	258	<10	44	21
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 095998

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 70  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 70 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.

SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1158	2070	200	60	0.4	384	<10	<1	4
1159	2250	180	150	3.2	470	<10	<1	3
1160	1950	150	30	0.2	294	<10	<1	3
1161	2700	150	30	1.3	312	<10	<1	6
1162	1890	210	30	0.5	430	<10	<1	4
1163	1370	110	60	5.5	264	<10	<1	3
1164	2070	140	50	2.0	311	<10	<1	3
1165	1930	160	60	1.1	286	<10	<1	3
1166	2960	160	160	1.6	370	<10	<1	6
1167	2550	160	20	0.1	262	<10	<1	5
1168	3050	220	20	0.3	341	<10	<1	8
1169	2530	270	<20	0.6	406	<10	<1	5
1170	2320	260	30	0.3	296	<10	<1	4
1171	2950	170	290	12.2	552	<10	<1	6
1172	2720	190	200	10.3	527	<10	<1	4
1173	2960	210	60	2.8	398	<10	<1	5
1174	3650	130	870	10.7	624	<10	<1	5
1175	3840	190	530	5.9	589	<10	<1	10
1176	5590	230	940	9.3	788	<10	<1	17
1177	5740	280	1970	34.5	1430	<10	<1	14
1178	3330	250	400	36.0	1260	<10	<1	4
1179	3020	160	200	17.9	592	<10	<1	4
1180	2160	190	190	7.2	432	<10	<1	4
1181	3480	260	450	14.9	577	<10	<1	4
1182	1990	200	1080	46.0	1000	<10	<1	5
1183	2890	130	60	2.0	469	<10	<1	5
1184	3100	170	200	9.6	648	<10	<1	5
1185	6410	260	470	41.3	1780	<10	<1	6
1186	2500	180	20	1.2	345	<10	<1	4
1187	1140	200	750	39.4	1310	<10	<1	4
1188	3990	310	490	34.9	1420	<10	<1	6
1189	3760	240	220	13.5	687	<10	<1	5
1190	3420	240	500	32.0	1300	<10	<1	5
1191	1770	250	480	20.8	834	<10	<1	3
1192	4480	250	590	39.5	1950	<10	<1	9
1193	3060	250	490	37.4	1560	<10	<1	3
1194	6730	500	120	0.4	200	<10	<1	14
1195	3530	300	150	29.1	427	<10	<1	5
1196	3310	250	50	0.4	377	<10	<1	10
1197	3490	370	40	2.5	364	<10	<1	9
1198	4600	410	410	16.8	586	<10	<1	10
1199	5490	390	40	0.4	122	<10	<1	9
1200	5920	430	120	0.3	107	<10	<1	15
1201	5020	280	260	22.3	623	<10	<1	10
1202	6260	270	1370	36.3	1380	<10	<1	14
1203	5070	190	940	37.7	1570	<10	<1	12
1204	4330	240	70	0.6	137	<10	<1	11
1205	4420	190	690	20.4	786	<10	<1	12

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1206	4410	310	590	39.5	514	<10	<1	7
1207	3020	230	40	1.1	242	<10	<1	9
1208	2440	160	390	9.9	308	<10	<1	3
1209	3380	120	920	24.1	435	<10	<1	5
1210	5530	310	1440	49.5	988	<10	<1	9
1211	5310	280	100	2.4	411	<10	<1	13
1212	4150	220	690	37.6	805	<10	<1	9
1213	7210	320	1480	44.1	1200	<10	<1	16
1214	3580	230	210	2.7	454	<10	<1	13
1215	2710	220	60	0.7	357	<10	<1	9
1216	3890	290	270	12.4	568	<10	<1	12
1217	2550	270	660	36.0	907	<10	<1	4
1218	2410	210	50	2.9	412	<10	<1	5
1219	1890	130	50	1.0	309	<10	<1	3
1220	5560	210	760	37.2	1280	<10	<1	8
1221	1670	360	300	43.5	1460	<10	<1	3
1222	570	130	1110	31.0	1120	<10	<1	3
1223	5530	230	220	40.9	1640	<10	<1	5
1224	1160	160	920	31.4	1140	<10	<1	5
1225	3260	180	580	38.1	1620	<10	<1	7
1226	5340	210	230	34.6	1520	<10	<1	5
1227	2820	250	290	37.2	1430	<10	<1	5
*Dup 1158	2160	220	80	0.4	402	<10	<1	3
*Dup 1170	2390	170	30	0.4	272	<10	<1	5
*Dup 1182	1270	250	930	53.3	906	<10	<1	4
*Dup 1194	6020	430	100	0.5	188	<10	<1	13
*Dup 1206	3360	280	400	30.6	445	<10	<1	5
*Dup 1218	2400	230	70	3.5	464	<10	<1	4
*Std MMISRM14	890	120	370	42.9	353	<10	53	20
*Std MMISRM14	710	110	310	40.0	283	<10	43	16
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.





## Certificate of Analysis

Work Order: 095999

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 70  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 70 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1228	4010	300	580	24.4	629	<10	<1	10
1229	6600	280	70	2.6	216	<10	<1	15
1230	4210	210	50	1.7	279	<10	<1	9
1231	5870	380	70	0.4	130	<10	<1	14
1232	7470	300	1010	24.2	881	<10	<1	19
1233	7820	250	100	0.7	233	<10	<1	19
1234	6750	250	850	56.5	1060	<10	<1	13
1235	1980	130	170	14.6	339	<10	<1	4
1236	3250	210	310	5.2	446	<10	<1	10
1237	2640	210	60	1.6	302	<10	<1	9
1238	6670	200	1230	35.1	1420	<10	<1	23
1239	2420	250	790	52.6	1350	<10	<1	5
1240	3580	280	60	14.3	391	<10	<1	11
1241	5490	150	1300	39.4	1450	<10	<1	17
1242	4040	470	80	5.2	399	<10	<1	10
1243	2610	210	100	31.7	784	<10	<1	4
1244	2370	200	450	52.0	1530	<10	<1	4
1245	4080	190	480	43.9	1310	<10	<1	8
1246	3540	210	120	14.9	540	<10	<1	11
1247	3860	230	90	1.5	488	<10	<1	17
1248	1570	170	780	33.8	1240	<10	<1	5
1249	4060	270	130	37.8	497	<10	<1	8
1250	3210	240	550	40.6	1070	<10	<1	6
1251	3290	270	330	25.2	654	<10	<1	7
1252	1420	90	710	26.6	1070	<10	<1	6
1253	1250	130	1060	31.5	1210	<10	<1	6
1254	1090	100	1310	38.5	1520	<10	<1	5
1255	2210	170	750	42.7	1600	<10	<1	7
1256	4660	250	300	38.7	1410	<10	<1	5
1257	5170	120	1620	20.7	978	<10	<1	19
1258	1860	190	450	37.1	1390	<10	<1	5
1259	230	110	1060	28.3	1070	<10	<1	1
1260	3630	170	110	12.3	892	<10	<1	8
1261	160	110	850	29.6	1010	<10	<1	<1
1262	1210	160	800	40.1	1470	<10	<1	5
1263	600	250	450	35.0	1180	<10	<1	<1
1264	2730	280	1090	20.6	748	<10	<1	6
1265	2870	200	70	14.0	332	<10	<1	4
1266	3510	300	220	26.6	440	<10	<1	5
1267	4630	320	920	49.7	729	<10	<1	6
1268	2720	340	440	109	536	<10	<1	2
1269	3720	190	330	27.6	457	<10	<1	9
1270	6570	290	560	52.3	1270	<10	<1	6
1271	2520	280	130	15.7	485	<10	<1	4
1272	720	250	570	24.0	727	<10	<1	2
1273	3850	230	390	39.3	1020	<10	<1	3
1274	2120	240	90	13.2	441	<10	<1	4
1275	110	190	390	43.3	1240	<10	<1	<1

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1276	2730	220	70	14.5	663	<10	<1	4
1277	470	170	940	31.8	1150	<10	<1	2
1278	260	120	760	36.2	1300	<10	<1	<1
1279	3020	230	310	25.9	881	<10	<1	6
1280	1510	190	220	12.8	555	<10	<1	4
1281	2530	170	800	29.2	1090	<10	<1	9
1282	2480	180	260	7.8	650	<10	<1	7
1283	90	150	670	28.4	717	<10	<1	<1
1284	4180	160	1210	22.6	965	<10	<1	15
1285	150	200	800	27.2	1030	<10	<1	<1
1286	4890	210	2570	28.0	1560	<10	<1	9
1287	2590	300	110	37.0	333	<10	<1	3
1288	2270	260	40	1.9	249	<10	<1	6
1289	4150	230	470	48.3	729	<10	<1	7
1290	4450	190	770	31.1	720	<10	<1	8
1291	2470	160	80	3.9	320	<10	<1	8
1292	2420	190	120	12.3	276	<10	<1	5
1293	2080	110	760	27.1	761	<10	<1	3
1294	1020	140	520	46.1	1270	<10	<1	2
1295	1740	150	260	35.7	1280	<10	<1	3
1296	260	200	390	40.0	848	<10	<1	<1
1297	1530	190	380	30.7	841	<10	<1	3
*Dup 1228	3300	250	490	21.1	552	<10	<1	7
*Dup 1240	3110	280	110	18.3	490	<10	<1	8
*Dup 1252	1010	100	670	27.4	833	<10	<1	3
*Dup 1264	2000	410	900	16.2	605	<10	<1	3
*Dup 1276	1980	280	100	13.2	410	<10	<1	4
*Dup 1288	2410	280	30	2.3	246	<10	<1	5
*Std MMISRM14	790	150	350	37.7	364	<10	45	19
*Std MMISRM14	780	150	350	38.0	362	<10	45	19
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096000

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 70  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 70 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.ca



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1298	2930	220	30	10.7	492	<10	<1	9
1299	2780	220	120	9.4	430	<10	<1	8
1300	2710	210	150	30.6	461	<10	<1	4
1301	3550	240	270	3.7	410	<10	<1	13
1302	5210	200	570	46.8	1170	<10	<1	12
1303	2690	180	1320	47.0	1370	<10	<1	9
1304	1590	140	320	42.1	1170	<10	<1	3
1305	3910	240	310	35.0	718	<10	<1	9
1306	2570	260	70	8.2	346	<10	<1	7
1307	3340	110	710	43.6	1120	<10	<1	13
1308	2840	160	520	34.6	964	<10	<1	10
1309	4580	240	260	57.3	1350	<10	<1	4
1310	5040	310	530	54.2	1070	<10	<1	7
1311	1910	160	70	28.0	257	<10	<1	3
1312 ✓	2680	490	750	42.9	836	<10	<1	7
1313	3270	250	120	40.3	583	<10	<1	6
1314	3340	250	470	23.5	500	<10	<1	10
1315	2300	330	300	59.0	761	<10	<1	4
1316	2310	120	1070	25.5	908	<10	<1	10
1317	4060	220	260	25.5	828	<10	<1	7
1318	1140	150	860	38.3	1010	<10	<1	9
1319	3890	340	180	48.9	1410	<10	<1	3
1320	2250	100	1060	24.2	840	<10	<1	10
1321	4920	330	370	54.7	1400	<10	<1	2
1322	1910	160	820	25.7	670	<10	<1	1
1323	1540	140	820	32.2	1010	<10	<1	6
1324	330	120	790	34.0	997	<10	<1	3
1325	1420	170	450	33.7	996	<10	<1	3
1326	4210	230	380	43.6	1450	<10	<1	2
1327	740	190	950	36.8	1220	<10	<1	4
1328	1750	150	400	23.1	741	<10	<1	2
1329	1110	280	430	39.1	1150	<10	<1	4
1330	2090	130	170	12.6	589	<10	<1	2
1331	2560	230	700	28.8	780	<10	<1	7
1332	960	390	440	32.1	820	<10	<1	3
1333 ✓	770	200	610	17.0	533	<10	<1	1
1334 ✓	1770	130	470	3.1	172	<10	<1	8
1335	3240	170	1400	6.9	391	<10	<1	11
1336	2830	160	990	7.6	362	<10	<1	7
1337	2740	170	930	10.5	464	<10	<1	4
1338	4680	200	1300	14.0	504	<10	<1	11
1339	2240	170	730	5.7	289	<10	<1	5
1340 ✓	1700	150	290	2.7	268	<10	<1	3
1341	480	230	1110	36.2	881	<10	<1	2
1342	3180	230	270	31.6	798	<10	<1	2
1343	2070	140	690	11.2	460	<10	<1	3
1344	1580	140	190	4.9	260	<10	<1	2
1345	1470	140	90	2.4	198	<10	<1	2

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



000000 000

Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1346 ✓	2910	190	630	20.8	469	<10	<1	3
1347 ✓	4210	210	1480	9.9	586	<10	<1	16
1348	1940	150	90	43.4	322	<10	<1	2
1349	180	200	200	29.2	576	<10	<1	<1
1350	6210	310	440	6.3	357	<10	<1	19
1351	3930	300	230	50.6	535	<10	<1	9
1352	2860	170	590	43.0	995	<10	<1	8
1353	2820	300	90	33.9	386	<10	<1	5
1354	1800	290	650	54.7	800	<10	<1	5
1355	1530	230	740	36.0	764	<10	<1	7
1356	2990	240	60	1.8	301	<10	<1	9
1357	2600	160	50	4.6	342	<10	<1	8
1358	1810	210	380	54.1	1140	<10	<1	2
1359	2990	270	170	19.6	441	<10	<1	8
1360	4310	480	300	72.4	1010	<10	<1	4
1361	3710	140	490	9.4	530	<10	<1	17
1362	2830	250	230	61.1	869	<10	<1	3
1363	1700	230	80	24.9	387	<10	<1	2
1364	3150	240	320	38.7	1210	<10	<1	8
1365	400	220	830	43.5	778	<10	<1	3
1366	810	270	230	48.2	1230	<10	<1	2
1367	2880	290	510	63.5	1060	<10	<1	4
*Dup 1298	2090	190	50	12.6	603	<10	<1	8
*Dup 1310	4020	260	410	38.0	933	<10	<1	5
*Dup 1322	2550	210	720	37.9	1080	<10	<1	3
*Dup 1334	1300	100	300	2.3	165	<10	<1	5
*Dup 1346	3020	250	750	25.4	738	<10	<1	6
*Dup 1358	2260	280	450	56.0	868	<10	<1	4
*Std MMISRM14	720	170	320	43.8	347	<10	43	18
*Std MMISRM14	690	160	300	43.9	309	<10	44	16
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096001

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Oct 28, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 74  
Date Submitted Oct 01, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 74 Soils

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method

*M* after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 [www.sgs.ca](http://www.sgs.ca)



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1368	4850	260	580	38.5	1390	<10	<1	8
1369	920	150	1140	30.8	1080	<10	<1	4
1370	4530	260	480	36.5	1290	<10	<1	7
1371	6100	210	700	43.0	1890	<10	<1	12
1372	2500	120	1450	22.0	942	<10	<1	8
1373	2640	310	390	46.3	1540	<10	<1	2
1374	810	210	930	40.7	1470	<10	<1	2
1375	2470	320	640	42.5	1600	<10	<1	3
1376	2090	290	860	35.3	1290	<10	<1	5
1377	4540	200	1140	16.1	625	<10	<1	8
1378	1370	120	100	0.9	256	<10	<1	4
1379	5250	140	1070	14.6	589	<10	<1	12
1380	3050	150	740	13.8	411	<10	<1	3
1381	2300	110	140	24.2	321	<10	<1	2
1382	3140	210	1360	32.3	1250	<10	<1	10
1383	1460	170	270	44.3	1340	<10	<1	3
1384	3940	400	250	3.9	448	<10	<1	13
1385	2900	170	140	11.2	500	<10	<1	7
1386	6100	130	1200	25.0	1010	<10	<1	26
1387	3070	220	240	19.1	542	<10	<1	7
1388	2990	150	1310	35.6	1300	<10	<1	13
1389	4030	180	1370	25.6	893	<10	<1	18
1390	1570	210	920	41.7	1210	<10	<1	7
1391	2510	160	560	38.2	1630	<10	<1	8
1392	470	250	800	36.0	1080	<10	<1	2
1393	4560	280	710	36.0	1240	<10	<1	6
1394	1770	180	950	33.9	1310	<10	<1	7
1395	1670	190	1440	56.1	1410	<10	<1	3
1396	3290	190	90	1.2	393	<10	<1	10
1397	2280	160	1370	27.1	1040	<10	<1	8
1398	3680	200	1130	38.5	1370	<10	<1	8
1399	4580	240	430	40.1	1540	<10	<1	4
1400	3710	130	1930	18.5	955	<10	<1	16
1401	740	140	1360	24.1	1050	<10	<1	3
1402	2170	300	510	39.5	1280	<10	<1	2
1403	4000	150	1230	16.0	674	<10	<1	9
1404	2860	200	460	16.4	440	<10	<1	3
1405	3400	210	780	18.6	449	<10	<1	3
1406	4400	150	820	11.3	457	<10	<1	6
1407	1620	200	460	18.0	390	<10	<1	1
1408	530	150	1480	32.4	1180	<10	<1	3
1409	2840	260	1020	18.2	672	<10	<1	4
1410	2920	280	780	21.6	645	<10	<1	5
1411	4070	160	710	15.1	476	<10	<1	4
1412	3240	200	610	8.9	462	<10	<1	5
1413	6370	180	1360	24.1	1150	<10	<1	20
1414	640	180	840	27.8	953	<10	<1	2
1415	5300	270	710	51.3	1600	<10	<1	4

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.





Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1416	4230	250	270	33.0	1240	<10	<1	5
1417	1820	440	1270	65.9	1270	<10	<1	<1
1418	5500	270	490	42.6	1280	<10	<1	7
1419	1040	110	860	17.2	818	<10	<1	5
1420	2520	240	260	38.8	512	<10	<1	4
1421	2210	170	1270	41.3	1420	<10	<1	8
1422	1130	180	590	38.0	1360	<10	<1	3
1423	3400	160	350	35.8	738	<10	<1	8
1424	3650	230	400	38.3	901	<10	<1	5
1425	4550	150	250	15.5	693	<10	<1	13
1426	4000	150	1050	30.3	1050	<10	<1	19
1427	3290	150	690	20.4	678	<10	<1	8
1428	4480	180	180	31.5	871	<10	<1	6
1429	5570	110	970	27.9	985	<10	<1	23
1430	490	160	200	42.0	1170	<10	<1	<1
1431	2730	120	410	29.6	1330	<10	<1	10
1432	6940	150	1240	17.7	809	<10	<1	47
1433	2640	160	750	30.3	1090	<10	<1	11
1434	1000	220	840	28.6	840	<10	<1	6
1435	1990	170	860	26.0	969	<10	<1	11
1436	3590	130	530	29.6	1090	<10	<1	15
1437	5160	210	810	23.8	784	<10	<1	30
1438	640	170	450	41.9	1120	<10	<1	3
1439	1720	200	210	22.9	765	<10	<1	3
1440	3640	170	640	20.8	675	<10	<1	14
1441	4490	260	390	23.7	574	<10	<1	11
*Dup 1368	1000	210	650	47.9	1480	<10	<1	2
*Dup 1380	4300	110	720	10.0	603	<10	<1	14
*Dup 1392	370	250	380	34.0	749	<10	<1	1
*Dup 1404	2740	190	500	12.2	357	<10	<1	4
*Dup 1416	2840	280	320	32.6	1140	<10	<1	4
*Dup 1428	2140	270	120	18.7	468	<10	<1	3
*Dup 1440	4050	140	70	0.4	107	<10	<1	12
*Std MMISRM14	1040	140	460	49.0	386	<10	57	26
*Std MMISRM14	870	120	380	46.4	329	<10	49	22
*Blk BLANK	<10	<10	20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	30	0.2	6	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096002

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

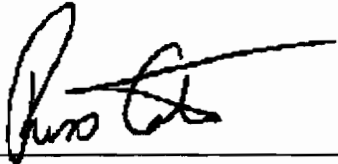
Date: Nov 23, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 33  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 2  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 33 Soils

Certified By : \_\_\_\_\_

  
Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1443	4050	440	190	7.5	266	<10	<1	16
1444	610	180	40	2.2	88	<10	<1	3
1445	2770	330	270	13.9	363	<10	<1	6
2826	1360	160	360	3.2	421	<10	<1	2
2827	1290	110	250	2.8	238	<10	<1	2
2828	1490	220	1580	32.9	778	<10	<1	3
2829	3510	140	500	26.1	948	<10	<1	3
2830	2320	240	650	36.5	1210	<10	<1	2
2831	3430	330	890	40.7	1320	<10	<1	6
2832	1640	100	220	3.3	347	<10	<1	2
2833	2760	170	1880	27.3	997	<10	<1	9
2834	3930	280	750	39.8	1420	<10	<1	5
2835	4790	130	1180	38.0	990	<10	<1	<1
2836	2810	160	1220	24.6	948	<10	<1	7
2837	1710	160	1640	38.1	1100	<10	<1	6
2838	1660	110	920	17.9	773	<10	<1	5
2839	5450	220	580	26.5	1250	<10	<1	9
2840	4360	200	250	25.3	1040	<10	<1	3
2841	3770	180	590	21.8	859	<10	<1	6
2842	4210	240	290	33.0	1360	<10	<1	5
2843	2280	160	1320	30.1	974	<10	<1	7
2844	2970	200	980	41.7	1310	<10	<1	9
2845	3400	180	780	29.0	1130	<10	<1	8
2846	4430	180	340	29.9	1320	<10	<1	8
2847	3460	170	300	23.1	1010	<10	<1	3
2848	2130	140	180	24.5	946	<10	<1	1
2849	2760	150	830	10.0	477	<10	<1	8
2850	3690	270	530	34.5	1020	<10	<1	6
2851	4520	180	1310	18.1	753	<10	<1	6
2852	3770	210	1460	24.3	857	<10	<1	8
2853	1550	230	590	27.8	807	<10	<1	2
2854	3360	130	1160	7.5	449	<10	<1	6
2855	3760	260	710	38.8	995	<10	<1	2
*Dup 1443	4400	330	230	6.5	252	<10	<1	17
*Dup 2835	5870	190	1380	27.5	910	<10	<1	2
*Dup 2847	2350	170	460	23.2	1030	<10	<1	3
*Std MMISRM14	810	220	350	44.6	330	<10	48	20
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096438

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 29, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 84  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

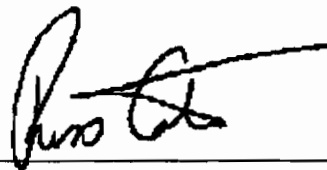
**Distribution of unused material:**

STORE: 84 Soils

**Comments:**

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By : \_\_\_\_\_

  
Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.

SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com

Member of the SGS Group (Société Générale de Surveillance)



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1446	5740	240	3580	13.2	740	10	<1	26
1447	2270	90	160	1.1	301	<10	<1	8
1448	3140	140	860	5.0	553	<10	<1	10
1449	3140	110	740	17.8	806	<10	<1	3
1450	3380	180	2230	24.1	1290	<10	<1	17
1451	6480	260	2410	22.1	1220	<10	<1	24
1452	4430	130	1310	7.3	715	<10	<1	16
1453	2100	90	770	7.9	395	<10	<1	3
1454	5810	230	2910	14.9	944	<10	<1	18
1455	3540	100	1430	7.4	455	<10	<1	10
1456	4930	130	1900	8.5	603	<10	<1	16
1457	6530	320	3180	21.2	1200	<10	<1	19
1458	1850	100	1150	9.9	271	<10	<1	5
1459	1060	170	1300	28.1	1250	<10	<1	4
1460	4910	260	560	31.7	1320	<10	<1	3
1461	5670	310	2760	15.1	885	<10	<1	23
1462	5550	220	1970	13.8	782	<10	<1	14
1463	2180	80	400	2.3	329	<10	<1	10
1464	2020	70	110	1.0	248	<10	<1	8
1465	2920	90	910	5.7	359	<10	<1	10
1466	3750	260	1440	16.0	688	<10	<1	7
1467	4570	200	1700	22.0	899	<10	<1	11
1468	4780	300	1120	31.0	1370	<10	<1	8
1469	5950	290	1970	23.6	1140	<10	<1	13
1470	2120	100	30	0.3	276	<10	<1	6
1471	4030	110	1650	6.0	548	<10	<1	10
1472	4590	150	2080	8.9	512	<10	<1	15
1473	3100	70	1250	6.7	368	<10	<1	8
1474	3330	100	1130	4.8	480	<10	<1	11
1475	7020	270	4240	16.1	702	<10	<1	26
1476	1580	70	50	0.5	236	<10	<1	4
1477	4530	180	1910	12.2	851	<10	<1	12
1478	6090	270	3010	19.7	887	<10	<1	28
1479	4910	190	1670	21.5	1110	<10	<1	18
1480	4930	300	1610	27.5	1370	<10	<1	8
1481	4280	220	1240	31.7	1490	<10	<1	9
1482	6190	180	3660	12.6	644	<10	<1	21
1483	1610	90	20	0.6	220	<10	<1	4
1484	3270	90	1230	4.6	381	<10	<1	11
1485	3260	130	1290	9.8	473	<10	<1	9
1486	1790	90	30	0.3	227	<10	<1	5
1487	4750	180	1320	13.0	748	<10	<1	13
1488	1710	80	30	0.5	208	<10	<1	4
1489	2060	90	230	1.1	279	<10	<1	6
1490	2430	120	240	9.9	381	<10	<1	4
1491	1690	100	240	2.9	277	<10	2	8
1492	3450	90	1140	6.2	378	20	<1	10
1493	4760	150	2000	7.8	595	10	<1	18

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1494	2540	190	490	3.9	449	<10	<1	9
1495	3950	200	1030	4.9	721	<10	<1	14
1496	4590	240	2480	27.3	1270	<10	<1	14
1497	5650	200	1900	16.7	1320	<10	<1	15
1498	4030	280	820	33.3	1390	<10	<1	7
1499	1950	100	130	11.1	316	<10	<1	4
1500	5120	180	1880	8.9	636	<10	<1	18
1501	3170	80	1220	6.0	444	<10	<1	7
1502	5410	250	2190	11.6	858	<10	<1	23
1503	1650	90	110	1.3	256	<10	<1	3
1504	4950	180	2390	16.5	855	<10	1	18
1505	2150	120	260	4.1	355	<10	1	5
1506	1840	120	860	17.4	270	<10	<1	4
1507	5330	260	1770	27.5	950	<10	<1	10
1508	1550	160	820	40.2	916	<10	<1	5
1509	3450	190	2070	23.8	1180	<10	<1	13
1510	3880	200	1220	39.2	661	<10	<1	10
1511	2710	100	710	4.0	333	<10	<1	11
1512	5150	230	1600	32.3	1210	<10	<1	17
1513	5390	190	2600	9.9	696	<10	<1	23
1514	3650	140	1050	4.1	526	<10	<1	19
1515	1090	90	20	0.7	227	<10	<1	2
1516	2250	110	530	11.4	361	<10	<1	8
1517	1990	140	430	10.6	358	<10	<1	6
1518	4060	230	700	12.4	517	<10	<1	8
1519	3620	180	600	29.6	690	<10	<1	5
1520	4020	180	100	2.1	168	<10	<1	8
1521	6860	260	2270	28.4	1240	<10	<1	24
1522	5150	340	1450	24.5	1080	<10	<1	7
1523	4930	150	2090	9.7	667	<10	<1	15
1524	5270	320	2170	21.1	848	<10	<1	17
1525	5980	180	1660	20.5	970	<10	<1	15
1526	3630	310	1140	28.9	670	<10	<1	9
1527	2560	180	120	20.8	318	<10	<1	3
1528	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1529	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
*Dup 1446	4780	180	2600	9.3	676	<10	<1	24
*Dup 1458	3540	150	1740	15.1	680	<10	<1	10
*Dup 1470	2280	100	50	0.6	337	<10	<1	8
*Dup 1482	5670	280	2780	17.8	726	<10	<1	14
*Dup 1494	2730	280	710	4.6	495	<10	<1	11
*Dup 1506	3050	170	1510	29.7	635	<10	<1	5
*Dup 1518	3950	270	1160	19.7	822	<10	<1	8
*Std MMISRM14	800	130	390	39.4	300	<10	46	18
*Std MMISRM14	750	120	330	42.6	307	<10	49	18
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Bik BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

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## Certificate of Analysis

Work Order: 096437

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 29, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 68  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

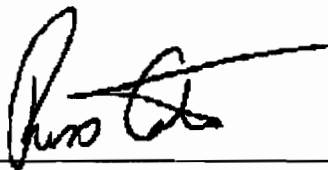
**Distribution of unused material:**

STORE: 68 Soils

**Comments:**

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By : \_\_\_\_\_

  
Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
- = No result

\*INF = Composition of this sample makes detection impossible by this method

*M* after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1530	2610	230	290	15.8	687	<10	<1	5
1531	1490	140	80	8.2	238	<10	<1	3
1532	3910	320	60	8.8	220	<10	<1	9
1533	3230	460	310	67.3	665	<10	<1	4
1534	2050	110	120	7.1	246	<10	<1	2
1535	4260	250	650	11.7	562	<10	<1	7
1536	1810	120	130	14.8	246	<10	<1	2
1537	5070	400	810	50.2	844	<10	<1	8
1538	4380	350	710	39.3	780	<10	<1	7
1539	5950	310	2260	28.7	1000	<10	<1	18
1540	2840	230	340	22.9	605	<10	<1	3
1541	5970	200	1760	27.8	978	<10	<1	9
1542	3670	210	1920	20.6	889	<10	<1	8
1543	3210	350	290	42.6	654	<10	<1	7
1544	2260	130	60	24.1	291	<10	<1	2
1545	1660	100	50	9.0	177	<10	<1	2
1546	7520	230	1220	35.3	886	<10	<1	9
1547	2160	140	130	14.0	233	<10	<1	2
1548	1960	140	120	9.1	320	<10	<1	2
1549	4220	250	50	2.5	202	<10	<1	7
1550	4170	300	140	5.4	245	<10	<1	7
1551	3670	310	500	34.1	667	<10	<1	5
1552	2850	300	150	36.8	640	<10	<1	4
1553	1290	90	200	4.8	258	<10	<1	2
1554	5450	360	1010	46.8	1020	<10	<1	8
1555	2820	220	120	1.8	217	<10	<1	7
1556	4610	240	1380	20.6	611	<10	<1	8
1557	3140	130	740	14.5	668	<10	<1	3
1558	3150	310	150	41.4	753	<10	<1	3
1559	440	110	760	19.1	686	<10	<1	<1
1560	2720	130	720	19.5	648	<10	<1	2
1561	3500	300	500	23.9	522	<10	<1	5
1562	590	150	250	28.8	774	<10	<1	1
1563	2560	230	1520	34.3	1210	<10	<1	8
1564	4110	200	120	4.2	542	<10	<1	12
1565	5370	160	1360	22.2	859	<10	<1	27
1566	5420	210	3910	24.8	1230	<10	<1	32
1567	6330	140	1500	21.5	979	<10	<1	34
1568	5730	390	1640	23.2	684	<10	<1	21
1569	6240	210	2060	24.3	883	<10	<1	23
1570	2820	200	280	1.1	379	<10	<1	13
1571	4950	120	1920	14.8	858	<10	<1	13
1572	3930	260	<20	0.1	129	<10	<1	9
1573	3040	150	360	27.7	1190	<10	<1	3
1574	460	70	40	14.4	432	<10	<1	1
1575	6770	170	1580	18.5	816	<10	<1	43
1576	5060	360	120	0.2	109	<10	<1	11
1577	4650	310	190	0.1	181	<10	<1	14

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1578	10200	100	3170	17.9	1420	<10	<1	28
1579	2140	140	1800	18.0	737	<10	<1	7
1580	2100	140	2500	19.1	929	<10	<1	13
1581	4540	170	1780	22.5	1000	<10	<1	28
1582	5050	180	1260	20.6	850	<10	<1	14
1583	2030	400	100	1.6	355	<10	<1	3
1584	3880	990	310	0.2	403	<10	<1	8
1585	1790	180	40	2.3	162	<10	<1	6
1586	2390	160	690	11.2	346	<10	<1	4
1587	2820	100	190	18.1	412	<10	<1	2
1588	3850	210	1040	35.5	807	<10	3	10
1589	6570	300	460	17.5	468	<10	<1	12
1590	8900	240	190	11.3	449	<10	<1	16
1591	1060	160	310	34.8	726	<10	<1	2
1592	6590	160	810	25.1	1040	<10	<1	25
1593	360	170	990	28.5	1120	<10	<1	2
1594	5260	130	1150	10.4	712	<10	<1	9
1595	6780	140	900	1.3	289	<10	<1	22
1596	5010	570	70	0.1	82	<10	<1	12
1597	3640	180	560	24.2	1140	<10	<1	5
*Dup 1530	2110	250	150	11.4	644	<10	<1	2
*Dup 1542	4690	320	1190	29.8	935	<10	<1	10
*Dup 1554	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
*Dup 1566	3240	140	2640	26.1	1670	<10	<1	17
*Dup 1578	3850	190	3510	25.0	1060	<10	<1	17
*Dup 1590	5250	250	70	4.5	182	<10	<1	13
*Std MMISRM14	810	110	350	41.3	276	<10	47	21
*Std MMISRM14	760	100	400	40.4	243	<10	47	21
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

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## Certificate of Analysis

Work Order: 096433

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 23, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 62  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 62 Soils

**Comments:**

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

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Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1598	3650	720	170	1.3	456	<10	<1	14
1599	1960	240	40	3.0	199	<10	<1	7
1600	4080	470	1130	15.8	648	<10	<1	15
1601	3580	220	1750	11.6	522	<10	<1	10
1602	1680	210	140	3.6	205	<10	<1	8
1603	1520	170	1360	32.4	1050	<10	<1	7
1604	5930	200	620	10.6	490	<10	<1	26
1605	7270	300	2300	37.3	1220	<10	<1	26
1606	1780	230	150	9.2	306	<10	<1	4
1607	2890	220	1620	29.4	961	<10	<1	17
1608	5330	300	1120	41.3	1060	<10	<1	26
1609	410	150	30	10.4	395	<10	<1	<1
1610	3070	210	1250	13.7	549	<10	<1	9
1611	4440	100	2710	13.6	1180	<10	<1	5
1612	5260	90	2020	5.4	737	<10	<1	7
1613	5180	120	1730	5.2	585	<10	<1	12
1614	6400	250	490	0.8	443	<10	<1	22
1615	6750	560	240	0.7	289	<10	<1	19
1616	4430	260	750	37.4	1210	<10	<1	7
1617	3190	250	90	0.4	295	<10	<1	11
1618	6430	240	400	30.3	1390	<10	<1	7
1619	6130	140	670	4.5	354	<10	<1	22
1620	4160	210	1630	14.1	360	<10	<1	30
1621	5260	350	1430	23.9	947	<10	<1	17
1622	3850	240	60	6.2	192	<10	<1	7
1623	5810	230	2250	18.7	642	<10	<1	50
1624	5870	120	1010	6.6	414	<10	<1	35
1625	1550	180	120	4.2	243	<10	<1	3
1626	6420	190	1770	29.0	1030	<10	<1	24
1627	5020	250	1760	21.4	745	<10	<1	26
1628	2300	180	1380	19.7	875	<10	<1	14
1629	5100	130	840	27.2	992	<10	<1	28
1630	6700	220	1440	29.2	1060	<10	<1	32
1631	4800	200	1130	28.6	892	<10	<1	21
1632	3740	210	100	2.2	632	<10	<1	19
1633	2870	120	50	10.9	332	<10	<1	5
1634	4910	240	230	25.2	801	<10	<1	6
1635	7030	190	2210	10.2	814	<10	<1	24
1636	5320	180	1960	20.7	938	<10	<1	29
1637	2520	140	180	13.4	500	<10	<1	5
1638	4030	120	1230	16.7	960	<10	<1	18
1639	4170	100	1380	9.4	533	<10	<1	24
1640	6250	500	80	0.3	227	<10	<1	20
1641	3820	400	160	4.9	271	<10	<1	14
1642	7960	420	200	0.3	99	<10	<1	25
1643	1330	160	200	3.7	127	<10	<1	7
1644	8820	1150	4310	32.9	1160	<10	<1	57
1645	7310	260	970	27.4	712	<10	<1	47

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Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1646	5600	250	100	1.8	122	<10	<1	18
1647	5740	320	1400	22.5	663	<10	<1	36
1648	4400	310	1430	18.5	567	<10	<1	18
1649	2490	170	350	9.1	404	<10	<1	7
1650	1760	250	290	4.2	296	<10	<1	5
1651	2340	180	1390	35.2	1270	<10	<1	13
1652	3000	160	620	37.9	1360	<10	<1	6
1653	2640	190	320	50.4	1260	<10	<1	5
1654	5960	320	740	46.8	1630	<10	<1	18
1655	7870	170	1590	27.3	1140	<10	<1	40
1656	2510	220	180	27.3	693	<10	<1	6
1657	3220	210	250	24.6	604	<10	<1	7
1658	6670	200	960	29.6	976	<10	<1	15
1659	7060	250	580	29.6	1830	<10	<1	4
*Dup 1598	3820	600	260	1.7	449	<10	<1	11
*Dup 1610	3050	200	980	19.5	600	<10	<1	7
*Dup 1622	2930	380	1380	8.9	322	<10	<1	16
*Dup 1634	5120	230	290	29.9	940	<10	<1	7
*Dup 1646	5760	310	90	1.3	76	<10	<1	16
*Dup 1658	5270	160	740	40.3	1300	<10	<1	11
*Std MMISRM14	770	160	330	47.2	292	<10	52	22
*Std MMISRM14	790	160	360	46.8	300	<10	53	22
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096436

To: **Northern Gold Mining Inc.**  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 21, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 60  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 60 Soils

Certified By : \_\_\_\_\_  
Operations Manager

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com



Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1660	6050	220	250	22.8	1240	<10	<1	5
1661	2320	200	170	25.0	1160	<10	<1	6
1662	2670	150	80	9.1	429	<10	<1	5
1663	3120	150	40	16.4	746	<10	<1	7
1664	3380	130	190	24.3	994	<10	<1	9
1665	3470	110	300	6.6	624	<10	<1	19
1666	2940	100	60	5.1	463	<10	<1	14
1667	5070	180	600	24.3	966	<10	<1	16
1668	6030	190	1250	22.4	981	<10	<1	21
1669	6070	170	760	27.4	1010	<10	<1	11
1670	4150	200	310	19.2	619	<10	<1	11
1671	5690	170	1810	16.1	677	<10	<1	23
1672	2830	140	90	22.1	951	<10	<1	6
1673	3000	100	30	2.2	303	<10	<1	13
1674	3190	160	40	13.2	485	<10	<1	6
1675	3640	120	50	11.3	637	<10	<1	10
1676	2160	140	30	6.7	317	<10	<1	5
1677	2440	140	80	10.8	339	<10	<1	12
1678	4900	140	160	28.0	848	<10	<1	14
1679	3890	150	170	29.7	637	<10	<1	7
1680	4840	140	240	22.9	746	<10	<1	18
1681	4640	200	470	23.2	696	<10	<1	13
1682	5750	310	470	24.9	969	<10	<1	14
1683	1520	210	400	13.1	542	<10	<1	4
1684	3900	120	300	10.3	558	<10	<1	15
1685	4870	120	560	24.0	1030	<10	<1	26
1686	3890	190	350	25.1	922	<10	<1	8
1687	2390	100	40	2.9	422	<10	<1	12
1688	2820	170	50	12.3	360	<10	<1	10
1689	2480	110	80	2.9	418	<10	<1	11
1690	5420	270	470	24.4	997	<10	<1	14
1691	5070	220	2160	17.2	678	<10	<1	26
1692	5090	170	210	19.1	878	<10	<1	14
1693	5410	280	570	25.6	1020	<10	<1	12
1694	1630	210	440	32.7	896	<10	<1	6
1695	2830	210	110	28.3	946	<10	<1	5
1696	3160	150	220	18.3	773	<10	<1	11
1697	3350	100	40	5.3	559	<10	<1	11
1698	4870	140	480	26.2	1030	<10	<1	18
1699	2330	90	20	0.7	338	<10	<1	10
1700	2600	100	50	1.3	415	<10	<1	14
1701	4080	100	150	21.9	782	<10	<1	11
1702	4910	320	230	30.0	976	<10	<1	7
1703	6020	160	2940	13.9	750	<10	<1	42
1704	2130	150	80	30.1	416	<10	<1	3
1705	4490	210	80	12.8	735	<10	<1	12
1706	4090	220	140	25.5	886	<10	<1	9
1707	2330	140	40	0.9	308	<10	<1	10

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1708	2640	80	30	1.8	412	<10	<1	14
1709	3460	130	70	11.1	604	<10	<1	10
1710	2710	110	70	5.2	420	<10	<1	10
1711	3890	150	220	28.6	1200	<10	<1	10
1712	2970	150	90	16.2	510	<10	<1	10
1713	4070	140	230	25.9	772	<10	<1	10
1714	2940	130	170	21.7	937	<10	<1	7
1715	3820	150	810	26.1	1050	<10	<1	12
1716	3440	160	120	6.9	507	<10	<1	12
1717	5130	150	530	21.5	829	<10	<1	28
1718	3560	150	400	28.9	987	<10	<1	15
1719	5670	150	700	20.2	877	<10	<1	31
*Dup 1660	6030	180	260	20.3	1340	<10	<1	6
*Dup 1672	3780	160	110	19.3	617	<10	<1	7
*Dup 1684	4050	180	180	12.9	471	<10	<1	13
*Dup 1696	2530	190	150	29.9	825	<10	<1	7
*Dup 1708	2830	100	50	2.6	378	<10	<1	9
*Std MMISRM14	720	100	310	41.1	236	<10	41	19
*Std MMISRM14	750	110	310	41.5	251	<10	42	19
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*Blk BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



## Certificate of Analysis

Work Order: 096435

To: Northern Gold Mining Inc.  
Attn: Ken Ratte  
Box 453  
1470 Government Rd. W.  
KIRKLAND LAKE  
ON P2N 3J1

Date: Nov 29, 2007

P.O. No. :  
Project No. : DEFAULT  
No. Of Samples 73  
Date Submitted Oct 22, 2007  
Report Comprises Pages 1 to 3  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE: 73 Soils

**Comments:**

Duplicate results outside acceptance criteria due to sample inhomogeneity.

Certified By : \_\_\_\_\_

Russ Calow, B.Sc., C.Chem.  
Vice President Global Geochemistry

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion. % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152 www.sgs.com





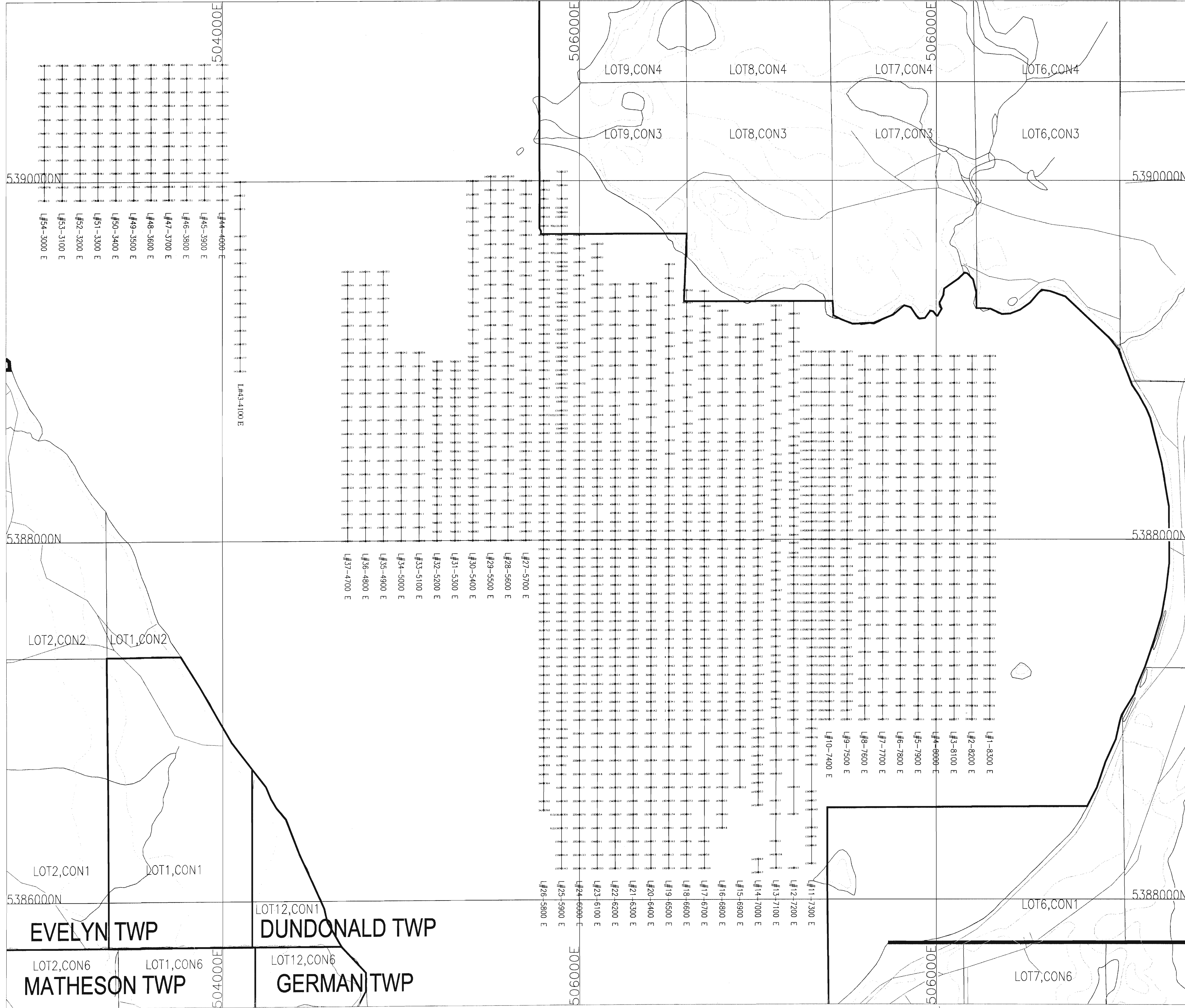
Element	Cu	Pb	Zn	Au	Ni	Te	Pd	Ag
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	10	20	0.1	5	10	1	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1720	4220	90	180	39.8	1380	<10	<1	3
1721	4890	120	630	26.6	1190	<10	<1	24
1722	3480	110	30	3.9	403	<10	<1	12
1723	3250	90	30	4.8	363	<10	<1	12
1724	1170	140	410	23.7	962	<10	<1	6
1725	3210	120	30	2.7	451	<10	<1	12
1726	4370	150	100	20.7	725	<10	<1	11
1727	3590	120	100	1.0	301	<10	<1	13
1728	3670	110	580	27.2	1100	<10	<1	19
1729	3080	120	50	15.6	614	<10	<1	9
1730	3870	110	30	1.9	326	<10	<1	16
1731	3390	80	<20	2.8	367	<10	<1	16
1732	5780	100	290	14.9	928	<10	<1	22
1733	3340	100	20	1.4	279	<10	<1	13
1734	4600	190	710	26.0	889	<10	<1	19
1735	3440	150	620	24.0	876	<10	<1	16
1736	3340	280	210	12.7	788	<10	<1	9
1737	2380	310	560	13.5	769	<10	<1	6
1738	6370	240	770	35.6	1300	<10	<1	16
1739	1720	270	380	27.2	1050	<10	<1	6
1740	1860	220	380	38.1	1410	<10	<1	6
1741	5190	150	910	22.5	928	<10	<1	31
1742	3380	160	310	30.6	1180	<10	<1	9
1743	3760	120	40	2.4	356	<10	<1	14
1744	4060	70	120	3.6	784	<10	<1	13
1745	3360	190	280	30.3	1190	<10	<1	12
1746	3590	110	50	9.2	486	<10	<1	13
1747	4480	110	90	12.6	858	<10	<1	16
1748	5120	100	160	15.9	926	<10	<1	19
1749	6060	190	910	23.5	915	<10	<1	27
1750	1940	200	290	32.6	1240	<10	<1	5
1751	2590	110	910	22.8	1020	<10	<1	17
1752	4910	250	370	46.3	1450	<10	<1	7
1753	2930	140	80	7.6	719	<10	<1	9
1754	2130	170	410	27.9	1140	<10	<1	10
1755	4420	130	610	25.8	1140	<10	<1	25
1756	5470	80	860	20.3	1030	<10	<1	6
1757	2820	90	40	1.1	319	<10	<1	13
1758	3970	130	170	24.6	972	<10	<1	11
1759	2630	170	490	32.1	1080	<10	<1	9
1760	2400	270	110	9.2	546	<10	<1	5
1761	5730	130	750	21.2	735	<10	<1	37
1762	4170	130	750	18.4	882	<10	<1	18
1763	4750	120	980	20.9	1010	<10	<1	24
1764	5840	240	390	46.0	1430	<10	<1	8
1765	3770	140	40	3.3	587	<10	<1	13
1766	980	190	670	31.7	975	<10	<1	5
1767	5230	130	440	30.1	1170	<10	<1	18

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



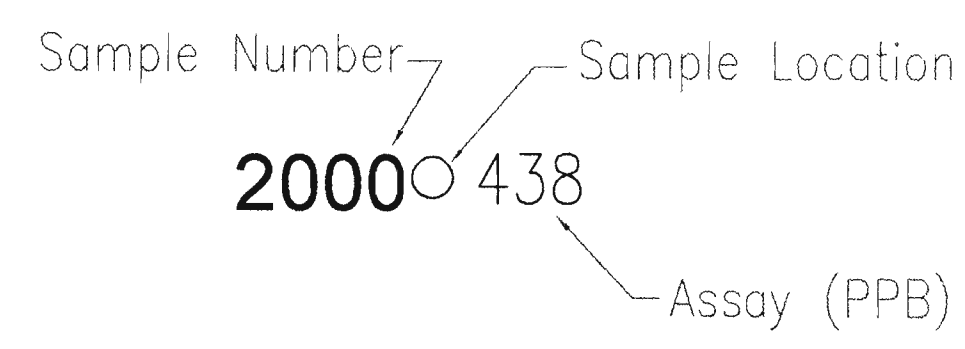
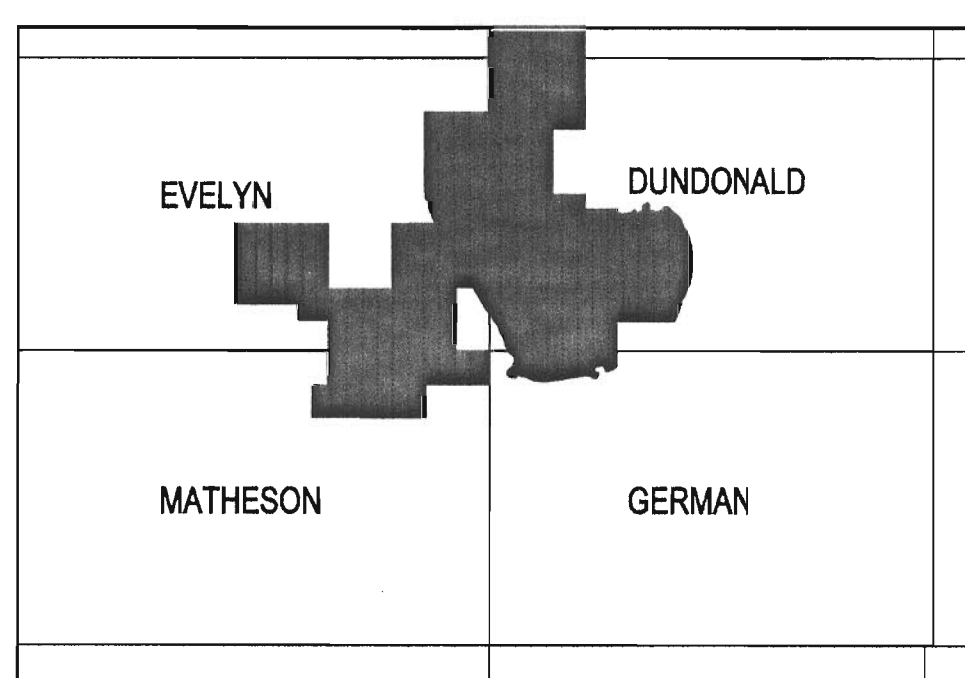
Element Method Det.Lim. Units	Cu MMI-M5 10 PPB	Pb MMI-M5 10 PPB	Zn MMI-M5 20 PPB	Au MMI-M5 0.1 PPB	Ni MMI-M5 5 PPB	Te MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Ag MMI-M5 1 PPB
1768	4200	210	220	26.2	814	<10	<1	11
1769	2460	80	40	0.4	376	<10	<1	14
1770	3470	160	130	29.8	711	<10	<1	10
1771	2700	90	90	2.3	496	<10	<1	17
1772	4610	170	510	27.8	1100	<10	<1	15
1773	3260	120	20	1.3	280	<10	<1	12
1774	3920	240	160	34.7	1160	<10	<1	8
1775	4090	160	530	20.3	896	<10	<1	20
1776	3700	160	90	7.3	715	<10	<1	13
1777	5240	150	670	22.8	1210	<10	<1	25
1778	3020	230	740	28.7	961	<10	1	13
1779	2790	150	850	25.5	991	<10	<1	15
1780	3840	200	1690	31.5	1880	<10	<1	23
1781	5300	260	730	19.6	530	<10	<1	32
2000	3810	300	1270	23.8	635	<10	<1	4
2001	3900	140	1200	13.3	547	<10	<1	4
2002	3910	360	290	53.1	737	<10	<1	4
2003	1190	190	1750	20.7	652	<10	<1	2
2004	4010	260	840	27.6	630	<10	<1	3
2005	4110	140	930	15.0	552	<10	<1	7
2006	3660	580	60	1.7	148	<10	<1	4
2007	4410	250	870	10.9	413	<10	<1	11
2008	2610	430	140	12.0	264	<10	<1	4
2009	4670	150	810	12.5	521	<10	<1	14
2010	2140	470	90	2.6	239	<10	<1	3
*Dup 1720	4100	80	140	27.3	828	<10	<1	5
*Dup 1732	4680	140	180	9.6	572	<10	<1	14
*Dup 1744	4340	80	100	1.1	666	<10	<1	16
*Dup 1756	4140	90	590	20.9	968	<10	<1	9
*Dup 1768	2940	200	200	31.9	1130	<10	<1	8
*Dup 1780	6620	220	1840	31.5	1460	<10	<1	44
*Dup 2010	2970	770	120	6.7	325	<10	<1	5
*Std MMISRM14	770	110	350	37.2	271	<10	46	20
*Std MMISRM14	800	120	380	39.1	293	<10	51	20
*BIK BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1
*BIK BLANK	<10	<10	<20	<0.1	<5	<10	<1	<1

The data reported on this certificate of analysis represents the sample submitted to SGS Minerals Services. Reproduction of this analytical report, in full or in part, is prohibited without prior written approval.



**LEGEND**

- Land Tenure**
- Freehold Patent
    - Surface And Mining Rights
    - Surface Rights Only
  - Licence of Occupation
    - ◆ Surface And Mining Rights
  - Mining Claim
    - 1234567
- Topographic**
- +—+— Railway
  - Road
  - Shoreline
  - Building
  - Topographic Contour

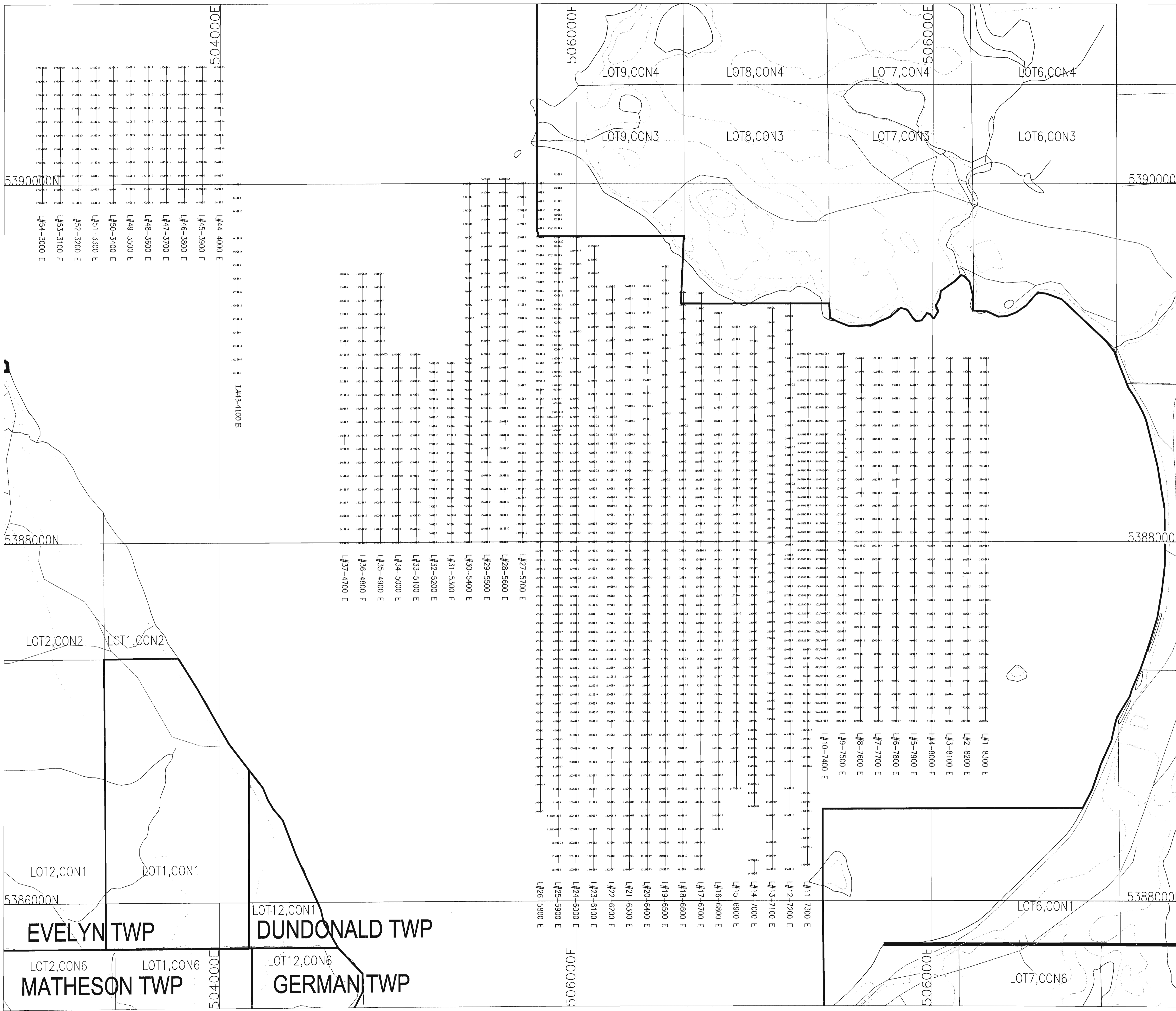


**FREDERICK HOUSE LAKE PROJECT**

DUNDONALD / GERMAN / EVELYN / MATHESON  
TOWNSHIPS  
Porcupine Mining Division, Ontario

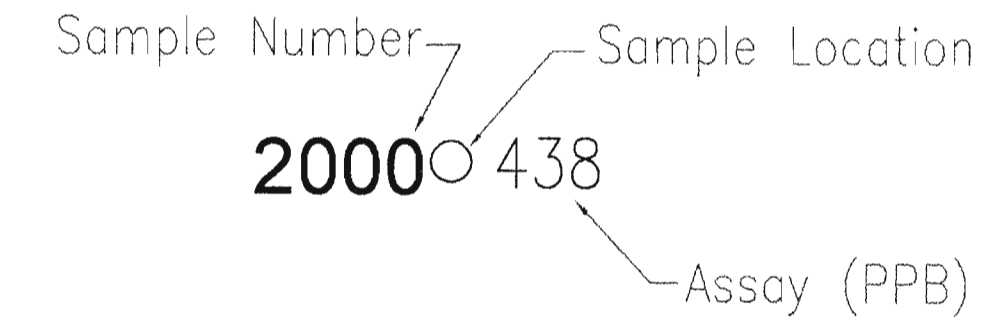
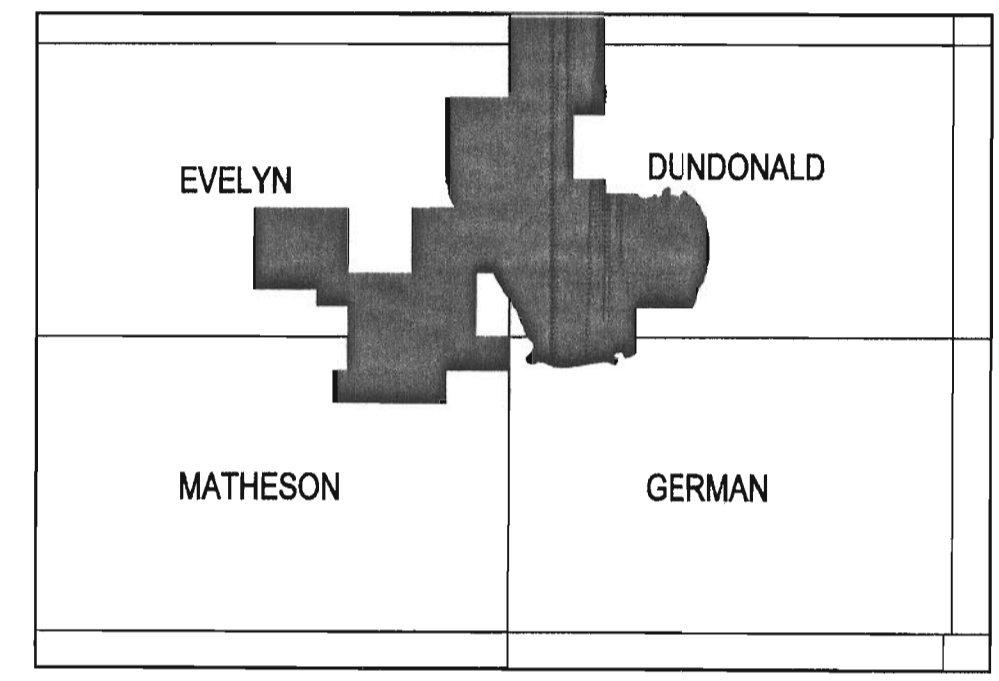
**Mobile Metal Ions Process  
Geochemical Survey**  
GOLD

NTS: 42A/10	DATA BY: P. Culhane/G. Matheson/K. Culhane
G.P.S. DATUM: NAD 83	DRAWN BY: B. Modill
DRAWING No.: FH2008_AU	DATE: April 08, 2008
SCALE: 0 200 400 600 800 1000 Meters	



**LEGEND**

- Land Tenure**
- Freehold Patent
    - Surface And Mining Rights
    - Surface Rights Only
  - Licence of Occupation
    - ◆ Surface And Mining Rights
  - Mining Claim
    - 1234567
- Topographic**
- +—+— Railway
  - Road
  - Shoreline
  - Building
  - Topographic Contour



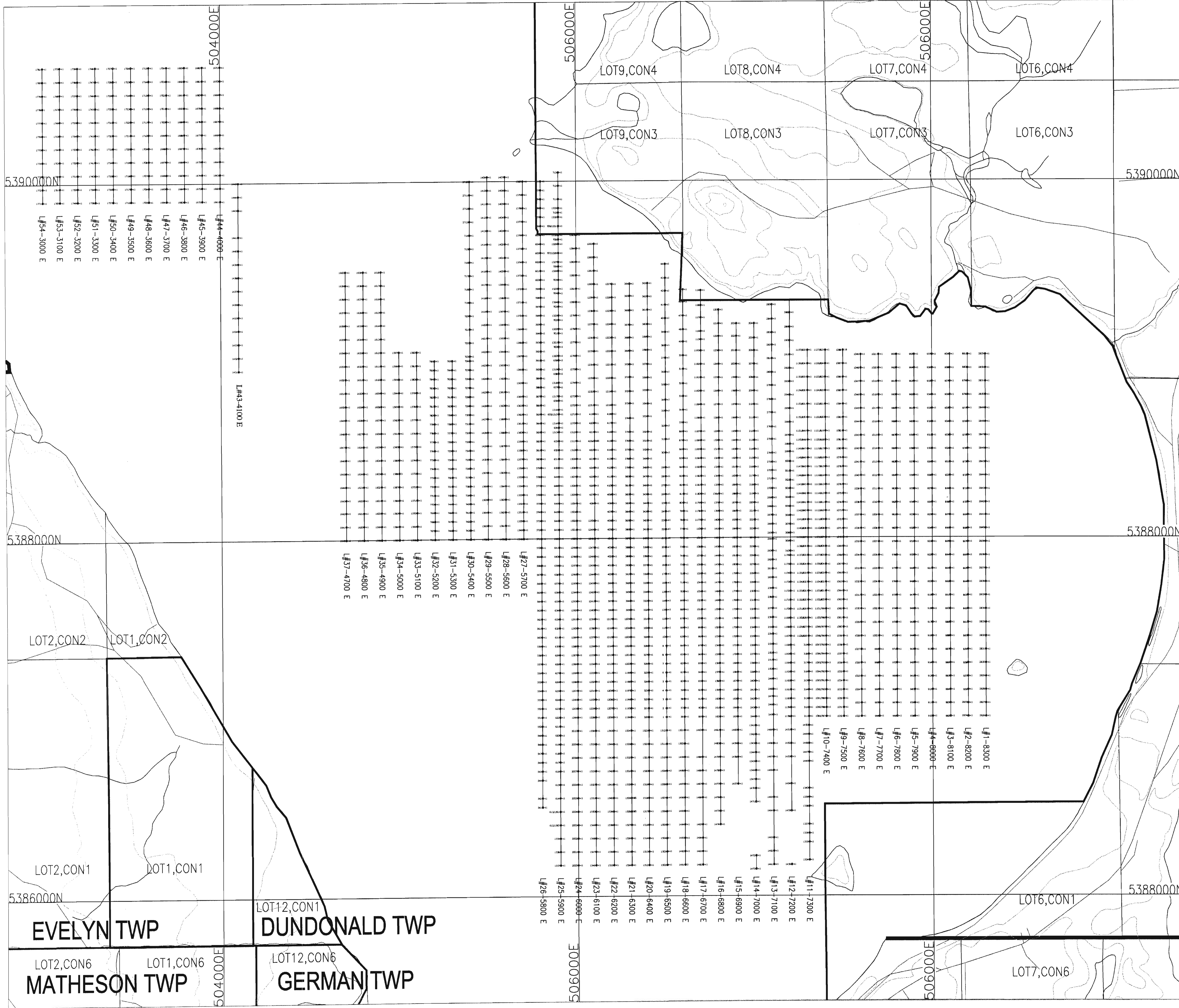
**FREDERICK HOUSE LAKE PROJECT**

DUNDONALD / GERMAN / EVELYN / MATHESON  
TOWNSHIPS  
Porcupine Mining Division, Ontario

**Mobile Metal Ions Process  
Geochemical Survey**  
SILVER

N.T.S.: 42A/10	DATA BY: P. Cuihane/G. Matheson/K. Cuihane
G.P.S. DATUM: NAD 83	DRAWN BY: B. Madill
DRAWING No.: FH2008_AG	DATE: April 08, 2008
SCALE:	Meters





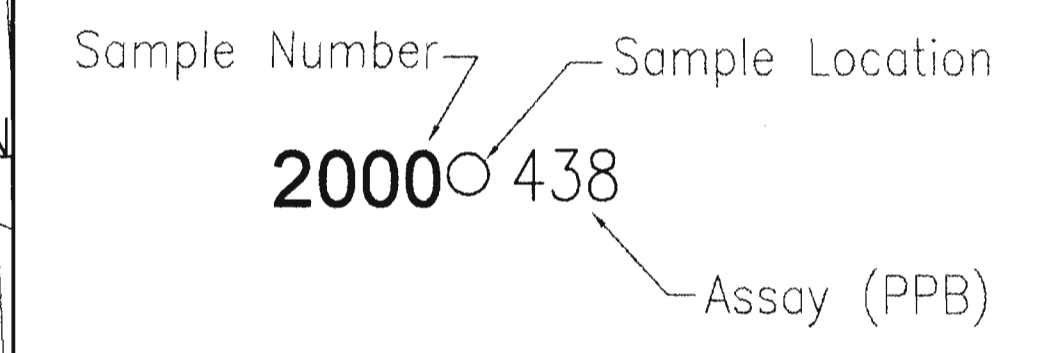
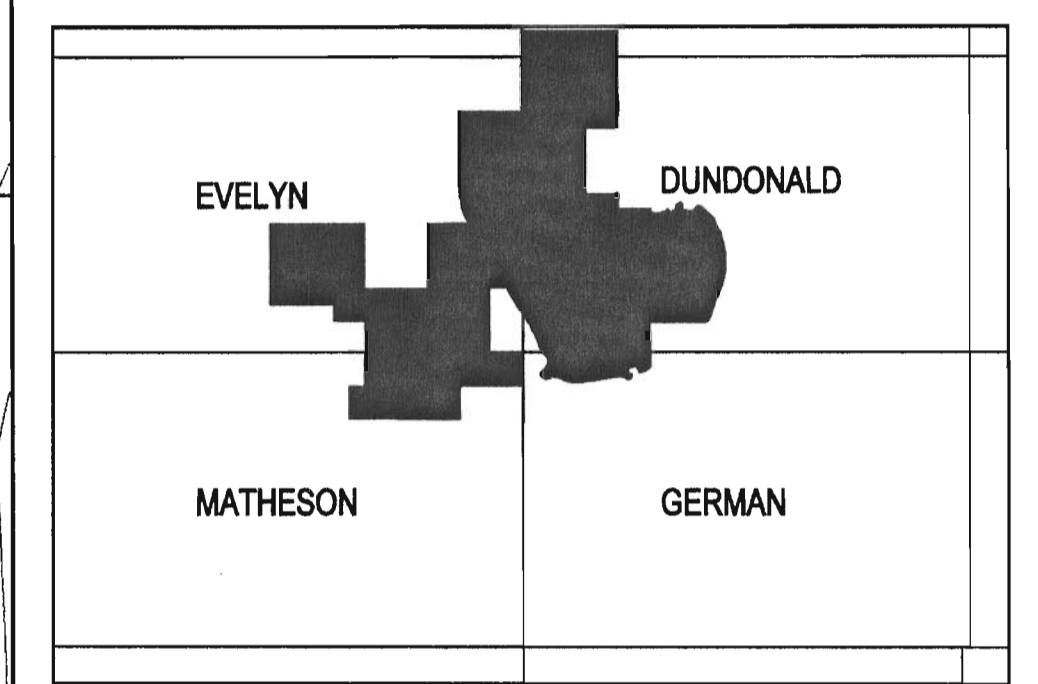
**LEGEND**

**Land Tenure**

- Freehold Patent
  - Surface And Mining Rights
  - Surface Rights Only
- Licence of Occupation
  - ◆ Surface And Mining Rights
- Mining Claim
  - 1234567

**Topographic**

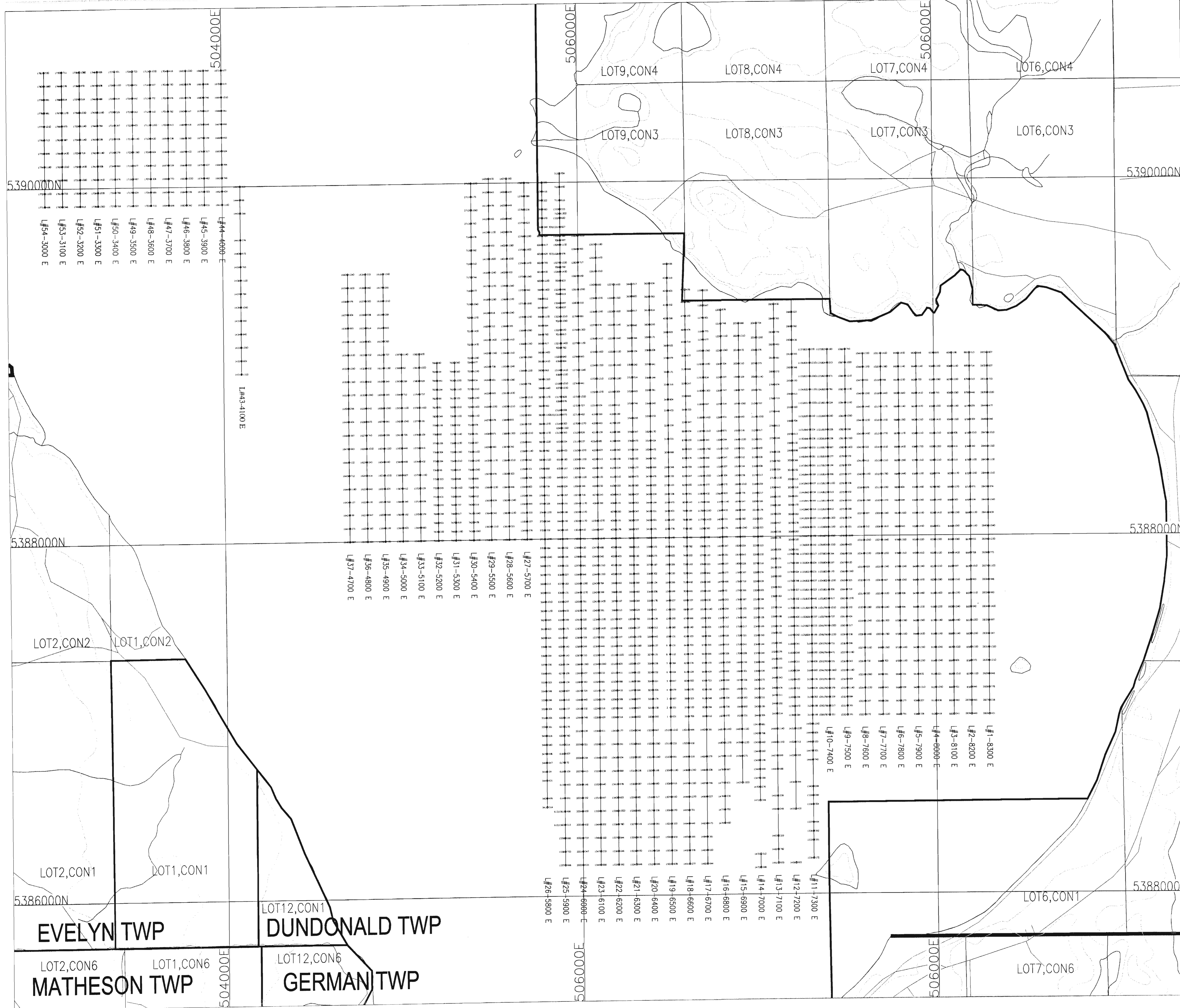
- +—+—+— Railway
- Road
- Shoreline
- Building
- Topographic Contour



**FREDERICK HOUSE LAKE PROJECT**  
 DUNDONALD / GERMAN / EVELYN / MATHESON TOWNSHIPS  
 Porcupine Mining Division, Ontario

**Mobile Metal Ions Process Geochemical Survey**  
 PALLADIUM

N.T.S.: 42A/10	DATA BY: P. Culhane/G. Matheson/K. Culhane
G.P.S. DATUM: NAD 83	DRAWN BY: B. Madill
DRAWING No.: FH2008_PD	DATE: April 08, 2008
SCALE: 0 200 400 600 800 1000 Meters	



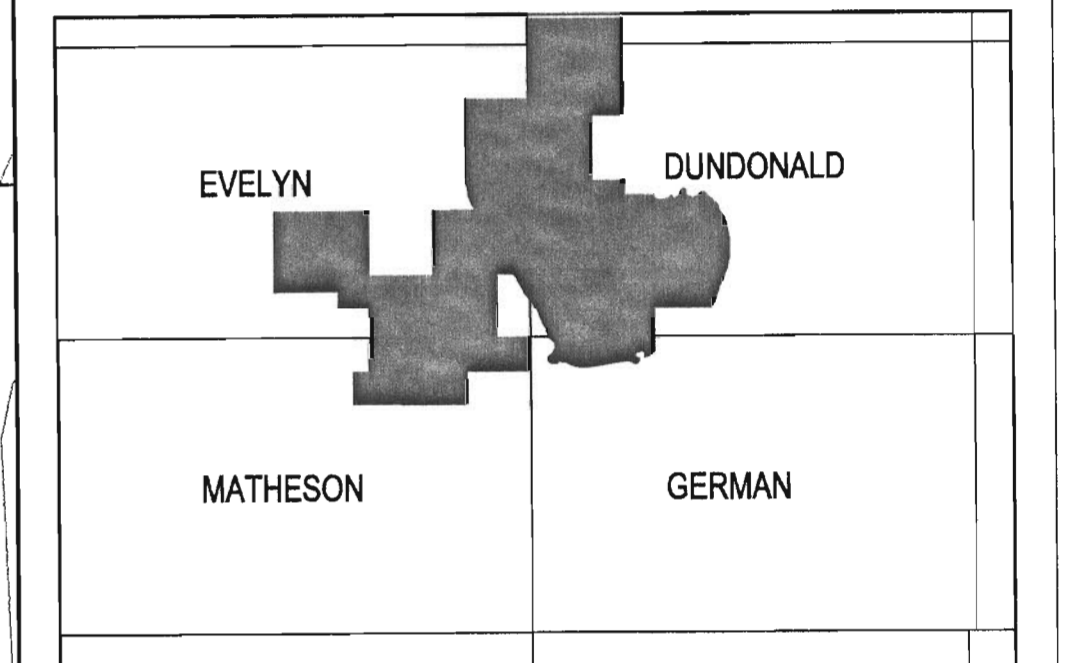
### LEGEND

**Land Tenure**

- Freehold Patent
  - Surface And Mining Rights
  - Surface Rights Only
- Licence of Occupation
  - ◆ Surface And Mining Rights
- Mining Claim
  - ⬡ Mining Claim

**Topographic**

- ⊕ Railway
- Road
- ~ Shoreline
- Building
- ~ Topographic Contour



Sample Number → Sample Location

2000 ○ 438

← Assay (PPB)



**FREDERICK HOUSE LAKE PROJECT**

DUNDONALD / GERMAN / EVELYN / MATHESON TOWNSHIPS  
Porcupine Mining Division, Ontario

**Mobile Metal Ions Process Geochemical Survey**

NICKEL

NT.S:	42A/10	DATA BY:	P. Culhane/G. Matheson/K. Culhane
G.P.S. DATUM:	NAD 83	DRAWN BY:	B. Madill
DRAWING No.:	FH2008_NI	DATE:	April 08, 2008
SCALE:	0 200 400 600 800 1000 Meters		

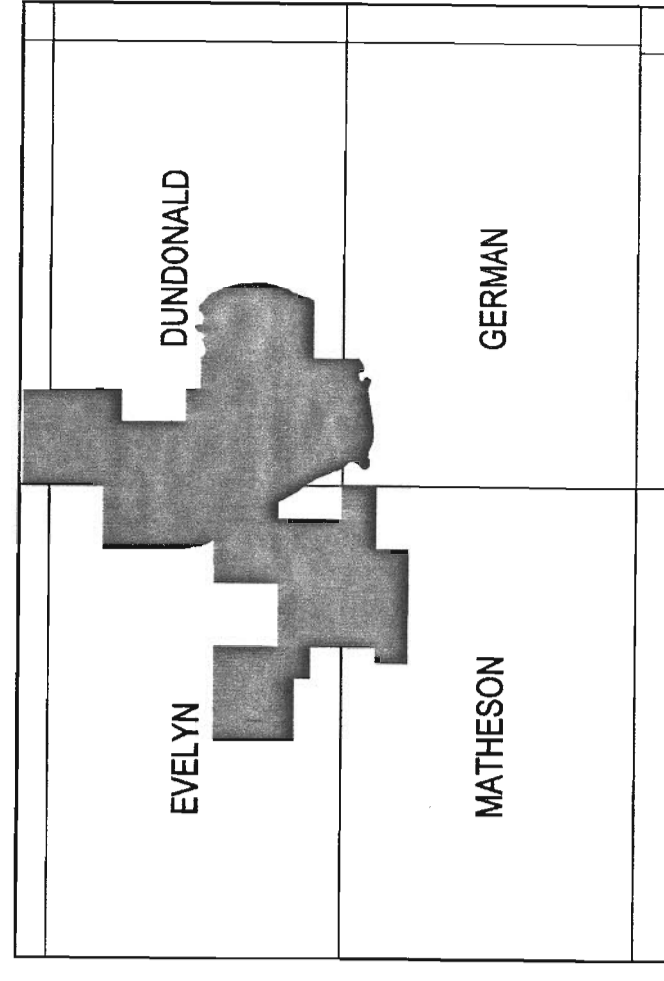
# LEGEND

## Land Tenure

- Freehold Patent
- Surface And Mining Rights
- Surface Rights Only
- Licence of Occupation
- Surface And Mining Rights
- Mining Claim

## Topographic

- Railway
- Road
- Shoreline
- Building
- Topographic Contour

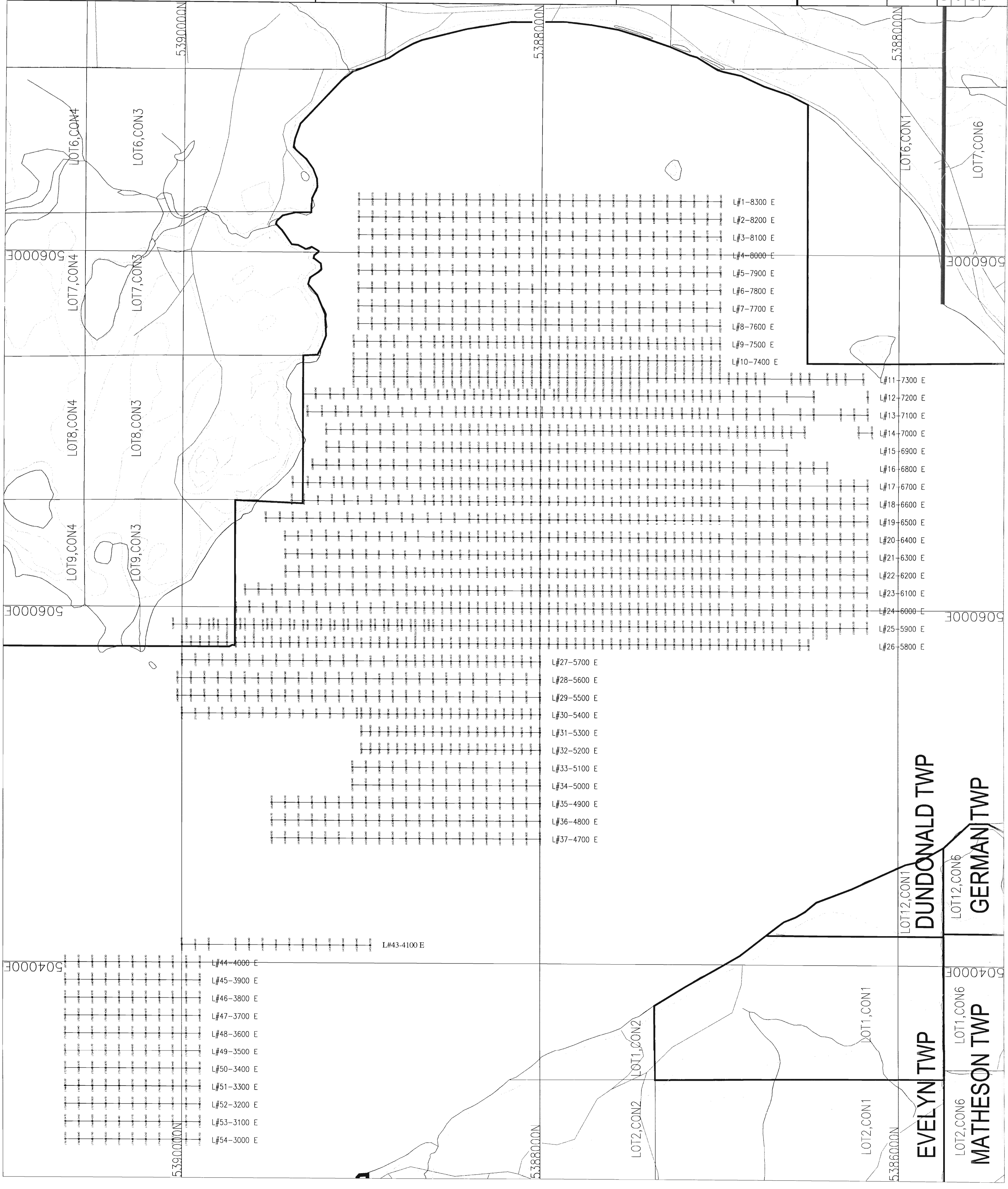


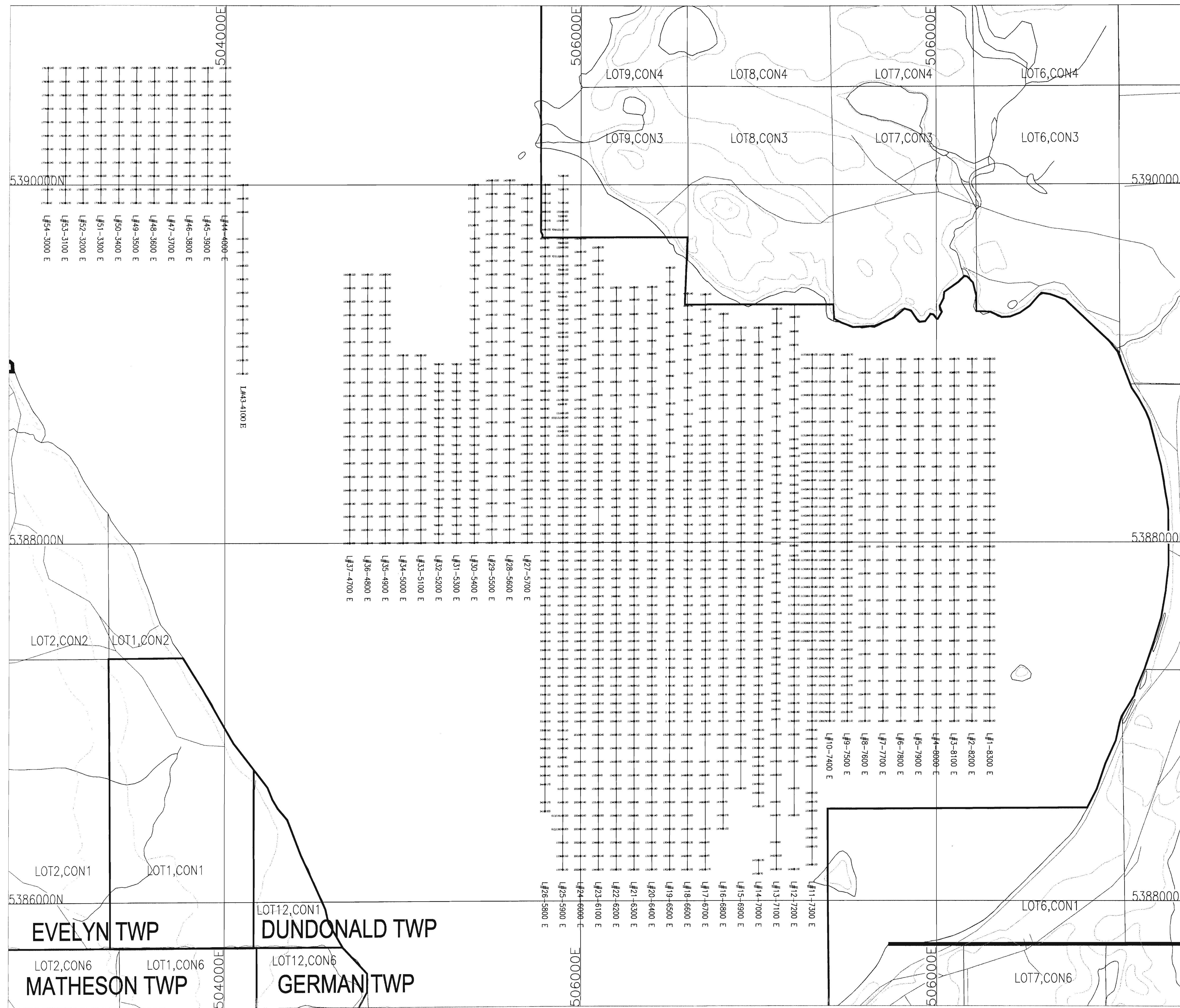
## FREDERICK HOUSE LAKE PROJECT

DUNDONALD / GERMAN / EVELYN / MATHESON TOWNSHIPS  
Porcupine Mining Division, Ontario

*Mobile Metal Ions Process Geochemical Survey*  
COPPER

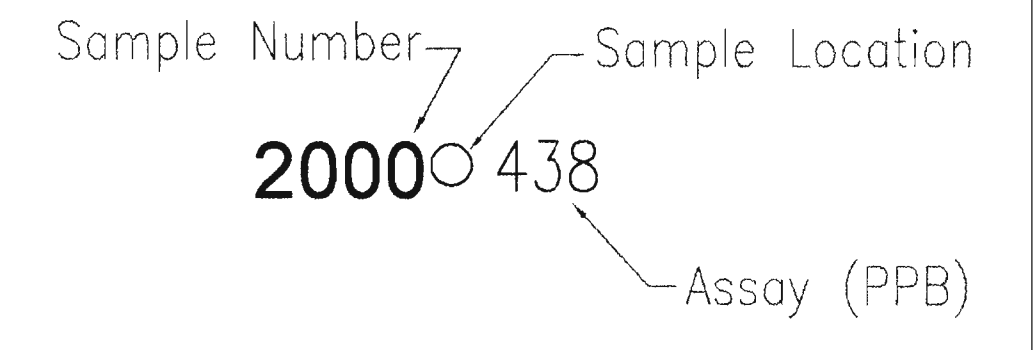
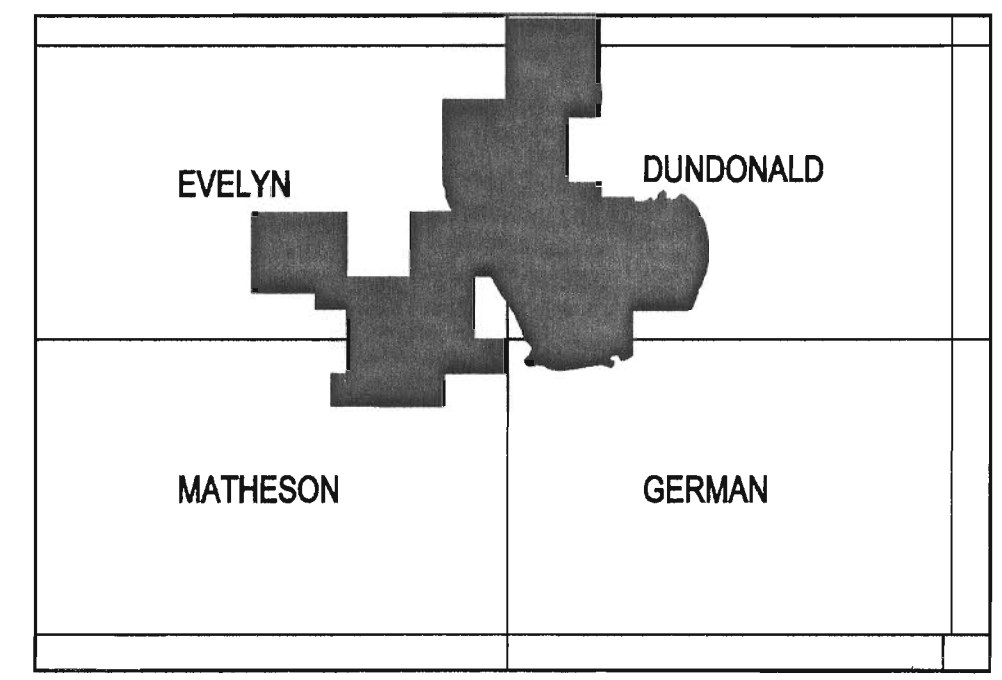
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G.P.S. DATUM:	NAD 83
DRAWING No.:	FR2008_CU
DATE:	April 08, 2008
SCALE:	0 200 400 600 800 1000 Meters





**LEGEND**

- Land Tenure**
- Freehold Patent
    - Surface And Mining Rights
    - Surface Rights Only
  - Licence of Occupation
    - ◆ Surface And Mining Rights
  - Mining Claim
    - 1234567
- Topographic**
- +—+—+— Railway
  - Road
  - Shoreline
  - Building
  - Topographic Contour

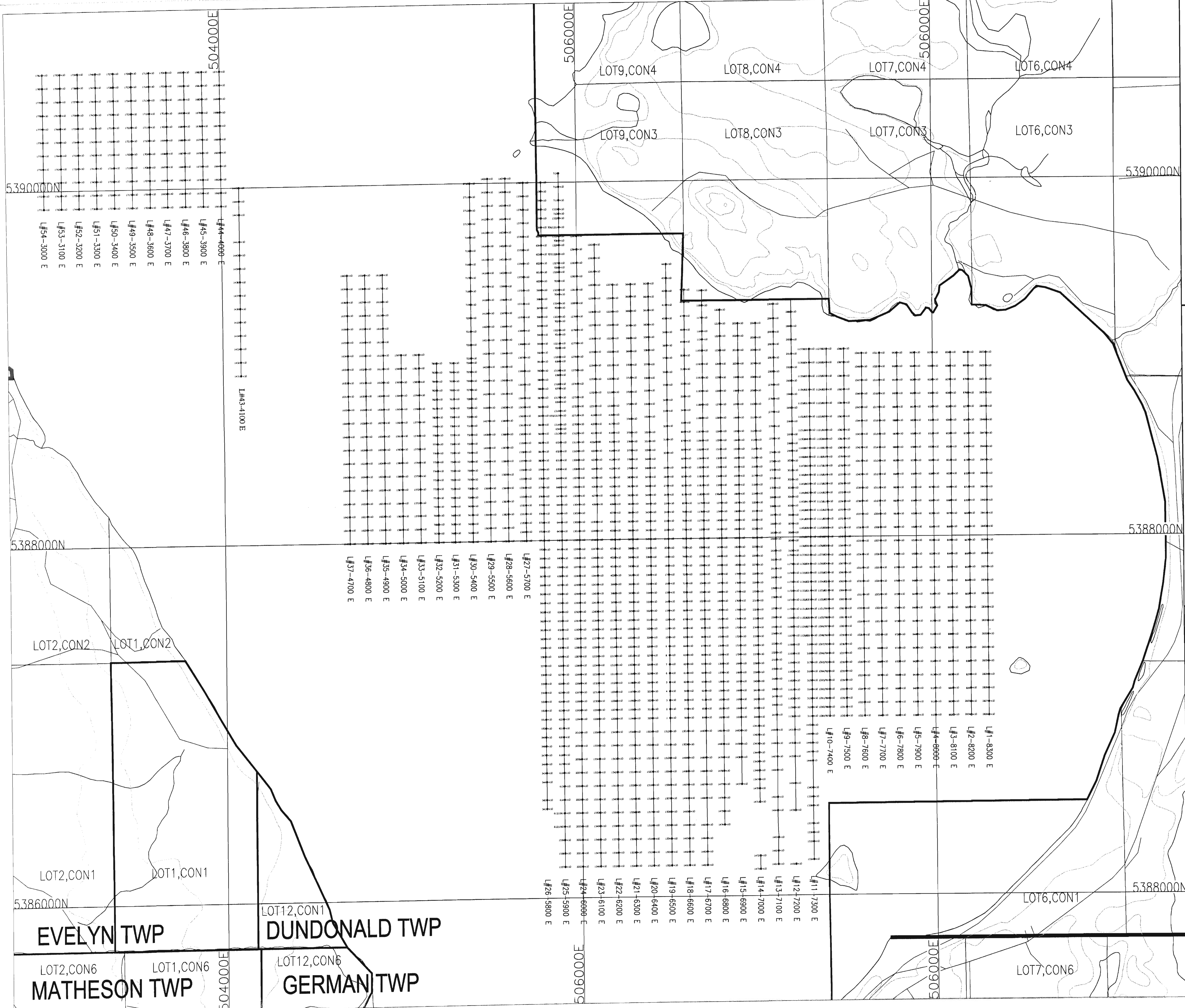


**FREDERICK HOUSE LAKE PROJECT**  
 DUNDONALD / GERMAN / EVELYN / MATHESON TOWNSHIPS  
 Porcupine Mining Division, Ontario

*Mobile Metal Ions Process  
 Geochemical Survey*  
 LEAD

NT.S:	42A/10	DATA BY:	P Culhane/G Matheson/K Culhane
G.P.S. DATUM:	NAD 83	DRAWN BY:	B Modill
DRAWING No.:	FH2008_PB	DATE:	April 08, 2008
SCALE:	0 200 400 600 800 1000 Meters		





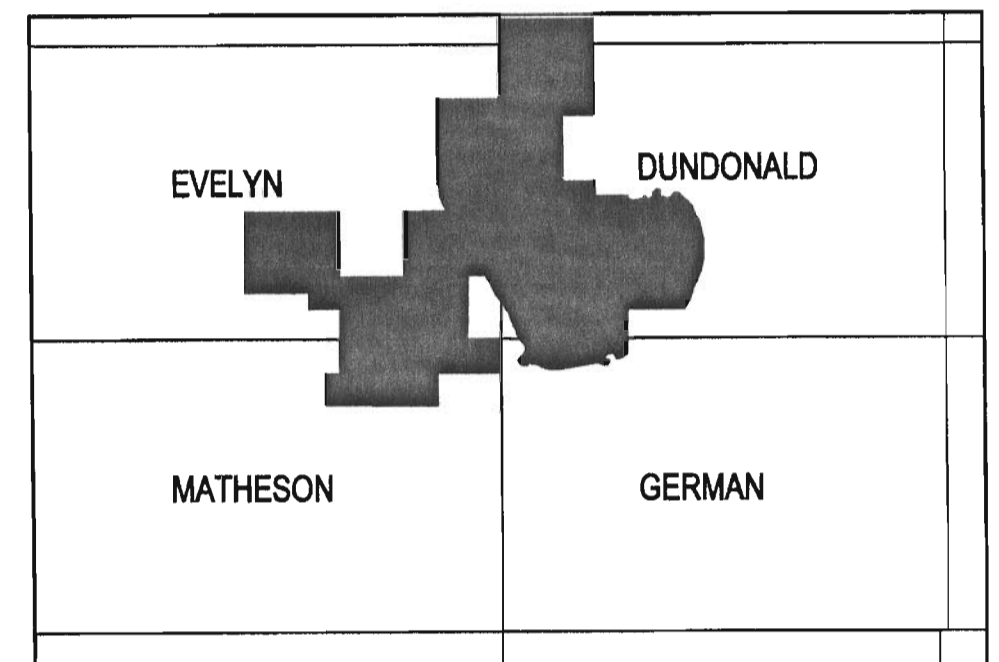
### LEGEND

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**Topographic**

- +—+— Railway
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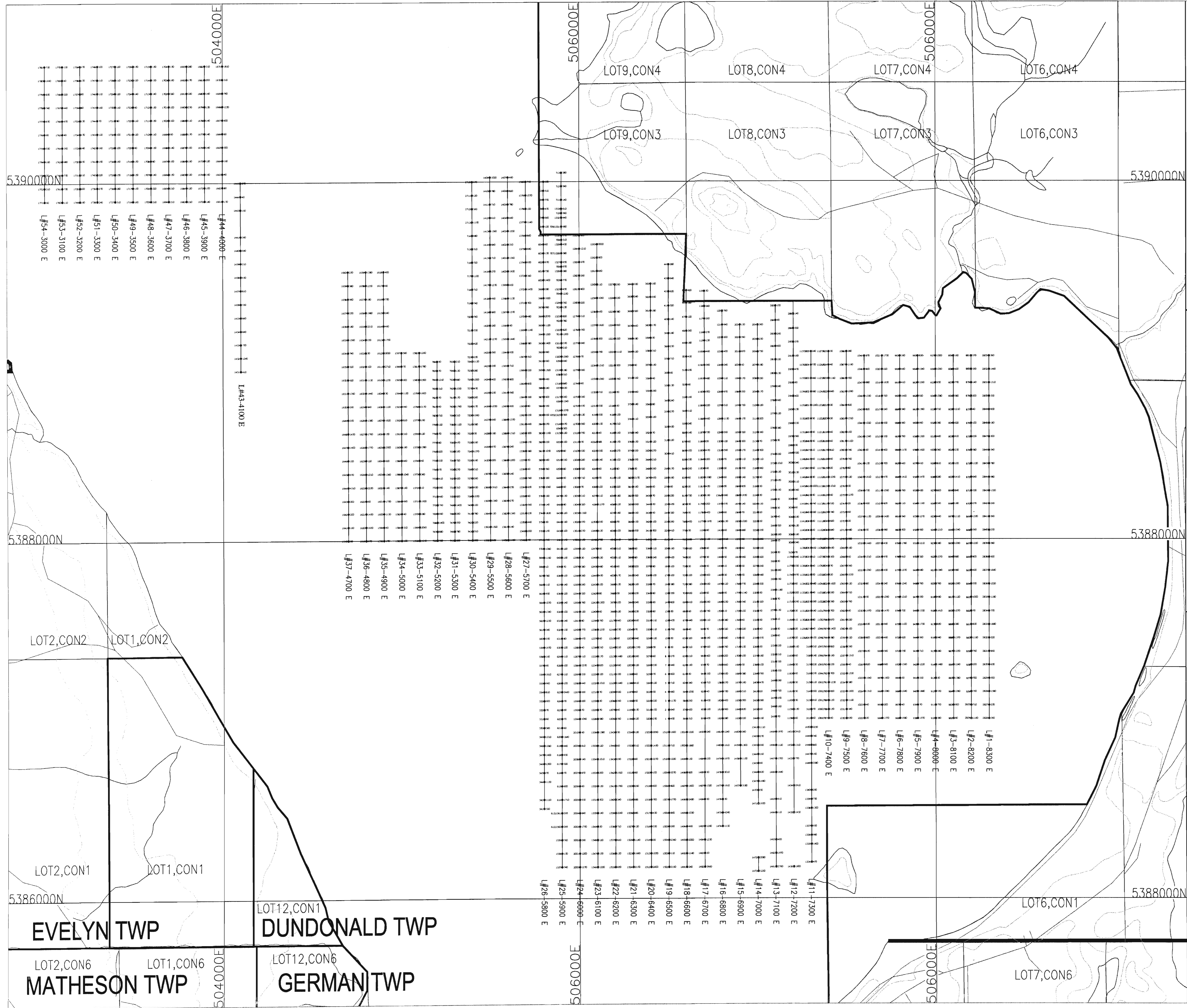
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 Sample Location 438  
 Assay (PPB)



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**Mobile Metal Ions Process Geochemical Survey**  
 TELLURIUM

N.T.S.: 42A/10	DATA BY: P. Culhane/G. Matheson/K. Culhane
G.P.S. DATUM: NAD 83	DRAWN BY: B. Madill
DRAWING No.: FH2008_TE	DATE: April 08, 2008
SCALE: 0 200 400 600 800 1000 Meters	



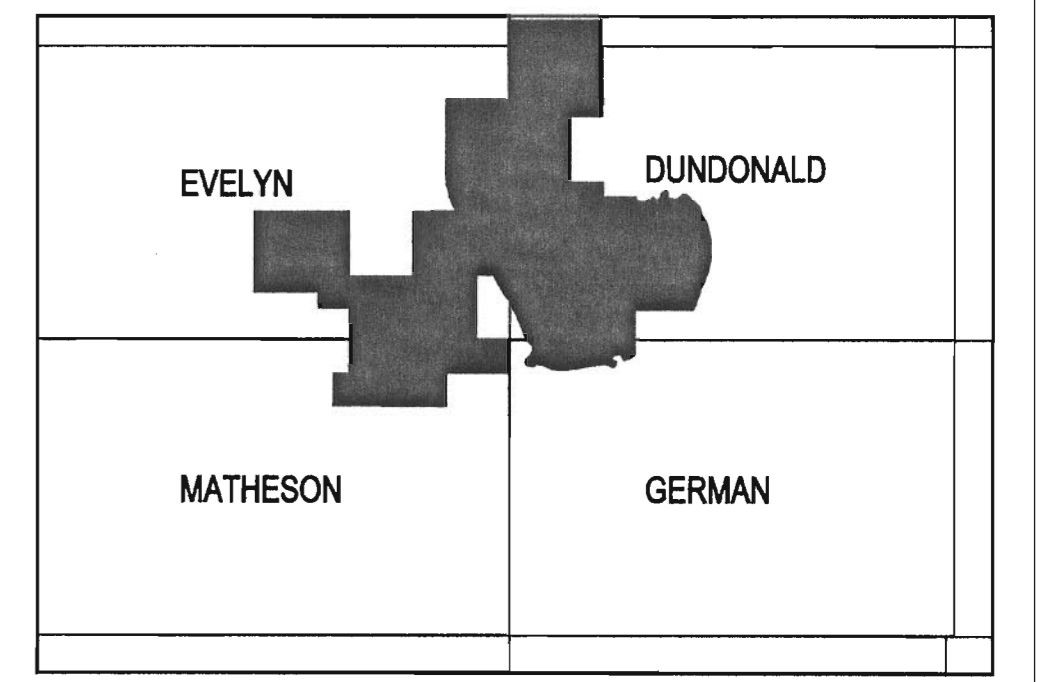
### LEGEND

**Land Tenure**

- Freehold Patent
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  - Surface Rights Only
- Licence of Occupation
  - ◆ Surface And Mining Rights
- Mining Claim
  - 1234567

**Topographic**

- ⊕⊕⊕⊕ Railway
- Road
- ~ Shoreline
- Building
- ~ Topographic Contour



Sample Number — Sample Location

2000 — 438

— Assay (PPB)

**NORTHERN GOLD MINING INC.**

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Porcupine Mining Division, Ontario

**Mobile Metal Ions Process Geochemical Survey**

ZINC

N.T.S.: 42A/10	DATA BY: P. Culhane/G. Matheson/K. Culhane
G.P.S. DATUM: NAD 83	DRAWN BY: B. Madill
DRAWING No.: FH2008_ZN	DATE: April 08, 2008
SCALE: 0 200 400 600 800 1000 Meters	