ARIS SUMMARY SHEET

District Geologist, Smithers Off Confidential: 89.04.07

ASSESSMENT REPORT 17423 MINING DIVISION: Skeena

PROPERTY: Todd Creek
LOCATION: LAT 56 13 29 LONG 129 46 25
UTM 09 6231146 452030
NTS 104A04W 104A05W
CLAIM(S): Toc 3-15
OPERATOR(S): Noranda Ex.
AUTHOR(S): Baerg, R.J.
REPORT YEAR: 1988, 159 Pages
COMMODITIES
SEARCHED FOR: Copper,Gold
GEOLOGICAL
SUMMARY: Copper-gold mineralization occurs in north trending hematitic quartz breccia veins and stockwork zones to 15 metres wide. Host rocks are siliceous feldspar porphyry volcanics of Jurassic age. Gold values range up to 9.7 grams per tonne over 3 metres in trenches and 6.8 grams per tonne over 6.15 metres in drilling.

WORK
DONE: Geological,Geochemical,Drilling
DIAD 580.0 m 9 hole(s);NQ
Map(s) - 5; Scale(s) - 1:250
GEOL 1800.0 ha
Map(s) - 4; Scale(s) - 1:5000,1:250
HMIN 27 sample(s) ;CU,PB,ZN,AG,AU
ROCK 704 sample(s) ;ME
Map(s) - 2; Scale(s) - 1:5000,1:1000,1:250
SILT 35 sample(s) ;ME
SOIL 48 sample(s) ;ME

RELATED
REPORTS: 03248,15988
MINFILE: 104A 001

GEOLOGICAL, GEOCHEMICAL AND DRILLING REPORT

ON THE

TODD CREEK PROPERTY

(TOC 3 - 15 CLAIMS)

N.T.S. 104 A/04, 05

SKEENA MINING DIVISION

Situated at Coordinates: 56° 16' 40" N
129° 46' W

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

By: Robert J. Baerg

May, 1988

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LIST OF FIGURES

INTRODUCTION:

The Todd Creek property is situated on the eastern side of the Coast Range Mountains of British Columbia, within the Skeena Mining Division. The property was staked to cover several Cu-Au occurrences which were originally discovered by Newmont Mining Corp. in 1959. 1987 fieldwork included saw trenching and mapping the showings, regional mapping, silt and rock sampling, and diamond drilling on the South Zone.

HISTORY:

The South and North Zone showings on the property were originally discovered in 1959 by prospector's Ole Olsen and Fred Hasselberg, Jr., in the employ of Newmont Mining Corporation. Newmont conducted a limited trenching and drilling program on the zones in 1960 with inconclusive results.

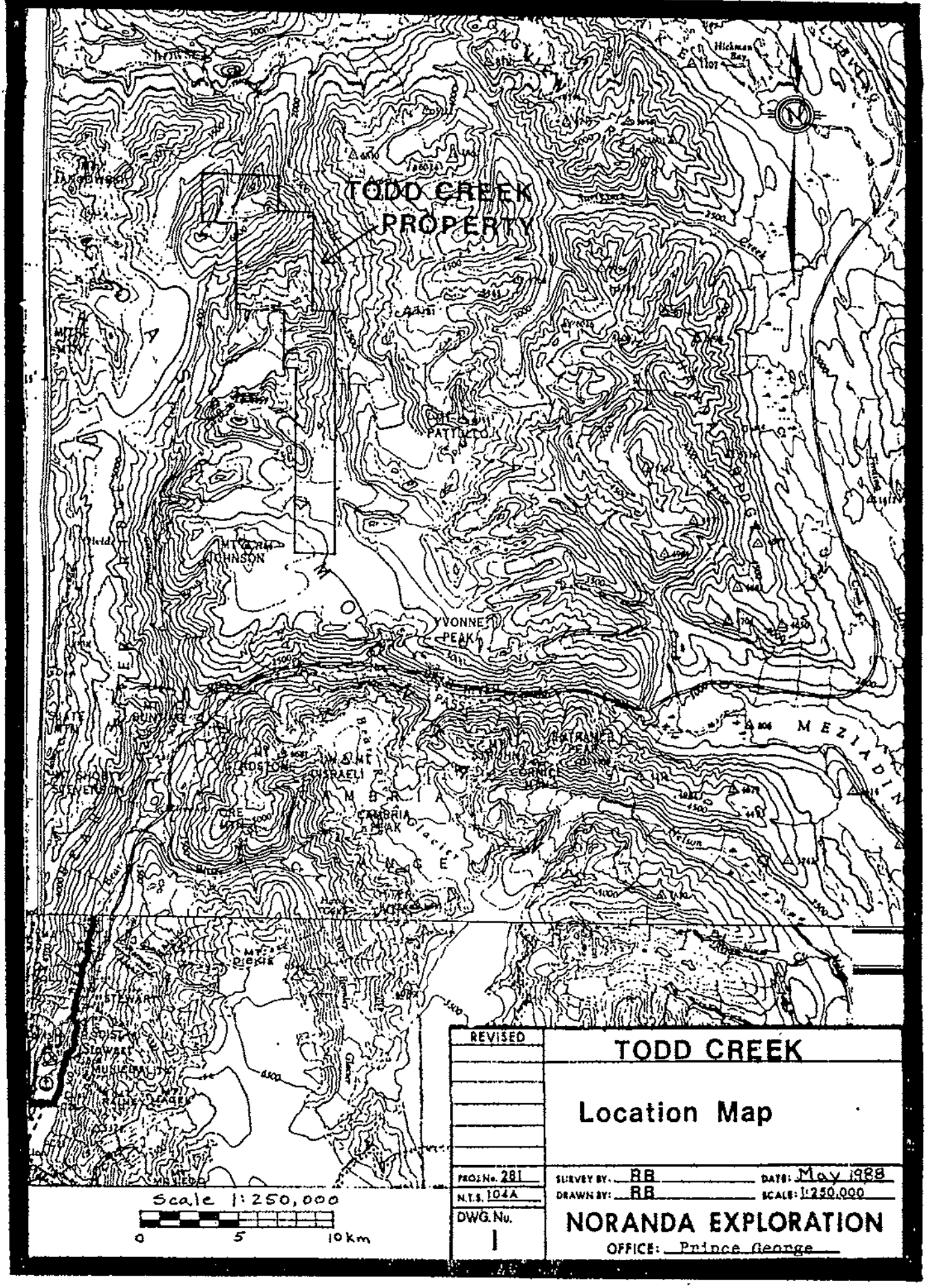
On the South Zone, a zone of chalcopyrite-pyrite stringers and hematitic quartz breccias, Newmont drilled 5 randomly spotted packsack drill holes.

In 1969, the South Zone showing was staked for Kerr Addison Mines by Wilf Christians. Kerr Addison, who recorded no work on the property, subsequently transferred title to Christians, who in turn sold the claims to C.S. Powney. During 1970-72, several trenches were blasted and sampled. In 1981, J.R. Woodcock Consultants staked the North Zone and a large altered area further north. From 1981 to 1984, Woodcock and Riocanex conducted extensive geological and geochemical programs on their claims. In 1985, Woodcock dropped everything except two units, which they currently hold.

In 1986, Noranda Exploration Company Limited staked the TOC 1-10 to cover the known showings. The TOC 11 and 12 were added later in 1986 and the TOC 13-15 in 1987.

LOCATION AND ACCESS:

The Todd Creek property is located in the Skeena Mining Division, approximately 45 km NNE of Stewart, B. C. (Figure #1) Highway #37A to Stewart passes 10 km to the south of the property. The property covers most of the western side of the Todd Creek valley and portions of Todd Creek glacier. Access to the property is via helicopter from Stewart, B. C.



REVISED

TODD CREEK

Location Map

PROJ No. 281
N.T.S. 104A
DWG. No. 1

SURVEY BY: RB
DRAWN BY: RB
DATE: May 1988
SCALE: 1:250,000

NORANDA EXPLORATION

OFFICE: Prince George

PHYSIOGRAPHY & VEGETATION:

The property lies on the eastern flank of the Coast Range Mountains. Relief in the area is great, from 2900 feet in the valley bottom to 6800 feet on the highest summit. Todd Creek glacier and several valley glaciers occupy portions of TOC 11 and 12. The sides of the valley have extensive areas of bedrock exposure which commonly forms steep rock faces and cliffs. The valley bottom has a thick cover of glacial outwash material. Vegetation on the property consists of young willow, poplar and alder in the valley bottom, grading up slope into local stands of fir, hemlock and spruce and higher up into alpine meadows and bare rock.

CLAIM STATISTICS:

The Todd Creek property consists of 12 modified grid claims (Figure #2), as listed below:

NAME	UNITS	RECORD #	EXPIRY DATE
TOC 3	20	5305	April 9, 1989
TOC 4	20	5306	April 9, 1989
TOC 5	20	5307	April 9, 1989
TOC 6	20	5308	April 9, 1989
TOC 7	18	5309	April 9, 1989
TOC 8	18	5310	April 9, 1989
TOC 9	20	5311	April 9, 1991
TOC 10	20	5312	April 9, 1991
TOC 11	20	5518	Sept 17, 1991
TOC 12	16	5577	Oct. 28, 1991
TOC 13	20	5996	Mar. 26, 1989
TOC 14	20	5887	Mar. 26, 1989
TOC 15	20	5998	Mar. 26, 1989

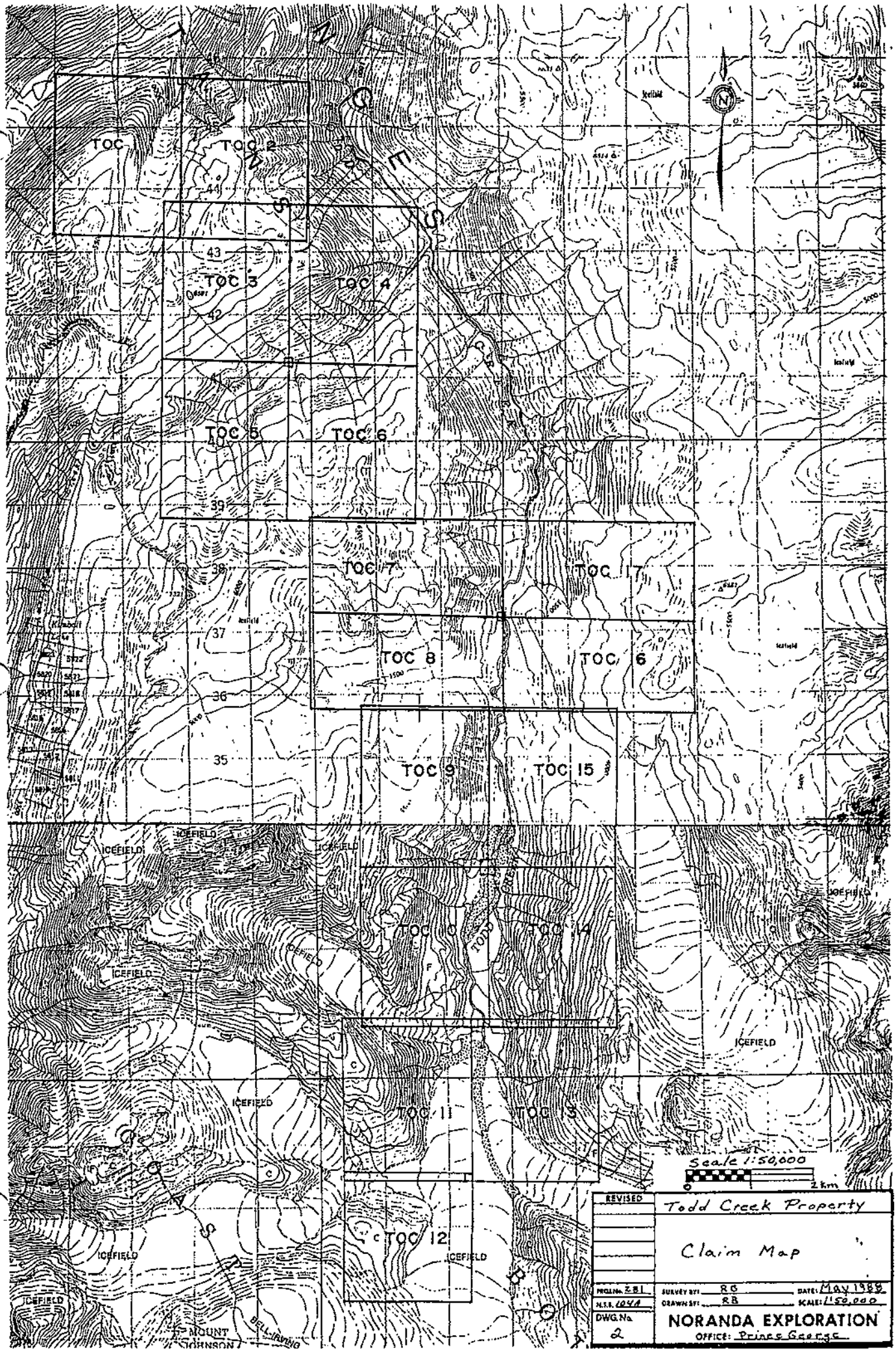
REGIONAL GEOLOGY:

The area has been mapped as being largely underlain by Lower Jurassic age Unuk River Formation volcanics and clastic sediments which are cut by numerous Jurassic and Tertiary age intrusive bodies ranging in size from narrow dykes and sills to large plutons. (Figure 3)

PROPERTY GEOLOGY:

South Zone

Geology - The South Zone is underlain by siliceous Feldspar Porphyry flows (?) which are exposed over an area 500m x 950m. (Figure 4) The porphyry flows are bounded to the west and north by dark green-grey andesite flows and agglomerate and to the south


TOC 1
TOC 2
TOC 3
TOC 4
TOC 5
TOC 6
TOC 7
TOC 17
TOC 8
TOC 16
TOC 9
TOC 15
TOC 10
TOC 14
TOC 11
TOC 13
TOC 12
ICEFIELD
MOUNT JOHNSON
BELL-IRVING
Scale 1:50,000
2km
REVISED
Todd Creek Property
Claim Map
PROJ. No. 281
SURVEY BY: RG
DATE: May 1988
N.T.S. 104A
DRAWN BY: RB
SCALE: 1:50,000
DWG. No. 2
NORANDA EXPLORATION
OFFICE: Prince George

SUMMARY:

The Todd Creek copper-gold property is located on the eastern flank of the Coast Range mountains approximately 45 km north northeast of Stewart, B. C. Mineralization, consisting of copper-gold bearing quartz and sulphide veins were first discovered by Newmont in 1959. Noranda staked the area of the showings in 1986 and has subsequently confirmed the presence of the copper-gold mineralization. To date, there are three main areas of interest:

1. South Zone: A copper-gold mineralized fracture zone cutting feldspar porphyry volcanics. Chip sampling on this zone in 1986 delineated an area 3m wide by 270m long, averaging 0.119 oz/T Au.

Drilling in 1987 tested the southern 175 meters of the zone. Significant intersections include 1.98 gmt Au/13.32 m (this includes 11.93 gmt Au/1.73 m), 4.10 gmt Au/2.0 m, 4.01 gmt Au/1.5 m, 3.51 gmt Au/1.38 m, 6.85 gmt Au/6.15 m, 2.84 gmt Au/9.93 m (includes 3.25 gmt/3.69 m and 3.36 gmt/2.61 m).

2. Mid Zone: A package of variably altered felsic volcanics mineralized with pyrite and minor malachite. Further prospecting and mapping located several new copper showings, but these contained no gold values. Soil/talus sampling over the northern part of the Mid Zone returned only local spotty values of little significance.

3. North Zone: Quartz breccia veins cut chloritic andesitic agglomerate. The best value from the North Zone trenches to date was 0.153 oz/T Au across 3m. A grab sample of old drill core, representing approximately 1 to 1.5 m, returned .58% Cu and .223 oz/T Au. Two of the North Zone veins were traced for over 250 meters to the south where they pinched out. Values ranged from .017 to .210 oz/T Au over 1 to 1.5 m widths.

The high grade breccia cobbles on the south side of Fall Creek were traced to the toe of a small glacier in central TOC 9 and it appears the source lies beneath the ice. A small soil grid on the south side of Fall Creek has outlined a copper-gold anomaly covering 200 m x 250 m. Values range up to 1030 ppm Cu and 360 ppb Au.

Reconnaissance silt, pan and rock sampling on the remainder of the property identified several streams which were anomalous in one or more of Au, Ag, As, Sb, Cu, Pb, Zn.

Further work is recommended on the three main areas as well as follow up on the stream and soil anomalies and continued reconnaissance work on the remainder of the property.

and east by glacial till. The western contact was not observed in outcrop, but is presumed to be a fault, while the northern contact is a sharply defined E-W trending, north dipping fault. The feldspar porphyry is pervasively altered; alteration ranging from quartz-pyrite, to quartz-sericite-pyrite, chlorite and iron-carbonate-quartz-sericite. The western 2/3 of the exposed porphyry body is predominantly quartz-pyrite altered and has a rusty yellow-brown weathered surface and is pale brown on a fresh surface. To the east, the porphyry is locally chloritic and proximal to the mineralized zone there is increased sericite alteration and locally iron-carbonate alteration. (Figure #6, 7, 8)

Mineralization - The mineralization, which consists of chalcopyrite, pyrite, specular hematite and malachite, is hosted in a 5 to 15m wide north-northeast trending, steeply west dipping fracture zone, which cuts the eastern flank of the exposed feldspar porphyry body. This zone has been traced for at least 900m. Mineralization occurs along the southern 425m and the northern 100m of the exposed portions of the zone. There are two types of mineralization within the fracture system:

1. massive pyrite-chalcopyrite stringers and veins from less than 1cm to 10cm wide, and,

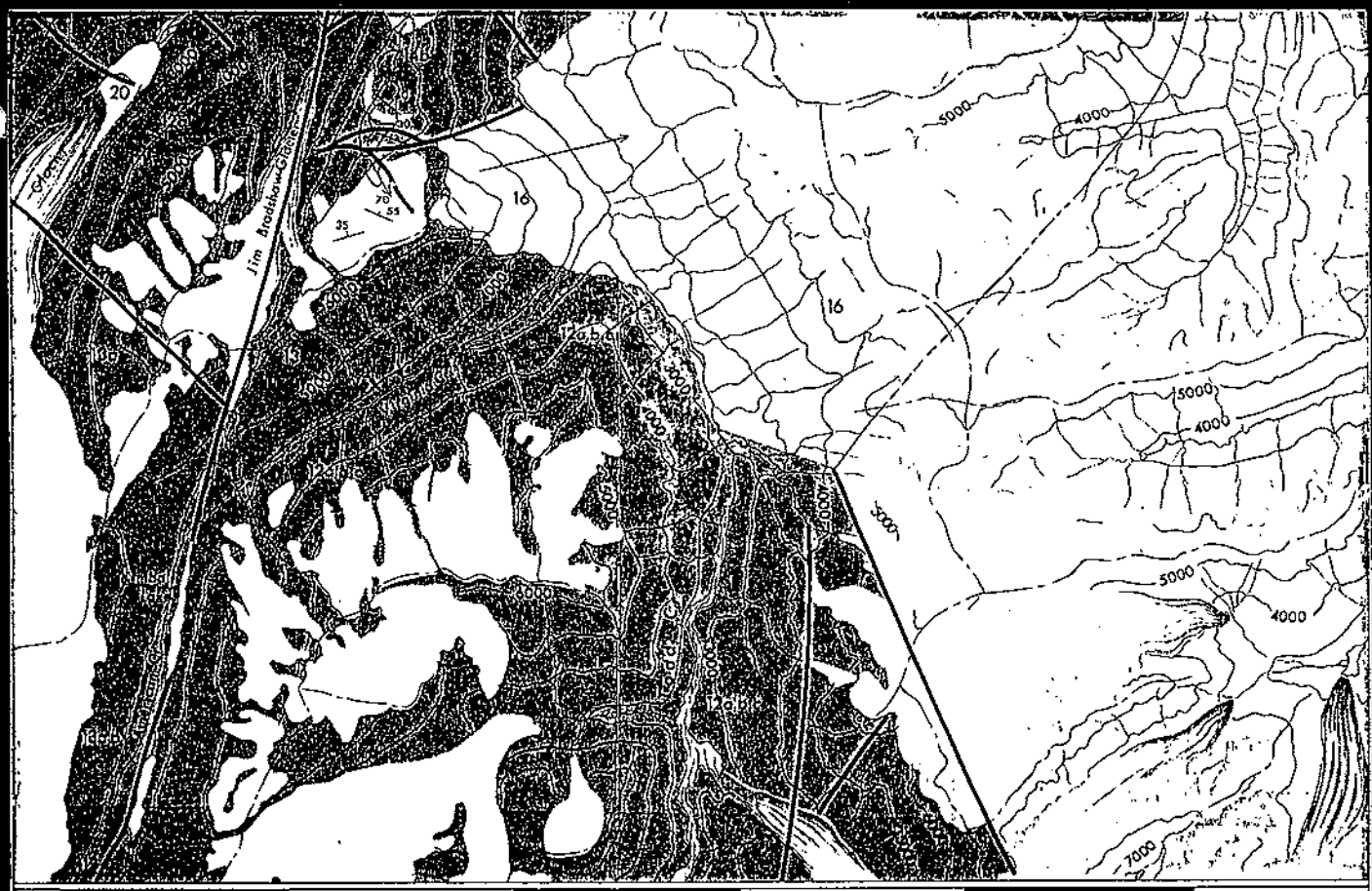
2. a zone of quartz-hematite-chalcopyrite stringers and breccia veins to 3m wide.

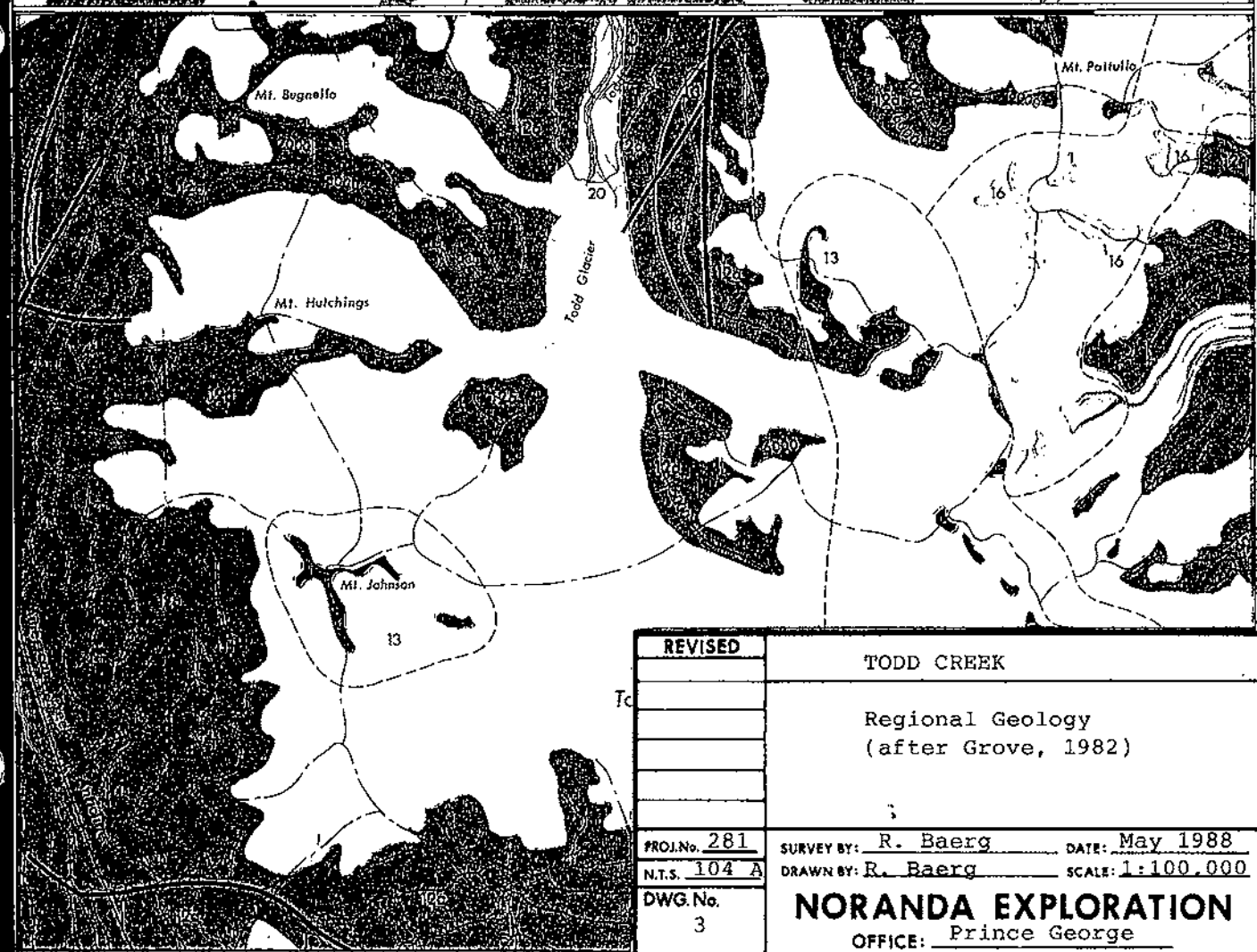
Typically the zone consists of one or two larger quartz breccia veins separated by a stockwork of narrow quartz-hematite veins. The larger quartz breccia veins occur along the footwall and hanging wall of the zone. Above the main zone, moving into the hanging wall, is a zone of silica-sericite-chlorite alteration with minor quartz-hematite and/or pyrite +/- hematite stringers. The amount of pyrite veining was observed to increase from south to north.

Geochemically, the two types of mineralization are distinct; the pyrite-chalcopyrite veins generally have distinctly higher Mo, Cu and As values and lower Au values than the quartz breccia veins.

Prospecting to the west of the above mentioned zone revealed several local, narrow, quartz-chalcopyrite veins. These do not appear to have much significance. As well, silt samples collected in the western area did not define any new anomalous areas.

Trenching - A total of 11 saw trenches were completed on the south end of the South Zone. The trenches were cut using a Stihl TS350 rock saw equipped with a diamond blade. Two parallel cuts, 5cm deep and 2.5-4 cm apart, were made and the sample material was then chipped out with a chisel and hammer. Table 1 lists the significant trench results.





REVISED	TODD CREEK
	Regional Geology (after Grove, 1982)
PROJ.No. 281	SURVEY BY: R. Baerg DATE: May 1988
N.T.S. 104 A	DRAWN BY: R. Baerg SCALE: 1:100,000
DWG. No. 3	**NORANDA EXPLORATION** OFFICE: Prince George

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

GEOLOGY OF THE UNUK RIVER ~ SALMON RIVER ~ ANYOX MAP AREA

KILOMETRES 0 — 10 KILOMETRES

SCALE - 100000

LEGEND

SEDIMENTARY AND VOLCANIC ROCKS

CENOZOIC

QUATERNARY

RECENT

20 UNCONSOLIDATED DEPOSITS, RIVER FLOODPLAIN, ESTUARINE RIVER CHANNEL AND TERRACES ALLUVIAL FANS, DELTAS AND BEACHES, OUTWASH, GLACIAL LAKE SEDIMENTS, TILL, PEAT, LANDSLIDES, VOLCANIC ASH, HOTSPRING DEPOSITS

19 BASALT FLOWS (a), CINDERS, ASH (b)

PLEISTOCENE AND RECENT

18 BASALT FLOWS

MESOZOIC

JURASSIC

HAZELTON GROUP

UPPER JURASSIC

NASS FORMATION

17 SILTSTONE, GREYWACKE SANDSTONE, SOME CALCARENITE, ARGILLITE, CONGLOMERATE, MINOR LIMESTONE, MINOR COAL (INCLUDING EQUIVALENT SHALE, PHYLLITE, AND SCHIST)

MIDDLE JURASSIC

SALMON RIVER FORMATION

16 SILTSTONE, GREYWACKE, SANDSTONE, SOME CALCARENITE MINOR LIMESTONE, ARGILLITE, CONGLOMERATE, LITTORAL DEPOSITS

15 RHYOLITE, RHYOLITE BRECCIA, CRYSTAL AND LITHIC TUFF

BETTY CREEK FORMATION

14 PILLOW LAVA, BROKEN PILLOW BRECCIA (a) ANDESITIC AND BASALTIC FLOWS (b)

13 GREEN, RED, PURPLE, AND BLACK VOLCANIC BRECCIA, CONGLOMERATE, SANDSTONE, AND SILTSTONE (a); CRYSTAL AND LITHIC TUFF (b); SILTSTONE (c), MINOR CHERT AND LIMESTONE (INCLUDES SOME LAVA (=14)) (d)

LOWER JURASSIC

UNUK RIVER FORMATION

12 GREEN RED AND PURPLE VOLCANIC BRECCIA, CONGLOMERATE, SANDSTONE, AND SILTSTONE (a), CRYSTAL AND LITHIC TUFF (b), SANDSTONE (c), CONGLOMERATE (d), LIMESTONE (e) CHERT (f) MINOR COAL (g)

11 PILLOW LAVA (a), VOLCANIC FLOWS (b)

TRIASSIC

UPPER TRIASSIC

TAKLA GROUP (?)

10 SILTSTONE, SANDSTONE, CONGLOMERATE (a) VOLCANIC SILTSTONE, SANDSTONE, CONGLOMERATE (b) AND SOME BRECCIA (c) CRYSTAL AND LITHIC TUFF (d), LIMESTONE (e)

PLUTONIC ROCKS

CENOZOIC

OLIGOCENE AND YOUNGER

DYKES AND SILLS (SWARMS), DIORITE (a), QUARTZ DIORITE (b), GRANODIORITE (c), BASALT (d)

EOCENE (STOCKS, ETC) AND OLDER

8 QUARTZ DIORITE (a), GRANODIORITE (b) MONZONITE (c), QUARTZ MONZONITE (d); AUGITE DIORITE (e); FELDSPAR PORPHYRY (f)

7 COAST PLUTONIC COMPLEX GRANODIORITE (a), QUARTZ DIORITE (b) QUARTZ MONZONITE, SOME GRANITE (c) MIGMATITE - AGMATITE (d)

MESOZOIC

JURASSIC

MIDDLE JURASSIC AND YOUNGER ?

6 GRANODIORITE (a) DIORITE (b), SYENODIORITE (c), MONZONITE (d), ALASKITE (e)

LOWER JURASSIC AND YOUNGER ?

DIORITE (a); SYENOGABBRO (b), SYENITE (c)

TRIASSIC

UPPER TRIASSIC AND YOUNGER ?

DIORITE (a); QUARTZ DIORITE (b), GRANODIORITE (c)

HORNBLENDE PREDOMINANT . . . H
BIOTITE PREDOMINANT . . . B

METAMORPHIC ROCKS

TERTIARY

3 HORNFELS (a) PHYLLITE, SCHIST (b) SOME GNEISS (c)

JURASSIC

2 HORNFELS (a) PHYLLITE, SEMI SCHIST, SCHIST (b) GNEISS (c), CATACLASITE, MYLONITE (d) TACTITE (e)

TRIASSIC

1 SCHIST (a), GNEISS (b), CATACLASITE MYLONITE (c)

HORNBLENDE OR AMPHIBOLE DEVELOPED . . . H
BIOTITE DEVELOPED . . . B
POTASSIUM FELDSPAR DEVELOPED . . . K

AREA UNMAPPED

SYMBOLS

ADIT
ANTICLINE (NORMAL, OVERTURNED)
BEDDING (HORIZONTAL, INCLINED, VERTICAL, CONTORTED)
BOUNDARY MONUMENT
CONTOURS (INTERVAL 1,000 FEET)
FAULT (DEFINED, APPROXIMATE)
FAULT (THRUST)
FAULT MOVEMENT (APPARENT)
FOLD AXES MINERAL LINEATION (HORIZONTAL, INCLINED)
FOSSIL LOCALITY
GEOLOGICAL CONTACT (DEFINED, APPROXIMATE)
GLACIAL STRIAE
GRAVEL, SAND, OR MUD
HEIGHT IN FEET ABOVE MEAN SEA LEVEL +6224'
INTERNATIONAL BOUNDARY
JOINT SYSTEM (INCLINED, VERTICAL)
MARSH
MINING PROPERTY
RIDGE TOP
SCHISTOSITY (INCLINED, VERTICAL)
SYNCLINE (NORMAL, OVERTURNED)
TUNNEL
VOLCANIC CONE

Compilation and geology by E. W. Grove, 1964 to 1970 with assistance by N. H. [illegible] and R. V. Kirkham, 1966 and James T. Fyles 1967
Geology of the Alice Arm area by N. C. Carter 1964 to 1966

TABLE 1:

TRENCH #	SAMPLE #	WIDTH (m)	Au (gmt)
23	9263	1.0	.75
	9269	0.6	.55
	9274	1.0	.75
	9275	1.1	.99
24	9260	2.7	1.78
25	9277	1.0	.93
	9278	1.0	3.26
	9279	1.0	.62
25	9280	1.0	.69
26	9282	1.1	.62
	9283	1.0	.62
	9284	1.0	.62
	9285	1.0	1.82
	9286	1.0	3.15
27	9294	1.0	.58
29	9321	1.0	2.06
	9323	1.0	.72
	9324	1.3	.82
1	9327	1.0	.65
13	9316	0.9	8.81
13	9317	1.0	.34

Weighted Averages:

Trench 25	9277-80	1.38 gmt/4.0 m
Trench 26	9282-86	1.34 gmt/5.1 m
Trench 29	9321-24	1.09 gmt/3.3 m
Trench 13	9316-17	4.35 gmt/1.9 m

Drilling - A total of 9 drill holes, 1904 feet, were completed in 1987. The drilling was contracted out to Van Alphen Exploration Services, Smithers, B.C.

Drilling has confirmed that the mineralized zone continues to depth and has a fairly uniform westerly dip of 60-75 degrees. (Figures 11-15). The mineralized zone almost always consists of a footwall and hanging wall quartz-hematite breccia vein with a stockwork zone of quartz-hematite veins between. The hanging wall is marked by a zone, of variable width, of silica-chlorite-sericite alteration with varying amounts of quartz-hematite and/or pyrite-hematite veining. As indicated by surface mapping pyrite content increases from south to north. Flow banding observed in the drill core appears to confirm that the host rocks are indeed volcanic in origin. Table 2 lists the significant drill results.

TABLE 2:

HOLE #	SAMPLE #	WIDTH (m)	Au (gmt)	Cu (%)	Weighted Averages (Au)
1	16004	1.43	.72	.08	
1	16026	1.23	.72	.20	
2	16031	2.76	.82	.10	
	16035	.50	.82	.03	
	16042	1.00	.86	.06	
	16045	1.00	.51	.04	
	16049	1.00	.55	.01	
	16052	.86	.99	.32	2.25/1.36 m
	16053	.50	4.42	.38	
	16057	1.50	4.59	.24	4.10/2.00 m
2	16058	.50	2.64	.28	
3	16068	1.50	.82	.06	
	16079	1.10	.72	.01	
	16081	.50	.51	.02	
	16083	1.00	3.12	.11	2.08/2.00 m
	16084	1.00	1.03	.12	
	16091	1.24	2.26	.10	
	16094	1.00	.65	.04	
	16099	.72	5.86	.40	
4	16111	.50	1.71	.35	
	16131	.50	.34	.72	
	16132	1.00	.07	.38	
	16134	1.53	1.34	.14	
	16139	.53	1.41	.06	
5	16155	1.20	1.47	.09	
	16164	1.50	.55	.02	
	16169	1.50	.65	.05	
	16170	1.50	.75	.12	
	16173	.50	5.97	.68	
	16177	1.00	.93	.03	
	16186	1.73	11.93	1.50	
6	16222	.80	2.23	.19	
	16227	.77	.82	.04	1.89/1.27 m
	16228	.50	3.53	.34	
7	16241	1.50	.58	.01	
	20077	.60	7.89	.38	
	20080	1.00	.51	.04	
	20085	1.50	4.01	.23	
8	20138	.81	1.13	.02	
	20139	1.00	7.30	.26	
	20140	1.00	11.69	.48	6.85/6.15 m
	20141	1.00	10.05	.31	
	20142	1.00	5.38	.09	
	20143	1.34	5.07	.20	
9	20170	1.48	1.35	.01	
	20200	.50	1.71	.11	
	20201	1.00	6.21	.97	
	20202	1.00	1.61	.50	3.07/4.19 m
	20203	1.00	.38	.10	
	20204	.69	5.49	.28	
	20208*	.80	8.16	.57	
	20209	1.00	.72	.10	3.36/2.61 m
	20210	.81	1.89	.18	

* returned 108 gmt Ag

Mid Zone

Geology - The Mid Zone is roughly located from the northwest corner of TOC 10 to the northern boundary of TOC 9. During 1987, the ridge from the northwest corner of TOC 10 to the south side of the icefield in central TOC 9 was extensively prospected (Figure 4, 5). The area is predominantly underlain by northtrending andesitic flows and agglomerate with minor interbedded feldspar porphyry flows and tuff, rhyolite flows, tuffs and volcaniclastics. As well there are two irregular feldspar porphyry bodies similar to the South Zone. The rhyolite and feldspar porphyry bodies are locally intensely quartz-sericite-pyrite altered.

Mineralization - Mineralization consists predominantly of east-west to northwest trending quartz-pyrite +/- chalcopyrite veins. The veins range from 1cm to 6m wide and 1m to 100m long. No significant precious metal values have been obtained from these veins. As well, there are local small zones and widespread large boulders of pyritic rhyolite breccia. This unit commonly contains 10-20% coarse grained pyrite with trace amounts of malachite. No significant precious metals were obtained from these rocks.

Silt samples collected from creeks draining the area were slightly anomalous in Cu, As, Co, Fe and Au.

Table 3 lists the sample results.

TABLE 3: SOUTH AND MID ZONE SAMPLE RESULTS

(All values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au ppb	Cu %	Au oz/T
15001	rock	1	13	9	10	0.2	7	1	3	1	-	-
15002	rock	1	15	9	24	0.1	6	1	6	2		
15003	float	4	1341	43	10	0.2	133	1	2	1		
15004	rock	1	32	13	84	0.2	9	1	2	1		
85215	rock	5	45907	27	161	1.6	78	4	2	48		
85216	rock	6	48614	39	156	1.6	173	4	5	59		
85217	rock	2	30680	43	118	1.8	246	3	10	350		
85222	silt	5	148	21	128	0.1	54	1	2	1		
85223	rock	1	*14.14	51	292	5.2	236	10	6			.010
85224	pan		240	220	110	0.8				130		
85225	pan		50	8	34	0.2				10		
85526	rock	6	3978	410	85	23.2	1248	1	68	13		
85527	rock	6	4511	151	616	22.5	245	7	33	3		
85528	rock	2	51	16	63	0.4	19	1	2	18		
85530	silt	6	200	69	97	1.2	140	1	4	7		
85531	silt	5	208	62	100	1.4	171	1	4	3		
85532	silt	11	281	55	188	1.1	141	1	2	6		
85533	rock	4	* 4.70	12	1	17.1	145	3	2	1		.001
85534	rock	25	10795	2281	7615	40.9	841	51	41	34		
85535	rock	20	710	332	174	11.7	635	1	32	31		
85536	rock	4	* 4.34	162	308	14.6	85	5	4	1		.001

(All values in ppm except where noted)

SAMPLE	TYPE	Mo		Cu	Pb	Zn	Ag	As	Cd	Sb	Au ppb	Cu %	Au oz/T
85537	rock	5	*	.76	68	176	5.8	167	2	2	1		.001
85538	rock	8	*	2.06	110	199	13.1	264	3	2	1		.001
85539	rock	6	*	3.84	69	189	12.2	158	3	2	1		.001
85540	rock	6	*	1.62	123	273	17.2	172	2	6	4		.001
85541	rock	5	*	1.35	486	886	20.7	78	7	2	4		.001
85542	rock	11		425	79	237	1.9	203	1	14	1		
85546	pan		?	260	300	100	0.4				300		
85547	silt	2		69	13	84	0.1	15	1	2	3		
85548	pan			120	14	50	0.4				10		
85549	silt	3		43	14	42	0.1	13	1	2	1		
85550	pan			12	130	180	0.2				10		
86751	silt	5		23	38	213	0.2	37	1	3	1		
86752	silt	5		20	23	168	0.2	40	2	3	1		
86753	pan			30	110	190	0.2				10		
86754	silt	5		24	22	160	0.3	37	1	3	1		
86755	pan			78	40	92	0.2				50		
86756	silt	3		37	26	153	0.2	61	1	5	4		
86757	silt	5		37	41	142	0.4	72	1	2	1		
86758	pan			38	20	160	0.4				30		
86759	silt	2		30	26	138	0.3	41	1	3	3		
86760	rock	250		377	40	101	7.3	659	1	5	1		
86761	rock	25		231	7	20	0.2	32	1	2	20		
86762	pan			30	10	98	0.4				10		
86763	silt	2		33	28	121	0.2	27	1	4	4		
86764	rock	13		2679	77	62	1.2	72	1	16	63		
86765	pan			8	4	62	0.2				10		
86766	silt	2		17	19	90	0.1	15	1	4	1		
86767	pan			28	18	150	0.2				10		
86768	silt	2		35	29	185	0.1	22	1	2	1		
87535	rock						*.02					1.34	.001
87536	rock						*.46					1.34	.001
87537	rock						*.02					.02	.001

* DENOTES ASSAY

Grid Sampling - A small grid, the Ridge Grid, was established for the purpose of talus and/or soil sampling (Figure 9). Grid lines were established using a compass and hip chain. Samples were collected at 25 meter intervals along the grid lines with the use of a grub hoe. Sample material consisted of talus fines. The samples were place in "wet strength" kraft envelopes and shipped to Noranda Labs in Vancouver. The talus samples were then crushed and then all samples were screened and sieved to -80 mesh. For the analytical procedure, refer to Appendix III. A total of 102 talus samples were collected on the grid. Samples from the Ridge Grid returned local spot anomalies of little significance.

North Zone

Geology - Reconnaissance mapping and prospecting has been completed over only a limited area. Rock units identified are mainly andesitic agglomerates and flows and feldspar porphyry. The feldspar porphyry at the eastern end of TOC 8 appears to be an intrusive. The feldspar porphyry mapped in central TOC 8 and 9, however, is difficult to ascertain as to whether it is intrusive or is a flow rock. Detailed mapping of this area is required before any conclusions can be made. The feldspar porphyries and the andesitic volcanics to the west have been locally altered; predominantly to either quartz-sericite-pyrite or iron-carbonate-quartz-sericite. A broad north-south trending zone of patchy to pervasive alteration occurs in the north-central portion of TOC 9 and parts of TOC 8. This zone is on strike with the gossan north of the Mid Zone, which in turn appears to be continuous with the Mid Zone. As well, local areas in the andesitic agglomerates are weakly sericite altered and foliated and contain up to 10% disseminated pyrite.

Mineralization - Mineralization observed to date occurs in two areas:

1. the east-southeast portion of TOC 8, (A and B zones),

2. south-central TOC 8 and northwest TOC 9.

The eastern mineralization consists mainly of north-northwest trending, .1 to 2 meter wide hematitic quartz-chalcopyrite veins and vein breccias. These veins constitute what Newmont called the "A" and "B" zones.

In 1987 the veins on the north side of Fall Creek were partially resampled (Figure 11) and the southern extension of these veins were traced out and locally sampled (Figure 5). As well, a sample of old drill core, representing 1 to 1.5 meters of mineralized quartz vein, was collected. This sample returned .223 oz/T Au confirming that Newmont's drilling hit higher grade mineralization at depth than what is present at surface.

The "A" zone veins are hosted by dark green, chloritic andesitic agglomerate. On the north side of Fall Creek, the footwall of the veins has been intensely iron-carbonate-quartz +/- pyrite altered. This footwall alteration is 10-15 meters wide and the veins do not appear to enter it. The veins range from .1 to 2 meters wide and were traced for over 150 meters to the south of Fall Creek where the veins pinched to <10 cm wide and/or splayed out in several small veins.

In 1987, the area on the south side of Fall Creek, along and between 1st and Ice creeks, was further prospected in an attempt to find the source of the high grade float discovered in 1986. In 1987, the float was followed south to just below an icefield in central TOC 9. It is in the author's opinion that the source of the high grade float is beneath this icefield. In the process of prospecting, several new copper occurrences were located, but they did not contain any significant precious metal values. Table 4 lists the results of sampling.

TABLE 4: NORTH ZONE SAMPLE RESULTS

(All values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au ppb	Cu %	Au oz/T
85195	rock									1735	.22	.244
85196	rock									260	1.23	.007
85197	rock									150	1.91	.005
85198	rock									9980	.35	.278
85199	rock									6050	2.10	.200
85200	rock									4110	2.85	.098
85201	rock									1995	1.45	.048
85202	rock									270	.23	.008
85203	rock									450	.13	.009
85204	rock									210	.01	.005
85205	silt	2	170	47	152	0.4	34	1	2	65	--	--
85206	rock									850	.55	.027
85207	rock									3220	.21	.086
85208	rock									8430	1.67	.210
85209	rock									640	.23	.017
85210	pan		280	40	78	0.8				140		
85211	pan		170	14	56	0.2				1680		
85212	pan		32	28	100	0.2				70		
85213	rock	3	1211	44	48	0.9	220	1	10	590		
85214	rock	1	66612	41	181	3.1	267	6	5	2370		
85218	rock	1		43	140	2.1	318	2	2	--	3.63	.020
85219	rock	6	1229	*1.17	*1.71	*.37	115	113	15	--	--	--
85220	pan		7000	16	92	0.6				110		
85221	silt	2	54	18	116	0.4	44	1	2	1	--	--
85529	float	22	2776	*7.70	*12.55	*3.85	108	920	31			.001
85543	silt	2	53	47	161	0.3	11	1	2	22		
85544	pan		280	8	120	0.6				40		
85545	silt	3	66	18	96	0.1	18	1	2	5		

* DENOTES ASSAY VALUES (% or opt)

Grid Sampling - As a follow up on 1986 silt samples 15151-57, two lines of soil samples, line 9800N and 10,000N, were completed over the source area.

The grid lines were established using a compass and hip chain and soil samples were collected from the B horizon with the use of

a grub hoe. Samples were placed in Kraft "wet-strength" envelopes and shipped to Noranda Labs in Vancouver where they were dried and sieved to -80 mesh. Refer to Appendix III for analytical procedure.

The sampling outlined a strong coincident copper-gold anomaly 200m x 250m and open to the north and south. Values range up to 1030 ppm Cu and 360 ppb Au. This area warrants further sampling and trenching.

Virginia Creek

Recon Sampling - A total of 2 days were spent stream sampling and prospecting in the Virginia Creek valley. A total of 12 heavy mineral (pan) samples, 16 silt samples and 3 rock samples were collected. (Figure 17) Table 5 lists the sample results.

TABLE 5: VIRGINIA CREEK SAMPLE RESULTS

(all values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)
80956	pan		22	56	140	.2			10
80957	silt	1	28	25	149	1.1	58	2	2
80958	silt	2	16	15	105	.6	219	8	2
80959	silt	1	22	14	102	.6	121	5	1
80960	pan		20	8	80	.2			10
80961	pan		22	420	112	.2			10
80962	silt	2	23	28	124	.6	58	2	1
80963	pan		23	20	92	.2			10
80964	silt	1	22	19	93	.5	28	2	1
80965	pan	LOST							
80966	silt	2	20	26	151	.8	69	4	1
80967	pan		22	80	360	3.2			10
80968	silt	1	17	46	212	2.3	36	2	1
80969	pan		12	80	140	.2			10
80970	silt	1	17	21	107	.4	33	2	4
80971	pan		56	52	290	.6			310
80972	silt	2	20	33	163	.4	30	2	1
80973	rock	43	18	29	141	1.9	4072	74	18
80974	rock	28	43	129	16	9.1	5530	73	175
80975	rock	14	55	98	163	7.0	2847	53	150
80988	pan		22	10	94	.2			10
80989	silt	1	24	22	110	.9	97	5	2
80990	silt	1	18	14	90	.4	47	2	10
80991	pan		34	16	96	.2			30
80992	silt	2	19	19	109	.5	41	2	5
80993	silt	1	16	10	81	.4	26	2	2
80994	silt	1	14	19	101	.3	26	2	2
80995	silt	1	15	15	99	.5	29	3	3
80996	pan		14	12	110	.2			10
80997	pan		22	20	160	.2			150
80998	silt	1	20	18	115	.5	18	2	1

The sampling has indicated two moderately anomalous areas, one on the north side and one on the south side of Virginia Creek. The anomaly on the north side of the creek consists of 3 sample sites, samples 80956-7, 80965-8, with anomalous values in Pb, Ag, As +/- Zn. The anomaly on the south side of the creek consists of 5 sample sites, samples 80958-62, 80971-5, 80991-2, with anomalous values in Au, Ag, As, Sb, Pb, Zn. Of particular note are stream samples 80971-2 and rock samples 80973-5. The 3 rock samples consisted of andesitic volcanic breccia containing 3-5% pyrite and .5-1% arsenopyrite. This area definitely warrants further sampling and prospecting.

TOC 12

Recon Sampling - During 1987, a large rusty, altered area was prospected and a total of 8 rock/talus samples were collected. (Figure 18) Table 6 lists the sample results.

TABLE 6: TOC 12 SAMPLE RESULTS

(all values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)
85187	rock	3	29	98	3	1.0	127	9	2
85188	talus	3	18	33	86	.2	16	2	1
85189	rock	7	35	140	5	2.8	118	13	21
85190	talus	2	11	22	51	.2	10	2	1
85191	rock	184	36	30	19	1.5	213	5	17
85192	rock	2	38	14	13	.4	7	4	2
85193	talus	1	39	25	97	.2	6	2	1
85194	talus	1	37	22	102	.1	11	4	1

The gossan proved to be a north-northwest trending zone of quartz-sericite-pyrite altered rhyolite tuffs which are bounded by maroon-green andesitic volcanics. The tuffs contains local vuggy siliceous zones with 10-15% pyrite. No significant precious metals were obtained from this area.

Knob Zone (TOC 15)

Recon Sampling - The Knob Zone is a prominent gossanous ridge which rises from the bottom of the Todd Creek valley. (Figure 19) The northern end of the ridge is composed of a tan-brown siliceous hornblende-feldspar porphyry (possibly trachyte?). Feldspar phenocrysts range up to 1cm in size. Mineralization consists of discontinuous zones to 5 meters wide of intense quartz-sericite-pyrite alteration which contain 1-25cm wide massive pyrite seams. The number and intensity of the alteration zones appears to decrease to the south. To the south, on the east side of the Knob Zone ridge, several 1-10cm wide chalcopyrite veins were also located. Table 7 lists the sample results.

TABLE 7: KNOB ZONE ROCK SAMPLE RESULTS

(all values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)
80976	py vein	5	13	107	93	1.7	329	2	41
80977	py vein	5	32	16	9	.3	232	2	25
80978	py vein	5	14	95	267	1.1	578	2	119
80979	py vein	2	3	4	5	.5	135	2	13
80980	py vein	7	52	233	52	1.5	975	2	71
80981	py vein	3	18	19	6	.3	236	2	7
80982	jasp-hem	95	3	15	28	.1	29	39	1
80983	cpy vein	12	734	62	104	1.3	529	2	111
80984	cpy vein	2	3697	13	207	1.4	203	210	5
80985	py vein	2	7	15	10	.2	286	2	10
80986	py vein	30	236	25	16	.8	584	2	126
86769	py vein	3	89	52	107	.5	811	2	108
86770	py vein	3	49	114	37	.4	455	2	530
86771	py vein	1	52	27	20	.7	770	3	270
86772	py vein	4	14	16	12	2.2	177	2	121
86773	py vein	6	13	13	9	1.4	100	3	37
86774	py vein	5	9	20	16	1.5	267	2	47
86775	py vein	5	9	35	25	.3	328	2	40

The sample results indicate that the pyrite veins are weakly auriferous but do not contain economic concentrations of gold.

BY Glacier (TOC 10)

Recon Sampling - The BY glacier lies immediately southwest of the South Zone camp and runs east-west. A one day recon traverse along the north side of the glacier (Figure 4) was completed. A total of 6 rock/talus samples were collected. Table 8 lists the sample results.

TABLE 8:

(all values in ppm except where noted)

SAMPLE	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)
85181	rock	16	13	10	37	.1	29	14	5
85182	rock	3	29	15	18	.5	95	61	8
85183	rock	9	552	15	19	.3	44	16	1
85184	talus	4	23	35	183	.4	21	3	2
85185	talus	5	11	35	107	.1	13	5	1
85186	talus	1	16	28	150	.2	9	3	1

Due to the steep terrane, only the slope immediately above the glacier could be prospected. This slope was usually covered by considerable talus material. This talus material, from sample site 85181 to 85183, consists mainly of felsic volcanics. These volcanics appear to range from dacite flows and fragmentals to rhyolite. Local rhyolite float was observed to have a heavy limonite +/- hematite coating. Several pieces were also found to

be vuggy with pyrite in the vugs. These felsic rocks appear to be a southern continuation of the felsic package identified in the Mid Zone.

Todd Creek Valley

Recon Sampling - Pan and silt sampling along the main Todd Creek Valley has identified several anomalous areas on both sides of the valley. (Figures 4, 5) The anomalies on the east side of the valley are predominantly Pb +/- As-Zn-Au. The anomalies on the west side are predominantly Cu-Au +/- Pb-As. This difference probably reflects two different geologic environments.

CONCLUSIONS:

Work completed in 1987 has outlined several target areas which warrant further work. These are:

1. South Zone - drilling has confirmed the presence of significant gold values over appreciable widths (up to 6.85 gmt Au/6.15m) within the South Zone. The erratic nature of the gold distribution in the drill holes may be due to the presence of higher grade shoots within the zone. Trenching across the wide stringer zone at the southern end returned generally sub-economic gold values.

2. Mid Zone - mapping and sampling have failed to outline any significant mineral zones. The zone of felsic volcanics previously identified now appears to be continuous to the south at least to the BY glacier. To date however, no significant mineralization has been found associated with these volcanics.

3. North Zone - follow up of the high grade float material indicates that the source lies under a small icefield in central TOC 9. Soil sampling on the south side of Fall Creek has outlined a strong coincident copper-gold anomaly 200m x 250m. Values range up to 1030 ppm Cu and 360 ppb Au. Resampling of the "A" zone trenches again returned low gold values but a sample of old core representing 1 to 1.5m of mineralized quartz vein returned .223 oz/T Au and .58% Cu. This confirms the presence, at least locally of significant gold values at depth.

4. Virginia Creek - reconnaissance stream and rock sampling has outlined two multi-element anomalous areas, one on each side of the creek. Rock samples from the area of the southern anomaly have returned values to 9.1 ppm Ag, 5530 ppm As, 73 ppm Sb and 175 ppb Au.

5. TOC 12 - reconnaissance prospecting and sampling failed to locate any significant mineralization. This work covered a large gossan in central TOC 12.

6. Knob Zone (TOC 15) - a large, prominent gossan with extensive areas of intense quartz-sericite-pyrite alteration was thoroughly prospected and sampled. Rock sampling indicates that the altered areas are only weakly anomalous in gold, best value 530 ppb.

7. BY Glacier (TOC 10) - reconnaissance work indicates that the felsic volcanics identified in the Mid Zone continue at least as far south as the BY glacier. No significant mineralization was located in this area to date.

RECOMMENDATIONS:

1. South Zone - continued drill testing. This should include holes to the north of NTC-8, 9 and another hole beneath each of NTC-3, 5, 7 and 9.

2. Mid Zone - further prospecting to the east along the creeks draining the Mid Zone.

3. North Zone - drill test the "A" zone, enlarge the grid covering the copper-gold soil anomaly for the purpose of mapping sampling and trenching.

4. Virginia Creek - follow up the 1987 anomalies with further sampling and prospecting.

5. TOC 12 - no further work is recommended in this area at this time.

6. Knob Zone (TOC 15) - no further work is recommended in this area at this time.

7. BY Glacier (TOC 10) - further prospecting and reconnaissance soil and rock sampling along the north side of the glacier.

8. Todd Creek Valley - follow up anomalous silt-pan samples with further sampling and prospecting.

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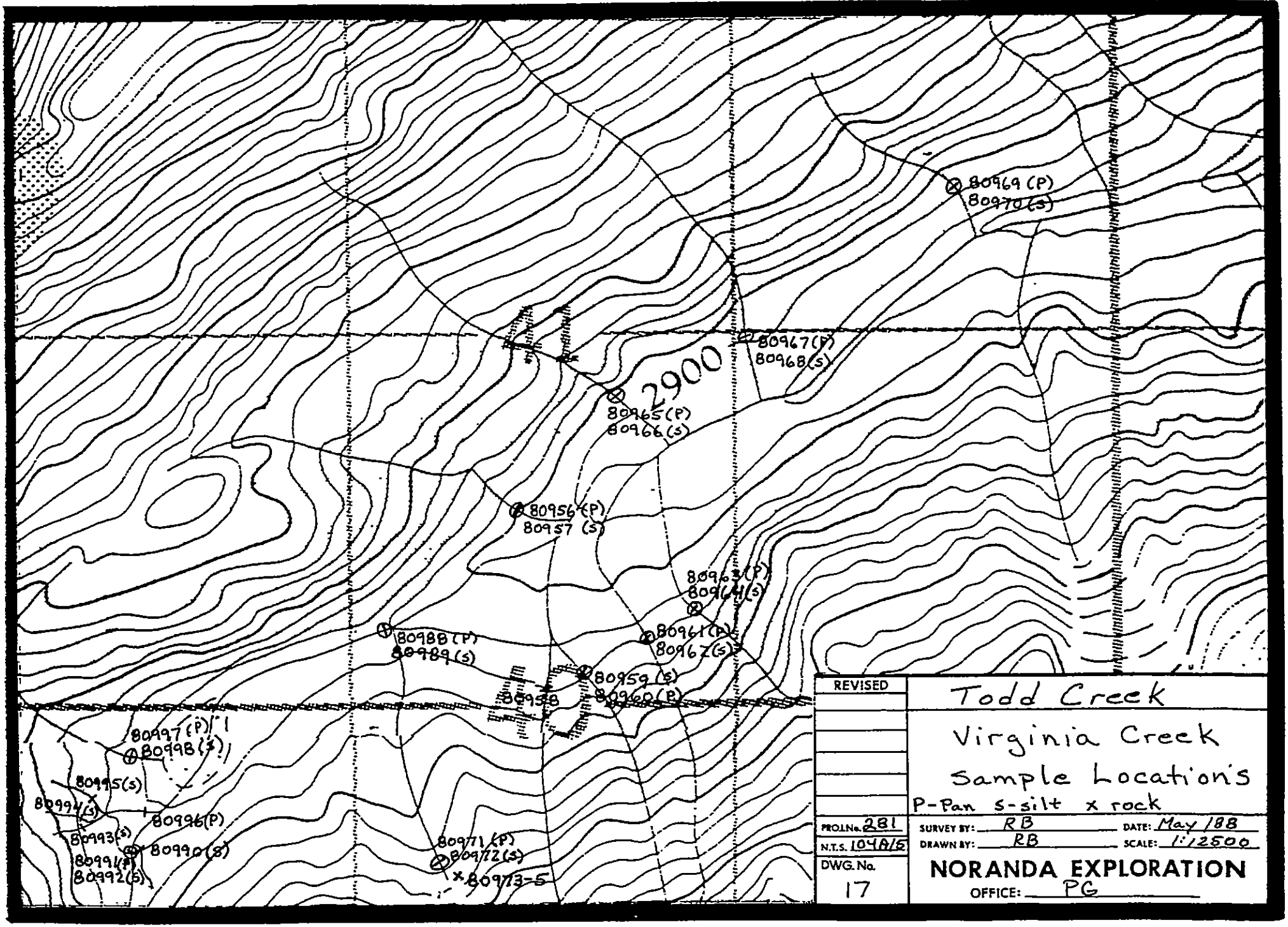
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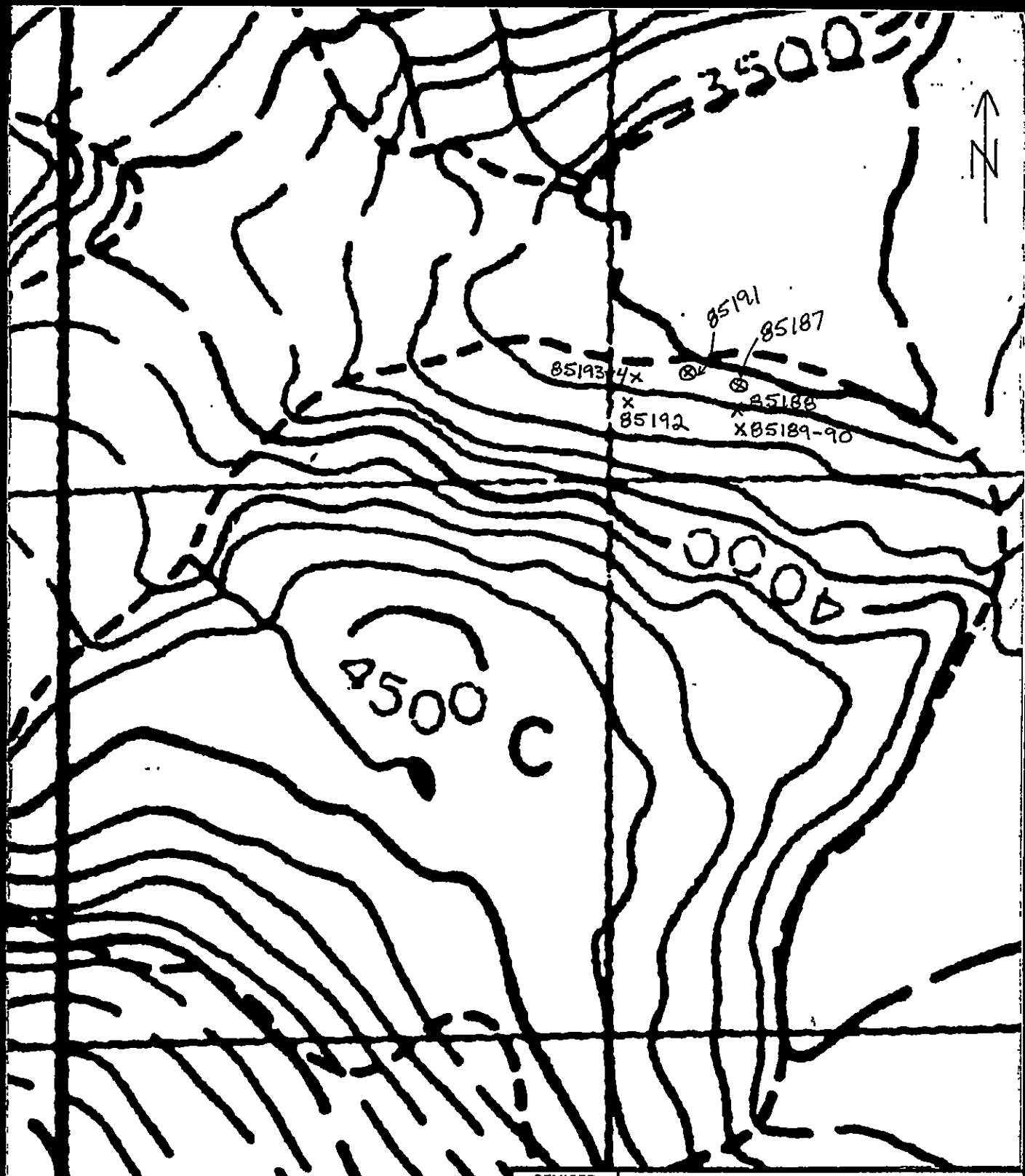
80990 (S)
80991 (P)
80992 (S)
80971 (P)
80972 (S)
80973-5
REVISED
Todd Creek
Virginia Creek
Sample Location's
P-Pan S-silt x rock
PROJ.No. 281
N.T.S. 104A/5
DWG. No. 17
SURVEY BY: RB
DRAWN BY: RB
DATE: May 188
SCALE: 1:12500
NORANDA EXPLORATION
OFFICE: PG



REVISED

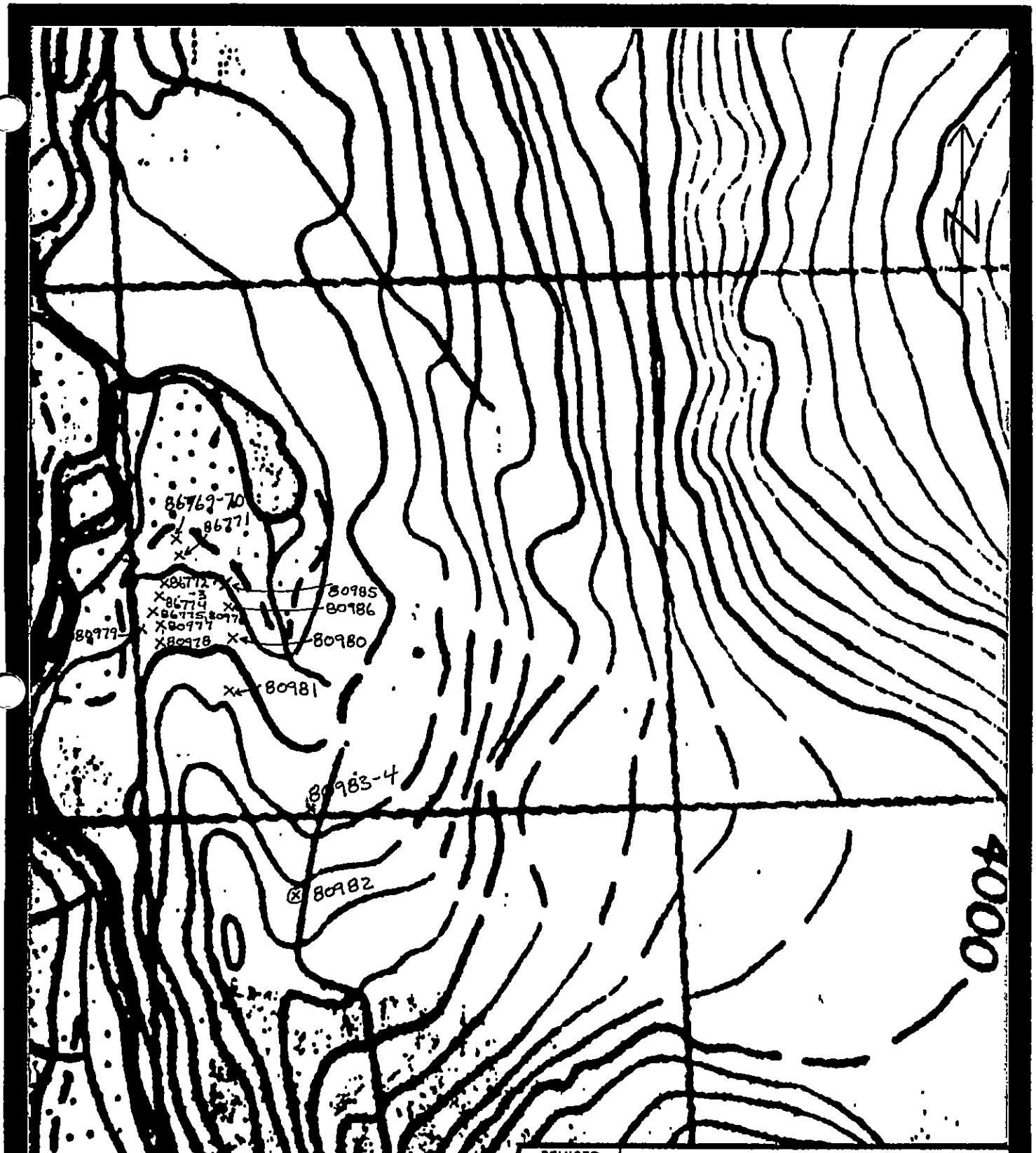
TODD CREEK

TOC 12
SAMPLE LOCATIONS

PROJ. No. 281
N.T.S. 104A5
DWG. No. 18

SURVEY BY: R. Baerg DATE: May 1988
DRAWN BY: R. Baerg SCALE: 1:10,000

NORANDA EXPLORATION
OFFICE: Prince George



REVISED	TODD CREEK
	KNOB ZONE SAMPLE LOCATIONS
PROJ.No. 281	SURVEY BY: R. Baerg DATE: May, 1988
N.T.S. 104A5	DRAWN BY: R. Baerg SCALE: 1:10,000
DWG. No. 19	**NORANDA EXPLORATION** OFFICE: Prince George

APPENDIX I

STATEMENT OF COSTS

PROJECT: TODD CREEK — May, 1988
TOC 3-5 Claims (60 units)
TODD 1 GROUP

a. Mandays -

7 mandays @ $127.85/day	$ 894.95

b. Supplies, Lodging, Expediting -

7 mandays @ $109.31/day	$ 765.17

c. Equipment, etc. -

7 mandays @ $22.02/day	$ 154.14

d. Transportation -

206B helicopter-4 hrs @ $571.50/hr	$ 2,286.00
truck-3days @ $35.00/day	$ 105.00

e) Geochem -

silt samples - 16 @ $11.00 ea (ICP & Au)	$ 176.00
pan samples - 12 @ $ 8.15 ea (Au-Ag-Cu-Pb-Zn)	$ 87.80
rock samples - 3 @ $13.00 ea (ICP & Au)	$ 39.00

f) Report Writing -

Drafting	$ 100.00
Report	$ 50.00
TOTAL	$ 4,668.06

APPENDIX I

STATEMENT OF COSTS

PROJECT: TODD CREEK — May, 1988
TOC 6-8 Claims (56 units)
TODD 2 GROUP

a. Mandays -

10 mandays @ $127.85/day	$ 1,278.50

b. Supplies, Lodging, Expediting -

10 mandays @ $109.31/day	$ 1,093.10

c. Equipment, etc. -

10 mandays @ $22.02/day	$ 220.20

d. Transportation -

206B helicopter- 2.9 hrs @ $571.50/hr	$ 1,657.35
truck- 5 days @ $35.00/day	$ 165.00

e) Geochem -

soil samples - 49 @ $11.00 ea (ICP & Au)	$ 539.00
rock samples - 11 @ $16.50 ea (Cu-Au assay)	$ 176.50
rock samples - 3 @ $ 7.00 ea (Au)	$ 21.00
pan samples - 3 @ $ 8.15 ea (Au-Ag-Cu-Pb-Zn)	$ 24.45

f) Report Writing -

Drafting	$ 100.00
Report	$ 50.00
TOTAL	$ 5,325.10

APPENDIX I

STATEMENT OF COSTS

PROJECT: TODD CREEK — May, 1988
TOC 9-12 Claims (78 units)
TODD 3 GROUP

a. Mandays -

130 mandays @ $127.85/day	$16,620.50

b. Supplies, Lodging, Expediting -

130 mandays @ $109.31/day	$14,210.30

c. Equipment, etc. -

130 mandays @ $22.02/day	$ 2,602.60

d. Transportation -

206B helicopter - 26.2 hrs @ $571.50/hr	$14,973.30
204 helicopter - 9.1 hrs @ $1279.50/hr	$11,643.45
truck - 65 days @ $35.00/day	$ 2,275.00
fuel	$ 3,371.12

e) Geochem -

silt - 10 samples @ $11.00 ea (ICP & Au)	$ 110.00
rock - 132 samples @ $13.00 ea (ICP & Au)	$ 1,716.00
rock - 2 samples @ $30.00 ea (Pb-Zn-Ag-Au assay)	$ 60.00
rock - 9 samples @ $22.50 ea (Cu-Au assay & ICP)	$ 202.00
rock - 344 samples @ $21.00 ea (Cu-Ag-Au assay)	$ 7,224.00
rock - 179 samples @ $13.00 ea (Cu-Ag-Au geochem)	$ 2,327.00
pan - 5 samples @ $ 8.15 ea (Au-Ag-Cu-Pb-Zn)	$ 40.75

f) Report Writing -

Drafting	$ 300.00
Report	$ 450.00
SUB - TOTAL	$78,126.52

g) Drilling - (1,904 feet) $62,714.57

TOTAL $140,841.09

APPENDIX II

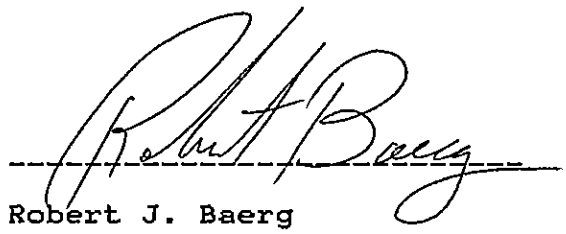
STATEMENT OF QUALIFICATIONS

I, Robert J. Baerg of the City of Prince George, Province of British Columbia, do certify that:

1. I have been employed as a geologist by Noranda Exploration Company, Limited since May, 1984.

2. I am a graduate of the University of British Columbia with a Bachelor of Science (Honors) in Geology (1984).

3. I supervised and assisted with the work described in this report.



Robert J. Baerg
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

APPENDIX III

ANALYTIGAL PROCEDURES

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

PREPARATION OF SAMPLES

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation.

ANALYSIS OF SAMPLES

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighted out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition that that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

ELEMENTS REQUIRING SPECIFIC DECOMPOSITION METHOD

Antimony - Sb: 0.2 g sample is attached with 3.3 ml of 6% tartaric aid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the acid solution with an AA-475, equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 ml of 70% perchloric acid and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from tje aqueous solution. Gold is determined from the MIBK solution with flame AA.

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10 ppb)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

APPENDIX IV

Todd Cr (RB) 8708-=73

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-ROCK P2-TALUS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 13 1987 DATE REPORT MAILED: Aug 21/87 ASSAYER. D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-077 281 File # 87-3212 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
85176	2	1703	28	153	1.2	3	7	1900	7.03	147	5	ND	2	205	1	40	2	29	8.31	.011	8	1	2.51	20	.01	2	.25	.01	.12	2	26
85177	3	1496	9	69	.5	1	2	965	2.97	79	5	ND	6	104	1	22	2	10	2.69	.030	10	4	.51	498	.01	3	.25	.03	.23	2	299
85178	14	1656	108	261	4.6	2	5	1260	4.67	66	5	ND	5	77	4	162	2	10	1.47	.021	6	4	.40	83	.01	3	.20	.02	.16	1	163
85179	6	1266	9	46	.3	1	4	1168	5.78	10	5	ND	3	66	1	8	2	11	.96	.011	14	1	.29	288	.01	2	.16	.02	.17	71	1560
85180	5	35	10	43	.4	2	6	1339	10.52	15	5	ND	6	70	1	5	2	28	1.35	.021	35	1	.55	237	.01	2	.19	.02	.20	373	1940
85181	16	13	10	37	.1	1	11	2240	8.89	29	5	ND	1	206	1	14	2	16	19.30	.012	2	1	3.32	26	.01	3	.26	.01	.01	8	5
85182	3	29	15	18	.5	1	4	241	24.33	95	5	ND	2	10	1	61	2	10	.04	.004	2	1	.05	23	.01	3	.02	.01	.02	58	8
85183	9	552	15	19	.3	1	123	1441	15.37	44	5	ND	1	26	1	16	2	10	4.01	.008	3	1	1.19	9	.01	2	.11	.01	.01	17	1
85187	3	29	98	3	1.0	5	5	39	2.84	127	5	ND	1	19	1	9	2	3	.10	.003	2	1	.01	48	.01	2	.03	.01	.03	1	2
85189	7	35	140	5	2.8	2	2	54	4.25	118	5	ND	1	23	3	13	2	5	.04	.009	2	3	.02	485	.01	3	.04	.01	.04	1	21
85191	184	36	30	19	1.5	16	57	166	15.08	231	5	ND	2	9	1	5	2	68	.53	.031	5	1	.43	6	.05	2	.64	.02	.17	1	17
85192	2	38	14	13	.4	5	19	19	14.33	7	5	ND	1	15	1	4	2	6	.07	.004	2	1	.03	2	.01	4	.11	.01	.09	1	2
STD C/AU-R	18	57	42	131	7.0	68	26	903	4.01	39	18	8	36	49	18	14	20	55	.48	.089	35	61	.98	173	.08	32	1.85	.07	.14	11	490

BV L

TOC 12

-20 MESH, PULVERIZED

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
BY 85184	4	23	35	103	.4	2	11	758	9.41	21	5	ND	3	12	2	3	2	45	.11	.132	10	1	1.86	84	.01	5	2.15	.02	.19	1	2
BY 85185	5	11	35	107	.1	2	5	483	7.14	13	5	ND	2	14	1	5	2	41	.07	.110	9	1	1.64	271	.03	6	1.87	.02	.17	2	1
BY 85186	1	16	28	150	.2	3	9	552	8.28	9	5	ND	3	13	1	3	2	39	.17	.136	12	1	1.58	85	.01	7	1.80	.02	.18	1	1
TOC 12 85189	3	18	33	86	.2	3	12	921	5.96	16	5	ND	3	11	1	2	2	34	.06	.115	13	3	.64	148	.01	12	1.18	.01	.14	1	1
TOC 12 85190	2	11	22	51	.2	1	12	967	4.33	10	5	ND	3	8	1	2	2	15	.02	.113	18	1	.27	131	.01	2	.61	.01	.13	2	1
TOC 12 85193	1	39	25	97	.2	4	10	500	10.35	6	5	ND	2	17	1	2	2	40	.20	.144	9	3	1.16	140	.01	22	1.53	.02	.12	2	1
TOC 12 85194	1	37	22	102	.1	5	13	800	8.31	11	5	ND	2	10	1	4	2	37	.09	.137	9	3	1.35	168	.01	4	1.68	.02	.10	1	1
STD C	19	58	41	132	7.1	70	26	916	4.01	39	20	7	36	48	19	17	22	56	.48	.090	36	60	.88	174	.08	37	1.82	.07	.14	13	-

E. Incomplete file   Todd Cr   O/   R. G. Dy

ACME ANALYTICAL LABORATORIES   852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6   PHONE 253-3158   DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SILT P2 TO P4-TALUS P5-ROCK   AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 21 1987   DATE REPORT MAILED: ASSAYER............DEAN TOYE. CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-090 281   File # 87-3506   Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
SILT																															
85221	2	54	18	116	.4	7	24	1609	9.26	49	5	ND	4	31	1	2	2	62	.50	.136	19	4	.80	221	.01	3	1.22	.03	.09	1	1
85222	5	148	21	128	.1	8	29	3192	10.95	54	5	ND	4	24	1	2	2	56	.59	.135	15	1	.39	56	.01	3	.74	.02	.10	1	1
85528	2	51	16	63	.4	4	19	899	5.99	19	5	ND	4	40	1	2	2	62	.39	.102	10	4	.78	176	.12	4	1.35	.03	.09	1	18
85530	6	200	69	97	1.2	5	27	1029	9.17	140	5	ND	7	16	1	4	2	25	.53	.077	14	1	.43	15	.01	5	.67	.03	.10	1	7
85531	5	208	62	100	1.4	5	29	969	10.26	171	7	ND	7	17	1	4	2	24	.73	.068	13	1	.49	13	.01	2	.62	.02	.09	1	3
85532	11	281	55	188	1.1	5	23	1469	7.89	141	5	ND	7	17	1	2	2	41	.37	.113	19	3	.55	70	.01	4	.95	.02	.11	1	6
85542	11	425	79	237	1.9	10	35	1570	11.30	203	5	ND	5	23	1	14	2	62	.45	.103	18	7	1.19	25	.01	3	1.50	.03	.09	1	1
STD C	18	57	40	131	6.8	67	27	1027	3.97	42	19	8	36	49	18	17	20	56	.48	.088	36	56	.88	175	.08	34	1.85	.08	.12	11	-

Mid Zone?

Complete file with assays to come.

cc: Rob
file: TODD 281

RECEIVED
AUG 31 1987

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11500N 9550E	4	18	25	78	.1	3	8	1855	5.18	24	5	ND	2	3	1	2	3	46	.05	.108	14	3	.08	157	.01	2	.89	.01	.20	1	1
11500N 9575E	14	25	35	200	.6	3	12	2590	6.96	140	5	ND	3	10	1	2	2	44	.31	.086	24	6	.14	176	.01	2	.68	.02	.17	1	1
11500N 9600E	27	22	22	115	.6	4	20	2132	6.01	52	5	ND	9	11	1	2	3	25	.36	.100	30	1	.11	426	.01	3	.46	.01	.17	1	3
11500N 9625E	2	16	16	63	.4	4	12	1632	3.70	9	5	ND	11	16	1	4	2	17	.51	.139	32	5	.10	319	.01	24	.49	.03	.24	1	2
11500N 9650E	2	19	13	65	.4	3	9	1240	3.99	10	5	ND	9	11	1	2	2	19	.35	.117	32	1	.09	289	.01	5	.48	.02	.19	2	2
11500N 9675E	2	22	16	66	.2	5	10	1855	4.21	9	5	ND	3	6	1	2	2	27	.13	.095	25	3	.12	314	.01	2	.76	.01	.19	1	3
11500N 9750E	1	64	18	67	.7	16	21	1283	9.02	30	5	ND	4	51	1	2	3	51	.15	.121	16	6	.14	271	.01	2	.48	.07	.17	1	143
11500N 9775E	2	276	20	80	.5	11	28	1917	9.90	24	6	ND	4	17	1	2	2	61	.10	.121	16	5	.22	240	.01	2	.73	.02	.12	1	17
11500N 9825E	1	23	19	47	.5	4	16	949	10.81	35	5	ND	3	22	1	2	2	36	.05	.191	17	7	.62	141	.01	2	1.09	.03	.13	1	1
11500N 9850E	1	45	17	98	.3	9	19	1711	5.95	11	5	ND	3	22	1	2	2	67	.34	.110	26	10	1.24	402	.01	7	2.15	.04	.18	1	3
11500N 9875E	2	45	24	120	.2	12	25	1769	8.38	12	5	ND	3	16	1	2	2	86	.17	.127	20	19	1.79	198	.01	2	2.51	.02	.11	1	2
11500N 9900E	1	56	19	135	.4	12	24	2948	7.26	6	5	ND	4	18	1	2	2	103	.38	.128	29	20	1.87	469	.01	9	2.89	.03	.16	1	1
11500N 9925E	1	39	25	111	.4	8	18	2332	7.00	13	5	ND	3	20	1	2	2	97	.38	.117	35	9	.73	563	.01	4	1.91	.03	.22	1	1
11500N 9950E	1	51	14	136	.3	7	23	2652	7.70	5	5	ND	4	27	1	2	2	96	.54	.154	26	5	.74	656	.02	5	1.54	.03	.15	1	1
11500N 9975E	1	34	15	129	.3	7	23	2184	8.16	7	5	ND	4	21	1	2	2	102	.47	.159	26	3	1.43	288	.01	9	2.47	.04	.14	1	1
11500N 10000E	1	19	17	124	.5	5	24	2263	6.56	9	6	ND	4	36	1	3	2	93	.60	.125	25	2	.63	306	.03	6	1.11	.03	.19	2	2
11500N 10050E	1	43	19	117	.3	6	22	2272	7.20	10	5	ND	4	21	1	2	2	91	.41	.116	22	6	.61	491	.05	5	1.18	.03	.14	1	5
11500N 10075E	1	30	15	116	.2	4	20	1963	6.67	10	5	ND	3	22	1	2	2	88	.60	.119	17	3	.48	376	.04	7	.96	.03	.13	1	2
11500N 10100E	1	29	12	116	.1	5	22	2044	7.20	5	5	ND	5	24	1	2	2	97	.82	.129	19	2	.58	346	.05	5	.86	.03	.14	1	2
11500N 10125E	1	59	16	127	.4	6	21	3335	6.92	8	5	ND	4	24	1	2	2	86	.62	.128	29	5	.73	538	.02	8	1.54	.03	.14	1	2
11500N 10150E	1	36	21	124	.3	6	23	2163	7.83	4	5	ND	4	13	1	2	2	97	.41	.127	21	1	.79	391	.02	4	1.52	.03	.12	1	1
11500N 10175E	1	76	25	140	.4	7	21	1944	8.05	11	5	ND	3	13	1	2	2	97	.33	.148	29	1	.88	474	.01	5	1.94	.03	.12	1	2
11500N 10200E	1	74	18	131	.3	9	25	1737	9.83	6	5	ND	4	18	1	2	2	96	.36	.141	19	3	.61	290	.01	2	1.35	.03	.10	3	73
11500N 10225E	1	70	11	145	.1	10	31	2993	11.26	2	5	ND	3	17	1	2	2	105	.48	.141	17	4	.41	182	.01	3	.83	.02	.13	1	12
11500N 10250E	2	106	23	104	.4	6	31	3296	13.26	22	5	ND	4	13	1	2	2	121	.30	.178	31	3	.37	532	.01	9	1.08	.02	.14	2	10
11500N 10275E	1	41	8	86	.2	5	24	2270	8.66	6	5	ND	4	15	1	2	2	96	.40	.116	20	2	.27	595	.01	2	.76	.02	.14	1	4
11500N 10300E	2	111	22	83	.1	4	30	2745	12.29	49	5	ND	3	11	1	2	2	88	.10	.185	17	1	.11	293	.01	2	.71	.01	.14	1	14
11500N 10325E	1	76	19	99	.2	7	17	929	9.47	21	5	ND	2	8	1	2	2	92	.13	.137	19	4	.34	248	.01	2	1.05	.02	.10	1	5
11500N 10350E	1	76	19	81	.5	6	23	1685	8.28	26	5	ND	4	9	1	2	2	62	.08	.163	20	1	.15	264	.01	2	.67	.01	.17	1	10
11500N 10375E	1	13	36	83	.1	2	6	2278	2.59	3	5	ND	3	18	1	2	3	19	.30	.123	19	1	.07	745	.01	7	.67	.02	.25	1	1
11400N 9500E	2	21	34	104	.3	7	10	1802	4.89	27	5	ND	3	8	1	5	2	52	.07	.127	16	8	.29	473	.01	2	1.86	.01	.16	2	3
11400N 9525E	2	26	28	88	.3	7	11	1882	4.24	21	5	ND	7	8	1	3	2	38	.18	.082	21	8	.40	336	.01	2	1.15	.02	.17	2	1
11400N 9550E	2	19	18	65	.4	3	9	2276	4.64	10	5	ND	5	7	1	2	3	26	.25	.071	18	2	.13	413	.01	2	.65	.01	.21	2	2
11400N 9575E	2	22	11	37	.1	2	6	1679	3.48	9	5	ND	7	9	1	3	2	23	.36	.087	16	1	.09	347	.01	2	.51	.02	.23	1	2
11400N 9600E	2	16	14	56	.3	2	8	1588	4.19	13	5	ND	7	13	1	2	3	29	.37	.121	24	1	.12	346	.01	2	.63	.02	.23	1	1
11400N 9625E	2	28	12	37	.3	2	6	1536	3.44	4	5	ND	10	6	1	2	3	20	.20	.074	22	2	.07	276	.01	2	.49	.01	.21	2	2
STD C/AU-S	20	60	39	132	7.4	72	29	1057	4.04	40	22	8	39	52	19	17	19	60	.48	.095	39	60	.89	180	.09	36	1.88	.09	.16	12	47

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11400N 9650E	3	12	8	38	.1	1	5	980	2.49	9	5	ND	9	4	1	2	2	18	.12	.060	14	1	.07	146	.01	2	.50	.01	.18	2	1
11400N 9675E	12	22	18	101	.2	4	13	1633	4.59	47	5	ND	5	7	1	3	3	29	.23	.090	26	4	.11	320	.01	3	.55	.01	.14	1	1
11400N 9700E	6	21	9	63	.2	4	9	1309	3.48	25	5	ND	7	7	1	2	2	23	.20	.074	22	2	.11	292	.01	2	.53	.01	.15	1	2
11400N 9750E	10	213	22	38	1.0	7	13	407	23.03	97	5	ND	5	15	1	3	3	128	.01	.310	19	5	.55	355	.01	4	3.45	.03	.16	4	96
11400N 9800E	3	143	17	69	.6	17	25	1543	9.91	41	5	ND	3	28	1	2	2	57	.10	.130	18	5	.17	329	.01	7	.60	.03	.15	1	29
11400N 9850E	3	50	30	100	.4	9	24	2308	8.08	33	5	ND	5	14	1	2	2	76	.09	.145	30	11	1.10	347	.02	6	2.26	.03	.13	2	16
11400N 9875E	2	41	27	69	.1	5	12	1553	6.13	24	5	ND	2	16	1	2	2	65	.19	.140	18	6	.51	441	.01	4	2.10	.02	.11	1	3
11400N 9900E	3	95	14	134	.1	14	22	2546	8.17	12	5	ND	4	22	1	2	2	107	.41	.113	36	26	.75	794	.01	10	2.11	.03	.14	1	1
11400N 9925E	3	95	15	73	.3	11	18	1580	8.24	35	5	ND	3	18	1	2	3	67	.15	.123	19	9	.41	341	.01	7	1.16	.03	.17	1	16
11400N 9950E	1	26	14	115	.1	6	22	2523	7.23	11	5	ND	4	29	1	2	2	83	.33	.130	27	5	.53	452	.02	4	1.24	.02	.09	1	2
11400N 9975E	2	38	14	123	.1	5	21	2503	7.95	6	5	ND	3	16	1	2	2	85	.32	.134	24	4	.53	453	.01	15	1.41	.03	.10	1	1
11400N 10000E	2	26	21	120	.1	5	15	1245	6.62	11	5	ND	2	11	1	2	2	77	.21	.125	17	5	.49	301	.01	8	1.49	.02	.09	1	3
11400N 10025E	1	16	9	91	.2	2	5	1417	2.86	7	5	ND	1	18	1	2	2	46	.38	.260	5	4	.11	289	.01	3	.83	.02	.12	1	1
STD C/AU-S	19	61	41	129	7.1	69	28	1047	3.85	40	20	8	38	50	19	17	19	58	.46	.093	38	59	.92	181	.08	38	1.77	.08	.13	14	48
11400N 10050E	2	19	10	81	.1	2	10	1206	6.62	8	5	ND	2	4	1	2	2	80	.04	.206	9	6	.15	103	.01	3	1.63	.01	.09	2	1
11400N 10075E	2	20	10	62	.3	2	4	285	3.46	6	5	ND	1	5	1	2	2	73	.05	.130	10	12	.14	145	.01	3	1.43	.01	.09	1	9
11400N 10100E	1	27	9	85	.1	4	8	835	4.39	5	5	ND	1	9	1	2	2	79	.13	.193	9	7	.23	264	.01	8	1.41	.02	.10	1	1
11400N 10125E	3	64	16	113	.1	11	28	1620	14.91	6	5	ND	3	8	1	2	2	103	.14	.227	23	4	.46	155	.01	6	1.12	.02	.07	2	65
11400N 10150E	3	182	8	103	.1	8	45	3235	14.35	11	5	ND	5	12	1	2	2	104	.21	.193	27	1	.47	311	.01	8	1.44	.02	.09	2	29
11400N 10175E	2	88	11	92	.1	7	25	1988	8.97	12	5	ND	3	13	1	2	2	79	.27	.127	22	2	.49	299	.01	3	1.29	.02	.10	1	6
11400N 10200E	3	87	10	122	.2	6	29	2539	11.70	6	5	ND	4	22	1	2	2	98	.33	.142	25	2	.45	243	.01	25	1.07	.03	.09	1	6
11400N 10225E	2	79	8	133	.1	5	23	2284	9.34	16	5	ND	2	26	1	2	2	81	.86	.185	21	3	.30	404	.01	5	.94	.02	.11	1	2
11400N 10250E	1	34	6	107	.1	5	19	1269	8.27	17	5	ND	3	11	1	2	2	79	.25	.131	15	4	.29	260	.01	3	1.01	.02	.10	1	2
11400N 10300E	2	81	7	87	.1	6	26	1902	9.76	24	5	ND	4	16	1	2	2	102	.35	.159	18	5	.20	412	.01	3	.61	.02	.14	1	9
11400N 10325E	2	101	5	84	.1	5	24	1795	11.41	39	5	ND	3	11	1	2	2	101	.16	.138	15	1	.17	228	.01	11	.65	.02	.10	1	41
11400N 10400E	3	19	57	93	.1	3	10	2241	5.63	14	5	ND	3	5	1	2	2	40	.06	.124	16	8	.14	185	.01	6	1.44	.02	.15	1	2
11400N 10425E	1	20	26	86	.1	3	8	1529	2.86	10	5	ND	4	12	1	2	3	22	.19	.094	21	2	.09	438	.01	2	.66	.01	.19	1	1
11400N 10450E	1	12	20	82	.2	1	6	1245	2.07	6	5	ND	3	10	1	2	2	19	.20	.079	20	1	.06	531	.01	2	.58	.01	.21	1	1
11400N 10500E	2	13	33	76	.3	5	8	1100	2.25	8	5	ND	4	15	1	2	2	22	.24	.091	23	6	.22	289	.01	3	1.49	.02	.18	1	1
11300N 10025E	2	63	14	101	.2	5	20	1554	7.64	19	5	ND	3	11	1	2	2	76	.19	.117	18	6	.36	325	.01	3	1.03	.02	.12	1	11
11300N 10050E	1	60	14	104	.1	7	20	2129	7.85	11	5	ND	3	10	1	2	2	88	.15	.135	21	5	.37	270	.01	3	1.38	.02	.09	1	6
11300N 10075E	3	26	16	109	.2	4	9	910	8.24	14	5	ND	2	6	1	2	2	67	.07	.178	19	9	.30	139	.01	4	3.12	.03	.07	1	1
11300N 10100E	2	147	10	99	.1	9	30	2872	10.61	11	5	ND	4	16	1	2	2	84	.22	.216	18	6	.24	961	.01	3	1.17	.02	.10	1	116
11300N 10125E	2	93	13	91	.1	4	15	1159	7.72	24	5	ND	2	4	1	2	2	87	.02	.137	16	6	.28	108	.01	5	1.48	.02	.08	1	8
11300N 10150E	2	67	17	87	.1	5	24	1943	11.10	26	5	ND	3	8	1	2	2	106	.09	.207	22	4	.20	110	.01	4	1.25	.02	.09	2	2
11300N 10175E	1	68	13	91	.1	6	24	1746	10.07	44	5	ND	3	7	1	2	2	89	.10	.169	21	2	.24	178	.01	3	.93	.02	.07	1	1
11300N 10200E	1	409	5	63	.1	9	57	3061	20.22	132	5	ND	5	5	1	2	2	105	.02	.325	23	5	.13	88	.01	4	.74	.01	.08	1	30

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11300N 10225E	1	79	16	81	.2	8	28	2100	9.95	41	5	ND	3	13	1	2	2	88	.11	.139	16	5	.22	180	.01	2	.62	.02	.07	1	8
11300N 10250E	1	81	29	143	.4	11	30	2210	12.33	98	5	ND	3	19	1	2	2	113	.24	.169	25	4	.30	232	.01	3	.85	.02	.10	1	25
11300N 10275E	1	50	11	81	.2	4	13	1100	6.31	58	5	ND	1	18	1	2	2	72	.51	.168	15	1	.17	679	.01	2	.95	.02	.08	2	4
11300N 10300E	1	850	15	69	.2	4	17	1130	7.77	38	5	ND	2	12	1	2	2	67	.14	.134	17	1	.15	393	.01	2	.84	.01	.12	1	815
11300N 10325E	1	84	23	80	.5	7	26	2024	9.26	42	5	ND	3	8	1	2	2	66	.09	.144	16	4	.18	291	.01	2	.62	.01	.11	1	12
11300N 10350E	1	69	44	115	.3	7	27	3844	10.83	43	5	ND	4	10	1	2	2	69	.14	.146	22	2	.20	412	.01	2	.67	.01	.10	1	16
11300N 10375E	1	19	37	80	.3	1	8	1856	3.53	11	5	ND	5	9	1	2	2	22	.26	.094	21	1	.08	671	.01	2	.58	.01	.18	1	1
11300N 10400E	1	12	36	86	.3	1	7	3008	3.68	4	5	ND	4	7	1	2	2	20	.25	.063	25	1	.08	1366	.01	2	.70	.01	.12	1	1
11300N 10425E	1	12	24	71	.1	1	6	1395	2.28	6	5	ND	3	2	1	2	2	19	.02	.072	10	1	.03	178	.01	2	.65	.01	.16	1	1
11300N 10450E	1	24	24	83	.1	1	5	1830	2.14	7	5	ND	1	6	1	2	2	19	.10	.109	7	1	.04	352	.01	2	.51	.01	.17	1	1
11300N 10475E	1	28	23	68	.2	2	7	1197	2.57	8	5	ND	4	13	1	2	2	22	.27	.083	23	1	.12	367	.01	2	.83	.02	.18	1	1
11300N 10500E	2	36	88	50	.6	3	16	1583	2.94	26	5	ND	3	9	1	2	2	22	.13	.160	14	1	.15	267	.01	4	1.21	.01	.19	1	2
11200N 10050E	1	49	22	83	.3	7	23	1431	9.15	19	5	ND	3	8	1	2	2	90	.17	.135	20	5	.23	184	.01	8	.88	.02	.08	1	3
11200N 10075E	4	46	21	89	.2	6	24	2084	10.21	16	5	ND	3	7	1	2	2	102	.10	.156	24	4	.16	171	.01	11	.95	.01	.10	1	1
11200N 10100E	1	35	12	90	.1	4	12	1144	7.61	12	5	ND	4	5	1	2	2	100	.04	.208	15	8	.08	153	.01	2	1.57	.01	.08	1	2
11200N 10125E	1	60	13	56	.4	3	22	1903	7.20	28	5	ND	4	6	1	2	2	48	.10	.178	18	2	.12	186	.01	2	.95	.01	.09	1	2
11200N 10150E	1	121	23	50	.1	4	32	2245	20.66	339	5	ND	5	3	1	2	2	113	.01	.226	19	4	.08	50	.01	6	.81	.01	.06	2	10
11200N 10175E	1	75	23	85	.2	6	22	1918	10.18	69	5	ND	4	5	1	2	2	83	.05	.181	14	3	.26	117	.01	5	.97	.01	.07	1	9
11200N 10200E	1	196	28	57	.3	4	22	1342	15.97	213	5	ND	4	7	1	2	2	72	.06	.224	14	4	.11	251	.01	4	.67	.01	.08	1	305
11200N 10225E	1	29	33	32	.1	1	23	895	16.96	47	5	ND	7	2	1	4	2	39	.01	.492	6	1	.03	44	.01	5	.31	.01	.07	3	5
11200N 10250E	3	115	34	73	.4	5	184	11903	18.72	60	5	ND	7	6	1	2	2	86	.01	.327	15	1	.06	99	.01	2	.55	.01	.07	1	21
11200N 10275E	2	127	24	80	.2	7	30	2127	13.14	51	5	ND	4	5	1	2	2	70	.03	.229	22	1	.14	160	.01	2	.80	.01	.08	2	40
11200N 10300E	4	62	29	133	.4	8	12	2088	7.99	25	5	ND	12	2	1	2	2	31	.03	.119	25	3	.15	91	.07	2	2.57	.07	.08	2	17
11200N 10325E	2	83	26	91	.4	7	19	2021	8.45	47	5	ND	3	4	1	3	2	63	.03	.142	17	6	.27	155	.01	2	1.47	.01	.09	1	52
11200N 10350E	3	40	68	220	.6	6	17	7084	11.71	26	5	ND	5	7	1	4	2	52	.04	.120	23	6	.21	576	.01	2	1.58	.01	.11	1	13
11200N 10375E	1	12	27	81	.4	2	8	1714	2.60	7	5	ND	6	11	1	2	3	20	.22	.072	21	1	.06	780	.01	2	.40	.01	.16	1	1
11200N 10400E	1	21	28	61	.3	3	10	1659	4.05	9	5	ND	6	12	1	2	3	30	.33	.089	20	4	.10	562	.01	2	.46	.02	.17	1	1
11200N 10425E	2	19	39	92	.1	2	13	4369	5.10	11	5	ND	4	3	1	2	4	27	.03	.129	18	1	.07	330	.01	4	.76	.01	.14	1	2
11200N 10450E	1	11	24	95	.3	2	5	1778	2.69	8	5	ND	1	6	1	2	3	22	.09	.155	7	3	.06	279	.01	2	.69	.01	.19	2	1
11200N 10475E	1	10	34	91	.4	2	8	1651	3.01	9	5	ND	3	12	1	2	2	23	.27	.094	22	1	.08	455	.01	2	.63	.01	.18	1	1
STD C/AU-S	18	57	40	129	7.1	68	28	1050	3.93	40	18	8	37	50	18	17	20	57	.47	.089	38	60	.86	179	.08	34	1.82	.08	.13	13	50

NORANDA VANCOUVER LABORATORY
****

PROPERTY/LOCATION:TODD CREEK (N. Zone) CODE :8708-080

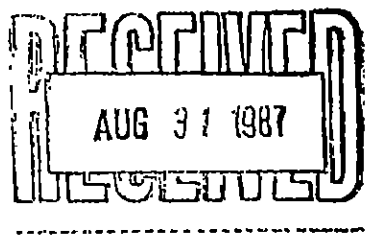
Project No. : 281 Sheet:1 of 1 Date rec'd:AUG.12
Material :3 PAN-CON Geol.:R.B. Date compl:AUG.20
Remarks :

Values in PPM, except where noted.

T.T. No.		SAMPLE No.	SAMPLE wt.(g)	PPB Au	Cu	Zn	Pb	Ag	
96	PAN	85210	51.3	140	280	78	40	0.8	N. Mid Zone
97		85211	36.0	1680	170	56	14	0.2	
98	PAN	85212	25.4	70	32	100	28	0.2	

N.B. Sulfuric reaction in samples 85210 and 85211

N.B. Pan-con: entire sample used for Au determination.
*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.



cc: Rot
file TODD 281

21/83 PG DP

Central Coast District

48 Soils 14 Rx
1 silt 3 Pans

Pan: BM, Au
S&S: 30 ICP + Au — To Acme
Rx: (Cu, Au Assay) (Au geoch)

Sheet 2 of 2

Lab Code 8708-080

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☑ SOIL
☐ SILT
☑ ROCK
Pan

Date Shipped: ???!
Date Received: Aug 12/87
Shipped Via: Bus
No. of Cartons: 4 Bags !!!!!
No. of Samples: ?02??!!
Geologist: R. Baerg
Date: Aug 5/87

Project Todd Cr (N. Zone) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
10000N	10600E	104A/5			85210	Pan	Au, Cu, Pb, Zn		
	25				85211	"	Ag, Fe, As, Co		
	50				85212	"			
	10675E								
85195	Rock	104A/5							
96									
97									
98				Cu-Au Assay					
99									
200									
01									
02				Augeochem					
03									
04	↓								
05	Silt						CBC 281		
06	Rock			Cu-Au Assay			PAN 8708-080		
07	"								
08	"								
09	"								

CBC 281 Pan 8708-080

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
ICP + Augeochem
or Cu-Au Assay as noted above

RESULTS TO: Prince George

15155

Sheet 1 of 2

Centra/Cord District

48 Soils

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped:

Date Received:

Shipped Via: Bus

No. of Cartons:

No. of Samples:

Geologist: R. Barry

Date: Aug 5/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☑ SOIL
☐ SILT
☐ ROCK

Project Todd Cr. (N. Zone) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
9800N	10000E	104A/5			10000N	10000E			
	25					25			
	50					50			
	75					75			
	100					100			
	25					25			
	50					50			
	75					75			
	200					200			
	25					25			
	50					50	N/S		
	75					75			
	300					300			
	25					25			
	50					50			
	75					75			
	400					400			
	25					25			
	50					50			
	75					75			
	10500E					500			
	~~10575E~~					25			
						50			
						10575E			

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:

15154

Todd Cr / N. Zone (RS) 8709-001

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED AUG 26 1987

DATE REPORTS MAILED Aug 29/87

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.

ASSAYER D. Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT 8709-001 281 FILE# 87-3621A PAGE# 1

SAMPLE	Cu %	Au oz/t	
87526	.67	.035	N. Zone
87528	.02	.001	N. Zone
87529	.59	.018	N. Zone
87530	3.33	.024	N. Zone
87531	2.02	.011	N. Zone
87532	3.04	.031	Hole 2 core
87533	.08	.001	Hole 2 core
87534	.58	.223	Hole 2 core

"Pan to follow"

cc: Rob
file: Todd 281

3/8 IC

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SILT P2-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

SILTS -20 MESH, PULVERIZED

DATE RECEIVED: AUG 26 1987 DATE REPORT MAILED: Aug 29/87 ASSAYER: D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8709-001 281 File # 87-3621 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
80957	1	28	25	149	1.1	5	11	1121	4.45	58	5	ND	5	23	1	2	2	55	.58	.084	14	5	1.00	299	.09	5	1.57	.04	.13	1	2
80958	2	16	15	105	.6	4	8	827	4.54	219	5	ND	3	26	1	8	2	47	.36	.064	10	8	.92	371	.03	8	1.73	.04	.14	1	2
80959	1	22	14	102	.6	3	8	850	4.30	121	5	ND	3	38	1	5	2	39	.93	.047	10	4	.76	250	.02	13	1.57	.04	.16	1	1
80962	2	23	28	124	.6	3	10	930	4.58	58	5	ND	3	27	1	2	2	41	.48	.075	12	1	.86	261	.06	16	1.89	.04	.18	1	1
80964	1	22	19	93	.5	3	11	900	4.73	28	5	ND	4	26	1	2	2	44	.71	.072	10	3	1.39	286	.07	38	2.13	.05	.15	1	1
80966	2	20	26	151	.8	4	9	991	4.13	69	5	ND	4	19	1	4	2	49	.35	.065	13	8	.83	231	.07	8	1.61	.04	.21	1	1
80968	1	17	46	212	2.3	3	10	1173	4.21	36	5	ND	3	27	1	2	2	51	.43	.049	12	4	.73	484	.07	7	1.39	.04	.21	1	1
80972	2	20	33	163	.4	3	10	1636	3.42	30	5	ND	3	22	1	2	2	44	.32	.053	15	4	.80	346	.04	19	1.34	.04	.22	1	1
80989	1	24	22	110	.9	2	8	850	4.23	97	5	ND	3	43	1	5	2	53	1.23	.045	10	9	.90	275	.07	11	1.55	.05	.15	1	2
80990	1	18	14	90	.4	2	8	852	4.28	47	5	ND	3	18	1	2	2	44	.36	.065	10	2	.89	137	.07	5	1.61	.04	.12	1	10
80992	2	19	19	109	.5	3	9	1042	4.14	41	5	ND	3	20	1	2	2	50	.38	.061	10	7	.97	154	.12	9	1.87	.05	.18	1	5
80993	1	16	10	81	.4	3	7	796	3.78	26	5	ND	2	18	1	2	2	37	.46	.057	9	5	.95	129	.07	6	1.61	.04	.14	1	2
80994	1	14	19	101	.3	7	9	948	4.05	26	5	ND	3	20	1	2	2	52	.38	.083	13	9	.96	150	.10	4	1.60	.04	.15	2	2
80995	1	15	15	99	.5	7	8	904	3.87	29	5	ND	3	21	1	3	2	49	.34	.070	11	6	.95	138	.10	5	1.61	.04	.14	1	3
~~80997~~	1	17	21	107	.4	5	8	917	4.03	33	5	ND	3	20	1	2	2	47	.34	.068	11	6	1.02	166	.09	7	1.71	.05	.14	1	4
80998	1	20	18	115	.5	4	10	963	3.94	18	5	ND	3	19	1	2	2	48	.33	.063	11	6	.97	169	.08	4	1.54	.04	.15	1	1
STD C/AU-S	18	58	42	135	7.6	69	28	1069	3.94	40	18	8	38	51	18	17	20	58	.48	.089	38	58	.89	183	.08	34	1.87	.09	.14	13	47

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
B0973	43	18	29	141	1.9	3	10	1018	10.96	4072	5	ND	3	20	1	74	2	54	.77	.095	10	5	.53	7	.11	11	1.46	.07	.19	1	18
B0974	28	43	129	16	9.1	4	2	112	7.05	5530	5	ND	1	3	1	73	3	8	.03	.001	2	3	.05	16	.01	9	.10	.03	.04	1	175
B0975	14	55	98	163	7.0	3	10	509	11.13	2847	5	ND	2	8	2	53	2	49	.31	.044	5	2	.60	13	.14	6	1.35	.04	.18	1	150

Virginia Cr

Central Cord District

Rk: (Cu, Au Assay)(30 ICP, Au) 3 to Anne
Silt: 30 ICP, Au
PANS: BM, Au

Sheet 1 of 1

Lab Code 8709-001

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

Date Shipped: ??!?
Date Received: Aug. 25/87
Shipped Via: Bus
No. of Cartons:
No. of Samples: 24
Geologist: R. Baerg
Date: Aug 18/87

MATERIAL:
- [ ] SOIL
- [x] SILT
- [x] ROCK
- ✓ Pan

Project Todd Cr (N. Zone) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
87526	Rock	Cu-Au Assay			80970	Silt			
~~[illegible]~~	~~[illegible]~~								
28	"								
29	"								
30	"								
31	"								
32	"								
33	"								
34	"								
80956	Pan								
57	Silt								
58	Silt								
59	Silt								
60	Pan								
61	Pan								
62	Silt								
63	Pan								
64	Silt								
65	Pan ← listed but not found								
66	Silt								
67	Pan								
68	Silt								
69	Pan								

CBC 281
PAN 8709-001

CBC 281
PAN 8709-001

ANALYTICAL INSTRUCTIONS

- [ ] ALL SAMPLES: ~~(Cu, Pb, Zn, Mo, Ag)~~
- [ ] ~~(Cu, Pb, Zn, Mo, Ag) + ___ + ___~~
- [ ] ~~(Cu, Pb, Zn, Mo, Ag) + AS NOTED~~

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Rocks – Cu + Au Assay
Silt – Au geochem + ICP
Pan – Au, Ag, Cu, Pb, Zn, As, Co, Fe

15161

Central District

Sheet 1 of 1

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Aug 24

Date Received:

Shipped Via: Bus

No. of Cartons: 1

No. of Samples: 15

Geologist: R. Baerg

Date: Aug 24/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☑ SILT
- ☑ ROCK
- ☑ Pan

Project Todd Cr No. 281

SAMPLE NOS./COORDS. FROM/~~LINE~~	TO/~~STATION~~	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
80971	Pan								
72	Silt								
73	Rock								
74	"								
80975	"								
80988	Pan								
89	Silt								
90	~~Pan~~ Silt								
91	~~Silt~~ Pan								
80992	Silt								
93	"								
94	"								
95	"								
96	Pan ✓								
97	~~Silt~~ PAN ✓		correction noted on pink slip (LAB)						
98	SILT								

RUSH 100

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Silt: Au geochem + ICP
Rock " " "
Pan: Au, Ag, Cu, Pb, Zn, As, Co, Fe

RESULTS TO: Prince George

15162

SEND IN BOX

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104A/5

PROPERTY Todd Creek (N. Zone)

DATE Aug 18/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Cu	G☐ A☑ Au	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
87526	Trench 2, resample of sample 55458, qtz-chl-hem-py-cpy bx vein	5	chip	.30m	✓	✓						RB
~~87527~~	~~Trench 2 resample of sample 55460, as for 87526~~	~~5-7~~	~~chip~~	~~1.1m~~	~~✓~~	~~✓~~						~~RB~~
7528	qtz-py-scr-cpy vein and bx	3-5	grab	comp	✓	✓						RB
7529	Trench 1, resample of sample 55464, as for 87526	5-7	chip	.6m	✓	✓						RB
87530	Trench 1, resample of sample 55465, as for 87526	10	chip	2.0	✓	✓						RB
7531	as for 87526	5	chip	.3m	✓	✓						RB
7532	as for 87526	5-7	chip	2m	✓	✓						RB
87533	grab of qtz-hem-chl-py-cpy bx vein material from Hole #3	2-3	grab	comp	✓	✓						RB
7534	for 87533, Hole #2	2-3		comp	✓	✓						RB

G = GEOCHEM A = ASSAY

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED AUGUST 17 1987

DATE REPORTS MAILED Aug 29/87

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.

ASSAYER D. Toye DEAN TOYE . CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT 8708-080 281 FILE# 87-3365A PAGE# 1

SAMPLE	Cu %	Au oz/t	
85202	.23	.008	N. Zone Todd Cr Valley
85203	.13	.009	
85204	.01	.005	

cc: Rob
" file: TODD 281

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SOIL P2-SOIL/SILT P3-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 17 1987 DATE REPORT MAILED: Aug 29/87 ASSAYER D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT-8708-080 281 File # 87-3365 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
10000N 10000E	2	123	19	105	.3	5	22	1853	8.63	37	5	ND	4	29	1	2	2	66	.90	.138	15	4	.61	53	.01	2	.93	.03	.14	1	21
10000N 10025E	2	62	21	110	.5	7	19	1621	7.55	34	5	ND	4	31	1	2	2	62	.80	.127	15	7	.78	99	.01	11	1.26	.03	.16	1	12
10000N 10050E	1	71	24	118	.3	5	21	1454	9.06	49	5	ND	4	30	1	2	2	53	.60	.119	16	2	.46	199	.01	2	.91	.02	.14	1	24
10000N 10075E	1	52	17	70	.5	4	14	910	5.03	17	5	ND	2	68	1	2	2	43	13.90	.101	9	3	.83	205	.01	8	1.11	.01	.12	2	23
10000N 10100E	1	89	22	95	.5	7	23	1346	8.81	33	5	ND	3	43	1	2	2	64	2.21	.125	13	6	.84	48	.01	2	1.02	.03	.09	1	10
10000N 10125E	1	80	21	103	.4	6	24	1314	9.50	46	5	ND	4	26	1	2	2	66	.78	.121	13	4	.80	50	.01	10	1.10	.03	.10	1	63
10000N 10150E	1	93	20	108	.4	8	27	1595	9.39	20	5	ND	3	48	1	2	2	68	4.40	.135	13	6	.96	42	.01	2	1.00	.02	.12	1	6
10000N 10175E	1	118	23	88	.8	9	29	1250	10.41	27	5	ND	3	57	1	2	2	59	5.14	.126	11	4	1.19	21	.01	2	.89	.02	.10	2	11
10000N 10200E	1	105	23	109	.5	9	29	1691	10.80	21	5	ND	3	43	1	2	2	69	1.80	.141	15	5	1.00	42	.01	2	1.04	.03	.11	1	4
10000N 10225E	2	66	21	125	.4	7	22	2016	7.79	15	5	ND	4	29	1	2	2	72	1.01	.095	19	6	.84	317	.01	9	1.53	.03	.13	1	1
10000N 10275E	1	100	28	99	.6	7	28	1610	11.83	59	5	ND	3	26	1	2	2	69	.80	.125	14	4	.61	76	.01	3	.88	.03	.10	1	42
10000N 10300E	1	53	22	125	.4	6	20	1646	7.83	21	5	ND	3	24	1	2	2	63	.62	.137	21	6	.58	322	.01	4	1.04	.02	.12	1	14
10000N 10325E	2	174	21	99	.6	6	23	2309	8.52	27	5	ND	4	27	1	2	2	63	.74	.160	21	7	.58	426	.01	9	1.19	.03	.14	1	64
10000N 10350E	1	87	29	107	.4	4	18	1253	7.85	39	5	ND	4	11	1	2	2	47	.20	.126	15	4	.39	340	.01	3	.90	.02	.13	1	105
10000N 10375E	1	98	22	114	.6	6	18	1412	7.82	43	5	ND	3	27	1	2	2	58	.54	.131	18	4	.61	334	.01	9	1.18	.03	.11	1	250
10000N 10400E	1	162	26	92	.7	6	22	1760	8.87	37	5	ND	4	17	1	2	2	60	.35	.126	22	6	.66	237	.01	4	1.49	.02	.12	1	240
10000N 10425E	1	156	27	87	.5	3	12	556	10.04	74	5	ND	4	6	1	2	2	83	.08	.205	16	7	.65	132	.01	3	2.20	.02	.11	1	230
10000N 10450E	1	147	34	109	.7	4	21	2485	9.64	38	5	ND	3	14	1	2	2	79	.35	.178	25	5	.62	393	.01	3	1.79	.02	.14	1	120
10000N 10475E	1	225	32	79	.4	3	18	1013	14.97	71	5	ND	5	4	1	2	2	93	.03	.181	15	4	.68	148	.01	3	2.25	.01	.11	2	90
10000N 10500E	2	490	36	98	.6	4	24	1995	11.23	69	5	ND	5	3	1	3	2	77	.02	.131	15	7	.81	93	.01	4	2.53	.01	.11	1	154
10000N 10525E	2	253	33	60	.9	3	10	379	9.52	69	5	ND	3	3	1	2	3	100	.02	.242	14	5	.52	76	.01	3	1.97	.01	.11	1	360
10000N 10550E	2	1030	39	128	.7	5	23	2125	13.50	81	5	ND	4	12	1	3	2	73	.16	.176	20	5	.93	225	.01	4	1.88	.02	.11	1	250
10000N 10575E	4	128	36	164	.6	4	19	2095	9.83	49	5	ND	4	5	1	2	2	62	.09	.203	18	6	.23	152	.01	3	1.45	.01	.14	1	25
10000N 10600E	3	293	49	170	.7	4	23	2465	10.52	168	5	ND	4	14	1	2	2	75	.24	.173	25	4	.42	213	.01	2	2.35	.02	.10	1	21
10000N 10625E	1	278	75	79	2.1	1	10	473	13.57	127	5	ND	4	111	1	2	2	23	.02	.149	14	1	.07	144	.01	8	.85	.02	.44	2	105
10000N 10650E	6	95	96	179	1.0	2	14	1224	10.11	164	5	ND	4	4	1	2	2	56	.04	.130	11	1	.16	86	.01	3	1.92	.01	.13	1	32
10000N 10675E	4	39	27	69	.1	3	7	596	6.30	62	5	ND	3	3	1	3	2	38	.04	.083	8	2	.04	83	.01	3	.89	.01	.11	1	5
9800N 10000E	1	74	23	101	.4	5	22	1636	9.22	50	5	ND	4	18	1	2	2	51	.36	.130	17	3	.24	209	.01	3	.63	.02	.13	2	20
9800N 10025E	1	58	25	106	.4	3	13	773	5.02	25	6	ND	5	26	1	2	3	35	.36	.102	18	1	.25	238	.01	8	.64	.02	.15	1	21
9800N 10050E	1	69	30	119	.5	3	18	1654	7.17	37	5	ND	5	24	1	2	2	40	.40	.114	18	1	.29	249	.01	9	.72	.02	.15	1	19
9800N 10075E	1	62	29	113	.5	3	16	1261	6.89	36	5	ND	4	15	1	2	2	42	.29	.115	19	1	.28	297	.01	3	.70	.02	.13	1	72
9800N 10100E	1	69	29	110	.5	3	15	1259	6.81	33	5	ND	4	14	1	2	2	38	.22	.115	18	1	.23	319	.01	6	.64	.02	.14	2	31
9800N 10125E	1	75	28	115	.5	4	17	1549	7.25	37	7	ND	4	10	1	2	2	43	.17	.116	20	1	.27	342	.01	3	.71	.01	.13	2	30
9800N 10150E	3	37	48	91	.7	4	12	1003	6.19	30	5	ND	3	61	1	2	2	52	.37	.148	27	8	.48	216	.01	7	1.42	.02	.11	1	11
9800N 10175E	2	35	156	159	1.1	10	13	1732	4.70	34	5	ND	3	22	1	4	3	54	.28	.112	28	11	.51	394	.03	5	1.74	.02	.14	2	1
9800N 10200E	2	58	36	102	1.0	6	8	689	5.63	31	5	ND	3	7	1	2	2	59	.10	.202	20	9	.34	178	.01	6	2.21	.02	.13	1	17
STD C/AU-S	18	57	40	132	7.3	69	28	1051	4.08	43	17	7	36	49	19	16	20	57	.50	.091	37	61	.89	174	.08	32	1.82	.08	.13	13	49

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
9800N 10225E	2	134	40	93	.6	4	16	521	10.63	78	5	ND	3	34	1	5	2	66	.38	.109	25	3	.42	203	.01	3	1.81	.02	.12	1	58
9800N 10250E	7	605	33	70	.3	3	21	2083	12.84	102	6	ND	4	26	1	5	4	60	.31	.180	27	2	.42	154	.01	7	1.98	.02	.09	3	91
9800N 10275E	4	150	19	76	.3	3	11	1198	5.74	31	5	ND	3	7	1	3	2	53	.08	.148	14	7	.55	137	.01	4	1.93	.02	.14	1	39
9800N 10300E	3	197	28	66	.1	2	12	1052	6.29	28	5	ND	2	9	1	2	2	63	.12	.092	17	8	.43	114	.01	6	2.47	.02	.12	1	29
9800N 10325E	3	242	28	68	.2	3	18	1498	9.34	35	5	ND	3	4	1	2	2	60	.02	.156	17	5	.38	99	.01	4	1.67	.01	.11	1	71
9800N 10350E	2	244	29	51	.3	2	9	718	7.54	35	5	ND	2	3	1	3	2	71	.03	.129	15	10	.39	90	.01	3	1.92	.01	.10	1	315
9800N 10375E	2	255	27	53	.1	2	16	1212	7.58	38	5	ND	3	2	1	4	2	52	.02	.137	20	3	.66	72	.01	4	1.57	.01	.09	1	97
9800N 10400E	3	332	26	49	.3	3	27	2450	9.48	49	5	ND	3	5	1	3	2	57	.02	.126	20	8	.52	149	.01	3	1.67	.01	.10	2	215
9800N 10425E	1	248	27	43	.1	2	20	1021	18.19	51	5	ND	3	17	1	2	2	43	.18	.182	20	1	.23	122	.01	4	.87	.02	.11	1	195
9800N 10450E	2	91	30	58	.1	8	89	3827	23.29	39	6	ND	3	29	1	2	2	49	.34	.197	19	3	.20	156	.01	6	.83	.02	.10	1	58
9800N 10475E	2	174	30	74	.4	1	25	3001	13.24	49	5	ND	4	12	1	2	2	57	.22	.177	30	1	.34	138	.01	3	1.47	.02	.12	1	48
9800N 10500E	3	78	27	87	.2	3	19	2001	7.37	31	5	ND	3	12	1	2	2	59	.30	.183	19	4	.28	368	.01	5	1.96	.02	.10	1	10
65205	2	170	47	152	.4	4	10	1639	4.75	34	5	ND	3	18	1	2	2	35	.42	.075	17	3	.36	217	.02	4	1.01	.02	.16	1	65

SAMPLE	Au* ppb	
85195	1735	N. Mid Zone
85196	260	
85197	150	
85198	9980	
85199	6850	A. Zone
85200	4110	
85201	1995	
85206	850	B. Zone
85207	3220	
85208	8430	
85209	640	

NORANDA VANCOUVER LABORATORY

****

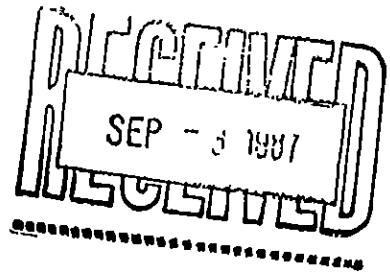
PERTY/LOCATION:TODD CREEK CODE :8708-090

Project No. :281 Sheet:1 of 1 Date rec'd:AUG.17
Material :3 PANB Geol.:R.B. Date compl:AUG.28
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Sample wt.(g)	PPB Au	Cu	Zn	Pb	Ag	
88	85220	27.8	110	7000	92	16	0.6	} Mid Zone
89	85224	41.0	130	240	110	220	0.8	
90	85225	56.0	10	50	34	8	0.2	

N.B. Pan-con: entire sample used for Au determination.
*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.



cc: Rob
file: TODD-281

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 21 1987
DATE REPORT MAILED: Aug. 31/87....

ASSAY CERTIFICATE

- SAMPLE TYPE: Rock Chips

ASSAYER: ..D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-090 281 File # 87-3506A

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AU OZ/T	
85218	3.63	-	-	-	.020	22.50
85219	-	1.17	1.71	.37	.001	30.00
85223	14.14	-	-	-	.010	
85529	-	7.70	12.55	3.85	.001	
85533	4.70	-	-	-	.001	
85536	4.34	-	-	-	.001	Mid
85537	.76	-	-	-	.001	
85538	2.06	-	-	-	.001	Zone
85539	3.84	-	-	-	.001	
85540	1.62	-	-	-	.001	
85541	1.35	-	-	-	.001	

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK

DATE RECEIVED: AUG 21 1987 DATE REPORT MAILED: Aug 31/87 ASSAYER. D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-090 281 File # 87-3506A

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM
85218	1	32103	43	140	2.1	41	40	370	25.29	318	5	ND	2	17	2	2	9	41	.37	.026	2	19	.88	5	.01	11	1.85	.03	.04	3
85219	6	1229	9948	16739	12.3	2	13	3957	6.81	115	5	ND	2	93	113	15	5	16	7.51	.048	9	5	4.06	29	.01	24	.46	.01	.13	1
85223	1	92522	51	292	5.2	3	30	1514	33.93	236	5	ND	3	21	10	6	102	9	1.87	.003	17	1	1.07	5	.01	2	.04	.04	.01	1
85529	22	2776	29396	99999	151.9	3	8	4102	4.48	108	5	ND	3	66	920	31	4	10	4.54	.032	5	1	2.31	14	.01	25	.30	.03	.10	3
85533	4	41249	12	1	17.1	3	43	145	9.05	145	5	ND	1	2	3	2	98	5	.13	.003	3	1	.12	11	.01	2	.17	.01	.03	1
85534	4	38376	162	308	14.6	3	53	82	11.05	85	5	ND	1	1	5	4	27	4	.01	.001	2	4	.07	12	.01	2	.14	.01	.02	1
85537	5	7394	68	176	5.8	2	175	705	17.41	167	8	ND	1	31	2	2	8	20	1.77	.014	3	1	.95	5	.01	15	.89	.03	.06	1
85538	8	10727	110	199	13.1	2	61	448	12.49	264	5	ND	2	23	3	2	30	19	.79	.011	5	1	.62	5	.01	2	.69	.03	.05	1
85539	6	30096	69	189	12.2	2	45	1345	16.05	158	5	ND	3	64	3	2	10	34	3.09	.029	2	2	1.63	62	.01	2	1.47	.03	.08	1
85540	6	15294	123	273	17.2	4	82	301	14.90	172	5	ND	1	6	2	6	19	50	.15	.021	4	1	1.52	5	.01	2	1.82	.02	.04	4
85541	5	12311	486	886	20.7	3	23	593	11.28	78	5	ND	2	15	7	2	19	120	.48	.070	8	7	3.04	15	.01	22	3.79	.04	.07	4
STD C	19	60	41	130	7.0	67	27	1019	3.83	42	17	7	36	47	18	17	22	55	.46	.087	34	59	.85	173	.08	38	1.79	.08	.13	14

ASSAY REQUIRED FOR Cu > 10,000 ppm
Zn > 20,000 ppm
Ag > 35 ppm

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SILT P2 TO P4-TALUS P5-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 21 1987 DATE REPORT MAILED: Aug 31/87 ASSAYER. D. Toye...DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-090 281 File # 87-3506 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
85221	2	54	18	116	.4	7	24	1409	9.26	49	5	ND	4	31	1	2	2	62	.50	.136	19	4	.80	221	.01	3	1.22	.03	.09	1	1
85222	5	148	21	128	.1	8	29	3192	10.95	54	5	ND	4	24	1	2	2	56	.59	.135	15	1	.39	56	.01	3	.74	.02	.10	1	1
85528	2	51	16	63	.4	4	19	899	5.99	19	5	ND	4	40	1	2	2	62	.39	.102	10	4	.78	176	.12	4	1.35	.03	.09	1	18
85530	6	200	69	97	1.2	5	27	1029	9.17	140	5	ND	7	16	1	4	2	25	.53	.077	14	1	.43	15	.01	5	.67	.03	.10	1	7
85531	5	208	62	100	1.4	5	29	969	10.26	171	7	ND	7	17	1	4	2	24	.73	.068	13	1	.49	13	.01	2	.62	.02	.09	1	3
85532	11	281	55	188	1.1	5	23	1469	7.89	141	5	ND	7	17	1	2	2	41	.37	.113	19	3	.55	70	.01	4	.95	.02	.11	1	6
85542	11	425	79	237	1.9	10	35	1570	11.30	203	5	ND	5	23	1	14	2	62	.45	.103	18	7	1.19	25	.01	3	1.50	.03	.09	1	1
STD C	18	57	40	131	6.8	67	27	1027	3.97	42	19	8	36	49	18	17	20	56	.48	.088	36	56	.88	175	.08	34	1.85	.08	.12	11	-

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11500N 9550E	4	18	25	78	.1	3	8	1855	5.18	24	5	ND	2	3	1	2	3	46	.05	.108	14	3	.08	157	.01	2	.89	.01	.20	1	1
11500N 9575E	14	25	35	200	.6	3	12	2590	6.96	140	5	ND	3	10	1	2	2	44	.31	.086	24	6	.14	176	.01	2	.68	.02	.17	1	1
11500N 9600E	27	22	22	115	.6	6	20	2132	6.01	52	5	ND	9	11	1	2	3	25	.36	.100	30	1	.11	426	.01	3	.46	.01	.17	1	3
11500N 9625E	2	16	16	63	.4	4	12	1632	3.70	9	5	ND	11	16	1	4	2	17	.51	.139	32	5	.10	319	.01	24	.49	.03	.24	1	2
11500N 9650E	2	19	13	65	.4	3	9	1240	3.99	10	5	ND	9	11	1	2	2	19	.35	.117	32	1	.09	289	.01	5	.48	.02	.19	2	2
11500N 9675E	2	22	16	66	.2	5	10	1855	4.21	9	5	ND	3	6	1	2	2	27	.13	.095	25	3	.12	314	.01	2	.78	.01	.19	1	3
11500N 9750E	1	64	18	67	.7	16	21	1283	9.02	30	5	ND	4	51	1	2	3	51	.15	.121	16	6	.14	271	.01	2	.48	.07	.17	1	143
11500N 9775E	2	276	20	80	.5	11	28	1917	9.90	24	6	ND	4	17	1	2	2	61	.10	.121	16	5	.22	240	.01	2	.73	.02	.12	1	17
11500N 9825E	1	23	19	47	.5	4	16	949	10.81	35	5	ND	3	22	1	2	2	36	.05	.191	17	7	.62	141	.01	2	1.09	.03	.13	1	1
11500N 9850E	1	45	17	98	.3	9	19	1711	5.95	11	5	ND	3	22	1	2	2	67	.34	.110	26	10	1.24	402	.01	7	2.15	.04	.18	1	3
11500N 9875E	2	45	24	120	.2	12	25	1769	8.38	12	5	ND	3	16	1	2	2	86	.17	.127	20	19	1.79	198	.01	2	2.51	.02	.11	1	2
11500N 9900E	1	56	19	135	.4	12	24	2948	7.26	6	5	ND	4	18	1	2	2	103	.38	.128	29	20	1.87	469	.01	9	2.89	.03	.16	1	1
11500N 9925E	1	39	25	111	.4	8	18	2332	7.00	13	5	ND	3	20	1	2	2	97	.38	.117	35	9	.73	563	.01	4	1.91	.03	.22	1	1
11500N 9950E	1	51	14	136	.3	7	23	2652	7.70	5	5	ND	4	27	1	2	2	96	.54	.154	26	5	.74	656	.02	5	1.54	.03	.19	1	1
11500N 9975E	1	34	15	129	.3	7	23	2184	8.16	7	5	ND	4	21	1	2	2	102	.47	.159	26	3	1.43	288	.01	9	2.47	.04	.14	1	1
11500N 10000E	1	19	17	124	.5	5	24	2263	6.56	9	6	ND	4	36	1	3	2	93	.60	.125	25	2	.63	306	.03	6	1.11	.03	.19	2	2
11500N 10050E	1	43	19	117	.3	6	22	2272	7.20	10	5	ND	4	21	1	2	2	91	.41	.116	22	6	.61	491	.05	5	1.18	.03	.14	1	5
11500N 10075E	1	30	15	116	.2	4	20	1963	6.67	10	5	ND	3	22	1	2	2	88	.60	.119	17	3	.48	376	.04	7	.96	.03	.13	1	2
11500N 10100E	1	29	12	116	.1	5	22	2044	7.20	5	5	ND	5	24	1	2	2	97	.82	.129	19	2	.58	346	.05	5	.86	.03	.14	1	2
11500N 10125E	1	59	16	127	.4	6	21	3335	6.92	8	5	ND	4	24	1	2	2	86	.62	.128	29	5	.73	538	.02	8	1.54	.03	.14	1	2
11500N 10150E	1	36	21	124	.3	6	23	2163	7.83	4	5	ND	4	13	1	2	2	97	.41	.127	21	1	.79	391	.02	4	1.52	.03	.12	1	1
11500N 10175E	1	76	25	140	.4	7	21	1944	8.05	11	5	ND	3	13	1	2	2	97	.33	.148	29	1	.88	474	.01	5	1.94	.03	.12	1	2
11500N 10200E	1	74	18	131	.3	9	25	1737	9.83	6	5	ND	4	18	1	2	2	96	.36	.141	19	3	.61	290	.01	2	1.35	.03	.10	3	73
11500N 10225E	1	70	11	145	.1	10	31	2993	11.26	2	5	ND	3	17	1	2	2	105	.48	.141	17	4	.41	182	.01	3	.83	.02	.13	1	12
11500N 10250E	2	106	23	104	.4	6	31	3296	13.26	22	5	ND	4	13	1	2	2	121	.30	.178	31	3	.37	532	.01	9	1.08	.02	.14	2	10
11500N 10275E	1	41	8	86	.2	5	24	2270	8.66	6	5	ND	4	15	1	2	2	96	.40	.116	20	2	.27	595	.01	2	.76	.02	.14	1	4
11500N 10300E	2	111	22	83	.1	4	30	2745	12.29	49	5	ND	3	11	1	2	2	88	.10	.185	17	1	.11	293	.01	2	.71	.01	.14	1	14
11500N 10325E	1	76	19	99	.2	7	17	929	9.47	21	5	ND	2	8	1	2	2	92	.13	.137	19	4	.34	248	.01	2	1.05	.02	.10	1	5
11500N 10350E	1	76	19	81	.5	6	23	1685	8.28	26	5	ND	4	9	1	2	2	62	.08	.163	20	1	.15	264	.01	2	.67	.01	.17	1	10
11500N 10375E	1	13	36	83	.1	2	6	2278	2.59	3	5	ND	3	18	1	2	3	19	.30	.123	19	1	.07	745	.01	7	.67	.02	.25	1	1
11400N 9500E	2	21	34	104	.3	7	10	1802	4.89	27	5	ND	3	8	1	5	2	52	.07	.127	16	8	.29	473	.01	2	1.86	.01	.16	2	3
11400N 9525E	2	26	28	88	.3	7	11	1882	4.24	21	5	ND	7	8	1	3	2	38	.18	.082	21	8	.40	336	.01	2	1.15	.02	.17	2	1
11400N 9550E	2	19	18	65	.4	3	9	2276	4.64	10	5	ND	5	7	1	2	3	26	.25	.071	18	2	.13	413	.01	2	.65	.01	.21	2	2
11400N 9575E	2	22	11	37	.1	2	6	1679	3.48	9	5	ND	7	9	1	3	2	23	.36	.087	16	1	.09	347	.01	2	.51	.02	.23	1	2
11400N 9600E	2	16	14	56	.3	2	8	1588	4.19	13	5	ND	7	13	1	2	3	29	.37	.121	24	1	.12	346	.01	2	.63	.02	.23	1	1
11400N 9625E	2	28	12	37	.3	2	6	1536	3.44	4	5	ND	10	6	1	2	3	20	.20	.074	22	2	.07	276	.01	2	.49	.01	.21	2	2
STD C/AU-S	20	60	39	132	7.4	72	29	1057	4.04	40	22	8	39	52	19	17	19	60	.48	.095	39	60	.89	180	.09	36	1.88	.09	.16	12	47

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11400N 9650E	3	12	8	38	.1	1	5	980	2.49	9	5	ND	9	4	1	2	2	18	.12	.060	14	1	.07	146	.01	2	.50	.01	.18	2	1
11400N 9675E	12	22	18	101	.2	4	13	1633	4.59	47	5	ND	5	7	1	3	3	29	.23	.090	26	4	.11	320	.01	3	.55	.01	.14	1	1
11400N 9700E	6	21	9	63	.2	4	9	1309	3.48	25	5	ND	7	7	1	2	2	23	.20	.074	22	2	.11	292	.01	2	.53	.01	.15	1	2
11400N 9750E	10	213	22	38	1.0	7	13	407	23.03	97	5	ND	5	15	1	3	3	128	.01	.310	19	5	.55	355	.01	4	3.45	.03	.16	4	96
11400N 9800E	3	143	17	69	.6	17	25	1543	9.91	41	5	ND	3	28	1	2	2	57	.10	.130	18	5	.17	329	.01	7	.60	.03	.15	1	29
11400N 9850E	3	50	30	100	.4	9	24	2308	8.08	33	5	ND	5	14	1	2	2	76	.09	.145	30	11	1.10	347	.02	6	2.26	.03	.13	2	16
11400N 9875E	2	41	27	69	.1	5	12	1553	6.13	24	5	ND	2	16	1	2	2	65	.19	.140	18	6	.51	441	.01	4	2.10	.02	.11	1	3
11400N 9900E	3	95	14	134	.1	14	22	2546	8.17	12	5	ND	4	22	1	2	2	107	.41	.113	36	26	.75	794	.01	10	2.11	.03	.14	1	1
11400N 9925E	3	95	15	73	.3	11	18	1580	8.24	35	5	ND	3	18	1	2	3	67	.15	.123	19	9	.41	341	.01	7	1.16	.03	.12	1	16
11400N 9950E	1	26	14	115	.1	6	22	2523	7.23	11	5	ND	4	20	1	2	2	83	.33	.130	27	5	.53	452	.02	4	1.24	.02	.09	1	2
11400N 9975E	2	38	14	123	.1	5	21	2503	7.95	6	5	ND	3	16	1	2	2	85	.32	.134	24	4	.53	453	.01	15	1.41	.03	.10	1	1
11400N 10000E	2	26	21	120	.1	5	15	1245	6.62	11	5	ND	2	11	1	2	2	77	.21	.125	17	5	.49	301	.01	8	1.49	.02	.09	1	3
11400N 10025E	1	16	9	91	.2	2	5	1417	2.86	7	5	ND	1	18	1	2	2	46	.38	.260	5	4	.11	289	.01	3	.83	.02	.12	1	1
STD C/AU-S	19	61	41	129	7.1	69	28	1047	3.85	40	20	8	38	50	19	17	19	58	.46	.093	38	59	.92	181	.08	38	1.77	.08	.13	14	48
11400N 10050E	2	19	10	81	.1	2	10	1206	6.62	8	5	ND	2	4	1	2	2	80	.04	.206	9	6	.15	103	.01	3	1.63	.01	.09	2	1
11400N 10075E	2	20	10	62	.3	2	4	285	3.46	6	5	ND	1	5	1	2	2	73	.05	.130	10	12	.14	145	.01	3	1.43	.01	.09	1	9
11400N 10100E	1	27	9	85	.1	4	8	835	4.39	5	5	ND	1	9	1	2	2	79	.13	.193	9	7	.23	264	.01	8	1.41	.02	.10	1	1
11400N 10125E	3	64	16	113	.1	11	28	1620	14.91	6	5	ND	3	8	1	2	2	103	.14	.227	23	4	.46	155	.01	6	1.12	.02	.07	2	65
11400N 10150E	3	182	8	103	.1	8	45	3235	14.35	11	5	ND	5	12	1	2	2	104	.21	.193	27	1	.47	311	.01	8	1.44	.02	.09	2	29
11400N 10175E	2	88	11	92	.1	7	25	1988	8.97	12	5	ND	3	13	1	2	2	79	.27	.127	22	2	.49	299	.01	3	1.29	.02	.10	1	6
11400N 10200E	3	87	10	122	.2	6	29	2539	11.70	6	5	ND	4	22	1	2	2	98	.33	.142	25	2	.45	243	.01	25	1.07	.03	.09	1	6
11400N 10225E	2	79	8	133	.1	5	23	2284	9.34	16	5	ND	2	26	1	2	2	81	.86	.185	21	3	.30	404	.01	5	.94	.02	.11	1	2
11400N 10250E	1	34	6	107	.1	5	19	1269	8.27	17	5	ND	3	11	1	2	2	79	.25	.131	15	4	.29	260	.01	3	1.01	.02	.10	1	2
11400N 10300E	2	81	7	87	.1	6	26	1902	9.76	24	5	ND	4	16	1	2	2	102	.35	.159	18	5	.20	412	.01	3	.61	.02	.14	1	9
11400N 10325E	2	101	5	84	.1	5	24	1795	11.41	39	5	ND	3	11	1	2	2	101	.16	.138	15	1	.17	228	.01	11	.65	.02	.10	1	41
11400N 10400E	3	19	57	93	.1	3	10	2241	5.63	14	5	ND	3	5	1	2	2	40	.06	.124	16	8	.14	185	.01	6	1.44	.02	.15	1	2
11400N 10425E	1	20	26	86	.1	3	8	1529	2.86	10	5	ND	4	12	1	2	3	22	.19	.094	21	2	.09	438	.01	2	.66	.01	.19	1	1
11400N 10450E	1	12	20	82	.2	1	6	1245	2.07	6	5	ND	3	10	1	2	2	19	.20	.079	20	1	.06	531	.01	2	.58	.01	.21	1	1
11400N 10500E	2	13	33	76	.3	5	8	1100	2.25	8	5	ND	4	15	1	2	2	22	.24	.091	23	6	.22	289	.01	3	1.49	.02	.18	1	1
11300N 10025E	2	63	14	101	.2	5	20	1554	7.64	19	5	ND	3	11	1	2	2	76	.19	.117	18	6	.36	325	.01	3	1.03	.02	.12	1	11
11300N 10050E	1	60	14	104	.1	7	20	2129	7.85	11	5	ND	3	10	1	2	2	88	.15	.135	21	5	.37	270	.01	3	1.38	.02	.09	1	6
11300N 10075E	3	26	16	109	.2	4	9	910	8.24	14	5	ND	2	6	1	2	2	67	.07	.178	19	9	.30	139	.01	4	3.12	.03	.07	1	1
11300N 10100E	2	147	10	99	.1	9	30	2872	10.61	11	5	ND	4	16	1	2	2	84	.22	.216	18	6	.24	961	.01	3	1.17	.02	.10	1	116
11300N 10125E	2	93	13	81	.1	4	15	1159	7.72	24	5	ND	2	4	1	2	2	87	.02	.137	16	6	.28	108	.01	5	1.48	.02	.08	1	8
11300N 10150E	2	67	17	87	.1	5	24	1943	11.10	26	5	ND	3	8	1	2	2	106	.09	.207	22	4	.20	110	.01	4	1.25	.02	.09	2	2
11300N 10175E	1	68	13	91	.1	6	24	1746	10.07	44	5	ND	3	7	1	2	2	89	.10	.169	21	2	.24	178	.01	3	.93	.02	.07	1	1
11300N 10200E	1	409	5	63	.1	9	57	3061	20.22	132	5	ND	5	5	1	2	2	105	.02	.325	23	5	.13	88	.01	4	.74	.01	.08	1	30

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
11300N 10225E	1	79	16	81	.2	8	28	2100	9.95	41	5	ND	3	13	1	2	2	98	.11	.139	16	5	.22	180	.01	2	.62	.02	.07	1	8
11300N 10250E	1	81	29	143	.4	11	30	2210	12.33	98	5	ND	3	19	1	2	2	113	.24	.169	25	4	.30	232	.01	3	.85	.02	.10	1	25
11300N 10275E	1	50	11	81	.2	4	13	1100	6.31	58	5	ND	1	18	1	2	2	72	.51	.168	15	1	.17	679	.01	2	.95	.02	.08	2	4
11300N 10300E	1	890	15	69	.2	4	17	1138	7.77	38	5	ND	2	12	1	2	2	67	.14	.134	17	1	.15	393	.01	2	.84	.01	.12	1	815
11300N 10325E	1	84	23	80	.5	7	26	2024	9.26	42	5	ND	3	8	1	2	2	66	.09	.144	16	4	.18	291	.01	2	.62	.01	.11	1	12
11300N 10350E	1	69	44	115	.3	7	27	3844	10.83	43	5	ND	4	10	1	2	2	69	.14	.146	22	2	.20	412	.01	2	.67	.01	.10	1	16
11300N 10375E	1	19	37	80	.3	1	8	1856	3.53	11	5	ND	5	9	1	2	2	22	.26	.094	21	1	.08	671	.01	2	.58	.01	.18	1	1
11300N 10400E	1	12	36	86	.3	1	7	3008	3.68	4	5	ND	4	7	1	2	2	29	.25	.063	25	1	.08	1366	.01	2	.70	.01	.12	1	1
11300N 10425E	1	12	24	71	.1	1	6	1395	2.28	6	5	ND	3	2	1	2	2	19	.02	.072	10	1	.03	178	.01	2	.65	.01	.16	1	1
11300N 10450E	1	24	24	83	.1	1	5	1830	2.14	7	5	ND	1	6	1	2	2	19	.10	.109	7	1	.04	352	.01	2	.51	.01	.17	1	1
11300N 10475E	1	28	23	68	.2	2	7	1197	2.57	8	5	ND	4	13	1	2	2	22	.27	.083	23	1	.12	367	.01	2	.83	.02	.18	1	1
11300N 10500E	2	36	88	50	.6	3	16	1583	2.94	26	5	ND	3	9	1	2	2	22	.13	.160	14	1	.15	267	.01	4	1.21	.01	.19	1	2
11200N 10050E	1	49	22	83	.3	7	23	1431	9.15	19	5	ND	3	8	1	2	2	90	.17	.135	20	5	.23	184	.01	8	.88	.02	.08	1	3
11200N 10075E	4	46	21	89	.2	6	26	2084	10.21	16	5	ND	3	7	1	2	2	102	.10	.156	24	4	.16	171	.01	11	.95	.01	.10	1	1
11200N 10100E	1	35	12	90	.1	4	12	1144	7.61	12	5	ND	4	5	1	2	2	100	.04	.208	15	8	.08	153	.01	2	1.57	.01	.08	1	2
11200N 10125E	1	60	13	56	.4	3	22	1903	7.20	28	5	ND	4	6	1	2	2	48	.10	.178	18	2	.12	186	.01	2	.95	.01	.09	1	2
11200N 10150E	1	121	23	50	.1	4	32	2245	20.66	339	5	ND	5	3	1	2	2	113	.01	.226	19	4	.08	50	.01	6	.81	.01	.06	2	10
11200N 10175E	1	75	23	85	.2	6	22	1918	10.18	69	5	ND	4	5	1	2	2	83	.05	.181	14	3	.26	117	.01	5	.97	.01	.07	1	9
11200N 10200E	1	196	28	57	.3	4	22	1342	15.97	213	5	ND	4	7	1	2	2	72	.06	.224	14	4	.11	251	.01	4	.67	.01	.08	1	305
11200N 10225E	1	29	33	32	.1	1	23	895	16.96	47	5	ND	7	2	1	4	2	39	.01	.492	6	1	.03	44	.01	5	.31	.01	.07	3	5
11200N 10250E	3	115	34	73	.4	5	186	11903	18.72	60	5	ND	7	6	1	2	2	86	.01	.327	15	1	.06	99	.01	2	.55	.01	.07	1	21
11200N 10275E	2	127	24	80	.2	7	30	2127	13.14	51	5	ND	4	5	1	2	2	70	.03	.229	22	1	.14	160	.01	2	.80	.01	.08	2	40
11200N 10300E	4	62	29	133	.4	8	12	2088	7.99	25	5	ND	12	2	1	2	2	31	.03	.119	25	3	.15	91	.07	2	2.57	.07	.08	2	17
11200N 10325E	2	83	26	91	.4	7	19	2021	8.45	47	5	ND	3	4	1	3	2	63	.03	.142	17	6	.27	155	.01	2	1.47	.01	.09	1	52
11200N 10350E	3	40	68	220	.6	6	17	7084	11.71	26	5	ND	5	7	1	4	2	52	.04	.120	23	6	.21	576	.01	2	1.58	.01	.11	1	13
11200N 10375E	1	12	27	81	.4	2	8	1714	2.60	7	5	ND	6	11	1	2	3	20	.22	.072	21	1	.06	780	.01	2	.40	.01	.16	1	1
11200N 10400E	1	21	28	61	.3	3	10	1659	4.05	9	5	ND	6	12	1	2	3	30	.33	.089	20	4	.10	562	.01	2	.46	.02	.17	1	1
11200N 10425E	2	19	39	92	.1	2	13	4369	5.10	11	5	ND	4	3	1	2	4	27	.03	.129	18	1	.07	330	.01	4	.76	.01	.14	1	2
11200N 10450E	1	11	24	95	.3	2	5	1778	2.69	8	5	ND	1	6	1	2	3	22	.09	.155	7	3	.06	279	.01	2	.69	.01	.19	2	1
11200N 10475E	1	10	34	91	.4	2	8	1651	3.01	9	5	ND	3	12	1	2	2	23	.27	.094	22	1	.08	455	.01	2	.63	.01	.18	1	1
STD C/AU-S	18	57	40	129	7.1	68	28	1050	3.93	40	18	8	37	50	18	17	20	57	.47	.089	38	60	.86	179	.08	34	1.82	.08	.13	13	50

NORANDA EXPLORATION (VAN) PROJEC. 8-090 281 FILE # 87-3506

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
85213	3	11211	44	48	.9	16	40	1215	26.68	220	5	ND	3	52	1	10	9	52	2.06	.028	7	5	1.69	11	.01	20	.58	.05	.08	6	590
85214	1	44612	41	181	3.1	5	17	199	32.76	267	5	ND	3	10	6	5	36	17	.31	.001	2	1	.29	5	.01	5	.40	.03	.02	1	2370
85215	5	45907	27	161	1.6	10	23	944	14.52	78	5	ND	2	53	4	2	14	29	2.06	.017	3	6	1.28	17	.01	19	1.41	.04	.08	1	48
85216	6	48614	39	156	1.4	52	36	633	29.40	173	5	ND	4	22	4	5	12	101	.61	.091	15	64	1.68	4	.01	8	2.20	.04	.05	1	59
85217	2	30680	43	118	1.8	32	29	287	31.36	246	5	ND	2	7	3	10	14	53	.13	.045	3	29	.81	5	.01	7	1.87	.02	.04	5	350
85526	6	3978	410	85	23.2	2	33	1811	8.96	1248	5	ND	1	252	1	68	10	8	10.23	.019	2	1	2.68	23	.01	7	.17	.01	.09	1	13
85527	6	4511	151	616	22.5	1	30	1595	4.96	245	5	ND	2	73	7	33	3	9	5.96	.007	9	1	2.19	9	.01	2	.06	.01	.02	3	3
85534	25	10795	2281	7615	40.9	2	222	1160	28.31	841	5	ND	2	31	35	41	21	54	1.40	.035	4	1	1.91	6	.01	4	1.89	.03	.05	3	34
85535	20	710	332	174	11.7	2	36	1246	20.50	635	5	ND	3	32	1	33	16	16	2.33	.014	8	1	1.35	6	.01	4	.51	.03	.04	2	31

ASSAY REQUIRED FOR Cu > 10,000 PPM.

Mid. Zone

← Massive Sulphide type geochem

Central Cord District

20 Rx
5 Pans
7 Silts
102 Talus

Rx+ Silts + Talus: ICP + Au
Rx: (Assay Cu, Au) (Assay Pb, Zn, Ag, Au) + ICP
All to Acme
PAN: BM, Au

Sheet 1 of 4

Lab Code 8708-090

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

(P) 24/08

N.B. Partial results (silt & 7 Au's) mailed 27/08 to P.G.

Date Shipped:
Date Received: Aug 17/87
Shipped Via: Bus
No. of Cartons:
No. of Samples: 46
Geologist: R. Baerg
Date: Aug 9/87

MATERIAL:
- [ ] SOIL
- [x] SILT
- [x] ROCK
- [x] Pan

Project Todd Cr. No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
85213	Rock				11200N	10000E	Talus	N/S	
14	"					25		N/S	
15	"					50			
16	"					75			
17	"					100			
18	"	Cu-Au Assay		*		25			
19	"	Pb-Zn-Ag-Au Assay		*		50			
20	Pan					75			
21	Silt					200			
22	"					25			
23	Rock	Cu-Au Assay		*		50			
24	Pan					75			
85225	Pan					300			
85526	Rock					25			
27	"					50			
28	Silt					75			
29	Rock	Pb-Zn-Ag-Au Assay		*		400		BC 281	
30	Silt					25		PAN 8708-090	
31	"					50			
32	"					75			
33	Rock	Cu-Au Assay		*	85537	Rock	Cu-Au Assay		*
34	"				38	"	"	"	"
35	"				39	"	"	"	"
36	"	Cu-Au Assay		*	40	"	"	"	"

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) [ ]
(Cu, Pb, Zn, Mo, Ag) + ___ + ___ [ ]
(Cu, Pb, Zn, Mo, Ag) + AS NOTED [ ]

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au geochem, or Cu-Au Assay + ICP for all samples
Run Talus as Rock geochem. Run Pan samples for Au, Cu, Pb, Zn, Ag, Fe, As, Co

Central Cord District

Sheet 2 of 4

Lab Code

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☐ SOIL
☐ SILT
☑ ROCK (Talus)

Project Todd Cr No. 281

Date Shipped:
Date Received:
Shipped Via: Bus
No. of Cartons:
No. of Samples: 46
Geologist: R. Baerg
Date: Aug 9/87

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
11300N	10000E	N/S			11400N	9500E			
	25					25			
	50					50			
	75					25			
	100					600			
	25					25			
	50					50			
	75					75			
	200					700			
	25					25			
	50		Talus			50			
	75					75			
	300					800			
	25					25			
	50					50			
	75					75			
	400					900			
	25					25			
	50					50			
	75					75			
	500					10000E			
85541	Rock	Cu-Au Assay		*		25			
42	Silt					50			
						75			

Talus

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au geochem + ICP
Run Talus as Rock geochem
Cu-Au Assay as noted.

Central Cord District

Sheet 3 of 4

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped:

Date Received:

Shipped Via: Bus

No. of Cartons:

No. of Samples: 43

Geologist: R. Baerg

Date: Aug 9/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (Talus)

Project Todd Cr No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
11400N	10100E		Talus		11500N	9700E	N/S	Talus	
	25					25	N/S		
	50					50			
	75					75			
	200					800	N/S		
	25					25			
	50					50			
	75					75			
	300					900			
	25					25			
	50					50			
	25					75			
	400					10000			
	25					25	N/S		
	50					50			
	75					75			
11400N	10 500E					100			
						25			
11500N	9550E					50			
	75					75			
	600					200			
	25					25			
	50					50			
	75					75			

ANALYTICAL INSTRUCTIONS

ALL SAMRLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Au geochem + ICP
Run Talus & Rock geochem

RESULTS TO: Prince George

Central Cord District

Sheet 4 of 4

RECORD OF SAMPLE TRANSMITTAL

Lab Code _____

Date Shipped: _____

Date Received: _____

Shipped Via: Bus

No. of Cartons: _____

No. of Samples: 4

Geologist: R. Baerg

Date: Aug 9/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (Talus)

Project Todd Cr No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
11500N	10300E		Talus						
	25								
	50								
11500N	10375								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au geochem + ICP
Run Talus as Rock geochem

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Cr. (Mid Zone)

DATE Aug 9/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
5213	qtz-chl-hem alt volc, with abund subhed-euhed py.	10-15	grab	float								RB
5214	Massive banded py with minor mal-cpy	70-80	grab	float								RB
5215	f.g. chl volc with local dissem to coarse py-cpy, abund narrow qtz-cc veining.	5	grab	float			Au geochem + ICP					RB
5216	shear zone, 10-20cm wide, in f.g. chl volc with dissem and mass py +/- mal	10-15	grab	comp								RB
5217	as for 85216	10-15	grab	comp								RB
5218	as for 85216, 3-5% cpy, 10-40cm wide	15-20	grab	comp	Cu-Au Assay + ICP							RB
5219	silic. grey tuff, str. fract. with py-cc-qtz-gn-sph infilling	5-10	grab	comp	Pb-Zn-Ag-Au Assay + ICP							RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATIO. MPANY, LIMITED

N.T.S. 104A/4

PROPERTY Todd Cr (Mid Zone)

DATE Aug 11/87

ROCK SAMPLE REPORT

PROJECT: 281

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
5223	py-cpy-mal vein to 15cm wide, locally to 10% cpy	15-20	grab	comp	Cu-Au Assay + ICP							RB
5526	qtz-cc-s/st bx with 1-2% py 1-2% cpy	2-4	grab	float	Au geochem + ICP							RB
5527	lt gry silic tuff bx with qtz-py-cpy infilling, ~.5-1% cpy	5	grab	float								RB
5529	as for 85219, ~10-12% coarse sph, ~2% coarse gn	15	grab	float	Pb-Zn-Ag-Au Assay + ICP							RB
5533	qtz-py-cpy cobbles, 1-2% cpy 3-5% py.	5-7	grab	float	Cu-Au Assay + ICP							RB
5534	f.g. volc with 30-40% mass. f.g. py, tr.-.5% cpy, abund qtz-cc v.	30-40	grab	float	Au geochem + ICP							RB
5535	argillite bx 30-40% mass. f.g. py, local qtz-cc v., tr. cpy.	30-40	grab	float								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Cr (Mid Zone)

N.T.S. 104A/4

DATE Aug 11/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
85536	q-py-cpy vein cobble, ~2-3% cpy, 3-5% py	5-8	grab	float								RB
85537	GR Zone, qtz-py-cc bx vein with disscm and coarse cpy in & vein frags and matrix ~1-2% cpy	5	chip	.7m								RB
85538	as for 85537	5-7	chip	2.5m		Cut Au Assay + ICP						RB
85539	as for 85537	5-7	chip	2.5m								RB
85540	as for 85537	3-5	chip	1.8m								RB
85541	as for 85537	3-5	chip	3.4m								RB

G = GEOCHEM A = ASSAY

Samples sent previously

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104B/4

PROPERTY Todd (N. Mid Zone)

DATE Aug 3/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
85195	qtz-hem-py bx cobble, ~10% coarse py, 1-2% spec hem., tr cpy?	10	grab	float		Cu-Au Assay						RB
85196	sheared, qtz-cc-py-ser-chl alt vole with local py-cpy shears, zone is ~.5-1m wide	1-2	grab	comp		+ ICP						RB
85197	str fract silic. vole with py +/- cpy infilling and py-cpy along narrow shears, zone is 1-3m wide, host is cc-scr-qtz-py alt.	3-5	grab	comp								RB
85198	qtz-hem-py-cpy bx cobble	3-5	grab	float								RB
85199	"A" zone, qtz stringers and local qtz-chl bx veins tr. - 1% cpy	3-5	grab	comp								RB
85200	qtz-chl-py-cpy bx vein zone, tr. - 2% cpy "A", ~20m south of 85199	5-7	chip	1m								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104A/5

PROPERTY Todd Creek

DATE Aug 5/87

ROCK SAMPLE REPORT

PROJECT: 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
85201	as for 85200, ~115m south of 85199	5-7	chip	1m		Cu-Au ICP	Assay +					RB
85202	Silic volc (tuff?) with local mal. staining and hairline qtz-py-cpy veins	tr	grab	comp		Au geochem + ICP						RB
85203	1-20cm qtz v. with local mal-cpy	tr	grab	comp								RB
85204	calcite-qtz bx vein with cockscomb qtz and banded qtz-cc, tr cpy-mal.	tr	grab	comp								RB
85205	Silt											RB
85206	qtz-hem-py-cpy bx vein, center of vein is bx with abund cc, vein walls are banded qtz-hem-py-cpy. 5-10% spec hem, tr-2% cpy, tr-2% py "B Zone"	1-5	chip	1m		Cu-Au Assay + ICP						RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATIC MPANY, LIMITED

PROPERTY Todd Creek (N. Zone)

N.T.S. 104A/5

DATE Aug 5/87

PROJECT 281

ROCK SAMPLE REPORT

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
5207	as for 85206 "B Zone"	1-5	chip	1m								RB
						Cu-Au Assay +						
5208	as for 85206 "B Zone"	1-5	chip	1m								RB
						ICP						
5209	as for 85206 "B Zone"	1-5	chip	1.5m								RB

G = GEOCHEM A = ASSAY

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION:TODD CREEK

CODE :8709-001

Project No. : 281 Sheet:1 of 1 Date rec'd:AUG.25

Material :11 PANS Geol.:R.B. Date compl:SEPT.01

Remarks :

Values in PPM, except where noted.

T.T. No.		SAMPLE No.	SAMPLE wt(g)	PPB Au	Cu	Zn	Pb	Ag
2	PAN	80956	28.8	10	22	140	56	0.2
3		80960	40.7	10	20	80	8	0.2
4		80961	72.0	10	22	112	420	0.2
5		80963	52.6	10	24	92	20	0.2
6		80967	68.5	10	22	360	80	3.2
7		80969	47.6	10	12	140	80	0.2
8		80971	51.2	310	56	290	52	0.6
9		80988	61.4	10	22	94	10	0.2
10		80991	47.6	30	34	96	16	0.2
11		80996	55.2	10	14	110	12	0.2
12	PAN	80997	58.2	150	22	160	20	0.4

Virginia Cr

R.B. Pan-con: entire sample used for Au determination.
*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.

cc: Rob
file: TODD CRK
281

Central Cord District

Rk: (Cu, Au Assay) (30 ICP + Au)
Silt: 30 ICP + Au
PANS: BM, Au

PANS + 1

Sheet 1 of 1

Lab Code 8709-001

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

Date Shipped: ???
Date Received: Aug. 25/87
Shipped Via: Bus
No. of Cartons:
No. of Samples: 24
Geologist: R. Baerg
Date: Aug 18/87

MATERIAL:
☐ SOIL
☑ SILT
☑ ROCK
✓ Pan

Project Todd Cr (N. Zone) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
87526	Rock	Cu-Au Assay			80770	Silt			
~~27~~	~~"~~								
28	"								
29	"								
30	"								
31	"								
32	"								
33	"								
34	"								
80956	Pan								
57	Silt								
58	Silt								
59	Silt								
60	Pan								
61	Pan								
62	Silt								
63	Pan								
64	Silt								
65	Pan	listed but not found ???							
66	Silt								
67	Pan								
68	Silt								
69	Pan								

CBC 281
PMN 8709-001

ANALYTICAL INSTRUCTIONS
ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) + ___ + ___ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Rocks – Cu + Au Assay
Silt – Au geochem + ICP
Pan – Au, Ag, Cu, Pb, Zn, As, Co, Fe

RESULTS TO: Prince George

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION: TODD CREEK

CODE :8708-122

Project No. :281 Sheet:1 of 1 Date rec'd:AUG.21

Material :10 PANS Geol.:R.B. Date compl:AUG.28

Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Sample wt.(g)	PPB Au	Cu	Zn	Pb	Ag
52	85544	56.4	40	280	120	8	0.6
53	85546	79.2	300	260	100	300	0.4
54	85548	26.0	10	120	50	14	0.4
55	85550	44.6	10	12	180	130	0.2
56	86753	32.7	10	30	190	110	0.2
57	86755	17.3	50	78	92	40	0.2
58	86758	32.7	30	38	160	20	0.4
59	86762	44.5	10	30	98	10	0.4
60	86765	17.9	10	8	62	4	0.2
61	86767	41.0	10	28	150	18	0.2

Todd Cr Valley

N.B. Pan-con: entire sample used for Au determination.
*Cu, Zn, Pb, Ag values obtained from Aqua Regia sol'n.

cc: Rob

file: TODD - 281

PG DP 03/19

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SILT P2-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 25 1987 DATE REPORT MAILED: P-20 MESH, PULVERIZED Sept 1/87 ASSAYER. D. Toye. DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-122 281 File # 87-3585 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
85543 P	2	53	47	161	.3	4	13	1573	4.25	11	5	ND	3	33	1	2	2	42	.45	.096	16	4	.57	445	.01	8	1.18	.02	.17	1	22
85545 P	3	66	18	96	.1	6	16	1050	5.74	18	5	ND	4	30	1	2	3	56	.44	.111	12	4	.79	231	.01	7	1.31	.02	.14	1	5
85547 P	2	69	13	84	.1	5	16	971	5.81	15	5	ND	4	26	1	2	2	60	.47	.113	11	4	.85	210	.01	4	1.43	.02	.16	1	3
85549 P	3	43	14	42	.1	2	11	444	5.02	13	5	ND	2	28	1	2	2	54	.26	.058	6	7	.43	249	.04	4	.79	.01	.09	1	1
86751 P	5	23	38	213	.2	12	11	1526	4.38	37	5	ND	5	28	1	3	2	40	.32	.074	18	8	.53	246	.01	7	1.41	.02	.20	1	1
86752 P	5	20	23	168	.2	12	9	2880	3.54	40	5	ND	2	40	2	3	2	32	.68	.076	17	12	.37	305	.01	5	1.08	.01	.13	1	1
86754 P	5	24	22	160	.3	13	10	1412	4.57	37	5	ND	4	29	1	3	2	43	.34	.084	19	14	.57	298	.02	7	1.30	.02	.17	1	1
86756 P	3	37	26	153	.2	19	15	1481	5.00	61	5	ND	3	24	1	5	3	41	.33	.078	14	15	.54	361	.01	5	1.26	.01	.13	1	4
86757 P	5	37	41	142	.4	14	17	2076	5.87	72	5	ND	3	24	1	2	2	60	.35	.072	18	27	.99	272	.01	6	1.93	.02	.12	1	1
86759 P	2	30	26	138	.3	12	14	1450	4.43	41	5	ND	3	27	1	3	2	49	.37	.090	16	9	.59	348	.02	5	1.26	.02	.16	1	3
86763 P	2	33	28	121	.2	12	14	1334	4.32	27	5	ND	4	34	1	4	2	44	.44	.090	14	11	.63	346	.01	6	1.37	.02	.15	1	4
86766 P	2	17	19	90	.1	7	10	1378	3.30	15	5	ND	3	46	1	4	2	28	.83	.110	17	5	.39	455	.01	6	1.12	.02	.16	1	1
86768 P	2	35	29	185	.1	18	15	1284	4.37	22	5	ND	4	28	1	2	2	57	.48	.092	13	14	.79	339	.05	13	1.42	.02	.13	1	1
STD C	19	59	41	131	7.1	70	28	1040	4.04	37	17	7	36	50	19	18	22	58	.50	.091	36	58	.86	179	.08	33	1.90	.08	.13	12	-

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
80976	5	13	107	93	1.7	7	6	23	14.09	329	5	ND	5	4	1	2	11	3	.02	.003	9	8	.03	4	.01	11	.10	.02	.14	1	41
80977	5	32	16	9	.3	3	7	18	6.19	232	5	ND	4	5	1	2	3	3	.05	.005	11	1	.02	13	.01	2	.13	.03	.14	1	25
80978	5	14	495	267	1.1	3	7	73	8.99	578	5	ND	4	10	1	2	8	4	.13	.006	2	3	.02	8	.01	4	.14	.02	.16	1	119
80979	2	3	4	5	.5	4	5	20	4.51	135	5	ND	3	6	1	2	2	3	.04	.008	3	5	.02	16	.01	4	.15	.03	.15	1	13
80980	7	52	1233	52	1.5	5	19	118	14.30	975	5	ND	5	22	1	2	8	4	.51	.025	5	1	.04	4	.01	4	.16	.02	.18	1	71
80981	3	18	19	6	.3	3	6	18	4.99	236	5	ND	5	4	1	2	5	2	.01	.005	9	1	.01	11	.01	5	.13	.02	.14	1	7
80982	95	3	15	28	.1	1	2	620	26.41	29	5	ND	2	8	1	39	2	1	.11	.002	2	1	.05	72	.01	11	.01	.01	.03	7	1
80983	12	2734	62	104	1.3	6	30	1581	14.57	529	5	ND	3	114	1	2	3	36	2.68	.057	6	1	2.40	11	.01	11	1.19	.03	.22	3	111
80984	2	3697	13	207	1.4	2	11	2292	7.11	203	5	ND	1	585	2	210	2	14	14.56	.026	5	1	2.78	57	.01	6	.15	.01	.13	3	5
80985	2	7	15	10	.2	3	5	53	4.85	286	5	ND	5	8	1	2	3	3	.10	.016	11	2	.04	11	.01	3	.23	.02	.20	1	10
80986	30	234	25	16	.8	2	13	44	14.45	584	5	ND	4	7	1	2	4	3	.10	.004	7	1	.04	5	.01	40	.13	.03	.15	1	126
86760	250	377	90	101	7.3	11	52	1426	9.58	659	5	ND	1	128	1	5	2	17	3.81	.005	2	1	.10	7	.01	2	.09	.01	.08	.1	1
86761	25	231	7	20	.2	1	9	1539	5.58	32	5	ND	3	71	1	2	2	19	3.98	.015	12	1	.94	48	.01	10	.17	.02	.16	70	20
86764	13	2679	77	62	1.2	1	7	1354	5.05	72	5	ND	5	37	1	16	2	8	.66	.021	14	1	.32	146	.01	19	.23	.02	.20	1	63
86769	3	89	52	107	.5	2	5	299	15.54	811	5	ND	5	24	1	2	7	4	.91	.015	5	1	.12	5	.01	3	.14	.02	.16	1	108
86770	3	49	114	37	.4	4	9	72	19.21	455	5	ND	2	4	1	2	19	2	.06	.003	2	1	.06	3	.01	4	.06	.01	.09	1	530
86771	1	52	27	20	.7	3	8	62	16.18	770	5	ND	3	5	1	3	10	3	.08	.004	2	1	.05	3	.01	7	.14	.01	.15	1	270
86772	4	14	16	12	2.2	2	7	18	10.20	177	5	ND	4	3	1	2	3	3	.04	.009	3	1	.02	6	.01	11	.15	.01	.16	1	121
86773	6	13	13	9	1.4	2	7	26	8.75	100	5	ND	5	4	1	3	2	4	.06	.023	6	1	.02	7	.01	9	.19	.01	.18	1	37
86774	5	9	20	16	1.5	1	6	25	14.04	267	5	ND	6	5	1	2	3	4	.06	.024	2	1	.04	4	.01	10	.18	.01	.18	2	47
86775	5	9	35	25	.3	2	8	61	16.59	328	5	ND	3	4	1	2	6	3	.02	.008	2	1	.02	2	.01	9	.13	.01	.13	1	40
STD C/AU-R	18	58	41	131	7.0	68	27	1028	3.96	41	19	7	36	48	18	17	21	56	.48	.089	36	60	.87	172	.08	37	1.82	.08	.13	13	490

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Rock Chips AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 25 1987 DATE REPORT MAILED: Sept 1/87 ASSAYER. D. Toye ..DEAN TOYE. CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8708-122 281 File # 87-3585A

Store

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	CU %	AU OZ/T
B0987	1	439	8	33	.1	1	5	1206	4.19	17	5	ND	4	24	1	2	2	10	.90	.023	5	2	.47	102	.01	2	.57	.02	.21	7	.04	.012

Central Cord District

PAN. BM, Au

Sheet 1 of

Lab Code 8708-122

RECORD OF SAMPLE TRANSMITTAL

PANS

(P)

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☑ SILT
- ☑ ROCK
- ☒ Pan

Date Shipped:
Date Received: Aug 21/87
Shipped Via: Bus
No. of Cartons:
No. of Samples: 44
Geologist: R. Baerg
Date: Aug 16/87

Project Todd Cr No. 281

SAMPLE NOS./COORDS. FROM/~~LINE~~	TO/~~STATION~~	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
85543	Silt				86767	Pan			
44	Pan				68	Silt			
45	Silt				69	Rock			
46	Pan				70	"			
47	Silt				71	"			
48	Pan				72	"			
49	Silt				73	"			
855 50	Pan				74	"			
751	Silt				86775	"			
52	Silt	CBC			80976	"			
53	Pan			28	77	"			
54	Silt	SIL			78	"			
55	Pan		8708-122		79	"			
56	Silt				80	"			
57	Silt				81	"			
58	Pan				82	"			
59	Silt				83	"			
60	Rock				84	"	CBC	281	
61	"				85	"	PAN	8708-122	
62	Pan				80986	"			
63	Silt				80987				
64	Rock								
65	Pan								
66	Silt								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au geochem + ICP for Rx and Silt
Au, Ag, Pb, Zn, Cu, As, Co, Fe for Pan samples

15160

SEND IN BOX

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone) (Knob Zone)

N.T.S. 104A/4

DATE Aug 16/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐A☐	G☐A☐	G☐A☐	G☐A☐	G☐A☐	G☐A☐	G☐A☐	SAMPL BY
86760	silic volc bx with jasper-py.	5	grab	float								RB
86761	calcite-qtz-hem-py-cpy bx cobble, ~5% hem, 1-2% py, tr cpy	1-2	grab	float		Au geochem + ICP						RB
86764	qtz-cc altered volc with 1-3 mm qtz stkwk vein, locally 1-2% cpy	1-2	grab	float								RB
86769	qtz-ser-py alt. volc with 1-10cm wide qtz-py seams.	10	grab	comp			Knob Zone ↓					RB
86770	as for 86769	10	grab	comp								RB
86771	as for 86769	5-7	grab	comp								RB
86772	as for 86769	10	grab	comp								RB
86773	as for 86769	5-7	grab	comp								RB
86774	as for 86769	5-7	grab	comp								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (Knob Zone)

N.T.S. 104A/4

DATE Aug 16

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMP BY
86775	as for 86769	10	grab	comp								RB
80976	as for 86769	5-8	grab	comp								RB
80977	as for 86769	8-10	grab	comp		Au geochem + ICP						RB
80978	as for 86769	8-10	grab	comp								RB
80979	as for 86769	8-10	grab	comp								RB
80980	as for 86769	8-10	grab	comp								RB
80981	as for 86769	8-10	grab	comp								RB
80982	banded jasper-hematite boulder, tr py, 10-15% hem.	tr	grab	float								RB
80983	several 1-10cm qtz-bx-py veins tr mal	5-7	grab	comp								RB
80984	10-50cm wide cc-bx veins with local cpy +/- chalcocite	tr	grab	comp								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (Knob Zone)

N.T.S. 104A/4

DATE Aug 16/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMP BY
80985	as for 86769	10-12	grab	comp		Au geochem 4 ICP						RB
80986	as for 86769	10	grab	comp								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (South)

N.T.S. 104A/4

DATE Aug 17/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPL BY
80987	Quartz-hem bx with tr cpy, ~~tr~~ tr py. (Trench 20)	tr	chip	.6m		Cu-Au Assay + ICP						RB

G = GEOCHEM A = ASSAY

Todd G - N. Zone (RB) 8708-080

ACME ANALYTICAL LABORATORIES LTD.
52 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED AUGUST 17, 1987
DATE REPORTS MAILED Sept 9/87

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : ROCK
Au* - 10 GM, IGNITED, HOT AQUA REGIA LEACHED, MIBK EXTRACTION, AA ANALYSIS.

ASSAYER _____ DEAN TOYE . CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT 8708-080 281 FILE# 87-3365 PAGE# 3

SAMPLE	Au* ppb
85202	270
85203	450
85204	210

Note:
Corrected coordinates of Rx as requested (Acme did some in the previous file)

cc: Rob
file: Todd.

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED AUGUST 17 1987

DATE REPORTS MAILED Sept 09/87

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK

Au by FA. 1/2 A.T.

ASSAYER _____ DEAN TOYE , CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT 8708-080 281 FILE# 87-3365A PAGE# 1

SAMPLE	Cu %	Au oz/t	
85195	.22	.244	N. Mid Zone
85196	1.23	.007	
85197	1.91	.005	
85198	.35	.278	
85199	2.10	.200	A Zone
85200	2.85	.098	
85201	1.45	.048	
85206	.55	.027	B Zone
85207	.21	.086	
85208	1.67	.210	
85209	.23	.017	

8709-061

FOSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
S. Zone
PROJECT: 281 8709-061
Todd Cr (RB)
TYPE OF ANALYSIS: ASSAY

CERTIFICATE#: 87595
INVOICE#: 70086
DATE ENTERED: 87-09-21
FILE NAME: NOR87595
PAGE # : 1

PRE FIX	SAMPLE NAME	width	oz/t Au	oz/t Ag	% Cu
A	9251	m	0.010	0.02	0.04
A	9252	m	0.006	0.02	0.01
A	9253	m	0.018	0.02	0.03
A	9254	m	0.001	0.02	0.01
A	9255	m	0.001	0.02	0.01
A	9256	m	0.001	0.02	0.01
A	9257	m	0.001	0.02	0.01
A	81000		0.004	0.02	0.07
A	87535		0.001	0.02	1.34
A	87536		0.001	0.46	1.34
A	87537		0.001	0.02	0.02

TR21

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SEP 23 1987

cc: Rob
file Todd.

w/s 1½' 2.5'

CERTIFIED BY : J. Fossbacher

Central District

Cond 11 Rx

Assay: Cu, Ag, Au to PR

Sheet 1 of 1

Lab Code 8709-061

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK

Project Todd Cr S. Zone No. 281

Date Shipped: Sept 6
Date Received: Sept. 11/87
Shipped Via: Bus
No. of Cartons: 2 sacks
No. of Samples: 11
Geologist: R. Baerg
Date: Sept 6/87

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
81000									
87535									
36									
37									
9258									
52									
53									
54									
55									
56									
9257									

To PR Labs as turnaround time is faster than B.C.

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay

RESULTS TO: Prince George

15163

SEND IN BOX

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Creek #281

DATE Sept 2/87

South Zone **ROCK SAMPLE REPORT**

PROJECT: 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Cu	G☑ A☐ Ag	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
81000	v.f.g mass. py and f.-med. g spec. hem in a cherty, silic volc, tr. cpy, 10-20% hem	30	grab	float	✓	✓	✓					RB
87535	qtz-chl-py alt. lbl-fs porph with a 5cm qtz-cc-cpy-hem bx vein	1	grab	float	✓	✓	✓					RB
87536	semi-mass py-cpy in a silic maroon-red hem. matrix ~3-5% cpy.	35	grab	float	✓	✓	✓					RB
87537	qtz-py +/- hem-cpy bx vein along 022/65W shear.	5-10	grab	comp	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104A/4

DATE Sept 6/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9251	qtz-cc +/- chl ~~actin~~, py alter bbl-fs porph., local qtz-hem +/- cpy veins from 1mm to 10cm. Trench 21	tr-1	chip	1m	✓	✓	✓					RB
9252	as for 9251, veins from 1mm - 1cm	tr-1	chip	1m	~~.005~~	~~.2~~	.01					RB
9253	as for 9252	tr-1	chip	1m	~~.018~~	~~.2~~	.03					RB
9254	as for 9252	tr-1	chip	1m	✓	✓	✓					RB
9255	as for 9252	tr-1	chip	1m	✓	✓	✓					RB
9256	as for 9252	tr-1	chip	1m	✓	✓	✓					RB
9257	as for 9252	tr-1	chip	1m	✓	✓	✓					RB
Samples 9251-57 are contiguous from East to West.												

G = GEOCHEM A = ASSAY

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

8709 - 069

REPORT: 427-7630 — Todd Cr. S. Zone (RB) — PROJECT: 281 — PAGE 1

SAMPLE NUMBER	ELEMENT UNITS (Width)	Au GMT	Ag GMT	Cu PCT	
R2 9258	1m	<0.07	1.0	0.01	} Tr 21
R2 9259	1m	<0.07	<0.7	0.04	
R2 9260	[illegible]	1.78	<0.7	0.05	Tr 21
R2 9261	[illegible]	<0.07	<0.7	0.01	Tr 22
R2 9262	[illegible]	<0.07	<0.7	0.02	} Tr 23
R2 9263	[illegible]	0.75	<0.7	0.04	
R2 9264	[illegible]	0.31	<0.7	0.03	
R2 9265	[illegible]	<0.07	<0.7	0.01	
R2 9266	[illegible]	0.24	<0.7	0.07	
R2 9267	[illegible]	<0.07	<0.7	0.01	
R2 9268	[illegible]	<0.07	<0.7	0.02	
R2 9269	[illegible]	0.55	<0.7	0.10	
R2 9270	1.3	0.34	<0.7	0.02	
R2 9271	[illegible]	0.38	<0.7	0.01	
R2 9272	[illegible]	0.14	<0.7	0.01	
R2 9273	1.3	0.34	<0.7	0.01	
R2 9274	1	0.75	<0.7	0.03	} .87/2m
R2 9275	1	0.99	<0.7	0.06	
R2 9276	0.8	0.14	<0.7	<0.01	
R2 9277	1	0.93	<0.7	0.04	} Tr 25
R2 9278	1	3.26	<0.7	0.20	1.38/4m or 1.6/3m or 2.1/2m
R2 9279	1	0.62	<0.7	0.02	
R2 9280	1	0.69	<0.7	0.03	
R2 9281	1.6	0.21	<0.7	0.04	

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control

file 281

Registered Assayer, Province of British Columbia

Central District

Cold.

24Rx

Assay: Cu, Ag, Au to BFC

Sheet 1 of 1

Lab Code 8709-069

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK

(P)

Project Todd Cr. (S. Zone) No. 281

Date Shipped: Sept 9/87
Date Received: Sept. 14/87
Shipped Via: Bus
No. of Cartons: 3 sacks +1
No. of Samples: 18
Geologist: R. Baerg
Date: Sept 8/87

SAMPLE NOS./COORDS. FROM/~~LINE~~	TO/~~STATION~~	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
9258	9275								

RUSH

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: ~~(Cu, Pb, Zn, Mo, Ag)~~ ☐
~~(Cu, Pb, Zn, Mo, Ag)~~ +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay!
(Bondar - Clegg)

RESULTS TO: Prince George

15161

SEND IN BOX

Central District

Cord

Sheet 1 of 1

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Sept 10/87

Date Received:

Shipped Via: Bus

No. of Cartons: 1 sack

No. of Samples: 6

Geologist: R. Baerg

Date: Sept 9/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ~~ROCK~~

Project Todd Cr. (S. Zone) No. 281

SAMPLE NOS./COORDS. FROM/~~LINE~~	TO/~~STATION~~	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
9276	9281								

Rush

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar-Clegg)

15165

SEND IN BOX

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104A/4

DATE Sept 8/87.

PROJECT: 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au	G☐ A☐ Ag	G☐ A☐ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9267	as for 9258, 7-10% vein	.5-1	chip	1.5m	✓	✓	✓					RB
	Trench 23A											
9268	as for 9258, 5% vein	.5-1	chip	1m	✓	✓	✓					RB
	Trench 23B											
9269	as for 9258, 20% vein	1-2	chip	.6m	✓	✓	✓					RB
	Trench 23B											
9270	as for 9258, 7-10% vein	.5-1	chip	1.3m	✓	✓	✓					RB
	Trench 23B											
9271	as for 9258, 20-25% vein	1-2	chip	1m	✓	✓	✓					RB
	Trench 23C											
9272	as for 9258, 10-12% vein	.5-1	chip	1m	✓	✓	✓					RB
	Trench 23C											
		.5-1	chip	1.3m	✓	✓	✓					RB
9273	as for 9258, 8-10% vein											
	Trench 23C											
9274	as for 9258, 12-15% vein	.5-1	chip	1m	✓	✓	✓					RB
	Trench 23D											
9275	as for 9258, 12-15% vein	.5-1	chip	1.1m	✓	✓	✓					RB
	Trench 23D											

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Creek (S. Zone)

DATE Sept 8/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9258	qtz-chl alt. bbl-fs porph with local 1-2cm qtz-hem-cpy veins (Trench 21)	tr-1	chip	1m	✓	✓	✓					RB
9259	as for 9258 (Trench 21)	tr.1	chip	1m	✓	✓	✓					RB
9260	as for 9258, abund qtz-hem-cpy veins and bx veins from 1-10cm, ~10% vein, .5-1% cpy (Trench 24)	1-2	chip	2.7m	✓	✓	✓					
:		~~1-2~~	~~chip~~	~~1.5m~~								RB
9261	as for 9258, several .5-5cm qtz-hem-cpy-cc vein, 3-5% vein Trench 22	.5-1	chip	1.5m	✓	✓	✓					
9262	as for 9258 3-5% vein Trench 23A	.5-1	chip	1m	✓	✓	✓					RB
9263	as for 9258, 12-15% vein Trench 23A	.5-1	chip	1m	✓	✓	✓					RB
9264	as for 9258, 5-7% vein Trench 23A	.5-1	chip	1m	✓	✓	✓					RB
9265	as for 9258, 2-5% vein Trench 23A	.5-1	chip	1m	✓	✓	✓					RB
9266	as for 9258, 12-15% vein Trench 23A	.5-1	chip	1m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104A/4

PROPERTY Todd Creek (S. Zone)

DATE Sept 9/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9276	qtz-ch l+/- ser alt. hbl-fs porph with local .1-2cm qtz-hem-cc-cpy veins, ~5% vein (Trench 25)	tr-1	chip	.8m	✓	✓	✓					RB
9277	as for 9276, ~25% vein (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9278	as for 9276, ~50% vein (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9279	qtz-hbl-fs porph bx, qtz-hem ~~fracture~~ bx vein, hem -cc +/- cpy infilling (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9280	as for 9279 (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9281	silic, str. fract hbl-fs porph with abund .1-1cm qtz-hem-cc-+/- cpy vein, ~10% vein (Trench 25)	tr-1	chip	1.6m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

NTC 87-2 8709-087

Todd Cr (RB)

REPORT: 427-8027 | PROJECT: 281 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 16031		0.82	<0.7	0.10
D2 16032		0.07	<0.7	0.09
D2 16033		<0.07	<0.7	0.05
D2 16034		<0.07	<0.7	0.03
D2 16035		0.82	<0.7	0.03
D2 16036		<0.07	<0.7	0.04
D2 16037		0.07	<0.7	0.01
D2 16038		<0.07	<0.7	0.02
D2 16039		0.45	<0.7	0.03
D2 16040		0.17	<0.7	0.01
D2 16041		0.31	<0.7	0.03
D2 16042		0.86	<0.7	0.06
D2 16043		0.34	<0.7	0.08
D2 16044		0.10	<0.7	0.01
D2 16045		0.51	<0.7	0.04
D2 16046		0.24	<0.7	0.01
D2 16047		0.24	<0.7	0.02
D2 16048		0.17	<0.7	0.01
D2 16049		0.55	<0.7	0.01
D2 16050		0.17	<0.7	0.01
D2 16051		0.10	<0.7	0.01
D2 16052		0.99	<0.7	0.32 /1.86m } 2.83gm/t / 1.36m
D2 16053		4.42	1.0	0.38 /1.5m
D2 16054		0.27	<0.7	0.03
D2 16055		0.31	<0.7	0.04
D2 16056		0.24	<0.7	0.14
D2 16057		4.59	0.7	0.24 /1.5m } 4.10gm/t / 2.0m
D2 16058		2.64	0.7	0.28 /.5
D2 16059		0.48	<0.7	0.05
D2 16060		<0.07	<0.7	0.01
D2 16061		<0.07	<0.7	0.01
D2 16062		<0.07	<0.7	<0.01
D2 16063		<0.07	<0.7	<0.01
D2 16064		<0.07	<0.7	0.01
D2 16065		<0.07	<0.7	0.01

RECEIVED OCT 21 1987

cc Rob
file: 281

20/10 PC 8P

[signature]

Central District

Assay: Cu, Ag, Au to B/C

Sheet 1 of 1

Lab Code 87-09-087

Cord
35 Cores

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Sept 15/87
Date Received: Sept 21/87
Shipped Via: Bus
No. of Cartons: 4
No. of Samples: 35
Geologist: R. Bacrg
Date: Sept 14/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☐ SOIL
☐ SILT
☑ ROCK (Core)

Project Todd Cr (NTC-87-2) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16031	2.74 - 5.50				16055	31.20 - 32.20			
32	5.50 - 7.00				56	32.20 - 33.10			
33	7.00 - 8.50				57	33.10 - 34.60			
34	8.50 - 10.00				58	34.60 - 35.10			
35	10.00 - 10.50				59	35.10 - 36.10			
36	10.50 - 12.00				60	36.10 - 37.60			
37	12.00 - 13.50				61	37.60 - 39.10			
38	13.50 - 14.54				62	37.10 - 40.60			
39	14.54 - 16.04				63	40.60 - 42.10			
40	16.04 - 17.82				64	42.10 - 43.60			
41	17.82 - 18.82				65	43.60 - 45.72			
42	18.82 - 19.82								
43	19.82 - 20.82								
44	20.82 - 21.56								
45	21.56 - 22.56								
46	22.56 - 23.56								
47	23.56 - 24.56								
48	24.56 - 25.56								
49	25.56 - 26.56								
50	26.56 - 27.56								
51	27.56 - 28.84								
52	28.84 - 29.70								
53	29.70 - 30.20								
16054	30.20 - 31.20								

RUSH!!

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar-Clegg)

15168

SEND IN BOX

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

NTC 87-1   8709-073

Todd Co (RB)

REPORT: 427-7683   PROJECT: 281   PAGE 1

SAMPLE NUMBER	ELEMENT UNITS width (m)	Au GMT	Ag GMT	Cu PCT
R2 9282	1.1	0.62	<0.7	0.01
R2 9283	1.0	0.62	<0.7	0.02
R2 9284	1.0	0.62	<0.7	0.03
R2 9285	1.0	1.82	<0.7	0.05
R2 9286	1.0	3.15	0.7	0.22
R2 9287	1.0	0.14	<0.7	0.02
R2 9288	1.0	0.24	<0.7	0.02
R2 9289	1.0	<0.07	1.0	0.01
R2 9290	1.0	<0.07	<0.7	0.01
R2 9291	1.0	0.24	<0.7	0.01
R2 9292	1.0	0.27	<0.7	0.05
R2 9293	1.0	<0.07	<0.7	<0.01
R2 9294	1.0	0.58	0.7	0.10
R2 9295	1.0	0.07	<0.7	0.02
R2 9296	1.0	0.27	<0.7	0.03
R2 9297	1.0	<0.07	<0.7	0.02
R2 9298	1.0	<0.07	<0.7	0.01
R2 9299	1.0	<0.07	1.4	<0.01
R2 9300	1.0	<0.07	1.4	0.01
R2 9301	1.0	0.10	2.1	0.02
R2 9302	1.0	<0.07	0.7	<0.01
R2 9303	1.0	<0.07	<0.7	0.02
R2 9304	1.0	0.07	<0.7	0.02
R2 9305	0.8	0.07	<0.7	0.03
R2 9306		1.10	0.7	0.04
R2 9307	1.0	0.07	<0.7	0.01
R2 9308	1.0	0.31	<0.7	0.11
R2 9309	1.0	0.24	<0.7	0.03
R2 9310	1.0	0.21	1.4	0.08
R2 9311	0.9	<0.07	<0.7	0.01
D2 16001		<0.07	<0.7	<0.01
D2 16002		<0.07	<0.7	<0.01
D2 16003		<0.07	<0.7	<0.01
D2 16004		0.72	<0.7	0.08
D2 16005		0.45	<0.7	0.03
D2 16006		<0.07	<0.7	0.01
D2 16007		<0.07	<0.7	<0.01
D2 16008		<0.07	<0.7	<0.01
D2 16009		<0.07	<0.7	0.03
D2 16010		0.10	<0.7	0.01

Tr 26: 1.37/5m, 2.5/2m

Tr 27

Tr 28

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 16011		0.24	<0.7	0.01
D2 16012		<0.07	<0.7	0.03
D2 16013		<0.07	<0.7	0.02
D2 16014		<0.07	<0.7	0.01
D2 16015		0.10	<0.7	0.06
D2 16016		0.17	<0.7	<0.01
D2 16017		0.07	<0.7	0.11
D2 16018		0.17	<0.7	0.05
D2 16019		0.41	<0.7	0.13
D2 16020		0.45	<0.7	0.10
D2 16021		<0.07	<0.7	0.02
D2 16022		<0.07	<0.7	0.01
D2 16023		<0.07	<0.7	0.01
D2 16024		<0.07	<0.7	<0.01
D2 16025		<0.07	<0.7	<0.01
D2 16026		0.72	<0.7	0.20
D2 16027		<0.07	<0.7	<0.01
D2 16028		<0.07	<0.7	<0.01
D2 16029		<0.07	<0.7	<0.01
D2 16030		<0.07	<0.7	<0.01

rec: Rob

file: 281

11.06

Registered Assayer, Province of British Columbia

Central Cord District

Assay: Cu, Ag, Au to B/C

Sheet 1 of 1

Lab Code 8709-073

RECORD OF SAMPLE TRANSMITTAL

30 Rx
80 Cores

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

Completion date: 08/10
W 427-7683

MATERIAL:
☐ SOIL
☐ SILT
☑ ROCK + Core

(P)

Project Todd Cr No. 281

Date Shipped: Sept 13/87
Date Received: Sept-16/87
Shipped Via: Bus
No. of Cartons: 7 Sacks
No. of Samples: 40
Geologist: R. Baerg
Date: Sept 12/87

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS. Au Ag	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16021	32.30	33.80	<0.07 <0.7						
22	33.80	35.30	" "						
23	35.30	36.80	" "						
24	36.80	38.87	" "						
25	38.87	40.37	" "						
26	40.37	41.60	0.12 <0.7						
27	41.60	43.10	<0.07 <0.7						
28	43.10	44.60	" "						
29	44.60	46.10	" "						
16030	46.10	48.20	" "						
9282	9311								

-NTC-
87-1

RUSH !!

427-7683
60 samples.

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +___+___ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar-Clegg)

15167

SEND IN BOX

Central District

Sheet 1 of 1

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Sept 11/87

Date Received:

Shipped Via: Bus

No. of Cartons:

No. of Samples: 20

Geologist: R Baerg

Date: Sept 11/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr (NTC-87-1) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS. Au	Ag	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16001	1.22 - 4.22		<0.07	<0.7						
02	4.22 - 7.22		--	--						
03	7.22 - 8.81		--	--						
04	8.81 - 10.24		0.72	<0.7						
05	10.24 - 11.87		0.45	<0.7						
06	11.87 - 12.54		<0.07	<0.7						
07	12.54 - 14.04		-	-						
08	14.04 - 14.99		--							
09	14.99 - 16.49		-	-						
10	16.49 - 18.12		0.10	<0.7						
11	18.12 - 19.62		0.24	<0.7						
12	19.62 - 21.12		<0.07	<0.7						
13	21.12 - 22.62		-	-						
14	22.62 - 24.12		-	-						
15	24.12 - 25.62		0.10	<0.7						
16	25.62 - 27.17		0.17	<0.7						
17	27.17 - 28.67		0.07	<0.7						
18	28.67 - 30.17		0.17	<0.7						
19	30.17 - 31.67		0.41	<0.7						
20	31.67 - 32.30		0.45	<0.7						

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐

(Cu, Pb, Zn, Mo, Ag) +__+__ ☐

(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:

Au, Ag, Cu Assay

15166

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104A/14

PROPERTY Todd Cr. (S. Zone) DATE Sept 12/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9282	Mixed qtz+hbl-fs porph bx, local narrow qtz-hem-ser-cpy v., ~50% qtz-bx (Trench 26)	tr	chip	1.1m	✓	✓	—					RB
9283	as for 9282, qtz-hem-cpy bx v. to 6cm, ~25-30% qtz bx, 5-10% qtz v. (Trench 26)	tr	chip	1m	✓	✓	—					RB
9284	as for 9282, 10-15% qtz bx, 10% qtz v. (Trench 26)	tr	chip	1m	✓	✓	—					RB
9285	as for 9284 (Trench 26)	tr	chip	1m	✓	—	—					RB
9286	as for 9284 (Trench 26)	tr	chip	1m	✓	—	—					RB
9287	hbl-fs porph, chl-ser +/- qtz alt., local narrow qtz-hem-cpy v. 3-5% qtz v. (Trench 27)	tr	chip	1m	—	—	—					RB
9288	as for 9287, 1-8cm qtz-hem-cpy bx v., 10-12% qtz v (Trench 27)	tr	chip	1m	✓	—	—					RB
9289	as for 9287, ~1% qtz v. (Trench 27)	tr	chip	1m	✓	—	—					RB
9290	as for 9287, 1-2% qtz v. (Trench 27)	tr	chip	1m	✓	—	—					RB
9291	as for 9287, ~2% qtz. v., (Trench 27)	tr	chip	1m	✓	—	—					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORA. COMPANY, LIMITED

N.T.S. 104A/9

PROPERTY Todd Cr. (S. Zone)

DATE Sept 12/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9292	as for 9287, 8-10% qtz v., (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9293	as for 9287, 2-3% qtz v., (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9294	as for 9287, 3-5% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9295	as for 9287, 2-3% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9296	as for 9287, 8-10% qtz v., (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9297	as for 9287, 2-3% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9298	as for 9287, 5-7% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9299	as for 9287, 3-5% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9300	as for 9287, 3-5% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9301	as for 9287, 5-7% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB
9302	as for 9287, 2-3% qtz v. (Trench 27)	tr	chip	1m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Cr (S. Zone)

N.T.S. 104 A/4

DATE Sept 12/87

PROJECT: 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9303	as for 9287, 2-3% qtz v. (Trench 22)	tr	chip	1m	✓	✓	✓					RB
9304	as for 9287, 8-10% qtz v. (Trench 22)	tr	chip	1m	✓	✓	✓					RB
9305	as for 9287, 3-5% qtz v. (Trench 22)	tr	chip	.8m	✓	✓	✓					RB
9306	as for 9287, 12-15% qtz v (Trench 11 Exten.)	tr	chip	1m	✓	✓	✓					RB
9307	as for 9287, 2-3% qtz v. (Trench 11 Exten)	tr	chip	1m	✓	✓	✓					RB
9308	as for 9287, 12-15% qtz v. (Trench 11 Exten.)	tr	chip	1m	✓	✓	✓					RB
9309	as for 9287, 10-12% qtz v. (Trench 11 Exten)	tr	chip	1m	✓	✓	✓					RB
9310	as for 9287, 8-10% qtz v. (Trench 11 Exten)	tr	chip	1m	✓	✓	✓					RB
9311	as for 9287, 3-5% qtz v. (Trench 11 Exten.)	tr	chip	.9m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone (604) 985-0681
Telex 04-352667

BONDAR-CLEGG

Certificate of Analysis

NTC 87-3.

8709-102

REPORT: 427-8061 | Todd Cr/S.Zone (RB) | PROJECT: 281 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS (width)	Au GMT	Ag GMT	Cu PCT		SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT	
R2 9312	0.9	<0.07	<0.7	0.02	Tr 13	D2 16080		<0.07	<0.7	0.01	
R2 9313	1.0	<0.07	<0.7	0.01		D2 16081		0.51	<0.7	0.02	
R2 9314	1.0	<0.07	<0.7	0.04		D2 16082		<0.07	<0.7	<0.01	
R2 9315	1.0	<0.07	<0.7	0.01		D2 16083		3.12	<0.7	0.11	/1m
R2 9316	0.9	0.81	0.7	0.30	/.9m	D2 16084		1.03	<0.7	0.12	/1m
R2 9317	1.0	0.34	<0.7	0.02	.154/2m	D2 16085		0.17	0.7	0.01	
R2 9318	1.0	0.10	<0.7	0.01		D2 16086		0.14	<0.7	0.01	
R2 9319	1.0	0.10	<0.7	0.01		D2 16087		0.07	<0.7	0.01	
R2 9320	1.2	0.31	<0.7	0.02		D2 16088		<0.07	<0.7	0.01	
R2 9321	1.0	2.06	1.0	0.02	/1m	D2 16089		<0.07	<0.7	0.01	
R2 9322	1.0	0.31	<0.7	0.12	/1m Tr 29	D2 16090		<0.07	<0.7	0.01	
R2 9323	1.0	0.72	<0.7	0.19	/1m	D2 16091		2.26	<0.7	0.10	/1.24m
R2 9324	1.3	0.82	<0.7	0.06		D2 16092		0.07	<0.7	0.02	
R2 9325	1.0	0.10	0.7	0.22	/1m	D2 16093		<0.07	<0.7	0.01	
R2 9326	1.0	0.21	<0.7	0.08		D2 16094		0.65	<0.7	0.04	
R2 9327	1.0	0.65	<0.7	0.08		D2 16095		0.21	<0.7	0.02	
R2 9328	1.0	0.07	<0.7	0.02		D2 16096		<0.07	<0.7	0.02	
R2 9329	1.0	0.10	<0.7	0.06		D2 16097		0.07	<0.7	0.01	
R2 9330	0.9	0.07	<0.7	0.07	Tr	D2 16098		0.07	<0.7	0.01	
R2 9331	1.0	<0.07	<0.7	<0.01		D2 16099		5.86	1.7	0.40	/.72m
R2 9332	1.0	<0.07	<0.7	<0.01		D2 16100		0.10	5.1	0.03	
R2 9333	1.0	<0.07	<0.7	<0.01		D2 16101		0.10	<0.7	0.01	
R2 9334	1.0	<0.07	<0.7	<0.01		D2 16102		<0.07	<0.7	<0.01	
R2 9335	1.0	<0.07	0.7	<0.01		D2 16103		<0.07	<0.7	<0.01	
R2 9336	1.0	<0.07	<0.7	0.02							
R2 9337	1.0	<0.07	<0.7	0.01							
D2 16066		<0.07	<0.7	<0.01							
D2 16067		<0.07	<0.7	0.01							
D2 16068		0.82	<0.7	0.06							
D2 16069		0.14	<0.7	<0.01							
D2 16070		0.07	<0.7	0.02							
D2 16071		<0.07	<0.7	0.01							
D2 16072		0.45	<0.7	0.04	*						
D2 16073		<0.07	<0.7	0.02							
D2 16074		0.34	<0.7	0.06							
D2 16075		<0.07	<0.7	0.02							
D2 16076		0.10	<0.7	0.02							
D2 16077		0.07	<0.7	0.01							
D2 16078		0.07	<0.7	0.01							
D2 16079		0.72	<0.7	0.01							

RECEIVED OCT 21 1987

cc Rob
file 281

2c/o PE 3F

NORANDA EXPLORATION COMPANY, LIMITED

Assay - Cu, Ag, Au
TO B.C.

Sheet 1 of _____

Central District
Coal
26 Rx
38 Cores

Lab Code 8709-102

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: ??

Date Received: Sept. 23/87

Shipped Via: Bus

No. of Cartons: 10 (LAB)

No. of Samples: ??

Geologist: R. Baerg

Date: Sept 15/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK

(P)

Project Todd Cr (CS-Zone) No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
9312	9324								
9325	9337								

RUSH

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: ~~(Cu, Pb, Zn, Mo, Ag)~~ ☐
~~(Cu, Pb, Zn, Mo, Ag)~~ + ___ + ___ ☐
~~(Cu, Pb, Zn, Mo, Ag)~~ + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar-Clegg)

NORANDA EXPLORATION COMPANY, LIMITED

Contra / Cord District

Sheet 1 of 1

RECORD OF SAMPLE TRANSMITTAL

Lab Code

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Creek (NTC-82-3) No. 281

Date Shipped: ???
Date Received: ???
Shipped Via: Bus.
No. of Cartons: ???
No. of Samples: ???
Geologist: R. Baerg
Date: Sept 17/87

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16066	1.22 - 2.50				16090	29.80 - 31.56			
67	2.50 - 3.50								
68	3.50 - 4.00								
69	4.00 - 5.50								
70	5.50 - 7.00								
71	7.00 - 8.50								
72	8.50 - 9.00								
73	9.00 - 10.50								
74	10.50 - 11.50								
75	11.50 - 12.50								
76	12.50 - 14.00								
77	14.00 - 15.50								
78	15.50 - 17.00								
79	17.00 - 18.10								
80	18.10 - 19.10								
81	19.10 - 19.60								
82	1960 - 21.30								
83	21.30 - 22.30								
84	22.30 - 23.30								
85	23.30 - 24.30								
86	24.30 - 25.30								
87	25.30 - 26.80								
88	26.80 - 28.30								
16089	28.30 - 29.80								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, ~~Pb, Zn~~, Mo, Ag) ☐
(Cu, ~~Pb, Zn~~, Mo, Ag) +___+___ ☐
(Cu, ~~Pb, Zn~~, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay.
(Bondar - Clegg)

Central Coast District

Sheet 1 of 1

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Sept 18/87

Date Received:

Shipped Via: Bus

No. of Cartons: 2

No. of Samples: ??

Geologist: R. Baerg

Date: Sept 18/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr. (NTC-87-3) No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16091	31.56 - 32.80								
92	32.80 - 34.00								
93	34.00 - 35.00								
94	35.00 - 36.00								
95	36.00 - 37.00								
96	37.00 - 38.00								
97	38.00 - 39.00								
98	39.00 - 39.60								
99	39.60 - 40.32								
16100	40.32 - 42.06								
01	42.06 - 45.06								
02	45.06 - 48.06								
03	48.06 - 51.21								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐

(Cu, Pb, Zn, Mo, Ag) +___+___ ☐

(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar - Clegg)

15171

NORANDA EXPLORAT. OMPANY, LIMITED

N.T.S. 104A/4

PROPERTY Todd Creek (S. Zone)

DATE Sept 15/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9312	Hornblende-Feldspar porphyry chl-ser-hem alt., with local .1-.3 cm qtz v. (Trench 13 Exten) ~1% qtz v.	tr	chip	.9m	✓	✓	✓					RB
9313	as for 9312, ~1-2% qtz v. (Trench B Exten)	tr	chip	1m	✓	✓	✓					RB
9314	as for 9312, ~2-3% qtz v. (Trench B Exten)	tr	chip	1m	✓	✓	✓					RB
9315	as for 9312, ~3-5% qtz v. (Trench B Exten)	tr	chip	1m	✓	✓	✓					RB
9316	Qtz-hem-cpy +/- py bx v, ~.1-.5% cpy (Trench B, resample 15171)	5	chip	.9m	✓	✓	✓					RB
9317	Hbl-Fs-porph, chl-ser +/- si alt, 10-12% qtz-hem-cpy v. (Trench B, resample 15171)	.1-.5	chip	1m	✓	✓	✓					RB
9318	as for 9317 10-12% qtz-hem-cpy v. (Trench B, resample 15171)	.1-.2	chip	1m	✓	✓	✓					RB
9319	as for 9317, 15-20% qtz v. (resample Trench B, 15170)	.1-.2	chip	1m	✓	✓	✓					RB
9320	as for 9317, 15-20% qtz v. (Trench B, resample 15170)	.1-.2	chip	1.2m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104A/4

DATE Sept 15/87

PROJECT: 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9321	Mixed qtz-hem-cpy v. stkwk breccia and hbl-fs porph bx, .1-.3% cpy, 40-50% qtz v. and bx v. (Trench 29)	1-2	chip	1m	✓	✓	✓					RB
9322	as for 9321, 20-25% qtz v and bx v., .1-.2% cpy	.5-1	chip	1m	✓	✓	✓					RB
9323	as for 9321 50-60% qtz v. and bx v., .3-.5% cpy	1-2	chip	1m	✓	✓	✓					RB
9324	as for 9321, 30-40% qtz v. and bx v., .1-.3% cpy	1-2	chip	1.3m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORAT. . OMPANY, LIMITED

N.T.S. 104A/4

PROPERTY Todd Creek (S. Zone)

DATE Sept 16/87.

ROCK SAMPLE REPORT

PROJECT: 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9325	Hbl-Fs porph., qtz-ser-chl alt., 3-5% qtz v. (Trench 1)	tr	chip	1m	✓	✓	✓					RB
9326	as for 9325, 3-5% qtz v	tr	chip	1m	✓	✓	✓					RB
9327	as for 9325, 15-20% qtz v, 1-10cm qtz bx v.	1	chip	1m	✓	✓	✓					RB
9328	as for 9325, 8-10% qtz v.	tr	chip	1m	✓	✓	✓					RB
9329	as for 9325, 3-5% qtz v.	tr	chip	1m	✓	✓	✓					RB
9330	as for 9325, 1-2% qtz v	tr	chip	.9m	✓	✓	✓					RB
9331	as for 9325, 2-3 "	tr	chip	1m	✓	✓	✓					"
9332	as for 9325, 2-3 "	tr	chip	1m	✓	✓	✓					"
9333	as for 9325, 1-2 "	tr	chip	1m	✓	✓	✓					"
9334	as for 9325, 1-2 "	tr	chip	1m	✓	✓	✓					"
9335	as for 9325, 1-2 "	tr	chip	1m	✓	✓	✓					"
9336	as for 9325, 2-3 "	tr	chip	1m	✓	✓	✓					"
9337	as for 9325, 3-5 "	tr	chip	1m	✓	✓	✓					"

G = GEOCHEM A = ASSAY

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Ca V7P 2R5
T- (604) 985-0681
04-352667

BONDAR-CLEGG

Certificate of Analysis

4

REPORT: 427-8156 | PROJECT: 281 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT	
D2 16104		<0.07	<0.7	0.01	
D2 16105		<0.07	<0.7	0.02	
D2 16106		<0.07	<0.7	<0.01	
D2 16107		0.10	<0.7	0.06	
D2 16108		<0.07	<0.7	<0.01	
D2 16109		<0.07	<0.7	<0.01	
D2 16110		<0.07	<0.7	<0.01	
D2 16111		1.71	<0.7	0.35	/ 0.5m
D2 16112		0.07	<0.7	0.01	
D2 16113		<0.07	<0.7	<0.01	
D2 16114		0.07	<0.7	<0.01	
D2 16115		<0.07	<0.7	<0.01	
D2 16116		<0.07	<0.7	<0.01	
D2 16117		<0.07	<0.7	<0.01	
D2 16118		<0.07	<0.7	<0.01	
D2 16119		<0.07	<0.7	<0.01	
D2 16120		<0.07	<0.7	<0.01	
D2 16121		<0.07	<0.7	<0.01	
D2 16122		<0.07	<0.7	0.02	
D2 16123		<0.07	<0.7	<0.01	
D2 16124		<0.07	<0.7	<0.01	
D2 16125		0.27	<0.7	0.08	
D2 16126		0.21	<0.7	0.07	
D2 16127		0.21	<0.7	0.20	/ 1.5m
D2 16128		<0.07	<0.7	0.05	
D2 16129		<0.07	<0.7	0.05	
D2 16130		<0.07	<0.7	0.09	
D2 16131		0.34	<0.7	0.72	/ 0.5m } .5% Cu/1.5m
D2 16132		0.07	<0.7	0.38	/ 1m }
D2 16133		0.10	<0.7	0.05	
D2 16134		1.34	0.7	0.14	/ 1.53m 0.47 oz/t } .036/2.5m
D2 16135		0.48	<0.7	0.04	/ 1m .017 }
D2 16136		0.27	<0.7	<0.01	
D2 16137		0.17	<0.7	<0.01	
D2 16138		0.07	<0.7	<0.01	
D2 16139		1.41	<0.7	0.06	/ .53m
D2 16140		0.07	<0.7	0.02	
D2 16141		<0.07	<0.7	0.02	

RECEIVED
OCT 22 1987
RESOURCES

Central District

Cond.

38 Cores

Assay: Cu, Ag, Au to B/C

Sheet 1 of 1

Lab Code 87-005

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: ???

Date Received: Sept. 28/87

Shipped Via: Bus

No. of Cartons: ??? (5 LAB!)

No. of Samples: ???

Geologist: R. Baerg

Date: Sept 20/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☐ SOIL
☐ SILT
☑ ROCK (core)

Project Todd Cr. (NTC-87-4) No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16104	.3 - 2.5			
05	2.5 - 4.0			
06	4.0 - 5.5			
07	5.5 - 6.0			
08	6.0 - 8.25			
09	8.25 - 9.75			
10	9.75 - 11.15			
11	11.15 - 11.65			
12	11.65 - 12.65			
13	12.65 - 14.15			
14	14.15 - 15.65			
15	15.65 - 17.15			
16	17.15 - 18.67			
17	18.67 - 20.17			
18	20.17 - 21.67			
19	21.67 - 23.17			
20	23.17 - 24.67			
21	24.67 - 25.60			
22	25.60 - 27.10			
23	27.10 - 28.60			
24	28.60 - 29.40			
16125	29.40 - 30.20			
26	30.20 - 31.20			
27	31.20 - 32.70			
16128	32.70 - 33.70			
29	33.70 - 34.70			
30	34.70 - 35.20			
31	35.20 - 35.70			
32	35.70 - 36.70			
33	36.70 - 37.47			
34	37.47 - 39.00			
35	39.00 - 40.00			
36	40.00 - 41.00			
37	41.00 - 42.00			
38	42.00 - 43.00			
39	43.00 - 43.53			
40	43.53 - 45.00			
16141	45.00 - 46.50			

RUSH!!

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐

(Cu, Pb, Zn, Mo, Ag) +___+___ ☐

(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:

Au, Ag, Cu Assay

(Bmdn - Clegg)

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
04-352667

BONDAR-CLEGG

Certificate of Analysis

NTC-87-4 8710-013

REPORT: 427-8192 Todd G (RB) PROJECT: 281 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 16142		0.10	<0.7	0.02
D2 16143		<0.07	<0.7	<0.01
D2 16144		<0.07	<0.7	<0.01
D2 16145		<0.07	<0.7	<0.01
D2 16146		0.10	<0.7	<0.01
D2 16147		<0.07	<0.7	0.01

RECEIVED OCT 21 1987

cc: Rob

file: 281

Registered Assayer, Province of British Columbia

Central District

Assay: Cu, Ag, Au
Tobe

Sheet 1 of 1

Lab Code 8710-013

RECORD OF SAMPLE TRANSMITTAL

6 Cores

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Date Shipped:
Date Received: Sept 30/87
Shipped Via: Bus
No. of Cartons: 1
No. of Samples: 6
Geologist: R Baerg
Date: Sept 24/87

Project Todd Cr No. 281
NTS-87-4

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16142	46.50 - 47.71								
43	47.71 - 49.71								
44	49.71 - 51.46								
45	51.46 - 53.96								
46	53.96 - 56.46								
16147	56.46 - 58.52								

Rush

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay
(Bondar-Clegg)

15173

SEND IN BOX

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Fax: 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 427-8189

PROJECT: 281 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT	
D2 16155		1.47	<0.7	0.09	
D2 16164		0.55	<0.7	0.02	
D2 16165		<0.07	<0.7	0.01	
D2 16166		<0.07	<0.7	0.02	
D2 16167		<0.07	<0.7	0.01	
D2 16168		0.45	<0.7	0.06	
D2 16169		0.65	<0.7	0.05	
D2 16170		0.75	<0.7	0.12	
D2 16171		<0.07	<0.7	0.01	
D2 16172		0.17	<0.7	0.37	
D2 16173		5.97	1.0	0.68	1.5m
D2 16174		0.41	<0.7	0.48	
D2 16175		0.17	<0.7	0.04	
D2 16176		0.27	<0.7	0.03	
D2 16177		0.93	<0.7	0.03	
D2 16178		0.10	<0.7	0.01	
D2 16179		0.21	<0.7	0.03	
D2 16180		0.45	<0.7	0.04	
D2 16181		<0.07	<0.7	0.03	50.77 – 51.77
D2 16182		0.17	<0.7	0.06	51.77 – 52.77
D2 16183		<0.07	<0.7	0.08	52.77 – 53.77
D2 16184		<0.07	<0.7	0.02	53.77 – 55.32 1.55
D2 16185		<0.07	0.7	0.02	
D2 16186		11.93	3.4	1.50	1.73m

Registered Assayer, Province of British Columbia

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

8710-011

NTC 87-5,6
Gold Cr (RB)

REPORT: 127-8189 | PROJECT: 281 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Au PPB
D2 16148		191	0.8	<5
D2 16149		109	0.3	<5
D2 16150		62	0.2	<5
D2 16151		150	1.6	140
D2 16152		29	0.2	<5
D2 16153		320	0.1	<5
D2 16154		195	0.2	<5
D2 16156		131	0.1	<5
D2 16157		92	<0.1	10
D2 16158		62	0.2	<5
D2 16159		15	<0.1	<5
D2 16160		82	0.1	<5
D2 16161		28	<0.1	<5
D2 16162		5	0.2	<5
D2 16163		51	<0.1	<5
D2 16187		580	0.7	20
D2 16188		82	0.5	10
D2 16189		59	0.6	5
D2 16190		39	0.4	<5
D2 16191		16	0.2	<5
D2 16192		265	<0.1	150
D2 16193		9	0.1	<5
D2 16194		6	0.1	<5
D2 16195		24	0.1	<5
D2 16196		1550	<0.1	100
D2 16197		92	0.2	<5
D2 16198		19	<0.1	<5
D2 16199		84	<0.1	<5
D2 16200		11	<0.1	<5
D2 16201		33	<0.1	<5
D2 16202		61	0.1	5
D2 16203		52	0.1	<5
D2 16204		20	<0.1	<5
D2 16205		5	<0.1	<5

5

6

16 DP

Sheet 1 of 1

Central / Cord District

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Sept 26/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

Date Received:

Shipped Via: Bus

No. of Cartons: 3

No. of Samples: 21/54

Geologist: R. Baerg

Date: Sept 26/87

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr No. 281

SAMPLE NOS /COORDS. FROM/LINE	SAMPLE NOS /COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16185	55.36 - 57.09		Assay		16204	18.31 - 19.81		Geochem	
86	57.09 - 58.59				05	19.81 - 21.31			
87	58.59 - 60.09		Geochem						
88	60.09 - 61.59								
89	61.59 - 63.09								
90	63.09 - 64.59								
91	64.59 - 66.45								
NTC-87-5									
NTC-87-6									
16192	0.00 - 3.0		Geochem						
93	3.0 - 4.5								
94	4.5 - 6.0								
95	6.0 - 6.87								
96	6.87 - 7.81								
97	7.81 - 9.31								
98	9.31 - 10.81								
99	10.81 - 12.31								
200	12.31 - 13.81								
01	13.81 - 15.31								
02	15.31 - 16.81								
03	16.81 - 18.31								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay or Geochem as noted (Bondar - Clegg)

RESULTS TO: Prince George

1517E

SEND IN BOX

Geoch or Assay. Cu, Ag, Au to B & C

Sheet 1 of 1

Central Coast District

Lab Code 8710-011

54 Cores
57

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

Date Shipped: ?
Date Received: Sept. 30/87
Shipped Via: Bus
No. of Cartons:
No. of Samples: 33/54
Geologist: R. Berg
Date: Sept 24/87

MATERIAL:
- [ ] SOIL
- [ ] SILT
- [x] ~~ROCK~~ (core)

Project Todd Cr No. 281
NTC-87-5

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16148	.3	- 2.62	Geochem		16172	42.39	- 43.77	Assay	
49	2.62	- 5.12	Geochem		73	43.77	- 44.27	Assay	
50	5.12	- 7.32	Geochem		74	44.27	- 44.77	Assay	
51	7.32	- 9.32	Geochem		75	44.77	- 45.77	Assay	
52	9.32	- 10.82	Geochem		76	45.77	- 46.77	Assay	
53	10.82	- 12.32	Geochem		77	46.77	- 47.77	Assay	
54	12.32	- 14.17	Geochem		78	47.77	- 48.77	Assay	
55	14.17	- 15.37	Assay		79	48.77	- 49.77	Assay	
56	15.37	- 16.61	Geochem		80	49.77	- 50.77		
57	16.61	- 18.26	Geochem						
58	18.26	- 20.26	Geochem						
59	20.26	- 22.26	Geochem						
60	22.26	- 24.26	Geochem		INCLUDED BUT NOT LISTED				
61	24.26	- 26.26	Geochem		(LAB)				
62	26.26	- 28.26	Geochem						
63	28.26	- 30.39	Geochem		16181	to 16184			
64	30.39	- 31.89	Assay						
65	31.89	- 33.39	Assay						
66	33.39	- 34.89	Assay						
67	34.89	- 36.39	Assay						
68	36.39	- 37.89	Assay						
69	37.89	- 39.39	Assay						
70	39.39	- 40.89	Assay						
16171	40.89	- 42.39	Assay						

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: ~~(Cu, Pb, Zn, Mo, Ag)~~ [ ]
~~(Cu, Pb, Zn, Mo, Ag)~~ + ___ + ___ [ ]
(Cu, Pb, Zn, Mo, Ag) + AS NOTED [ ]

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:

Cu, Au, Ag Assay or Geochem as noted
(Bondar-Clegg)

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
Phone (604) 986-0681
Telex 352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 427-8593

PROJECT: 281 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 16211		<0.07	<0.7	<0.01
D2 16212		<0.07	<0.7	<0.01
D2 16213		<0.07	<0.7	<0.01
D2 16214		<0.07	<0.7	<0.01
D2 16215		<0.07	<0.7	<0.01
D2 16216		<0.07	<0.7	<0.01
D2 16217		<0.07	<0.7	<0.01
D2 16218		<0.07	<0.7	<0.01
D2 16219		<0.07	<0.7	<0.01
D2 16220		<0.07	<0.7	<0.01
D2 16221		<0.07	<0.7	<0.01
D2 16222		0.23	<0.7	0.07
D2 16223		0.31	<0.7	0.19
D2 16224		0.21	1.2	0.08
D2 16225		0.10	<0.7	0.03
D2 16226		0.10	<0.7	0.02
D2 16227		0.82	<0.7	0.05
D2 16228		3.3	0.7	0.34

Bondar-Clegg & Company Ltd.
[illegible] Pemberton Ave.
Vancouver, B.C.
[illegible] V7P 2R5
: (604) 985-0681
: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

8710-030

REPORT: 127-8593 | Todd Co (RB) | PROJECT: 281 | PAGE 1

NTS 82 E

SAMPLE NUMBER	ELEMENT	Cu	Ag	Au
	UNITS	PPM	PPM	PPB
02-16206		23	<0.1	5
02-16207		17	<0.1	5
02-16208		26	<0.1	5
02-16209		19	<0.1	5
02-16210		31	<0.1	20

7/10 86 2F

Central Cod District

23 Cores

Geochem Assay: Cu, Ag, Au to B's L

Sheet 1 of 1

Lab Code 87/0-030

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: ?

Date Received: Oct.07/87

Shipped Via: Bus

No. of Cartons: 2 (LABS!)

No. of Samples: 23

Geologist: R. Bacon

Date: Sept 28/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
16206	21.31 - 23.81								
07	23.81 - 25.31		Geochem						
08	25.31 - 26.81								
09	26.81 - 28.31								
10	28.31 - 29.86								
11	29.86 - 31.36								
12	31.36 - 32.86								
13	32.86 - 34.36								
14	34.36 - 35.86								
15	35.86 - 37.36								
16	37.36 - 38.36								
17	38.36 - 39.36								
18	39.36 - 40.36								
19	40.36 - 41.36								
20	41.36 - 42.36		Assay						
21	42.36 - 43.66								
22	43.66 - 44.46								
23	44.46 - 45.56								
24	45.56 - 46.56								
25	46.56 - 47.56								
26	47.56 - 48.83								
27	48.83 - 49.60								
28	49.60 - 50.10								

NTS-87-6

Rush!!

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +___+___ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay on Geochem as noted (Bondar-Clegg)

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
[illegible]: (604) 985-0681
[illegible] 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 427-8735

PROJECT: 281 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 16229		<0.07	<0.7	0.04
D2 16230		<0.07	<0.7	<0.01
D2 20064		0.07	<0.7	<0.01
D2 20065		<0.07	<0.7	<0.01
D2 20066		<0.07	<0.7	0.01
D2 20067		<0.07	<0.7	<0.01
D2 20068		<0.07	<0.7	0.01
D2 20069		0.10	<0.7	0.03
D2 20070		0.07	<0.7	0.10
D2 20071		0.07	<0.7	0.05
D2 20072		0.07	<0.7	0.04
D2 20073		<0.07	<0.7	<0.01
D2 20074		<0.07	<0.7	0.01
D2 20075		<0.07	<0.7	0.01
D2 20076		0.14	<0.7	0.01
D2 20077		7.89	1.0	0.38
D2 20078		0.10	<0.7	0.01
D2 20079		0.21	<0.7	0.02
D2 20080		0.51	7.2	0.04
D2 20081		0.10	<0.7	<0.01
D2 20082		<0.07	1.4	<0.01
D2 20083		0.10	<0.7	0.05
D2 20084		0.21	<0.7	0.10
D2 20085		4.01	0.7	0.23
D2 20086		0.07	<0.7	<0.01
D2 20126		<0.07	<0.7	<0.01
D2 20127		0.07	0.7	0.07
D2 20128		<0.07	<0.7	<0.01
D2 20129		<0.07	<0.7	
D2 20130		<0.07	2.7	
D2 20131		<0.07	5.1	0.03
D2 20132		<0.07	0.7	0.04
D2 20133		<0.07	<0.7	0.13
D2 20134		<0.07	<0.7	<0.01
D2 20135		<0.07	<0.7	0.01
D2 20136		0.07	<0.7	0.04
D2 20137		0.07	<0.7	<0.01
D2 20138		1.13	<0.7	0.02
D2 20139		7.30	0.7	0.26
D2 20140		11.69	1.4	0.48
D2 20141		10.05	1.0	0.31
D2 20142		5.38	0.7	0.09
D2 20143		5.07	2.7	0.20

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
[illegible]: (604) 985-0681
[illegible]: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

NTC 87-6,7 8710-048

REPORT: 127-8735 Todd Cr (RB) PROJECT: 281 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Au PPB
D2 16231		23	0.1	20
D2 16232		17	0.1	15
D2 16233		6	0.1	<5
D2 16234		3	<0.1	<5
D2 16235		1	0.1	<5
D2 16236		22	0.1	130
D2 16237		2	<0.1	<5
D2 16238		2	<0.1	<5
D2 16239		5	<0.1	20
D2 16240		23	0.1	<5
D2 16241		77	<0.1	580
D2 16242		8	<0.1	20
D2 16243		9	<0.1	<5
D2 16244		20	0.1	<5
D2 16245		156	<0.1	100
D2 16246		1300	<0.1	260
D2 16247		635	0.1	150
D2 16248		205	<0.1	<5
D2 16249		89	<0.1	<5
D2 16250		56	0.1	<5
D2 20051		58	0.1	<5
D2 20052		6	<0.1	<5
D2 20053		7	0.1	<5
D2 20054		136	0.1	<5
D2 20055		30	0.1	<5
D2 20056		250	0.2	95
D2 20057		30	0.2	10
D2 20058		113	0.8	40
D2 20059		127	0.5	<5
D2 20060		8	0.1	<5
D2 20061		23	0.1	<5
D2 20062		13	0.1	<5
D2 20063		15	0.1	<5
D2 20087		39	<0.1	<5
D2 20088		5	<0.1	<5
D2 20089		4	<0.1	<5
D2 20090		7	0.1	<5
D2 20091		7	0.1	<5
D2 20092		2	<0.1	<5
D2 20093		2	<0.1	<5

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Au PPB
D2 20094		1	0.1	<5
D2 20095		7	0.1	<5
D2 20096		15	0.1	<5
D2 20097		10	0.1	10
D2 20098		5	0.1	<5
D2 20099		2	0.1	<5
D2 20100		27	0.1	<5
D2 20101		24	0.1	<5
D2 20102		6	0.1	<5
D2 20103		54	<0.1	10
D2 20104		14	0.1	<5
D2 20105		67	0.1	<5
D2 20106		88	<0.1	15
D2 20107		11	0.1	<5
D2 20108		6	0.1	<5
D2 20109		3	<0.1	<5
D2 20110		4	0.1	<5
D2 20111		2	<0.1	<5
D2 20112		2	<0.1	<5
D2 20113		4	<0.1	<5
D2 20115		6	<0.1	<5
D2 20116		181	<0.1	110
D2 20117		11	<0.1	<5
D2 20118		2	0.1	<5
D2 20119		2	0.1	<5
D2 20120		44	<0.1	<5
D2 20121		525	0.2	30
D2 20122		460	0.2	15
D2 20123		32	0.2	<5
D2 20124		81	0.1	<5
D2 20125		29	0.1	15
D2 20144		34	<0.1	<5
D2 20145		79	<0.1	<5
D2 20146		14	<0.1	<5
D2 20147		158	0.1	<5
D2 20148		4	0.1	<5
D2 20149		17	<0.1	<5
D2 20150		14	<0.1	<5

NORANDA EXPLORATION COMPANY, LIMITED

Assay/Geoch: Cu, Ag Au to B-C

Rush

Sheet 1 of 2

Central Coast District

Lab Code 8710-048

122 Cores

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

(P)

Date Shipped: Oct 5/87
Date Received: Oct. 15/87
Shipped Via: Bus
No. of Cartons: 9+1
No. of Samples: 66
Geologist: R. Baerg
Date: Oct 2/87

MATERIAL:
- [ ] SOIL
- [ ] SILT
- [x] ROCK (core)

Project Todd Cr. No. 281

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
NTC-87-6					16250	13.47	-14.97		
16229	50.10	-51.34	Assay		20051	14.97	-16.47		
30	51.34	-52.84			52	16.47	-17.97		
31	52.84	-54.34			53	17.97	-19.47		
32	54.34	-55.84			54	19.47	-20.97		
33	55.84	-57.34			55	20.97	-22.71		
34	57.34	-58.84	Geochem		56	22.71	-24.21	Geochem	
35	58.84	-60.34			57	24.51	-25.71		
36	60.34	-61.84			58	25.71	-27.21		
37	61.84	-63.34			59	27.21	-28.47		
38	63.34	-64.84			60	28.47	-29.97		
39	64.84	-66.45			61	29.97	-31.47		
					62	31.47	-32.97		
NTC-87-7					63	32.97	-34.66		
16240	0.00	-2.00			64	34.66	-36.16		
41	2.00	-3.50			65	36.16	-37.66		
42	3.50	-5.00			66	37.66	-39.16		
43	5.00	-6.50			67	39.16	-40.66		
44	6.50	-7.68	Geochem		68	40.66	-42.16	Assay	
45	7.68	-8.68			69	42.16	-43.66		
46	8.68	-9.68			70	43.66	-45.16		
47	9.68	-10.68			71	45.16	-46.66		
48	10.68	-11.97			72	46.66	-48.16		
49	11.97	-13.47			20073	48.16	-49.66		

ANALYTICAL INSTRUCTIONS

- [ ] ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag)
- [ ] (Cu, Pb, Zn, Mo, Ag) + ___ + ___
- [ ] (Cu, Pb, Zn, Mo, Ag) + AS NOTED

SPECIAL INSTRUCTIONS OR REMARKS: Au, Ag; Cu Assay or Geochem as noted. (Bondar-Clegg)

RESULTS TO: Prince George

NORANDA EXPLORATION COMPANY, LIMITED

Sheet 2 of 2

Central District

Core

RECORD OF SAMPLE TRANSMITTAL

Lab Code

Date Shipped: Oct 5/87

Date Received:

Shipped Via: Bus

No. of Cartons: 9

No. of Samples: 66

Geologist: R. Baerg

Date: Oct 4/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr. No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
NTC-87-7									
20074	49.66 - 51.16								
75	51.16 - 52.66								
76	52.66 - 53.44								
77	53.44 - 54.04								
78	54.04 - 55.04								
79	55.04 - 56.04								
80	56.04 - 57.04			Assay					
81	57.04 - 58.04								
82	58.04 - 59.04								
83	59.04 - 60.04								
84	60.04 - 60.98								
85	60.98 - 62.48								
86	62.48 - 64.00								
87	64.00 - 65.50								
88	65.50 - 67.00								
89	67.00 - 68.50			Geochem					
90	68.50 - 70.00								
91	70.00 - 71.50								
92	71.50 - 72.52								
93	72.52 - 74.02								
20094	74.02 - 75.59								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay or Geochem as noted
(Bondar-Clegg)

NORANDA EXPLORATION COMPANY, LIMITED

Sheet 1 of 2

Central District
Cord.

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Oct 8/87

Date Received:

Shipped Via: Bus

No. of Cartons: 5 +2

No. of Samples: 56

Geologist: R. Baerg

Date: Oct 7/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr No. 281
NTC-87-8

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
20095	0.0 - 2.50				20119	37.13 - 38.63			
96	2.50 - 4.0				20	38.63 - 39.59			
97	4.0 - 5.5				21	39.59 - 41.09			
98	5.5 - 7.0				22	41.09 - 42.49		Geochem	
99	7.0 - 8.5				23	42.49 - 43 99			
100	8.5 - 10.52				24	43.99 - 45.49			
1	10.52 - 12.02				25	45.49 - 46.11			
2	12.02 - 13.52				26	46.11 - 47.11			
3	13.52 - 14.63				27	47.11 - 48.11			
4	14.63 - 16.13				28	48.11 - 49.11			
5	16.16 - 17.63		Geochem		29	49.11 - 50.11			
6	17.63 - 19.13				30	50.11 - 51.11			
7	19.13 - 20.63				31	51.11 - 52.11			
8	20.63 - 22.13				32	52.11 - 53.11			
9	22.13 - 23.63				33	53.11 - 54.11		Assay	
10	23.63 - 25.13				34	54.11 - 55.11			
11	25.13 - 26.63				35	55.11 - 56.11			
12	26.63 - 28.13				36	56.11 - 57.11			
13	28.13 - 31.13				37	57.11 - 58.11			
14	Missing				38	58.11 - 58.92			
15	31.13 - 32.63				39	58.92 - 59.92			
16	32.63 - 34.13				40	59.92 - 60.92			
17	34.13 - 35.63				41	60.92 - 61.92			
201 18	35.63 - 37.13				201 42	61.92 - 62.92			

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +___+___ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay or Geochem as noted
(Bondar-Clegg)

RESULTS TO: Prince George

NORANDA EXPLORATION COMPANY, LIMITED

Sheet 2 of 2

Central District

Cord.

Lab Code

RECORD OF SAMPLE TRANSMITTAL

Date Shipped: Oct 8/87

Date Received:

Shipped Via: Bus

No. of Cartons: 5

No. of Samples: 56

Geologist: K. Berg

Date: Oct 8/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr. NTC-87-8 No. 281

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
20143	62.92 + 64.26		Assay						
44	64.26 + 65.76								
45	65.76 + 67.26								
46	67.26 + 68.76		Geochem						
47	68.76 + 70.26								
48	70.26 + 71.76								
49	71.76 + 73.26								
50	73.26 + 75.59								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐

(Cu, Pb, Zn, Mo, Ag) + ___ + ___ ☐

(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:

Au, Ag, Cu Assay or Geochem as noted.
(Bondar-Clegg)

Bondar-Clegg & Company Ltd.
130 [illegible]berton Ave.
N[illegible] [illegible]couver, B.C.
C[illegible] [illegible]P 2R5
[illegible] [illegible]04) 985-0681
Te[illegible] [illegible]4-352667

BONDAR-CLEGG

Certificate of Analysis

9

REPORT: 427-8745

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	Cu PCT
D2 20200		1.71	<0.7	0.11
D2 20201		6.21	1.4	0.97
D2 20202		1.61	<0.7	0.50
D2 20203		0.38	<0.7	0.10
D2 20204		5.49	1.0	0.28
D2 20205		0.21	<0.7	0.03
D2 20206		0.27	<0.7	0.07
D2 20207		0.10	<0.7	0.07
D2 20208		8.16	108.0	0.57
D2 20209		0.72	<0.7	0.10
D2 20210		1.89	<0.7	0.18

ZONE A: 3.065 Au, 7.02 Ag, .434 Cu / 4.19 m

ZONE B: 5.673 Au, 66.66 Ag, .415 Cu / 2.61 m

Print all

3.5/

Bondar-Clegg & Company Ltd.
[illegible] Pemberton Ave.
[illegible] Vancouver, B.C.
V7P 2R5
: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

NTC 87-9
Todd Cr (RB)

8710-050

REPORT: 127-8745

PROJECT: 281

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Au PPB
D2 20151		17	0.1	10	D2 20191		17	0.1	<5
D2 20152		4	<0.1	<5	D2 20192		19	0.1	<5
D2 20153		6	0.1	<5	D2 20193		4	0.2	<5
D2 20154		19	0.1	<5	D2 20194		4	<0.1	20
D2 20155		19	0.1	5	D2 20195		3	0.1	5
D2 20156		66	0.1	5	D2 20196		10	<0.1	20
D2 20157		115	<0.1	<5	D2 20197		79	<0.1	25
D2 20158		215	<0.1	10	D2 20198		97	0.1	15
D2 20159		182	0.2	35	D2 20199		500	0.2	70
D2 20160		66	0.1	440	D2 20211		179	<0.1	10
D2 20161		6	0.1	<5	D2 20212		465	<0.1	15
D2 20162		7	0.1	<5	D2 20213		47	0.1	<5
D2 20163		68	0.1	<5	D2 20214		54	<0.1	<5
D2 20164		102	0.1	<5	D2 20215		215	0.1	15
D2 20165		8	0.1	<5	D2 20216		90	0.1	<5
D2 20166		12	0.1	<5	D2 20217		42	0.2	10
D2 20167		10	0.1	<5	D2 20218		9	0.1	<5
D2 20168		270	0.1	<5					
D2 20169		102	0.1	<5					
D2 20170		100	0.1	1350					
D2 20171		210	<0.1	60					
D2 20172		68	<0.1	<5					
D2 20173		67	0.1	<5					
D2 20174		148	2.2	<5					
D2 20175		9	0.2	<5					
D2 20176		64	<0.1	<5					
D2 20177		114	0.3	<5					
D2 20178		280	0.3	90					
D2 20179		18	<0.1	<5					
D2 20180		14	<0.1	<5					
D2 20181		34	0.1	20					
D2 20182		470	<0.1	10					
D2 20183		5800	<0.1	190					
D2 20184		240	0.8	20					
D2 20185		88	0.8	40					
D2 20186		7	0.1	10					
D2 20187		18	0.2	<5					
D2 20188		28	<0.1	<5					
D2 20189		47	<0.1	<5					
D2 20190		174	1.8	110					

23/m PG 3P

NORANDA EXPLORATION COMPANY, LIMITED

Assay/Geoch: Cu, Ag, Au
Tod Cr

Sheet 1 of 2

Central District
Cord
68 Cores

Lab Code 8710-050

RECORD OF SAMPLE TRANSMITTAL

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
☐ SOIL
☐ SILT
☑ ROCK

Date Shipped: Oct 13/87
Date Received: Oct 16/87
Shipped Via: Freightways
No. of Cartons: 5
No. of Samples: 68
Geologist: R. Baerg
Date: Oct 10/87

Project Todd Cr. No. 281
NTC-87-9

SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
20151	0.0 - 1.5				20175	35.17 - 36.67			
52	1.5 - 3.0				76	36.67 - 38.47			
53	3.0 - 4.5				77	38.47 - 39.57			
54	4.5 - 6.0				78	39.57 - 41.53			
55	6.0 - 7.21				79	41.53 - 43.03			
56	7.21 - 8.71				80	43.03 - 45.17			
57	8.71 - 10.21				81	45.17 - 47.78			
58	10.21 - 11.27				82	47.78 - 48.91			
59	11.27 - 12.77				83	48.91 - 49.91			
60	12.77 - 14.27				84	49.91 - 50.91			
61	14.27 - 15.77		Geochem		85	50.91 - 52.10		Geochem	
62	15.77 - 17.27				86	52.10 - 53.60			
63	17.27 - 18.77				87	53.60 - 55.10			
64	18.77 - 20.27				88	55.10 - 56.60			
65	20.27 - 21.77				89	56.60 - 58.10			
66	21.77 - 23.27				90	58.10 - 59.60			
67	23.27 - 24.69				91	59.60 - 61.10			
68	24.69 - 26.19				92	61.10 - 62.60			
69	26.19 - 27.69				93	62.60 - 64.45			
70	27.69 - 29.17				94	64.45 - 65.90			
71	29.17 - 30.67				95	65.90 - 66.90			
72	30.67 - 32.17				96	66.90 - 67.90			
73	32.17 - 33.67				97	67.90 - 68.90			
74	33.67 - 35.17				98	68.90 - 69.90			

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) + ___ + ___ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: France George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay on geochem as noted.
(Bondar-Clegg)

NORANDA EXPLORATION COMPANY, LIMITED

Sheet 2 of 2

Central District

Cord.

RECORD OF SAMPLE TRANSMITTAL

Lab Code

Date Shipped: Oct 13/87

Date Received:

Shipped Via: Freightways

No. of Cartons: 5

No. of Samples: 68

Geologist: R. Baerg

Date: Oct 16/87

NORANDA EXPLORATION COMPANY, LIMITED
P.O. BOX 2380
1050 DAVIE STREET
VANCOUVER, B.C.
V6B 3T5

MATERIAL:
- ☐ SOIL
- ☐ SILT
- ☑ ROCK (core)

Project Todd Cr No. 281
NTS 93-9

SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT	SAMPLE NOS./COORDS. FROM/LINE	SAMPLE NOS./COORDS. TO/STATION	N.T.S. NOS.	G.C.I. NOS.	ADD ELEMENT
~~20088~~	~~68.90~~								
20129	69.90 - 70.97		Geochem						
200	70.97 - 71.47								
01	71.47 - 72.47								
02	72.47 - 73.47								
03	73.47 - 74.47								
04	74.47 - 75.16		Assay						
05	75.16 - 76.16								
06	76.16 - 77.16								
07	77.16 - 78.29								
08	78.29 - 79.09								
09	79.09 - 80.09								
10	80.09 - 80.90								
11	80.90 - 82.40								
12	82.40 - 83.90								
13	83.90 - 85.40								
14	85.40 - 86.90		Geochem						
15	86.90 - 88.40								
16	88.40 - 89.90								
17	89.90 - 91.40								
18	91.40 - 92.96								

ANALYTICAL INSTRUCTIONS

ALL SAMPLES: (Cu, Pb, Zn, Mo, Ag) ☐
(Cu, Pb, Zn, Mo, Ag) +__+__ ☐
(Cu, Pb, Zn, Mo, Ag) + AS NOTED ☐

RESULTS TO: Prince George

SPECIAL INSTRUCTIONS OR REMARKS:
Au, Ag, Cu Assay or Geochem as noted.
(Bondar-Clegg)

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone) (Knob Zone)

N.T.S. 104 A/4

DATE Aug 16/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
86760	silic volc bx with jasper-py	5	grab	float								RB
86761	calc, fr qtz hrm-py-cpy bx rubble, ~5% hrm, 1-2% py, tr cpy	1-2	grab	float								RB
86764	qtz-cc altered volc with 1-5 mm qtz stockwork vein, locally 1-2% cpy	1-2	grab	float								RB
86769	qtz-ser-py alt volc with 1-10 cm wide qtz-py seams	10	grab	comp								RB
86770	as for 86769	10	grab	comp								RB
86771	as for 86769	5-7	grab	comp								RB
86772	as for 86769	10	grab	comp								RB
86773	as for 86769	5-7	grab	comp								RB
86774	as for 86769	5-7	grab	comp								RB

Au geochem Dx

ICP

Knob Zone

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (Knob Zone)

N.T.S. 104 A/4

DATE Aug 16

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
86775	as for 86769	10	grab	comp								RB
80976	as for 86769	5-8	grab	comp								RB
80977	as for 86769	8-10	grab	comp		Au geochem + ICP						RB
80978	as for 86769	8 10	grab	comp								RB
80979	as for 86769	8-10	grab	comp								RB
80980	as for 86769	8-10	grab	comp								RB
80981	as for 86769	8-10	grab	comp								RB
80982	banded jasper-hematite boulder, tr py 10-15% hem	tr	grab	float								RB
80983	several 1-10cm qtz-bx-py veins tr mal	5-7	grab	comp								RB
80984	10-50cm wide cc-bx veins with local cpy +/- chalcocite	tr	grab	comp								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (Knob Zone)

N.T.S. 104A/4

DATE Aug 16/87

PROJECT: 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
30985	as for 86769	10-12	grab	comp		Au geochem + ICP			✓			RB
30986	as for 86769	10	grab	comp								RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (South)

N.T.S. 104A/4

DATE Aug 17/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
80987	Quartz-brm bx with tr cpy, tr~~p~~	tr	chip	.6m		Cu-Au Assay						RB
	~~tr~~ py (Trench 20)						1					
						TCP						

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104A/5

PROPERTY Todd Creek (N. Zone)

DATE Aug 18/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Cu	G☐ A☑ Au	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
87526	Trench 2, resample of sample 55458, qtz-chl-hem-py-cpy hx vein	5	chip	.3m	✓	✓						RB
87527	Trench 2, resample of sample 55460, as for 87526	5-7	chip	1.1m	✓	✓						RB
87528	qtz-py-cpy vein and hx	3-5	grab	comp	✓	✓						RB
87529	Trench 1, resample of sample 55464, as for 87526	5-7	chip	.6m	✓	✓						RB
87530	Trench 1, resample of sample 55465 as for 87526	10	chip	2m	✓	✓						RB
87531	as for 87526	5	chip	.3m	✓	✓						RB
87532	as for 87526	5-7	chip	2m	✓	✓						RB
87533	grab of qtz-hem-chl-py-cpy hx vein material from Hole 2	2-3	grab	comp	✓	✓						RB
87534	as for 87533, Hole #1	2-3	grab	comp	✓	✓						RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Creek #281

DATE Sept 2/87

South Zone **ROCK SAMPLE REPORT**

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Cu	G☑ A☐ Ag	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
B1000	v.f.g mass. py and f.-mod g spec. hem in a cherty, silic volc, tr cpy. 10-20% hem	30	grab	float	✓	✓	✓					RB
87535	qtz-chl-py alt lbl-fs prph with a 5cm qtz-cc-cpy-hem bx vein	1	grab	float	✓	✓	✓					RB
87536	semi-mass py-cpy in a silic maroon-red hem matrix ~3-5% cpy	35	grab	float	✓	✓	✓					RB
87537	qtz-py +/- hem-cpy bx vein along 022/65W shear	5-10	grab	comp	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104A/14

DATE Sept 6/87

PROJECT: 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au	G☐ A☐ Ag	G☐ A☐ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9251	qtz-cc +/- chl-py alt zone +/- fs porph, local qtz-hem +/- cpy veins from 1mm to 10cm . Trench 21				✓	✓	✓					RB
52	as for 9251, veins from 1mm - 1cm	+/-1	chip	1m	✓	✓	✓					RB
9253	as for 9252	+/-1	chip	1m	✓	✓	✓					RB
9254	as for 9252	+/-1	chip	1m	✓	✓	✓					RB
9255	as for 9252	+/-1	chip	1m	✓	✓	✓					RB
9256	as for 9252	+/-1	chip	1m	✓	✓	✓					RB
9257	as for 9252	+/-1	chip	1m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Creek (S. Zone)

DATE Sept 8/87

ROCK SAMPLE REPORT

PROJECT: 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au	G☐ A☐ Ag	G☐ A☐ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9258	qtz-chl alt bbl fs porph with local 1-2cm qtz-carb-cpy veins (Trench 21)	tr 1	chip	1m	✓	✓	✓					RB
9259	as for 9258 (Trench 21)	tr 1	chip	1m	✓	✓	✓					RB
9260	as for 9258, abund qtz [illegible] (Trench 24)	1 <	chip	27m	✓	✓	✓					
		[illegible]	chip [illegible]	[illegible]								RB
9261	as for 9258 [illegible] ~5cm [illegible] 3% vein Trench 22	≤1	chip	[illegible]	✓	✓	✓					
9262	as for 9258, 3-5% vein	≤1	chip	1m	✓	✓	✓	Trench 23A				RB
9263	as for 9258, 12-17% vein	≤1	chip	1m	✓	✓	✓					RB
9264	as for 9258 5-7% vein	≤1	chip	1m	✓	✓	✓					RB
9265	as for 9258 25% vein	≤1	chip	1m	✓	✓	✓					RB
9266	as for 9258, 12-15% vein	≤1	chip	1m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S Zone)

N.T.S. 104 A/4

DATE Sept 8/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au	G☐ A☐ Ag	G☐ A☐ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9267	as for 9258, 7-10% vein	.1	chip	15m	✓	✓	✓					RB
	Trench 23A											
9268	as for 9258, 5% vein	.1	chip	1m	✓	✓	✓					RB
	Trench 23B											
9269	as for 9258, 20% vein	1-2	chip	.6m	✓	✓	✓					RB
	Trench 23B											
9270	as for 9258, 7-10% vein	.1	chip	1.5m	✓	✓	✓					RB
	Trench 23B											
9271	as for 9258, 2% vein	2	chip	1m	✓	✓	✓					RB
	Trench 23C											
9272	as for 9258, 10-15% vein	1	chip	1m	✓	✓	✓					RB
	Trench 23C											
		5-1	chip	1.3m	✓	✓	✓					RB
9273	as for 9258, 5-10% vein											
	Trench 23C											
9274	as for 9258, 15-20% vein	.2-1	chip	1m	✓	✓	✓					RB
	Trench 23D											
9275	as for 9258, 5% vein	.1	chip	1.1m	✓	✓	✓					RB
	Trench 23D											

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104 A/4

DATE Sept 7/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9276	qtz-chl+/- ser alt hbl-fs porph with local .1-2cm qtz-hem ca-cpy veins ~5% vein (Trench 25)	+.1	chip	.8m	✓	✓	✓					RB
9277	as for 9276 ~25% vein (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9278	as for 9276 ~30% vein (Trench 25)	.2	chip	1m	✓	✓	✓					RB
9279	qtz-hbl-fs porph & bx qtz-hem [illegible] bx vein hem ca +/- cpy infilling (Trench 25)	.2	chip	1m	✓	✓	✓					RB
9280	as for 9279 (Trench 25)	1-2	chip	1m	✓	✓	✓					RB
9281	sil-ser alt hbl-fs porph with abund .1-1cm qtz-hem ca +/- cpy vein ~10% vein (Trench 25)	+.1	chip	1.6m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Cr (S. Zone)

N.T.S. 104 A/4

DATE Sept 12/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9282	1 m rd qtz+hll-fs [illegible] bx local micro qtz-hem-ser-py v, 50% qtz-bx (Trench 26)	tr	chip	1 m	✓	✓	✓					RB
9283	as for 9282 qtz hem-ser-py bx v tr bcm, 25-50% qtz bx 5-10% qtz v (Trench 26)	tr	chip	1 m	✓	✓	✓					RB
9284	as for 9282 10-15% qtz bx 10% qt v (Trench 26)	tr	chip	1 m	✓	✓	✓					RB
9285	as for 9284 (Trench 26)	tr	chip	1 m	✓	✓	✓					RB
9286	as for 9284 (Trench 26)	tr	chip	1 m	✓	✓	✓					RB
9287	[illegible] qtz-hem-py v 3-5% qtz v (Trench 27)	tr	chip	1 m	✓	✓	✓					RB
9288	as for 9287 1-8cm qtz-hem-py bx v 10-11% qtz v (Trench 27)	tr	chip	1 m	✓	✓	✓					RB
9289	as for 9287 1% qtz v (Trench 27)	tr	chip	1 m	✓	✓	✓					RB
9290	as for 9287 1-2% qtz v (Trench 27)	tr	chip	1 m	✓	✓	✓					RB
9291	as for 9287 1-2% qtz v (Trench 27)	tr	chip	1 m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Cr (s ? mc)

N.T.S. 104 A/4

DATE Sept 1?/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
7292	n. fm 7287 8-10m, qtz v (Trench 27)	tr	cl. p	1m	—	—	—					RB
7293	n. fm 7287 2-3m, qtz v, (Trench 27)	tr	cl. p	1m	—	—	—					RB
7294	n. fm 7287 [illegible] qtz v (Trench 27)	tr	[illegible]	[illegible]	—	—	—					RB
7295	n. fm 7287 [illegible] qtz v (Trench 27)	tr	[illegible]	[illegible]	—	—	—					RB
[illegible]	n. fm 7287 [illegible] qtz v (Trench [illegible])	[illegible]	[illegible]	1m	—	—	—					RB
7297	n. fm 7287 [illegible] qtz v (Trench 27)	tr	cl. p	1m	—	—	—					RB
7298	n. fm 7287 3-? m qtz v (Trench 27)	tr	cl. p	[illegible]	—	—	—					RB
7299	n. fm 7287 [illegible] qtz v (Trench 27)	tr	cl. p	1m	—	—	—					RB
7300	n. fm 7287 3-?m qtz v (Trench 27)	tr	cl.	1	—	—	—					RB
7301	n. fm 7287 3-?m qtz v (Trench 27)	tr	cl. p	1m	—	—	—					RB
7302	n. fm 7287 2-3m qtz v (Trench 27)	tr	cl. p	1m	—	—	—					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Cr (> 2mc)

N.T.S. 104 A/4

DATE Sept. 2/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9303	0 - 1m 9287 2-3% qtz v	+r	ch. p	1m	✓	✓	—					RB
	(Trench 27)											
9304	0 - 1m 9287 5-10% qtz v	+r	ch. p	1m	✓	✓	—					RB
	(Trench 27)											
9305	0 - 1m 9287 5-10% qtz v	+r	ch p	.8m	✓	✓	—					RB
	(Trench 27)											
9306	0 - 1m 9287 10-15% qtz v	+r	ch p	1m	✓	—	—					RB
	(Trench 11 Extn.)											
9307	0 - 1m 9287 2-3% qtz v	+	ch p	1m	✓	✓	—					RB
	(Trench 11 Extn.)											
9308	0 - 1m 9287 10-15% qtz v	+	ch p	1m	✓	✓	—					RB
	(Trench 11 Extn.)											
9309	0 - 1m 9287 5-10% qtz v	+	ch p	1m	✓	✓	—					RB
	(Trench 11 Extn.)											
9310	0 - 1m 9287 3-5% qtz v	+	ch p	1m	✓	✓	—					RB
	(Trench 11 Extn.)											
9311	0 - 1m 9287 3-5% qtz v	+r	ch p	.9m	✓	✓	—					RB
	(Trench 11 Extn.)											

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 104 A/4

PROPERTY Todd Creek (S.Zone)

DATE Sept 15/87

ROCK SAMPLE REPORT

PROJECT 281

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9312	Hornblende-Feldspar porphyry chl-ser-hem alt. with local .1-.3cm qtz v (Trench 13 Extn) ~1% qtz v	tr	chip	.9m	✓	✓	✓					RB
9313	as for 9312 ~1<2% qtz v (Trench 13 Extn)	tr	chip	1m	✓	✓	✓					RB
9314	as for 9312 2-3% qtz v (Trench 13 Extn)	tr	chip	1m	✓	✓	✓					RB
9315	as for 9312 2-3% qtz v (Trench 13 Extn)	tr	chip	1m	✓	✓	✓					RB
9316	Qtz-hem-cpy +/- py bx v, .1-.5% cpy (Trench 13 resample 15171)	5	chip	.9m	✓	✓	✓					RB
9317	Hbl-Fs-prph, chl-ser alt, 10-15% qtz hem cpy v (Trench 13 resample 15171)	.1-.5	chip	1m	✓	✓	✓					RB
9318	as for 9317 10-15% qtz hem cpy v (Trench 13 resample 15171)	.1-.2	chip	1m	✓	✓	✓					RB
9319	as for 9317, 15-20% qtz v (resample Trench 13 15170)	.1-.2	chip	1m	✓	✓	✓					RB
9320	as for 9317, 15-20% qtz v (Trench 13, resample 15170)	.1-.2	chip	1.2m	✓	✓	✓					RB

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S Zone)

N.T.S. 104A/4

DATE Sept 15/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9321	Mixed qtz-hem-cpy-v stwk breccia and tbl-fg pmph bx .1-.3% cpy 40-50% qtz vnd and bx v (Trench 29)	1-2	chip	1m	✓	✓	—					RJ
9322	as fm 9321 20-25% qtz v vnd bx v .1-.2% cpy	.5-1	chip	1m	✓	—	—					RJ
9323	as fm 9321 50-60% qtz v and bx v .3-.5% cpy	1-2	chip	1m	✓	—	—					RJ
9324	as fm 9321 20-40% qtz v vnd bx v .1 3% cpy	.5	chip	1.5m	✓	—	—					RJ

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Todd Creek (S. Zone)

N.T.S. 104A/4

DATE Sept 16/87

PROJECT 281

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au	G☐ A☑ Ag	G☐ A☑ Cu	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
9325	Hbl-Fs porph gtz-scr-chl	+r	chip	1m	✓	✓	✓					RB
	silt, 3-5% gtz v (Trench 1)											
9326	as for 9325, 3-5% gtz v	+r	chip	1m	✓	✓	✓					RB
9327	as for 9325 15-20% gtz v,	1	chip	1m	✓	✓	✓					RB
	1-10cm gtz bx v											
9328	as for 9325 5-10% gtz v.	+r	chip	1m	✓	✓	✓					RB
9329	as for 9325, 3-5% gtz v	+r	chip	1m	✓	✓	✓					RB
9330	as for 9325 1-2% gtz v	+r	chip	1m	✓	✓	✓					RB
9331	as for 9325 2-3 "	+r	chip	1m	✓	✓	✓					"
9332	as for 9325 2-3 "	+r	chip	1m	✓	✓	✓					"
9333	as for 9325 1-2 "	+r	chip	1m	✓	✓	✓					"
9334	as for 9325 1-2 "	+r	chip	1m	✓	✓	✓					"
9335	as for 9325 1-2 "	+r	chip	1m	✓	✓	✓					"
9336	as for 9325 2-3 "	+r	chip	1m	✓	✓	✓					"
9337	as for 9325 3-5 "	+r	chip	1m	✓	✓	✓					"

G = GEOCHEM A = ASSAY

APPENDIX V

Drill core is stored at the camp.

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 6, 1987
DATE COMPLETED: Sept. 9, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9982.5E
DEP: 9831.6N

PROJECT: 281
PAGE 1 OF 2

DIP: -45
BEARING: 100

HOLE NO: NTC - 87- 1

ELEV: 1050 m.
LENGTH: 48.2 m. (157 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	1.22	0	OVERBURDEN															
1.22	8.81	78	HORNBLENDE-FELDSPAR PORPHYRY															
			Light to medium green-grey-purple, fine	1cm qtz-cc-hem v	trace	16001	1.22-4.22	3.00	<0.07		<0.7		<0.01					
			to medium grained, pervasively chl +/-	2.11m/35 deg.		16002	4.22-7.22	3.00	<0.07		<0.7		<0.01					
			si-ser-hem-cc altered, chl has replaced	cc-qtz bx zone		16003	7.22-8.81	1.59	<0.07		<0.7		<0.01					
			all hbl-fs grains; locally mod. to str.	3.66m/0 deg.														
			silic. and bleaching; local cc-qtz bx	2mm qtz-hem v.														
			veins zones sub-parallel to CA; local	5.55m/65 deg.														
			1 to 1cm qtz-cc-hem +/- cpy veins,	1mm qtz-cc-hem-														
			locally ofset by cc-qtz bx; local	cpy v. 6.62m/70														
			disseminations and patches of spec. hem	deg.														
			to 2mm; 1-2% qtz veining.															
8.81	12.54	95	AS FOR 1.22-8.81 M:															
			Str. qtz-hem-cc-cpy veining, veins	qtz-hem-cc-cpy v	1-2 %	16004	8.81-10.24	1.43	0.72		<0.7		0.08					
			locally show crustiform banding of	8.81-8.84m/45 d.		16005	10.24-11.67	1.63	0.45		<0.7		0.03					
			qtz-hem-cc, tr-.2% cpy; 25-30% qtz	9.18-9.28m/70 d.		16006	11.67-12.54	0.67	<0.07		<0.7		0.01					
			veining.	9.39-9.44m/55 d.														
				12.36-12.38/50 d														
				12.52-12.54/70 d														
				qtz-hem-cc-cpy														
				stockwork:														
				9.50-9.73m/65 d														
				9.89-10.23m/50 d														
				10.67-10.8m/65 d														
				11.16-11.68m/40-														
				60 deg														
				11.71-11.84m/70														
12.54	14.99	96	AS FOR 1.22-8.81M:	qtz-hem-ser-cpy	trace	16007	12.54-14.04	1.50	<0.07		<0.7		<0.01					
			1-2% quartz veining.	v 13.61-13.64m/		16008	14.04-14.99	0.95	<0.07		<0.7		<0.01					
				60 deg														

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-1 PAGE 2 of 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE a/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
14.99	18.12	99	AS FOR 1.22-8.81M:	qtz-ser-hem-cpy v	trace	16009	14.99-16.49	1.50	<0.07		<0.7		0.03					
			Pale purple-brown, int. hairline	16.08-16.03m/70 d		16010	16.49-18.12	1.63	0.10		<0.7		0.01					
			fractures with str. ser-qtz-chl altera-	16.08-16.18m/60 d														
			tion, local .1-2cm qtz-hem-cpy v.,	16.15-16.17m/60 d														
			3-4% qtz veining.	16.51-16.54m/70 d														
18.12	27.17	100	AS FOR 1.22-8.81M:	qtz-hem-cc-ser-	trace	16011	18.12-19.62	1.50	0.24		<0.7		0.01					
			Pale to med. green; locally silic;	cpy v.:		16012	19.62-21.12	1.50	<0.07		<0.7		0.03					
			local str. fractured with sericite on	18.23-18.25m/85 d		16013	21.12-22.62	1.50	<0.07		<0.7		0.02					
			fractures; local irregular qtz-cc bx	20.69-20.81m/45 d		16014	22.62-24.12	1.50	<0.07		<0.7		0.01					
			veining subparallel to CA; 8-10% qtz v.	21.07-21.13m/55 d		16015	24.12-25.62	1.50	0.10		<0.7		0.06					
				23.63-23.66m/60 d		16016	25.62-27.17	1.55	0.17		<0.7		<0.01					
				24.06-24.10m/75 d														
				24.11-24.13m/55 d														
				24.50-24.52m/60 d														
				26.53-26.60m/60 d														
				26.68-26.72m/50 d														
27.17	32.30	99	HORNBLENDE-FELDSPAR PORPHYRY-QUARTZ	Lower shear	trace to	16017	27.17-28.67	1.50	0.07		<0.7		0.11					
			BRECCIA: Light green-grey-yellow;	contact:	.2%	16018	28.67-30.17	1.50	0.17		<0.7		0.05					
			intensely fractured and ser-chl alt.,	32.3m/65 deg		16019	30.17-31.67	1.50	0.41		<0.7		0.13					
			fragments subround to sub angular,	Qtz-hem-ser-cpy v		16020	31.67-32.30	0.63	0.45		<0.7		0.10					
			sericite surrounds fragments, chl has	27.27-27.30m/65 d														
			replaced the hbl-fs grains and occurs															
			on fractures; local mod to str. silic.,															
			abundance of qtz bx fragments increase															
			toward bottom; trace-.2% cpy in qtz bx															
			zones and in irregular .1-3 cm qtz-ser															
			+/- hem v., approx 8-10% qtz. v.															
32.30	38.87	95	ANDESITE:	qtz-hem-cpy v:	trace	16021	32.30-33.80	1.50	<0.07		<0.7		0.02					
			Pale green with local maroon-grey	33.73-33.79m/55 d		16022	33.80-35.30	1.50	<0.07		<0.7		0.01					
			sections, fine to medium grained,	Lower Contact:		16023	35.30-36.80	1.50	<0.07		<0.7		0.01					
			int. ser-chl +/- si alteration; local	38.87m/70 deg		16024	36.80-38.87	2.07	<0.07		<0.7		<0.01					
			maroon-grey fragments to 2 cm; local															
			irregular qtz-cc +/- hem-cpy patches,															
			<1% qtz vein.															
38.87	48.20	97	ANDESITE:	Qtz-cc-cpy bx v:	trace	16025	38.87-40.37	1.50	<0.07		<0.7		<0.01					
			Dark maroon-grey; abundant subhed. fs.	41.47-41.53m/50 d		16026	40.37-41.60	1.23	0.72		<0.7		0.20					
			pheno's to 3mm; abundant irregular qtz	Qtz-andes-chl-cpy		16027	41.60-43.10	1.50	<0.07		<0.7		<0.01					
			patches to 3mm; locally 2-3% dissem.	bx v.:		16028	43.10-44.60	1.50	<0.07		<0.7		<0.01					
			fine grained spec. hem; approx. 1%	47.68-47.69m/45 d		16029	44.60-46.10	1.50	<0.07		<0.7		<0.01					
			qtz. v.			16030	46.10-48.20	2.10	<0.07		<0.7		<0.01					
48.20			END OF HOLE															
			LOGGED BY: ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 11, 1987
DATE COMPLETED: Sept. 13, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9976.3E
DEP: 9967.4N

PROJECT: 281
PAGE 1 OF 2

DIP: -45
BEARING: 100

HOLE NO: NTC - 87-2

ELEV: 1060 m.
LENGTH: 45.72 m. (150 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	2.74	0	OVERBURDEN															
2.74	14.54	83	HORNBLENDE-FELDSPAR PORPHYRY: Pale green-brown to medium brown; moderate to strong chl-ser +/- si alteration, pale green sections are strong serecite altered; moderate to strong silic.; local .2-10 cm qtz-hem-ser-cpy v. and bx v., local irregular qtz-cc bx zones; approx 2% qtz v.	Qtz-hem-cpy v: 5.16-5.21m/75 d Hem-volc-ser bx: 7.72-7.79m/75 d Qtz-hem-ser-cpy bx: 8.33-8.35m/45 d 10.28-10.38m/65 d 12.35-12.37m/70 d	trace	16031 16032 16033 16034 16035 16036 16037 16038	2.74- 5.50 5.50- 7.00 7.00- 8.50 8.50-10.00 10.00-10.50 10.50-12.00 12.00-13.50 13.50-14.54	2.76 1.50 1.50 1.50 0.50 1.50 1.50 1.04	0.82 0.07 <0.07 <0.07 0.82 <0.07 0.07 <0.07	<0.7 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7	0.10 0.09 0.05 0.03 0.03 0.04 0.01 0.02			
14.54	28.84		STRINGER ZONE															
14.54	17.82	99	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, pale green-brown; strong chl-ser-si alteration, chl after hbl-fs moderate to strong silic.; strong bx with ser-qtz filling fractures, local volc-qtz-hem-ser +/- cpy bx zones to 23 cm wide, 10-12% qtz v.	Qtz-hem-ser-cpy v.: 14.98-14.99m/75 d 15.11-15.14m/65 d 15.84-16.34m/55 d 17.68-17.69m/50 d	trace	16039 16040	14.54-16.04 16.04-17.82	1.50 1.78	0.45 0.17	<0.7 <0.7	0.03 0.01			
17.82	21.56	93	HORNBLENDE-FELDSPAR PROPHYRY: Pale green-brown to medium brown; locally bleached-ser zones; strong qtz-hem-cpy +/- ser v. and bx v., 12-15% qtz v.	Qtz-cc bx v.: Qtz-hem: 18.11-18.20m/40 d 18.49-18.54m/50 d 19.02-19.03m/40 d 19.27-19.39m/60 d 20.10-20.13m/70 d 20.16-20.17m/85 d	.1-.5%	16041 16042 16043 16044	17.82-18.82 18.82-19.82 19.82-20.82 20.82-21.56	1.00 1.00 1.00 0.74	0.31 0.85 0.34 0.10	<0.7 <0.7 <0.7 <0.7	0.03 0.06 0.08 0.01			
21.56	28.84	98	HORNBLENDE-FELDSPAR PORPHYRY: Pale green-grey-brown; fine grained; strong ser-chl alteration, local weak silic; local fracture zones with qtz-hem-cc +/- cpy filling the fractures, 15% qtz v.	Qtz-hem-ser-cpy 21.62-21.67m/55 d 22.69-22.71m/50 d 23.68-23.74m/50 d 25.28-25.52m/70 d 25.76-25.77m/60 d 28.56-28.57m/60 d	trace to .2%	16045 16046 16047 16048 16049 16050 16051	21.56-22.56 22.56-23.56 23.56-24.56 24.56-25.56 25.56-26.56 26.56-27.56 27.56-28.84	1.00 1.00 1.00 1.00 1.00 1.00 1.28	0.51 0.24 0.24 0.17 0.55 0.17 0.10	<0.7 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7	0.04 0.01 0.02 0.01 0.01 0.01 0.01			

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-2 PAGE 2 of 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
28.84	35.10	99	MIXED QUARTZ-HEMATITE-HORNBLEND-FELDSPAR PROPHYRY BRECCIA: Pale green-brown; int. ser-chl-si alteration, fragments (.1 to 5cm, subangular to subround; local bright red qtz-hem fragments; dissem cpy throughout with higher conc. in qtz bx zones. 50-60% qtz-bx material; bottom 20 cm has a flow-bx texture, .1-.5% cpy.	Qtz-ser-hem-cpy bx v.: 29.72-30.14m/65 d 30.76-30.79m/65 d 33.25-34.47m/ 155-65 d. Shear Cont/Fol: 35.10m/75 d	.1-.5%	16052	28.84-29.70	0.86	0.99	<0.7	0.32				
						16053	29.70-30.20	0.50	4.42	1.0	0.38						
						16054	30.20-31.20	1.00	0.27	<0.7	0.03						
						16055	31.20-32.20	1.00	0.31	<0.7	0.04						
						16056	32.20-33.10	0.90	0.24	<0.7	0.14						
						16057	33.10-34.60	1.50	4.59	0.7	0.24						
						16058	34.60-35.10	0.50	2.64	0.7	0.28						
35.10	36.10	99	ANDESITE: Fine grained, pale green, intensely ser-chl altered; irregular 1-2mm qtz-hem veinlets and chl seams; top 5cm is flow banded with abundant fine grained dissem py +/- cpy and local qtz-hem fragments; bottom 10cm is a volc-qtz +/- hem-cpy bx, 1-2% qtz. v.	Volc-qtz-hem-cpy bx vr 36.00-36.10m/45 d	trace	16059	35.10-36.10	1.00	0.48	<0.7	0.05							
36.10	45.72	93	ANDESITE: Fine to medium grained, dark grey-maroon to medium green; subhedral to euhedral fs. phenos to 2mm; local fine grained dissem spec. hem.; local patches of chl-ser alteration; abundant irregulat qtz patches to 5 mm.		nil	16060	36.10-37.60	1.50	<0.07	<0.7	0.01							
						16061	37.60-39.10	1.50	<0.07	<0.7	0.01							
						16062	39.10-40.60	1.50	<0.07	<0.7	<0.01							
						16063	40.60-42.10	1.50	<0.07	<0.7	<0.01							
						16064	42.10-43.60	1.50	<0.07	<0.7	0.01							
						16065	43.60-45.72	2.12	<0.07	<0.7	0.01							
45.72			END OF HOLE															
			LOGGED BY: ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 13. 1987
DATE COMPLETED: Sept. 16, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9976.3E
DEP: 9967.4N

PROJECT: 281
PAGE 1 OF 2

DIP: -65
BEARING: 100

HOLE NO: NTC - 87-3

ELEV: 1060 m.
LENGTH: 51.21m (168 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	1.22	0	OVERBURDEN															
1.22	21.30	97	HORNBLENDE-FELDSPAR PORPHYRY: Pale green to medium brown; chl-ser +/- si altered, section is marked by alternating brown and pale green bleached zones; local str. hairline fractures with qtz-cc-ser; local irregular qtz-cc bx zones; qtz-hem +/- ser-cpy veins occur throughout, with sronger stringer zones from 3.57-8.55m, 10.96-13.87m, 17.41-19.50m, veins predominantly occur in pale green bleached zones, 3-5% qtz v. overall.	Qtz-cc-ser-hem-cpy v: 3.57-3.91m/40 5.69-5.73m/60 8.53-8.65m/45 10.96-10.48m/45 11.05-11.16m/45 13.86-13.87m/50 17.41-17.46m/45 19.23-19.25m/50 19.35-19.42m/45	trace	16066	1.22- 2.50	1.28	(0.07	(9.7	(0.01			
						16067	2.50- 3.50	1.00	(0.07	(0.7	0.01			
						16068	3.50- 4.00	0.50	0.82	(0.7	0.06			
						16069	4.00- 5.50	1.50	0.14	(0.7	(0.01			
						16070	5.50- 7.00	1.50	0.07	(0.7	0.02			
						16071	7.00- 8.50	1.50	(0.07	(0.7	0.01			
						16072	8.50- 9.00	1.50	0.45	(0.7	0.04			
						16073	9.00-10.50	1.50	(0.07	(0.7	0.02			
						16074	10.50-11.50	1.00	0.34	(0.7	0.06			
						16075	11.50-12.50	1.00	(0.07	(0.7	0.02			
						16076	12.50-14.00	1.50	0.10	(0.7	0.02			
						16077	14.00-15.50	1.50	0.07	(0.7	0.01			
						16078	15.50-17.00	1.50	0.07	(0.7	0.01			
						16079	17.00-18.10	1.10	0.72	(0.7	0.01			
						16080	18.10-19.10	1.00	(0.07	(0.7	0.01			
						16081	19.10-19.60	0.50	0.51	(0.7	0.02			
						16082	19.60-21.30	1.70	(0.07	(0.7	(0.01			
21.30	31.56	100	HORNBLENDE-FELDSPAR PORPHYRY: Pale green-light brown, bleached; str. ser-chl-si alteration; local irregular cc-qtz bx patches; local .1-12cm qtz-hem-ser-cpy v. throughout, 21.30-25.30 is strongly fractured with 15-20% qtz-hem-cpy v. and qtz-hem stockwork, 5-10% qtz v. overall.	Qtz-hem-ser-cpy v: 21.77-21.87m/45 21.91-21.97m/45 22.02-22.06m/50 22.45-22.53m/60 22.71-22.83m/45	trace to .5%	16083	21.30-22.30	1.00	3.12	(0.7	0.11			
						16084	22.30-23.30	1.00	1.03	(0.7	0.12			
						16085	23.30-24.30	1.00	0.17	0.7	0.01			
						16086	24.30-25.30	1.00	0.14	(0.7	0.01			
						16087	25.30-26.80	1.50	0.07	(0.7	0.01			
						16088	26.80-28.30	1.50	(0.07	(0.7	0.01			
						16089	28.30-29.80	1.50	(0.07	(0.7	0.01			
						16090	29.80-31.56	1.76	(0.07	(0.7	0.01			
31.56	40.32	99	QUARTZ AND HORNBLENDE-FELDSPAR PORPHYRY BRECCIA: Pale green, strongly ser-si-chl atered, chl altered hbl-fs grains to 2mm, strongly fractured-bx; fragments to 5cm; abundant irregular qtz-ser-hem-cpy stockwork v. and local si flooding; local qtz-cc v. and bx, several qtz-hem-cpy-ser bx v. to 72cm; fractures are locally strongly weathered-oxidized; fault gouge at 39.00-39.03m.	Qtz-ser-hem-cpy bx v: 32.40-32.77m/55 39.60-40.32m/50 Contact: 40.32m/50	.1-.3%	16091	31.56-32.80	1.24	2.26	(0.7	0.10			
						16092	32.80-34.00	1.20	0.07	(0.7	0.02			
						16093	34.00-35.00	1.00	(0.07	(0.7	0.01			
						16094	35.00-36.00	1.00	0.65	(0.7	0.04			
						16095	36.00-37.00	1.00	0.21	(0.7	0.02			
						16096	37.00-38.00	1.00	(0.07	(0.7	0.01			
						16097	38.00-39.00	1.00	0.07	(0.7	0.01			
						16098	39.00-39.60	0.60	0.07	(0.7	0.01			
						16099	39.60-40.32	0.72	5.86	1.7	0.40			

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-3 PAGE 2 of 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
40.32	42.06	94	ANDESITE: Pale green, very fine grained; intense ser-chl alteration, local hairline fractures with ser-chl; several .2-2cm qtz-hem v., one py stringer to 2mm wide	Qtz-hem-cpy bx v: 41.84-41.86m/25		16100	40.32-42.06	1.74	0.10		5.1		0.83					
42.06	51.21	98	ANDESITE Dark grey-maroon, fine grained matrix; bimodal Fs grains, .5-2mm phenos and .1-.1m grains in matrix; trace-1% fine grained dissem hem in matrix and in chl altered fs phenos; local bright red hem rich patches proximal to areas of hairline qtz-cc v. (60 deg to CA); locally fragmental; local silic sections where strongly fractured.	Qtz-hem-cpy v: 49.23-49.24m/35		16101	42.06-45.06	3.00	0.10		(0.7		0.01					
						16102	45.06-48.06	3.00	(0.07		(0.7		(0.01					
						16103	48.06-51.21	3.15	(0.07		(0.7		(0.01					
51.21			END OF HOLE LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 17, 1987
DATE COMPLETED: Sept. 19, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9964.6E
DEP: 9927.5N

PROJECT: 281
PAGE 1 OF 2

DIP: -45
BEARING: 100

HOLE NO: NTC - 87-4

ELEV:
LENGTH: 58.52m (192 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	.30	0	OVERBURDEN															
0.30	6.00	77	HORNBLENDE-FELDSPAR PORPHYRY: Fine to medium grained, pale to medium green; strongly chl-ser-si alteration; chl after hbl-fs grains, local hairline fractures with ser; hbl-fs grains locally show a weak flow alignment; local irregular qtz-cc patches; matrix is locally pale brown, (K alteration?) fractures are locally strongly weathered; 1-2% qtz v.	Flow Contact: 0.44m/70 deg Qtz-cc-hem-cpy-py V: 5.68-5.76m/60 d	trace	16104	0.30-2.50	2.20	<0.07	<0.7	0.01			
						16105	2.50-4.00	1.50	<0.07	<0.7	0.02			
						16106	4.00-5.50	1.50	<0.07	<0.7	<0.01			
						16107	5.50-6.00	0.50	0.10	<0.7	0.06			
6.00	8.25	92	HORNBLENDE-FELDSPAR PORPHYRY: Medium grained, pale green-brown; strongly chl-ser-K? alteration, intense weathering along fractures, local hiarline fractures with ser; local cc-qtz bx patches.	Weathered Fractures 40 deg	trace	16108	6.00-8.25	2.25	<0.07	<0.7	<0.01			
8.25	18.67	97	HORNBLENDE-FELDSPAR PORPHYRY: Fine-medium grained, medium to dark green, chl after hbl-fs grains; very fine grained chl in matrix; moderate to strongly silic; local hairline qtz-cc v.; local flow alignment of hbl grains; 3-5% qtz v.; 3-5% cpy, 1-2% py in v. at 11.36m.	qtz-chl-hem-cpy-py v: 11.36-11.63m/65 d	trace	16109	8.25- 9.75	1.50	<0.07	<0.7	<0.01			
						16110	9.75-11.15	1.40	<0.07	<0.7	<0.01			
						16111	11.15-11.65	0.50	1.71	<0.7	0.35			
						16112	11.65-12.65	1.00	0.07	<0.7	0.01			
						16113	12.65-14.15	1.50	<0.07	<0.7	<0.01			
						16114	14.15-15.65	1.50	0.07	<0.7	<0.01			
						16115	15.65-17.15	1.50	<0.07	<0.7	<0.01			
						16116	17.15-18.67	1.52	<0.07	<0.7	<0.01			
18.67	25.60	86	HORNBLEND-FELDSPAR PORPHYRY: Fine grained, pale grey-green, bleached moderate to strong silic., chl-ser after hbl-fs grains, qtz v. in local strongly weathered fractures 30 deg to CA; local narrow qtz-cc v., (1% qtz v.		trace	16117	18.67-20.17	1.50	<0.07	<0.7	<0.01			
						16118	20.17-21.67	1.50	<0.07	<0.7	<0.01			
						16119	21.67-23.17	1.50	<0.07	<0.7	<0.01			
						16120	23.17-24.67	1.50	<0.07	<0.7	<0.01			
						16121	24.67-25.60	0.93	<0.07	<0.7	<0.01			

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK

HOLE NO.: NTC-87-4

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCR	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
25.60	37.47	89	QUARTZ-HEMATITE STRINGER ZONE:	dk green chl dyke	trace	16122	25.60-27.10	1.50	<0.07		<0.7		0.02					
			HORNBLENDE-FELDSPAR PORPHYRY:	27.98-28.06m/90 d	to .5%	16123	27.10-28.60	1.50	<0.07		<0.7		<0.01					
			Medium to coarse grained, silic. fs	Qtz-hem-cpy-bx v:		16124	28.60-29.40	0.80	<0.07		<0.7		<0.01					
			phenos to 5mm, hbl phenos to 2mm, grey-	29.52-29.59m/70 d		16125	29.40-30.20	0.80	0.27		<0.7		0.08					
			green-brown, locally bleached; strongly	33.97-34.02m/55 d		16126	30.20-31.20	1.00	0.21		<0.7		0.07					
			si-chl and locally ser altered, 30.25-	34.10-34.11m/70 d		16127	31.20-32.70	1.50	0.21		<0.7		0.20					
			32.70m is strongly weathered and	cc-cpy v--50% cpy		16128	32.70-33.70	1.00	<0.07		<0.7		0.05					
			fractured qtz v. zone with local cpy-	35.42-35.45m/75 d		16129	33.70-34.70	1.00	<0.07		<0.7		0.05					
			py-mal, ser-musc-chl on fractures;	Banded qtz-hem-		16130	34.70-35.20	0.50	<0.07		<0.7		0.09					
			dark green chl cyke at 27.9m has	cpy-py v ~15% cpy		16131	35.20-35.70	0.05	0.34		<0.7		0.72					
			irregular qtz-cc-hem patches to 5mm,;	15% py:		16132	35.70-36.70	1.00	0.07		<0.7		0.38					
			8-10% qtz v.	35.47-35.51m/80 d		16133	36.70-37.47	0.77	0.10		<0.7		0.05					
37.47	43.53	96	MIXED QUARTZ-HORNBLENDE-FELDSPAR	Qtz-hem-cpy v,	.1-.5%	16134	37.47-39.00	1.53	1.34		0.7		0.14					
			PORPHYRY BRECCIA ZONE:	bx v:		16135	39.00-40.00	1.00	0.48		<0.7		0.04					
			Pale green-grey; strongly chl-ser-si	37.47-43.53m/		16136	40.00-41.00	1.00	0.27		<0.7		<0.01					
			alteration, strongly fract-bx with	65 to 75 deg.		16137	41.00-42.00	1.00	0.17		<0.7		<0.01					
			numerous pale yellow-white to white			16138	42.00-43.00	1.00	0.07		<0.7		<0.01					
			qtz-hem-cpy v and bx v. to 80cm;			16139	43.00-43.53	0.53	1.41		<0.7		0.06					
			dissem cpy in v and bx matrix; trace															
			py; 30-35% v. material, .1-.3% cpy.															
43.53	47.71	97	HORNBLENDE-FELDSPAR PORPHYRY:	Qtz-hem-volc bx:	trace	16140	43.53-45.00	1.47	<0.07		<0.7		0.02					
			Light green, bleached, strongly silic	47.71m/50 deg		16141	45.00-46.50	1.50	<0.07		<0.7		0.02					
			with 3-5% milky-grey qtz-cpy v. to 2cm,	Gry qtz-cpy v:		16142	46.50-47.71	1.21	0.18		<0.7		0.02					
			locally strongly fractured with ser on	44.81-44.83m/75 d														
			fractures, chl-ser-si altered, local	46.53-46.55m/45 d														
			fractures are strongly weathered,															
			bottom 26 cm is a silic qtz-hem-volc															
			bx with trace dissem cpy.															
47.71	51.46	95	ANDESITE:		trace	16143	47.71-49.71	2.00	<0.07		<0.7		<0.01					
			Maroon-grey, fine grained, fragmental			16144	49.71-51.46	1.75	<0.07		<0.7		0.01					
			at top, grading into mass. flow; local															
			irregular qtz-cc patches to 1cm; local															
			hairline qtz-cc v., (1% qtz v.;															
			strongly weathered fractures.															
51.46	58.52	92	ANDESITE:	Weathered	trace	16145	51.46-53.96	2.50	<0.07		<0.7		<0.01					
			Massive, fine grained, light yellow-	Fractures 25 deg		16146	53.96-56.46	2.50	0.10		<0.7		<0.01					
			green; strong ser-chl alteration, local			16147	56.46-58.52	2.06	<0.07		<0.7		0.01					
			marron-grey patches; strongly weathered															
			rusty fractures; local hairline qtz-cc															
			v. to 2mm.															
58.52			END OF HOLE															
			LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 19, 1987
DATE COMPLETED: Sept. 21, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9964.0E
DEP: 9927.5N

PROJECT: 281

PAGE 1 OF 2

DIP: -65
BEARING: 100

HOLE NO: NTC - 87-5

ELEV:
LENGTH: 66.45m (218 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	0.30	0	OVERBURDEN															
0.30	2.62	80	HORNBLENDE-FELDSPAR PORPHYRY: Pale green-brown, cleached; medium to coarse grained, strongly chl-ser +/- si altered, local qtz-cc +/- cpy v., locally fractured and silic., strongly weathered on fractures, <1% qtz v.		trace	16148	0.30- 2.62	2.32		<5		0.8		191				
2.62	7.32	99	HORNBLENDE-FELDSPAR PORPHYRY: Medium green-grey, medium to coarse grained, flow banding strong chl-K? +/- ser-si altered, chl after hbl-fs grains to 3mm; local light grey bleached sections; strong weathering on fractures; <1% qtz v.	Flow Banding: 55 deg	trace	16149	2.62- 5.12	2.50		<5		0.3		109				
				Qtz-hem-cpy bx v: 5.28m/60 deg		16150	5.12- 7.32	2.20		<5		0.2		62				
7.32	9.32	99	HORNBLENDE-FELDSPAR PORPHYRY: Light grey, medium grained, bleached strongly weathered on fractures, local qtz-hem v., qtz-cc v., strongly chl-si altered; local bx; 1-2% qtz v.		trace	16151	7.32- 9.32	2.00		140		1.6		150				
9.32	16.61	100	HORNBLENDE-FELDSPAR PORPHYRY: Fine to medium grained, flow banded, local hairline qtz-cc v. +/- cpy-hem, strongly chl altered, 3-5% qtz v., 2-3% cpy in the two qtz-chl-hem-cpy bx v.	Qtz-chl-hem-cpy bx v:	trace	16152	9.32-10.82	1.50		<5		0.2		29				
				14.17-14.34m/45 d		16153	10.82-12.32	1.50		<5		0.1		320				
				15.13-15.22m/60 d		16154	12.32-14.17	1.85		<5		0.2		195				
						16155	14.17-15.37	1.20	1.47		<0.7		0.89					
						16156	15.37-16.61	1.24		<5		0.1		131				
16.61	18.26	99	HORNBLENDE-FELDSPAR PORPHYRY: Pale green-grey, fine grained, strongly si-ser +/- chl altered, local qtz-hem +/- cpy patches and narrow v., strongly fractured, strongly weathered on fractures, 1-2% qtz v.	Contact: 18.26m/40 deg	trace	16157	16.61-18.26	1.65		10		<0.1		92				

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-5 PAGE 2 of 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
18.26	30.39	99	HORNBLENDE-FELDSPAR PORPHYRY: Medium brown-green, fine to coarse grained, chl +/- ser-si altered; abundand hairline qtz-cc v. and bx v., local narrow bx zones, local slicken-sides on weathered fractures, 1-2% qtz v.			16158	18.26-20.26	2.00		<5		0.2		62				
						16159	20.26-22.26	2.00		<5		<0.1		15				
						16160	22.26-24.26	2.00		<5		0.1		82				
						16161	24.26-26.26	2.00		<5		<0.1		28				
						16162	26.26-28.26	2.00		<5		0.2		5				
						16163	28.26-30.39	2.13		<5		<0.1		51				
30.39	43.77	97	QUARTZ-HEMATITE STRINGER ZONE:	Qtz-chl v:	trace	16164	30.39-31.89	1.50	0.55		<0.7		0.82					
			HORNBLENDE-FELDSPAR PORPHYRY: Medium green-brown, fine to coarse grained, local fragments, chl-si-ser-K? altered; local abundant hairline fractures with ser; local 1-5cm qtz-chl v.; chl after hbl-fs grains to 3mm, local dissem spec. hem grains; local qtz-cc bx v. and irregular patches; abundant, .1-10cm qtz-hem-cpy v. and bx v., 5-7% qtz. v.	30.99-31.09m/40 d; Qtz-hem-cpy-py v: 31.70-31.77m/55 d; 37.01-37.04m/50 d; 38.97-39.08m/75 d; 38.79-38.81m/65 d; 39.71-39.73m/50 d; 39.91-39.98m/50 d; 43.51-43.53m/55 d	to .1%	16165	31.89-33.39	1.50	<0.07		<0.7		0.61				
						16166	33.39-34.89	1.50	<0.07		<0.7		0.02					
						16167	34.89-36.39	1.50	<0.07		<0.7		0.01					
						16168	36.39-37.89	1.50	0.45		<0.7		0.06					
						16169	37.89-39.39	1.50	0.65		<0.7		0.05					
						16170	39.39-40.89	1.50	0.75		<0.7		0.12					
						16171	40.89-42.39	1.50	<0.07		<0.7		0.01					
						16172	42.39-43.77	1.38	0.17		<0.7		0.37					
43.77	55.36	94	QUARTZ-HORNBLENDE-FELDSPAR PORPHYRY BRECCIA ZONE: Pale green-grey, chl-ser +/- si altered int. fract-bx with ser +/- qtz-chl on fractures; abundant qtz-hem-cc +/- cpy-py v., bx v., irregular patches, locally with up to 15% cpy. (Note: approx .2-.3m or core "ground up" due to core tube mislatch)	Qtz-hem-cpy-py bx v: 43.77-44.08m/50 d; 44.27-44.38m/45 d; 44.63-44.67m/65 d; 51.70-51.74m/60 d; 51.84-51.88m/55 d; 52.14-52.20m/40 d; 52.85-52.92m/70 d	.1-.5%	16173	43.77-44.27	0.50	5.97		1.0		0.68				
						16174	44.27-44.77	0.50	0.41		<0.7		0.48					
						16175	44.77-45.77	1.00	0.17		<0.7		0.04					
						16176	45.77-46.77	1.00	0.27		<0.7		0.03					
						16177	46.77-47.77	1.00	0.93		<0.7		0.03					
						16178	47.77-48.77	1.00	0.10		<0.7		0.01					
						16179	48.77-49.77	1.00	0.21		<0.7		0.03					
						16180	49.77-50.77	1.00	0.45		<0.7		0.04					
						16181	50.77-51.77	1.00	<0.07		<0.7		0.03					
						16182	51.77-52.77	1.00	0.17		<0.7		0.06					
						16183	52.77-53.77	1.00	<0.07		<0.7		0.08					
						16184	53.77-55.36	1.59	<0.07		<0.7		0.02					
55.36	57.09	98	QUARTZ VEIN: Banded on outer margins, bx in center; upper 20cm appears to be mylonite?, minor cc-ser; local red qtz fragments and hem patches, cpy-py as irregular bands and dissem grains, approx 5-7% cpy, sharp contacts.	Upper Contact: 55.36m/45 deg Lower Contact: 57.09m/40 deg	5-7 %	16185	55.36-57.09	1.73	<0.07		<0.7		0.02					
57.09	66.45	98	ANDESITE: Pale green-grey; fine grained upper 40cm is a coarse fragmental, fragments to 5cm; local qtz bx fragments and trace dissem cpy-py in the top 1 meter, trace-.5% dissem red hem grains; chl-ser altered; local hairline to 1cm qtz-cc v., some qtz v. are grey-opaque; local fragmental patches throughout.			16186	57.09-58.59	1.50	11.93		3.4		1.50					
						16187	58.59-60.09	1.50		20		0.7		580				
						16188	60.09-61.59	1.50		10		0.5		82				
						16189	61.59-63.09	1.50		5		0.6		59				
						16190	63.09-64.59	1.50		<5		0.4		39				
						16191	64.59-66.45	1.86		<5		0.2		16				
66.45			END OF HOLE - LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 24, 1987
DATE COMPLETED: Sept. 27, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9967E
DEP: 0059N

PROJECT: 281
PAGE 1 OF 2

DIP: -45
BEARING: 100

HOLE NO: NTC - 87-6

ELEV:
LENGTH: 66.45m (218 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AS gmt	AS ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	6.87	89	HORNBLENDE-FELDSPAR PORPHYRY: Grey-green-brown, coarse grained, fs phenos to 5mm altered to chl, hbl grains to 2mm with ser rims, chl-si-ser altered; strongly weathered on fracture local hairline qtz-cc veins, (1% qtz v.		trace	16192	0.00- 3.00	3.00		150		(0.1		265				
						16193	3.00- 4.50	1.50		<5		0.1		9				
						16194	4.50- 6.00	1.50		<5		0.1		6				
						16195	6.00- 6.87	0.87		<5		0.1		24				
6.87	7.81	99	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, si-chl-ser altered, local qtz hem-cpy v. to 3cm, strongly fractured with ser on fractures, approx 10% qtz v		trace	16196	6.87- 7.81	0.94		100		(0.1		1550				
7.81	29.86	97	HORNBLENDE-FELDSPAR PORPHYRY: As for 0.0-6.87, locally bleached, locally strongly fractured and weathered, increased bleaching, fractures and qtz-cc v. toward bottom.		trace	16197	7.81- 9.31	1.50		<5		0.2		92				
						16198	9.31-10.81	1.50		<5		(0.1		19				
						16199	10.81-12.31	1.50		<5		(0.1		84				
						16200	12.31-13.81	1.50		<5		(0.1		11				
						16201	13.81-15.31	1.50		<5		(0.1		33				
						16202	15.31-16.81	1.50		5		0.1		61				
						16203	16.81-18.31	1.50		<5		0.1		52				
						16204	18.31-19.81	1.50		<5		(0.1		20				
						16205	19.81-21.31	1.50		<5		(0.1		5				
						16206	21.31-23.81	2.50		<5		(0.1		23				
						16207	23.81-25.31	1.50		<5		(0.1		17				
						16208	25.31-26.81	1.50		<5		(0.1		6				
						16209	26.81-28.31	1.50		5		(0.1		9				
						16210	28.31-29.86	1.55		20		(0.1		31				
29.86	43.66	98	PYRITE STRINGER ZONE HORNBLENDE-FELDSPAR PORPHYRY: Pale green-grey, bleached, moderate to strong silic, chl-ser altered, chl after hbl-fs grains to 2mm; numerous irregular qtz-cc v. and bx patches, abundant hairline to 5cm py +/- qtz v., local irregular py aggreg. in fracture areas; incr py v. toward bottom; matrix locally pink-brown, K alteration?, qtz-cc v. decrease toward bottom.	Py stringers: 65-75 deg Qtz-hem-cpy-py v: 37.49-37.59m/65 d 39.22-39.23m/65 d Qtz-py v: 39.49-39.54m/50 d	3-5 %	16211	29.86-31.36	1.50	(0.07		(0.7		(0.01					
						16212	31.36-32.86	1.50	(0.07		(0.7		(0.01					
						16213	32.86-34.36	1.50	(0.07		(0.7		(0.01					
						16214	34.36-35.86	1.50	(0.07		(0.7		(0.01					
						16215	35.86-37.36	1.00	0.07		(0.7		(0.01					
						16216	37.36-38.36	1.00	(0.07		(0.7		0.01					
						16217	38.36-39.36	1.00	0.07		(0.7		0.05					
						16218	39.36-40.36	1.00	0.07		(0.7		0.01					
						16219	40.36-41.36	1.00	(0.07		(0.7		(0.01					
						16220	41.36-42.36	1.00	(0.07		(0.7		(0.01					
						16221	42.36-43.66	1.30	(0.07		(0.7		0.01					

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK

HOLE NO.: NTC-87-6

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
29.86	43.66		CONTINUED FROM PREVIOUS PAGE 37.49-43.66: mixed qtz-hem and py stringer zone, approx 5% barren qtz-cc v., approx 1-2% qtz-hem +/- cpy-py v. trace cpy															
43.66	51.34	93	QUARTZ BRECCIA VEIN ZONE: HORNBLENDE-FELDSPAR PORPHYRY: Pale green-brown, chl-ser-si altered, locally strongly fractured, approx. 50-60% qtz-hem-cpy-py bx v., 1-3% cpy, 1-3% py, intensely weathered and fractured; top of bx v. at 49.60m is semi-mylonite, abundant rolled qtz fragments in a foliated granular matrix	Qtz-cc-hem-cpy-py bx v: 43.66-43.87m/55 d 44.52-44.90m/65 d 48.83-49.26m/55 d 49.60-50.10m/65 d	2-6 %	16222	43.66-44.46	0.80	2.23		(0.7		0.37				
						16223	44.46-45.56	1.10	0.31		(0.7		0.19				
						16224	45.56-46.56	1.00	0.41		1.4		0.08				
						16225	46.56-47.56	1.00	0.10		(0.7		0.03				
						16226	47.56-48.83	1.27	0.10		(0.7		0.02				
						16227	48.83-49.60	0.77	0.82		(0.7		0.04				
						16228	49.60-50.10	0.50	3.53		0.7		0.34				
						16229	50.10-51.34	1.24	(0.07		(0.7		0.04				
51.34	66.45	100	HORNBLENDE-FELDSPAR PORPHYRY: Grey-green, medium grained, chl-si-ser altered, top 2m is strongly silic; chl after hbl-fs grains to 2mm; abundant qtz-cc bx veins throughout (approx 8-10%) local strongly weathered fractures; trace py.		trace	16230	51.34-52.84	1.50	(0.07		(0.7		(0.01				
						16231	52.84-54.34	1.50		20		0.1		23			
						16232	54.34-55.84	1.50		15		0.1		17			
						16233	55.84-57.34	1.50		(5		0.1		6			
						16234	57.34-58.84	1.50		(5		(0.1		3			
						16235	58.84-60.34	1.50		(5		0.1		1			
						16236	60.34-61.84	1.50		130		0.1		22			
						16237	61.84-63.34	1.50		(5		(0.1		2			
						16238	63.34-64.84	1.50		(5		(0.1		2			
						16239	64.84-66.45	1.61		20		(0.1		5			
66.45			END OF HOLE LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Sept. 28, 1987
DATE COMPLETED: Sept. 30, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9966.3E
DEP: 9959 N

PROJECT: 281

PAGE 1 OF 3

DIP: -65
BEARING: 180

HOLE NO: NTC - 87-7

ELEV:
LENGTH: 75.59m (248 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	7.68	87	HORNBLENDE-FELDSPAR PORPHYRY: Coarse grained, hbl-fs grains to 5mm altered to chl; siliceous, chl +/- ser altered, local hiarline to 2mm fractures with qtz +/- cc filling; local fractures moderately weathered, local qtz-hem +/- cpy bx v. occur in narrow bleached si-chl-ser altered zones; 2-3% qtz-hem v.	Qtz-hem bx v: 3.09-3.22m/55 d	trace	16240	0.00- 2.00	2.00		(5		0.1		23				
						16241	2.00- 3.50	1.50		580		(0.1		77				
						16242	3.50- 5.00	1.50		20		(0.1		8				
						16243	5.00- 6.50	1.50		(5		(0.1		9				
						16244	6.50- 7.68	1.18		(5		0.1		20				
7.68	11.97	100	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, silic, chl-ser altered; abundant qtz-hem-cpy-py and qtz-py-cpy v. from .1 to 4 cm, approx 5-7% qtz v.)1-.2% cpy, 1% py.	Qtz-hem-cpy-py bx v: 8.26-8.30m/45 d 9.05-9.06m/45 d 9.41-9.43m/55 d	trace to 1%	16245	7.68- 8.68	1.00		100		(0.1		156				
						16246	8.68- 9.68	1.00		260		(0.1		1300				
						16247	9.68-10.68	1.00		50		0.1		635				
						16248	10.68-11.97	1.29		5		(0.1		205				
11.97	22.71	99	HORNBLENDE-FELDSPAR PORPHYRY: As for 0-7.68; local narrow bleached zones surround .1-1 cm qtz-py v.; hbl grains to 2mm weakly to moderately chl-ser altered; <1% qtz v.		trace	16249	11.97-13.47	1.50		(5		(0.1		89				
						16250	13.47-14.97	1.50		(5		0.1		56				
						20051	14.97-16.47	1.50		(5		0.1		58				
						20052	16.47-17.97	1.50		(5		(0.1		6				
						20053	17.97-19.47	1.50		(5		0.1		7				
						20054	19.47-20.97	1.50		(5		0.1		136				
						20055	20.97-22.71	1.74		(5		0.1		30				
22.71	28.47	91	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, strongly weathered, pale green-grey-brown; silic, chl-ser altered; strongly fractured, local irregular qtz-chl v. to 1 cm, local qtz +/- py-cpy v to 2 cm, 2-3% qtz v.; lim after hbl-fs and on fractures in weathered zones.		trace to 1%	20056	22.71-24.21	1.50		95		0.2		250				
						20057	24.21-25.71	1.50		10		0.2		39				
						20058	25.71-27.21	1.50		40		0.8		113				
						20059	27.21-28.47	1.26		(5		0.5		27				
28.47	34.66	99	HORNBLENDE-FELDSPAR PORPHYRY: As for 11.97-22.71, 1% qtz locally strongly fractured.	Flow Banding: 50 deg	trace	20060	28.47-29.97	1.50		(5		0.1		8				
						20061	29.97-31.47	1.50		(5		0.1		23				
						20062	31.47-32.97	1.50		(5		0.1		13				
						20063	32.97-34.66	1.69		(5		0.1		5				

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-7 PAGE 2 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AS gmt	AS ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
34.66	53.44	100	PYRITE-QUARTZ-HEMATITE STRINGER ZONE:															
			HORNBLENDE-FELDSPAR PORPHYRY:	Qtz-py-hem v:	3-5 %	20064	34.66-36.16	1.50	0.07		<0.7		<0.01					
			Bleached, pale green-grey, moderate to	42.81-42.85m/50 d		20065	36.16-37.66	1.50	<0.07		<0.7		<0.01					
			very silic, chl-ser altered, chl after	Cpy-py-qtz-hem v:		20066	37.66-39.16	1.50	<0.07		<0.7		0.01					
			hbl-fs grains to 5mm; locally abundant	44.43-44.46m/45 d		20067	39.16-40.66	1.50	<0.07		<0.7		<0.01					
			paly yellow qtz-cc bx v. parallel to	44.94-44.95m/50 d		20068	40.66-42.16	1.50	<0.07		<0.7		0.01					
			sub-parallel to CA, locally contains	Qtz-py V:		20069	42.16-43.66	1.50	0.10		<0.7		0.03					
			qtz-hem v. fragments; .1-9cm qtz-hem	46.09-46.18m/35 d		20070	43.66-45.16	1.50	0.07		<0.7		0.10					
			+/- py-cpy and qtz-py +/- cpy v	47.46-47.47m/25 d		20071	45.16-46.66	1.50	0.07		<0.7		0.05					
			throughout, v. increasing toward bottom	Qtz-py-cpy		20072	46.66-48.16	1.50	0.07		<0.7		0.04					
			local fragmental sections, fragments to	Stringers:		20073	48.16-49.66	1.50	<0.07		<0.7		<0.01					
			5 cm; unit becomes more silic and mass.	45-50 deg		20074	49.66-51.16	1.50	<0.07		<0.7		0.01					
			toward bottom, 2-3% qtz-hem v,			20075	51.16-52.66	1.50	<0.07		<0.7		0.01					
			3-5% qtz-py v., trace-.1% cpy.			20076	52.66-53.44	0.78	0.14		<0.7		0.01					
53.44	53.96	100	QUARTZ BRECCIA VEIN:	Qtz bx v:	6-9 %	20077	53.44-54.04	0.60	7.89		1.0		0.38					
			White-pink, strongly fractured, 5-7%	53.44-53.96m/55 d														
			py, 1-2% cpy															
53.96	60.98	98	QUARTZ-HEMATITE STRINGER ZONE:															
			HORNBLENDE-FELDSPAR PORPHYRY:		trace	20078	54.04-55.04	1.00	0.10		<0.7		0.01					
			Medium grained, pale green, moderate to		to .5%	20079	55.04-56.04	1.00	0.21		<0.7		0.02					
			very silic, chl-si altered; locally			20080	56.04-57.04	1.00	0.51		7.2		0.04					
			strongly fractured with qtz-ser on			20081	57.04-58.04	1.00	0.10		<0.7		<0.01					
			fracture; local strongly weathered			20082	58.04-59.04	1.00	<0.07		1.4		<0.01					
			fractures; irregular qtz-hem +/- cpy-py			20083	59.04-60.04	1.00	0.10		<0.7		0.05					
			v. throughout, 5-7% qtz-hem v.			20084	60.04-60.98	0.94	0.21		<0.7		0.10					
60.98	62.48	98	QUARTZ BRECCIA VEIN:	Upper Contact:	3-5 %	20085	60.98-62.48	1.50	4.01		0.7		0.23					
			Int. bx and re-silic, matrix is pale	60.98m/35 deg														
			yellow-grey fine grained quartz with	Lower Contact:														
			subang-subround qtz-hem-cpy fragments	62.48m/65 deg														
			to 2cm; local grey banded zones appear															
			to be semi-mylonite, grey color due to															
			very fine grained sulph?, 1-2% cpy,															
			trace-2% py as dissem grains and small															
			patches.															
62.48	72.52	100	HORNBLENDE-FELDSPAR PORPHYRY:	Qtz-hem bx v:		20086	62.48-64.00	1.52	0.07		<0.7		<0.01					
			Medium-coarse grained, medium green-	65.82-65.83m		20087	64.00-65.50	1.50		<5	<0.1		39					
			grey, hbl-fs phenos altered to chl +/-	Qtz-cc-volc bx v:		20088	65.50-67.00	1.50		<5	<0.1		5					
			ser, weakly to moderately silic;	72.09-72.52m/65 d		20089	67.00-68.50	1.50		<5	<0.1		4					
			locally abundant hairline fractures			20090	68.50-70.00	1.50		<5	0.1		7					
			with qtz-ser; locally trace-1% fine			20091	70.00-71.50	1.50		<5	0.1		7					
			grained dissem, spec hem grains, local			20092	71.50-72.52	1.02		<5	<0.1		2					
			qtz-cc bx v. to 43 cm wide, bottom of															

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-7 PAGE 3 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. NCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
62.48	72.52		CONTINUED FROM PREVIOUS PAGE unit is marked by a 43 cm wide qtz-cc- hbl-fs porph. bx v., bx contains local pink qtz fragments which had been previously bx and re-cemented, (1% qtz- hem v.					1										
72.52	75.59	100	ANDESITE: Fine grained, grey maroon shear with local pale green-grey ser altered zones fragmental at top of unit, top 40cm is intensely ser-chl altered; local qtz-cc v. to 10cm.	Shear: 74.29m/60 deg Qtz-cc v: 74.29-74.35m/60 d		20093 20094	72.52-74.02 74.02-75.59	1.50 1.57		(5) (5)		(0.1 0.1		2 1				
75.59			END OF HOLE LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Oct. 2, 1987
DATE COMPLETED: Oct. 5, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9960E
DEP: 9996.2N

PROJECT: 281
PAGE 1 OF 3

DIP: -45
BEARING: 180

HOLE NO: NTC - 87-8

ELEV: 1125 m
LENGTH: 75.59m (248 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCR	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	10.52	89	HORNBLENDE-FELDSPAR PORPHYRY: Medium-dark green, very fine to coarse grained, local coarse grained fragments in fine grained sections; moderate to very silic, strong chl alteration of hbl pheno's, grain size grades from fine to coarse to fine from top to bottom; local hairline qtz-cc v; bottom 1.5m is strongly fractured & weathered.		nil	20095	0.00- 2.50	2.50		5	0.1	7				
						20096	2.50- 4.00	1.50		<5	0.1	15				
						20097	4.00- 5.50	1.50		10	0.1	10				
						20098	5.50- 7.00	1.50		<5	0.1	5				
						20099	7.00- 8.50	1.50		5	0.1	2				
						20100	8.50-10.52	2.02		5	0.1	27				
10.52	14.63	100	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, pale green-grey, silic, fine to medium grained; intense ser +/- chl alteration of hbl-fs grains locally creates speckled-mottled texture; local intense hairline fractures with ser-qtz; local hairline to 5mm hem +/- qtz v., tract qtz-py v. to .5mm; trace fine grained disseм py; matrix is a pale brown-green-grey mixture of si-ser-chl.		trace	20101	10.52-12.02	1.50		65	0.1	24				
						20102	12.02-13.52	1.50		<5	0.1	6				
						20103	13.52-14.63	1.11		10	<0.1	54				
14.63	39.59	100	HORNBLENDE-FELDSPAR PORPHYRY: Pale grey-green to dark green-brown, numerous narrow bleached sections as for 10.52-14.63m; dark sections are coarse grained, silic, chl +/- ser altered with distinct flow? banding, local sections have alternating light ser altered bands to 1cm with dark green-brown bands to 5cm, dark sections locally contain 1-3% dissem spec. hem. grains to 2mm (after hbl?), fs grains are altered to light green chl, local hairline to 2mm qtz-cc v; trace hem v. in bleached sections; local qtz-chl v, local fractures are weakly to moderately weathered.	Hem-qtz-py-cpy bx vs 32.69-32.78m/60 deg Flow Banding 55 deg	trace	20104	14.63-16.13	1.50		<5	0.1	14				
						20105	16.13-17.63	1.50		<5	0.1	67				
						20106	17.63-19.13	1.50		15	<0.1	88				
						20107	19.13-20.63	1.50		<5	0.1	11				
						20108	20.63-22.13	1.50		<5	0.1	6				
						20109	22.13-23.63	1.50		<5	<0.1	3				
						20110	23.63-25.13	1.50		5	0.1	4				
						20111	25.13-26.63	1.50		<5	<0.1	2				
						20112	26.63-28.13	1.50		<5	<0.1	2				
						20113	28.13-31.13	3.00		<5	<0.1	4				
						20115	31.13-32.63	1.50		<5	<0.1	6				
						20116	32.63-34.13	1.50		110	<0.1	181				
						20117	34.13-35.63	1.50		<5	<0.1	11				
						20118	35.63-37.13	1.50		<5	0.1	2				
						20119	37.13-38.63	1.50		<5	0.1	2				
						20120	38.63-39.59	0.96		<5	<0.1	44				

NORANDA EXPLORATION COMPANY, LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TODD CREEK HOLE NO.: NTC-87-8 PAGE 2 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
39.59	42.49	97	HORNBLENDE-FELDSPAR PORPHYRY:		trace	20121	39.59-41.09	1.50		80		0.2		525				
			Pale brown-green, bleached, silic, ser-			20122	41.09-42.49	1.40		15		0.2		450				
			chl altered hbl-fs grains, local less															
			altered dark brown sections; matrix is															
			a pale brown with locally abundant fine															
			grained pale yellow-green ser; local															
			strong hairline fractures with ser;															
			local qtz-hem +/- py-cpy v. to 1cm,															
			1-2% qtz-hem v, trace py-cpy.															
42.49	46.11	100	HORNBLENDE-FELDSPAR PORPHYRY:		trace	20123	42.49-43.99	1.50		<5		0.2		32				
			As for 14.63-39.59m			20124	43.99-45.49	1.50		5		0.1		81				
						20125	45.49-46.11	0.62		15		0.1		29				
46.11	58.92	97	PYRITE STRINGER ZONE:	Qtz-hem-cpy-py	1-2 %	20126	46.11-47.11	1.00	<0.07		<0.7		<0.01					
			HORNBLENDE-FELDSPAR PORPHYRY:	bx v:		20127	47.11-48.11	1.00	0.07		0.7		0.07					
			Bleached, silic, light grey-brown, si-	47.45-47.55m/65 d		20128	48.11-49.11	1.00	<0.07		<0.7		<0.01					
			ser +/- chl altered, local speckled	Py veins:		20129	49.11-50.11	1.00	<0.07		<0.7		0.05					
			texture due to ser after hbl-fs grains;	60-70 deg		20130	50.11-51.11	1.00	<0.07		2.7		0.05					
			intense fractures with hairline to 1cm			20131	51.11-52.11	1.00	<0.07		5.1		0.03					
			pale yellow-white qtz-ser v; matrix is			20132	52.11-53.11	1.00	<0.07		0.7		0.04					
			light brown to grey si-ser; local chl			20133	53.11-54.11	1.00	<0.07		<0.7		0.13					
			grains after hbl-fs; .1 to 1cm py +/-			20134	54.11-55.11	1.00	<0.07		<0.7		<0.01					
			qtz-hem-cpy v. throughout, increase in			20135	55.11-56.11	1.00	<0.07		<0.7		0.01					
			hem content toward bottom; bottom of			20136	56.11-57.11	1.00	0.07		<0.7		0.04					
			unit has irregular red hem patches;			20137	57.11-58.11	1.00	0.07		<0.7		<0.01					
			local fractures strongly weathered;			20138	58.11-58.92	0.81	1.13		<0.7		0.02					
			1-2% py, trace cpy.															
58.92	64.26	100	QUARTZ BRECCIA VEIN:	Upper Contact:	3-4 %	20139	58.92-59.92	1.00	7.38		0.7		0.26					
			Multiple phases of bx and banding;	58.92m/45 deg		20140	59.92-60.92	1.00	11.69		1.4		0.48					
			qtz varies from white to pale yellow to	Banding:		20141	60.92-61.92	1.00	10.85		1.0		0.31					
			pink to maroon; local massive white qtz	55-65 deg		20142	61.92-62.92	1.00	5.38		0.7		0.09					
			with delicate red hem +/- chl-cpy	Lower Contact:		20143	62.92-64.26	1.34	5.07		2.7		0.20					
			banding; bottom 1.25m is int. bx, qtz	64.26m/65 deg														
			fragments to 5cm in a pale yellow															
			granular qtz matrix, cpy occurs as															
			dissem grains and patches to 5mm															
			throughout, py predominately assoc with															
			coarser cpy patches, 1-2% cpy, 1% py;															
			local blocks of hbl-fs proph to 10cm															
			within the vein(s); vein is locally															
			cut by cc-qtz v. to 6cm.															
64.26	75.59	100	HORNBLENDE-FELDSPAR PORPHYRY:		trace	20144	64.26-65.76	1.50		5		<0.1		34				
			Pale grey-green, fine to medium grained			20145	65.76-67.26	1.50		<5		<0.1		79				
			with local coarse grained fragments to			20146	67.26-68.76	1.50		<5		<0.1		141				
			10cm, hbl-fs grains altered to chl-ser,			20147	68.76-70.26	1.50		<5		0.1		158				

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-8 PAGE 3 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
			matrix is moderate to very silic, spec			20148	70.26-71.76	1.50		(5)		0.1		4				
			hem occurs as very fine dissem grains,			20149	71.76-73.26	1.50		(5)		(0.1		17				
			locally 1-2% and decr toward bottom,			20150	73.26-75.59	2.33		(5)		(0.1		14				
			local hairline to 1cm qtz-cc-v., trace															
			qtz-hem v., trace qtz-py-cpy v; local															
			hairline fractures with qtz-ser, local															
			fractures strongly weathered.															
75.59			END OF HOLE															
			LOGGED BY ROBERT BAERG															

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: Oct. , 1987
DATE COMPLETED: Oct. 8, 1987
CORE SIZE: NQ
PROPERTY: TODD CREEK
N.T.S. # 104 A/04

FIELD CO-ORDINATES:

LAT: 9959.3E
DEP: 9996.2N

PROJECT: 281

PAGE 1 OF 3

DIP: -65
BEARING: 100

HOLE NO: NTC - 87-9

ELEV: 1125 m
LENGTH: 92.96m (305 feet)

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
0	7.21	98	HORNBLENDE-FELDSPAR PORPHYRY: Medium to dark green, very fine to carse grained, local coarse grain fragments in fine grained sections, moderate to very silic; strong chl altered of hbl and/or fs pheno's; local hairline qtz-cc v.		nil	20151	00.00- 1.50	1.50		10		0.1		17				
						20152	1.50- 3.00	1.50		<5		<0.1		4				
						20153	3.00- 4.50	1.50		<5		0.1		6				
						20154	4.50- 6.00	1.50		<5		0.1		19				
						20155	6.00- 7.21	1.21		5		0.1		19				
7.21	11.27	100	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, medium-pale green-grey, fine fine to coarse grained, fs pheno's to 5mm; silic, chl-ser altered; local qtz-ser fractured v, local fractures int. weathered, weathered zone from 6.62-8.50m has local narrow qtz +/- py-cpy v		trace	20156	7.21- 8.71	1.50		5		0.1		66				
						20157	8.71-10.21	1.50		<5		<0.1		115				
						20158	10.21-11.27	1.06		10		<0.1		215				
11.27	24.69	99	HORNBLENDE-FELDSPAR PORPHYRY: Dark green-brown to pale grey-green; medium to coarse grained; local narrow bleached silic. zones with speckled-mottled textures; dark sections have 1-3% dissem spec. hem grains to 1mm and are chl-ser-si altered; local qtz-hem v to 2cm; local qtz-cc v to 4cm and local qtz-chl v. to 2cm; locally intense hairline fractures with qtz-ser.		trace	20159	11.27-12.77	1.50		35		0.2		182				
						20160	12.77-14.27	1.50		440		0.1		66				
						20161	14.27-15.77	1.50		<5		0.1		6				
						20162	15.77-17.27	1.50		<5		0.1		7				
						20163	17.27-18.77	1.50		<5		0.1		68				
						20164	18.77-20.27	1.50		<5		0.1		102				
						21065	20.27-21.77	1.50		<5		0.1		8				
						20166	21.77-23.27	1.50		<5		0.1		12				
						20167	23.27-24.69	1.42		<5		0.1		10				
24.69	29.17	98	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, silic, pale green-brown with local dark green-brown sections; int. hairline fractures and qtz-cc-ser v. with local hem; matrix is pale green-brown with abundant pale yellow ser after fs and chl after hbl, local fine grained chl fragments to 3cm, trace dissem py-cpy.	Qtz-hem bx v: 28.80-28.97m/60 d	trace	20168	24.69-26.19	1.50		<5		0.1		270				
						20169	26.19-27.69	1.50		<5		0.1		102				
						20170	27.69-29.17	1.48		1350		0.1		190				

NORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-9 PAGE 2 OF 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
29.17	38.47	93	HORNBLENDE-FELDSPAR PORPHYRY: Dark green-brown to pale grey-brown; crs. grained; numerous narrow bleached silic sections, locally with hairline to 1mm qtz-py-cpy v., dark sections contain 1-3% dissem spec hem grains to 2mm, locally int. hairline fractures with qtz-ser; locally flow banded; locally strongly weathered & fractured.	Flow Banding: 55-60 deg	trace	20171	29.17-30.67	1.50		60		(0.1		210				
						20172	30.67-32.17	1.50		(5		(0.1		68				
						20173	32.17-33.67	1.50		(5		0.1		67				
						20174	33.67-35.17	1.50		(5		2.2		148				
						20175	35.17-36.67	1.50		(5		0.2		91				
						20176	36.67-38.47	1.80		(5		0.1		64				
38.47	41.53	99	HORNBLENDE-FELDSPAR PORPHYRY: Bleached, silic, ser-chl altered, medium to coarse grained; ser after fs locally produces a speckled texture, matrix is a pale grey-brown si-ser; local qtz-hem-py v. from .1 to 3cm, trace cpy.	Flow Banding: 50 deg	trace	20177	38.47-39.57	1.5		(5		0.3		114				
						20178	39.57-41.53	1.96		90		0.3		280				
41.53	45.17	100	HORNBLENDE-FELDSPAR PORPHYRY: As for 29.17-38.47m		trace	20179	41.53-43.03	1.50		(5		(0.1		18				
						20180	43.03-45.17	2.14		(5		(0.1		14				
45.17	47.78	85	HORNBLENDE-FELDSPAR PORPHYRY: As for 38.47-41.53m		trace	20181	45.17-47.78	2.61		20		0.1		34				
47.78	48.91	85	HORNBLENDE-FELDSPAR PORPHYRY: As for 29.17-38.47m	Qtz-cc-hem-py-cpy v: 48.38-48.48m/45 d	trace	20182	47.78-48.91	1.13		10		(0.1		470				
48.91	52.10	98	HORNBLENDE-FELDSPAR PORPHYRY: As for 38.47-41.53m; abundant qtz-cc-hem-py-cpy v. to 5cm, approx 1% cpy, 1-2% py	Cpy-qtz-cc-hem-py v: 48.92-48.94m/70 d 49.34-49.35m/65 d 50.50-50.52m/30 d	2-3 %	20183	48.91-49.91	1.00		190		(0.1		5800				
						20184	49.91-50.91	1.00		20		0.8		240				
						20185	50.91-52.10	1.19		40		0.8		88				
52.10	64.45	98	HORNBLENDE-FELDSPAR PORPHYRY: As for 29.17-38.47m		trace	20186	52.10-53.60	1.50		10		0.1		7				
						20187	53.60-55.10	1.50		(5		0.2		18				
						20188	55.10-56.60	1.50		(5		(0.1		28				
						20189	56.60-58.10	1.50		(5		(0.1		47				
						20190	58.10-59.60	1.50		110		1.8		174				
						20191	59.60-61.10	1.50		(5		0.1		17				
						20192	61.10-62.60	1.50		(5		0.1		19				
						20193	62.60-64.45	1.85		(5		0.2	/	4				
64.45	65.90	98	HORNBLENDE-FELDSPAR PROPHYRY: Pale grey-green, bleached, silic; top 35 cm is a qtz-cc bx zone, rest of unit is cut by numerous irreg yellow-white qtz bx v. to 3cm, approx 10-15% v.		trace	20194	64.45-65.90	1.45		20		(0.1		4				

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

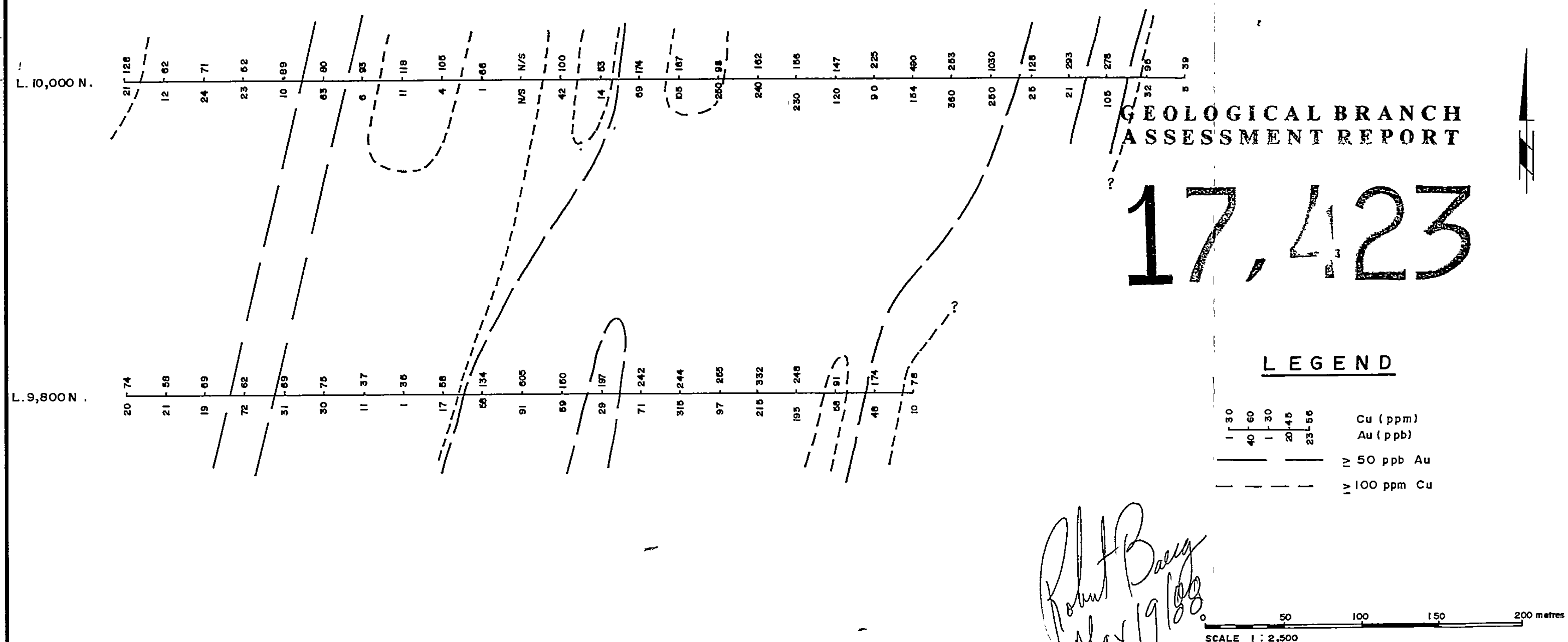
D.D.H. #

PROPERTY: TODD CREEK HOLE NO.: NTC-87-9 PAGE 3 of #3

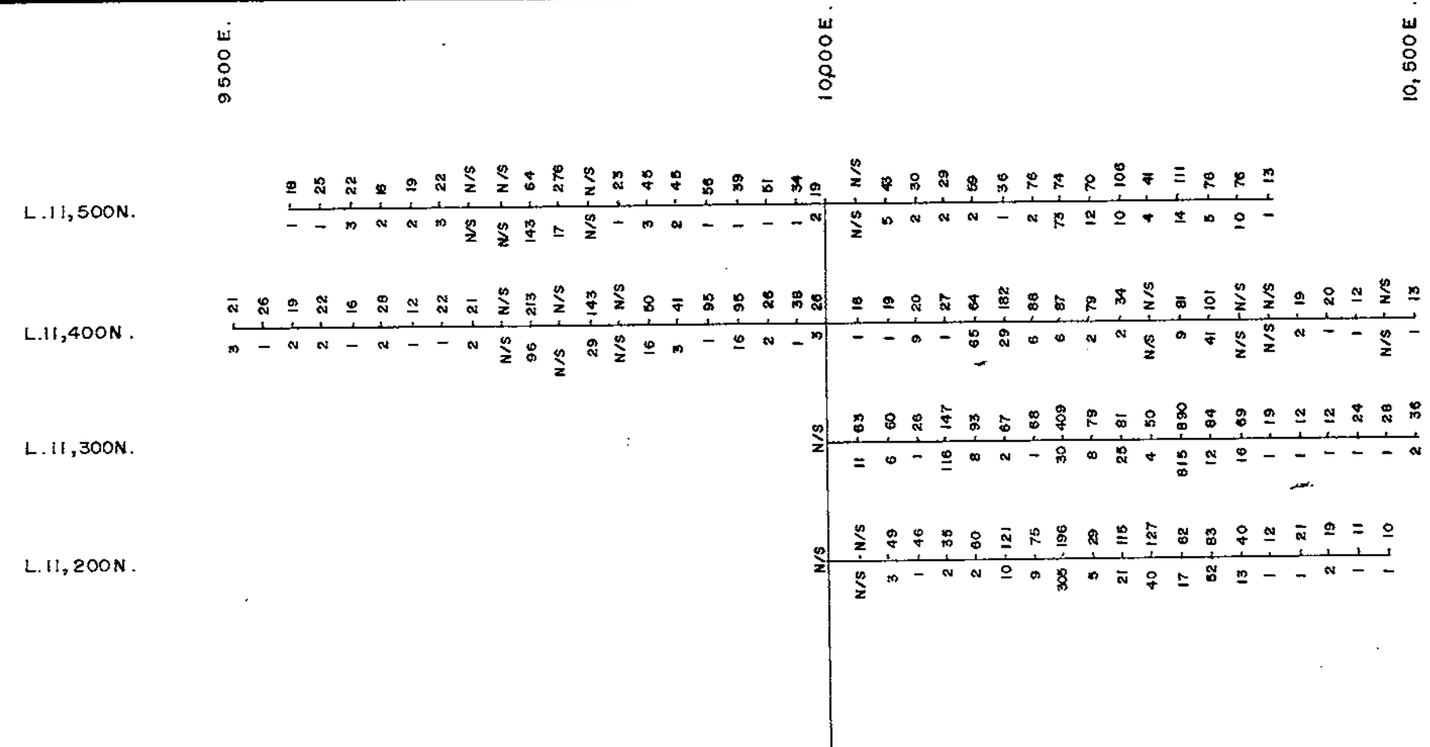
FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. HCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	PB %	PB ppm	ZN %	ZN ppm
65.90	70.97	100	PYRITE STRINGER ZONE:															
			HORNBLENDE-FELDSPAR PORPHYRY:	Py v: 55-70 deg	1-2 %	20195	65.90-66.90	1.00		5		0.1		31				
			As for 29.17-38.47m; slightly more			20196	66.90-67.90	1.00		20		<0.1		10				
			bleached and altered, 1% py as 1-8mm v			20197	67.90-68.90	1.00		25		<0.1		79				
			and local dissem grains, trace cpy.			20198	68.90-69.90	1.00		15		0.1		97				
						20199	69.90-70.97	1.07		70		0.2		500				
70.97	75.16	98	QUARTZ BRECCIA VEIN ZONE:	Qtz-cpy-py-hem	5-7 %	20200	70.97-71.47	0.50	1.71		<0.7		0.11					
			70.97-71.47: 25% fine grained py bands	bx v:		20201	71.47-72.47	1.00	6.21		1.4		0.97					
			10-15% qtz-bx v; zone has been int.	70.97-71.06m/65 d		20202	72.47-73.47	1.00	1.61		0.7		0.50					
			sheared, py is ground up and there are	71.68-71.98m/50 d		20203	73.47-74.47	1.00	0.38		<0.7		0.10					
			numerous rolled qtz fragments.	Banding: 35 deg		20204	74.47-75.16	0.69	5.49		1.0		0.26					
			71.47-75.16: qtz bx v and si flooded															
			hbl-fs porph, 15% qtz-hem-cpy-py banded															
			and bx v., approx 75% si flooded, ser															
			altered hbl-fs porph, si-flooded zone															
			has a pale yellow matted texture, 10%															
			hbl-fs porph fragments; dissem and															
			irreg v of cpy-py to 2cm throughout;															
			irreg maroon-red hem v. throughout.															
75.16	78.29	99	HORNBLENDE-FELDSPAR PORPHYRY:		trace	20205	75.16-76.16	1.00	0.21		<0.7		0.03					
			Pale grey-green, fine grained, int.		to 1%	20206	76.16-77.16	1.00	0.27		<0.7		0.07					
			bleached, silic, ser-chl altered,			20207	77.16-78.29	1.13	0.10		<0.7		0.07					
			upper 25cm and lower 100cm are int.															
			fractured and silic.; .2-7cm, irreg.,															
			qtz-hem-py-cpy v. throughout, local															
			.1-.5% py, local qtz-chl v.															
78.29	80.90	100	MIXED QUARTZ & VOLCANIC BRECCIA ZONE:	Upper Contact:	trace	20208	78.29-79.09	0.80	8.16		100.0		0.57					
			Pale yellow-white-red qtz-bx zone from	78.29m/40 deg	to 1%	20209	79.09-80.09	1.00	0.72		<0.7		0.10					
			78.29-78.84, grades into mixed qtz-	Banding:		20210	80.09-80.90	0.91	1.89		<0.7		0.15					
			porphyry bx, the mixed bx consists of	78.84m/45 deg														
			1-22cm volc frags with interstitial	Lower Contact:														
			white to red qtz fragments and fine	80.90m/50 deg														
			grained pale yellow si, 20-30% qtz-bx															
			fragments, local dissem cpy-py in the															
			si matrix and qtz fragments.															
80.90	92.96	92	HORNBLENDE-FELDSPAR PORPHYRY:		trace	20211	80.90-82.40	1.50		10		<0.1		179				
			Fine to coarse grained, paly green-grey			20212	82.40-83.90	1.50		15		<0.1		465				
			moderate to very silic, locally			20213	83.90-85.40	1.50		<5		0.1		47				
			bleached; fs are locally a pale pink-			20214	85.40-86.90	1.50		<5		<0.1		54				
			brown (K-spar?); trace qtz-hem-cpy v			20215	86.90-88.40	1.50		15		0.1		215				
			to 2mm; trace qtz-py-cpy v to 2mm;			20216	88.40-89.90	1.50		<5		0.1		90				
			local qtz-cc v. to 1cm, locally 1-2%			20217	89.90-91.40	1.50		10		0.2		42				
			fine grained dissem spec. hem.			20218	91.40-92.96	1.56		<5		0.1		91				
92.96			END OF HOLE															
			LOGGED BY ROBERT BAERG															

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423



REVISED	TODDD CREEK
	NORTH ZONE
	Fall Creek Grid
	Cu-Au Soil Geochem
PROJ.No. 281	SURVEY BY: R.B. DATE: May, 1988
N.T.S. 104A/4	DRAWN BY: S.K.B. SCALE: 1 : 2500
DWG.No. FIG. 10	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.



LEGEND

34 69 40 30 60 — Cu (ppm) / Au (ppb)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robert Barry
May 19/88

0 100 200 300 metres
SCALE 1:5,000

REVISED

TODD CREEK

MID ZONE

Ridge Grid

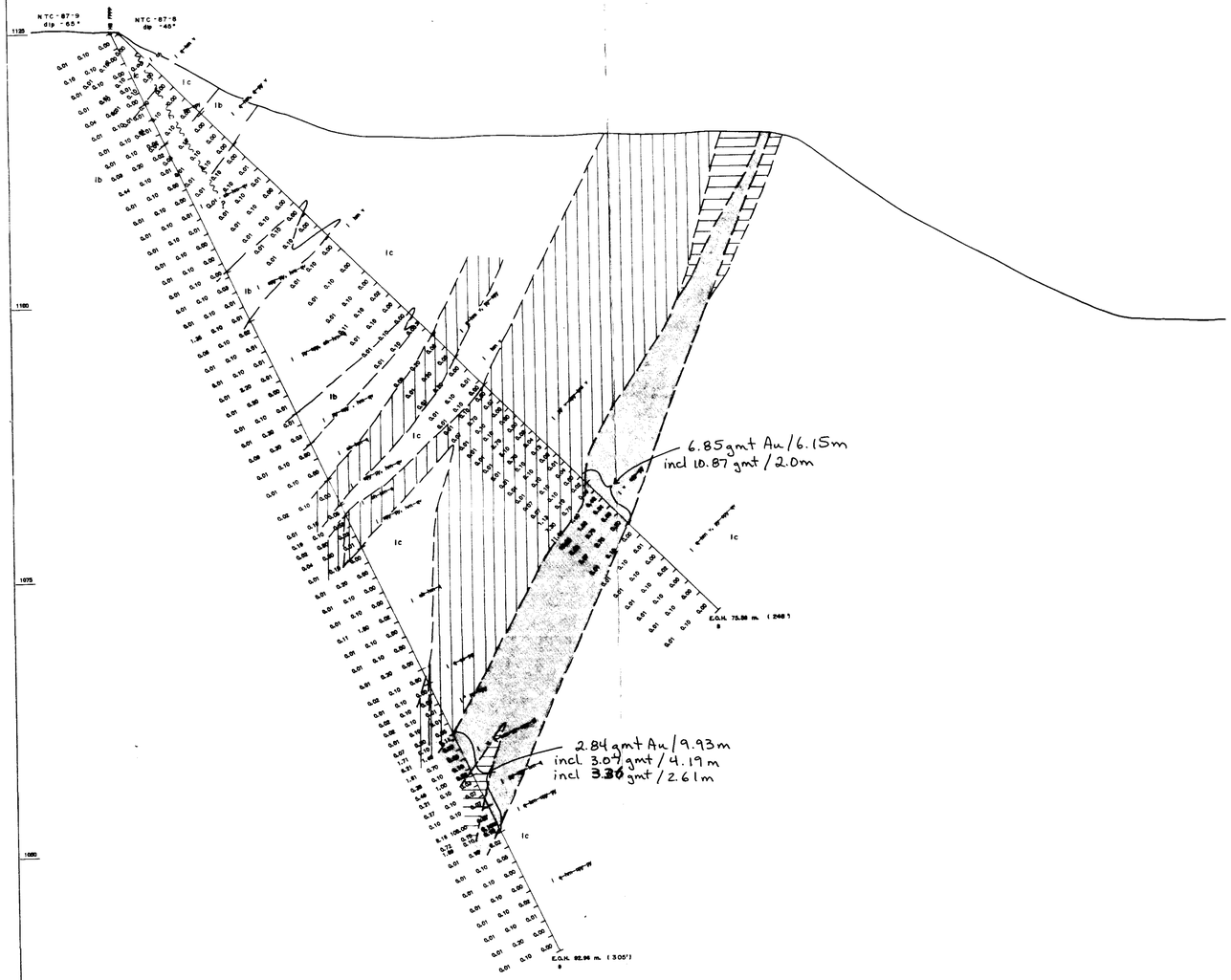
Cu - Au Talus Geochem

PROJ. No. 281
N.T.S. 104A/4
DWG. No. FIG. 9

SURVEY BY: R.B. DATE: May, 1988
DRAWN BY: S.K.B. SCALE: 1:5,000

NORANDA EXPLORATION
OFFICE: PRINCE GEORGE, B.C.

VANCAL 11926



LEGEND

ROCK TYPES

1 Hornblende-Feldspar Porphyry Volcanic
1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.

- **1a** quartz +/- pyrite altered, white to pale brown weathering.
- **1b** sericite +/- quartz-pyrite altered, rusty yellow weathering.
- **1c** chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
- **1d** carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.

2 Andesite, anhedral feldspar grains in a maroon to dark grey matrix, 2-5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.

- **2d** carbonate +/- pyrite altered, dark brown weathering.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.

Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.

Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qv	quartz vein
hm	hematite
py	pyrite
cpy	chalcopyrite
si	silica
se	sericite
ch	chlorite
cb	carbonate

Au gmt, Ag gmt, Cu %

Robert Baerg
May 19/88

TODD CREEK

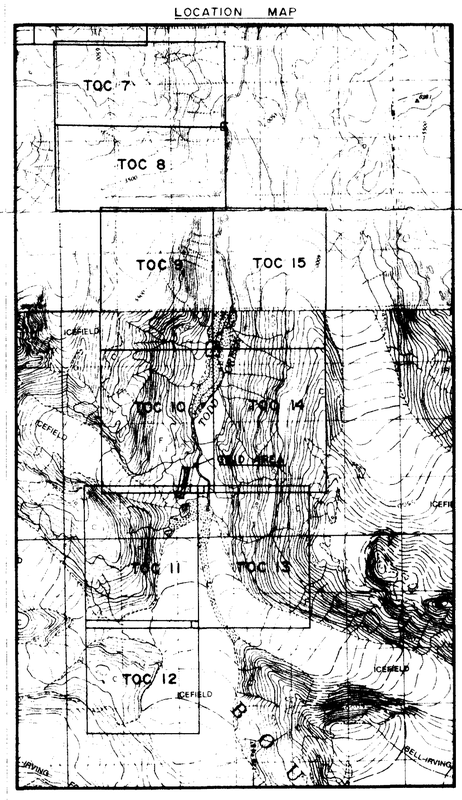
DRILL SECTION

9996.2

noranda exploration company, limited

SCALE: 1/250	DDH 8,9
NTS: 104A04	PROJECT: 281
OCTOBER 1987	GEOL: R. BAERG

FIG. 16



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

LOCATION MAP

0 1 2 3 4 Kilometres
SCALE 1 50,000

LEGEND

ROCK TYPES

1	Hornblende-Feldspar Porphyry Volcanic 1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.
1a	quartz +/- pyrite altered, white to pale brown weathering.
1b	sericite +/- quartz-pyrite altered, rusty yellow weathering.
1c	chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
1d	carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.
2	Andesite, anhedral feldspar grains in a maroon to dark grey matrix, .2-.5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.
2d	carbonate +/- pyrite altered, dark brown weathering.
☐	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.
▧	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.
░	Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.
▨	Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qtz - quartz
hem - hematite
cpy - chalcopyrite
chl - chlorite
ep - epidote
cc - calcite
py - pyrite
mal - malachite
rhy - rhyolite

SYMBOLS

⊥	flow banding, strike and dip	①	Float - quartz-hematite-chalcopyrite
—	joint, strike and dip	②	Float - quartz-hematite
∿∿	fault	③	Float - pyrite-chalcopyrite
— —	contact, inferred, defined		Float - pyrite
⬭	area of outcrop	✕ 85178	Float sample
v	vein	• 85177	Rock sample
bx	breccia		
⊢⊣	chip sample line		
⊢⊣, ⥢	trench		
⊢⊙	D.D.H LOCATION		

1986 TABLE OF ANALYSES

ALL VALUES IN ppm EXCEPT WHERE NOTED

TRENCH Nº	SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)	Cu %	Au (oz/T)
1	15006	rock	2	818	23	27	0.4	209	11	-	.08	.001
"	15007	rock	17	721	43	27	0.9	1,128	5	-	.07	.001
"	15008	rock	3	3,123	17	46	0.3	55	7	-	.35	.025
	15009	rock	3	20,464	35	83	1.1	274	2	-	2.25	.062
2	15010	rock	1	106	20	24	0.7	23	14	-	.01	.001
"	15011	rock	1	370	10	24	0.3	14	7	-	.04	.001
"	15012	rock	5	1,096	28	41	0.4	144	12	-	.11	.001
"	15013	rock	2	1,187	19	56	0.3	124	7	-	.12	.012
	15014	rock	1	1,048	5	14	0.2	40	4	-	.11	.001
3	15018	rock	31	1,765	105	44	1.5	1,874	2	-	.18	.020
5	15059	rock	1	391	4	16	0.1	25	3	-	.04	.003
"	15060	rock	5	13,503	26	64	1.0	469	2	-	1.41	.060
"	15061	rock	6	7,357	37	58	1.4	276	6	-	.76	.058
"	15062	rock	5	712	94	27	0.7	338	8	-	.07	.004
6	15063	rock	1	1,120	7	23	0.2	47	9	-	.11	.072
"	15064	rock	17	11,976	68	58	0.4	1,005	2	-	1.25	.088
"	15065	rock	15	3,969	28	66	0.1	269	3	-	.39	.013
7	15066	rock	23	2,848	106	83	1.2	2,265	2	-	.28	.031
"	15067	rock	1	4,182	10	27	0.2	25	4	-	.41	.158

ALL VALUES IN PPM EXCEPT WHERE NOTED

TRENCH Nº	SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au (ppb)	Cu %	Au (oz/T)
12	15161	rock	2	3,157	28	43	0.3	134	1	4	-	.33	.012
"	15162	rock	2	5,722	18	48	0.8	310	1	2	-	.61	.062
"	15163	rock	1	489	8	19	0.1	19	1	2	-	.05	.019
"	15164	rock	2	296	5	25	0.1	13	1	2	-	.03	.033
"	15165	rock	1	180	6	31	0.1	7	1	2	-	.02	.011
12a	15166	rock	7	6,038	19	37	0.4	289	1	2	-	.65	.064
6a	15167	rock	2	190	4	17	0.1	2	1	2	-	.02	.001
13	15168	rock	23	8,129	21	44	1.0	245	1	4	-	.90	.003

1987 TABLE OF ANALYSES

TRENCH #	SAMPLE #	TYPE	WIDTH	Au (gmt)	Ag (gmt)	Cu (%)
TR 1	9325		1.0 m	0.10	0.7	0.22
	9326		1.0 m	0.21	0.7	0.08
	9327		1.0 m	0.65	0.7	0.08
	9328		1.0 m	0.07	0.7	0.02
	9329		1.0 m	0.10	0.7	0.06
	9330		0.9 m	0.07	0.7	0.07
	9331		1.0 m	0.07	0.7	0.01
	9332		1.0 m	0.07	0.7	0.01
	9333		1.0 m	0.07	0.7	0.01
	9334		1.0 m	0.07	0.7	0.01
	9335		1.0 m	0.07	0.7	0.01
	9336		1.0 m	0.07	0.7	0.02
	9337		1.0 m	0.07	0.7	0.01

Map Sheet Index

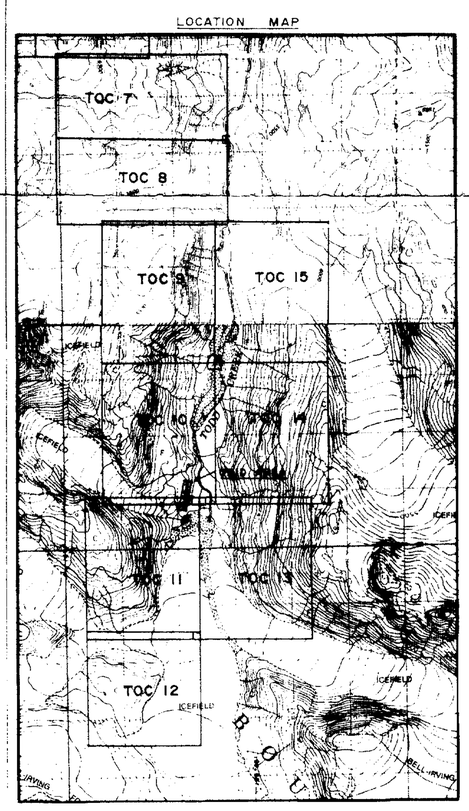
Robert Baerg
May 19/88

SOUTH ZONE

0 5 10 15 20 metres
SCALE 1 250

REVISED	
	TODD CREEK
	GEOLOGY MAP
PROJ. No. 281	SURVEY BY: R.B. DATE: Aug. 1987
N.T.S. 104A/4	DRAWN BY: S.K.B. SCALE: 1 : 250
DWG. No. FIG. 8	**NORANDA EXPLORATION** OFFICE: PRINCE GEORGE, B.C.

LOCATION MAP



SCALE 1 : 10,000

LEGEND

ROCK TYPES

1 — Hornblende-Feldspar Porphyry Volcanic
1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.

1c — quartz +/- pyrite altered, white to pale brown weathering.

1b — sericite +/- quartz-pyrite altered, rusty yellow weathering.

1c — chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.

1d — carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.

2 — Andesite, anhedral feldspar grains in a maroon to dark grey matrix, 2-5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.

2d — carbonate +/- pyrite altered, dark brown weathering.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.

Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.

Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qtz - quartz
hem - hematite
cpy - chalcopyrite
chl - chlorite
ep - epidote
cc - calcite
py - pyrite
mal - malachite
rhy - rhyolite

SYMBOLS

- flow banding, strike and dip
- joint, strike and dip
- fault
- contact, inferred, defined
- area of outcrop
- v — vein
- bx — breccia
- chip sample line
- trench
- D.D.H. LOCATION
- ① Float - quartz-hematite-chalcopyrite
- ② Float - quartz-hematite
- ③ Float - pyrite-chalcopyrite
- ④ Float - pyrite
- ⑤ 85178 Float sample
- x 85177 Rock sample

1986 TABLE OF ANALYSES

ALL VALUES IN ppm EXCEPT WHERE NOTED

TRENCH NT	SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Sb	Au (ppb)	Cu %	Au (oz/T)
10	41808	rock	2	7,835	7	35	0.8	16	13	-	.78	.162
"	41809	rock	2	25,526	35	73	2.9	273	23	-	2.76	.118
"	41810	rock	13	5,512	45	77	0.8	1,128	2	-	.55	.047
11	41811	rock	3	3,093	8	34	0.2	12	7	-	.30	.085
11	41812	rock	1	4,626	8	33	0.7	88	12	-	.48	.259
"	41813	rock	2	5,526	7	92	0.3	67	20	-	.59	.123
8	15068	rock	1	2,518	12	32	0.8	36	14	-	.25	.183
"	15069	rock	11	6,936	30	59	0.4	578	2	-	.77	.064
"	15070	rock	5	598	24	45	0.3	228	2	-	.06	.004
9	15071	rock	3	1,612	6	14	0.1	16	7	-	.16	.004
"	15072	rock	1	1,031	5	14	0.1	20	5	-	.10	.022
"	15073	rock	8	294	14	51	0.6	720	2	-	.03	.008
"	15074	rock	2	140	14	36	0.3	82	4	-	.01	.001
1	15075	rock	3	16,917	27	183	18.4	291	109	-	4.16	.148

ALL VALUES IN PPM EXCEPT WHERE NOTED

TRENCH NT	SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au (ppb)	Cu %	Au (oz/T)
13	15168	rock	23	8,179	21	44	1.0	245	1	4	-	.90	.003
"	15169	rock	8	3,597	36	54	0.5	450	1	2	-	.38	.008
"	15170	rock	8	606	49	80	1.9	269	1	23	-	.06	.017
"	15171	rock	2	2,263	11	132	2.2	63	8	176	-	.23	.128
14	15172	rock	2	405	9	20	0.1	39	1	2	-	.02	.001
"	15173	rock	2	39	28	21	0.2	66	1	2	-	.01	.001
"	15174	rock	2	18,565	20	73	3.0	62	2	18	-	2.05	.115
"	15175	rock	2	757	7	28	0.3	3	1	4	-	.08	.001
15	15176	rock	2	98	19	8	0.3	157	1	5	-	.01	.002
"	15177	rock	2	6,403	14	84	10.9	256	1	53	-	.66	.130
"	15178	rock	2	65	4	23	0.2	3	1	2	-	.01	.001
16	15179	rock	4	8,431	19	36	0.4	256	1	9	-	.87	.037
"	15180	rock	5	2,900	13	22	0.6	86	1	7	-	.30	.021
"	15181	rock	1	1,346	8	15	0.2	17	1	6	-	.15	.007
17	15182	rock	2	2,073	7	39	0.2	6	1	2	-	.21	.020
"	15183	rock	2	935	4	31	0.1	6	1	3	-	.09	.002
"	15184	rock	2	4,569	3	31	0.6	13	1	6	-	.48	.135
18	15185	rock	3	881	9	21	0.2	2	1	2	-	.09	.066
19	15186	rock	2	820	8	27	0.3	2	1	2	-	.09	.087

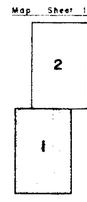
1987 TABLE OF ANALYSES

TRENCH #	SAMPLE #	TYPE	WIDTH	Au (gmt)	Ag (gmt)	Cu (%)
TR 21	9251	chip	1.0 m	*0.010	*0.02	0.04
	9252		1.0 m	*0.006	*0.02	0.01
	9253		1.0 m	*0.018	*0.02	0.03
	9254		1.0 m	*0.002	*0.02	0.01
	9255		1.0 m	*0.001	*0.02	0.01
	9256		1.0 m	*0.001	*0.02	0.01
	9257		1.0 m	*0.001	*0.02	0.01
	9258		1.0 m	0.07	1.0	0.01
	9259		1.0 m	0.07	0.7	0.04
TR 24	9260		1.0 m	1.78	0.7	0.05
TR 22	9261		1.0 m	0.07	0.7	0.01
TR 23	9262		1.0 m	0.07	0.7	0.02
	9263		1.0 m	0.75	0.7	0.04
	9264		1.0 m	0.31	0.7	0.03
	9265		1.0 m	0.07	0.7	0.01
	9266		1.0 m	0.24	0.7	0.07
	9267		1.5 m	0.07	0.7	0.01
	9268		1.0 m	0.07	0.7	0.02
	9269		0.6 m	0.55	0.7	0.10
	9270		1.3 m	0.34	0.7	0.02
	9271		1.0 m	0.38	0.7	0.01
	9272		1.0 m	0.14	0.7	0.01
	9273		1.3 m	0.34	0.7	0.01
	9274		1.0 m	0.75	0.7	0.04
	9275		1.1 m	0.99	0.7	0.06
TR 25	9276		0.8 m	0.14	0.7	0.01
	9277		1.0 m	0.93	0.7	0.04
	9278		1.0 m	3.26	0.7	0.20
	9279		1.0 m	0.62	0.7	0.02
	9280		1.0 m	0.69	0.7	0.03
	9281		1.6 m	0.21	0.7	0.04
TR 26	9282		1.1 m	0.62	0.7	0.01
	9283		1.0 m	0.62	0.7	0.02
	9284		1.0 m	0.62	0.7	0.03
	9285		1.0 m	1.82	0.7	0.05
	9286		1.0 m	3.15	0.7	0.22
TR 27	9287		1.0 m	0.14	0.7	0.02
	9288		1.0 m	0.24	0.7	0.02
	9289		1.0 m	0.07	1.0	0.01
	9290		1.0 m	0.07	0.7	0.01
	9291		1.0 m	0.24	0.7	0.01
	9292		1.0 m	0.27	0.7	0.05
	9293		1.0 m	0.07	0.7	0.01
	9294		1.0 m	0.58	0.7	0.10
	9295		1.0 m	0.07	0.7	0.02
	9296		1.0 m	0.27	0.7	0.03
	9297		1.0 m	0.07	0.7	0.02
	9298		1.0 m	0.07	0.7	0.01
	9299		1.0 m	0.07	1.4	0.01
	9300		1.0 m	0.07	1.4	0.01
	9301		1.0 m	0.10	2.1	0.02
	9302		1.0 m	0.07	0.7	0.01
	9303		1.0 m	0.07	0.7	0.02
	9304		1.0 m	0.07	0.7	0.02
	9305		0.8 m	0.07	0.7	0.03
TR 28	9306			1.10	0.7	0.04
	9307		1.0 m	0.07	0.7	0.01
	9308		1.0 m	0.31	0.7	0.11
	9309		1.0 m	0.24	0.7	0.03
	9310		1.0 m	0.21	1.4	0.08
	9311		0.9 m	0.07	0.7	0.01
TR 13	9312		0.9 m	0.07	0.7	0.02
	9313		1.0 m	0.07	0.7	0.01
	9314		1.0 m	0.07	0.7	0.04
	9315		1.0 m	0.07	0.7	0.01
	9316		0.9 m	8.81	0.7	0.30
	9317		1.0 m	0.34	0.7	0.02
	9318		1.0 m	0.10	0.7	0.01
	9319		1.0 m	0.10	0.7	0.01
	9320		1.2 m	0.31	0.7	0.02
TR 29	9321		1.0 m	2.06	1.0	0.02
	9322		1.0 m	0.31	0.7	0.12
	9323		1.0 m	0.72	0.7	0.19
	9324		1.3 m	0.82	0.7	0.06

NOTE: * denotes oz/t values

SAMPLE #	TYPE	WIDTH	Au (ppb)	Ag (ppm)	Cu (ppm)
85176	grab		26	1.2	1703
85177	"		290	.5	1496
85178	"		162	4.6	1656
85179	"		62	.1	1266
85180	"		1940	.4	35

Map Sheet Index



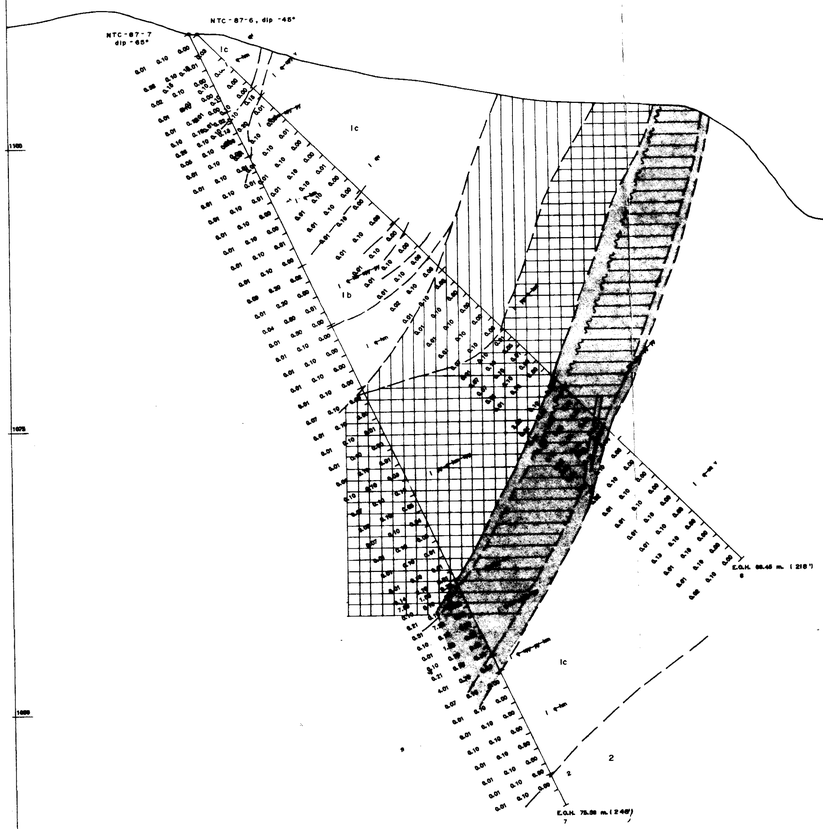
SCALE 1 : 250

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robert Bowy
May 19/1988

REVISED	TODD CREEK
	GEOLOGY MAP SOUTH ZONE
PROJ. No.	SURVEY BY: R.B. DATE: Aug. 1987
N.T.S. 104A/4	DRAWN BY: S.K.B. SCALE: 1 : 250
DWG. No. FIG. 7	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.



L E G E N D

ROCK TYPES

1	Hornblende-feldspar Porphyry Volcanic Hornblende-feldspar porphyry volcanic 1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.
1a	quartz +/- pyrite altered, white to pale brown weathering.
1b	sericite +/- quartz-pyrite altered, rusty yellow weathering.
1c	chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
1d	carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.
2	Andesite, anhedral feldspar grains in a maroon to dark grey matrix, .2-.5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.
2d	carbonate +/- pyrite altered, dark brown weathering.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.
	Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.
	Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qv	quartz vein
hm	hematite
py	pyrite
cpy	chalcopyrite
si	silica
se	sericite
ch	chlorite
cb	carbonate

Au gmt, Ag gmt, Cu %

TODD CREEK

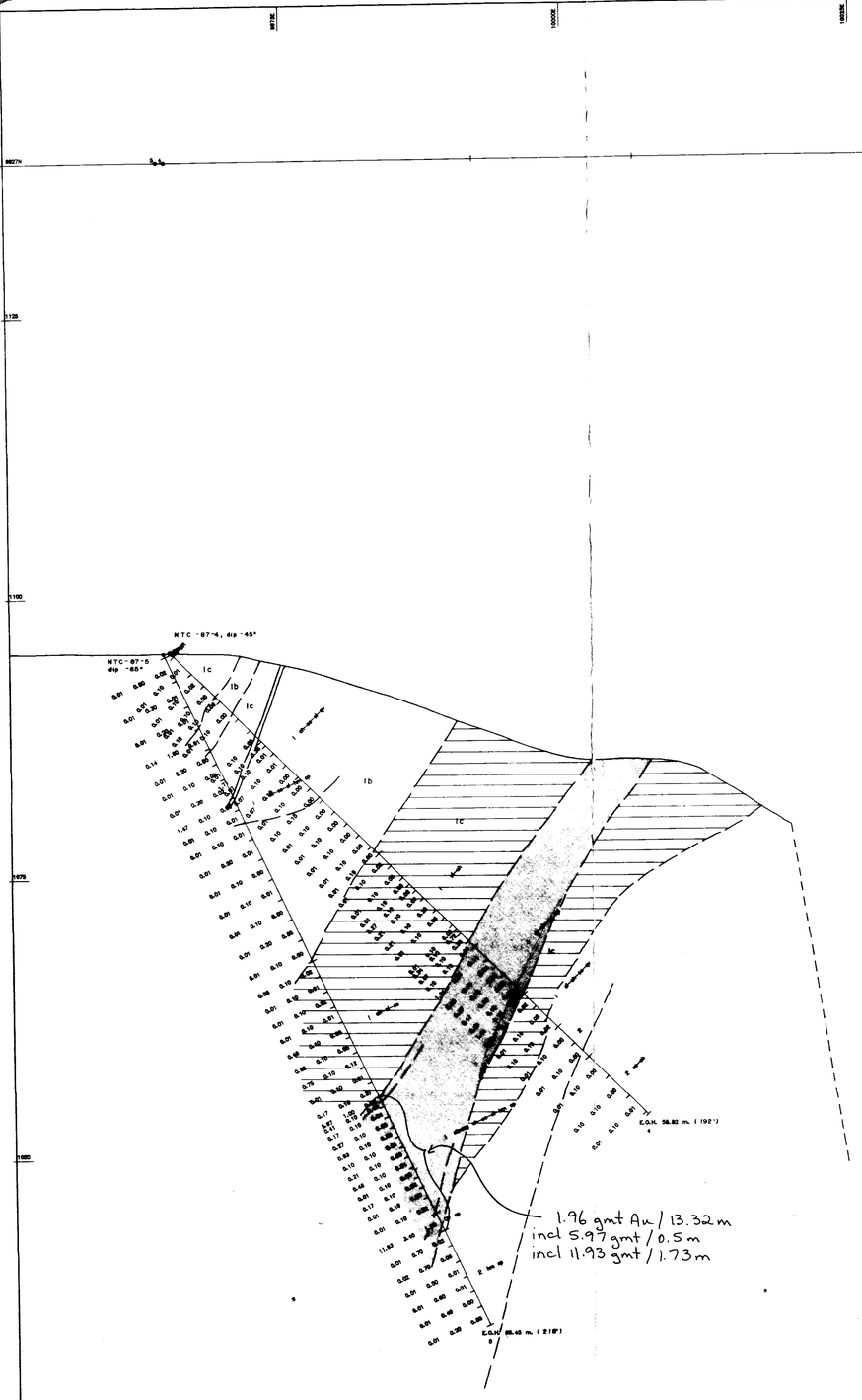
DRILL SECTION

9959.0 N

noranda exploration company, limited

SCALE: 1/250	DDH 6,7
NTS: 104A04	PROJECT: 281
OCTOBER 1987	GEOL: R. BAERG

FIG. 15



L E G E N D

ROCK TYPES

1 Hornblende-feldspar Porphyry Volcanic 1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.

- **1a** quartz +/- pyrite altered, white to pale brown weathering.
- **1b** sericite +/- quartz-pyrite altered, rusty yellow weathering.
- **1c** chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
- **1d** carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.

2 Andesite, anhedral feldspar grains in a maroon to dark grey matrix, .2-.5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.

- **2d** carbonate +/- pyrite altered, dark brown weathering.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.

Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.

Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.

Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qv	quartz vein
hm	hematite
py	pyrite
cpy	chalcopyrite
si	silica
se	sericite
ch	chlorite
cb	carbonate

Au gmt, Ag gmt, Cu %

Robert Baerg
May 1988

TODD CREEK

DRILL SECTION

9927.5 N

noranda exploration company, limited

SCALE: 1/250	DDH 4,5
NTS: 104A04	PROJECT: 281
OCTOBER 1987	GEOL: R. BAERG

FIG. 14

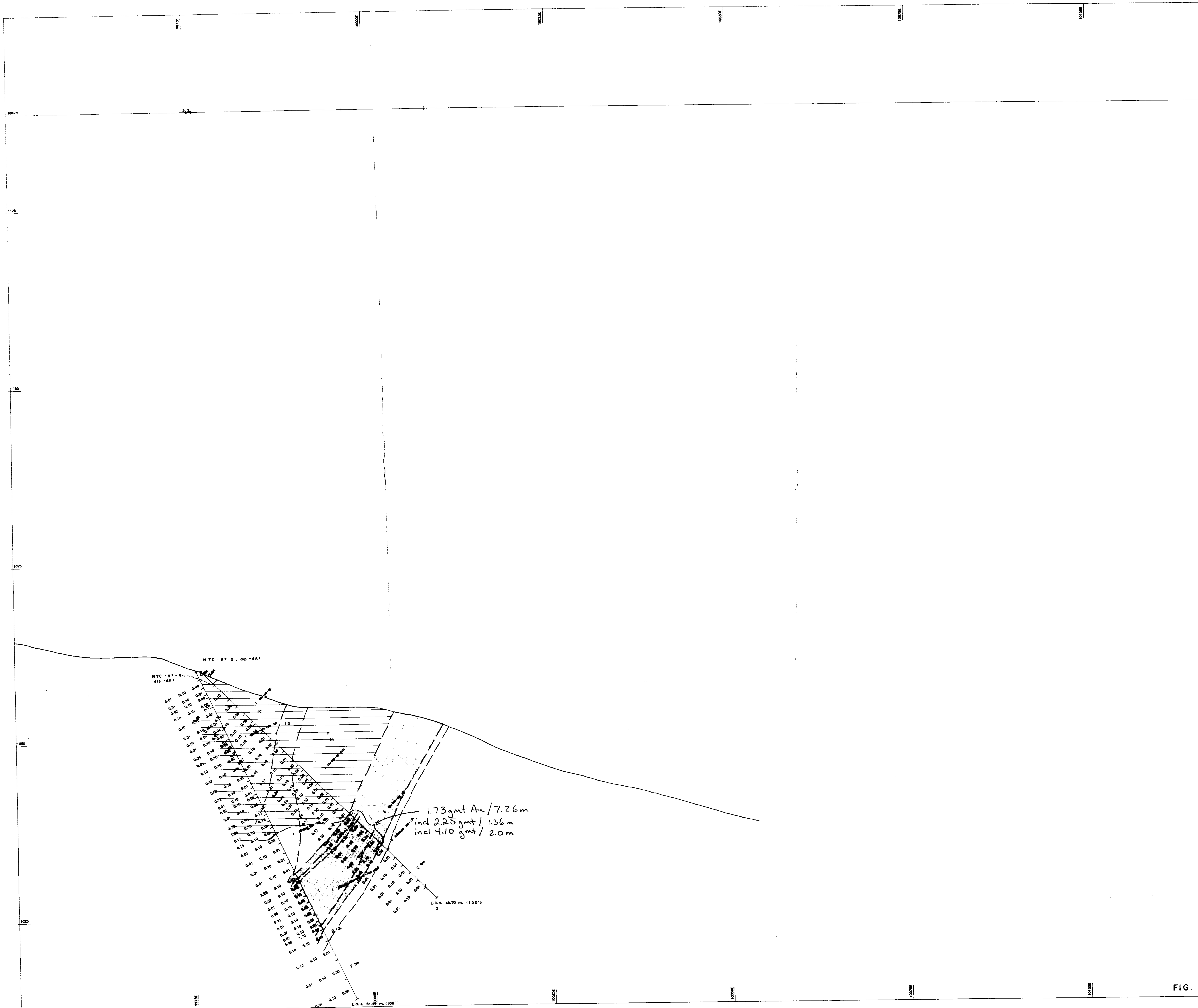


FIG. 13

LEGEND

ROCK TYPES

1	Hornblende-Feldspar Porphyry Volcanic 1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local sphanitic and banded tuff fragments, local tuff-volcanic breccia.
1a	quartz +/- pyrite altered, white to pale brown weathering.
1b	sericite +/- quartz-pyrite altered, rusty yellow weathering.
1c	chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
1d	carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.
2	Andesite, anhedral feldspar grains in a maroon to dark grey matrix, .2-.5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.
2d	carbonate +/- pyrite altered, dark brown weathering.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.
	Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.
	Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qv	quartz vein
hm	hematite
py	pyrite
cpy	chalcopyrite
si	silica
se	sericite
ch	chlorite
cb	carbonate

Au gmt, Ag gmt, Cu %

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robert Baerg
May 19/88

TODD CREEK

DRILL SECTION

9867.4 N

noranda exploration company, limited

SCALE: 1/250	DDH 2,3
NTS: 104A04	PROJECT: 281
OCTOBER 1987	GEOL: R. BAERG

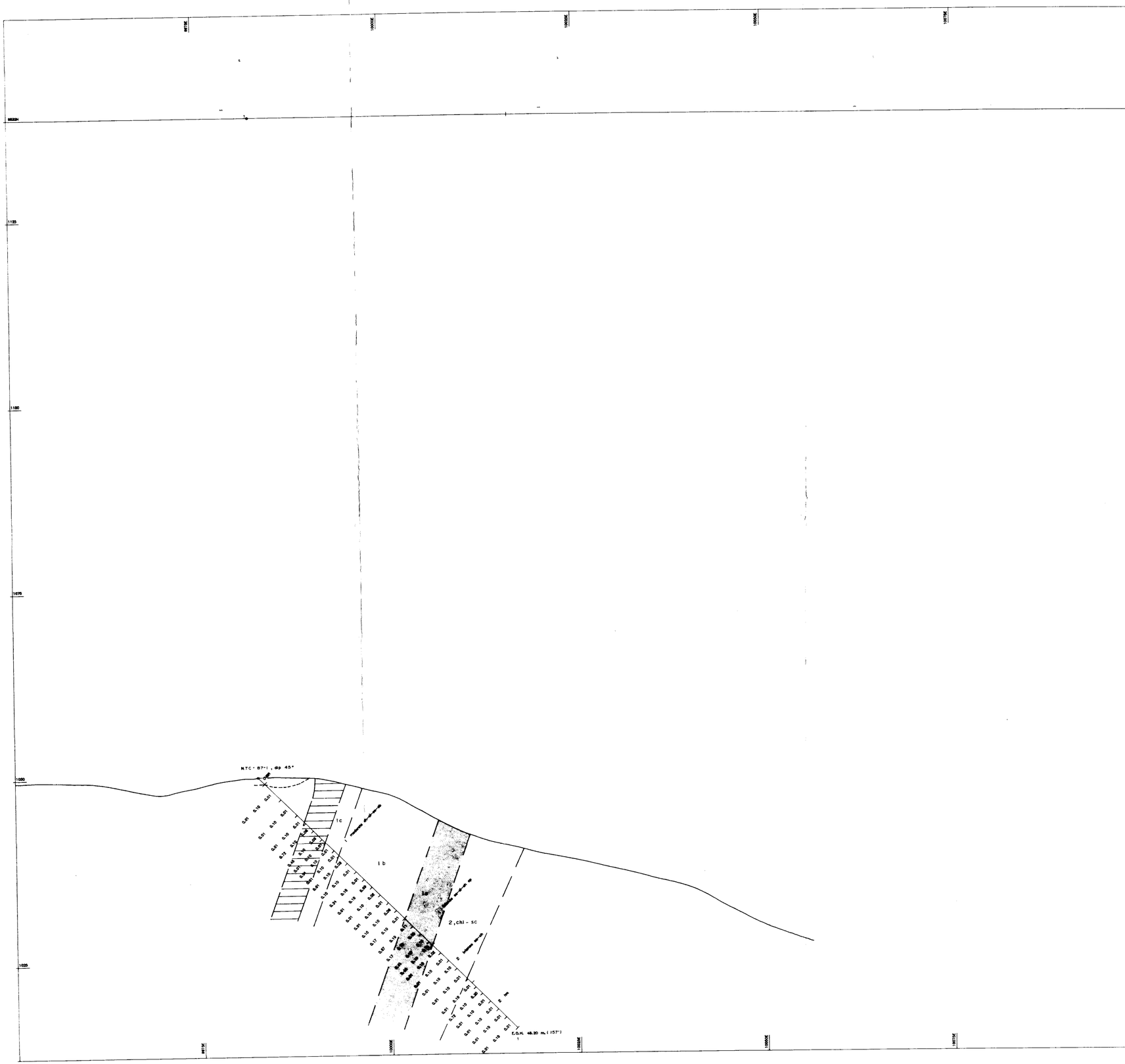


FIG. 12

L E G E N D

ROCK TYPES

1	Hornblende-Feldspar Porphyry Volcanic 1-2mm euhedral hornblende and feldspar grains in a green or pale to medium brown aphanitic matrix, local aphanitic and banded tuff fragments, local tuff-volcanic breccia.
1a	quartz +/- pyrite altered, white to pale brown weathering.
1b	sericite +/- quartz-pyrite altered, rusty yellow weathering.
1c	chlorite +/- quartz-epidote-pyrite altered, white to pale green weathering.
1d	carbonate +/- quartz-pyrite-epidote altered, pale to dark brown weathering.
2	Andesite, anhedral feldspar grains in a maroon to dark grey matrix, .2-.5% disseminated specular hematite grains, local 1-2mm pale grey fragments, minor carbonate.
2d	carbonate +/- pyrite altered, dark brown weathering.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.
	Quartz-hematite-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.
	Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.
	Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.

qv	quartz vein
hm	hematite
py	pyrite
cpy	chalcopyrite
si	silica
se	sericite
ch	chlorite
cb	carbonate

Au gmt, Ag gmt, Cu %

Robert Baerg
May 17/88

TODD CREEK

DRILL SECTION

9831.6 N

noranda exploration company, limited

SCALE: 1/250	DDH 1
NTS: 104A04	PROJECT: 281
OCTOBER 1987	GEOL: R. BAERG

TOC 6

TOC 7

TOC 8

TODD CLAIMS

L.C.P.

Rusty Zone

Sheared Rhyolite

Till

local areas of q-sc-py alt <10m.

See Detailed Map

ZONE "A"

Trench 1

Trench 2

Trench 3

Trench 4

Old drill sites

ZONE "B"

CAMP

FALL SNOW BRIDGE CREEK

FALL CREEK GRID

"RIDGE GRID"

TODD CREEK

ICE

L 10000 N

L 9800N

L 11,500N.

L 11,400N.

L 11,300 N.

L 11,200N.

B.L. 10,700E AT 90°

LOCATION MAP

0 1 2 3 4 5 Kilometres

SCALE 1:100,000

LEGEND

ROCK TYPES

1 — Feldspar Porphyry, pale brown, la-quartz-pyrite altered, lb-quartz-sericite pyrite altered, lc-chlorite altered, ld-iron-carbonate +/- quartz-sericite altered

2 — Dark green, maroon grey andesite flows, agglomerate tuff, breccia

3 — Light grey-green feldspar porphyry flows, tuff and tuff breccia

4 — Rhyolite, massive, breccia, lapilli tuff, locally quartz-sericite-pyrite altered

5 — Dark green hornblende porphyry intrusive

Quartz-pyrite +/- sericite altered mineralized zone

ba	barite	q	quartz
bn	bornite	sc	sericite
cal	calcite	sp	sphalerite
chl	chlorite	stk wk.	stock work
cpy	chalcopyrite	Tt	tetrahedrite
gn	galena		
hem	hematite		
mal	malachite		
py	pyrite		

SYMBOLS

- Outcrop area
- Geologic contact defined, inferred
- Mineralized vein
- x , ● Rock, float sample
- 41821 Silt sample
- Glacial till
- Icefield
- Trench or chip sample line
- Strike and dip
- Pan sample , Pan sample and silt sample

TABLE OF ROCK AND SILT SAMPLE ANALYSIS

ALL VALUES IN ppm EXCEPT WHERE NOTED

SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au (ppb)	Cu %	Au (oz./T)
15151	silt	1	94	22	104	0.4	32	1	2	24		
15152	silt	1	142	24	102	0.3	54	1	2	37		
15153	silt	1	100	27	323	0.4	51	3	2	25		
15154	silt	1	80	16	101	0.2	57	1	2	39		
15155	silt	1	122	29	103	0.3	42	1	2	32		
15156	silt	1	90	33	123	0.3	48	1	2	129		
15157	silt	1	65	20	104	0.4	45	1	2	14		
15158	silt	1	80	22	100	0.5	43	1	2	37		
55428	rock	53	270	5,153	3,673	7.3	75	67	41	1		
55429	rock	9	286	11,968	6,220	39.3	53	70	12	12		
55430	silt	1	70	30	162	0.4	26	1	2	9		
55431	rock	2	51	55	29	0.3	307	1	2	220		
55432	rock	28	146	548	2,552	10.7	191	17	2	6		
55433	rock	6	42,247	33	299	8.3	397	7	2	-	4.81	.016
55434	rock	6	1,159	164	1,354	1.5	200	15	3	-	.12	.007
55435	rock	8	35,197	65	170	9.9	2,183	6	11	-	3.94	.109
55436	rock	3	1,568	10	101	0.7	112	1	2	-	.16	.009
55437	rock	12	12,587	69	158	5.0	925	3	2	-	1.27	.063
55438	silt	2	43	39	266	0.2	29	2	2	6		
55439	rock	2	276	216	52	15.7	57	1	18	82		
55440	rock	7	628	278	24,353	5.0	14	389	14	39		
55441	rock	2	21	11	113	0.2	2	1	2	1		
55442	rock	2	15	13	62	0.2	6	1	2	1		
55443	rock	7	780	13	85	0.2	80	1	4	92		
55444	rock	83	23	20	8	0.9	186	1	8	37		
55445	silt	8	22	24	133	0.3	109	1	3	10		
55446	silt	2	20	25	115	0.5	42	1	2	4		
55447	rock	5	21	24	21	0.4	300	1	8	37		
55448	rock	7	9,849	22	199	2.2	286	3	2	1,990		
55449	rock	34	2,392	20	225	2.9	1,674	4	4	580		
55450	rock	15	16,572	67	2,992	11.3	2,626	58	5	-	1.88	.029
55451	rock	18	19,241	71	190	7.4	252	4	2	-	2.19	.032
55470	rock	13	134	218	78	1.9	1,086	1	19	1,880		
55472	rock	3	218	16	9	0.3	86	1	2	2,100		
55473	rock	4	200	23	70	0.7	457	1	2	69		
55474	rock	4	42	21	16	1.3	228	1	2	89		
55475	rock	3	34,611	26	181	0.1	78	4	2	-	4.03	.046
55476	rock	2	275	6	6	0.1	8	1	2	10		
55477	rock	4	311	55	29	1.9	686	1	7	580		
55478	rock	2	117	12	24	0.1	43	1	2	28		
55479	rock	4	18	9	72	0.1	12	1	2	15		
55480	rock	1	23	13	44	0.3	72	1	2	4		
55481	rock	2	682	33	64	2.4	497	1	2	830		
55482	rock	1	3,298	4	12	13.6	2	1	2	6		
55483	rock	4	126	26	44	0.7	326	1	2	50		
55484	rock	3	2,149	41	54	1.2	590	1	2	600		
55485	silt	2	96	24	111	0.3	98	1	2	68		
55486	rock	7	28	13	11	0.1	60	1	3	6		
55487	rock	3	19	20	17	0.2	70	1	2	3		
55488	rock	24	33,626	42	100	2.2	117	5	2	-	4.45	.048
55489	rock	2	69	15	15	0.2	53	1	2	46		
55490	rock	11	10,185	27	52	0.3	246	2	2	-	1.10	.067
55491	rock	3	1,387	12	35	1.2	37	1	2	26400	-	-
55492	silt	2	69	11	99	0.3	51	2	2	18		
55493	rock	3	165	14	22	0.3	14	1	2	46		
55494	rock	2	2,880	10	94	0.3	25	1	2	4,150		
55495	silt	2	171	30	87	0.4	89	3	2	47		
55496	rock	6	50,898	30	137	14.2	43	6	2	-	6.29	.001
55497	silt	1	26	15	105	1.1	30	1	2	19		
55498	silt	2	123	24	86	0.4	91	1	2	3		
55499	rock	5	1,329	45	122	1.5	804	2	2	109		
15214	rock	9	781	12	8	0.8	69	1	5	122	-	-
15215	silt	2	15	28	84	0.2	8	1	2	1		
15216	silt	2	16	11	72	0.1	2	1	4	32		
15217	rock	18	39	162	145	4.3	784	2	19	28	-	-
15218	rock	2	60	9	28	0.1	2	1	2	-	.01	.001
15219	rock	11	12,650	41	73	10.2	352	1	2	-	1.41	.008
15220	rock	2	754	7	127	0.3	193	1	2	-	.08	.016
15221	rock	3	152	13	99	0.2	7	1	2	-	.02	.128
15222	rock	3	6,073	19	47	0.7	110	1	2	-	.66	.009
15223	rock	7	105	39	44	0.2	997	1	2	72	-	-
15224	rock	4	15,912	28	41	0.2	96	2	2	-	1.70	.152
15225	rock	3	6,844	10	45	0.2	8	1	2	-	.74	.004
15226	rock	6	22	18	33	0.8	322	1	2	-	.01	.008
15227	talus	2	35	33	160	0.7	16	1	2	1		
15228	rock	14	26,381	55	512	5.2	25	5	2	-	3.08	.060
15229	rock	4	26,561	23	102	5.2	20	2	2	-	3.01	.197
15230	rock	4	6,859	8	49	0.1	8	1	2	-	.73	.001
15231	rock	41	42,285	45	135	18.2	206	5	2	-	5.76	.008
15232	silt	2	61	16	93	0.2	11	1	2	3		
15233	silt	2	94	23	99	0.8	44	1	2	26		
55471	rock	7	5208	230	852	7.8	49	4	2	-	0.59	.009

MAP SHEET INDEX

2

1

NOTE Topography based on photocopy enlargement N.T.S. 1:50,000 scale map 104A/5

0 100 200 300 400 500 m

SCALE 1:5,000

Robert Berg May 1988

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,123

REVISED
R.B. Oct., 1986
R.B. May, 1988

TODD CREEK

NORTH ZONE GEOLOGY MAP AND ROCK, SILT SAMPLE LOCATIONS

PROJ. No. 540

N.T.S. 104A/5

DWG. No. FIG. 5

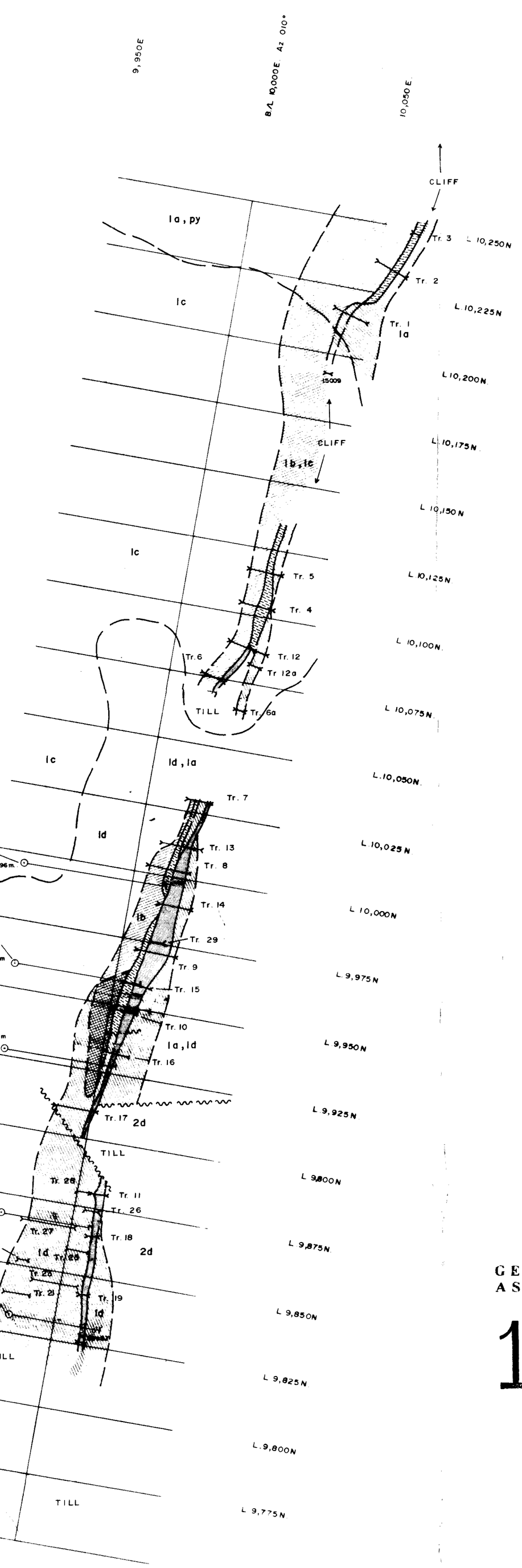
SURVEY BY: R.B. DATE: Aug. 1986

DRAWN BY: S.K.B. SCALE: 1:5000

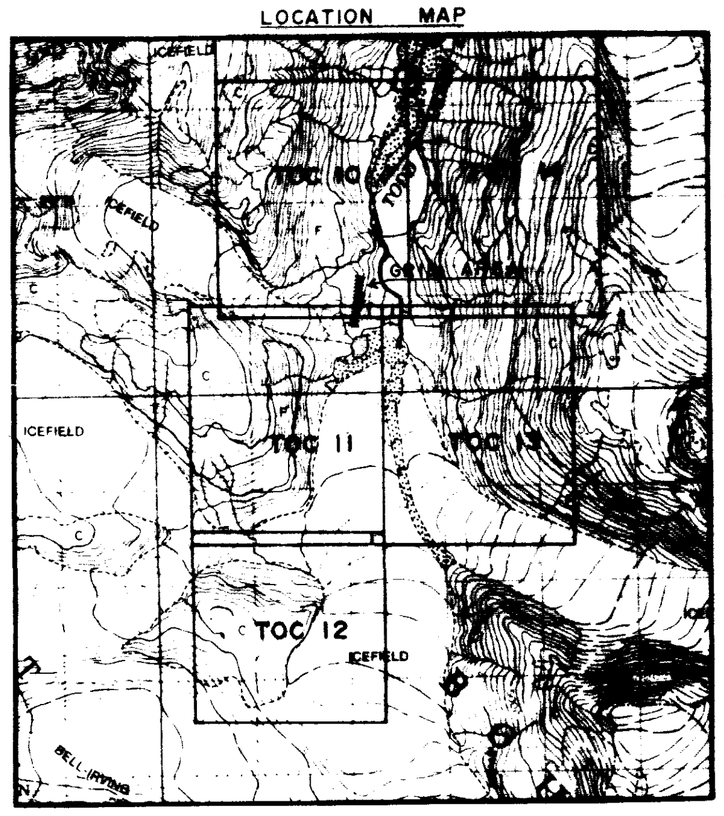
NORANDA EXPLORATION

OFFICE PRINCE GEORGE, B.C.

VANCAL 11817



LOCATION MAP



LEGEND

ROCK TYPES

- 1 Hornblende - Feldspar Porphyry Volcanic
  - 1a Quartz +/- pyrite altered
  - 1b Sericite - quartz +/ pyrite altered
  - 1c Chlorite +/ quartz - epidote altered
  - 1d Carbonate +/ quartz - pyrite - epidote altered
- 2 Andesite
  - 2d Carbonate +/- hematite - pyrite altered
- Quartz - hematite - chalcopyrite +/- chlorite calcite breccia vein and/or stockwork
- Quartz - hematite chalcopyrite stringer zone
- Pyrite - sericite - chalcopyrite vein zone, massive veins to 20 cm wide
- Pyrite - sericite +/- chalcopyrite stringer zone

SYMBOLS

- Geological contact, inferred, defined
- Trench and chip sample area
- Fault
- 1987 D.D.H. LOCATIONS

TABLE OF ASSAYS

TRENCH #	SAMPLE #	WIDTH (m)	Cu %	Au o.p.t.
1	15006	3.0	0.08	.001
1	15007	3.0	0.07	.001
1	15008	2.8	0.35	.025
2	15010	3.0	0.01	.001
2	15011	3.0	0.04	.001
2	15012	3.0	0.11	.001
2	15013	3.0	0.12	.012
3	15018	1.7	0.18	.020
4	15055	3.0	0.16	.021
4	15056	3.0	1.57	.043
4	15057	3.0	0.55	.004
4	15058	3.0	0.03	.001
5	15059	2.0	0.04	.003
5	15060	3.0	1.41	.060
5	15061	3.0	0.76	.058
5	15062	3.0	0.07	.004
6	15063	3.0	0.11	.072
6	15064	3.0	1.25	.088
6	15065	2.0	0.39	.013
6a	15167	3.0	0.02	.001
7	15066	3.0	0.28	.031
7	15067	3.0	0.41	.158
8	15068	3.0	0.26	.283
8	15069	3.0	0.72	.064
8	15070	3.0	0.06	.004
9	15071	2.5	0.16	.044
9	15072	3.0	0.10	.022
9	15073	3.0	0.03	.008
9	15074	3.0	0.01	.001
10	41808	3.0	0.28	.162
10	41809	3.0	2.76	.118
10	41810	3.0	0.55	.047
11	41812	3.0	0.48	.259
11	41813	1.5	0.59	.123
12	15160	3.0	0.03	.013
12	15161	3.0	0.33	.012
12	15162	3.0	0.61	.062
12	15163	3.0	0.05	.019
12	15164	3.0	0.03	.033
12	15165	3.0	0.02	.011
12a	15166	3.0	0.65	.064
13	15168	3.0	0.90	.003
13	15169	3.0	0.38	.008
13	15170	3.0	0.06	.017
13	15171	3.0	0.23	.128
14	15172	3.0	0.02	.001
14	15173	3.0	0.01	.001
14	15174	3.0	2.05	.115
14	15175	3.0	0.08	.041
15	15176	3.0	0.01	.002
15	15177	3.0	0.66	.130
15	15178	3.0	0.01	.011
16	15179	3.0	0.87	.037
16	15180	3.0	0.30	.091
16	15181	3.0	0.35	.007
17	15182	3.0	0.21	.029
17	15183	3.0	0.09	.022
17	15184	3.0	0.48	.135
18	15185	3.0	0.09	.066
19	15188	2.0	0.09	.087
20	80987	0.6	n/a	n/a
--	15009	1.0	2.25	.062

0 10 20 30 40 50 60 70 metres
SCALE 1:1,000

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robt Berg
May 17/88

REVISED
R. B. Oct. 1987

TODD CREEK

SOUTH ZONE GEOLOGY AND 1987 D.D.H.'s NTC 1-9

PROJ. No. 281
N.T.S. 104 A/4
DWG No
FIG. 6

SURVEY BY R.B. DATE: Aug. 1987
DRAWN BY S.K.B. SCALE: 1:1000

NORANDA EXPLORATION
OFFICE PRINCE GEORGE, B.C.

ICEFIELD

TOC 9

TOC 10

TOC 11

LCP

LARGE GOSSAN

maroon andesite agglomerate

Upper Rhyolite Falls

Lower Rhyolite Falls

q-sc-py

q-py-cpy

G-R Zone

Area of talus

By Glacier

CAMP Δ 86

CAMP Δ 87

See Detailed Map

Cliff

TODD CREEK

6000 5500 5000 4500 4000 3500 3000

0 1 2 3 4 5 Kilometres

SCALE 100,000

LOCATION MAP

LEGEND

ROCK TYPES

1 — **Feldspar** Porphyry, pale brown, Ia-quartz-pyrite altered, Ib-quartz-sericite pyrite altered, Ic-chlorite altered, Id-iron-carbonate +/- quartz-sericite altered.

2 — Dark green, maroon, grey andesite flows, agglomerate tuff, breccia

3 — Light grey-green feldspar porphyry flows, tuff and tuff breccia

4 — Rhyolite, massive, breccia, lapilli tuff, locally quartz-sericite-pyrite altered

5 — Dark green hornblende porphyry intrusive

Quartz-pyrite +/- sericite altered mineralized zone

ba	barite	q	quartz
bn	bornite	sc	sericite
cal	calcite	sp	sphalerite
chl	chlorite	stk wk.	stock work
cpy	chalcopyrite	Tt	tetrahedrite
gn	galena		
hem	hematite		
mal	malachite		
py	pyrite		

SYMBOLS

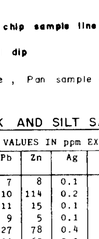
- Outcrop area
- Geologic contact defined, inferred
- Mineralized vein
- x , ● Rock, float sample
- 41821 → Silt sample
- g Glacial till
- Icefield
- Trench or chip sample line
- Strike and dip
- Pan sample, Pan sample and silt sample

TABLE OF ROCK AND SILT SAMPLE ANALYSIS

ALL VALUES IN ppm EXCEPT WHERE NOTED

SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au (ppb)	Cu %	Au (oz/T)
41815	rock	3	43	7	8	0.1	16	1	10	8		
41816	silt	4	14	10	114	0.2	14	1	2	4		
41817	rock	4	80	11	15	0.1	17	1	9	24		
41818	rock	2	76	9	5	0.1	25	1	10	2		
41819	rock	2	287	27	78	0.4	30	1	2	13		
41820	rock	2	27	20	63	0.2	11	1	2	1		
41821	silt	1	10	9	104	0.1	5	1	2	8		
41822	rock	3	27	17	113	0.1	8	1	2	1		
41823	silt	3	55	16	48	0.1	19	1	2	1		
41824	rock	18	617	66	19	0.9	459	1	3	98		
41825	rock	13	5,260	73	75	1.4	647	1	2	21		
15001	rock	2	13	9	10	0.2	7	1	3	1		
15002	rock	1	15	9	24	0.1	6	1	6	2		
15003	rock	4	1,341	43	10	0.2	133	1	2	1		
15004	rock	1	32	13	84	0.3	9	1	2	1		
15005	rock	22	19,707	19	57	0.5	256	2	6	21		
15019	silt	5	77	19	185	0.4	28	1	2	1		
15020	rock	2	108	24	21	2.1	23	1	24	10		
15021	rock	2	54	18	22	0.1	14	1	6	4		
15022	rock	2	26	11	13	0.1	21	1	5	1		
15023	rock	1	18	10	14	0.1	16	1	2	1		
15024	rock	1	14	10	5	0.1	18	1	4	1		
15025	rock	3	244	23	31	0.5	19	1	4	5		
15051	rock	2	11	19	14	0.1	3	1	5	2		
15052	rock	481	1,820	67	22	4.2	210	1	10		.18	.005
15053	rock	21	726	33	36	1.3	187	1	7		.07	.001
15054	rock	16	11,054	41	82	1.6	152	2	4		1.17	.022
15076	rock	6	858	24	22	0.2	161	1	2	21		
15077	rock	23	660	92	45	0.3	192	1	2	1		
15078	rock	4	3,384	26	26	0.1	453	1	2	52		
15079	rock	5	1,706	27	23	0.2	277	1	2	66		
15080	rock	5	948	42	31	0.6	486	1	2	57		
15081	rock	6	331	14	15	0.1	117	1	2	13		
15082	rock	7	1,465	112	29	2.8	850	1	2	108		
15083	rock	3	67	75	77	0.8	561	1	2	74		
54426	rock	16	1,337	30	38	0.6	248	1	2	37		
54427	silt	7	99	23	59	0.2	58	1	2	6		
54428	silt	9	105	40	118	0.4	117	1	2	10		
54429	silt	3	58	24	48	0.3	29	1	2	3		
54430	rock	4	44	2	1	0.1	5	1	2	1		
54431	rock	8	28	12	1	0.2	10	1	2	4		
54432	rock	8	2,235	10	51	0.2	83	1	2	50		
54433	rock	92	5,376	24	69	1.4	185	1	2	380		
54434	rock	11	142	35	17	0.3	244	1	2	46		
54435	rock	10	192	33	16	0.4	250	1	5	55		
54436	rock	25	12,138	39	28	0.4	366	1	5	1,560		
54437	rock	3	54	18	20	0.3	81	1	2	4		
54438	silt	1	24	19	101	0.3	13	1	2	4		
54439	rock	8	786	29	8	1.3	228	1	5	210		
54440	rock	9	5,304	13	34	0.4	76	1	2	19		
54441	rock	11	460	33	19	0.9	180	1	2	31		
54442	rock	6	40	29	35	0.6	243	1	2	23		
54443	rock	4	9	15	25	0.4	30	1	2	7		
54444	rock	8	35	25	30	0.3	193	1	2	4		
54445	rock	9	593	31	61	0.5	129	1	2	1		
54446	rock	32	6,605	16	61	0.1	153	1	2	1		
54447	rock	9	105	61	36	0.6	295	1	2	49		
54448	rock	8	235	34	25	0.8	235	1	2	21		
54449	rock	11	16,838	103	69	5.9	260	2	2	25		
54450	rock	8	328	35	18	0.5	170	1	2	4		
55500	rock	2	207	6	2	0.1	8	1	2	5		
15190	rock	2	97	6	28	0.1	2	1	2	-	.01	.000
15191	rock	2	16	6	1	0.1	16	1	2	-	.01	.001
15192	rock	8	14	12	86	0.2	21	1	33	2	-	-
15193	rock	2	12	14	2	0.2	2	1	3	1	-	-
15194	rock	5	15	23	189	0.4	50	6	4	1	-	-
15195	rock	1	8	2	3	0.1	2	1	2	2	-	-
15196	rock	6	200	25	7	0.5	243	1	28	76	-	-
15197	rock	25	3,847	39	37	0.6	1,045	1	4	3,140	-	-
15198	rock	12	2,573	85	39	1.3	2,314	1	4	1,220	-	-
15199	rock	57	23,514	145	246	4.8	2,990	7	14	290	-	-
15200	rock	10	10,072	10	21	0.1	79	1	2	-	1.10	.001
15201	rock	13	15,453	11	50	0.1	22	2	2	-	1.86	.001
15213	silt	2	38	14	67	0.3	9	1	6	18	-	-
15232	silt	2	61	16	93	0.2	11	1	2	3	-	-
15233	silt	2	94	23	99	0.4	44	1	2	26	-	-

MAP SHEET INDEX



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robert Bary May 1988

NOTE Topography based on photocopy enlargement of N T S 1 50,000 scale map 104A/4

0 100 200 300 400 500 m

SCALE 1 5,000

REVISED
R.B. Oct., 1986
R B May, 1988

TODD CREEK

SOUTH ZONE GEOLOGY MAP AND ROCK, SILT SAMPLE LOCATIONS

PROJ. No. 540

N.T.S. 104A/4

DWG. No. FIG. 4

SURVEY BY: R.B. DATE: Aug. 1986

DRAWN BY: S.K.B. SCALE: 1:5000

NORANDA EXPLORATION

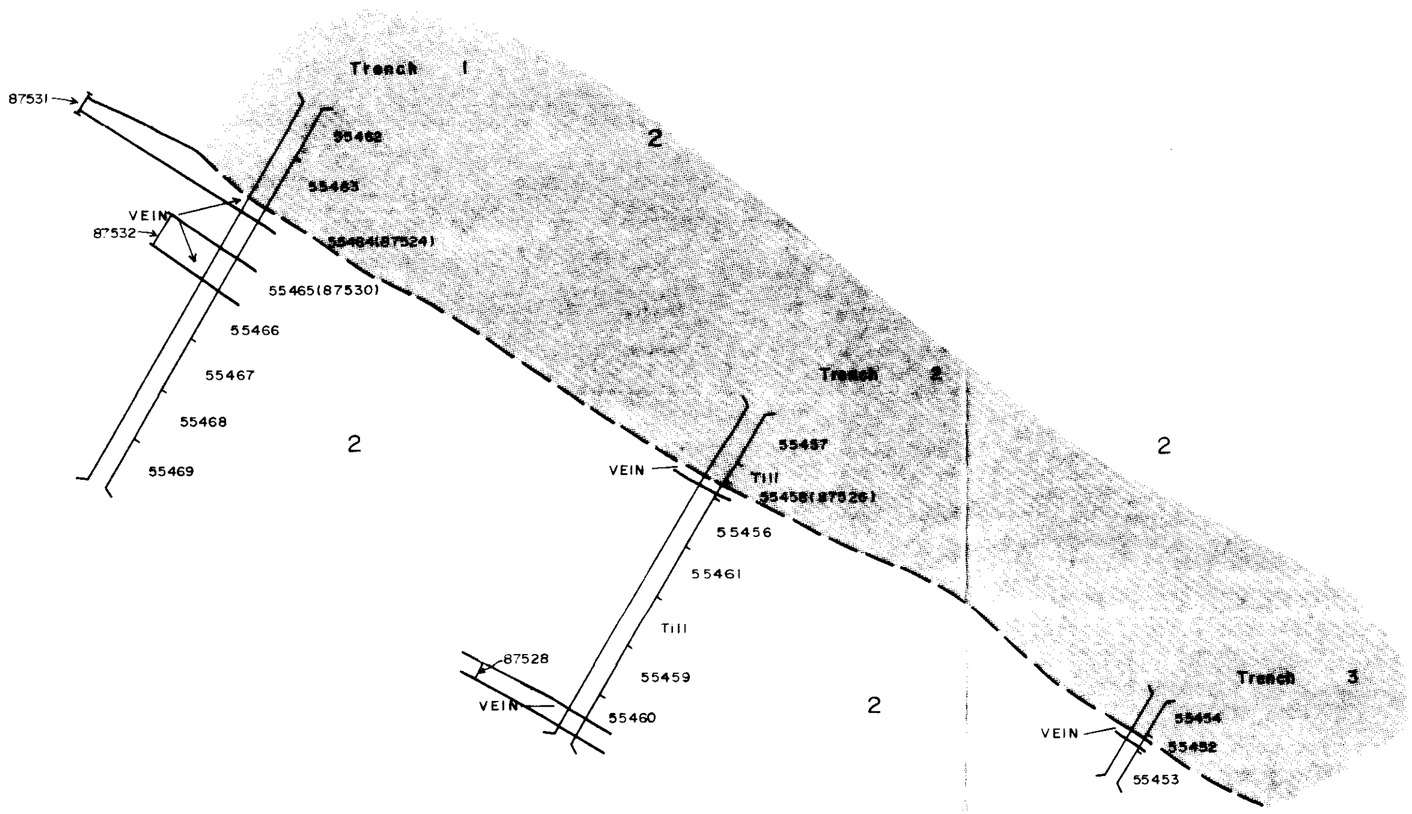
OFFICE PRINCE GEORGE, B.C.

VANCAL 11917

LOCATION MAP

0 1 2 3 4 5 Kilometres

SCALE : 100,000



Old drill core
87533 grab from hole 3
87534 " " " 2

LEGEND

ROCK TYPES

1 — Feldspar Porphyry, pale brown, 1a-quartz-pyrite altered, 1b-quartz-sericite pyrite altered

2 — Dark green, maroon grey andesite flows, agglomerate tuff, breccia

Quartz - pyrite +/- sericite altered mineralized zone

SYMBOLS

- Outcrop area
- Geologic contact defined, inferred
- Mineralized vein
- x, ● Rock, float sample
- 41821 Silt sample
- Glacial till
- Icefield
- Trench or chip sample line
- Strike and dip
- Fault

Trench 4

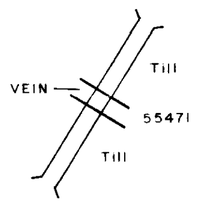


TABLE OF ROCK SAMPLE ANALYSIS

ALL VALUES IN ppm EXCEPT WHERE NOTED

SAMPLE #	TYPE	Mo	Cu	Pb	Zn	Ag	As	Cd	Sb	Au (ppb)	Cu %	Au (oz/T)
55452	rock	14	8,250	247	1,220	13.5	46	6	2	-	.92	.013
55453	rock	3	1,862	27	135	0.9	15	1	2	-	.20	.001
55454	rock	3	59	12	76	0.5	9	1	2	-	.01	.001
55455	silt	2	157	23	118	0.3	40	1	2	26		
55456	rock	5	6,240	73	486	2.7	72	4	2	-	.68	.001
55457	rock	7	30	121	687	0.8	12	4	7	-	.01	.001
55458	rock	19	6,668	1,172	3,139	20.2	37	23	5	-	.70	.016
55459	rock	6	186	43	165	0.4	21	1	2	-	.02	.001
55460	rock	11	1,711	53	398	4.4	35	3	2	-	.18	.153
55461	rock	8	319	22	150	0.3	21	1	2	-	.03	.001
55462	rock	7	26	22	99	0.3	49	1	2	-	.01	.001
55463	rock	6	17	19	92	0.3	25	1	2	-	.01	.001
55464	rock	26	6,227	80	909	3.0	167	11	2	-	.67	.011
55465	rock	9	917	102	713	1.2	28	6	2	-	.10	.003
55466	rock	26	41,484	51	398	14.1	109	7	2	-	5.39	.030
55467	rock	17	61	38	226	0.4	10	1	2	-	.01	.001
55468	rock	4	924	80	161	0.6	21	1	2	-	.10	.002
55469	rock	11	5,482	45	320	2.3	59	5	2	-	.53	.014
55471	rock	7	5,208	230	852	7.8	49	4	2	-	.59	.009
87526	rock										.67	.035
87528	"										.02	.001
87529	"										.59	.018
87530	"										3.33	.024
87531	"										2.02	.011
87532											3.04	.031
87533	core										.08	.001
87534	core										.58	.223

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,423

Robert Berry
May 19/88

0 5 10 15 20 metres

SCALE 1 : 250

REVISED	TODD CREEK
	NORTH "A" ZONE
	TRENCH LOCATIONS
PROJ No. 240	SURVEY BY: R.B. DATE: Sept. / 1986
N.T.S. 104A/5	DRAWN BY S.K.B. SCALE: 1:250
DWG. No. FIG. 11	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.