



42A07NW2010 2.18643 MACKLEM

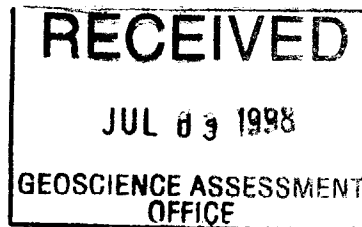
010

DIAMOND DRILL LOG

LEADER MINING INTERNATIONAL INC.

SHEET 1 of 6

HOLE NO.: ML-1-97
 LOCATION: 0+00; 4+00 South
 AZIMUTH: 360 degrees
 DIP AT COLLAR: -50 degrees
 ELEVATION: Surface
 CORE SIZE: NQ
 LOGGED BY: B. MacRae



DIP TESTS - ACID
 DEPTH DIP
 51 m -49 degrees
 200 m -46 degrees
 300 m -47 degrees

2.18643

PROPERTY: Nighthawk Lake
 TOWNSHIP: Macklem Twp.
 CLAIM NO.: P. 1206736
 STARTED: June 19, 1997
 FINISHED: June 22, 1997
 CONTRACTOR: Norex Drilling Ltd.

TOTAL DEPTH OF HOLE: 359 Meters

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
0	55.0	Overburden								
55.0	100.9	Altered Pillowed Mafic Volcanic -dark green -fine grained pillow selvages, carbonate amygdules, hyaloclastic interpillow material -sericite-chlorite alteration, occasional bright yellow green sericite wisps -strong carbonatization -foliation: 60 degrees to CA -some fine grained sections with dark green chlorite clots -20% irregular carbonate-quartz stringers at 60 to 5 degrees to CA 64.6 - 65.0 m: 50% carbonate-quartz material, minor pyrite 66.0 - 66.6 m: 30% carbonate-quartz material, sub parallel to CA, no visible sulphides 68.5 - 69.2 m: 25% carbonate-quartz material, 10 degrees to CA -some regular, narrow carbonate stringers, 27 degrees to CA, less than 0.5 cm wide	22101	61.65	62.80	1.15	0.002	nil		
			22102	62.80	63.80	1.00	nil			
			22103	63.80	65.00	1.20	0.002			
			22104	65.00	66.00	1.00	nil			
			22105	66.00	66.70	0.70	nil			
			22106	66.70	68.00	1.30	0.003			
			22107	68.00	69.00	1.00	nil			
			22108	69.00	70.00	1.00	nil			
			22109	70.00	71.00	1.00	0.003			
			22110	72.80	74.00	1.20	0.009			
			22111	78.90	79.80	0.90	0.003			
			22112	79.80	80.50	0.70	0.012			
		-74.0 m to end of unit: sericite-chlorite altered coarse pillow breccia, occasional pillows								
		-78.9 - 79.9 m: 20% carbonate-quartz material								
		-fine grained hematite stained carbonate developed around carbonate blobs at 100.44 m and 100.65 m								
		-99.36 - 100.04 m: very fine grained, grey, mafic dyke								

D.D.H.: ML-1-97

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
100.9	131.1	Mafic Pillowed Volcanic/Pillow Breccia -dark to medium green -amygdaloidal -carbonate and some sericite alteration, patchy pink hematite staining -breccia fragments are indistinct, pink to purple tinted (hematite staining), averaging 5 cm wide in a fine grained matrix -few carbonate-quartz stringers								
131.1	157.5	Mafic Volcanic (Fragmental?) -dark green -weak to moderate carbonatization -intermixed zones of large fragments, 3 cm wide, and small fragments, up to 1 cm wide, in a fine grained matrix near top of this unit gradually becoming more massive down hole; massive, medium to fine grained mafic flow by 139.0 m -148.4 - 149.8 m: quartz-carbonate vein, minor pyrite + minor chalcopyrite specks, also minor hematite (red, bluish colour) -157.3 - 157.5 m: quartz-carbonate, no visible sulphides, pinkish brown carbonate	22113	147.50	148.35	0.85	nil			
			22114	148.35	149.00	0.65	0.003			
			22115	149.00	149.75	0.75	0.507	0.542		
			22116	149.75	150.90	1.15	0.017	0.012		
157.5	171.7	Mafic Fragmental -dark green to black -moderate carbonatization -strong foliation: 65 degrees to CA -15% overall carbonate stringers to 163.0 m, occasionally with pink carbonate -from 163.0 m, less foliated; large, 3 cm wide and small, up to 1 cm wide fragments are present -167.5 m: fault gouge, 10 cm wide -169.9 - 170.2 m: quartz-carbonate vein, 40 degrees to CA -170.2 to end of unit: fine grained, massive, dark green	22117	169.70	170.20	0.50	nil			
171.7	185.1	Mafic Volcanic (Fragments? Pillows?) -light mottled green -sericite and carbonate alteration; sericite alteration is patchy and yellowish green								

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
185.1	189.9	-carbonate amygdules and masses up to 1-2 cm in size -amygdules and chlorite clots are elongate in direction of foliation at 70 degrees to CA and appear banded in last 1.5 m of this unit	22118	173.90	175.00	1.10	nil			
			22119	175.00	175.40	0.40	nil			
			22120	175.40	176.20	0.80	nil			
189.9	192.4	Contact Zone -transitional zone -colour variable, light to dark green -several repeating zones of a few isolated light green fine grained breccia fragments about 15 cm wide with indistinct rims followed by about a meter of dark green medium grained amygdaloidal and fragmental mafic volcanic -1 to 2% scattered, irregular carbonate stringers and masses -189.1 m: broken core -189.7 m: broken core -189.8 -189.9 m: crumbled and broken core								
192.4	193.45	Mafic Fragmental -dark to medium green -ragged fragments up to 5 cm; also other indistinct mafic volcanic breccia fragments -foliation: 30 degrees to CA -carbonate and chlorite alteration; weak, patchy sericite -about 15% small very irregular carbonate masses and stringers								
193.45	233.0	Mafic Volcanic -indistinct medium green breccia fragments, 10 cm long, in dark green matrix -becoming medium to fine grained, green beige coloured down hole -moderate carbonatization -sharp contact with next unit								
		Pillowed Mafic Volcanic -green, medium grained; upper contact is 15 cm of fine grained, dark green volcanic -moderate carbonatization								

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)				
FROM	TO											
233.0	270.3	-amygdaloidal; amygdules generally increase in size down hole from 1-2 mm to 3-5 mm where they are pink coloured at 201.75 m; amygdules elongated at 20 degrees to CA										
		-3 to 5% irregular carbonate stringers and masses with very minor quartz, pink purple hematite, occasional sericite wisps, rare tiny pyrite cubes										
		-201.75 -207.0 m: decrease in amygdules and hematite; increase in 2-3 mm chlorite clots; very occasional regular narrow carbonate stringers randomly oriented; dark green in colour; medium grained; moderately foliated at 45 degrees to CA; moderate carbonatization										
		-207.0 - 210.6 m: amygdules and hematite staining increase; minor pyrite										
		-after 210.6 m: volcanic breccia, flow contact?										
		-light to medium green pillowed mafic volcanic; amygdules as above		22121	210.60	211.35	0.75	0.014				
		-occasional pink stained carbonate stringers carry minor sulphide		22122	211.35	212.70	1.35	0.002	0.002			
		-occasional yellow green sericite wisps		22123	212.70	213.55	0.85	nil				
		-at 213.0 m: 8 cm of 80% carbonate material, minor scattered pyrite cubes and 2mm clots		22124	213.55	214.60	1.05	0.003				
		213.8 - 228.3 m: 5% irregular carbonate sometimes with quartz stringers, minor pyrite										
		-228.3 - 229.8 m: 60% carbonate material		22125	228.30	229.30	1.00	0.007				
		-229.8 - 232.0 m: 15% irregular and randomly oriented carbonate quartz stringers up to 2 cm wide		22126	229.30	230.00	0.70	nil				
				22127	230.00	230.95	0.95	nil				
		-after 232.0 m: gradual increase in sericite alteration results in a bright lime core colour		22128	230.95	231.95	1.00	0.021				
				22129	231.95	233.00	1.05	nil				
		Sericite Altered Amygdaloidal Pillowed Mafic Volcanic										
		-light apple green colour due to alteration										
		-increase in sericite alteration and silicification										
		decrease in carbonatization										
		-veins in this unit are quartz with tourmaline plus minor carbonate; wallrock proximal to veins is altered to very pale green										
		-233.0 - 235.1 m: highly altered, 30% quartz	22130	233.00	233.80	0.80	nil					
		234.55 - 235.1 m: 50% quartz, 5% tourmaline	22131	233.80	234.55	0.75	0.003					
			22132	234.55	235.20	0.65	0.002					
		-235.1 - 239.0 m: less altered mafic pillowed volcanic with frequent wisps of sericite	22133	235.20	236.30	1.10	0.007	0.002				
			22134	236.30	237.35	1.05	0.010					
			22135	237.35	238.10	0.75	0.003					

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
		-239.0 - 251.0 m: highly altered with very minor sulphide to 240.3 m: increase in carbonate quartz stringers, blebs to 20%	22136	238.10	239.00	0.90	0.003			
			22137	239.00	239.85	0.85	0.002			
			22138	239.85	240.70	0.85	0.002			
		From 240.3 m: 5-10% larger quartz carbonate veins, less carbonate present in the veins	22139	240.70	241.80	1.10	nil			
		247.65 - 248.50 m: high alteration around several quartz veins; 20% quartz and 80% bleached wall rock inclusions, tourmaline and very minor pyrite	22140	241.80	242.70	0.90	0.002			
			22141	242.70	243.70	1.00	0.009			
		248.5 - 249.9 m: less than 20% quartz and tourmaline	22142	243.70	244.65	0.95	nil			
			22143	244.65	245.70	1.05	nil			
			22144	245.70	246.80	1.10	0.002	0.002		
			22145	246.80	247.50	0.70	0.021			
			22146	247.50	248.50	1.00	nil			
			22147	248.50	249.70	1.20	0.003			
			22148	249.70	250.45	0.75	0.003			
			22149	250.45	251.00	0.55	0.005			
		-at 251.0 m: 0.35 m of 40% grey and white quartz veins with chloritic material and lime green wisps of sericite	22150	251.00	251.65	0.65	0.002			
			22151	251.65	252.65	1.00	0.009			
		-from 251.0 m: 15-20% irregular quartz and carbonate-quartz stringers with lime green sericite wisps in weakly to moderately carbonatized amygdaloidal pillowed mafic volcanic	22152	252.65	253.70	1.05	0.057	0.048		
			22153	253.70	254.75	1.05	0.002			
			22154	254.75	256.00	1.25	0.007			
			22155	256.00	257.00	1.00	0.003			
			22156	257.00	258.10	1.10	0.003			
			22157	258.10	259.25	1.15	0.012			
		-a several short, up to 0.2 m long, more highly altered sections in this part of the unit	22158	259.25	260.20	0.95	0.014			
		261.3 - 263.0 m: highly altered; 35% quartz + carbonate overall with bleached wallrock and a small amount of fuchsite?; includes 10 cm quartz + tourmaline vein	22159	260.20	261.30	1.10	0.005			
			22160	261.30	262.35	1.05	0.043			
			22161	262.35	263.00	0.65	0.010			
		265.35 - 266.70 m: 15% quartz + carbonate with some tourmaline in the quartz	22162	265.25	265.75	0.50	0.007			
		- 266.8 - 270.3 m: alteration intensity decreases down hole to 270.3 m	22163	265.75	266.85	1.10	0.005			
			22164	266.85	267.65	0.80	nil			
			22165	267.65	269.00	1.35	nil	nil		
			22166	269.00	270.25	1.25	0.005			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
270.3	359.0	Amygdaloidal Pillowed Mafic Volcanic -light to dark green, short sections of more lime green throughout -some pillow breccia -moderate to strong carbonatization, some pink carbonate -patchy sericite alteration seen as wisps -foliation: 60 degrees to CA -amygdules average 2-5 mm, up to 1 cm -foliated chlorite present in some pillows -1 to 2% carbonate and carbonate-quartz stringers -short sections of lime green more highly sericite altered zones; especially 280.0 - 282.8 m: with quartz carbonate stringers at 281.0 m, scattered tiny pyrite cubes in some hematite stained carbonate stringers 288.85 m: 2.5 cm quartz carbonate veinlet, 90 degrees to CA, contains 5% chalcopyrite in 0.5 - 1 cm clots, minor tourmaline, other nearby small quartz veins do not contain visible sulphides -292.85 - 294.40 m: 10-15% carbonate, carbonate-quartz, and quartz stringers; amygdaloidal; purple stained carbonate at 293.0 m -295.70 -298.6 m: sericite alteration increases; bright blood red hematite in the carbonate; 15% carbonate and quartz-carbonate stringers -298.6 - 299.25 m: silicification increases resulting in light bright green colour; about 5% narrow quartz and quartz-carbonate stringers with minor tourmaline -309.95 - 316.25 m: 10% carbonate and quartz stringers; some tourmaline in quartz stringers -to end of hole: up to 10% irregular carbonate and minor quartz stringers and masses; purple hematite staining common to 334.5 m; foliation: low angle to CA at 332.0 m; occasional pillow breccia with short sections of fragmental somewhat obscured in the foliation; wisps of sericite; strong carbonatization; several 5 cm wide carbonate veins -foliation: 60 degrees to CA at end at hole	22167	280.00	281.00	1.00	0.003	0.278		
			22168	281.00	281.80	0.80	0.002			
			22169	281.80	282.45	0.65	0.005			
			22170	282.45	283.10	0.65	0.051			
			22171	287.00	287.70	0.70	nil			
			22172	287.70	288.65	0.95	0.003			
			22173	288.65	289.15	0.50	0.259			
			22174	289.15	290.00	0.85	0.026			
			22175	290.00	290.80	0.80	0.005			
			22176	290.80	291.50	0.70	0.003			
			22177	291.50	292.50	1.00	0.003			
			22178	292.50	293.65	1.05	0.015			
			22179	293.65	294.50	0.85	nil			
			22180	294.50	295.50	1.00	0.012			
			22181	295.50	296.45	0.95	0.017			
			22182	296.45	297.45	1.00	nil			
			22183	297.45	298.55	1.10	0.009			
			22184	298.55	299.35	0.80	0.003			
			22185	299.35	300.42	1.07	0.007			
		22193	312.60	313.55	0.95	0.021				
		22194	352.25	353.00	0.75	0.003				
	359.0	End of Hole								
		Core logged June 27/97; Core stored at Timmins Warehousing, Airport Rd., Timmins, Ontario								

D. A. MacRae

HOLE NO.: ML-2-97
 LOCATION: 1+00 West; 4+50 South
 AZIMUTH: 360 degrees
 DIP AT COLLAR: -50 degrees
 ELEVATION: Surface
 CORE SIZE: NQ to 137 m; BQ to 392 m
 LOGGED BY: B. MacRae

DIP TESTS - ACID
 DEPTH DIP
 51 m -43 degrees
 200 m -43 degrees
 300 m -42 degrees
 380 m -41 degrees

TOTAL DEPTH OF HOLE: 392 Meters

PROPERTY: Nighthawk Lake
 TOWNSHIP: Macklem Twp.
 CLAIM NO.: P. 1206736
 STARTED: June 22, 1997
 FINISHED: June 25, 1997
 CONTRACTOR: Norex Drilling Ltd.

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
0	51.0	Overburden								
51.0	85.0	Altered Amygdaloidal Pillowed Mafic Volcanic -dark to medium green -moderate, patchy sericite alteration -53.7 - 57.0 m: slightly higher sericite alteration in pillow breccia; increased carbonate and quartz stringers; broken core at 56.0 - 57.0 m -first 9 m of core is broken -57.0 - 60.5 m: isolated brecciated pillow with indistinct rims in a relatively fine grained, darker green matrix -62.0 - 85.0 m: rusty weathered, rubbly core; pillows or pillow breccia; strong foliation: 30 degrees to CA; weathered amygdules; chlorite clots	22186 22187 22188 22189	52.75 53.70 54.90 56.00	53.70 54.90 56.00 57.20	0.95 1.20 1.10 1.20	0.009 nil 0.096 0.003	0.058		
85.0	95.00	Mafic Volcanic -medium green -medium grained -decreased sericite alteration -foliation: 20 -25 degrees to CA -moderate carbonatization -some amygdaloidal pillows -85.5 - 85.8 m: 80% carbonate, minor quartz in sericite and chlorite material, very minor sulphides -87.45 - 87.65 m: 60% carbonate, minor quartz, and chloritic material with very minor pyrite	22190 22191 22192	85.20 86.00 87.35	86.00 87.35 88.30	0.80 1.35 0.95	0.005 nil 0.024			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
95.0	104.0	-89.5 - 95.0 m: weathered, broken, crumbly core to 95.0m Fault Gouge								
104.0	182.0	Mafic Volcanic -dark grey green -fine to medium grained -pillows, pillow breccia to fragmental; with massive sections -some pillows with amygdules -foliated: 15 - 20 degrees to CA -strong carbonatization; -very few carbonate or quartz stringers to 105.0 m; none from 113.0 to 125.4 m -some hematite staining in carbonate minerals to 106.3 m -broken and weathered core to 105.8 m -119.8 - 120.9 m: hematite stained amygdules; pillows have dark green chlorite clots and distinct narrow rims -122.85 - 123.3 m: black very fine grained material; sharp upper contact; gradational lower contact -137.0 m: end of NQ core; switch to BQ -136.8 - 140.0 m: amygdaloidal pillows with fine grained dark green rims and chlorite clots; some carbonate and quartz stringers -140.0 m: 1 mm cream carbonate grains give core a speckled appearance -140.0 - 154.0 m: 1-2% quartz and carbonate stringers; 142.5 m: 10 cm of 50% carbonate and quartz material, 50% chlorite and wallrock and 1-2 % pyrite -166.45 - 167.0 m: 60% quartz-carbonate material; at 166.45 m 25 cm of 80 % quartz carbonate, no visible sulphides -177.05 m: probable pillows; occasional 5 cm bands of carbonate stringers (interpillow?); amygdules, 2-6 mm; chlorite clots								
182.0	277.2	Sericite Altered Mafic Volcanic -pillows, pillow + flow breccia + fragmental, and more massive sections -dark green to lime green								

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
		-sericite alteration intensity is variable; highest sericite alteration coincides with the brightest yellow green core -pillows are distinctive with light green centers; 1-6 mm dark green chlorite clots; some contain carbonate amygdules up to 5 mm; near 182 m some pillows have 1-2 mm cream carbonate grains with rare amygdules; some pillow centers are bleached pale lime green -carbonate alteration decreases to very weak by 191.0 m -194.6 - 200.0 m: less sericite alteration, occasional sericite wisps in dark to medium green massive to fragmental mafic volcanic; no amygdules; rare carbonate stringers; a couple of pyrite cubes up to 4 mm seen at 204.5 m -200.9 - 227.0 m: higher sericite alteration, bright lime green to golden brown sericite wisps; increase in carbonatization and quartz as irregular stringers and masses; patchy weak carbonatization; foliated: 50 -60 degrees to CA; appears pillowed with some amygdules; minor scattered pyrite 206.6 - 206.8 : rubble 210.5 - 215.0 m: most intense alteration; quartz + tourmaline veining not as well developed as in ML-1-97 217.85 - 221.8 m: 7 cm quartz vein with carbonate at 218.0 m; 80 cm quartz vein with carbonate at 218.2 17 cm of 50% quartz and carbonate at 226.83 m 217.85 - 227.0 m: 30 % quartz and carbonate stringers/masses -230.0 - 234.55 m: 25% irregular carbonate-quartz and quartz masses and stringers in sericite altered volcanic -238.92 m: irregular 2 cm wide carbonate-quartz stringers with minor tourmaline in the quartz								
			22195	208.35	209.50	1.15	nil	0.005		
			22196	209.50	210.70	1.20	0.009			
			22197	210.70	212.00	1.30	0.003			
			22198	212.00	213.15	1.15	nil			
			22199	213.15	214.26	1.11	0.003			
			22200	214.26	215.35	1.09	nil			
			22201	215.35	216.75	1.40	0.002			
			22202	216.75	217.85	1.10	0.005	0.007		
			22203	217.85	218.65	0.80	0.005			
			22204	218.65	219.70	1.05	0.010			
			22205	219.70	221.00	1.30	0.029			
			22206	221.00	221.80	0.80	0.003			
			22207	221.80	222.90	1.10	0.009			
			22208	222.90	224.00	1.10	0.009			
			22209	224.00	224.85	0.85	nil			
			22210	224.85	226.00	1.15	nil			
			22211	226.00	227.00	1.00	nil			
			22212	227.00	227.85	0.85	nil			
			22213	227.85	229.15	1.30	0.017			
			22214	229.15	230.10	0.95	0.015			
			22215	230.10	231.50	1.40	nil			
			22216	231.50	233.00	1.50	0.007			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)				
FROM	TO											
277.20	392.0	-from 240.65 m to end of unit there is a gradual decrease in sericite alteration; limey green sericite alteration colour is seen in the medium green rock; moderate carbonatization; pillows, some with up to 4 mm wide carbonate amygdules, some with foliated chlorite clots; foliation: 65 - 70 degrees to CA; pillow breccia; very minor pyrite as scattered cubes up to 10% carbonate, quartz stringers/masses	22217	233.00	234.00	1.00	Nil	0.017				
			22218	234.00	235.50	1.50	0.021					
			22219	235.50	236.40	0.90	nil					
			22220	236.40	237.50	1.10	nil					
			22221	237.50	238.40	0.90	nil					
		22222	242.55	243.55	1.00	nil						
		22223	243.55	244.90	1.35	nil						
		22224	244.90	246.00	1.10	nil						
		22225	246.00	247.50	1.50	nil						
		22226	247.50	248.70	1.20	nil						
		22227	260.85	262.00	1.15	nil						
		277.20	392.0	Mafic Volcanic -pillows; pillow breccia and fragments; flow breccia? fragmental?; massive -dark green -as in above unit some pillows have carbonate amygdules and/or elongated chlorite clots -foliation: 25 - 30 degrees to CA -patchy weak to moderate carbonatization	22228	285.50	287.00	1.50	0.002	nil		
					22228	285.50	287.00	1.50	0.002	nil		
					22228	285.50	287.00	1.50	0.002	nil		
22228	285.50				287.00	1.50	0.002	nil				
		-285.5 - 287.0 m: 25% irregular quartz and carbonate-quartz stringers/masses, very minor pyrite										
		-299.2 - 299.4 m: rusty core										
		-299.0 - 306.30 m: pink purple hematite stained core										

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
		-328.5 - 336.0 m: chlorite alteration increasing; fine grained green black irregular chlorite masses in some pillows, 1 cm wide; fine grained chlorite as interpillow material; -patchy hematite staining after 306.3 m -low angle fractures, apparently along pillow rims/boundaries -foliation: 70 degrees to CA, at 341.0 m -356.0 -359.0 m: variations in foliation give swirled appearance to amygdules and stringers 356.4 - 356.75 m: 35-40% quartz and carbonate stringers, no visible sulphides -360.5 - 363.25 m: 10% quartz and carbonate stringers, veins and masses, scattered chalcopyrite noted at 363.25 -363.25 m to end: pink hematite stained pillow breccia - fragments distinctively pink; 1-2 mm chlorite clots throughout; becomes massive, fine grained, dark green, 373.2 - 374.5 m; return to pillows; some dark, fine grained angular fragments, 381.15 - 382.4 m; weak to moderate carbonatization -382.25 - 385.15 m: rusty core								
	392.0	End of Hole Core logged June 27/97; Core stored at Timmins Warehousing, Airport Rd., Timmins, Ontario	22229	356.30	357.75	1.45	nil			
			22230	360.50	362.00	1.50	nil			
			22231	362.00	363.50	1.50	nil			

S. C. Markov

HOLE NO.: ML-3-97
 LOCATION: 2+00 East; 5+20 South
 AZIMUTH: 045 degrees
 DIP AT COLLAR: -50 degrees
 ELEVATION: Surface
 CORE SIZE: NQ
 LOGGED BY: B. MacRae

DIP TESTS - ACID
 DEPTH DIP
 68 m -39 degrees
 200 m -38.5 degrees
 310 m -38 degrees

PROPERTY: Nighthawk Lake
 TOWNSHIP: Macklem Twp.
 CLAIM NO.: P. 1206736
 STARTED: June 26, 1997
 FINISHED: July 4, 1997
 CONTRACTOR: Norex Drilling Ltd.

TOTAL DEPTH OF HOLE: 378.25 Meters

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
0	61.0	Overburden cased to 66.0 m								
61.0	85.0	<p>Sericite Altered Mafic Volcanic Pillow Breccia/Fragments -medium green; light lime green in higher sericite alteration zones -pillow breccia/fragments; fragments with both ragged and indistinct boundaries, 5-20 cm long, strongly foliated, irregularly shaped carbonate amygdules 3-4 mm, 1-2mm dark green chlorite clots -moderate sericite alteration; patchy carbonatization; moderate chloritization -strong foliation: 45 - 60 degrees to CA - 1-2% carbonate and carbonate-quartz and quartz stringers -trace pyrite grains, less than 0.5 mm, in occasional clusters 74.0 - 87.0 m: amygdule size increases, 5-10 mm, becoming indistinguishable from the carbonate +/- quartz masses sericite alteration decreases 5-7% carbonate and quartz stringers 80.5 m: 12 cm wide fractured quartz vein with 5% tourmaline, minor carbonate Patchy hematite staining of carbonate; 85.8 - 87.0 m, irregularly shaped carbonate +/- quartz masses with narrow, up to 1 mm wide purple hematite zones close to the outer rims of the masses -blocky, broken core, 61.0 - 79.0 m -rusty core, 67.9 - 68.6 m, 73.0 - 75.2 m, at 78.4 m</p>								
			22232	78.00	79.00	1.00	0.058			
			22233	79.00	80.00	1.00	0.446			
			22234	80.00	80.60	0.60	0.446	0.528		
			22235	80.60	81.70	1.10	0.050			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
87.0	91.6	<p>Altered Mafic Volcanic Pillow Breccia/Fragments</p> <ul style="list-style-type: none"> -medium green -pillow breccia/fragments: outlines are vague; some with dark green chlorite clots to 1.5 mm; carbonate amygdules to 5 mm, larger amygdules are irregular in shape and likely to be carbonate masses -moderate carbonatization; patchy sericite alteration -strongly foliated: 30 -50 degrees to CA -88.7 - 88.85 m: dyke, fine grey (incestuous hyperbyssal?) -more massive with 5 mm amygdules after 90.0 m 								
91.6	93.5	<p>Variolitic Pillowed Mafic Volcanic</p> <ul style="list-style-type: none"> -medium to dark green with 3-6 mm buff yellow green varioles elongated in direction of strong foliation (35 degrees to CA) -clustering of varioles in pillow centers -some chlorite clots and small carbonate amygdules -chloritic; patchy weak carbonatization 								
93.5	103.7	<p>Mafic Volcanic</p> <ul style="list-style-type: none"> -medium green -carbonate amygdules, 3-7 mm, elongate with direction of foliation -moderate foliation: 40 degrees to CA -possible vague pillow fragments at 95.0 m -moderate carbonatization; weak sericite alteration with occasional light green sericite wisps - 1-2% narrow carbonate stringers/masses -99.85 - 101.0 m: more massive looking, medium grained, medium green mafic volcanic with several isolated pillow? fragments less than 3 cm with one at 10 cm; fragments are bright cream green, subrounded to angular with sharp edges; matrix not carbonatized but fragments contain carbonate grains and very narrow stringers; one fragment contains chlorite clots -after 101.0 m, gradual increase in sericite wisps; gradual contact with next unit 								
103.7	134.5	<p>Sericite Altered Pillowed Mafic Volcanic</p> <ul style="list-style-type: none"> -dark green at start with bright light green sericite wisps; medium green by 								

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
		110.0 m; zones of highest sericite are pale lime green-yellow green -pillowed with amygdules, some variolitic sections (as above, 91,6 - 93.5 m); some pillow breccia fragments; -carbonate amygdules up to 7 mm -sericite alteration gradually increasing from previous unit -occasional scattered tiny pyrite grains -103.7 - 110.0 m: carbonate amygdules average 2-5 mm; bright green sericite wisps; carbonatized; up to 1 % carbonate stringers, several irregular, 2 cm wide, at low angle to CA; -110.0 - 114.2 m: possible pillows; strong foliation: 45 degrees to CA; ore is medium green; dark green, elongated, 2 mm by 6 mm chlorite clots; zones of carbonate, 3-5 mm amygdules; up to 1% carbonate stringers -114.2 - 123.0 m: possible flow contact at 114.2 m; pillows and possible pillow breccia; amygdules, chlorite clots and variolitic sections; 116.4 -117.0 m, large carbonate amygdules to 2.25 cm with hematite staining 115.15 - 115.6 m: high sericite alteration; bright yellow green; some hematite staining; increase in amygdule size to 2 cm (carbonate masses?); 115.05 m, 30 cm irregular carbonate vein -123.0 - 124.8 m: very high sericite alteration with quartz and tourmaline veins/stringers; pillowed; volcanic rock is very pale yellow green; not carbonatized; chlorite clots are emerald green; occasional pyrite throughout; carbonate-quartz and quartz stringers. At 124.0 m, 35 cm, irregular quartz with 5% tourmaline, 5% chlorite, wall rock inclusions, carbonate, and minor pyrite -124.8 - 130.1 m: high sericite alteration core is light to medium green; sericite tends to be buff coloured; foliated and fractured. From 124.8 - 128.0 m, 5% quartz and carbonate stringers; several irregular carbonate-quartz stringers at low angle to CA; at 126.45 m, a 5 cm wide quartz-carbonate stringer; no stringers after 128.0 m; rusty fracture at 130.1 m -130.1 - 131.5 m: higher sericite alteration; lime yellow colour with a 3 cm wide quartz stringer at low angle to CA at 130.6 m, chlorite and tourmaline rim both contacts of stringer -131.5 - 134.5 m: core is light green, carbonatized, bleached, with in situ fracturing;								
			22236	114.20	115.10	0.90	0.009			
			22237	115.10	115.75	0.65	0.005			
			22238	115.75	116.75	1.00	0.012			
			22239	116.75	117.50	0.75	0.009			
			22240	122.00	123.00	1.00	0.010			
			22241	123.00	124.00	1.00	0.178			
			22242	124.00	124.85	0.85	0.994	1.265		
			22243	124.85	126.15	1.30	nil			
			22244	126.15	127.25	1.10	0.002			
			22245	127.25	128.00	0.75	nil			
			22246	128.00	129.10	1.10	nil			
			22247	129.10	130.10	1.00	nil			
			22248	130.10	131.00	0.90	0.010			
			22249	131.00	131.90	0.90	nil			
			22250	131.90	132.80	0.90	0.003			
			22251	132.80	133.60	0.80	0.003			
			22252	133.60	134.45	0.85	0.056			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
134.5	194.7	at 133.3 m, trace chalcopryrite and arsenopyrite 133.7 - 134.5 m: high sericite alteration; 35% carbonate and quartz in sericite altered volcanic, some tourmaline with the quartz; at 134.10 m, quartz with tourmaline, 1% chalcopryrite, trace pyrite, possible arsenopyrite	22253	134.45	135.65	1.20	0.003			
		Altered Mafic Volcanic -medium to dark green -sericite alteration decreasing; chloritic; patchy carbonatization -foliation: 45 degrees to CA -134.5 - 136.5 m; possible pillow breccia/fragments, 5-8 cm, with carbonate amygdules and chlorite clots in a more massive looking medium green, foliated volcanic; up to 1% carbonate and quartz stringers -shadowy fragments? Seen to 138.0 m 140.0 - 145.0 m: pillows with pale green centers and fine grained, dark green selvages; some pillows contain carbonate amygdules, averaging 2-4 mm; occasional pink-purple hematite staining of carbonate; occasional larger carbonate masses, 1.5 cm or more; less than 1% carbonate and quartz stringers; dark green chlorite clots, 1-2 mm; at 140.5 m: quartz amygdules; amygdules and clots elongate with foliation; possible pillow breccia/fragments by 143.0 m -after 145.0 m, pillows and pillow breccia/fragments similar to above; alteration bleaching at 145.0 m, 146.0 m, & 148.5 m -at 154.0 m, patchy development of white, carbonate grains, less than 1 mm, gives core speckled appearance -157.0 - 159.55 m: cream-white angular, non calcitic, 1-2 mm grains; mineral may be scratched by knife; possible serpentine? the speckled appearance differs from 154.0 m; -161.8 - 162.0 m: carbonate amygdules, up to 1 cm or more are hematite stained -164.8 - 174.35 m: occasional 10-12 cm wide bands of irregular carbonate material-interpillow? amygdules to 1 cm								
		-171.25 - 171.75 m: several small irregular quartz and carbonate veins with specks of chalcopryrite and pyrite seen at 171.3 m and 171.65 m -sericite alteration increasing by 179.0 m; core is light medium green in places -180.3 m: 10 cm quartz carbonate vein with chlorite, wallrock inclusions, speck of chalcopryrite	22254	171.05	171.80	0.75	0.005			
			22255	180.15	181.00	0.85	nil			

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
194.7	196.8	180.8 - 181.0 m: 40% carbonate and quartz material	22256	181.00	181.65	0.65	Nil			
		181.75 m: 10 cm quartz and carbonate vein, minor tourmaline in center, scattered pyrite in sericite altered wallrock on upper side; less pyrite but possible chalcopyrite on lower contact	22257	181.65	182.35	0.70	0.087			
		183.17 - 183.5 m: 60% quartz and carbonate material, specks of chalcopyrite	22258	182.35	183.05	0.70	nil			
		cream coloured varioles at 187.6 m and 189.0 m	22259	183.05	184.50	1.45	0.009			
196.8	269.4	Massive Volcanic Flow (or Intrusive?)								
		-massive at top; upper contact appears to be flow contact								
		-dark grey; fine grained								
		-moderate carbonatization; reduced chlorite								
		-5% quartz-carbonate stringers								
		-195.3 m: a 3 cm quartz carbonate stringer, 18 degrees to CA	22260	194.70	195.65	0.95	0.274	0.240		
		-195.7 m: scattered pink carbonate amygdules, elongate, 1 mm wide; chlorite clots, less than 1 mm, foliated at 35 degrees to CA								
		Pillowed Mafic Volcanic								
		-fine grained; dark green (mottled) to light green								
		-pillowed; pillow breccia sections: 207.2 - 216.2 m								
-10 -15% carbonate amygdules, round to slightly elongate										
-5% varioles										
-210.7 - 211.3 m: sericite altered, 50% quartz-carbonate material	22261	210.75	211.30	0.55	0.002					
-331.4 - 227.2 m; amygdules increase to 35% of core										
-228.7 - 230.6 m: up to 1 mm growths of serpentine in a more Mg-rich zone	22262	251.20	251.90	0.70	0.015					
-253.4 - 254.0 m: 60% carbonate quartz material	22263	253.15	254.00	0.85	0.012					
-254.88 - 255.0 m: quartz-carbonate veins	22264	254.00	254.85	0.85	0.010					
	22265	254.85	255.15	0.30	nil					
-260.8 - 261.0 m: quartz-carbonate vein	22266	260.55	261.00	0.45	0.027	0.017				
-265.3 - 265.6 m: 70% carbonate-quartz material										

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
269.4	277.2	Weakly Sericite Altered Pillowed Mafic Volcanic -fine grained -light green in colour -mottled texture with up to 20% chlorite clots/masses to 3 mm -10% carbonate amygdules -moderate carbonatization; weak to moderate sericite alteration -weak foliation: 45 degrees to CA -15% quartz-carbonate stringers	22267	269.00	269.60	0.60	0.012			
			22268	269.60	270.30	0.70	0.014			
			22269	270.30	271.20	0.90	0.019			
			22270	271.20	272.00	0.80	0.103			
			22271	272.00	272.90	0.90	0.015			
			22272	272.90	274.00	1.10	0.014			
			22273	274.00	275.00	1.00	0.024			
			22274	275.00	276.00	1.00	0.021			
			22275	276.00	277.20	1.20	0.002			
277.2	281.3	Pillowed Mafic Volcanic -medium to dark green; fine grained -moderate carbonatization -20% carbonate-quartz stringers/masses -up to 10% carbonate amygdules, average 2-5 mm -small green chlorite clots in most pillows -277.8 - 278.0 m: 90% carbonate-quartz material with 50% pink carbonate -279.8 - 280.1 m: 80% carbonate-quartz material (20% dark red/purple carbonate) trace pyrite								
			22276	279.70	280.85	1.15	0.029			
			22277	280.85	281.72	0.87	0.005			
			22278	281.72	282.50	0.78	0.007			
			22279	282.50	283.56	1.06	0.005			
			22280	283.56	284.63	1.07	0.019			
			22281	284.63	285.70	1.07	0.168			
			22282	285.70	287.00	1.30	0.789	0.766		
			22283	287.00	288.10	1.10	0.214			
			22284	288.10	289.00	0.90	0.045			
			22285	289.00	290.00	1.00	0.003			
			22286	290.00	291.00	1.00	0.026			
			22287	291.00	292.00	1.00	0.003			
			22288	292.00	293.00	1.00	0.002			
			22289	293.00	294.00	1.00	0.007			
281.3	294.0	Sericite Altered Mafic Volcanic -rapid gradation into light green to yellow green pillowed mafic volcanic -moderate sericite alteration: intensity gradually decreasing down unit -weak patchy carbonatization -carbonate amygdules, average 4 mm, some larger -irregular dark green chlorite clots to 4 mm average size -occasional fuchsite noted in quartz-carbonate veins -15% carbonate and quartz stringers/masses -scattered small pyrite cubes throughout -at 281.9 m: 30 cm carbonate-quartz vein								

METERS		CORE DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH (m)	AU (g/t)	AU (g/t)		
FROM	TO									
294.0	378.25	<p>Altered Pillowed Mafic Volcanic -pillowed, as above unit -medium green -less sericite alteration than above unit; weak to moderate carbonatization -up to 10% carbonate and quartz masses/stringers -occasional hematite (pink) stained amygdules -foliation: 45 degrees to CA at 307.0 m; 35 degrees to CA at 356.0 m -very occasional pyrite and chalcopyrite -294.0 - 295.5 m, 316.8 - 317.15 m, 351.3 - 354.7 m, 367.2 - 368.7 m, and 376.6 - 378.0 m: tiny serpentine grains less than 1 mm speckling the core (as at 157.0 m) -296.7 - 397.4 m: 50% quartz and carbonate as two irregular stringers; locally up to 1% pyrite -309.0 - 323.0 m: up to 20% amygdules average 5-8 mm 309.8 m: irregular 2-3 cm wide carbonate-quartz stringer with specks chalcopyrite and pyrite -after 323.0 m: less than 5% carbonate/quartz stringers and masses -338.0 - 341.8 m: increase in sericite alteration towards 341.8 m -341.8 - 351.3 m: moderate sericite alteration; light green colour; 346.05 - 346.35 m: 40% carbonate with minor quartz, trace pyrite, irregular stringer at low angle to CA -362.0 - 365.6 m and 366.6 - 367.15 m: variolitic pillows? -371.0 - 378.25 m: lightly increasing sericite alteration; core is light green; after 377.0 m, unaltered matrix is dark green-black</p>								
			22290	294.00	295.00	1.00	0.024			
			22291	295.00	296.00	1.00	nil	nil		
			22292	296.00	296.60	0.60	0.007			
			22293	296.60	297.45	0.85	0.046			
			22294	297.45	298.45	1.00	0.027			
			22295	309.50	310.50	1.00	nil	nil		
			22296	345.50	346.60	1.10	0.002			
			22297	355.40	356.40	1.00	0.024			
			22298	373.15	373.85	0.70	nil			
	378.25	End of Hole								
		Core logged July 11/97; Core stored at Timmins Warehousing, Airport Rd., Timmins, Ontario								

S. C. Markar



Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)
W9860.00697
Assessment Files Research Imaging



42A07NW2010 2.18643 MACKLEM 900

Subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

see FINA REUSED

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

2.18643

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

Name <i>DE WIS HAFOREST.</i>	Client Number <i>155614</i>
Address <i>691 Macklem Dr. Apt 109 Timmins, Ontario</i>	Telephone Number <i>705.268.2961</i>
	Fax Number <i>705.267.1459.</i>
Name	Client Number
Address	Telephone Number
	Fax Number

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

Geotechnical: prospecting, surveys, assays and work under section 18 (regs)
 Physical: drilling stripping, trenching and associated assays
 Rehabilitation

Work Type <i>Drilling B.O. Core.</i>	Office Use
Dates Work Performed From Day <i>19</i> Month <i>05</i> Year <i>97</i> To Day <i>20</i> Month <i>08</i> Year <i>97</i>	Commodity
Global Positioning System Data (if available)	Total \$ Value of Work Claimed <i>80817</i>
Township/Area <i>Macklem Dr.</i>	NTS Reference
M or G-Plan Number <i>G-3997</i>	Mining Division <i>Porcupine</i>
	Resident Geologist District <i>Timmins</i>

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)

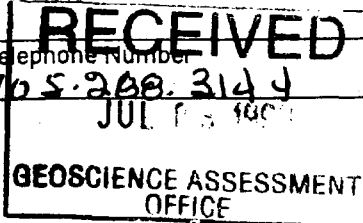
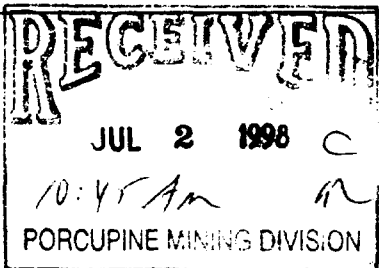
Name <i>DE WIS HAFOREST.</i>	Telephone Number <i>268-3144 (705)</i>
Address <i>691 Macklem Dr. Apt. 109</i>	Fax Number <i>267-1459 (705)</i>
Name <i>Timmins, Ontario</i>	Telephone Number
Address	Fax Number
Name <i>William E. MacPhee</i>	Telephone Number <i>705-267-3081</i>
Address <i>Timmins, Ontario P4W 7E3</i>	Fax Number <i>705-267-3081</i>

4. Certification by Recorded Holder or Agent

I, *DE WIS HAFOREST.* 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 <i>[Signature]</i>	Date <i>July 2/98</i>
Agent's Address	Telephone Number <i>705-268-3144</i>
	Fax Number <i>267-1459 705</i>

0241 (03/97)



deced: Sept. 30/98

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

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
Drilling	1130 Metres	62.99/Metre	71,183.56
N.Q. core	N.Q. core		
Adel Drilling Limited			
Associated Costs (e.g. supplies, mobilization and demobilization).			
James Bay Exploration 006-97			5000.00
William E. Muecke			2493.10
James Bay Exploration Services			2140.00
Transportation Costs			
Food and Lodging Costs			
Total Value of Assessment Work			80,816.66

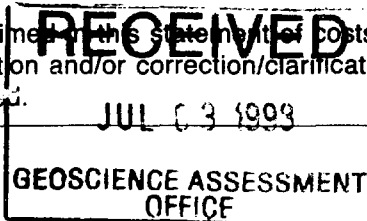
Calculations of Filing Discounts:

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 × 0.50 = Total \$ value of worked claimed.

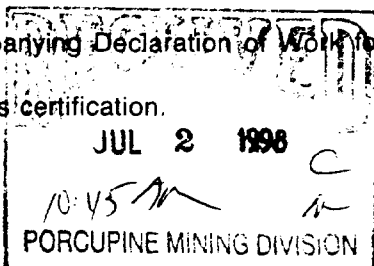
Note:

- 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, DEVIDA HOFFMAN, 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 Recorded Holder. I am authorized to make this certification.



Signature: [Signature] Date: July 2/98

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

Telephone: (888) 415-9846
Fax: (877) 670-1555

November 18, 1998

DENIS LAFOREST
691 MACHEAN DRIVE
APT 109
TIMMINS, ONTARIO
P4N-7W6

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpgc.htm

Dear Sir or Madam:

Submission Number: 2.18643

Status

Subject: Transaction Number(s): W9860.00697 Approval After Notice

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 Bruce Gates by e-mail at gatesb2@epo.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.18643

Date Correspondence Sent: November 18, 1998

Assessor: Bruce Gates

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00697	1126678	MACKLEM	Approval After Notice	November 08, 1998

Section:
16 Drilling PDRILL

The 45 days outlined in the Notice dated September 24, 1998 have passed.

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

Correspondence to:

Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

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

DENIS LAFOREST
TIMMINS, ONTARIO

MICHAEL WALTER DON PEPLINSKI
BEARDMORE, ON

PIERRE SYLVIO MAILLET
TIMMINS, ON

DOUGLAS JOSEPH LALONDE
TIMMINS, Ontario

Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: November 18, 1998

Submission Number: 2.18643

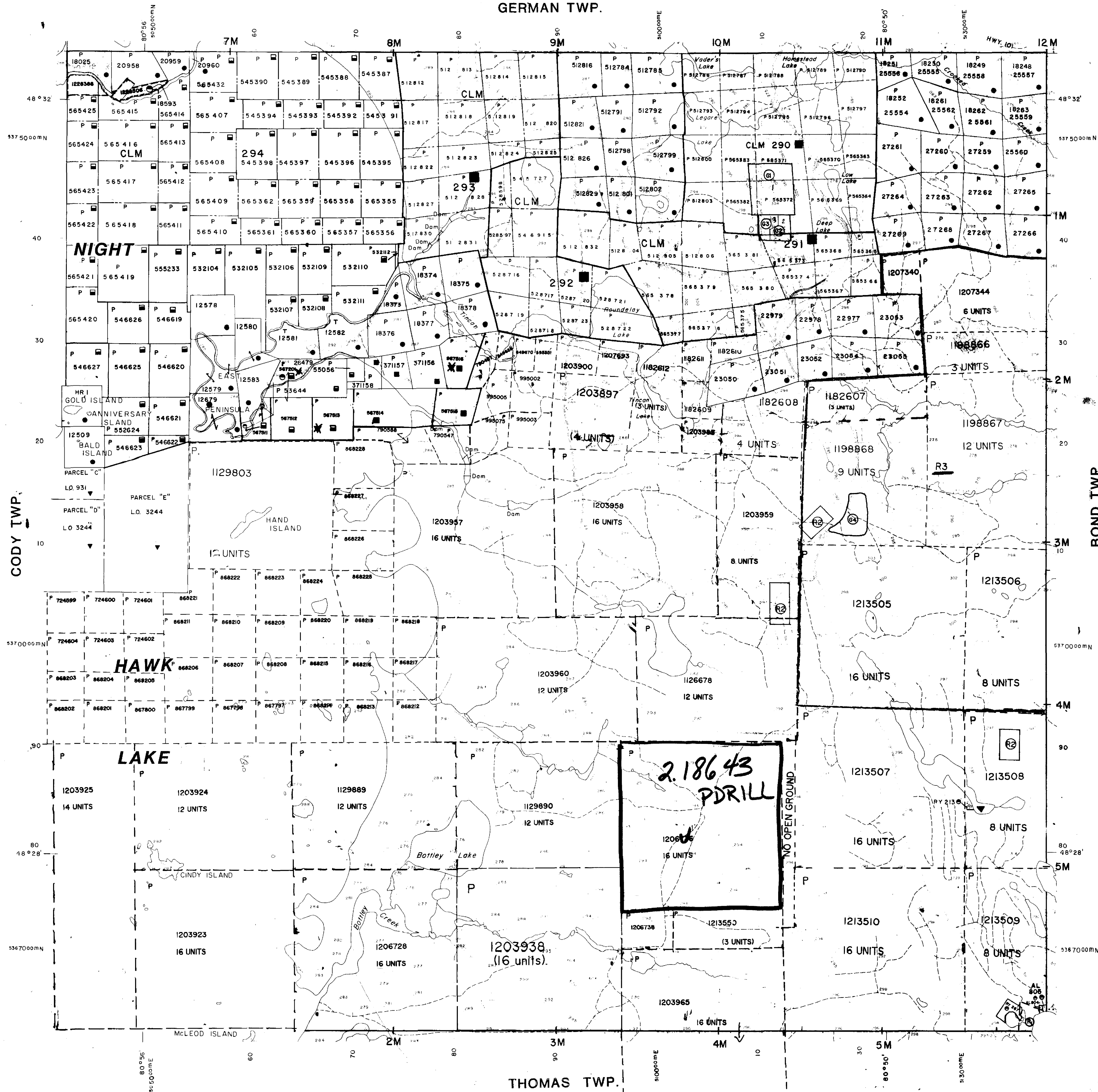
Transaction Number: W9860.00697

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1206736	73,677.00
Total: \$	<u>73,677.00</u>

MAP SYMBOLOLOGY

Aerial Cableway	Pipeline (above ground)
Boundary	Railroad
International	Single Track
Disturbance	Double Track
Abandoned	Abandoned
Approximate	Turntable
Lot, Concession	Road
Approximate	Highway, County
Park Boundary	Township
Bridge	Access (line of doubtful maintenance or significant driveway)
Wood, Railroad	Trail, Back Road (dashed line)
Building	Roads
Chimney	Double line river with multiple rapids
Cliff, Pit, Pile	Double line river with multiple rapids
Contours	Reservoir
Intersected	River, Stream, Canal
Approximate	Approximate
Depression	Approximate
Control Points	Approximate
Horizontal	Approximate
Vertical	Approximate
Culvert	Lock
Falls	Spot Elevation (above ground)
Double line river	Transmission Line
Fence, Hedge, Wall	Power
Feature Outline (Construction Features, etc.)	Tunnel
Flooded Land	Utility Poles
Lock	Wharf, Dock, Pier
Marsh or Swamp	Wooded Area
Mast	
Mine Head Frame	
Outcrop	

GERMAN TWP.



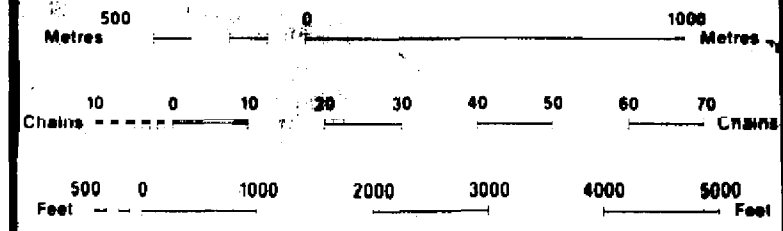
LEGEND

HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
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	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1910, CHAP. 300, SEC. 83, SUBSEC. 1.



SCALE 1:20 000
GRID ZONE 17

Reserve flooding rights on Night Hawk Lake to Ontario Hydro to elevation 903.5', T & N.O. Ry. datum.

DATE OF ISSUE
NOV 20 1998

PROVINCIAL RECORDING OFFICE - SUDBURY

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.

TOWNSHIP
MACKLEM
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ministry of Natural Resources
Land Management Branch

ORIGINAL COMPILATION JULY 1998
REVISED BY D.C.
ACTIVATED APRIL 13/93
Number
G-3997

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
HR I GOLD ISLAND				
ANNIVERSARY ISLAND				
BALD ISLAND				
PARCEL "C"				
PARCEL "D"				
PARCEL "E"				
PARCEL "F"				
PARCEL "G"				
PARCEL "H"				
PARCEL "I"				
PARCEL "J"				
PARCEL "K"				
PARCEL "L"				
PARCEL "M"				
PARCEL "N"				
PARCEL "O"				
PARCEL "P"				
PARCEL "Q"				
PARCEL "R"				
PARCEL "S"				
PARCEL "T"				
PARCEL "U"				
PARCEL "V"				
PARCEL "W"				
PARCEL "X"				
PARCEL "Y"				
PARCEL "Z"				

① - SITE PREPARATION 06/02/83, 77094 V.8

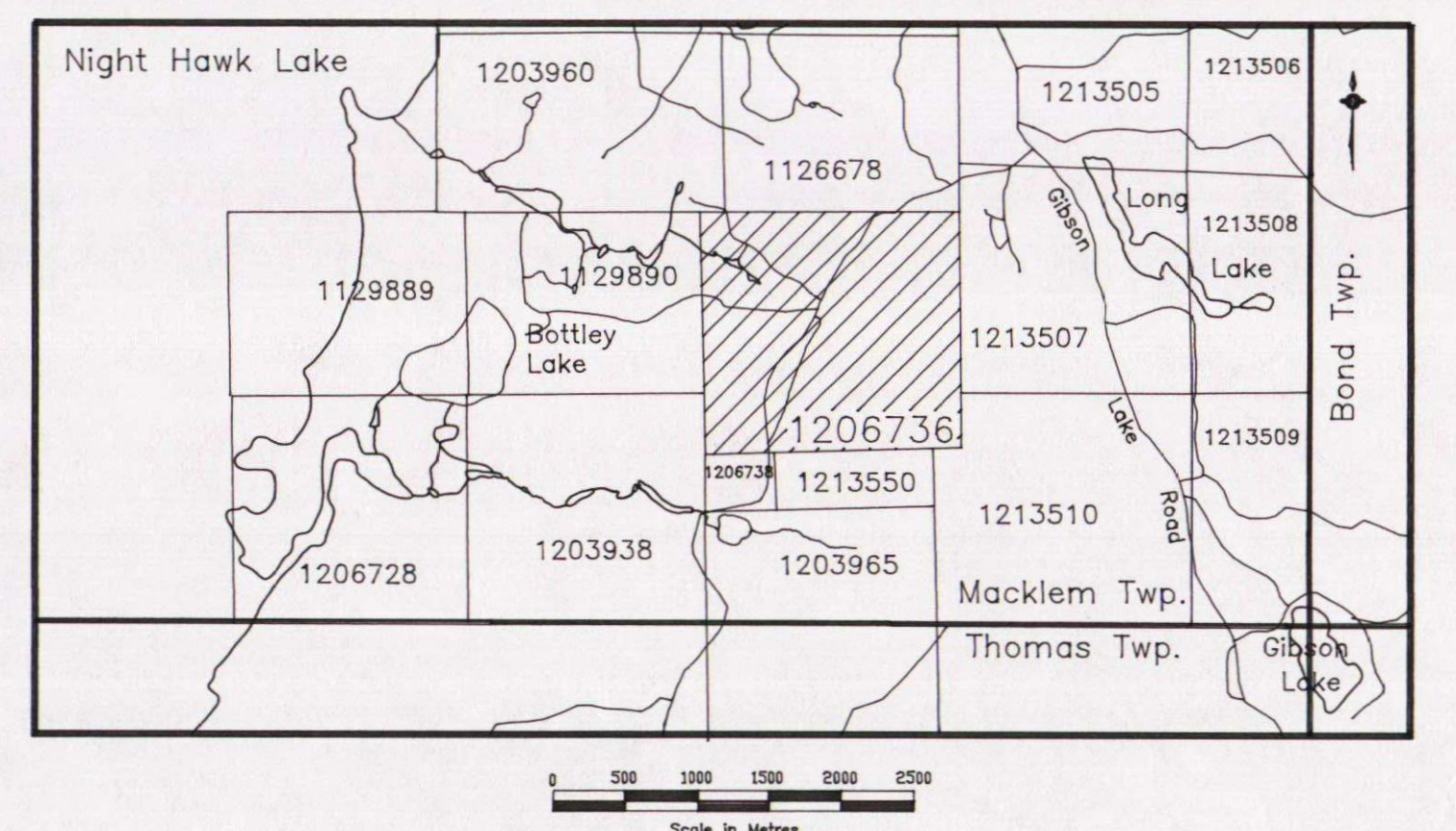
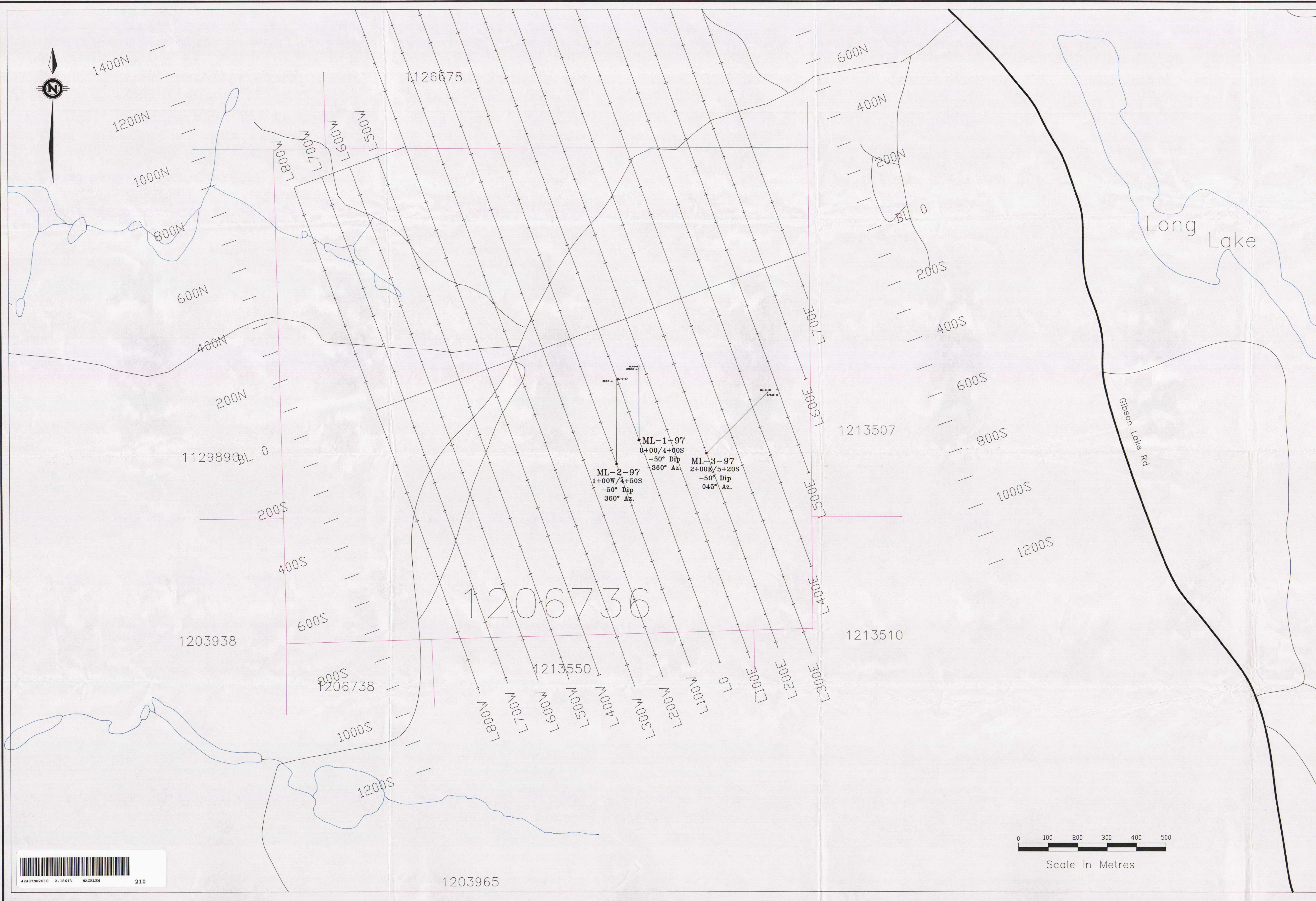
② - SURFACE AND MINING RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE BY ORDER NO. W-26/83 HER DATED SEPT. 27, 1993 SECTION 35, THE MINING ACT, R.S.O. 1990 (FOREST TEST PLOTS)

③ - THIS TWP. IS SUBJECT TO FOREST ACTIVITY IN 1994/95 FURTHER INFORMATION AVAILABLE ON FILE.

R3 - SURFACE RIGHTS ONLY WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE BY ORDER NO. WP 12/97 HER DATED MAY 2/97 SECTION 35, THE MINING ACT, R.S.O. 1990

SAND AND GRAVEL

- ④ AGGREGATE PERMIT - ISSUED AUG.5/88
- ⑤ AGGREGATE PERMIT - ISSUED FEB.9/89
- ⑥ AGGREGATE PERMIT - ISSUED NOV.21/90
- ⑦ AGGREGATE PERMIT - ISSUED SEPT.21/91



LOCATION MAP

Legend

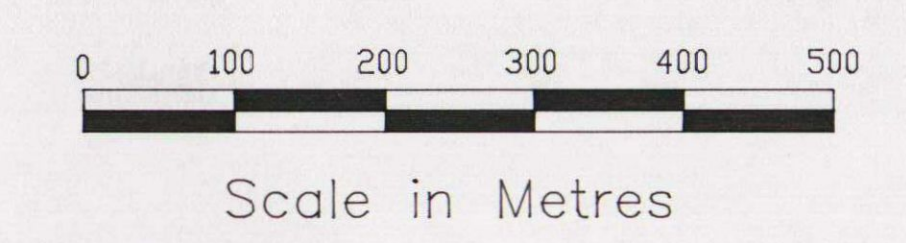
- drill hole, Leader Mining International Inc.
ML-1-97
ML-2-97
ML-3-97
- drill hole, Kidd Creek
MC25-01
MC25-02
MC25-03
- drill hole, United Kingdom
MAC-85-1
MAC-85-2
MAC-85-3
- roads & trails
- drainage
- claim line with post

LEADER 2.18643
Mining International Inc.

Nighthawk Lake Property
Macklem Township, Ontario 2.18643

Drill Hole Location Map

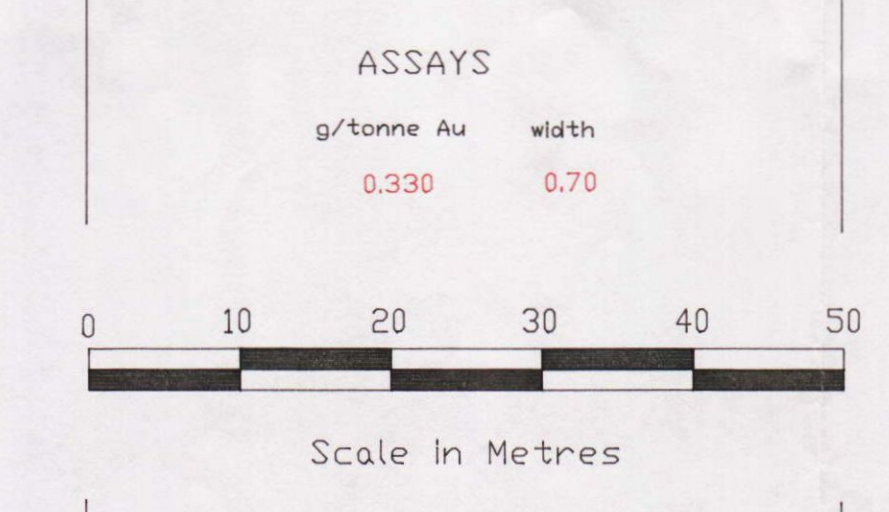
CLAIM: P.1206736	DATE: April 2, 1998
DRAWN BY: W.E.MacRae	SCALE: 1:5000
COMPILED:	REVISED:



ML-1-97

Azimuth: 0° Dip: -50°

0+00, 4+00S



ASSAYS
g/tonne Au with
0.330 0.70

LEADER
Mining International Inc.
Nighthawk Lake Property
Macklen Township, Ontario

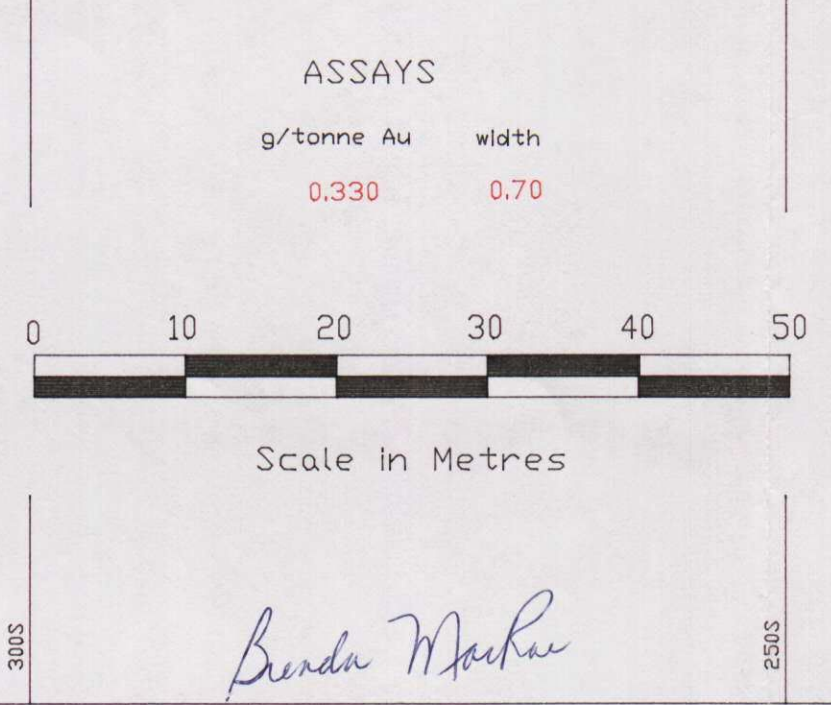
DRILL SECTION
HOLE ML-1-97

CLAIM: P.1206736	DATE: April 2, 1998
DRAWN BY: B.A. MacRae	SCALE: 1:500
COMPILED:	REVISED:

ML-3-97

Azimuth: 045 ° Dip: -50°

2+00E, 5+20S



LEADER
Mining International Inc.
Nighthawk Lake Property
Macklem Township, Ontario

**DRILL SECTION
HOLE ML-3-97**

CLAIM: P.1206736	DATE: April 2, 1998
DRAWN BY: B.A.MacRae	SCALE: 1:500
COMPILED:	REVISED: