

QUEENSTON MINING INC

Drill Hole: AN99-17

DIAMOND DRILL HOLE RECORD

Page: 1 of 32

Property: ANOKI Collar loc from #1 Post L-9433; 160' S, 735' W
 Northing: 16950.00
 Easting: 6600.00
 Elevation: 11000.00

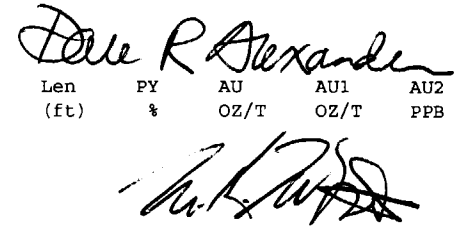
*** Dip Tests ***			*** Dip Tests ***		
Depth	Azi.	Dip	Depth	Azi.	Dip
		88.6	1180.8		-72.0
		295.2	1476.0		-71.5
		590.4	1771.2		-73.0
		885.6	2066.4		-73.0

Collar Azimuth (Grid) .0
 Collar Dip: -75.0
 (0 Degrees Grid equals 017 degrees True)
 Hole Length: 2125.4

Date Printed: 8 Jan, 2001

Date Started: June 3, 1999
 Date Completed: June 18, 1999

Drilled by: BENOIT
 Core Size: NQ
 Material left in hole NX CASING
 Core Location: Upper Canada Site 1
 Logged by: MMC, D. Alexander

Dave R Alexander


From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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SUMMARY LOG

.0	84.3	OVERBURDEN
84.3	87.7	BASALT
87.7	449.7	FELDSPAR PORPHYRY FELSIC DYKE
449.7	777.1	BASALT
777.1	809.9	CARBONATED ZONE CARBONATED ULTRAMAFICS
809.9	990.0	BASALT
990.0	1020.1	FELDSPAR PORPHYRY FELSIC DYKE
1020.1	1146.9	HIGH MAG BASALT
1146.9	1346.4	ULTRAMAFIC MAFIC INTRUSIVE
1346.4	1996.8	BASALT GABBRO
1996.8	2125.4	ULTRAMAFIC ULTRAMAFIC KOMATIITE

2.20881

RECEIVED
 FEB 07 2001
 GEOSCIENCE ASSESSMENT
 OFFICE

PROVINCIAL RECORDING
 OFFICE - SUDBURY
 RECEIVED
 FEB 07 2001
 A.M. 9:50 P.M.
 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6



32D04SW2021 2.20881 GAUTHIER

010

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
.0	84.3	OVERBURDEN 0.0 to 39.4- loonshit/sand; 309.4 to 87.7- boulders. Casing left in hole.								
84.3	87.7	BASALT A rubbly and broken interval, probably cored from a boulder or boulders. The section consists of a very pale green-grey, Mg basalt with flow breccia down to about 86.2 feet. Below this is a very dark green grey, mafic dyke? which is amphibolitic for about 6 inches and then becomes slightly cleaner and strongly chloritic. The bottom contact is broken and slightly ground; it probably lies at a high core angle.								
87.7	449.7	FELDSPAR PORPHYRY FELSIC DYKE Opening into a dark purple grey to brown coloured intrusive, with a prominent speckled texture. Generally a fresh rock with some locally cloudy zones where carbonate, epidote, silica and hematite are beginning to overprint the otherwise fairly pristine matrix. A phase very much like that logged in AN16- a fairly clean feldspar porphyry which lies somewhere between rocks previously logged as FP's and FD's. This example consists of a weakly bimodal assortment of small milky white feldspar phenos supported in a very fine grained feldspathic groundmass. The phenos are generally clean and sharp with a smaller population of slightly larger and more anhedral to subhedral grains in the 3-5 mm range. These are set amongst a larger number of 2-3 mm lath-like crystals. The smaller grains are mostly plagioclase, whereas some of the larger grains may be K-feldspar. The matrix is fairly homogeneous and featureless, except where fine dusty epidote alteration has begun to grow. Fine chloritic flecks also occur in some of the more strongly altered areas. A weakly magnetic and slightly calcitic unit; the carbonate is generally confined to very fine stringers or threads cutting randomly through the rocks. A blocky and very hard phase; this has produced a good deal of crushed and broken core. Cut by a few pale to grass green mafic dykes. Locally washed with hematite (more fracture induced) and or epidote (fracture controlled and pervasive). Traces amounts of fine pyrite, chalcopyrite and specular hematite are found on fracture faces and in a few scattered tiny qtz stringers, as well as in the matrix of the intrusive. Jointed and broken along low, moderate and high angle stringers. More details follow: 87.7 130.1 Feldspar Porphyry. A mostly brownish to purple toned section. Fairly fresh with some local hematite alteration in the matrix. Cut by a pale green, weakly speckled basaltic/mafic dyke at 91.2 to 92.5. The dyke is oriented at about 20 degrees to the CA and has spindly to wispy extremities. Contacts are sharp and have a saw-tooth texture developed. A blocky section with some more severely broken areas at 108.5, 110-112, and 121 to 123. Flecked with chlorite below about 120. Weakly mineralised with fine grainy pyrite on fracture faces. 130.1 133.0 Feldspar Porphyry. A more strongly altered zone where the primary phenocrysts are obliterated. Patchy/cloudy epidote, carbonate and silica/hematite fluids have saturated the rock turning it more purplish or beige to greenish. Little sulphide is	26501	127.9	130.1	2.2	TR	nil	.000	14
			26502	130.1	133.0	2.9	TR	nil	.000	nil
			26503	133.0	136.0	3.0	TR	nil	.000	2
			26504	155.0	157.4	2.4	TR	nil	.000	nil
			26505	157.4	160.6	3.2	TR	nil	.000	nil
			26506	160.6	163.7	3.1	TR	nil	.000	nil
			26507	163.7	166.0	2.3	TR	nil	.000	nil
			26508	166.0	166.9	.9	TR	nil	.000	nil
			26509	166.9	167.9	1.0	1.0%	nil	.000	3
			26510	167.9	170.0	2.1	TR	nil	.000	nil
			26511	203.9	206.6	2.7	TR	nil	.000	nil
			26512	206.6	209.0	2.4	TR	nil	.000	nil
			26513	209.0	212.0	3.0	TR	nil	.000	nil
			26514	212.0	215.0	3.0	TR	nil	.000	nil
			26515	215.0	218.0	3.0	0.5%	nil	.000	5
			26516	218.0	220.4	2.4	TR	nil	.000	9
			26517	220.4	222.3	1.9	TR	nil	.000	2
			26518	222.3	225.0	2.7	TR	nil	.000	nil
			26519	222.3	226.1	3.8	TR	nil	.000	nil
			26520	226.1	227.7	1.6	0.5%	nil	.000	7
			26521	227.7	229.6	1.9	TR	nil	.000	nil
			26522	229.6	233.0	3.4	TR	nil	.000	nil
			26523	233.0	234.9	1.9	TR	nil	.000	nil
			26524	234.9	236.2	1.3	TR	nil	.000	nil
			26525	236.2	239.1	2.9	TR	nil	.000	nil
			26526	254.0	256.2	2.2	TR	.001	.000	20
			26527	256.2	258.4	2.2	TR	nil	.000	nil
			26528	258.4	261.0	2.6	TR	nil	.000	nil
			26529	261.0	264.1	3.1	TR	nil	.000	nil
			99999	264.1	265.0	.9	LC	.000	.000	0
			26530	265.0	267.6	2.6	TR	nil	.000	nil
			26531	267.6	270.0	2.4	TR	nil	.000	3
			26532	270.0	273.0	3.0	TR	nil	.000	2
			26533	273.0	275.5	2.5	TR	nil	.000	nil
			26534	275.5	277.1	1.6	TR	nil	.000	11
			26535	277.1	279.7	2.6	TR	nil	.000	nil
			26536	279.7	283.3	3.6	TR	nil	.000	nil
			99999	283.3	285.4	2.1	LC	.000	.000	0
			26537	285.4	288.9	3.5	TR	nil	.000	nil

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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90.0 90.1 Ms 0.68.
 98.5 98.6 Ms 3.72.
 118.0 118.1 Ms 10.1.
 133.0 133.1 Ms 4.95.
 141.0 141.1 Ms 0.37.
 157.6 157.7 Ms 7.40.
 167.0 167.1 Ms 7.05.
 180.0 180.1 Ms 0.23.

194.0 195.0 Mafic Intrusive.

A very fine-grained, dark green mafic dyke. Sharp, blocky/broken contacts at 45/35 DTCA. Flecked with very fine, widely scattered 1 mm biotite grains. A chloritic and non-magnetic unit with a very few ghostly angular xenoliths which resemble the host rock but which are slightly more amphibolitic. Devoid of sulphide mineralisation and veining. Weakly calcitic in the matrix and very slightly hematized away from the upper contact.

195.0 222.3 Feldspar Porphyry.

Returning to the host intrusive. A purple to slightly reddish section with slightly cloudy to muddy zones where dusty epidote/carbonate and stringer introduced hematite have been added to the system. Slightly more hairline fracturing is present; epidote, specular hematite and carbonate (calcite) are the main alteration products present. Weakly magnetic. Blocky throughout with some finely broken areas- ex 205 to 208.

222.3 226.1 Mafic Intrusive.

A dark grey-green phase, finely mottled to finely felted in the groundmass. A chlorite-rich, weakly calcitic mafic intrusive or possibly a narrow basaltic dykelet. Opening along a sharp, 5 to 10 degree contact; slightly speckled with fine amphibole for about 2 feet and then becoming more uniform. Slightly darker in colour with a fine amphibole overprint approaching the lower contact. Sharp, 75 degree lower contact. Very weakly foliated in the lowermost parts of the unit at approx 40 DTCA. Weakly mineralised with disseminated pyrite. Very little veining is present; a few tiny stringers of calcite and or qtz xcut the unit at moderate angles.

226.1 279.7 Feldspar Porphyry.

Resuming in the host phase. Variably grey to purplish to slightly greenish locally. Fresh to slightly cloudy with scattered very fine carb and epidote stringers. Continuing blocky with some finely crushed zones. Slightly more scrappy pale white qtz veining is developing; both fine pyrite and chalcopryrite are present in one small, high angle example at 227.3. A very low angle qtz stringer at approx 236 carries minor brassy pyrite. The rocks become slightly more hematized approaching 279. Broken at the lower contact.

253.8 255.0 Broken Blocky Core.

264.3 268.0 Broken Blocky Core.

206.5 206.6 Ms 11.4.
 224.0 224.1 Ms 0.83.
 236.3 236.4 Ms 0.38.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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265.6 265.7 Ms 6.44.

279.0 279.1 Ms 6.07.

279.7 288.9 Amphibolitic.

Opening into a very dark grey-green, weakly speckled to mottled zone of amphibolitic material. Sharply bounded along high angle? broken up contacts. A calcitic area with 2-3 mm euhedral carb metacrysts and pervasive alteration in the matrix. Overprinted with very fine amphibole and weakly hematized in the groundmass. Weakly foliated in part at approx 30 degrees. Fine wispy, dark green chlorite is growing on top of the matrix and beginning to accentuate the fabric. Parts of this interval appear to be highly altered host, while other areas may have been a mafic dyke of unknown primary composition. The carbonate and amphibole have effectively destroyed most of the primary mineralogy and textures in much of the section. Not particularly magnetic. Weakly mineralised with fine matrix bound disseminated pyrite. Veining is absent. Blocky and broken with a ground zone at 285.4.

283.3 285.4 Lost core.

288.9 292.0 Quartz Feldspar Porphyry.

Sharp contact into a pale pink, coarsely speckled unit, which resembles some of the aplites logged in the McBean holes. The upper contact is lying at a very low core angle whereas the trailing boundary is occupied by a 3-4 inch thick pale milky qtz vein. The vein concludes along a 60 degree contact. A fairly fresh, blocky intrusive, which consists of subhedral to rounded pale milky feldspars (K feldspar?) 2-4 mm across, and anhedral, slightly cloudy qtz grains in the 2-5 mm size range. These components are barely supported in a pale flesh toned, aphanitic groundmass. Very few mafics are present; small flecks and plates of dark green chlorite (some after amphibole?) are interstitial to the other components. The rocks are very hard and non-magnetic. Traces of very fine pyrite are sprinkled throughout the interval. The trailing qtz vein is essentially unmineralised and carries a few small wallrock rafts. Slightly calcitic in fine qtz-carb fractures.

292.0 295.3 Feldspar Porphyry.

A short section of reddish brown (hematized) host rock with a slightly cloudy/muddy aspect. Weakly silicified and slightly more strongly mineralised with very fine diss pyrite. The rocks are xcut by a crude set of 30-40 degree qtz-calcite-chlorite filled fractures, the largest of which carry anhedral, spotty 1-2 mm pyrite crystals. Becoming redder and more hematitic towards the lower contact. Bounded at 15 degrees along an intrusive contact at 295.3.

295.3 302.0 Mafic Intrusive.

Sharp contact into a dark green, fine grained and homogeneous intrusive with a very subtle dark green speckling. Fine angular amphiboles and small plates of biotite are barely visible in the groundmass. These are supported in a finer mafic matrix which has now been carbonated/hematized and dusted with fine gritty epidote. Magnetic in the lower half or so of the unit. Slightly more strongly carbonated/hematized in a few areas- pervasive calcite

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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alteration in these areas reacts well to cold HCl. Sparsely veined with a few carb threads. Very little mineralisation is developed; a bit of disseminated pyrite becomes apparent in the more strongly hematized/carbonated zones. Sharp lower contact at approx 15-20 degrees to CA.

302.0 323.5 Feldspar Porphyry.

Resuming in the host intrusive. Slightly reddened in the upper few feet, and then becoming more typically greyish. Slightly clouded in part and cut by low angle chloritic fractures. Blocky with a few crushed up areas. Locally more carbonated and epidote-rich which obliterates the feldspar phenos. Continuing weakly magnetic and calcitic in fine fractures. Weakly mineralised with traces of diss pyrite in the groundmass.

323.5 324.4 Mafic Intrusive.

Contact into a dark grass green, weakly speckled section. Chloritic and littered with 1-2 mm needles and plates of amphibole. Weakly calcitic in a pale pinkish, low angle stringer. Negligible sulphide is present. Non magnetic and bounded by high angle, fairly sharp contacts.

324.4 336.7 Feldspar Porphyry.

Continuing in the host. Pale purple-red to more greyish with a narrow section of more intense silicification and hematite addition at about 326. Blocky and broken with some ground and broken areas. Slightly more silica/albite in the system here.

336.7 340.4 Mafic Intrusive.

Sharp contact at approx 30 degrees into a dark green, fine grained intrusive. Slightly offset and very weakly brecciated at the upper contact. A homogeneous, very finely felted groundmass with minimal variations in texture is characteristic. The unit is cut by a few scrappy calcite stringers, and reacts in both the groundmass and stringers to cold HCl. Negligible sulphide. Sharp basal contact at 35 DTCA.

284.0 284.1 Ms 0.48.

291.0 291.1 Ms 1.22.

295.0 295.1 Ms 0.80.

300.0 300.1 Ms 11.0.

305.0 305.1 Ms 8.74.

314.8 314.9 Ms 10.1.

324.0 324.1 Ms 0.49.

333.0 333.1 Ms 8.98.

338.0 338.1 Ms 0.39.

340.4 371.1 Feldspar Porphyry.

Continuing in the host porphyry. Predominantly purplish to slightly greyish in colour and quite broken up for much of the interval. A few muddy, more strongly altered (silica and hematite) zones are developed here and there. These are typically 3 to 6 inches wide and tend to have few or no phenocrysts present. One example at around 349 is associated with a slightly pitted/weathered chloritic/epidotic shear, lying at 20 DTCA. Slightly more

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
423.1	423.2	Ms	5.61.							
438.0	438.1	Ms	0.45.							
446.0	446.1	Ms	68.3.							
449.0	449.1	Ms	9.04.							
449.7	777.1	BASALT								
		Contact into a system of dark grass green to more pale pistachio green coloured mafic flows and intercalated cherty exhalite/interflow horizons. Xcutting these primary phases are a variety of mafic dykes. The volcanic rocks are probably iron tholeiites and they exhibit a number of well developed flowy textures; frothy and slightly variolitic tops, amygdaloidal and weakly developed flow breccias are relatively common. Less typical are fine hyaloclastite layers and definitive pillow margins, although there is some textural evidence for small pillows in a few spots. Initially a calcitic system where modest amounts of fine scrappy carbonate stringers and threads cut the unit in a random fashion. Wispy and dusty epidote occurs in some of the frothy top materials. Variably magnetic, but quite strongly so where evident. Weakly mineralised with disseminated and anhedral spotty pyrite; trace amounts are sprinkled throughout the system with slightly greater concentrations in the exhalite units and in some of the more porous tops and frothy/vesicular/variolitic areas. A sequence of relatively undeformed thin flows and associated interflow materials. Some of the dykes have weak foliations developing; presumably these rocks were relatively more ductile than the host basalts and have taken up much of stress in the system. More details follow in the breakout.	26577	449.7	452.6	2.9	2.0%	nil	.000	nil
			26578	452.6	454.5	1.9	TR	nil	.000	nil
			26579	454.5	457.0	2.5	TR	nil	.000	nil
			26580	457.0	459.1	2.1	TR	nil	.000	nil
			26581	459.1	462.0	2.9	TR	nil	.000	nil
			26582	462.0	465.0	3.0	TR	nil	.000	nil
			26583	465.0	466.5	1.5	0.5%	nil	.000	7
			26584	466.5	467.7	1.2	TR	nil	.000	2
			26585	467.7	470.0	2.3	0.5%	nil	.000	9
			26586	470.0	472.3	2.3	0.5%	nil	.000	5
			26587	472.3	475.0	2.7	0.5%	nil	.000	nil
			26588	480.0	482.2	2.2	TR	nil	.000	nil
			26589	482.2	484.4	2.2	0.5%	nil	.000	nil
			26590	484.4	487.0	2.6	1.0%	nil	.000	nil
			26591	487.0	489.1	2.1	2.5%	nil	.000	8
			26592	489.1	491.6	2.5	1.0%	nil	.000	5
			26593	491.6	494.4	2.8	1.5%	nil	.000	nil
			26594	494.4	497.3	2.9	1.0%	nil	.000	nil
			26595	497.3	500.0	2.7	1.5%	nil	.000	nil
			26596	500.0	501.8	1.8	2.0%	nil	.000	nil
			26597	501.8	503.5	1.7	1.5%	.001	.000	17
		449.7 459.1 Basalt.	26598	503.5	505.0	1.5	TR	nil	.000	nil
		A dark grey-green section with weak amphibolitic alteration developed away from the contact above. Medium to medium-fine grained with a felted texture in the matrix. Moderately magnetic and essentially massive. Riddled with fine scrappy carb stringers at moderate to high core angles. Well mineralised with fine cubic/spotty pyrite against the dyke contact for about 2 feet. Calcitic and weakly foliated at about 45 degrees in the uppermost 12 inches of the unit.	26599	505.0	506.3	1.3	0.5%	nil	.000	nil
			26600	506.3	508.0	1.7	1.5%	nil	.000	7
			26601	508.0	510.0	2.0	2.0%	nil	.000	3
			26602	510.0	512.3	2.3	0.5%	nil	.000	nil
			26603	512.3	515.0	2.7	1.0%	nil	.000	nil
			26604	515.0	517.8	2.8	1.0%	nil	.000	nil
			26605	517.8	521.0	3.2	0.5%	nil	.000	nil
		459.1 465.0 Mafic Intrusive.	26606	521.0	523.5	2.5	1.5%	nil	.000	nil
		A pale grey to slightly purple toned dyke with a weakly speckled appearance and a broken/blocky aspect. A weakly porphyritic phase with a finer granular groundmass. 1-2 mm subhedral pale white feldspar phenos, slightly smaller ragged plates of amphibole and a few tiny angular mafic fragments are supported in a dirty feldspathic matrix. The groundmass is very slightly hematized and pervasively carbonated after the original feldspar components. Calcitic in the matrix and slightly mineralised with fine diss pyrite. Fine amphibole and chlorite are fogging up the matrix; more so towards the lower contact. Sharp upper contact @ 45 DTCA. Convolutated, interpenetrating lower contact. Possibly related to the FP mass above.	26607	523.5	525.1	1.6	0.5%	nil	.000	nil
			26608	525.1	526.9	1.8	1.0%	nil	.000	nil
			26609	526.9	530.0	3.1	0.5%	nil	.000	10
			26610	530.0	533.0	3.0	0.5%	.002	.000	47
			26611	533.0	534.7	1.7	1.0%	nil	.000	nil
			26612	534.7	536.4	1.7	2.0%	nil	.000	nil
			26613	536.4	537.3	.9	TR	nil	.000	12
			26614	537.3	538.3	1.0	TR	.008	.000	254
			26615	538.3	539.1	.8	TR	.002	.000	82
			26616	539.1	540.9	1.8	0.5%	nil	.000	5
			26617	540.9	543.4	2.5	0.5%	nil	.000	5
		465.0 466.5 Basalt.	26618	543.4	545.3	1.9	1.0%	nil	.000	nil
		A narrow sliver of flowy/frothy basalt with a spotty/patchy amygdaloidal texture. Dark green with lighter green patches and bubbles(epidote), typically around amygs and small angular qtz-carb patches. Weakly	26619	545.3	547.3	2.0	TR	nil	.000	2
			26620	547.3	549.1	1.8	0.5%	.002	.000	62
			26621	549.1	550.9	1.8	0.5%	nil	.000	2

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
		mineralised with fine spotty pyrite. Slightly foliated/layered against the underlying dyke. Strongly magnetic throughout.	26622	550.9	553.0	2.1	TR	nil	.000	nil
			26623	553.0	555.5	2.5	TR	.001	.000	19
			26624	555.5	557.7	2.2	TR	nil	.000	15
		466.5 467.7 Mafic Intrusive.	26625	557.7	560.0	2.3	0.5%	.001	.000	29
		Another narrow, weakly speckled, greyish coloured dyke with some similarities to the rocks at 459.1. This example has sharp contacts at 30/30 DTCA and a central core region which resembles the preceding mafic dyke. The margins are strongly altered and have a pale green finer grained, bleached appearance. These areas are also lightly speckled with very fine amphibole (fresher) and tend to be slightly harder than the darker core area. The core has a more pervasive amphibole overprint as opposed to the margins. Essentially non-magnetic and weakly mineralised with very fine diss pyrite. The dyke is weakly calcitic throughout the matrix and in a few small carb threads.	26626	560.0	561.8	1.8	TR	nil	.000	15
			26627	561.8	563.3	1.5	TR	nil	.000	nil
			26628	615.0	618.0	3.0	TR	nil	.000	nil
			26629	618.0	621.0	3.0	1-2	.001	.000	19
			26630	621.0	624.3	3.3	TR-1	nil	.000	9
			26631	624.3	625.9	1.6	TR-1	nil	.000	2
			26632	625.9	627.7	1.8	TR	nil	.000	3
			26633	627.7	629.0	1.3	NIL	nil	.000	nil
			26634	629.0	632.0	3.0	TR	nil	.000	nil
			26635	632.0	634.2	2.2	TR-1	.001	.000	43
			26636	634.2	636.0	1.8	TR-1	nil	.000	nil
		467.7 487.0 Basalt.	26637	636.0	637.8	1.8	2-3	nil	.000	14
		Opening into a dark green fairly fine grained and massive section with a flowy/frothy top developing below approx 482 feet (tops may be downhole in this area). Very slightly veined with small scrappy calcite stringers in the more massive zone. Developing into a weak flow breccia and altered with pale green epidote in the flowy area. Fine amygs and variolites are common in a finely laminated, flowy, slightly ropey top zone. Variably magnetic with strong responses at the bottom and top of the sequence. Weakly mineralised with diss and spotty/fracture-filling pyrite, especially in the flowy top area. Ground lower contact; probably a high angle interface.	26638	637.8	639.7	1.9	TR	nil	.000	nil
			26639	639.7	643.0	3.3	1-2	nil	.000	nil
			26640	643.0	646.0	3.0	TR-1	nil	.000	nil
			26641	646.0	648.7	2.7	TR	nil	.000	1
			26642	648.7	649.7	1.0	TR-1	nil	.000	nil
			26643	649.7	653.0	3.3	TR-1	nil	.000	2
			26644	653.0	656.0	3.0	TR	nil	.000	7
			26645	656.0	659.0	3.0	TR	nil	.000	nil
			26646	659.0	661.4	2.4	TR	nil	.000	nil
			26647	661.4	664.0	2.6	1-2	nil	.000	nil
		487.0 4.0 491.6 Cherty Exhalite quartz.	26648	664.0	667.0	3.0	TR	nil	.000	nil
		A chaotic, coarsely brecciated zone of pale grey, patchy qtz, a few basaltic bits and sub-angular fragments and rafts of a dark purple grey cherty material. Quite strongly magnetic in the exhalite component. Calcitic in fine fractures and around some of the 'fragments'. Crudely layered/foliated at approx 40 DTCA. Well mineralised in the upper half of the unit with disseminated, dusty and fine anhedral pyrite. Xcut by very fine calcitic and epidote-bearing threads. Becoming more qtz-rich below 490, with less sulphide. Fairly sharp lower contact at approx 55 DTCA.	26649	703.0	706.0	3.0	TR	nil	.000	nil
			26650	706.0	709.0	3.0	2-3	nil	.000	9
			26651	709.0	712.0	3.0	1-2	nil	.000	nil
			26652	712.0	715.0	3.0	TR-1	nil	.000	nil
			26653	715.0	718.0	3.0	3-5	nil	.000	10
			26654	718.0	721.0	3.0	TR-1	nil	.000	2
			26655	721.0	724.0	3.0	TR	nil	.000	nil
			26656	724.0	725.6	1.6	TR-1	nil	.000	2
			26657	725.6	727.0	1.4	5-7	nil	.000	3
		491.6 503.5 Basalt.	26658	727.0	728.6	1.6	NIL	nil	.000	nil
		Returning to a dark green to grey to lime green, lightly spotted interval of flowy basalt. An area of amygdaloidal and locally frothy/shardy flow top material. The upper 3 feet is strongly altered with fine epidote and a few scrappy/gritty carbonate stringers. Below this the rocks become greyer and fine grained; 2-3 mm darker grey amygs? and small glassy shards are sprinkled throughout much of the remainder of the interval, along with spotty and fine irregular fracture-filling pyrite. Many of the aforementioned features are slightly flattened and/or elongated along a deformation plane at about 30-35 DTCA. Fine patches of epidote are developed around very fine fractures or patches of greyish carbonate. Continuing calcitic and generally strongly magnetic in the interval. Sharp lower contact at 60 DTCA.	26659	728.6	731.0	2.4	TR-1	nil	.000	2
			26660	731.0	734.0	3.0	TR	nil	.000	nil
			26661	745.0	748.4	3.4	TR	nil	.000	2
			26662	748.4	751.0	2.6	TR-1	nil	.000	nil
			26663	751.0	754.0	3.0	TR	.001	.000	31
			26664	754.0	757.0	3.0	TR	.004	.000	132
			26665	757.0	760.0	3.0	TR	nil	.000	nil
			26666	760.0	763.0	3.0	TR	nil	.000	nil
			26667	763.0	766.0	3.0	TR-1	nil	.000	3
			26668	766.0	769.0	3.0	TR-1	nil	.000	15
			26669	769.0	771.5	2.5	TR-1	.003	.000	117
			26670	771.5	774.0	2.5	2-3	.025	.000	857
			26671	774.0	775.6	1.6	1-2	.003	.000	117
		503.5 506.3 Carbonate-quartz veining.	26672	775.6	777.1	1.5	5-8	.006	.000	205

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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A pale grey white, gritty/granular zone of predominantly calcite enclosing small rafts of basalt and cm scale plates of slightly paler angular qtz. Slightly pink in part and not especially well mineralised in the carbonate proper. Instead, small amounts of pyrite are found in and around the rock fragments. Weakly epidotitic in part. A recrystallised tensional zone with a sharp, 35-40 degree lower contact.

506.3 508.0 Cherty Exhalite.

A very dark grey to earthy black toned section of brecciated and crudely laminated chert. Strongly magnetic and riddled with pale grey stringers and threads of calcite; these lie at roughly 40-45 DTCA and promote the 'laminated texture'. Small amounts of wispy sericite and more greenish epidote are found in the matrix and around the carbonate stringers. Fairly well mineralised with diss and subhedral pyrite; some of this is slightly deformed and appears to mimic the carb stringers. Sharp lower contact at 40-45 DTCA.

508.0 526.9 Basalt.

Continuing in dark green, fine grained flowy to semi-massive basalt. Weakly speckled and altered with cloudy carbonate and epidote in the interval down to 523. Slightly more massive to subtly brecciated below 523. Small darker amygs? shards or possibly variolites are scattered through the upper portion; as in the overlying examples a weak deformation fabric is visible lying at about 40 DTCA. Some stretching/elongation/flattening of the amygs is evident. Not well veined except for an irregular scrappy/angular zone of infilling carbonate at 524 to 526. Not very magnetic down to 518 and then becoming strongly so for the rest of the interval. Weakly mineralised with spotty, patchy and cubic pyrite to 3 mm across. Tops may be downhole here. Contains small bluish qtz eyes?? ex at approx 515. Sharp lower contact at approx 45 DTCA.

526.9 537.3 Cherty Exhalite Oxide Iron Formation.

Entering at very dark grey to slightly purple toned section of predominantly massive to subtly layered chert and subordinate pale grey patchy and linear veinlike qtz-carbonate. The interval is locally weakly hematized and can be roughly divided into crude layers or bands, some of which are cherty and others which are strongly magnetic and rich in magnetite and possibly a fine mafic tuff component. These layers lie at approx 30 DTCA and are sub-cm to many cm's thick.

A chloritic/epidote/sericitic lens or layer about 1 inch thick rolls through the interval at about 531 to 532.5- this feature sits at about 10 DTCA and might represent a strong shear. Below 533 is a very low angle, pale grey qtz-carb vein? which similarly runs along the core until about 536. A well mineralised section in part; diss and spotty/patchy and streaky or cubic pyrite up to 5 mm across is scattered throughout the interval. Slightly greater concentrations lie near the flat veining noted above. Calcitic in threads and heavier veining throughout the unit. A crude oxide facies iron formation of sorts with an irregular, deformed character. The unit is invaded by pale grey qtz towards 537; the last 7 inches of the interval is weakly clouded with epidote and carbonate and is probably basalt. Sharp lower contact at 50 DTCA.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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537.3 538.3 Mafic Intrusive.

A narrow, dark green, finely mottled intrusive, bounded by very sharp contacts at 50/60 DTCA. A homogeneous, fine grained dyke with a felted matrix texture. Essentially non-magnetic and lacking in veining and sulphides. Consists of a fine intergrown assemblage of chlorite, carbonate and slightly sharper needles of amphibole. Also contains small plates of biotite.

538.3 545.3 Basalt.

Returning to a section of slightly speckled to streaky, flow/amygdaloidal basalt. Invaded/brecciated by several pale grey siliceous and cherty tongues which may be related to nearby slightly larger cherty zones. Continuing calcitic and generally strongly magnetic. An amphibolitic flow bottom may be present at 539.7; it is sharply bounded against an underlying pale cherty layer at 55 DTCA. Tops may be downhole at this point. Weakly cooked and epidotised against the overlying dyke. Moderately mineralised with diss and fine spotty pyrite, mostly in the matrix. A crude alignment of the amyggs occurs at about 40-50 DTCA. Irregular, sharp basal contact at approx 30 DTCA.

545.3 550.9 Cherty Exhalite.

Opening into another dark grey, brecciated and chaotic zone of mostly chert with a small amount of strongly magnetic material. Textures, veining and alteration seen in this area are very similar to that seen in the preceding units. This example has more of the cloudy, wipsy and thread-like carbonate seen at 506 for example and generally less sulphide. Portions of the unit are slightly redder (hematized), while other areas have subtle layers of chert and darker magnetite-rich material. One area has a very fine laminated structure suggestive of primary layering; this sits at about 548. The layering lies at 25-30 DTCA. The unit concludes along a sharp, 25 degree lower contact.

550.9 561.8 Basalt.

Continuing in a dark grey-green, fine grained and mostly massive host basalt. Slightly coarser grained in part with minimal veining or strong sulphide mineralisation. A narrow zone of weak flow breccia/variolitic flow top sits at approx 559 at 40 DTCA. Weakly magnetic and calcitic in a few tiny stringers and patches of carbonate alteration. Very finely speckled in part- these mm sized sub-angular features might be small glassy shards or possibly very small variolites? Sharp lower contact at 20 DTCA.

561.8 564.5 Mafic Intrusive.

Low angle, slightly undulating contact into a pale grey, finely speckled mafic intrusive. Similar to dykes logged in other McBean and Anoki holes with a characteristic microporphyritic texture. This dyke consists of a coarsely felted matrix of interwoven pale green chlorite and carbonate supporting numerous acicular amphiboles and scattered 1-2 mm plates of biotite. The latter phases are fairly fresh and contrast with the paler matrix. The dyke is massive and homogeneous with virtually no fractures or other veining. Sulphides are similarly lacking. Slightly coarser biotite characterises the center of the dyke. Sharp lower contact at approx 10

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY ‡	AU OZ/T	AU1 OZ/T	AU2 PPB
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degrees. Some alignment of fine amphibole parallel to the contact is visible.

564.5 569.9 Basalt.

A short, fairly anonymous section of basalt. Fine grained with a slightly amphibolitic zone developing at around 568- a sub-flow boundary? Xcut by a few high angle carb stringers. Barely magnetic using the pen magnet. Calcitic in stringers and to some extent in the matrix. Very little sulphide is present. Sharp lower contact at 25 DTCA.

569.9 573.9 Mafic Intrusive.

Contact into a medium grey toned dyke with a weak salt and pepper texture. Medium-fine grained and massive with a very few high angle carb threads. This small intrusive may be related to the dyke at 561; it has a pale grey-green matrix, but consists of a crowded aggregate of fine mafics and tiny pale white feldspars barely supported in a slightly muddy feldspathic groundmass. Acicular and lath-like amphiboles and subhedral feldspar grains range up to 3 mm across. Fairly homogeneous with a very few scattered fine pyrite grains. Becoming slightly more rich in mafics moving downhole. Weakly calcitic in the carbonate threads. Non magnetic. High angle? lower contact.

573.9 585.5 Basalt.

Returning to the host basalt. A fairly massive to slightly speckled interval with some minor patchy carbonate/epidote alteration. Very fine quench texture/skinny ropey flow texture is present at about 582; this lies at approx 30 DTCA. Calcitic in the patchy carb alteration and in the few scrappy carbonate stringers scattered throughout the unit. Weakly mineralised with fine pyrite; this typically occurs in or around carb stringers or patchy alteration. Darker toned and presumably more amphibolitic at and below the upper contact. Bounded at 585 along a sharp, roughly 60 degree contact.

585.5 588.4 Amphibolitic.

Opening into a dirty beige, coarsely speckled to mottled section of moderately amphibolitised dyke? rock. This interval consists of a very fine aggregate of carbonate grains and interstitial matted and slightly foliated amphibole. Possibly cataclastic at a microscopic scale. The weak fabric lies at 50-60 degrees and becomes more definitive down to about 588 where it rolls flat and is then truncated by a high angle carb stringer. The protolith here is unknown; all primary texture and mineralogy appears to have been destroyed. The rocks are xcut by a series of 50-60 degree carb stringers which in turn are cut by a slightly later conjugate set of pale qtz stringers. Neither of these systems carry any significant sulphide. Ankerite has replaced calcite in this interval. A weakly mineralised section with some spotty pyrite in and around veining low in the section- the sulphide is generally confined to the matrix however. Sharp lower contact at approx 70 degrees.

452.6 452.7 Ms 18.4.
462.5 462.6 Ms 3.11.
467.0 467.1 Ms 0.23.
472.3 472.4 Ms 5.33.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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better defined amygdules are also present... Similarly suggesting tops of flows. Tops would appear to be down-hole although that is not always clear. The rocks are weakly to moderately magnetic - the strength of the magnetism appearing to depend on the individual flow as opposed to having a central section that is differently magnetic than the margin. Most of the cherty flow top to interflow material is also variably magnetic from the presence of iron which tends to colour the rock a dark grey. The lower contact is gradationally more siliceous over 1.4 feet before apparently intersecting a brownish, more amphibolitic, foliated, and much more strongly magnetic flow at 661.4 at 60 degrees. Mineralization is a mix of pyrite and pyrrhotite - up to 2-3% on a very local scale, with pyrrhotite being more common in the cherty sections. Veining to fracturing is minor in amount and is largely confined to late calcite fractures. The cherty sections include.

634.2 639.7 Cherty interval with erratic patches of chert to 637.8 where the most prominent section of chert exists from 637.8 to 639.7 at 35/45 degrees. Outside upper contact at 28 degrees.

648.7 649.7 Cherty interval at 47/44 degrees - this is the only other prominent cherty section in this package aside from some accessory silicification from 660.0 to 661.4 at 24/60 degrees with weak amphibolitization at the very base of this area.

630.0 630.1 Ms 6.01.
 639.0 639.1 Ms 0.01.
 642.8 642.9 Ms 32.4 - with pyrrhotite.
 649.4 649.5 Ms 16.4.
 656.0 656.1 Ms 1.31.
 659.9 660.0 Ms 0.57.
 662.0 662.1 Ms 108.0.

661.4 727.0 Basalt.

Continue in the sequence of basaltic rocks as previous, varying from dark green to dark grey green in colour with erratic sections where chlorite to calcite-filled amygdules and more rarely variolites are common. As noted before accessory epidote and calcite alteration tend to accompany the patches where amygdules are better developed - i.e. Possible flow margin areas, although tops are unclear. The rocks also continue to be variably magnetic from weak to strong and pyrite mineralization tends to focus in the more calcite-epidote altered sections ranging up to 5-7% on a very local scale as very fine grained to coarser recrystallized blebs and fracture-parallel streaks. Silicification is minor here although there are some greyer siliceous patches also suggestive of tops. The lower contact is along a siliceous, strongly magnetic flow top from 725.6 to 727.0 at 50/40 degrees with 5-7% accessory pyrite.

669.0 669.1 Ms 54.6.
 677.9 678.0 Ms 1.38.
 688.9 689.0 Ms 62.8.
 698.9 699.0 Ms 1.00.
 708.0 708.1 Ms 12.6.

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
718.0	718.1	Ms 69.3.								
724.0	724.1	Ms 37.8.								
726.4	726.5	Ms 751.0.								
728.0	728.1	Ms 2.67.								
734.0	734.1	Ms 21.3.								
727.0	728.6	Carbonated Ultramafics. Contact into a very narrow section of ultramafic that, unlike the adjacent basaltic rocks, is ankeritic and nonmagnetic. The rock is foliated at 23 to 40 degrees to the core axis, is weakly fractured with ankerite-quartz stringers and is unmineralized. Due to the alteration with chlorite, ankerite and amphibole the original protolith is certainly not pristine but the ultramafic character is relatively clear. Contacts are at 40/38 degrees.								
728.6	777.1	Basalt. Return to the basaltic package of rocks as seen above the narrow unit of ultramafic with patchy bleached and altered sections (as tops ?) where amygdules are best developed. This represents the basal package of the basaltic suite here and the alteration begins to vary at 748.4 where there is a local switch from calcite to ankerite. Between 748.4 and 769.5, the rocks are alternately bleached and ankeritic to paler grey green and beige tones; and, darker green to grey green and calcitic with variable epidote alteration. Below 769.5, the rocks are all ankeritic leading up to the lower contact. The lower contact is marked by the start of a grey siliceous flow at 771.5 at 57 degrees which becomes more highly fractured and brecciated with cherty material (a ropey flow top ?) after 775.6. The lower contact is at 35 degrees, accompanied by some accessory veining and ankerite +/- silica flooding plus 5-8% pyrite in blebs and streaks. There is accessory hematite in the basal flow unit as well as yellowish to beige sericite alteration. The basal flow exhibits a patchy magnetism from weak to strong.								
745.0	745.1	Ms 68.8.								
748.5	748.6	Ms 35.3.								
751.0	751.1	Ms 26.6.								
758.0	758.1	Ms 34.9 calcitic.								
769.0	769.1	Ms 57.4 calcitic.								
771.6	771.7	Ms 12.0.								
775.7	775.8	Ms 17.6.								
777.0	777.1	Ms 24.2.								
777.1	809.9	CARBONATED ZONE CARBONATED ULTRAMAFICS Contact into a very interesting package of carb rocks that vary from mid grey green to grey, grey beige and black in colour. The sequence is sufficiently blasted with ankerite that the original protolith is unclear. Fingerprints suggesting a dominant ultramafic protolith include traces of fuchsite very locally, and some dark grey to black foliated and amphibolitic rocks with an ultramafic character / chemistry. Some of the carbonated, amphibolitized ultramafic patches have reddish alteration suggestive of prior or contemporaneous incipient alteration. The more massive carb sections are essentially anonymous although some reddish traces also suggest	26673	777.1	780.0	2.9	TR	.003	.000	93
			26674	780.0	783.0	3.0	TR	.001	.000	19
			26675	783.0	786.0	3.0	TR	nil	.000	nil
			26676	786.0	789.0	3.0	TR	nil	.000	2
			26677	789.0	792.0	3.0	TR	nil	.000	5
			26678	792.0	795.0	3.0	TR	nil	.000	12
			26679	795.0	798.0	3.0	TR	.001	.000	45
			26680	798.0	801.0	3.0	TR	nil	.000	9
			26681	801.0	804.2	3.2	TR	nil	.000	10

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
		an incipient alteration component. One section from 801.0 to 804.2 at 47/40 degrees lacks any ultramafic features and may have originally been a basalt. The lower contact with basalt at 809.9 is also slightly problematic with the basal 8 cms being strongly calcitic and featureless before any true basalt is seen further on.	26682	804.2	807.0	2.8	TR	nil	.000	2
		The rocks vary from relatively massive with a weakly developed foliation in the carb sections to more highly foliated at 30 to 50 degrees in the ultramafic passages. Magnetism is moderate to strong throughout and exsolved magnetite is common. The rocks are thoroughly flooded with ankerite +/- very local silica, well fractured to brecciated with ankerite +/- quartz stringers and fractures but is generally very sparsely mineralized with fine pyrite. As mentioned above the lower contact is a tentative placement at 809.9 at 50 degrees.	26683	807.0	809.9	2.9	TR	nil	.000	nil
		At 795.6 there is a 3 cm hematite band at 65 degrees with a trace of chalcopyrite and some tiny ankerite fragments - nonmagnetic.								
		778.0 778.1 Ms 1.08 carb.								
		783.0 783.1 Ms 16.2 carb.								
		787.7 787.8 Ms 1.38 carb ultramafic.								
		791.9 792.0 Ms 4.31 carb + incipient.								
		796.7 796.8 Ms - 950 carb with traces fuchsite.								
		802.0 802.1 Ms 11.2 basalt ??.								
		806.0 806.1 Ms 41.8 4Ui.								
		809.0 809.1 Ms 42.5 carb altered.								
809.9	990.0	BASALT								
		Contact into a much fresher package of basaltic rocks once the sequence is clear of the carb alteration of the overlying unit. At the outset, the rocks are moderate to strongly foliated at 55 to 60 degrees to the core axis, are magnetic, well fractured with pitted to vuggy calcite stringers subparallel to the foliation and variably reddened from calcite and hematite alteration. This style of alteration and foliation diminishes around 816.3 but starts up again from 818.6 to 820.7 as an envelope around a narrow foliated/sheared ultramafic from 819.6 to 820.4 at 50/43 degrees. Magnetism diminishes rapidly after 820.7 to 822 and the sequence then consists of relatively massive basalts.	26684	809.9	813.0	3.1	TR-1	nil	.000	3
		The massive basalts that follow the foliated and magnetic section are mid to dark green and grey green in colour, very fine grained, relatively fresh, nonmagnetic and weakly altered. Little pervasive calcite or carb alteration is in evidence other than variable epidote and chlorite associated with late calcite +/- quartz stringers. Pyrite mineralization is minor but tends to cue around some of these late fractures as disseminated cubes to recrystallized blebs. There is only a very local weak development of amygdules and no clear sense of flow tops.	26685	813.0	816.0	3.0	TR	nil	.000	3
		Circa 882.8 some crudely developed quench textures combined with much darker, foliated, magnetic potential selvage material suggest that the sequence is pillowed. This crudely developed pillowed nature continues to 925.0 where there is again a switch to more massive and, at this point, magnetic flows. The sequence breakdown within this package includes :	26686	816.0	818.6	2.6	TR	nil	.000	3
			26687	818.6	820.7	2.1	TR-1	nil	.000	2
			26688	820.7	823.0	2.3	NIL	nil	.000	5
			26689	823.0	826.0	3.0	NIL	nil	.000	3
			26690	826.0	829.0	3.0	NIL	nil	.000	2
			26691	900.0	903.0	3.0	NIL	nil	.000	12
			26692	903.0	905.5	2.5	TR	.001	.000	26
			26693	905.5	908.0	2.5	TR	nil	.000	7
			26694	926.0	928.8	2.8	NIL	nil	.000	5
			26695	928.8	931.0	2.2	TR	.002	.000	74
			26696	931.0	933.0	2.0	TR	.006	.000	210
			26697	933.0	936.0	3.0	TR	.004	.000	132
			26698	969.0	971.6	2.6	NIL	nil	.000	3
			26699	971.6	974.0	2.4	TR	nil	.000	nil
			26700	974.0	976.2	2.2	NIL	nil	.000	12
			26701	976.2	979.7	3.5	TR	.001	.000	17
			26702	979.7	983.0	3.3	TR	nil	.000	3
			26703	983.0	985.9	2.9	TR	nil	.000	7
			26704	985.9	988.8	2.9	TR	nil	.000	nil
			26705	988.8	990.0	1.2	TR	nil	.000	3

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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809.9 819.6 Basalt foliated.

The start of the package as described above that is foliated, fractured, calcitic and reddened from 809.9 to 816.3, and, 818.6 to 819.6 (eventually to 820.7).

819.6 820.4 Ultramafic.

The narrow, foliated, sheared ultramafic described in the opening overview.

820.4 882.8 Basalt.

A section of nonmagnetic, massive flow with some accessory reddening, calcite alteration and magnetism adjacent to the narrow sheared ultramafic unit (to 820.7). Most of this unit is not pervasively altered with calcite - only scattered late calcite fractures are present with variable chlorite and epidote alteration. Magnetic susceptibilities to this point include :.

812.0 812.1 Ms 41.2.

816.0 816.1 Ms 41.5.

818.0 818.1 Ms -960.

819.5 819.6 Ms 37.1.

820.3 820.4 Ms 0.33 Ultramafic.

820.9 821.0 Ms 38.7.

829.0 829.1 Ms 0.47.

836.0 836.1 Ms 0.41.

845.0 845.1 Ms 0.83.

857.0 857.1 Ms 0.45.

865.0 865.1 Ms 0.35.

875.0 875.1 Ms 0.28.

882.0 882.1 Ms 0.37.

882.8 925.0 Pillowed.

Contact into the pillowed basalts as described above. The sequence is represented by mid to pale green and grey green massive rocks interspersed with irregularly spaced selvage zones that are characterized by streaky dark, chlorite-altered zones with crudely developed quench textures. The pillows are essentially nonmagnetic with local amygdules at the margins while the selvage zones are dark, chlorite-altered, magnetic, and, generally at shallow angles to the core axis. Selvage zones also tend to be the sites of accessory calcite and epidote alteration, and, are better mineralized with pyrite than the more massive pillows. Veining is minor.

There is some accessory ankerite in this package between 903.0 and 905.5 associated with minor quartz-ankerite veining, traces of pyrite and some blocky to broken core from 904.9 and 905.4.

Magnetic susceptibilities tend to bear out the more magnetic selvage material as :.

884.0 884.1 Ms 1.18 weakly magnetic selvage material / contact zone.

888.0 888.1 Ms 0.29 pillow.

894.1 894.2 Ms 41.8 selvage.

902.0 902.1 Ms 0.86 pillow.

903.0 903.1 Ms -957.0 pillow.

915.0 915.1 Ms 36.9 selvage.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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920.1 920.2 Ms 184.0 selvage.
924.0 924.1 Ms 0.68 pillow.

925.0 990.0 High Mag Basalt.

Contact along a weakly foliated section over a few cms at 40 degrees to the core axis into a package of massive basalt again. The contact is very subtle to some extent but the increase in magnetism is dramatic - certainly after 925.4 (925.0 to 925.4 being a transition that could relate to either adjacent package). This package is characterized by massive, strongly magnetic rocks with a crude suggestion of flow margins by fine grained, weakly foliated material, or, accessory fracturing with calcite chlorite and epidote in fine grained sections, or, much finer grained rocks that may or may not be interflow related. The basalt varies from medium to dark green and grey green, is strongly magnetic, and has a local, crudely developed gabbroic texture. Chlorite, calcite and epidote are the main alteration minerals with pervasive calcite alteration being quite common. The rock is poorly veined with late calcite fractures, some of which show reddish hematite alteration at the margins. Pyrite mineralization is sparse and tends to cue with the calcite +/- epidote fractures - preferring those with reddish alteration.

The areas of note in this package include some quartz veining with limited ankerite alteration, some very thin fine grained flows to interflow material, and, a narrow flow breccia section as :

928.8 933.0 Quartz Vein Zone.

The basalt in this area is bleached to pale grey beige and beige in colour adjacent to the strongest irregular veining with quartz +/- carb from 930.2 to 930.5 and 931.0 to 933.0. The only apparent ankerite in the system is from 929.8 to 930.2 just above the first vein to vein breccia. Otherwise, the rocks in this area are strongly overprinted with calcite, and sparsely mineralized with pyrite - magnetism persists with fine exsolved magnetite.

971.6 979.7 Interflow Material.

Contact into a narrow section of thin flows to interflow material within the basaltic package. Outside contacts of the system are at 26/13 degrees with the internal contacts running essentially along the core axis. This short system is divisible into an upper bleached section to 976.2 and a lower section of dark grey green very fine grained flows to 979.9. The upper part is pale grey green to beige in colour with reddish tones. It is weakly to nonmagnetic but does carry fine exsolved magnetite in the granular to somewhat gritty calcite bands that potentially represent interflow to tuffaceous material. The lower section is very fine grained and is at least partly silicified. This lower unit is also more typical of the overall package being moderate to strongly magnetic, variably calcitic and altered with chlorite and epidote. The upper contact of the overall system is strongly calcitic and reddish altered from hematite, the lower contact is fine grained and lime green from epidote alteration. The contact between the two internal members is along the core axis but is cut by a 3 cm quartz vein with traces of pyrite at 66 degrees. The pyrite content is elevated in this area but is still in only trace amounts.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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Contact into a dark green to medium grey green massive flow with a foliated, partly reddish stained, calcitic lower contact to 1111.9, and, similarly a foliated, calcitic top after 1117.8, ending along 9 cms of more siliceous flow top material. The foliation at the base of the flow averages 55 to 60 degrees, while the foliation at the upper contact is shallower at 30 to 40 degrees - lower contact sharp at 27 degrees. The flow is very fine grained to massive, weakly to moderately magnetic, chloritic, weakly epidote altered, pervasively calcitic, moderately fractured with calcite +/- quartz and sparsely mineralized with pyrite.

1118.9 1140.1 Interflow Material altered.

Contact into an interesting package of interflow rocks that are near the base of the basaltic sequence. The package is framed by two zones of cherty interflow from 1119.7 to 1125.9 at 27/42 degrees, and, 1135.1 to 1140.1 at 35/42 degrees surrounding a zone that is best described as variably siliceous, incipient altered basaltic flows. The package is also cut by two, narrow, orange-stained felsic dykes at 1118.9 to 1119.7 at 27/20 degrees, and, 1126.5 to 1128.0 at 30/25 degrees - lower contact irregular. These dykes are assumed to promote the siliceous to incipient altered nature of the central zone of basalt. All of the rocks are moderate to strongly siliceous, noncalcitic with a weak reaction to the presence of ankerite, poorly veined to fractured with carb +/- quartz and sparsely mineralized with pyrite.

The cherty interflow members +/- minor intercalated basaltic material, vary from pale to medium grey in colour with variable orange staining. Portions of the zone are weakly to moderately magnetic with exsolved magnetite, with much less magnetite noted in the lower zone due to a lack of intercalated basaltic material - the lower zone being weakly streaked with chloritic to basaltic material.

The central zone of incipient altered basalt is similarly hard and siliceous - consisting of typical reddish incipient style alteration that is streaked with chlorite alteration to chloritic basalt plus some greyer toned siliceous flows. The pyrite content is elevated in the better incipient altered sections at the apparent expense of magnetite. Pyrite contents on average, however, are low.

The two felsic dykes range from dull yellow brown to orangish. They are essentially a granular mosaic of quartz and feldspar in a very fine grained, siliceous and variably stained matrix. They are close in chemistry and appearance to the earlier feldspar porphyry dykes except that the alteration is stronger here and more quartz grains are present. The dykes are mineralized with trace only very fine pyrite.

Since the individual breakdowns are very narrow, only the overview interflow is coded for plotting.

1140.1 1142.3 Basalt.

Contact into a narrow basaltic flow that appears to mark a transition into into a contact zone. The flow is dull to dark grey green in colour, moderately magnetic, weakly ankeritic, noncalcitic, and is weakly siliceous at the contacts over 7 cms and 8 cms. Both contacts are also weakly to moderately foliated at 42/39 degrees. The rock is moderately veined and very sparsely mineralized. The lower contact is clear albeit a little subtle to

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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diffuse at 39 degrees.

1142.3 1146.9 Contact Zone.

Contact zone of apparent basalt marking the transition with ultramafic rocks at depth. Below the subtle contact with the last recognizable flow the the rock grades greener in colour, is more strongly mottled with ankerite, flecked with biotite and is not as strongly magnetic. Circa 1144, the rock grades brownish in colour and subsequently grades coarser grained with ankerite, amphibole, biotite and chlorite down to the lower contact with a 6 cm, orange stained, cherty interflow / flow top at 41 degrees. Portions of the section have an ultramafic appearance but this may be related to the presence of the adjacent ultramafic suite. This section is effectively unmineralized. Lower contact with ultramafic at 41 degrees.

Magnetic susceptibilities within the sequence include .:

1023.0 1023.1 Ms 9.54.
 1027.0 1027.1 Ms 22.1.
 1035.1 1035.2 Ms 23.5.
 1038.4 1038.5 Ms 27.0.
 1041.0 1041.1 Ms 23.5.
 1043.0 1043.1 Ms 16.0.
 1048.0 1048.1 Ms 16.6.
 1048.4 1048.5 Ms -968 chert.
 1050.0 1050.1 Ms 16.2.
 1054.0 1054.1 Ms 12.3 ropey.
 1056.0 1056.1 Ms 20.8.
 1058.0 1058.1 Ms 0.59 mi.
 1063.0 1063.1 Ms 10.2.
 1072.0 1072.1 Ms 23.1.
 1082.0 1082.1 Ms 12.4.
 1091.0 1091.3 Ms 5.43 ropey flow.
 1092.0 1092.1 Ms 2.93 ropey flow.
 1093.0 1093.1 Ms 17.0 ropey flow.
 1097.0 1097.1 Ms 25.3 ropey flow.
 1104.0 1104.1 Ms 5.56 flow top.
 1107.0 1107.1 Ms 41.4.
 1110.0 1110.1 Ms 21.2 flow top.
 1112.0 1112.1 Ms 35.1.
 1117.0 1117.1 Ms 17.5.
 1119.3 1119.4 Ms 0.64 dyke.
 1122.0 1122.1 Ms 52.5 intercalated basalt.
 1124.0 1124.1 Ms -957 chert.
 1127.0 1127.1 Ms 0.61 dyke.
 1131.0 1131.1 Ms 0.81 incipient altered.
 1133.0 1133.1 Ms 35.7.
 1136.0 1136.1 Ms 2.97 chert.
 1139.0 1139.1 Ms 1.88 chert.
 1142.0 1142.1 Ms 48.1.
 1143.0 1143.1 Ms 0.77 carbonated.
 1146.0 1146.1 Ms 2.44 carbonated, amphibolitic.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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1244.0. This section is weakly ankeritic with no reaction to the presence of calcite. Veining is minimal, mineralization is trace to 1% disseminated pyrite.

1252.9 1262.9 Mafic Intrusive Contacts at 38/31 degrees and diffuse - this unit is calcitic once more.

1262.9 1279.4 Ultramafic Blue grey to greenish ultramafic that is variably chloritized to locally partly amphibolitized - particularly in a lower flow ?? after 1271.5. The rock also grades calcitic in the lower flow and is only weakly magnetic. The contact between flows ?? is at 22 degrees with veining.

1279.4 1319.6 Mafic Intrusive What appears to be the last dyke of the system with a shallow lower contact zone over roughly 5 feet that ends at a steeper angle of 40 degrees. The lower contact zone appears to have inrafted bits of ultramafic - foliation averaging 20 degrees.

1319.6 1346.4 Ultramafic This basal package of the ultramafic sequence is divisible into several types of alteration - reddish to brownish, calcitic, partly amphibolitic style alteration that looks like the forerunner to incipient alteration at the dyke contact from 1319.6 to 1322.5 (lower contact at 22 degrees), and at the base of the zone from 1333.6 to 1346.4 at 44/47 degrees - lower contact with veining. These rocks are weakly to moderately magnetic and are sparsely mineralized with trace amounts of fine pyrite.

The central part of this basal sequence consists of blue black, foliated ultramafic with traces of gouge from 1322.5 to 1328.9, followed by more chloritic, foliated, calcitic ultramafic from 1328.9 up to the basal brownish altered rocks. The foliation varies from 20 to 40 degrees in the area, mineralization is minor to negligible. The chloritic section contains numerous streaks and blebs of calcite subparallel to the foliation - upper contact at 24 degrees. Gouge sections include :.

1322.6 1322.8 Broken Blocky Core w/ Gouge orientation unclear due to broken core, and, .

1325.6 1325.8 Broken Blocky Core w/ Gouge again no clear orientation.

The lower contact of the ultramafic sequence is sharp with veining at 47 degrees.

Magnetic susceptibilities across this corridor include :.

1148.2 1148.3 Ms 11.2 brownish and calcitic.

1150.0 1150.1 Ms 14.9.

1151.2 1151.3 Ms 13.8 brown altered.

1156.0 1156.1 Ms 17.5.

1158.0 1158.1 Ms 15.4 mi.

1162.0 1162.1 Ms 27.1.

1166.0 1166.1 Ms 13.4 mi.

1171.0 1171.1 Ms 22.3 mi.

1180.0 1180.1 Ms 24.8 mi.

1182.0 1182.1 Ms 30.6.

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
1190.0	1190.1	Ms 11.4 mi.								
1199.5	1199.6	Ms 12.2 mi.								
1210.5	1210.6	Ms 12.7 mi.								
1220.0	1220.1	Ms 25.3 mi.								
1230.0	1230.1	Ms 3.34 contact area mi.								
1235.0	1235.1	Ms 44.9.								
1250.0	1250.1	Ms 49.2.								
1260.0	1260.1	Ms 25.0 mi.								
1270.0	1270.1	Ms 10.8.								
1279.0	1279.1	Ms 0.81 more weakly to nonmagnetic flow.								
1289.0	1289.1	Ms 14.2 mi.								
1299.0	1299.1	Ms 26.5 mi.								
1309.0	1309.1	Ms 33.2 mi.								
1319.0	1319.1	Ms 0.95 mi contact zone.								
1322.0	1322.1	Ms 1.23.								
1325.5	1325.6	Ms 44.4.								
1328.0	1328.1	Ms 29.8.								
1331.0	1331.1	Ms 1.45.								
1333.0	1333.1	Ms 2.20.								
1336.0	1336.1	Ms 32.6.								
1339.0	1339.1	Ms 19.9.								
1345.0	1345.1	Ms 20.6.								
1346.4	1996.8	BASALT GABBRO								
		Contact into a sequence of either coarse basaltic flow or gabbro with a minimal contact effect from the adjacent ultramafic expressed by chlorite alteration, some local pervasive calcite and patchy magnetism over the top 5 feet - strongest to 1347.3 feet.	26777	1346.4	1349.0	2.6	NIL	.001	.000	22
			26778	1388.0	1391.0	3.0	TR	nil	.000	3
			26779	1391.0	1394.0	3.0	1-2	nil	.000	7
			26780	1394.0	1397.0	3.0	NIL	nil	.000	5
		Below the weakly developed contact effects, the coarse flow is rather uniform in appearance, fresh in nature, medium to dark grey green in colour, weakly to nonmagnetic, poorly veined with quartz calcite and epidote +/- chlorite fractures and very sparsely to unmineralized. The rock has a gabbroic texture with intergrown plagioclase and mafic minerals and there are no specific features to determine if the package is intrusive or extrusive. Veining averages less than 5% calcite and quartz often with associated epidote or chlorite at vein margins. The sequence is also cut by fine, apparently late alteration healed fractures with or without calcite. The pyrite content is minimal and tends to cue with the quartz +/- calcite veins - the best example of this is from 1391.5 to 1394.0 where there is 1-2% pyrite in an area with 10 to 15% quartz veining.	26781	1549.7	1551.7	2.0	NIL	nil	.000	nil
			26782	1551.7	1554.0	2.3	TR	nil	.000	3
			26783	1554.0	1556.0	2.0	1-2	nil	.000	5
			26784	1556.0	1557.5	1.5	TR-1	nil	.000	3
			26785	1557.5	1560.0	2.5	NIL	nil	.000	7
			26786	1578.0	1581.0	3.0	TR	nil	.000	7
			26787	1581.0	1584.0	3.0	TR	nil	.000	2
			26788	1584.0	1587.0	3.0	1-2	nil	.000	nil
			26789	1587.0	1590.0	3.0	TR	nil	.000	16
			26790	1590.0	1593.0	3.0	TR	nil	.000	2
			26791	1593.0	1596.0	3.0	TR	nil	.000	5
			26792	1596.0	1598.0	2.0	TR	nil	.000	nil
			26793	1598.0	1600.5	2.5	TR	nil	.000	3
		Magnetic susceptibilities tend to be low in the sequence as :	26794	1600.5	1603.0	2.5	TR	nil	.000	1
			26795	1603.0	1606.0	3.0	TR	nil	.000	3
		1348.0 1348.1 Ms 5.21 in weakly magnetic contact zone.	26796	1606.0	1609.0	3.0	TR-1	nil	.000	nil
		1358.0 1358.1 Ms 0.36.	26797	1609.0	1612.0	3.0	TR-1	nil	.000	2
		1368.0 1368.1 Ms 0.28.	26798	1612.0	1615.0	3.0	TR	nil	.000	2
		1388.0 1388.1 Ms 0.31.	26799	1670.0	1673.0	3.0	NIL	nil	.000	nil
		1392.0 1392.1 Ms 0.12 veined area.	26800	1673.0	1676.0	3.0	TR	nil	.000	5
		1398.0 1398.1 Ms 0.34.	26801	1676.0	1678.0	2.0	TR	nil	.000	13
		1418.0 1418.1 Ms 0.36.	26802	1678.0	1681.0	3.0	TR	nil	.000	3

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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quite variable magnetic susceptibilities from 0.21 to 51.7 - averaging in the 3 to 7 range. The down-hole contact is foliated to streaky altered at 60 to 65 degrees over 27 cms.

1581.6 1581.7 Ms 7.45.

1584.4 1585.5 Ms 33.7.

1590.9 1591.0 Ms 1.87.

1600.5 1622.2 Basalt.

Continue in dark grey green (to locally almost black from amphibolitization) basaltic flows with irregularly spaced streaky altered to foliated, fine grained sections that probably represent flow margins. Pyrite mineralization is locally better, to trace to 1%, in the more amphibolitized parts, calcite and epidote alteration are variable. This section is also cut by a narrow mafic dyke from 1616.0 to 1618.3 at 28/5 degrees, and, the lower contact appears to be along a 4 cm dyke at 37 degrees that has been intruded next to a foliated flow top. The main dyke is dull grey green to brownish grey green in colour, very fine grained but flecked with coarser amphibole to 3 mms, variably calcitic, nonmagnetic, poorly veined to fractured and sparsely mineralized. Magnetic susceptibilities are more stable across this section from 0.43 to 1.47 - even in the mafic intrusive.

1603.0 1603.1 Ms 1.47.

1608.6 1608.7 Ms 0.43.

1617.0 1617.1 Ms 0.52 mi.

1616.0 1618.3 Mafic Intrusive.

1622.2 1744.0 Basalt.

Return to the coarse flow style of assemblage as seen above 1549.7 with the exception that the rocks are slightly darker in colour than before. Otherwise, the rocks are nearly identical with a gabbroic texture, weak veining and alteration, very minor sulphides, and, relatively uniform magnetic susceptibilities from weakly to nonmagnetic rocks. There is some grungy epidote +/- calcite alteration locally in the system but nothing that appears to be clearly flow top style of material until 1742.4 to 1744.0 at 27/34 degrees. Between 1673.8 and 1677.7 there are three irregular veins at 0 to 25 degrees to the core axis with a very hard, massive, black mineral that may be tourmaline - some accessory epidote, calcite and chlorite alteration here but the sulphide association is weak. There is, however, some accessory pyrite in the order of 2-3% between 1718.6 and 1722.6 associated with quartz calcite fractures, a pervasive overprinting calcite, accessory chlorite and epidote, and, weak amphibolitization.

1742.4 1744.0 Flow top.

1622.7 1622.8 Ms 0.40.

1632.0 1632.1 Ms 0.36.

1643.9 1644.0 Ms 0.40.

1659.0 1659.1 Ms 0.38.

1673.0 1673.1 Ms 0.32.

1674.0 1674.1 Ms 0.35 with veining and tourmaline.

1683.0 1683.1 Ms 0.38.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
------------	-----------	---------	----------	------	---------	----------	---------

rapid change in magnetic susceptibility amongst some blocky core. The basalt is dark green in colour, chloritic, variably calcitic, weakly to locally moderately magnetic, and is variably foliated at 0 to 45 degrees. Pervasive calcite alteration is most often associated with the foliated sections. Some tiny white earthy flecks of possible leucoxene are also noted in this area. Both veining and mineralization are poor. The core is locally blocky to broken which confuses the definition of the lower contact. Magnetic susceptibilities include :.

1872.0 1872.1 Ms -955.
1873.2 1873.3 Ms 6.87.
1875.5 1875.6 Ms 0.40.
1879.3 1879.4 Ms 1.31.
1880.7 1880.8 Ms 3.41.
1882.2 1882.3 Ms 4.92.

1882.6 1996.8 High Mag Basalt amphibolitic.

Contact into magnetic basalts / iron tholeiite alluded to above. This system is the basal package prior to contact with an ultramafic sequence that seems to mark an entrance into the Anoki Deep Wedge. As a result the basalts are variably altered and deformed, and exhibit a moderate to well developed foliation from 10 to 60 degrees to the core axis - shallow core angles dominate. At the outset, this package consists of dark green, chloritic massive to weakly foliated basalts with isolated flecks of leucoxene and irregular, patchy amphibolitization. With depth, particularly after 1916, the basalts are more strongly (albeit not uniformly) amphibolitic and strongly calcitic to the base of the system. There is minor accessory pyrite in this area - elevated pyrite contents tending to be most closely allied with the strongest amphibolitization. The rocks are moderate to strongly magnetic, moderately to well veined and fractured with calcite and sparsely mineralized with pyrite.

Within this lower basalt package there are a couple of interesting units as : irregular quartz-calcite veining running along the core axis from 1887.2 to 1889.3 with 1-2% disseminated pyrite; a very fine grained, amphibole-speckled, calcite fractured, reddish brown mafic intrusive from 1928.3 to 1929.1 at 42/44 degrees; a highly fractured to brecciated, grey to pinkish remnant of a felsic dyke from 1956.8 to 1957.6; a second, pale greyish potential felsic dyke remnant from 1964.3 to 1965.3 at 55/17 degrees; and, another mi - grey, calcitic, 4.5 cms, at 24 degrees at 1978.3. The two possible felsic dykes are very fine grained with only a hint of a porphyritic texture - both occur within highly amphibolitized rocks and are fractured to brecciated from the deformation. Mineralization in the dykes is very minor. The lower contact of the basalt is sharp at 36 degrees. Magnetic susceptibilities include :.

1883.0 1883.1 Ms 13.3.
1888.0 1888.1 Ms 24.7.
1895.3 1895.4 Ms 53.9.
1910.0 1910.1 Ms 45.2.
1919.4 1919.5 Ms 102.0.
1928.9 1929.0 Ms 8.20 mi.

From To
(ft) (ft)

Geology

Sample From To Len PY AU AU1 AU2
No. (ft) (ft) (ft) % OZ/T OZ/T PPB

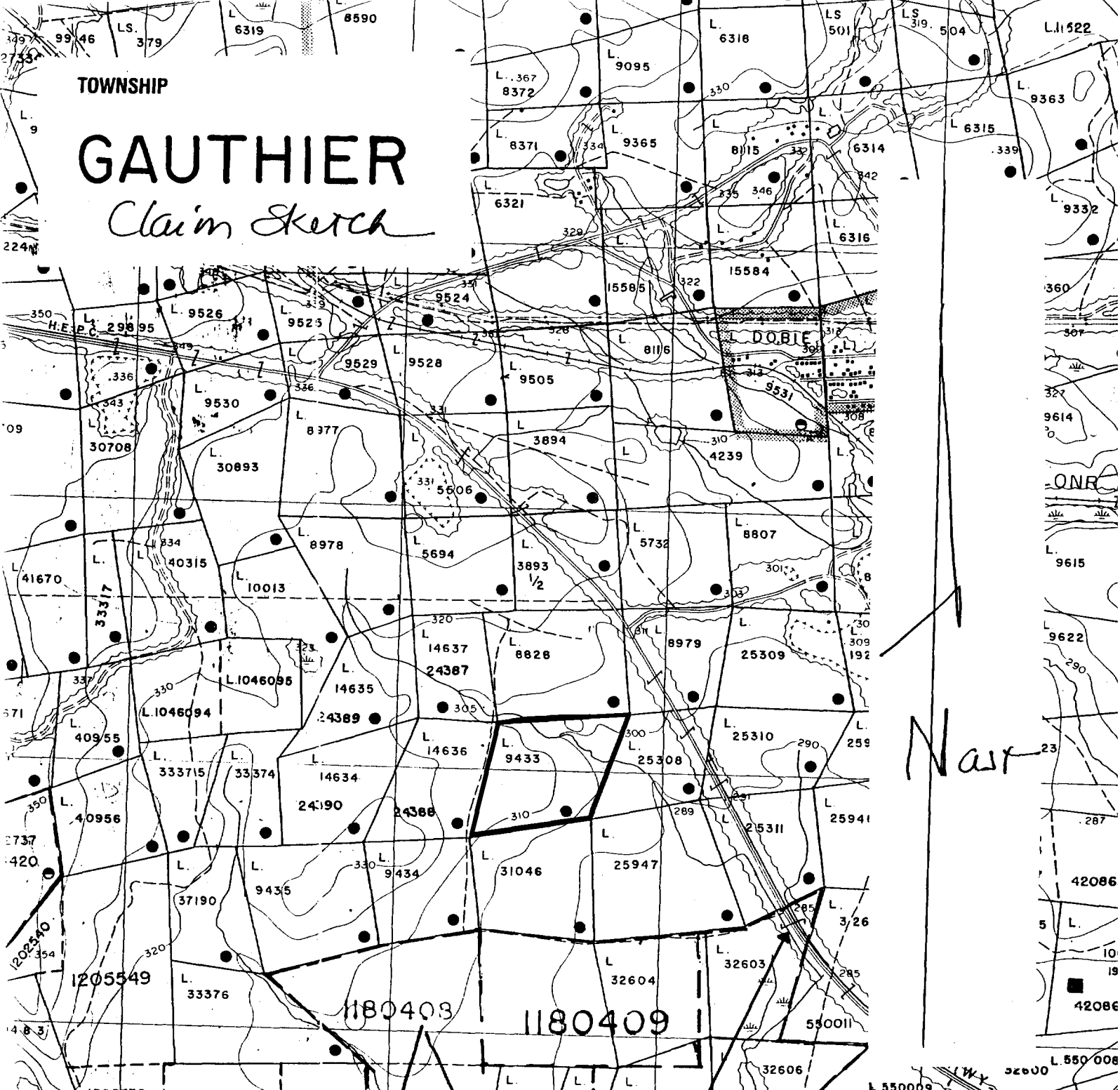
2003.0 2003.1 Ms 44.4.
2012.5 2012.6 Ms 56.2.
2022.0 2022.1 Ms 36.4.
2036.0 2036.1 Ms 28.0.
2047.0 2047.1 Ms 2.42 flow top.
2049.4 2049.5 Ms 26.3 altd 1F.
2059.5 2059.6 Ms 27.1 altd 1F.
2065.0 2065.1 Ms 9.95 flow top.
2076.0 2076.1 Ms 27.4.
2083.6 2083.7 Ms 29.9.
2098.2 2098.3 Ms 0.46 flow top.
2101.0 2101.1 Ms 1.30 flow top.
2106.0 2106.1 Ms 23.5.
2116.0 2116.1 Ms 18.1.
2124.1 2124.2 Ms 22.9.

2125.4 End of Hole.

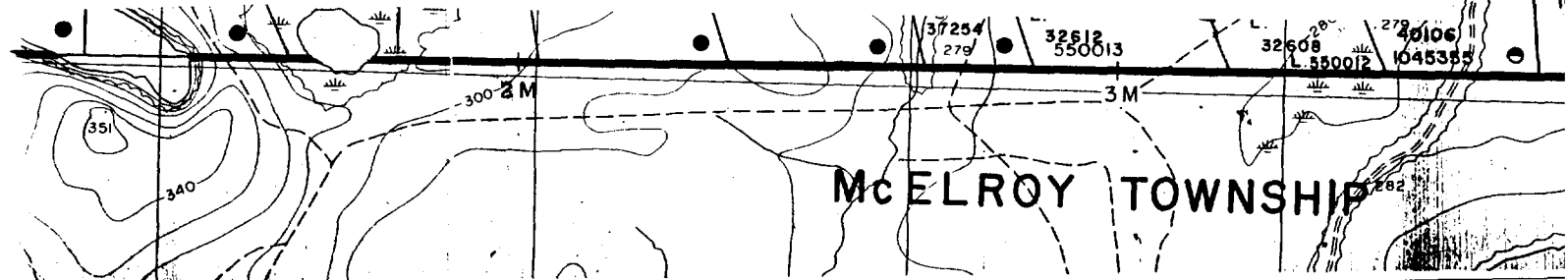
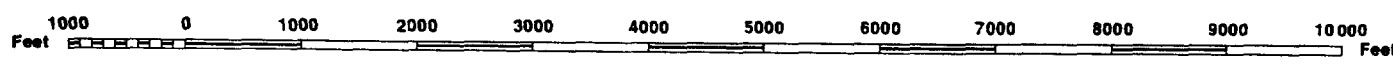
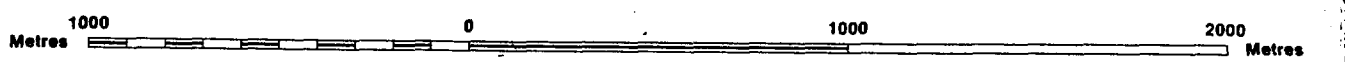
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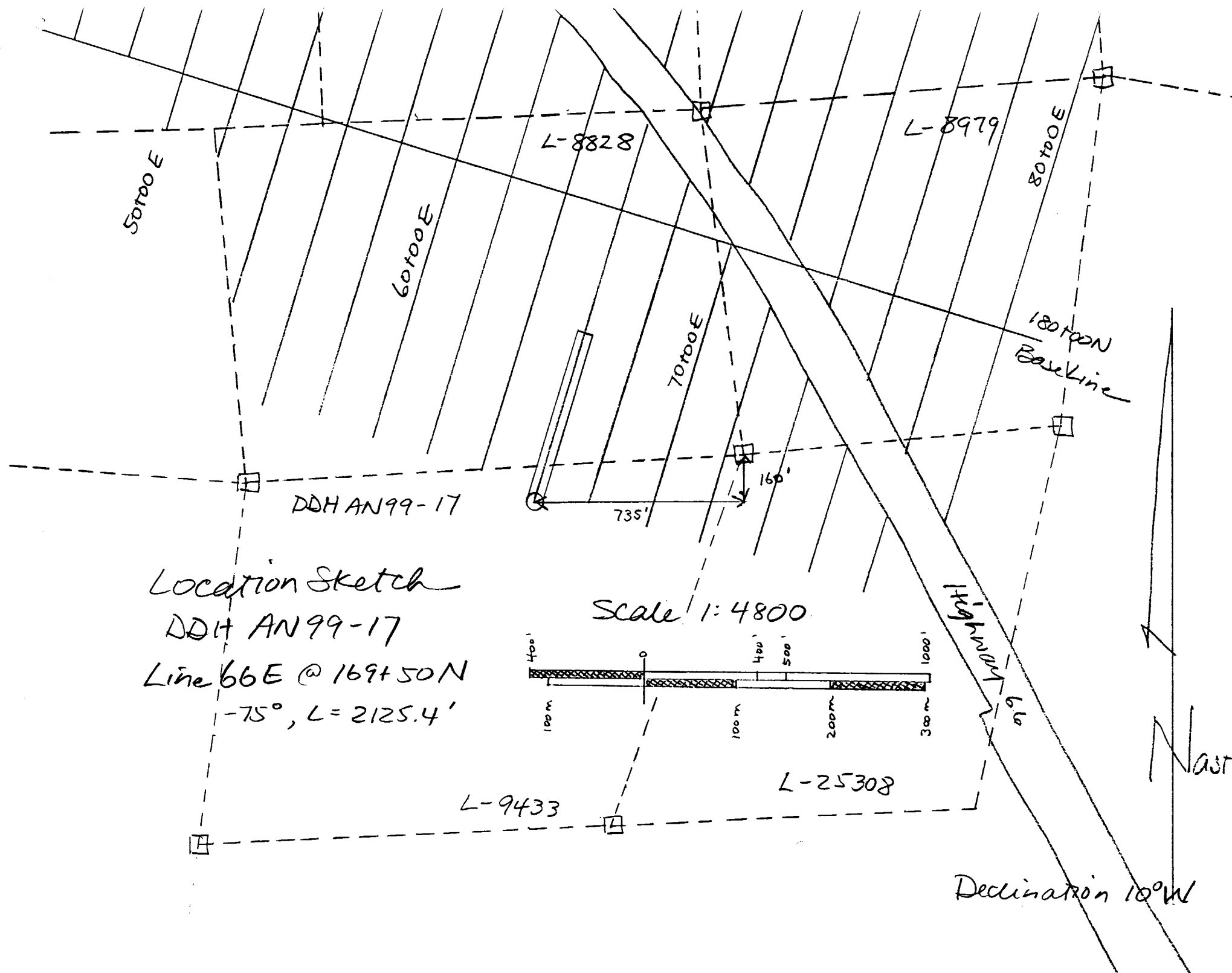
GAUTHIER

Claim Sketch



Scale 1:20 000





Location Sketch
 DDH AN 99-17
 Line 66E @ 169+50N
 -75°, L = 2125.4'

Drill Hole: AN99-18

QUEENSTON MINING INC

Property: ANOKI Collar loc from #3 post L-8979: 130'N, 185'E
Northing: 17500.00
Easting: 7400.00
Elevation: 11000.00

DIAMOND DRILL HOLE RECORD

Collar Azimuth (Grid) .0
Collar Dip: -55.0
(0 Degrees Grid equals 017 degrees True)
Hole Length: 980.4

*** Dip Tests ***			*** Dip Tests ***		
Depth	Azi.	Dip	Depth	Azi.	Dip
32.8		-54.0	590.4		-54.5
295.2		-56.0	885.6		-53.5

Date Started: June 18, 1999
Date Completed: June 29, 1999

Drilled by: Benoit Diamond Drilling
Core Size: NQ
Material left in hole NX CASING
Core Location: Upper Canada Site #1
Logged by: Dale R. Alexander

Dale R Alexander

Date Printed: 8 Jan, 2001

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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SUMMARY LOG

.0	19.7	OVERBURDEN
19.7	382.0	BASALT
382.0	427.1	INTERFLOW MATERIAL
427.1	537.1	BASALT
537.1	553.8	INCIPIENT ALTERED ULTRAMAFICS SHEAR ZONE
553.8	803.4	BASALT
803.4	829.3	CONTACT ZONE
829.3	980.4	BASALT

2.20881

RECEIVED
FEB 07 2001
GEOSCIENCE ASSESSMENT
OFFICE

PROVINCIAL RECORDING
OFFICE - SUDBURY
RECEIVED
FEB 07 2001
A.M. 9:50 P.M.
7|8|9|10|11|12|1|2|3|4|5|6



32D04SW2021 2.20881 GAUTHIER

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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A breakdown within the system includes :.

19.7 96.5 Basalt massive flows.

96.5 129.9 Basalt massive to pillowed.

129.9 293.2 Pillowed.

With depth, the pillowed package appears to grade more magnetic with magnetic susceptibilities in the 0.50 to 1.00 range as compared against less than 0.50 at the start of the system. This phenomenon is partly a function of the amount of selvage material which is invariably magnetic. Magnetic susceptibilities in the order of 100 to in excess of 300 are readily encountered in selvage material with finely granular calcite, magnetite and chlorite +/- pyrite. Also within the more magnetic rocks there is more chlorite at the apparent expense of epidote. The rocks remain quite siliceous. Lower contact at 61 degrees. Areas of interest within the pillowed sequence include :.

137.3 137.9 Broken Blocky Core w/ Gouge.

At 200.8 to 201.3 and 202.0 to 203.4, there are two wider than average irregular quartz calcite veins at 57/65 and 38/35 degrees respectively. The pyrite content is slightly elevated here but that is largely due to selvage material rather than the veins themselves.

At 207.1, contact into a strongly magnetic flow bottom ?? or interflow material with magnetic susceptibilities to 325 - this section appearing to mark the start of much more strongly magnetic selvage to interpillow material. Section from 207.1 to 207.5 at 61/65 degrees.

At 227.5, a 1.7 cm, quartz-calcite vein at 38 degrees with traces of chalcopyrite.

247.9 250.8 Mafic Intrusive Contact into another of the dark brownish to black, calcitic, amphibolitic, metamorphosed dykes seen earlier in the drillhole. As before, the rock is nonmagnetic (MS 0.30 to 0.41), weakly fractured with calcite and very sparsely mineralized with pyrite. Contacts are at 28/70 degrees.

258.0 259.6 Pyritic A narrow section averaging about 10% pyrite in a selvage area to interpillow material. There is some accessory silica here, and some vuggy calcitic fracturing, otherwise the section is typically calcitic and magnetic. The lead into this section similarly contains a mix of selvage material from 256.3 to past 261 - magnetic susceptibilities are in the range of 8.5 to 98.9 with a value of 65.3 in the pyritic section, and, 0.87 plus 1.98 in the more central parts of pillows above and below the zone respectively. There is also accessory fracturing with calcite to almost a vein breccia just before the pyritic section from 256.6 to 258.0 - MS 22.4. Outside contacts of the pyritic section are at 34/12 degrees.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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286.2 288.4 Mafic Intrusive Contact into a bit fresher mafic dyke. This unit is dark brownish green in colour, very fine grained with a weak granular texture, and is finely flecked with acicular crystals of amphibole. Unlike prior dykes this one is very weakly magnetic with susceptibilities of 0.77 to 1.52. The rock is weakly overprinted with calcite, and is neither veined nor mineralized. Contacts are at 57/56 degrees with little to no chilling.

293.2 319.5 Basalt massive to pillowed.

Within this package of basalt there is a transition from pillowed to massive flows. As a result, magnetic susceptibilities are more uniform in the massive flows from 0.71 to 1.20, with more erratic values from 3.0 to 72.4 in the selvage style material (72.4 at lower contact). Definition of individual flows is not totally clear but, in addition to some selvage to interpillow material, there are local crudely developed quench textures and foliated to weakly brecciated flow margins in the order of 30 cms to 1 meter apart. The lower contact is well defined along a pillowed flow or flow top at 24 degrees.

319.5 382.0 Basalt massive flows.

Return to a package of massive flows as noted at the collar of the drillhole. In the upper half of this section flow margins are highlighted by weakly brecciated and foliated zones +/- a local crude suggestion of quench textures. In the lower part of this package flows are interrupted by three mafic dykes that confuse the flow sequence. In general the massive flows are more uniform magnetically than the pillowed zones with magnetic susceptibilities in the 0.38 to 1.22 range except around flow margins where accessory magnetite continues to exist with susceptibilities from 2.65 to 15.9. Veining and fracturing with calcite +/- epidote and chlorite continue but the pyrite contents are less substantial than in the pillow selvage zones seen earlier. The lower contact of the basalt is surprisingly subtle amongst blocky core at 26 degrees. The mafic intrusives within the lower part of the system include ..

358.3 369.1 Mafic Intrusive The largest dyke in the system here, this mafic intrusive is brownish altered and partly amphibolitized up to 361.0 to 361.5 where the rock grades to more of a brownish green and fresher mafic intrusive that is fine grained to granular textured and flecked with amphibole. The dyke is weakly to moderately overprinted with calcite and is moderately magnetic with susceptibilities from 8.88 to 24.8 (higher in the amphibolitized area). At the shallow contacts magnetism is more erratic with some seeming dipole effects - contacts are at 15/6 degrees. The amphibolitized part of the dyke is fractured to veined with calcite and is sparsely mineralized with fine pyrite - the fresher part of the dyke is weakly fractured with calcite and is essentially unmineralized. Due to the very shallow contacts of this dyke, the next intersections may well be part of the same unit just threading the core axis.

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
The outside contacts of the interflow package are at 26/55 degrees - upper contact bleached a pale grey beige colour over 25 cms, lower contact sharp but a little irregular.										
427.1	537.1	BASALT								
		Return to a basaltic suite of rocks consisting of medium to very dark grey green and green massive flows with rather poorly defined flow tops. The suite varies from dark, very fine grained, siliceous flows to more granular textured massive flows that tend to be lighter in colour. Flow margins are represented by weakly brecciated sections wherein it is unclear where the top of one flow stops and the bottom of the next begins. Flow margins are further fogged by the presence of variable calcite and epidote veining and fracturing - from weak to moderate. Sulphide mineralization is very minor. At the start of the system, up to a contact with a mafic dyke at 433.7, the basalt is variably magnetic with magnetic susceptibilities in the range of 1.30 to 17.1. Thereafter, the sequence is largely nonmagnetic with susceptibilities in the 0.50 to 0.74 corridor except in the flow top locales where readings vary from 1.33 to 3.70. Two areas with accessory limy epidote and calcite alteration along with vuggy calcite stringers are deficient in magnetite with readings of 0.45 and 0.38, and there is a dramatic increase in alteration and magnetism across the lower contact zone after 534.5 with erratic susceptibilities from 11.7 to 41.8.	26873	427.1	430.0	2.9	NIL	.001	.000	19
			26874	496.0	499.0	3.0	TR-1	.002	.000	69
			26875	520.0	523.0	3.0	NIL	nil	.000	2
			26876	532.0	534.5	2.5	TR	nil	.000	5
			26877	534.5	537.1	2.6	TR	nil	.000	3
433.7	435.1	Mafic Intrusive Contact into the mafic intrusive noted above. The dyke is of the strongly calcitic, amphibolitic and nonmagnetic type with magnetic susceptibilities of 0.45 and 0.47. As normal the dyke is brownish in colour and granular textured, is weakly fractured with calcite and is essentially unmineralized. Contacts are weakly foliated and are along veining at 60/65 degrees.								
The lower contact of the basaltic package appears to start along more of an alteration front rather than a change in rock type. Beginning at 534.5 there is a subtle increase in calcite, chlorite and magnetism after a thin calcitic fracture at 72 degrees. By 535.4 the rock becomes very fine grained, is strongly calcitic and becomes more brownish to reddish toned leading up to the lower contact also at 72 degrees.										
537.1	553.8	INCIPIENT ALTERED ULTRAMAFICS SHEAR ZONE								
		Contact into a package of sheared, incipient altered ultramafic rocks although, due to the strong alteration, the protolith is not totally clear. The package can probably be better described as a chlorite schist with numerous grey to off-white and pinkish streaks of carb +/- quartz intercalated with brownish to reddish toned amphibolitized streaks - as relatively typical incipient alteration. Hints of an ultramafic chemistry are present throughout the section but other rock types are present as well. Also typical to incipient alteration is the moderate hardness of the rock, moderate to locally strong magnetism, the presence of ankerite, and fine,	26878	537.1	539.2	2.1	TR-1	nil	.000	2
			26879	541.2	542.3	1.1	TR	nil	.000	0
			26880	542.3	544.0	1.7	TR	nil	.000	2
			26881	544.0	545.8	1.8	TR	nil	.000	7
			26882	545.8	548.0	2.2	TR	nil	.000	5
			26883	548.0	550.6	2.6	TR-1	nil	.000	9
			26884	550.6	553.0	2.4	TR	.001	.000	29
			26885	553.0	553.8	.8	TR	nil	.000	17

From (ft)	To (ft)	Geology	Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
		disseminated pyrite. The rock is moderate to well foliated at 50 to 65 degrees to the core axis with local contorted material. The existence of a shear zone is largely defined from the foliation combined with the presence of lost core from 539.2 to 541.2 although no gouge is noted in the package.								
		539.2 541.2 Lost core.								
		The other rock types within the system include an apparent in-rafterd wedge of brownish green, very fine grained, strongly calcitic, magnetic basalt from 538.4 to 539.2 - contacts broken; a reddish brown, magnetic, amphibolitic, calcitic, granular to finely speckled unit of probable mafic intrusive origin from 545.8 to 550.6 - contacts at 55/50 degrees with veining, and; a narrow, calcitic, orange stained cherty interflow unit at the very base of the system from 553.2 to 553.8 at 60/65 degrees.								
		545.8 550.6 Mafic Intrusive.								
		553.2 553.8 Interflow Material.								
		Carbonate in the system is a mixture of both calcite and ankerite - the rocks up to 542.3 being very strongly calcitic, grading to ankeritic with late calcite fractures below that point aside from a central core of the mafic intrusive which is calcitic, and, the cherty interflow section at the end of the zone which is similarly calcitic. Aside from the cherty interflow at the lower contact with a reading of 0.45, all of the rocks in this corridor are moderate to strongly magnetic with magnetic susceptibilities in the order of 13.3 to 45.2. The lower contact of the system is at 56 degrees.								
553.8	803.4	BASALT								
		Contact into a package of medium to pale grey green and grey basalts that are much lighter in colour and less magnetic than any of the basaltic rocks seen to date - an Mg tholeiite ?? The basalt is fine grained to very fine grained with a local mottled texture that appears to reflect a variable alteration with calcite. Magnetic susceptibilities seem to occupy a rather narrow range from 0.10 to 0.20. The core is very weakly fractured with calcite +/- chlorite and is essentially unmineralized.	26886	553.8	556.0	2.2	NIL	nil	.000	2
			26887	556.0	559.0	3.0	NIL	nil	.000	0
			26888	612.0	615.0	3.0	TR-1	nil	.000	7
			26889	615.0	618.0	3.0	TR	.001	.000	34
			26890	618.0	620.0	2.0	TR	.001	.000	31
			26891	620.0	621.7	1.7	TR	nil	.000	3
			26892	621.7	624.7	3.0	NIL	nil	.000	3
			26893	624.7	627.0	2.3	TR	nil	.000	7
		From 578.6 to 579.3, the light coloured basalt is cut by a narrow mafic dyke at 51/54 degrees. The dyke has a crudely developed gabbroic to granular texture with plagioclase, mafic minerals and minor calcite. Unlike most of the mafic dykes, the rock is dull to dark grey green in colour and is not speckled with amphibole. The dyke is weakly fractured with calcite and is mineralized with fine traces of pyrite. Both contacts are sharp and slightly chilled. Magnetic susceptibilities are slightly elevated over the adjacent basalt at 0.63 and 0.66.	26894	627.0	630.0	3.0	TR	nil	.000	14
			26895	722.0	725.0	3.0	TR	nil	.000	10
			26896	725.0	728.0	3.0	TR-1	nil	.000	7
			26897	728.0	729.2	1.2	2-3	nil	.000	15
			26898	729.2	730.6	1.4	TR	nil	.000	0
			26899	730.6	733.0	2.4	TR	nil	.000	0
			26900	733.0	736.0	3.0	NIL	nil	.000	5
			26901	736.0	739.0	3.0	NIL	.001	.000	24
			26902	739.0	741.4	2.4	TR	.001	.000	19
		At 607.2 the first of the flow features in the sequence begin to emerge - here brecciated margins to adjacent flows with a weakly bleached, siliceous, irregular top averaging 46 degrees to the core axis. Flow features are	26903	741.4	744.0	2.6	NIL	nil	.000	5
			26904	775.0	778.0	3.0	TR	nil	.000	3
			26905	778.0	781.0	3.0	TR-1	.001	.000	26

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
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altered with calcite, sparsely mineralized with pyrite, and, magnetic susceptibilities in the 0.10 to 0.21 range. The rocks are moderately hard from local elevated silica and there are some weakly bleached sections with potential fine variolites - otherwise flow features are absent. The lower contact is along a streaky altered to foliated flow top at 21 degrees.

708.1 730.6 Basalt chloritic - contact into chloritic basalt that appears to mark a transition zone into another package of pale basalts with sections of cherty interflow. The couple of flows in this corridor are dark green and chloritic with a speckled to crudely developed gabbroic texture - some fine grained material suggesting flow margins. Magnetic susceptibilities are elevated over the adjacent flows with readings greater than 0.45, and there is a weak reaction to the presence of ankerite. At 724.8 the basalt is strongly flooded with calcite and becomes more strongly magnetic with susceptibilities of 7.38 and 9.90. The core then becomes increasingly amphibolitic after 727.7 with some incipient style alteration above a narrow chloritic, amphibolitic shear from 729.2 to 730.3 at 60 to 70 degrees. Susceptibilities in this area range from 14.8 to 38.2 but drop off rapidly in the shear to 12.8 then 0.79 and 0.86 by the lower contact at 52 degrees. Elevated pyrite is found in the incipient altered style of material just above the shear but otherwise occurs in only trace amounts. The lower contact is sharp with the adjacent flow being weakly foliated at its base at 50 to 60 degrees.

729.2 730.3 Shear Zone.

730.6 741.4 Basalt cherty - a section of pale, thin, siliceous basaltic flows with gradational contacts into cherty tops as some of the flows in the package from 607.2 to 678.0. As before the rocks are weakly fractured with calcite and very sparsely mineralized with pyrite. The flows are pale to medium grey and grey green in colour grading to pale greenish and brownish in some of the cherty tops. Magnetic susceptibilities are in the range of 0.10 to 0.12 with up to 0.46 adjacent to the prior shear. Layering in the cherts and the flow tops is at 55 to 60 degrees - lower contact broken but appears to be at 62 degrees.

741.4 773.8 Basalt - a section of pale grey green to grey, speckled to massive flows of probable Mg tholeiite composition with foliated to brecciated flow margins at 45 to 60 degrees. Flows appear to range from just over a foot to 17 feet (the first flow), with flow discrimination becoming a bit more obscure at depth. The rocks are weakly fractured with calcite and very sparsely mineralized with pyrite. Magnetic susceptibilities are in the range of 0.12 to 0.24. The lower contact is along a brecciated flow top with accessory silica over 17 cms at 46 degrees, marking a return to more cherty material in the system.

From To
(ft) (ft)

Geology

Sample No.	From (ft)	To (ft)	Len (ft)	PY %	AU OZ/T	AU1 OZ/T	AU2 PPB
------------	-----------	---------	----------	------	---------	----------	---------

cms.

The lower contact of the zone is moderately fractured to brecciated, calcite overprinted and is relatively sharp at 57 degrees.

829.3 980.4 BASALT

Contact into a package of dark green to dark grey green basaltic flows. This sequence of flows is quite different from the massive flows at the start of the hole in that flow centers vary from fine to medium grained and are speckled to flecked with hornblende producing a local mottled appearance. These are more typical Anoki Main Zone basalts or coarse flows and are different again from the gabbroic textured units which tend to be flecked to speckled with plagioclase. Flow margins are defined by fine grained to very fine grained rocks with or without fractured to streaky altered and foliated, to brecciated tops / bottoms - i.e. The gradation to finer grained rocks at flow margins hampers precise definition of individual flows. The only chert in the system appears toward the end of the hole after 953.6, where some flow tops are streaked with cherty material at an average of 60 degrees to the core axis. Indications from the cherty tops at the end of the hole is that tops are north.

The rocks are rather weakly fractured to pervasively altered with calcite, and mineralization is sparse. Pyrite is most common in some of the calcite fractured to partly amphibolitized flow margins - up to 2-3% but only on a cm scale. The flow margins also tend to be the more magnetic parts of the flows with susceptibilities in the 1.02 to 2.0 range with a local spike to 8.65 in the presence of magnetite. Flow centers occupy a narrow susceptibility range from 0.43 to 0.57 - other variations are found at the upper contact which grades rapidly from a high of 31.5 at the contact to uniformly less than 1.0 over the first 6 feet, and, in the cherty tops to interflow at the end of the hole which range from 0.13 to 0.37. The main alteration minerals are chlorite and calcite with lesser epidote and amphibole.

The chert component approaching the end of the hole is best defined as flow top material with streaks of chert rather than a true cherty interflow member. The occurrences consist of foliated to brecciated and possibly ropey flows with chert that are constrained in two corridors coded as :.

953.6 957.7 Flow top cherty - a mix of thin flows with several of the tops accompanied by chert, and;.

974.0 976.3 Flow top cherty - with 11 cms of chert and granular carb at the lower contact at 59 degrees.

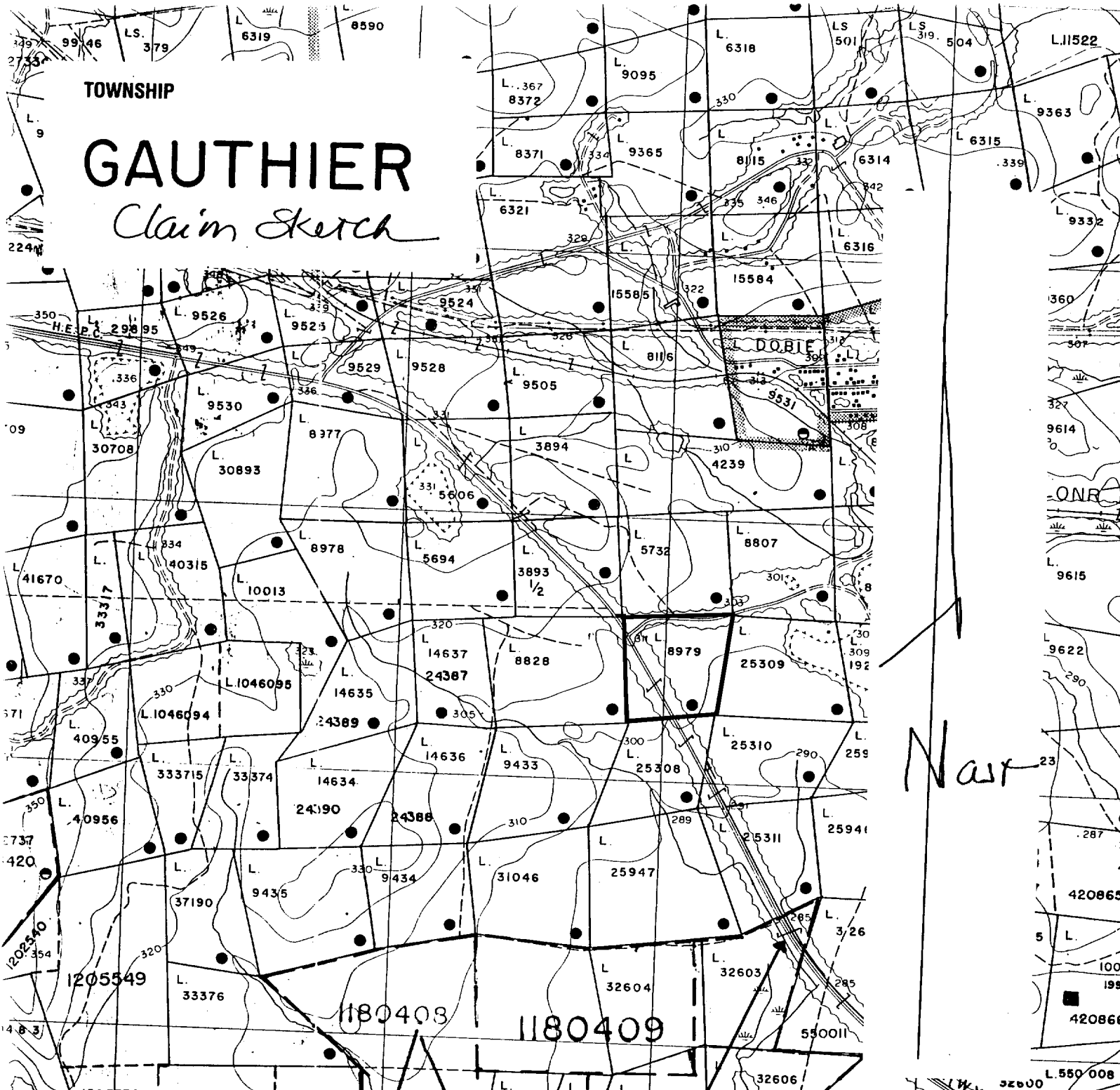
980.4 End of Hole.

26925	829.3	832.0	2.7	TR	.001	.000	17
26926	877.0	880.0	3.0	NIL	.001	.000	21
26927	880.0	883.0	3.0	TR-1	nil	.000	5
26928	883.0	886.0	3.0	TR-1	nil	.000	5
26929	953.0	956.0	3.0	TR	nil	.000	10
26930	956.0	959.0	3.0	TR	nil	.000	9
26931	974.0	977.0	3.0	TR	nil	.000	19

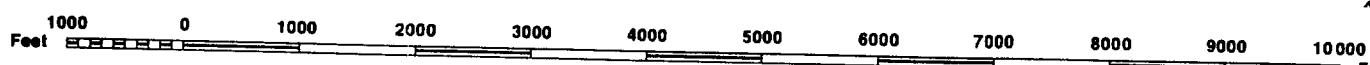
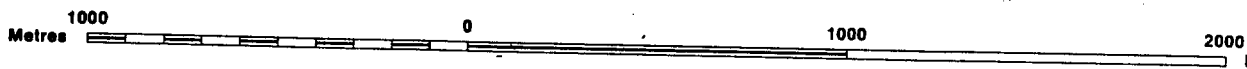
TOWNSHIP

GAUTHIER

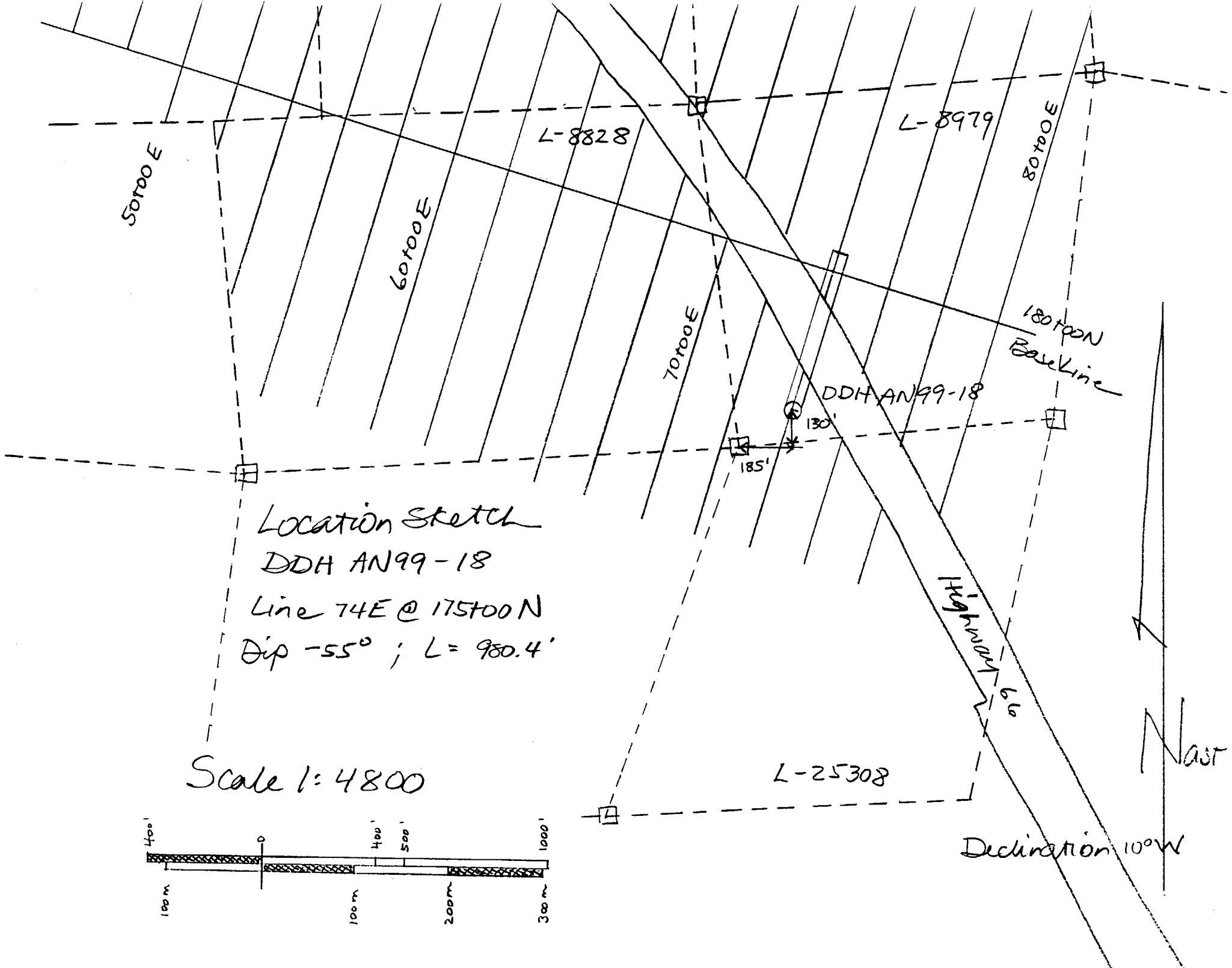
Claim Sketch



Scale 1:20 000

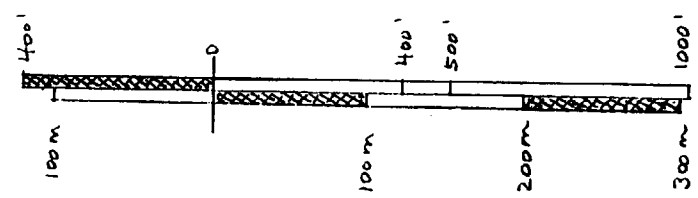


McELROY TOWNSHIP



Location sketch
 DDH AN99-18
 Line 74E @ 17500N
 Dip -55° ; $L = 980.4'$

Scale 1:4800





Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)
W0180.00050
Assessment Files Research Imaging



32D04SW2021 2.20881 GAUTHIER 900

Sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this work and correspond with the mining land holder. Questions about this collection and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240. - Please type or print in ink.

2.20881

1. Recorded holder(s) (Attach a list if necessary)

Form with fields for Name, Address, Client Number, Telephone Number, Fax Number for QUEENSTON MINING INC.

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Form with checkboxes for Geotechnical, Physical, and Rehabilitation work types. Includes fields for Work Type (DIAMOND DRILLING), Dates Work Performed, and Township/Area (GAUTHIER TWP.).

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required; - provide proper notice to surface rights holders before starting work; - complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are linked for assigning work; - include two copies of your technical report.

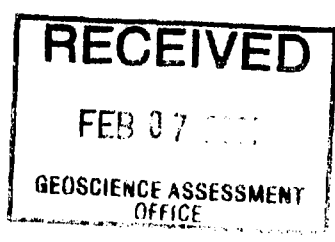
3. Person or companies who prepared the technical report (Attach a list if necessary)

Form listing technical report preparers: DALE ALEXANDER KIRKLAND LAKE EXPLORATION MANAGER, MURRAY MCGILL, PROJECT GEOLOGIST, TERRY PLAYFORD, CORE GRABBER; BENOIT DIAMOND DRILLING LTD.; SWASTIKA ASSAY LABORATORIES.

4. Certification by Recorded Holder or AGENT

I, WAYNE BENHAM, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent (Wayne Benham), Date (6/2/01), Agent's Address (Queenston Mining Inc., Toronto, Ontario), Telephone Number (416) 364-0001, Fax Number (416) 364-5098.



5. **Work to be recorded and distributed.** Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W0180.00050

2008031

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
1 G.751 L. 8828	10.5 ha	\$32,891	0	\$15,750	\$17,141
2 G.968 L. 8979	7.3 ha	\$25,348	0	\$10,9500	\$14,398
3 G.969 L. 9433	9.5 ha	\$17,711	0	\$14,100	\$3,611
4 1225507	6	0	\$2,400	0	0
5 1227221	1	0	\$400	0	0
6 1227222	1	0	\$400	0	0
7 1227223	1	0	\$400	0	0
8 1225731	3	0	\$1,200	0	0
9 1227326	1	0	\$400	0	0
10 1203540	2	0	\$800	0	0
11 ✓ 1226075	1	0	\$2,400	0	0
12 ✓ 1226196	2	0	\$4,800	0	0
13 ✓ 1226197	2	0	\$4,800	0	0
14 ✓ 1226198	2	0	\$4,800	0	0
15 ✓ 949740	1	0	\$400	0	0
16 ✓ 949781	1	0	\$400	0	0
17 ✓ 949827	1	0	\$400	0	0
Column Totals	25	\$75,950	\$24,000	\$40,800	\$35,150

I, WAYNE BENHAM, 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.

Signature of Recorded Holder or Agent Authorized in Writing

Date

Wayne Benham

6/2/01

6. Instructions for cutting back credits that are not approved.

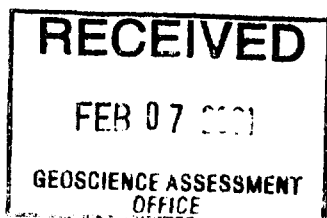
Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 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.

For Office Use Only

Received Stamp



Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

2.20881

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
18	859580	1	0	\$400	0
19	859581	1	0	\$400	0
20	859582	1	0	\$400	0
21	882658	1	0	\$400	0
22	882659	1	0	\$400	0
23	882660	1	0	\$400	0
24	892274	1	0	\$400	0
25	892275	1	0	\$400	0
26	892276	1	0	\$400	0
27	892277	1	0	\$400	0
28	892278	1	0	\$400	0
29	892279	1	0	\$400	0
30	980442	1	0	\$400	0
31	982172	1	0	\$400	0
32	982173	1	0	\$400	0
33	982174	1	0	\$400	0
34	982175	1	0	\$400	0
35	1096919	1	0	\$400	0
36	1096920	1	0	\$400	0
37	643183	1	0	\$400	0
38	643187	1	0	\$400	0
39	643213	1	0	\$400	0
40	643214	1	0	\$400	0
41	644007	1	0	\$400	0
42	644008	1	0	\$400	0
43	644478	1	0	\$400	0
44	644479	1	0	\$400	0
45	644480	1	0	\$400	0
46	644481	1	0	\$400	0
47	644488	1	0	\$400	0
48	644489	1	0	\$400	0
50	800153	1	0	\$400	0
51	800154	1	0	\$400	0
52	800155	1	0	\$400	0
53	800156	1	0	\$400	0

Column Totals

RECEIVED

\$75,950

\$38,000

\$40,800

\$35,150

FEB 07 2001

 GEOSCIENCE ASSESSMENT
OFFICE

W.P.
6/2/01



Schedule for Declaration of Assessment Work on Mining Land

Transaction Number (office use)

W 0180.00050

2, 200, 000

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
54	802410	1	0	\$400	0
55	802411	1	0	\$400	0
56	802412	1	0	\$400	0
57	983348	1	0	\$400	0
58	983349	1	0	\$400	0
59	1214034	1	0	\$400	0
60	1219966	1	0	\$400	0
61					
62					
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85					
86					
87					
88					
Column Totals		\$75,950	\$40,800	\$40,800	\$35,150

RECEIVED
 FEB 07 2001
 GEOSCIENCE ASSESSMENT
 OFFICE

W J...
 6/2/01

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, this 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 a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.20881

Work Type	Units of work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
DIAMOND DRILLING	3,108 feet	\$16.09/ft.	\$50,008
SUPERVISION	12 days	\$300/day	\$3,600
CORE LOGGING, DRILL LOGS, SECTIONS	42 days	\$282/day	\$11,850
GEOTECHNICIAN-CORE GRAB & SPLIT	28 days	\$150/day	\$4,200
ASSAYING	431 samples Au	\$12/sample	\$5,172
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
	TRUCK 28 days	\$30/day	\$840
	Fuel		\$280
Food and Lodging Costs			
Total Value of Assessment Work			\$75,950

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK	x 0.50 =	Total \$ value of worked claimed.
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Note:

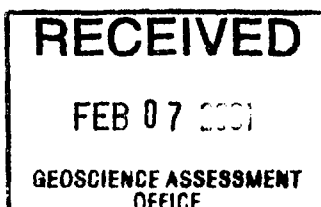
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, WAYNE BENHAM, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

Declaration of Work form as AGENT I am authorized to make this certification.
(recorded holder, agent, or state company position with signing authority)

Signature <i>W Benham</i>	Date 6/2/01
------------------------------	----------------



February 26, 2001

Wayne Benham
QUEENSTON MINING INC.
1116-111 RICHMOND STREET WEST
TORONTO, ONTARIO
M5H-2G4

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

Telephone: (888) 415-9845
Fax: (877) 670-1555

Dear Sir or Madam:

Submission Number: 2.20881

Status

Subject: Transaction Number(s): W0180.00050 Approval

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. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

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 **LUCILLE JEROME** by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY
Lucille Jerome
Acting Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.20881

Date Correspondence Sent: February 26, 2001

Assessor: LUCILLE JEROME

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W0180.00050	8828	GAUTHIER	Approval	February 21, 2001

Section:
16 Drilling PDRILL

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

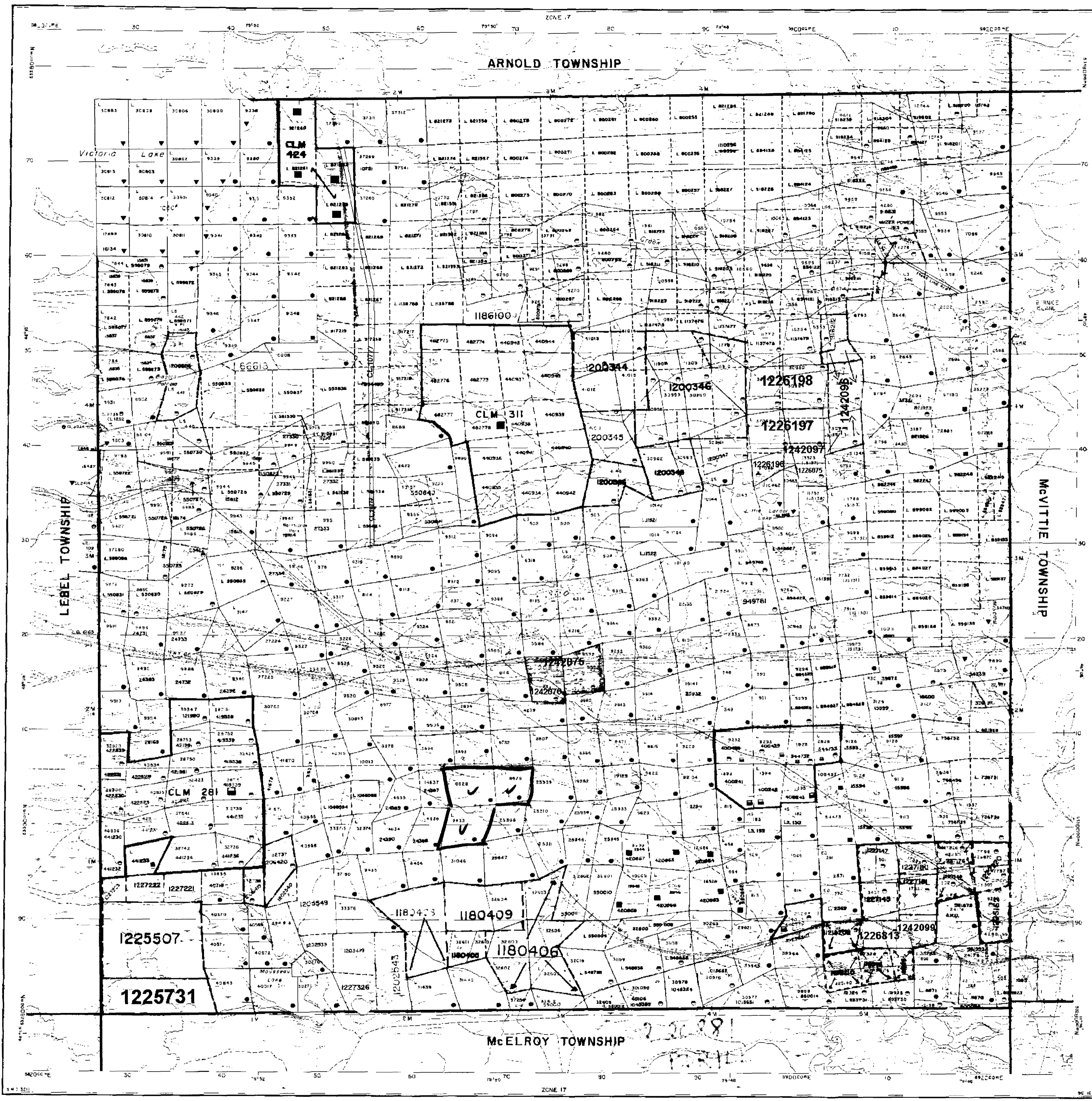
Correspondence to:

Resident Geologist
Kirkland Lake, ON

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

Wayne Benham
QUEENSTON MINING INC.
TORONTO, ONTARIO

Assessment Files Library
Sudbury, ON

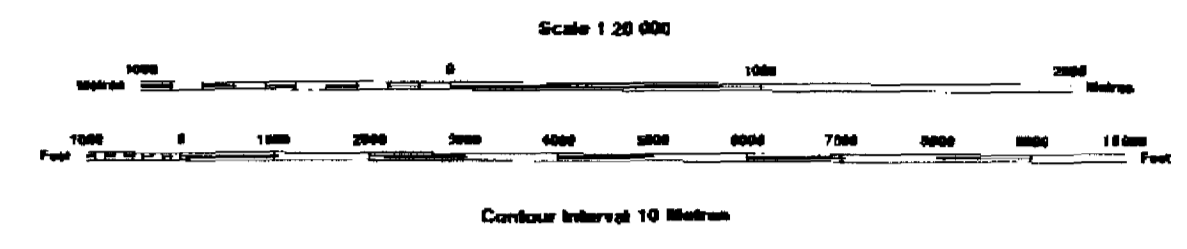


INDEX TO LAND DISPOSITION

PLAN
 G-3211
 TOWNSHIP

M.R.A. ADMINISTRATIVE DISTRICT
KIRKLAND LAKE
 MINING DIVISION
LARDER LAKE
 LAND TITLES/REGISTRY DIVISION
TIMISKAMING

GAUTHIER



AREAS WITHDRAWN FROM DISPOSITION
 M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M.+S. - MINING AND SURFACE RIGHTS

SYMBOLS

Description	Order No.	Date	Disposition	File
Boundary				
Township, Meridian, Baseline				
Road allowance; surveyed				
shoreline				
Lot/Concession; surveyed				
unsurveyed				
Parcel; surveyed				
unsurveyed				
Right of way; road				
railway				
utility				
Reservation				
Cliff, Pit, Pile				
Contour				
Interpolated				
Approximate				
Depression				
Control point (horizontal)				
Flooded land				
Mine head frame				
Pipeline (above ground)				
Railway; single track				
double track				
abandoned				
Road; highway, county, township				
access				
trail, bush				
Shoreline (original)				
Transmission line				
Wooded area				

DISPOSITION OF CROWN LANDS

Patent	
Surface & Mining Rights	●
Surface Rights Only	○
Mining Rights Only	◐
Lease	
Surface & Mining Rights	■
Surface Rights Only	□
Mining Rights Only	◼
Licence of Occupation	▲
Order-in-Council	○
Cancelled	⊗
Reservation	⊙
Sand & Gravel	⊕
LAND USE PERMIT	⊛

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

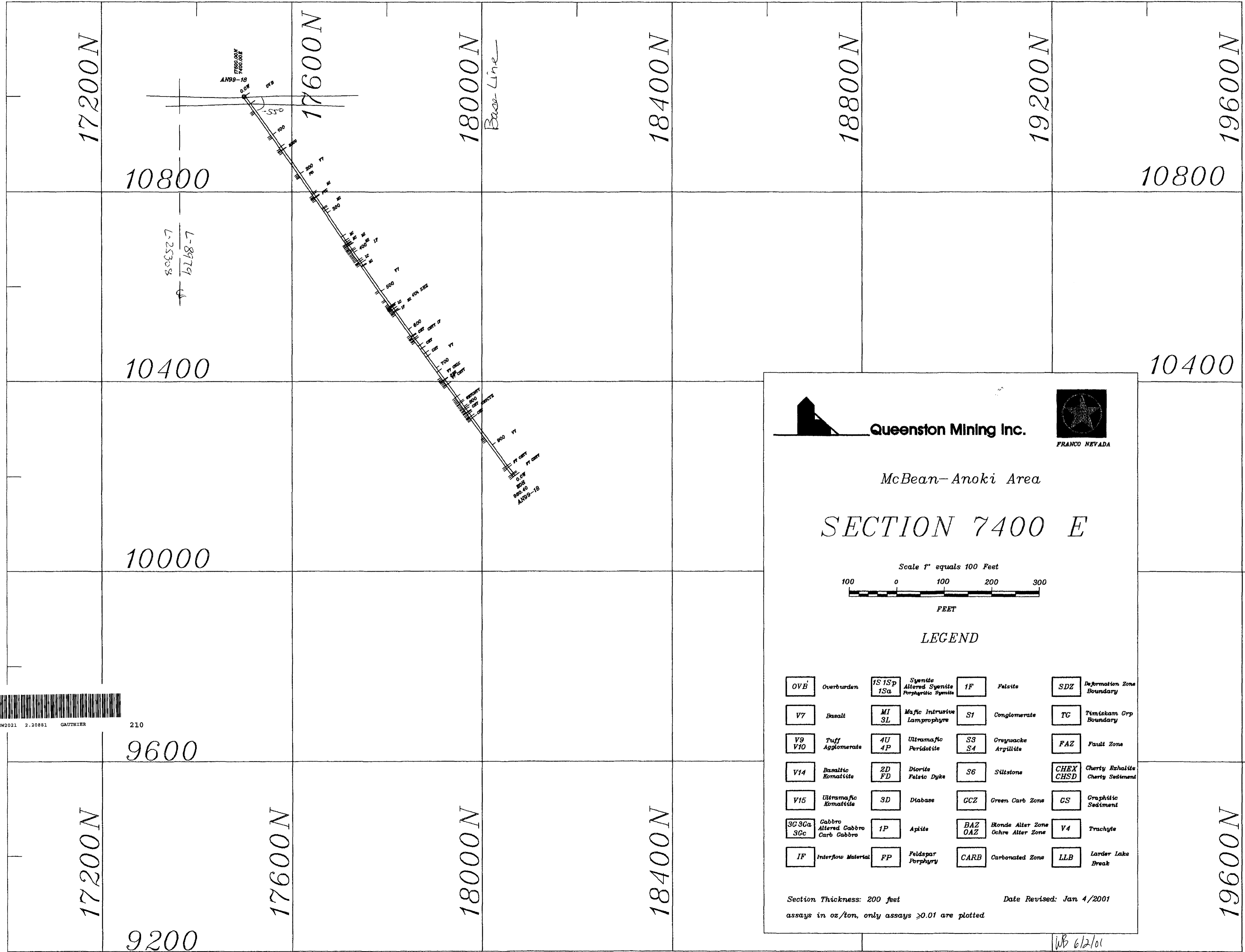
NOTICE OF FORESTRY ACTIVITY
 THIS TOWNSHIP / AREA FALLS WITHIN THE
 TIMISKAMING MANAGEMENT PLAN
 AND MAY BE SUBJECT TO FORESTRY OPERATIONS.
 THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:
 P.O. BOX 129
 5455th St. N.
 POB 129
 705-642-3222

ARCHIVED JULY 28, 1992
 ARCHIVED AUGUST 28, 1997
 CIRCULATED JANUARY 25, 1995 ML

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources
 The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only

Claim Line → L-8979
 AN99-18
 L-25308
 17.5°
 Line 7400E
 N. 35°

SECTION 7400 E



Queenston Mining Inc.
 FRANCO NEVADA

McBean-Anoki Area
SECTION 7400 E

Scale 1" equals 100 Feet
 100 0 100 200 300
 FEET

LEGEND

OVb Overburden	1S1Sp Syenite	1F Felsite	SDZ Deformation Zone Boundary
V7 Basalt	1Sa Altered Syenite	S1 Conglomerate	TC Timiskam Crp Boundary
V9 Tuff	MI Mafic Intrusive	S3 Argillite	FAZ Fault Zone
V10 Agglomerate	3L Lamprophyre	S4 Creguacke	CHEX Cherty Eschalite
V14 Basaltic Komatiite	4U Ultramafic	S6 Siltstone	CHSD Cherty Sediment
V15 Ultramafic Komatiite	4P Peridotite	GCZ Green Carb Zone	CS Craphtic Sediment
3C3Ca Gabbro	2D Diorite	BAZ Blonde Alter Zone	V4 Trachyte
3Cc Altered Gabbro	FD Felsic Dyke	OAZ Ochre Alter Zone	LLB Larder Lake Break
IF Interflow Material	3D Diabase	FP Feldspar Porphyry	
	1P Apitite	CARB Carbonated Zone	

Section Thickness: 200 feet
 assays in oz/ton, only assays >0.01 are plotted

Date Revised: Jan 4/2001

WB 6/2/01



320045W2021 2.20881 GAUTHIER 210