20900.00 Northing : Easting : 15400.00 6250.00 Elevation : Hole Depth: 965.66mt

Project ID: 464 Core Size : NQ Date Logged: 25APR96 Logged By: RKM Assisted by :

MINING CLAIM NUMBER: CLM 229 DRILLING STARTED: APRIL 20, 1996 DRILLING COMPLETED: MAY 15, 1996

DRILLING CONTRACTOR: BRADLEY BROTHERS LIMITED DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE LOGGING STARTED: APRIL 25, 1996
LOGGING COMPLETED: MAY 20, 1996
LOGGED BY: RYAN MCEACHERN

Drill Hole Surv	ev Data	
Depth	Azimuth	Dip
Collar	180.00	-81.00
32.00mt	183.00	-81.00
50.00mt	185.00	-80.50
98.00mt	183.00	-80.00
152.00mt	181.00	-79.25
200.00mt	184.00	-78.50
250.00mt	184.00	-77.50
302.00mt	182.00	-76.75
350.00mt	184.00	-76.00
400.00mt	178.00	-75.75
452.00mt	178.00	-75.00
500.00mt	181.00	-74.50
554.00mt	180.00	-74.00
602.00mt	182.00	-73.75
650.00mt	185.00	-73.00
701.00mt	185.00	-72.75
752.00mt	185.00	-72.25
800.00mt	182.00	-72.00
848.00mt	182.00	-71.75
902.00mt	182.00	-71.25
950.00mt	186.00	-70.75



rom To	Geology
0.00 20.00	OVERBURDEN
20.00 188.00	PILLOWED FLOW, Amygdaloidal, pillowed, trace specks AU, trace specks CP, trace blebs MR, trace blebs PO, trace specks PY, trace microveins QV 37.35 39.20 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 60.40 61.57 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet 61.57 63.85 MASSIVE MAFIC FLOW(<1%bt) 110.85 112.10 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, albite, foliated, Porphyritic, trace microveins QV 115.45 115.92 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated, trace blebs CP, 00.3-0.5% specks PY, 00.3-0.5% microveins QV 146.50 146.75 FELSIC DYKE(PURPLISH/WHITE) 159.10 159.40 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 159.40 161.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 166.15 166.85 ULTRAMAFIC INTRUSIVE, actinolite, biotite, foliated 166.15 166.85 ULTRAMAFIC INTRUSIVE, actinolite, biotite, foliated 170.27 170.90 POTASSICALLY ALTERED PILLOWED FLOW(+5%pervasive K), biotite, chlorite, Banded, foliated 173.45 173.85 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, hornblende, biotite 174.80 175.05 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated 175.05 175.05 POTASSICALLY ALTERED PILLOWED FLOW(+5%pervasive K), biotite, QZ, trace blebs PO, 20% veins QV 175.55 176.45 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 177.20 178.80 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated 177.20 178.80 FELSIC DYKE(PURPLISH/WHITE), sericite, Fractured, foliated 177.20 178.80 FELSIC DYKE(PURPLISH/WHITE), sericite, Fractured, foliated 177.20 178.80 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 184.55 185.25 ULTRAMAFIC INTRUSIVE, actinolite, foliated

LACER D	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-103
From	То	Geology	
188.00	195.74	PILLOWED FLOW, Fine Grained, 45 FO very lightly fractured, 00.3-0.5% selvages BI, trace PO, trace vein associated/in vein PY, trace QV	ce stringers CB,
195.74	202.00	MASSIVE MAFIC FLOW(<1%bt), Massive, Medium Grained, very lightly fractured, trace stringe stringers PY, trace microveins QV 199.65 200.48 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, Fine Grained PY	
202.00	234.07	PILLOWED FLOW, Fine Grained, 45 FO lightly fractured, 00.3-0.5% selvages BI, trace streams and layering EP, trace PO, trace vein associated/in vein PY, trace QV 204.58 206.05 FELSIC DYKE(PURPLISH/WHITE), Medium Grained, 45 FO 206.40 207.00 FELSIC DYKE(PURPLISH/WHITE), Fine Grained 207.56 207.83 FELSIC DYKE(PURPLISH/WHITE), Fine Grained, 40 FO 208.24 208.95 MAFIC DYKE(GREENISH), Massive, Fine Grained 210.21 210.73 ULTRAMAFIC INTRUSIVE, Massive, Medium Grained 211.64 212.35 INTERMEDIATE DYKE(PURPLISH/BROWN), Fine Grained, 60 FO 214.57 214.95 ULTRAMAFIC INTRUSIVE, Massive, Medium Grained 229.83 230.28 FELSIC DYKE(PURPLISH/WHITE), Fine Grained	ingers CB, trace
234.07	237.57	MAFIC DYKE(GREENISH), Massive, Medium Grained, slightly fractured, trace vein associated/stringers QV 235.34 236.19 FELSIC DYKE(PURPLISH/WHITE), Fine Grained, 40 FO 00.5-2% veins associated/in vein PO	·
237.57	267.92	PILLOWED FLOW, Fine Grained, 50 FO slightly fractured, trace stringers AB, trace selvages CB, trace selvages CL, trace vein associated/in vein CP, 00.3-0.5% selvages EP, trace associated/in vein PY, trace QV 245.26 247.12 MAFIC DYKE(GREENISH), Massive, Medium Grained 247.23 249.77 INTERMEDIATE DYKE(PURPLISH/BROWN), Massive, Fine Grained 253.89 254.36 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, Fine Grained, 50 FO 262.82 263.51 INTERMEDIATE DYKE(PURPLISH/BROWN), Massive, Fine Grained	
267.92	275.00	GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, Coarse Grained, slightly fra stringers CB, trace vein associated/in vein PO, trace stringers QV	actured, trace
275.00	303.18	PILLOWED FLOW, Fine Grained, 50 FO fairty lightly fractured, trace stringers AB, trace selvages CB, trace selvages CL, trace CP, 00.5-2% selvages EP, 00.3-0.5% PO, trace PY, trace 276.95 277.38 INTERMEDIATE DYKE(PURPLISH/BROWN), Massive, Fine Grained 280.70 281.28 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, Massive, 0288.93 289.23 MAFIC DYKE(GREENISH), Porphyritic 299.40 300.62 INTERMEDIATE DYKE(PURPLISH/BROWN), Massive, Fine Grained	ice QV
303.18	309.30	HEALED FAULT ZONE + Qz/Ab/Cb Vns+/- Kf,Ep, Fine Grained, slightly fractured, trace blebs PO, trace stringers QV	CP, trace blebs
309.30	407.00	PILLOWED FLOW, Fine Grained, slightly fractured, trace stringers AB, trace selvages BI, trace trace selvages CL, trace vein associated/in vein CP, trace selvages EP, trace vein associated/in 00.3-0.5% PO, trace vein associated/in vein PY, 00.3-0.5% QV 310.00 310.43 FELSIC DYKE(PURPLISH/WHITE), Fine Grained, fairly lightly fractured 312.30 312.76 MAFIC DYKE(GREENISH), Porphyritic 313.12 314.50 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), Porphyritic, 60 FO 318.71 319.35 MAFIC DYKE(GREENISH), Fine Grained 322.99 323.48 MAFIC DYKE(GREENISH), Porphyritic 335.00 336.10 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), Fractured, Porphyritic, trace 339.20 340.60 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), trace fracture filling PY 345.90 346.20 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic 349.60 349.95 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic 349.85 351.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 354.73 356.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 356.15 357.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 360.00 360.45 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 360.45 361.85 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclase, 366.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 360.50 366.89 FELSIC DYKE(PURPLISH/BROWN), foliated 374.30 375.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 376.70 378.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 376.70 378.15 INTERMEDIATE DYKE(PURPLISH/BROWN), slmandine garnet,	vein MR, specks PY

	CIVIL OA	NADA LIMITED DETOUR DARE MINEX DITIL TIOLE, 404-103
From	То	Geology
		382.20 383.00 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 387.00 387.56 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 390.93 391.30 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, Fractured, foliated 391.50 391.95 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, foliated, Porphyritic 395.78 396.25 INTERMEDIATE DYKE(PURPLISH/BROWN), Fractured, foliated 397.25 398.70 HYPABYSSAL GABBRO, chlorite, foliated, trace vein associated/in vein PY, trace microveins QV 400.40 400.98 FELSIC DYKE(PURPLISH/WHITE), sericite, albite, foliated, Fractured 400.98 401.48 MAFIC DYKE(GREENISH), biotite, foliated
407.00	497.13	PILLOWED FLOW, VARIOLITIC, Amygdaloidal, trace specks AU, trace blebs CP, trace blebs MR, trace blebs PO, trace specks PY, 00.5-2% microveins QV 417.00 418.00 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 426.05 426.85 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% microvelns QV 429.50 430.12 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 430.05 431.02 INTERMEDIATE DYKE(PURPLISH/BROWN), inamandine garnet, foliated 437.10 437.97 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 447.00 447.00 MAFIC DYKE(GREENISH), biotite, foliated 447.00 MAFIC DYKE(GREENISH), biotite, foliated 447.00 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 447.00 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 447.01 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 447.02 447.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 544.52 FELSIC DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% veins QV 457.26 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% veins QV 457.26 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% veins QV 457.26 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% veins QV 464.24 464.61 MAFIC DYKE(GREENISH), biotite, foliated 464.61 465.29 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, 00.3-0.5% veins QV 464.24 464.61 MAFIC DYKE(GREENISH), biotite, foliated 476.04 477.73 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 476.04 491.43 PLAG PORPH MAFIC DYKE, plagioclase, foliated, Porphyritic 494.25 I FELSIC DYKE(PURPLISH/BROWN), foliated 492.64 494.16 PLAG PORPH MAFIC DYKE, plagioclase, foliated, Porphyritic 494.25 I FELSIC DYKE(PURPLISH/BROWN), almandine garnet, foliated 492.94 494.16 PLAG PORPH MAFIC
497.13	534.61	MASSIVE MAFIC FLOW(<1%bt), foliated, trace blebs PO, trace microveins QV 500.30 501.55 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 505.35 507.88 MAFIC DYKE WITH CHLORITIC PHENOS, plagloclase, chlorite, foliated, Porphyritic 508.60 509.55 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 510.95 511.75 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 521.66 522.26 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagloclase, foliated, Porphyritic 522.26 523.04 HYPABYSSAL GABBRO, foliated 532.21 532.53 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 534.06 534.61 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
534.61	633.65	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, trace specks AU, 00.3-0.5% bands and layering BI, trace wisp CP, trace blebs MR, trace blebs PO, trace specks PY, trace microveins QV 536.29 536.65 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 545.01 546.59 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, foliated 549.20 549.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 554.10 556.78 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclase, foliated 556.78 558.40 HEALED FAULT ZONE + Qz/Ab/Cb Vns+/- Kf,Ep, chlorite, Fractured 558.40 562.50 FELSIC DYKE(PURPLISH/WHITE), hematite, Fractured 566.00 INTERMEDIATE DYKE(PURPLISH/BROWN), Fractured, foliated 566.05 567.80 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, trace microveins QV 573.50 574.15 FELSIC DYKE(PURPLISH/BROWN), almandine garnet, foliated, trace microveins QV 573.50 574.15 FELSIC DYKE(PURPLISH/WHITE), Fractured 590.40 591.80 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 597.15 598.70 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 602.02 604.60 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated Porphyritic 609.38 611.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 11.50 611.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 11.50 611.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 11.50 611.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated

ACER D	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-103
From	То	Geology	
		624.50 625.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		627.70 628.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		628.15 628.57 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 628.75 631.80 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine gamet, foliated	
		632.45 633.65 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		602.40 600.60 INTERNIEDIATE DIRECTION EIGIDDROVING, IGIALEG	
633.65	760.10	WEAK POTASSIC PILLOW FLOW(1-5%K), foliated, pillowed, trace fracture filling AB, 2-4% bath trace tracture filling AB, 2-4% bath trace filling AB, 2-4% bath trace tracture filling AB, 2-4% bath trace fracture filling AB, 2-4% bath trace f	
+		BI, trace wisp CP, trace specks MR, 00.5-2% blebs PO, trace specks PY, 00.3-0.5% microveins 634.30 636.40 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	QV
		649.00 649.53 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		653.95 655.20 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic	
		656.20 656.85 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic	
		657.25 657.77 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
4		661.95 662.75 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
-		662.75 663.10 FELSIC DYKE(PURPLISH/WHITE), foliated 666.70 667.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		672.60 673.40 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
- 1		688.04 688.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
j		688.95 689.00 FAULT ZONE;+/- CHLORITIC GOUGE, chlorite, hornblende, foliated	
Ì		689.00 689.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		689.30 689.86 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated	
1		689.86 690.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	. L
		689.40 690.00 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, foliated, Port 696.85 697.20 INTERMEDIATE DYKE (PURPLISH/BROWN), foliated	onyrπic
		697.40 699.16 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated	
ł		699.90 702.10 FELSIC DYKE(PURPLISH/WHITE), foliated, Fractured	
ĺ		708.00 709.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		712.05 713.00 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, Banded, foliate	ed .
		713.00 713.45 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
l		[713.45] 714.52 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, Banded, foliate	ed ·
		714.52 715.24 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated   737.75 738.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		742.75 743.40 INTERMEDIATE DYKE(PURPLISH/BROWN), folialed	
		743.67 744.34 MAFIC DYKE(GREENISH)	
		744.47 745.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		747.50 748.25 ULTRAMAFIC INTRUSIVE, actinolite, foliated	
		754.15 754.38 ULTRAMAFIC INTRUSIVE, foliated	
		754.38   754.75   INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		755.10 756.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		756.95 757.70 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, Banded, foliated	
		757.70 758.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		758.10 760.10 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, Banded, foliated	
760.10	811.40	CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, biotite, t	Banded foliated
		trace specks AU, 10% bands and layering BI, trace specks CP, trace blebs PO, trace specks PY	
İ		and/or phenocrysts TE	
i		761.90 764.80 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, Banded, foliate 765.60 766.10 FELSIC DYKE(PURPLISH/WHITE)	ea ea
ŀ		766.20 766.70 MAFIC DYKE(GREENISH)	
		767.55 768.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		768.20 769.50 MAFIC DYKE(GREENISH)	
		770.70 771.50 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, Banded, foliate	ed
		772.43 773.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		774.20 775.05 FELSIC DYKE(PURPLISH/WHITE), foliated	
i		777.10 777.63 FELSIC DYKE(PURPLISH/WHITE), foliated	
j		777.93 778.36 FELSIC DYKE(PURPLISH/WHITE), foliated 780.40 780.75 HEALED FAULT ZONE + Qz/Ab/Cb Vns+/- Kf,Ep, brecciated, Fractured	
İ		782.80 783.90 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		784.95 785.50 FELSIC DYKE(PURPLISH/WHITE), foliated	
		787.00 788.50 FELSIC DYKE(PURPLISH/WHITE), foliated	
}		792.17 792.42 FELSIC DYKE(PURPLISH/WHITE), foliated	
l		795.85 796.05 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
		796.35 797.28 INTERMEDIATE DYKE(PURPLISH/BROWN), biotite, foliated	
		798.25 799.50 FELSIC DYKE(PURPLISH/WHITE), foliated	
		800.55 801.15 FELSIC DYKE(PURPLISH/WHITE), foliated 804.20 805.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		806.72 808.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
_,l	_		

_ACER D	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-10:
From	То	Geology	
811.40	821.10	INTERMEDIATE DYKE(PURPLISH/BROWN), biotite, foliated, 00.5-2% pervasive BI, trace	blebs QV
821.10	965.66	PILLOWED FLOW, chlorite, biotite, pillowed, foliated, trace specks CP, trace blebs PO, trace 827.55 828.70 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 831.80 832.15 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 833.60 834.25 FELSIC DYKE(PURPLISH/WHITE), foliated 841.85 842.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 851.80 852.15 FELSIC DYKE(PURPLISH/WHITE), foliated 853.60 854.35 FELSIC DYKE(PURPLISH/WHITE), Practured, foliated 853.60 854.35 FELSIC DYKE(PURPLISH/WHITE), Prophyritic, foliated 853.62 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 865.06 861.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 867.95 FELSIC DYKE(PURPLISH/WHITE), foliated 873.75 874.85 GABBROIC DYKE(PURPLISH/BROWN), foliated 873.75 874.85 GABBROIC DYKE(PURPLISH/BROWN), foliated 876.25 876.65 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 878.38 879.66 MAFIC DYKE(GREENISH), foliated 880.99 882.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 880.99 882.10 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 880.90 885.41 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 897.30 899.21 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 897.30 899.21 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 915.05 MAFIC DYKE(GREENISH), foliated 915.05 MAFIC DYKE(GREENISH), biotite, foliated 915.05 MAFIC DYKE(GREENISH), biotite, foliated 916.27 917.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 924.35 924.63 MAFIC DYKE(GREENISH), biotite, foliated 924.35 924.63 MAFIC DYKE(GREENISH), biotite, foliated 938.87 938.97 MAFIC DYKE(GREENISH), biotite, foliated 938.89 938.97 MAFIC DYKE(GREENISH), foliated 941.20 941.66 MAFIC DYKE(GREENISH), foliated 941.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 941.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 941.20 941.66 MAFIC DYKE(GREENISH), foliated 941.20 941.66 MAFIC DYKE(GREENISH), foliated 941.20 941.66 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 941.66 942.16 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 941.60 941.60 MAFIC DYKE(GREENISH), foliated 941.60 941.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 941.60 941.60 INTERMEDIATE DYKE(PU	
965.66		** END OF HOLE **	

CHALCOPYRITE
MARCASITE
PYRRHOTITE
PYRITE
BIOTITE
CARBONATE
EPIDOTE
ALBITE
CHLORITE
QUARTV
HEMATITE
POTASSIUM FELDSPAR
POTASSIC ALTERATION
QUARTZ VEIN
FOLIATION

Drill Hole: 464-108

Northing : 20977.00 Easting : 15400.00 Elevation : 6280.00 Hole Depth : 1205.00mt Project ID: 464
Core Size: NQ
Date Logged: 04JUN96
Logged By: RKM
Assisted by:

MINING CLAIM NUMBER: CLM 229
DRILLING STARTED: JUNE 3, 1996
DRILLING COMPLETED: JUNE 22, 1996
DRILLING CONTRACTOR: BRADELY BROTHERS LIMITED
DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE
LOGGING STARTED: JUNE 4, 1996
LOGGING COMPLETED: JUNE 23, 1996
LOGGED BY: RYAN MCEACHERN

6 Mill

Drill Hole Survey Data				
Depth	Azimuth	Dip		
Collar	193.00	-82.00		
29.00mt	193.00	-82.25		
47.00mt	193.00	-82.00		
101.00mt	189.00	-81.00		
150.00mt	185.00	-80.50		
200.00mt	181.00	-79.50		
251.00mt	180.00	-78.75		
302.00mt	178.00	-78.00		
353.00mt	178.00	-77.00		
401.00mt	178.00	-76.00		
449.00mt	178.00	-74.25		
500.00mt	175.00	-73.75		
551.00mt	177.00	-73.00		
599.00mt	175.00	-71.75		
650.00mt	175.00	-71.25		
707.00mt	174.00	-70.75		
755.00mt	174.00	-70.25		
803.00mt	175.00	-69.25		
857.00mt	178.00	-69.00		
908.00mt	175.00	-68.25		
953.00mt	180.00	-67.75		
1001.00mt	178.00	-67.00		
1049.00mt	183.00	-66.25		
1103.00mt	180.00	-65.50		
1154.00mt	183.00	-65.00		
1205.00mt	182.00	-64.00		

From	То	Geology
0.00	25.10	OVERBURDEN
25.10	31.00	MASSIVE MAFIC FLOW(<1%bt), Fractured, foliated, 70 FO extremely well fractured, trace microveins QV 27.75 29.83 FELSIC DYKE(PURPLISH/WHITE), foliated
31.00	43.10	PILLOWED FLOW, foliated, pillowed, trace blebs PO, trace microveins QV 39.25 39.75 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated
43.10	69.10	MASSIVE MAFIC FLOW(<1%bt), foliated, trace microveins QV 44.60 46.25 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 48.00 49.00 WEAKLY POTASSIC MAFIC FLOW(1-5%K), foliated 56.25 56.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 59.10 59.60 MAFIC DYKE(GREENISH), foliated 59.60 61.00 WEAKLY POTASSIC MAFIC FLOW(1-5%K), foliated
69.10	96.75	CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, actinolite, biotite, foliated, 00.5-2% bands and layering BI, 00.3-0.5% fracture filling CB, trace vein associated/in vein KF, trace blebs PO, trace specks PY, 00.5-2% veins QV 87.90 89.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 89.50 89.98 MAFIC DYKE(GREENISH), foliated 91.20 92.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 94.45 95.00 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclase, foliated, Porphyritic

From	То	Geology
96.75	156.15	PILLOWED FLOW, foliated, pillowed, VARIOLITIC, 00.5-2% bands and layering BI, trace vein associated/in vein CB, trace blebs PO, 00.3-0.5% microveins QV 122.77 123.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 00.3-0.5% microveins QV 137.08 137.90 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 138.72 140.80 MASSIVE MAFIC FLOW(<1%bt), biotite, foliated 140.80 141.08 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 141.70 142.79 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 143.10 143.45 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 145.38 146.05 INTERMEDIATE DYKE(PURPLISH/BROWN), magnetite, foliated 152.80 154.30 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, almandine garnet, sericite, foliated
156.15	161.35	SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, almandine garnet, Porphyritic, foliated, 10% pervasive KF
161.35	240.75	PILLOWED FLOW, foliated, pillowed, trace specks AU, trace blebs CP, trace blebs MR, 00.3-0.5% blebs PO, trace specks PY, 00.5-2% veins QV 176.00 176.60 MAFIC DYKE(GREENISH), biotite, foliated 178.25 178.65 ULTRAMAFIC INTRUSIVE, foliated 189.58 191.60 INTERMEDIATE DYKE(PURPLISH/BROWN), magnetite, foliated 203.36 204.45 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, almandine garnet, Porphyritic, foliated 206.80 208.04 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, almandine garnet, Porphyritic, foliated 215.05 215.60 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclase, foliated 227.95 228.40 ULTRAMAFIC INTRUSIVE, actinolite 236.72 237.40 FELSIC DYKE(PURPLISH/WHITE), Fractured, 00.3-0.5% disseminations & scattered crystals CP, 00.5-2% disseminations & scattered crystals PY 240.00 240.75 ULTRAMAFIC INTRUSIVE, actinolite
240.75	244.40	HEALED FAULT ZONE + Qz/Ab/Cb Vns+/- Kf,Ep, albite, hematite, Fractured, 5-7% vein associated/in vein AB, trace blebs CP, trace crystals and/or phenocrysts PY 242.20 243.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
244.40	289.35	PILLOWED FLOW, albite, pillowed, foliated, trace crystals and/or phenocrysts AB, trace blebs CP, trace blebs MR, , 00.3-0.5% specks PY, 00.3-0.5% microveins QV 248.35 248.70 ULTRAMAFIC INTRUSIVE, actinolite, foliated 269.60 270.00 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, albite, chlorite, Porphyritic, foliated 289.00 289.35 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
289.35	294.00	MASSIVE MAFIC FLOW(<1%bt), foliated, 2-4% bands and layering BI, trace blebs CP, trace blebs PY, trace microveins QV
294.00	330.25	PILLOWED FLOW, foliated, VARIOLITIC, pillowed, trace bands and layering BI, trace blebs CP, trace blebs MR, trace blebs PO, trace crystals and/or phenocrysts PY, trace microveins QV 297.70 298.10 MAFIC DYKE(GREENISH), foliated 298.45 299.85 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, Fractured, foliated 300.60 301.95 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, Fractured, foliated 310.10 310.90 MASSIVE MAFIC FLOW(<1%bt), foliated 324.85 325.08 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagloclase, foliated, Porphyritic 326.30 327.10 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 327.70 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 329.85 330.10 FELSIC DYKE(PURPLISH/WHITE), foliated
330.25	333.85	MASSIVE MAFIC FLOW(<1%bt), foliated, trace blebs PO, trace stringers QV 332.95 333.45 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated
333.85	459.65	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, trace specks AU, 00.5-2% bands and layering BI, 00.3-0.5% blebs CP, trace blebs MR, 00.5-2% blebs PO, trace crystals and/or phenocrysts PY, 00.5-2% microveins QV 335.60 335.85 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagiociase, foliated, Porphyritic 338.60 338.92 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 342.62 343.50 MAFIC DYKE(GREENISH), albite, foliated 344.40 344.95 MAFIC DYKE(GREENISH), albite, foliated 346.26 346.68 FELSIC DYKE(PURPLISH/WHITE), foliated 365.30 366.32 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 367.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 367.58 369.20 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 369.79 370.55 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated

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From	То	Geology	
		375.35 376.90 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 376.90 377.21 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, foliated, Porph 377.21 379.70 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	yritic
		383.80 386.00 MAFIC DYKE(GREENISH), foliated  386.00 386.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		392.10 392.75 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	on he sattle
}		393.85 394.75 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, foliated, Po 396.70 398.35 MASSIVE MAFIC FLOW(<1%bt), foliated	rpnyrπic
ļ		404.35 404.85 FELSIC DYKE(PURPLISH/WHITE), foliated 404.85 405.20 MAFIC DYKE(GREENISH), foliated	
ļ		405.45 406.10 FELSIC DYKE(PURPLISH/WHITE), foliated 406.20 408.80 PLAG PORPH FELSIC DYKE(+K/+/- hem matrix), plagioclase, almandine gar	not foliated
		Porphyritic	riet, rollateu,
		411.25 412.35 MAFIC DYKE(GREENISH), foliated 420.33 421.12 MAFIC DYKE(GREENISH), foliated	
		422.90 423.36 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 423.45 423.77 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		424.80 425.25 MAFIC DYKE(GREENISH), foliated	
		425.49 425.80 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 437.43 437.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		440.40 441.05 MAFIC DYKE(GREENISH), albite, foliated, Porphyritic 441.80 442.43 PLAG PORPH FELSIC DYKE(+K/+/- hern matrix), plagioclase, foliated, Porph	vritic
		443.10 444.95 FELSIC DYKE(PURPLISH/WHITE), foliated 447.20 449.05 FELSIC DYKE(PURPLISH/WHITE), foliated	,,
		456.85 457.70 MAFIC DYKE(PURPLISH), foliated	
459.65	465.10	INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, magnetite, foliated 461.78 462.10 MAFIC DYKE(GREENISH), foliated	
465.10	467.05	PILLOWED FLOW, foliated, pillowed, 00.5-2% bands and layering BI, trace microveins CB, tra blebs MR, 00.3-0.5% blebs PO, trace crystals and/or phenocrysts PY, 00.5-2% microveins QV	
		465.55 465.80 MAFIC DYKE(GREENISH) 466.97 467.05 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
467.05	481.90	MASSIVE MAFIC FLOW(<1%bt), foliated, 30% pervasive BI, trace blebs PO, trace microvelns 469.65 471.05 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	σΛ
		471.05 471.65 MAFIC DYKE(GREENISH), foliated 480.40 481.90 MAFIC DYKE(GREENISH), foliated	
481.90	560.93	GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, chlorite, biotite, foliated, tr associated/in vein MR, trace disseminations & scattered crystals PO, trace blebs PY	ace vein
		483.60 484.85 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated	
		488.72 488.82 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 491.20 492.10 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
		493.26 493.85 MASSIVE MAFIC FLOW(<1%bt), biotite, foliated 495.40 496.21 MASSIVE MAFIC FLOW(<1%bt), biotite, chlorite, foliated	
		497.65 498.20 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 500.30 500.55 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
		500.72 502.18 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
		505.80 506.30 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 520.60 522.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		524.60 525.30 MASSIVE MAFIC FLOW(<1%bt), foliated	
		533.80 534.25 MAFIC DYKE(GREENISH), foliated 541.15 542.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
		543.05 544.75 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
-		548.40 550.35 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 554.00 556.50 FELSIC DYKE(PURPLISH/WHITE), foliated	
		557.30 558.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		558.30 558.90 MASSIVE MAFIC FLOW(<1%bt), foliated, Amygdaloidal 558.90 560.93 MAFIC DYKE(GREENISH), foliated	
560.93	578.00	GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, trace blebs CP, to 0.5-2% discerning tions & scattered constate PO	race blebs MR,
		00.5-2% disseminations & scattered crystals PO 553.00 565.00 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 574.95 575.70 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
}		INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
578.00	- 582 ድሶ		

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From	То	Geology
582.60	602.20	GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, trace blebs CP, trace blebs MR, 00.5-2% disseminations & scattered crystals PO, trace blebs PY 588.70 589.70 FELSIC DYKE(PURPLISH/WHITE), hematite, foliated 601.85 602.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
602.20	604.50	MASSIVE MAFIC FLOW(<1%bt), foliated 602.90 604.38 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
604.50	608.75	INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, trace fracture filling AB, trace blebs PO, trace microveins QV
608.75	609.25	MASSIVE MAFIC FLOW(<1%bl), foliated 609.95 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated
609.25	623.05	PILLOWED FLOW, pillowed, foliated 620.40 620.74 FELSIC DYKE(PURPLISH/WHITE), foliated 620.90 621.15 FELSIC DYKE(PURPLISH/WHITE), foliated 621.25 623.05 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated
623.05	627.90	INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, trace vein associated/in vein AB, 00.5-2% pervasive BI
627.90	638.74	FELSIC DYKE(PURPLISH/WHITE), Porphyritic, Fractured, foliated, fairly fractured, 00.3-0.5% vein associated/in vein AB, trace vein associated/in vein CB, trace pervasive KF, trace blebs PO, 00.3-0.5% microveins QV 627.90 628.55 MASSIVE MAFIC FLOW(<1%bt), foliated 632.85 633.40 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated 633.55 635.50 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated 638.25 638.74 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
638.74	652.35	MASSIVE MAFIC FLOW(<1%bt), Fractured, foliated, extremely well fractured, trace vein associated/in vein CB, trace blebs PO, trace specks PY, trace microveins QV 639.10 639.45 FELSIC DYKE(PURPLISH/WHITE), foliated 640.32 640.90 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 642.05 643.85 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 646.65 647.55 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 646.65 649.20 PLAG PORPH INTERMEDIATE DYKE, plagioclase, hematite, foliated, Porphyritic 651.00 652.35 PLAG PORPH INTERMEDIATE DYKE, plagioclase, hematite, foliated, Porphyritic
652.35	664.75	FAULT ZONE;+/- CHLORITIC GOUGE, Fractured 651.75 652.20 FELSIC DYKE(PURPLISH/WHITE), Fractured 652.35 655.00 MASSIVE MAFIC FLOW(<1%bt), Fractured, foliated 655.00 656.75 FELSIC DYKE(PURPLISH/WHITE), hematite, Fractured 656.75 657.30 MASSIVE MAFIC FLOW(<1%bt) 657.30 658.50 FELSIC DYKE(PURPLISH/WHITE), hematite, Fractured 658.80 659.12 FELSIC DYKE(PURPLISH/WHITE), hematite, Fractured 659.12 662.70 MASSIVE MAFIC FLOW(<1%bt), Fractured, foliated 662.70 663.68 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 00.5-2% disseminations & scattered crystals PO 663.68 664.75 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, chlorite, foliated
664.75	681.65	MASSIVE MAFIC FLOW(<1%bt), foliated  664.75 667.45 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 00.3-0.5% blebs PY  667.45 669.67 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated  672.68 673.82 FELSIC DYKE(PURPLISH/WHITE), foliated  674.38 676.22 FELSIC DYKE(PURPLISH/WHITE), foliated  677.52 678.75 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated  680.75 681.65 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, almandine garnet, foliated
681.65	756.70	PILLOWED FLOW, pillowed, foliated, trace vein associated/in vein CB, trace blebs MR, trace blebs PO, trace microveins QV 688.40 689.87 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 689.87 690.45 MAFIC DYKE(GREENISH), foliated 692.39 693.05 WEAK POTASSIC PILLOW FLOW(1-5%K), foliated, pillowed 693.05 693.41 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 693.90 695.53 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 697.10 697.56 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 697.95 698.32 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 698.32 700.15 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 700.36 701.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated

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From	То	Geology	
		701.90 702.55 FELSIC DYKE(PURPLISHAWHITE), foliated 705.00 705.30 ULTRAMAFIC INTRUSIVE, foliated 705.75 706.05 ULTRAMAFIC INTRUSIVE, actinolite, foliated	
		706.35 707.10 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
Ì	i	707.60 710.90 ULTRAMAFIC INTRUSIVE, actinolite, foliated 712.55 714.27 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
		716.25 717.18 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, sericite, foliated 717.18 717.56 ULTRAMAFIC INTRUSIVE, actinolite, foliated	
}	ı	717.56 720.10 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, sericite, foliated 720.10 721.65 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		722.85 723.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
ì		725.89 726.45 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 729.65 730.46 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated	
- 1		731.87 732.25 ULTRAMAFIC INTRUSIVE, actinolite, foliated 732.90 733.50 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclase	. Porphyritic.
		foliated 733.84 735.80 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated	
		735.99 736.18 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated	
		737.60 738.58 ULTRAMAFIC INTRUSIVE, actinolite, foliated 751.03 752.35 FELSIC DYKE(PURPLISH/WHITE), foliated	
756.70	760.55	INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 00.5-2% disseminations & scattered of	crystals PY
760.55	827.00	PILLOWED FLOW, pillowed, foliated, 00.3-0.5% bands and layering BI, 00.3-0.5% vein assoc trace blebs MR, trace blebs PO, trace blebs PY	lated/in vein CB,
		760.80 762.90 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, albite, Po	orphyritic, foliated
l		772.45 773.21 PLAG PORPH MAFIC DYKE, albite, Porphyritic, foliated 773.21 773.60 ULTRAMAFIC INTRUSIVE, actinolite, foliated	
}		774.62 775.75 MAFIC DYKE WITH CHLORITIC PHENOS, chlorite, Porphyritic, foliated 776.20 777.18 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated	
		781.57 782.15 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 787.33 789.65 INTERMEDIATE DYKE(PURPLISH/BROWN), biolite, foliated	
		803.95 804.80 FELSIC DYKE(PURPLISH/WHITE), hematite, Fractured	
1		809.75 810.55 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated 810.55 811.25 INTERMEDIATE DYKE(PURPLISH/BROWN)	
1		812.93 813.62 ULTRAMAFIC INTRUSIVE 813.62 814.90 INTERMEDIATE DYKE(PURPLISH/BROWN)	
}		816.55 816.95 INTERMEDIATE DYKE(PURPLISH/BROWN) 818.95 819.80 INTERMEDIATE DYKE(PURPLISH/BROWN)	
		820.35 821.35 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 825.25 827.00 INTERMEDIATE DYKE(PURPLISH/BROWN)	
827.00	863.80	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, 00.3-0.5% vein associated/in vein CB, trai	ce blebs CP, trace
	İ	blebs PO, trace specks PY 835.10 838.45 MASSIVE MAFIC FLOW(<1%bt), foliated	
		845.94 846.12 FELSIC DYKE(PURPLISH/WHITE), foliated 846.20 846.90 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
-		846.90 847.35 FELSIC DYKE(PURPLISH/WHITE), foliated	
Ì		851.95 852.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 857.90 858.42 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
	,	861.60 863.37 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, microveins QV	00.3-0.5%
		863.37 863.80 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
863.80	867.20	CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, biotite 00.5-2% vein associated/in vein AB, 20% bands and layering BI, 60% pervasive CL, trace bleb	
		and/or phenocrysts PY, 00.5-2% microveins QV 865.40 865.78 FELSIC DYKE(PURPLISH/WHITE), albite, foliated	•
867.20	904.38	SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated, 00.3-0.5% fracture f	illing AB, trace
		microveins QV 870.15 870.40 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC foliated	C, chlorite, biotite,
ļ		873.52 874.02 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC	C, foliated
		874.02 875.75 FELSIC DYKE(PURPLISH/WHITE), hematite, foliated 876.06 876.73 FELSIC DYKE(PURPLISH/WHITE), foliated	
		876.73 877.35 INTERMEDIATE DYKE(PURPLISH/BROWN), biotite, foliated 879.85 880.03 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TAL(	Chiatite chlorite
			· , _ · - · · - · · · · · · · · · · · · · ·

rom	То	Geology
		foliated 881.90 883.25 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, biotite, chiorite,
ļ		foliated, 00.3-0.5% blebs PO 883,25 883,72 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated
		883.92 884.24 ULTRAMAFIC INTRUSIVE, actinolite, foliated
		884.24 885.00 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 885.00 885.35 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated
		885.35 886.88 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		888.00 889.60 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated
1		889.60 891.89 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, foliated 891.89 892.24 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		892.24 893.00 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated
		893.00 893.95 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, foliated 893.95 894.30 FELSIC DYKE(PURPLISH/WHITE), foliated
		894.30 894.80 CHLORITIC GREENSTONE; +50% CHLORITE ALTERATION; MINOR TALC, chlorite, foliated
		894.80 895.50 FELSIC DYKE(PURPLISH/WHITE), foliated
		895.50 896.90 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, foliated,   00.3-0.5% veins QV
		901.80 903.00 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, chlorite, foliated
		903.00 904.38 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
904.38	917.85	ULTRAMAFIC INTRUSIVE, actinolite, foliated
		908.54 908.80 FELSIC DYKE(PURPLISH/WHITE), foliated 914.30 915.20 FELSIC DYKE(PURPLISH/WHITE), foliated
		915.35 915.68 FELSIC DYKE(PURPLISH/WHITE), foliated
		917.30 917.85 FELSIC DYKE(PURPLISH/WHITE), foliated
917.85	928.12	CHLORITIC GREENSTONE; +50% CHLORITE ALTERATION; MINOR TALC, chlorite, biotite, foliated
l		918.00 918.42 FELSIC DYKE(PURPLISH/WHITE), foliated
		918.68 919.12 FELSIC DYKE(PURPLISH/WHITE), foliated 919.65 921.35 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		921.54 922.68 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		922.68 923.45 FELSIC DYKE(PURPLISH/WHITE), foliated 923.45 923.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		923.95 924.58 FELSIC DYKE(PURPLISH/WHITE), foliated
		925.80 927.55 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 927.65 928.12 FELSIC DYKE(PURPLISH/WHITE), foliated
		, "
928.12	964.55	PILLOWED FLOW, pillowed, foliated, 00.3-0.5% bands and layering BI, trace vein associated/in vein CB, trace blebs CP, trace blebs PO, trace microveins QV
		932.25 933.52 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		934.62 935.05 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		936.11 938.50 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 938.70 939.74 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
1		939.74 940.14 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated
		946.25 947.20 ULTRAMAFIC INTRUSIVE, actinolite, foliated 949.15 949.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		949.40 951.35 ULTRAMAFIC INTRUSIVE, actinolite, foliated
		955.32 956.30 ULTRAMAFIC INTRUSIVE, actinolite, foliated
		956.47 958.30 ULTRAMAFIC INTRUSIVE, actinolite, foliated 958.30 958.61 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		958.61 960.95 ULTRAMAFIC INTRUSIVE, actinolite, foliated
		964.20 964.55 ULTRAMAFIC INTRUSIVE, actinolite, foliated
964.55	974.95	MASSIVE MAFIC FLOW(<1%bt), foliated, 20% pervasive CL, trace blebs PY, trace microveins QV
		972.33 972.98 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated
974.95	991.00	PILLOWED FLOW, foliated, pillowed, trace vein associated/in vein AB, trace vein associated/in vein CB, trace
		blebs PO, trace stringers QV 974.95 976.15 FELSIC DYKE(PURPLISH/WHITE), foliated
991.00	1003.60	MASSIVE MAFIC FLOW(<1%bt), foliated, 00.5-2% vein associated/in vein CB, 20% pervasive CL, trace blebs PO,
		, trace stringers QV  991.00 992.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		994.68 995.51 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated
		995.51 996.87 ULTRAMAFIC INTRUSIVE, foliated
		1002.22 1003.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated

LACER L	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-108
From	То	Geology	
1003.60	1053.61	PILLOWED FLOW, pillowed, foliated, 00.5-2% vein associated/in vein CB, 20% pervasive CL, 00.5-2% microveins QV 1004.47 1005.20 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1006.80 1008.30 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, plagioclas Porphyritic 1009.85 1010.74 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1016.38 1017.80 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1017.90 1020.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1028.28 1029.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1028.28 1029.40 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1035.90 1037.03 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 1037.50 1038.90 FELSIC DYKE(PURPLISH/WHITE), foliated 1039.15 1041.10 FELSIC DYKE(PURPLISH/WHITE), foliated 1044.03 1044.31 PLAG PORPH FELSIC DYKE(+KI+/- hem matrix), plagioclase, almandine gifoliated	se, foliated,
1053.61	1057.50	FELSIC DYKE(PURPLISH/WHITE), sericite, almandine garnet, foliated	
1057.50	1071.82	PILLOWED FLOW, pillowed, foliated, trace blebs PO, trace specks PY, trace microveins QV 1057.50 1057.87 MAFIC DYKE(GREENISH), biotite, foliated 1058.15 1058.56 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1059.05 1060.27 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 1064.85 1065.50 FELSIC DYKE(PURPLISH/WHITE), foliated 1071.45 1071.82 FELSIC DYKE(PURPLISH/WHITE), foliated	
1071.82	1095.87	MASSIVE MAFIC FLOW(<1%bt), foliated, 10% pervasive BI, trace vein associated/in vein CB 1079.97 1080.53 MAFIC DYKE(GREENISH), biotite, foliated 1084.18 1085.20 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 1093.20 1094.35 FELSIC DYKE(PURPLISH/WHITE), almandine garnet, foliated 1094.35 1095.62 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, biotite,	foliated
1095.87	1111.00	PILLOWED FLOW, pillowed, foliated, 00.3-0.5% bands and layering BI, trace vein associated/iblebs PO, trace blebs PY, trace microveins QV 1097.28 1098.20 INTERMEDIATE DYKE(PURPLISH/BROWN), blotite, foliated 1100.15 1100.70 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 1103.60 1103.97 MAFIC DYKE(GREENISH), foliated 1106.20 1106.81 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, trace specks PY, OV QV 1110.65 1111.00 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, biotite,	0.3-0.5% microvelns
1111.00	1123.00	MASSIVE MAFIC FLOW(<1%bt), foliated, trace bands and layering BI, trace blebs PO, trace of phenocrysts PY, trace microveins QV	crystals and/or
1123.00	1152.45	GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, homblende, biotite, foliate BI, trace blebs PO, trace veins QV 1137.50 1138.70 WEAK POTASSIC PILLOW FLOW(1-5%K), biotite, foliated, pillowed, trace microveins QV 1142.87 1145.98 WEAK POTASSIC PILLOW FLOW(1-5%K), biotite, foliated, pillowed, trace specks PY, 00.5-2% veins QV 1151.10 1152.45 PLAG PORPH MAFIC DYKE, foliated, Porphyritic	blebs PO, trace
1152.45	1157.60	WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated, trace blebs PO, trace crystals a PY, trace microveins QV	and/or phenocrysts
1157.60	1205.00	GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, homblende, Coarse Grain PY, trace veins QV 1159.20 1160.60 WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated, trace blebs FQV 1163.00 1164.85 WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated, trace stringe	PO, trace microveins
1205.00		** END OF HOLE **	

CP	CHALCOPYRITE
MR	MARCASITE
PO	PYRRHOTITE
PY	PYRITE
BI\(bt)	BIOTITE
CB	CARBONATE
EP	EPIDOTE
AB	ALBITE
CL	CHLORITE
QZ	QUARTV
HEM	HEMATITE
Kf	POTASSIUM FELDSPAR
K	POTASSIC ALTERATION
QV	QUARTZ VEIN
FO	FOLIATION

Drill Hole: 464-110

Northing : 21070.00 Easting : 15400.00 Elevation : 6280.00 Hole Depth : 356.40mt Project ID: 464
Core Size: NQ
Date Logged: 23JUN96
Logged By: RKM
Assisted by:

MINING CLAIM NUMBER: CLM 229
DRILLING STARTED: JUNE 18, 1996
DRILLING COMPLETED: JUNE 22, 1996
DRILLING CONTRACTOR: BRADLEY DIAMOND DRILLING
DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE
LOGGING STARTED: JUNE 23, 1996
LOGGING COMPLETED: JUNE 26, 1996
LOGGED BY: RYAN MCEACHERN

Drill Hole Survey Data

Depth Azimuth Dip

Collar 180.00 -82.00

29.00mt 184.00 -81.50

80.00mt 178.00 -81.00

131.00mt 169.00 -80.50 182.00mt 172.00 -80.00 253.00mt 163.00 -79.00 284.00mt 162.00 -77.00 335.00mt 163.00 -73.00

From	То	Geology
0.00	19.00	OVERBURDEN
19.00		PILLOWED FLOW 50.70 52.67 PLAG PORPH MAFIC DYKE, foliated, Porphyritic, 60 FO , trace disseminations & scattered crystals PY, trace microveins QV 53.55 54.17 MAFIC DYKE(GREENISH), foliated, Fine Grained, 28 FO , trace microveins QV 54.54 54.84 FELSIC DYKE(PURPLISH/WHITE), foliated, 55 FO , trace disseminations & scattered crystals PY, trace microveins QV 55.52 55.87 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 55 FO , trace disseminations & scattered crystals PY, trace microveins QV 55.87 56.48 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Medium Grained, 40 FO , trace disseminations & scattered crystals PY, trace microveins QV 56.48 56.82 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 40 FO , trace disseminations & scattered crystals PY, trace microveins QV 59.88 60.97 PLAG PORPH MAFIC DYKE, foliated, Porphyritic, 55 FO , trace wisp PY 60.97 61.32 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Medium Grained, 35 FO , trace disseminations & scattered crystals PY 65.44 65.86 FELSIC DYKE(PURPLISH/WHITE), foliated, 50 FO , trace vein associated/in veln PY, trace microveins QV 65.86 67.97 FELSIC DYKE(PURPLISH/WHITE), foliated, 75 FO , trace microveins QV
69.58	78.08	MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained, slightly fractured 46 FO , trace patches, as in quilts CL, trace QV 74.16 74.46 MAFIC DYKE(GREENISH), foliated, Medium Grained, 55 FO , trace blebs QV 77.00 78.08 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Medium Grained, 40 FO , trace vein associated/in vein PY, trace blebs QV
78.08	82.20	PILLOWED FLOW, foliated, pillowed, slightly fractured 55 FO , trace bands and layering BI, trace selvages PY, trace microveins QV
82.20	85.60	PILLOWED FLOW, foliated, pillowed, very lightly fractured 60 FO , trace selvages CL, trace selvages KF, trace selvages PY, trace microveins QV
85.60	101.02	MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained, very lightly fractured 50 FO , trace vein associated/in vein CP, trace vein associated/in vein PO, trace vein associated/in vein PY, trace blebs QV 89.65 PLAG PORPH MAFIC DYKE, Porphyritic, foliated, 62 FO , trace patches, as in quilts PO, trace patches, as in quilts PY, trace microveins QV
01.02	115.37	ULTRAMAFIC INTRUSIVE, Porphyritic, Medium Grained, lightly fractured 45 FO , 5-7% disseminations & scattered crystals MG, trace vein associated/in vein PO, trace blebs QV 109.73 113.00 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, foliated, 35 FO , trace wisp PO,

		NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-
rom	То	Geology	
		trace wisp PY, trace microveins QV	
115.37	118.55	FELSIC DYKE(PURPLISH/WHITE), foliated, 50 FO very lightly fractured, trace dissemination crystals PY	ns & scattered
118.55	168.20	ULTRAMAFIC INTRUSIVE, Medium Grained, foliated, 55 FO lightly fractured, 10% disseminal scattered crystals MG, trace fracture filling QV 118.55 119.46 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 50 FO 129.00 132.43 ULTRAMAFIC INTRUSIVE, Medium Grained, foliated, 35 FO 132.43 135.45 FELSIC DYKE(PURPLISH/WHITE), foliated, 60 FO 144.23 144.68 CHLORITIC GREENSTONE;+50% CHLORITE ALTERATION;MINOR TALC, foliated, 45 FO 5-7% microveins QV 145.40 145.83 MAFIC DYKE(PURPLISH/WHITE), foliated, 55 FO 145.83 146.17 FELSIC DYKE(PURPLISH/WHITE), foliated, 55 FO 156.16 156.70 MAFIC DYKE(GREENISH), Fine Grained, foliated, 55 FO	
		156.90 157.35 MAFIC DYKE(GREENISH), Fine Grained, foliated, 55 FO trace vein associatrace blebs QV 157.35 158.00 ULTRAMAFIC INTRUSIVE, foliated, 30 FO 160.58 160.95 ULTRAMAFIC INTRUSIVE, foliated, 45 FO 164.40 165.04 ULTRAMAFIC INTRUSIVE, foliated, 43 FO	ated∕in vein PO,
168.20	181.00	MASSIVE MAFIC FLOW(<1%bl), Medium Grained, foliated, 40 FO very lightly fractured, tradessociated/in vein PY, trace microveins QV 178.13 179.39 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS	ce vein
181.00	247.50	scattered crystals PY, 00.5-2% QV	seminations & isseminations &  QV  sined, foliated, IFO trace lined, foliated, GQV  bliated, 00.5-2% bbs QV trace  cliated, 00.5-2%
247.50	299.84	MASSIVE MAFIC FLOW(<1%bt), Fine Grained, foliated, 55 FO very lightly fractured, trace vein PO, trace vein associated/in vein PY, 00.5-2% QV 249.92 250.46 FELSIC DYKE(PURPLISH/WHITE), foliated, 35 FO trace disseminations & crystals PY, trace microveins QV 254.00 254.54 FAULT ZONE;+/- CHLORITIC GOUGE, Fragmental, 60 FO 257.28 257.70 FELSIC DYKE(PURPLISH/WHITE), foliated, 50 FO trace disseminations & crystals PY, trace microveins QV 259.13 260.68 ULTRAMAFIC INTRUSIVE, Medium Grained, foliated, 60 FO 263.81 264.60 FELSIC DYKE(PURPLISH/WHITE), foliated, 50 FO trace disseminations & crystals PY, trace microveins QV 274.66 275.17 FELSIC DYKE(PURPLISH/WHITE), foliated, 52 FO trace wisp PY, trace microveins QV 280.80 FAULT ZONE;+/- CHLORITIC GOUGE 283.00 284.02 PLAG PORPH MAFIC DYKE, Porphyritic, foliated, 55 FO trace vein associatrace microveins QV	scattered scattered scattered croveins QV
299.84	313.40	PILLOWED FLOW, VARIOLITIC, pillowed, foliated, 45 FO very lightly fractured, trace selvage associated/in vein PY, 00.3-0.5% veins QV 301.18 302.79 PLAG PORPH INTERMEDIATE DYKE, 35 FO	es BI, trace vein

PLACER D	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-110
From	То	Geology	
313.40	329.23	WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated, 40 FO slightly fractured, 00.5, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 316.51 316.90 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, Porphyritic, foliated, 65 blebs QV 317.50 320.04 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, Porphyritic, foliated, 60 vein associated/in vein PY, trace microveins QV 320.04 320.95 INTERMEDIATE DYKE(PURPLISH/BROWN), Fine Grained, foliated, 60 FO associated/in vein PO, trace vein associated/in vein PY, trace QV	FO trace
329.23	349.88	PILLOWED FLOW, pillowed, foliated, 42 FO slightly fractured, trace vein associated/in vein I associated/in vein PO, trace vein associated/in vein PY, trace QV 333.49 333.83 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, Porphyritic, foliated, 62 vein associated/in vein PY, trace microveins QV 333.83 338.20 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, Medium Gra 49 FO trace vein associated/in vein PY, 00.5-2% QV 349.41 349.88 INTERMEDIATE DYKE(PURPLISH/BROWN), Porphyritic, foliated, 48 FO	FO trace
349.88	356.40	MASSIVE MAFIC FLOW(<1%bt), VARIOLITIC, foliated, 55 FO not fractured, trace vein assa PY, 00.5-2% QV 351.90 352.50 PLAG PORPH INTERMEDIATE DYKE, Porphyritic, foliated, 65 FO trace ve vein PY, trace blebs QV	ociated/in vein
356.40		** END OF HOLE **	

Drill Hole: 464-110A

Project ID: 464
Core Size: NQ
Date Logged: 26JUN96
Logged By: YEB
Assisted by:

Northing : 21070.00 Easting : 15400.00 Elevation : 6280.00 Hole Depth : 705.55mt

MINING CLAIM NUMBER: CLM 229
DRILLING STARTED: JUNE 23, 1996
DRILLING COMPLETED: JULY 7, 1996
DRILLING CONTRACTOR: BRADLEY BROTHERS LIMITED
DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE
LOGGING STARTED: JUNE 26, 1996
LOGGING COMPLETED: JULY 12, 1998

LOGGED BY: RYAN MCEACHERN

Drill Hole Survey Data				
Depth	Azimuth	Dip		
Collar	180.00	-82.00		
29.00mt	184.00	-81.50		
80.00mt	178.00	-81.00		
131.00mt	169.00	-80.50		
182.00mt	172.00	-80.00		
253.00mt	163.00	-79.00		
284.00mt	162.00	-77.00		
335.00mt	163.00	-73.00		
296.00mt	164.00	-78.25		
320.00mt	162.00	-77.00		
359.00mt	163.00	-75.00		
410.00mt	156.00	-74.75		
461.00mt	162.00	-74.50		
512.00mt	164.00	-73.50		
563.00mt	164.00	-71.75		
614.00mt	167.00	-70.50		
668.00mt	166.00	-69.75		
705.00mt	166.00	-69.25		

From	То	Geology
286.40	300.12	MASSIVE MAFIC FLOW(<1%bt), Medium Grained, foliated, 48 FO very lightly fractured, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 293.96 294.16 INTERMEDIATE DYKE(PURPLISH/BROWN), Fine Grained, foliated, 40 FO trace clustered or grouped QV 294.75 294.90 FAULT ZONE;+/- CHLORITIC GOUGE, 30 FO 299.26 300.12 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, Porphyritic, foliated, 50 FO trace disseminations & scattered crystals PY, 00.3-0.5% microveins QV
300.12	310.50	PILLOWED FLOW, foliated, pillowed, 45 FO very lightly fractured, 00.3-0.5% selvages BI, trace patches, as in quilts PO, 00.5-2% QV
310.50	320.99	WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated, 45 FO very lightly fractured, trace selvages BI, , trace selvages PO, 00.3-0.5% QV 317.01 317.34 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, Porphyritic, foliated, 51 FO trace fracture filling PY, trace microveins QV
320.99		PILLOWED FLOW, foliated, pillowed, VARIOLITIC, 45 FO very lightly fractured, trace selvages BI, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 320.99 321.36 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic, 46 FO trace vein associated/in vein PY, 00.5-2% QV 325.70 326.24 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic, 48 FO 00.3-0.5% disseminations & scattered crystals PY, 00.3-0.5% microveins QV 338.73 339.11 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 50 FO trace disseminations & scattered crystals PY 341.80 342.29 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 60 FO trace patches, as in quilts PY, trace fracture filling QV
353.36	363.00	MASSIVE MAFIC FLOW(<1%bt), VARIOLITIC, foliated, Medium Grained, 55 FO slightly fractured, trace patches, as in quilts AB, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 353.36 353.60 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 60 FO 354.41 354.71 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, foliated, Porphyritic, 57 FO trace

rom	То	Geology
202.25	207.7-	crystals and/or phenocrysts PY
363.00	387.70	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, 50 FO trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 366.87 367.16 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 60 FO trace vein
		associated/in vein PY, 10% microveins QV 370.80_371.38_INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 50 FO trace vein associated/in vein PY, trace microveins QV 372.83_373.09_FELSIC_DYKE(PURPLISH/WHITE), foliated, 47 FO trace fracture filling QV
387.70	398.33	PILLOWED FLOW, foliated, pillowed, 50 FO very lightly fractured, trace selvages BI, trace vein associated/in vein CP, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% QV 389.53 390.90 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 35 FO trace blebs QV
398.33	404.90	MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained, 50 FO not fractured, 00.3-0.5% bands and layering BI, 00.5-2% QV
404.90	420.30	PILLOWED FLOW, foliated, pillowed, 55 FO very lightly fractured, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.3-0.5% QV 412.07 413.06 MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained, 50 FO trace vein associated/in vein PO, trace blebs QV
420.30	432.50	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, 45 FO slightly fractured, trace vein associated/in vein CP, 00.3-0.5% vein associated/in vein PY, 00.5-2% QV 421.05 421.70 FELSIC DYKE(PURPLISH/WHITE), foliated, 40 FO 2-4% microveins QV 428.32 428.72 FELSIC DYKE(PURPLISH/WHITE), foliated, 43 FO 00.5-2% microveins QV 431.71 432.16 FELSIC DYKE(PURPLISH/WHITE), foliated, 60 FO 00.5-2% QV 432.20 432.50 FELSIC DYKE(PURPLISH/WHITE), foliated, 68 FO trace disseminations & scattered crystals PY, 00.3-0.5% microveins QV
432.50	448.53	MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained, 46 FO vein PO, trace vein associated/in vein PO, trace vein associated/in vein PY, 00.5-2% anastomosing QV 443.25 443.63 FELSIC DYKE(PURPLISH/WHITE), foliated, 62 FO 00.5-2% microveins QV 443.92 444.17 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fine Grained, 52 FO 00.5-2% disseminations & scattered crystals PY, 00.5-2% microveins QV 445.45 446.41 FELSIC DYKE(PURPLISH/WHITE), foliated, 50 FO crystals PY, 00.3-0.5% microveins QV 447.97 448.53 FELSIC DYKE(PURPLISH/WHITE), foliated, 48 FO crystals PY, 00.5-2% microveins QV
448.53	452.03	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, 47 FO slightly fractured, 00.5-2% bands and layering BI, trace patches, as in quilts PO, trace patches, as in quilts PY, 00.3-0.5% QV
452.03	454.10	MASSIVE MAFIC FLOW(<1%bt), foliated, Fine Grained, 49 FO slightly fractured, 00.3-0.5% QV
454.10	486.00	PILLOWED FLOW, foliated, pillowed, 47 FO very lightly fractured, 00.3-0.5% selvages BI, trace selvages PO, trace selvages PY, 00.3-0.5% QV 454.76 455.04 FELSIC DYKE(PURPLISH/WHITE), foliated, Porphyritic, 50 FO 00.5-2% microveins QV 470.00 472.47 MAFIC DYKE(GREENISH), foliated, Medium Grained, 40 FO 00.5-2% veins QV
486.00	572.25	PILLOWED FLOW, foliated, pillowed, 55 FO very lightly fractured, trace bands and layering BI, 00.3-0.5% selvages PO, 00.3-0.5% selvages PY, 00.3-0.5% QV  486.05 488.00 FELSIC DYKE(PURPLISHWHITE), foliated, Porphyritic, 50 FO trace clustered or grouped PO, trace microveins QV  490.34 490.71 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 40 FO trace vein associated/in vein PY, 00.5-2% QV  490.76 491.11 FELSIC DYKE(PURPLISHWHITE), foliated, Porphyritic, 47 FO trace microveins QV  516.61 517.43 FELSIC DYKE(PURPLISHWHITE), foliated, 59 FO trace vein associated/in vein PY, 00.3-0.5% microveins QV  517.43 519.53 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 40 FO trace vein associated/in vein PO, trace microveins QV  523.38 523.83 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), foliated, Porphyritic, 39 FO 00.5-2% veins QV  532.15 533.35 INTERMEDIATE DYKE(PURPLISH/BROWN)  537.29 540.12 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated, 00.3-0.5% veins QV  542.52 543.75 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated  550.95 551.90 MAFIC DYKE(GREENISH)  554.90 556.65 SERICITICALLY ALTERED(+10%)+/- PLAG PHENOS, sericite, foliated

ACER [	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-110/
From	То	Geology	
		562.10 564.10 PLAG PORPH MAFIC DYKE, foliated, Porphyritic 569.50 569.85 MASSIVE MAFIC FLOW(<1%bt), Coarse Grained 571.30 572.25 PLAG PORPH FELSIC DYKE(+Kf+/- hern matrix), Porphyritic	
572.25	613.70	MASSIVE MAFIC FLOW(<1%bl), Coarse Grained, foliated, slightly fractured, 00.5-2% bands a trace blebs PO, 00.3-0.5% microveins QV 582.45 582.90 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 585.20 585.88 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, blotite, foliated 586.60 588.85 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 589.25 590.40 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 593.65 594.17 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
		596.20 596.70 MAFIC DYKE WITH CHLORITIC PHENOS, chlorite, Porphyritic, foliated 609.05 609.34 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 609.34 610.45 ULTRAMAFIC INTRUSIVE 612.60 612.90 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 613.10 613.70 ULTRAMAFIC INTRUSIVE	
613.70	692.00	GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Coarse Grained 616.30 616.83 INTERMEDIATE DYKE(PURPLISH/BROWN) 617.90 618.10 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 628.70 629.16 FELSIC DYKE(PURPLISH/WHITE), sericite, foliated 631.70 632.30 MAFIC DYKE(GREENISH), chlorite, foliated 635.30 635.45 MAFIC DYKE WITH CHLORITIC PHENOS, chlorite, Porphyritic, foliated 638.75 641.10 FELSIC DYKE(PURPLISH/WHITE), foliated 641.20 642.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 645.10 646.65 PLAG PORPH INTERMEDIATE DYKE, Porphyritic, foliated 664.05 665.35 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 677.78 679.67 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 681.22 681.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 682.20 683.30 MASSIVE MAFIC FLOW(<1%bt), foliated 686.60 686.92 MASSIVE MAFIC FLOW(<1%bt), foliated 688.00 689.88 MASSIVE MAFIC FLOW(<1%bt), foliated 689.88 690.12 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 689.88 690.12 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
692.00	705.55	ULTRAMAFIC INTRUSIVE, homblende, Coarse Grained, trace blebs PO 701.84 702.82 WEAKLY POTASSIC MAFIC FLOW(1-5%K), foliated 702.82 703.65 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 703.82 704.50 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
705.55		** END OF HOLE **	

CP MR PO PY	CHALCOPYRITE MARCASITE PYRRHOTITE PYRITE
BI\(bt) CB EP AB CL QZ HEM Kf	BIOTITE CARBONATE EPIDOTE ALBITE CHLORITE QUARTV HEMATITE POTASSIUM FELDSPAR
K	POTASSIC ALTERATION

QUARTZ VEIN

FOLIATION

QV

FO

Northing : 20800.00 Easting : 15400.00 Elevation : 6280.00 Hole Depth : 408.20mt Project ID: 464 Core Size: NQ Date Logged: 13JUL96 Logged By: RKM Assisted by:

MINING CLAIM NUMBER: CLM 229
DRILLING STARTED: JUNE 23, 1996
DRILLING COMPLETED: JULY 8, 1996
DRILLING CONTRACTOR: BRADLEY BROTHERS LIMITED
DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE
LOGGING STARTED: JULY 9, 1996
LOGGING COMPLETED: JULY 14, 1996
LOGGED BY: RYAN MCEACHERN

Drill Hole Surv	ey Data	
Depth	Azimuth	Dip
Collar	180.00	-80.00
38.00mt	192.00	-79.00
50.00mt	190.00	-79.00
98.00mt	189.00	-78.00
152.00mt	185.00	-76.50
203.00mt	185.00	-74.75
254.00mt	184.00	-74.00
305.00mt	183.00	-72.00
356.00mt	184.00	-72.50
395.00mt	191.00	-70.25

From	To	Geology
0.00	25.00	OVERBURDEN
25.00	44.00	PILLOWED FLOW, VARIOLITIC, sheared, foliated, pillowed, extremely well fractured, 00.5-2% bands and layering BI, trace blebs PO, 00.3-0.5% microveins QV
44.00		MASSIVE MAFIC FLOW(<1%bt), Coarse Grained, foliated, lightly fractured, trace specks AU, 00.5-2% bands and layering BI, trace blebs CP, trace blebs PO, trace specks PY, trace microveins QV 50.60 51.50 FELSIC DYKE(PURPLISH/WHITE), Fractured 51.50 53.50 WEAK POTASSIC PILLOW FLOW(1-5%K), Fractured, pillowed 68.80 60.00 PILLOWED FLOW, foliated, pillowed 61.15 61.40 FELSIC DYKE(PURPLISH/WHITE), foliated 69.62 71.65 ULTRAMAFIC INTRUSIVE, actinolite, foliated 72.95 ULTRAMAFIC INTRUSIVE, actinolite, foliated 72.95 T3.15 FELSIC DYKE(PURPLISH/WHITE), foliated 73.15 73.50 ULTRAMAFIC INTRUSIVE, actinolite, foliated 73.15 WEAK POTASSIC PILLOW FLOW(1-5%K), foliated, pillowed 80.60 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated 87.45 88.85 WEAK POTASSIC PILLOW FLOW(1-5%K), foliated, pillowed 88.85 90.17 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated 88.85 90.17 FELSIC DYKE(PURPLISH/WHITE), Porphyritic, foliated
91.80		PILLOWED FLOW, VARIOLITIC, foliated, pillowed, 00.5-2% bands and layering BI, trace vein associated/in vein CB, trace blebs CP, trace blebs PO, trace specks PY, 00.3-0.5% microveins QV 97.70 98.20 FELSIC DYKE(PURPLISH/WHITE), Fractured 106.80 107.15 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), Porphyritic, foliated 112.50 112.95 FELSIC DYKE(PURPLISH/WHITE) 116.50 117.05 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), Porphyritic, foliated 117.05 118.05 MAFIC DYKE(GREENISH), foliated 120.24 121.15 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Coarse Grained 126.65 127.18 MAFIC DYKE(GREENISH), foliated 127.80 128.22 MAFIC DYKE(GREENISH), foliated 137.13 137.60 MAFIC DYKE(GREENISH), foliated, Medium Grained 140.83 141.85 GABBROIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE 143.95 146.63 FELSIC DYKE(PURPLISH/WHITE), foliated 150.00 150.65 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 152.00 152.74 MAFIC DYKE WITH CHLORITIC PHENOS, chlorite, Porphyritic, foliated 157.75 160.53 FELSIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, Medium Grained 157.75 160.53 FELSIC DYKE;DISTINCT MED-CRSE GRAINED INTRUSIVE, Medium Grained 157.75 160.53 FELSIC DYKE(PURPLISH/WHITE), plagioclase, Porphyritic, foliated 160.53 161.10 WEAK POTASSIC PILLOW FLOW(1-5%K), pillowed, foliated 161.10 162.18 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 161.10 162.18 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated

LACER L	OME CA	NADA LIMITED "" DETOUR LAKE MINEX "" DTIII HOIE: 46	4-111
From	То	Geology	
		162.18 162.57 FELSIC DYKE(PURPLISH/WHITE), foliated	
162.57	165.75	INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
165.75	220.65	PILLOWED FLOW, brecciated, foliated, pillowed, trace specks AU, trace blebs CP, trace blebs MR, trace blebs PO, trace crystals and/or phenocrysts PY, trace microveins QV  166.50 167.25 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated  173.08 174.31 ULTRAMAFIC INTRUSIVE, foliated  175.12 176.40 BRECCIATED PILLOWED FLOW, foliated, brecciated, trace wisp CP, trace vein associated/in vein MR, 00.5-2% interstitial PO, 00.3-0.5% interstitial PY, trace microveins QV  177.15 177.80 BRECCIATED PILLOWED FLOW, foliated, brecciated, trace blebs CP, 00.5-2% interstitial PO, 00.3-0.5% crystals and/or phenocrysts PY  178.13 178.75 BRECCIATED PILLOWED FLOW, foliated, brecciated, trace blebs CP, 00.5-2% interstitial PO, 00.3-0.5% crystals and/or phenocrysts PY, trace microveins QV  178.75 179.35 FELSIC DYKE(PURPLISH/WHITE), foliated  190.15 190.67 INTERMEDIATE DYKE(PURPLISH/WHITE), foliated  190.15 190.67 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, 00.3-0.5% microvelns QV  191.67 192.11 PLAG PORPH MAFIC DYKE, plagloclase, foliated, Porphyritic  193.90 195.05 ULTRAMAFIC INTRUSIVE, foliated  196.98 197.55 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, foliated, Porphyritic  199.85 200.35 MAFIC DYKE(GREENISH), biotite, foliated  205.40 206.20 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated  205.40 206.20 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated  212.90 213.26 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated  214.00 214.05 HEALED FAULT ZONE + Qz/Ab/Cb Vns+/- Kf,Ep  214.05 215.00 INTERMEDIATE DYKE(PURPLISH/WHITE)  216.45 217.05 FELSIC DYKE(PURPLISH/WHITE)  216.45 217.05 FELSIC DYKE(PURPLISH/WHITE)  216.45 217.05 FELSIC DYKE(PURPLISH/WHITE)  217.05 218.50 INTERMEDIATE DYKE(PURPLISH/WHITE), almandine garnet, foliated	
220.65	225.10	PLAG PORPH FELSIC DYKE(+Kf+/- hern matrix), plagioclase, sericite, Fractured, Porphyritic, foliated, fairly well fractured, 00.5-2% fracture filling AB	
225.10	239.30	PILLOWED FLOW, pillowed, foliated, very lightly fractured, trace vein associated/in vein AB, 00.3-0.5% bands and layering BI, 00.5-2% vein associated/in vein CB, trace blebs CP, trace blebs MR, 00.3-0.5% blebs PO, trace crystals and/or phenocrysts PY, trace microveins QV 227.05 227.55 PLAG PORPH MAFIC DYKE, plaglociase, foliated, Porphyritic 230.15 233.20 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated 234.10 234.95 GABBROIC DYKE; DISTINCT MED-CRSE GRAINED INTRUSIVE, foliated, Coarse Grained 236.50 237.10 FELSIC DYKE(PURPLISH/WHITE), foliated 238.55 239.30 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
239.30	251.55	PILLOWED FLOW, foliated, pillowed, trace vein associated/in vein AB, trace specks AU, 00.3-0.5% bands and layering BI, 00.5-2% vein associated/in vein CB, 00.3-0.5% blebs CP, trace blebs MR, 00.5-2% blebs PO, trace crystals and/or phenocrysts PY, trace veins QV 243.05 243.58 MAFIC DYKE(GREENISH) 243.58 244.05 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, Porphyritic, foliated 247.40 248.55 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
251.55	259.10	INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
259.10	266.20	PILLOWED FLOW, VARIOLITIC, pillowed, foliated, 00.3-0.5% bands and layering BI, 00.3-0.5% vein associated/in vein CB, 00.3-0.5% wisp CP, trace blebs MR, 00.5-2% blebs PO, 00.3-0.5% specks PY, 00.5-2% veins QV	
266.20	270.00	FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated, very lightly fractured, 00.5-2% fracture filling AB, trace fracture filling CP, trace fracture filling PO	
270.00	306.40	PILLOWED FLOW, VARIOLITIC, foliated, pillowed, very lightly fractured, trace bands and layering BI, trace blebs CP, trace blebs MR, 00.3-0.5% blebs PO, trace specks PY, 00.5-2% veins QV 272.60 273.25 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 274.70 276.78 MAFIC DYKE(GREENISH), foliated 276.86 277.05 MAFIC DYKE WITH CHLORITIC PHENOS, chlorite, feldspar, foliated, Porphyritic 277.95 278.60 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, foliated, Porphyritic 283.90 284.95 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 287.25 288.75 INTERMEDIATE DYKE(PURPLISH/BROWN), simandine garnet, foliated 290.35 291.45 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	

ACER D	OME CA	NADA LIMITED *** DETOUR LAKE MINEX ***	Drill Hole: 464-111
From	То	Geology	
		304.85 305.35 FELSIC DYKE(PURPLISH/WHITE), Fractured, foliated	
306.40	311.05	INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated, not fractured	
311.05	376.00	PILLOWED FLOW, VARIOLITIC, Amygdaloidal, foliated, pillowed, trace blebs CP, trace blebs I PO, trace specks PY, 00.3-0.5% microveins QV	MR, trace blebs
		312.72 312.90 FELSIC DYKE(PURPLISH/WHITE), foliated 315.47 315.93 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		317.86 318.75 FELSIC DYKE(PURPLISH/WHITE), foliated	
		320.78 321.60 PLAG PORPH FELSIC DYKE(+Kf+/- hem matrix), plagioclase, foliated, Porphy 321.60 321.95 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	TITIC
		325.85 327.15 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 331.25 331.75 FELSIC DYKE(PURPLISH/WHITE), foliated, Fractured	
		332.75 333.75 MASSIVE MAFIC FLOW(<1%bt), foliated, Medium Grained	
		334.05 336.60 MASSIVE MAFIC FLOW(<1%bt), foliated 342.33 344.12 FELSIC DYKE(PURPLISH/WHITE), almandine gamet, foliated	
		345.00 347.55 PLAG PORPH MAFIC DYKE, Porphyritic 347.55 348.00 FELSIC DYKE(PURPLISH/WHITE), Fractured	
		348.80 349.10 FELSIC DYKE(PURPLISH/WHITE)	
		349.90 350.40 INTERMEDIATE DYKE(PURPLISH/BROWN) 361.05 361.50 INTERMEDIATE DYKE(PURPLISH/BROWN)	
		364.15 364.90 FELSIC DYKE(PURPLISH/WHITE), 00.5-2% blebs PY 366.00 367.05 MAFIC DYKE(GREENISH)	
		367.05 368.10 MAFIC DYKE WITH CHLÓRITIC PHENOS, chlorite, Porphyritic	
376.00	381.80	FELSIC DYKE(PURPLISH/WHITE), foliated, Fractured 379.10 379.60 PILLOWED FLOW, foliated, pillowed, 00.3-0.5% blebs MR, 00.3-0.5% blebs P	0
381.80	408.20	PILLOWED FLOW, Amygdaloidal, foliated, pillowed, trace blebs MR, trace blebs PO, trace micr	roveins QV
		388.45 389.70 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine gamet, foliated 390.40 391.88 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated	
		394.78 396.00 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine gamet, foliated 397.50 397.98 INTERMEDIATE DYKE(PURPLISH/BROWN)	
		401.30 402.30 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated	
		404.25 404.60 FELSIC DYKE(PURPLISH/WHITE) 406.75 408.20 FELSIC DYKE(PURPLISH/WHITE)	
408.20		** END OF HOLE **	
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**Drill Hole: 464-111A** 

Date: 31st Oct, 1992 20825.00 Northing : Easting : 15400.00 6280.00 Elevation : Hole Depth: 742.87mt

Project ID: 464 Core Size : NQ Date Logged: 15JUL96 Logged By: RKM Assisted by :

MINING CLAIM NUMBER: CLM 229 DRILLING STARTED: JULY 9, 1996 DRILLING COMPLETED: JULY 16, 1996 DRILLING CONTRACTOR: BRADLEY BROTHERS LIMITED

DRILL CORE STORAGE LOCATION: DETOUR LAKE MINE LOGGING STARTED: JULY 15, 1996 LOGGING COMPLETED: JULY 19, 1996

LOGGED BY: RYAN MCEACHERN

Drill Hole Survey Data Depth Azimuth Dip 180.00 -80.00 Collar 38.00mt 192.00 -79.00 50.00mt 190.00 -79.00 98.00mt 189.00 -78.00 152.00mt 185.00 -76.50 203.00mt 185.00 -74.75 254.00mt 184.00 -74.00 305.00mt 183.00 -72.00 356.00mt 184.00 -72.50 395.00mt 191.00 -70.25 446.00mt 186.00 -68.50 497.00mt 186.00 -68.00 551.00mt 186.00 -67.50 599.00mt 188.00 -67.00 650.00mt 190.00 -65.50 701.00mt 190.00 -65.00

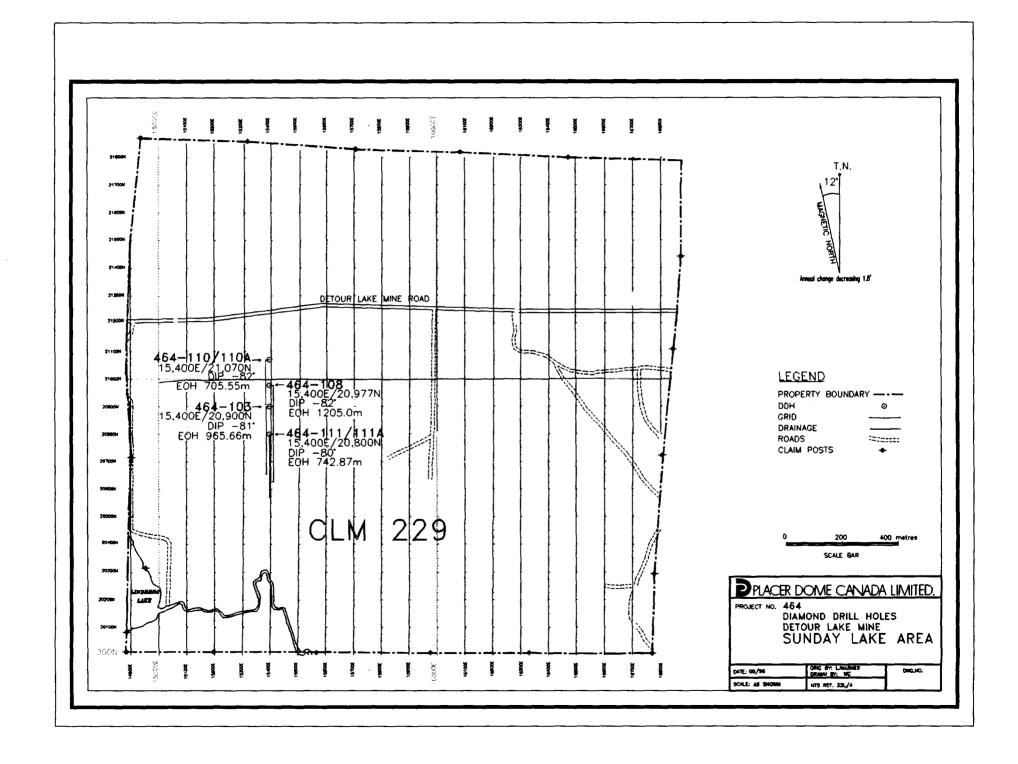
192.00 -65.00

742.80mt

From	То	Geology
384.65	451.40	PILLOWED FLOW, GREEN, VARIOLITIC, Amygdaloidal, foliated, pillowed, trace vein associated/in vein AB, 00.3-0.5% bands and layering BI, trace vein associated/in vein CB, trace vein associated/in vein CL, trace blebs CP, trace blebs MR, trace blebs PO, trace specks PY, 00.3-0.5% veins QV 388.40 389.70 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 390.45 391.09 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 397.00 397.70 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 401.30 403.55 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 404.00 406.37 MASSIVE MAFIC FLOW(<1%bt), blotite 406.37 406.70 INTERMED DYKE WITH CHLORITIC PHENOCRYSTS, chlorite, Porphyritic, foliated 406.37 408.90 FELSIC DYKE(PURPLISH/BROWN), almandine garnet, foliated 410.40 411.20 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 412.60 413.75 INTERMEDIATE DYKE(PURPLISH/BROWN), almandine garnet, foliated 417.75 FELSIC DYKE(PURPLISH/WHITE), foliated 423.40 424.00 FELSIC DYKE(PURPLISH/WHITE), foliated 423.40 424.00 FELSIC DYKE(PURPLISH/WHITE), foliated 424.80 425.14 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 426.65 427.62 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 430.30 430.85 INTERMEDIATE DYKE(PURPLISH/BROWN), foliated 449.10 449.75 FAULT ZONE;+/- CHLORITIC GOUGE 449.75 451.20 FELSIC DYKE(PURPLISH/WHITE), Fractured 451.20 451.40 FAULT ZONE;+/- CHLORITIC GOUGE
451.40	457.00	FELSIC DYKE(PURPLISH/WHITE), brecciated, foliated, Fractured, well fractured, 00.5-2% vein associated/in vein AB, trace vein associated/in vein CB, trace blebs PO, 00.3-0.5% specks PY, trace veins QV
457.00	460.32	PLAG PORPH INTERMEDIATE DYKE, foliated, Porphyritic, trace vein associated/in vein AB, trace fracture filling CB
460.32	464.30	INTERMEDIATE DYKE(PURPLISH/BROWN), foliated, Fractured, trace crystals and/or phenocrysts PY, trace stringers QV

i		NADA LIMITED		Drill Hole: 464-111
rom 1	Го		Geology	
742.87		" END OF HOLE "		
.2.07		2.00 01 1.022		
		•		
	i			
	i			
	;			
ļ				

CP	CHALCOPYRITE
MR	MARCASITE
PO	PYRRHOTITE
PY	PYRITE
DIV(b4)	BIOTITE
BI\(bt)	
CB	CARBONATE
EP	EPIDOTE
AB	ALBITE
CL	CHLORITE
QZ	QUARTV
HEM	HEMATITE
Kf	POTASSIUM FELDSPAR
K	POTASSIC ALTERATION
QV	QUARTZ VEIN
FO	•
ru	FOLIATION





### **Report of Work Conducted After Recording Claim**

Transaction Number	
109660.00485	

### **Mining Act**

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Instructions: - Please type or print and submit in duplicate.

- Refer to the Mining Act and Regulations for re Recorder.



900

-	А	set	oara	are	copy	or the	s form	must	pe	complet		
	_									-	 _	

	corded Holder(s)	ER DOME CANADA	LIMITED		C	lient Na 300210
۸۵	P.O. BO	960 TIMMINS,	ONTARIO	P4N 7H1		elephone No. (705) 267-5400
Āi	ning Division PORCUPINE		Township/Area WEST OF	F SUNDAY LAKE	N	or G Plan No. G-1680
١	Dates Vork From: Performed	APRIL 20, 19	96	To: J	ULY 15,	1996
٧		c One Work Group Onl	ly)			
_	Work Group			Туре		
	Geotechnical Survey					
ζ	Physical Work, Including Drilling	3712.63 metre	s in four	diamond drill	holes (-	+ 2 wedged holes)
	Rehabilitation	holes	464-103;	464-108; 464-1	10+110A	; 464-111+111A
	Other Authorized Work					
	Assays					- 1 39F
	Assignment from Reserve					
_						

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address			
Bradley Bros. Ltd.	PO Box 485, Timmins ON P4N 7E7			
Ryan McEachern, Placer Dome	PO Box 960, Timmins ON P4N 7H1			

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse shape	de
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I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.			Date	7			ecorded Holder or Agent (Signature)  Robert Fuel					
		<del></del>						As	sistant	La	nd	Manag
	n of Work Rep											
	I have a personal on and annexed re		the facts	set forth Ir	ı this Work rej	port, having	performe	ow ent be	k or witnesse	d same o	during a	and/or after
Name and Ad	dress of Person Cer	litying	<del></del>									
Paul	Burchell,	Placer	Dome	Canad	la Limit	ed; PC	Box	960,	Timmin	s ON	P4N	7H1
Telepone No.	267 5400	Date		10	1261	Certified I	By (Signati	ure)	1			

1 01 011100 000 01119				
Total Value Cr. Recorded	Deemed Approval Date  Date Notice for Amendments Sent	Mining Recorder  Date Approved  NOV. 14, 1996	_ \ \	AUG 16 1996  3:05  PORCUPINE MINING DIVISION
0241 (02/01)	1		<u>L</u>	
0241 (03/91)				

Credits you are claiming in this report may be cut back. In order to minimize the which claims you wish to priorize the deletion of credits. Please mark (>) one	adverse effects of such deletions, please indicate from of the following:
<ol> <li>Credits are to be cut back starting with the claim listed last, working b</li> <li>Credits are to be cut back equally over all claims contained in this rep</li> <li>Credits are to be cut back as priorized on the attached appendix.</li> </ol>	
In the event that you have not specified your choice of priority, option one will	be implemented.
Note 1: Examples of beneficial interest are unrecorded transfers, option agree to the mining claims.	ements, memorandum of agreements, etc., with respect
Note 2: If work has been performed on patented or leased land, please co	mplete the following: Copy of ML parcel

included.

Date

16 Aug 1996 Signature Robin Ruice I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.



Ministry of Northern Development and Mines

### Statement of Costs for Assessment Credit

19660.0048

Personal Information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 6 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, Sudhury, Ontario, P3F ARS

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kitometres of grid line, number of samples, etc.	Cost Per Unit	Total Cost
overburden drilling	89.10m	varies	\$4,542.59
diamond drilling	3712.63m	varies	\$208,195.34
logging core	62 days	\$250/day	\$15,500.00
sociated Costs (e.g. supplies,	mobilization and demobilization).		
wedging cos	ts for 2 drillholes		\$5,600.00
Sperry Sun :	surveys		\$2,730.00
* see detailed cost	statement attached for	cost breakdown	per hole
Transpo	rtation Costs		
•	•		
Food an	d Lodging Costs		
62 days		\$40/day .	\$2480.00
	Total Value o	! Assessment Work	239,047.93
ilculations of Filing Discounts:	AUG 16 1996		\$239,000 being o
Work filed within two years of p If work is filed after two years a	antormance is claimed at 100% of the and up to live years after performance is situation applies to your claims, us	, it can only be claimed	at 50% of the lotal
TOTAL VALUE OF ASSESSMEN	NT WORK × 0.50 =	Total \$ val	ue of worked claimed.
ote:  York older than 5 years is not eligated to the secon	gible for credit. d to verify expenditures claimed in th ction/clarification. If verification and/o	ils statement of costs w r correction/clarification	rithin 45 days of a is not made, the

\_\_\_\_\_, do hereby certify, that the amounts shown are as accurate as may (please print full name) reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on SEMICE GEOLOGIST the accompanying Declaration of Work form as DENICE GEOLGIST I am authorized (recorded holder, agent, or state company position with signing authority) to make this certification.

147666.00425

DDH - Detour Lake Minesite to Destor claims

Work Report # Claim # CLM 229	# Units 0	\$ Assessment Done 239000	\$ Value Applied 0	\$ Value Assigned 239000	
1133200	1	0	2400		
· 1133201	1	0	2400		
1133202	1	0	2400		
1133203	1	0	2400		
1133204	1	0	2400		
1133205	1	0	2400		
1133206	1	0	2400		
1133207	1	0	2400		
1133208	1	0	2400		
1133209	1	0	2400		
1158819	1	0	2400		
1158820	1	0	2400		
1160141	1	0	12 <del>00</del>	1600	
1160142	4	0	4800	6400	
1160143	4	0	4800	6400	·
1160144	2	0		3200	Pfrice 18 NOV/96
1160145	3	0		4800	2001/196
1160146	1	0		1400	18 100011
1160147	2	0		3200	
1160148	4	0		6400	
1160149	4	0		6400	
1160150	4	0		:5042	
1160151	4	0	4800	stay at 4800	
578384	1	0	2400	2200	
578385	1	0	2400	2200	
578386	1	0		220C)	
578387	1	0	240 <del>0</del> -	2200	
578388	1	0	24 <del>0</del> 0	2200	
578389	1	0	2 <del>400</del>	2200	Spice 18 Nov 196
578390	1	0	2400	2200	Wev/96
578391	1	0		2200	0 / 4
578392	1	0		2200	
578393	1	0		2200	
578394	1	0		2200	
578395	1	0		2200	
578396	1	0	2400	2200	

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Work Report # Claim #	# Units	\$ Assessment Done			\$ Reserve Work
578397	1	0		220C	
578398	1	0	2400	2200	
578399	1	0		2200	
578400	1	0		2200	
578401	1	0		2200	
578402	1	0		2200	
578403	1	0		2200	
578404	1	0		2200	
578405	1	0		2200	
578406	1	0		2200	
578407	1	0		2200	
578408	1	0		2200	
578409	1	0	2400	2200	
578410	1	0	2400	2200	
578411	1	0	2400	2200	
578412	1	0	2400	2200	
578413	1	0	2400	2200	
578414	1	0	24 <del>0</del> 0	2200	
578415	1	0	2400	2200	
578416	1	0	2400	2200	
578417	1	0	2400	2200	Africa 18 Nov196
578418	1	0	2400	2200	18 Nov/196
578419	1	0	2400	2200	10/02-11:
578420	1	0	2400	2200	
578421	1	. 0	2400	2200	
578422	1	0		2200	
578423	1	0		2200	
578428	1	0	2400	2200	
578429	1	0		2200	
578430	1	0	2 <del>40</del> 0	2200	
578433	1	0	2400	2260	
578434	1	0	2400	2260	
578435	1	0	2400	22 <del>80</del>	
578436	1	0	2400	2200	
578437	1	0		2200	
578438	1	0		2200	
578439	1	0		2200	
578440	1	0	240 <del>0</del>		
578441	1	0	2400	Stay	
578442	1	0	2400	2200	

page 2 of 3 RPrice 16 aug 199

DDH - Detour Lake Minesite to Destor claims

Work Report # Claim #	# Units	\$ Assessment Done \$	Value Applied	\$ Value Assigned	\$ Reserve Work
836966	1	0	2000		
836967	1	0	2000		
836971	1	0	2000		
836972	1	0	2000		
836973	1	0	2000		
836974	1	0	2000		
836976	1	0	2000	Rl 18 N	1,0
836977	1	0	2000	fle	100
836978	1	0	2000	<i>-</i> /	0119
836979	1	0	2000	1873	
1190901	6	0	14400		
1190902	2	0	4800		
1190903	1	0	2400		
1160200	1	0	2000		·
	118	239000	239000	239000	0

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