

PROPERTY: Mt. Anderson
HOLE NO. MA-85-3
BEARING: 135 deg
DIP-COLLAR: -45 deg

NORANDA EXPLORATION COMPANY LIMITED
STARTED: Sept. 29/85
FINISHED: Sept. 30/85
LENGTH: 121.10 metres
CORE SIZE: NO

FIELD CO-ORDINATES
L 30 + 50E
16 + 25N

Bearing
135

DIP TESTS
Dip
-50

Depth
92.3 m

M.T.S. 105 D/4
PROJECT NO. 611
LOGGED BY: M. Webster/B. Thomas
SHEET 1 of 7

METRES		Reco- very %	DESCRIPTION OF UNITS	Mineraliza- tion	Sample No.	METRES			ASSAYS					
From	To					From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	1.7		OVERBURDEN											
1.7	106.2		GRANODIORITE: a.gr., equigranular, subhedral crystals of Plag. 30%, Qtz 30%, K-spar 20%, Hb 10%, Biotite 5%, others 5%. Local epidote stringers, chlorite alt'n, narrow highly fractured intervals. Py euhedral, f.gr., disse. 1% avg. with narrow zones described below containing up to 5% Py. Local occurrences of mafic rich diorite angular xenolithic fragments generally <10 cm dia with no significant contact alterations or sulphide enhancement. Local magnetic zones less than 1 m wide. Contains qtz veins and mafic dykes as noted below.	1% Py										
			2.9-3.3: Mafic dyke; f.g., med-green, slightly porphyritic, accompanied by silica stringers in wisps on the dyke material within 2 cm of margin. Local manganese stain along contact. Fine, disse. euhedral Py occupies up to 2%, non-magnetic, 1% hematite disse. throughout dyke commonly along contact.		96351	2.9	3.3	.4	10	.4	12	52	28	2
			3.3-3.33: Quartz Vein; laminated silica with opaque whitish fill and bands 1-3 mm wide parallel to laminations along contact margins with crystalline, clear f.g. freegrowing qtz lining centre of vein. Thin black coating of crystals in occasional open cavities <.25 cm wide, 2 cm long in centre of vein, no visible sulphide. Clay, sericite alt'n 1-3 cm wide in granodiorite host parallel to vein. Thin, intermittent layer of f.gr. chlorite along contact margin.		96352	3.3	3.4	.1	10	.4	30	32	16	6
			3.6-3.61: Quartz Vein; as above											
			9.0-9.5: Fracture Zone; chlorite and silica filled fractures <0.25 cm wide, 20% sericite, 40% chlorite alt'n, 5% hematite disse. throughout interval. 5-6 narrow qtz veins (as above) <0.5 cm wide @ 60 deg. Fractures @ 85-90 deg. Biotite completely altered to chlorite. Iron oxides common. Gradational upper & lower contacts to zone over 10 cm.		96353	9.0	9.5	.5	10	.2	8	36	6	6
			9.5-9.6: Mafic Dyke (as above); cross-cut by quartz stringers 10-90 deg spaced 3 cm apart, 3% disse. Py throughout dyke, slightly magnetic on low angle <45 deg fractures.		96354	9.5	9.6	.1	10	.2	8	78	54	6
			9.6-10.4: Granodiorite; as upper contact to dyke from 9.0 to 9.5 metres		96355	9.6	10.4	.8	10	.2	6	40	14	2
			11.6-12.2: Siliceous Granodiorite containing 4 <1 cm wide qtz veins (as above) up to 2% disse. Py along vein margins adjacent to host rock, chlorite alt'n intense with chlorite fill along contact margins. Vein 20-30 deg		96356	11.6	12.2	.6	10	.2	6	36	14	2

METRES		Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES			ASSAYS						
From	To					From	To	Length	Au	Ag	Pb	Zn	Cu	As	
			145.34-45.35: Quartz vein; ingrowing crystal cavities 10.25 cm wide in places along vein centre, manganese coating, laminated with crystalline vein centre 0.5 cm wide												
			146.44-51.46: Granodiorite cut by numerous qtz stringers												
			146.45 - 0.25 cm wide qtz vein, minor clay alt'n, chlorite film on contact margin, laminated, crystalline vein centre, no visible sulphides <25 deg.												
			146.75 - 0.5 cm wide qtz vein (as above) <20 deg												
			147.47 - 1.0 cm wide qtz vein, <20 deg												
			147.90 - 0.25 cm wide qtz vein, <18 deg												
			148.5 - 0.25 cm wide qtz vein, <45 deg												
			150.60 - 0.25 cm wide qtz vein, <37 deg												
			150.70 - 0.25 cm wide qtz vein, <40 deg												
			151.13 - 0.25 cm wide qtz vein, <135 deg												
			151.27 - 0.25 cm wide qtz vein, <40 deg												
			151.46-51.53: 2.5 cm wide qtz vein, <22 deg, as above		96368	51.46	51.6	.14	10	.2	6	28	22		
			154.45-54.65: 1.5 cm wide qtz vein at 45 deg, 1-2% hematite and at along margins, contact vuggy & weathered out, chlorite and clay alt'n 2-3 cm in host, laminar silica clear and white opaque at margins which grades lower 1.0 cm to crystalline qtz coated with black film in open cavities less than 0.25 cm wide at vein centre, up to 5% v.f.g. disseminated Py along margins.		96369	54.45	54.65	.2	10	.2	8	32	8		
			157.9-58.1: Pervasive clay, chlorite alt'n, 5% hematite & iron oxide stain, 2% v.f.g. disseminated Py in granodiorite		96370	58.0	58.5	.5	10	.2	8	38	4		
			158.38-58.39: 1.0 cm wide qtz vein at 52 deg												
			160.06-60.09: Mafic xenolith, angular fragment chlorite rich, minor clay alt'n, clear margins.												
			161.02-61.23: at 61.04 0.25 cm wide laminated qtz vein; 196 deg		96372	60.93	61.33	.4	10	.2	8	36	6		
			161.08 - 0.25 cm wide laminated qtz vein; 50 deg												
			161.18 - 0.25 cm wide laminated qtz vein; 35 deg												
			161.5-61.51: 1.0 cm wide hematite rich qtz vein; 45 deg increased chlorite alt'n up to 30% of host, 100% clay alt'n of feldspars, pervasive silicification alt qtz grains anhedral white to light grey, <1% disseminated Py		96373	61.33	61.63	.3	10	.2	10	46	4		
			161.75-61.80: Mafic xenolith, porphyritic angular fragment 4 cm dia.												
			162.20: 0.5 cm wide chlorite rich qtz vein; <70 deg												
			162.30-62.36: Granodiorite; intense sausseritization of feldspars to light green, qtz grains anhedral pervasive silicification, 1% disseminated Py												
			162.36-62.50: Clay light grey, fine gr. clay, no apparent vein or fracture or associated host rock alt'n, white on drying.		96374	62.36	62.8	.44	10	.2	8	48	12		

METRES			DESCRIPTION OF UNITS	Mineraliza- tion	Sample No.	METRES			ASSAYS					
From	To	Reco- very %				From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
			163.65-63.80: 1.5 cm wide qtz vein at 90 deg.											
			164.0-64.12: Mafic xenolith porphyritic angular fragments dark green chlorite rich f.g. matrix, 1% disseminated Py, upper contacts slightly clay altered.		96375	63.94	64.2	.26	10	.2	8	54	6	4
			164.31-64.41: 2 cm wide qtz vein at 65 deg, vein centre filled with 1 cm wide opaque white, f.g., silica lami- nated centre, chlorite/clay alt'n 3 cm wide in host.		96376	64.31	64.41	.1	10	.2	6	10	4	2
			167.03-67.09: 6 cm wide qtz vein at 30 to 45 deg laminar luggy, weathered out contact margins, chlorite film & intense alt'n at margins, minor iron oxide stains. Light green to white opaque silica vein filling 2 cm wide, laminated silica margin texture, no visible sulphides or fluorite.		96377	67.0	67.23	.23	40	.2	10	40	8	4
			167.13-67.15: 0.5 cm wide qtz vein at 48 deg, laminar minor chl, 1 cm wide clay alt'n in host granodiorite.											
			167.70: 0.25 cm wide chlorite rich silica stringer/ fracture at 48 deg, no sulphides.											
			168.56-68.58: 2 cm wide qtz vein at 45 deg, intense saussuritization of host for width of sample.		96378	68.5	68.7	.2	10	.2	6	42	6	4
			169.0-69.0: Quartz veinlets 0.25-0.5 cm wide at: 171.80 - 30 deg 172.02 - 30 deg 173.27 - 45 deg 173.34 - 50 deg 173.37 - 55 deg											
			173.0-73.8: Intense saussuritization and silicification of granodiorite. Light green feldspar 30%, anhedral qtz grains 35%, chloritic Mb 25%, epidote, chlorite, minor Py and others 10%.											
			173.62-73.64: 1.0 cm wide qtz vein at 45 deg, 1% disse- minated Py and 1% disseminated hematite along contact margins.											
			173.8-75.10: Multiple (10-12) very narrow (<0.25-0.5 cm wide) qtz stringers at low angles to core, avg. 15 deg, minor calcareous alt'n and chlorite along contact mar- gins, laminated vein margins infilled by white, f.g., opaque silica, minor f.g. disseminated Py along margins. Clay chlorite alt'n 1-2 cm from vein in host granodiorite.		96379	73.8	74.3	.51	10	.2	6	58	10	6
					96380	74.3	74.66	.36	30	.2	10	42	28	4
					96381	74.66	75.1	.44	10	.2	8	56	10	10
			175.21-75.3: Mafic xenolith, chlorite rich porphyritic dioritic angular block. Clear unaltered contact, <1% Py Non-magnetic.											
			175.88-75.89: 1 cm wide qtz vein at 45 deg.											
			176.11-76.15: 2 - 4 mm wide qtz stringers joined to sil- ica mass 2 x 4 cm in dia., amorphous silica 2 cm wide to finely crystalline silica lining a 2-3 mm wide open cavity, lined with a black film, no visible sulphides.		96382	76.05	76.2	.15	10	.2	8	38	10	8

METRES		Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES			ASSAYS						
From	To					From	To	Length	Au	Ag	Pb	Zn	Cu	As	
			Narrow quartz stringers less than 0.25 cm dia. at 79.23-79.29, 79.37 m												
			79.32-79.34 and 79.35, 79.37: Two 2 cm wide quartz stringers, 2-3 mm wide chlorite alt'n of host, minor clay alt'n in host. One 10 mm dia. euhedral, purple fluorite grain in upper stringer, no visible sulphides.		96383	79.05	79.7	.65	10	.2	6	44	6	6	
			79.49-79.52: 3 cm wide quartz vein, cloudy to white opaque v.f.g. silica with 2 weathered out py(?) vuggs stained with Fe oxides, vuggy chl rich contact to chl altered granodiorite host 2-3 cm from contact. One euhedral fluorite grain 10-12 mm dia. in vug at centre of vein within amorphous grey translucent qtz, minor clay alt'n at margins.												
			Narrow fractures some containing opaque silica & minor chlorite less than 0.25 cm wide at 80.05, 80.47, 80.63, 80.82, 81.07, 81.12, 81.34, 81.50 m.												
			82.0-82.10: Intense chlorite alt'n and silicification of granodiorite, green colour also attributed to 50-80% saussuritization of feldspar.												
			84.0-8.2: Slight increase of fracture frequency to approx. every 10 cm, no increase in silicification or sulphide content.												
			87.45-87.47: Quartz veinlet, clay margins and slight bleaching and increased clay alt'n of host 3 cm either side of veinlet.												
			87.56-92.5: Up to 80% saussuritization of feldspar, pervasive silicification and up to 5% disse. py throughout host. Epidote and chl common in silica stringers as listed below.												
			88.13-88.15: Qtz vein crystalline clear vein centre, 1-2% disse. py along margins at 40 deg		96384	88.1	88.27	.17	10	.2	8	44	16	14	
			88.2-88.24: Mafic dyke 135 deg clear contact very little host rock alt'n, no visible sulphides												
			88.27-89.2: Fracture zone; silicified, heavily clay altered granodiorite cut by multiple narrow (less than 0.25 cm wide) fractures commonly filled with small chlorite crystals and intermittently lined with amorphous white opaque silica, minor epidote and disse. py along contacts.		96385	88.27	88.68	.41	10	.2	8	50	12	14	
			89.20-89.60: 2 cm wide qtz vein containing dendritic manganese, lisanite and hematite, 1-5% disse. py and 40% chlorite along contact margins at 60 deg.		96386	88.68	89.2	.52	10	.2	12	46	16	8	
			91.50: 0.25 cm wide epidote filled fracture, slight bleaching of host 2 cm from contact.												
			91.82-91.88: Mafic dyke at 60 deg.												
			94.78-94.80: Chloritic fracture at 45 deg, minor clay alt'n 2 cm from contact.		96388	91.4	91.9	.5	10	.2	6	56	18	6	

METRES		RECORD	DESCRIPTION OF UNITS	Mineraliza- tion	Sample No.	METRES			ASSAYS					
From	To					From	To	Length	Au	Ag	Pb	Zn	Cu	As
			197.16-97.21: Multiple qtz stringers less than 0.25 cm wide at various angles, minor clay and chlorite alt'n. Calcareous alt'n 20% along fractures/contacts.		96389	91.1	101.0	.9	10	.2	8	52	6	6
			1100.52-101.18: Qtz veinlets; 0.5 cm wide at 100.56, 1100.62, 100.65, 100.69, 100.76 each comprised of white opaque amorphous silica with weak marginal clay and chlorite alt'n.											
			1103.4-103.7: Bleached silicified zone within granite/diorite host, gradual transition to diorite at 1106.2 m.											
106.2	106.9		DIORITE: 80% asussarization of feldspar to light green colour, 1-2% disse py, narrow qtz stringers ranging from 0.25-0.7 cm wide occur at 106.3, 106.4, 1106.7, 106.8 at 23-28 deg.		96320	106.2	106.9	.7	10	.2	18	42	8	4
			1106.5-106.51: Mafic dyke at 45 deg 1 cm wide, cut by qtz stringer (younger), local clay alt'n.											
			1106.9-107.5: Diorite as above with fewer qtz stringers, pervasive silicification, 1-2% py.		96321	106.9	107.5	.6	10	.2	18	50	8	2
			1107.5-107.92: Altered diorite; intense clay alt'n feldspar completely altered to clay, 10% hematite and Fe oxide stain, manganese stain along fractures & throughout host, silicification increases from 30% at 107.5 to 80% at 107.92, 20-30% chlorite throughout, qtz crystals smoky grey to opaque in colour, minor disse py.		96322	107.5	107.92	.42	10	.6	20	38	40	2
			1107.92-109.72: Qtz vein; agate laminar and crystalline silica textures. Agate; clear, buff and white amorphous laminated silica 3-4 cm thick lines, vein margins and dioritic xenoliths. Radial clear to slightly cloudy silica blades grow perpendicular to laminae inward to vein core and around coated xenoliths. Crystals 2-4 cm long up to .25 cm wide commonly Fe or Mn stained. Open cavities 1-2 cm dia. found within intergrowing radial clusters. Fluorite grains light green, angular, cubic 2-10 mm dia. occur at laminar silica or agate and crystalline radial crystal contact as well as along contact to host diorite in minor amounts. Diorite xenoliths: angular 1-10 cm dia. intensely clay and chl altered, med. grained less than 1% disse py.		96323	107.92	108.24	.35	10	.4	50	10	12	2
					96324	108.24	108.62	.38	10	.2	26	8	12	2
					96325	108.62	108.95	.33	10	.6	128	8	12	2
					96326	108.95	109.3	.35	10	.4	26	10	8	2
					96327	109.3	109.72	.42	10	.6	26	22	18	2
			1109.72-110.22: Diorite intensely clay altered, heavy manganese and iron oxide stain. Green fluorite crystals 1x2 cm within narrow agate structure, no visible sulphides.		96328	109.72	110.22	.5	10	.4	26	6	8	2
			1110.22-110.37: Quartz vein agate, minor crystalline qtz 1.0 cm wide at vein centre, no fluorite found.		96329	110.22	110.37	.15	20	4.2	70	10	8	2

[illegible]