

MAP NO. ASSESSMENT REPORT X DOCUMENT NO.: 092631
PROSPECTUS MINING DISTRICT: Whitehorse
CONFIDENTIAL X TYPE OF WORK: Rotary Drilling
115 I 6 OPEN FILE

REPORT FILED UNDER: Noranda Exploration Co. Ltd

DATE PERFORMED: 2-7 June, 1988

DATE FILED: 22 November, 1988

LOCATION: LAT.: 62 16'N

AREA: Mt Freegold

LONG.: 137 03'W

VALUE \$: 2400.00

CLAIM NAME & NO.: DART 1-6 (YA23829-34)

WORK DONE BY: H. Copland

WORK DONE FOR: Noranda Exploration Co. Ltd

DATE TO GOOD STANDING | REMARKS: #35 EMMONS HILL

| In 1988 12 rotary holes were drilled totalling 468 m. Anom-
|alous but low-grade gold values were obtained from gneiss in-
|truded by rhyolite dykes. The best value was 2835 ppb Au over
|1.5 m in hole #7.

DRILLING REPORT

on the

DART 1 - 6 CLAIMS

(Mt. Freegold)

Whitehorse Mining District

N.T.S.: 115 I/6

Latitude: 62 16'

Longitude: 137 03'

This report has been examined by
the Geological Evaluation Unit
under Section 53 (A) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$

Regional Manager, Exploration and
Geological Services for Canada
of Yukon Territory

DATE DUE
Dec 5
2001

Owned & Operated by: Noranda Exploration Company, Ltd.
(no personal liability)

H. Copland
Nov. 1988

09 2631

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 2400.00 .

J. J. Bennett

Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

025831

SUMMARY

The DART 1-6 claims are located near Mt. Freegold in the Dawson Range. Gold-silver mineralization associated with rhyolite dykes, brecciation and quartz veining is observed in Paleozoic gneiss. Diamond drilling in 1987 had extremely poor recoveries and representative assays could not be obtained. In order to improve recoveries a program of reverse circulation drilling (12 holes, 468 metres) was completed in 1988. Results indicated anomalous but low grade values associated with altered gneiss where intruded by rhyolite dykes. No further drilling is recommended.

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CHAPTER ONE: INTRODUCTION

1-1: Introductory Statement

The DART 1-6 claims lie on the northeast flank of Mt. Freegold in the Dawson Range. In 1988 a reverse circulation drilling program was undertaken to assess the known zone of gold-silver mineralization associated with Tertiary dyking. A total of 12 holes (467.9 metres) were completed.

1-2: Location & Access

The property lies 55km west of Carmacks, Y.T. on the east flank of Mt. Freegold. (Lat. 62 16', Long. 137 03') The location is locally known as Emmons Hill. (see figs. 1 & 2) The Freegold road provides good 2WD access to within 1.5km of the property where a road up Grizzly Gulch to the claims is accessible to 4WD vehicles.

1-3: Topography & Vegetation

The claims are located within the Dawson Range of the Yukon plateau. The summit of Mt. Freegold lies at 1450 metres whereas the elevation of the property is approximately 1,220 metres. The claims dip gently to the north and east.

The claims lie above treeline with only small isolated stands of stunted spruce visible. Alpine grasses and moss cover the majority of the area. Permafrost is prevalent throughout over the claims and it is encountered at depths exceeding 50cm. Drainage of the claims is via runoff into Stoddart Creek to the north. Running water is absent from the property after spring runoff.

1-4: History

The American Yukon prospect, as described by Johnstone (1937), is

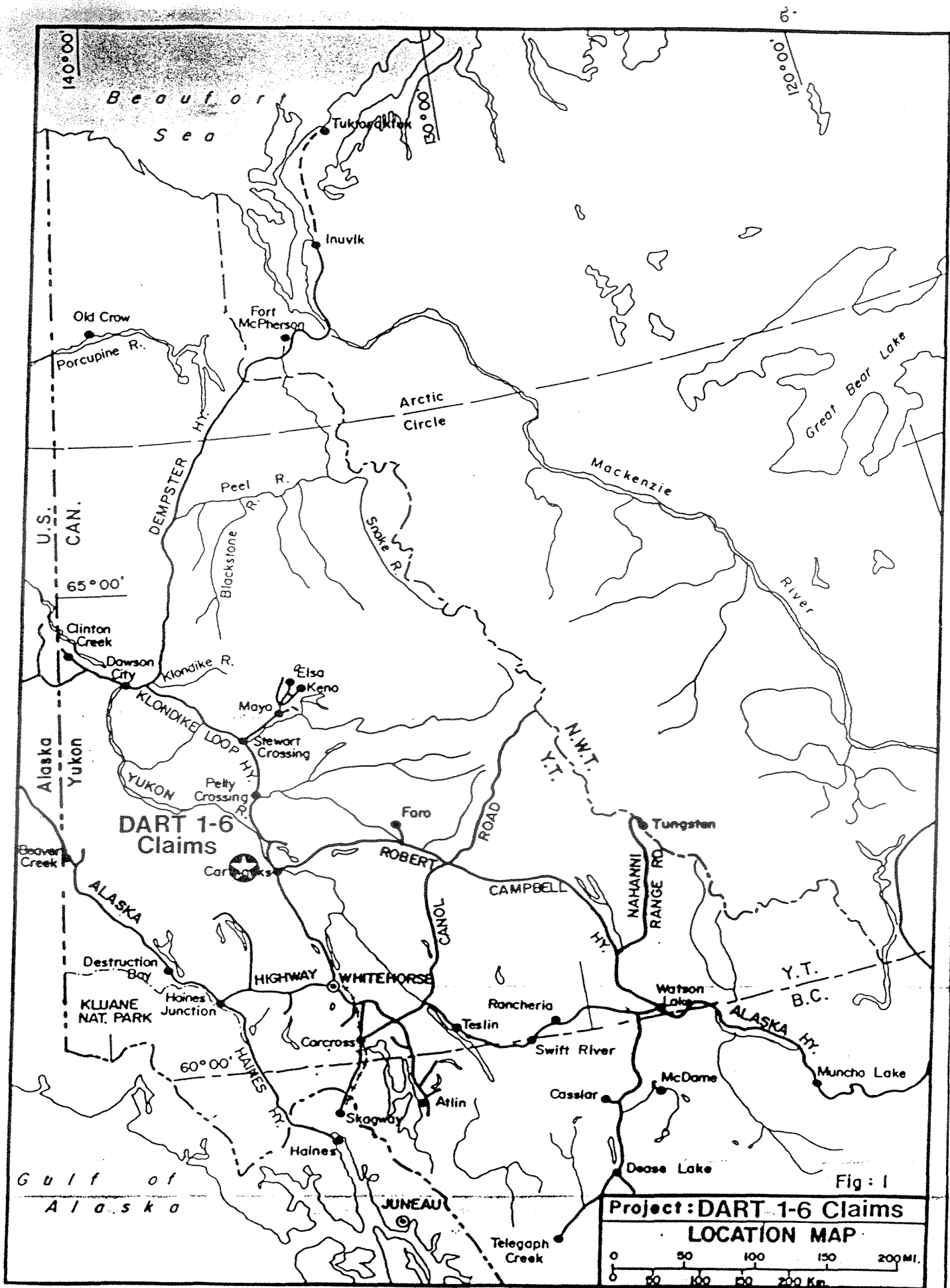
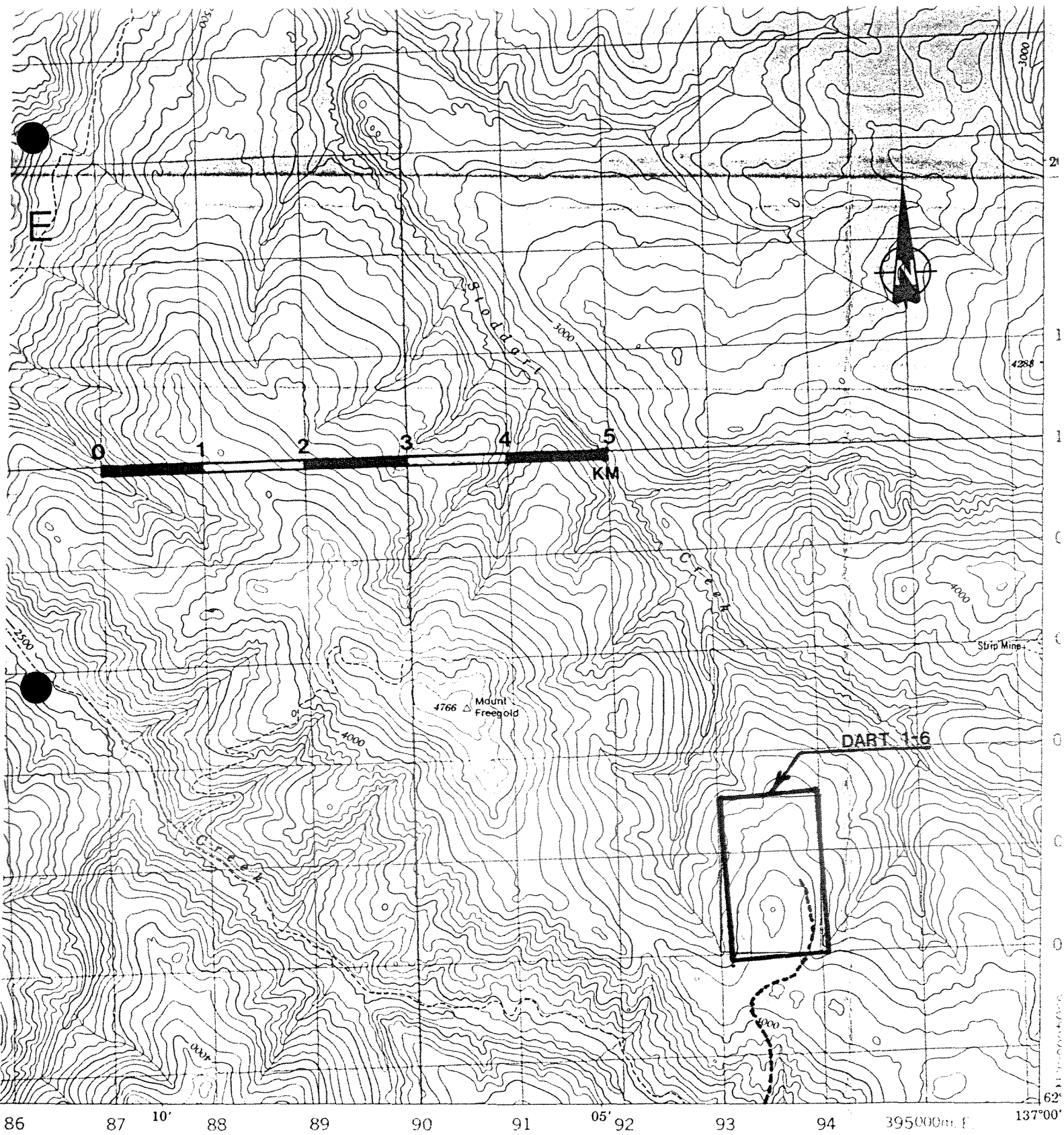


Fig: 1
Project: DART 1-6 Claims
LOCATION MAP
 0 50 100 150 200 MI.
 0 50 100 150 200 Km.

YANGAL 11928



DART 1 - 6 CLAIMS

MT. FREEGOLD

115 I/6

Figure 2: 1:50,000

Nov. 88

located approximately 300 metres east of Emmons Hill. A 28 metre shaft with short crosscuts at 12 metre and 25 metre levels was sunk in the 1930's on a brecciated felsic dyke. This shaft reported cuts mineralization from 4.5 - 20 metres (15-65') with assays from 4.5 - 5.18 metres (15-17') up to 4.0 oz/t Au and from 18.3 - 20 metres (60-65') an average of 1.5 oz/t Au (MacDonald, April 1980).

The DART 1 - 6 claims were staked and recorded in 1978 by Noranda Exploration Company, Limited (N.P.L.). In 1979 the company conducted I.P. and CEM geophysical surveys and soil sampling over a 4,000 metre chain and compass grid. The CEM survey defined a weak anomaly which trends NNW across DART-4 and DART-6 claims. The I.P. survey defined a percent frequency effect (PFE) and low resistivity anomalies coincident with the CEM anomaly. Soil samples were taken at 100 metre intervals over the coincident geophysical anomalies. A weak zinc anomaly was found over the geophysical target zones, however no geochemical values for Au, Ag, As or Sb are available. In 1980 two BQ drill holes to total 94.2 metres were drilled. Three cat trenches were excavated July 5-8, 1981 by Noranda. In the summer of 1985 minor blast trenching was conducted in the vicinity of the shaft. This was followed in 1986 by further bulldozer trenching and sampling. Existing trenches were deepened in a failed attempt to reach bedrock. New trenches were hindered by permafrost.

In 1987 two diamond drill holes (49.8 and 134.7 metres, NQ) were completed below the now caved shaft. Recovery was poor due to broken ground and results were deemed as not representative. Best values obtained were 1.09 gmt Au/3.3 metres in hole 87-1.

1-5: Claim Definition (see fig. 3)

This report covers the following claims:

CLAIM	RECORD NO.	RECORD DATE	ANNIVERSARY
Dart 1-6	YA23829 - 34	Oct. 25, 1978	Oct. 25, 1994

Upon acceptance of this report the claims will be in good standing until the above date.

1-6: 1988 Work Program

During the period June 2 - June 7, 12 reverse circulation holes totalling 467.9 metres were completed on the property. A Schram R/C drill owned and operated by E. Canon Diamond Drilling of Whitehorse was used. The following personnel were involved on the project:

C. Wild	Project Geologist	Whitehorse, Y.T.
B. Bark	Geological Technician	Peterborough, Ont.
R. Copland	Field Assistant	Whitehorse, Y.T.
J. Copland	Cook	" "



Figure 3: DART 1-6 Claims
 Scale 1:31,680
 N.T.S. 115 I/6

CHAPTER TWO: GEOLOGY

2-1: Regional Geology (see fig. 4)

The Mt. Freegold area lies near the boundary of the Yukon Cataclastic Terrane and the Yukon Crystalline Terrane. Paleozoic schist and gneiss of the Crystalline Terrane predominate over the claims. The basement rocks have been intruded by two main events: an early Jurassic meta-plutonic suite comprised of foliated syenite to monzonite and a younger suite of Cretaceous to Tertiary plutonic and volcanic suites. (see also Table of Formations)

The Big Creek fault is the major structural feature of the area. It trends northwest along Big Creek and divides the Yukon Crystalline terrane on the southwest from the Cataclastic terrane on the northeast. This fault is thought to be responsible for many of the copper porphyry and vein gold deposits throughout the Dawson Range.

2-2: Property Geology

The property is underlain primarily by the Paleozoic gneiss-schist unit which includes a biotite-quartz-feldspar schist and feldspar augen gneiss. Just to the northeast lies the contact with the Jurassic Klotassin Meta-Plutonic suite comprised of a foliated hornblende-biotite granodiorite. Intruding the gneiss on the property are small dykes and dyke swarms of an orthoclase-hornblende syenite (Jurassic), and Cretaceous Coffee Creek granite.

TABLE OF FORMATIONS

TERTIARY

- 1) Carmacks suite - andesite, basalt flows
- 2) Caribou Creek Conglomerate - quartz pebble conglomerate
- 3) Bow Creek Granite - fine grained biotite granite
- 4) Mt. Nansen Volcanics
 - a) -andesite to latite flows and tuffs
 - b) -leucocratic latite rhyolite & quartz-feldspar porphyry

CRETACEOUS

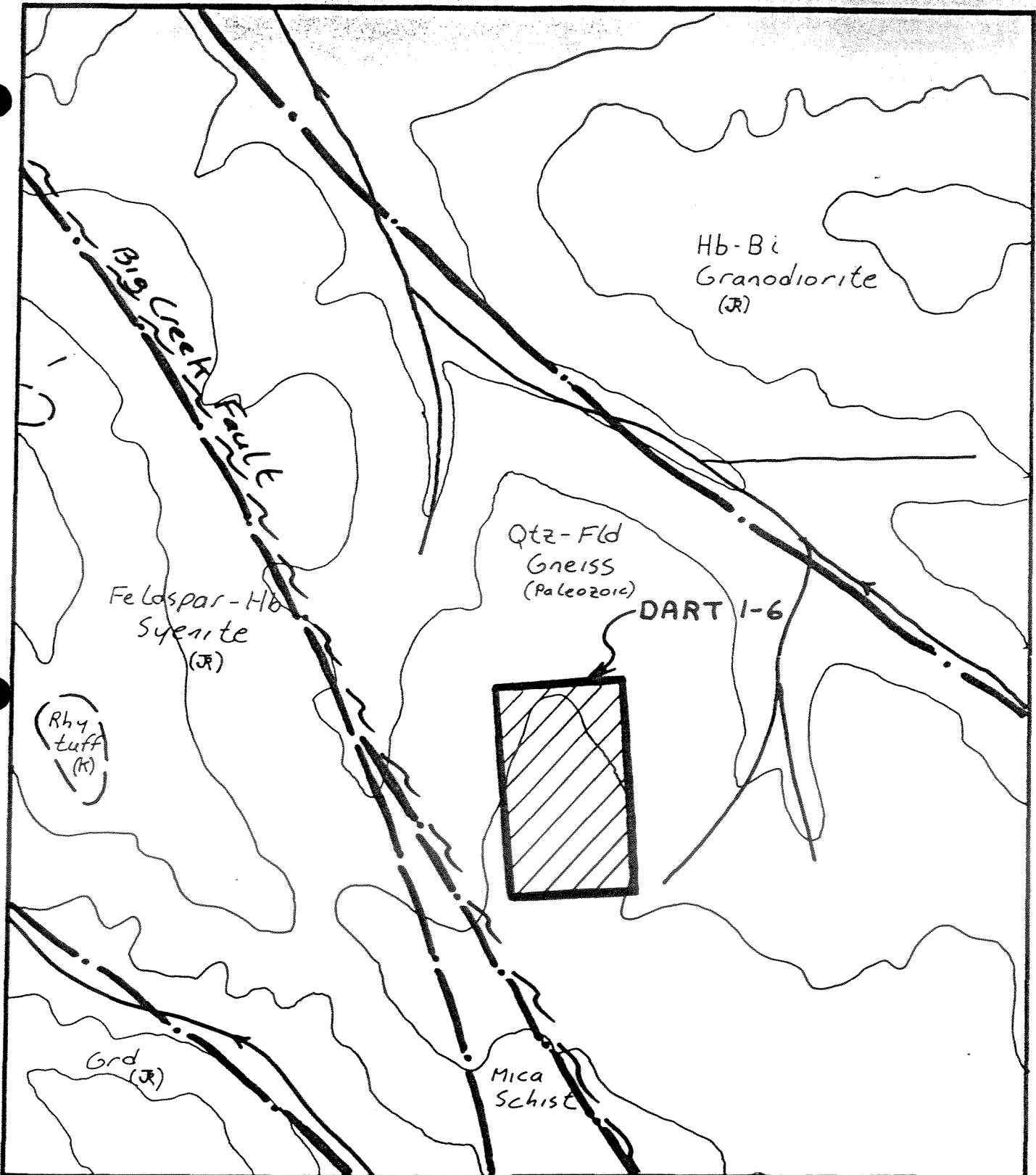
- 5) Dawson Range Batholith
 - a) -Casino granodiorite
 - b) -Coffee Creek granite

JURASSIC

- 6) Mt. Freegold Meta-Plutonic Suite
 - a) feldspar-hornblende syenite
 - b) " " monzonite
- 7) Klotassin Meta-Plutonic Suite -foliated hornblende biotite granodiorite

PALEOZOIC & OLDER

- 8) Schist & gneiss Unit -hornblende biotite-feldspar schist & gneiss
- 9) Metasedimentary Unit -quartzite, quartz-feldspar-mica schist, limestone



Geology after Carlson 1987

0 500 1000 1500 2000 2500
m

REVISED

PROJ. No. 329

N.T.S. 1157/6

DWG. No. 4

DART 1-6

GEOLOGY

SURVEY BY: _____ DATE: Nov 88

DRAWN BY: HE SCALE: 1:30,000

NORANDA EXPLORATION

OFFICE: Whitehorse

VANCOUVER 11887

Most closely associated with mineralization on the property are dykes of a felsic quartz-feldspar porphyritic rhyolite probably Tertiary in age. Brecciation and quartz veining in association with this dyking is observed to contain various sulphides (pyrite, pyrrhotite, arsenopyrite, sphalerite, galena and stibnite) up to 10%. It is within these rocks that the best gold and silver values are obtained.

CHAPTER THREE: DRILLING

3-1: Procedure

A total of 12 reverse circulation holes were drilled during June 1988.

The following table summarizes hole locations:

Hole	Co-ordinates	Azimuth	Angle	Depth
NRF 88-1	10065N, 9975E	230	-60	36.6
-2	10075N, 10000E	"	"	39.6
-3	10075N, 10025E	"	"	42.7
-4	10075N, 10050E	"	"	39.6
-5	10000N, 9975E	"	"	36.6
-6	10003N, 10000E	"	"	38.1
-7	10000N, 10025E	"	"	39.6
-8	10000N, 10025E	"	"	39.6
-9	9925N, 9970E	"	"	36.6
-10	9925N, 9995E	"	"	39.6
-11	9925N, 10020E	"	"	39.6
-12	9925N, 10045E	"	"	39.6

Samples were collected on 1.5m intervals throughout the entire length of the holes. Two splits of each interval were taken for analysis and logging. The sample for logging was sieved, fines and chips separated, and stored in plastic trays for examination. Approximately 2-3kg per interval was sent to ACME Labs in Vancouver for analysis. This sample was sieved to -80 mesh and a 0.5 gm sample analysed for Au, Ag As, Sb & Hg using ICP and AA.

3-2: Results (see figs. 5,6,7,8)

Drilling encountered similar geology to that exposed in trenches. Oxidized gneiss and schist is intruded by rhyolitic dykes or sills. An

altered zone characterized by weak to moderate silica sericite, carbonate and argillic alteration appears to be dipping to the northeast. This zone is intimately related to rhyolitic dyking.

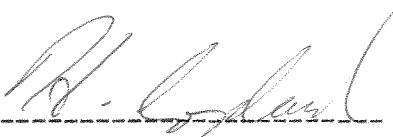
Results were disappointing. A number of sections in 8 of the 12 holes contained anomalous gold 100 - 1000 ppb over widths up to 9 metres. The best holes are located in the vicinity of the old shaft (Holes 7,8). Best value obtained was 2835 ppb Au over 1.5 metres in Hole 7.

Pathfinder elements were usually elevated in the the intervals of high gold although this was not always the case. Arsenic, antimony and mercury usually showed a good correlation. Silver and gold also showed similiar influences although not in every case.

CHAPTER FOUR: CONCLUSIONS & RECOMMENDATIONS

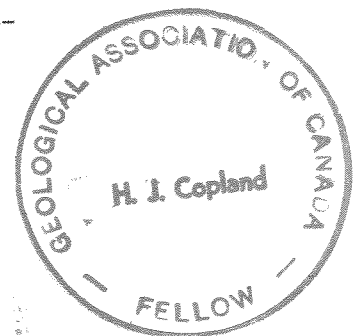
The zone of known mineralization on the DART claims was tested in 1988 using reverse circulation. It was hoped better results could be obtained using this method as opposed to diamond drilling which in 1987 provided, poor recoveries. Although functioning satisfactorily drilling did not provide any significant anomalies. No further drilling is recommended on the property.

Respectfully submitted by;



Hugh Copland

Project Geologist



STATEMENT OF COSTS

Reverse Circulation Drilling	467 metres @ \$30/m	\$14,010.
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SELECTED REFERENCES

Carlson, G.G.

1987, Geology of Mt. Nansen and Stoddart Creek Map sheets; DIAND Open
File 1987-2

MacDonald, G.

1979, Geophysical Assessment Report on the DART 1-6 Claims; Noranda
Exploration Company, Limited

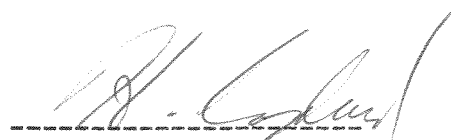
Webster, M.P.

1986, Geology, Geochemistry & Trenching Report on the DART 1-6 Claims;
Noranda Exploration Company, Limited.

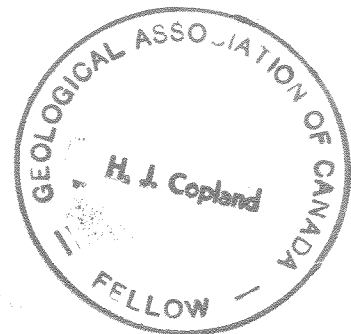
STATEMENT OF QUALIFICATIONS

I, Hugh Copland of the City of Whitehorse, Yukon, do hereby certify that:

1. I have been an employee of Noranda Exploration Company Limited (NPL) in Whitehorse since May, 1985.
2. I am a graduate of the University of British Columbia with a B.Sc. in Geology and of McMaster University, Hamilton, Ontario with a B.Eng..
3. I am a member of the Yukon Professional Geoscientist Society, and a fellow of the Geological Association of Canada.
4. I supervised work on the claims during 1988.



Hugh Copland
Project Geologist



APPENDIX 1
Drill Logs & Results

PROPERTY: Mt. Freegold
HOLE NO.: NRF 88-1
BEARING: 230
DIP-COLLAR: -60

NO R A N D A E X P L O R A T I O N C O M P A N Y L I M I T E D
STARTED: June 3/88
FINISHED: June 4/88
LENGTH: 36.58
CORE SIZE: RC

FIELD CO-ORDINATES
10065 N
9975 E

DIP TESTS
Bearing Angle Depth

N.T.S. 115 1/6
PROJECT NO. 329
LOGGED BY: Chris Wild
SHEET 1 of 2

METRES From	To	DESCRIPTION OF UNITS	Structure	%	Sample No.	Breakage	ASSAYS							
							Sulph	Alt	Ag	ppmAs	ppmSb	ppmAu	ppmHg	ppb
0	14.57	010 OVERBURDEN no return												
4.57	16.10	010 T7-SER SCHIST 130% green dtz-hbd gneiss 150% oxidized, fe-stain gneiss, v. siliceous sericitic 120% dtz-calcite limonitic stained; prob not vein			12L, 3a, 13351DR 13s, 2c, 13m		3.71	9071	961	4901	4001			
6.10	17.62	0180% rusty, orange and red stain gbd gr.; hem, 11m 10- 120% dtz, cal, blag?			13a, 3s, 13352DR 13m, 1c, 12L		3.11	4121	741	781	3001			
7.62	19.14	0160% dtz ser schist/40% rhyolite 160% rusty, siliceous orange/black mottled, min hem. 140% pale gray, v.f.g.; unaltered		tr. py	12L, 2c 13353DR		1.01	1881	391	251	1801			
9.14	110.67	01 mottled orange/black/green oxid. gn (dtz-ser schist) pale gray Fp dyke; v.f.g. siliceous---)rhyolite		tr. py	12L, 2c 13354DR		.71	1091	291	141	1201			
10.67	112.19	0190% rhyol/10% dtz ser schist pale gray, sl. greenish, minor f.g. cubic pyrite 15% dtz carb		tr. py	13c, 3L 13355DR		.51	811	221	131	901			
12.19	113.72	0150% rhyol/50% dtz-ser schist decreasing pale gray dyke, weak pyrite stringer in dyke 10% dark green (gbd) and red (hematite) chips		tr. py	12c, 2-3L 13356DR		.81	4391	1011	611	801			
13.72	115.24	010 dtz-ser schist, v. soft, many fines, black-orange oxidation, fresh greenish pale gray dyke (10%)		tr. py	12c, 2L 13357DR		1.91	4521	731	971	2201			
15.24	116.76	01 hbd gn, 10-20% oxidized gneiss, contact 15.5m, fresh green & white hbd-blag-dtz gneiss, prob intrusive origin, incr. Sk, sericitic		tr. py	12-3m, 11-2c 13358DR		.51	1761	141	611	701			
16.76	118.29	01 dark black green hbd (+chl?), gray and white dtz-blag coarser pyrite, (5% oxidized material)		tr. py	11-2c 13359DR		.41	691	711	171	401			
18.29	119.81	01 highly foliated, larger chips of hbd-chl, layered gneiss, white dtz-feld segregations, 10% oxidized chips; minor lustrous light green epidote - 1%		tr. py	13chl, 12c 13360DR		.41	631	811	151	501			
19.81	121.34	01 fine gr. biotite---)brownish tinge; (10% hbd, chl, possibly gray felsic dyking (5% oxidized chips)		tr. py	13m, 2c 13361DR		.11	501	311	131	501			
21.34	122.86	01 10-20% hbd, +80% gray dtz-feld, weakly sericitic, foliated 1% oxidized chips		tr. py	13m, 2c 13362DR		.11	371	211	111	201			
22.86	124.38	01 10% hbd-chl as thin bands or plates in gry dtz-feld		tr. py	13m, 2c 13363DR		.11	311	411	211	301			
24.38	125.91	01 As above, trace red mineral, vfg poss cinnebar or hem		tr. py	13m, 2c 13364DR		.11	181	311	211	201			
25.91	127.43	01 20% hbd-chl, tr. magnetite or pyrr. (2% oxidized material (cave from above?), 75% dtz-feld-calcite		tr. py	11-2c 13365DR		.11	231	311	211	301			
27.43	128.96	01 As above, coarser cubic pyrite		tr. py	" 13366DR		.11	161	211	411	101			

PROPERTY: Mt. Freegold
HOLE NO.: NRF 88-2
BEARING: 230
DIP-COLLAR: -60

NORANDA EXPLORATION COMPANY LIMITED
STARTED: June 4, 1988
FINISHED: June 4, 1988
LENGTH: 39.62
CORE SIZE: RC

FIELD CO-ORDINATES
10075 N
10000 E

N.T.S. 115 1/6
PROJECT NO. 329
LOGGED BY: Chris Wild
SHEET 1 of 2

METRES	Reco- From To (very X)	DESCRIPTION OF UNITS	Structure	X		Sample No.	Break Age	ASSAYS							
				Sulph	Alt			Ag	ppmAs	ppmSb	ppmAu	ppbHg	ppbI		
0	16.10	OVERBURDEN no return													
6.10	17.62	QTZ-SER SCHIST siliceous, mottled orange & black, some (red---)lim, hem 10% white qtz; very poorly sorted (chips---)strongly fractured very weak cb altn				12s, 2m 12L		2.3	350	26	7	220			
7.62	19.14	140% dark green gray, f.g., hbd 140% qtz-feld with minor hbd 120% highly oxidized				12s, 3L 13c		3.3	162	40	10	330			
9.14	10.67	Qtz-ser schist/hbd gn 150% dark f.g. hbd, v.f.g. 5x in unoxidized chips 140% rusty siliceous chips 110% white-gray qtz-feld				113s, 3L 13c		5.3	152	39	7	220			
10.67	12.19	170% dark hbd (+chl?) weakly pyritic 110% oxidized material-qtz, lim, hem 120% white-gray qtz-feld, tr. 2% Py (dyking)				11-2 13L 13c v. 1weak		2.8	199	34	1	220			
12.19	13.72	IRHYOL DYKE 150% green-gray f.g. qtz-feld (rhyolite) dyke 120% dark green black hbd-chl 120-30% oxidized chips				11 13L, (3c)		1.6	145	25	6	230			
13.72	15.24	160% pale gray rhyolite dyke 120% oxidized qtz-feld-hbd gn				11 13L(3c)		.2	155	10	1	40			
15.24	16.76	1Pale gray, weakly oxidized rhyolite dyke 5% dark hbd, 1minor sericitic schist -not calc				12 13m, 3L		.4	54	7	2	30			
16.76	18.29	IRHYOL DYKE 80% pale gray qtz-feld 110% oxidized siliceous 110% dark bluish black hbd + pyrite ?				11-2 13L, 3m 1(v. weak) 13c		.1	73	6	1	120			
18.29	19.81	1HBD GN 60% dark hbd, chl 140% light qtz, feld, pale green (ser?) 110% oxidized				12 13c, 3m		.2	330	25	1	90			
19.81	21.34	1As above				13 13c, 3m		1.8	235	41	7	160			
21.34	22.86	1IRHYOLITE DYKE 80% greenish cream, vfg siliceous dyke 120% bluish black hbd, pyrite (+chl), no oxidized chips 1not calc				11 13m		9.3	222	39	18	300			
22.86	24.38	190% creamy gray dyke, greenish due to sericite? 15% hbd, 5% oxides				11 13m		2.6	164	25	9	230			
24.38	25.91	195% creamy greenish gray dyke. (5% oxides, hbd				1tr. 13m		.7	74	11	2	120			
25.91	27.43	140% gray dyke 150% orange, oxidized siliceous dyke material? 15% hbd, chl siliceous-schist				11 13c, 3L		.8	355	21	7	250			
27.43	28.96	180% pale orange/yellow oxidized rhyolite 120% hbd + qtz plag---)hbd gn				11 12L, (v. 1weak3c)		.2	141	9	3	40			

METRES		Reco- very %	DESCRIPTION OF UNITS	Structure	Sulph %	Alt	Sample No.	Break age	ASSAYS				
From	To								Ag ppm	As ppm	Sb ppm	Au ppm	Hg ppb
28.96	30.48		01HBD GN pale to dark gray, f.g., foliated, pyrite along fol, 10-20% oxidized rhyolite dyke. (5% Qtz-ser schist)		12-3	13m	13391DR		.71	116	20	11	50
30.48	32.00		0115% hbd gn/85% rhyol dyke 115% dark gray-black foliated hbd 180% greenish-pale gray f.g. rhyolite dyke 15% oxides		12	13m	13392DR		.81	67	14	21	70
32.00	33.53		01RHYOL DYKE 80% pale green rhyolite dyke, foliated or banded, 10% white Qtz-calcite. (5% oxides)		tr.	13m, 11-2c	13393DR		.61	63	6	11	80
33.53	35.05		01HBD (b1) GN 70% Qtz-plag 130% Qtz-b1 schist 15% oxides		tr.	11-2c, 13m, 2b	13394DR		.21	48	2	11	20
35.05	36.58		01HBD GN siliceous, spotty crystals, flakes of hbd, chl, b1, end of oxides		tr.	12c, 3m, 13b	13395DR		.21	21	3	9	30
36.58	38.10		01As above		tr.	11-2c, 3b	13396DR		.21	19	2	11	20
38.10	39.62		01As above		tr.	11-2c	13397DR		.11	9	2	11	10

END OF HOLE

METRES		RECOVERY (%)	DESCRIPTION OF UNITS	STRUCTURE	Sulph	Alt	SAMPLE BREAK		ASSAYS				
From	To						No.	Tag	Ag ppm	As ppm	Bi ppm	Au ppm	Hg ppb
27.43	28.96		Ø1HBD GN 40% pale gray Qtz-plag segregations or rhyolite 140% med. gr hbd gn 120% oxidized siliceous chise			13b, 2c	13414DR		.1	72	4	2	160
28.96	30.48		Ø1HBD GN 60% hbd gn, mod oxidized fine-med gr 135% oxidized siliceous Qtz-ser schist 15% white vein Qtz			12c, 2m 13L	13415DR		3.6	187	35	4	500
30.48	32.00		Ø1HBD GN 50% siliceous hbd (bi, chl) gneiss, fine-med lgrained 150% oxidized siliceous, Qtz-ser schist-pale orange ankeritic			12c, 2m 12L	13416DR		3.2	203	41	2	190
32.00	33.53		Ø1QTZ-SER SCHIST 80% yellowish orange oxid, 20% darker less oxidized hbd (bi-chl) gn			12c, 2L 12m	13417DR		1.0	349	25	11	320
33.53	35.05		Ø1As above			11-2c, 2L 12m	13418DR		4.8	224	31	3	280
35.05	36.58		Ø1HBD GN 70% fine-med gr, banded gn, 30% oxidized siliceous schist			13c, 3L 13m	13419DR		3.0	201	36	2	190
36.58	38.10		Ø1QTZ-SER SCHIST 75% oxidized siliceous Qtz-ser schist 125% dark gray, fg gneiss			11-2L, 2m 12c	13420DR		3.3	518	66	6	190
38.10	39.62		Ø1HBD GN decreasing oxidation to 10%, 90% compositionally layered hbd gn, dark gn hbd and gray (Qtz-plag)			13L, 11-2c	13421DR		2.3	232	49	2	150
39.62	41.15		Ø1HBD GN as above			13L, 2-3c	13422DR		1.9	195	21	8	70
41.15	42.67		Ø1As above (2% oxidized)			12c, 3b	13423DR		.3	63	13	1	80
END OF HOLE													

NORANDA EXPLORATION COMPANY LIMITED

PROPERTY: Mt. Freegold - STARTED: June 4/88 FIELD CO-ORDINATES: 10075 N
 HOLE NO.: NRF 88-4 FINISHED: June 4/88 LENGTH: 39.62 CORE SIZE: RC
 BEARING: 230 DIP TESTS: Bearing Angle Depth
 DIP-COLLAR: -60 CORE SIZE: RC

N.T.S. 115 1/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES From	To	RECOVERY (%)	DESCRIPTION OF UNITS	Structure	X Sulph	Alt	Sample No.	Break age	ASSAYS							
									Ag	ppmAs	ppmSb	ppmAu	ppbHg	ppbI		
0	3.05		0 OVERBURDEN no return													
3.05	4.57		0 QTZ-SER SCHIST oxidized siliceous, prob near surface veining in rusty quartz-sericite schist (after hbd gn) Hbd + bi spotty, mottled appearance		1tr.	12s, 3m 13b, no 1carb	13427DR		.11	75	4	5	70			
4.57	16.10		0 10-20% oxidized, rest has higher mafic (hbd, chl + bi) content, mottled green gray (oxid to orange - black) 15% white quartz		1tr.	13s, 3m 12b, no 1carb	13428DR		.11	24	21	6	10			
6.10	7.62		0 Hbd gn 160% spotted hbd gn 130% white quartz 110% orange oxid schist		1tr. 1	12s, 3m 12o extr 1weak 1calc	13429DR		.11	111	21	21	20			
7.62	9.14		0 10-20% mod-weakly oxidized, mottled chl-bi and hbd, sericitic along oxidized 'gneiss' planes		1	12b, 2m 13c	13430DR		.21	16	2	1	20			
9.14	10.67		0 10-30% mod-weakly oxidized, 10% possible vein quartz with f.g. Sx		1-2	12b, 2m 13c incr	13431DR		.21	55	3	1	30			
10.67	12.19		0 10-20% weakly oxidized, more siliceous, with tiny flakes of bi and chl, less hbd		1	12b, 3m 12-3c	13432DR		.11	65	2	1	50			
12.19	13.72		0 Increasing bi (chl), decr. hbd, 10-15% oxidized Qtz- ser schist (siliceous), 10% white quartz		1	12b, 2m 13c	13433DR		.31	105	12	1	10			
13.72	15.24		0 RHYOLITE 50% oxidized siliceous material 150% pale schistose hbd gn, gray mottled with bi 150% poss pale gray rhyolite dyking		1	13b, 3m 13c, 3L	13434DR		.11	86	6	2	10			
15.24	16.76		0 Hbd gn, 25% oxidized Qtz-ser schist, mottled siliceous igneiss mainly Qtz-palg-bi, little hbd		12+	13b, 2m 13c, 3L	13435DR		.11	171	4	2	20			
16.76	18.29		0 RHYOLITE 25% oxidized sericitic hbd gn 150% pale to creamy gray-rhyolite dyke, Sx assoc with rhyolite, mainly cubic Py, also bright green mineral		12+	13m, 3L 1v. weak 1calc	13436DR		.91	289	12	1	90			
18.29	19.81		0 Hbd gn, 80% dark gray hbd gn, some mottled bi, generally f.g., 20% oxidized sericitic hbd gn		11-2	13m, 3L	13437DR		21.4	669	81	165	760			
19.81	21.34		0 150% dark f.g. hbd gn, 20% oxidized hbd gn, 30% pale gray, weakly oxidized Qtz and/or rhyolite		12	13m, 3L 13c	13438DR		3.1	251	17	6	150			
21.34	22.86		0 190% siliceous red and dark gray hbd gn, mottled 110% oxidized		1	12b, 1-2c 13m, 3L	13439DR		.5	111	10	1	60			
22.86	24.38		0 RHYOLITE pale gray, somewhat spotty mottled with bi, probably mainly rhyolite with some siliceous or flood- ed gn or schist, 5% oxidized		12	12s, 1-2c	13440DR		.5	458	7	2	40			
24.38	25.91		0 IAS ABOVE 12% oxidized		12	11c	13441DR		.11	172	6	1	70			
25.91	27.43		0 IAS ABOVE mottled Qtz-bi-chl minor bright green, v.f.g.		12	12c, 2b	13442DR		.4	97.0	4	1	20			

C1

PROPERTY: Mt. Freegold

HOLE NO.: NRF 88-5

BEARING: 230

DIP-COLLAR: -60

NORANDA EXPLORATION COMPANY LIMITED

STARTED: June 4/88

FINISHED: June 5/88

LENGTH: 36.58

CORE SIZE: RC

FIELD CO-ORDINATES

10000 N

9975 E

DIP TESTS

Bearing

Angle

Depth

N.T.S. 115 I/6

PROJECT NO. 329

LOGGED BY: Chris Wild

SHEET 1 of 2

METRES	Reco- From To	DESCRIPTION OF UNITS	Structure	%		Sample No.	Break lage	ASSAYS						
				Sulph	Alt			Ag ppm	As ppm	Sb ppm	Au ppm	Hg ppm		
01	7.621	01OVERBURDEN no return												
7.621	9.141	0101Z-SER SCHIST orange and black mottled, highly oxidized sericitic schist after hnd gn 15% white vein quartz				12L, 2m 13s, 2c		13976DR		33	361	154	3	2200
9.141	10.671	01As above, minor hematite, very siliceous, ankeritized				12L, 2m 12c		13977DR		51	451	163	5	1700
10.671	12.191	0120X green f.g. hnd gneiss, 5% white Qtz (plag?) 175% mottled orange-black oxidized schist hematite + ankerite + sericite				12L, 2m 12c		13978DR		9	472	148	5	2200
12.191	13.721	0180+X oxidized schist as above, selectively ankeritized muddy, difficult to clean, poss highly argillic 120% weakly oxidized, greenish hnd gn				12L, 2m (2a?)		13979DR		6	893	299	10	4100
13.721	15.241	01More mixed, variable chip size-prob fracture zone 175% oxidized esp hematite, very weakly calc (few chips) 120% weakly oxidized, 5% quartz-feld				12L, 2m (2a?)		13980DR		6	860	281	13	3600
15.241	16.761	01Uniform chip size 190% oxidized Qtz-ser schist, very siliceous, mottled orange-black; 10% Qtz-plag, minor hnd				12L, 2m 13c		13981DR		10	573	116	8	1400
16.761	18.291	01Qtz-ser schist/rhyolite 150% oxidized schist, few calcareous chips 150% pale gray rhyolite dyke, sl greenish, mottled with weak bi + Sx				12L, 2m 13b		13982DR		8	483	79	4	1200
18.291	19.811	0170% oxidized schist, as above (larger chips) 130% pale gray mottled rhyolite				12m, 2L 12c, (3b)		13983DR		3	532	195	3	1620
19.811	21.341	0185% oxidized Qtz-ser schist, as above 110-15% mottled pale gray rhyolite, bi + Sx				12m, 2L 12c, (3b)		13984DR		10	575	243	5	1800
21.341	22.861	0170% oxidized Qtz-ser schist, as above 130% mottled pale greenish gray rhyolite				12m, 2L 12-3c (3b)		13985DR		5	513	120	2	1700
22.861	24.381	0190% oxidized Qtz-ser schist, ankeritized 110% pale gray rhyolite				12m, 2L 12c		13986DR		5	482	127	4	1500
24.381	25.911	01As above, more weakly ankeritized				12m, 2L		13987DR		3	333	131	10	2100
25.911	27.431	01Qtz-ser schist/rhyolite 150% oxidized Qtz-ser schist 150% pale gray, slightly Qtz porphyritic rhyolite dyke				12m, 2L (extr weakly calc)		13988DR		1	192	85	5	1700
27.431	28.961	01As above, strong acid gives mod rx, 10% hcl gives weakly discernible rx				12m, 2L 13c		13989DR		2	419	195	1	2200

METRES		RECORDING	DESCRIPTION OF UNITS	Structure	%	Sample No.	Breakage	ASSAYS				
From	To							Sulph	Alt	Ag	ppmAs	ppmSb
28.96	30.48		RHYOLITE 17% pale gray (sl. greenish) weakly porphyritic rhyolite 13% oxidized qtz-ser schist	ltr.	12m, 2L (3c)	13990DR		.4	485	171	5	2300
30.48	32.00		17% pale gray rhyolite dyke 12% oxidized orange-black qtz-ser schist 11% siliceous, olive green chips, assoc with rhyolite		12m, 2L	13991DR		.1	1755	198	1	10000
32.00	33.53		19% pale gray rhyolite 15% olive green chips, vfg (poss green chalc) 15% olive green chips	(1)	13m	13992DR		.1	3464	140	7	16400
33.53	35.05		17% pale gray rhyolite 13% oxidized schist, (not calc) 15% olive green chips	ltr.	12m, 2L (not calc)	13993DR		.3	1274	182	6	4700
35.05	36.58		As above END OF HOLE	1	"	13994DR		.2	3376	239	1	6000

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-6
 BEARING: 230
 DIP-COLLAR: -60

NORANDA EXPLORATION COMPANY LIMITED
 STARTED: JUNE 5/88
 FINISHED: JUNE 5/88
 LENGTH: 38.10
 CORE SIZE: RC

FIELD CO-ORDINATES
 10003 N
 10000 E

DIP TESTS
 Bearing Angle Depth

N.T.S. 115 1/5
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES		RECORDED To (every x)	DESCRIPTION OF UNITS	Structure	x	Alt	Sample No.	Breakage	ASSAYS								
From	To								Ag	ppmAs	ppmSb	ppmAu	ppmHg	ppbI			
	016.10		01 OVERBURDEN no return														
6.10	7.62		01 QTZ-SER SCHIST oxidized mottled orange-black siliceous qtz-ser schist 30% dark black with orange, 70% pale orange and gray minor white quartz; weakly calc- ankerite			12L, 2m 13c	13995DR		9.4	744	392	72	3000				
7.62	9.14		01 As above, very siliceous-white quartz with limonite and darker mottled qtz-ser schist (probably chl after hbd) very weakly calc			12L, 2m	13996DR		2.2	674	134	107	2000				
9.14	10.07		01 Slightly higher proportion of darker ser schist 5x preserved in weaker oxidized fragments very weakly calc			10L, 2m	13997DR		2.0	583	77	71	940				
10.67	12.19		01 As above, increasing quartz content-possible veining, very fine grained 5x, float in acid			12L, 2m	13998DR		2.0	403	96	49	420				
12.19	13.72		01 20% white quartz with limonite 180% mottled orange qtz-ser schist			12L, 2m 12s	13999DR		4.1	526	53	225	1200				
13.72	15.24		01 hbd Gs 180% weakly oxidized, dark gray (greenish) hbd-chl gr 120% oxidized orange qtz-ser schist minor white quartz			12L, 3m 12c	14000DR		1.9	673	147	105	820				
15.24	16.76		01 QTZ-SER SCHIST weakly oxidized, mottled black, yellow, orange, gray only v. weakly calc			13L, 3m	17126DR		.7	237	59	14	300				
16.76	18.29		01 QTZ-SER SCHIST moderately oxidized, mottled black- orange-yellow, minor hematite in qtz-ser schist			12m, 2L 13c	17127DR		.2	90	14	1	110				
18.29	19.81		01 As above 120% 'rusty' quartz-also yellowish green 110% dark gray-black hbd (bi, chl) fragments			11-2 12m, 2L	17128DR		1.1	281	59	30	360				
19.81	21.34		01 Slowly decreasing oxidation 120% dark gray hbd and light gray qtz-plag minor hematite in 'rusty' quartz			11-2 12m, 2L	17129DR		2.9	640	355	41	2300				
21.34	22.86		01 As above, somewhat less oxidized			11-2 13L, 3m	17131DR		2.6	595	306	39	2800				
22.86	24.38		01 50% oxidized, mottled orange-black schist, minor hem 150% pale greenish gray, mottled with f.g. bi + 5x			13L, 3m 13c, 3b	17132DR		.5	221	80	3	310				
24.38	25.91		01 As above, mottled gray chips may be unoxidized orange chips (poss both altered rhyolite)			11-2 13L, 3m 13c, 3b	17133DR		.3	210	124	6	600				
25.91	27.43		01 RHYOLITE 190% mottled gray rhyolite 110% oxidized, minor hematite			12 13b	17134DR		.3	183	85	4	430				
27.43	28.96		01 60% unoxidized gray rhyolite 140% oxidized, mottled orange-black qtz-ser schist			12 13L, 3m 13b	17135DR		.1	3037	332	1	5000				

NOTE No. 71300R combined with 171290R water in hole!

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-7
 BEARING: 230
 DIP-COLLAR: -60

NORANDA EXPLORATION COMPANY LIMITED
 STARTED: June 5/88
 FINISHED: June 5/88
 LENGTH: 39.62m
 CORE SIZE: RC

FIELD CO-ORDINATES
 10000 N
 10025 E

DIP TESTS
 Bearing Angle Depth

N.T.B. 115 1/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES		DESCRIPTION OF UNITS	Structure	X	Sample	Break	ASSAYS							
From	To						Sulph	Alt	No.	Age	Ag ppm	As ppm	Sb ppm	Au ppm
0	4.57	OVERBURDEN no return												
4.57	16.10	0107Z-SER SCHIST oxidized orange & black siliceous, weakly sericitic schist 40% mainly limonitic quartz grains, possibly vein mottled patchy appearance, not homogeneous; not calc	str.	12L, 3m	17142DR			13.9	900	213	730	1800		
6.10	7.62	01As above, large poorly sorted chips indicate extensive fracturing 30% limonitic quartz, few ankeritized grains	str.	12L, 3m	17143DR			10.2	877	103	470	1300		
7.62	9.14	0150% limonitic quartz 110% oxidized dark mainly hbd grains 140% pale mottled schist; extr weak carb	str.	12L, 3m	17144DR			9.5	929	190	750	1700		
9.14	10.67	01As above, large fragments show banded quartz and dark gray chalcedony with limonite along crosscutting microfractures	str.	12L, 3m	17145DR			4.3	614	84	270	960		
10.67	12.19	0150% Qtz-ser schist; abundant sericite, hematite stain 140% limonitic quartz grains 110% dark chalcedony or fg mafics	str.	12L, 2m	17146DR			4.0	1863	242	290	1050		
12.19	13.72	01As above, poorly sorted chips-highly fractured few ankeritized grains	str.	12L, 2m	17147DR			7.2	850	194	1270	1100		
13.72	15.24	01Becomes mainly mottled black-orange oxidized Qtz-ser schist 130% limonitic quartz 110% dark chalcedony or f.g. hbd (hard)	str.	12L, 2m	17148DR			2.1	220	68	97	420		
15.24	16.76	0190% oxidized, mottled orange black Qtz-ser schist 110% limonitic quartz-grades to above 1very weakly ankeritized	str.	12L, 2m	16601DR			1.9	186	65	89	310		
16.76	18.29	0180% oxidized, mottled schist 120% dark gray hbd gn, med gn. fg bands in siliceous schist possibly chalcedonic 1few ankerite grains	str.	12L, 2m	16602DR			2.7	203	60	96	350		
18.29	19.81	0140% oxidized mottled schist 140% pale gray, dark mottled rhyolite (?) 120% white quartz	str.	12L, 2m 13b	16603DR			2.6	219	59	310	440		
19.81	21.34	0170% limonitic quartz (rhyolite) 120% oxidized Qtz-ser schist 110% dark f.g. hbd gn	str.	12L, 3m	16604DR			1.5	168	51	65	320		
21.34	22.86	01HBN GN weak oxidation, very siliceous, weakly calcareous 120% mafics 60% felsics probably hbd gn 120% limonitic quartz	str.	13L, 3c	16605DR			1.0	235	167	87	500		
22.86	24.38	01mottled felsic hbd gn 150% oxidized, mixed white quartz v.f.e. Sx	str.	13L	16606DR			4.2	350	178	117	780		

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-8
 BEARING: 230
 DIP-COLLAR: -60

MEMORANDUM
 STARTED: June 5/88
 FINISHED: June 5/88
 LENGTH: 39.62m
 CORE SIZE: RC

EXPLORATION COMPANY LIMITED
 FIELD CO-ORDINATES
 10000 N
 10050 E

DIP TESTS
 Bearing Angle Depth

N.T.S. 1:15 1/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES From	To	DESCRIPTION OF UNITS	Structure	%		Sample No.	Breakage	ASSAYS							
				Sulph	Alt			Ag	ppmAs	ppmSb	ppmAu	ppbHg	ppbI		
0.16	1.0	OVERBURDEN no return													
6.10	7.62	150X limonitic white quartz-veining 110X quartz flooded oxidized Qtz-ser schist		11s, 2L 13m		66217DR		.31	430	18	81	1400			
7.62	9.14	150X limonitic white quartz-veining 150X oxidized dark and pale gray hbd gr/Qtz-ser schist minor hematite, rare ankerite		11s, 2L 12m		66218DR		2.71	1726	63	122	2500			
9.14	10.67	150X limonitic white quartz veining 110X orange siliceous Qtz-ser schist, minor ankerite		11s, 2L 13m		66219DR		.41	740	15	61	510			
10.67	12.19	As above, 90X quartz, quite rusty, very weak calc		11s, 2L 13m		66220DR		.11	271	13	71	250			
12.19	13.72	As above, 80X rusty quartz with mafic layers---silica flooding into gneissic host 120X siliceous orange-black mottled schist		11s, 2L 13m		66221DR		.31	254	24	11	410			
13.72	15.24	Decreasing white quartz to 50X thinly interlayered in mottled sericitic schist v.f.g. Sx may be assoc with l.f.g. mafics - chl---hbd		ltr. 12s, 2L 13m		66222DR		.31	423	37	16	860			
15.24	16.76	As before, 80-90X limonitic quartz, prob veins mottled sericite schist interlayers, B1, chl, hbd? in thin layers in quartz, poss assoc v.f.g. Sx. v. weakly calc		11s, 2L 13m		66223DR		.31	286	35	31	690			
16.76	18.29	QTZ SER-SCHIST 150X mottled orange-black oxidized Qtz-ser schist 130X dark gray to black, sl. rusty, fg mafic chips 120X white-pale gray quartz		ltr. 13s, 2m 12L		66224DR		3.11	735	72	66	900			
18.29	19.81	RHYOLITE 175X limonitic quartz, rhyolite veining 115X dark mafic interlayers 110X mottled hematitic quartz-ser schist min ankerite		ltr. 11s, 3m 12L, 3c		66225DR		1.61	336	27	29	370			
19.81	21.34	RHYOLITE/QTZ SER-SCHIST 150X limonitic white-gray-yellowish quartz some veining 130X oxidized Qtz ser schist, peppered with B1, hbd, chl 120X mafic component of schist or gneiss		ltr. 12s, 3m 12L, 3c		66226DR		1.81	374	28	44	580			
21.34	22.86	QTZ-SER SCHIST 190X oxidized Qtz-ser schist and limonitic quartz more thinly interlayered Qtz-flooded schist 110X mafics		ltr. 12s, 3m 12L		66227DR		2.91	1005	28	330	810			
22.86	24.38	AS ABOVE		ltr. 12s, 3m 12L		66228DR		2.11	684	39	390	1500			
24.38	25.91	QTZ-SER SCHIST/HBD GN 150X oxidized siliceous sericitic schist 150X med gray & greenish Qtz-feld gneiss; fine platy B1 chl		ltr. 13L, 3m		66229DR		2.81	2680	35	1070	460			

017

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-9
 BEARING: 230
 DIP-COLLAR: -60

STARTED: June 5/88
 FINISHED: June 5/88
 LENGTH: 36.58
 CORE SIZE: RC

NORANDA EXPLORATION COMPANY LIMITED
 FIELD CO-ORDINATES
 9925 N
 9970 E

DIP TESTS
 Bearing Angle Depth

N.T.S. 115 1/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES From	RECO-1 To (every X)	DESCRIPTION OF UNITS	Structure	X		Sample No.	Break lage	ASSAYS						
				Sulph	Alt			Ag	ppmAs	ppmSb	ppmAu	ppmHg	ppbI	
01	4.571	01 OVERBURDEN no return												
4.571	6.10	01 QTZ-SER SCHIST/RHYOLITE 150% oxidized mottled orange-black Qtz-ser schist 150% unoxidized pale gray mottled schist (rhyolite?) Sx 1 assoc with both		11	13L, 3c, 13m	16633DR		.61	204	82	52	120		
6.10	7.621	01 60% pale gray rhyolite dyking 140% mottled Qtz-ser schist-oxidized; minor ankerite 15% mainly assoc with rhyolite		11-2	13L, 3m (13c)	16640DR		.41	204	16	14	90		
7.621	9.141	01 On above, rhyolite shows mottled appearance with 1 darker Sx and bi		11-2	13, 3a 13c	16641DR		.21	62	12	3	60		
9.141	10.671	01 RHYOLITE 180% pale to creamy gray, less mottled rhyolite 110% pale yellowish orange quartz & minor ser schist 110% mottled banded dark gray schist		11	13L, 3m 13c	16642DR		.31	92	8	7	50		
10.671	12.191	01 QTZ SER-SCHIST 150% mottled reddish - orange & black oxidized Qtz-ser 1 schist 130% mottled banded dark greenish gray schist 120% gray rhyolite		11	13L, 3m (13c)	16643DR		.31	146	20	2	190		
12.191	13.721	01 RHYOLITE 175% pale gray weakly mottled homogeneous rhyolite 1 (with Sx) 120% oxidized Qtz-ser schist (some mottled orange- 1 black) 15% unoxidized weakly chloritic dark gray schist		12	13L, 3m	16644DR		.61	87	21	10	170		
13.721	15.241	01 RHYOLITE/GNEISS/SCHIST 150% rhyolite 130% dark greenish gray Qtz-bi-chl (after hbd?) schist 120% oxidized Qtz-ser schist		12	13b, 2c	16645DR		1.01	68	15	1	190		
15.241	16.761	01 HBD (bi-chl) GN 190% dark greenish gray calcareous, Qtz-bi-chl schist 110% oxidized dark banded schist		11+	11c, 2b	16646DR		.11	38	7	1	70		
16.761	18.291	01 90% med gray Qtz-bi-chl-hbd schist (gneiss) mottled 110% oxidized dark banded schist 1 minor Qtz-carb segregations in gneiss		11+	11c, 2b	16647DR		.11	150	6	3	220		
18.291	19.811	01 70% dark banded schist, as above 120% pale gray Qtz-rhyolite dyke or compositional 1 segregation 110% oxidized Qtz-ser schist		12	12c, 2b	16648DR		.61	114	66	9	150		
19.811	21.341	01 RHYOLITE/QTZ-SER SCHIST/HBD GN 150% pale gray rhyolite 120% dark banded schist 130% oxidized dark banded (+sericitic) schist		11	11c, (3m 13L)	16649DR		.11	40	8	1	50		

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-10
 BEARING: 230
 DIP-COLLAR: -60

NORANDA EXPLORATION COMPANY LIMITED
 STARTED: June 6/88
 FINISHED: June 6/88
 LENGTH: 39.62
 CORE SIZE: RC

FIELD CO-ORDINATES
 9925 N
 9995 E

N.T.S. 115 1/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

METRES		DESCRIPTION OF UNITS	Structure	X	Sample	Break	ASSAYS							
From	To						Sulph	Alt	No.	Age	Ag	ppmAs	ppmSb	ppmAu
016.10		010 VERBURDEN no return												
6.10	7.62	010 QTZ-SER SCHIST 180% orange-red oxidized Qtz-ser schist, lim + hem 1 minor Qtz flooding not calc 120% dark gray hbd gn, fine gr, siliceous	tr	12L, 2m 13s	16660DR			7.8	567	45	37	450		
7.62	9.14	010 HBD GN/QTZ-SER SCHIST 140% dark gray banded, fg, hbd gn 130% orange oxidized Qtz-ser schist mottled, orange-red 1 black 130% white to yellowish gray quartz (diag?)	tr	13L, 3m 13s	16661DR			5.3	579	32	290	350		
9.14	10.67	0160% dark banded schist (gneiss) vfg Sx 130% orange oxidized, siliceous Qtz-ser schist 110% free quartz-white to yellowish gray	tr. 1	13L, 3m 13s	16662DR			6.2	289	40	245	400		
10.67	12.19	01As above, mottled dark schist, weakly oxidized 30% 1 moderately well oxidized, patchy gradational with dark 1 schist minor quartz grains (weak veining)	tr. 1	13L, 3m 13c	16663DR			4.1	209	86	68	360		
12.19	13.72	0160% weakly oxidized greenish siliceous, sericitic 1 schist 130% dark banded, mottled gneiss 110% mod-strong oxidized Qtz-ser schist, minor ankerite	tr.	13L, 3m 13c	16664DR			2.1	101	26	23	220		
13.72	15.24	0140% greenish siliceous Qtz-ser schist 140% dark banded gneiss 120% mod oxidized Qtz-ser schist	tr	13L, 3m	16665DR			2.2	77	36	17	180		
15.24	16.76	0175% pale gray to sl. greenish siliceous Qtz-ser schist 120% mod to strongly oxidized schist, v. weak ankerite 15% dark banded layers	tr	13L, 3m	16666DR			1.2	381	19	24	250		
16.76	18.29	0150% pale to medium gray thinly layered gneiss 130% pale greenish gray Qtz-ser schist 120% weakly-mod oxidized schist	1	12m, 3L 13c	16667DR			1.9	676	40	33	430		
18.29	19.81	0190% pale, mottled gray siliceous gneiss or rhyolite 1 dyke 110% greenish and yellow (weakly oxidized) Qtz-ser 1 schist	2		16668DR			1.1	133	20	18	210		
19.81	21.34	0140% 'spotted' rhyolite, bi + Sx 140% orange, mod oxidized Qtz-ser schist 120% dark banded gneiss	2	13L, 2m 13c	16669DR			.8	127	15	17	230		
21.34	22.86	0150% orange Qtz-ser schist (weakly sericitic) 150% dark to pale thinly layered gneiss	1	13L, 3m 12c	16670DR			1.2	267	27	14	480		
22.86	24.38	01As above	tr. 1	13L, 3m 12c	16671DR			1.8	877	29	39	730		
24.38	25.91	01HBD GN 180% mottled dark green-pale gray banded gneiss 120% oxidized Qtz-ser schist	tr	11-2c	16672DR			.5	92	8	27	130		

PROPERTY: Mt. Freegold
 HOLE NO.: NRF 88-11
 BEARING: 230
 DIP-COLLAR: -60

STARTED: June 6/88
 FINISHED: June 6/88
 LENGTH: 39.62
 CORE SIZE: RC

NORANDA EXPLORATION COMPANY LIMITED
 FIELD CO-ORDINATES: 9925 N 10020 E

DIP TESTS
 Bearing Angle Depth

N.T.S. 115 I/6
 PROJECT NO. 329
 LOGGED BY: Chris Wild
 SHEET 1 of 2

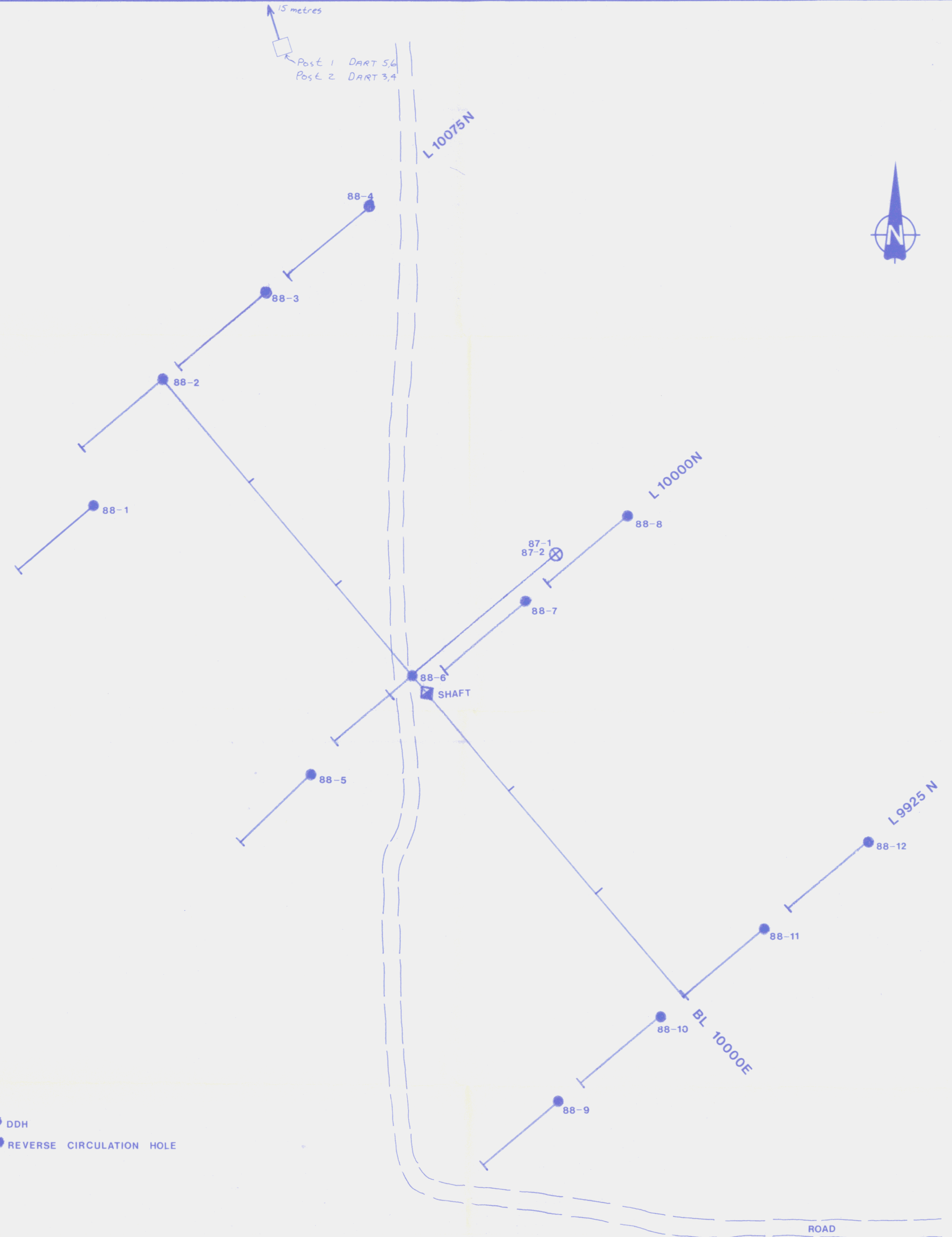
METRES From	Reco- To	every x DESCRIPTION OF UNITS	Structure	X Sulph	Alt	Sample No.	Break lage	ASSAYS							
								Ag	ppm As	ppm Sb	ppm Au	ppb Hg	ppb		
01	4.571	01OVERBURDEN no return													
4.571	6.10	01QTZ-SER SCHIST 160X oxidized, mottled orange-black qtz-ser schist 1siliceous but few limonitic qtz chips 140X thinly banded, pale to dark gray schist (gneiss)		1tr.	12L, 2m 11c	16682DR		.91	661	231	11	501			
6.10	7.621	0150X oxidized, mottled orange-black qtz-ser schist 125X dark gray-black weakly oxidized hbd schist 125X greenish yellow siliceous sericitic schist		1tr.	12L, 2m 11c	16683DR		1.21	901	201	21	1001			
7.621	9.141	01QTZ-SER SCHIST/RHYOLITE 150X pale gray, mottled, weakly sericitic rhyolite 150X weakly to strongly oxidized, mottled orange-yellow 1gray quartz-sericite schist			13L, 3m 11c	16684DR		.51	6751	191	41	701			
9.141	10.671	01RHYOLITE 180X pale gray, mottled rhyolite, minor flecks of bl, 1chl and fg Sx 120X oxidized qtz-ser schist mottled orange-black		12	11c, (3L 13m)	16685DR		.21	5931	141	11	601			
10.671	12.191	0190X rhyolite-as above 110X qtz-ser schist-as above		11	11-2c 1(3L, 3m)	16686DR		1.81	1451	171	31	701			
12.191	13.721	01Weakly sericitic (greenish) gray mottled rhyolite 15X white quartz veining (+carb)		12	11-2c 13m	16687DR		3.51	2811	391	471	6901			
13.721	15.241	0180X rhyolite: fine-mg Sx in rhy and qtz veins 110X white qtz-carb veining 110X more mafic interlayers, host f.g. Sx		13	12c, 3m	16688DR		6.11	3201	2311	1371	8301			
15.241	16.761	01Pale green-gray (creamy) rhyolite dyke, minor oxidized 1chips, very siliceous, prob rhyolite		11-2	13c, 2m	16689DR		1.11	1291	291	391	1801			
16.761	18.291	0180X slightly darker green rhyolite 120X dark gray to black, weakly oxidized hbd schist		11-2	12m, 3c	16690DR		.91	1431	291	221	4301			
18.291	19.811	0175X siliceous greenish yellow sericitic rhyolite + 1schist (difficult to distinguish between) 120X dark gray hbd schist 15X oxidized qtz-ser schist; mottled orange		11-2	12m, 3c	16691DR		1.01	1221	281	61	2101			
19.811	21.341	01RHYOLITE/QTZ-SER SCHIST/HBD GN 150X sericitic rhyolite 125X hbd schist + mottled paler gray siliceous hbd (bl) 1schist 125X oxidized qtz-ser schist		11-2	12m, 3c 13L	16692DR		1.91	1611	361	91	3601			
21.341	22.861	01HBD GN/QTZ-SER SCHIST 170X dark gray hbd schist 130X weakly oxidized qtz-ser schist; pale yellow-orange 1interlayered hbd schist		11-2	13L, 3m	16693DR		2.31	5431	321	3621	4801			
22.861	24.381	0160X pale greenish gray, weakly oxidized, weakly		11	13L, 2c 13m	16694DR		5.21	4461	371	2111	4001			

N. O. R. A. N. O. A. E. P. L. O. R. A. T. I. O. C. O. M. P. A. N. Y. L. I. M. I. T. E. D.

PROPERTY: Mt. Frøegold STARTED: June 6/88 FIELD CO-ORDINATES DIP TESTB N.T.G. 115 1/6
HOLE NO.: NRF 88-12 FINISHED: June 6/88 9923 N Bearing Angle Depth PROJECT NO. 329
BEARING: 230 LENGTH: 39.62 10045 E LOGGED BY: Chris Wild
DIP-COLLAR: -60 CORE SIZE: RC SHEET 1 of 2

METRES From	Reco- To	DESCRIPTION OF UNITS	Structure	X Sulph	Alt	Sample No.	Break lage	ASSAYS									
								Ag	ppmAs	ppmSb	ppmAu	ppbHg	ppbI				
0	3.05	OVERBURDEN no return															
3.05	4.57	Q1QTZ BI-SER SCHIST 150% yellowish weakly oxidized qtz-ser schist 125% unoxidized greenish-brown (bi + chl) qtz-ser- lschist 125% white qtz and pale gray rhyolite, fg 5x		1-2	13L, 2-3m 12c	16705DR		.21	161	41	11	201					
4.57	16.10	Q1RHYOLITE 180% white dark peppered (bi + 5x) very siliceous rhyolite 120% weak-med oxidized qtz-ser schist 110% of rhyolite is limonite stained		1	12b, 3m (3c)	16706DR		.11	151	21	31	101					
6.10	7.62	Q1QTZ-BI-SER SCHIST/RHYOLITE 150% white to med gray peppered rhyolite 150% weak-med oxidized orange to dark green qtz-ser-chl lschist		1	13m, 3L, 13b 11-2c	16707DR		.11	141	41	21	51					
7.62	9.14	Q1QTZ-BI-SER SCHIST 160% gray peppered felsic layer on rhyolite dyke 140% greenish to orange mottled qtz-ser schist		2	11-2c, 3L 13m, 3b	16708DR		.31	121	21	11	51					
9.14	10.67	Q180% gray peppered schist or gneiss; foliated, darker lgray 115% oxidized qtz-ser-bi schist prob. interlayered with peppered schist; 5% white-yellowish qtz vein		1	12b, 12-3c	16709DR		.11	71	21	11	51					
10.67	12.19	Q1As above		tr	12b, 2c	16710DR		.41	231	31	11	51					
12.19	13.72	Q1As above, weakly oxidized qtz-bi-ser schist (gneiss)		1-2	12b, 3c	16711DR		.21	731	151	11	101					
13.72	15.24	Q1Greenish gray felsic 'peppered' gneiss 10-15% oxidized 12% pyrite-med gr.		2	13m, 3c 12b	16712DR		.21	451	131	31	201					
15.24	16.76	Q1HBD GN darker green gray qtz-med (bi-chl) gneiss lmottled bi-chl alter nod, weakly sericitic		2	13m, 3b 11-2c	16713DR		.31	321	31	11	201					
16.76	18.29	Q1'PEPPERED' SCHIST-RHYOLITE paler green gray inter- layered felsic-mafic qtz (feld) hdd (bi-chl) gneiss		2	13b, 3m 12c	16714DR		.31	581	31	11	51					
18.29	19.81	Q1Increasing biotite becoming 'peppered' again (10% oxidized)		1	13b, 2c	16715DR		.21	251	31	21	51					
19.81	21.34	Q1HBD GN 175% dark green chloritic schist 125% white qtz-not peppered; vein		tr	1chl 1c	16716DR		.11	191	31	21	51					
21.34	22.86	Q1QTZ-BI-SER SCHIST felsic bi-peppered gneiss, 10% oxidized 5% white qtz		1	12b, 2-3c	16717DR		.41	401	91	11	101					
22.86	24.38	Q1Gray and green qtz bi-chl schist		1	12b, 1c 12 chl	16718DR		.31	781	81	11	51					
24.38	25.91	Q170% 'peppered' brownish gray 125% oxidized qtz-ser schist		1	12b, 3L, 13m	16719DR		.21	1261	91	31	101					

15 metres
Post 1 DART 5,6
Post 2 DART 3,4



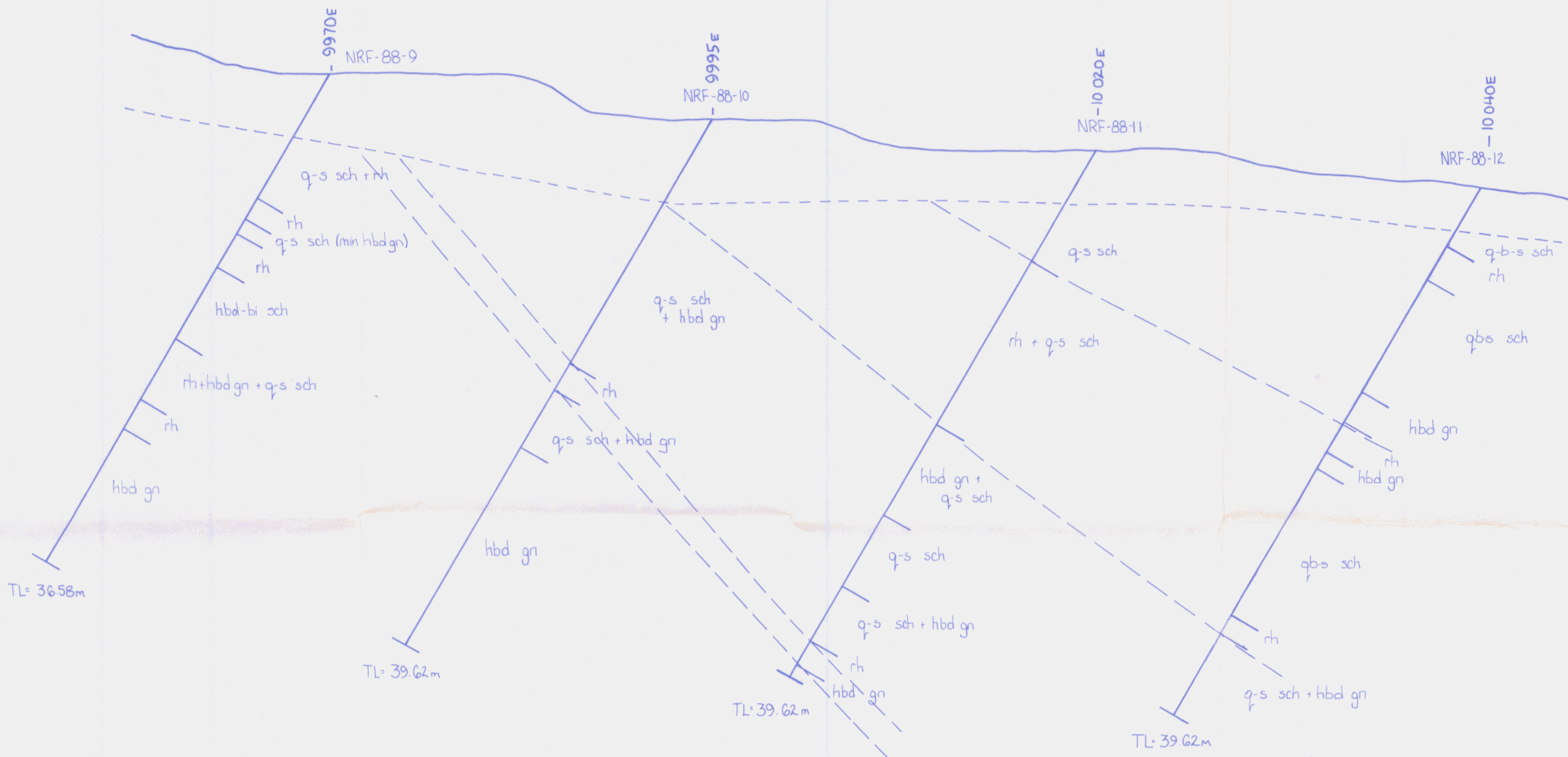
⊕ DDH
● REVERSE CIRCULATION HOLE



REVISED	MT. FREEGOLD	
	DRILL PLAN	
PROJ. No. 329	SURVEY BY: C.W.	DATE: June 88
N.T.S. 1:157.6	DRAWN BY: H	SCALE: 1:500
DWG. No. 5	NORANDA EXPLORATION	
	OFFICE: Whitehorse	

(361)

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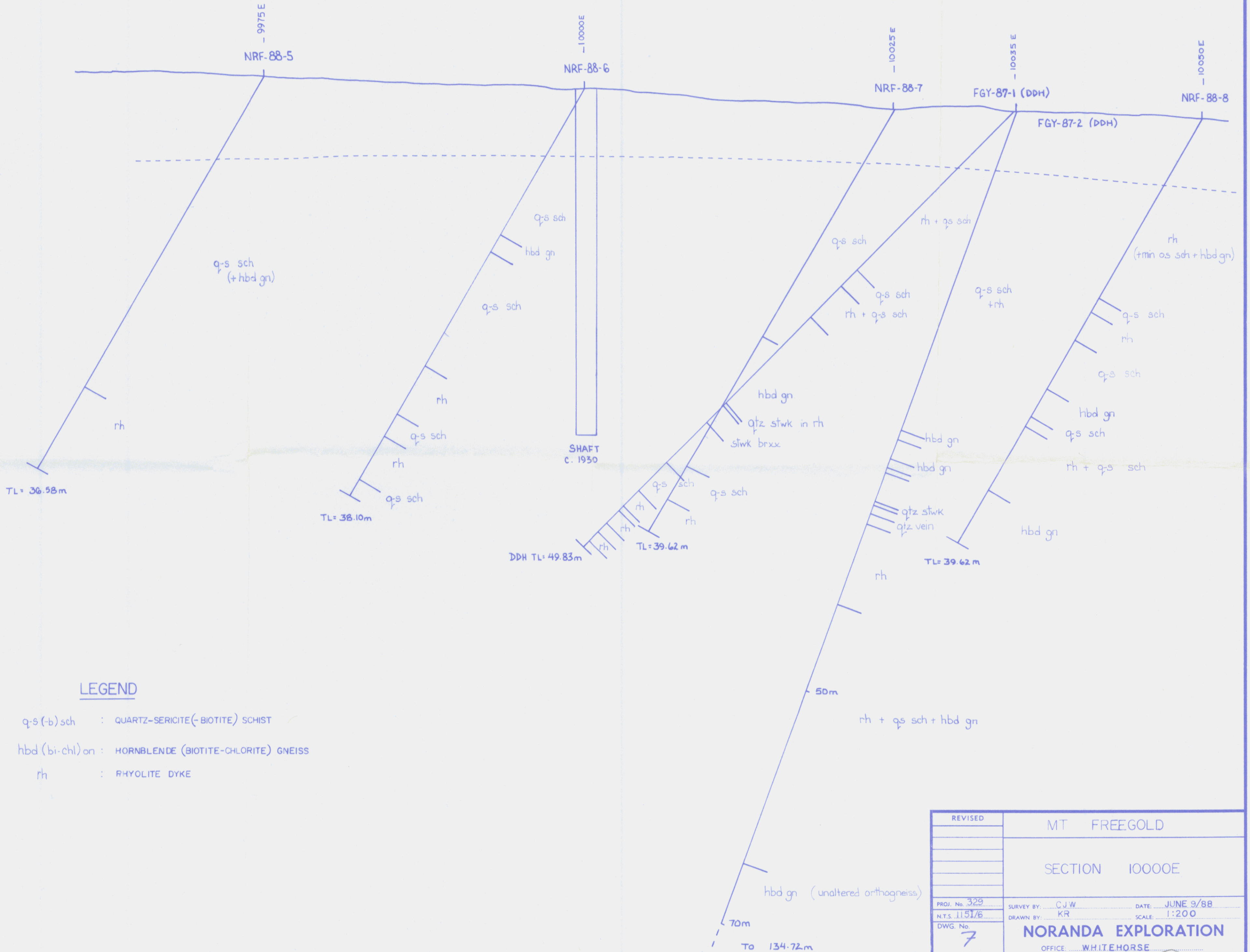
LEGEND

- q-s(-b)sch : QUARTZ-SERICITE (-BIOTITE) SCHIST
- hbd gn : HORNBLLENDE GNEISS
- rh : RHYOLITE DYKE

REVISED	MT FREEGOLD	
	SECTION 9925 N	
PROJ. No. 329	SURVEY BY: CJW	DATE: JUNE 6 1988
N.T.S. 115 1/6	DRAWN BY: KR	SCALE: 1:200
DWG. No. 6	NORANDA EXPLORATION	
	OFFICE: WHITEHORSE	

1892 60

362

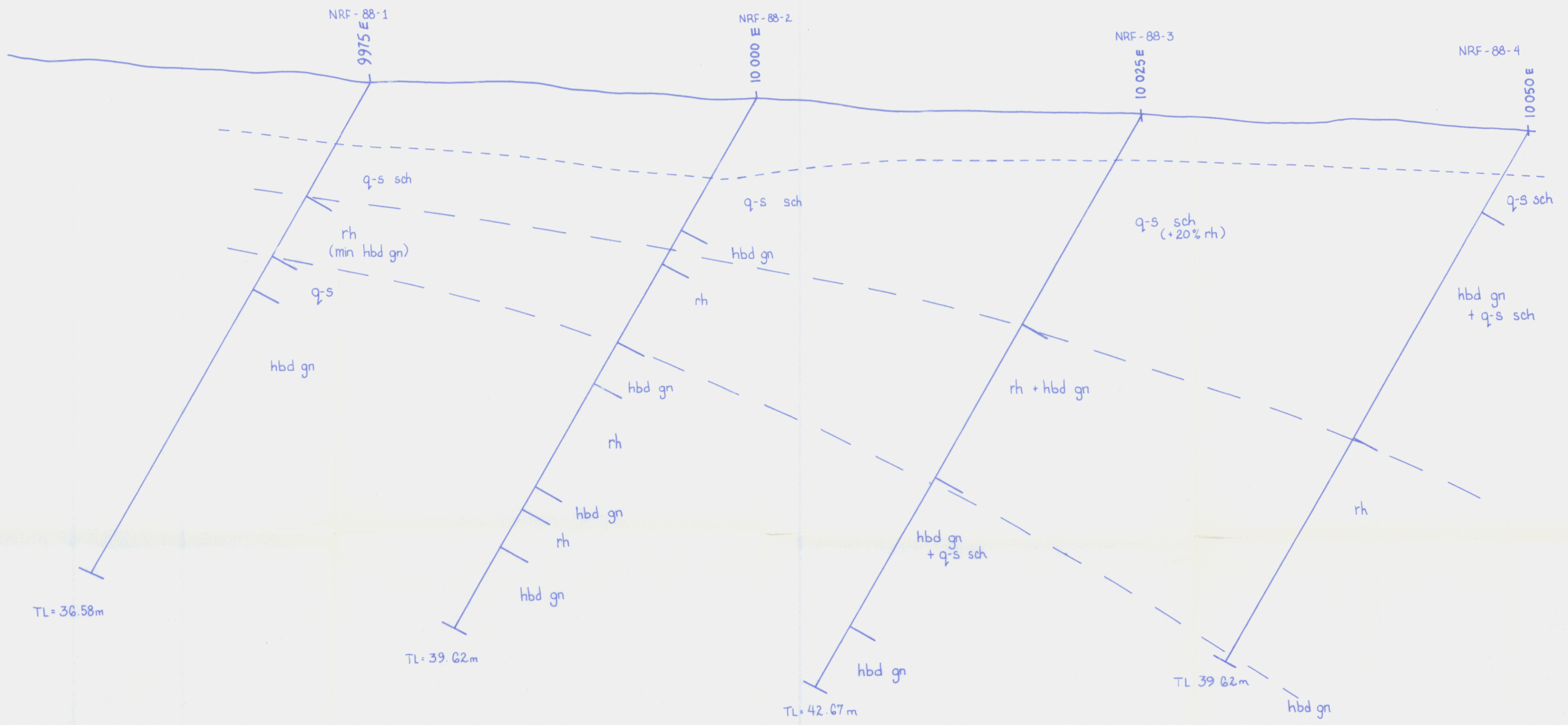


LEGEND

- q-s (-b) sch : QUARTZ-SERICITE(-BIOTITE) SCHIST
- hbd (bi-chl) on : HORNBLLENDE (BIOTITE-CHLORITE) GNEISS
- rh : RHYOLITE DYKE

REVISED	MT FREEGOLD	
	SECTION 10000E	
PROJ. No. 329	SURVEY BY: C.J.W.	DATE: JUNE 9/88
N.T.S. 1151/6	DRAWN BY: KR	SCALE: 1:200
DWG. No. 7	NORANDA EXPLORATION	
	OFFICE: WHITEHORSE	

092631 363



LEGEND

- q-s sch : QUARTZ-SERICITE SCHIST
- hbd gn : HORNBLENDE GNEISS
- rh : RHYOLITE DYKE

NOTE:
 section looking 320°
 NRF-88-1 is in section 10065N

REVISED	MT FREEGOLD	
	SECTION 10075N	
PROJ. No. 329	SURVEY BY: CJW	DATE: JUNE 8 1988
N.T.S. 1:151/8	DRAWN BY:	SCALE: 1:200
DWG. No. 8	NORANDA EXPLORATION	
	OFFICE: WHITEHORSE	

VANICAL 1989