

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-18

Collar Eastings: 6375.00 Collar Northings: 6425.00 Collar Elevation: 0.00

Grid: MAIN

INQ: CORE STORED HEMLO STORAGE TIMMINS

Collar Inclination: -45.00

Grid Bearing: 140.00

Final Depth: 300.00 metres DRILLED BY: NDS DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: Jim Edwards R.CALHOUN

Date: April 26-30, 97 Down-hole Survey: ACID

DATES LOGGED: April 27-30, 1997

DRILLED ON:P1159634,P998384

			- <i></i>			
					ASSAY	rs
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH AU g/ton

0 16 (Ovb) Overburden

16 17 (2a,6a, cg, lx, bio,mod Mag)

Recrystallized Mafic Volcanic

The unit coarse grained and light grey in colour. It is spotted with leucoxene and biotite blades <1 centimeter in length. The unit is intruded by small 1-5 cm wide felsic intrusive. The unit is weakly to moderately magnetic.

17 23 (6a, bio, Mag)
Mafic Intrusion

The unit is medium to coarse grained and dark green to greyish green in colour. The unit becomes coarser grained down section In places it has a birds foot texture. It is moderately magnetic and Possibly a coarse grain which has been recrystallized as the result of the injection of the porphyry of The unit could be interpreted as a coarse grained flow or as an gabbro?

23 28.7 (2a,6a, cg, lx, mod Mag)
Mafic Volcanic with FD intruding

The unit is medium to coarse grained and dark

green to black in colour

There are localized areas of the birds foot texture as seen in the above unit. The unit is intruded by carbonate veins that are <1 mm and by small felsic intrusive which infills fractures within the volcanic . The unit is moderately to strongly magnetic.

28.7 30.5 (7d, wk hem, wk mag, chl)

Perth Felsic Porphyry

The unit is a coarse grained feldspar porphyry. The unit is pink to reddish in colour the redder areas are a result of hematite staining. The unit displays a perthitic texture with feldspar crystals averaging

RECEIVED

DEC 18 1997

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2.10006

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disseminated. The interval between 44-44.7 the pyrite is finely disseminated near the contacts of

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ASSAYS WIDTH AU g/ton FROM TO LITHOLOGICAL DESCRIPTION SAMPLE No. FROM TO 1cm wide in length. The feldspars are lath shaped to sub-hedral to euhedral. There is good zonations within the individual feldspars displaying an exsolution halo. The upper contact of this unit is at 30 degrees to the core axis 30.5 35 (2a.mg.T.Ep.Ch.Carb) Mafic Volcanic Intruded with Felsic Intrusive The unit is similar to the above mafics. The unit is fine to medium grained. The unit is black in colour and becomes finer grained down section. There is contorted and convoluted carbonate veining up to 5 mm wide At 30.7 there small zone of pyrite up to 3% around a small 2 centimeter quartz vein. At 35.5 there is a khaki colour zone 15 centimeters wide where pyrite occurs as blebs and clusters around a hematized quartz carbonate vein. With in this zone there appears to be garnets . The unit is weakly magnetic. Locally the unit has a greyish blue sheen which could be attributed to moderate silicification. The unit is intrude by the a porphyry along fractures these felsic intrusions variable in size and characterized by Mega crystic to fine grained granitic looking intrusions and can be up to 60 centimeters in size. On average they are 5 10 centimeters in width. Epidote occurs along fractures in the rock. 36.50 1.50 0.31 1221 35.00 37.1 44.7 (7d hem, Py 2%) 1222 36.50 38.10 1.60 1.70 Perth Felsic Porphyry 1314 38.10 39.60 1.50 0.02 The unit is variable in colour ranging from a granitic pink to reddish to greyish blue almost diorite 1223 39.60 41.10 1.50 0.25 1224 41.10 42.60 1.50 0.08 looking. Note the shape of the feldspars are sub 0.02 1225 42.60 43.60 1.00 rounded to sub hedral in shape. 37.6 to 38.2 There are large lath sulphides that are well zoned and closely packed. The feldspars are .5 - 1.5 centimeters long and .1 - .8 cm wide. In some areas the unit looks granitic with a few mafic intrusions. There are faint quartz veining where the unit is a greyish colour due to silicification Pyrite mineralization is variable and is clustered to finely

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ASSAYS FROM TO WIDTH AU g/ton SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM the porphyry mafic volcanic.. There are spotty chlorite nodules which are round and <1 mm in diameter and make up 3% of the rock by volume. 1.20 0.02 43.60 44.80 (2a.Ep.Carb.Wk loc mod Sil.loc Py 1-3%., Mod Magnetic) 1226 44.7 69.7 62.90 63.90 1.00 0.03 1227 Magnetic Mafic Volcanic The unit is dark grey to black in colour and fine grained. Again the unit is heavily veined with carbonate veins consisting mostly of calcite. Which are .2 1 mm wide. There are also inter-fingering fractures of felsic porphyry. At 63.5 - 63.7 There is an area of Epidote patches with a khaki colour. There is 2-4% pyrite and a smoky quartz vein that is 2 centimeters wide with in this .7 meter interval. 72.70 1.30 0.02 1228 71.40 69.7 (7d, hem, Loc Sil. Loc Py 2%) 101.7 72,70 74.00 1.30 0.07 1229 Hematized Feldspar Porphyry 85.80 1.20 0.10 1230 84.60 The above mafic I intruded by finer grained 99.40 100.60 1.20 0.02 1315 equivalent to the over units. The feldspars are 101.60 1.00 0.78 100.60 1231 smaller and the unit is more greyish in colour with a sometimes brick red hue due to hematite stain. The unit is weakly magnetic due to spotty chlorite. The feldspars are more rounded than in the above units. There are inclusions of the mafic volcanics which are 3-6 centimeters wide. The inclusions sub angular. There is a small;; interval of 50 centimeters at 93.5 - 94 meters where the porphyry is mega crystic in appearance. The contact between this unit and the lower mafic volcanic unit is characterized by 2% pyrite and intense silicification giving the unit a greyish blue sheen. 0.19 1232 101.60 102.60 1.00 (2a, Ep, Carb, Mod Magnetic ) 101.7 118.9 0.70 0.17 1316 102.60 103.30 Magnetic Mafic Volcanic 0.70 0.53 1317 103.30 104.00 The unit is fine grained and black with a purplish 1.00 0.51 1233 104.00 105.00 hue locally. The unit has patches of epidote which 106.00 1.00 0.02 are 3-10 centimeters that fade in and out the unit . 1318 105.00 106.90 0.90 0.02 1319 106.00 The Epidote alteration trends to increase down 0.02 106.90 108.50 1.60 1320 section. At 115. - 116 Epidotization and Sericite 1.50 0.03 108.50 110.00 1321 alteration gives this interval a light green to pale vellowish colour. This small zone has well developed quartz veins that are less than .2mm in

diameter. Along the total length of this unit it is

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**ASSAYS** 

SAMPLE No.

FROM TO

### LITHOLOGICAL DESCRIPTION

intruded by the feldspar porphyry . It seems that there are two generations or two different types of injections of the porphyry in to the mafic volcanics. The one is where you have large zoned feldspars and is mega crystic. The feldspars had time to grow and therefore the cooling must have been slower. The second pulse or injection is a finer grained equivalent of the above with more chlorite associated with it than the above and cooled much more quickly The unit is almost granitic looking.

At 106.3 to 110.0 the feldspar porphyry with mafic inclusions. The unit is more greyish looking (due to silicification). The volcanic inclusions are magnetic and the porphyry intrusions are locally magnetic. At 110 the mafic volcanic is intensely veined with carbonate veins which are mostly calcite and moderately silicified.

118.9 126.7

## (7d, mod Sill)

#### Feldspar Porphyry

This small felsic intrusion intrude the mafic volcanics. The feldspars are much small and rounded to sub-hedral. They are well zoned. The unit is fine grained and greyish in colour due to silicification overprinting. Pyrite is finely disseminated though out the unit and is cubic. The unit also has mafic inclusions which are 3-7 centimeters wide.

126.7 137.2

#### (2a, Ep,, Carb, Chl) Mafic Volcanic

The unit is magnetic and fine to medium grained. It is black in colour with a pale green hue due to epidote alteration. With in this unit cross cutting relationships are evident. They indicate that the Mafic Volcanic has under gone Epidotization. Then the porphyry intruded The volcanic and chlorite infilled micro fracture and finally carbonate micro fracture and carbonate banding occurred. There is a small altered zone at 28.8 - 28.95 where a small quartz 3 centimeters wide is present. This 15 centimeter zone is intensely silicified and locally there is 4% finely disseminated pyrite which has a

TO

FROM

WIDTH AU g/ton

1.00 0.02 1234 122.00 123.00

1.00 0.02 129.60 1235 128.60 132.00 1.00 0.18 1236 131.00

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ASSAYS WIDTH AU g/ton SAMPLE No. FROM OT LITHOLOGICAL DESCRIPTION TO FROM cubic habit. A similar alteration exists at 31.5 -31.5. Within the quartz vein there is a few flecks of galena. Pyrite is 5% locally in this area. 1237 137.20 138,20 1.00 0.19137.2 144.9 (7d, Py 1-2 %)138.20 139.20 1.00 0.90 1238 Feldspar Porphyry 1322 139.20 140.70 1.50 0.10The unit is a fine grained porphyry and diorite 140.70 1323 141.90 1.20 0.02 looking due to a greyish silicified overprinting. 141.90 143.30 1.40 0.03 Within the unit are 3-6 centimeter inclusions of 1324 1325 143.30 144.90 1.60 0.05 mafic volcanics 0.031326 144.90 146.00 1.10 (2a, Ep, Carb, Py <1%) 144.9 151.4 1239 150.10 151.10 1.00 0.03 Mafic Volcanic The unit is weakly magnetic and fine to medium grained with carbonate veining less than 1 mm and some minor carbonate bands up to 5cm wide. The unit is massive. In general the unit compose of mostly mafic volcanics which are greyish to pale green in colour which have been intruded by feldspar porphyry of different affinities of the Perth lake porphyry. The porphyry varies considerable in colour and texture from brick red due to hematization to granitic pink and medium grained to quartz diorite looking which is greyish white due to overprinting of silicification. Some of the feldspar porphyry is mega crystic to medium grained. The above mafic volcanics has epidote patches. 1240 151.10 152.00 0.90 0.04 (7d, mod hematization, Chl, Py 1%) 151.4 153.5 1241 152.00 153.50 1.50 0.30 Hematized Feldspar Porphyry The unit is medium grained and brick red in colour. The unit has micro fractures of chlorite running though it. 0.07 1242 153.50 154.00 0.50 (2a, Ep, Carb wk Sil) 153.5 169.4 0.05 155.50 156.50 1.00 1243 Mafic Volcanic 165.50 167.00 1.50 0.02 1244 The unit is similar to the above with feldspar 0.02 167.00 168.00 1.00 1245 porphyries intruding fractures from mm to decimeter scale. There is weak silicification and the unit is pale green with a greyish overcast due to silicification. The only mineralization present occurs within a small 2 cm smoky quartz vein <2% pyrite at 163.5.

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			CAMPLE N	PDOM	ASSAYS	WIDTH AU	a/ton
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDIN NO	g/ ton
169.4	171	(7d,Chl) (Feldspar Porphyry The unit is fine grained and has that granitic pink colour to it. Within this unit there is <2% finely disseminated sulphides. The upper and lower contacts of this unit are coarser grained suggesting that the margins had a longer time to cool and recrystallized.					
1	179.4	(2a, Ep, Carb, mod Sil, Py 3%)  Mafic Volcanic  This unit is fine grained the ground mass is black in colour and there is a pale green alteration halo of Epidote making the ground mass. The unit is very hard. Note the intensely silicified zone at 173-177.5 2-3% pyrite. At 173.5 177.5 the unit has quartz carbonate veins and smoky quartz veins <2 cm wide associated with pyrite.	1246 1247 1248 1249 1250	173.70 174.70 176.20 177.20 178.20	174.70 176.20 177.20 178.20 179.20	1.00 1.50 1.00 1.00 1.00	0.02 0.02 0.02 0.02 0.02
4	181.2	(7d,Sil,Chl) Feldspar Porphyry The unit is a fine grained with a greyish overcast appearance. The unit looks like a quartz diorite but The Feldspars are visible. The unit also has spotty chlorite which make up <2% of the unit per volume. This unit does not have any mafic inclusions with in it.	1251	179.20	180.70	1.50	0.02
.2	185.4	(2a, Ep, Carb)  Mafic Volcanic  This unit is similar to the above mafic units. It is fine grained and pale green colour due to epidote patches though out the unit.	1252 1253	180.70 181.70	181.70 182.70	1.00 1.00	0.02 0.02
5.4	187.8	(7d,Py 3%.Sil)  Feldspar Porphyry  The unit starts out as a coarse grained 7d, with 1cm lath shaped feldspars and is a light pink colour. The unit progrades into a greyish unit with quartz veins 2-3 centimeters wide that are 52 degrees to the core axis. The majority of the pyrite mineralization is associated with these quartz veins as clustered to	125 <b>4</b> 1255	185.80 186.80	186.80 187.80	1.00	0.02 0.03

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ASSAYS WIDTH AU g/ton TO SAMPLE No. FROM LITHOLOGICAL DESCRIPTION FROM TO blebby pyrite with a cubic habit. Galena is also present in a minor amount <1%. The pyrite is also finely disseminated though out the unit. Again the unit has that greyish appearance that is a result of a silicification overcasting the unit. (2A. Ep.Carb.qcv, loc bx) 187.8 211.6 Mafic Volcanic Possibly Pillowed The unit is fine to medium grained and a pale green to greyish colour. Epidote is moderately pervasive though out the unit. There are area were There are intense Epidote patchy zones that give the unit a pale green colour masking the groundmass. Epidote also occurs along fractures from a micro to centimeter scale. The unit moderately carbonate veined and is a weak but pervasive component of the groundmass. There are some carbonate bands and small 3- 5 centimeter intrusions of feldspar porphyry and also infilled fractures. Note the small brecciated zone between 209 - 209.2. This plus some chlorite bands in the unit may indicate the unit is pillowed. 0.02 212.00 1.00 211.00 1256 (2a, Mag, Hem, Qcv, Py 3%) 2116 213.3 1.10 0.02 1257 212.00 213.10 Magnetic Mafic Volcanic The unit is black and fine grained. It is magnetic and the is 3% pyrite with in the unit at is associated with the quartz carbonate veining which is vuggy. Pyrite is also along micro fractures with in the unit. Epidote is a minor component of this unit. 1.00 0.03 224.40 1258 223.40 (2a, Ep, Carb, loc Sil) 213.3 240.5 0.02 225.40 1.00 1260 224.40 Mafic Volcanic 225.40 226.40 1.00 0.02 1259 The unit is a pale green and fine to medium grained. 1.00 0.09 1261 231.30 232.30 There are areas of patchy epidote alteration and at times is pervasive. At 224.9 there is some finely disseminate pyrite along the edge of a small felsic intrusion. At 234.5 - 234.7 the core is black in colour and the pyrite is blebby and cubic in nature. With in this small 20 centimeter zone the core is magnetic due to magnetite. 1.00 0.02 1262 240.20 241.20 240.5 241.2 (7d, hem, Loc Sil)

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ASSAYS WIDTH AU g/ton TO SAMPLE No. FROM LITHOLOGICAL DESCRIPTION FROM TO Feldspar Porphyry Same as above porphyry unit. 0.02 1263 242.00 243.00 1.00 (2a, Ep, Wk Mag) 241.2 246.6 Weakly Magnetic Mafic Volcanic The unit is very blocky and the IP anomaly may be the result a small pyritic zone with in a quartz carbonate vein and along carbonate bands at . The unit is blocky, fine to medium grained and pale green in colour 0.90 0.02 246.20 247.10 1264 (7d,hem,Sil) 246.6 247.5 Feldspar Porphyry The unit has that syenite reddish colour with a grayish overcast over the unit due to silicification. The unit is fine to medium grained and the feldspars are lath shaped and <.25 mm in width. 0.02 247.90 0.80 1265 247.10 (2a, Ep, mod sil) 247.5 256.5 249.00 1.10 0.02 247.90 1266 Mafic Volcanic 252.00 1.00 0.09 1267 251.00 1.00 0.02 255.00 256.00 1268 The unit is fine grained and pale green to medium green in colour. There is a 30 cm wide zone of 2-3% clustered and disseminated pyrite associated with a 4 cm wide quartz carbonate veins at 253.9 meters. At 254.5 there is a small felsic intrusion of porphyry that has 2% pyrite which is finely disseminated along the contacts between it and the mafics that it intrudes. 0.02 256.00 257.50 1.50 1269 (7d,Sil, Pv 1%) 256.5 274.1 1.50 0.05 257.50 259.00 1270 Feldspar Porphyry. 1.00 0.02 263.00 264.00 1271 The unit is medium grey in colour and similar to the 1272 264.00 265.50 1.50 0.02 porphyry that was intersected in MC96-12. The unit 0.02 1.50 1273 265.50 267.00 has feldspar laths that are well zoned and less than 0.02 267.00 268.50 1.50 1274 1 mm in length and sub - hedral to sub rounded and 268.50 0.03 1275 269.50 1.00 make up 35% of the units volume. The unit has a reddish hue from between 266 to 269 possibly due to hematite staining. Between 269 and 274 the is disseminated coarse grained pyrite cubes which are \_5 cm cubes. 275.00 1.00 0.02 1276 274.00 (2a, Epidotization, mod hem, mod sil Py 2%) 274.1 284.5

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					ASSAYS	3	
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH AU	g/ton
		Dense Mafic Volcanic The unit is a pale green to medium green colour with some minor areas with a dark grey colour. There is a noticeable change in the density of this unit than the above mafic units especially between 274.1-284.4. There is small zones of mineralization between the following intervals from 276.5 - 277 There is fine grained pyrite 3% which is associated with quartz carbonate veins and small <5cm injections of felsic porphyry. At 281.5 - 282 there is a zone of coarse pyrite which is clustered and again is associated with quartz carbonate veins. There is 2 - 3% pyrite with in this interval	1277 1278 1279 1280 1281 1282 1283 1284	275.00 276.00 277.00 278.00 279.00 280.50 281.60 282.60	276.00 277.00 278.00 279.00 280.50 281.60 282.60 283.60	1.00 1.00 1.00 1.00 1.50 1.10 1.00	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
284.5	286.4	(7d) Small Dyke of Perth Lake Porphyry Small 1.9 metre injection of the Perth lake porphyry. It is medium grained and similar to the above descriptions of this unit	1285	283.60	284.60	1.00	0.02
286.4	294	(2a, Ep,mod hem,mod sil) (Dense Mafic Volcanic The unit is similar to the above mafic	1286 1287 1288 1289 1290 1291	286.50 287.60 288.50 289.50 290.50 291.50 292.50	287.60 288.50 289.50 290.50 291.50 292.50 293.50	1.10 0.90 1.00 1.00 1.00 1.00	0.02 0.02 0.02 0.02 0.02 0.02 0.02
294	298.5	(7d) <b>Feldspar Porphyry</b> Same as Above	1293 1294 1295	293.50 294.50 295.50	294.50 295.50 296.50	1.00 1.00 1.00	0.02 0.02 0.02
298.5	300	(2a,Ep, mod hematization.)					
		This small section is much blocker than the above with $<1\%$ pyrite mineralization					
300		End Of Hole					

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FROM

ASSAYS TO WIDTH AU g/ton SAMPLE No. FROM LITHOLOGICAL DESCRIPTION

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
100.00	-43.50	140.00
200.00	-43.00	140.00
300.00	-42.50	140.00

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#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-19

6750.00 Collar Eastings: 6560.00 Collar Northings: 0.00 Collar Elevation:

Grid: MAIN

NO CORE STORED AT BATTLE MOUNTAIN, TIMMINS

Collar Inclination: -45.00

Grid Bearing: 140.00

Final Depth: 300.00 metres DRILLED BY: NDS DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: Jim Edwards , Calhoun

Date: April 30 - May 6, 1997 Down-hole Survey: ACID

DATES LOGGED: April 30 - May 6, 1997

DRILLED ON:P1159633,P1159634

146 001	AL DION	ALD ALL BRITISH INCOMES, SECTION						
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAY:	S WIDTH AU	g/ton	
0	11.1	(Ovb) Overburden						
11.1	58.8	Magnetic Ultramafic The unit is a dark grey to black in colour. In some areas there is a blue overprint present. The unit is fine to medium grained and the entire unit is weakly to moderately magnetic. Fractures of talc chlorite and calcite veins are from .1 mm to .5 mm in width. Other fractures of chlorite and carbonate have a diffuse rim of alteration. This is most evident between 26.4 - 27.4 metres and 41.6 - 42.3 metres. The core also has a blue overprint to it. This is the only interval where cubic pyrite is disseminated 1 - 2%. Note that the altered interval is non magnetic.  A Spinifex textured flow is present between 34.8 - 35.2 metres and 54.0 54.6 metres. The blades are .5 mm .8 mm long. At 35.6 - 37 there is some	1296 1297 1298 1299 1300 1301 1302	26.40 27.40 41.50 54.40 55.90 56.90 57.80	27.40 28.90 42.50 55.90 56.90 57.80 58.80	1.00 1.50 1.00 1.50 1.00 0.90 1.00	0.02 0.02 0.02 0.04 0.02 0.02 0.02	

(2a, 6a fg, Ep,chl,Qcv Py 2- 3%) 57.8 59.5 Mafic Dyke

axis.

poly- suturing.

The unit is a medium green and fine to medium grained. The contact between this unit and the above unit is characterized by and increase in

concentric fracturing present which appears to be

Generally the alteration is very weak and near the contact increases along the contacts of mafic dykes which intrude the Ultramafic flow. At 56 metres the alteration is evident and pyrite is along Quartz carbonate veins pyrite with in this interval is 2 - 3%. Note this interval also non magnetic. The lower contact with the mafic dyke is 62 degrees to the core

The mineralization consists of coarse blebby disseminated cubic pyrite 2-5 mm which occurs in

intervals from .2 - .8 metres wide.

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<b></b>					ASSAYS			
TROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH A	J g/ton	
		quartz carbonate veining and carbonate bands. Which persist though out the mafic unit and pyrite is associated along the edges of qcv veins.						
9.5 63	3.2	(1a, tcNch, loc w altered, Py 3-4%)  Locally Weakly Altered Ultramafic  The unit is similar to the above Ultramafic unit. It is greyish to black in colour and fine to medium grained. In the weakly altered sections there is a bluish overcast. The mineralization consists of disseminated cubic pyrite.	1303 1304	58.80 59.80	59.80 60.80	1.00 1.00	0.02 0.02	
3.2 65	5.9	(2a, 6a fg, Ep,chl,Qcv Py 1 -2%)  Mafic Dyke  The unit is medium grained and medium green in colour. The pyrite is concentrated along the edges of quartz carbonate veins.	1305	63.30	64.80	1.50	0.02	
5.9 11	13.2	(1a, Loc Spx, tc, Chl, Py 1%) (Ultramafic Flow The unit is a dark grey to black in colour. In some areas there is a blue overprint present. The unit is fine to medium grained and the entire unit is moderately magnetic. Fractures of talc chlorite and calcite veins are from .1 mm to .5 mm in width The unit is massive looking and there I some variation in the grain size in some areas there are small grains of carbonate which are round and less than .2 mm in diameter.	1306 1309	64.80 73.00	66.30 74.00	1.50 1.00	0.02 0.02	
13.2 11	15.5	(2a, 6a fg, Ep,chl,Qcv Py 1 -2%)  Mafic Dyke  The unit is medium green in colour and there medium grained. There are a few small fracture of talc % chlorite which abut up to the upper and lower contacts of this unit and disappear. This cross-cutting relationship indicate that the Ultramafic was fractured with talc%chlorite and then intruded by this mafic dyke. The unit has about 3% quartz carbonate veining with in it which is more than seen in any of the other units.						
15.5 1	45.8	(1a, tcNch, Py< 1%)	1307	114.20	115.70	1.50	0.02	

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	HOLE	No.:	MC97-19
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FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH AU	J g/ton	
		Ultramafic Flow The quartz carbonate veining from the above unit persists to 123 meters. The unit is similar in texture and colour to the above units. There are small intervals less than .5 metres wide of coarser grained material which appears to intrude the unit.	1308	118.50	120.00	1.50	0.02	
145.8	153.5	(2a, 6a fg, Ep,chl,Qcv Py)  Mafic Dyke  Same as the other mafic dykes The unit is medium grained with a medium green colour. The unit is the void of any mineralization.						
153.5	182	(1a, tcNch, Py< 1%) Ultramafic Flow The unit is similar to the above units There are small intervals less than .5 metres wide of coarser grained material which appears to intrude the unit. The lower portion of the unit has a mottled appearance with a bluish overcast. Note the small 8 centimeter fracture which is with a felsic intrusive and is silicified.	1310	165.00	166.00	1.00	0.02	
.82	186	(1BK,tc/chl Carb, Py <1%) (Possibly Basaltic Komatiite) The unit is medium grained and is the only place that carbonate is a component of the matrix. The unit has a mottled or spotty appearance the unit has quartz carbonate veins which are <2 cm wide.	1311 1312	182.00 184.50	183.00 185.50	1.00	0.02 0.02	
.86	216.8	(la, tcNch, Py< 1%) Ultramafic Flow Same as the Above. Massive dark grey to black massive magnetic Ultramafic flows.	1313	185.50	187.00	1.50	0.02	
216.8	217.4	(2a, 6a fg, Ep,chl,Qcv Py)  Mafic Dyke  Small mafic dyke which is dark green in colour and has more chlorite stringers running sub - parallel to the core axis than the other mafic dyke up section.						
217.4	221.3	(1a, teNch, Py< 1%) Ultramafic Flow						

HOLE No: MC97-19

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-19

\_\_\_\_\_

Page 4

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH A	U g/ton
		Same as the Above. Massive dark grey to black massive magnetic Ultramafic flows.					
221.3	238.7	(2a, 6a fg, Ep,chl,Sil) (Silicified Mafic Dyke The unit is fine grained and medium green in colour. The unit has a series of small talc chlorite fracture running sub - parallel to the core axis. The core is polished looking and has a shinny sheen to it from 232.7 - 238.7 there is a well preserved chill margin present.					
238.7	300	(1a, tcNch, Py< 1% Asp <1%) Ultramafic Flow Same as the Above. Massive dark grey to black massive and moderately to strongly magnetic. The core is fine to medium grained with .5 - 2 cm	1327 1328	260.00 261.00	261.00 262.00	1.00 1.00	0.02 0.02

the core axis.

At 259.9 to 262.5 metres the core is intensely fractured and infilled with carbonate and pinkish calcite. The carbonate veins are anastomosing with trace arsenopyrite <1% and up to 2% pyrite between 259 - 262.5. The arsenopyrite has a needle like habit at 261.5 metres. There is a greenish overcast to the core from 259.9 to 261.5. and from 276.8 - 282.3 This greenish alteration is harder than chlorite and could possible be epidote. It is a medium dull looking green. The sulphides are concentrated within the carbonate veining and along its edges. Again down section the core is moderately magnetic.

carbonate (calcite veins) running at 58 degrees to

300 END OF HOLE

### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
100.00	-44.00	140.00
200.00	-44.00	140.00
300.00	-43.00	140.00

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-20

6750.00 Collar Eastings: 6740.00 Collar Northings: 0.00 Collar Elevation:

Grid: MAIN

NQ CORE STORED AT BATTLE MOUNTAIN, TIMMINS

Collar Inclination: -45.00

Grid Bearing: 140.00

Final Depth: 200.00 metres
DRILLED BY: NDS DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: Jim Edwards R CALHOUN

Date: May 7 - May 8,1997 Down-hole Survey: ACID

DATES LOGGED: May 7 - May 8, 1997

**DRILLED ON:P1159633** 

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t	
0.00	33.00	(Ovb) Overburden						
33.00	34.80	(1a, BK,wk alt'd, fol, loc tc/ch)  Weakly Altered Basaltic Komatiite  The unit has a mottled appearance and is medium grained. The colour is variable but is typically light grey with a greenish hue. There are bullish quartz veins present that are parallel to the foliation which is 48 - 52 degrees to the core axis. The unit is very soft and platy. The lower contact is at 34.85 and is 60 degrees to the core axis. The margin has been chilled and is fine grained for .5 meters						
34.80	36.20	( 2a, lx, Py 2%, wk Si)l Silicified Mafic Volcanic The unit is fine to medium grained and dark grey with a greenish hue and bullish looking sub - parallel to the core axis. The unit is hard and massive. The pyrite occurs as cubes and is disseminated through out the unit	1329	34.80	36.20	1.40	0.29	
36.20	38.45	(1a,Bk,wk alt'd,fol,spx, 2% qcv, gcb) Weakly Altered Basaltic Komatiite The unit is greyish green in colour and well foliated 56 - 60 degrees to the core axis. The unit is very soft and quartz carbonate veins are stretched out along the foliation. There Is a weak cremulation cleavage within the qcv's. There is a nice Spinifex texture at 38 -38.1 which are feather like at 38.45. The unit becomes intensely silicified and greyish in colour.	1497	36.20	37.50	1.30	0.11	
38.45	40.80	(2a, Sil, qtz, Py 4-5%, Chl) Chloritic Mafic Volcanic The unit starts off light grey in colour and the unit is quartz veined and pyritic 4 - 5% near the upper contact. The alteration is consistent thought out the	<b>1498</b> 1330	<b>37.50</b> 38.50	<b>38.50</b> 39.50	1.00 1.00	<b>0.02</b> 5.91	

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-20

ASSAYS WIDTH Au g/ton TO FROM SAMPLE No. LITHOLOGICAL DESCRIPTION FROM TO unit but the pyrite fizzles out and the unit takes on a more greenish looking hue at 39.45 metres. 0.1140.90 1.40 1331 39.50 (1a,BK, fol, tc/ch,gcb) 40.80 41.70 Basaltic Komatiite This unit is similar to the above 1a, Basaltic Komatiite it is more bleached looking than the above Ultramafics and progrades into mafic volcanics. 0.06 41.90 1.00 1332 40.90 (2a, lx, chl, 2% Qcv, Py 1%) 41.70 43.60 1.00 0.04 1333 41.90 42.90 Mafic Volcanic The unit is dark grey in colour with a green hue and a mottled appearance. In unit is fine to medium grained and in areas where the unit is medium grained the colour of it is medium green. (1BK, tc/ch, spx qcv, fol) 45.70 43,60 Basaltic Komatiite The unit is similar to the above Basaltic Komatiites. It is very soft and greasy. The unit had a well developed Spinifex texture which is now very faint due to intense tc/ch alteration. The unit is also 0.90 0.05 45.50 46.40 1334 (2a, lx, py 1%)45.70 47.00 Mafic Volcanic The unit is greyish black in colour and similar to the above mafic units. These mafic units are separated from the Ultramafic units using the two criteria these magnetics and Hardness. The ultramafics are weakly to moderately magnetic and the mafics are non magnetic. The mafic units are generally hard than the Ultramafic units and finally Basaltic Komatiite unit have been separated from ultramafic units on the basis of grain size. The Basaltic Komatiites are grainy and are generally medium grained. While the Ultramafics are finer grained and platter in appearance 0.02 47.60 1.20 46.40 1335 (2a, Sil, 2% qcv, Py 1%) 52.70 47.00 0.02 0.80 1336 51.60 52.40 0.02 1.60 52.40 54.00 1337 (1a,Bk,tc/ch, loc Bx, spx, Py 1%) 52.70 54.00

HOLE No: MC97-20

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

LITHOLOGICAL DESCRIPTION

HOLE No.: MC97-20

TO

FROM

Page 3 ASSAYS WIDTH Au g/ton FROM TO SAMPLE No. 55.50 1.50 0.02 1338 54.00

Basaltic Komatiite , locally Brecciated The unit is greyish blue in colour. The unit is fine grained and Spinifex blades are elongated and stretched out along the foliation which is 58 degrees to the core axis (1a, BK, 3% qcv, wk Sil, Py 1%) 54.00 59.60 Weakly Silicified Basaltic Komatiite The unit is medium grained and dark grey to black in colour. The quartz carbonate veins have a well developed crenulation cleavage which is sub parallel to the core axis. (1a, BK, 3% qcv, Spx str Mag) 59.60 65.60 (Basaltic Komatiite The unit is fine to medium grained. The colour of the unit is dark grey with a bluish hue to it. The unit is soft and greasy. The quartz carbonate veins are sub - parallel to the core axis and are pinkish in colour. These veins have a well developed crenulation cleavage. The lower contact is crushed and possibly faulted (2a,T, Chl,wk Sil, 5% qcv, Py 1%) 70.50 65.60 Silicified and Chloritic Mafic Volcanic There are a few small interflows of tcNch. The unit is dark grey to greenish in colour and down section the unit becomes more dark grey to black in colour as a result of intense chlorite alteration. The lower contact is 64 degrees to the core axis (1a, Tc/ch, Poly, Loc Bx, ) 70.50 95.40 Ultramafic Flow The unit is like a tcNch mud it is brecciated in areas. The upper portion of the unit is polysutured. Here the unit intensely fractured. These fractures are infield with talc and sometimes coarse grained pyrite. The unit becomes like a tcNch mud which is brecciated at 84.95 metres. There are fragments of more consolidated Ultramafic material from sub rounded to round clasts The unit is very platy due to the talc chlorite. 0.05 99.40 1.00 1339 98.40 95.40 104.70 (2a, Chl, 4% qcv, 2-3% Py) 0.02 1.00 99.40 100.40 1340 Chloritic Mafic Volcanic

# DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) HOLE No.: MC97-20

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH Au	g/ton
		The unit is fine to medium grained. The unit is greyish green in colour and extremely chloritic. There is disseminated pyrite through out the unit and The pyrite is more concentrated along the quartz carbonate veining. The veins have a weak crenulation cleavage and are 1 - 3 centimetres wide.					
104.70	110.60	Ultramafic Flow The unit is a Ultramafic flow with wispy talc chlorite fractures and a crenulation cleavage which is 47 degrees to the core axis. The unit is intensely polysutured. In areas the talc chlorite fractures are anastomsing. The unit is soft and greasy and there is some pyrite cubes which have developed in these fractures.	1341	106.70	107.70	1.00	0.04
110.60	112.20	(2a, Qcv,Chl,2% Py) (Mafic Volcanic The unit is fine grained and quartz carbonate veined. The colour of the unit is greyish with a brownish hue.	1342	111.20	112.20	1.00	0.03
112.20	138.20	(1a, tc/Ch, Poly, Loc Bx, Py 1%, Mag)  Ultramafic Flow  The entire unit is moderately to strongly magnetic.  The unit is dark grey with a bluish hue. Quartz carbonate veining is intense and fractures are infilled with talc. In some area the core like a crumbly mud in which pyrite cubes have formed.  The unit consists of 1 -2% pyrite locally. There is a 3 metre interval there is 2% pyrite from 125 - 128 metres. From 129 - 131 the core is bluish green and	1343	122.40	123.40	1.00	0.02
138.20	140.50						

HOLE No: MC97-20

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) Page 5 HOLE No.: MC97-20 ASSAYS WIDTH Au g/ton FROM TO SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM 0.02 142.00 143.00 1.00 1344 (1a,Alt'd,BK,fol,Spx, 4-5% Py) 140.50 143.50 Moderately Altered Basaltic Komatiite The unit is a medium grained Basaltic Komatiite and is intensely altered from 142 - 143 metres the pyrite content is 3 - 4%. The unit is intensely sheared up and wispy. The mineralization occurs along a wispy crenulation cleavage that is 50 degrees to the core axis (1a, tc/ch, loc Bx) 143.50 153.20 Brecciated Ultramafic This unit is a talc chlorite Ultramafic. With fractures which are infilled with talc and talc carbonate. The unit is soft and magnetic. The unit is fine grained and brecciated. The colour of the unit is dark grey to black with a bluish hue. The lower section of the unit is medium grained and there is a Spinifex texture which is poorly developed. 0.02 153.30 154.30 1.00 1345 153.20 171.50 (1a, Spx,m alter'd, Py 4% loc) Moderately Altered Ultramafic Flow The unit is moderately altered. There is a Spinifex texture where the elongated blades have finely disseminated pyrite along the edges of these blades. There is a weak foliation which is 42 degrees to the core axis. The entire unit has a Spinifex texture but the pyrite fizzle out at 155.3 metres. Within this unit separate flows are visible. A Spinifex textured flow fades into possible an cumulate flow down section suggesting that tops are up hole. The unit then alternate between being polysutured and Spinifex textured. The sulphide content increase down section and is locally 3% at the lower section of the unit between 171.3 and 171.5 metres. 0.02 170.60 171.60 1.00 1346 171.50 173.00 (2a, Sil, Chl, 4% Py, Qev) 1.00 0.02 171.60 172.60 1347 Silicified Mafic Volcanics The unit is harder than an of the previous units.

There is Quartz carbonate veins and Quartz veins are on a micro scale <1 mm yet pervasive through out the unit. There is a .5 cm section of 4% blebby and disseminated pyrite near the upper contact.

## DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

END OF HOLE

200

HOLE No.: MC97-20

FROM	то	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH Au	g/ton
		The unit then takes on a greenish hue with a sheen that is similar to MC97-19. This sheen is a result of moderate silicification.					
173.00	200.00	(1a, tc/chl, 2% Py)  Ultramafic Flow  The unit is magnetic and Pyrite is blebby within the soft talc carbonate fracture fillings. The unit to medium grained and platy. The lower section of the unit is similar to the muddy appearance of the ultramafic in above sections.	1348 1349 1350 1351 1352 1353	172.60 188.00 189.50 193.00 194.00 195.00 196.50	173.60 189.50 191.00 194.00 195.00 196.50 197.50	1.00 1.50 1.50 1.00 1.00 1.50	0.02 0.02 0.02 0.02 0.02 0.03 0.02

## DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
100.00	-44.00	140.00
200.00	-44.00	140.00

HOLE No: MC97-20

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-21

Collar Eastings: 6375.00 Collar Northings: 6685.00 Collar Elevation: 0.00

Grid: MAIN

NQ CORE STORED B.M.G. STORAGE TIMMINS

Collar Inclination: -45.00

Grid Bearing: 180.00 Final Depth: 305.00 metres

DRILLED BY: NDS DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: Jim Edwards R CALHOUN

Date: MAY 8-May 12,1997 Down-hole Survey: ACID

DATES LOGGED: May 9-12, 1997

DRILLED ON:P1189764,P1159634

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t
0	17.6	(Ovb) Overburden					
17.6	58.8	(6c, Mag Py <1%)  Matachewan Diabase Dyke  The hole was collared into a diabase dyke. The unit is coarse grained and becomes finer at the lower contact. There is a .5 cm chill margin between the diabase and feldspar porphyry. The unit has the typical diabase texture and is moderately to strongly magnetic. There is trace pyrite which is disseminated and coarse <1% Py.					
58.8	98.0	Hematized Feldspar Porphyry The unit is a coarse grained feldspar porphyry. The unit is reddish in colour the redder areas are a result of increased hematite staining. The unit displays a perthitic texture with feldspar crystals averaging .58 cm wide in length. The feldspars are lath shaped to sub-hedral to euhedral and are well packed. There is good zonations within the individual feldspars displaying an exsolution halo. The textural characteristics of this unit are homogenous. The unit has micro fractures which are infilled with chlorite and there is spotty magnetite present which composes 2% of the volume of this unit. There are various colour changes that occur in the unit as a result of alteration in the form of silicification, hematization and Quartz veining. Intense silicification gives the unit a greyish translucent overcast to it. While weak to moderate Silicification results in the core having a salmon to fleshy pink colour. Hematization gives the unit a deep red to brick reddish colour. The quartz veins in the unit are small 1 - 3 cm wide and are smoky looking. The quartz veins usually have a greater concentration	1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377	58.80 60.30 61.80 63.30 64.80 66.30 67.80 69.30 70.80 72.30 73.80 80.20 81.70 82.70 84.20 85.70 86.70 89.70 91.20 92.70 96.50	60.30 61.80 63.30 64.80 66.30 67.80 69.30 70.80 72.30 75.30 76.80 81.70 82.70 84.20 85.70 86.70 88.20 91.20 92.70 96.50 98.00	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	0.02 0.07 0.02 0.02 0.10 0.02 0.02 0.02 0.02 0.05 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-21

ASSAYS WIDTH Au g/t SAMPLE No. FROM LITHOLOGICAL DESCRIPTION FROM TO of sulphides associated with them. Yet, the unit has finely disseminated sulphides scattered though out. At 58.2 - 61.8 the unit is a deep brick red colour hue to hematization and locally Py 2% At 62 - 66.3 The unit has a greyish overcast due to silicification. The sulphide content in this zone is 3% pyrite. At 68.5 - 70.2 the unit is has angular mafic inclusions incorporated into it. From 83.2 to 87.3 there is a increased concentration of 1 - 3 cm quartz veins with local pyrite up to 2%. The unit takes on a salmon colour at 89 metres and the quartz veining increases. There is a weak foliation which is 49 degrees to the core axis. Fractures sets are also oriented at the same angle. The unit is moderately to intensely silicified down section. The are small zones of 3 - 7 cm wide of intense hematization and silicification that give the unit a deep red colour with a sheen to these areas. These small zones have an increase in pyrite up to 3%. There is a small auto-brecciated zone of zoned feldspar porphyry at 97.9 - 98.1 it has a upper contact angle of 50 degrees to the core axis The individual zoned feldspars are broken up and welded and amalgamated together to from larger fragments 3- 4 cm wide. The fragments are in a dark brownish red matrix. 1.50 0.19 98.00 99.50 1378 (7d, Hem, m Sil, Qtz, Py 2-3%) 98.0 122.5 101.00 1.50 0.11 99.50 Silicified and Hematized Feldspar Porphyry 1379 1380 101.00 102.50 1.50 0.12The unit is a finer grained equivalent of the above. 0.02 1.50 1381 102.50 104.00 The colour is variable and is a granitic to syenite 1382 107.00 108.00 1.00 0.02 pinkish colour. It has a greyish overcast due to 0.05 1.50 1383 108.00 109.50 silicification. Note that in the above unit the spotty 109.50 110.50 1.00 0.02 1384 magnetite within the unit made it weakly to 0.02 110.50 111.50 1.00 1385 moderately magnetic. It seem that the Silicification 116.00 1.50 0.02 1386 114.50 suppress the magnetite. Only along fresh fractures 116.00 117.50 1.50 0.02 1387 is the unit weakly magnetic. Locally some areas 1388 117.50 119.00 1.50 0.02 are intensely silicified and have a fleshy pink 0.05 119.00 120.50 1.50 1389 colour which is translucent looking. The sulphide 1390 120.50 121.50 1.00 0.02 content of these zones is up to 3%. These areas

HOLE No: MC97-21

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-21

**ASSAYS** WIDTH SAMPLE No. FROM TO Au g/t LITHOLOGICAL DESCRIPTION FROM TO 0.02 1391 121.50 122.50 1.00 include the following intervals which also have quartz veins associated with them. 108.3 - 108.5. 110.5 - 111.1, 117.7 117.9,118.6 - 120.5. At 120.9 there is an increase in the number and concentration of angular mafic inclusions with in the porphyry. The mineralization is along micro fractures of chlorite and Py is also finely disseminated through out the unit. There is a weak preferred fabric which is weak at 52 degrees to the core axis. The unit becomes finer towards its lower contact with a Silicified Mafic. 1.50 0.02 122.50 124.00 1392 (2a, Sil ,Ep, Qev, Py 2 - 3 %, Ank,) 122.5 125.3 0.02 125.30 1.30 1393 124.00 Silicified Mafic Volcanic The unit is fine to medium grained. The colour varies due to the presence of Epidote alteration which gives some area of the unit a lime green overprinting. There are both quartz carbonate veins and injections of the felsic porphyry which anastomize throughout the unit. The average width of these Quartz carbonate veins ids 2-4 cm and the Felsic injections is 4 - 6 centimetres wide. There is no pyrite associated with the injection of the porphyry The individual feldspars are still zoned and are larger than when the unit is massive. The pyrite is finely disseminated through out the mafic unit. The unit is harder and dense. 0.02 126.30 1.00 125.30 1394 135.4 (7d,Sil,Hem,Qtz, Py 2%, Chl,) 125.3 0.02 126.30 127.80 1.50 1395 Silicified Feldspar Porphyry 0.02 129.30 1.50 127.80 1396 The unit is similar to the above 7d, There is more 0.02 129.30 130.80 1.50 1397 micro fractures which are infilled with chlorite and 0.02 1.50 130.80 132.30 1398 fine pyrite is strung along some of these fractures. 0.02 132.30 133.80 1.50 1399 There are smoky quartz veins running though the 0.02 1.40 133.80 135.20 1400 unit that have pyrite associated with them. 0.02 1.60 135.20 136.80 1401 (2a, Sil ,Ep, Qcv, Py 3- 4 %, Ankerite,) 135.4 159.0 0.02 149.90 1.40 1402 148.50 Silicified Mafic Volcanic 0.09 155.00 1.50 1403 153.50 This unit is similar to the above mafic unit. There 0.02 156.50 1.50 155.00 1404 is more Epidote alteration giving the unit a lime 0.02 1.00 157.50 1405 156.50 green colour and The quartz carbonate veining is 159.00 1.50 0.02 157.50 1406 intense and with more pyrite associated with

HOLE No: MC97-21

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-21

TO

FROM

172.5

ASSAYS

SAMPLE No.

FROM

TO

them. Again the injections of porphyry have no mineralization associated with them. There is a small zone of finely disseminated pyrite 3 - 4% throughout a quartz carbonate vein at 135.9. And there is a small zone at 154.0 metres of 5cm of massive finely disseminated pyrite. The best zone is from 153.9 to 156.7 where pyrite is 4 -5% and finely disseminated within fine grained intensely silicified mafics and intensely quartz veined on a micro scale At 158.6 to 159. 2 a small porphyry dyke with brecciated inclusions of the mafics. At 164.5 - 165.5 there is a small diabase dyke which intrudes the mafic volcanics. The quartz carbonate veins are moderately pervasive and .5 -1 cm wide. Pyrite is localized around quartz veins. The lower 1.5 metres of the unit is brecciated

LITHOLOGICAL DESCRIPTION

(7d,Sil, 3% Qzt, Chl Py <1%) 191.2 (Silicified Feldspar Porphyry The unit has an greyish overcast over the zone feldspars. The unit is salmon coloured with a greyish hue and the unit is the fine grained equivalent of the above. The feldspars are smaller .1 - .4 centimetres wide and more of the grains appear to be sub rounded to rounded Mafic inclusions are sub angular and sub rounded. There is an increase in quartz veining in the unit There is an 4 cm wide quartz vein at the contact which has blebby pyrite with in it along micro fractures of chlorite. The mineralization along this contact is 4 - 5%.

before progrades into a feldspar porphyry at 172.5

(2a, Sil ,Ep, Qcv, Py 3-4 %, Ankerite,) 191.2 194.6 Silicified Mafic Volcanic Again the unit is a moderately silicified mafic volcanic. This mafic unit is medium to coarse grained. Epidote alteration occurs as lime green to pale green patches and blobs thought out the unit. In some areas the unit is so coarse grained it

0.02 1.50 160.50 159.00 1407 0.04 160.50 162.00 1.50 1408 0.02 163.50 1.50 162.00 1409 0.02 163.50 165.00 1.50 1410 0.08 1.50 165,00 166.50 1411 0.58 166.50 168.00 1.50 1412 0.05 1.50 1413 168.00 169.50 171.00 1.50 0.02 1414 169.50 0.02 172.50 1.50 171.00 1415 0.02 174.00 1.50 1416 172.50 0.02 175.50 1.50 174.00 1417 0.02 176.50 177,50 1.00 1418 0.02 177,50 179.00 1.50 1419 0.02 1420 187.50 188.50 1.00 1.50 0.02 188.50 190.00 1421 0.02 1422 190.00 191.20 1.20

WIDTH Au g/t

HOLE No: MC97-21

## DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) HOLE No.: MC97-21

				ASSAYS		
TOM TO LITHOLOGICAL	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
have netted texture. Ag	times the unit appears to ain there are injections of entimetres to decimetres					
moderate. These veins a	phyry ured and quartz veining is re 1 5 centimetres wide d pyrite associated with sub angular mafic	1423 1424	199.50 201.00	201.00 202.00	1.50 1.00	0.02 0.05
"baked" mafic volcanic veins sub-parallel to o		1425 1426	205.40 206.90	206.90 208.40	1.50 1.50	0.02 0.02
zones with increased shematite red. Sections dominant over 6m. Pyri in areas of increased are finer grained with more syenitic unit.  -218-224- mixed section Lower contact 5-10% pyrized -224-228-5% quartz vericated -256-256.8-coarse por -278-288.5-bleached awith pyrite approximat	red generally witth local syenite pink clica and quartz veining, to deep of mixing as above with porphyry the content is highly variable tr to 3-5% quartz veins and bleaching. Some areas feldspar grains nearly gone to form a nof porphyry and mafics, pyrite 1-3%. The with quartz veining. The with quartz veining. The phyry, feldspars to lom, zoned and quartz veined sections 1 to 10cm ely every 2m.  in "syenitic" porphyry.	1427 1428 1429 1430 1431 1432 1433 1434 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448	208.40 212.00 213.50 215.00 216.50 218.00 221.00 222.90 224.00 225.40 226.60 227.90 229.40 233.20 234.60 235.60 237.10 238.60 240.10 241.10	240.10 241.10	1.50 1.00	0.05 0.08 0.30 0.13 0.08 0.06 0.11

HOLE No: MC97-21

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-21

ACCAVE

					ASSAYS	3	
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
			1450	243.10	244.10	1.00	0.02
			1451	244.10	245.30	1.20	0.04
			1452	245.30	246.80	1.50	0.02
			1453	250.00	251.00	1.00	0.02
			1454	251.00	252.50	1.50	0.02
			1455	252.50	254.00	1.50	0.02
			1456	265.20	266.20	1.00	0.43
			1457	266.20	267.70	1.50	0.03
			1458	278.00	279.50	1.50	0.02
			1459	279.50	281.00	1.50	0.02
			1460	281.00	282.50	1.50	0.02
			1461	282.50	284.00	1.50	0.02
			1462	284.00	285.50	1.50	0.02
			1463	285.50	287.00	1.50	0.02
			1464	295.00	296.00	1.00	0.02
			1465	301.00	302.00	1.00	0.07

302.5 305.0 (2a, Sil ,Ep, Qcv,,,)

Mafic Volcanic

fine grained, dark green, locally epidotized with small 1cm

veinlets of porphyry, minor pyrite.

305.0 EOH

### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
100.00	-44.00	180.00
200.00	-42.00	180.00
305.00	-42.00	180.00

HOLE No: MC97-21

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-22

Collar Eastings: 6750.00
Collar Northings: 6825.00
Collar Elevation: 0.00

Grid: MAIN

INQL CORE STORED IN BMG STORAGE TIMMINS

Collar Inclination: -45.00

Grid Bearing: 180.00

Final Depth: 173.00 metres
DRILLED BY NDS DRILLING TIMMINS

CASING LEFT IN HOLE

Logged by: Jim Edwards,R Calhoun

Date: MAY 12-14,1997 Down-hole Survey: ACID

DATES LOGGED - MAY 13-14,1997

DRILLED ON:P1189764,P1159633

					ASSAYS			 
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t	
0.0	56.0	(1a, fol, Ser, qcv) Ultramafic fine grained, light to medium green, medium hard, sericitic, foliated 60 degrees to c.a Veined with ankerite on foliation and minor quartz veins 1 -3cm in width, trace to minor pyrite. Possibly basaltic komatiitie.						
63.0	95.4	(la, tal/chl, fol, ank,Sp) Ultramafic fine grained, dark green to blackish talc chlorite ultramafic, soft, weakly foliated, locally spotted with carbonate 'grains', carbonate is ankeritic. Spinifex feature locally. Brecciated locally. quartz veining 2-4cm. Small <1m sections of more basaltic appearing units.	1466 1467 1468 1469 1470 1471	57.80 59.00 60.50 84.50 85.70 86.70	59.00 60.50 62.00 85.70 86.70 87.70	1.20 1.50 1.50 1.20 1.00 1.00	0.02 0.02 0.02 0.02 0.02 0.02	
		84.4-87.7: 5% quartz veins 75-85 degrees to core axis.						
95.4	97.6	(2a, fol)  Mafic Volcanic  fine grained, dark green, quartz carbonate  veined, weakly mineralized. Upper contact  crushed, lower contact 80 degrees to core axis.  vrite is disseminated fine.	1472 1473	95.40 96.60	96.60 97.60	1.20	0.02 0.02	
97.6	108.2	(1a, qcv) Ultramafic - fine grained, medium to dark green, weakly sericitic, trace pyrite, minor to 2% quartz carbonate veins weakly foliated at 45 degrees to core axis. Small bands of mafic volcanic, dark green.	92			^ 6 <sub>1</sub>		
108.2	117.3	(2a,fg,qcv,Py 1%)  Mafic Volcanic  fine grained, dark green, massive, very minor quartz/carbonate veins <2mm. Small	1474 1475 1476 1477	110.10 111.10 111.60 112.40	111.10 111.60 112.40 113.40	1.00 0.50 0.80 1.00	0.02 0.83 0.06 0.04	

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) HOLE No.: MC97-22

clusters and fractures related laminae. Veining in the mafics is minor. Pyrite content ranges from 2%

					ASSAYS	;	
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	OT	MIDIH	Au g/t
111012		inclusions of ultramafics with baked/chill contacts. Pyrite is minor overall as fine disseminations.	1478 1479 1480	113.40 114.30 115.30	114.30 115.30 116.10	0.90 1.00 0.80	0.02 0.07 0.02
		111.1-111.6: Quartz veining 20% with mafics bleached 2cm on either side. Vein 10 degrees to core axis. Pyrite 15% as coarse cubes, fine dissemination's.	1481	116.10	117.30	1.20	0.02
		112.6-112.8: As above 5-8% pyrite.					
		113.4-114.3: Sericitic ultramafic-5% quartz, nil pyrite, contacts 50 degrees to core axis.					
		115.1-116.1: Sericitic ultramafic.					
117.3	127.1	(la,qcv, fol) Ultramafic fine grained, medium to dark green, weakly sericitic, 5-10% veining of carbonate (dominant) and quartz <2cm in width. Foliation 45 degrees to core axis.	1482 1483	117.30 118.60	118.60 119.60	1.30 1.00	0.02 0.35
		118.6-119.6: Mafics with quartz vein and 10% sulfides associated with vein, bleached red vein.					
127.1	151.4	(1a/2a, Py)) Ultramafic/Mafic Volcanics The section is a rhythmic sequence of mafic volcanics and ultramafics. Ultramafics - fine grained, light to medium green,	1484 1485 1486 1487 1488 1489	127.10 130.10 132.80 135.90 140.00 141.50 142.90	128.40 130.70 133.80 136.90 141.50 142.90 143.80	1.30 0.60 1.00 1.50 1.40 0.90	0.09 0.02 0.02 0.02 0.02 0.02 0.02
		soft talc ultramafics, weakly to moderately sericitic. Color is dependent on carbonate and quartz veining ranging from 10-25%. Carbonate is dominant with veins <3cm along foliations, 50-60 degrees to core axis. Ultramafics have trace to trace pyrite.	1490 1491 1492 1493 1494 1495 1496	142.90 143.80 145.00 146.00 147.50 148.90 150.40	145.00 146.00 147.50 148.90 150.40 151.40	1.20 1.00 1.50 1.40 1.50	0.02 0.02 0.02 0.02 0.02
		Mafic Volcanics - fine grained, dark green, massive with variable pyrite at dissemination's,					

HOLE No: MC97-22

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-22

Note Not. Neev as

FROM TO

LITHOLOGICAL DESCRIPTION

SAMPLE No. FROM TO

ASSAYS TO WIDTH Au g/t

to 8% locally. The contacts between ultramafics and mafics are 40-55 degrees to core axis.

The following lists the ultramafic and mafic sections:

127.1-128.4: MV 128.4-130.1: ultra 130.1-130.7: MV 130.7-132.8: ultra 132.8-133.8: MV 133.8-135.0: ultra 135.0-135.6: MV 135.6-135.9: ultra 135.9-136.9: MV

136.9-140.0: ultra: 30% veining, sericite-moderate fault gouge upper contact WR-531.

140.0-142.9: MV 142.9-143.8: ultra 143.8-146.0: MV 146.0-148.9: ultra 148.9-151.4: MV

151.4 173.0 (1a,talc/chl)

Ultramafic

fine grained, dark green soft talc/chlorite ultramafic. Unit is highly fractured with talc/chlorite between fragments. This may be polysuturing are indicative of faulting. Carbonate/quartz veining is minor. Pyrite is nil.

164.4-169.0: Well developed spinifex features.

173.0 END OF HOLE

DOWN-HOLE SURVEY DATA

DEPTH INCLINATION BEARING 100.00 -42.00 180.00

HOLE No: MC97-22

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

173.00

TO

FROM

HOLE No.: MC97-22

ASSAYS SAMPLE No. FROM TO WIDTH Au g/t

LITHOLOGICAL DESCRIPTION

BEARING DEPTH INCLINATION 180.00 -39.00

HOLE No: MC97-22

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-23

Collar Eastings: 6875.00 Collar Northings: 6775.00 Collar Elevation: 0.00

Grid: MAIN

INQL CORE STORED HEMLO STORAGE TIMMINS

Collar Inclination: -45.00

Grid Bearing: 180.00

Final Depth: 224.00 metres

DRILLED BY: NDS DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: R.Calhoun Date: MAY 21-24,1997

Down-hole Survey: ACID DATES LOGGED MAY 22-24,1997

**DRILLED ON:P1159633** 

			SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t
FROM	TO	LITHOLOGICAL DESCRIPTION	SATIFLE NO.	FROM	10	WIDI	B, -
0.0	33.0	Overburden					
33.0	99.7	(1a, talc/chl, bx, cal,sp, fol)  Ultramafic - fine grained, medium to dark green, talc/chlorite ultramafic. Unit is highly fractured to brecciated with numerous fault gouge sections 5 -20cm. Calcite occurs as small veinlets randomly oriented <0.5cm in width. Spinifex features were noted at 50-52.5 meters, 92.6-93.1 meters. Units contains 1-3 meter sections of mafic volcanics	1501 1502 1503 1504 1505	85.50 95.00 96.10 96.40 97.30	86.00 96.10 96.40 97.30 97.90	0.50 1.10 0.30 0.90 0.60	0.08 0.02 0.02 0.02 0.02

33.0-70.5: Highly brecciated, fractured.

at 56-60 meters.

70.5-99.7: Unit is more competent but continues to be talc/chlorite.

medium to dark green, fine grained. Foliated at 43 degrees to core axis. Unit is locally magnetic as

38.8-40.0: Mafic volcanic - 5% quartz veining.

41.2-45.7: Mafic volcanic - 5% quartz veining.

85.5-86.0: Contains 6cm quartz/carbonate vein with 30% pyrite as massive veinlets.

96.1-96.4: Possibly interflow sediment with layering (graphite??) and fine laminae of pyrite. Pyrite also occurs as clusters and disseminations - total pyrite 10%. Layered 65 degrees to core axis.

96.4-97.3: Weakly altered ultramafic pale green, siliceous, carbonate veining.

97.3-97.9: Possible interflow sediment as above, pyrite <5%.

2.18006

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

Page 2 HOLE No.: MC97-23

FROM TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t
99.7 111.4	(1a, BK,cal, sil,Py 1%, Po 1%)  Ultramafic-Basaltic Komatiite fine to medium grained, medium to dark green, unit is competent with increased calcite veinlets, massive. Small patchy silicification which lightens the colour to grey green. Very minor to trace pyrite as disseminations and occasional nodules of pyrrhotite-minor chalcopyrite. Pyrite is associated with calcite veinlets while the pyrrhotite occurs with silicified sections.					
111.4 185.0	Mafic Volcanics fine grained medium green, pillowed mafic volcanics. The pillows are marked by increased chlorite and by epidote which is sometimes abundantly associated with calcite veins. Epidote can occur as "disseminations" giving the unit a lime green colouration. Widespread silicification makes the rock hard (can't be scratched with a knife). Locally the intensity of the silicification gives the core a cherty appearance and a light grey colour. Pyrite is disseminated throughout the section as fine grains, to clusters and fine laminae. The abundance does not have (appear to have) any correspondence to the degree of other alteration. Pyrite is generally 1-2% increasing over short sections to 5-7%. Unit is magnetic throughout weakly to generally moderately to strong with 4-8 meter sections non-magnetic.  122.7-125.3: 15% quartz and/or calcite veining 3 -5% pyrite as disseminations. Quartz is milky	1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520	122.00 123.00 124.00 125.30 132.50 133.50 134.50 150.50 152.00 153.50 156.50 164.00 165.00	123.00 124.00 125.30 126.30 133.50 134.50 135.50 146.00 152.00 153.50 155.00 156.50 158.00 165.00	1.00 1.00 1.30 1.00 1.00 1.00 1.10 1.50 1.50 1.50 1.5	0.02 0.02 0.02 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02

133.5-134.5: 5% quartz veining 90 degrees to core axis, glassy 2-4% pyrite, fine disseminations. 150.5-158.0: More highly siliceous with pale grey green "cherty" sections. Increased clusters and laminae of pyrite, 3-5% overall (possible varioles?,

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-23 ASSAYS WIDTH Au g/t SAMPLE No. FROM TO LITHOLOGICAL DESCRIPTION FROM TO amygdules). 158.0-162.2: Ultramafic, dark green, soft, talc/chlorite veining, medium grained. 164.0-166.2: Pyrite 5-7% as disseminations and laminae (clusters) increased epidote, siliceous. (2a, fr, Py 1%) 185.0 188.8 Mafic Volcanic - medium to coarse grained, dark green, massive mafic. Contacts are crushed, fractured upper may be at 60 degrees to core axis. Epidote is minor, pyrite trace to <1% mainly associated with 3cm quartz carbonate vein at 187.9 meters. 0.02 198.80 200.30 1.50 1521 (2a, ep,sil, mag) 188.8 207.9 201.60 1.30 0.02 1522 200.30 Mafic Volcanic 0.02 202.40 0.80 1523 201.60 fine grained, medium green to epidote 207.40 1.40 0.02 206.00 1524 lime green, siliceous, magnetic pillowed volcanic 0.50 0.02 207.40 207.90 1525 as above. Selvages are again marked by concentrations of chlorite and epidote. Quartz/carbonate veining is nil to minor. Pyrite 1% generally in selvages, 1% locally as disseminations. Pillows are 2-3 meters in size. 197.0-203.0: More massive section decreased epidote and small porphyry section 201.6-202.3m 203-207.4: Increase in pyrite, 1-2% increased alteration with some brecciation, sealed. 207.4-207.9: Siliceous dark grey to green, 1% pyrite. 0.02 0.90 207.90 208.80 1526 Ultramafic 207.9 224.0 212.30 1.10 0.04 211.20 1527 - dark green to black, fine grained, talc/chlorite 0.14 213.80 1.50 ultramafic with sections of 1-2% pyrite. Contact with 1528 212.30 mafic 85 degrees to core axis. Weakly foliated at 58 degrees to core axis. Unit is magnetic and has

HOLE No: MC97-23

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

Page 4 HOLE No.: MC97-23

TO FROM

LITHOLOGICAL DESCRIPTION

SAMPLE No. FROM

ASSAYS

TO WIDTH Aug/t

207.9-208.8: 3% disseminated pyrite

208.8-209.3: Fault gouge.

211.2-213.8: 1-3% disseminated pyrite in small

"veins" or layers.

213.8-224.0: Brecciated and small fault gouge

sections.

224.0

End of Hole

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
100.00	-42.00	180.00
224.00	-41.00	180.00

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

(1a, chl, sp)

Fine grained, dark green, chloritic with local

Ultramafic

121.0 161.0

Logged by: R.Calhoun HOLE No.: MC97-24 Collar Inclination: -45.00 Collar Eastings: 5500.00 Date: OCT 9-12,1997 Grid Bearing: 180.00 Collar Northings: 7175.00 Down-hole Survey: ACID Final Depth: 363.00 metres 0.00 Collar Elevation: DATES LOGGED OCT9-12,1997 DRILLED BY: NOREX DRILLING, TIMMINS Grid: MAIN CASING LEFT IN HOLE INQL CORE STORED HEMLO STORAGE TIMMINS **DRILLED ON:P1189887** ASSAYS TO WIDTH Au g/t FROM SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM (OVB) 0.0 63.0 Overburden (2a, cal,fr) 73.0 63.0 Mafic Volcanics Fine to medium grained, medium to dark green, chlorite blebs, minor calcite. Unit is highly fractured to locally crumbled. (la.cal, tal/chl) 73.0 94.7 Ultramafic Fine grained, dark green to locally dark green grey, calcite veining. Carbonatization as calcite in matrix abundant 77.0-89.0 meters and a calcite vein to 94.7 meters. Talc/chlorite ultramafic varying to chloritic ultramafic. Locally hardness increases to siliceous hardness. 0.02 96.30 1.20 1544 95.10 (1a, chl, py 1-3%)94.7 121.0 0.02 1.20 1545 101.20 102.40 Ultramafic Fine grained, dark green, mainly chloritic, more basaltic in nature. Maybe a highly chloritic basalt. Unit contains pyrite 1-3%, locally 5% as fine disseminations and as minor veinlets discontinuous and large clusters. Calcite veining continues as small white veins <0.5m, 80 degrees and 10 degrees to core axis. Small syenite vein at 106.05-106.20 with 5% pyrite as fine Rose de la Company of the disseminations. Unit is locally magnetic especially from 113.0-121.0 meters. 94.7-106.0: Pyrite 1-3%, locally 5%. 106.0-121.0: Pyrite 1% locally in clusters.

HOLE No: MC97-24

0.02

1.40

127.30

1546

125.90

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-24

ASSAYS WIDTH Au g/t FROM SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM talc/chlorite.Calcite veining as above. Spinifex features from 133.0-137.3 meters. Calcite more abundant towards bottom of section. Unit uniformly magnetic, moderate to strong. 125.9-127.3: Felsic dyke, dark grey contact at 35 degrees to core axis, 1-2% pyrite. Ultramafic above is baked in appearance 125.0-125.9 meters and below 127.3-127.5, may contain biotite(?). 133.0-137.3: Spinifex features. 145.0-149.0: Spinifex features. 150.9-161.6: Increase in carbonatization as <0.5m veins and disseminated in matrix. Increase in talc/ chlorite. Sulfide content nil to trace. 0.02 1.00 1547 160.60 161.60 (7d,sil, py 3-5%, tour, chl) 161.6 176.1 0.02 162.50 0.90 161.60 1548 Porphyry 0.02 162.50 163.40 0.90 1549 Fine to medium grained, pale whitish grey to pink 0.02 164.20 0.80 163.40 1550 with hematite alteration. Unit is siliceous with 0.02 164.20 165.70 1.50 1551 multiple quartz veins white to 2cm wide. Pyrite 3-0.02 1.50 1552 165.70 167.20 5% as fine disseminations and euhedral grains. 0.02 167.20 168.70 1.50 1553 Tourmaline occurs with some quartz veins as at 0.02 1.50 1554 168.70 170.20 171.2 but most fractures in the porphyry contain 170.20 171.70 1.50 0.02 1555 chlorite. These fractures are random at 10 to 80 0.02 173.20 1.50 171.70 1556 degrees to core axis. Upper and lower contacts at 0.00 174.70 1.50 1557 173.20 50 degrees to core axis. 0.02 174.70 176.10 1.40 1558 (f,g) 176.1 176.9 Gouge with abundant calcite, at 52 degrees to core axis, knife edge lower contact, upper contact porphyry. 0.02 1.00 183.70 184.70 1559 176.9 184.7 (1a, fol, tal/chl) Ultramafic Fine grained, dark green to green grey with abundant calcite veins and in matrix. Upper portion of unit is well foliated at 52 degrees to core axis becoming

HOLE No: MC97-24

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-24

ASSAYS WIDTH Au g/t OT SAMPLE No. FROM LITHOLOGICAL DESCRIPTION FROM TO more massive towards the bottom. Unit is talc/chlorite moderate. Lower contact is marked by quartz veining some felsic intrusive and pyrite as disseminations and small veinlets. 0.02 184.70 186.20 1.50 1560 (2a, cal.Bl,sil,hm,py 1%) 184.7 192.1 1.50 0.02 186.20 187.70 1561 Mafic Volcanic-Basalt 0.02 1.50 187.70 189.20 1562 Fine grained, dark green massive. Calcite veining 1.50 0.02 189.20 190.70 1563 is moderate as small veins randomly oriented. Unit is weakly altered as bleaching to 188.5 as feathery patches which may be potassic alteration along fractures. Unit is locally siliceous and has random hematitic "veined" section. Pyrite occurs as fine disseminations, small 0.5cm clusters and as veinlets normally associated with calcite veining. Overall the pyrite content is 1% to locally 1-3%. Lower contact is not well defined. 1.50 0.02 198.50 200.00 1564 192.1 211.2 (2a, Fe T, am, B1) 201.30 1.30 0.02 1565 200.00 Fe Tholeiitic-Mafic Volcanic-Amygduloidal Basalt 206.00 1.50 0.02 204.50 1566 Fine grained, generally dark green with calcite filled 1.00 0.02 207.00 1567 206.00 amygdules to 0.5cm, generally 1-2mm. Amygdules often occur in clusters which maybe formed at pillow edges but pillows are not very obvious. Pyrite occurs throughout the unit as fine disseminations <1% but increase in altered/bleached sections which occur randomly and often with minor quartz veining. Calcite also occurs as veinlets < 0.5cm maximum at generally 48 degrees to core axis. Unit is magnetic locally near 1-2m, moderate to strong. (2a, Fe T, Bleached, Py 1%) 211.2 227.0 Mafic Volcanic-Fe Thol. Basalt Fine grained, dark green massive, generally featureless except for area of patchy bleaching, to 10cm. Bleaching to khaki colour probably alteration with minor <1% fine pyrite associate. Minor quartz veining as white to glassy <0.5cm. 0.02 248.00 1.00 247.00 1568 (2b, Mg T, am, py) 227.0 249.0 Mafic Volcanie-Mg Thol. Basalt

Fine grained, light green to grey due to abundance

HOLE No: MC97-24

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) Page 4 HOLE No.: MC97-24 ASSAYS WIDTH Au g/t FROM SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM of calcite in the matrix. Small frequent veins and calcite filled amygdules. Amygdules occur throughout but form frequent clustered zones to 30cm wide which may be marked 1-2m pillows. Selvages are not obvious but may also be marked by increased chlorite. Pyrite is minor to trace. 0.02 273.70 1 00 272.70 1569 297.3 (2b,qcv,am) 249.0 Mafic Volcanic-Basalt Fine grained, dark green, less calcite than above but still appears to be pillowed. Calcite occurs as veins small <0.5cm and as white veins to 40cm. Nodules/amygdules of calcite occurs throughout to 0.3cm, locally abundant. Pillow selvages are marked by increased chlorite and secondary bleaching. Some selvages are also marked by basaltic fragments in calcite. Pyrite content is low overall with minor <1.0m sections of 2-4%. Minor sections of Porphyry pink with 2-5% pyrite <10cm. 259.4-261.5: Calcite veining to 40cm. 265.0-281.0: 10cm zones of mafic fragments in calcite. 281.0-287.0: Zones of potassic alteration up to 30cm as khaki coloration, siliceous, carbonatized. 297.1-297.3: Hematitic, weakly pyritized. 0.02 337.10 1.00 336.10 1570

297.3	342.8	(2c,chl,am, bx, py 1%)
		Mafic Fragmental-(Flow Breccia)
		Fine grained, dark green chlorit
		fragments to 4cm, bleached, cont

Fine grained, dark green chloritic matrix, hosting fragments to 4cm, bleached, containing calcite amygdules, and medium green fragments to 1cm less evident. Fragment abundance increases down section with bleached fragments nearly disappear at 329 meters. Frequent fractures generally 30-40 degrees to core axis have <1cm wide pink alteration zones with minor to 1% fine pyrite. Calcite occurs as small veins <3mm wide, white and local nodules of white to pinkish colour. Pyrite is trace overall as

HOLE No: MC97-24

0.02

0.02

337.10

341.80

1571

1572

338.10

342.80

1.00

1.00

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

7 100 1 211			
HOLE No.:	MC97-24		

	<b></b> -				ASSAYS		
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
		fine disseminations. Locally weak to moderately magnetic.					
		336.5-337.1: Foliated 40 degrees to core axis, 1-2% pyrite as fine disseminations.					
		341.1-342.8: Foliated 50 degrees to core axis with 1-2% pyrite as fine disseminations and local clusters of euhedral grains.					
40.0	347.1	(2a/b, am,py 1-3%)	1573	342.80	344.30	1.50	0.02
<b>4</b> 2.8	347.1	Mafic Volcanic-Basalt-Amygduloidal	1574	344.30	345.70	1.40	0.02
		Fine grained, medium green matrix hosting calcite amygdules generally <1mm to locally 3mm. Unit maybe pillowed with cluster or increased amygdules may reflect pillow edges. Pyrite 1-3% as fine disseminations and semi continuous veinlets. Upper contact at 50 degrees to core axis. Calcite also occurs as <5mm white veins.	1575	345.70	347.10	1.40	0.02
47.1	363.0	(2b,chl,bl,py 1%) Mafic Volcanic-Pillowed Basalt Fine grained, very dark green matrix to locally medium green, chloritic. Pillow selvages are marked by increased chlorite and occasionally by <3mm veinlets of pyrite.Calcite amygdules occurs throughout <1mm in uppersection to up to 7mm below 356.0m. Calcite also occurs as small veinlets <5mm randomly oriented and irregular nodules. Locally there is minor bleaching at pillow selvages extending over 5-10cm. Pyrite is nil to trace generally except where noted.	1576	348.40	350.00	1.60	0.25
		348.4-350.0: Veinlets of pyrite associated with pillow selvages are approximately 0.5 massive wide					
63.0		END OF HOLE					
,.0		div of hold					

HOLE No: MC97-24

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

Page 6 HOLE No.: MC97-24

					ASSAYS		
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t

#### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
65.00	-42.00	180.00
150.00	-40.00	180.00
250.00	-39.00	180.00
296.00	-39.00	180.00
363.00	-39.00	180.00

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) HOLE No.: MC97-25 5875.00 Collar Eastings: 7000.00 Collar Northings: 0.00 Collar Elevation: Grid: MAIN INQL CORE STORED HEMLO STORAGE TIMMINS FROM TO 37.0 (OVB) 0.0 Casing 49.9 (6c) 37.0 Diabase diabase texture. Unit is fine grained 47.0-49.9. (2a, Fe T, cal, py 5%)) 63.7 49.9

Collar Inclination: -45.00

Grid Bearing: 180.00

Final Depth: 239.00 metres

DRILLED BY: NOREX DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: R.Calhoun Date: OCT 14-17,1997 Down-hole Survey: ACID DATES LOGGED OCT 15-18,1997

**DRILLED ON:P1189887** 

					ASSAY	S		
EDOM	TNO.	TITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t	

Fine to medium grained, medium green, massive with

Mafic Volcanic-Fe Thol. Basalt Fine grained, dark green, medium hardness, possibly weakly siliceous, massive with multiple fractures generally calcite filled. Fracture 15, 60 and 85 degrees to core axis.

51.4-52.6: Small vein or layers of felsic intrusive (syenite) with minor pyrite. Pyrite 5% in mafic between intrusive layers at 52.1-52.2 meters.

63.4-63.7: Felsic at contact, minor pyrite associated with felsics.

(la, tal/chl) 63 7 81.6 Ultramafic

Fine grained, dark green to blackish, soft, chloritic and talcose, massive except for calcite filled fractures as above and as local nodules as at 77.0-81.0 metersvery low core angle

(7, hm, am) 81.6 84.0 Felsic Intrusive

Medium grained, pink to brick red, hematitic. Unit contains calcite which appears to be amygdules or phenocrysts slightly pink < 1mm generally but up to 2mm in size. Groundmass, matrix is highly calcitic. Calcite takes in a pinkish coloration from the hematite. Lower contact is knife edged at 70 degrees to core axis. Mag

4000-6000 susceptibility.

2.18006

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-25

ASSAYS WIDTH Au g/t SAMPLE No. FROM TO LITHOLOGICAL DESCRIPTION FROM TO 0.04 1577 85.10 86.20 1.10 (2a. hm. sil, ep,sil) 99.1 84.0 0.02 87.10 0.90 1578 86.20 Mafic Volcanic-Basalt 1.40 0.02 1579 87.10 88.50 This zone contains abundant hematite, locally silicified, 0.02 1.00 88.50 89.50 1580 epidote, and calcite amygdules locally. Alteration has 91.00 1.50 0.02 1581 89.50 made unit petrology difficult but sufficient flow 0.02 92.50 1.50 91.00 1582 structures are preserved. 0.02 1583 92.50 94.00 1.50 Fine grained, colour varies from dark green to brick red 0.02 94.00 95.00 1.00 1584 based on hematite content. Small quartz eyes?? are 0.02 1585 95,00 96.50 1.50 formed locally. Stretched, calcite amygdules generally 0.04 98.00 1.50 96.50 1586 1mm locally 3mm. Magnet susceptibility-2000 to 4000 0.02 1587 98.00 99.10 1.10 locally.

84.0-90.1: 50/50 relatively unaltered mafic and hematized mafic, patchy zones of quartz and feldspar veins? with associated bleaching. Pyrite content is highly variable but can reach 5-7% locally over 1 meter. Patchy alteration may in part be due to brecciation and layered alteration may indicate selvages differentially altered. Unit siliceous .

90.1-95.0: Hematite alteration dominates with less areas of dark green epidotized mafic. Pyrite content increases to be generally 3-7%. Local quartz veins have 5-10% pyrite associated as at 94.3 to 95.0 meters. Small brecciated zone at 94.2-94.3 meters.

95.0-99.1: Amygduloidal basalt with calcite filled amygdules and minor quartz filled. Pyrite 1-3% but from 98.0-99.1-small quartz filled fractures have fine disseminated pyrite 0.4cm on either side.

99.1 120.7 (2a, bx,hm,ep,Sil, py 1-2%)

Mafic Volcanic-Basalt Breccia (Fragmental)

Fine grained, medium to dark green matrix hosting fragments of similar composition. Fragmental range from subrounded to angular <0.5cm to 3cm. Hematite alteration is nil to locally moderate especially above 112.1. Epidotization is distributed throughout weak to moderate and locally strong as noted below. Unit is fairly uniformly silicified moderate to strong. Pyrite content is <1%-2% generally as disseminations slightly higher in areas of narrow veinlets.

1.50 0.02 100.60 1588 99.10 102.10 1.50 0.02 1589 100.60 0.02 103.60 1.50 1590 102.10 105.10 1.50 0.02 1591 103.60 0.02 105.10 106.20 1.10 1592 0.02 107.50 1.30 1593 106.20 0.02 107.50 109.00 1.50 1594 0.02 1.50 1595 109.00 110.50 0.02 112.10 1.60 1596 110.50 0.02 1.50 1597 112.10 113.60 1.00 0.02 117.20 118.20 1598

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DIAMOND DRILL LOG

PROPERTY:	Mahoney	Creek	(507)	

PROPERTY: Mahoney Creek (507)	Page 3
HOLE No.: MC97-25	

					ASSAY	 S	
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
		co 4 400 0 W hiti- bearing with fragments to 3cm	1599 1600	118.20 119.20	119.20 120.70	1.00 1.50	0.02 0.02
		99.1-106.2: Hematitic breccia with fragments to 3cm, variably hematitized matrix and fragments are generally hematitic-epidote occurs as interstitial "veins" and fracture fillings. Silicified magnetic locally.	2000				
		106.2-106.6: Epidotitic breccia-nil hematite and the fragments appear suspended in an epidote matrix. Fragments are smaller than above <1cm with some cherty grey fragments with pyrite. Silicified.					
		106.6-112.1: Hematitic breccia as above, silicified, epidote as fracture fillings and local netting. Pyrite content 1-2% locally 5% in narrow veining. Magnetic locally.					
		112.1-120.7: Epidotitic breccia with weakly hematized fragments, fragments to 2cm+, in an epidotitic matrix and some fracture fillings. Some cherty fragments as above. Pyrite is minor to 1%. Unit is very siliceous. Minor quartz veining. Local magnetic, strong.					
120.7	124.9	(6a,ep,cal, qv)  Mafic Intrusive  Medium grained, dark green to epidote green. Epidotized  matrix. Minor to 1% calcite veining, and calcitic matrix.  Quartz veining is minor.					
124.9	129.4	(2a,fol, hm)	1101 1102	124.90 126.40	126.40 127.90	1.50 1.50	0.02 0.02
		Mafic Volcanic-Foliated Basalt Fine grained, dark green matrix to pink where calcite occupies the foliation trend, hematitic. Calcite veins or foliation fillings define to the foliation at 35 degrees to core axis. Unit is soft and may have a sedimentary component.	1103	127.90	129.40	1.50	0.02
129.4	134.1	(2a,bx,hm, mag)  Mafic Volcanics—Basaltic Breccia—Hematitic  Fine grained, hematitic matrix hosting fragments to 2cm, sub—rounded to angular, some fragments are grey cherty in appearance. Unit is silicified, strongly. Unit is uniformly strongly magnetic.  Pyrite 1-3% as disseminations and small veinlets.	1104 1105 1106	129.40 130.40 131.90	130.40 131.90 133.40	1.50	0.02

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

the unit.

HOLE No.: MC97-25

					ASSAY	S	
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
134.1	143.3	(2a, bx, Ep,py 1-2%)  Mafic Volcanic-Basaltic Breccia-Epidotitic  Unit is similar to above but hematite has been replaced by epidote. Pyrite is 1-2% generally. Fragments are up to 2cm in size. Unit is uniformly magnetic. Quartz veining is a minor component as narrow very infrequent veins.	1107 1108 1109	140.00 141.20 142.20	141.20 142.20 143.30	1.20 1.00 1.10	0.02 0.02 0.08
143.1	239.0	(2b, chl, cal,ep, sil)  Mafic Volcanic-Pillowed Basalt  Fine grained, pale to light green, hard, pillowed.  Pillows are marked by slight increase in chlorite, medium green and generally calcite and epidote in the upper section. In the lower section some	1110 1111 1112 1113 1114	159.30 184.40 185.60 186.60 187.60	159.70 185.60 186.60 187.60 188.50	0.40 1.20 1.00 1.00 0.90	0.04 0.02 0.02 0.02 0.02

146.2-148.8: Flow breccia fragments to 3cm with dark edges, epidote, calcite between fragments.

selvages have sericitic weak. Pyrite is minor and is generally located within calcitic selvages. Some sections are brecciated. These are probably flow breccia with fragments to 3cm with dark green edges with pale green interiors. The unit is silicified moderately to strongly. The basalt are ubiquitously silicified but does not seem to alter

148.8-154.3: Pillowed with some small fragments in selvages. Small 10cm syenite at 150 meters.

154.3-159.6: Flow breccia with fragments to 3cm with dark rims. Fragments are suspended in a dominantly calcite matrix with some epidote. Upper contact at 88 degrees to core axis but is somewhat contorted.

154.3-154.7: Hematitic syenite with 1-3% pyrite.

159.7-170.0: Pillow basalt with small sections of brecciation which may be in selvages, weak sericite.

170.0-184.4: Pillowed basalt with net patterned fractures, bleach possibly weakly sericitic? Numerous

HOLE No: MC97-25

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-25

ASSAYS

FROM TO LITHOLOGICAL DESCRIPTION

SAMPLE No.

FROM TO

WIDTH Au g/t

calcite veinlets.

184.4-188.5: Section contains weak pyrite, small hematitic syenites and small section of bleaching.

188.5-239.0: Pillowed basalts-pillows average 1.0-1.5 meters with local small pillows <0.5cm. Brittle fracturing with calcite probable sericite in net patterned fracturing. Pyrite minor generally with calcite in selvages. Pillow selvages are dark rimmed. Calcite in selvages in abundant to 226.7 where "new" flow begins. Contact is 80 degrees to core axis. Lower flow is pillowed not as fractured and contains more sericite as blebs and irregular patches.

239.0 END OF HOLE

#### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
50.00	-44_00	180.00
150.00	-43_00	180.00
200.00	-41-00	180.00
239.00	-41.00	180.00

HOLE No: MC97-25

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-26

6125.00 Collar Eastings: Collar Northings: 6425.00 Collar Elevation:

0.00

Grid: MAIN

CORE STORED AT BMG STORAGE TIMMINS ONTARIO

Collar Inclination: -45.00

Grid Bearing: 180.00

Final Depth: 200.00 metres

DRILLED BY: NOREX DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: R.Calhoun Date: OCT 18-21,1997

Down-hole Survey: ACID DATES LOGGED OCT 19-21,1997

**DRILLED ON:P1189764** 

- <i></i>					ASSAYS			
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t	
0.0	15.0	(OVB) Overburden to 14.7m.						
15.0	22.8	(6C)  Diabase  Dark grey to blackish, fine grained, strongly  magnetic-Lower  contact at 45 degrees to core axis.						
22.8	48.2	Mafic Volcanic-Pillowed Basalt/Porphyry Fine grained, light epidote green to locally dark green, epidotized siliceous, saussuritized, locally baked due to injection of porphyry. The porphyry which comprises 20% of the section, varies from coarse perthitic with zoned feldspars to 1cm and fine syenitic. The porphyry is generally brick red hematitic, contacts are at 45-48 degrees to core axis. Porphyry "veins" range from 5cm to 80cm with a larger section at 37.5-39.6cm. Fracturing in felsics are filled with calcite as in the mafics. Unit is locally moderately to strongly magnetic.	1115	40.00	41.00	1.00	0.07	
48.2	62.3	(2b, hm, mag)  Mafic Volcanic-Basalt  Fine grained, grey with pink/red overcast. The mafics in this section have taken up some of the hematite from the porphyry fluids with only small sections 10-15cm of porphyry fine grained. The mafics are highly fractured to veined with stockwork pattern (ladden veins) filled with calcite. Some volcanic textures remain but are generally gone. Pyrite content is nil to trace. Locally magnetic. 58.4-61.5: Mafics completed hematitized brick red with minor quartz and trace sulfides. Minor felsics.	1116 1117 1118 1119 1120 1121	55.00 56.00 57.40 58.40 59.40 60.50	56.00 57.40 58.40 59.40 60.50 61.50	1.00 1.40 1.00 1.00 1.10 1.00	0.02 0.24 0.09 0.37 1.28 1.29	
62.3	73.0	(2b,7d, ep,cal,chl) Mafic Volcanics-Basalt	5101 5102	61.50 62.40	62.40 63.80	0.90 1.40		HOLE No: MC97-2

2.18000

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

pillowed with 50% porphyry to 99.7 meters, minor pyrite in porphyry, mafics are epidotitized or saussuritized fractures and in matrix. Variably

magnetic.

HOLE No.: MC97-26

rom to	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	MIDIH	Au g/t
	Pillowed, fine grained, epidote green with minor grey sections as above. Porphyry is minor component of this section as medium to coarse grained perthitic feldspar porphyry with "veins" 10-20cm. Pillow selvages are marked by calcite/epidote and chloritic rims. There is an increase in quartz veining over above to <5% of section. Pyrite content is trace to nil.	5103 5104 5105 5106 5107	63.80 64.80 65.80 66.80 68.00	64.80 65.80 66.80 68.00 69.40	1.00 1.00 1.00 1.20 1.40	0.26 0.07 0.02 0.02 0.02
3.0 83.1	(2a, hm, sil, py 1%)  Mafic Volcanic-Basalt  Fine grained, grey with pink/red overcast due to hematite. Mafics are quite altered and have lost all volcanic textures. Brick red sections are siliceous, hematitized, and have minor quartz veining as <2cm wide veins. Pyrite content is 1% to trace occurring generally in areas with chlorite fillings on fractures. Chlorite is a minor component throughout. Porphyry occurs as small veins <10cm to 1.4 meters from 74.9 to 76.3 meters, coarse feldspar porphyry.	5108 5109 5110 1122 1123 1124 1125	75.10 76.20 77.40 78.90 80.30 81.40 82.10	76.20 77.40 78.90 80.30 81.40 82.10 83.10	1.10 1.20 1.50 1.40 1.10 0.70 1.00	0.73 0.02 0.28 0.65 1.64 0.04 0.02
3.1 95.4	(2a, alt'd/7d, hm, ser,py 1%)  Mafic Volcanic-Altered Basalt  Fine grained, khaki colored alternating with hematitic bands. Foliation is 10-20 degrees to core axis. Alteration in this zone is visually more intense than above with increased carbonatization and sericitization, probable saussuritization. Pyrite occurs as euhedral grains and fine disseminations locally to 2% but generally trace to <1%. Carbonatization is calcite. 92.4-95.4: Less sericite, becomes grey as above with porphyry forming contact area 94.3-95.4, coarse grained, feldspar porphyry.	1126 1127 1128 1129 1130 1131	83.10 84.50 86.00 87.50 89.00 90.20	84.50 86.00 87.50 89.00 90.20 91.20	1.40 1.50 1.50 1.50 1.20 1.00	0.11 1.42 0.11 1.20 0.18 0.02
95.4 103.6	(2a/7d, mag)  Mafic Volcanics-Basalt/Porphyry  Fine grained epidote green mafic volcanic, probably					

HOLE No: MC97-26

## DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507) HOLE No.: MC97-26

					ASSAYS	3		
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t	
103.6 1	115.3	Porphyry/Basalt Fine to medium grained feldspar porphyry generally brick red alternating with basalt 60% porphyry/40% basalt. Porphyry contains pyrite 1- 2% as disseminations and local small clusters, while the basalt which is grey to pink overcast contains 1-2% pyrite as fine disseminations. Pinkish coloration is hematite, and the basalts may in part be carbonatization. Calcite occurs in fractures and minor small veinlets.Moderate to strongly magnetic over 1-2 meters.	1132 1133 1134 1135 1136 1137 1138	107.40 108.90 109.90 110.60 111.60 112.50 113.50	108.90 109.90 110.60 111.60 112.50 113.50 114.50	1.50 1.00 0.70 1.00 0.90 1.00 1.00	0.20 0.02 0.02 0.11 0.06 0.02 0.02	
115.3	152.7	Mafic Volcanic-Basalt/Porphyry Fine grained, epidote green, saussuritized basalt with grey/pink sections containing 20% feldspar porphyry. Basalts are saussuritized epidotized, siliceous, locally brecciated, 123.5-129.8. Porphyrys are medium to coarse grained, zoned feldspars and minor quartz veining. Pyrite content overall is minor with small sections 1-2% as fine disseminations. One calcite vein at 129.8 contains minor specularite. Locally moderately to strongly magnetic.148.2-151.3: Coarse grained porphyry with zoned feldspar to 5mm.	1139 1140 1141 1142 1143 1144	129.90 145.90 146.90 148.20 149.70 151.30	130.90 146.90 148.20 149.70 151.30 152.70	1.00 1.00 1.30 1.50 1.60 1.40	0.02 0.02 0.26 0.20 1.58 0.02	
152.7	200.0	(2b, hm, calcite, py)  Mafic Volcanic-Pillowed Basalt  Fine grained, epidote green to dark green, saussuritized pillowed basalt. Pillows are marked by calcite weak hematite in selvages with dark chloritic rims. Unit 11locally brecciated in selvages. Fracturing is random to locally abundant with associated saussuritization and minor calcite. Pyrite content is generally nil to trace with minor sections of 1% over <0.5m. Small veins of medium grained feldspar porphyry are randomly distributed and are <10cm in length. Alteration is epidotization, weak to moderate						

HOLE No: MC97-26

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-26

ASSAYS

FROM TO

LITHOLOGICAL DESCRIPTION

SAMPLE No.

FROM

TO WIDTH Au g/t

hematization, and moderate silicification. Unit is non magnetic overall with small sections moderately magnetic, <0.5m. Rock is highly fractured locally crumbled, fracture-45 to 70

degrees to core axis.

200.0

END OF HOLE

#### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
20.00	-43.00	180.00
100.00	-43.00	180.00
200.00	-41.00	180.00

HOLE No: MC97-26

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-27

Grid: MAIN

Collar Eastings: 6125.00 Collar Northings: 6275.00 Collar Elevation: 0.00

NQ CORE STORED BATTLE MOUNTAIN STORAGE TIMMINS

Collar Inclination: -45.00 Grid Bearing: 180.00

Final Depth: 275.00 metres DRILLED BY: NOREX DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: R.Calhoun Date: OCT 21-29,1997 Down-hole Survey: ACID DATES LOGGED OCT 22-29,1997

DRILLED ON:P1189764,P998384

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t	
0.0	18.0	(Ovb) Overburden/Casing						
18.0	29.3	Mafic Volcanic-Pillowed Basalts Fine grained, pale (bleached) to medium green, calcitic pillowed basalt. Selvages are marked by calcite and dark chloritic rims. Unit is locally bleached to pale green over 3-5cm and along some fractures. amygdaloidal with feldspar filled amygdules. Unit is brittle fractured to crushed. 25.0-26.9: Coarse grained, perthitic, feldspar porphyry-red to brick red. Feldspars 60-70% of unit 25-26 meters. Upper contact at 40 degrees to core axis. Lower 70 degrees to core axis.			<u>.</u>		of	
26.9	32.2	(7d) Felsic Intrusive Fine grained, feldspar porphyry, dark red to greenish, nil to trace pyrite.						
32.2 32.3	159.7	(2a, hm, sil, felds)  Mafic Volcanic-Pillowed Basalt  Fine grained, pale green to medium green, calcitic pillowed basalt. Unit is as above except that the pale green colour and bleaching are dominant. Pyrite is <1% overall with very small sections of 1-2%. Hematite on some fractures. Porphyry sections are <20cm and coarse. Green epidote is wide spread and possible feldspathization in bleached section or saussuition with a combination of epidote, calcite and zeolites. The saussuritization occurs as complete bands to 10cm and as brittle fracture veins forming a net pattern. The rock is also highly silicified to	1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157	66.50 71.00 72.50 103.00 104.00 105.00 106.20 111.70 112.80 114.20 115.20 115.80 117.50 119.00	67.90 72.50 74.00 104.00 105.00 106.20 107.70 112.80 114.20 115.20 115.80 117.50 119.00 120.50	1.40 1.50 1.00 1.00 1.20 1.50 1.10 1.40 1.00 0.60 1.70 1.50	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02	

### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

Mafic Volcanic-Basalt

Medium grained, dark green with pale green

patches and discordant "veinlets". Unit is not as

HOLE No.: MC97-27

				ASSAYS	3	
om to	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
		1159	131.00	132.00	1.00	0.02
	very hard.	1160	132.00	133.00	1.00	0.02
		1161	135.00	136.00	1.00	0.02
	he entire unit is brittle fractured with few pieces	1162	136.00	137.00	1.00	0.02
	ver 10cm to locally crushed to <2cm pieces.	1163	137.00	138.00	1.00	0.02
	alcite is moderately abundant occurring as small	1164	157.50	159.00	1.50	0.02
	<pre>&lt;1cm veins, within selvages and with in the matrix.</pre>	1101	10.100			
	Selvages are also locally marked by dark rims					
	(chloritic?). Alteration intensity is moderate to					
	high. Small veins of porphyry <10cm.					
	06.2-111.7: Dark green flow with less alteration					
	and calcite veins, weak pyrite.					
	11.7-111.5: perthitic porphyry with up to 0.6cm					
	white zones feldspar moderately abundant dark					
	brick red with basalt inclusion 70cm. Upper					
	ontact at 65 degrees to core axis. Lower contact					
	60 degrees.					
	11.9-112.8: Porphyry is sheared with abundant					
	calcite in veins and fracture fillings, minor pyrite.					
	17.5-120.5: Mixed zone of fractured to brecciated					
	basalt and random veins of porphyry weakly					
	mineralized with pyrite.					
	31.0-137.0: Short sections of hematitized basalts					
	with 1% pyrite as at 136.0-137.0m.					
	37.0-154.0: Small <20cm porphyry veins red,					
	feldspar to <2mm generally 60 degrees to core					
	axis. Pyrite is minor <1% to trace. Pervasive					
	saussuritization can exceed 10cm but more is					
	associated with features.					
	56.2-159.1: Hematitized, calcite vein, quartz					
	veining minor possible leucoxene basalt. Pyrite					
	1%. Lower contact 60 degrees.					
100	).6 (2a, sil, hem)	1165	179.70	180.60	0.90	0.02
7 180	).b (Za, SII, Nem)					

HOLE No: MC97-27

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

81.7-182.8: Hematitized section with 10% quartz veining with pyrite 1% and small chalcopyrite

95.3-197.3: Weak hematite, 10% quartz/calcite veining 1-3% pyrite contacts 48 degrees to core

blebs in quartz.

HOLE No.: MC97-27

HOLD NO. 1 HOUSE TO SEE THE PROPERTY OF THE PR

ASSAYS WIDTH Au g/t TO SAMPLE No. FROM LITHOLOGICAL DESCRIPTION TO FROM siliceous as above although still quite fractured appears more competent than above. Contains small <10cm veins of porphyry and one vein 71.0 meters. Hematite is more universally abundant but weak. Minor hematitized section especially in lower contact area. Calcitic matrix and calcite veins <5mm random. 160.4-161.4: Brick red porphyry, white zoned feldspars. 165.3-167.2: Felsic intrusive-not obviously a porphyry, feldspar quartz matrix is diffuse, pink to brick red. 179.7-180.6: Hematitized basalt and 15cm of felsic intrusive. Pyrite 1%. 0.02 181.70 1.10 1166 180.60 (2b, Ep, Sil, hem) 180\_6 241.6 1.10 0.02 181.70 182.80 1167 Mafic Volcanic-Pillowed Basalt 0.02 196.30 1.00 1168 195.30 Fine grained, dark green to pale epidote green in 0.02 196.30 197.30 1.00 1169 saussuritized sections. Saussuritzation is 0.02 1.00 210.20 1170 209.20 pervasive over 5-10cm 0.90 0.02 210.20 211.10 1171 and associated with brittle fractures to form net 1.00 0.02 214.50 1172 213.50 patterns. Pillows are marked by dark rims, 215.10 0.60 0.02 214.50 1173 brecciated basalt, selvages in this section are not 0.02 1.00 216.10 1174 215.10 calcitic as in above. Unit is also fractured and 219.20 1.20 0.02 1175 218.00 generally core is in pieces >10cm. Small section 1.00 0.02 219.20 220,20 1176 of weak hematitization occur randomly. Unit is 230.50 1.10 0.02 229.40 1177 pervasively 0.02 1.40 233.10 234.50 1178 silicified, hard. Minor porphyry veins <5cm. Pyrite 0.02 1.00 234.50 235.50 1179 <1% to 0.02 1.50 235.50 237.00 1180 locally 2-3%. Quartz is a minor component. Calcite 238.20 1.20 0.02 237.00 1181 in matrix and in small <4mm veinlets. 0.02 0.80 241.60 1182 240.80

HOLE No: MC97-27

DIAMOND DRILL LOG

PROPERTY:	Mahoney	Creek	(507)
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Г	-	ندا	110	-	-	1100		

HOPE I	10 110.	<i>5, 2,</i>						
FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t	
		axis.						
		09.1-211.1: Porphyry-felsic intrusive with inclusions of basalt. Pyrite 2-3%.						
		13.5-215.1: Weakly Hematitized calcite and quartz veined, with 3-6% pyrite as fine disseminations and fine veinlets. Weakly magnetic.						
		29.4-230.5: Pyrite 2-5% as fine disseminations in saussuritized volcanics.						
		33.1-240.8: Unit continues to be saussuritized but contain variable hematite weak to moderate locally. Pyrite is minor generally.						
		40.8-241.6: Felsic intrusive at contact, 1-2% minor chalcopyrite.						
241.6	275.0	Mafic Intrusive Medium grained dark green to blackish with grains or nodules of pyroxene or chloritoid to biotite. Weakly mineralized, locally with pyrite very minor cpy. Small felsic veins. Unit is massive, finer grained at upper contact weakly calcitic. Small sections of blue fibrous mineral, talc??	1183 1184 1185 1186 1187 1188 1189	241.60 242.60 248.00 255.30 256.30 264.90 269.00 270.00	242.60 243.60 249.00 256.30 257.30 266.00 270.00 271.00	1.00 1.00 1.00 1.00 1.00 1.10 1.00	0.02 0.02 0.02 0.02 0.04 0.07 0.04 0.02	
		Pyrite occurs locally at 1-3%, usually disseminated but also as fine veinlets near felsic veins which occur frequently. The felsic veins are <20cm rarely >30cm.						
275.0		END OF HOLE						

HOLE No: MC97-27

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

FROM

HOLE No.: MC97-27

ASSAYS

TO WIDTH Au g/t SAMPLE No. FROM LITHOLOGICAL DESCRIPTION TO

DOWN-HOLE SURVEY DATA

BEARING INCLINATION DEPTH 180.00 -43.0050.00 180.00 -41.00 209.00

HOLE No: MC97-27

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-28

Grid: MAIN

73

9125.00 Collar Eastings: Collar Northings: 6185.00 Collar Elevation:

0.00

NQ CORE STORED BATTLE MOUNTAIN STORAGE TIMMINS

Collar Inclination: -45.00 Grid Bearing: 180.00 Final Depth: 254.00 metres DRILLED BY: NOREX DRILLING, TIMMINS

CASING LEFT IN HOLE

Logged by: R.Calhoun Date: OCT 21-29,1997 Down-hole Survey: ACID

DATES LOGGED OCT 29-NOV 3,1997

DRILLED ON:P1189528,P1159640

FROM TO	LITHOLOGICAL DESCRIPTION			ASSAYS		
	PILLOROGICAT DEPONIELION	SAMPLE No.	FROM	TO	WIDTH	Au g/t
.0 3.0	(Ovb) Overburden/Casing					
30.3	(2a/b, FeT, cal,sil,mag)  Mafic Volcanic-Pillowed Basalts  Fine grained, medium to dark green FeT basalt, with pillow selvages marked by increased chlorite.  Pillows are generally large 2-3 meters. Unit is calcitic in matrix and as small <1mm veins. Unit is variably siliceous weakly to moderately. Pyrite content is low generally associated with selvages. Unit not magnetic.					
30.3 41.5	Mafic Intrusive-Diabase Medium grained, medium grey to grey brown, diabase texture. Highly fractured <1% to 1% fine disseminated pyrite. Lower contact chilled, weakly hematitic. Contacts at 60 degrees to core axis.	Sal & la	30	0 6	<b>J</b>	
41.5 238.0	(2a/b, FeT, sil, Py, Ep,qcv, Py)  Mafic Volcanic-Pillowed Basalts  Fine grained, dark green, weakly siliceous, FeT with numerous calcitic veinlets, weak epidote. Calcite veins are up to 1cm but are generally <0.5cm.  Minor quartz veining glassy with minor pyrite as disseminations and discontinuous veinlets.  Infrequent weak bleaching generally associated with selvages. Calcite veinlets in healed fractures increase down hole. Unit is moderately siliceous possibly increasing down hole. Minor quartz veining overall. Patchy epidote alteration.  97.0-113.0: Unit becomes very dark green to black, weakly magnetic, still siliceous. Calcite filled	1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 5111 5112 5113 5114 5115	41.50 43.00 44.50 49.00 51.20 53.50 54.50 56.00 57.00 58.00 134.50 145.60 150.90 152.00 159.90 161.00	43.00 44.50 45.50 50.00 52.30 54.50 56.00 57.00 58.00 59.00 135.50 146.60 152.00 153.00 161.00 162.30	1.50 1.50 1.00 1.00 1.10 1.50 1.00 1.00	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02

HOLE No: MC97-28

**:**;;

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-28

#### ASSAYS WIDTH Au g/t TO FROM SAMPLE No. LITHOLOGICAL DESCRIPTION TO FROM 0.021.50 162.30 163.80 5117 fracturing continues. 0.02 164.80 1.00 163.80 5118 0.02 1.20 166.70 167.90 5119 113.0-139.0: Alteration intensity increases down 0.02 1.00 5120 167.90 168.90 hole but is patchy as pale green bleaching around 0.02 174.50 1.50 5121 173.00 fractures and locally pervasive. Silicification 0.02 176.00 1.50 5122 174.50 decreases locally. Unit becomes medium grained. 0.02 1.50 177.50 5123 176.00 Pyrite <1% generally; 5-8% 134.9-135.1m. 0.02 209.00 210.00 1.00 5124 0.02 1.50 210.00 211.50 5125 139.0-166.8: Unit becomes paler green with 0.02 212.50 1.00 211.50 5126 increase in alteration bleaching, more areas of 0.02 1.50 221.00 222.50 5127 pervasive alteration increased fracturing in net 0.02 230.10 1.00 229,10 5128 pattern. Selvages contain calcite and pyrrhotite. 0.02 1.00 232.00 233.00 5129 Unit is increasingly magnetic due to pyrrhotite. 0.02 1.50 5130 233,00 234.50 Minor disseminated pyrrhotite outside of selvages. 1.00 0.02 237.50 236.50 5131 Pyrite to 5% over 15cm, 160-166.8m. 0.02 0.50

238.00

5132

237.50

166.8-180.0: Unit is more intensely altered with wider section of pervasive bleaching with some quartz knots and veins. Pyrite to 5% locally as disseminations, pyrrhotite along fracture planes. Unit calcitic moderately siliceous. Weak foliation at 169.0 at 68 degrees to core axis.

180.0-209.0: Alteration decreases to patchy fracture related and local 10-20cm pervasive Minor quartz veining.

186.8-188.1: Flow breccia, fragments to 2cm variably altered.

209.0-238.0: Alteration increases as fracture related and pervasive saussuritization unit colour is highly variable as dark green, pale epidote green, and locally reddish due to hematite. Unit becomes weakly to moderately foliated at 70 degrees to core axis. Pyrite is 1-2% locally 5%.

Lower contact 237.5-238.0 possibly interflow sediment, 5-8% pyrite foliated 78 degrees to core axis.

(2a, Ep, mag, Py 1-2%) 238.0 248.8 Mafic Volcanic-Basalt

HOLE No: MC97-28

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

Page 3 HOLE No.: MC97-28

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	ASSAYS TO	WIDTH	Au g/t
248.8	254.0	Medium grained, dark green to locally epidote green, highly crushed, and fractured, weak to moderately magnetic over 10-15cm. Pyrite 1-2%.	5133	248.80	250.00	1.20	0.02
240.0	234.0	Mafic Volcanic-Basalt FeT Fine grained, dark green, possible siliceous ultramafic. Unit is silicified, weakly carbonated and moderately to strongly magnetic. Pyrite 1-2% to	5134 5135	250.00 251.50	251.50 253.00	1.50 1.50	0.02 0.02

END OF HOLE 254.0

### DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
52.00	-43.00	180.00
150.00	-40.00	180.00
206.00	-39.00	180.00
254.00	-38.00	180.00

#### DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-29

Grid: MAIN

8750.00 Collar Eastings: 5825.00 Collar Northings: 0.00 Collar Elevation:

135.0-200.0-Sections 2-5 meters of very coarse

nil to trace.

aggregates of pyroxene, biotite, minor calcite. Pyrite

Collar Inclination: -45.00 Grid Bearing: 180.00

Final Depth: 200.00 metres DRILLED BY: NOREX DRILLING, TIMMINS Logged by: R.Calhoun Date: NOV 4- NOV 6,1997 Down-hole Survey: ACID DATES LOGGED NOV4-NOV 6,1997

15.0   (OVB)   Overburden/Casing	rid: MAIN Q CORE STORE	D BATTLE MOUNTAIN STORAGE TIMMINS CASING LEFT IN HOLI	3		DRILLE	ED ON:P1	159637
15.0   44.0   (2a, px,py, ep)   Mafic Volcanic-Basalt   Fine grained, dark green, massive mafic volcanics.   The unit is cut by veins of feldspathic, pyroxene veins with calcite-Feldspar is white, while pyroxene reach 4mm in size. Veining is at generally shallow angles 15-25 degrees to core axis as at 17-19   meters, etc. Basalt is variably magnetic moderate to strong. Pyrite is minor as fine disseminations.   Hinor epidote.	FROM TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM			Au g/t
Mafic Volcanic-Basalt Fine grained, dark green, massive mafic volcanics. The unit is cut by veins of feldspathic, pyroxene veins with calcite. Weldspar is white, while pyroxene reach 4mm in size. Veining is at generally shallow angles 15-25 degrees to core axis as at 17-19 meters, etc. Basalt is variably magnetic moderate to strong. Pyrite is minor as fine disseminations. Minor epidote.  44.0 200 (2/6a,bi, mag) Mafic Intrusive-Basalt Unit is a mixed zone of basalt and pyroxenite. The pyroxenite sections contain coarse pyroxene crystals and aggregates to 1 inch in diameter and biotite unit is dark green, highly magnetic generally except in area of quartz/feldspar and calcitic veining. These veining areas are variable in colour from white to mixture of green and white to pink.Sulfide content as pyrite is 1-2% generally but can exceed 5% over 10-25cm. Basaltic sections (may be fine pyroxenible pyroxene crystals. These sections are also magnetic, from weak to locally strong.							
### 44.0 200 (2/6a,bi, mag) #### Mafic Intrusive—Basalt Unit is a mixed zone of basalt and pyroxenite. The Unit is a mixed zone of basalt and pyroxene		Mafic Volcanic-Basalt Fine grained, dark green, massive mafic volcanics. The unit is cut by veins of feldspathic, pyroxene veins with calcite Feldspar is white, while pyroxene reach 4mm in size. Veining is at generally shallow angles 15-25 degrees to core axis as at 17-19 meters, etc. Basalt is variably magnetic moderate to strong. Pyrite is minor as fine disseminations.					
98.8-102.4- Blue grey, fine grained, foliated 60 degrees to core axis, minor pyrite.	14.0 200	Mafic Intrusive-Basalt Unit is a mixed zone of basalt and pyroxenite. The pyroxenite sections contain coarse pyroxene crystals and aggregates to 1 inch in diameter and biotite unit is dark green, highly magnetic generally except in area of quartz/feldspar and calcitic veining. These veining areas are variable in colour from white to mixture of green and white to pink. Sulfide content as pyrite is 1-2% generally but can exceed 5% over 10-25cm. Basaltic sections (may be fine pyroxenite) are dark green, fine grained and have no discernible pyroxene crystals. These sections are also magnetic, from	5137 5138 5139 5140 5141 5142 5143 5144 5145 5146 5147	53.80 54.80 56.40 60.70 70.00 86.00 87.20 88.60 98.80 99.90 101.00	54.80 55.50 57.40 61.70 71.50 87.20 88.60 89.90 99.90 101.00 102.40	1.00 0.70 1.00 1.50 1.20 1.40 1.30 1.10 1.10	0.02 0.02 0.02 0.12 0.02 0.06 0.10
100 1-111 V-RING GRAV TOLLACHO, MILIOU DVI 100, COLOTON-		Overburden/Casing  (2a, px,py, ep)  Mafic Volcanic-Basalt  Fine grained, dark green, massive mafic volcanics.  The unit is cut by veins of feldspathic, pyroxene veins with calcite Feldspar is white, while pyroxene reach 4mm in size. Veining is at generally shallow angles 15-25 degrees to core axis as at 17-19 meters, etc. Basalt is variably magnetic moderate to strong. Pyrite is minor as fine disseminations. Minor epidote.  (2/6a,bi, mag)  Mafic Intrusive-Basalt  Unit is a mixed zone of basalt and pyroxenite. The pyroxenite sections contain coarse pyroxene crystals and aggregates to 1 inch in diameter and biotite unit is dark green, highly magnetic generally except in area of quartz/feldspar and calcitic veining. These veining areas are variable in colour from white to mixture of green and white to pink. Sulfide content as pyrite is 1-2% generally but can exceed 5% over 10-25cm. Basaltic sections (may be fine pyroxenite) are dark green, fine grained and have no discernible pyroxene crystals. These sections are also magnetic, from weak to locally strong.		30	0 6		

DIAMOND DRILL LOG

PROPERTY: Mahoney Creek (507)

HOLE No.: MC97-29

ASSAYS

WIDTH Au g/t SAMPLE No. FROM OT LITHOLOGICAL DESCRIPTION FROM

END OF HOLE 200.0

DOWN-HOLE SURVEY DATA

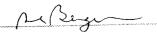
BEARING DEPTH INCLINATION

180.00 -38.00200.00

HOLE No: MC97-29



	TLE MOUNTAIN CANAD -57221.0 ( COMPLET		PROJECT DATE PR	: 507 INTED: 1-MAY-97	PAGE 1
SAMPLE NUMBER		Au //T			
1221	0.	31			***************************************
1222		70			
1223	0.	25			
1224	0.	.08			
1225	<0.	.03			
1226	<0				
1227		.03			
1228		.03			
1229		.07			
1230	0	.10			
1231	0	.78			
1232		.19			
1233	0	.51			
1234	<0	.03			
1235	<0	.03			
1236	0	.18			
1237		.19			
1238	0	.90			
	*				
	***	•			
		<b>Sec</b>			
		~			
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CLIENT: BATT REPORT: T97-	LE MOUNTAIN CA	NADA LTD. PLETE )	PROJECT: 507  DATE PRINTED: 5-MAY-97 PAGE 1
SAMPLE	ELEMENT	Au	
NUMBER	UNITS	G/T	
1239		0.03	
1240		0.04	
1241		0.30	
1242		0.07	
1243		0.05	
1244		<0.03	
1245		<0.03	
1246		<0.03	
1247		<0.03	
1248		<0.03	
1249		<0.03	
1250		<0.03	
1251		<0.03	
1252		<0.03	
1253		<0.03	
1254		<0.03	
1255		0.03	
1256		<0.03	
1257		<0.03	
1258		<0.03	
1259		0.03	



	TLE MOUNTAIN CANAD -57228.0 ( COMPLET		DATE PRINTED: 5-MAY-97 PAGE 1	
SAMPLE	ELEMENT	Au		
NUMBER		<b>:/</b> T		
	•••••			
1260	<0.			
1261		09		
1262	<0.			
1263	<0.			
1264	<0.	03		
1265	<0.	.03		
1266	<0.	.03		
1267	0	.09		
1268	<0	.03		
1269	<0	.03		
4070	Λ	.05		
1270		.03		
1271		.03		
1272		.03		
1273 1274		.03		
12/4				
1275		.03		
1276		.03		
1277		.03		
1278	<0	.03		
1279	<0	.03		
1280	<0	).03		
1281		0.03		
1282		0.03		
1283		0.03		
1284		0.03		
	-1	0.03		
1285		1.03		
		······································		





	LE MOUNTAIN ( 57232.0 ( COM	PLETE )		PROJECT: 507 DATE PRINTED:	5-MAY-97	PAGE	1
SAMPLE NUMBER	ELEMENT UNITS	Au G/T					
1286		<0.03					
1287		<0.03					
1288		<0.03					
1289		<0.03					
1290		<0.03					
1291		<0.03					
1292		<0.03					
1293		<0.03					
1294		<0.03					
1295		<0.03					
	•••••		•				
						,.,,.,	

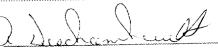




	LE MOUNTAIN CAN 57236.0 ( COMPL		T: 507 PRINTED: 9-	MAY-97	PAGE 1	
SAMPLE NUMBER	ELEMENT UNITS	Au G/T				.,
		0.03	 			
1296 1297		0.03				
1297		0.03				
1299		0.04				
1300		0.03				<b></b>
1300			 			
1301		0.03				
1302		0.03				
1303		0.03				
1304		0.03				
1305		0.03	 			
1306		0.03				
1307		0.03				
1308		<0.03				
1309		<0.03				
1310		<0.03	 			
1311		<0.03				
1312		<0.03				
1313		<0.03				

ITS - Bondar Clegg 5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5

Tel: (613) 749-2220, Fax: (613) 749-7170





	TLE MOUNTAIN CANADA LTD. -57242.0 ( COMPLETE )	PROJECT: 507 DATE PRINTED: 7-MAY-97 PAGE 1
SAMPLE	ELEMENT Au	
NUMBER	UNITS G/T	
1314	<0.03	
1315	<0.03	
1316	0.17	
1317	0.53 <0.03	
1318		
1319	<0.03	
1320	<0.03	
1321	0.03	
1322	0.10	
1323	<0.03	
1324	0.03	
1325	0.05	
1326	0.03	





REPORT: T97	TLE MOUNTAIN CANADA LTD. -57244.0 ( COMPLETE )		PROJECT: 507 DATE PRINTED:	12-MAY-97	PAGE 1
SAMPLE Number	ELEMENT AU Units G/T				
1327 1328	0.03 0.04				

ITS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170





	TLE MOUNTAIN CANADA LTD. -57248.0 ( COMPLETE )	PROJECT: 507  DATE PRINTED: 15-MAY-97 PAGE 1
SAMPLE	ELEMENT Au	
NUMBER	UNITS G/T	
1329	0.29	
1330	5.91	
1331	0.11	
1332	0.06	
1333	0.04	
477/	0.05	
1334 1335	<0.03	
1336	<0.03	
1337	<0.03	
1338	<0.03	
•••••		

TTS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170





	ILE MOUNTAIN CANADA LTD. -57248.1 ( COMPLETE )	PROJECT: 507 DATE PRINTED: 15-MAY-97 PAGE 1
SAMPLE NUMBER	ELEMENT AuGrav UNITS G/T	
1330	4.11	

ITS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170

NBeg



	TLE MOUNTAIN CANADA LTD. -57250.0 ( COMPLETE )	PROJECT: 507 DATE PRINTED: 14-MAY-97 PAGE 1
SAMPLE NUMBER	ELEMENT AU Units G/T	
1339	0.05	
1340	<0.03	
1341	0.04	
1342	0.03	
1343	<0.03	
1344	<0.03	
1345	<0.03	
1346	<0.03	
1347	<0.03	
1348	<0.03	
1349	<0.03	
1350	<0.03	
1351	<0.03	
1352	<0.03	
1353	0.03	
1354	<0.03	





SAMPLE ELEMENT AU INTEGER UNITS 6/T  1355		LE MOUNTAIN CANADA LTD. 57252.0 ( COMPLETE )	PROJECT: 507 DATE PRINTED: 14-MAY-97 PAGE 1
1355	SAMPLE	ELEMENT Au	
1356 0.07 1357	NUMBER	UNITS G/T	
1357	1355	<0.03	
1358	1356		
1359 0.10  1360 40.03 1361 40.03 1362 40.03 1363 40.03 1364 0.05  1366 40.03 1366 40.03 1369 40.03 1369 40.03 1370 40.03 1371 0.05 1372 40.03			
1360	1358	<0.03	
1361	1359	0.10	
1362	1360	<0.03	
1363	1361		
1364 0.05  1365 0.04 1366 40.03 1367 40.03 1369 40.03 1370 40.03 1371 0.05 1372 40.03			
1365 0.04 1366 < 0.03 1357		<0.03	
1366	1364	0.05	
1367	1365	0.04	
1368	1366	<0.03	
1369 < 0.03  1370 < 0.03  1371	1367		
1370 <0.03 1371	1368		
1371 0.05 1372 <0.03	1369	<0.03	
1372 < 0.03	1370	<0.03	
	1371	0.05	
	1372	<0.03	

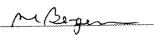


REPORT: T97-5	7256.0 ( COM	NADA LTD. PLETE )	DATE PRINTED: 17-MAY-97 PAGE 1
SAMPLE NUMBER	ELEMENT UNITS	Au G/T	
1373		<0.03	
1374		0.09	
1375		<0.03	
1376		<0.03	
1377		0.11	
1378		0.19	
1379		0.11	
1380		0.12	
1381		<0.03	
1382		<0.03	
1383		0.05	
1384		<0.03	
1385		<0.03	
1386		<0.03	
1387		<0.03	
1388		<0.03	
1389		0.05	
1390		<0.03	
1391		<0.03	
1392		<0.03	
1393		<0.03	
1394		<0.03	
1395		<0.03	
1396		<0.03	
1397		<0.03	
1398		<0.03	
1399		<0.03	
1400		<0.03	
1401		<0.03	
1402		<0.03	
		0.00	
1403		0.09	
1404		<0.03 <0.03	
1405 1406		<0.03	
4/04		·0.03	

Mogu



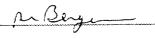
SAMPLE BLEMENT AU NUMBER UNITS 6/T  1408 0.04 1409 <0.03 1410 <0.03 1411 0.08 1412 0.58  1413 0.05 1414 <0.03 1415 <0.03 1416 <0.03 1417 <0.03 1417 <0.03 1418 0.03 1419 0.03 1420 <0.03 1421 0.03 1422 0.03 1422 0.03 1423 0.03 1424 0.03 1425 0.03 1426 0.03 1427 0.06		CLIENT: BATTLE MOUNTAIN CANADA LTD. REPORT: T97-57261.0 ( COMPLETE )		CLIENT: BATTLE MOUNTAIN CANADA LID.		PROJECT: 507  DATE PRINTED: 16-MAY-97 PAGE 1
1408 0.04 1409 <0.03 1410	SAMPLE					
1409	NUMBER	UNITS G/T				
1410	1408					
1411     0.08       1412     0.58       1413     0.05       1414     <0.03	1409					
1412       0.58         1413       0.05         1414       <0.03	1410					
1413	1411					
1414       <0.03	1412	0.58				
1414       <0.03	1413	0.05				
1415						
1416       <0.03		<0.03				
1417       <0.03		<0.03				
1419       <0.03		<0.03				
1419       <0.03	1418	<0.03				
1420       <0.03		<0.03				
1421       <0.03		<0.03				
1422       < 0.03		<0.03				
1424 0.05 1425 <0.03 1426 <0.03 1427 0.06 1428 <0.03 1429 <0.03 1430 <0.03		<0.03				
1424     0.05       1425     <0.03	1423	<0.03				
1425       <0.03		0.05				
1426       <0.03		<0.03				
1427 0.06  1428 <0.03 1429 <0.03 1430 <0.03		<0.03				
1429 <0.03 1430 <0.03		0.06				
1429 <0.03 1430 <0.03	1428	<0.03				
1430 <0.03						
• • • • • • • • • • • • • • • • • • • •						





MPLE JMBER  1432 1433 1434 1436 1437  1438 1449 1440 1441 1442	VNITS G/  <0.0 0.0 0.0 0.0 0.1 0.0 0.1 0.0 0.0	03 05 03 04 10 04 12 11		
1432 1433 1434 1436 1437 1438 1439 1440 1441 1442	UNITS G/  <0.0 0.0  <0.0 0.1  0.0 0.1 0.1 0.0	/T		
1433 1434 1436 1437 1438 1439 1440 1441 1442	0.0 <0.0 0.0 0.1 0.0 0.1 0.0	05 03 04 10 04 12 11		
1434 1436 1437 1438 1439 1440 1441 1442	<0.0 0.0 0.1 0.0 0.1 0.1 0.0	03 04 10  04 12 11	 	
1436 1437 1438 1439 1440 1441 1442	0.0 0.1 0.0 0.1 0.1 0.0	04 10 04 12 11		
1437 1438 1439 1440 1441 1442 1443	0.1 0.0 0.1 0.1 0.0	10 04 12 11 05	 	
1438 1439 1440 1441 1442 1443	0.0 0.1 0.1 0.0	04 12 11 05		 
1439 1440 1441 1442 1443 1444	0.1 0.1 0.0 0.0	12 11 05		
1440 1441 1442 1443 1444	0.1 0.0 0.0	11 05		
1441 1442 1443 1444	0.0	05		
1442 1443 1444	0.0			
1443 1444		08		
1444			 	 .,
	0.3	30		 
1//5	0.1	13		
1447	0.0	08		
1446	0.0	06		
1447	0.1	11	 	 
1448	0.0	08		 
1449	0.0	04		
1450	<0.0	03		
1451	0.0	04		
1452	<0.0	03	 	 
1453	<0.0	03		 
1454	<0.0	03		
1455	<0.0	03		
1456	0.4			

TTS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170





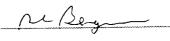
	LE MOUNTAIN CANADA LTD. 57264.0 ( COMPLETE )	PROJECT: 507  DATE PRINTED: 18-MAY-97 PAGE 1
SAMPLE	ELEMENT Au	
NUMBER	UNITS G/T	
1457	0.03	
1458	<0.03	
1459	<0.03	
1460	<0.03	
1461	<0.03	
1462	<0.03	
1463	<0.03	
1464	<0.03	
1465	0.07	
1466	<0.03	
1467	<0.03	
1468	<0.03	
1469	<0.03	
1470	<0.03	
1471	<0.03	
1472	<0.03	
1473	<0.03	
1474	<0.03	
1475	0.83	
1476	0.06	
1477	0.04	
1478	<0.03	





		PLETE )	PROJECT: 507 DATE PRINTED: 18-MAY-97 PAGE 1
SAMPLE NUMBER	ELEMENT UNITS	Au G/T	
1479		0.07	
1480		<0.03	
1481		<0.03	
1482		<0.03	
1483		0.35	
1484		0.09	
1485		<0.03	
1486		<0.03	
1487		<0.03	
1488		<0.03	
1489		<0.03	
1490		<0.03	
1491		<0.03	
1492		<0.03	
1493		<0.03	
1494		<0.03	
1495		<0.03	
1496		<0.03	

TTS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170





CLIENT: BATTLE MOUNTA REPORT: 197-57267.0 (		PROJECT: 507 DATE PRINTED: 18-MAY-97	PAGE 1
SAMPLE ELEMEI NUMBER UNI			
1497 1498	0.11 <0.03		

ITS - Bondar Clegg
5450 Canotek Road Unit 47-50, Ottawa, Ontario, K1J 9G5
Tel: (613) 749-2220, Fax: (613) 749-7170





	E MOUNTAIN CANADA LTD. 57279.0 ( COMPLETE )	PROJECT: 507  DATE PRINTED: 28-MAY-97 PAGE 1
SAMPLE	ELEMENT AU	
NUMBER	UNITS G/T	
1501	0.08	
1502	<0.03	
1503	<0.03	
1504	<0.03	
1505	<0.03	
1506	<0.03	
1507	<0.03	
1508	<0.03	
1509	<0.03	
1510	0.04	
1511	<0.03	
1512	<0.03	
1513	<0.03	
1514	<0.03	
1515	<0.03	
AF47	<0.03	
1516 1517	<0.03	
1517	0.09	
1519	<0.03	
1520	<0.03	
	-0.07	
1521	<0.03 <0.03	
1522	<0.03	
1523	<0.03	
1524 1525	<0.03	
1323		
1526	<0.03	
1527	0.04	
1528	0.14	

- Boye



CLIENT: BATTLE MOUNTAIN CANADA LTD. REPORT: 197-57782.0 ( COMPLETE )			PROJECT: 507 DATE PRINTED: 17-OCT-97 PAGE 1
KEPOKI: 177	J//02:0 ( 00:		
SAMPLE	ELEMENT	Au	
NUMBER	UNITS	G/T	
1544		<0.03	
1545		<0.03	
1546		<0.03	
1547		<0.03	
1548		<0.03	
1549	•••••	<0.03	
1550		<0.03	
1551		<0.03	
1552		<0.03	
1553		<0.03	
1554		<0.03	
1555		<0.03	
1556		<0.03	
1557		<0.03	
1558		<0.03	
1559		<0.03	
1560		<0.03	
1561		<0.03	
1562		<0.03	
1563		<0.03	
1564		<0.03	
1565		<0.03	
1566		<0.03	
1567		<0.03	
1568	*****************************	<0.03	
1569		<0.03	
1570		<0.03	
1571		<0.03	
1572		<0.03	
1573			
1574		<0.03	
1575		<0.03	
1576		0.25	

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256





	LE MOUNTAIN CANADA LTD. 57792.0 ( COMPLETE )	PROJECT: 507 DATE PRINTED: 22-OCT-97 PAGE 1
SAMPLE	ELEMENT Au	
NUMBER	UNITS G/T	
	0.07	
1577	0.04	
1578	<0.03 <0.03	
1579	<0.03	
1580	<0.03	
1581	70.03	
1582	<0.03	
1583	<0.03	
1584	<0.03	
1585	<0.03	
1586	0.04	
1587	<0.03	
1588	<0.03	
1589	<0.03	
1590	<0.03	
1591	<0.03	
1592	<0.03	
1593	<0.03	
1594	<0.03	
1595	<0.03	
1596	<0.03	
1597	<0.03	
1371		

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	LE MOUNTAIN CANADA LTD. 57793.0 ( COMPLETE )	PROJECT: 507  DATE PRINTED: 21-OCT-97 PAGE 1
SAMPLE	ELEMENT AU	
NUMBER	UNITS G/T	
1598	<0.03	
1599	<0.03	
1600	<0.03	
1101	<0.03	
1102	<0.03	
1103	<0.03	
1104	<0.03	
1105	<0.03	
1106	<0.03	
1107	<0.03	
1108	<0.03	
1109	0.08	
1110	0.04	
1111	<0.03	
1112	<0.03	
4447	<0.03	
1113 1114	<0.03	
1114	10.03	

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CLIENT: BATTLE MOUNTAIN CANADA LTD. REPORT: T97-57805.0 ( COMPLETE )		DATE RECEIVED: 21-OCT-97	PROJECT: 507 DATE PRINTED: 24-0CT-97	PAGE 1 DE 3
SAMPLE	ELEMENT AU			
NUMBER	UNITS G/T			
1115	0.07			
1116	<0.03			
1117	0.24			
1118	0.09			
1119	0.37			
1120	1.28			
1121	1.29			
1122	0.65			
1123	1.64			
1124	0.04			
1125	<0.03			
1126	0.11			
1127	1.42			
1128	0.11			
1129	1.20			
1130	0.18			
1131	<0.03			
1132	0.20			
1133	<0.03			
1134	<0.03			
1135	0.11			
1136	0.06			
1137	<0.03			
1138	<0.03			
1139	<0.03			
1140	<0.03			
1141	0.26			
1142	0.20			
1143	1.58			
1144	<0.03			

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	TLE MOUNTAIN CANADA LTD. -57816.0 ( COMPLETE )	DATE RECEIVED: 24-OCT-97	PROJECT: 507 DATE PRINTED: 28-0CT-97	PAGE 1 DE 3
SAMPLE	ELEMENT Au30			
NUMBER	UNITS PPB			
1145	<5			
1146	<5			
1147	<5			
1148	<5			
1149	<5			
1150	<5			
1151	<5			
1152	12			
1153	8			
1154	<5			
1155	<5			
1156	<5 -			
1157	<5			
1158	<5			

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256

n Bagan



CLIENT: BATTLE MOUNTAIN CANADA LTD.

#### Certificat D'Analyse Assay Lab Report

PROJECT: 507

PEDADT - TO7.				
KLFOKI. 197	-57820.0 ( COMPLETE )	DATE RECEIVED: 24-OCT-97	DATE PRINTED: 27-OCT-97	PAGE 1 DE 3
SAMPLE	ELEMENT Au30			•••••
NUMBER	UNITS PPB			
1159	6			
1160	8			
1161	6			
1162	16			
1163	10			,
1164	9			
1165	11			
1166	<5			
1167	13			
1168	11			
1169	9			••••••
1170	7			
1171	<5			
1172	8			
1173	20			
1174	6			
1175	7			
1176	6			
				••••••••

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256

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CLIENT- RAT	TLE MOUNTAIN CAN	ADA LTD.		PROJECT: 507		
	-57834.0 ( COMPL		DATE RECEIVED: 30-OCT-97	DATE PRINTED:	3-NOV-97	PAGE 1 DE 3
SAMPLE	ELEMENT	Au				
NUMBER	UNITS	G/T				
1177		0.03				
1178	<	0.03				
1179		0.03				
1180	<	0.03				
1181		0.03				
1182		:0.03				
1183	•	:0.03				
1184	•	0.03				
1185	•	0.03				
5101		0.17				
5102	•	<0.03				
5103		0.26				
5104		0.07				
5105	•	<0.03				
5106		<0.03				
5107	•••••••••••••••••••••••••••••••••••••••	<0.03				
5108		0.73				
5109		<0.03				
5110		0.28				
·····		,		••••••	,	
	•••••					
	***************************************			***************************************		

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	BATTLE MOUNTAIN CA		DATE RECEIVED:	31-oct-97	PROJECT: 507 DATE PRINTED:	3-NOV-97	PAGE	1 DE 3
SAMPLE NUMBER	ELEMENT Units	Au G/T						
1186 1187 1188		<0.03 0.04 0.07						
1189 1190		0.04 <0.03						

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256

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Cimilitee					
CLIENT: BATTLE MOUNTAIN CANADA LTD. REPORT: T97-57853.0 ( COMPLETE )		DATE RECEIVED: 04-NOV-97	PROJECT: 507 DATE PRINTED: 10-NOV-97	PAGE 1 DE 3	
SAMPLE NUMBER	ELEMENT UNITS	Au G/T			
1191		<0.03			
1192		<0.03			
1193		<0.03			
1194		<0.03			
1195		<0.03			
1196		<0.03			
1197		<0.03			
1198		<0.03			
1199		<0.03			
1200		<0.03			
5111		<0.03			
5112		<0.03			
5113		<0.03			
5114		<0.03			
5115		<0.03			
5116		<0.03			
5117		<0.03			
5118		<0.03			
5119		<0.03			
5120		<0.03			
5121		<0.03			
5122		<0.03			
5123		<0.03			

ITS - Chimitec - Bondar Clegg
1322-B rue Harricana, Val d'Or, Québec, J9P 3X6
Tél: (819) 825-0178, Fax: (819) 825-0256





CLIENT: BA	TTLE MOUNTAIN CANADA LTD.		PROJECT: 507	
	7-57855.0 ( COMPLETE )	DATE RECEIVED: 05-NOV-97	DATE PRINTED: 10-NOV-97	PAGE 1 DE 3
SAMPLE	ELEMENT Au			
NUMBER	UNITS G/T			
F43/	-0.07			
5124	<0.03			
5125	<0.03			
5126 5127	<0.03 <0.03			
	<0.03 <0.03			
5128	<0.03			
5129	<0.03			
5130	0.05			
5131	<0.03			
5132	<0.03			
5133	<0.03			
5134	<0.03			
5135	<0.03			
	•			
				•••••

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256

M Beye



REPORT: T97	TLE MOUNTAIN CANADA LTD. -57861.0 ( COMPLETE )	DATE RECEIVED: 06-NOV-97	PROJECT: 507 DATE PRINTED: 10-NOV-97	PAGE 1 DE 3
SAMPLE	ELEMENT Au			,
NUMBER	UNITS G/T			
5136	<0.03			
5137	<0.03			
5138	<0.03			
5139	<0.03			
5140	0.12			
E4/4	<0.03			***************************************
5141 5142	0.06			
5143	0.10			
5144	0.06			
5145	<0.03			
				••••••
5146	<0.03			
5147	0.12			
5148	<0.03			

ITS - Chimitec - Bondar Clegg 1322-B rue Harricana, Val d'Or, Québec, J9P 3X6 Tél: (819) 825-0178, Fax: (819) 825-0256

N. Berg.



Ministry of Northern Development and Mines

#### **Declaration of Assessment Work** Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction I	Number (office )	JS6)
W976.	Number (office )	
Assessment	Files Research	Imaging

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, the information is a Questions about this collection 933 Ramsey Lake Road, Sudt

correspond with the mining land holder. Development and Mines, 6th Floor,

Fax Number

(705) 268 4572

268-9600

Instructions: - For WO 42A05NE0169 2.18006 THORNELOE - Please	900 >rm 0240.
4 Passandad Included Al / Albank a Hak Maranasan	
1. Recorded holder(s) (Attach a list if necessary)	
Rattle Mountain Canada Ltd	Client Number 143550
Po Box 1205, 60 Shirky St. South	Telephone Number
•	(705) 268-9600 Fax Number
Timmins, Ont. P4N 847755	(705) 268-9572  Client Number
Address	Telephone Number
	Totophone Number
	Fax Number
2. Turns of works performed. Check ( ) and an action of Check (	2.18006
2. Type of work performed: Check ( ) and report on only ONE of the contract of	
	, stripping, Rehabilitation
Work Type  0. 10.11 00.1	Office Use
Diamond Drilling - 00 H, DOH MC 97-18 to 29, 30350 m	Commodity
6	Total \$ Value of 199175
Dates Work Performed From O1 64 1997 To 30 11 1997 Day Month Year Day Month Year	NTS Reference
Global Positioning System Data (if available)  Township/Area  Bistel Conscallen Denter Thursday	Mining Division Porcupiae
M or G-Plan Number 63946333463339	Hesident Geologist
	District / mmin
Please remember to: - obtain a work permit from the Ministry of Natural F - provide proper notice to surface rights holders bef - complete and attach a Statement of Costs, form 0 - provide a map showing contiguous mining lands the include two copies of your technical report.	ore starting work; 212:
3. Person or companies who prepared the technical report (Attach	a list if necessary)
Name (Attack)	Telephone Number
Address DEOCIVES	Fax Number
RECEIVED	
DEC 1 8 1997 10 PM	Telephone Number
Address	Fax Number
GEOSCIENCE ASSESSMENT OFFICE	Telephone Number
Address	Fax Number
. Certification by Recorded Holder or Agent	
George J. Kolesza-, do hereby certify that	I have personal knowledge of the facts set
orth in this Declaration of Assessment Work having caused the work to be after its completion and, to the best of my knowledge, the annexed rep	e performed or witnessed the same during
Signature of Recorded Holder or Agent	Date Osc 17, 1997
	Vsc 17,1997

. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to he mining land where work was performed, at the time work was performed. A map showing the contiguous link nust accompany this form. Bank. Value of work Value of work Value of work to be distributed assigned to other Value of work Number of Claim applied to this at a future date. Mining Claim Number. Or if performed on this mining claims. Units. For other work was done on other eligible claim. claim or other mining land, list mining land, show in this mining land. hectares. column the location number \$2,825 indicated on the claim map. \$24,000 N/A \$26, 825 16 ha 0 TB 7827 0 eg \$24,000 0 12 \$4,892 1234567 0 eq \$ 4,000 \$ 8, 892 2 1234568 eg 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Column Totals  $\_$  , do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done. Der 17, 1997 Signature of Recorded Holder or Agent Authorized in Writing 6. Instructions for cutting back credits that are not approved. Some of the credits claimed in this declaration may be cut back. Please check ( > ) in the boxes below to show how you wish to prioritize the deletion of credits: 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated. 2. Credits are to be cut back starting with the claims listed last, working backwards; or 3. Credits are to be cut back equally over all claims listed in this declaration; or 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe): Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary. Date Notification Sent Deemed Approved Date For Office Use Only Received Stamp Total Value of Credit Approved Date Approved Approved for Recording by Mining Recorder (Signature)

SCHEDULE FOR DECLARATION OF ASSESSMENT WORK ON MINING LAND

Work Transaction # EASTCAN97.063

90		ASSI	ESSMENT WORK ON MINI	NG LAND			EASICANSI.UUS
						6976	3.00765
ork ini! he	was done on other eligible	INUMBER OF CLAIM UNITS.For other imining land. Ilist hectares.	PERFORMED on this    claim or other	VALUE OF WORK APPLIED to this claim	ASSIG	OF WORK NED to other	BANK.Value of work to be distributed at a future date
1		19 ha	0.00				
2	P 0495308	24 ha	0.00				
3	P 0495309	25 ha	0.00				1
4	P 0530884	1	0.00	400.00	7,		
5	P 0583234		0.00	400.00	1		
6	P 0649963	1	0.00	400.00	(		
7	P 0649964	1 1	0.00	400.00	1	_	2004
8	P 0649965	1	0.00	281.00	/ 6	2.1	
9	P 0757659	1	0.00	400.00	7		J
10	P 0764945	1	0.00	400.00			1000
11	P 0916816	1	0.00	367.00	1		OVU
12	P 0998383	1	0.00	281.00	1		
13	P 0998384	1	20.105.00	281.00	1		19.824.00
14	P 1159632	1	0.00	281.00	$\int_{t}$		
15	P 1159633	1	45.453.00	281.00	1,	12.721.00	32.451.00
16	P 1159634	1	29.623.00	281.00			29.342.00
17	P 1159635	1	0.00	281.00			
18	P 1159636	1	0.00	281.00	7		
19	P 1159637	1	12.249.00	281.00	1		11.968.00
20	P 1159638	1	0.00	281.00	1		
21	P 1159639	1	0.00	281.00	1		
22	P 1159640	1	911.00	281.00	7		630.00
23	P 1159641	1	0.00	281.00	/		
24	P 1159642	1	0.00	281.00			
25	P 1159643	1	0.00	281.00	J		
26	P 1176341	1	0.00	281.00			
27	P 1177807	1	0.00	281.00	1		
28	P 1177808	1	0.00	281.00	1		
29	P 1177809	1	0.00	281.00			CEIVEL
30	P 1177811	1	0.00	282.00	1	de n	EC 1 8 1997
31	P 1177814	1	0.00	282.00	1	ľ	
32	P 1177821	2	0.00	564.00	/	GEOSCI	ENCE ASSESSME OFFICE
33	P 1177822	1	0.00	282.00	1		
34	P 1177823	1	0.00	282.00	1		1
35	P 1177824	1	0.00	282.00	1		
36	P 1177825	4	0.00	1.128.00	1/		
37	P 1177826	2	0.00	564.00	1		
38	P 1177827	2	0.00	564.00	1		<u> </u>
39	P 1177828	6	0.00	1.692.00			
40	P 1177829	1	0.00	282.00			
41	P 1177830	2	0.00	564.00	+/-		
42	P 1177831	1	0.00	282.00	+ + -		
43	P 1181409	1	0.00		+/-		
41	P 1181410	1	0.00		1		
4!	P 1181413	1	0.00				
41	P 1181995	2	0.00	564.00			

Work Transaction # EASTCAN97.063

(09x0.00465

ork in	G CLAIM NUMB was done on g land. show ocation numb e claim man	other eligible win this column per indicated	NUMBER OF CLAIM UNITS.For other Imining land. Ilist hectares.	VALUE OF WORK PERFORMED on this i claim or other mining land	VALUE OF WORK APPLIED to this claim	VALUE OF WORK	BANK.Value of work to be distributed lat a future date
48	P	1189528	1	14.352.00	282.00	/	14.070.00
49	<u>'</u>	1189544	2	0.00	564.00		
50	P	1189552	2	0.00	564.00	/	
51	P	1189553		0.00	282.00	/	
52	P	1189562	1	0.00	282.00		
53	P	1189580	1	0.00	282.00	/,	
54	P	1189592	3	0.00	846.00	//	
55	P	1189593	1	0.00	282.00		
56	Р	1189764	4	35.847.00	1.128.00	7,	34.719.00
57	Р	1189861	4	0.00	1.128.00	1/	
58	P	1189886	5	0.00	1.692.00	1	
59	Р	1189887	6	40.635.00	1.692.00	12.000.00	26.943.00
60	Р	1189888	4	0.00	1.128.00	/	
61	P	1189914	† 1	0.00	282.00	7	
62	Р	1189915	1	0.00	282.00	7	
63	P	1198802	1	0.00	282.00	1	
64	P	1198803	1	0.00	282.00		
65	P	1198804	1	0.00	282.00		
66	P	1201162	1	0.00	282.00	1	
67	P	1204623	1	0.00	282.00	1	1
5ô	P	1223951	1	0.00	400.00	<b>V</b>	
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<u> </u>			Column Total	s 199.175.00	29.228.0	0 24,721.0	169.947.00



Ministry of Northern Development and Mines

### Statement of Costs for Assessment Credit

Transaction Nu	mber (office use)
1/92/0	1446
W/160.	0076)

Dec 17,1997

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

	Units of Work  Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Diamond Dulling	3035 metres	51.05/m	154932.00
Labour	132 man days	275.55/minday	36373-00
Assaying	511 Samples (Au)	1000 Isample	5110-00
Associated Costs (e.g. suppli	es, mobilization and demobilization).		
		202	300 <b>6</b>
		W/En+	
Tran	RECE	IVED	
	sportation Costs DEC 1	8 1997	
Rental trucks * gas	GEOSCIENCE OFF	ASSESSMENT ICF	2760.00
Food	and Lodging Costs		
			ł
	Total Value of	Assessment Work	199175.00
Calculations of Filing Discoun		Assessment Work	199175.00
. Work filed within two years o	f performance is claimed at 100% of the	above Total Value of A	Assessment Work.
. Work filed within two years o	ss:  f performance is claimed at 100% of the s and up to five years after performance, f this situation applies to your claims, use	above Total Value of A it can only be claimed the calculation below	Assessment Work. at 50% of the Total
Work filed within two years of the work is filed after two years Value of Assessment Work. If TOTAL VALUE OF ASSESSMENT Work older than 5 years is not A recorded holder may be request for verification and/or co	f performance is claimed at 100% of the s and up to five years after performance, f this situation applies to your claims, use MENT WORK × 0.50 =	above Total Value of A it can only be claimed the calculation below Total \$ value	Assessment Work. at 50% of the Total : ue of worked claimed
Work filed within two years of the work is filed after two years Value of Assessment Work. If TOTAL VALUE OF ASSESSMENT Work older than 5 years is not A recorded holder may be request for verification and/or co	f performance is claimed at 100% of the and up to five years after performance, f this situation applies to your claims, use MENT WORK × 0.50 = eligible for credit.  sired to verify expenditures claimed in this rrection/clarification. If verification and/or	above Total Value of A it can only be claimed the calculation below Total \$ value	Assessment Work. at 50% of the Total : ue of worked claimed
Work filed within two years of the work is filed after two years Value of Assessment Work. I TOTAL VALUE OF ASSESSMENT TOTAL VALUE OF ASSESSMENT Work older than 5 years is not A recorded holder may be requested for verification and/or confinister may reject all or part of the entification verifying costs:	f performance is claimed at 100% of the sand up to five years after performance, this situation applies to your claims, use MENT WORK × 0.50 =  eligible for credit. direction/clarification. If verification and/or the assessment work submitted.	above Total Value of A it can only be claimed the calculation below  Total \$ value  s statement of costs w correction/clarification	Assessment Work. at 50% of the Total: ue of worked claimed ithin 45 days of a is not made, the
Work filed within two years of the work is filed after two years Value of Assessment Work. I TOTAL VALUE OF ASSESSMENT Work older than 5 years is not A recorded holder may be requested for verification and/or confinister may reject all or part of the corder of the cor	f performance is claimed at 100% of the and up to five years after performance, this situation applies to your claims, use MENT WORK × 0.50 =  eligible for credit. sired to verify expenditures claimed in this rrection/clarification. If verification and/or the assessment work submitted.	above Total Value of A it can only be claimed the calculation below Total \$ value s statement of costs w correction/clarification amounts shown are as	Assessment Work. at 50% of the Total: ue of worked claimed ithin 45 days of a is not made, the s accurate as may e lands indicated on
Work filed within two years of the work is filed after two years Value of Assessment Work. I TOTAL VALUE OF ASSESSMENT Work older than 5 years is not A recorded holder may be requested for verification and/or confinister may reject all or part of the corder of the cor	f performance is claimed at 100% of the sand up to five years after performance, this situation applies to your claims, use MENT WORK × 0.50 =  eligible for credit. direction/clarification. If verification and/or the assessment work submitted.	above Total Value of A it can only be claimed the calculation below Total \$ value s statement of costs w correction/clarification amounts shown are as	Assessment Work. at 50% of the Total: ue of worked claimed ithin 45 days of a is not made, the s accurate as may e lands indicated on

Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

February 20, 1998

George J. Koleszar BATTLE MOUNTAIN CANADA LTD. P.O. BOX 1205 60 Shirley St. South Timmins, ONTARIO P4N 7J5



Geoscience Assessment Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5

Telephone: (888) 415-9846 Fax: (705) 670-5881

Submission Number: 2.18006

Dear Sir or Madam:

Status
W9760.00765 Deemed Approval

Subject: Transaction Number(s):

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY

Blair Kite

Supervisor, Geoscience Assessment Office

Mining Lands Section

### Work Report Assessment Results

**Submission Number:** 

2.18006

Date Correspondence Sent: February 20, 1998

Assessor:Steve Beneteau

Transaction Number

First Claim

Number Township(s) / Area(s)

**THORNELOE** 

Status

**Approval Date** 

W9760.00765

998384

BRISTOL, CARSCALLEN, DENTON,

Deemed Approval

February 20, 1998

Section:

16 Drilling PDRILL

Correspondence to:

Resident Geologist South Porcupine, ON

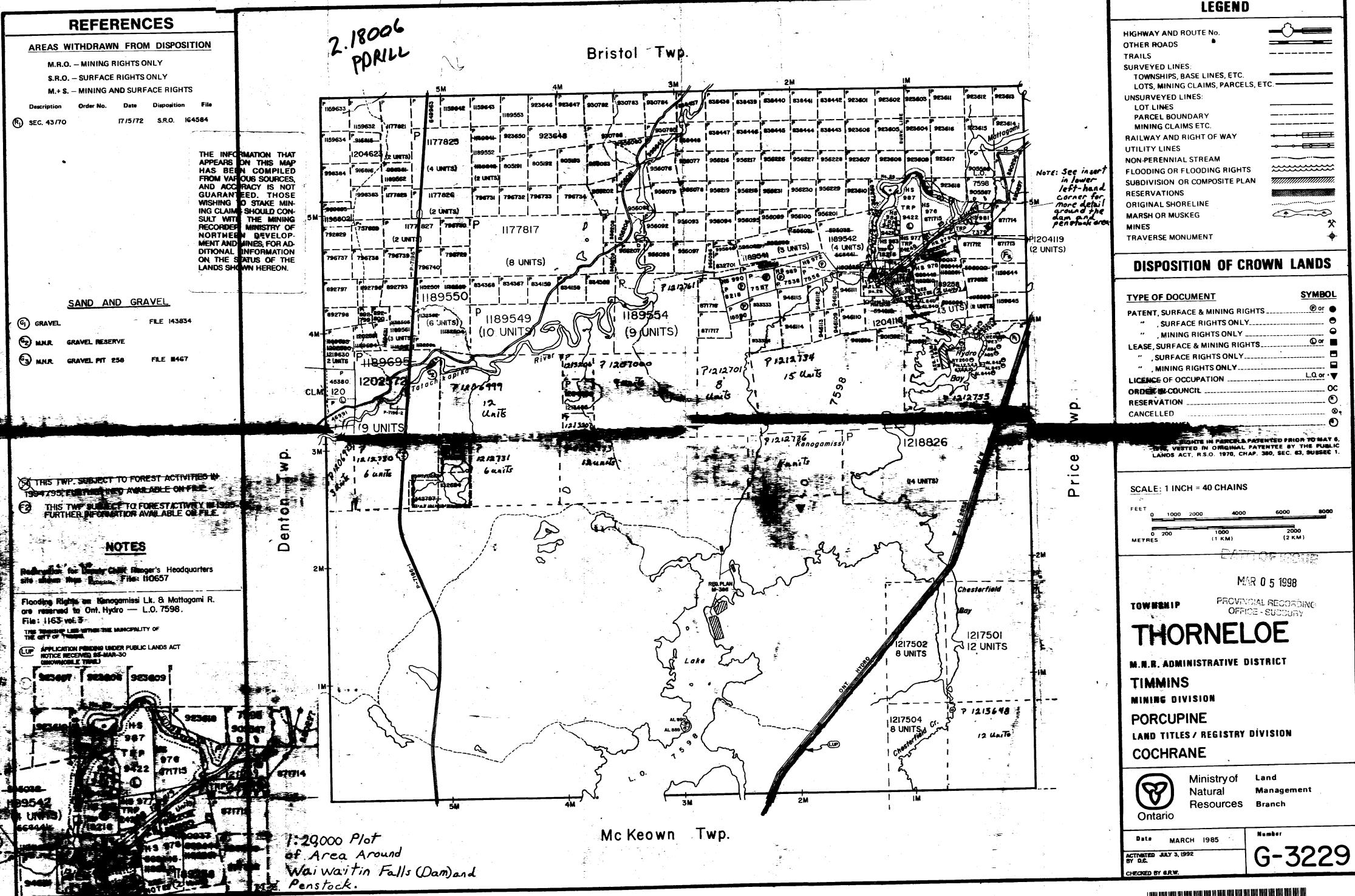
Assessment Files Library Sudbury, ON

Recorded Holder(s) and/or Agent(s):

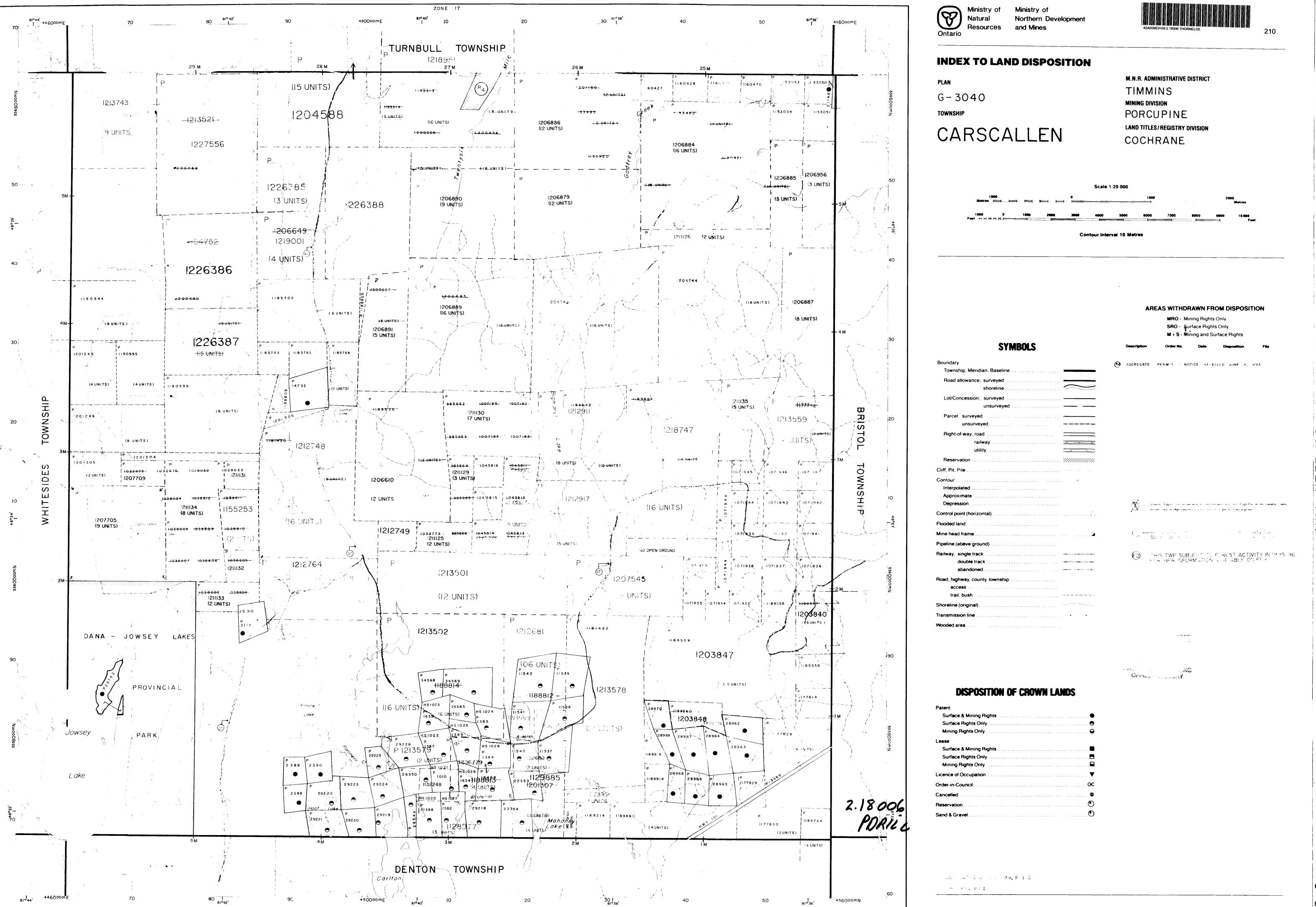
George J. Koleszar

BATTLE MOUNTAIN CANADA LTD.

Timmins, ONTARIO







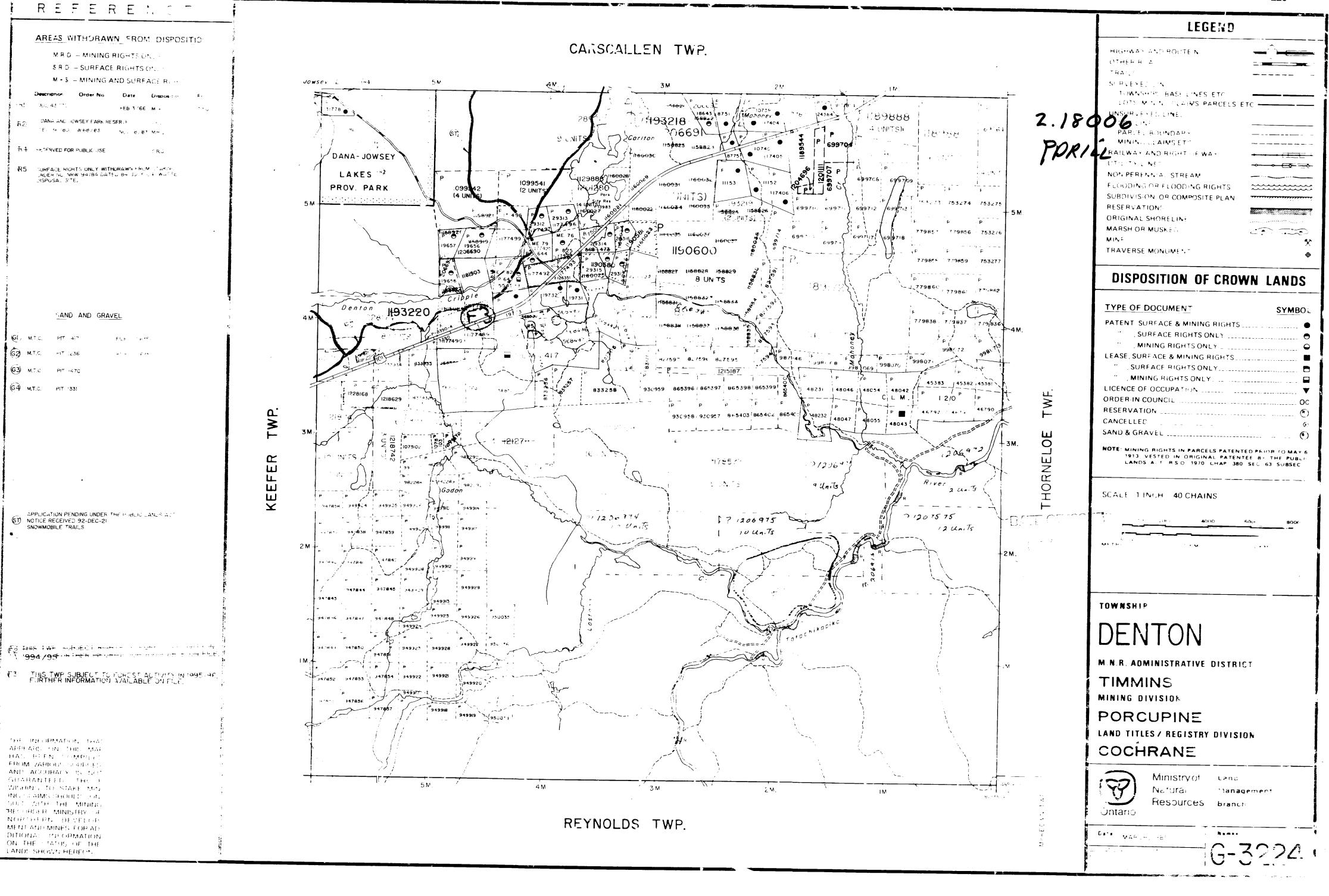
ZONE 17

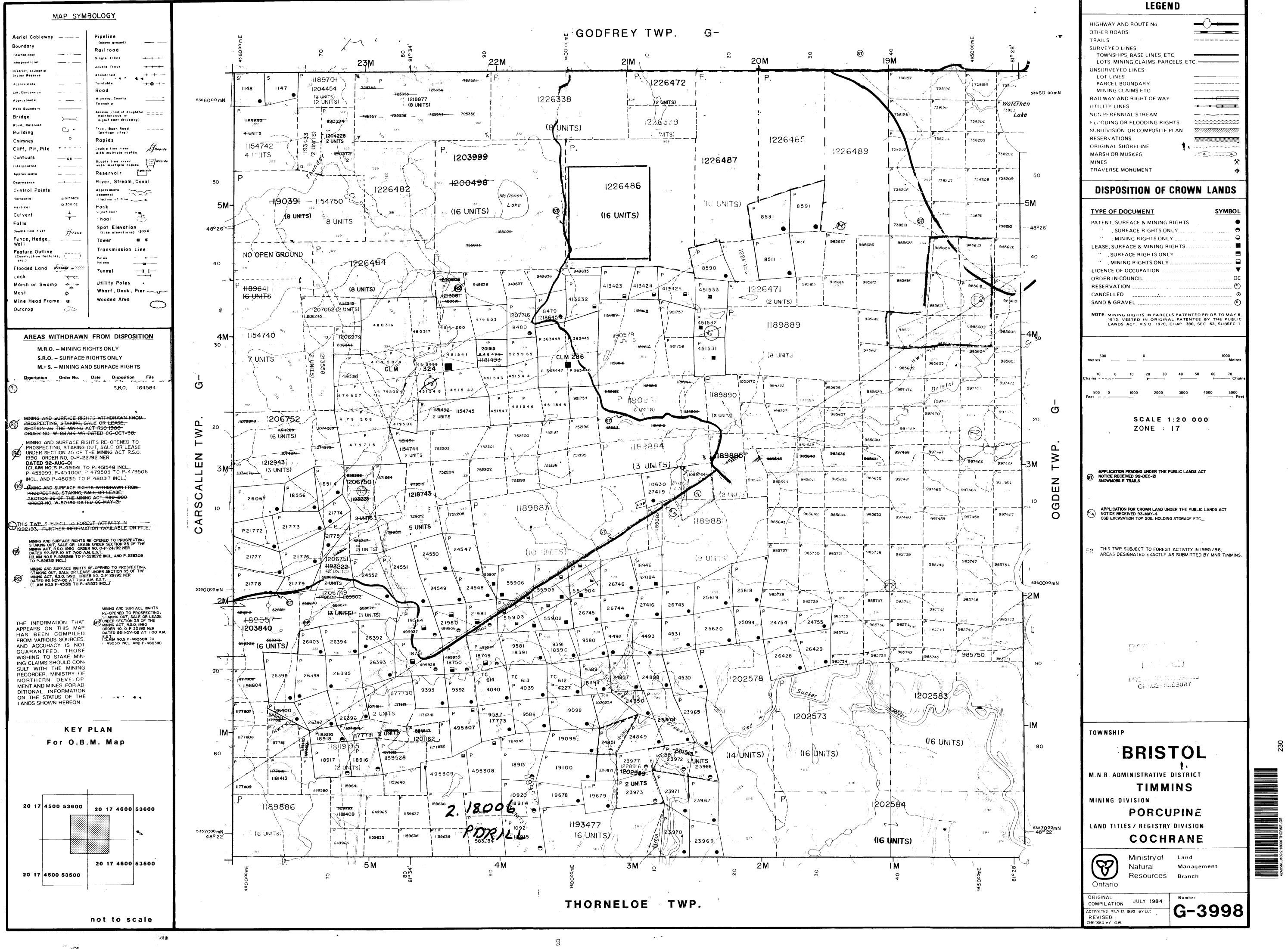
SMD 3040

Map base and land disposition drafting by Surveys and Mapping The disposition of land, location of lot fabric and parcel boundaries on Branch, Ministry of Natural Resources.

this index was compiled for administrative purposes only.







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