MT. ANDERSON PROPERTY ASSESSMENT REPORT, 1985

on the

TAM 1-8 Claims

and

MAT 1, 2, 4-16 Claims

Whitehorse Mining District

N.T.S. 105 D/3

Latitude 60°12′

Longitude 135°09′

Author: M.P. Webster

Date: April, 1986

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Minin Act and is allowed as representation work in the amount of $ 10,700.00.

D.A Emond

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

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER ONE: INTRODUCTION

1-1: INTRODUCTORY STATEMENT

Noranda Exploration Company, Limited (N.P.L.) in a joint venture agreement with Sanfred Resources Ltd. operated a detailed exploration program on the TAM 1-8 and MAT 1, 2, 4-16 claims in the Wheaton River area.

This program included soil, talus fines and rock sampling, I.P., VLF and magnetometer geophysical surveys, geological mapping, trenching and diamond drilling.

1-2: LOCATION AND ACCESS

The TAM 1-8 and MAT 1, 2, 4-16 claims are situated within the Whitehorse Mining District on Mt. Anderson in the Wheaton River area approximately 60 kilometres south of Whitehorse, Yukon (Figure 1). The claims are located on N.T.S. 105 D/3 at latitude 60°12′ and longitude 135°09′.

Access to the property is available by paved road from Whitehorse via the Alaska Highway and Skagway Road to the Annie Lake Road turnoff approximately 45 kilometres south of Whitehorse. The Annie Lake Road provides year round access to the Mt. Skukum Mine and meets with the Partridge Creek trail approximately 40 kilometres southwest from the paved

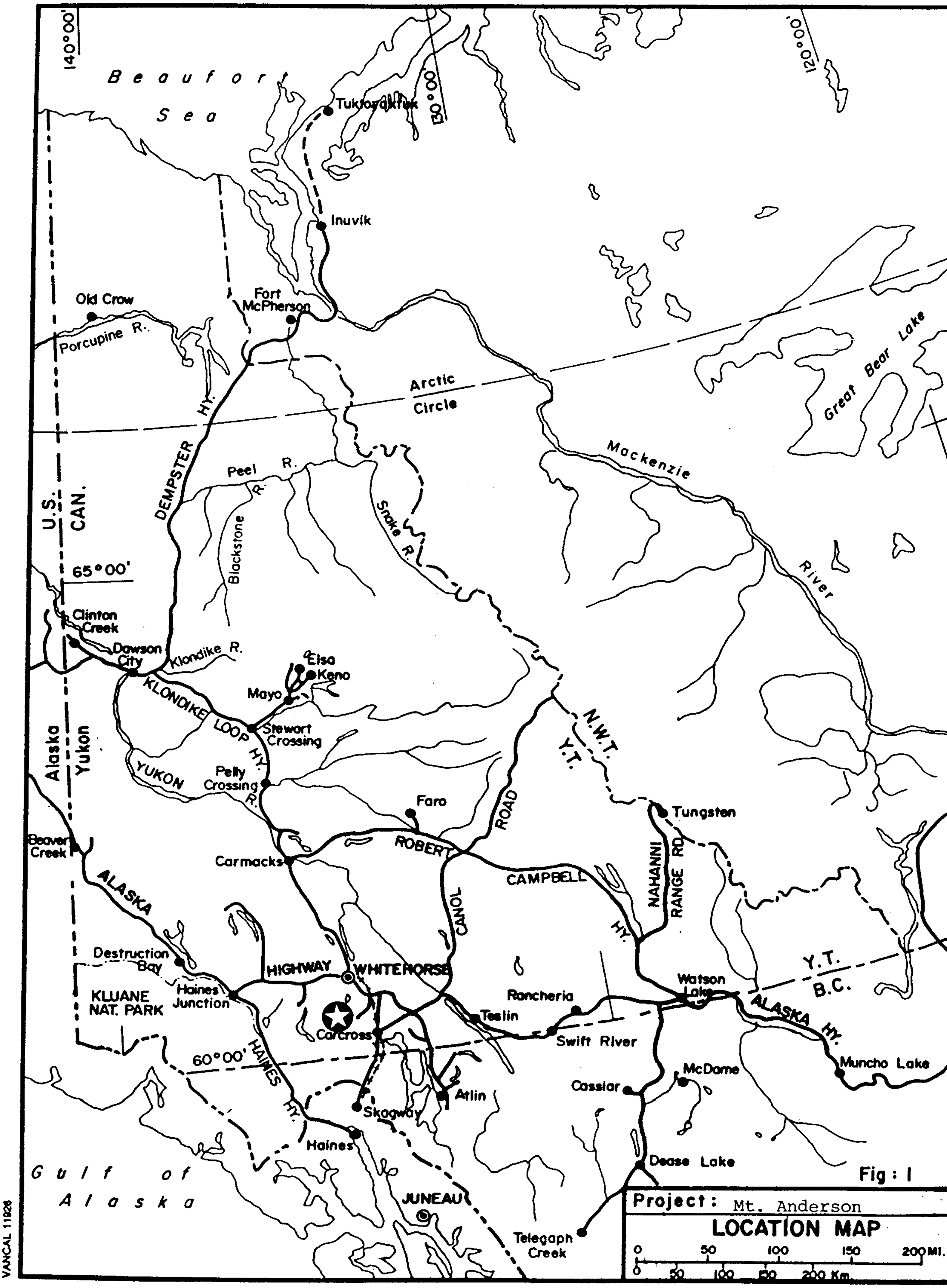


Fig: I

Project: Mt. Anderson

LOCATION MAP

highway exit. The Partridge Creek trail will accommodate 4x4 vehicles a distance of 4 kilometres to the claims and was extended in 1985 approximately 800 metres along the west side of Mt. Anderson.

1-3: PHYSIOGRAPHY AND VEGETATION

The Wheaton River area lies along the western flank of the Yukon Plateau and east of the Coast Ranges. The terrain varies from rolling hills to elevated plains incised by wide, deep v-shaped valleys with hanging valleys remaining from the Pleistocene glaciation.

The TAM 1-8 and MAT 1, 2, 4-16 claims are particularly characteristic of this region in that relatively flat plains occupy the central part of the claim group which is bounded by steep, rugged slopes up to 610 metres (2,500') high where the plateau meets the Becker Creek valley to the west and the Wheaton River valley to the north.

Vegetation on the property is typical of the regional pattern. Vegetation on the TAM group is sparse and grassy whereas the Wheaton River and Becker Creek valleys are densely wooded with conifer, birch and willow. The treeline is found at approximately 1,370 metres (4,500') elevation. Small stands of spruce and pine may be found locally in stream channels above this elevation.

1-4: HISTORY OF THE PROPERTY

The Whirlwind Pb-Ag-Au vein was staked as RIP and WOLF claims in 1906 or 1907. By 1915, 98 metres (322') had been drifted 46 metres (150') along the vein in the lower No. 1 adit and 106 metres (350') had been drifted directly on the vein in the upper No. 2 adit. The results of sampling done in 1912 on the Whirlwind vein in the No. 1 adit averaged 0.08 oz/t Au and 6.4 oz/t Ag over a width of 0.45 metres (1.5') and length of 24 metres (78'). On a different vein, now presumed to be north of the upper and lower adits, 23 metres (75') of drifting with a 10 metre (30') crosscut was completed. A fourth adit now presumed to be south of the upper and lower adits had been driven but failed to intersect a vein. A small mill was built shortly after 1912 but no production is recorded. This history of the property remains uncertain until 1926 when rock trenching was recorded by E. Butterfield on the Flora and Mountain Sheep Extension claims. In 1934-35, H. Beatty recorded similar work on the Gold Claim group. In subsequent years the property was restaked eleven times. The ownership and recorded work is summarized in Table 1.

CLAIM STATUS

NAME	GRANT NO.	RECORD DATE
TAM 1-4	YA22726-YA22729	July, 1978
TAM 5-8	YA24271-YA24274	July, 1978
MAT 1,2,4 Fr,5 Fr, 6-9	YA82425-26, 28-33	June 14, 1984
MAT 10-16 Fr	YA92914-20	August 2, 1985

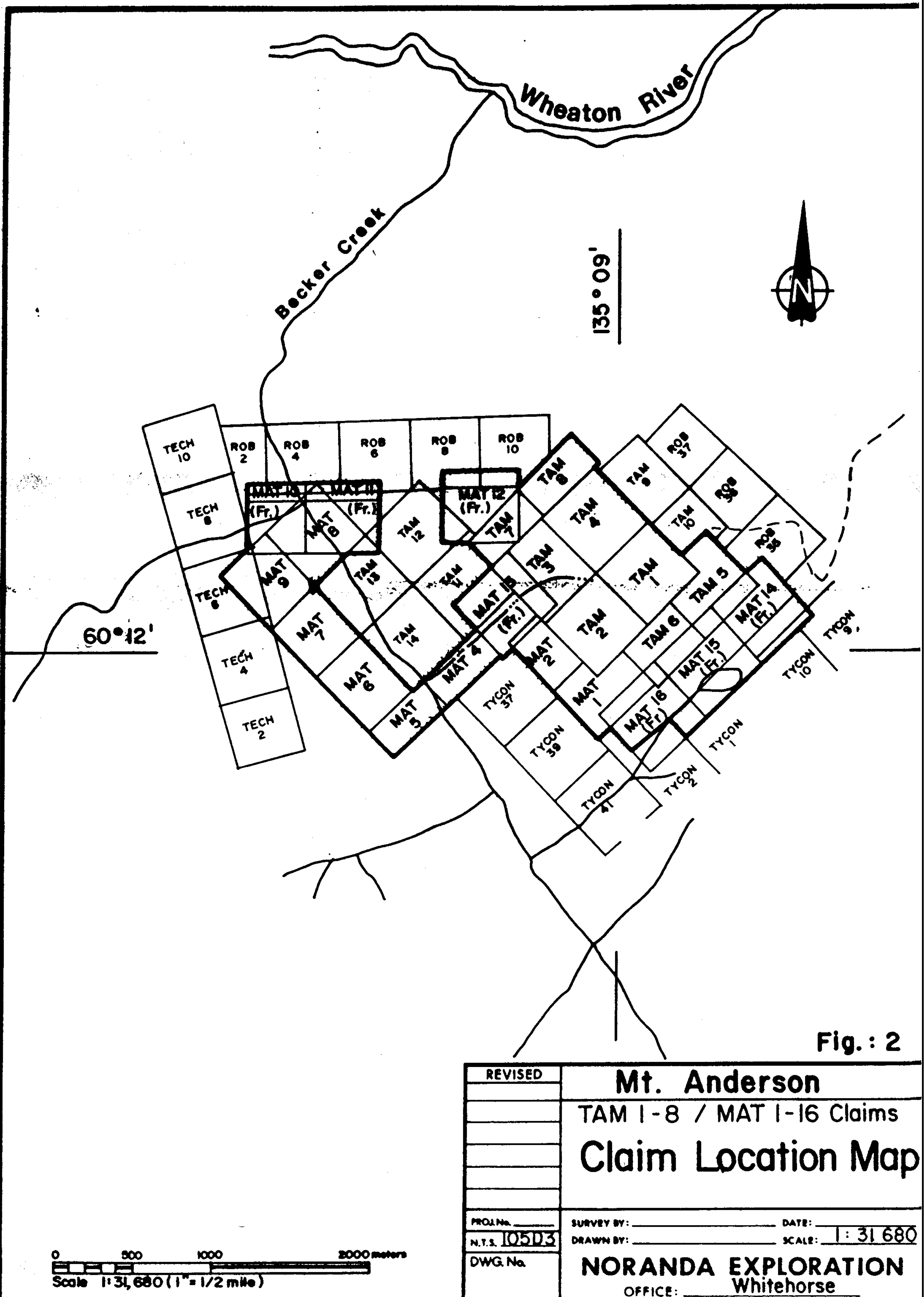


Fig.: 2

REVISED	Mt. Anderson
	TAM 1-8 / MAT 1-16 Claims
	Claim Location Map
PROJ. No.	SURVEY BY: DATE:
N.T.S. 105D3	DRAWN BY: SCALE: 1:31 680
DWG. No.	NORANDA EXPLORATION
	OFFICE: Whitehorse

TABLE 1:
CLAIM STATUS

YR RE-STAKED	CLAIM NAME	OWNERSHIP	DESCRIPTION OF WORK DONE
1944	Mountain Sheep (4405)	J. Johns, W. McAlister	Rock trenching
1947	RHSM (57335)	J.C. Richards, W. McAlister, G. Simons	Test shipment to Trail Smelter after property exam by Keno Hill. Test grade: 1.0 oz/t Au, 12.6 oz/t Ag, 11.6% Pb, 5.2% Zn 1984: bulldozer trenching
1951	Mt. Sheep (60201)	J. Johns	
1957	Star etc. (73145)	L. Laroche	
1957	Skinner etc. (73186)		
1960	Jax etc. (74871)	L. Russell	
1962	Eagle etc. (92035	G. Caldwell	
1964	DL 91543	Yukon Antimony Corp. Ltd.	1965: bulldozer trenching
1967	HL Y12963	W. Hyde	June-Nov/67: option to Silgold ML June /68: option to Adanac Mg & Exp. Ltd., bulldozer trenching mineralized shoot 3'x50', avg. 2 oz/t Au, 50 oz/t Ag and option dropped 1970. 1973: option to Adonis ML, bulldozer trenching, sampling program
1974	Au Y73290 Rush YA3785	D. Waugh	
1977	Blue Sky YA8899	D. Bernier	
1978	TAM YA22726	W. Kuhn	1979: geophysical survey, trenching 1980: trenching
1983		Sanfred Resources Ltd.	TAM claims transferred. 1984: optioned to Noranda in Sept. 1985: Noranda operated geochem, I.P., VLF, mag surveys, bulldozer trenching, legal surveying, diamond drill programs. MAT 1-16 claims tied on south and west of TAM claims.

1-5: WORK PROGRAM

The 1985 field work was conducted on the TAM 1-8 and MAT 1, 2, 4-16 claims from early July to late October, 1985. The work program on the MAT and TAM claims included detailed soil, rock and talus fines sampling, geological mapping, surveying, staking, geophysical surveys, bulldozer and blast trenching and diamond drilling.

The camp was established on the east side of Mt. Anderson on a small creek draining east to Partridge Creek. This camp provided a central operation base for Noranda Exploration Co. Ltd. in the Wheaton River area and accommodated two winterized trailers for the drill crew in September and October, 1985.

The personnel involved in the program are listed below.

Mary Webster	Party Chief
Shirley Abercrombie	Senior Assistant
Hugh Copland	Senior Assistant
Steve Mackay	Senior Assistant
Stuart MacKenzie	Senior Assistant
Barbara Thomae	Senior Assistant
Dennis Bull	Junior Assistant
Arthur Fekete	Junior Assistant
John Nash	Junior Assistant
Kim Blackwell	Cook

Geophysical Surveys:

Peter Walcott	I.P. Survey Supervisor Peter E. Walcott and Associates Ltd.
Lyndon Bradish	Results Interpretation (Noranda Vancouver)
John Devlin	Operator - I.P.
Hugh Copland	Operator - VLF
Tony Lippert	Magnetometer Survey Supervisor
Tim Keleman	Operator - Mag

Legal Survey:

Peter Thomson	Legal Surveyor
2 Assistants	Thomson and Iles Surveyors & Engineers

Diamond Drilling:

Murray Smith	Contractor
	Arctic Diamond Drilling Ltd.
Ken Sheck	Foreman
Henry Calmagane	Night Shift Foreman
2 helpers	
Cook	

Trenching:

Clarence Graham	Cat Operator - Arctic D.D. Ltd.
Tony Fekete	Contractor - D/8 Cat
Ed Chambers	Contractor - D/8 Cat
Jacques Moreau & assistants	Contractor - blasting

Geochemical Analyses:

Bondar Clegg Co. Ltd.	Whitehorse, Y.T.
Noranda Exploration Co. Ltd.	Vancouver Lab
Vancouver Petrographics	Vancouver, B.C.

1-6: LEGAL SURVEYING AND CLAIM STAKING

Peter E. Thomson and two assistants of Thomson and Iles Surveyors and Engineers, Whitehorse conducted a legal survey of the TAM 1-8 claims on July 16 and 24, 1985. The TAM 1-8 claims were found to be well located with no internal fractions. The TAM 9-12 and MAT 1-3 claims located adjacent to the TAM 1-8 claims were also surveyed. It was found that the MAT 3 fr. overlapped the TAM 2, 3 claims and that a narrow fraction of open ground existed between MAT 1, TAM 5, TAM 6 claims and the TYCON claim block to the south. Open ground also existed on the current claim map between the TAM group and the ROB claims to the north.

On July 18 and 19, 1985 staking was done to cover fractions of open ground in the immediate area of the TAM 1-8 and MAT 1-9 claims. The MAT 13 fr. was staked to cover the misplaced MAT 3 fr. The MAT 14-16 claims were staked to cover the fraction of open ground between the TAM group and TYCON claims. The MAT 10-12 fr. claims were staked to cover the triangular fractions of open ground between the TAM group and ROB claims to the north. The MAT 10-16 fr. claims were recorded in Whitehorse August 2, 1985 and are included in the option agreement between Sanfred Resources Ltd. and Noranda Exploration Co. Ltd. The claims were stake to complete and protect the property and interests of the investing parties.

Thomson also surveyed the grid baseline from 2000E to 3400E and tied in old workings on the Whirlwind vein where convenient.

CHAPTER TWO: GEOLOGY

2-1: REGIONAL GEOLOGY

The geology and mineral potential of the Wheaton River area has been documented by D.D. Cairnes (1912, 1916), J.O. Wheeler (1961), and more recently by M.J. Smith (1979), M.B. Lambert (1974) and the Northern Cordillera Mineral Inventory (Archer, Cathro & Associates Ltd., 1981).

The oldest rocks in the region are the Precambrian metasediments of the Yukon Group (Table 2). The Yukon Group quartz-mica schists, feldspathic gneisses and crystalline limestone occur as a northwest trending belt intruded by granitic rocks of the Cretaceous Coast Intrusions. The Triassic Lewes River Group metavolcanic rocks and Jurassic Laberge Group metasediments unconformably overlie the Yukon Group and occupy the northeastern part of the Wheaton River area. The Lower Tertiary Skukum Group[1] is comprised of intermediate to felsic volcanic rocks which occur in two volcanic centres: 1) the Mt. Skukum caldera complex, and 2) the Bennett Lake complex 20 km to the south at the Yukon-B.C. border. A similar volcanic sequence of slightly older, Upper Cretaceous Mt. Nansen Group rocks occur at the Montana Mountain centre, which hosts the Venus Au-Ag-Pb-Zn deposit, 50 km SE of Mt. Skukum (Figure 2).

---

1. The Skukum Group volcanics have been described as the "Carmacks basalts" and "Wheaton River Volcanics" (Cairnes, 1912, p. 64 and 68), the "New Volcanics" and "Acid Volcanics" (Cockfield and Bell, 1926, p. 34), and recently as two groups subdivided into seven members of defined composition and texture (Pride, 1983, p. 94-104).

TABLE 2: TABLE OF FORMATIONS

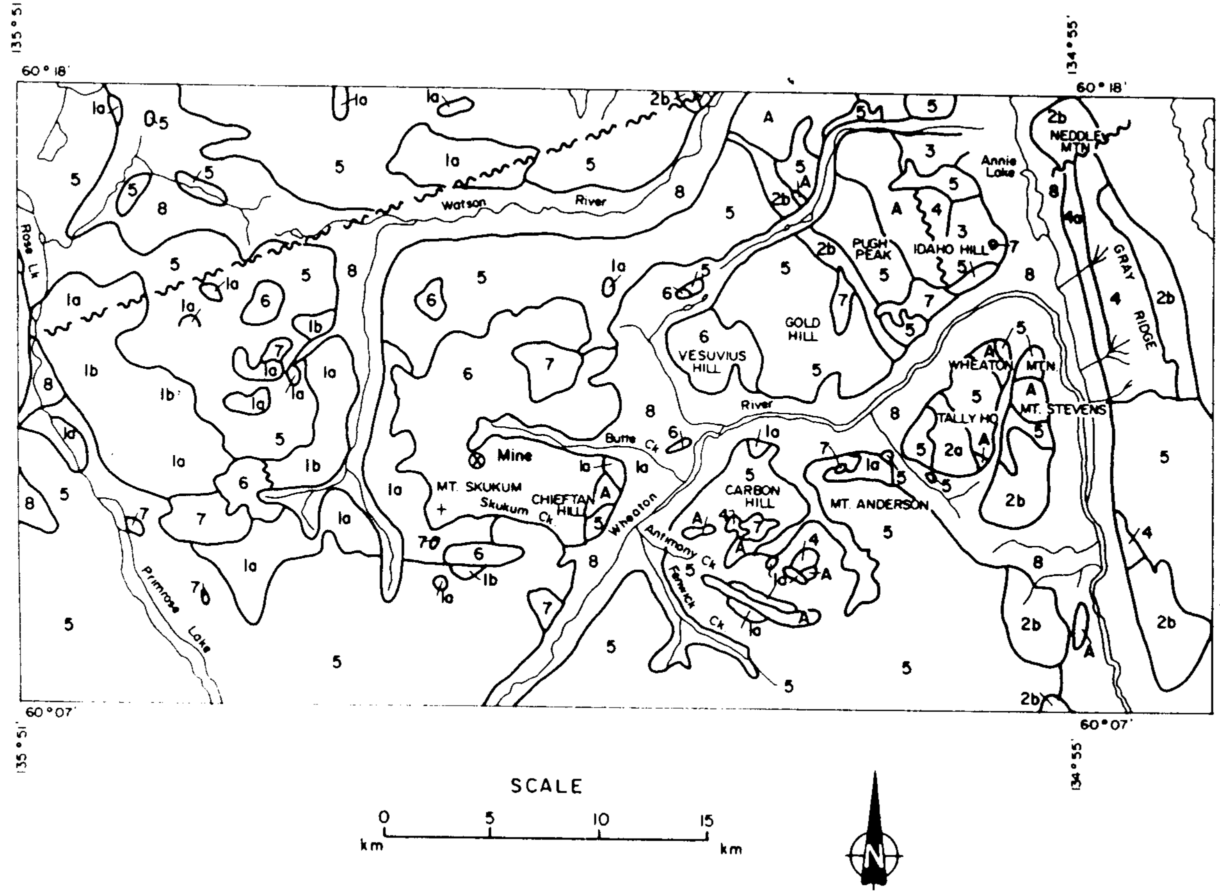
ERA	PERIOD or EPOCH	FORMATION	LITHOLOGY
Cenozoic	Recent and Pleistoce		Glacial debris, loess, volcanic ash Basalt; minor pyroclastic rocks
			---UNCONFORMITY---
	Tertiary		Granite Porphyry, Rhyolite
			---INTRUSIVE INTO LOWER SKUKUM GP.---
		Skukum Group	Andesite, basalt, rhyolite, trachyte breccia, tuffs, flows. Granitic breccia, minor greywacke, sandstone and siltstone.
Mesozoic	Cretaceous	Coast Intrusions	Hbld-bio-oligoclase granodiorite diorite, granite, pegmatitic syenite
			---INTRUSIVE CONTACT---
		Hutshi Group	Basalt, andesite, porphyritic andesite, qtz latite & rhyolite flows, breccias and tuffs; minor greywacke, argillite; conglomerate locally at base
	Upper Jurassic	Tantalus Fm	Arkose, siltstone, congl. argillite, coal
	Lower Jurassic	Laberge Group	Conglomerate, greywacke, arkose quartzite, siltstone, argillite, hornfels
			---UNCONFORMITY---
	Upper Triassic	Lewes River Group	Volcanic greywacke, siltstone, argillite, limestone breccia, conglomerate; volcanic breccia, agglomerate, tuff; andesite porphyritic andesite & basalt
Paleozoic	Pennsylvanian(?) & Permian	Taku Group	Limestone, breccia, chert; greenstone and (?) pyroclastic rocks
Precambrian		Yukon Group	Quartz-mica, qtz-chlorite and mica schists; quartzite, feldspathic hbld gneiss, amphibolite, epidote-amphibolite crystalline limestone; felds-pathic gneiss, lit-par-lit gneiss; gneissic porphyritic granodiorite & quartz diorite

The Bennett Lake complex consists of a rhyolite to dacite ash flow, breccia and tuff volcanic package in part circumscribed by a high level rhyolite ring dyke with related intrusions. Lambert describes this complex as "two nested calderas, an eroded structural dome and a thick succession of pyroclastic and epiclastic rocks related to eruption, subsidence and filling of the cauldrons" (Lambert, 1974, p. 9).

Lambert suggested that the Skukum region may represent a second caldera complex with grossly similar geology and structural characteristics.

The Skukum complex occupies approximately 140 km^2 and is elliptical in plan. It is partially fault bounded and in places intruded by felsic dykes and stocks. A major north trending fault divides the Skukum ellipse into two parts which are made up of probably genetically related interlayered sedimentary-volcanic units. On the west side, andesitic flows, pyroclastic flows and sedimentary units up to 500 metres thick are found. The eastern block consists of altered pyroclastic, brecciated, flow banded and spherulitic felsic lava flows up to 800 metres thick. Cogenetic high level rhyolite to dacite intrusions punctuate the perimeter of the complex. These rhyolites are thought to represent late ring fracture intrusions associated with a caldera event (Pride, nee Smith, 1981).

The Montana Mountain volcanic complex lies 40 km southeast of Mt. Skukum and 20 km northeast of the Bennett Lake complex. Late Cretaceous intermediate volcanic flows, breccias and felsic dykes of the Mt. Nansen Group occupy a circular area approximately 7 km in diameter. The Mt. Nansen suite cuts the basement Paleozoic Nakina Formation volcanic rocks and



Legend

CENOZOIC

Quaternary

- **8** Alluvium, glacial deposits, volcanic ash, loess

Tertiary or Earlier

- **7** Rhyolite

MESOZOIC

- **6** SKUKUM GROUP
  Andesite, basalt, rhyolite and trachyte breccia tuffs & flows, granitic conglomerate, minor greywacke

Cretaceous

- **5** COAST INTRUSIONS
  Granodiorite, quartz diorite

Jurassic (?) and Cretaceous

- **4** HUTSHI GROUP
  Basalt, andesite, qtz. latite & rhyolite, minor sediments
- **4a** TANTALUS FORMATION
  Arkose, siltstone, conglomerate, argillite, coal

Jurassic

- **3** LABERGE GROUP
  Greywacke, arkose, quartzite, conglomerate, siltstone, argillite, hornfels

Triassic

- **2** LEWES RIVER GROUP
  A) Limestone, limestone breccia
  B) Metamorphosed rocks

PRECAMBRIAN and LATER

- **1** YUKON GROUP
  A) Quartz-mica, quartz chlorite and mica schists, micaceous quartzite, gneiss, amphibolite
  B) Crystalline limestone

- **A** Volcanic rocks of uncertain age

Fig.: 3

REVISED	WHEATON RIVER Property
	REGIONAL GEOLOGY (Modified from SMITH, 1981)
PROJ No. II NTS 105 D DWG No	SURVEY BY ... DATE MAY 85 DRAWN BY AI SCALE **NORANDA EXPLORATION** OFFICE Whitehorse

13

Jurassic Laberge Group sedimentary rocks.

Preliminary oxygen isotope studies conducted by Dr. Bruce Nesbitt (University of Alberta, pers. comm.) divide the Wheaton River vein occurrences into epithermal or mesothermal deposits. Mesothermal veins have been identified south of the Wheaton River on Mt. Anderson (Whirlwind), Mt. Stevens and at the Venus Mine on Montana Mountain. Epithermal systems appear to occur north of the Wheaton River to include Mt. Skukum and Gold Hill vein deposits. Both vein types occur on Mt. Anderson, Tally Ho Mountain and Wheaton Mountain. Speculation regarding geological, structure and mineralization processes and the chronology of events in the Wheaton River area is continuing.

2-2: PROPERTY GEOLOGY

The property is largely underlain by Cretaceous Coast Intrusion granodiorite to diorite which overlies a wedge of Precambrian Yukon Group metasediments on the northeast side of Mt. Anderson. On the north face of Mt. Anderson a small Tertiary rhyolite plug intrudes granodiorite and is considered to be part of the rim of the Mt. Skukum caldera complex.

The Cretaceous granodiorite to diorite is complexly fractured and jointed near the north face which grades to diorite or quartz diorite on the south part of the property. Clay and chlorite alteration is most pervasive on surface and in close proximity to quartz veins, zones of silicification or mineralization and dyke intrusions. The granodiorite and diorite host rocks are intruded by at least two types of quartz veins. Late stage calcareous vein systems are described in thin sections (Section 7-3: Petrography). Mafic dykes described as basalt to porphyritic andesite dykes usually accompany quartz veins, however the relative age of the dykes and veins is uncertain.

Two modes of quartz veins have been determined by Nesbitt (et al) and the association between mafic dykes and quartz veins is only identified in the mesothermal, Whirlwind vein system. This system appears to be found only on the northern part of the property whereas the agate-fluorite epithermal vein occurs to the south. The vein systems are readily distinguished in the field by the presence of sulphides and white bull quartz in the mesothermal veins and by the laminar, agate silica textures and lack of visible sulphides in the epithermal system.

Rock Descriptions

Coast Intrusions: Medium to coarse grained, grey to pinkish equigranular granodiorite to black and white biotite-hornblende diorite. Euhedral to subhedral quartz grains, feldspar grains commonly intensely altered to grey, buff clay masses at surface, near dyke or vein intrusions. Minor disseminated chlorite, pyrite, galena.

Dykes

Mafic: Basalt-Andesite medium-dark green, very fine grained, some porphyritic, locally cut by narrow calcite veinlets, local disseminated pyrite, silicification.

Felsic: Rhyolitic - buff to white, very fine grained, locally porphyritic, limonite, manganese stained, sharp contacts, siliceous, minor disseminated pyrite. Clay common along margins.

Quartz Veins

Mesothermal: White, bull quartz, highly fractured, commonly hosts galena, sphalerite, pyrite, clay alteration along margins. Accompanied by mafic dykes.

Epithermal: Buff to beige, laminar agate to radial silica crystals, open vugs, green to purple fluorite crystals within vugs, clay altered margins. No visible sulphides.

CHAPTER THREE: GEOCHEMISTRY

3-1: SOIL SAMPLING PROGRAM

A total of 1099 soil samples were taken on the 1985 grid from L20+00E to L3400E at line spacing of 25 and 50 metres and station intervals of 25 metres. The baseline and TL 2400N azimuth is 100°. Soil samples taken along grid lines were analyzed for Cu, Pb, Zn, As, Ag, Au and locally for Hg and Ba.

Multi-element anomalies were found on the west side of the grid along two subparallel roughly linear zones which trend approximately 130°. The south zone extends from L24+50E, 20+75N to L20+00E, 21+50N and appears to continue west from the grid. The north zone is approximately 100 metres in length and extends from L21+50E, 23+25N to L22+50, 22+75N. These two trends are outlined by contour intervals greater than 10.0 ppm Ag (maximum 77.0 ppm Ag), 1000 ppm Zn (maximum 2400 Zn), 2000 ppm Pb (maximum 11,000 ppm Pb), 100 ppb Au (maximum 1,700 ppb Au). Within these trends anomalies of 2,500 ppm As, 50 ppm Mo and 680 ppm Cu occur as isolated highs.

A third multi-element anomaly is best outlined by the 100 ppb Au contour and extends from L26+00E, 19+50N to L30+75E, 20+25N. The zone is up to 125 metres wide and trends at approximately 85° across the grid. Isolated anomalies within this zone range up to 20 ppm As, 2,800 ppm Pb, 14.0 ppm Ag, 1,800 ppm zn, 140 ppm Cu and 800 ppb Au. This zone is noted to roughly parallel the creek draining west from Whirlwind vein, however, significant Au anomalies which range from 30-560 ppb Au were taken from the steep bank north of the creek and may not necessarily represent mechanical transport of anomalous soils from the vein and tailings of Trench No. 2. Isolated gold anomalies occur elsewhere on the grid as follows:

LINE	STATION	Au (ppb)
L24+00E	24+25N	480
L25+00E	24+25N	1700
L27+75	22+25N	180
L28+25	22+25N	130
L28+50	22+00N	310
L29+75E	23+25N	410
L30+00E	23+75N	300
L31+00E	17+00N	100

Detailed soil sampling was done in close vicinity to an exposed quartz vein on line 26+50E/21+00N. These samples (62) were sieved in the field and taken on lines L26+50, 26+75 and 27+00E from stations 21+00 to 22+00N at 5 metre intervals. Analyzed element highs were as follows 80 ppb Au, 26 ppm As, 650 ppm Zn, 8.2 ppm Ag, 640 ppm Pb and 60 ppm Cu.

Nine soil samples were taken from a series of sloughed trenches on the southeast side of the property. The results are as follows:

SAMPLE	Cu	Zn	Pb	Ag	As	Mo	Au
P69580	220	1300	4000	31.0	70	40	790
P69581	100	1600	720	4.4	40	16	250
P69582	190	2100	2500	12.0	54	10	340
P69583	12	80	130	1.4	24	14	80
P69585	6	50	76	2.8	38	10	60
P69586	20	100	110	7.5	34	2	200
P69589	20	100	1200	20.0	140	8	500
P69590	14	90	190	2.6	30	6	40
P69591	58	580	450	1.6	24	8	80

No visible sulphides are reported to have been found, however, 10-20 cm wide bands of iron oxide stained soils may be found in the base of the trenches.

3-2: ROCK SAMPLING PROGRAM

A total of 110 rock samples were taken during this program. Detailed sampling of Trenches 1-4 will be discussed in Chapter Five. Most samples were analysed for Cu, Zn, Pb, Ag, As, Mo, Au and some samples from Trench 2 were also analysed for Ba.

Significant gold anomalies accompanied by Pb, Ag and As anomalies were found in float and quartz veins which crop out on the northwest ridge of Mt. Anderson. These values range from 30 to 780 ppb Au, 12 to 900 ppm As, 2.8 to 130.0 ppm Ag and 130 to 38,000 ppm Pb (samples R70076-80). Quartz vein float samples (R70090-91), taken between the ridge top and the old adits A-D, have multi-element anomalies which carry up to 900 ppm cu, 580 ppm Zn, 4,900 ppm Pb, 140.0 ppm Ag, 5,000 ppm As and 550 ppb Au. Most veins in this area are <4 cm wide and are difficult to trace more than a few metres on surface. The quartz is typically white, massive and accompanied by minor disseminated pyrite and galena.

Detailed sampling of Adits A-D (Figures 5f-5i) has determined that moderate to low gold anomalies are found in wall rock and clay alteration adjacent to the main vein system. High grade silver values are correlated with high grade lead values in each adit. In Adit B, sample R69676 has 3,600 ppm Ag with 46,000 ppm Pb taken from galena bearing quartz vein material. High gold values (>750 ppb Au) are also found in quartz veins which contain disseminated to podlike blebs of galena, however no correlation to base metal occurrences is obvious. Lead values may range from 960 to 46,000 ppm Pb whereas gold values range from 750 ppb to 2,100 ppb Au (R70081-89, R69676-79, R69604-07).

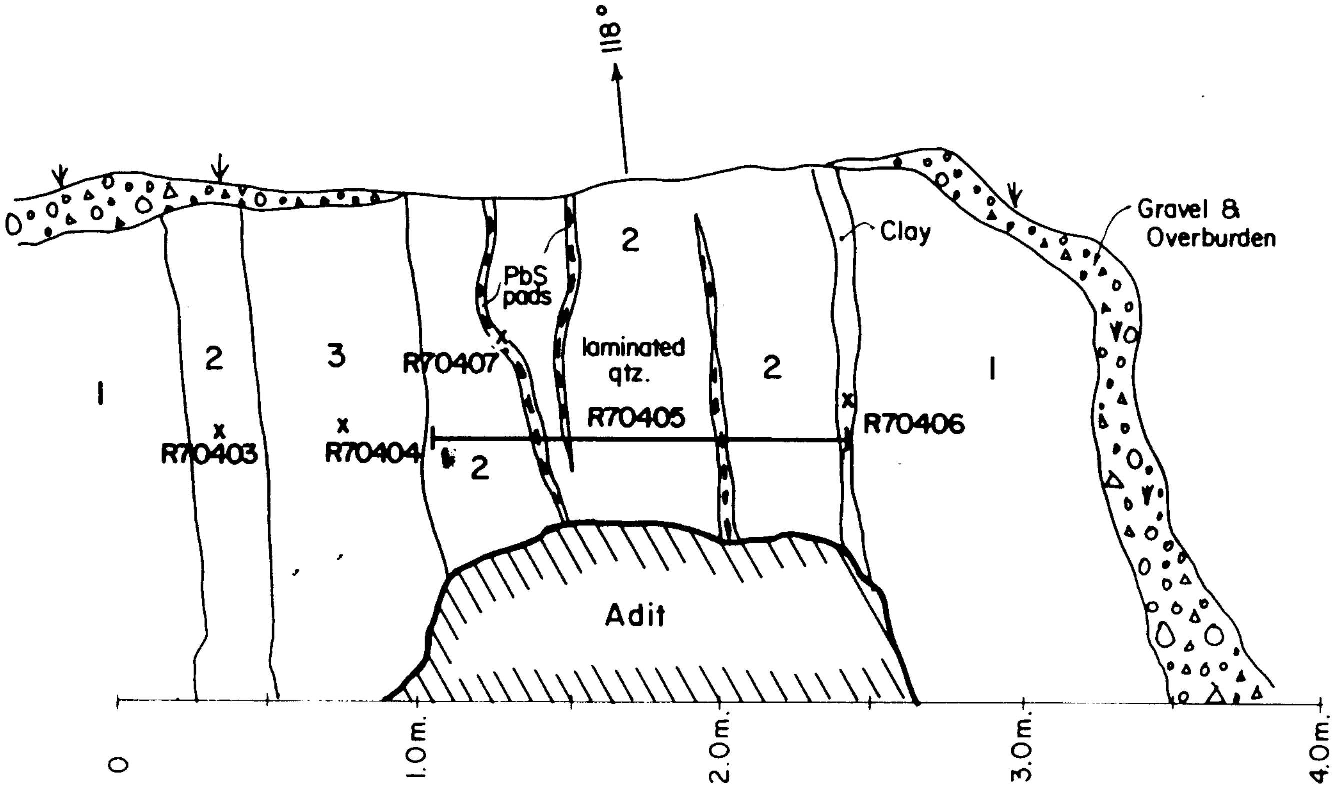
Trench 5 (Figure 5j) carries 30 to 20,000 ppb Au in samples R70256-61. The spectacular gold anomaly is found in glassy white quartz with <1% visible pyrite and galena. The margins of the vein are clay altered and flanked by a felsic dyke to the north and a mafic dyke to the south. High gold and silver anomalies (up to 350 ppm Ag) are located in close vicinity to the quartz vein. These values were not found at depth in drill hole MA-85-7.

Detailed sampling of narrow quartz veins and clay alteration zones along the new access road to DDH-MA-85-5 determined five gold anomalies ranging from 30 to 120 ppb Au. These anomalous samples were taken from quartz veins <2 cm wide with 4-10 cm clay altered and bleached margins in strongly jointed granodiorite to diorite host rocks. The highest values of other elements in these samples include 8.0 ppm Ag, 3,720 ppm Zn, 11,800 ppm Pb and 144 ppm As.

Samples taken from old pits which expose quartz veins up to 10 cm wide accompanied by mafic dykes southwest of the road have values which range up to 200 ppb Au, 110.0 ppm Ag, 17,000 ppm Pb and 600 ppm Zn. Arsenic values are low in this area. Samples taken below these pits near the stream are not anomalous (R69577-79).

Two rock samples taken from the base of old trenches on the east part of the property range from 100 to 140 ppb Au and up to 2.2 ppm Ag and 210 ppm Pb (R69584-88). Soil samples taken from numerous old trenches in this area also detect significant base and precious metal anomalies.

Samples (R78276-91) taken from Pit A, B and along the extension of the agate-fluorite vein have maximum values as follows; 76 ppm Cu, 58 ppm Zn, 46 ppm Pb, 32 ppm As, 1.6 ppm Ag and 30 ppb Au. The quartz is buff to white in colour with laminar agate to radial crystalline silica textures accompanied by 1-3 cm wide clay alteration along the contact to host granodiorite. Green fluorite is found in Pit B at the centre of the agate vein. The fluorite is loosely packed in euhedral silica casts up to 3 cm wide. The highest precious metal values from this vein are found in Pit B which range up to 1.6 ppm Ag and 30 ppb Au (R78282-78289).



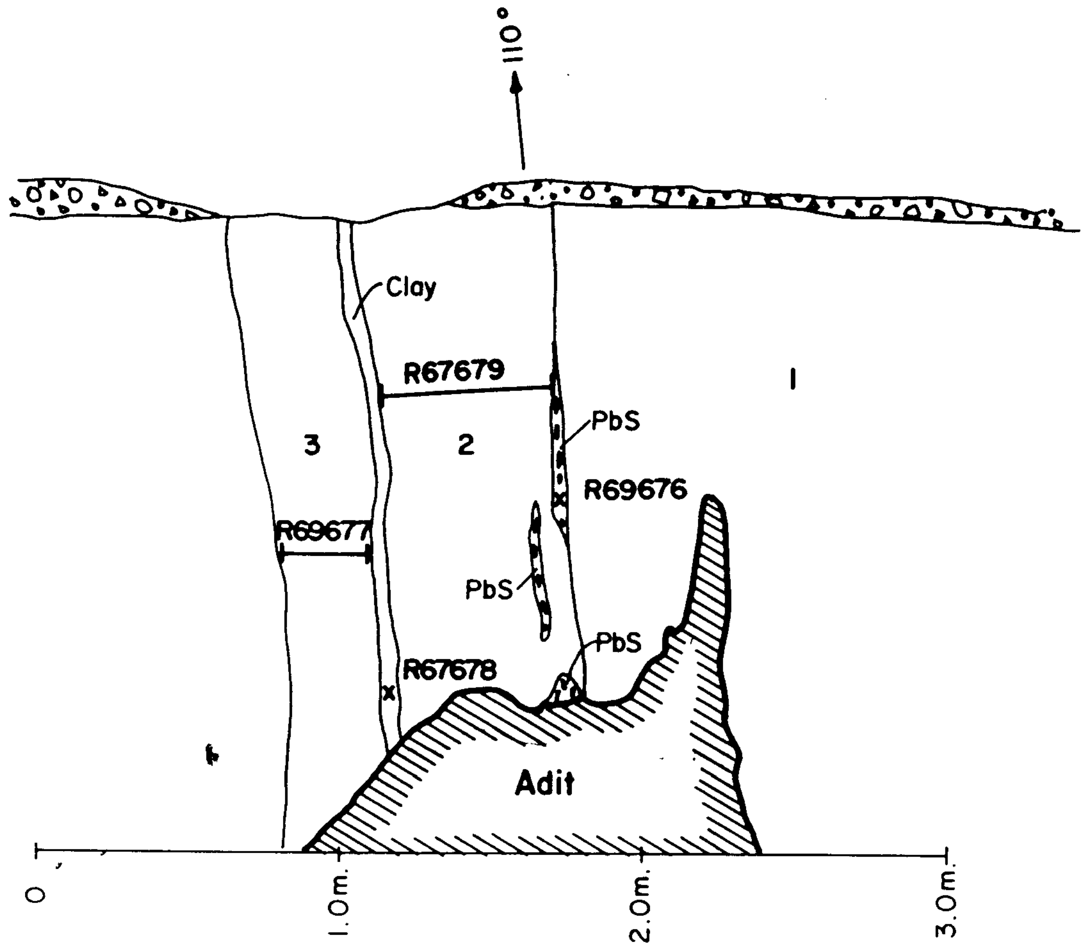
LEGEND

3	Basalt dyke
2	Quartz vein and clay alteration zone.
1	Granodiorite
├──┤	Channel or Chip sample
x	Grab sample

Fig.: 5f

REVISED	Mt. Anderson (MAT Claims)
	Portal Section of Adit "A"
PROJ.No. II	SURVEY BY: DATE: MAY 86
N.T.S. 105D3	DRAWN BY: AI SCALE: 1cm. = 25cm.
DWG. No.	NORANDA EXPLORATION OFFICE: Whitehorse

VANCAL 11927



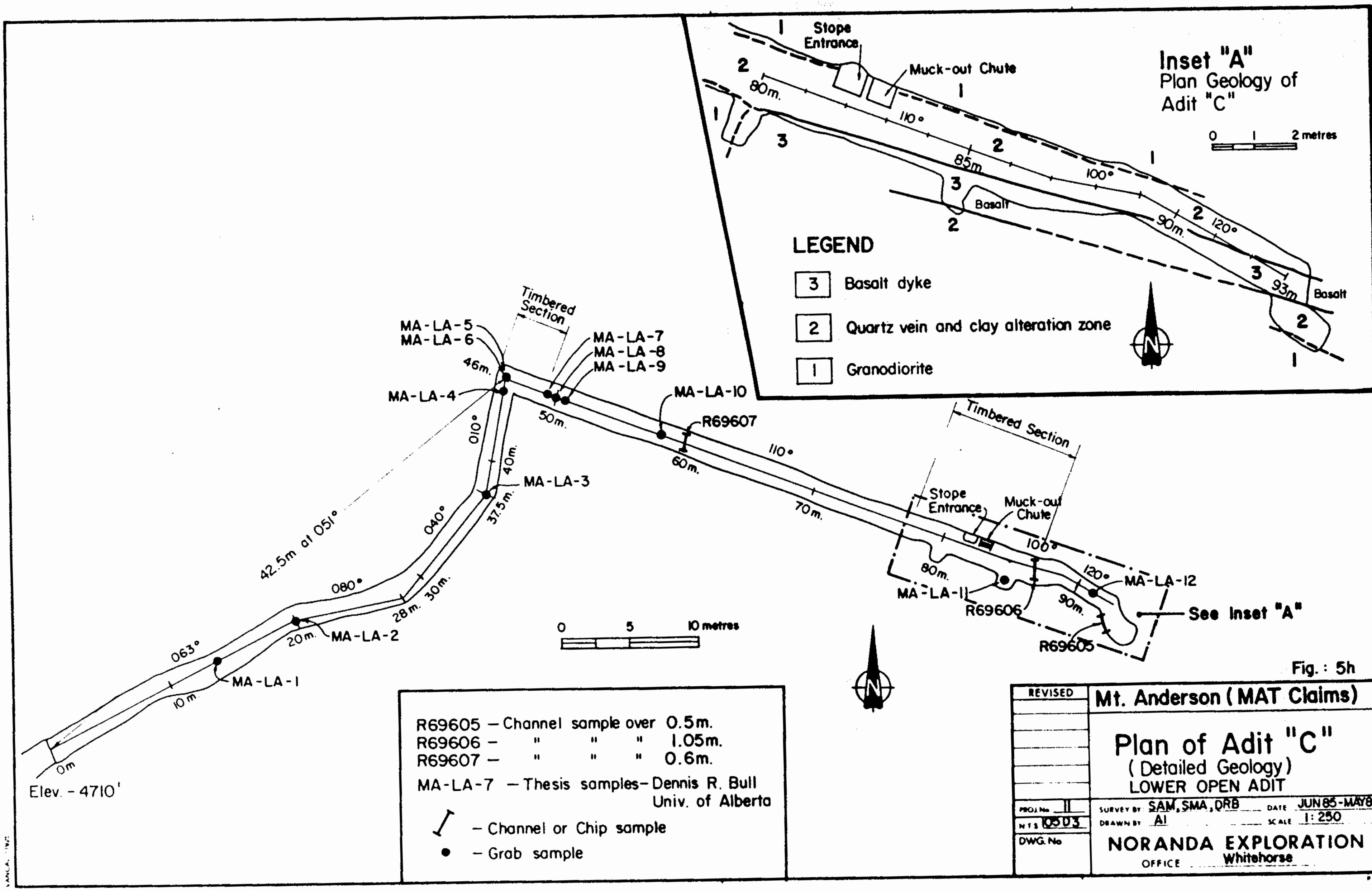
LEGEND

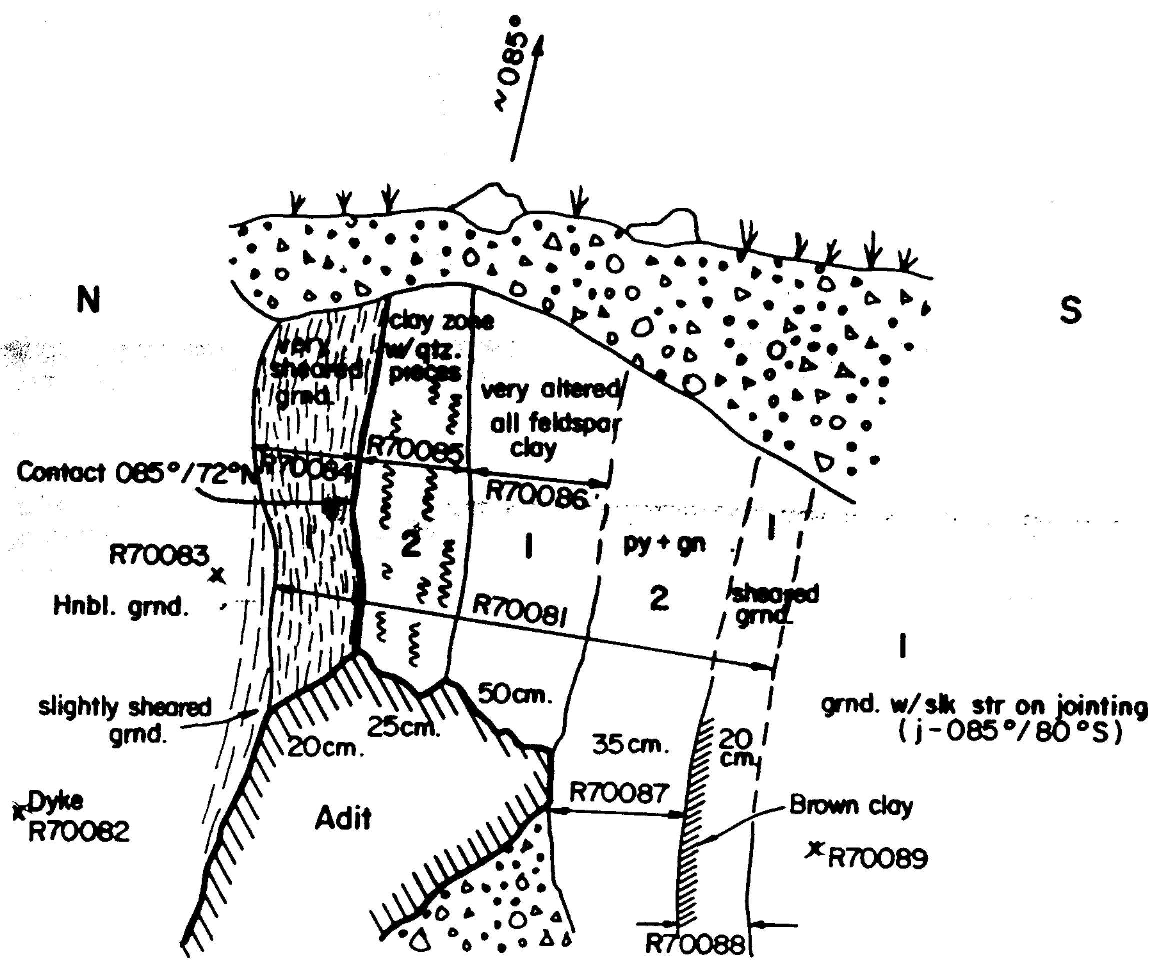
3	Basalt dyke
2	Quartz vein and clay alteration zone.
1	Granodiorite
├──┤	Channel or Chip sample
x	Grab sample

Fig. : 5g

REVISED	Mt. Anderson (MAT Claims)
	Portal Section of Adit "B"
PROJ. No. II	SURVEY BY: ______ DATE: JUN 86
N.T.S. 105 D3	DRAWN BY: Al SCALE: 1cm. = 25 cm.
DWG. No.	NORANDA EXPLORATION OFFICE: Whitehorse

VANCAL 11927


Inset "A"
Plan Geology of Adit "C"
0 1 2 metres
Stope Entrance
Muck-out Chute
80m.
110°
85m.
100°
90m.
120°
93m.
Basalt
LEGEND
3 Basalt dyke
2 Quartz vein and clay alteration zone
1 Granodiorite
Timbered Section
MA-LA-5
MA-LA-6
MA-LA-4
MA-LA-7
MA-LA-8
MA-LA-9
MA-LA-10
R69607
46m.
50m.
60m.
70m.
010°
40m.
MA-LA-3
37.5m.
040°
42.5m at 051°
080°
28m. 30m.
20m.
MA-LA-2
063°
MA-LA-1
10m.
0m
Elev. - 4710'
0 5 10 metres
Timbered Section
Stope Entrance
Muck-out Chute
100°
80m.
MA-LA-11
R69606
120°
MA-LA-12
90m.
R69605
See Inset "A"
R69605 – Channel sample over 0.5m.
R69606 – " " " 1.05m.
R69607 – " " " 0.6m.
MA-LA-7 – Thesis samples – Dennis R. Bull Univ. of Alberta
– Channel or Chip sample
– Grab sample
Fig.: 5h
REVISED
Mt. Anderson (MAT Claims)
Plan of Adit "C"
(Detailed Geology)
LOWER OPEN ADIT
PROJ. No. II
N.T.S. 105D3
DWG. No.
SURVEY BY SAM, SMA, DRB
DATE JUN 85-MAY 86
DRAWN BY AI
SCALE 1:250
NORANDA EXPLORATION
OFFICE Whitehorse



LEGEND

3	Basalt dyke
2	Quartz vein and clay alteration zone.
1	Granodiorite (grnd.)
├──┤	Channel or Chip sample
x	Grab sample

Fig. : 5i

Mt. Anderson (MAT Claims)

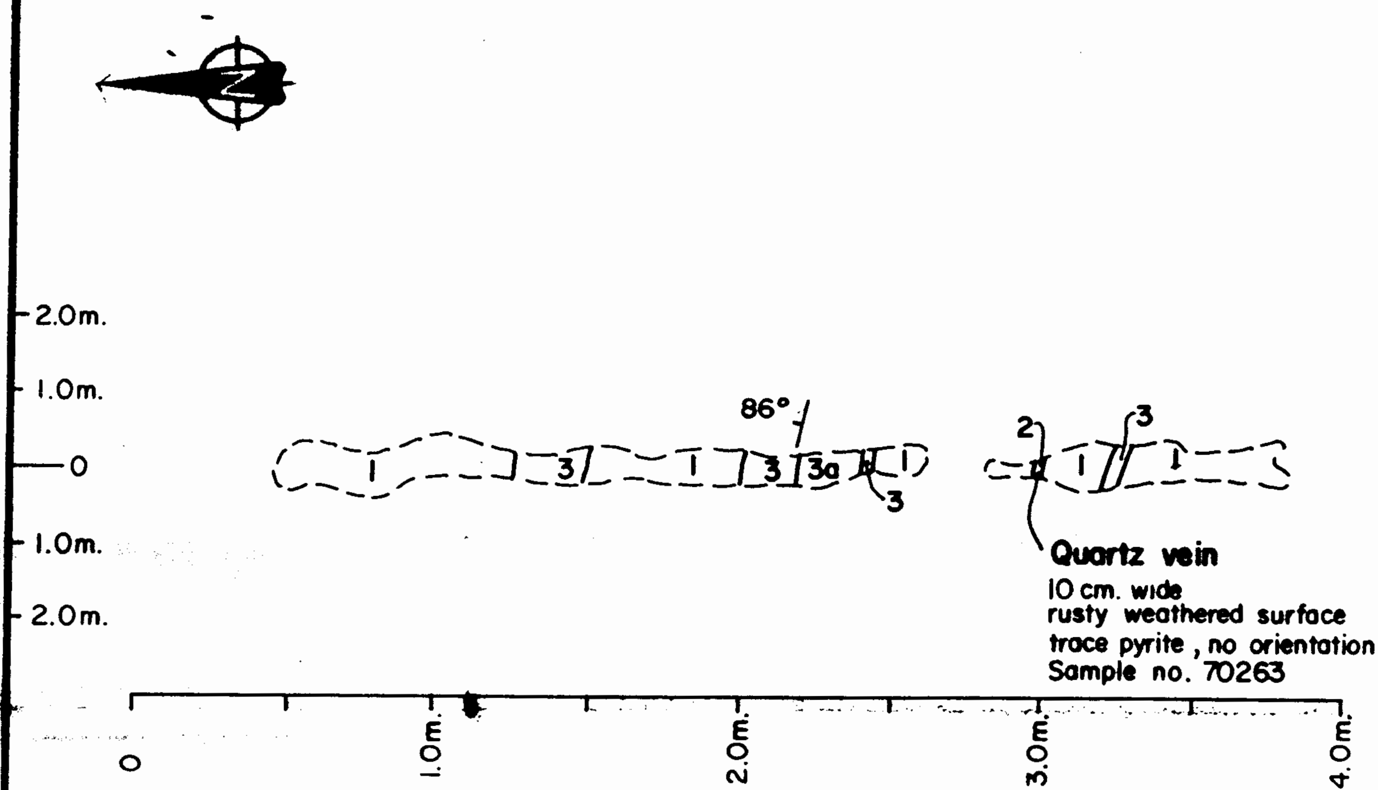
Portal Section of Adit "D"

REVISED	SURVEY BY:	DATE: MAY 86
PROJ.No. II	DRAWN BY: AI	SCALE: 1cm.= 25cm.
N.T.S. 105D3		
DWG. No.		

NORANDA EXPLORATION

OFFICE: Whitehorse

VANCAL 11927



LEGEND

3	Basalt dyke. (3a) Rhyolite dyke.
2	Quartz vein
1	Granodiorite

Fig. : 5j

REVISED	Mt. Anderson (TAM Claims)
	Trench No. 5
PROJ. No. 11	SURVEY BY: SA — DATE: JUN 86
N.T.S. 105D3	DRAWN BY: AI — SCALE: 1 cm. = 25cm.
DWG. No.	NORANDA EXPLORATION — OFFICE: Whitehorse

VANCAL 11927

CHAPTER FOUR: GEOPHYSICS

4-1: INDUCED POLARIZATION SURVEY

The following is a report prepared by L. Bradish of the Vancouver office of Noranda Exploration Company, Limited.

"During the period July 19 to July 24, 1985 seven lines of Time Domain I.P. was completed. The dipole-dipole array employed a 25 metre dipole length with chargeability and resistivity values recorded for n = 1 through 4. The purpose of the survey was to test a mineralized vein for an I.P. response and map this vein if possible.

The results have mapped a number of features seen in the resistivity and chargeability data. All of the chargeability anomalies are of low amplitude which indicate only a marginal increase in the sulphide content. The sources of these chargeability targets and the resistivity anomalies are generally well defined and are expressions of simple geometric shapes.

Listed below are the more prominent features that can be observed in the resistivity and chargeability data.

L. 2150E/2012.5N-2050N : A clear signature seen in the resistivity data indicating a low resistivity source at near surface and not extending to any appreciable depth. There is no associated response seen in the chargeability data.

L. 2150E/2100N-2125N : The chargeability data indicates a narrow zone where the sulphide (?) content has increased by a marginal amount. No decrease in resistivity is noted.

L. 2175E/2012.5N-2050N :	A low resistivity zone of very limited depth extent is defined between these stations. There is no associated chargeability response of interest.
L.2175E/2062.5N-2137.5N :	A broad low amplitude chargeability anomaly that has some depth extent as measured by the I.P. This wide source has no unique resistivity response and is probably due to an increase in sulphide content.
L. 2200E/2225N-2250N :	A thin surficial veneer of low resistivity is evident between these stations. An associated low polarization zone is probably a result of the low resistivity feature.
L. 2200E/2075N-2150N :	A zone of high polarization occurs between these stations and is recorded on all four separations indicating the source to be near surface and extending to depth. There appears to be no distinct resistivity signature associated with this response.
L.2250E/2112.5N-2162.5N :	The combined low resistivity and high chargeability responses point to small near surface source. This source is probably centered at 2137.5N and is not as wide as stated above. The chargeability anomaly pattern shows this small source to be a localized concentration within a wide unit between 2100N and 2175N and also of limited depth extent.
L. 2900E/2025N :	The resistivity has clearly defined a large contrast in the vicinity of this station. This probably reflects a change in the geology. A very weak and small dimensioned chargeability source is recorded on the north flank of the contact.
L.2900E/2162.5N-2187.5N :	This chargeability anomaly has a low amplitude indicating a small increase in polarizeable material. However this source does appear to have significant depth extent. This source appears to have a marginally higher resistivity than the surrounding host rocks.

L. 2950E/2025N : As for Line 2900E, the resistivity data clearly shows a large contrast indicating the presence of a geological contact. A similar but not as pronounced contrast is seen in the chargeability data at this point.

L. 2950E/2262.5N-2300N : A shallow low resistivity zone of limited depth extent is detected by the resistivity data. The resistivity contrast is not very great.

L. 2950E/2200N-2312.5N : A wide zone of above background chargeability is recorded, however there is no well defined pattern to this anomaly that allows any particular shape to be interpreted. This

chargeability

zone encompasses the low resistivity source mentioned above.

L. 3000E/1950N-2025N : A wide zone of low resistivity of moderate depth extent is recorded and is coincidental with a change in the chargeability background. There is only a very marginal increase in the chargeability at 2037.5N-2050N.

L. 3000E/2175N-2200N : The chargeability data has recorded the effects of a narrow zone of polarizeable material. This response is marginally above background.

L. 3000E/2275N-2300N : A zone at a depth of 25.35 metres is defined by the chargeability data. The shape of the anomaly is probably affected somewhat by the small low resistivity zone recorded at 2250N/n=2.

Many anomalies have been defined by this Time Domain I.P. Survey. For the most part they are of low amplitude implying a moderate increase/localization of polarizeable material. All of the chargeability anomalies (with the exception of that recorded on Line 2950E) have good anomaly shapes indicating discrete targets.

The amplitudes of these anomalies are typically 1.5 to 3.0 times background and wide, thus they probably represent a marginal increase in sulphide (?) content. Those anomalies described as narrow offer some possibility to being sourced by a narrow, more massive source (speculative interpretation!). In particular responses 1,2,3,5,6, and 8 should be closely examined (geology, geochem). Response 4 should also be examined (geology, geochem) but as a second priority data would assist the interpretation of the I.P. data."

4-2: VLF-EM SURVEY

A total of 8.9 line km were surveyed at 50 metre line intervals and station intervals of 12.5 metres during this program.

Instrumentation:

EM-16 VLF-EM System

The VLF-EM survey employed an EM-16 unit manufactured DJC (sKF7Y). The VLF transmitter station used as a signal source was station NLK, Jim Creek, Washington, U.S.A. This instrument measures the in-phase and quodrature components of the secondary Em field.

Discussion of Results

The VLF-EM survey defined several anomalous trends as identified on the plan maps. Responses due to topographic changes are evident and are shown as a train of small ellipse symbols on the map while suspected bedrock conductivity north of the baseline on lines 2850E and adjacent lines, lies on the north west side of a defined IP PFE anomaly. The east extension of this EM conductor, although shown as a topographic response may be in part due to a narrow zone of low resistivity.

The south EM anomaly on lines 3000E to 3100E is suspected to be sourced by a narrow non-polarizeable low resistivity source.

4-3: MAGNETOMETER SURVEY

A total of 11.025 line km were surveyed at line spacings of 25 metres and 50 metres and station intervals of 12.5 metres during this program.

Instrumentation

MP-3 Magnetometer System: Magnetometers manufactured by Scintrex Ltd. of Concord, Ontario were employed for this survey. The MP-3 Total Field Magnetometer System consists of one or more field units and a recording base station. Diurnal and day to day variations in the magnetic field are automatically corrected at the end of the survey/day by the built in microprocessor giving the data a useable accuracy of 1 nanoTesla (gamma).

Discussion of Results

The magnetometer survey recorded values with an amplitude envelope of approximately 900 nT and a fairly uniform spectral response. A prominent magnetic high centered at L.2250E/2212.5N forms the nose of a long, wide magnetic high extending eastward off of the grid limits.

The contour map has been heavily filtered due to the "spikey" nature of the magnetic field. Three broad magnetic features reflecting changes in the lithology of the grid area are as follows:

Unit 1: An area north of 2450N on Line 2450E, 2500E, 2550E and the north ends of Lines 2650N to 2800N(?) enclosed by the 200 nT contour.

Unit 2: A magnetic high enclosed by the 500 nT contour between Lines 2100E and 2900E and north of the 2200N baseline.

Unit 3: The remaining area.

These divisions are somewhat general but the magnetic map should assist in further delineating and extrapolating the geology.

CHAPTER FIVE: TRENCHING PROGRAM

5-1: BULLDOZER TRENCHING

Trench 2 was cleared of debris and three new trenches (Trenches 3, 4a and 4b) were excavated by D-8 cat. Trench 2 will be fully discussed in section 5-2.

Trench 3 was excavated in an east-west direction over the I.P. anomaly on line 2900E/2162.5-2187.5N. Granodiorite exposed in the base of the trench was found to carry up to 5% fine grained disseminated pyrite, 1-2% disseminated galena and moderately pervasive clay alteration. The clay alteration is distributed uniformly throughout the granodiorite with the exception of a yellow to rusty orange clay and iron oxide rich fracture zone 10-20 cm wide which ran up to 5,000 ppm Pb, 1,380 ppm Zn, 19.6 ppm Ag and 10 ppb Au (R85926-27). The disseminated sulphides range up to 2.4 ppm Ag, 960 ppm Zn, 142 ppm Pb, 24 ppm As and 10 ppb Au (R85928, Figure 7b).

Trenches 4a and 4b were excavated in an east-west direction on line 29+50E/20+25N and 22+25N to investigate I.P. anomalies of low chargeability and low resistivity in this area. Moderately clay altered and fractured granodiorite was encountered in both trenches. Disseminated pyrite and chlorite alteration was found in the centre of both trenches. The highest rock geochemical anomalies found in Trench 4a and 4b were 4.2 ppm Ag, 730 ppm Zn, 940 ppm Pb, 40 ppb Au and 90 ppm As (R85929-34). Disseminated sulphides and clay alteration is thought to be the source of the I.P. anomalies (Figure 7c).

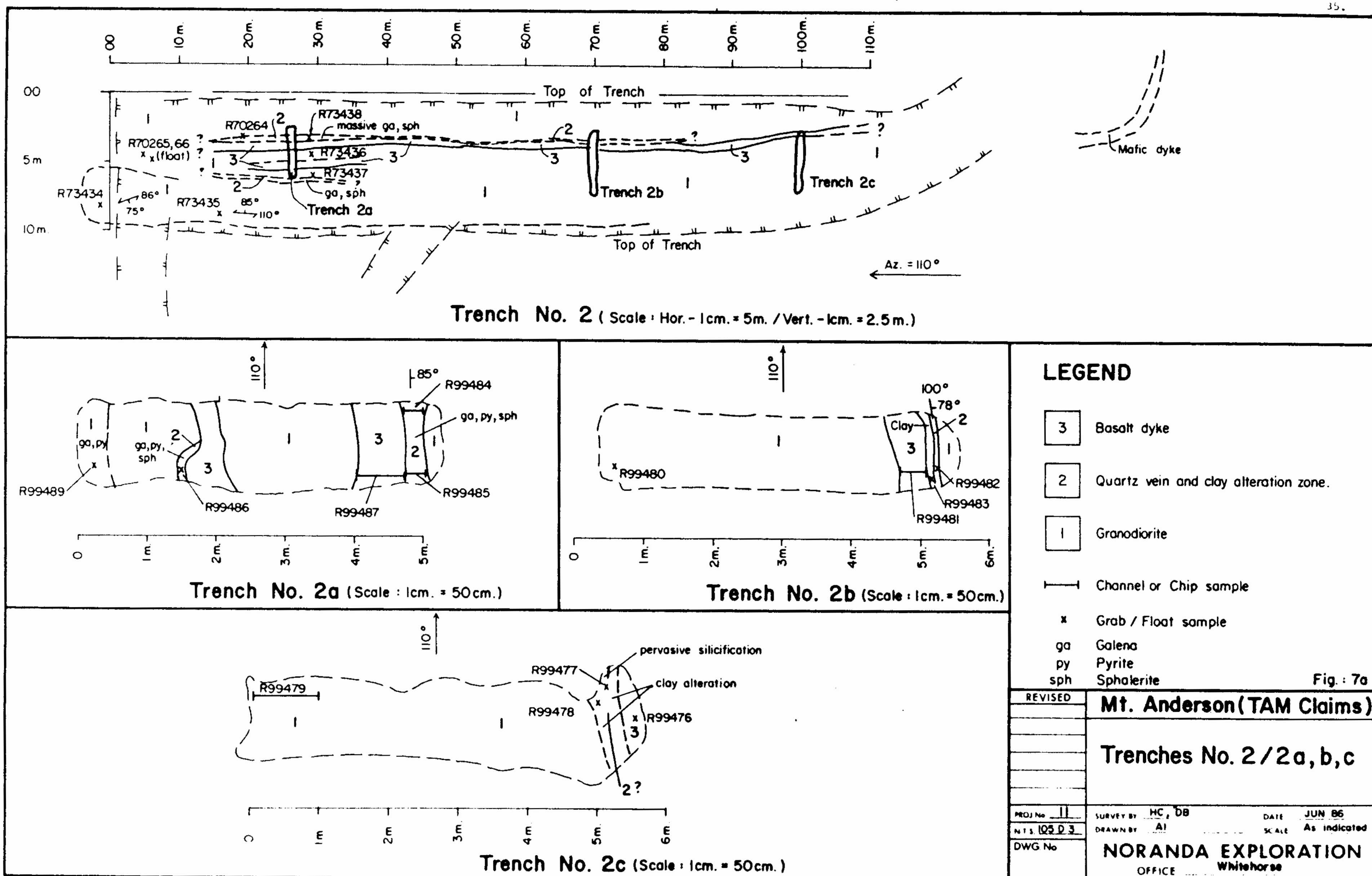
5-2: BLAST TRENCHING - Trench 2

Three 2 metre long x 1 metre wide x 1 metre deep trenches were blasted across the Whirlwind vein structure following bulldozer clearing of debris in Trench 3. Prior to blast trenching, massive galena with minor interstitial sphalerite was sampled from the quartz vein over a width of 20 cm. This sample (R73436) ran 510 ppm Cu, 34.6 ppm Ag, 2,820 ppm Zn, 13,600 ppm Pb, 80 ppm Ba and 6,800 ppb Au.

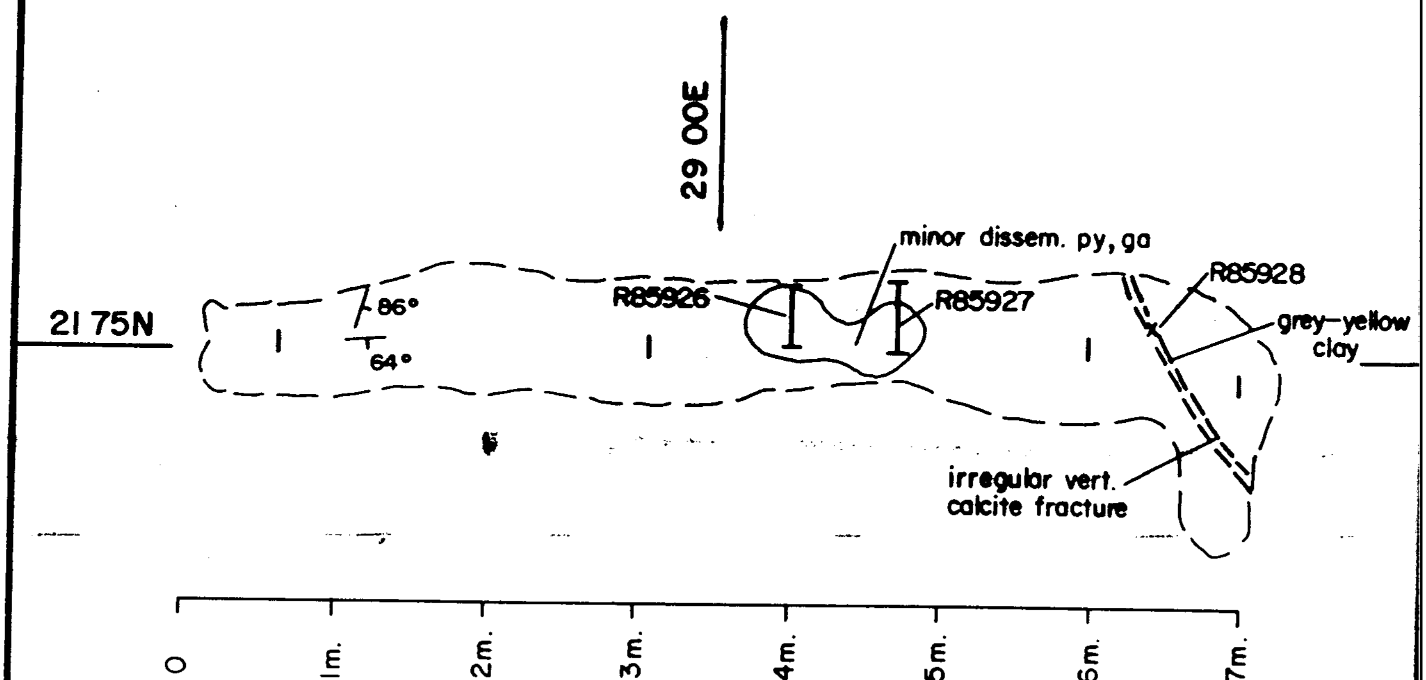
Detailed mapping and sampling (R99476-89) of Trenches 2a, 2b and 2c (Figure 7a) revealed two narrow parallel veins along fracture planes in granodiorite which carry massive sulphides and precious metal values. Both veins vary from 1-20 cm wide and taper to <1 to 5 cm in width in Trenches 2b, 2c. The best exposure of mineralization occurs in Trench 2a and the highest precious metal values are taken from galena rich samples which are summarized below.

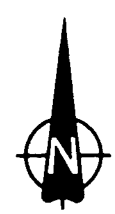
	Cu ppm	Ag ppm	Zn ppm	Pb ppm	As ppm	Au ppb
R99484	2,200	520.0	23,400	40,000	262	4,040
R99485	10,400	999.9	33,600	40,000	104	1,740
R99486	1,740	20.8	11,800	1,980	128	1,580

These values and the continuity of the vein system were not delineated at depth in diamond drill holes MA-85-1, MA-85-2.



00
10 m
20 m
30 m
40 m
50 m
60 m
70 m
80 m
90 m
100 m
110 m
Top of Trench
5 m
10 m
R70264
R73438
massive ga, sph
R70265, 66
x (float)
R73436
R73437
ga, sph
R73434
R73435
86°
75°
85°
110°
Trench 2a
Trench 2b
Trench 2c
Mafic dyke
Az. = 110°
Trench No. 2 (Scale : Hor. - 1cm. = 5m. / Vert. - 1cm. = 2.5 m.)
110°
85°
R99484
ga, py, sph
ga, py
ga, py, sph
R99489
R99486
R99487
R99485
Trench No. 2a (Scale : 1cm. = 50cm.)
100°
78°
Clay
R99480
R99482
R99483
R99481
Trench No. 2b (Scale : 1cm. = 50cm.)
pervasive silicification
R99477
clay alteration
R99479
R99478
R99476
2?
Trench No. 2c (Scale : 1cm. = 50cm.)
LEGEND
3 Basalt dyke
2 Quartz vein and clay alteration zone.
1 Granodiorite
Channel or Chip sample
x Grab / Float sample
ga Galena
py Pyrite
sph Sphalerite
Fig. : 7a
REVISED
Mt. Anderson (TAM Claims)
Trenches No. 2 / 2a, b, c
PROJ No 11
NTS 105 D 3
DWG No
SURVEY BY HC, DB
DRAWN BY AI
DATE JUN 86
SCALE As indicated
NORANDA EXPLORATION
OFFICE Whitehorse



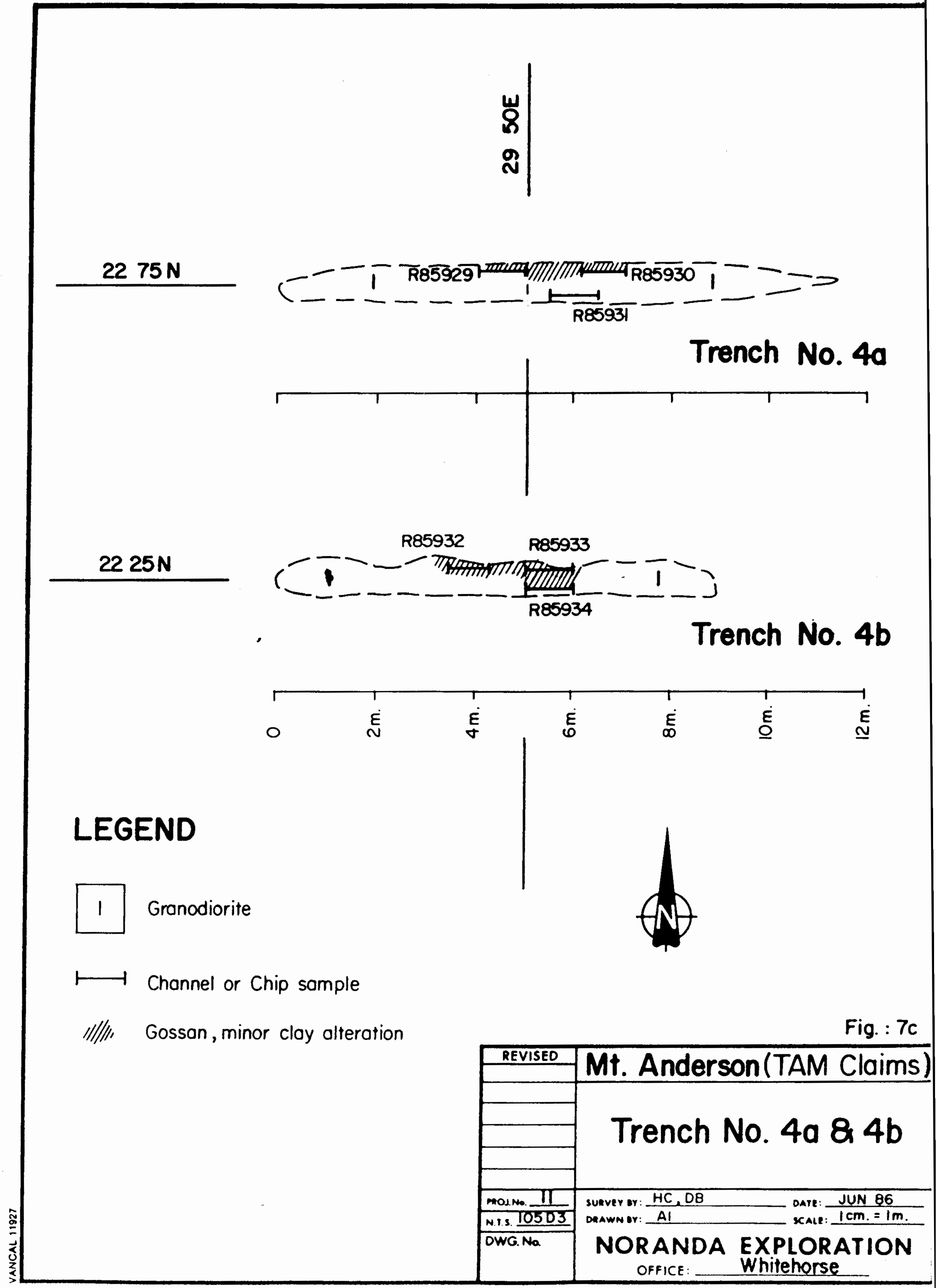


LEGEND

I	Granodiorite
⊢—⊣	Channel or Chip sample
x	Grab sample
ga	Galena
py	Pyrite

Fig. : 7b

REVISED	Mt. Anderson (TAM Claims)
	Trench No. 3
PROJ. No. II	SURVEY BY: HC, DB — DATE: JUN 86
N.T.S. 105 D3	DRAWN BY: AI — SCALE: 1cm. = 50 cm.
DWG. No.	NORANDA EXPLORATION OFFICE: Whitehorse


29 50E
22 75 N
R85929
R85930
R85931
Trench No. 4a
22 25 N
R85932
R85933
R85934
Trench No. 4b
0
2m.
4m.
6m.
8m.
10m.
12m.
LEGEND
I Granodiorite
Channel or Chip sample
Gossan, minor clay alteration
N
Fig. : 7c
REVISED
Mt. Anderson (TAM Claims)
Trench No. 4a & 4b
PROJ. No. 11
N.T.S. 105 D3
DWG. No.
SURVEY BY: HC, DB
DRAWN BY: AI
DATE: JUN 86
SCALE: 1cm. = 1m.
NORANDA EXPLORATION
OFFICE: Whitehorse
VANCAL 11927

CHAPTER SIX: DIAMOND DRILL PROGRAM

6-1: INTRODUCTION

A total of 528.67 metres in seven diamond drill holes were drilled during this program. The program tested a number of geophysical, geochemical and
quartz vein showings.

The Whirlwind vein was found to be discontinuous or faulted off in diamond drill holes 1, 2, 4 and 5 whereas the agate fluorite vein tested in diamond drill hole 3 was found to increase in width with depth. Diamond drill holes 6 and 7 failed to intersect significant mineralization at depth. Further delineation of the agate fluorite vein is recommended as silica textures, fluorite and precious metals in small amounts suggest an epithermal origin of this vein and the potential for precious metal lode deposits at depth.

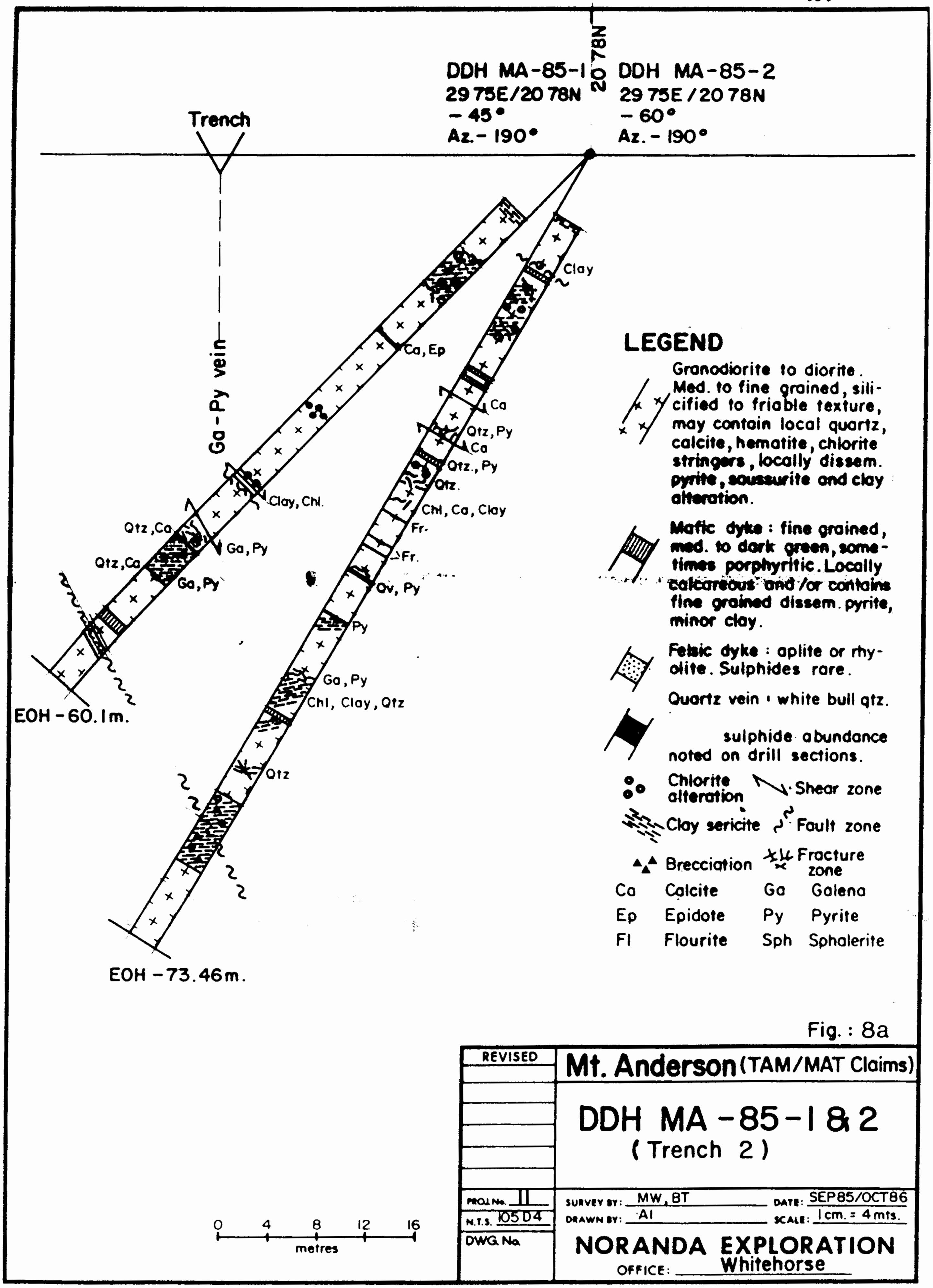
6-2: DIAMOND DRILL HOLES MA-85-1, MA-85-2

Location: 29+75E/20+78N, 29+75E/20+78N
Dip: -45, -60
Azimuth: 190°, 190°
Depth: 60.1 metres, 73.46 metres
Target: Whirlwind Vein in trench 2 consisting of massive white quartz up to 0.6 metres wide containing massive galena, pyrite and clay alteration along vein margins. Pervasive silicification is noted throughout host granodiorite and subparallel dark green, commonly porphyritic andesite dyke.

Drill holes MA-85-1 and MA-85-2 intersected medium grained granodiorite intermittently fractured, altered and locally cut by narrow mafic dykes and quartz or quartz carbonate veinlets. Two heavily clay and chlorite alteration zones associated with fracture systems commonly containing quartz are found in MA-85-1 at intervals 7.6 to 15.9 metres and 39.3 to 49.2 metres. Silicified zones of granodiorite, commonly accompanied by narrow quartz or quartz carbonate stringers, have gold values which range from 20 to 280 ppb Au. Where galena, pyrite and rare sphalerite is visible within the veinlets (average 1.0 cm wide), gold and silver values are increased to a maximum of 280 ppb Au, 35.0 ppm Ag with up to 1.92% Pb and 6.9% Zn in MA-85-1 and up to 260 ppb Au, 7.2 ppm Ag, 1.9% Pb and 1.7% Zn in MA-85-2. Shear zones in both holes carry abundant clay with a slight precious metal enhancement (up to 100 ppb Au and 1.2 ppm Ag) and base metal enhancement only where sulphides are visible. A fault zone was encountered near the end of each hole. This zone carries up to 100 ppb Au, 2.0 ppm Ag, 132 ppm Pb and 120 ppm Zn in MA-85-1 and appears to be accompanied by a mafic dyke in both holes. Precious metal values in the dyke and host rock granodiorite appears to be linked to silicification and quartz veinlets rather than the occurrence of base metal sulphides.

6-3: DIAMOND DRILL HOLE MA-85-3

Location: 3050E/1625N
Dip: -45
Azimuth: 135°
Depth: 121.10 metres
Target: Agate fluorite vein


2078N
DDH MA-85-1
2975E/2078N
- 45°
Az.- 190°
DDH MA-85-2
2975E/2078N
- 60°
Az.- 190°
Trench
Ga - Py vein
Clay
Ca, Ep
Ca
Qtz, Py
Ca
Qtz., Py
Qtz.
Clay, Chl.
Chl, Ca, Clay
Fr.
Fr.
Qtz, Ca
Ga, Py
Qtz, Ca
Ga, Py
Qv, Py
Py
Ga, Py
Chl, Clay, Qtz
Qtz
EOH - 60.1m.
EOH - 73.46m.
LEGEND
Granodiorite to diorite. Med. to fine grained, silicified to friable texture, may contain local quartz, calcite, hematite, chlorite stringers, locally dissem. pyrite, saussurite and clay alteration.
Mafic dyke : fine grained, med. to dark green, sometimes porphyritic. Locally calcareous and/or contains fine grained dissem. pyrite, minor clay.
Felsic dyke : aplite or rhyolite. Sulphides rare.
Quartz vein : white bull qtz.
sulphide abundance noted on drill sections.
Chlorite alteration
Shear zone
Clay sericite
Fault zone
Brecciation
Fracture zone
Ca Calcite
Ga Galena
Ep Epidote
Py Pyrite
Fl Flourite
Sph Sphalerite
Fig. : 8a
REVISED
Mt. Anderson (TAM/MAT Claims)
DDH MA-85-1 & 2
(Trench 2)
PROJ. No. II
N.T.S. 105 D4
DWG. No.
SURVEY BY: MW, BT
DATE: SEP85/OCT86
DRAWN BY: AI
SCALE: 1cm. = 4 mts.
NORANDA EXPLORATION
OFFICE: Whitehorse
0 4 8 12 16
metres
VANCAL 11927

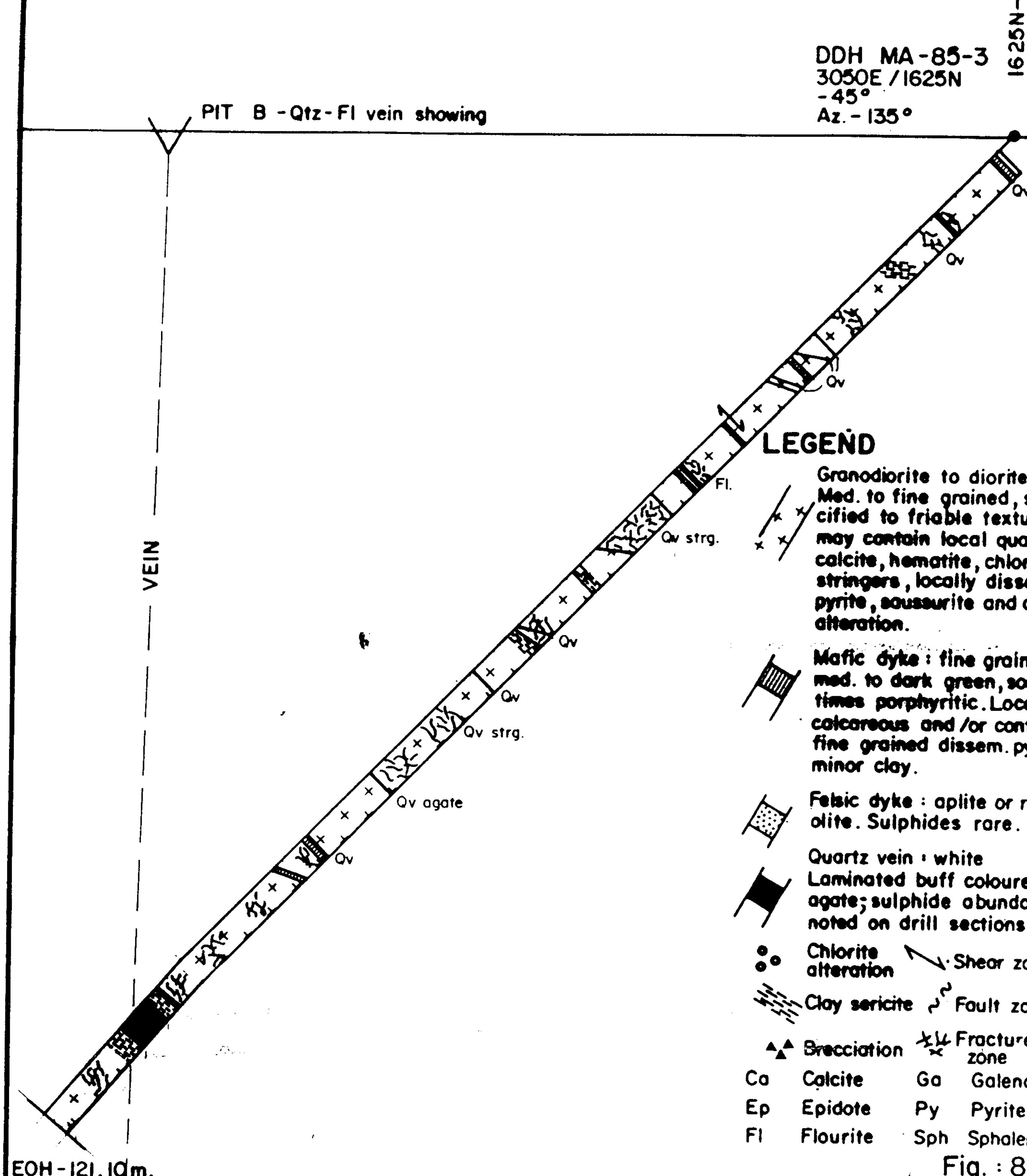
The dominant rock type of MA-85-3 is medium grained granodiorite which locally contains narrow fracture zones commonly filled with silica, chlorite, minor epidote, iron oxides and pyrite. Narrow mafic dykes occur intermittently throughout the hole and do not appear to be associated with quartz veins or mineralization. The agate fluorite vein is intersected from 107.92 to 110.37 and has enhanced silver values which range from 0.2 to 4.2 ppm Ag. From 110.22 to 110.37 metres a slight increase in gold to 20 ppb Au accompanies the 4.2 ppm Ag value found in a 1 cm wide laminated agate vein. The altered granodiorite marginal to the vein has values which range from 10 to 90 ppb Au and 0.2 to 2.2 ppm Ag with an apparent depletion of arsenic over the alteration and vein system from 107.5 to 110.37 metres. No significant base metal anomalies were detected in this hole.

The vein increases in width from 0.5 metres wide at surface in Pit B to 2.45 metres or 1.74 metres in real width approximately 78 metres below surface.

Gold values of 70 ppb and 30 ppb Au are found at 25.0 and 74.66 metres respectively within narrow laminated silica stringers with some chlorite and minor pyrite along the veinlet contact margins.

6-4: DIAMOND DRILL HOLE MA-85-4

Location: 2325E/2087N
Dip: -45
Azimuth: 010°
Depth: 75.29 metres
Target: Multi-element (Au, Ag, Pb, Cu, Zn) soil geochemical and magnetic low anomalies which nearly parallel a projected extension of the Whirlwind vein from Adit C to Trench 2.



LEGEND

Granodiorite to diorite. Med. to fine grained, silicified to friable texture; may contain local quartz, calcite, hematite, chlorite stringers, locally dissem. pyrite, saussurite and clay alteration.

Mafic dyke : fine grained, med. to dark green, sometimes porphyritic. Locally calcareous and /or contains fine grained dissem. pyrite minor clay.

Felsic dyke : aplite or rhyolite. Sulphides rare.

Quartz vein : white qtz Laminated buff coloured agate; sulphide abundance noted on drill sections.

Chlorite alteration

Shear zone

Clay sericite

Fault zone

Brecciation

Fracture zone

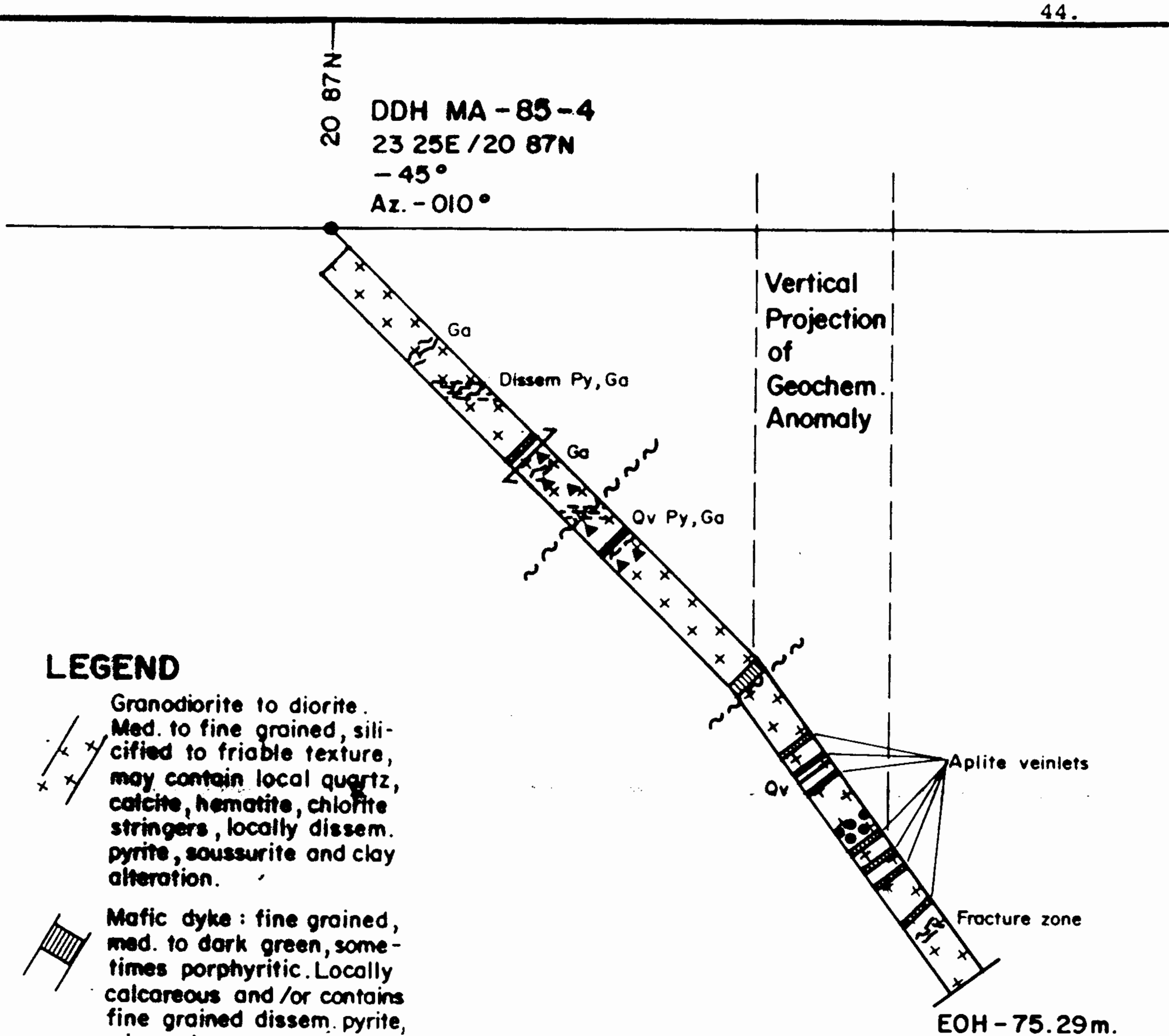
Ca	Calcite	Ga	Galena
Ep	Epidote	Py	Pyrite
Fl	Flourite	Sph	Sphalerite

Fig. : 8b

REVISED	Mt. Anderson (TAM/MAT Claims)
	DDH MA-85-3
PROJ. No. 11	SURVEY BY: MW, BT DATE: SEP 85/MAY86
N.T.S. 105D4	DRAWN BY: AI SCALE: 1cm = 5mts.
DWG. No.	NORANDA EXPLORATION OFFICE: Whitehorse

Drill hole MA-85-4 intersected medium to coarse grained granodiorite locally cut by dykes, quartz veinlets, fractures, shears and fault zones. The narrow fracture systems may contain white quartz, pyrite and iron oxides, intermittent galena grains, minor sphalerite, chlorite, clay and manganese. The highest geochemical results found in MA-85-4 were taken from the lower contact of a fault zone at 32.2 metres as follows; 1,200 ppb Au, 200.0 ppm Ag, >40,000 ppm Pb and 402 ppm Zn over a sample width of 8 cm. Gravel size pieces of massive galena and pyrite were recovered from the fault zone along with fragments of quartz, granodiorite and mafic dyke material. Other values obtained from fracture zones in granodiorite 5 metres above and below this fault ran up to 3.6 ppm Ag, 1,840 ppm Pb and 1,260 ppm Zn. Slightly anomalous gold values ranging from 10 to 40 ppb Au occur in clay altered, fractured and silicified granodiorite and narrow mafic dykes from 43.0 to 57.05 metres. A second fault zone occurs at 47.5 metres below which aplite dykes appear and the granodioritic host rock becomes more competent and silicified with decreasing amounts of clay and chlorite alteration. A marked decrease in sulphide occurrence is noted below the fault zone at 43.0 metres. The hole was stopped in competent, unaltered granodiorite.

The magnetic low anomaly may trace a fault zone in the magnetic granodiorite host rock from the NW part of the property through trench 2 at 30+00E on the baseline. Intense clay alteration and leaching near the surface of disseminated sulphides in the granodiorite and stringer zones explain the geochemical anomalies in surface soils.



LEGEND

Granodiorite to diorite. Med. to fine grained, silicified to friable texture, may contain local quartz, calcite, hematite, chlorite stringers, locally dissem. pyrite, saussurite and clay alteration.

Mafic dyke: fine grained, med. to dark green, sometimes porphyritic. Locally calcareous and /or contains fine grained dissem. pyrite, minor clay.

Felsic dyke: aplite or rhyolite. Sulphides rare.

Quartz vein: white bull qtz.

sulphide abundance noted on drill sections.

Chlorite alteration — Shear zone

Clay sericite — Fault zone

Brecciation — Fracture zone

Ca	Calcite	Ga	Galena
Ep	Epidote	Py	Pyrite
Fl	Flourite	Sph	Sphalerite

0 5 10 15 20 metres

Fig.: 8C

REVISED

Mt. Anderson (TAM/MAT Claims)

DDH MA-85-4

PROJ. No. II

N.T.S. 105D4

DWG. No.

SURVEY BY: MW, BT DATE: SEP85 / MAY86

DRAWN BY: AI SCALE: 1 cm. = 5 mts.

NORANDA EXPLORATION

OFFICE: Whitehorse

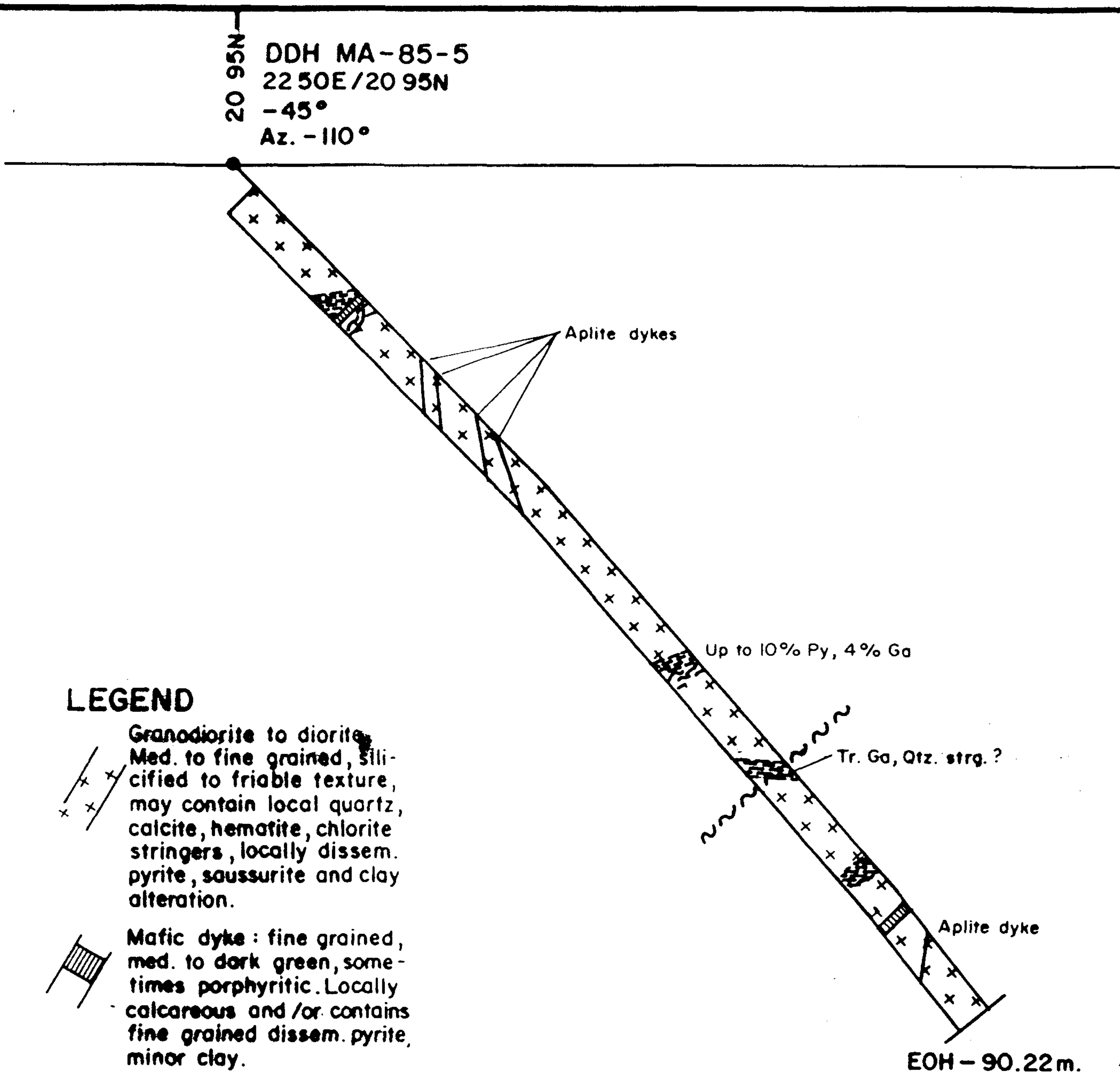
VANCAL 11927

6-5: DIAMOND DRILL HOLE MA-85-5

Location: 2250E/2095N
Dip: -45
Azimuth: 110°
Depth: 90.22 metres
Target: The probable centre of an I.P. anomaly which produced combined low resistivity and high chargeability responses at 21+37.5N on line 22+50E. The I.P. anomaly, geological projection of the Whirlwind vein, low magnetic response and geochemical anomalies outlined good potential for vein continuity and mineralization at depth.

Drill hole MA-85-5 intersects granodiorite which includes sections of extensive clay alteration and zones of pervasive silicification. Mineralization includes disseminated pyrite and galena which is generally found in heavily clay altered, loosely consolidated and fractured granodiorite (e.g. 53.04 to 56.70 metres). The values range from 10 to 50 ppb Au, 0.6 to 14.4 ppm Ag, 88 to 3420 ppm Pb and 402 to 2000 ppm Zn. The highest gold value of 560 ppb Au was found in a narrow strongly silicified porphyritic mafic dyke, sample 85851 from 14.18 to 15.04 metres. At 67.75 metres quartz pebbles recovered from the fault zone which extends from 64.95 to 68.1 metres carry 110 ppb Au, 8.2 ppm Ag, 1820 ppm Pb and 580 ppm Zn. A slight Au, Ag and moderate base metal enhancement is noted in samples taken from 54.02 metres to 77.9 metres which ranges from 10 to 60 ppb Au, 3.8 to 14.4 ppm Ag, 1,440 to 5,200 ppm Pb and 402 to 6,400 ppm Zn. Narrow aplite dykes occurring near surface carry few sulphides yet show significant arsenic enhancement which ranges up to 304 ppm As in the first 20 metres of core.

The disseminated sulphides account for the surface geochemical



LEGEND

Granodiorite to diorite, Med. to fine grained, silicified to friable texture, may contain local quartz, calcite, hematite, chlorite stringers, locally dissem. pyrite, saussurite and clay alteration.

Mafic dyke: fine grained, med. to dark green, sometimes porphyritic. Locally calcareous and /or contains fine grained dissem. pyrite, minor clay.

Felsic dyke: aplite or rhyolite. Sulphides rare.

Quartz vein : white bull qtz.

sulphide abundance noted on drill sections.

Chlorite alteration — Shear zone

Clay sericite — Fault zone

Brecciation — Fracture zone

Ca	Calcite	Ga	Galena
Ep	Epidote	Py	Pyrite
Fl	Flourite	Sph	Sphalerite

0 5 10 15 20
metres

Fig. : 8d

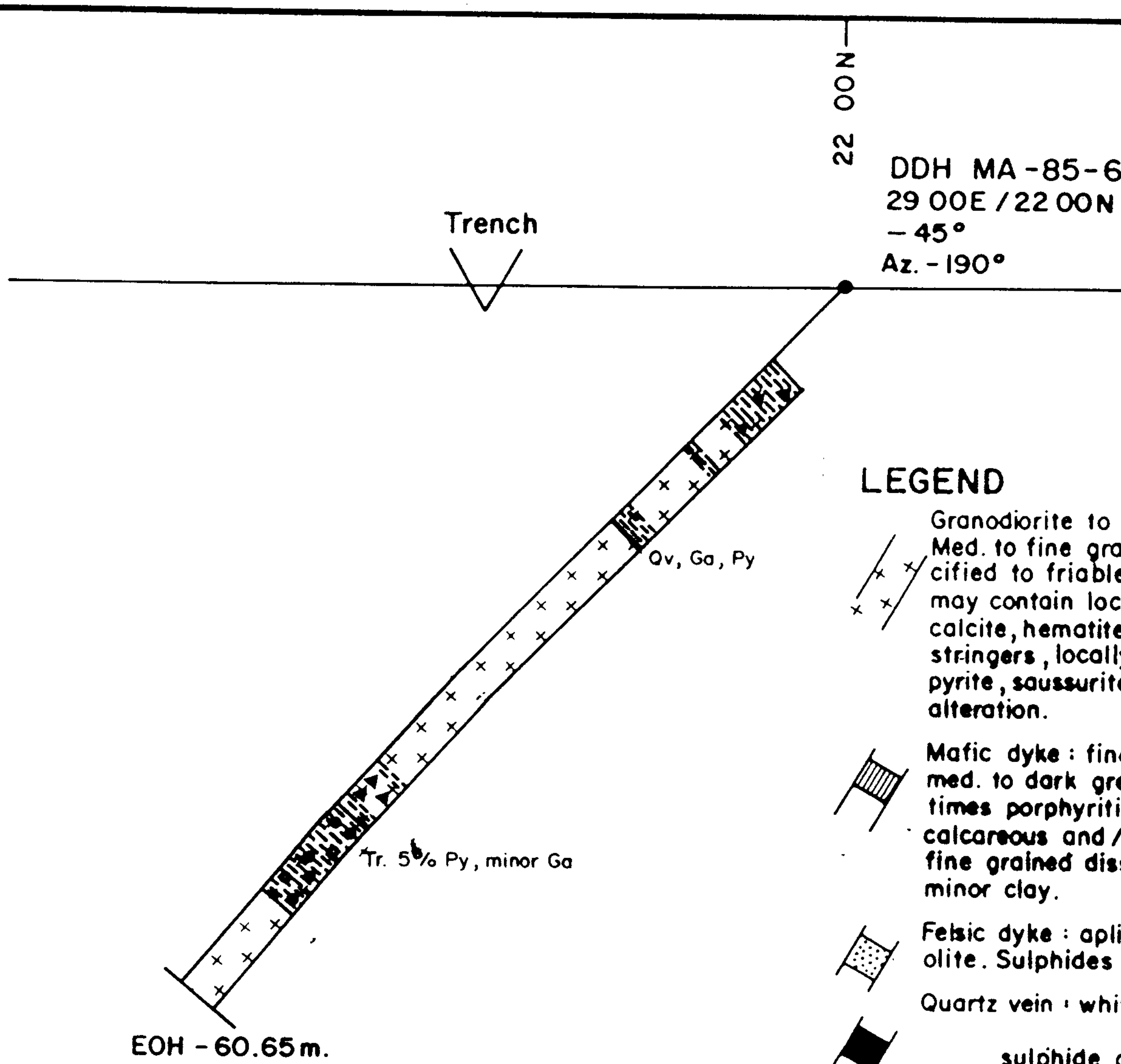
REVISED	**Mt. Anderson** (TAM/MAT Claims)
	DDH MA-85-5
PROJ. No. 11	SURVEY BY: MW, BT — DATE: OCT85/MAY86
N.T.S. 105D4	DRAWN BY: AI — SCALE: 1cm. = 5mts.
DWG. No.	**NORANDA EXPLORATION** OFFICE: Whitehorse

anomalies and may explain the I.P. anomaly. The mafic dykes, on this property detected a low magnetic response, are also accounted for. The association of the Whirlwind vein occurrence with mafic dykes is realized in surface and underground showings, however the abundant fracture systems and fault zones encountered in the drill core of MA-85-4 appear to have obscured this postulate at depth. No significant quartz veins greater than 2 cm wide were recovered in this hole.

6-6: DIAMOND DRILL HOLE MA-85-6

Location: 2900E/2200N
Dip: -45
Azimuth: 190°
Depth: 60.65 metres
Target: I.P. anomaly of low amplitude chargeability and an increase in polarization material.

Drill hole MA-85-6 intersected coarse grained granodiorite which varied in character from heavily fractured, clay altered, loosely consolidated rock to competent, siliceous diorite. Disseminated pyrite and galena in altered granodiorite to diorite was intersected from 21.87 to 23.1 metres. Geochemical values taken over this interval were 50 ppb Au, 2.6 ppm Ag, 510 ppm Pb and 540 ppm Zn. A 2.5 cm wide quartz vein immediately below this interval contains blebs of galena and pyrite and has values up to 510 ppb Au, 11.4 ppm Ag, 2,060 ppm Pb and 1,820 ppm Zn over 25 cm (sample 85886). From 46.95 to 58.8 metres, trace to 5% disseminated pyrite is found in granodiorite to siliceous, chloritic diorite. Sample 85892 (50.8 to 51.7 metres) has 50 ppb Au and 0.8 ppm Ag without significant base metal



LEGEND

Granodiorite to diorite. Med. to fine grained, silicified to friable texture, may contain local quartz, calcite, hematite, chlorite stringers, locally dissem. pyrite, saussurite and clay alteration.

Mafic dyke: fine grained, med. to dark green, sometimes porphyritic. Locally calcareous and/or contains fine grained dissem. pyrite, minor clay.

Felsic dyke: aplite or rhyolite. Sulphides rare.

Quartz vein: white bull qtz.

sulphide abundance noted on drill sections.

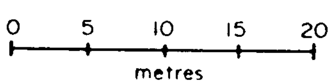
Chlorite alteration — Shear zone

Clay sericite — Fault zone

Brecciation — Fracture zone

Ca	Calcite	Ga	Galena
Ep	Epidote	Py	Pyrite
Fl	Flourite	Sph	Sphalerite

Fig.: 8e



REVISED	Mt. Anderson (TAM/MAT Claims)
	DDH MA - 85 - 6
PROJ. No. 11	SURVEY BY: MW, BT — DATE: OCT 85/MAY 86
N.T.S. 105D4	DRAWN BY: AI — SCALE: 1cm. = 5mts.
DWG. No.	NORANDA EXPLORATION OFFICE: Whitehorse

enhancement in altered diorite. No significant base metal anomalies are found below 24.0 metres and the interval containing up to 5% disseminated sulphides (21.87 to 24.0 metres) may be the possible source of the I.P. anomaly.

6-7: DIAMOND DRILL HOLE MA-85-7

Location: 2386E/2468N
Dip: -47
Azimuth: 170°
Depth: 47.85 metres
Target: 20,000 ppb Au anomaly from quartz vein showing in Trench 5.

Drill hole MA-85-7 intersects granodiorite cut by numerous mafic dykes, fracture and fault zones, a rhyolite dyke and narrow quartz stringers. The most anomalous sample was taken from a 3 cm wide quartz vein which contains black euhedral sphalerite grains, pyrite and galena grains with clay and chlorite alteration along the vein margins. This sample (96414) ran 380 ppb Au, 44.0 ppm Ag, 1,400 ppm Pb, 31,000 ppm Zn and 182 ppm As. A wide fault zone was encountered from 17.51 to 29.40 metres. Core recovery was poor throughout this interval, however units of mafic, porphyritic and felsic dykes were sampled although most contact and structural characteristics were obliterated during drilling. The most anomalous geochemical results from this zone are as follows:

	Au	Ag	Pb	Zn
Fault Gouge	10	4.0	198	412
Mafic Dykes	20	44.0	1740	2620
Felsic Dyke	10	3.6	170	192
Quartz Vein	10	4.0	198	186

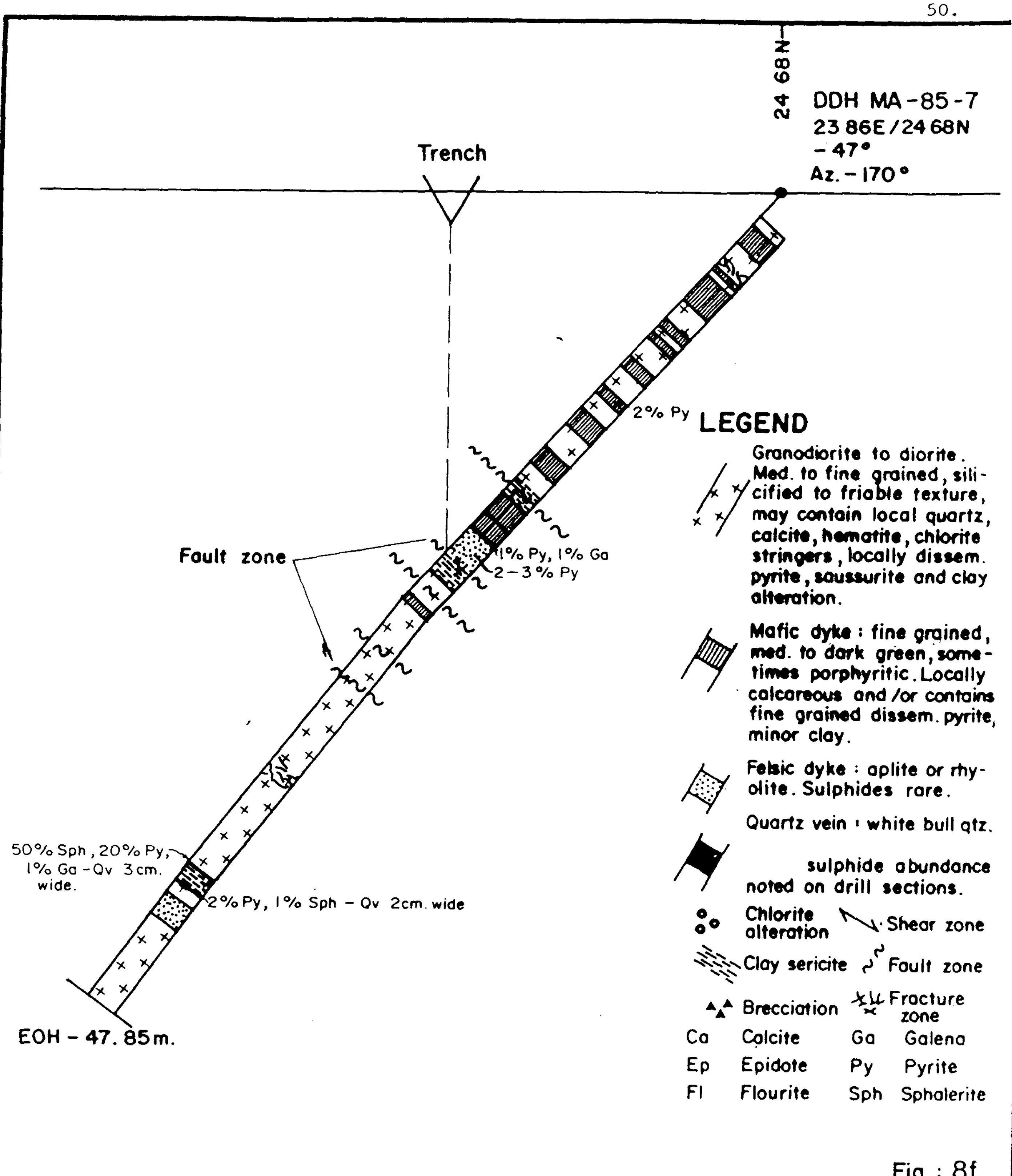


Fig. : 8f

REVISED	Mt. Anderson (TAM/MAT Claims)
	DDH MA-85-7 (Trench 5)
PROJ.No. II	SURVEY BY: MW, BT — DATE: OCT 85/MAY86
N.T.S. 105 D 4	DRAWN BY: AI — SCALE: 1cm. = 2.5mts
DWG. No.	NORANDA EXPLORATION — OFFICE Whitehorse

VANCAL 11927

A 2.0 cm wide quartz vein intersected at 41.3 metres ran 10 ppb Au, 7.4 ppm Ag, 720 ppm Pb and 750 ppm Zn. The felsic dyke intersected immediately below this vein ran up to 10 ppb Au, 5.8 ppm Ag, 432 ppm Pb and 252 ppm Zn.

The high gold values (up to 20,000 ppb Au) detected in the quartz vein of Trench 5 do not appear to continue at the magnitude at depth. The highest gold values intersected in MA-85-7 are associated with quartz veins, however the fault and fracture zones and numerous intrusive events along these zones including mafic and felsic dykes and quartz veins make correlation of units and delineation of vein structure very difficult.

CHAPTER SEVEN: MINERALIZATION

7-1: REGIONAL MINERALIZATION

Three mineralized vein types have been described in the Wheaton River area by Cairnes (1912), Cockfield and Bell (1944), and Wheeler (1961). These are gold-silver, antimony-silver and silver-lead deposits.

Gold-silver veins are found as fissure type veins in the Cretaceous granitic Coast Range intrusions on Wheaton Mountain and Mt. Anderson. Mt. Stevens and Gold Hill host gold-silver vein deposits in the greenschist facies rocks of the Lewes River Group associated with granitic intrusions. Both vein occurrences are compositionally uniform and structurally persistent. The dominant sulphides are pyrite and galena. Minor native gold and gold-silver tellurides may be present in the quartz or calcite gangue components.

Antimony-silver veins are typically hosted by Coast Range intrusions and old volcanic rocks of uncertain age cut by porphyritic granitic/rhyolitic dykes. Quartz is the dominant gangue mineral with significant calcite and barite. Argentiferous stibnite is the chief metallic mineral although galena, sphalerite, jamesonite, tetrahedrite, arsenopyrite and other Ag-Pb-Sb sulphides may be present.

The silver-lead veins parallel the bedding planes of the Laberge Group greywackes on Idaho Hill. These tabular or podlike replacement deposits host argentiferous arsenopyrite and galena with minor pyrite, sphalerite and chalcopyrite. Quartz and/or calcite are the dominant gangue minerals.

Mineralization is thought to be linked to the doming and subsidence of the Skukum caldera complex. Buchanan's (1981) model of epithermal precious metal vein deposits describes temporal and vertical zonation of vein fractures related to a caldera environment. The epithermal model outlines a vertically zoned mineralogy passing with depth from agate and clays at the paleosurface to barren quartz, calcite, fluorite and barite; then quartz, clays, alunite, zeolites; then quartz, arsenides, antimonides, pyrite, sulfosalts, sulphides, gold, silver, (lead, zinc and copper); then quartz, adularia, pyrite, chlorite, silver and base metal sulphides.

The types of veins previously described in this section may in some cases represent erosional levels of an epithermal deposit. Carbon Hill (POP claim group) exemplifies this theory in that veins of barite and quartz pass, with depth, to stibnite and gold-stibnite assemblages. The Mt. Skukum carbonate-gold deposit is capped by an alunite rich, low pH zone which is thought to typify higher levels of the vertical zonation sequence.

Preliminary oxygen isotope studies conducted by Dr. Bruce Nesbitt (University of Alberta, pers. comm.) divide the Wheaton River vein occurrences into two distinct types; epithermal and mesothermal. The heavy isotope, mesothermal veins appear to occur south of the Wheaton River and include the Venus Mine and Mt. Stevens occurrences. These veins usually have base metal sulphides and white crystalline "bull" quartz gangue. The epithermal veins have a light isotope signature, an absence of base metal sulphides and possible barite-fluorite-calcite assemblages with saccharoidal-or agate-silica gangue textures. The apparent difference in ore-shoot character of the two vein types is significant. Ore-shoots in epithermal veins tend to be longer along strike than down dip whereas mesothermal shoots are highly elongated down dip and commonly separated by barren intervals.

Nesbitt (et. al) has observed that both vein types are found on Mt. Anderson, Tally Ho Mountain and Wheaton Mountain. The economic potential of both vein types is proven in the epithermal Mt. Skukum deposit (200,000 tons at 0.6 oz/T Au) and in the mesothermal Venus Mine, 40 km to the southeast which has 80,000 tons of remaining proven reserves at 2.5% Pb, 1.77% Zn, 8.9 oz/T Ag and 0.28 oz/T Au. Speculation regarding structural and geological controls and the imprinting of one vein system on another is ongoing.

7-2: PROPERTY MINERALIZATION

Three modes of mineralization are found on the property. Two types of vein systems are described by Nesbitt (et al.) as mesothermal accompanied by base and precious metals and epithermal with fluorite and minor precious metal values at surface. Disseminated sulphides are detected by the I.P. survey in granodiorite host rocks without significant precious metal enhancement.

The Whirlwind vein system is considered mesothermal and includes all veins north and west of Trench 2. This system typically consists of white, bull quartz with clay alteration at vein contacts, usually accompanied by basalt to andesite dykes. The nature of the veins is podlike to pinching and swelling up to 3 metres wide in Adit C. Massive, high grade galena is found up to 10 cm wide in Trench 2. Disseminated and small pockets of galena are found within the quartz veins in the adits and on surface as far east as Trench 2. Adit C carried up to 0.479 oz/T Au (R19943, chip 1 metre, Biczok, 1984) in quartz bearing disseminated galena as Trench 2 was found to carry up to 6,800 ppb Au, 2,220 ppm Ba, >40,000 ppm Pb, 33,600 ppm Zn, >999.9 ppm Ag, 10,400 ppm Cu and 262 As in discontinuous pods of high grade sphalerite, galena and possibly tetrahedrite. Continuity of vein structure and mineralization was not observed in surface mapping, trenching and diamond drilling.

The agate-fluorite vein was found to carry slight precious metal enhancement on surface (30 ppb Au, R78283) and at depth (90 ppb Au, 2.2 ppm Ag; R96330, 96333). Fluorite changes in colour from green to purple and clay alteration occurs along the vein margins. Agate textures and vein structure are continuous with depth.

Disseminated pyrite and galena in drill hole MA-85-6 are thought to be the source of the I.P. anomaly at 2900E/21+70N. Geochemical values ran as high as 50 ppb Au, 2.6 ppm Ag, 510 ppm Pb and 540 ppm Zn in this zone. A narrow 2.5 cm wide quartz vein containing blebs of pyrite and galena was also encountered in this hole but is not thought to be the cause of the I.P. anomaly. Surface mapping and sampling noted disseminated sulphides in host granodiorite with values as high as 19.6 ppm Ag, 1,380 ppm Zn and 5,000 ppm Pb (R85926-28).

Highly anomalous rock geochemical values found in a glassy quartz vein in Trench 5 which range from 30-20,000 ppb Au, 0.2-35.0 ppm Ag, 22-28,000 ppm Pb and 2-760 ppm As (R70256-61). The gold anomalies are highest in the quartz vein but were not repeated along strike or intersected in MA-85-7 at depth.

7-3: PETROGRAPHY

Four rock samples were sent to Vancouver Petrographics Ltd. for detailed analysis and rock description. The samples were taken from Trench No. 2 in order to determine detailed characteristics and the possible relationship between quartz veins, basalt dykes and mineralization.

In samples #8345 and 8348 taken from dioritic host rock near the main massive sulphide quartz vein of Trench No. 2, two types of late vein development is present. In sample #8345, an altered quartz-sericite-ankerite and pyrite groundmass is cut by a massive sulphide stringer containing galena, sphalerite, chalcopyrite and tetrahedrite with lesser amounts of silicate and carbonate. Sample #8348 is made up of altered, fine-grained diorite containing Ti-oxides and Ti-free assemblages of chlorite-calcite and epidote. Early veins consist of irregular and discontinuous assemblages of fine-grained biotite, epidote, calcite and tremolite/clinopyroxene minerals. Late vein development consists of fine to medium grained calcite which crosscuts the altered diorite. Two samples of dyke material were taken from Trench No. 2. Sample #8346 taken from the west side of Trench No. 2 is described as andesite-basalt flow with three types of veins: early quartz, epidote (early) and later calcite-epidote-(opaque). A fine-grained calcite stringer (less than 0.1 mm ave. width) crosscuts the quartz-chlorite. The porphyritic andesite dyke (#8347) contains plagioclase phenocrysts in a groundmass of lathy and anhedral plagioclase, biotite and minor Ti-oxides. This sample of dyke material has abundant amygdules visible to the naked eye which contain quartz, biotite or K-feldspar-quartz-biotite mineral assemblages.

An age relationship between vein and dyke intrusive events cannot be determined at this time. However, it is clear by crosscutting relationships that early and late stage vein development has been outlined. Early veins are comprised of massive sulphides with lesser amounts of silicates, chlorite and carbonates. Late vein development consists of fine to medium-grained calcite. The origin of the calcite may be a result of remobilization possibly related to one or more dyke intrusive events. The late calcite and laminated silica/fluorite veins are speculated to be have been introduced during an epithermal event related to the doming and subsidence of the Mt. Skukum caldera. Further study is needed to confirm one or both of these hypotheses. A detailed sample description of each sample is given in Appendix 3.

CHAPTER EIGHT: CONCLUSIONS AND RECOMMENDATIONS

The 1985 field program tested the Whirlwind vein system extensively and found that surface multi-element soil geochemical anomalies defined the Au-Pb-Ag veins. The I.P. survey failed to significantly outline the veins and tended to pick up changes in geology and zones of increased amounts of disseminated sulphides or clay alteration in host granodiorite to diorite rocks. The magnetometer survey produced a magnetic low response over a presumed fault zone of mafic dyke(s) which parallels the projected extension of the Whirlwind vein from Adit C to Trench 2. Diamond drilling and trenching did not prove a significant extent or continuity to the Whirlwind vein system and no further work is recommended in this area.

Further work is recommended on the agate-fluorite vein where low levels of precious metals are detected on surface and in diamond drill hole MA-85-3. The vein increases from 0.8 metres wide in Pit B to approximately 2 metres true width at 77.5 metres below surface. The vein has a minimum 100 metre strike length and is confirmed by Dr. Bruce Nesbitt (University of Alberta) to be epithermal and possibly related to the Mt. Skukum gold deposit. Further diamond drilling is recommended on the epithermal vein as lode gold deposits may be found at depth in this type of system.

Respectfully submitted,

Mary P. Webster

Mary P. Webster

Field Geologist

<u>REFERENCES</u>

Bradish, L. Mt. Anderson I.P., inter-office memo July 29, 1985.

Buchanan, L.J., 1981. Precious Metal Deposits Associated with Volcanic Environment in the Southwest.

Cairnes, D.D., 1912. Wheaton District, Yukon Territory. G.S.C., Mem 31.

Cockfield, W.E. and Bell, A.H., 1944. Whitehorse District, Yukon. G.S.C., Paper 44-14.

Nesbitt, B., 1985. Dual Origins of Lode Gold in the Canadian Cordillera; 13th Whitehorse Geoscience Forum, December, 1985 oral presentation.

Northern Cordillera Mineral Inventory, 1981. Archer, Cathro and Associates.

Pride, M.J. (nee Smith),1983. Interlayered Sedimentary-volcanic Sequence Mt. Skukum Volcanic Complex; Yukon Exploration and Geology 1983, pp. 94-104.

Roots, C.F., 1979. Geological Setting of Gold-Silver Veins on Montana Mountain; Yukon Exploration and Geology 1979-80, pp. 116-122.

Smith, M.J., 1981. The Skukum Volcanic Complex, 105DSW: Geology and Comparison to the Bennett Lake Cauldron Complex; Yukon Exploration and Geology 1982, pp. 68-72.

Wheeler, J.O., 1961. Whitehorse Map-Area, Yukon Territory. G.S.C., Mem. 312.

STATEMENT OF QUALIFICATIONS

I, Mary P. Webster, of the City of Whitehorse, Yukon Territory do hereby certify that:

1. I have been employed as a Geologist by Noranda Exploration Company, Limited (No Personal Liability) since May 1984.

2. I am a graduate of McMaster University, Hamilton, Ontario with a B.Sc. in Geology.

3. I am a member of the Prospector's and Developers Association and the B.C. and Yukon Chamber of Mines.

4. I supervised and carried out part of the work described in this report.

Mary P. Webster
Field Geologist
Noranda Exploration Co. Ltd.
(No Personal Liability)

STATEMENT OF COSTS

PROJECT: Mt. Anderson - TAM and MAT Claims

Stage 1:	
Legal Survey	5,653.75
Linecutting	1,153.44
Stage 2: Geophysical Surveys	
Mag, VLF	1,817.90
I.P.	7,150.40
Geology:	
Detail Geology; mapping, core logging, fieldwork	14,759.05
Prospecting	195.80
Trenching:	
Heavy equipment and blasting	16,349.61
Geochemistry:	
Sample analyses, shipment, data processing	16,708.39
Stage 3: Diamond Drilling	
Anomaly diamond drilling	58,810.37
Core split assaying	5,557.64
Engineering, labour and services	7,096.02
Stage 4: Report Writing	
Report, drafting and secretarial services	6,500.00
Administrative costs (20%)	28,350.47
TOTAL	$170,102.84

Legend

TERTIARY

4	Granite porphyry, rhyolite
3	Uncertain age (a) mafic ; basalt, andesite, porphyritic dykes, flows. (b) felsic ; rhyolite dykes. (c) felsic ; aplite dykes.

CRETACEOUS

2	Coast Intrusions (a) granodiorite (b) diorite

PRECAMBRIAN

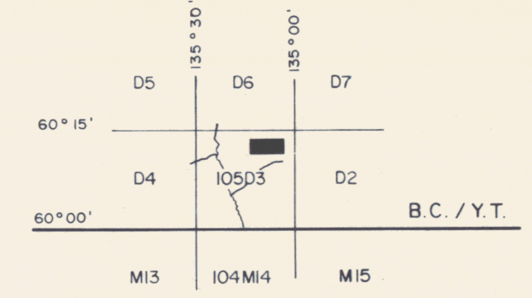
1	Yukon Group metasediments, limestone.

Symbols

- Geological contact (real, assumed)
- Outcrop
- Gossan
- Bedding
- Schistosity, shear zone
- Fault
- Road / trail

Qv	Quartz vein
Qvag	Agate, laminated and fibrous silica texture
Fl	Flourite
Py	Pyrite
Ga	Galena
Sph	Sphalerite

0 50 100 200 300 metres



Map Index

Fig. : 4

REVISED	Mt. Anderson (MAT / TAM Claims)
	Geology
PROJ. No. 11	SURVEY BY: MW — DATE: SEP 85 / MAY 86
N.T.S. 105 D 3E	DRAWN BY: AI — SCALE: 1 : 5 000
DWG. No.	**NORANDA EXPLORATION** OFFICE: Whitehorse

091846

Fig.: 5a

MOUNT ANDERSON

SOIL GEOCHEMISTRY
AU IN PPB.

PROJ. NO. 850611
N.T.S.
DWG. NO.

SURVEY BY: M.W. DATE: NOV. 12, 1985.
DRAWN BY: EDP/VAN SCALE: 1:2500

NORANDA EXPLORATION
OFFICE: WHITEHORSE

091846

Fig.: 5b

MOUNT ANDERSON

SOIL GEOCHEMISTRY
MO, AS IN PPM.

PROJ. NO. 850611
N.T.S.
DWG. NO.

SURVEY BY: M.W.
DRAWN BY: EDP/VAN
DATE: NOV. 12, 1985.
SCALE: 1:2500

NOREANDA EXPLORATION

OFFICE: WHITEHORSE

091846

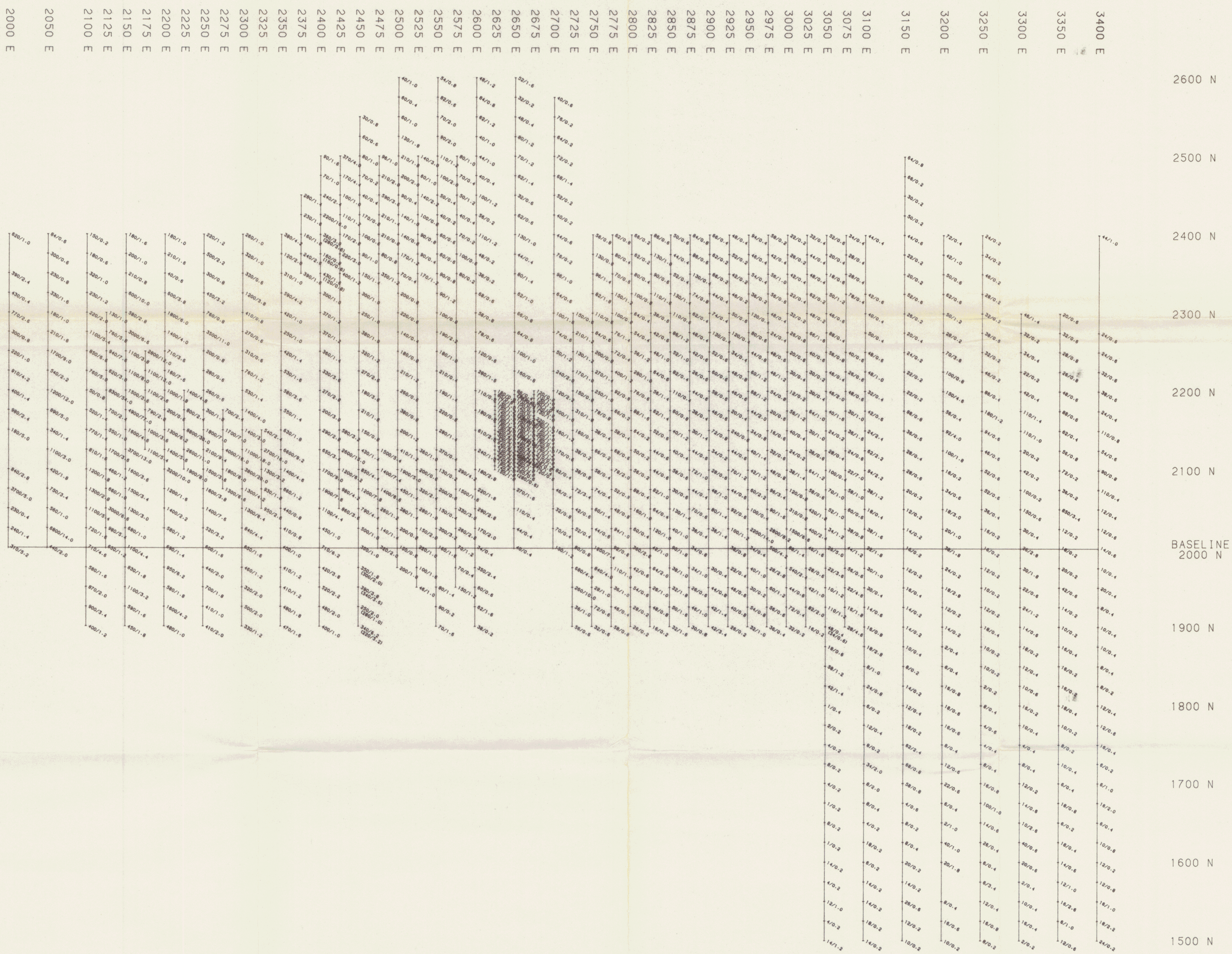


Fig.: 5c

MOUNT ANDERSON

SOIL GEOCHEMISTRY
PB, AG IN PPM.

PROJ. NO. 850611
N.T.S.
DWG. NO.

SURVEY BY: M.W.
DRAWN BY: EDP/VAN
DATE: NOV.12,1985
SCALE: 1:2500

NORANDA EXPLORATION
OFFICE: WHITEHORSE
091846

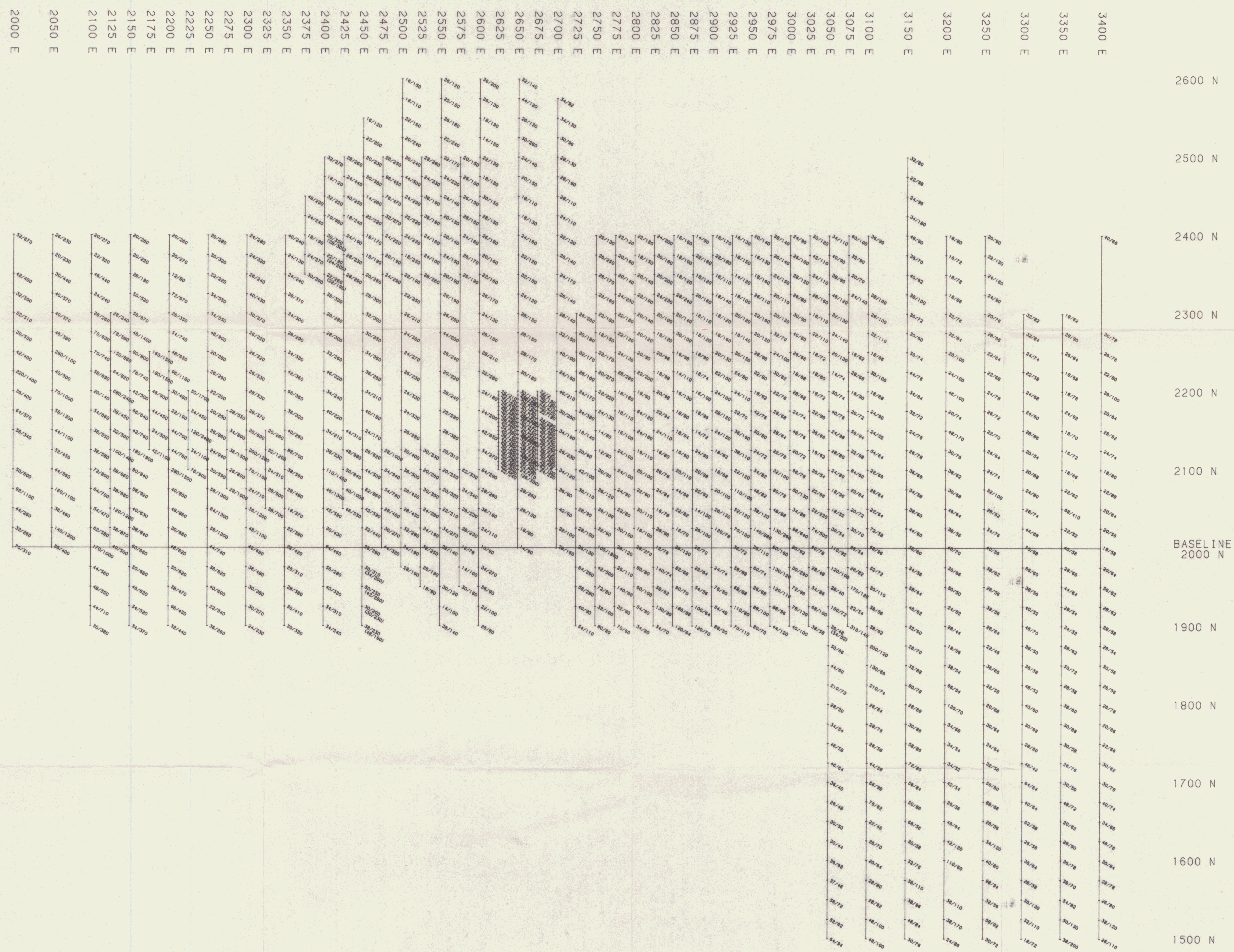


Fig.: 5d

MOUNT ANDERSON

SOIL GEOCHEMISTRY
CU, ZN IN PPM.

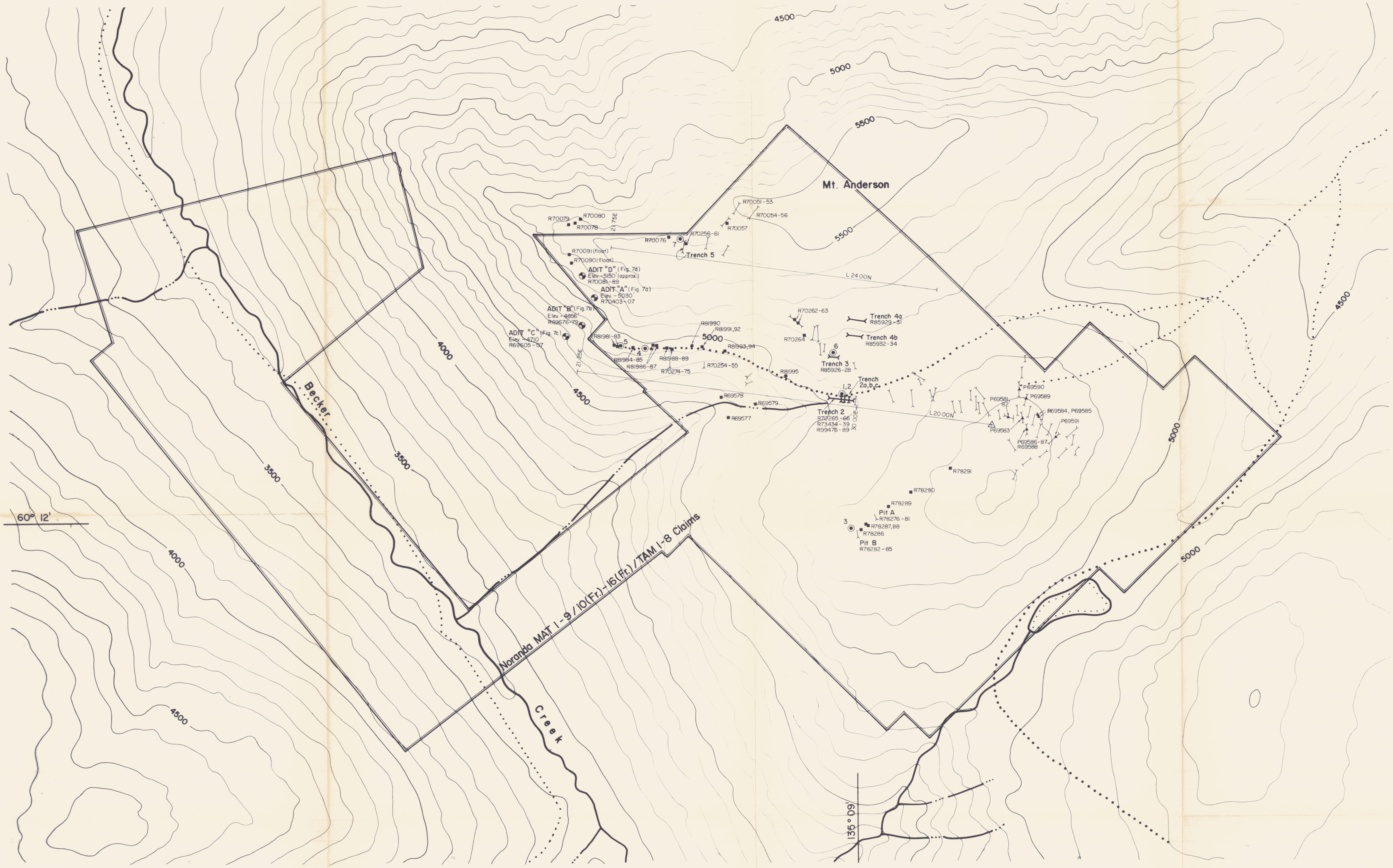
PROJ. NO. 850611
N.T.S.
DWG. NO.

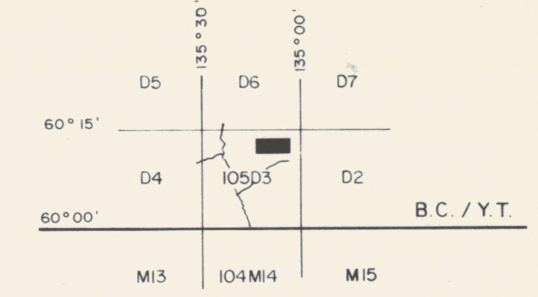
SURVEY BY: M.W.
DATE: NOV. 12, 1985.
DRAWN BY: EDP/VAN.
SCALE: 1:2500

NORANDA EXPLORATION

OFFICE: WHITEHORSE

091846





Map Index

Legend

- Pit, diggings
- Adits
- Pre-1985 Trenches
- 1985 Trenches
- 2 1985 Diamond drill holes
- Rock samples
- Soil samples (outside grid boundary)
- Trail / Road
- Legal survey reference station

Refer to Figure 7c for underground rock sample locations,
Figures 5a - 5d for soil sample locations and results on grid.

0 50 100 200 300 metres

Fig. : 5e

REVISED	Mt. Anderson (MAT / TAM Claims)
	Rock Sample Location Map
PROJ. No. 11	SURVEY BY: DATE: SEP 85 / MAY 86
N.T.S. 105 D 3E	DRAWN BY: AI SCALE: 1 : 5 000
DWG. No	**NORANDA EXPLORATION** OFFICE: Whitehorse

091846

091846

Fig 6(a)

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400γ
PROFILE SCALE: 1cm.=100γ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0, 5.0, 7.5
ρa: 100, 300, 500, 1000, 1500, 2500

REVISED

MT. ANDERSON

I.P. and MAG. SURVEY

Line: 2150E

PROJ. No. 6·11
N.T.S.
DWG. No.

SURVEY BY:
DATE: Oct./85
DRAWN BY: [signature]
SCALE: 1:1250

NORANDA EXPLORATION
OFFICE: Vancouver

091846

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400δ
PROFILE SCALE: 1cm.=100δ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0, 5.0, 7.5
ρa: 100, 300, 500, 1000, 1500, 2500

FIG 6(b)

REVISED	MT. ANDERSON
	I.P. and MAG. SURVEY
	Line: 2175E
PROJ. No. 6-11	SURVEY BY: — DATE: Oct./85
N.T.S.	DRAWN BY: — SCALE: 1:1250
DWG. No.	NORANDA EXPLORATION
	OFFICE: Vancouver

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400γ
PROFILE SCALE: 1cm.=100γ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0,5.0,7.5
ρa: 100,300,500,1000, 1500,2500

Fig 6(c)

REVISED	
	MT. ANDERSON
	I.P. and MAG. SURVEY
	Line: *2200E*
PROJ. No. 6·11	SURVEY BY: ______ DATE: Oct./85
N.T.S. ______	DRAWN BY: [signature] SCALE: 1:1250
DWG. No.	NORANDA EXPLORATION
	OFFICE: Vancouver

091846

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400γ
PROFILE SCALE: 1cm.=100γ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0, 5.0, 7.5
ρa: 100, 300, 500, 1000, 1500, 2500

FIG 6(d)

REVISED	
	MT. ANDERSON
	I.P. and MAG. SURVEY
	Line: 2250E
PROJ. No. 6·11	SURVEY BY: ____ DATE: Oct./85
N.T.S. ____	DRAWN BY: JArthur SCALE: 1:1250
DWG. No.	NORANDA EXPLORATION
	OFFICE: Vancouver

091846

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400ɣ
PROFILE SCALE: 1cm.=100ɣ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0, 5.0, 7.5
ρa: 100, 300, 500, 1000, 1500, 2500

FIG 6(e)

REVISED	MT. ANDERSON
	I.P. and MAG. SURVEY
	Line: *2900E*
PROJ. No. 6-11	SURVEY BY: ______ DATE: Oct./85
N.T.S. ______	DRAWN BY: [signature] SCALE: 1:1250
DWG. No.	NORANDA EXPLORATION
	OFFICE: Vancouver

091846

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400γ
PROFILE SCALE: 1cm.=100γ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0,5.0,7.5
ρa: 100,300,500,1000, 1500,2500

FIG. 6(5)

MT. ANDERSON
I.P. and MAG. SURVEY
Line: 2950E

REVISED

PROJ. No. 6-11
N.T.S.
DWG. No.

SURVEY BY:
DRAWN BY:
DATE: Oct./85
SCALE: 1:1250

NORANDA EXPLORATION
OFFICE: Vancouver

091846

LEGEND

MAG

INSTRUMENT: MP-3
FIELD MEASUREMENT: Total
DATUM: 57,400γ
PROFILE SCALE: 1cm.=100γ

I.P.

ARRAY: Dipole-Dipole
FREQUENCY: 4.0/0.25 Hz
a: 25m.
CONTOUR INTERVAL:
P.F.E.: 3.0,5.0,7.5
ρa: 100,300,500,1000, 1500,2500

REVISED	
	MT. ANDERSON
	I.P. and MAG. SURVEY
	Line: ***3000E***
PROJ. No. 611	SURVEY BY: — DATE: Oct./85
N.T.S.	DRAWN BY: — SCALE: 1:1250
DWG. No.	NORANDA EXPLORATION
	OFFICE: Vancouver

Instrument : MP3

Datum : 57400.0 nT

Contour Interval : 100 nT
(2 passes through a 9 pt. Hanning Filter.)

Conductor Axis : ▬▬▬

50m 25m 0m 50m 100m

FIG 6(L)

MT ANDERSON

MAGNETOMETER SURVEY

(FILTERED CONTOUR PRESENTATION)

PROJECT: MT.ANDERSON PROJECT # : 611
BASELINE AZIMUTH : 100 Deg.

SCALE = 1: 2500 DATE : 8/ 6/85
SURVEY BY: TL NTS :
FILE: M611.ZAT
NORANDA EXPLORATION

Vers. 2.00 Fri 25 Oct 198516: 0

091846

FIG 6(i)

MT. ANDERSON

VLF SURVEY

FREQ. 21.8 KILOHERTZ
PROJECT: MT. ANDERSON PROJECT # : M611
BASELINE AZIMUTH : 100 Deg.

SCALE = 1: 2500 DATE : 7/25/85
SURVEY BY: NTS : 105D
FILE: VM611.ZAT
NORANDA EXPLORATION

Vers. 1.00 Tue 1 Jan 1980 at 2:25 Normal Profile Grid Center at 2850.0E, 2231.2N

091846

APPENDIX 1

SOIL, TALUS FINES GEOCHEMICAL RESULTS

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION:Mt. Anderson — CODE :8508-005

Project No. : 311 — Sheet:1 of 8 — Date rec'd:July 30

Material : Soil — Geol.:M.W. — Date compl:Aug. 15

Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
85	21.00E-20.00N	170	1000	710	4.6	16	2	10
86	20.25	62	580	720	1.6	12	10	10
87	20.50	54	470	1100	5.4	4	10	10
88	20.75	64	700	1300	2.8	6	10	10
89	21.00	72	800	1200	1.8	6	10	10
90	21.25	36	580	810	1.6	14	10	10
91	21.50	36	550	770	1.4	100	10	10
92	21.75	54	660	520	1.4	80	10	10
93	22.00	20	140	50	0.8	20	10	10
94	22.25	58	690	760	5.0	70	10	10
95	22.50	70	740	850	6.6	30	10	10
96	22.75	70	630	1100	5.4	52	10	10
97	23.00	36	260	220	2.0	26	10	10
98	23.25	34	240	230	1.2	36	10	10
99	21.00E-23.50N	46	440	320	1.0	32	10	10
100	CHECK NL-5	24	80	70	1.4	56	10	-
101	21.00E-23.75N	22	320	180	0.6	12	10	10
102	21.00E-24.00N	20	270	150	0.2	16	10	10
103	21.25E-20.00N	40	500	650	1.2	10	10	10
104	20.25	56	870	980	5.4	8	10	10
105	20.50	120	1200	3000	6.6	6	10	10
106	20.75	38	680	660	1.0	1	10	10
107	21.00	38	660	460	1.2	6	10	10
108	21.25	100	1400	1700	3.6	10	10	10
109	21.50	32	500	550	1.0	60	10	10
110	21.75	38	450	700	2.4	70	10	10
111	22.00	680	2400	8300	54.0	2500	10	740
112	22.25	64	820	620	3.0	62	10	10
113	22.50	150	860	940	7.6	50	10	10
114	22.75	78	580	760	5.8	40	10	10
115	21.25E-23.00N	26	240	130	1.0	16	10	10
116	21.50E-20.00N	60	660	1100	4.4	12	10	10
117	20.25	38	840	680	1.0	1	10	130
118	20.50	40	630	1300	3.0	1	10	10
119	20.75	58	920	1500	3.4	2	10	10
120	21.00	80	840	1600	3.6	2	10	10
121	21.25	180	1900	3700	13.0	16	10	90
122	21.50	42	760	1600	4.6	10	10	10
123	21.75	66	640	4900	77.0	30	50	290
124	22.00	42	500	1500	3.6	36	4	10
125	22.25	76	740	1100	8.0	290	8	20
126	22.50	80	800	1100	3.8	220	4	10
127	22.75	46	1400	3000	6.6	60	6	10
128	23.00	56	670	580	2.8	38	2	10
129	23.25	50	520	600	10.0	62	2	10
130	23.50	28	190	210	0.8	16	1	10
131	23.75	20	220	200	1.0	1	2	10
132	21.50E-24.00N	20	260	180	1.6	1	2	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
133	22.00E-20.00N	48	620	690	1.4	6	2	10
134	20.25	30	660	580	1.2	2	2	10
135	20.50	48	860	1400	2.2	4	2	10
136	20.75	40	800	1200	1.6	6	2	80
137	21.00	280	1500	3200	10.0	14	6	20
138	21.25	44	760	1400	5.6	16	2	20
139	21.50	44	700	1300	6.2	12	2	10
140	21.75	22	190	200	0.6	6	2	10
141	22.00	30	480	1000	1.8	26	2	10
142	22.25	96	1100	160	7.6	560	4	40
143	22.50	48	650	710	3.6	54	2	10
144	22.75	54	740	1400	4.0	30	4	10
145	23.00	26	350	1800	6.0	14	2	70
146	23.25	72	670	600	3.8	94	4	10
147	23.50	12	80	40	0.6	1	1	10
148	23.75	20	270	210	1.6	10	2	10
149	22.00E-24.00N	20	260	180	1.0	4	2	10
2	22.50E-20.00N	44	740	600	1.6	1	2	10
3	20.25	56	1300	520	3.2	1	2	10
4	20.50	64	1300	1400	7.6	2	2	10
5	20.75	56	1300	1600	3.8	1	4	10
6	21.00	30	590	1500	3.6	1	4	10
7	21.25	24	940	2100	9.4	1	2	10
8	21.50	26	860	1800	7.0	16	2	10
9	21.75	20	250	300	1.0	8	1	10
10	22.00	22	200	260	0.6	8	2	10
11	22.25	26	260	280	0.6	30	2	10
12	22.50	20	280	200	0.8	36	1	10
13	22.75	46	900	3500	11.0	180	4	30
14	23.00	54	550	760	0.8	90	4	10
15	23.25	34	550	450	3.2	36	2	10
16	23.50	22	220	300	0.8	14	2	10
17	23.75	30	320	500	2.2	28	2	10
18	22.50E-24.00N	20	280	220	1.2	20	2	10
19	23.00E-20.00N	42	680	650	1.6	2	2	10
20	20.25	48	1100	840	4.4	8	2	10
21	20.50	56	1200	1300	8.4	1	2	10
22	20.75	24	710	1300	4.2	1	6	10
23	21.00	70	1100	3800	20.0	4	32	10
24	21.25	300	1200	11000	18.0	50	22	1700
25	21.50	30	600	1400	3.0	1	2	10
26	21.75	28	370	1400	4.0	1	4	10
27	22.00	28	330	530	1.4	1	2	10
28	22.25	26	530	760	1.2	1	2	10
29	22.50	26	320	310	0.6	20	2	10
30	22.75	26	320	270	0.6	50	2	10
31	23.00	30	370	410	0.8	100	6	10
32	23.25	40	430	1200	3.8	220	2	10
33	23.50	26	240	330	0.6	52	2	10
34	23.75	24	320	320	1.0	36	2	10
35	23.00E-24.00N	24	280	260	1.0	18	2	10
36	23.50E-20.00N	22	420	400	1.0	6	2	10
37	20.25	22	380	410	0.8	10	2	10
38	20.50	18	370	440	0.8	2	2	10
39	20.75	28	480	660	1.2	6	2	10
40	21.00	38	560	1400	4.6	14	2	10
41	23.50E-21.25N	88	700	6600	9.2	32	20	530

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
42	23.50E-21.50N	40	260	630	1.8	10	2	10
43	21.75	36	320	550	1.4	8	2	10
44	22.00	66	360	580	3.6	26	2	10
45	22.25	42	360	530	1.6	58	2	20
46	22.50	34	330	420	1.4	84	2	80
47	22.75	28	290	250	1.0	28	1	10
48	23.00	34	300	420	1.0	130	2	10
49	23.25	38	310	590	4.2	120	2	10
50	23.50	24	240	310	1.0	48	2	10
51	23.75	24	130	120	2.0	28	2	10
52	23.50E-24.00N	40	240	380	4.2	38	2	10
53	24.00E-20.00N	84	460	710	6.2	20	4	110
54	20.25	30	430	450	1.0	18	2	20
55	20.50	42	590	1100	4.4	26	4	20
56	20.75	46	1300	1900	7.6	32	6	40
57	21.00	110	1400	1700	9.0	38	4	80
58	21.25	38	330	650	3.4	12	4	30
59	21.50	34	210	290	2.8	4	2	10
60	21.75	40	220	200	3.0	16	2	10
61	22.00	34	240	270	2.8	10	2	10
62	22.25	46	320	330	3.6	22	2	10
63	22.50	32	260	360	1.4	38	2	10
64	22.75	28	300	370	1.2	24	2	10
65	23.00	20	280	370	1.2	2	2	10
66	23.25	38	330	300	1.0	44	2	50
67	23.50	22	190	120	0.8	16	2	10
68	23.75	24	200	160	0.6	20	2	10
69	24.00E-24.00N	28	300	280	3.6	30	2	10
70	24.50E-19.00N	48	190	220	3.2	1	4	30
71	19.25	30	230	280	1.0	1	2	20
72	19.50	42	280	340	3.6	1	2	30
73	19.75	34	300	300	2.0	1	2	70
74	20.00	28	390	350	1.0	1	2	20
75	20.25	32	440	500	1.0	2	2	10
76	20.50	42	590	790	4.4	2	4	10
77	20.75	62	860	1200	7.8	6	6	10
78	21.00	44	500	850	4.4	6	4	20
79	21.25	26	620	430	1.4	2	4	10
80	21.50	24	170	150	0.8	1	2	10
81	21.75	40	180	210	1.8	14	1	10
82	22.00	34	210	180	3.6	10	1	10
83	22.25	36	260	270	2.6	30	1	30
84	22.50	34	360	320	1.2	50	1	50
85	22.75	30	350	380	1.0	38	2	10
86	23.00	32	300	250	1.0	54	1	20
87	23.25	28	300	300	1.0	52	2	10
88	23.50	20	260	150	1.4	56	1	10
89	23.75	18	190	90	1.0	38	1	10
90	24.00	18	170	100	0.6	36	1	10
91	24.25	22	220	170	0.8	32	2	10
92	24.50	14	260	40	0.4	6	1	10
93	24.75	50	360	70	0.2	38	2	10
94	25.00	20	230	80	1.0	40	2	10
95	25.25	22	200	60	0.6	18	1	10
96	24.50E-25.50N	16	120	30	0.8	2	1	10
97	25.00E-19.75N	28	190	200	1.0	4	2	40
98	25.00E-20.00N	34	190	150	0.8	4	2	90

T.iT. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
99	25.00E-20.25N	32	280	200	0.8	1	2	10
100	CHECK NL-5	26	70	70	1.2	52	10	-
101	25.00E-20.50N	28	430	380	1.4	4	2	10
102	20.75	26	430	450	1.4	6	2	10
103	21.00	36	500	1900	5.0	2	4	10
104	21.25	30	400	410	1.2	8	4	10
105	21.50	26	280	200	1.2	10	2	30
106	21.75	24	330	380	0.8	18	2	10
107	22.00	24	330	260	0.6	28	2	10
108	22.25	26	230	210	1.2	56	2	20
109	22.50	24	270	180	0.8	40	1	110
110	22.75	24	300	140	0.4	42	1	10
111	23.00	26	310	220	0.6	14	1	10
112	23.25	22	250	200	0.8	32	2	10
113	23.50	22	190	70	0.4	24	1	10
114	23.75	18	250	170	1.2	28	2	10
115	24.00	24	230	140	0.8	130	2	10
116	24.25	22	220	140	1.0	56	1	1700
117	24.50	24	230	90	0.4	24	1	10
118	24.75	44	500	200	2.0	32	1	10
119	25.00	30	240	210	1.8	14	2	10
120	25.25	20	240	130	1.8	24	1	10
121	25.50	22	160	60	1.0	18	1	10
122	25.75	18	110	60	0.4	2	1	10
123	25.00E-26.00N	16	150	40	1.0	8	1	10
124	25.50E-19.00N	38	140	70	1.6	1	2	20
125	19.25	14	100	90	0.2	1	1	20
126	19.50	30	120	80	1.4	1	1	20
127	20.00	22	140	160	1.8	8	2	30
128	20.25	34	270	300	3.2	1	4	40
129	20.50	22	210	150	0.4	2	2	10
130	20.75	20	320	200	0.6	2	2	10
131	21.00	20	250	130	0.2	10	1	10
132	21.25	20	310	370	0.4	8	2	10
133	21.50	28	380	280	1.4	6	2	10
134	21.75	22	290	220	0.8	52	2	10
135	22.00	28	240	190	1.4	48	1	10
136	22.25	20	220	210	0.4	60	1	10
137	22.50	26	240	180	1.0	76	1	10
138	22.75	44	200	190	2.2	36	1	10
139	23.00	26	250	100	0.8	28	1	10
140	23.25	26	160	90	1.2	54	1	10
141	23.50	20	190	90	0.8	2	1	10
142	23.75	24	150	60	0.6	24	1	10
143	24.00	20	140	60	0.6	36	1	10
144	24.25	20	150	40	0.2	22	1	30
145	24.50	24	140	50	0.4	40	1	10
146	24.75	34	230	100	2.0	10	1	10
147	25.00	22	170	110	1.2	18	1	10
148	25.25	22	240	90	2.0	8	1	10
149	25.50E-25.50N	26	180	70	2.0	60	1	10
2	25.50E-25.75N	22	150	82	0.6	30	2	10
3	25.50E-26.00N	26	120	54	0.8	16	2	10
4	26.00E-19.00N	26	80	38	0.2	8	2	10
5	19.25	22	100	62	1.6	4	2	60
6	19.50	56	90	60	0.6	4	1	10
7	26.00E-19.75N	34	270	350	2.4	18	2	520

T.'T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
8	26.00E-20.00N	10	90	34	0.4	2	1	20
9	20.25	24	110	170	2.0	12	6	50
10	20.50	36	180	290	2.8	12	6	40
11	20.75	28	280	220	1.6	10	2	10
12	21.00	84	290	180	2.8	10	10	10
13	21.25	34	270	240	1.0	8	2	10
14	21.50	42	650	610	2.8	8	2	10
15	21.75	24	200	180	0.8	12	1	10
16	22.00	24	180	110	0.6	20	1	10
17	22.25	32	280	280	1.6	16	1	10
18	22.50	28	210	120	0.6	26	1	10
19	22.75	26	150	78	0.6	34	1	10
20	23.00	24	130	58	0.8	48	1	10
21	23.25	26	170	68	0.6	50	1	10
22	23.50	22	160	36	0.2	36	1	10
23	23.75	20	160	48	0.2	34	1	10
24	24.00	26	180	110	1.2	30	2	10
25	24.25	28	150	56	0.2	68	1	10
26	24.50	30	150	100	1.2	20	1	10
27	24.75	18	130	40	0.4	22	1	10
28	25.00	22	130	44	1.0	34	1	10
29	25.25	14	150	40	1.0	10	1	10
30	25.50	18	190	62	1.2	8	1	10
31	25.75	36	130	84	0.8	18	1	10
32	26.00E-26.00N	36	200	48	1.2	14	1	10
33	26.50E-20.00N	14	90	40	0.4	2	1	10
34	20.25	18	80	44	0.4	1	1	10
35	20.50	26	150	110	0.4	1	1	10
36	20.75	28	260	270	1.6	4	1	10
37	21.00	26	300	280	0.6	8	1	10
38	21.25	30	500	980	4.6	10	1	10
39	21.50	38	230	150	1.6	10	1	10
40	21.75	26	190	130	0.6	1	1	10
41	22.00	30	150	78	0.8	10	1	10
42	22.25	30	180	160	0.8	12	1	10
43	22.50	28	170	100	1.0	22	1	10
44	22.75	26	150	64	0.8	26	1	10
45	23.00	28	150	66	0.8	20	1	10
46	23.25	24	120	62	1.0	30	1	10
47	23.50	32	150	80	1.4	50	1	10
48	23.75	22	120	44	0.4	12	1	10
49	24.00	24	160	130	1.0	2	1	10
50	24.25	18	130	62	0.6	1	1	10
51	24.50	18	110	32	0.6	12	1	10
52	24.75	20	150	62	1.4	10	1	10
53	25.00	24	140	70	1.2	20	1	10
54	25.25	30	260	80	1.2	20	1	10
55	25.50	26	130	48	0.4	18	1	10
56	25.75	44	120	32	0.2	14	1	10
57	26.50E-26.00N	32	140	52	1.6	28	1	10
58	27.00E-20.00N	28	160	130	1.2	10	1	240
59	20.25	22	100	70	0.4	1	1	10
60	20.50	42	90	32	0.8	1	1	10
61	20.75	36	90	46	0.4	4	1	20
62	21.00	34	120	82	0.4	2	1	10
63	21.25	26	230	170	0.6	14	1	10
64	27.00E-21.50N	34	190	160	1.2	6	1	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
65	27.00E-21.75N	30	260	400	1.0	16	1	10
66	22.00	46	210	120	2.2	18	1	10
67	27.00E-22.25N	24	160	240	2.0	22	1	10
68	27.25E-19.00N	54	110	56	0.6	1	1	10
69	19.25	40	90	36	1.0	2	1	10
70	19.50	58	280	260	10.0	32	1	510
71	19.75	64	390	680	4.0	14	2	360
72	20.00	26	130	80	0.8	2	1	190
73	20.25	28	100	52	0.4	1	1	10
74	20.50	26	90	42	0.6	1	1	10
75	20.75	36	110	72	3.4	6	1	30
76	21.00	42	100	38	0.8	4	1	10
77	21.25	20	90	38	0.2	2	1	10
78	21.50	16	140	160	0.4	10	1	10
79	21.75	34	380	310	1.8	12	1	10
80	22.00	34	170	150	0.8	8	1	10
81	22.25	28	160	170	1.0	8	2	10
82	22.50	32	170	130	1.2	20	1	10
83	22.75	30	180	210	1.2	24	1	10
84	27.25E-23.00N	26	260	150	0.6	20	1	10
85	27.50E-19.00N	80	80	32	0.6	1	1	10
86	19.25	32	100	72	0.6	1	6	10
87	19.50	72	80	28	1.0	1	1	10
88	19.75	42	500	840	4.0	12	1	800
89	20.00	100	1800	1200	7.4	20	1	180
90	20.25	32	90	44	0.6	2	1	10
91	20.50	36	100	60	1.4	6	1	30
92	20.75	36	120	74	0.4	10	1	10
93	21.00	30	90	58	0.4	10	1	10
94	21.25	12	80	66	0.2	6	1	10
95	21.50	14	80	38	0.4	10	1	30
96	21.75	24	130	78	0.8	26	1	10
97	22.00	22	220	250	1.0	18	1	10
98	22.25	20	270	270	1.4	12	1	10
99	27.50E-22.50N	22	170	200	0.8	14	1	10
100	CHECK NL-5	26	70	70	1.4	58	10	-
101	27.50E-22.75N	18	150	84	0.6	18	1	10
102	23.00	22	180	110	0.6	26	1	10
103	23.25	22	160	82	1.8	34	1	10
104	23.50	26	170	96	1.4	52	1	10
105	23.75	26	250	130	0.8	24	1	10
106	27.50E-24.00N	22	130	56	0.8	20	1	10
107	27.75E-19.00N	70	60	58	0.8	1	1	10
108	19.25	32	90	46	0.4	1	1	10
109	19.50	140	60	36	1.0	1	1	10
110	19.75	26	110	110	1.0	1	1	10
111	20.00	28	120	92	0.8	10	1	10
112	20.25	30	100	94	1.0	12	1	10
113	20.50	22	80	48	0.8	18	1	10
114	20.75	24	90	52	0.8	12	1	10
115	21.00	24	100	78	2.0	16	1	10
116	21.25	24	100	68	0.6	10	1	10
117	21.50	16	100	58	0.4	6	1	10
118	21.75	16	110	66	0.2	18	1	10
119	22.00	18	180	92	0.8	16	1	10
120	22.25	28	280	400	1.2	26	1	180
121	27.75E-22.50N	24	130	72	0.4	18	1	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
122	27.75E-22.75N	22	120	76	1.4	22	1	10
123	23.00	22	180	100	0.8	26	1	10
124	23.25	24	250	150	1.2	38	1	10
125	23.50	20	140	70	0.6	46	1	10
126	23.75	20	160	80	0.4	12	1	10
127	27.75E-24.00N	22	120	62	0.8	40	1	10
128	28.00E-19.00N	34	80	26	0.2	4	1	10
129	19.25	54	90	28	0.2	1	1	10
130	19.50	60	100	54	0.6	1	2	10
131	19.75	80	80	42	0.6	1	2	10
132	20.00	28	270	360	2.8	12	1	560>
133	20.25	16	100	60	0.4	1	1	10
134	20.50	30	110	160	1.0	8	1	10
135	20.75	22	90	88	0.4	4	1	10
136	21.00	20	100	56	0.2	1	1	10
137	21.25	16	110	50	0.2	4	1	10
138	21.50	24	160	64	0.2	2	1	10
139	21.75	64	120	88	1.6	12	1	10
140	22.00	18	90	76	0.6	18	1	10
141	22.25	22	200	280	1.0	24	1	10
142	22.50	20	90	56	1.2	24	1	10
143	22.75	20	120	54	0.4	38	1	10
144	23.00	20	140	64	0.4	26	1	10
145	23.25	22	190	100	0.8	28	1	10
146	23.50	20	140	80	0.4	20	1	10
147	23.75	18	150	62	0.2	28	1	10
148	28.00E-24.00N	22	180	66	0.2	46	1	10
149	28.25E-22.75N	18	120	42	0.6	12	1	10
2	28.25E-23.00N	20	100	36	0.6	30	1	10
3	23.25	24	230	110	1.6	36	1	10
4	23.50	20	200	90	0.6	28	1	10
5	23.75	30	180	130	1.0	64	1	10
6	28.25E-24.00N	24	200	86	0.6	28	1	10
7	28.50E-22.75N	30	100	86	1.2	36	1	10
8	23.00	20	140	110	0.6	28	1	10
9	23.25	28	240	130	1.4	56	1	10
10	23.50	16	120	52	0.4	30	1	10
11	23.75	18	100	44	0.4	30	1	10
12	28.50E-24.00N	16	160	50	0.6	22	1	10
13	28.75E-22.75N	18	120	48	0.4	20	1	10
14	23.00	16	110	62	0.4	22	1	10
15	23.25	20	160	74	0.8	18	1	10
16	23.50	18	120	130	0.4	18	1	10
17	23.75	22	160	86	0.6	16	1	10
18	28.75E-24.00N	14	90	84	0.8	18	1	10
19	29.00E-22.75N	18	160	130	0.4	10	1	10
20	23.00	18	120	74	0.4	10	1	10
21	23.25	18	140	44	0.4	16	1	10
22	23.50	16	110	66	0.2	16	1	10
23	23.75	22	180	62	0.2	30	1	10
24	29.00E-24.00N	16	170	66	0.4	22	1	10
25	29.25E-20.25N	70	100	100	1.2	20	1	320>
26	20.50	52	120	92	0.6	12	1	10
27	20.75	110	100	44	0.6	14	1	10
28	21.00	22	120	70	1.2	18	1	10
29	21.25	38	110	44	0.6	16	1	10
30	29.25E-21.50N	36	190	240	0.6	16	1	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
31	29.25E-21.75N	22	70	20	0.4	20	1	10
32	22.00	24	110	46	0.6	22	2	10
33	22.25	24	80	48	0.8	20	6	10
34	22.50	30	150	34	0.4	20	1	10
35	22.75	16	140	120	0.4	16	1	10
36	23.00	20	120	50	0.6	22	1	10
37	23.25	18	100	46	0.2	12	1	10
38	23.50	14	120	42	0.2	16	1	10
39	23.75	18	150	52	0.2	14	1	10
40	29.25E-24.00N	16	130	48	0.4	14	1	10
41	29.50E-22.75N	20	120	80	0.6	20	2	10
42	23.00	22	160	120	0.4	24	6	10
43	23.25	26	110	36	0.2	16	2	10
44	23.50	18	160	54	0.4	26	2	10
45	23.75	16	130	46	0.4	24	1	10
46	29.50E-24.00N	20	140	94	0.4	20	1	10
47	29.75E-22.75N	32	70	24	0.4	22	1	20
48	23.00	20	130	48	0.4	30	2	10
49	23.25	20	110	56	0.6	28	1	410
50	23.50	24	150	56	1.0	22	6	10
51	23.75	20	140	42	0.4	28	2	10
52	29.75E-24.00N	38	140	58	0.2	18	2	10
53	30.00E-22.75N	40	80	26	0.8	18	2	10
54	23.00	30	90	32	0.2	16	2	20
55	23.25	26	80	22	0.4	18	1	10
56	23.50	28	120	42	0.4	20	1	10
57	23.75	26	100	26	0.2	16	2	300
58	30.00E-24.00N	24	90	22	0.2	16	1	10
59	30.25E-22.75N	22	110	66	1.6	20	1	10
60	23.00	16	110	48	0.2	18	2	10
61	23.25	26	160	62	0.2	24	2	10
62	23.50	24	110	48	0.4	32	6	20
63	23.75	42	110	44	0.4	22	2	10
64	30.25E-24.00N	30	120	32	0.4	30	2	10
65	30.50E-22.75N	24	140	88	0.4	24	2	10
66	23.00	32	130	46	0.6	34	2	10
67	23.25	46	120	50	1.2	26	1	10
68	23.50	38	90	18	0.6	22	1	10
69	23.75	40	90	20	0.4	26	1	10
70	30.50E-24.00N	34	110	52	0.6	28	1	10
71	30.75E-23.25N	24	140	78	0.4	26	2	10
72	23.50	20	70	28	0.4	26	1	10
73	23.75	32	90	28	0.4	26	1	10
74	30.75E-24.00N	60	100	34	0.4	28	1	10
75	31.00E-22.75N	32	110	50	0.4	26	1	10
76	23.00	28	100	40	0.4	28	1	10
77	23.25	38	100	42	0.6	20	1	10
78	31.00E-24.00N	36	90	44	0.4	24	1	10
79	P 69580	220	1300	4000	31.0	70	48	790
80	69581	100	1600	720	4.4	40	16	250
81	69582	190	2100	2500	12.0	54	10	340
82	69583	12	80	130	1.4	24	14	80
83	69585	6	50	76	2.8	38	10	60
84	69586	20	100	110	7.8	34	2	200
85	69589	20	100	1200	20.0	140	8	500
86	69590	14	90	190	2.6	30	6	40
87	P 69591	58	580	450	1.6	24	8	80

NORANDA VANCOUVER LABORATORY
****

PROPERTY/LOCATION: ~~YUKON GENERAL~~ Mt. Anderson

CODE :8509-052

Project No. : ~~694~~ 611
Material :SOIL
Remarks :

Sheet:1 of 6
Geol.:M.W.

Date rec'd:SEP.09
Date compl:OCT.23

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
132	2175E-2250N	160	1500	2800	12.0	850	210
133	2225	180	1500	1100	13.0	440	10
134	2200	46	900	1100	2.6	250	10
135	2175	44	450	790	2.8	30	10
136	2150	34	500	1000	3.6	16	10
137	2175E-2125N	42	1100	1100	5.4	22	10
138	2225E-2100N	76	900	1900	8.0	16	60
139	2125	34	1100	2600	11.0	16	10
140	2150	120	3400	8800	30.0	56	10
141	2175	34	450	800	2.4	22	10
142	2225E-2200N	50	1700	1400	4.8	32	10
143	2275E-2075N	28	1000	1300	6.6	10	10
144	2100	26	800	1800	8.0	24	60
145	2125	36	1500	4000	16.0	26	10
146	2150	34	800	1700	7.0	14	10
147	2275E-2175N	28	550	700	2.4	16	10
148	2325E-2050N	38	700	950	2.6	20	10
149	2075	28	900	930	1.8	26	10
2	2100	34	510	1300	3.2	10	10
3	2125	52	1200	2700	16.0	24	30
4	2325E-2150N	20	260	540	2.4	20	10
5	2375E-2350N	30	390	390	1.6	62	10
6	2375	24	270	240	2.6	40	10
7	2400	18	190	160	1.8	30	10
8	2425	24	240	230	1.6	34	10
9	2375E-2450N	48	230	280	1.4	40	10
10	2400E-2350N	22	260	430	1.6	36	10
11	2375	22	190	160	0.8	34	10
12	2400	30	350	360	3.0	60	10
13	2425	70	980	2200	16.0	340	480
14	2450	32	220	240	2.4	34	10
15	2475	18	120	70	1.0	14	10
16	2400E-2500N	32	270	90	1.6	20	10
17	2425E-2050N	46	530	860	3.6	16	10
18	2075	40	1000	980	4.2	20	10
19	2100	50	840	1200	6.2	14	10
20	2125	48	980	2600	15.0	36	10
21	2150	44	310	580	3.2	14	10
22	2350	28	290	400	1.2	70	10
23	2375	28	230	220	3.0	50	10
24	2400	24	190	170	2.8	36	10
25	2425	18	240	110	1.2	24	10
26	2450	40	250	100	1.0	36	10
27	2475	24	440	170	4.4	34	10
28	2425E-2500N	28	260	370	4.0	30	10
29	2475E-2000N	44	320	320	2.0	22	10
30	2025	30	270	140	1.4	10	10
31	2475E-2050N	26	400	260	1.2	16	10

cc 06/11 ... RP

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
32	2475E-2075N	54	780	1400	6.6	16	10
33	2100	54	940	1400	7.4	24	10
34	2125	28	1000	1500	5.4	22	10
35	2350	24	290	350	1.2	44	10
36	2375	20	190	80	0.8	26	10
37	2400	24	220	210	0.8	22	10
38	2425	32	270	210	1.4	70	10
39	2450	76	470	590	3.6	120	10
40	2475	96	450	210	2.0	80	10
41	2475E-2500N	26	250	96	1.0	24	10
42	2525E-1950N	18	80	46	1.0	16	10
43	1975	26	190	100	1.6	14	10
44	2000	32	250	220	1.0	14	10
45	2025	34	190	150	2.0	10	10
46	2050	24	280	280	1.0	12	10
47	2075	30	350	320	2.4	6	10
48	2100	20	260	200	0.6	10	10
49	2125	30	330	360	1.0	28	10
50	2350	28	260	170	1.2	18	10
51	2375	24	100	90	0.4	46	10
52	2400	24	160	90	0.8	22	70
53	2425	36	190	100	0.8	36	10
54	2450	38	190	140	2.2	54	10
55	2475	24	330	60	1.0	24	10
56	2525E-2500N	28	280	140	3.0	42	10
57	2575E-1950N	30	180	150	1.2	2	30
58	1975	14	100	70	0.4	4	10
59	2000	16	78	70	1.2	10	30
60	2025	28	230	260	2.8	2	100
61	2050	36	230	330	3.0	10	30
62	2075	34	540	1500	1.6	8	10
63	2100	62	330	290	4.2	12	10
64	2350	26	190	80	0.2	32	10
65	2375	26	170	100	0.6	24	10
66	2400	24	160	70	0.2	22	10
67	2425	28	160	40	0.4	36	10
68	2450	26	150	50	1.2	40	10
69	2475	26	100	70	0.4	24	10
70	2575E-2500N	20	150	80	1.0	20	10
71	TF 2625E-2100N	34	250	160	1.6	6	10
72	2105	32	240	140	1.4	2	10
73	2110	34	310	180	1.8	4	10
74	2115	34	390	240	2.2	2	10
75	2120	34	170	320	4.2	4	10
76	2130	34	520	450	5.0	10	10
77	2135	38	600	570	7.4	4	10
78	2140	38	480	320	4.8	8	10
79	2145	36	440	280	4.4	10	10
80	2150	34	340	210	4.0	14	10
81	2155	36	340	220	5.4	8	10
82	2160	32	340	150	3.4	1	10
83	2165	30	180	100	1.4	6	10
84	2170	28	280	120	1.0	6	10
85	2175	30	240	140	1.4	4	10
86	2180	28	300	160	1.2	2	10
87	2185	26	190	130	1.0	2	10
88	TF 2625E-2190N	28	190	140	1.0	12	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
89	TF 2625E-2195N	26	200	110	0.8	4	10
90	TF 2625E-2200N	26	260	150	0.6	1	10
91	2625E-2100N	32	240	150	1.8	8	10
92	2105	32	230	140	1.8	1	10
93	2110	28	300	180	2.0	1	10
94	2115	32	360	240	2.2	1	10
95	2120	30	290	220	2.6	2	10
96	2125	32	520	320	3.8	8	10
97	2130	36	500	470	5.8	8	10
98	2135	66	700	640	8.2	10	10
99	2140	44	480	330	5.4	6	10
100	CHECK NL-5	24	66	70	1.4	60	–
101	2145	36	460	300	5.0	1	10
102	2150	40	140	200	4.8	14	10
103	2155	34	380	190	3.0	12	10
104	2160	42	370	180	5.0	2	10
105	2165	38	250	180	1.2	1	10
106	2170	34	280	160	1.4	4	10
107	2175	32	230	140	1.8	6	10
108	2180	28	390	150	1.6	1	10
109	2185	26	180	130	1.2	2	10
110	2190	24	240	170	1.0	1	10
111	2195	22	120	80	0.6	8	10
112	2625E-2200N	26	210	180	0.8	6	10
113	2650E-2100N	24	410	260	0.6	12	10
114	2105	24	290	370	2.8	1	20
115	2110	26	290	280	1.8	8	80
116	2115	32	400	580	3.4	10	10
117	2120	32	410	360	3.4	8	10
118	2125	26	430	260	2.8	2	10
119	2130	28	430	460	3.0	10	10
120	2135	36	430	490	4.2	12	10
121	2140	32	310	110	2.4	14	10
122	2145	36	300	190	2.2	12	10
123	2150	28	220	110	1.2	18	10
124	2650E-2165N	32	240	120	1.0	8	10
125	2650E-2100N	26	390	260	0.6	4	10
126	2105	26	270	200	1.2	4	10
127	2110	36	300	360	2.0	1	40
128	2115	36	410	620	3.4	8	10
129	2120	30	340	260	1.4	4	10
130	2125	28	580	300	2.2	1	10
131	2130	30	420	400	2.0	14	10
132	2135	34	450	500	3.2	14	10
133	2140	36	340	210	2.2	20	10
134	2170	34	310	130	1.6	10	10
135	2175	28	220	120	1.2	4	10
136	2180	34	230	120	0.8	16	10
137	2185	34	190	110	1.0	26	10
138	2190	32	190	100	1.0	20	10
139	2195	32	180	90	0.8	16	10
140	2650E-2200N	34	190	100	1.0	18	10
141	2675E-2100N	24	230	120	0.6	1	10
142	2105	62	100	40	1.4	20	10
143	2110	48	78	28	0.6	26	50
144	2115	30	260	210	1.2	12	10
145	2675E-2120N	30	300	210	0.8	14	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
146	2675E-2125N	38	260	170	1.0	12	10
147	2130	42	270	130	1.2	22	10
148	2135	36	440	150	1.0	12	10
149	2140	26	430	180	0.6	16	10
2	2145	24	240	260	1.4	16	10
3	2150	26	220	150	1.0	20	10
4	2155	38	460	170	1.4	14	10
5	2160	30	340	280	1.2	8	10
6	2165	24	290	220	1.0	6	10
7	2175	22	190	130	1.0	14	10
8	2180	32	250	120	0.8	8	10
9	2185	24	210	90	1.0	10	10
10	2190	28	160	130	1.0	12	10
11	2195	26	190	110	1.0	10	10
12	2675E-2200N	32	2	120	0.8	6	10
13	3050E-1500N	64	94	14	1.2	1	10
14	1525	52	62	4	0.2	8	10
15	1550	56	72	12	1.0	4	10
16	1575	37	46	4	0.2	8	10
17	1600	36	68	14	0.2	6	10
18	1625	30	44	1	0.2	8	10
19	1650	30	50	8	0.2	10	10
20	1675	26	48	1	0.2	4	10
21	1700	36	40	4	0.2	6	40
22	1725	46	64	8	0.2	10	10
23	1750	46	58	4	0.2	14	10
24	1775	34	54	2	0.2	16	10
25	1800	28	20	1	0.4	4	10
26	1825	210	70	42	1.4	2	10
27	1850	44	60	58	1.2	4	10
28	1875	50	66	18	0.6	1	10
29	3050E-1900N	36	48	48	0.4	2	10
30	3100E-1500N	48	100	14	0.2	8	10
31	1525	48	100	18	0.2	14	10
32	1550	28	92	14	0.2	4	10
33	1575	28	80	14	0.2	8	50
34	1600	20	64	6	0.2	14	10
35	1625	26	70	18	0.2	10	10
36	1650	22	46	4	0.2	4	10
37	1675	76	62	8	0.4	8	10
38	1700	66	98	8	2.0	6	100
39	1725	44	58	34	2.0	2	10
40	1750	26	58	8	0.2	2	10
41	1775	28	76	12	0.4	2	10
42	1800	26	64	6	0.2	1	10
43	1825	210	74	24	0.8	1	10
44	1850	130	66	8	1.0	2	10
45	3100E-1875N	200	120	18	2.8	1	10
46	3150E-1500N	30	78	10	0.2	12	10
47	1525	46	84	12	0.2	10	10
48	1550	38	96	26	0.6	10	10
49	1575	36	110	14	0.2	14	10
50	1600	32	76	20	0.2	16	10
51	1625	30	58	8	0.4	4	10
52	1650	66	56	8	0.2	8	10
53	1675	50	86	4	0.6	14	20
54	3150E-1700N	56	84	58	0.8	20	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
55	3150E-1725N	72	80	68	0.8	18	10
56	1750	58	86	62	2.4	24	10
57	1775	30	86	18	0.2	20	10
58	1800	28	68	12	0.4	10	10
59	1825	80	78	14	0.2	16	10
60	1850	32	88	8	0.2	14	10
61	3150E-1875N	28	70	10	0.4	8	10
62	3200E-1500N	24	86	10	0.2	12	10
63	1525	38	170	16	0.6	16	10
64	1550	36	110	8	0.4	10	10
65	1600	110	60	20	1.8	8	10
66	1625	42	120	40	1.0	18	10
67	1650	46	64	2	1.0	2	10
68	1675	26	56	6	0.4	10	10
69	1700	42	54	22	0.6	8	10
70	1725	34	52	12	0.6	10	10
71	1750	34	54	8	0.4	8	10
72	1775	34	68	16	0.6	6	10
73	1800	120	70	18	0.6	2	10
74	1825	66	54	16	0.8	6	10
75	1850	38	54	6	0.4	4	10
76	3200E-1875N	18	56	2	0.4	6	10
77	3250E-1500N	30	72	8	0.2	2	10
78	1525	58	92	16	0.8	2	10
79	1550	32	56	12	0.4	4	10
80	1575	98	94	6	3.4	2	10
81	1600	40	80	6	0.4	8	10
82	1625	34	120	26	0.4	10	10
83	1650	26	56	14	0.6	6	10
84	1675	88	66	100	1.0	4	10
85	1700	56	60	16	0.8	1	10
86	1725	32	56	8	0.4	1	10
87	1750	34	64	4	0.4	4	10
88	1775	30	64	4	0.6	4	10
89	1800	20	68	8	0.4	10	10
90	1825	22	58	2	0.2	10	10
91	1850	36	66	10	0.2	18	10
92	3250E-1875N	22	46	10	0.2	16	10
93	3300E-1500N	18	72	2	0.2	26	10
94	1525	32	110	16	0.4	12	10
95	1550	30	130	10	0.4	14	10
96	1575	28	58	2	0.4	1	10
97	1600	36	64	20	0.6	1	10
98	1625	26	56	40	0.6	4	10
99	1650	62	38	10	2.6	8	10
100	CHECK NL-5	24	66	66	1.4	62	–
101	1675	40	64	14	0.6	10	10
102	1700	64	64	12	0.2	20	10
103	1725	46	42	8	0.4	10	10
104	1750	28	60	4	0.4	8	10
105	3300E-1775N	30	68	10	0.4	16	10
106	3350E-1500N	38	200	12	0.6	16	10
107	1525	50	130	6	1.0	12	10
108	1550	54	82	16	2.6	12	10
109	1575	38	70	12	1.0	4	10
110	1600	36	78	14	0.6	20	10
111	3350E-1625N	28	90	18	0.4	10	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
112	3350E-1650N	20	62	6	0.2	20	10
113	1675	48	72	18	0.8	8	10
114	1700	30	50	6	0.4	10	10
115	1725	26	76	10	0.4	10	10
116	1750	30	58	8	0.2	1	10
117	3350E-1775N	30	68	10	0.2	1	10
118	3400E-1500N	26	110	24	0.2	4	10
119	1525	38	120	18	2.2	8	10
120	1550	26	80	16	1.0	1	10
121	1575	28	78	12	0.8	6	10
122	1600	30	84	12	0.2	10	10
123	1625	46	76	10	0.8	2	10
124	1650	34	66	6	0.4	1	10
125	1675	40	74	16	2.0	8	10
126	1700	30	78	6	1.0	12	30
127	1725	30	62	6	0.2	6	10
128	1750	22	66	16	0.4	4	10
129	3400E-1775N	20	66	12	0.6	2	10

file

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION:MT. ANDERSON CODE :8509-077

Project No. :611 Sheet:1 of 1 Date rec'd:SEP.20
Material :SOILS Geol.:M.W. Date compl:OCT.03
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	Mo	As	PPB Au
124	20.50E-20.00N	36	400	440	2.0	2	22	10
125	20.25	140	1300	6800	14.0	10	120	10
126	20.50	36	460	560	1.0	2	46	10
127	20.75	160	1100	750	3.4	2	60	10
128	21.00	44	560	420	1.8	2	100	10
129	21.25	52	450	1100	3.0	2	52	10
130	21.50	44	1100	340	1.4	1	66	10
131	21.75	58	1300	890	5.0	2	100	10
132	22.00	70	1000	1200	12.0	2	72	10
133	22.25	40	500	540	2.2	1	32	10
134	22.50	280	1100	1700	9.0	1	44	10
135	22.75	46	380	210	1.6	1	20	10
136	23.00	40	370	180	1.0	1	8	10
137	23.25	40	570	330	1.6	1	14	10
138	23.50	30	440	230	0.8	1	6	10
139	23.75	20	230	300	0.6	1	8	10
140	20.50E-24.00N	26	230	84	0.6	1	6	10
141	20.00E-20.00N	70	310	310	5.2	8	130	10
142	20.25	32	260	240	1.4	8	30	10
143	20.50	44	260	230	0.4	12	20	10
144	20.75	92	1100	3700	5.0	8	26	40
145	21.00	50	600	840	2.8	4	130	10
146	21.50	56	340	180	5.0	6	220	10
147	21.75	64	570	980	2.4	2	96	10
148	22.00	36	400	400	1.4	2	130	10
149	22.25	220	1400	910	4.2	2	260	10
150	CHECK NL-5	24	66	76	1.0	10	60	--
151	22.50	42	400	220	1.0	2	26	10
152	22.75	30	550	300	0.8	2	20	10
153	23.00	52	510	770	2.6	2	22	10
154	23.25	32	500	430	0.4	1	18	10
155	23.50	42	400	390	2.4	2	20	10
156	20.00E-24.00N	52	670	620	1.0	1	22	10
157	26.50E-21.45N	30	300	180	0.8	1	12	10
158	21.50	40	340	180	1.2	1	10	10
159	21.55	32	250	130	1.0	2	8	10
160	21.60	30	270	160	0.6	2	14	10
161	21.65	26	170	150	0.6	1	2	10
162	21.70	26	240	120	0.6	1	2	10
163	21.75	24	190	100	0.2	1	4	10
164	21.80	30	230	140	0.4	1	2	10
165	21.85	26	160	100	0.4	1	4	10
166	21.90	30	200	110	0.4	1	16	10
7	21.95	24	140	78	0.4	1	14	10
168	26.50E-22.00N	30	140	86	0.4	2	18	10

cc MW WM DP 07/10

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION:Mt. Anderson CODE :8508-024

Project No. : 611 Sheet: 1 of 4 Date rec'd:Aug.6
Material :Soil & Rx Geol.: M.W. Date compl:Aug. 28
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	Mo	PPB Au
2	21.00E-19.00N	30	380	400	1.2	1	10
3	19.25	44	710	900	3.4	1	10
4	19.50	48	550	870	2.0	1	10
5	21.00E-19.75N	44	560	580	1.6	1	10
6	21.50E-19.00N	34	370	450	1.8	1	50
7	19.25	34	520	590	1.6	1	10
8	19.50	46	620	1100	3.2	1	20
9	21.50E-19.75N	50	680	830	1.8	1	10
10	22.00E-19.00N	32	440	480	1.0	1	10
11	19.25	96	430	1600	4.2	26	10
12	19.50	38	470	580	1.8	1	10
13	22.00E-19.75N	50	620	950	6.2	1	10
14	22.50E-19.00N	36	260	410	2.0	1	10
15	19.25	22	340	410	1.0	1	10
16	19.50	40	600	700	1.8	1	10
17	22.50E-19.75N	36	620	440	2.0	1	10
18	23.00E-19.00N	24	330	330	1.2	1	10
19	19.25	30	370	500	2.0	1	30
20	19.50	30	380	320	2.0	1	30
21	23.00E-19.75N	36	480	460	1.2	1	10
22	23.50E-19.00N	30	330	470	1.6	1	30
23	19.25	30	410	480	1.8	1	10
24	19.50	28	380	410	1.2	1	10
25	23.50E-19.75N	26	310	410	1.2	1	10
26	24.00E-19.00N	34	240	400	1.0	1	10
27	19.25	34	310	480	2.0	1	10
28	19.50	40	330	520	2.2	1	10
29	24.00E-19.75N	56	280	420	3.8	1	20
30	24.50E-19.00N	38	230	340	6.2	1	50
31	19.25	30	200	250	2.0	1	10
32	19.50	50	250	390	3.8	1	20
33	24.50E-19.75N	30	310	350	1.8	1	10
34	27.00E-22.50N	40	100	50	1.2	1	10
35	22.75	32	150	74	0.6	1	10
36	23.00	28	140	100	1.6	1	10
37	23.25	26	140	64	0.6	1	10
38	23.50	24	170	96	1.0	1	10
39	23.75	26	140	76	0.2	1	10
40	24.00	22	120	44	0.6	1	10
41	24.25	24	110	40	0.2	1	10
42	24.50	28	110	52	0.2	1	10
43	24.75	28	190	68	1.4	1	10
44	25.00	28	130	72	0.2	1	10
45	25.25	30	96	64	0.2	1	10
46	25.50	34	130	76	0.2	1	10
47	27.00E-25.75N	34	92	40	0.6	1	10
48	31.50E-19.00N	52	60	14	0.2	1	10
49	31.50E-19.25N	46	62	14	0.2	1	10

. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	Mo	PPB Au
50	31.50E-19.50N	58	64	16	0.4	1	10
51	19.75	34	56	12	0.2	1	10
52	20.00	36	60	16	0.2	1	10
53	20.25	44	60	14	0.2	1	10
54	20.50	38	60	12	0.2	1	10
55	20.75	34	58	20	0.2	1	10
56	21.00	36	66	28	0.6	1	30
57	21.25	26	78	28	0.4	1	10
58	21.50	24	76	36	0.6	1	90
59	21.75	32	72	88	0.8	1	10
60	22.00	34	64	22	0.2	1	10
61	22.25	44	76	22	0.2	1	10
62	22.50	30	74	24	0.2	1	10
63	22.75	30	60	20	0.4	1	10
64	23.00	30	72	26	0.2	1	10
65	23.25	38	100	52	0.6	1	10
66	23.50	40	62	20	0.2	1	20
67	23.75	36	70	22	0.2	1	10
68	24.00	48	90	44	0.6	1	20
69	24.25	34	180	50	0.2	1	10
70	24.50	24	96	30	0.2	1	10
71	24.75	22	98	66	0.2	1	10
72	31.50E-25.00N	32	80	64	0.8	1	10
73	32.00E-19.00N	28	44	14	0.2	1	10
74	19.25	24	52	12	0.2	1	30
75	19.50	50	50	18	2.8	2	10
76	19.75	30	66	24	0.2	2	10
77	20.00	40	70	38	1.8	4	10
78	20.25	38	56	20	1.0	1	10
79	20.50	46	64	18	3.0	1	10
80	20.75	30	68	34	0.6	2	10
81	21.00	38	62	16	0.2	1	10
82	21.25	30	76	100	1.8	1	10
83	21.50	48	170	92	4.0	1	10
84	21.75	20	74	56	0.4	1	10
85	22.00	46	100	150	4.6	1	10
86	22.25	24	100	100	0.8	1	10
87	22.50	20	100	70	3.6	1	10
88	22.75	22	84	28	0.2	1	10
89	23.00	32	76	50	1.2	1	10
90	23.25	18	86	62	0.6	1	10
91	23.50	18	78	50	0.6	1	10
92	23.75	16	72	42	1.0	1	10
93	32.00E-24.00N	18	80	72	0.4	1	10
94	32.50E-19.00N	26	64	18	0.4	16	20
95	19.25	38	56	12	0.2	1	10
96	19.50	26	56	10	0.2	1	10
97	19.75	38	62	12	0.2	1	10
98	20.00	40	56	16	0.2	1	10
99	32.50E-20.25N	34	76	16	0.2	1	10
100	CHECK NL-5	26	68	76	1.4	10	–
101	32.50E-20.50N	28	62	36	0.4	1	10
102	20.75	32	100	52	0.6	2	20
103	21.00	24	74	52	0.6	1	20
104	21.25	24	64	46	0.6	1	40
105	21.50	22	70	94	0.6	1	10
106	32.50E-21.75N	26	72	180	1.2	1	10

T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	Mo	PPB Au
07	32.50E-22.00N	24	78	86	0.4	1	10
.08	22.25	22	68	46	0.2	1	10
109	22.50	22	64	32	0.2	1	10
110	22.75	28	66	38	0.6	1	10
111	23.00	20	76	32	0.2	1	10
112	23.25	24	90	28	0.2	1	10
113	23.50	24	160	46	0.2	1	10
114	23.75	22	130	34	0.2	1	10
115	32.50E-24.00N	20	90	24	0.2	1	10
116	33.00E-18.00N	40	60	16	0.2	1	10
117	18.25	48	52	10	0.6	1	10
118	18.50	36	58	12	0.4	1	10
119	18.75	38	50	18	0.2	1	10
120	19.00	46	70	14	0.6	1	10
121	19.25	40	52	24	1.2	2	10
122	19.50	38	56	22	0.6	2	10
123	19.75	66	60	30	1.8	1	10
124	20.00	70	68	26	2.8	2	10
125	20.25	44	68	30	0.4	1	10
126	20.50	26	74	150	0.6	2	10
127	20.75	24	80	100	0.2	2	10
128	21.00	20	68	42	0.2	1	10
129	21.25	20	54	20	0.2	1	10
130	21.50	28	86	110	1.0	1	10
131	21.75	24	60	110	1.4	1	10
132	22.00	24	68	42	0.4	1	10
133	22.25	22	58	22	0.2	1	10
134	22.50	24	74	34	0.4	1	10
135	22.75	32	84	32	0.2	1	10
136	33.00E-23.00N	32	82	46	1.4	1	10
137	33.50E-18.00N	38	60	18	0.4	1	10
138	18.25	28	58	16	0.2	1	10
139	18.50	50	72	16	0.2	1	20
140	18.75	58	62	16	0.4	1	10
141	19.00	34	52	10	0.2	1	10
142	19.25	28	54	14	0.2	1	10
143	19.50	44	64	42	0.6	1	20
144	19.75	28	66	20	0.2	1	10
145	20.00	40	56	18	0.2	1	10
146	20.25	22	52	12	0.2	1	10
147	20.50	68	410	850	3.4	2	50
148	20.75	22	62	36	0.2	1	30
149	33.50E-21.00N	18	66	72	0.2	1	10
2	33.50E-21.25N	16	72	56	0.8	1	130
3	21.50	18	70	62	0.4	1	20
4	21.75	24	92	88	0.6	1	10
5	22.00	18	76	48	0.6	1	20
6	22.25	18	68	26	0.8	1	10
7	22.50	26	84	28	0.8	1	10
8	22.75	28	90	32	0.6	1	30
9	33.50E-23.00N	18	62	20	0.6	1	10
10	34.00E-18.00N	26	76	12	0.4	1	10
11	18.25	26	56	8	0.2	1	10
12	18.50	30	56	8	0.4	1	10
13	18.75	26	54	10	0.4	1	10
14	19.00	28	58	10	0.4	1	10
15	34.00E-19.25N	28	62	8	0.4	1	10

8508-005

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVE
BURNABY, B.C. V5B
TEL : (604) 299 - 6

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 611 8508-005
TYPE OF ANALYSIS: GEOCHEMICAL Mt. Anderson (MW)

CERTIFICATE#: 85476
INVOICE#: 6106
DATE ENTERED: 85-11-19
FILE NAME: NOR85476
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Ba	PPB Hg
X	2125E 2150N	1300	40
X	2175N	1280	40
X	2200N	700	240
X	2225N	960	60
X	2125E 2250N	880	80
X	2200E 2125N	1080	40
X	2175N	1180	20
X	2200E 2225N	1060	20
X	2250E 2100N	1060	80
X	2150N	1480	60
X	2250E 2175N	840	30
X	2300E 2075N	1040	40
X	2125N	1040	160
X	2300E 2175N	800	40
X	2400E 2075N	1240	30
X	2125N	980	60
X	2400E 2175N	900	40
X	2650E 2100N	1040	20
X	2125N	1020	60
X	2150N	1160	30
X	2175N	1520	20
X	2650E 2200N	1160	40
X	2750E 1925N	1480	30
X	1950N	1480	20
X	1975N	2480	20
X	2000N	1000	60
X	2750E 2025N	1280	40

CERTIFIED BY : J. Rossbacher

8509-052

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVE
BURNABY, B.C. V5B
TEL : (604) 299 - 6

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 611 8509-052
TYPE OF ANALYSIS: GEOCHEMICAL Yukon Gen. (MW)

CERTIFICATE#: 85478
INVOICE#: 6107
DATE ENTERED: 85-11-19
FILE NAME: NOR85478
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Ba	PPB Hg
X	3050E 1500N	1340	50
X	1525N	1040	40
X	1550N	1220	30
X	1575N	860	20
X	1600N	1260	40
X	1625N	960	20
X	1650N	920	40
X	1675N	980	20
X	3050E 1700N	800	30
X	3100E 1500N	1280	40
X	1550N	1320	40
X	1600N	1180	40
X	1650N	860	60
X	3100E 1700N	1140	40
X	3150E 1500N	1120	40
X	1550N	1340	60
X	1600N	1460	60
X	1650N	1000	30
X	3150E 1700N	1040	30
X	3200E 1600N	1340	80
X	1650N	1740	60
X	1700N	1180	20
X	1750N	820	20
X	3200E 1800N	1560	20

CERTIFIED BY : F. Rossbacher

20/11/85 MW ✓ LVM DP

8507-052

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVEN
BURNABY, B.C. V5B 3
TEL : (604) 299 - 69

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 611 8507-052
TYPE OF ANALYSIS: GEOCHEMICAL Mr Anderson (MW)

CERTIFICATE#: 85477
INVOICE#: 6134
DATE ENTERED: 85-11-26
FILE NAME: NOR85477
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Ba	PPB Hg	PPM Sb
S	2900E 1975N	1040	20	2
S	2025N	1860	20	2
S	2050N	1180	20	1
S	2150N	1000	30	1
S	2175N	1020	20	1
S	2900E 2200N	980	20	1
S	2950E 2000N	1060	20	1
S	2025N	1660	80	14
S	2950E 2050N	1180	20	1
S	3000E 2000N	1160	20	1
S	2025N	1000	30	2
S	3000E 2025N	1320	40	1

CERTIFIED BY : J. Rossbach

5/12/85 MW WM NP

APPENDIX 2

ROCK GEOCHEMICAL RESULTS

NORANDA EXPLORATION COMPANY, LIMITED
Mt. Anderson Geochemical Results

SAMPLE NO.	TYPE	WIDTH	Cu ppm	Zn ppm	Pb ppm	As ppm	Ag ppm	Au ppb
PIT A								
78276	chip	1 m	10	42	36	8	.2	10
78277	chip	1 m	40	22	26	12	.4	10
78278	chip	1 m	18	50	26	10	.2	10
78279	chip	1 m	8	56	10	2	.2	10
78280	rock	grab	76	48	32	32	.2	20
78281	rock	grab	38	46	40	2	.2	10
PIT B								
78282	chip	0.3 m	20	44	26	12	1.2	20
78283	chip	0.4 m	18	38	30	16	.4	30
78284	chip	0.5 m	16	52	12	2	.2	10
78285	chip,	high grade along Fl.	28	56	40	16	1.6	20
78286	rock	grab	14	42	36	4	.2	10
78287	rock	grab	20	58	38	12	.4	20
78288	rock	grab	28	44	46	2	.2	10
78289	rock	grab	34	42	28	2	.2	10
QUARTZ FLOAT SAMPLES								
78290	rock	grab	8	38	6	2	.2	20
78291	rock	grab	12	52	10	2	.2	10

Mt. Anderson file

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION:Mt. Anderson — CODE :8508-005

Project No.	: 311	Sheet:	1	Date rec'd:	July 30
Material	: Rock	Geol.:	M.W.	Date compl:	Aug 22
Remarks	:				

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Mo	PPB Au
96	ROCK 70051	26	70	130	0.4	12	2	10
97	52	12	80	4	0.2	2	2	10
98	53	26	150	20	0.2	2	2	10
99	70054	30	68	4	0.2	8	2	10
100	CHECK NL-5	30	72	76	1.4	52	4	, -
101	70055	64	80	36	0.2	40	2	10
102	56	28	200	6	0.2	2	2	10
103	70057	32	78	120	1.2	20	2	10
104	69577	8	180	10	0.2	2	2	10
105	78	10	62	36	0.6	2	2	10
106	69579	6	74	28	0.2	8	2	10
107	69584	6	8	6	0.6	16	2	100
108	69588	8	16	210	2.2	16	70	140
109	70076	300	2300	7200	160.0	860	2	520
110	77	14	220	130	2.8	12	2	30
111	78	30	520	38000	92.0	120	2	780
112	79	8	50	1200	4.2	32	2	30
113	80	1100	1600	6000	130.0	900	10	300
114	81	160	740	3100	25.0	5800	8	750
115	82	110	4200	94	0.8	88	2	30
116	83	62	1500	140	0.6	16	2	20
117	84	590	5800	640	4.6	320	2	30
118	85	340	600	8200	58.0	2100	170	2100
119	86	100	340	960	14.0	3600	2	80
120	87	240	210	1700	32.0	2100	2	100
121	88	170	590	2600	12.0	2000	2	100
122	89	100	1200	1100	9.6	500	8	30
123	90	480	580	1200	56.0	2800	2	100
124	70091	900	370	4900	140.0	5000	2	550
125	70254	60	370	520	6.0	36	2	200
126	55	12	20	150	3.2	16	8	80
127	56	14	32	20	0.6	44	6	30
128	57	60	60	150	2.4	4	4	40
129	58	10	10	22	0.2	2	2	70
130	59	68	350	3700	45.0	360	4	20000
131	60	58	900	1400	8.0	84	2	2600
132	61	500	1000	28000	350.0	760	62	5500
133	62	32	360	520	6.4	320	2	40
134	63	26	190	270	8.8	480	2	50
135	64	150	1600	19000	260.0	110	60	3500
136	65	40	480	21000	28.0	12	12	3800
137	70266	70	330	21000	250.0	12	2	220

22/08/85 (M.W) W.M. DP

BONDAR-CLEGG / BBBACHER 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.
PROJECT: 611 8511-019
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85509
INVOICE#: 6157
DATE ENTERED: 85-12-04
FILE NAME: NOR85509
PAGE # : 4

PRE FIX		SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au	PPM As	
X		99489	118	6.4	1840	500	390	86	Trench 2
X	DDH 5	85851	60	1.6	328	310	560	264	
X		85852	38	2.4	356	960	100	134	
X		85853	28	0.4	276	50	60	304	
X		85854	12	0.2	496	46	20	90	
X		85855	10	0.2	380	128	10	52	
X		81981	58	7.2	2940	4900	120	144	Road
X		81982	14	5.4	560	1660	10	24	
X		81983	78	7.0	3720	11800	70	60	
X		81984	16	3.2	1280	2140	10	24	
X		81985	26	7.4	960	2980	10	22	
X		81986	32	1.4	570	276	10	18	
X		81987 (14)	20	1.8	274	286	10	54	
X		81988	38	1.2	1360	364	10	26	
X		81989	26	4.6	1040	510	120	128	
X		81990	8	0.8	890	278	10	64	
X		81991	18	3.6	380	650	50	58	
X		81992	20	0.4	840	68	10	28	
X		81993	12	2.0	254	690	30	50	
X		81994	8	0.2	68	24	10	26	
X		81995	22	8.0	182	320	10	36	
X		85856	10	1.4	700	418	10	18	
X		85857	10	3.6	440	374	10	24	
X		85858	14	0.6	640	88	10	22	
X	53.04-56.7m	85859 granodiorite	12	14.4	402	2700	50	20	
X		85860	6	5.4	850	272	10	22	
X		85861	24	3.0	1880	170	10	18	
X		85862	26	1.2	2000	230	10	26	
X	DDH # 5	85863	10	6.0	1240	3420	10	24	
X		85864	18	1.2	510	196	10	34	
X		85865	18	0.4	262	28	10	24	
X		85866	8	0.8	680	420	10	28	
X		85867	8	0.4	492	152	10	16	
X		85868	8	1.6	760	900	10	22	
X		85869	10	1.6	810	1020	10	20	
X		85870	24	8.2	580	1820	110	26	
X		85871	8	6.6	4800	4500	10	4	
X		85872	4	1.8	910	940	20	4	
X		85873	14	9.6	2420	2080	20	8	
X		85874	22	6.0	2620	3060	30	8	

CERTIFIED BY : P. Rossbacher

8509-007

ROSSBACHER 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.
PROJECT: 611 8509-007 Mt. Anderson (MW)
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85323
INVOICE#: 5511
DATE ENTERED: SEPT.5.1985
FILE NAME: NOR85323
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM Ba	PPB Au
A	R 73434	1	4	0.6	122	32	860	10
A	73435	1	4	0.6	66	4	840	10
A	73436	23	510	34.6	2820	13600	80	6800
A	73437	1	96	8.2	2480	2200	360	220
A	73438	1	98	11.6	1600	2440	260	540
A	73439	1	12	0.6	128	28	2220	10

10/9/85 MW ✓ WM DP

CERTIFIED BY : R. Rossbacher

SAMPLE NO.	Cu ppm	Zn ppm	Pb ppm	As ppm	Ag ppm	Au ppb	Mo ppm
69676	50	230	46000		3600.0	1400	16
77	52	260	10000		56.0	30	12
78	12	80	7400		140.0	70	6
69679	12	240	960		13.0	1300	2
69604	4	50	60		.8	10	1
5	12	240	2800		11.0	50	1
6	8	200	6000		17.0	80	1
69607	160	800	55000		170.0	300	38
70274	10	150	1700		3.8	10	1
70275	6	600	17000		110.0	50	1
96373	4	46	10	4	.2	10	
74	12	48	8	8	.2	10	
75	6	54	8	4	.2	10	
76	4	10	6	2	.2	10	
77	8	40	10	4	.2	40	
78	6	42	6	4	.2	10	
79	10	58	6	6	.2	10	
80	28	42	10	4	.2	30	
81	10	56	8	10	.2	10	
82	10	38	8	8	.2	10	
83	6	44	6	6	.2	10	
84	16	44	8	14	.2	10	
85	12	50	8	14	.2	10	
86	16	46	12	8	.2	10	
87	16	48	6	8	.2	10	
88	18	56	6	6	.2	10	
89	6	52	8	6	.2	10	
90	38	530	204	50	1.0	40	
91	28	92	16	72	.4	10	
92	34	92	26	52	5.6	20	
93	540	144	64	64	.2	30	
94	14	84	20	24	2.6	30	
95	20	88	920	24	.2	10	
96	8	78	46	22	.2	10	
97	14	44	34	16	.2	10	
98	6	34	40	26	.2	10	
96334	6	48	10	6	.2	10	
96335	52	54	4	14	.6	10	
99476	8	126	20	44	.2	60	
77	26	222	630	90	1.6	130	
78	16	178	156	10	.6	10	
79	50	426	258	20	.6	10	
80	12	194	98	14	.2	10	
81	18	102	22	34	1.4	10	
82	38	550	102	66	5.4	270	
83	76	720	510	90	4.0	40	
84	2200	23400	>40000	262	520.0	5040	
85	10400	33600	>40000	104	>999.9	1740	
86	1740	11800	1980	128	20.8	1580	
99487	46	214	660	86	4.0	340	
85875	38	4800	2480	16	13.0	60	
76	10	6400	4000	6	10.4	60	
77	6	6100	5200	8	8.4	50	
78	6	4100	2000	6	3.8	10	
79	18	1620	1440	28	6.4	10	

SAMPLE NO.	Cu ppm	Zn ppm	Pb ppm	As ppm	Ag ppm	Au ppb	Mo ppm
85880	20	2680	2000	10	12.8	40	
81	14	1000	760	8	3.6	10	
82	10	1180	700	4	5.0	10	
83	22	408	920	22	3.4	10	
84	38	2040	1140	8	15.2	30	
85	90	540	510	2	2.6	50	
86	38	1820	2060	16	11.4	510	
87	16	1740	1900	22	5.8	60	
88	14	76	56	4	1.0	10	
89	18	88	142	4	1.0	20	
90	10	62	20	6	.4	10	
91	8	74	24	2	.6	10	
92	10	66	20	4	.8	50	
93	8	68	72	8	.6	10	
94	6	64	38	8	.4	10	
95	6	68	30	4	.6	10	
96	10	64	64	8	.4	10	
97	4	70	58	8	.2	10	
98	10	66	100	10	.4	10	
99	4	62	46	8	.4	10	
00	8	70	18	6	.4	10	
85901	14	88	20	8	.4	10	
85926	54	1380	1080	24	10.8	10	
27	50	700	5000	6	19.6	10	
28	26	960	142	24	2.4	10	
29	20	530	88	32	1.8	10	
30	2	398	16	26	.6	10	
31	16	302	54	36	1.2	20	
32	20	188	144	90	2.0	40	
33	88	730	940	28	4.2	10	
85934	66	690	78	20	3.4	10	
96401	20	58	24	14	.4	10	
2	50	210	54	10	1.4	10	
3	22	164	26	4	.4	10	
96404	42	116	40	8	.6	10	
99485	15400	>40000	>40000	204	520.0	2040	

APPENDIX 3

PETROGRAPHIC DESCRIPTIONS

John S. Cook / Tony Webs'e

<u>MA 8345</u> Altered Pyritic Dacite with vein of Sphalerite-Galena-(Chalcopyrite-Tetrahedrite)

The rock contains scattered plagioclase phenocrysts in a groundma of quartz-sericite-ankerite-pyrite. Quartz with lesser ankerite and minor pyrite form recrystallized lenses. The rock is cut by a massive sulfide vein dominated by galena and sphalerite, with much less chalcopyrite and tetrahedrite.

phenocrysts	
plagioclase	2- 3%
groundmass + segregations	
sericite	35-40
quartz	25-30
ankerite	17-20
pyrite	2- 3
apatite	0.2
Ti-oxide	0.2
galena	minor
chalcopyrite	trace
pyrrhotite	trace

sulfide vein	
sphalerite	4- 5%
galena	1½-2
chalcopyrite	0.3
tetrahedrite	0.2

Plagioclase forms a few prismatic phenocrysts from 0.5-2 mm in siz Phenocrysts are recognized by prismatic outlines; they are completely replaced by extremely fine grained dense aggregates of sericite.

The groundmass contains irregular patches of extremely fine graine sericite, very fine grained ankerite, and very fine to fine grained quartz, with disseminated pyrite, apatite, and Ti-oxide. Locally, ankerite forms patches of coarser grains up to 2 mm across. Quartz is somewhat concentrated in lenses of slightly coarser grain size than in the rock. Locally sericite is recrystallized to very fine grained muscovite. Pyrite forms subhedral to euhedral disseminated grains averaging 0.05-0.15 mm in size, with a few up to 0.5 mm across. Some coarser grains and patches, especially near the massive sulfide vein, contain fractures partly filled with galena. In this part of the rock, some coarser pyrite grains contain minor to moderately abundant inclusions of galena and lesser chalcopyrite and minor pyrrhotite. Apatite forms acicular grains up to 0.3 mm in length; many are broken on basal partings every 0.05 mm or so. Ti-oxide forms extremely fine grained patches alone or with extremely fine to very fine grained pyrite

The rock contains a few coarser patches of ankerite-quartz.

The sulfide vein is up to 2 mm wide and consists of coarse to medium patches of sphalerite and galena. Sphalerite patches contain abundant chalcopyrite inclusions, mainly less than 0.005 mm in size, with scattered chalcopyrite grains averaging 0.01-0.03 mm across. Some sphalerite patches contain interstitial zones of very fine grained galena and lesser tetrahedrite. Tetrahedrite also forms equant inclusions averaging 0.02 mm in size scattered through some sphalerite grains. At one side of the vein is a patch consisting of very fine to fine grained chalcopyrite and pyrite intergrown with lesser silicates and carbonate. Chalcopyrite also forms local thin veinlets cutting across one sphalerite patch.

MA 8346   Andesite-Basalt Flow

The rock contains plagioclase and altered mafic phenocrysts in a groundmass dominated by plagioclase with lesser chlorite and calcite and minor Ti-oxide and opaque. It is cut by three types of veins: early quartz, early? epidote, and later calcite-(epidote-opaque).

phenocrysts		
plagioclase	5- 7%	
mafic	7- 8	(clinopyroxene or hornblende - completely alter
groundmass		
plagioclase	50-55	
chlorite	15-17	
calcite	8-10	
Ti-oxide	1- 1½	
epidote	1- 1½	
opaque	½- 1	
veins		
quartz-(chlorite)	1	
epidote	0.3	
calcite	2- 3	

Plagioclase forms ragged prismatic phenocrysts avergaing 0.5-0.8 mm in length, with a few tabular phenocrysts up to 1.5 mm long. Dusty opaque inclusions are common. A few show alteration patches of very fine grained epidote with lesser chlorite and sericite.

Mafic phenocrysts are equant to prismatic, averaging 0.5-1.5 mm in size. They are completely altered to irregular patches of epidote-chlorite or less commonly to calcite-tremolite or calcite-chlorite. Epidote/chlorite ratios vary widely, with some phenocrysts dominated by epidote with only minor chlorite, and other, generally smaller ones dominated by chlorite. Some phenocrysts, especially those dominated by chlorite, contain disseminated, very fine grains and clusters of subhedral pyrite.

The groundmass is dominated by lathy plagioclase averaging 0.05-0.15 mm in length, with interstitial patches of finer grained plagioclase, extremely fine grained calcite, and very fine grained chlorite. Ti-oxide forms dusty to extremely fine grained disseminated patches. Epidote forms scattered ragged patches up to 0.15 mm in size; these commonly consist of very fine grained aggregates. Opaque forms very fine disseminations and a few coarser (up to 0.3 mm) irregular clusters associated with chlorite and lesser epidote.

The rock is cut by a vein 0.3 mm wide of very fine grained quartz, with lenses of extremely fine grained chlorite near the centerline.

One discontinuous veinlet 0.2 mm wide consists of fine grained epidote.

Several irregular veinlets up to 0.3 mm wide (average less than 0.1 mm) consist of very fine to locally fine grained calcite, with local patches of epidote and opaque. One of these veins cuts across the quartz vein.

MA 8347 Porphyritic Andesite

The rock contains scattered plagioclase phenocrysts in a groundmass with abundant lathy plagioclase in a groundmass of anhedral plagioclase and patches of biotite, with minor Ti-oxide. The rock contains abundant amygdules of quartz, biotite, or K-feldspar-quartz-biotite.

phenocrysts	
plagioclase	3- 4%
groundmass	
plagioclase	70-75
biotite	15-17
Ti-oxide	1- 1½
amygdules	
K-feldspar	2- 3
quartz	2- 3
biotite	2- 3

Plagioclase forms scattered prismatic to tabular phenocrysts from 1 to 2 mm in size. These are moderately altered to extremely fine grained sericite. Most show subhedral to euhedral outlines.

The groundmass is dominated by lathy plagioclase grains from 0.1-0.3 mm in average length, surrounded by anhedral, finer grained plagioclase and interstitial patches of biotite averaging 0.03-0.07 mm in size. Groundmass plagioclase shows similar alteration to that in the phenocrysts. Biotite is light to medium olive green in color. Ti-oxide forms disseminated, extremely fine grained patches less than 0.03 mm in size.

The rock contains elongated amygdules, mainly flattened in the same orientation. Most are from 0.2-1 mm in size. Three different types are common. Some consist almost entirely of quartz as very fine to fine grained aggregates, commonly with a few prismatic grains up to 0.1 mm long extending inwards from the border of the amygdule. These prismatic patches consist of extremely fine grained biotite. Other patches consist entirely of biotite, ranging from 0.03-0.05 mm in grain size. Grains are intergrown in subradiating clusters. Biotite in amygdules is pleochroic from pale or light olive green to medium olive green (as in the groundmass, but more obvious in coarser grains in amygdules). The third type of amygdule contains anhedral to subhedral, very fine grained K-feldspar along the border, intergrown with quartz towards the interior. Many of these contain cores of extremely fine grained biotite; in some cores consist of minor wispy biotite flakes, in others cores are similar to the biotite-rich amygdules.

At one end of the sample is a late fracture containing limonite, in the fracture and in a weak alteration halo outwards from it.

MA 8348   Altered Fine Grained Diorite

The rock is a strongly altered fine to medium grained diorite i which only minor relic textures are preserved. Mafic grains (hornbler are altered to chlorite-(calcite), in part pseudomorphic, or to patch of epidote-calcite-(chlorite). Plagioclase is altered to extremely fine grained sericite, with or without calcite and minor chlorite. No original plagioclase texture is preserved. The rock contains replacem patches of calcite-epidote-tremolite-plagioclase-quartz-chlorite and veins of a variety of types and textures.

plagioclase	60-65%
mafic grains	20-25
Ti-oxide	2 -3
opaque	trace
alteration patch	5- 7
veins	
1) biotite-calcite	1½-2
2) epidote	0.3
3) calcite-tremolite/clinopyroxene	½- 1
4) late calcite	1½-2

Plagioclase probably formed very fine to fine grained aggregates. It is completely replaced by extremely fine to very fine grained sericite, with or without minor to moderately abundant calcite. Some recrystallized patches of sericite show slightly radiating textures.

Mafic grains show a variety of alteration assemblages, possibly reflecting two original mafic minerals (e.g., hornblende and clinopyroxene). Some are replaced by pseudomorphs of very fine grained chlorite with moderately abundant disseminated Ti-oxide. These probably are after hornblende (based on prismatic outlines of some grains and on absence of good cleavage typical of chlorite after biotite). A smaller numer are replaced by irregular intergrowths of ragged epidote grains and interstitial chlorite and/or calcite. Original mafic grains appear to be from 0.5-1 mm in average size.

Ti-oxide forms mainly irregular patches up to 0.1 mm in size of extremely fine grained aggregates; it may be after sphene, or may represent Ti-oxide released from original mafic grains during alteratio to the Ti-free assemblages of chlorite-calcite-epidote.

Opaque forms scattered grains and clusters of grains averaging 0.0 0.03 mm in size; it generally is altered to hematite.

The rock contains an alteration patch several mm across containing a core of coarse interstitial calcite grains with inclusions of fine ragged prismatic grains of epidote and lesser tremolite, with a thin outer zone containing very fine to fine grains of plagioclase, chlorite, and quartz (the last especially at one end of the patch).

The rock is cut by veins up to 0.5 mm wide of extremely fine grained, pale to light olive green biotite with scattered very fine grains of calcite. These veins are discontinuous, and somewhat irregular in outline.

A few early veins up to 0.15 mm wide consist of extremely fine grained epidote.

One early vein consists of fine to medium grained calcite with ragged prismatic grains of tremolite/clinopyroxene, in part altered to epidote.

The rock is cut by a late vein of fine to medium grained calcite.

APPENDIX 4

DIAMOND DRILL LOGS and SAMPLE RESULTS

NORANDA EXPLORATION COMPANY LIMITED

PROPERTY:	Mt. Anderson	STARTED:	Sept. 24/85	N.T.S.	105 D/4
HOLE NO.:	MA-85-1	FINISHED:	Sept. 24/85	PROJECT NO.	611
BEARING:	190 deg	LENGTH:	60.1 metres	LOGGED BY:	M. Webster/B. Thomas
DIP-COLLAR:	-45 deg	CORE SIZE:	NQ	SHEET	1 of 3

FIELD CO-ORDINATES: L 29+75 E, 20+78N

DIP TESTS

Bearing	Dip	Depth
190 deg	-50 deg	60 m

METRES						METRES			ASSAYS					
From	To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	7.3		OVERBURDEN											
7.3	7.6	~95	GRANODIORITE: F.g. to m.g., K-spar rich interval 35-60%, chloritized hornblende 25%; plagioclase 10%; quartz 10%. Epidote alteration and sericitic. Moderately magnetic.											
7.6	11.9	100	GRANODIORITE: C.g.; Plagioclase ~30%; Quartz ~25%; Hb. (unaltered 15%, altered 20%); K-spar 10%; saussurite along fracture surfaces, chloritized Hb's throughout strongly magnetic. Magnetite appears to be concentrated with euhedral coarser grained Hb crystals. Moderately high fracture density mainly 25 deg from core vertical = orientation. Extensively chloritized zone @ 10.5-11.3 m. Hematite stain (powdery red) and goethite on fracture and slickensided surfaces.											
11.9	12.1		DIORITE: Very chloritized, epidote alteration and sericitization to some degree. Strongly magnetic. Contains <5% Qtz; 10-15% Plag; Hb's mainly chloritized.											
12.1	12.8		GRANODIORITE: Epidote on fracture surfaces. Minor calcite veinlets (stringers).											
12.8	12.9		DIORITE: F.g., chloritized, epidote altered.											
12.9	15.8		GRANODIORITE: C.g.; ~35% Plag; 25% Qtz; 40% chloritic Hb's; <5% K-spar. Chlorite and epidote veinlets locally. Minor calcite veining. Strongly magnetic. Local goethite, hematite, limonitic alteration. Some clay alteration (white). Fractures at 14.6-14.8 m, 15.1-15.8 m		96276	14.6	15.2	.6	40	.2	24	58	8	422
15.8	15.9		DIORITE: F.g., extensive chlorite alteration, hematite staining, rusty brown alteration. Strongly magnetic.											
15.9	24.4		GRANODIORITE: C.g. with 3-4 cm intervals of intensive chlorite alteration. Plagioclase sericite. Rusty yellow brown alteration. Chloritic hornblende. Local calcite stringers. Jarosite alt'n, hematite alt'n. 21.9 m: quartz stringer bearing minor galena/at, .5 cm width. Alteration - hematite, goethite; sericitized and chloritized extensively throughout, epidote alt'n.	1-3% py in small lens of magnetite	96277	21.9	22.1	.2	10	.4	38	60	6	98
24.4	25.3		GRANODIORITE to QUARTZ DIORITE: Chloritic, c. gr., moderate sericite alt'n, pyrite dissem. along fracture surfaces.	~2% py diss. in fractures	96278	24.4	25.3	.9	10	.2	22	58	6	84

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
25.3	30.8		GRANODIORITE TO DIORITE: C.g., chloritic, calcite stringers throughout. Chlorite and minor epidote concentrated on fracture surfaces. Clay and sericite alt'n. Trace py. Hematite alt'n on fracture surfaces. Strongly magnetic.	2% py	96279	30.25	31.4	1.15	20	.2	50	60	6	28
30.8	33.56		SHEAR ZONE: Dark green, c.g. granodiorite? Moderately magnetic. Fractures and slickensides throughout.	3-5% py on fractures	96280	32.5	33	.5	10	.2	16	62	14	28
33.56	33.8		FAULT ZONE: Very broken up, clay and chlorite alt'n, clay gouge.	Trace py										
33.8	37.8		GRANODIORITE: C.g., extensively altered (chlorite and sericite). Minor hematite alt'n. Abundant calcite stringers. Magnetic.	Trace py										
37.8	38.6		GRANODIORITE: Shear zone at ~38.4-38.8 m, 20 deg. Pyritic along slickensides, chloritic. Sample at 37.8-38.4 chloritic, sericitic, c. gr. granodiorite-qtz diorite. Goethite and hematite alt'n. Strongly magnetic.		96281	37.8	38.4	.6	10	.2	28	60	6	26
38.6	39.3		SHEAR ZONE: Grey, green powdery clay alteration.	Py cubic form in stringers & on fracture surfaces ~1%	96282	38.4	48.8	.4	70	.4	14	62	4	34
39.3	49.2		Brecciated, altered-chlorite, saussurite; abundant shears-slickensides. Calcite veins throughout <.5 cm. Very broken up. Moderately chloritic granodiorite, c.g. diorite intervals. Stringer pyrite and dissem. (especially on fractures). Abundant siliceous intervals. Clay (grey-green) present in shear zone areas.	Massive sulphide lens, py, pyrrhotite?										
			Siliceous zone in chloritic granodiorite interval. Lens of galena, pyrite, finely dissem. and local blotches.		96283	39.6	40	.4	60	2.4	10	68	16	16
			DIORITE: Chlorite altered, sericitic. Galena & py crystals with quartz veinlet <1.5 cm.	5% py, up to 1-2% Ga, poss. pyrrhotite (dissem. & frac)	96284	42.1	43	.9	20	7.0	1920	3100	134	26
			Granodiorite chloritic. Dissem. sulphides throughout. Silicified and sericitic to some degree. Minor fractures filled with py and possibly galena.	Py 10% local Ga 1%	96285	43	43.6	.6	10	2.0	64	264	34	18
			Granodiorite chloritic, slickensided siliceous, clay altered. Mainly fracture py.	Py cubes & minor Ga, 1-2% each	96286	44.95	45.75	.8	20	.6	26	70	14	18

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			Shear Zone: chloritic, sericitic interval with grano-diorite-diorite. Calcite veinlets throughout. Fracture py.		96287	45.5	46.25	.75	100	1.2	24	66	10	354
			Siliceous brecciated zone (proximal to small qtz vein). Very chloritic & sericitic. Minor epidote alt'n. Minor galena and pyrite concentrated on fracture surfaces and throughout stringers.	Possible Py and Ga	96288	47.2	47.75	.55	100	7.0	1840	1620	92	442
			Quartz vein (.75 cm) with siliceous zone. Calcite veinlets present (assoc. with qtz).	Ga 2-3% Py 1%	96289	47.75	47.9	.15	280	35.0	202	6900	570	152
			Extensively altered, clay, chlorite. Siliceous zone.	1% Py, Ga, finely diss.	96290	47.9	48.1	.2	50	3.0	40	92	22	222
			Siliceous qtz diorite - .75 cm white qtz veinlet cross-cuts interval, calcite veins possibly assoc. Galena & py in veinlet and locally as finely dissem. blebs. Qtz appears brecciated upward through sample interval. Mineralization decreases toward bottom of interval.		96291	48.35	49.2	.85	210	2.2	166	222	36	268
49.2	56.1		ANDESITE DYKE or FLOW: Lt. to med. grey-green, f.g., extensive chlorite alt'n, somewhat brecciated. Abundant slickensides (~20 deg from core vertical). Finely dissem. sulphides throughout.		96292	53.65	54.2	.55	10	1.2	32	76	8	74
56.1	56.5	50	FAULT ZONE: Chlorite and clay altered. Poor recovery. Granodiorite? Lower contact of dyke?	1% Py diss.	96317	56.1	56.5	.4	100	2.0	132	120	28	18
56.4	60	100	GRANODIORITE-QUARTZ DIORITE: Chloritic, minor epidote; hematite stain on fracture surfaces, siliceous.	Tr Py diss.										
	60		END OF HOLE											

N O 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

PROPERTY: Mt. Anderson
HOLE NO. MA-85-2
BEARING: 190 deg
DIP-COLLAR: -60 deg

STARTED: Sept. 24/85
FINISHED: Sept. 25/85
LENGTH: 73.46 metres
CORE SIZE: NQ

FIELD CO-ORDINATES
L 29+75 E
20+78N

DIP TESTS

Bearing	Dip	Depth
190 deg	-58 deg	73 m

N.T.S. 105 D/4
PROJECT NO. 611
LOGGED BY: M. Webster/B. Thomae
SHEET 1 of 3

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	4.7		OVERBURDEN											
4.7	9.6	100	GRANODIORITE; coarse grained, clay altered, abundant narrow fractures, commonly Fe oxide stain, hematite alt'n, chloritic alt'n moderate. Hb (chl alt'n) 25%, Plag 25%, Qtz 35%, K-spar 10%, opaques mt, Py 5%. Xenolithic diorite fragments up to 10 cm diam.											
9.6	10.3	35	FAULT ZONE: very broken up, clay altered, Fe oxide rich granodiorite, poor recovery and contact to dyke not clear.											
10.3	10.5	100	MAFIC DYKE: dark green, porphyritic, chloritized Hb crystals 2-3 mm, qtz lens 1 x 2 cm, silicified, chlorite-goethite at margins, abrupt lower contact at 40 deg to granodiorite, abundant hematite stain.	Tr. Py										
10.5	19.6	90	GRANODIORITE: c.g., clay altered, chlorite, sericite, limonite abundant. Epidote on fracture surfaces, angles vary 40-15 deg. Fracture zones 13.1-13.8, 17.2-18.4 m. Diorite phase f.g., large white plag crystals, chlorite alt'n of Hb from 16.4-16.48 m.											
19.6	19.7	100	MAFIC DYKE: As above, no visible sulphides.											
19.7	20.5	100	GRANODIORITE: As above, intense chlorite alt'n of Hb, locally magnetic, minor saussuritization.											
20.5	20.6	100	MAFIC DYKE: As above, no visible sulphides.											
20.6	27.55	100	GRANODIORITE: As above, diorite phases, narrow mafic stringers <1 cm wide, no visible sulphides. 22.8-22.9, 26.1-26.2: SHEAR ZONES: granular, clay altered granodiorite, slightly magnetic, minor calcite, no associated qtz veins or silicification, poor recovery, dip not determined.											
25.55	27.7		Qtz veinlets <1 cm wide containing minor py, contacts chloritic with minor calcite. Py f.g., euhedral, dissem	1% Py	96293	27.55	27.7		10	3.0	620	102	6	28
27.7	27.8		MAFIC DYKE: fine to med. grained, non-porphyritic, dark green chloritic, partial sericitic alt'n, no visible sulphides or calcareous alt'n.											
27.8	37.8		GRANODIORITE: (as above), minor diorite phases, narrow mafic dyke (stringers) silicified zones. 27.8-31.7: qtz stringers and silicification, 28.1-28.2 strong chloritic alt'n, local hematite, pyrite. Magnetic in non siliceous granodiorite host. Minor calcite crystals in some qtz stringers.	Py 1% 30.4-30.7	96294	31.4	31.7	.3	120	1.2	88	62	8	28

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			31.7-31.8: fracture, chlorite, clay alt'n, minor calcite crystal intermittent along fracture surfaces.	Tr. Py										
			31.8-32.6: lower fracture contact, py cubes on fr. surface, chlorite, clay altered, slickensides, very little silica.	1% Py	96295	31.8	32.6	.8	20	1.0	158	58	6	18
			33.7-33.95: Mafic dyke, non-porphyritic, minor calcareous alt'n, hematite, no visible sulphides.											
			Fractures at 31.7, 33.4, 35.6, 37.0 m. Poor core recovery, zones very narrow 1-3 cm wide. No visible sulphides or distinct silicification.											
37.8	41.2		DIORITE: c.g., silicified, saussuritic plag, chloritic Hb, dark grey qtz crystals, strongly magnetic, local zones of silicification with minor calcite, py dissem. on fracture surfaces.											
			37.8-38.9: Diorite; multiple hairline quartz filled fractures, pyrite cubic form, calcite (5%) associated with fractures.	2% Py	96296	37.8	38.9	1.1	10	.8	66	62	6	12
			38.9-39.2: Quartz vein; pyrite concentrated along contact, minor chl crystals, white massive qtz, 5 cm wide vein @ 15 deg, minor calcite.	2% Py	96297	38.9	39.2	.3	20	3.6	8	84	12	20
			39.2-41.2: Diorite; multiple hairline qtz-calcite stringers, chloritic hornblende, minor epidote, minor f.g., dissem. py.	1% Py	96298	39.5	40.3	.8	10	1.2	30	64	8	16
41.2	52.4		GRANODIORITE: c.g., chloritic Hb, siliceous, dioritic phases, local qtz-calcite stringer zones, pyrite along contact or fracture surfaces, 1-2% dissem. euhedral, f.g. pyrite, local intense clay alt'n as noted.	Tr. Py										
			42.3-42.45: Quartz stringer, white massive quartz, chloritic granodiorite fragments included, contact uneven, vein 8 cm wide, 2% dissem. py along upper contact.	Up to 2% Py	96299	42.3	42.45	.15	10	1.0	46	38	8	32
			43.4-44.0: intense clay alt'n, 5% hematite, minor goethite.											
		50	44.0-44.2: intense chlorite-clay alt'n, pyritic lens 2 cm diam x 4 cm massive, discontinuous.	5%	96300	44	44.2	.2	120	2.6	154	384	96	32
			44.2-45.0: intense clay alt'n, 5% hematite, minor goethite.											
			48.5-48.9: multiple qtz stringers, pervasive silicification, py and minor galena dissem. within veinlets, clay alt'n of plag. chl. Hb. 48.5: 1.5 cm qtz veinlet, 2% py, 2% ga 48.55: 1.0 cm wide qtz veinlet, 2.5% py, 2.5% ga 48.8: 0.75 cm qtz veinlet, 1% py, 1% ga 48.9: 0.75 cm qtz veinlet, 2% py, 2% ga	Avg. 1% Py. 1% Ga	96301	48.5	48.9	.4	10	7.2	1900	1700	114	22

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
52.4	53.5		MAFIC DYKE: grey, f.g. saussеritic matrix qtz veinlets brecciated fragments throughout, strongly magnetic. Clay alt'n along margins, minor dissem. py.											
			52.85-53.0: Alteration zone, highly fragmented, 60% clay with strong silicification from 52.85 to 53.05 m. Very fine grained, dissem. pyrite.	3-5% Py	96302	52.85	53	.15	50	.8	12	66	8	46
53.5	76.5		QUARTZ DIORITE-GRANODIORITE: c.g., silicified, chloritic hornblende, 1% dissem. subhedral py, local quartz-calcite stringers, clay alt'n and fractures.											
			53.5-54.0: strongly clay altered diorite, abundant manganese stain, heavily fractured upper contact of 1.5 cm wide mafic dyke.	1% Py	96303	53.5	54	.5	50	6.2	920	182	12	54
			58.0-58.9: Narrow qtz stringers max. .75 cm wide containing 1-2% dissem. py, minor clay and chlorite alt'n along contacts, host qtz-diorite.	Avg. 1% Py	96304	58	58.9	.9	10	4.2	446	140	16	18
			58.9-59.8: Silicified diorite, pervasive chloritic alt'n, pale green colour, feldspars completely altered to clay, 1% dissem. py.	1% Py	96305	58.9	59.8	.9	20	1.8	122	66	8	14
		50	60.0-66.8: Fault Zone; extensive chl, clay alt'n of granodioritic host, poor core recovery, extremely friable, non-consolidated, <1% Py in small pebbles 2-3 cm dia. in core.											
			59.95-61.6: Mafic dyke, 3 narrow qtz stringers along bottom contact containing up to 2% dissem. py and minor galena.	2% Py, Ga	96306	59.95	61.6	1.65	260	4.4	730	630	62	20
			70.1-72.1: Clay altered granodiorite, minor hematite, pyrite.	<1% Py	96307	70.7	72.1	1.4	10	.6	56	58	6	26
	76.5		END OF HOLE											

N O 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

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

STARTED: Sept. 29/85
FINISHED: Sept. 30/85
LENGTH: 121.10 metres
CORE SIZE: NQ

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

DIP TESTS

Bearing	Dip	Depth
135	-50	92.3 m

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

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

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			13.31-13.33: Qtz Vein; intense clay, sausserite 4 cm on either side of vein, vein centre filled with white opaque fine gr. silica (?) <.25 cm wide, unevenly filled <32 deg.		96357	13.25	13.4	.15	10	.2	18	46	6	8
			14.0-14.01: Qtz Vein <42 deg; clay alt'n 4 cm either side of vein, one Py cube .25 cm dia. within vein.		96358	13.88	14.13	.25	10	.2	6	36	6	2
			15.8-16.45: Intense clay alt'n, 2 one cm wide qtz vein at 16.0, 16.25, minor dissem Py 2% in host. Minor chlorite alt'n.		96359	15.8	16.45	.65	10	.2	6	42	6	2
			21.7-21.8, 21.85-22.0: Quartz veins at angles 35, 50 deg., chlorite film along margins, clay alt'n 5-10 cm into host.		96360	21.55	22.3	.75	10	.2	4	38	78	2
			25.0-25.03: Quartz vein, chlorite and 2% very f.g. chlorite and Py along clay alt'n margins, saussseritization of feldspar in host.		96361	24.8	25.1	.3	70	.2	12	46	20	2
			26.4-26.41: Quartz vein (as above); <35 deg											
			26.95-26.97: Quartz vein (as above); <47 deg											
			27.4-27.6: Mafic dyke (as above); minor 2 cm wide marginal bleaching, clay alt'n of host.		96362	27.4	27.6	.2	20	.8	10	60	192	10
			29.0-29.01: Quartz vein (as above); <36 deg											
			29.6-29.61: Quartz vein (as above); <30 deg											
			34.87-35.95: Shear Zone; chloritic, brecciated and heavily fractured granodiorite, minor hematite, <1% dissem. Py		96363	35.0	35.95	.95	10	.2	10	64	4	2
			36.04-36.07: Quartz vein (as above); <52 deg		96364	35.95	36.2	.25	10	.4	8	38	6	2
			40.35-40.66: Siliceous zone with 5-6 <.5 cm wide qtz veins bleaching, clay alt'n 3 cm wide in host granodiorite. Pervasive chlorite alt'n, no visible sulphides		96365	40.35	40.66	.31	10	.2	6	40	6	2
			40.55-40.56: 1 cm wide qtz vein with 4 mm dia. purple fluorite crystal at centre of vein											
			40.80-41.45: Quartz vein <1 cm wide at 40.95, 45 deg; 41.03 m, 42 deg; 41.05 m, 60 deg; 41.08 m, <30 deg; 41.25 m, <36 deg		96366	40.95	41.45	.5	10	.2	6	34	6	2
			41.7-41.9: Aplite dyke; 10 deg, 2-3 cm wide, clear contact unaltered margins, 1% dissem Py within dyke, light pink, fine grained.		96367	41.7	41.9	.2	10	.2	8	30	12	2
			44.7-44.8: Porphyritic basalt dyke or xenolithic fragment, contacts clear, very little clay alt'n, non-magnetic, 1% dissem Py, dark green.											

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			45.34-45.35: Quartz vein; ingrowing crystal cavities 0.25 cm wide in places along vein centre, manganese coating, laminated with crystalline vein centre 0.5 cm wide											
			46.44-51.46: Granodiorite cut by numerous qtz stringers 46.45 - 0.25 cm wide qtz vein, minor clay alt'n, chlorite film on contact margin, laminated, crystalline vein centre, no visible sulphides <25 deg. 46.75 - 0.5 cm wide qtz vein (as above) <20 deg 47.47 - 1.0 cm wide qtz vein, <20 deg 47.90 - 0.25 cm wide qtz vein, <18 deg 48.5 - 0.25 cm wide qtz vein, <45 deg 50.60 - 0.25 cm wide qtz vein, <37 deg 50.70 - 0.25 cm wide qtz vein, <40 deg 51.13 - 0.25 cm wide qtz vein, <135 deg 51.27 - 0.25 cm wide qtz vein, <40 deg											
			51.46-51.53: 2.5 cm wide qtz vein, <22 deg, as above		96368	51.46	51.6	.14	10	.2	6	28	22	2
			54.45-54.65: 1.5 cm wide qtz vein at 45 deg, 1-2% hematite and at along margins, contact vuggy & weathered out, chlorite and clay alt'n 2-3 cm in host, laminar silica clear and white opaque at margins which grades over 1.0 cm to crystalline qtz coated with black film in open cavities less than 0.25 cm wide at vein centre, up to 5% v.f.g. dissem Py along margins.		96369	54.45	54.65	.2	10	.2	8	32	8	2
			57.9-58.1: Pervasive clay, chlorite alt'n, 5% hematite & iron oxide stain, 2% v.f.g. disses Py in granodiorite		96370	58.0	58.5	.5	10	.2	8	38	4	2
			58.38-58.39: 1.0 cm wide qtz vein at 52 deg											
			60.06-60.09: Mafic xenolith, angular fragment chlorite rich, minor clay alt'n, clear margins.											
			61.02-61.23: at 61.04 0.25 cm wide laminated qtz vein; 96 deg 61.08 - 0.25 cm wide laminated qtz vein; 50 deg 61.18 - 0.25 cm wide laminated qtz vein; 35 deg		96372	60.93	61.33	.4	10	.2	8	36	6	4
			61.5-61.51: 1.0 cm wide hematite rich qtz vein; 45 deg increased chlorite alt'n up to 30% of host, 100% clay alt'n of feldspars, pervasive silicification alt qtz grains anhedral white to light grey, <1% dissem Py		96373	61.33	61.63	.3	10	.2	10	46	4	4
			61.75-61.80: Mafic xenolith, porphyritic angular fragment 4 cm dia.											
			62.20: 0.5 cm wide chlorite rich qtz vein; <70 deg											
			62.30-62.36: Granodiorite; intense saussuritization of feldspars to light green, qtz grains anhedral pervasive silicification, 1% dissem Py											
			62.36-62.50: Clay light grey, fine gr. clay, no apparent vein or fracture or associated host rock alt'n, white on drying.		96374	62.36	62.8	.44	10	.2	8	48	12	8

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			63.65-63.80: 1.5 cm wide qtz vein at 90 deg.											
			64.0-64.12: Mafic xenolith porphyritic angular fragment dark green chlorite rich f.g. matrix, 1% dissem Py, upper contacts slightly clay altered.		96375	63.94	64.2	.26	10	.2	8	54	6	4
			64.31-64.41: 2 cm wide qtz vein at 65 deg, vein centre filled with 1 cm wide opaque white, f.g., silica laminated centre, chlorite/clay alt'n 3 cm wide in host.		96376	64.31	64.41	.1	10	.2	6	10	4	2
			67.03-67.09: 6 cm wide qtz vein at 30 to 45 deg laminar vuggy, weathered out contact margins, chlorite film & intense alt'n at margins, minor iron oxide stain. Light green to white opaque silica vein filling 2 cm wide, laminated silica margin texture, no visible sulphides or fluorite.		96377	67.0	67.23	.23	40	.2	10	40	8	4
			67.13-67.15: 0.5 cm wide qtz vein at 48 deg, laminar minor chl, 1 cm wide clay alt'n in host granodiorite.											
			67.70: 0.25 cm wide chlorite rich silica stringer/ fracture at 48 deg, no sulphides.											
			68.56-68.58: 2 cm wide qtz vein at 45 deg, intense saussaritization of host for width of sample.		96378	68.5	68.7	.2	10	.2	6	42	6	4
			Quartz veinlets 0.25-0.5 cm wide at: 71.80 - 30 deg 72.02 - 30 deg 73.27 - 45 deg 73.34 - 50 deg 73.37 - 55 deg											
			73.0-73.8: Intense saussaritization and silicification of granodiorite. Light green feldspar 30%, anhedral qtz grains 35%;, chloritic Hb 25%, epidote, chlorite, minor Py and others 10%.											
			73.62-73.64: 1.0 cm wide qtz vein at 45 deg, 1% dissem Py and 1% dissem hematite along contact margins.											
			73.8-75.10: Multiple (10-12) very narrow (<0.25-0.5 cm wide) qtz stringers at low angles to core, avg. 15 deg, minor calcareous alt'n and chlorite along contact margins, laminated vein margins infilled by white, f.g., opaque silica, minor f.g. dissem Py along margins. Clay chlorite alt'n 1-2 cm from vein in host granodiorite.		96379	73.8	74.3	.5	10	.2	6	58	10	6
					96380	74.3	74.66	.36	30	.2	10	42	28	4
					96381	74.66	75.1	.44	10	.2	8	56	10	10
			75.21-75.3: Mafic xenolith, chlorite rich porphyritic dioritic angular block. Clear unaltered contact, <1% Py Non-magnetic.											
			75.88-75.89: 1 cm wide qtz vein at 45 deg.											
			76.11-76.15: 2 - 4 mm wide qtz stringers joined to silica mass 2 x 4 cm in dia., amorphous silica 2 cm wide to finely crystalline silica lining a 2-3 mm wide open cavity, lined with a black film, no visible sulphides.		96382	76.05	76.2	.15	10	.2	8	38	10	8

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
			Narrow quartz stringers less than 0.25 cm dia. at 79.23 79.29, 79.37 m											
			79.32-79.34 and 79.35, 79.37: Two 2 cm wide quartz stringers, 2-3 mm wide chlorite alt'n of host, minor clay alt'n in host. One 10 mm dia. euhedral, purple fluorite grain in upper stringer, no visible sulphides.		96383	79.05	79.7	.65	10	.2	6	44	6	6
			79.49-79.52: 3 cm wide quartz vein, cloudy to white opaque v.f.g. silica with 2 weathered out py(?) vuggys stained with Fe oxides, vuggy chl rich contact to chl altered granodiorite host 2-3 cm from contact. One euhedral fluorite grain 10-12 mm dia. in vug at centre of vein within amorphous grey transluscent qtz, minor clay alt'n at margins.											
			Narrow fractures some containing opaque silica & minor chlorite less than 0.25 cm wide at 80.05, 80.47, 80.63, 80.82, 81.07, 81.12, 81.34, 81.50 m.											
			82.0-82.10: Intense chlorite alt'n and silicification of granodiorite, green colour also attributed to 50-80% saussaritization of feldspar.											
			84.0-8.2: Slight increase of fracture frequency to approx. every 10 cm, no increase in silicification or sulphide content.											
			87.45-87.47: Quartz veinlet, clay margins and slight bleaching and increased clay alt'n of host 3 cm either side of veinlet.											
			87.56-92.5: Up to 80% saussaritization of feldspar, pervasive silicification and up to 5% dissem. py throughout host. Epidote and chl common in silica stringers as listed below.											
			88.13-88.15: Qtz vein crystalline clear vein centre, 1-2% dissem py along margins at 40 deg		96384	88.1	88.27	.17	10	.2	8	44	16	14
			88.2-88.24: Mafic dyke 135 deg clear contact very little host rock alt'n, no visible sulphides											
			88.27-89.2: Fracture zone; silicified, heavily clay altered granodiorite cut by multiple narrow (less than 0.25 cm wide) fractures commonly filled with small chlorite crystals and intermittently lined with amorphous white opaque silica, minor epidote and dissem py along contacts.		96385	88.27	88.68	.41	10	.2	8	50	12	14
					96386	88.68	89.2	.52	10	.2	12	46	16	8
			89.20-89.60: 2 cm wide qtz vein containing dendritic manganese, limonite and hematite, 1-5% dissem py and 40% chlorite along contact margins at 60 deg.		96387	89.2	89.6	.4	10	.2	6	48	16	8
			91.50: 0.25 cm wide epidote filled fracture, slight bleaching of host 2 cm from contact.		96388	91.4	91.9	.5	10	.2	6	56	18	6
			91.82-91.88: Mafic dyke at 60 deg.											
			94.78-94.80: Chloritic fracture at 45 deg, minor clay alt'n 2 cm from contact.											

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			97.16-97.21: Multiple qtz stringers less than 0.25 cm wide at various angles, minor clay and chlorite alt'n. Calcareous alt'n 20% along fractures/contacts.		96389	91.1	101.0	.9	10	.2	8	52	6	6
			100.52-101.18: Qtz veinlets; 0.5 cm wide at 100.56, 100.62, 100.65, 100.69, 100.76 each comprised of white opaque amorphous silica with weak marginal clay and chlorite alt'n.											
			103.4-103.7: Bleached silicified zone within grano-diorite/diorite host, gradual transition to diorite at 106.2 m.											
106.2	106.9		DIORITE: 80% saussuritization of feldspars to light green colour, 1-2% dissem py, narrow qtz stringers ranging from 0.25-0.7 cm wide occur at 106.3, 106.4, 106.7, 106.8 at 23-28 deg.		96320	106.2	106.9	.7	10	.2	18	42	8	4
			106.5-106.51: Mafic dyke at 45 deg 1 cm wide, cut by qtz stringer (younger), local clay alt'n.											
			106.9-107.5: Diorite as above with fewer qtz stringers, pervasive silicification, 1-2% py.		96321	106.9	107.5	.6	10	.2	18	50	8	2
			107.5-107.92: Altered diorite; intense clay alt'n feldspars completely altered to clay, 10% hematite and Fe oxide stain, manganese stain along fractures & through-out host, silicification increases from 30% at 107.5 to 80% at 107.92, 20-30% chlorite throughout, qtz crystals smokey grey to opaque in colour, minor dissem py.		96322	107.5	107.92	.42	10	.6	20	38	40	2
			107.92-109.72: Qtz vein; agate laminar and crystalline silica textures. Agate; clear, buff and white amorphous laminated silica 3-4 cm thick lines, vein margins and dioritic xenoliths. Radial clear to slightly cloudy silica blades grow perpendicular to laminae inward to vein core and around coated xenoliths. Crystals 2-4 cm long up to .25 cm wide commonly Fe or Mn stained. Open cavities 1-2 cm dia. found within intergrowing radial clusters. Fluorite grains light green, angular, cubic 2-10 mm dia. occur at laminar silica or agate and crystalline radial crystal contact as well as along contact to host diorite in minor amounts. Diorite xenoliths: angular 1-10 cm dia. intensely clay and chl altered, med. grained less than 1% dissem py.		96323	107.92	108.24	.35	10	.4	50	10	12	2
					96324	108.24	108.62	.38	10	.2	26	8	12	2
					96325	108.62	108.95	.33	10	.6	128	8	12	2
					96326	108.95	109.3	.35	10	.4	26	10	8	2
					96327	109.3	109.72	.42	10	.6	26	22	18	2
			109.72-110.22: Diorite intensely clay altered, heavy manganese and iron oxide stain. Green fluorite crystal blebs 1x2 cm within narrow agate structure, no visible sulphides.		96328	109.72	110.22	.5	10	.4	26	6	8	2
			110.22-110.37: Quartz vein agate, minor crystalline qtz 1.0 cm wide at vein centre, no fluorite found.		96329	110.22	110.37	.15	20	4.2	70	10	8	2

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			110.37-111.53: Contact Qtz vein to altered Granodiorite		96330	110.37	110.51	.14	90	.8	24	18	8	4
			intense clay alt'n, loosely consolidated to friable		96331	110.51	110.77	.26	10	.2	16	48	12	24
			textures 20-50% sericite, Fe oxides, manganese stain &											
			clays. Less than 1% dissem py, chlorite 10% along con-		96332	110.77	111.13	.36	10	.6	12	46	6	10
			tact, no visible sulphides along contact. Complete		96333	110.13	111.53	.4	10	2.2	26	32	10	12
			sausseritization of feldspars. Qtz vein 4 cm wide sub-											
			parallel to core from 111.8 to 111.4 as 96323-27.											
111.5	121.9		Silicified Granodiorite to Diorite; c.g. with inter-		96334	111.53	102.03	.5	10	.2	10	48	6	6
			mittent qtz filled fractures up to .75 cm wide, mod-		96335	121.1	121.4	.3	10	.6	4	54	52	14
			erate to intense saussеritization, chloritic alt'n,											
			1-2% fine grained euhedral py dissem throughout.											
			Alt'n decreases toward end of hole.											
	121.9		EOH											

NORANDA EXPLORATION COMPANY LIMITED

PROPERTY: Mt. Anderson
HOLE NO. MA-85-4
BEARING: 010 deg
DIP-COLLAR: 45 deg

STARTED: Sept. 29/85
FINISHED: Sept. 30/85
LENGTH: 75.29 metres
CORE SIZE: NQ

FIELD CO-ORDINATES
L 23 + 25E
20 + 87N

DIP TESTS

Bearing	Dip	Depth
010	-53.5	70 m

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

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
2.0	10.3	85-90	GRANODIORITE: c.g., mottled black and white with intervals of Fe oxide staining. Hornblende (20%) chloritic. Manganese staining on fracture surfaces. Regular intervals of clay alt'n. Locally magnetic. Minor epidote alt'n, minor sericitization, local fracture zones avg. less than 0.25 m wide. Qtz 30%, Plag 35%, chloritized and unaltered Hb 30%, K-spar 5%.	No sulphides visible										
10.3	11.2	100	Fe-OXIDE STAINED GRANODIORITE: c.g. (same composition as above), abundant goethite throughout especially on fracture surfaces. Minor jarosite alt'n on fractures. Moderately magnetic.		96308	10.3	11.2	.9	10	.6	58	202	6	28
11.2	12.5	90	SILICIFIED, ALTERED GRANODIORITE: pitted surface with goethite lining vugs. Generally very gossanous. Minor jarosite and chocolate brown limonites. Tiny lens of f.g. galena. Pre-existing sulphides estimated at up to 5% or greater over whole interval. Slightly magnetic. Unit is quite broken up toward 12.5 m, unit is generally quite friable.	Local f.g. Ga in .5 cm lens & tr. Py locally	96309	11.2	12.5	1.3	10	.8	186	246	6	22
12.5	18.4	98	GRANODIORITE: c.g., as described in first unit. Light to moderate Fe-oxide stain. Fracture. Manganese staining on fracture surfaces. Abundant epidote veinlets throughout. 17.6-17.7: silicified zone. Iron oxides on fracture surfaces.	Local trace										
18.4	22.3	85	GOSSANOUS GRANODIORITE: with unaltered fine grained intervals. Rusty zones are very pitted and friable. Vuggy texture (up to 3 cm width). Local py lenses (.75 cm and stringer 0.2 cm (1% of unit, jarosite and goethite alt'n throughout. Fine grained muscovite flakes common in surface pits and as fracture coatings. Py ~2% finely dissem through rock and concentrated on fractures. Ga ~1-2% occurs in vugs & dissem throughout rock, usually in conjunction with py.	Local f.g. Ga & Py <1%	96310	18.7	19.7	1	10	1.8	900	320	6	22
					96311	19.7	21.8	1.1	10	5.4	1680	244	12	22
22.3	22.5	~90	MAFIC DYKE: no sharp contact, very broken up. Fine to m.g. Hb grey green-med. grey green. Slightly magnetic. Rusty weathering. Somewhat pitted surface, pervasive chloritic alt'n.	No sulphides visible										
22.5	43.0	80	GRANODIORITE: as described in first unit. Gossanous along fractures. Manganese staining, orange colour in first 0.3 m due to Fe oxide.											
		65	23.3-29.4: Shear zone - loosely consolidated, rusty coloured, granodiorite with pitted surfaces and abundant clay alt'n. Goethite and jarosite alt'n.											

NORANDA EXPLORATION COMPANY LIMITED PROPERTY: Mt. Anderson HOLE NO. MA-85-4 SHEET 2 of 4

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			24.2-25.3: very gossanous, py grain casts containing Fe oxide boxwork <4 mm dia.	2% Py & casts	96312	24.2	25.3	1.2	10	1.0	114	252	18	20
			25.3-26.4: Py & Ga occur dissem (v.f.g.) in very tiny stringers or fracture planes.	1% Py & 1% Ga	96313	25.3	26.4	1.1	10	3.6	1840	356	8	30
			26.4-27.4: Py &Ga occur dissem in tiny veinlets concentrated along fracture surfaces. More consolidated core.	1.5% Py & 1% Ga	96314	26.4	27.4	1	10	.8	162	260	8	30
		25	29.4-32.2: Fault Zone											
			29.4-30.8: Heavily clay altered granodiorite with mafic phases. Very poor recovery, no visible sulphides											
		0	30.8-31.7: No core recovered over this interval.											
		33	31.7-32.2: As 29.4-30.8 interval, no visible sulphides.											
		60	32.2-33.0: Qtz vein, rusty brown to white, v.f.g. pitted surface, gossanous. Poor recovery. Ga @ ~32.25 m up to 50% of core over .05 m. Also solid Ga gravel size rounded chunk recovered. Top & bottom of qtz vein is sheared; pliable clays obscure contact margins, clay alt'n pervasive through host granodiorite 2 cm either side of contact.	Blebs of Ga & 1 cm wide vein give sample ~3-4% Ga overall, Possible tr. Py	96315	32.2	33	.8	1200	200.0	>40000	402	82	6
		95	33.0-43.0: local fracture zones in granodiorite, minor jarosite and goethite on fracture surfaces & decreases toward end of hole.		96316	33	34	1	10	1.6	468	1260	26	6
			33.0-33.03: yellow brown clay											
43.0	46.0	100	GRANODIORITE-QTZ-DIORITE: c.g., chloritic and sericitic gradational phase change to diorite from 40 m. Extensive white clay alt'n. 44.5: some py cubes locally and on fracture surfaces Mafic xenoliths or fraction of dyke material up to 5 cm width		96318	43.4	44.5	1.1	30	3.2	218	118	42	2
46.0	47.5	100	MAFIC DYKE: dark green to dark grey, f.g. matrix with c.g. quartz phenocrysts & plagioclase. Moderately chloritized, sericitized. Epidote on fracture surfaces. Moderately magnetic. Minor Fe oxide on fracture surface (Up to 30% qtz phenocrysts)		96319	46	47.5	1.5	20	.6	22	40	8	2
		100	47.5-47.95: fractured zone, rusty brown to yellow oxides on fracture surfaces. Dark green-grey overall colour due to chlorite alt'n. Gradational contact to granodiorite from 47.95-48.1 m.	Tr. fracture Py visible	96390	47.5	48	.5	40	1.0	204	530	38	50
48.1	52.1	100	GRANODIORITE: c.g. moderate to extensive epidote alt'n and veinlets, moderate chlorite alt'n. Hb's partially altered to chlorite ~30%. Hb subhedral to euhedral crystals up to 1 cm length. Py finely crystalline occurs	1.5% Py	96391	48.7	49.2	.5	10	.4	16	92	28	72
			in blebs throughout rock and is concentrated on epidote altered fracture surfaces. Chlorite dioritic xenoliths present, 4 cm dia., <2% of interval. Also epidote altered. Subrounded gradational transition to less altered Py, poor granodiorite at 52.4 m.		96392				20	.6	26	92	34	52

METRES						METRES			ASSAYS					
From	To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	From	To	Lgth	Au	Ag	Pb	Zn	Cu	As
52.4	63.2	~85	GRANODIORITE: containing intermittent subangular mafic rich diorite xenoliths up to 6 cm diam., fine grained chlorite rich matrices containing med. gr. plag, qtz lath-like crystals, minor py, clay altered margins. Xenoliths make up 2% of this interval.											
			53.55: aplite veinlet 2 cm wide. Up to 70% qtz. Light to med. grey. Minor f.g. Hb's ~5%, Plag ~20% coarser grained. Vein is ~25 deg from core vertical. No visible sulphides.											
			55.34: aplite veinlet 1 cm wide, no sulphides or clay alt'n.											
			56.7-56.72: c.g. granodiorite with malachite stain local Cp crystal with malchite filling py cube boxwork. Does not occur within rock at upper & lower intervals.	3% Cpy & Py	96393	56.62	56.8	.18	30	5.6	64	144	540	64
			56.9-56.92: qtz veinlet <1 cm width. Contains f.g. crystalline py blebs also lens of py. Sulphides make up ~3% of vein, ~60 deg to core vertical. Fracture filling chloritization on surfaces, saussertization and chlorite alt'n throughout up to 40% of rock.	3% Py with Qtz vein	96394	56.85	57.05	.2	30	.2	20	84	14	24
			59.2-59.22: med. grey aplite veinlet which has been displaced along tiny fracture surface, ~width of vein 2 cm, unclear contact.											
			62.3-62.45: med. green, chlorite altered with epidote veinlets and alt'n. Silicified zone. Dark brown oxides in tiny specs throughout rock on fresh and fractured surfaces. Appears to be a phase change with granodiorite. No sharp contacts.											
			62.87-62.92: ~3.75 cm thick aplite dyke. Thin chlorite @ margins, clear cut contacts to 65 deg from core vertical. Lt. to med. grey colour, appears quite fresh. Minor sulphides, py locally @ contact (upper). Possible Ga or finely dissem. magnetite in dyke.	Local Py @ contact	96395	62.87	63.07	.2	10	2.6	920	88	20	24
63.2	63.4		GOSSANOUS GRANODIORITE: Fe-oxide stain especially on fracture surfaces. Partially chlorite altered. Jarosite (lt. yellow) and goethite. Appears siliceous. Pyrite boxwork gossans. Intensely Fe-oxidized in places, ~1.5% py visible locally.	1.5% Py	96396	63.2	63.4	.4	10	.2	46	78	8	22
63.4	75.2		Xenoliths form 3% of interval. Subangular to subrounded. Clearly distinct contacts. Up to 10 cm dia. Hb plagioclase subhedral crystals (porphyritic) with fine gr. crystalline matrix of similar composition. Mafic diorite xenoliths in granodiorite host.											
			64.1-64.16: Aplite Dyke (2 cm width) granitic-rhyolitic dyke, med. to lt. grey chlorite alt'n along margins (contacts), 60 deg fro core vertical. Qtz ~75%, Plag ~10%, K-spar ~5%, magnetite or galena? finely dissem within dyke.		96397	64	64.2	.2	10	.2	34	44	14	16

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			65.8-65.82: (2 cm width), 25 deg to core vertical, v.f.initic to g. aphanitic to rhyolitic dyke. Same as above Hb and 25with up to ~10% Hb and 25% Plag, ~60% Qtz. contact. No sulphides visible. Sharp contact.											
			66.18-66.28: (10 cm width), sharp contact, 65 deg from core vertical. ~75% Qtz, 10% Plag, finely dissem. magnetite, galena?		96398	66.15	66.3	.15	10	.2	40	34	6	26
			69.4-69.42: fractured zone (2 cm), gravel size recovery											
	75.29		END OF HOLE											

N O 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

PROPERTY: Mt. Anderson	STARTED: Oct. 6 /85	FIELD CO-ORDINATES	DIP TESTS	N.T.S. 105 D/4
HOLE NO. MA-85-5	FINISHED: Oct. 8 /85	L 22+50E	Bearing Dip Depth	PROJECT NO. 611
BEARING: 110 deg	LENGTH: 90.22 metres	20+95N		LOGGED BY: M. Webster/B. Thomas
DIP-COLLAR: 45 deg	CORE SIZE: NQ			SHEET 1 of 4

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	2.57		OVERBURDEN											
2.57	14.02	~98	GRANODIORITE: C.g., mottled black-dark green and white. Epidote veinlets and chlorite altered Hb (up to 70%). Minor sericite alt'n and local rusty brown Fe-oxide staining on fracture surfaces and locally throughout rock. Strongly magnetic. Plag 40%, Qtz 30%, Hb 25%, K-spar 3%, Biotite 2%, Hb form euhedral subhedral crystals up to 1 cm with average size 0.75 cm. Plag & Qtz are in m.g.-c.g. size range. Abundant (up to 70%) epidote alt'n and veinlets @ 10.80-11.28. Mafic xenoliths; up to 1% of interval, subrounded, dioritic f.g. mafic matrix with Plag crystals of m.g. size 25% porphyritic, 1 cm to 6 cm dia. 7.61-7.62 m: Mafic Dyke; ~.75 cm width, 30 deg to core vertical, local epidote alt'n on contacts. Contacts fairly distinct. Med. to light grey. 10.19-10.20 m: Mafic Dyke; .5 cm width, 55 deg from core vertical 13.88-14.02 m: Broken up granodiorite, gravel size.	No visible sulphides										
14.02	16.45	100	Quartz Porphyritic Mafic Dyke: Not magnetic, m.g. to c.g. grey qtz in highly altered chlorite and epidote matrix, fine grained.	Ga 2 tiny specks visible, local within dyke	85851	14.18	15.04	.86	560	1.6	310	328	60	264
			14.50 m: Zone <1 cm thick clay alt'n, very soft 15.9-16.15 m: Intense rusty zone, mainly goethite with minor jarosite within chloritized and epidote altered interval. Minor manganese staining Py boxwork.	Gossanous, no visible sulphides	85852	15.9	16.15	.25	100	2.4	960	356	38	134
16.45	17.2	100	GRANODIORITE: Very broken up interval, gravel sized recovery mainly epidote altered with minor chloritization Local Fe-oxide staining.	No visible sulphides										
17.2	17.98	100	GRANODIORITE: M.g. to c.g., Fe-oxide stain locally. Local manganese staining. Minor chlorite and epidote alt'n. Moderate to strongly magnetic.	Trace Py										
17.98	39.55	100	GRANODIORITE: C.g. with narrow, moderately rusty intervals. Contains up to 2% subrounded dioritic xenoliths and is crosscut by aplitic dykes. Zones of rusty staining are generally broken up and fractured. Gradational boundaries between gossanous and unoxidized zones. Manganese staining on fractured areas.											

NORANDA EXPLORATION COMPANY LIMITED PROPERTY: Mt. Anderson HOLE NO. MA-85-5

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	ASSAYS Au	Ag	Pb	Zn	Cu	As
			APLITE DYKES:											
			19.54-19.55 m: .5 cm thick, 45 deg to core vertical, trace galena? within adjacent core	1% Py in tiny qtz stringers within dyke	85853	19.51	19.61	.1	60	.4	50	276	28	304
			22.70-22.72 m: 1.5 cm thick, 45 deg to core vertical, sharp contacts, no visible sulphides											
			22.80-22.82 m: 1.75 cm wide, 45 deg to core vertical											
			23.95-23.98 m: 3.0 cm wide, 45 deg to core vertical											
			32.0-32.07 m: 7 cm width, 45 deg to core vertical, 65% f.g. qtz matrix with c.g. plag crystals and minor Hb 35%. Fractured.	No visible sulphides	85855	31.85	32.12	.27	10	.2	128	380	10	52
			32.74-32.75 m: .5 cm wide, 48 deg from core vertical											
			36.20-36.21 m: .5 cm wide, 50 deg from core vertical	No visible sulphides										
			36.61-36.63 m: 2.0 cm wide, 15 deg from core vertical											
			37.31-37.35 m: 3.5 cm wide, 20 deg from core vertical											
			Gossanous Zone; with epidote filled fracture. Calcite and manganese stain on fracture surface, 10 deg from core vertical. K-spar rich interval up to 20% Py box-work.	No visible sulphides	85854	27.68	28.68	1.0	20	.2	46	496	12	90
			Granodiorite becomes less Fe-oxide and manganese stained toward end of interval.											
39.55	40.48	100	GRANODIORITE: C.g., K-spar rich (20%), epidote altered up to 50%. Epidote occurs in veinlets and fractures. Chlorite altered Hb. Siliceous, non-magnetic. Very little Fe-oxide stain and manganese stain.	No visible sulphides										
40.48	53.04	90	GRANODIORITE: C.g., dissem Py casts containing oxide boxwork. Granodiorite intervals are fractured and have intense Fe-oxide staining on fractured surfaces. Heavy gossanous stain over 85% of interval. Chlorite & epidote alt'n abundant. Whole interval is fractured with some areas having only gravel-pebble sized recovery.	No visible sulphides i.e. all oxidized										
			42.77-43.18 m: Pebble size recovery and gravel size											
			46.25-46.45 m: Pebble size recovery, 75% core recovery Decreased Fe-oxide stains toward end of interval.	No visible sulphides	85856	47.18	47.64	.46	10	1.4	418	700	10	18
53.04	56.7	95	GRANODIORITE: C.g., gossanous. Visible sulphides throughout this interval. Some intervals are more intensely gossanous.											
			53.04-53.47 m: Lightly clay altered, coarse gr. granodiorite with epidote veining. Very fractured. Mottled green and white due to chlorite altered Hb's. Rusty stain on fracture fillings. Py associated with Hb in some areas.	2% Py in tiny lenses, vugs & fract fillings, minor diss Ga	85857	53.04	53.47	.43	10	3.6	374	440	10	24
			53.47-54.02 m: Granodiorite, c.g. chlorite altered with very minor Fe-oxide stain. Fracture surfaces are somewhat manganese stained. Minor sericite alt'n. Py is finely crystalline dissem throughout, appears to be concentrated around chloritized Hb, white clay alt'n on fractures also. Siliceous toward end of interval. Abrupt contact to next unit interval.	Py diss 2% very tarnished in places	85858	53.47	54.02	.55	10	.6	88	640	14	22
			54.02-54.50 m: Gossanous, altered granodiorite. Py concentrated on fracture surfaces, minor finely dissem Ga on fracture surfaces	Py 2%, Ga trace	85859	54.02	54.5	.48	50	14.4	2700	402	12	20

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			54.50-54.97: Siliceous, chlorite altered zone with tiny chloritic stringers and fracture fillings of finely crystalline Py and associated local fine galena.	Py 1-2% Ga .5%	85860	54.5	54.97	.47	10	5.4	272	850	6	22
			Lt brown-yellowish gossanous zone; silicified, altered fractured and broken up. Abundant epidote alt'n. Up to 60% gossanous. <1% Py	<1% Py finely dissem	85861	54.97	55.3	.33	10	3.0	170	1880	24	18
			Lightly gossanous, 10% stain mainly on fracture surfaces. Abundant white clay alt'n ~30% and up.	2% Py, trace Ga?	85862	55.3	55.97	.67	10	1.2	230	2000	26	26
			Granodiorite; c.g. altered, very gossanous in places. Sulphide rich, up to 10% Py in places, 2% Ga locally. More epidote alt'n toward end of interval, less Fe-oxide stain toward end of interval. Minor manganese stain. Ga and Py are dissem throughout and in fine lenses. 3 mm interval is very soft and friable.	7% Py, 1.5% Ga	85863	55.97	56.67	.7	10	6.0	3420	1240	10	24
56.7	61.67	100	GRANODIORITE: C.g., chlorite and epidote alt'n as well minor sericite alt'n. Mottled dark green and white. Lt rusty Fe-oxide stain <5% (mainly of fractures). Trace Py. Moderate to strongly magnetic. Local K-spar rich intervals, salmon pink colour. Mafic xenoliths, dioritic subrounded, 2% of interval. Abrupt change to Fe-oxide stained interval (next).	Trace Py										
61.67	62.05	100	GRANODIORITE: Gossanous, c.g. Dark green and rusty brown mottled. Very broken up, pebble to gravel size @ end of interval. Fe-oxides make unit very friable. Quite fractured. Vuggy texture, goethitie with minor jarosite?	<1%	85864	61.67	62.05	.88	10	1.2	196	510	18	34
			GRANODIORITE: C.g., white clay alt'n on fracture surfaces. Mottled dark green and white. Very little Fe-oxide staining. Non-magnetic. Epidote veinlets & alt'n throughout.	Py 2% diss & in lenses	85865	62.5	63.75	1.5	10	.4	28	262	18	24
			63.75-64.56 m: Granodiorite with pervasive yellow clay alt'n.	Py 2.5% diss & in fract.	85866	63.75	64.56	.81	10	.8	420	680	8	28
			64.56-64.95 m: Clay altered minor Fe-oxide stain	Py 2-3% diss	85867	64.56	64.95	.34	10	.4	152	492	8	16
64.95	68.1	~50	FAULT ZONE: v. broken up interval, poor recovery. Gravel and pebble size, rounded to subrounded pieces of granodiorite? containing sulphides. Goethite on fracture surfaces and white clay alt'n. Gossanous clay altered granodiorite, much like above.	2% overall Py veinlet (2mm)	85868	64.95	66.44	1.4	10	1.6	900	760	8	22
				diss & fract	85869	66.44	67.3	.86	10	1.6	1020	810	10	20
			67.75 m: Quartz Vein? rusty staining. Only pebble size recovery. Impossible to estimate thickness of vein due to poor recovery and broken nature.	Trace Py, Ga pebble <1 cm dia., rare	85870	67.3	68.1	.8	110	8.2	1820	580	24	26
68.1	73.0	100	GRANODIORITE: Sausseritization of feldspars to light green colour, slight 20% chlorite alt'n of matrix. 15% Qtz, 5% Plag. Minor med. brown staining. Unit becomes increasingly more chloritic and less sausseritized toward end of interval. Non-magnetic. Mod. fracture density. Competent, silicified											
			68.1-71.25 m: Clay altered, white, bright yellow oxidation minimal associated with galena (PbO)	Py & Ga 4-5% occur in tiny lenses	85871	68.1	68.76	.66	10	6.6	4500	4800	8	4
					85872	70.25	71.25	1.0	20	1.8	940	910	4	4

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			72.13-73.0 m: Granodiorite, clay and sericite altered chloritic with Fe-oxide staining on fracture surfaces, very broken up toward end of interval. Small .5 cm fracture with qtz crystals up to 3 mm length, bladed pinkish crystals.	3% Py, 2% Ga	85873	72.13	73.0	.87	20	9.6	2080	2420	14	8
73.0	74.43		GRANODIORITE: C.g., white-rusty brown and dark green mottled and vuggy texture, Fe-oxide filled fractures, minor dissem Py and Ga.	Py & Ga ~3% diss and in vugs	85874	73.0	73.9	.9	30	6.0	3060	2620	22	8
					85875	73.9	74.43	.53	60	13.0	2480	4800	38	16
74.43	79.95	~85	GRANODIORITE: M.g.-c.g., chlorite and epidote altered, very friable and broken up, poor core recovery. Local Fe-oxide stain. 75.50-75.70 m: Abundant clay alt'n.											
			74.2-74.72 m: Light grey green colour, white clay alt'n minor Fe-oxide stain, manganese stained, finely dissem Py in most of unit. Disseminated v.f.g. Ga.	1-2% Py & 2% Ga	85876	74.2	74.72	.52	60	10.4	4000	6400	10	6
			74.72-75.2 m: M.g. chlorite and epidote altered grano-diorite? Minor clay alt'n. Py occurs uniformly dissem throughout with galena locally. This unit is less broken, more siliceous.	Py 2% Ga 2-5%	85877	74.72	75.2	.48	50	8.4	5200	6100	6	8
			75.2-76.1 m: Grey clay altered zone of broken up core & areas of pebble sized recovery. Dissem and fracture Py, not uniform distribution.	1% Py	85878	75.2	76.1	.9	10	3.8	2000	4100	6	6
			76.1-76.5 m: Broken up zone, slightly gossanous	Tr Py visible	85879	76.1	76.5	.4	10	6.4	1440	1620	18	28
			76.5-77.9 m: Clay altered zone, broken, poor recovery, trace Ga, 1% Py , Fe-oxide stained, minor hematite staining	1% Py, trace Ga	85880	76.5	77.9	1.4	40	12.8	2000	2680	20	10
			77.9-78.7 m: Fracture zone; qtz pebbles. Granodiorite silicified and clay altered. Minor Fe-oxide stain. Py replacing Hb and dissem. Trace Ga.	Py 1.5%, Ga trace	85881	77.9	78.7	.8	10	3.6	760	1000	14	8
			78.7-79.55: Silicified, gossanous granodiorite with Py blebs and possible Ga. Minor white clay alt'n. Broken up, poor recovery.	Py 2% possible Ga	85882	78.7	79.55	.85	10	5.0	700	1180	10	4
			79.55-79.95 m: Rusty (lt) clay altered zone with dissem Py and possibly broken up qtz veinlets.	Py 2%	85883	79.3	79.95	.15	10	3.4	920	408	22	22
79.95	80.15	100	MAFIC DYKE: Dark green-black, v.f.g., chlorite altered to 60%. Minor sericite alt'n. Light greyish phases with Py cubes dissem throughout and concentrated on fracture surfaces and in stringers, up to 2.5%. Ga occurs in small fractures and in tiny blebs locally Appears to decrease in amount toward end of sampled interval. Clear contact.	Py 2% Ga 1%	85884	79.95	81.13	1.18	30	15.2	1140	2040	38	8
80.15	90.22	100	GRANODIORITE: C.g., very chlorite altered 50%, silicified 10%. Minor epidote alt'n. Minor rusty brown clay alt'n on fractured surfaces. Py dissem throughout. Dark and light green. 84.73-84.75 m: Aplite Dyke; 2 cm width, 55 deg from core vertical. F.g. 60% qtz. Sharp contact. No visible sulphides. Granodioritic unit contains <1% dioritic xenoliths sub-rounded ~5 cm and becomes less chlorite and epidote altered toward end of hole. Generally unit is quite siliceous.											
	90.22		END OF HOLE											

NORANDA EXPLORATION COMPANY LIMITED

PROPERTY: Mt. Anderson
HOLE NO. MA-85-6
BEARING: 190 deg
DIP-COLLAR: 45 deg

STARTED: Oct. 9/85
FINISHED: Oct. 10/85
LENGTH: 60.65 metres
CORE SIZE: NQ

FIELD CO-ORDINATES

DIP TESTS

Bearing	Dip	Depth
190	-51	60 m

N.T.S. 105 D/4
PROJECT NO. 611
LOGGED BY: M. Webster/B. Thomae

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	7.17		OVERBURDEN											
7.17	12.19		GRANODIORITE: C.g., black-dark green and white mottled. Chlorite altered (up to 80%), Hb's and chlorite in fracture fillings. Epidote veinlets throughout, hematite stain on fracture surfaces. Very broken up with vuggy texture locally. Very minor Fe-oxide stain on fracture surfaces. K-spar rich interval at 10.5-10.9 m, salmon pink matrix. Subrounded diorite xenoliths, dark green and white, 3-4 cm dia, <1% of interval, most are smaller (1 cm size). Composition; c.g. subhedral Hb's chloritized ~30%, Plag m.g. to c.g. ~30%, Qtz m.g., greyish colour ~25%, K-spar ~15% (varies), moderately to slightly magnetic.	No visible sulphides										
12.19	12.52		Chlorite and Epidote altered phase with granodiorite. Light to med. grey green colour with grey qtz crystals c.g. Plag. saussuritized up to 40%, <5% K-spar. Abundant epidote veins-veinlets toward end of interval. Fe-oxide on fracture surfaces.											
12.52	21.87		GRANODIORITE: M.g. to c.g., fractured, mottled dark green-black and white intervals of abundant epidote alt'n. Minor Fe-oxide stain, chlorite alt'n abundant over most of interval. Up to 2% dioritic chloritized xenoliths. Minor light yellow clay alt'n. Manganese staining on fracture surfaces. Hb crystals subhedral-euhedral up to 1 cm length.	No visible sulphides										
21.87	24.01		ALTERED DIORITE?: C.g. greyish qtz suspended in a saussuritic, chloritic matrix. Appears light to med. grey-green. Finely dissem py and possible ga <1%. Fe-oxide staining on fracture surfaces. Py occurs mainly in tiny stringers.	1.5% Py Local Ga	85885	21.87	23.1	1.23	50	2.6	510	540	90	2
			23.1-23.35: Qtz vein ~2.5 cm, ~50 deg from core vertical containing Py and Ga within vein & wallrock, 3% Ga, 2.5% Py. Clay alt'n up to 20% of unit sampled. Silicified, end of interval.	5% sulphides with vein of qtz & wall-rock	85886	23.1	23.35	.25	510	11.4	2060	1820	38	16
				~3% Py & Ga	85887	23.35	24.0	.65	60	5.8	1900	1740	16	22
24.01	26.57		GRANODIORITE: Less epidote and chlorite altered interval. Light grey-green mottled with dark green Hb's. Very fractured at beginning and at end of interval. Manganese staining on fracture surfaces. Minor white clay alt'n.											
26.57	46.95	~98	GRANODIORITE: C.g. silicified, white clay alt'n (minor) mottled green and white/black and white. Epidote alt'n mainly along fractures. Chlorite alt'n of Hb's up to 40%. Also chlorite minor along fractures. Xenoliths diabasic dark green and white, subrounded 1.0 to 20 cm dia. about 2% of unit. Minor sericite alt'n. Moderately	No visible sulphides										

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
			to strongly magnetic. Unit becomes more epidote altered toward end. K-spar rich interval 32.8-33.9 m up to 50% of matrix in local areas. Unit has relatively low fracture density. Cross-cut by aplite dykes.											
			42.61–42.63: ~1 cm width, 55 deg to core vertical											
			43.55–43.57: ~1.5 cm width, 50 deg to core vertical											
			Minor calcite veinlets.											
46.95	47.85	100	Brecciated? silicified, chlorite and epidote altered granodiorite. Swirly textures. Local Py lenses. Very soft, <1% pyrite.	<1% Py	85888	46.95	47.35	.4	10	1.0	56	76	14	4
			Very broken up interval of brecciated zone. Py replacing Hb's locally.	Trace Py	85889	47.35	47.85	.5	20	1.0	142	88	18	4
47.85	48.52		GRANODIORITE: C.g., mottled white and dark green. Minor sericite and epidote alt'n on fracture surfaces.											
48.52	50.8		Brecciated zone with granodiorite. Silicified, extensively chlorite altered in places. K-spar rich in places. Swirly and broken up texture. Up to 30% epidote veinlets and alt'n, 2% xenoliths, subrounded, dioritic, 3-6 cm. White clay altered zone with breccia as described above.	Trace Py local	89890	48.52	49.05	.53	10	.4	20	62	10	6
			Clay altered chloritized zone in end of brecciated interval. Fracture Py (dissem).	~1% Py	85891	50.25	50.8	.55	10	.6	24	74	8	2
50.8	58.8		DIORITE?: C.g. qtz crystals grey with extensively chl & epidote altered matrix. Hb crystals 100% chloritized. Light grey green colour overall. Finely dissem sulphide throughout, mainly pyritic. Very siliceous and very low fracture density.											
			85892 - siliceous with clay alt'n on fracture surfaces (white), very chlorite altered in places	Py 3% dissem & on fracture	85892	50.8	51.7	.9	50	.8	20	66	10	4
			85893 - same as above, minor yellowy clay alt'n		85893	51.7	52.33	.63	10	.6	72	68	8	8
			Siliceous, chloritized with slippery white clay on fracture surfaces. Minor Fe-oxide stain. Possible v.f.g trace galena. Stringer Py and in lenses.	3.5% dissem Py	85894	52.33	53.43	1.1	10	.4	38	64	6	8
			Siliceous and white clay alt'n. Very minor Fe-oxide stained clay.	5% Py dissem	85895	53.43	54.0	.57	10	.6	30	68	6	4
			Silicified and white clay alt'n. Possibly galena finely dissem.	4% Py dissem	85896	54.0	54.65	.65	10	.4	64	64	10	8
			Dissem. Py toward end of sample. Lenses of Py. Light brown Fe-oxide stained clay alt'n.	1.5%	85897	54.65	55.18	.53	10	.2	58	70	4	8
			Py occurs finely dissem throughout fractures and lenses Very siliceous sample.		85898	55.18	55.78	.6	10	.4	100	66	4	8
			Siliceous with white clay alt'n on fracture surfaces. Py mainly found on fractures with local blebs throughout.	1% Py	85899	56.1	57.17	1.07	10	.4	46	62	4	8
			0.5 cm qtz vein with up to 30% Py (broken up) with chl altered and white clay altered unit. Local blebs of Py <1%, same as above description.	<1% Py in alt granodiorite, 30% Py in qtz veinlet	85900	56.8	57.8	1.0	10	.4	18	70	8	6
			Coarser grained granodiorite. Same alt'n as above with local Py cubes throughout interval.	Py ~1%	85901	58.1	58.8	.7	10	.4	20	88	14	8

NORANDA EXPLORATION COMPANY LIMITED PROPERTY: Mt. Anderson HOLE NO. MA-85-6

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	ASSAYS Au	Ag	Pb	Zn	Cu	As
58.8	60.65		GRANODIORITE: C.g., gradational contact, up to 20% chl and epidote alt'n with white clay alt'n on fracture surfaces. Mottled dark green and white colour. Generally same unit as #1. K-spar rich phases within, chloritization.	No visible sulphides.										
	60.65		END OF HOLE											

NORANDA EXPLORATION COMPANY LIMITED

PROPERTY: Mt. Anderson
HOLE NO. MA-85-7
BEARING: 170 deg
DIP-COLLAR: -47 deg

STARTED: Oct. 11/85
FINISHED: Oct. 11/85
LENGTH: 47.85 metres
CORE SIZE: NQ

FIELD CO-ORDINATES
23+86E
24+68N

DIP TESTS

Bearing	Dip	Depth
170	-53	46

N.T.S. 105 D/4
PROJECT NO. 611
LOGGED BY: M. Webster/B. Thomas

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	Au	Ag	Pb	Zn	Cu	As
0	1.4		OVERBURDEN											
1.4	1.7		GRANODIORITE: F.g. to m.g., siliceous mottled black & white/green & white Hb's 30% (20% chloritized), Plag. ~50%, Qtz ~20%, transluscent grey. Med to light Fe-oxide stain. Broken up with poor recovery at beginning of hole.	No visible sulphides										
1.7	2.92		MAFIC DYKE: Olive green to med. dark green, chlorite altered, porphyritic, lightly to moderately magnetic. Very f.g. green matrix with f.g. to m.g. Hb and Plag lathes. Fe oxides and manganese stain along fracture surfaces.	No visible sulphides										
2.92	4.5		GRANODIORITE: Siliceous, f.g. to m.g. unit as described in above, no foliation.											
4.5	4.75		MAFIC DYKE: Sharp contact, 55 deg to core vertical down hole. Fe oxide and dissem remnant Py oxidized cubes on fractures, siliceous, epidote altered (fracture fillings and vugs), f.g. granodiorite.											
4.75	6.7		MAFIC DYKE: V.f.g., contact 50 deg to core vertical, very sharp. Fe oxide staining on fracture surfaces. Minor calcite stringers. Very uniform throughout interval.											
6.7	7.7		GRANODIORITE: F.g. siliceous, white clay alt'n on fracture surfaces, up to 10% epidote and Fe oxides dissem. and along fracture surfaces.											
7.7	8.28		FRACTURE ZONE 7.70-8.08: Broken up mafic dyke, contacts broken, no measurement possible. 8.08-8.28: Broken f.g. granodiorite, minor gossanous vug fillings.											
8.28	8.48		MAFIC DYKE: Minor clay alt'n, calcite veinlet-stringers											
8.48	10.0		GRANODIORITE: F.g., white clay alt'n on fracture surfaces, siliceous (up to 40% qtz). Very tiny fractures abundant near middle of interval. (Epidote filled). Minor Fe oxide stain, calcite stringers.	Py 2-5%, v. f.g., dissem	96401	8.48	10.0	1.52	10	.4	24	58	20	14
10.0	10.65		MAFIC DYKE: Fractured with manganese staining, calcite stringers <1%, slightly coarser grained. Broken at contacts.											
10.65	10.85		GRANODIORITE: F.g., broken up, minor clay alteration.											

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	ASSAYS Au	Ag	Pb	Zn	Cu	As
10.85	11.52		MAFIC DYKE: Minor Fe oxide stain, calcite veinlets locally.	No visible sulphides										
11.52	11.82		GRANODIORITE: M.g. to c.g. siliceous, up to 40% of Hb's are chlorite altered.											
11.82	12.27		MAFIC DYKE: F.g. with dissem sulphides throughout, (v.f.g. Py), sharp contact with granodiorite. ~80 deg to core vertical.	Py up to 2%	96402	11.82	12.27	.45	10	1.4	54	210	50	10
12.27	12.37		GRANODIORITE: Siliceous, m.g. Up to 10% epidote alt'n interstitial to Qtz, 65% Feld 5%, Hb 10%, Ep 10%, Py 5% Chl 5%.	No visible sulphides										
12.37	12.7		MAFIC DYKE: F.g., calcite stringers, manganese staining Pyrite finely, uniformly dissem throughout.		96403	12.37	12.7	.33	10	.4	26	164	22	4
12.7	13.2		GRANODIORITE: Siliceous, m.g. to c.g. Up to 45% Hb subhedral crystals near centre of interval. Very broken up toward end of interval. Fe-oxide and manganese stained throughout. Last .2 m minor <5% as fractures, Py dissem clusters 5-8%. Pervasive silicification from 12.2-13.0		96404	12.7	13.2		10	.6	40	116	42	8
13.2	14.1		MAFIC DYKE: With calcite stringers and local clay alt'n Long fracture down centre of core. Minor trace Py.											
14.1	15.5		GRANODIORITE: Siliceous, m.g. to c.g. with epidote veinlets throughout. Subhedral Hb crystals (chlorite altered). Broken & rusty brown near end of unit.											
15.5	16.6		MAFIC DYKE: V.f.g. med. green to dark green colour calcitic stringers at 15.85, 60 deg down hole, 16.0 55 deg. Some chl at margins, chl spots <2 mm dissem evenly distributed throughout, minor bleaching along margins of stringers.											
16.6	17.51		DIORITE: F.g. to c.g. variable coarseness over 10 cm, Py dissem 2-5%, silicification pervasive, minor silica stringers ~20 cm apart, 30-50 deg to core, most coarse grained Hb up to 1 cm x 0.25 cm at fault margin. Larger Py dissem 5%, Fe-oxides occasionally on stringers.											
17.51	17.81		FAULT GOUGE: Poor recovery, broken, granulated and fractured.		96405	17.51	18.44	.25	10	3.2	104	412	68	100
		27	17.81-18.44: Clay zone, 25 cm for 93 cm core, white-cream-ochre coloured clays with Fe-oxide Py cubes weathered out granules of diorite(?) 2-3 mm amalg. Py chip											
18.44	19.94	85	PORPHYRITIC ANDESITE/MAFIC DYKE: Heavily manganese stained, v.f.g., very vuggy Fe stained & oxidized unit at 19.6-19.8. Weak calcite in vugs, open cavities up to 0.25 deep unevenly distributed. PbS 2%, very broken up.		96406	18.44	19.94	1.5	10	44.0	1740	2040	132	168
19.94	10.73	40	MAFIC DYKE or FLOW: Highly broken to pebbles 2-3 cm dia Last 10 cm manganese and minor limonite stain.		96407	19.94	20.73		20	8.6	780	2620	124	160

METRES From	METRES To	Recovery %	DESCRIPTION OF UNITS	Mineralization	Sample No.	METRES From	METRES To	Lgth	ASSAYS Au	Ag	Pb	Zn	Cu	As
20.73	20.91		QUARTZ VEIN: 1 speck <0.5 mm dia PbS, minor white powdery clay alt'n, qtz is white-opaque, vuggy, no free growth, limited recovery.		96408	20.73	20.91	.18	10	4.0	198	186	24	32
20.91	22.25	62.5	RHYOLITE DYKE or FLOW: Light green silicified, olive green very f.g. Py dissem 2-3% intermittentily, usually oxidized Fe oxides on fracture surfaces.		96409	20.91	22.25	.83	10	3.6	170	192	28	48
22.25	29.4		FAULT GOUGE: Granulated diorite and more competent areas 28-28.5 m, c.g. heavily clay altered diorite sericite alt'n 20%, chl 5-10%, Py <1%. Py dissem 2-4% at 23.3-23.47 m. Basalt dykes-mafic v.f.g. semi-siliceous, contact obscure, highly fractured with Fe oxides on fractures 22.3-22.8, 24.6-25.0 m.		96410	28.0	29.4	1.4	10	1.0	32	192	28	16
29.4	32.6	80	DIORITE: Strong sericite oxidization, core commonly friable between 10 cm solid chunks, chl 20%, silica.											
32.6	36.6		GRANODIORITE: Coarse grained, Hb 20%, Qtz 30%, Feld 25% Ep 5%, Chl 10-20%. Generally consistant silicification and good core recovery, limited <1% calcite alt'n. Fe-oxides and any abundance of chl limited to fractures, always hairline fractures 30-60 deg every ~20 cm, no significant dissem sulphides.											
			32.6-33.2: Contact silicification, pervasive minor manganese stain on top final 5% dissem Py.		96411	32.6	33.2	.6	10	.4	22	82	16	8
			35.45-35.55: 4 narrow fractures, friable, minor dissem Py 2%, <45-60 deg.											
36.6	36.9		GRANODIORITE: Fragmented, fractured and clay alt. 20%. Sericite staining and Py up to 10% along fracture plane											
38.9	39.3		GRANODIORITE: Granulated, clay altered. 39.3-39.6: Slightly more silicified, <2% Py		96412	38.9	39.6	.5	10	1.4	54	392	86	34
39.6	40.13		GRANODIORITE: Silicified, Fe-oxides on fractures also dissem Py 20%, Sphl 2%, Hem 1%. Hb-chloritic epidote up to 20%, dissem Py 5% cubic, metallic luster unoxidized.		96413	39.6	40.13	.53	10	.6	20	398	68	26
40.13	40.31		QUARTZ VEIN: 40.2-40.23 with massive sph, py and PbS specks. Sph 50%, Py 20%, Qtz 30%. Black sph euhedral massive in Qtz up to 1.5 cm wide. Green chl alt'n by vein margins, Py dissem bleb <.25 cm at margins, oxidation to leave rusty vugs in core. One PbS speck <1% isolated in Qtz.		96414	40.13	40.31	.18	380	44.0	1400	31000	212	182
40.31	40.66		GRANODIORITE: Silicified. Py containing 1-2% PbS stringers, all directions, hairline. Sericite and slight greenish tinge to core; saussuritization or chl alt'n likely. Py dissem on fractures 10%, sometimes 15%.		96415	40.31	40.66	.53	80	4.2	570	1380	90	26
40.66	41.11		Competent clay altered granodiorite, no visible sulphides.		96416	40.66	41.11	.45	10	.8	110	362	56	12

Metres From	Metres To	Recovery %	Description of Units	Mineralization	Sample No.	Metres From	Metres To	Lgth	Au	Ag	Pb	Zn	Cu	As
41.11	41.56		QUARTZ VEIN: 41.30-41.32 - 2 cm wide, semi-opaque Qtz vein, Py 1-2%, sph speck. Yellow clay oxides, Fe-oxides line fractures.		96417	41.11	41.56	.45	10	7.4	720	750	90	36
41.75	43.0		FELSIC DYKE: F.g. white, saccaroidal, v.f.g. Qtz crystals consolidated by silicification. Minor opaque white crystals equigranular, euhedral with interstitial alt. feldspar, minor py dissem, minor calcite stringers along margins.		96418	41.75	42.59	.84	10	1.0	62	252	18	2
					96419	42.59	43.0	.41	10	5.8	432	104	26	6
43.0	47.85		GRANODIORITE: C.g., very little alt'n, minor Fe-oxides, 1-2% py along fracture surfaces.											
	47.85		END OF HOLE											