

Latitude 1740N
 Departure 1600mE
 Elevation ~280m (from Topo Map)
 Dip at Collar -45°
 Bearing 150° True
 Total Dept 197.2m Core Size .. BTW
 Remarks Relog of hole drilled 95/03/28

checked 96/02/06 G.S.

Noranda Mining & Exploration Inc. Sheet N.
 DIAMOND DRILL CORE LOG

Trope	Dip	Magnetic	Corrected
Tests		Bearings	Bearings
Depth			
182.6m	-40	179	155
101.2m	-41	179	155

Project No 10108
 Property Millerville (Seal Pond Area)
 NTS 12A/15
 Date Started 95/03/28
 Contractor Petro Drilling Ltd.
 Logged by Relogged G. Squires (Dec. 8-14/95)

Sheet No. 1 of 1
 Hole No. 51° 03' 1
 Grid Name .. Seal Pond
 Completed .. 95/04/10

Depth & Lithology	Description	Alteration	Mineralization	Remarks
0-4.3m	Overburden.			
4.3-7.5m Magnetic Mafic/Dacite Dyke/Flow?	- Dark grey fine grained dyke/flow? "Looks fresh" and is hard to scratch. Can see transparent (~2%) plagioclase with simple twinning (~1mm long under microscope) and small 1-2mm irregular qtz/carb blebs (micro-amygdaloids?). Rock consists of ~10-30% magnetite which sheds doubt on "fresh" nature of rock and accounts for hardness. Xenolith of underlying unit at 7.0-7.3m (a feldspar phytic and amygdaloidal flow fragment with chlorite stockwork - see below). - Rock is tentatively a high level mafic/dacite dyke/flow (fine grained, small phenos, small possible amyg). - No definite qtz phenos observed. - Magnetite is enigmatic and strongly suggests a mafic protolith. - Lower contact 80° to core axis (c.a.), weakly brecciated, in contact with weakly deformed chlorite stockwork of next unit.	- 2-3% qtz/carb veinlets - No chlorite stockwork	Unit contains 5-30% v.f.g. magnetite (and is magnetic) Magnetite probably an "alteration" mineral as it is too abundant for a primary igneous flow composition	
7.5-22.7m Magnetic Mafic/Dacite(?) Flow and Chlorite "Stockwork"	Purplish grey (due to magnetite) to dark green where chloritized, 5-30% plagioclase porphyritic 1-4mm (frequently glomeroporphyritic), 0 to rarely 30% quartz/carb amygdaloidal, <1% probable equant grey quartz porph (1-3mm) mafic/dacite? flow. Matrix to unchloritized ± unshaded zones contains 5% to frequently 50% v.f.g. magnetite which completely envelopes euhedral altered plagioclase and amyg (± possible qtz phenos) The magnetite (i.e. Fe-rich) and amygdaloidal habit, as well as overall colour and lack of flow bending suggests the rock is mafic (hard to find qtz phenos also). The magnetite is a probable alteration product of Fe-rich igneous minerals. Though similar in colour and magnetite content to overlying unit, this unit has coarser phenos/amygs and has a prevalent chlorite stockwork alteration. <u>Chlorite Stockwork/shearing</u> The overall unit is variably sheared. This shearing is ubiquitously concentrated at chloritic zones (veins/bands), leading one to the conclusion that the chlorite is structural in nature. However ~10% of these chlorite bands/veins are undeformed. At 16.8m one chlorite "band" is seen to cut an earlier (syn-volcanic?) qtz/carb vein with no offset of the vein (i.e. alteration not related to shearing and therefore likely stockwork?) 7.5-17.2m: 25-50% of this area is sheared over 5cm to 100cm zones with boudins of original flow and bands oriented 70-80° to core axis. In this zone are also best examples of unshaded stockwork.	25-50% chlorite bands and veins (usually sheared)	Unit contains 5-30% v.f.g. magnetite (and is magnetic) Magnetite probably an "alteration" mineral as it is too abundant for a primary igneous flow composition	Whole Rock Sample #163393 at 9.0m Chlorite stockwork band/vein in amyg/porph Dacite/mafic flow (No depletion?) Whole Rock Sample #163394 at 14.7m Amygs and porph Dacite/mafic flow (lithotype)
			Tr py and cpy Magnetite almost absent in chlorite zones	

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.....10108

Sheet No.....2 of 7

Property.....Millerken (Sed Port Area)

Hole No.....SP-08-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
22.7-33.0m Massive Mafic/Felsic Dyke?	17.2-22.7: 90% sheared at 70-80° c.s. and 75% chlorite as shear bands (deformed stockwork?) Rare boudins of original amygdaloidal mafic. Last one seen at 22.0m Base of unit defined by first appearance of undeformed fine grained mafic dyke at 22.7m T Identical to unit at 4.3 to 7.5m, weakly to moderately magnetic where not sheared or significantly altered. Local 1-2mm fsp laths. Matrix of fresh areas is qtz/chl/magnetite and if there wasn't any magnetite I'd call this a dacite dyke. There is a mm-scale planar lamination over much of the unit at 70 to 80° c.s. This I first took to be tectonic (some of which is that: boudins, etc.) but a lot appears to be incipient "curdy" flow banding, i.e. "bumpy" alternating bands of chlorite (glass portion of flow bands) and qtz/carb (crystalline portion of flow bands); these have no symmetry. 22.4-22.9 sheared banded 22.9-23.0 massive 23.0-24.5 shear banded 24.5-25.3 "flow" banded (zebra rock) 25.3-28.0 massive (good gradation at base) 28.0-33.0 gradational flow banded and massive. Note: 28.6 to 33.0 sporadic silicification and qtz veining (related to underlying dyke?)	75% chlorite bands Weak to moderate chlorite in bands/laminae 31.8-33.0 strong silicification		Whole Rock Sample #163395 at 25.8m. Massive aphyric dacite/mafic
33.0-33.8m Hornblende porphyry Dyke	Mauve-tan aphyritic matrix (med-hard) with prominent laths and blocks of chloritized 1-3mm Hornblende/Riebeckite (5-10%). Probably part of paratelluric part of Topasite Complex. Rocks above and below are silicified (due to dyke?)			
33.8-38.7m Shear Banded Mafic?	As above 33.0. Shear banded pervasively at 80° c.s. (some of this may have been flow bands). Top 30cm strongly silicified. (Unit is sheared zebra rock)	33.8-34.1 strong silicification (red is laminae of chl and carb ± qtz)		
38.7-42.8m Hornblende porphyry	As at 33.0-33.8. Top contact cuts bending at undulatory 10 to 80° (bending at 60-70°). Bottom contact concordant at 85° c.s.	No silicification around this dyke! Red colour, looks like f.g. granite		
42.8-51.6m Sheared Banded Mafic? (as in lift?)	As at 33.8-38.7. Some possible local fold axes highlighted by light and dark bands.	Mod-est chl and carb as alternating shear laminae	1-2% disc py, trace cpy Note that 1-3% py trace cpy in sheared mafics ever since 28.1m	Whole Rock Sample #163396 at 48.7m Sheared mafic unit

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.....10106

Sheet No.....3 of 7

Property.....Allertown (Seal Pond Area)

Hole No.....SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
Mineralize Zone	No remnant flow textures for a while (phenos, amygs, flow bands). Too sheared. Mafic designation based purely on surface of sheared rock. Some qtz (carb) veinlets are physically folded. General note: These shear banded "mafic" (locally called zebra rock) are of unknown protolith (best guesses are tectonized mafics or ash tufts. No distinct crystals, amygdalae or igneous (or sedimentary) textures are preserved. The dark chlorite and carbonate ($\pm$ qtz) interbands are not suggestive of felsic material and usually have tectonic looking features, suggestive of shear strain.	Strong chlorite as interbands with carb ($\pm$ qtz). None of unit is magnetic		
51.6-51.7m Zone of Base Metal Veining	Fine grained Pb-Zn veining and cpy veining sub parallel to foliation ~10-15% of interval. Core is split, and appears to be siliceous boudins (rhyolite remnant?) with metal veining in anastomosing chloritic foliation planes (mineralization looks pre-tectonic with some later remobilization). This interval appears to be part of underlying unit.	Chlorite on parting planes	5% f.g. Pb-Zn veining, 1-3% veinlet cpy	
51.7-58.3m Felsic Flow (Silicified top of min. zone)	Medium grey to white bleached felsic unit consisting of 90% siliceous (silicified) "rhyolite" with 10% yellow to white sericite/muscovite anastomosing foliation planes. Microscopic quartz and plagioclase (?) phenocryst outlines indicate igneous nature. Plag now replaced by transparent quartz.	Strong silicification Strong sericite in foliated areas (<10% of unit)	1-3% disseminations concentrated with sericite	
58.3-58.1m Felsic Sericite Schist	Strongly foliated medium grey sericite schist. Probable deformed equivalent of above unit. Foliation at 70-90° c.a. (penetrative). 2-3%, 1-3mm remnant qtz and fsp.	Strong sericite ($\pm$ chl) 5% deformed qtz veins (or remnant rhyolite)	5% disc py and stringers	
58.1-72.7m Chlorite Schist (ash-lapilli tuff? felsic?)	Strongly foliated (70-90° c.a.) medium to dark grey-green, waxy chlorite ($\pm$ sericite) schist. Primary textures absent. Some hints of qtz $\pm$ fsp phenos. Rare zones with amygdalae (?) and boudinoid lapilli (?) fragments of possible felsic. The unit is strongly chloritic and could be altered felsic ash-lapilli tuff with hydrothermal chlorite. At least partial felsic component indicated by some sericite zones, and gradational top, and lapilli. Felsic (lapilli) zones at 63.1-63.2, 64.1-64.5, 65.65-67.1 (pink, grey, green rhy. clasts and one pumice frag at 65.8m). Hornblende/Rhyolite porphyry dykes at 65.25-65.65 and 68.5-69.1. Rock is red-brown and f.g. groundmass appears to be intergrown qtz and orthoclase (loose dykes?). Base of unit sheared, gradational over 30cm.	Intense chlorite with local sericite zones up to 0.5m wide (with chl)	2-3% disc py	Whole Rock Sample 8163707 at 59.2m chl $\pm$ ser schist (possible deformed ash) "feeder"

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No. 10108

Sheet No. 4 of 7

Property Millertown (Seal Pond Area)

Hole No. SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
72.7-88.4m "Mafic" Flow/Dyke (undeformed)	Dark green, massive, f.g. ephyritic 1% well developed, slightly flattened quartz amygdaloids (2mm-1cm long). Remarkably undeformed considering overlying and underlying deformation. Under microscope no obvious phenos except for quartz pinkheads which are inconclusive.	Pervasive dark green (greenschist?) (chlorite) Local "beige" sericite/carb alteration at 84.0-84.5m	1-2% diss py. 87.3-88.4m 3-5% py veinlets (random unsheared stockwork). This sulphide appears to be beginning of main mineralized zone (i.e. gradational)	Whole rock sample previously taken by M. Roy at 86.9m Note: at 83.0m there is a finely developed foliation and an open fold which may suggest overturning of unit. More like a folded cleavage. May not be significant.
Note: (Mz in min. zone begins at -87.3m)	Texturally this is a classic thick "mafic" flow. Its lack of deformation suggests a possible dyke, but is deformed at contacts (lower contact really at 90.2m). Amygdaloids more abundant and larger with depth.			
88.4-90.2m As above (more mineralized) (Sericitic) Felsic? or Altered Mafic	Same as above, but abrupt increase in stringer pyrite. Amygs still present, still undeformed. However, closer examination shows waxy sheen and less granular cored surface, broken core shows this to be an artifact of increased sericite (introduced by mineralizing fluids or indicative of beginning of felsic? last 10cm strongly sheared (including sulphides) at 90° c.s. (May be same unit as above).	Strong chlorite Mod to strong sericite	88.4-88.6 15% py as stringers 88.6-90.3 2-3% py as stringers	
90.2-104.4m Intensely Sheared Mineralized Zone (Felsic protolith)	90.2-91.1 25% remnant medium grey cherty rhyolite boudins with 1-2mm qtz ± fsp xol outlines (2-3%) latter now replaced by qtz. These remnants look fairly different from unit above 90.2m (but may be same). Remainder of interval is highly sheared 80-90° c.s., sericitized and pyritized.	90.2-104.4 Strong sericite throughout Moderate chlorite locally ~5% deformed qtz vein fragments	90.2-90.3 15% buckshot py (c.g.) 90.4-90.7 5% diss py (f.g.) 90.7-90.8 20% py (m.g.) 90.8-91.1 1-2% py (f.g.)	
	91.1-94.7 Well developed ductile shear zone at 85-90° c.s. Rare remnant grey cherty rhyolite boudins with 1-3mm white fsp phenocrysts. Interval is brownish due to "rusty sericite" and pyrite. Mod to strong black chlorite in possible leplith zone at 93.1-93.8. 94.7-95.2 heavily pyritized. 95.3-96.9 moderately pyritized. 96.9-102.5 weakly mineralized. This zone is distinctively brown with up to 3% qtz amygs. (Brown is rusty sericite). Strongly sheared and waxy. Some probable rhyolite frags. 102.5-104.4 heavily pyritized part of above unit.		91.1-94.7 5% py (93.5-93.8 15% py) 94.7-95.0 30-50% py 95.1-95.3 30-50% py 95.3-96.9 10-15% py 96.9-100.3 2-5% py 100.3-100.5 2% cpy stringers (spill) 102.5-103.2 10-15% py 103.2-104.4 30-50% buckshot py At 102.7 3cm wide massive c.g. py band with 3% cpy	M. Roy Whole rock at 92.8m Sample taken of 50% py at 102.8 (for display purposes).
104.4-106.2m Hornblende or biotite granite dyke	Dyke is brownish orange (k-sper) and consists of a (2-3mm) m.g. core of intergrown k-sper (brown) and qtz and mafic mineral (Hornblende or biotite or both) and coarse equant grains of saussuritized plag. Chilled (f.g.) on both ends to look mafic (dark green) with small phenos of mafic mineral (Hornblende?) and plag. Top contact intrusive at 85° c.s. Bottom contact not seen (piece of core missing). This dyke probably a variant of other Topasite Complex dykes in hole. No shearing at all (i.e. post tectonic).	Minor alteration of feldspar		

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No. 10108

Sheet No. 6 of 7

Property..... Millertown (Seal Pond Area)

Hole No..... SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
109.2-120.1m Mineralized Sheared Felsic	Continuation of unit seen above previous dyke. Unit consists of ~10% strongly flattened (80-90° c.a., locally 60° c.a.) light grey siliceous rhyolite boudins which are likely disrupted parts of a more massive flow. Local good quartz phenocrysts (1-3mm). Pyrite generally greater than 10% with several almost massive sulphide zones. Several gougy fault zones. End of most intensely mineralized and sheared zone.	Strong sericite as foliation bands and anastomosing "matrix" (30-70% of silicates) Local moderate chlorite.	5-20% py as disseminations and bands, and anastomosing (flattened) stockwork veining. Tr 1% cpy locally 109.4-110.2 40-60% py 115.0-115.1 80% py, 1-2% cpy	
120.1-128.7m Ditto: (Less Mineralized) Flow/Lapilli Tuff	This unit is somewhat arbitrary, mainly being separated as less deformed (more primary features preserved) and less mineralized than above unit. In this zone, frequent amygdaloes, quartz eyes and even remnant polyfethic lapilli tuff are preserved. Most material is felsic, although the top 1.5m superficially looks mafic (dark green, pretty chloritic, amygdaloidal - but with frequent sericite partings). Lapilli zone at 124.3m.	Strong sericite, local strong chlorite	1-3% py overall with trace cpy Locally 5-10% py at 122.5-123.3	
128.7-128.3m Silicified Rhyolite (undeformed) Marks end of mineralized zone	Light grey to white, undeformed (?) but has a structurally induced weak parting (narrow sericitic fractures) and is foliated (last 20cm) in more carbonatized base (at 70° c.a.). There is silicification throughout. 1-3% 1-3mm euhedral glassy qtz eyes. This may be a dyke (subsequently altered) or part of the alteration system (deformation indicates relatively early).	Strong silicified	Tr 1% disc py (f.m.g.)	
128.3-145.3m Felsic Ash/Lapilli Tuff (with some flow component?) (Weakly deformed) Strongly Altered Hydrothermal Chlorite?	Dark grey-green, waxy. 2-5% milky qtz amygdaloes (?) frequently. Overall unit looks mafic (especially at 128.6-128.8 and - 134.5-143.5) because of generally dark green, massive, amygdaloidal texture, but throughout there is a lot of sericitic "carbonate" giving it the waxy, altered felsic look, apparent felsic lapilli zones (2-5mm grains) occur at 130.0-130.1 and 132.4-133.5 (apparent quartz eyes). finer adjacent areas look like sheared felsic ash tuff under scope. Shearing overall is moderate to weak.	Strong mod chl, mod ser If unit is felsic, the black chlorite might be VMS related Alternately, just fine altered tuff glass.	Trace to 1% cpy as qtz vein hosted splashes locally	Much of unit below 134.5 looks very "maficky" (similar to 120.1-121.5)
145.3-147.0m Qtz Feldspar Porphy Dyke	Medium grey-green massive, with 2-3% grey 1-3mm feldspar (rectangular) and quartz (equant) crystals. Feldspars are replaced by quartz. Rock has partings as in silicified rhyolite at 126.7 to 128.3. Except for lesser silicification here, I would say both units are identical. Rock not foliated (except for parting).	Weak pervasive sericite Feldspars replaced by quartz		
147.0-148.3m Felsic Ash Tuff	Medium grey, fine grained, looks somewhat laminated. Minor 1-5cm felsic lapilli zones give away matrix of this unit. Upper contact sharp at 85° c.a. Lower contact quickly gradational over 1cm into underlying lapilli tuff (tops up hole?) Ash contains fine 1mm qtz eyes locally.	Moderate pervasive sericite/carbonate Local strong chlorite bands	Tr py	
148.3-151.8m Felsic Lapilli Tuff	Medium-dark grey with obvious stretched sandy/pebbly rhyolite fragments (good quartz eyes, cherty grey frags, also altered frags) Moderately deformed (but only flattened) with protolith obvious. (85-90° c.a. flattening)	Strong black chlorite matrix to fragments Moderate pervasive sericite ± carb	3-5% py replaces some fragments and as diffuse bands parallel to flattening	

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No..... 10108

Sheet No..... 6 of 7

Property..... Alderdown (Beal Pond Area)

Hole No..... SP-85-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
151.6-156.5m Felsic Ash to Crystal Tuff	Medium green fine grained, hints of lamination. Sparse fine qtz xals except where local 1 to 10cm beds contain abundant (up to 50%) 1-2mm qtz phenos. The unit superficially appears mafic. Main alteration is sericite ± carb with frequent 0.5 to 1cm bands of black chlorite/pyrite of apparent hydrothermal origin. Chl/py bands are 80-90° c.a. and may have been bedding parallel originally or are rotated stockwork.	Moderate pervasive ser ± carb 5-10% black chlorite bands of hydrothermal origin host coarse pyrite	5-10% m-c.g. py disseminated and patchy throughout Also occurs as frequent 80-90° c.a. bands 0.5 cm wide hosted in black chl bands	
156.5-162.9m Quartz Porphyry (Dyke?)	Medium green to pale grey-brown where bleached. Beginning of unit marked by start of mottled bleaching and siliceous nature. (looks like altered felsic flow). These features are prevalent but "come and go". Quartz phenocrysts are easy to find throughout (1-3%, 1-3m). Small areas look like above ash tuff. Best guess is this is an altered rhy. like dyke (rather than flow or tuff).	Weak to moderate silicification, local pervasive sericite	1-2% f.g. py on fractures in more siliceous areas	
162.9-165.0m Mafic dyke (or felsic ash tuff?)	This unit definitely looks like a f.g. locally quartz amygdaloidal medium green mafic dyke. Top contact qtz veined and equivocal. However the bottom contact looks quickly gradational over 1-2cm into an obvious qtz crystal felsic tuff. In the last 2cm, scattered pin head qtz phenocrysts(?) appear to attest to gradational nature (indicating tops up hole?). At 163.4 to 163.5 there is also a convincing qtz crystal tuff bed (seeolith?). Unit is totally undeformed. Last real flattening seen at 156.5m and that in part is bedding. Presence of amyg and pervasive med green chlorite suggest mafic dyke.	Pervasive greenschist chlorite (i.e. not "hydrothermal")	Trace py	
165.0-167.4m Felsic Ash to Lapilli Tuff	As in above lapilli tuffs, but generally finer grained. Definitely a felsic rock (lots of qtz eyes). Base appears somewhat gradational into a lower massive F Q P dyke but probably a different unit. Probable mafic dykes (or ash? less likely) at 165.4-165.6 and 167.0 to 167.2m.	Weak to moderate sericite and chlorite	Trace py	
167.4-169.8m Feldspar Quartz Porphy Dyke	Medium grey-green, glassy and hard, 3-5% feldspar and qtz phenos. Top contact 90° c.a. Basal contact 80° c.a. and knife sharp.	Nil	Nil	
169.8-172.1m Felsic Ash Tuff	Medium-dark green, very fine grained. Looks like a mafic dyke but under microscope see beds (2cm thick) of >50% 1mm quartz phenocrysts which define its felsic (and tuffaceous) nature. This throws doubt on "mafic dyke" seen below 162.9m.	Moderate pervasive chlorite and sericite	Trace py	
172.1-180.3m Felsic Ash to Lapilli Tuff	Similar to above unit, but more siliceous (i.e. less altered) and coarser grained with frequent sand-sized fragments of rhyolite and quartz phenocrysts. Generally coarser towards base, but only a fine grained lapilli (<4mm grains) in size at most. Last 50cm are moderately foliated at 80-90° c.a. and rusty stained.	Weak to moderate sericite/chlorite	Trace py	

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.....10108

Sheet No.....7 of 7

Property.....Millerton (Seal Pond Area)

Hole No.....SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
180.3-183.5m Felsic Ash Tuff	Very fine grained, med green, <5% 1-2mm qtz phenos.	Moderate pervasive chlorite $\pm$ sericite	Trace py	
183.5-188.5m Felsic Ash Tuff (minor lapilli)	Fine grained, med green, many qtz xals (1-2mm) 2-3% 1-2mm rhy fragments (grey to mauve). General 5-10cm zones of 5% quartz and epidote-filled amygdales (fragments of flow?).			
188.5-190.4m Felsic Ash Tuff	Med-dark green, very fine grained, locally siliceous. No positive qtz phenos because of fine grain size. (Outside chance this is a mafic dyke, but I doubt it)	Mod pervasive chl $\pm$ ser Locally silicified 5% milky quartz veining	Trace py	
190.4-191.9m Felsic Ash/Lapilli Tuff	Same colour. Border line between ash and lapilli tuff. Frequent <0.5 cm rhy frags. Lots of qtz phenos.	Mod pervasive chlorite $\pm$ sericite	1-3% py as bands (rare) disseminations and clots	
191.9-197.2m Dolite Lapilli / Ash tuff	Medium green, fine to medium grained. This unit is distinctive in having 5-10%, 1-3mm epidotized plagioclase phenocrysts. Also abundant quartz phenocrysts. Qtz and plag can occur alternatively abundant and up to 50% xals (under microscope), as discreet 1-5cm bands. This, along with infrequent <0.5 cm rhyolite clasts indicates the units tuffaceous nature. Parts can probably be called crystal tuff (>50% xals). There is a general increase in xal grain size with depth, indicating tops up role (i.e. to northwest).	Moderate pervasive chlorite $\pm$ sericite Epidote in lap xals (i.e. altered plag) Minor qtz veining Frequent red hematite on fractures Note: Hematite and epidote may indicate facies change in alteration i.e. getting away from best alteration	Trace py	
197.2m EOH				

Latitude.....17°40N
 Departure.....18°00E
 Elevation.....~280m (from Topo Map)
 Dip at Collar.....-45°
 Bearing.....150° True
 Total Dept.....197.2m Core Size... BTW
 Remarks.....

Noranda Mining & Exploration Inc. Sheet No
DIAMOND DRILL CORE LOG
 True Dip
 Tests Dip Magnetic Corrected
 Depth Bearings Bearings
 192.8m -40 179 155
 101.2m -41 179 155

Project No..... 10108
 Property..... Mittertown (Seal Pond Area)
 NTS..... 12A/15
 Date Started..... March 28/95
 Contractor..... Petro Drilling Ltd.
 Logged by..... Gilles Roy
 Sheet No.....1 of 4
 Hole No.....SP-95-1
 Grid Name.....Seal Pond
 Completed.....April 10/95

Depth & Lithology	Description	Alteration	Mineralization	Remarks
0-4.27	Casing.			
4.27-6.97	Rhyolite-dacite, massive, dark grey, strongly mag. Qtz feldspar grains <1-2mm. Shows a weak foliation at 80-85° to core axis. Sharp contact at 80° c.s.	2-4% qtz/calcite veins		
6.97-17.2	Rhyolite-dacite, with 15-25% qtz/fsp replaced in part by qtz/calcite (30-70%). Dark grey, bluish. Strong mag. 25% of unit is a chloritic schist which is non-mag to weakly mag. Foliation of the chloritic schist is 80° c.s.	Intense local chloritization due to the devitrification of the rhyolite. Carbonatization 8-10% of the rhyolite	Tr py	The chloritic alteration (and foliation) combines give a "tuffaceous look" (outside chance its a tuff)
17.2-22.7	Rhyolite-dacite, dark grey bluish to med grey with 30-40% of moderately foliated c' dacite schist, (fol 80-90° c.s.) (Alteration) Rhyolite-dacite is strongly mag and the schist weak to non-mag. Sharp lower contact at 90° c.s. (fractures with rusty possibly antiferite veinlets (2mm)).	Devitrification in 30-40% of the unit shown by a chlorite schist Carbonatization 5%	Tr py Tr cpy	Tuff look
22.7-24.5	Intermediate tuff with rounded to subangular rhyolite and minor chert fragments (rhyolite up to 5cm, 15%) in the first .5m, mod to strong mag and below the first .5m non to weak mag. Moderate foliation, 60-80° c.s.	Weak 2-4% carbonatization	py = 1%	The size and number of fragments decrease to the lower contact. This unit may be an autobreccia with silicified fragments of the underlying unit
24.5-31.4	Andesite-intermediate volcanic rock, massive to weakly foliated, medium grey, non mag. Locally hydrothermal breccia with silicification. The last 2.4m is deep green, massive to poorly foliated, probably basalt.	Weak carb Loc silicification 10cm 26.4 10cm 26.6 15cm 27.7 30cm 28.7	at 30.9 to 31.0 py = 7%	
31.4-31.8	Mylonite soft sericite schist with quartz eyes strongly elongated. fol 80° c.s. could be tuff.		Tr py	
31.8-33.0	Mafic rock, hydro brecciated by hairlike qtz veinlets.	Silicified by the intrusive below	Tr py	

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.....10108

Sheet No.....2 of 4

Property.....Millerton (Seal Pond Area)

Hole No.....SP-05-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
33.0-33.8	Brown, pinkish intrusive rock, aphanitic, with 10% of chlorite/calcite "amygdale spots" <3mm. At 33.15 to 33.2 rhyolite breccia with sharp contact.		Tr py associated with the chlorite Rhyolite breccia has 10% py in fine veinlets.	
33.8-38.7	Intermediate tuff, grey to medium green, gritty, fine grained not well laminated. The lamination is probably tectonic, some parasitic fold show at 37.55 (could be due to a fall tuff if the normal polarity case) no mag. loc weak mag. Foliation 80°.	Carbonatization (3-5% calcite) finely disseminated Silicification and breccia at the upper contact for ~50cm	1-2% py	
38.7-42.77	Intrusive like from 33 to 33.8 but brick like color and weakly mag. Both contacts are sharp without any alteration. Upper contact irregular, lower contact at 85° c.e.	Weak carb	Tr py	
42.77-51.55	Identical to 33.8-38.7, sharp l.o. fol 75-85° c.e.			
51.55-58.0	Brecciated rhyolite flow (Hyaloclastite?) Pale grey rhyolite fragments (up to 10cm) surrounded by a sericitic (with minor chlorite) schist (devitrification?) From 51.55-53.37 interbedded with a intermediate tuff. Same at the lower contact from 58.4-58.0 Upper tuff fol 80 Lower tuff fol irregular 70-80°.	Loc weak carb associated with the tuff	From 51.55-51.75 stringer of cpy ± ga + sph Fine grey bluish vein of sph + ga with cpy sph + ga 3% cpy 3% From 51.75-53.37 4-5% py From 53.37-58.4 2-3% py From 58.4-58 4-5% py	
58.0-88.4	Intermediate tuff (with local felsic tuff interbedded) and lava interbedded. The lava (andesite) is dark grey-green, massive with a weak foliation shown by plagioclase(?) The tuff is finely laminated, brown, dark green, and light green (ash-lithic tuff). Locally weak mag. Minor dyke, mafic (diorite) brown with 15% amphibole (hornblende) from 65.25-65.65, 68.5-67.1. From 83.5 this unit is getting slightly more felsic probably associated with a light silicification alteration.	Loc weak carb loc sericitic/argillaceous alteration from 87.5-88.1 med strength	2-3% py Tr cpy From 87-88.4 2-3% py stringer	
88.4-120.1	Felsic to intermediate tuff with intrusive dyke (diorite). Fine laminated ash tuff interbedded with lithic tuff. This unit is well foliated except for the dykes. Foliation is constant 75-85° Several fault gouge zones associated with a medium to strong argillaceous ± sericitic alteration. 90.0-91.5 fault gouge 93.8-94.7 fault gouge.	93.0-91.5 Strong argillaceous ± sericitic alt 91.5-93.8 Weak argill-chl alt 93.8-94.7 Strong argill ± ser wk chl	88.4-88.7 py = 15% in stringer didn't seem to be controlled by the foliation 88.7-90.3 9% py 90.3-93.8 6-7% py tr cpy 93.8-94.7 2-3% py 94.7-95.4 20% py 95.4-100.3 5-6% py tr cpy 100.3-100.5 4-5% stringer cpy, 2% py	

Noranda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.10108

Sheet No.3 of 4

PropertyMillerstown (Seal Pond Area)

Hole No.SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
	104.4-109.2 Mafic dyke (diorite), dark green with 25% feldspar, reddish (probably potassic) strongly magnetic. 112.0-113.7 fault gouge 117.2-118.0 fault gouge.	109.2-110.3 wk chl, wk ser 110.3-115.0 wk ser 112.0-113.7 mod-str arg ± ser 117.2-119.0 is identical to 112.0-113.7	100.5-102.6 4% py, <1% cpy 102.5-104.4 20% py, <1% cpy 109.2-110.2 25-30% py, tr cpy 110.2-111.1 3-5% py, tr cpy 111.1-111.4 2% cpy, 10% py 111.4-114.8 5-7% py, <1% cpy 114.8-116.8 20% py, tr cpy 115.8-120.1 5-8% py, tr cpy	102.67-102.71 90% py, 10% cpy 109.55-110.0 50% py, tr cpy 115-118.1 80% py, tr cpy
120.1-126.7	Mafic to intermediate tuff. Tuff is dark gray to med gray, poorly to med foliated. Locally mag. Beginning at 121.7 several horizons of dark gray mafic tuff with 10-20% elongated feldspar (1.5mm x >3mm up to almost the total circumference of the core). Partly replaced by calcite (amygdale or lapilli). At 123.5 up to the l.c. this unit is 75% of the core. Paraseismic folding at 125.2. Fol 80-80° c.s. Fault gouge 123.0-123.5 Lower contact is sharp at = 75° c.s.	120.1-121.9 med chl all 123.0-123.5 strong argillite sil and med sericitization	2-5% py <1 cpy 122.5-123.0 1% cpy, 5-8% py	
126.7-128.15	Rhyolite, massive to med foliated at the l.c. fol = 75 c.s. Pale "beige" (off-white) Hairlike fractures.		None	
128.15-145.3	Mafic to intermediate volcanic rock mainly tuff with minor felsic tuff, loc weak mag. Felsic tuff from 134.2-134.5. This unit is mafic at the upper contact gradually progressing to an intermediate tuff.	128.15-128.5 silicification decreasing from the upper contact 131.4-134.2 med to str chl 136.8-137.2 str chl 137.3-143.0 w-m chl 143.145.3 w-m chl.	3-5% py <1% cpy From 129.7-130.0 1% cpy 4% py	131.4-133.2 1% cp, 3% py 135.8-136.8 10-12% py 138.6-138.7 10-12% py, tr cp 143.0-145.3 5-8% py
145.3-147.15	Rhyolite, light green. l.c. qtz vein of 1.5cm.	Wk ser all	1% py	
147.15-151.6	Felsic lithic tuff, med gray-blue. l.c. fault gouge of 3cm.			
151.6-156.5	Intermediate ash tuff with minor rhyolite beds Foliation 70-85° Rhyolite 152.9-153.1 153.9-154.3 l.c. sharp at 85° c.s.	Mod to str chl all	3-5% py tr cpy 3-5% py tr cpy 154.8-156.0 8% py	

Horanda Mining & Exploration Inc.

DIAMOND DRILL CORE LOG

Project No.....10108

Sheet No.....4 of 4

Property.....Millerton (Seel Pond Area)

Hole No.....SP-95-1

Depth & Lithology	Description	Alteration	Mineralization	Remarks
158.5-162.9	Rhyolite, massive to flow brecciated, with minor mafic (andesite) interbedded. Mafic 159.2-159.5 161.3-161.5 I.e. qtz veined and fractured.		3-5% py tr cpy	
162.9-167.4	Mafic volcanic (andesite) Massive to foliated. From 165.6-169.2 irregular foliation showing 2 tectonic fabrics fol 75-85, fol 50-60 (fault like) sharp i.e. 90° c.s. (fracture).		1-2% py 166.9-167.4 3-4% py	
167.4-169.6	Rhyolite, grey light blue. Massive with ~10% of feldspar.	Local discoloration along hairlike veinlets		
169.6-172.1	Andesite Sharp contacts, sericite-calcite veinlets Weak foliation at 70-80° c.s. No mag.	Qtz vein (8cm) at 171.5 with all of the upper contact for ~15cm	1-2% py	
172.1-180.3	Intermediate tuff interbedded with minor intermediate volcanic - med grey-green. Fine tuff (ash) to lapilli tuff. Moderate foliation, bedding 70-80° c.s. No mag. From 175.45-179.6 the tuff is more felsic, bluish. I.e. fault gouged and qtz veined with minor cpy for 15cm.	Mod carbonatization upto 179.8m	2-4% py 1% py, tr op	
180.3-197.2	Felsic volcanic (rhyolite) interbedded with intermediate volcanic, minor felsic tuff. Felsic volcanic is blue grey, massive. From 191.9-197.2, porphyritic felsic flow with 25% of (replaced by calcite ± epidote).	Mod carb. From 191.9-194 fracture filling with rust and calcite (hematization) (14 fractures) Epidotization and calcite of the feldspar porphyry from 192 to the end	Local py stringer 185.3-185.8 4% py 187.8 6% py/2cm 189.9-191.4 3% py 192.0 2% cpy/ 1cm 1% py	
197.2 EOH	Note by G. Squires: See my relog for better geological descriptions. This log by G. Roy has important detailed sulphide estimates.			