MAP NO.: 116 A 4	**ASSESSMENT REPORT**	X	**DOCUMENT NO:** 092815
	PROSPECTUS		**MINING DISTRICT:** Dawson
	CONFIDENTIAL	X	**TYPE OF WORK:** Geology, Geochemistry, Geophysics
	OPEN FILE		

REPORT FILED UNDER: Noranda Exploration Company Ltd.

DATE PERFORMED: June-July 1989 **DATE FILED:** January 29, 1990

LOCATION: **LAT.:** 64° 05'N **AREA:** Ogilvie Mountains

LONG.: 137° 52'W **VALUE $:** 20 400.00

CLAIM NAME & NO.: AUS 1-32 YB 04454-85
AUS 33-48 YB 23557-72

WORK DONE BY: K.D. Galambos

WORK DONE FOR: Noranda Exploration Ltd.

DATE TO GOOD STANDING:

REMARKS: #30 AUS A multi-element soil geochemical anomaly with up to 1000 ppm arsenic and 880 ppb gold exists over a biotite-hornblende granodiorite dyke which has intruded fine-grained shale, siltstone and chert of the Ordovician Road River Formation

GEOLOGICAL, GEOCHEMICAL & GEOPHYSICAL REPORT

ON THE

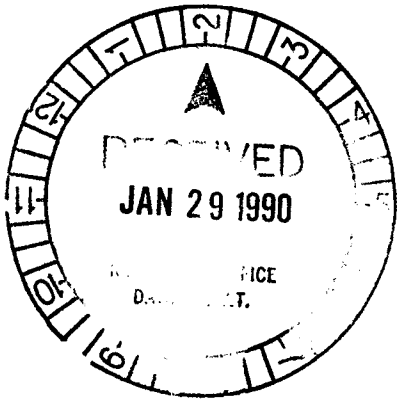
AUS 1 - 48 CLAIMS

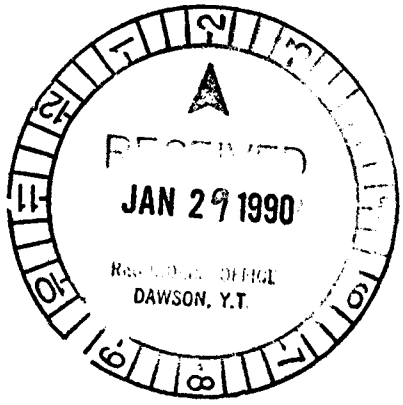
Dawson Mining District

N.T.S.: 116 A/4

Latitude: 64 05'N

Longitude: 137 52'W





092815

Owner: Noranda Exploration Co. Ltd.
(no personal liability)

K.D. Galambos, P. Eng.

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 20,400.00.

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

092180

SUMMARY

The Panorama Ridge property (Aus claims) consists of 48 contiguous mineral claims in the Ogilvie Mountains approximately 75km east of Dawson City, Yukon. There is a 4WD road to within 16km of the property but access is currently by helicopter charter from Dawson.

Sixteen claims were added to the south of the original claim block in 1989 to cover possible geochem extensions. The geochemical grid was expanded to cover the property with a sample spacing of 50m on lines spaced 100m apart. A total of 369 soil samples and 105 rock samples were collected. A 10km cut grid was established but geophysical surveys were interrupted due to forest fires in the area. A total of 68km of magnetics and 6km of I.P. were completed. (95km of mag & 10km of I.P. were planned)

Sampling has confirmed the existence of a multi element soil geochem anomaly. A coincident arsenic (generally >1000ppm) and gold (>40ppb and up to 880ppb) geochem anomaly covers an area 100-300m wide and 1.5km long. Rock samples collected to date have returned values up to 3.66 gmt Au.

Geophysics have outlined an area of lower magnetics which generally overlie a central intrusive dyke in the area of the geochem anomaly. Higher gold geochem values correlate somewhat with regions having moderate to high resistivities and adjacent to moderate-strong chargeability increases.

The proposed 1990 program consists of restaking of the claims burned in the July fire, cutting 30km of grid, completing 26km of IP and handtrenching of the most favourable looking anomalies.

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CHAPTER ONE: INTRODUCTION

1-1: Introductory Statement

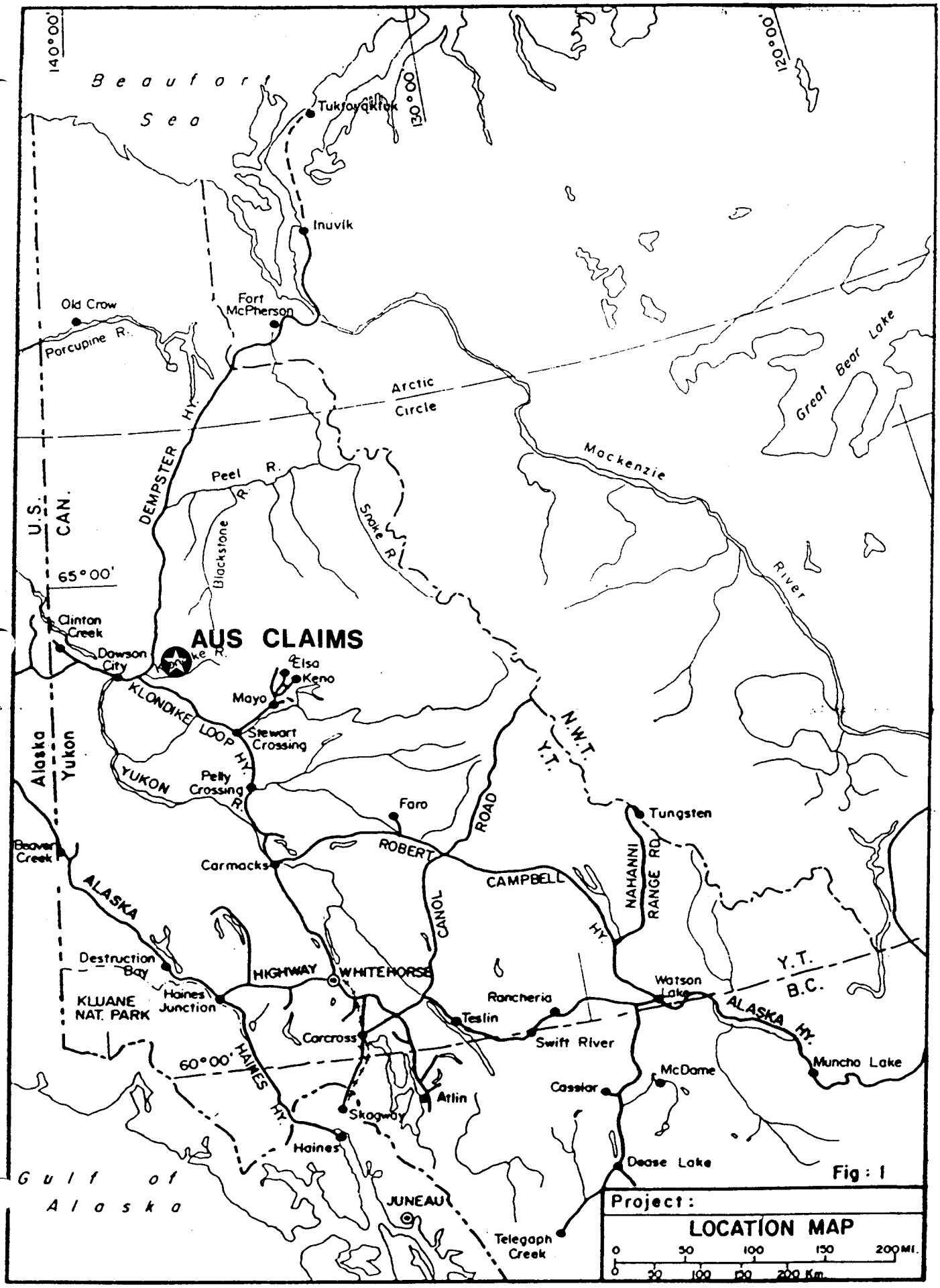
The Aus 1-32 (YB04454 - 485) and the Aus 33-48 (YB23557-572) are located approximately 75km east of Dawson City, Yukon. The property, known as Panorama Ridge, was staked in 1987 to cover an area of anomalous soils and expanded in 1989 to cover possible extensions. It is 100% owned by Noranda Exploration Co. Ltd. and all work completed on the property (geological, geochemical and geophysical surveys) were conducted by or under the guidance of Norex personnel.

1-2: Location & Access

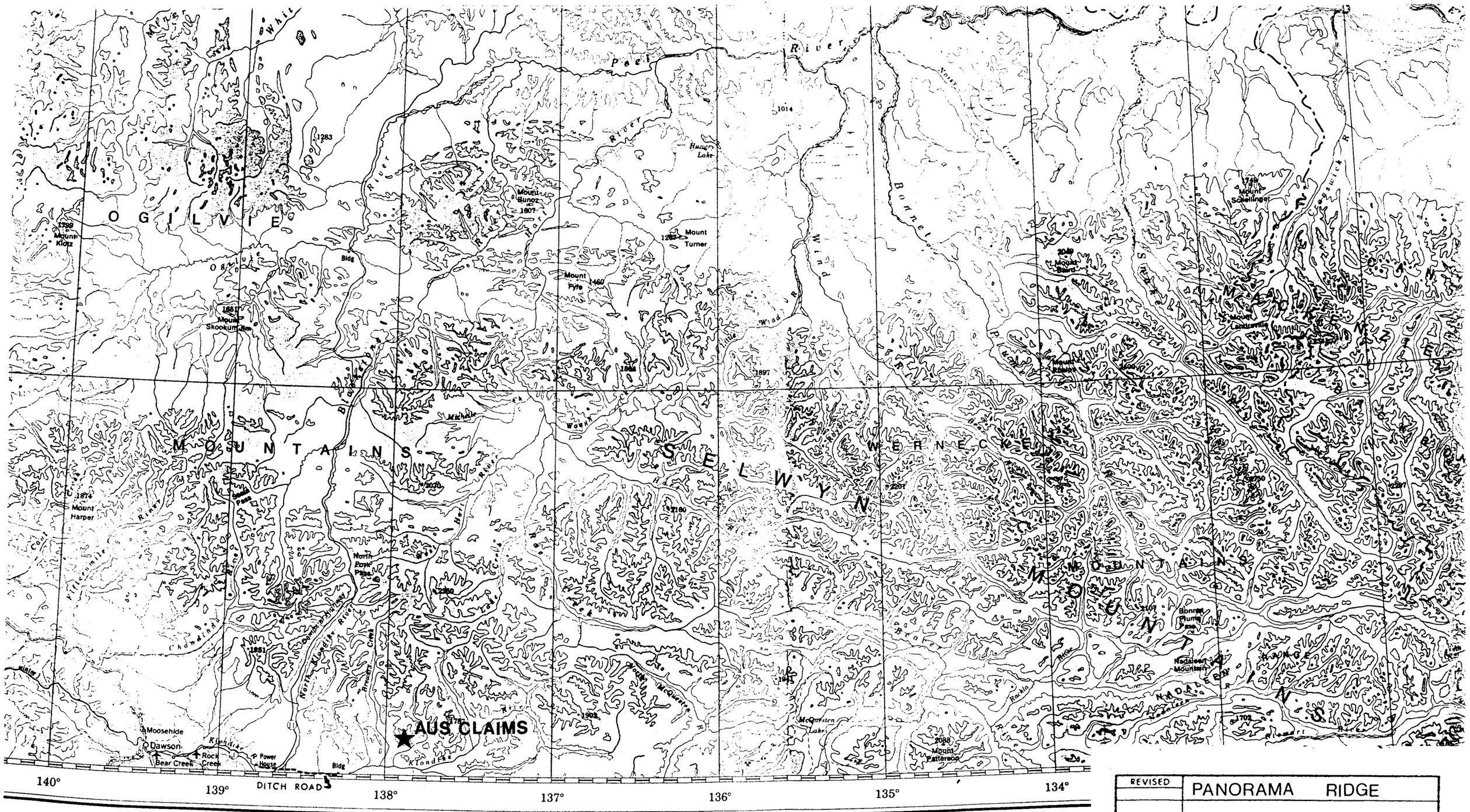
The Aus 1-48 claim group is located in west central Yukon, approximately 75km east of Dawson City in the Ogilvie Mountains. the property is centred at Latitude 64 05'N, Longitude 137 52'W on the NTS 116 A/4 mapsheet. Access to the property is currently by a 35 minute helicopter charter from Dawson. There is a 4WD road to within 16km of the property but obstacles such as steep cliffs on the Klondike River and major creek crossings exist past its present terminus.

1-3: Physiography & Vegetation

The claims straddle a steep ESE - WNW trending ridge in the Ogilvie Mountains. Elevation varies between 2500' (760m) on the northeast corner to 4200' (1280m) in the south-central portion of the property. Bedrock is exposed on the steeper parts of the property and along some ridge tops. Elsewhere subcrop and talus slopes predominate. Good soil development is confined to more stable areas of the property.



VANCAL 11829



Lambert Conformal Conic Projection

Projection conique conforme de Lambert

SCALE 1:1,000,000 ÉCHELLE

Kilometres 10 5 0 10 20 30 40 50 60 70 80 90 100 110 Kilomètres

1 Millimetre = 1 Kilometre — 1 Millimètre = 1 Kilomètre

Statute miles 10 5 0 10 20 30 40 50 60 70 Milles terrestres

1 Inch = 15.78 Statute miles — 1 Pouce = 15.78 Milles terrestres

REVISED	PANORAMA RIDGE
	CLAIM LOCATION MAP
PROJ No 326	SURVEY BY: KDG DATE: NOV. 1988
NTS 116 A/4	DRAWN BY: SCALE:
DWG. No.	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

(Joins Lee Creek 116 B/1)

M Q U I N T A I N S

AUS CLAIMS

Aussie Creek

O'Brien Creek

Scale: 1:50,000

1.25 Inches to 1 Mile approximately

FIG. 3

REVISED	PANORAMA RIDGE
	CLAIM LOCATION MAP
PROJ No. 326	SURVEY BY. KDG DATE NOV 1988
NTS 116 A/4	DRAWN BY. SCALE 1:50,000
DWG. No.	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

Much of the property was burned in July of 1989 and the present vegetation cover is unknown. Prior to this fire, vegetation was concentrated on southern slopes where a thick tangle of buckbrush with sparse cluster of aspen, birch and pine existed. Ridge tops supported primarily buckbursh with only the odd stunted pine while north slopes are primarily bare except for grasses. Small groves of spruce and pine existed near creek bottoms at lower elevations.

1-4: History of the Claims

The Aus 1-32 (YB04454-483) were staked Oct. 9, 1987 and registered Oct. 20, 1987 by Gordon Clark and Assoc.. Claim ownership was subsequently transferred to Noranda Exploration Company, Limited who remains the sole owner of the property. Aus 33-48 (YB23557-572) were staked on June 20 and 21 1989 and registered July 6, 1989. Upon acceptance of this report the claims shall remain in good standing until January 30, 1997 and 1995 respectively.

1-5: Previous Exploration

The only previous exploration recorded in this area was that completed on the IDA claims (approximately 15km NE) by Rio Tinto Canadian Exploration Limited between 1979 and 1981. These claims lapsed in late 1986 and were restaked as the IDA/ORO claims in 1987 by Noranda Exploration Co., Ltd.. The Aus claims were staked to cover an area of anomalous soils discovered with a reconnaissance program conducted by Norex personnel in 1987.

1-6: Work Program

In 1987, Noranda Exploration Co. Ltd. conducted reconnaissance traverses in the area of the claim group and discovered and area

of anomalous soils. The claims were staked and no further work was completed until 1988. In 1988 Norex personnel completed geological and geochemical surveys over the property and outlined an area of elevated arsenic, gold with minor copper and antimony associations.

The 1989 program consisted of infill geochem surveys, further geological prospecting, linecutting and geophysical surveys. A total of 112 persondays were spent on the property collecting 366 soil samples and 102 litho samples. In addition, 10km of cut grid was established with 68km of magnetics and 6km of IP completed.

Personnel involved in the 1989 program included:

Ken Galambos	Project Geologist	Whitehose, Yukon
Lena Brommeland	Field Geologist	Toronto, Ont.
Melanie Chursinoff	" "	Whitehorse, Yukon
Tammy Kobluik	Assistant	Vancouver, B.C.
Janine Copland	Cook	Whitehorse, Yukon
Merv Tew	Field Foreman	" "
Contractors:		
Gordon Clark & Assoc.	Whitehorse, Yukon	
Trans North Helicopter	" "	
Frontier Helicopter	Abbotsford, B.C.	
MPH Consultants	Toronto, Ont.	

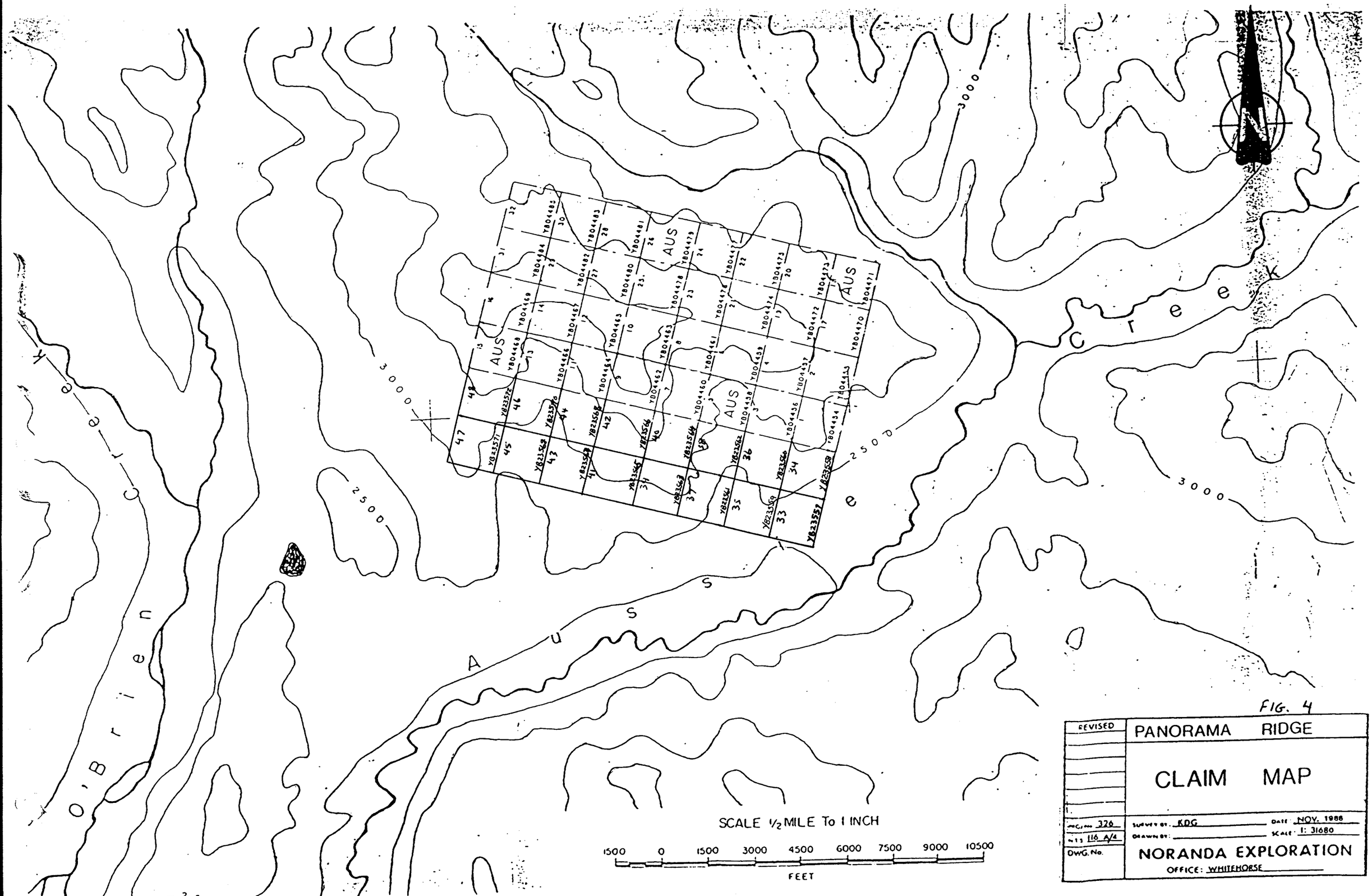


FIG. 4

REVISED	PANORAMA RIDGE
	CLAIM MAP
PROJECT 326	SURVEY BY: KDG DATE: NOV. 1988
FILE 116 A/4	DRAWN BY: SCALE: 1: 31680
DWG. No.	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

CHAPTER TWO: GEOLOGY

2-1: Regional Geology

The property lies approximately 25km north of the Tintina Trench, a major NW trending fault which separates Proterozoic to Mesozoic sedimentary, volcanic and intrusive rocks in the Selwyn Basin on the north-east from metamorphic rocks of the Yukon Cataclastic Terrane on the south-west.

The Selwyn Basin sequence in the project area consists primarily of shale, chert and minor basaltic volcanic rocks of the Ordovician-Silurian Road River Formation. This unit is believed to have a thickness of approximately 300m and may be isoclinally folded with possible infolds of the underlying PreCambrian-Cambrian "Grit Unit". The Grit Unit is exposed approximately 10km to the north of the property and consists of mainly gritty quartzite, sandstone and quartz-pebble conglomerate; black maroon and green shales along with their metamorphosed equivalents; minor limestone and black chert.

Intruding into these sediments are Cretaceous stocks of diorite, gabbro, hornblende and hornblende-biotite syenite and feldspar porphyritic syenite.

2-2: Property Geology

Exposure on the property is quite good with outcrop exposed in cliffs, on steeper slopes and along some ridge tops. Highly fractured subcrop and talus slopes cover a large percentage of the rest of the property.

Geological 1:10,000 scale mapping was conducted over a five day period in August of 1988. Traverses were primarily along ridges with a few run across-section. Geology on the claim group

TABLE OF FORMATIONS

QUATERNARY

26 unconsolidated glacial and alluvial deposits

CRETACEOUS

21a fine to coarse grained biotite granodiorite and biotite quartz monzonite

21b hornblende and hornblende-biotite syenite and feldspar porphyritic syenite, minor diorite

20 orange to brown weathering diorite and gabbro; altered equivalents; 20a may be older

ORDOVICIAN AND SILURIAN

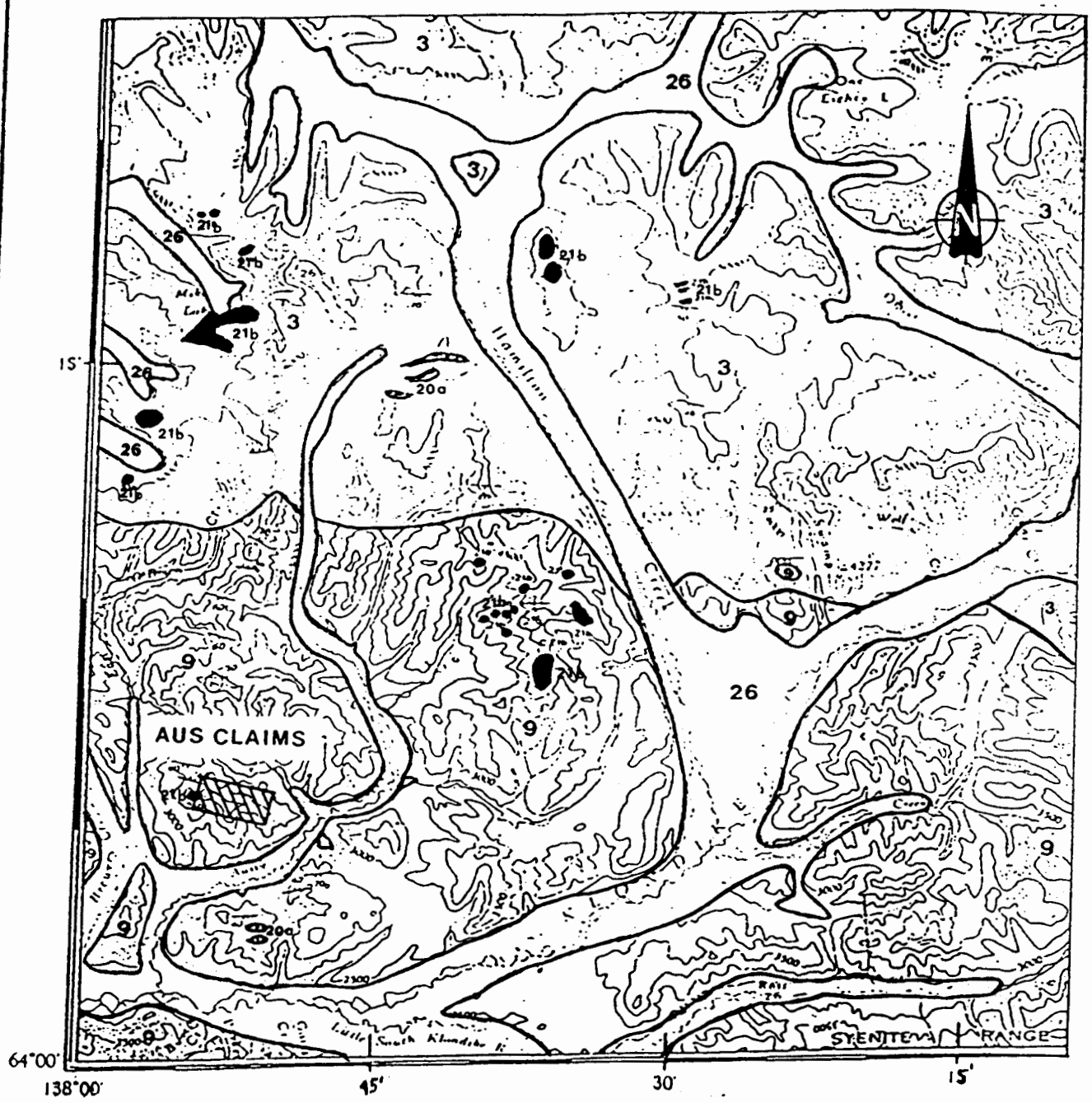
9 Road River Formation

interbedded dark grey-black shale, siltstone and chert; their silicified equivalent; minor basaltic volcanic rocks

PRECAMBRIAN AND/OR CAMBRIAN

3 Grit Unit

gritty quartzite, sandstone and quartz-pebble conglomerate; black, maroon and green shales, their metamorphosed equivalent; minor limestone and black chert.



Elevations in feet above mean sea-level

MAP 1283A

GEOLOGY

LARSEN CREEK

YUKON TERRITORY

Scale 1:250,000

Miles 4 0 4 8 12 Miles

Kilometres 6 0 6 12 18 Kilometres

FIG. 5

appears quite simple with a large cental, medium to coarse grained felsic dyke intruding into and tilting sediments of the Road River formation. Several smaller felsic dykes flank the central one and appear to have intruded along bedding planes in the sediments.

The Ordovician-Silurian Road River sediments on the property consist of medium grey, fine grained sediments. Shale, siltstone, their silicified equivalents and chert predominate. Also exposed in one location near the intrusive contact is a small amount of calc-silicate alteration indicating the presence of limy sediments. The sediments dip steeply away (65-70 degrees) from the central ridge and enclosed intrusive dykes.

The intrusive rocks consist of what appears to be two gradational phases of granodiorite (possibly syenite in places). Medium and coarse grained biotite-hornblende granodiorite is most abundant with a hornblende rich phase predominating along parts of the northern margin of the central dyke. Both phases are porphyritic with K-feldspar phenocrysts up to 1cm across. The youngest intrusive rock on the property is believed to be what was initially mistaken for and labelled as a silicified dyke. In fact it is a K-feldspar-hornblende-biotite monzonite. This occurs as a very dense dyke, with up to 5% pyrrhotite and minor pyrite, to the south of and paralleling the large central dyke.

The major alteration on the property is due to the contact metamorphism of sediments flanking the larger intrusive body. This results primarily in the silicification of the sediments with minor calc-silicate alteration of limy beds. There also appears to be an actinolite enrichment in the intrusive which may be associated with and form a halo around areas of previous metal enrichment.

VANCAL 11928

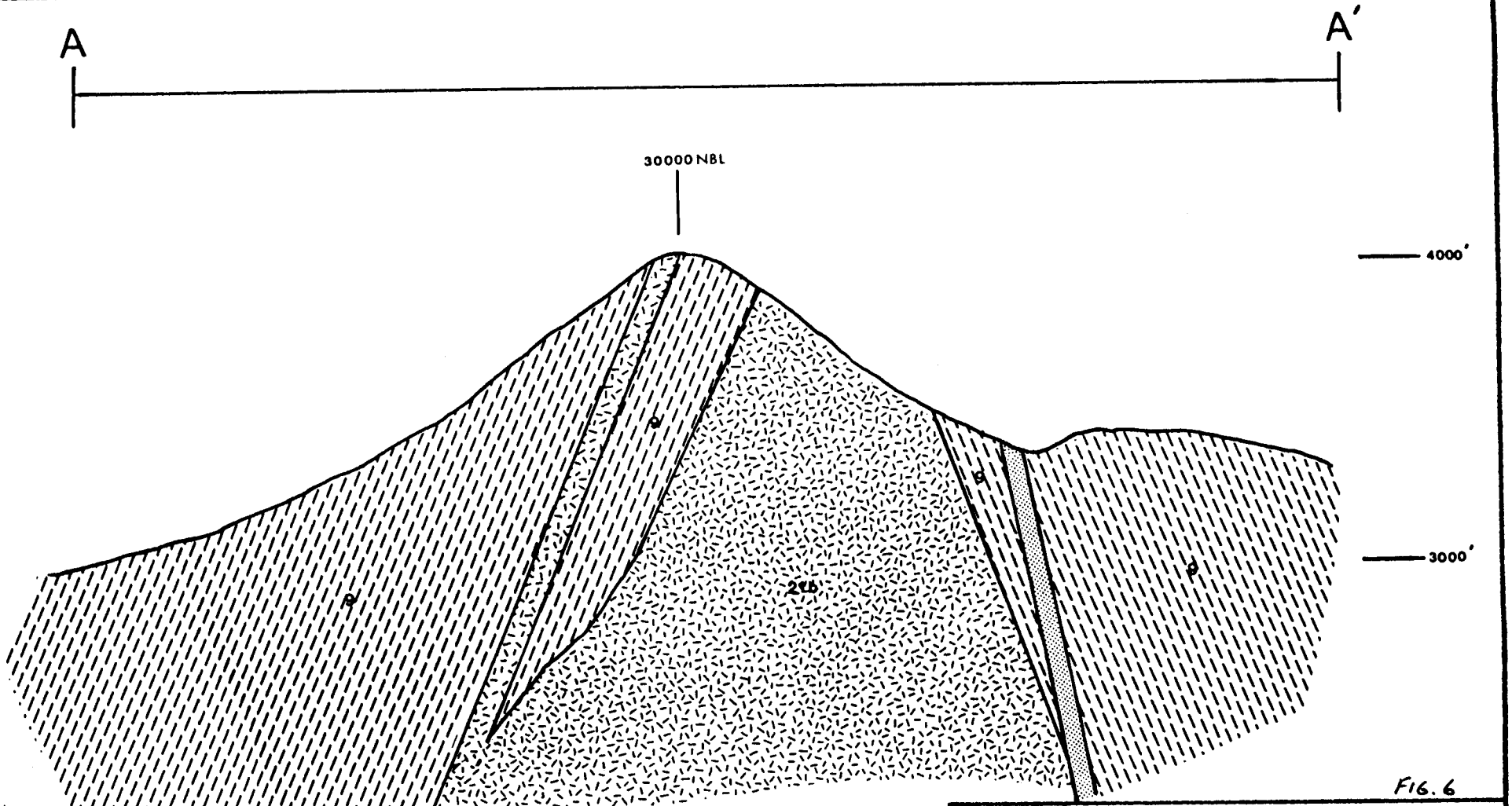


Fig. 6

GEOLOGY

- SILICIFIED DYKE, 2-3% SULPHIDES
- 2b — MEDIUM & COARSE-GRAINED GRANODIORITE
- g — ROAD RIVER FORMATION SEDIMENTS: SHALES, SILTSTONES & SILICIFIED EQUIVALENTS; CHERT

REVISED	PANORAMA RIDGE
	SECTION A-A'
	LOOKING EAST
PROJ No 326	SURVEY BY KDG DATE NOV. 1988
N.T.S. 116A/4	DRAWN BY SCALE 1:10000
DWG. No	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

(No bedrock source has been found as of yet to explain the gold in soils geochem anomaly.)

CHAPTER THREE: GEOCHEMISTRY

3-1: Soil Geochemistry

The soil geochem grid was narrowed from 200m line spacing to 100m line spacing and extended approximately 600m to the south. Samples in each case were taken from 'B' horizon soils which were often oxidized to a rusty red colour.

A total of 366 soils were collected from the survey. The samples were placed in gusseted Kraft wet strength sample bags, dried and shipped to the Noranda Lab in Vancouver for preparation and analysis for Ag, As, Sb and Au, or to Acme Analytical for analysis using their 31 element ICP package.

The survey outlined a 1.5km trending zone highly anomalous in As (up to 1,000 ppm) between 200 and 400m wide with smaller areas anomalous in Sb (up to 250 ppm) and Au (up to 880 ppb). No obvious source has been found for these zones of enrichment.

3-2: Rock Geochemistry

A total of 102 rock samples were collected on the property, the majority of which are grab type samples of talus or felsenmere. All samples were prepared and analysed by Acme Analytical Laboratories Ltd. of Vancouver using their 31 element ICP package.

Four samples returned values >1.0 gmt gold with the highest being 3.66 gmt from a calc-silicate altered, fine grained sediment at approximately 17295E, 28775N. (No anomalous gold in soil geochem values exist in this area.)

Complete results are included in Appendix II.

CHAPTER FOUR: GEOPHYSICS

During early-mid July 1989, geophysical surveys consisting of total field magnetics and time-domain I.P. were completed on the grid of the Panorama Ridge property. The magnetometer survey was completed on most lines of the survey grid while I.P. was performed on selected lines. Both surveys were completed by MPH Consulting Ltd. of Toronto, Ontario. The magnetics survey utilized an EDA Omni-Plu magnetometer system with a basestation configuration. The I.P. survey utilized an EDA IP-6 time-domain receiver. A 25 metre dipole-dipole array was used with readings taken down to the fifth separation (n=5). The I.P. data is presented in pseudo-section form at a scale of 1:2500 while the magnetic data and I.P. interpretation are presented at a scale of 1:5000 on a plan map.

Production: I.P. 6.1km

Mag. 68.0km

A detailed geophysical report can be found in Appendix III.

CHAPTER FIVE: MINERALIZATION

Mineralization on the Aus claims appears to be associated with the intrusive rocks or within calc-silicate altered sediments. Arsenopyrite is the most widespread mineral and occurs primarily as dissemination within the central and southern dykes. Pyrite is the second most common mineral and again occurs as disseminations but is concentrated almost entirely within the southern dyke. Minor massive sulphide veins occurs with up to 30% arsenopyrite, pyrite and pyrrhotite. Chalcopyrite was noted only in a few locations as were galena sphalerite and stibnite.

Gold mineralization appears to be associated with arsenopyrite on most areas of the property. There is however a weak gold-copper correlation locally and a gold-arsenic-antimony correlation with the higher gold values in soils. This gold-antimony correlation is less apparent in the rock samples collected to date.

Three types of gold mineralization have been noted on the property. Gold occurs in sulphide rich veins (up to 30% AsPy, Py Po and 1.39 gmt gold), sulphide poor quartz and quartz-actinolite veins (up to 2.84 gmt gold) and calc-silicate altered sediments (up to 3.66 gmt Au). Only one rock sample collected which contains enriched gold (R52407 - 3.66 gmt Au) has a bedrock source. No bedrock source has been located which explains the main 100-300m X 1.5km soil anomaly.

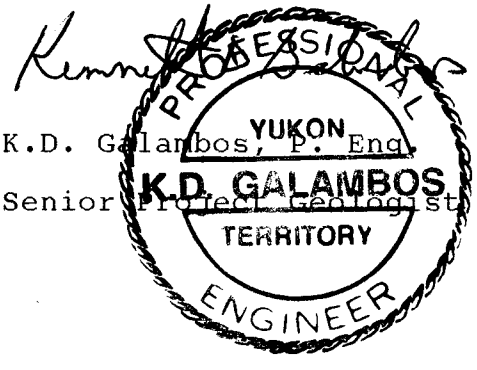
CHAPTER SIX: CONCLUSIONS & RECOMMENDATIONS

The 1990 program was successful in confirming the presence of a multi element soil anomaly and the existence of gold mineralization in both the intrusive and calc-silicate altered sediments on the property.

Geophysical surveys have outlined an area of lower magnetics underlying the soil anomaly. A good correlation is suggested between gold geochem values and areas showing moderate-high resistivities and adjacent to moderate-strong chargeability increases.

In order to retain undisputed ownership of the property Noranda must replace claim posts which were burned in the July, 1989 fire. A 1990 program which will consist of cutting grid lines completing 26km of IP and handtrenching of the best anomalies is recommended. Further handtrenching and/or a diamond drilling program to further test the gold potential of the property hinges on the first phase results.

Respectfully submitted by;



K.D. Galambos, P. Eng.
Senior Project Geologist

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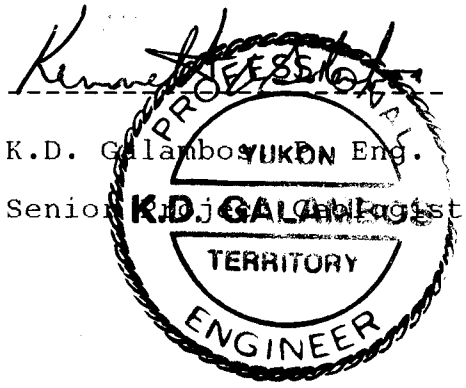
STATEMENT OF COSTS

LABOUR:	112 person days at $150/day	$16,800.
SUPPLIES & LODGING:	222 person days at $50/day	11,100.
GROUND TRANSPORT :	rental & fuel	2,000.
AIR TRANSPORT :	37 hrs @ $650/hr.	24,050.
CONTRACTORS :	Linecutter 10km @ $600/km	6,000.
	Geophysics Mag 67km @ $150/km	10,200.
	IP 6km @ $2000/km	12,000.
GEOCHEM ANALYSIS :	366 soil samples @ $15/sample	5,490.
	102 rock samples @ $20/sample	2,040.
ORTHOPHOTO :		2,640.
Report Writing, Drafting etc.		2,000.
	TOTAL	$94,320.

STATEMENT OF QUALIFICATIONS

I, Ken Galambos, of the City of Whitehorse, Yukon do hereby certify that:

1. I have been a employee of Noranda Exploration Company, Limited (npl) in Whitehorse since March, 1988.
2. I am a graduate of the University of Saskatchewan with a B.E. in Geological Engineering.
3. I have practised by profession for the past eight years primarily in the Northern Cordillera.
4. I supervised and participated in field work done on the Aus claims in 1989.
5. I am a member of the Association of Professional Engineers of the Yukon Territory and the Geological Association of Canada.



K.D. Galambos, Eng.
Senior Project Geologist

APPENDIX I

SOIL SAMPLE GEOCHEMICAL RESULTS

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPB.

- SAMPLE TYPE: P1-P5 SOIL PG ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DAT. RECEIVED: JUN 19 1989 DATE REPORT MAILED: June 23/89 SIGNED BY. C. Leong ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8906-072 324 File # 89-1599 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	HG PPB
L15900E 30000N BL	1	31	21	222	.1	105	10	350	4.64	31	5	ND	5	25	1	3	2	79	.29	.105	44	24	.50	192	.04	2	1.98	.01	.07	1	3	50
L15900E 29950N	4	58	12	101	.1	44	6	219	3.13	71	5	ND	2	15	1	2	2	130	.14	.055	16	38	.54	124	.06	2	1.91	.01	.05	1	10	40
L15900E 29900N	3	22	14	81	.2	21	5	205	3.57	98	5	ND	1	14	1	2	2	103	.12	.063	12	33	.42	168	.06	5	1.52	.01	.08	1	123	30
L15900E 29850N	2	23	16	93	.2	17	7	308	3.00	83	5	ND	1	20	1	2	2	65	.15	.057	11	30	.46	232	.05	2	1.67	.01	.06	1	6	30
L15900E 29800N	2	27	22	75	.3	21	7	280	3.28	260	5	ND	1	19	1	2	5	71	.15	.049	13	30	.55	203	.05	3	1.82	.01	.08	1	8	80
L15900E 29750N	2	23	22	74	.4	17	6	250	3.15	263	5	ND	1	19	1	2	2	77	.15	.045	11	27	.45	159	.05	4	1.46	.01	.08	1	6	60
L15900E 29700N	2	40	24	75	.3	18	7	242	2.54	329	5	ND	1	19	1	2	7	52	.16	.056	12	24	.43	110	.04	4	1.47	.01	.07	1	10	80
L15900E 29650N	2	71	38	74	.9	23	7	195	3.00	478	5	ND	1	20	1	10	12	66	.13	.041	15	31	.58	142	.06	4	1.79	.01	.08	1	25	70
L15900E 29600N	1	52	28	62	.4	19	5	141	2.85	331	5	ND	1	14	1	4	11	63	.11	.032	14	29	.48	112	.05	4	1.72	.01	.05	1	13	40
L15900E 29550N	2	122	39	85	2.3	25	7	151	2.61	649	5	ND	1	33	1	9	15	57	.25	.052	17	33	.66	149	.05	6	1.90	.01	.08	1	21	90
L15900E 29500N	1	251	35	86	1.8	25	8	202	3.46	873	5	ND	4	11	1	15	11	52	.08	.024	13	33	.57	139	.06	2	2.48	.01	.07	1	40	120
L15900E 29450N	1	354	113	124	1.0	27	7	187	3.09	1381	5	ND	3	15	2	40	11	45	.09	.022	14	33	.59	176	.06	5	1.98	.01	.10	1	100	320
L15900E 29400N	3	70	42	82	.2	33	9	243	3.72	614	5	ND	2	28	1	11	8	101	.19	.061	16	39	.64	173	.07	2	2.33	.01	.09	2	8	30
L15900E 29350N	6	66	45	113	.5	26	8	240	4.51	929	5	ND	1	23	1	16	33	98	.15	.064	13	31	.36	121	.03	6	1.97	.01	.05	1	69	30
L15900E 29300N	2	46	24	78	.6	15	5	202	3.67	61	5	ND	1	12	1	10	2	75	.08	.054	13	21	.21	138	.05	5	1.31	.01	.06	1	8	50
L15900E 29250N	3	29	30	62	.4	14	5	166	2.87	72	5	ND	1	14	1	11	2	106	.08	.032	13	19	.18	135	.09	3	.96	.01	.07	1	4	40
L15900E 29200N	13	52	22	89	.3	55	9	302	4.06	75	5	ND	1	24	1	8	2	253	.13	.062	14	44	.60	146	.04	11	1.95	.01	.07	1	10	60
L15900E 29150N	8	29	19	59	.1	31	6	124	3.26	50	5	ND	3	13	1	2	2	143	.13	.023	13	38	.65	141	.10	3	1.96	.01	.06	1	8	50
L15900E 29100N	1	28	21	83	.1	25	8	182	2.88	25	5	ND	2	10	1	2	2	63	.09	.022	13	36	.61	126	.07	4	2.33	.01	.05	1	9	40
L15900E 29050N	2	21	33	78	.2	23	7	226	2.80	33	5	ND	2	25	1	11	2	65	.22	.041	13	32	.56	216	.07	3	1.73	.01	.08	1	7	30
L15900E 29000N	1	27	24	112	.7	28	13	399	2.97	70	5	ND	3	15	1	4	2	57	.13	.030	13	27	.43	203	.04	4	1.80	.01	.05	1	4	30
L15900E 28950N	2	26	21	166	1.0	36	9	221	3.49	67	5	ND	1	20	1	2	2	104	.15	.087	14	35	.43	155	.04	2	2.07	.01	.06	1	5	40
L15900E 28900N	2	29	21	174	.6	33	15	315	3.79	29	5	ND	1	16	1	2	2	75	.13	.042	12	36	.49	214	.06	2	2.60	.01	.06	1	3	50
L15900E 28850N	4	54	24	138	.3	37	6	158	3.60	45	5	ND	2	35	1	3	2	140	.12	.080	21	46	.46	292	.04	5	1.80	.01	.08	1	5	40
L15900E 28800N	5	27	34	459	.6	32	7	224	2.98	27	5	ND	1	23	3	2	2	209	.17	.100	16	35	.47	218	.04	5	1.62	.01	.07	1	4	30
L15900E 28750N	2	21	12	146	1.0	27	6	177	2.86	10	5	ND	2	14	1	2	2	66	.13	.035	12	35	.60	151	.05	5	1.90	.01	.06	1	3	60
L15900E 28700N	4	28	28	211	.6	27	10	1231	3.21	16	5	ND	1	29	2	2	2	85	.10	.103	16	25	.29	253	.05	2	1.13	.01	.10	1	3	30
L15900E 28650N	6	77	61	478	.3	62	14	486	4.07	73	5	ND	4	56	3	24	2	124	.47	.088	24	48	1.17	272	.08	5	2.22	.01	.15	1	19	150
L15900E 28600N	3	26	15	165	.3	26	8	214	3.81	22	5	ND	3	23	1	2	2	86	.13	.054	15	31	.36	273	.05	5	1.83	.01	.08	1	4	50
L15900E 28550N	2	18	15	85	.2	18	6	165	2.92	17	5	ND	3	14	1	2	2	72	.09	.043	13	26	.34	229	.04	7	1.67	.01	.06	1	2	30
L15900E 28500N	2	37	13	98	.4	24	6	207	2.68	10	5	ND	2	25	1	2	2	68	.15	.057	15	25	.33	266	.04	5	1.38	.01	.08	1	5	80
L16200E 29200N	5	54	17	130	.8	28	7	324	1.87	18	5	ND	1	24	3	2	2	68	.49	.049	11	20	.24	206	.03	5	1.03	.01	.06	1	5	80
L16200E 29150N	3	38	31	124	.1	32	9	205	4.23	63	5	ND	2	23	1	2	2	76	.16	.050	11	31	.53	122	.08	2	2.04	.01	.09	1	3	40
L16200E 29100N	2	24	15	112	.1	28	10	266	3.79	29	5	ND	3	20	1	2	2	68	.15	.032	11	34	.52	190	.06	5	2.12	.01	.09	2	47	30
L16200E 29050N	5	33	22	92	.6	26	10	240	4.45	54	5	ND	3	54	1	3	2	80	.16	.081	14	30	.42	220	.05	4	1.88	.01	.09	1	2	30
L16200E 29000N	2	41	16	135	.6	44	18	226	3.49	20	5	ND	4	17	1	2	2	68	.11	.038	11	38	.45	166	.06	6	2.94	.01	.07	1	2	60
STD C/AU-S	17	58	37	132	6.5	67	30	1026	4.14	40	19	7	36	49	17	15	18	58	.49	.088	38	56	.84	176	.07	35	1.92	.06	.13	11	48	1400

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
L16200E 28900N	3	35	17	127	.2	32	11	352	3.04	22	5	ND	1	22	2	2	2	72	.20	.062	11	29	.58	181	.06	6	1.99	.01	.11	1	3	30
L16200E 28850N	2	34	15	108	.2	24	10	815	2.82	13	5	ND	1	15	1	2	2	61	.10	.039	11	22	.31	221	.05	2	1.27	.01	.06	1	3	30
L16200E 28800N	1	17	16	217	.1	38	10	386	4.01	3	5	ND	4	9	1	2	2	67	.08	.099	25	31	.69	361	.02	5	2.32	.01	.20	1	1	10
L16200E 28750N	1	26	10	117	.1	28	7	199	2.88	9	5	ND	2	10	1	2	2	60	.08	.067	16	26	.66	219	.02	2	1.87	.01	.12	1	6	20
L16200E 28700N	2	29	15	120	.6	31	9	248	3.80	12	5	ND	4	14	1	2	2	66	.11	.045	14	34	.67	241	.03	2	2.36	.01	.12	1	2	40
L16200E 28650N	2	52	18	215	.4	47	9	248	3.75	22	5	ND	2	16	1	2	2	111	.07	.054	15	35	.29	243	.02	2	2.07	.01	.07	1	3	30
L16200E 28600N	1	24	12	94	.2	25	8	255	2.72	12	5	ND	2	14	1	2	2	56	.09	.039	12	24	.38	300	.03	2	1.56	.01	.06	1	1	10
L16200E 28550N	2	39	15	104	.1	29	7	184	2.84	12	5	ND	1	20	1	2	2	75	.14	.075	14	27	.43	241	.03	5	1.57	.01	.08	1	2	20
L16700E 29250N	2	54	14	81	.2	43	9	164	3.81	127	5	ND	2	18	1	2	2	56	.14	.028	10	27	.53	151	.06	6	2.06	.01	.09	1	5	30
L16700E 29200N	1	41	12	64	.1	34	10	191	3.20	72	5	ND	2	25	1	2	2	52	.15	.028	11	32	.72	137	.07	2	2.34	.01	.10	1	5	10
L16700E 29150N	1	33	12	65	.1	37	16	311	3.14	44	5	ND	2	47	1	2	2	55	.19	.028	9	37	.84	149	.09	2	2.60	.01	.11	1	1	20
L16700E 29000N	5	48	20	238	.4	43	10	202	3.85	20	5	ND	2	18	2	2	2	75	.16	.042	11	28	.43	178	.05	2	2.11	.01	.05	1	1	20
L16700E 28950N	2	40	16	151	.3	43	9	184	3.41	16	5	ND	3	10	1	2	2	59	.08	.026	12	31	.41	166	.05	2	2.13	.01	.05	1	6	40
L16700E 28900N	1	17	14	69	.1	19	5	122	3.06	13	5	ND	2	10	1	2	3	63	.09	.022	11	28	.37	136	.05	2	1.88	.01	.03	1	2	20
L16700E 28850N	1	16	15	56	.1	13	4	107	1.96	6	5	ND	1	12	1	2	2	58	.11	.017	12	21	.30	171	.05	5	1.64	.01	.04	1	4	10
L16700E 28800N	1	21	12	70	.1	22	8	216	2.71	12	5	ND	2	13	1	2	2	55	.12	.027	12	30	.48	209	.05	6	1.94	.01	.05	1	1	40
L16700E 28750N	1	17	11	56	.1	19	5	119	2.30	12	5	ND	1	11	1	2	2	52	.09	.021	10	25	.41	166	.04	4	1.72	.01	.05	1	1	10
L16700E 28700N	1	22	11	62	.1	19	5	140	2.13	11	5	ND	1	14	1	2	2	50	.12	.028	13	25	.44	162	.04	3	1.56	.01	.05	1	2	30
L16700E 28650N	1	16	7	47	.1	14	3	81	1.58	7	5	ND	1	12	1	2	2	36	.10	.029	10	21	.31	146	.02	2	1.24	.01	.04	2	3	30
L16700E 28600N	1	16	13	61	.1	15	5	141	2.32	10	5	ND	2	12	1	2	2	53	.11	.022	13	24	.37	168	.04	7	1.72	.01	.04	1	77	20
L16700E 28550N	6	67	16	171	.4	38	6	162	4.97	43	5	ND	1	34	1	4	2	142	.05	.117	22	38	.14	291	.03	2	1.53	.01	.06	1	3	20
L16700E 28500N	1	26	14	174	.1	30	12	828	3.48	15	5	ND	2	18	1	2	2	71	.12	.049	13	31	.40	333	.04	2	2.18	.01	.06	1	4	20
L16900E 29250N	2	27	16	72	.2	21	8	274	3.07	187	5	ND	1	19	1	3	2	76	.15	.042	11	31	.47	201	.05	3	1.85	.01	.06	1	1	30
L16900E 29200N	1	25	12	61	.1	22	6	170	2.79	103	5	ND	3	16	1	4	2	67	.14	.021	12	32	.57	130	.06	8	2.06	.01	.07	1	2	10
L16900E 29150N	1	26	12	61	.1	27	10	179	3.18	74	5	ND	3	14	1	2	2	59	.10	.024	12	33	.57	115	.06	2	2.17	.01	.07	1	3	20
L16900E 29100N	3	42	15	121	.9	32	9	203	3.88	76	5	ND	3	23	1	2	2	135	.12	.061	14	39	.44	174	.05	7	2.05	.01	.08	1	1	40
L16900E 29000N	2	39	14	81	.3	32	9	184	3.44	58	5	ND	4	15	1	3	2	64	.09	.031	13	37	.60	141	.07	3	2.38	.01	.08	1	2	20
L16900E 28950N	2	42	24	325	.6	30	10	318	3.45	39	5	ND	2	28	2	4	3	106	.27	.052	12	34	.55	185	.06	5	2.09	.01	.09	1	6	10
L16900E 28900N	2	30	21	165	.7	32	11	253	4.27	19	5	ND	3	15	1	3	2	70	.12	.077	15	33	.47	168	.05	2	2.29	.01	.10	1	3	30
L16900E 28850N	3	40	17	101	1.1	25	9	249	3.67	18	5	ND	2	15	1	2	2	66	.14	.053	13	32	.47	140	.05	3	1.97	.01	.07	1	2	20
L16900E 28800N	1	38	25	201	.4	28	18	1447	3.73	14	5	ND	4	22	1	2	2	90	.19	.146	16	43	.93	330	.07	2	2.69	.01	.21	1	8	10
L16900E 28750N	1	38	14	79	.4	31	8	236	2.97	18	5	ND	3	13	1	3	3	60	.09	.035	12	32	.52	171	.05	9	1.91	.01	.09	1	27	20
L16900E 28700N	1	32	12	88	.1	28	8	290	2.78	14	5	ND	5	25	1	2	2	58	.28	.040	18	33	.70	273	.08	4	1.68	.01	.09	1	6	10
L16900E 28650N	1	31	14	84	.1	26	8	206	2.65	14	5	ND	1	17	1	2	2	60	.19	.037	13	32	.61	253	.05	3	2.05	.01	.08	1	5	20
L16900E 28600N	3	34	13	119	.1	24	7	244	2.08	25	5	ND	1	23	1	2	2	74	.39	.065	12	29	.61	182	.03	8	1.49	.01	.07	1	4	30
STD C/AU-S	18	58	40	132	6.5	68	30	1019	4.11	40	18	7	37	49	17	14	22	58	.48	.087	38	55	.83	174	.07	35	1.92	.06	.13	11	48	1300

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	HG PPB
L16900E 28550N	2	41	13	100	.4	23	7	279	2.38	7	5	ND	1	31	1	2	2	67	.36	.070	19	29	.56	399	.03	3	1.75	.01	.11	1	5	50
L17000E 29250N	2	22	19	77	.4	22	9	234	3.37	100	5	ND	1	25	1	2	2	59	.21	.055	13	28	.44	164	.06	7	2.55	.01	.07	1	1	30
L17000E 29200N	3	26	19	76	.6	26	12	322	3.40	78	5	ND	2	28	1	2	2	83	.19	.060	14	30	.54	224	.06	8	2.04	.01	.09	1	5	20
L17000E 29150N	4	41	20	115	.3	37	9	181	3.44	113	5	ND	3	38	1	2	2	161	.13	.051	18	51	.60	206	.06	2	2.21	.01	.10	1	1	30
L17000E 29100N	2	40	16	73	.2	32	8	211	3.20	86	5	ND	5	25	1	2	2	77	.16	.036	19	33	.60	159	.08	5	2.23	.01	.09	1	4	20
L17000E 29050N	1	36	12	60	.1	29	8	171	2.60	72	5	ND	5	19	1	2	2	56	.19	.037	18	30	.60	168	.07	8	2.12	.01	.08	1	1	30
L17000E 29000N	1	34	14	69	.1	30	9	191	2.91	63	5	ND	4	21	1	2	2	58	.21	.041	18	31	.59	186	.07	2	2.03	.01	.08	1	7	50
L17000E 28950N	3	50	16	140	.4	32	11	566	2.49	44	5	ND	1	36	1	2	2	72	.58	.089	15	33	.60	277	.04	15	1.98	.01	.08	1	2	40
L17000E 28900N	2	54	27	135	.5	28	9	247	4.38	18	5	ND	4	20	1	2	2	77	.08	.046	18	39	.43	227	.05	4	2.42	.01	.10	1	4	20
L17000E 28850N	2	57	16	109	.1	32	11	208	3.57	16	5	ND	7	14	1	2	2	77	.10	.029	18	35	.76	214	.06	7	2.59	.01	.17	1	3	10
L17000E 28800N	2	53	17	118	.1	43	14	264	4.12	14	5	ND	5	16	1	2	2	71	.10	.036	17	36	.70	182	.05	7	2.60	.01	.13	1	2	20
L17000E 28750N	1	28	6	61	.1	19	6	201	2.03	7	5	ND	2	21	1	2	2	49	.21	.059	19	22	.40	214	.04	4	1.33	.01	.06	1	1	60
L17000E 28700N	1	39	10	88	.1	27	8	358	2.54	7	5	ND	4	23	1	2	2	45	.23	.051	19	22	.39	234	.05	2	1.28	.01	.06	1	12	30
L17000E 28650N	3	63	15	169	.1	37	12	474	3.61	10	5	ND	4	24	1	2	2	59	.11	.053	18	27	.34	199	.05	7	1.76	.01	.09	1	10	40
L17000E 28600N	1	34	13	84	.1	24	7	195	3.83	13	5	ND	3	15	1	2	2	93	.07	.026	15	29	.26	153	.05	4	1.86	.01	.06	1	3	30
L17000E 28550N	1	43	16	75	.1	30	13	406	4.00	13	5	ND	4	13	1	2	2	62	.08	.039	16	31	.36	189	.05	2	2.44	.01	.07	1	4	40
L17100E 30000N	1	47	54	95	.6	18	7	238	3.30	481	5	ND	1	16	2	10	4	48	.12	.036	13	26	.38	149	.04	2	2.15	.01	.05	1	20	50
L17100E 29950N	1	30	73	172	2.4	13	6	376	2.70	518	5	ND	1	19	3	15	6	52	.10	.063	12	22	.25	176	.03	3	1.55	.01	.05	1	52	30
L17100E 29900N	1	45	49	166	1.2	13	9	997	2.55	345	5	ND	1	67	2	10	5	48	.42	.078	12	23	.35	234	.03	3	1.59	.01	.08	1	34	40
L17100E 29850N	1	98	56	80	.6	18	8	291	2.65	528	5	ND	1	32	1	10	2	46	.22	.048	18	24	.44	162	.04	2	1.61	.01	.07	1	145	30
L17100E 29800N	1	66	38	96	.1	17	9	348	2.87	792	5	ND	2	39	1	13	2	49	.36	.047	23	26	.46	224	.05	2	1.75	.01	.07	1	47	20
L17100E 29750N	2	176	25	91	.3	16	8	518	2.43	1103	11	ND	1	62	1	14	2	37	.65	.069	47	22	.41	157	.03	2	1.75	.01	.07	1	31	70
L17100E 29700N	1	111	61	111	.7	16	7	280	2.99	927	5	ND	1	29	1	26	2	46	.29	.051	20	25	.42	151	.03	3	1.91	.01	.06	1	16	50
L17100E 29650N	3	119	28	143	.2	20	9	433	2.97	353	5	ND	1	65	2	7	2	57	.49	.061	17	25	.41	332	.05	2	1.86	.01	.10	1	47	20
L17100E 29600N	4	65	15	67	.5	29	7	239	2.74	215	5	ND	1	25	1	2	3	126	.26	.052	13	32	.51	168	.06	8	1.83	.01	.07	1	22	20
L17100E 29550N	3	171	22	73	.3	26	14	319	2.84	312	5	ND	1	24	1	4	2	66	.21	.070	16	29	.59	199	.07	2	2.09	.01	.10	1	30	30
L17100E 29500N	4	64	21	60	.1	27	7	189	2.55	56	5	ND	1	22	1	2	2	64	.20	.032	13	22	.30	180	.05	2	1.77	.01	.04	1	580	30
L17100E 29450N	4	48	30	91	.2	46	12	429	3.73	299	5	ND	1	28	1	4	2	103	.24	.078	19	30	.41	203	.05	8	1.88	.01	.06	1	59	40
L17100E 29400N	5	24	16	68	.1	21	7	211	3.50	96	5	ND	1	18	1	2	2	88	.15	.047	14	22	.34	128	.05	2	1.56	.01	.06	1	3	20
L17100E 29350N	4	29	15	58	.1	29	9	174	3.38	34	5	ND	2	28	1	2	2	95	.17	.033	13	32	.57	148	.08	2	2.24	.01	.09	1	3	20
L17100E 29300N	9	31	19	51	.1	24	5	116	4.68	63	5	ND	1	44	1	6	2	206	.14	.059	19	49	.61	168	.11	2	2.39	.02	.08	2	4	30
L17100E 29250N	2	26	12	65	.2	19	6	208	2.72	83	5	ND	1	21	1	2	3	159	.11	.062	14	40	.38	167	.03	6	1.69	.01	.06	1	7	20
L17100E 29200N	3	39	18	129	.5	35	10	430	3.33	30	5	ND	1	21	1	2	2	102	.15	.053	13	27	.32	197	.07	3	1.66	.01	.07	1	7	30
L17100E 29150N	2	27	17	114	.7	21	6	260	2.38	11	5	ND	1	18	1	2	2	96	.18	.046	10	26	.37	210	.06	2	1.55	.01	.06	1	2	20
L17100E 29100N	1	33	25	142	.5	23	11	286	4.35	21	5	ND	1	14	1	5	2	94	.09	.036	13	36	.35	183	.07	2	2.28	.01	.07	1	1	30
L17100E 29050N	1	41	18	218	.9	27	10	267	3.73	19	5	ND	1	16	2	2	2	81	.14	.058	15	33	.36	233	.05	2	2.04	.01	.08	1	6	40
STD C/AU-S	18	59	38	132	6.7	67	30	1051	4.13	42	19	7	37	51	18	15	19	59	.49	.090	39	55	.84	181	.07	32	1.95	.06	.13	11	53	1300

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
L17100E 29000N	2	39	21	115	.3	25	6	211	3.06	17	5	ND	2	15	1	2	2	95	.16	.055	14	29	.52	157	.06	2	1.65	.01	.07	1	3	20
L17100E 28950N	3	49	21	125	.5	24	5	180	2.33	10	5	ND	1	16	1	2	2	94	.22	.089	15	35	.67	226	.04	2	1.70	.01	.09	1	4	30
L17100E 28900N	2	49	19	105	.1	21	6	309	3.58	8	5	ND	1	13	1	2	4	98	.09	.042	17	24	.19	359	.06	2	1.53	.01	.05	1	5	20
L17100E 28850N	1	27	14	117	.1	21	12	1058	3.64	4	5	ND	1	14	1	2	2	66	.14	.060	17	26	.52	287	.04	2	1.85	.01	.10	1	1	30
L17100E 28800N	1	33	11	65	.1	24	7	176	3.21	9	5	ND	3	12	1	2	2	54	.09	.022	13	28	.50	159	.04	2	2.06	.01	.07	1	6	40
L17100E 28750N	1	14	11	50	.1	13	5	190	2.85	7	5	ND	2	12	1	2	2	51	.09	.031	12	22	.34	141	.04	2	1.69	.01	.05	2	2	20
L17100E 28700N	1	30	14	101	.2	25	8	177	3.14	9	5	ND	4	11	1	2	2	56	.08	.027	12	27	.35	211	.05	3	2.31	.01	.05	1	1	30
L17100E 28650N	2	23	13	71	.1	15	5	210	2.77	14	5	ND	1	15	1	2	2	85	.07	.044	16	24	.20	157	.03	9	1.30	.01	.06	1	5	20
L17100E 28600N	1	35	8	69	.1	23	6	145	3.29	12	5	ND	3	11	1	2	2	54	.07	.022	13	26	.33	158	.04	6	2.13	.01	.04	1	11	30
L17100E 28550N	1	22	15	69	.1	15	6	249	5.22	17	5	ND	1	12	1	2	2	85	.08	.043	14	26	.34	110	.07	2	1.60	.01	.06	1	1	20
L17100E 28500N	1	65	18	257	.6	42	19	610	5.73	9	5	ND	3	12	3	2	2	85	.09	.061	23	36	.33	485	.06	4	2.59	.01	.08	1	4	50
L17200E 29250N	2	30	12	66	.6	24	10	244	2.77	70	5	ND	2	21	1	2	2	80	.13	.028	14	32	.50	197	.06	2	1.99	.01	.06	1	3	10
L17200E 29200N	2	39	13	84	.5	25	8	175	3.11	21	5	ND	3	15	1	2	2	78	.14	.027	13	33	.62	122	.07	3	2.28	.01	.08	1	3	20
L17200E 29150N	1	93	15	320	.4	61	19	784	4.19	30	5	ND	1	30	3	2	2	70	.23	.092	23	31	.38	509	.03	5	1.94	.01	.13	1	1	40
L17200E 29100N	1	39	22	139	.6	26	10	321	3.93	14	5	ND	2	12	1	2	2	70	.09	.032	15	34	.43	245	.06	5	2.53	.01	.06	1	5	10
L17200E 29050N	15	88	33	520	.8	92	11	257	2.77	18	5	ND	2	26	2	7	2	333	.52	.168	25	43	1.66	162	.03	17	2.39	.01	.22	1	5	30
L17200E 29000N	1	107	19	186	.1	84	23	788	7.16	18	5	ND	2	10	1	2	2	71	.08	.070	18	38	.44	219	.04	8	2.58	.01	.13	1	1	20
L17200E 28950N	1	63	16	131	.1	33	16	1005	5.02	12	5	ND	1	14	1	2	2	77	.10	.052	14	31	.30	298	.05	2	2.35	.01	.07	1	4	30
L17200E 28900N	1	27	9	68	.1	19	7	287	3.04	10	5	ND	1	14	1	2	2	60	.16	.040	14	24	.36	289	.04	3	1.74	.01	.05	1	5	20
L17200E 28850N	1	27	13	72	.1	24	9	202	3.29	11	5	ND	4	12	1	2	2	56	.11	.022	13	30	.48	219	.04	3	2.66	.01	.06	1	1	70
L17200E 28800N	1	23	11	76	.2	19	7	445	2.35	4	5	ND	1	17	1	2	2	54	.14	.040	18	20	.29	278	.03	3	1.51	.01	.08	1	7	20
L17200E 28750N	2	18	14	71	.3	21	7	172	3.56	14	5	ND	3	28	1	2	2	144	.11	.055	15	38	.42	380	.04	8	2.32	.01	.07	1	2	50
L17200E 28700N	1	16	13	213	.6	24	13	1116	3.19	7	5	ND	3	16	3	2	2	63	.17	.077	18	29	.45	866	.05	6	2.39	.01	.08	1	2	20
L17200E 28650N	3	21	12	70	.9	17	6	203	2.77	16	5	ND	2	31	1	2	2	221	.08	.052	17	46	.29	505	.04	2	2.01	.01	.08	1	1	90
L17200E 28600N	1	40	17	183	.4	34	11	394	3.83	10	5	ND	2	14	1	2	2	70	.11	.034	15	29	.33	501	.05	2	2.32	.01	.06	1	1	40
L17200E 28550N	2	30	12	106	.6	22	6	175	2.49	7	5	ND	2	26	1	2	2	63	.14	.081	16	21	.23	479	.04	5	1.46	.01	.07	1	1	20
L17200E 28500N	2	85	17	210	.9	34	8	237	6.09	17	5	ND	2	14	1	2	2	81	.10	.052	18	30	.17	313	.04	6	1.85	.01	.07	1	6	100
L17500E 30000N	1	90	243	265	.6	13	8	246	2.83	809	5	ND	7	13	2	187	21	43	.25	.094	16	29	.47	77	.03	3	2.78	.01	.03	1	20	20
L17500E 29950N	1	46	21	52	.2	14	4	114	2.33	448	5	ND	1	12	1	7	13	51	.11	.029	14	22	.34	92	.04	9	1.52	.01	.04	1	15	50
L17500E 29900N	1	53	22	70	1.0	17	8	376	3.31	764	5	ND	2	16	1	8	9	67	.12	.038	14	25	.42	163	.07	7	1.61	.01	.08	1	4	20
L17500E 29850N	2	100	26	73	1.2	19	6	183	3.05	828	5	ND	1	21	1	4	7	58	.16	.037	15	27	.51	125	.06	2	1.87	.01	.07	1	22	40
L17500E 29800N	1	81	24	61	.5	18	5	125	2.38	477	5	ND	1	23	1	7	7	50	.18	.033	15	25	.47	147	.04	9	1.65	.01	.06	1	34	20
L17500E 29750N	1	80	37	69	1.2	16	6	245	2.42	541	5	ND	1	22	1	12	7	48	.19	.051	17	25	.47	126	.04	15	1.68	.01	.07	1	15	30
L17500E 29700N	1	97	33	58	.9	15	5	132	2.51	519	5	ND	3	21	1	11	7	49	.15	.047	17	21	.39	110	.04	6	1.80	.01	.06	1	22	50
L17500E 29650N	1	84	43	56	.5	16	5	137	2.29	441	5	ND	2	20	1	15	11	58	.18	.044	17	22	.38	99	.04	9	1.63	.01	.06	1	31	30
L17500E 29600N	1	104	66	68	1.1	17	6	165	2.48	424	5	ND	4	25	1	33	5	48	.25	.054	22	22	.44	120	.05	8	1.59	.01	.07	1	37	40
STD C/AU-S	17	58	41	132	7.2	67	29	918	4.10	39	23	7	37	49	17	15	19	57	.48	.088	38	56	.81	181	.07	34	1.93	.06	.13	13	51	1400

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	HG PPB
L17500E 29550N	1	69	54	60	.3	17	5	153	2.12	206	5	ND	5	25	1	18	2	42	.24	.045	20	23	.50	118	.07	2	1.40	.01	.08	1	73	30
L17500E 29500N	2	76	68	65	.3	16	7	241	2.25	624	6	ND	8	34	1	32	2	47	.35	.044	23	22	.44	165	.07	2	1.40	.01	.07	1	38	30
L17500E 29450N	3	85	49	169	.8	33	9	337	2.92	185	5	ND	1	26	2	11	13	71	.26	.066	16	31	.43	195	.04	4	1.97	.01	.06	1	16	50
L17500E 29400N	7	49	33	92	1.1	18	3	60	2.48	29	5	ND	1	24	1	5	2	95	.12	.046	15	33	.21	117	.04	4	1.04	.01	.09	1	6	20
L17500E 29350N	3	91	33	197	.1	43	15	460	2.82	39	5	ND	2	32	1	2	3	75	.55	.067	15	33	.62	194	.06	2	1.91	.01	.08	1	12	30
L17500E 29300N	3	35	15	67	.1	21	7	183	3.97	17	5	ND	4	24	1	2	2	62	.19	.033	13	27	.49	173	.07	2	1.75	.01	.10	1	2	40
L17500E 29250N	1	20	13	76	.1	16	9	444	2.31	6	5	ND	1	32	1	2	2	51	.23	.060	12	20	.36	186	.07	2	1.25	.01	.10	1	4	10
L17500E 29200N	1	27	15	62	.1	30	8	169	2.86	13	5	ND	3	25	1	2	2	61	.28	.022	15	34	.83	163	.09	2	2.10	.01	.09	1	6	10
L17500E 29150N	2	38	11	70	.4	24	6	224	2.43	9	5	ND	1	26	1	2	2	51	.19	.044	12	25	.55	159	.05	3	1.63	.01	.09	1	8	30
L17500E 29100N	1	32	32	117	.5	20	8	168	4.86	13	5	ND	3	10	1	2	2	91	.06	.034	14	38	.30	248	.05	4	2.14	.01	.08	1	4	20
L17500E 29050N	2	34	20	102	.6	20	6	166	3.59	11	5	ND	3	12	1	2	2	103	.11	.034	12	30	.54	225	.10	3	1.80	.01	.09	1	11	30
L17500E 29000N	1	25	10	46	.6	13	4	64	1.79	4	5	ND	1	12	1	2	2	50	.07	.024	16	13	.08	304	.04	2	.86	.01	.05	1	1	20
L17500E 28950N	1	24	12	54	.2	17	5	124	3.17	10	5	ND	3	10	1	2	2	58	.07	.020	14	20	.20	175	.05	2	1.56	.01	.05	1	4	10
L17500E 28900N	1	20	16	77	.3	15	11	495	3.04	6	5	ND	2	18	1	2	2	67	.17	.035	14	22	.25	329	.04	2	1.65	.01	.05	1	3	10
L17500E 28850N	2	22	14	130	.2	19	10	290	2.96	5	5	ND	1	20	1	2	2	77	.22	.104	27	31	.60	413	.02	7	2.30	.01	.23	1	2	30
L17500E 28800N	2	18	10	56	.2	15	5	160	2.39	7	5	ND	3	10	1	2	2	56	.07	.028	16	21	.29	200	.03	3	1.45	.01	.08	2	6	10
L17500E 28750N	1	20	14	62	.1	16	6	142	3.75	9	5	ND	3	12	1	2	2	67	.09	.028	14	22	.23	148	.06	2	1.53	.01	.05	1	2	20
L17500E 28700N	1	34	12	87	.1	22	8	266	3.21	10	5	ND	2	12	1	2	2	62	.09	.032	17	27	.36	266	.04	2	2.01	.01	.05	1	3	40
L17500E 28650N	2	177	15	103	1.6	101	19	1031	13.22	10	5	ND	5	19	1	3	2	69	.06	.088	36	49	.32	377	.01	6	2.55	.01	.13	1	12	130
L17500E 28600N	3	84	22	144	.8	65	13	319	7.03	16	5	ND	2	53	1	2	2	177	.08	.116	20	49	.33	971	.02	4	2.32	.01	.14	1	1	60
L17500E 28550N	1	29	16	137	.3	27	9	254	4.34	11	5	ND	1	14	1	2	2	79	.09	.087	14	31	.32	356	.04	2	2.36	.01	.07	1	1	40
L17500E 28500N	1	30	12	67	.1	23	8	201	3.59	10	5	ND	3	16	1	2	2	67	.10	.021	14	32	.42	394	.04	2	2.37	.01	.06	1	2	10
STD C/AU-S	18	60	40	132	6.7	68	30	966	4.19	41	21	7	38	51	18	15	20	60	.49	.092	39	55	.85	179	.07	35	1.95	.06	.13	11	51	1300

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: PANORAMA RIDGE CODE : 8907-013

Project No. :324 Sheet:1 of 4 Date rec'd:JUL.04
Material :204 SOILS Geol.:K.G. Date compl:JUL.17
Remarks :

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Ag	As	Sb	PPB Au
2	15700E-28500N	0.4	8	1	5
3	28550	1.0	6	4	5
4	28600	0.7	22	4	5
5	28650	0.5	8	1	5
6	28700	0.2	4	1	5
7	28750	0.8	12	1	5
8	28800	0.5	10	6	5
9	28850	1.4	54	20	5
10	28900	0.4	28	4	5
11	28950	0.8	26	8	5
12	29000	1.1	30	6	10
13	29050	0.3	30	8	5
14	29100	0.6	64	26	5
15	29150	0.9	50	10	5
16	29200	0.3	76	38	5
17	29250	2.4	630	260	45
18	29300	1.0	300	86	30
19	29350	1.6	460	88	85
20	29400	5.4	2390	134	90
21	29450	0.5	390	16	5
22	29500	0.7	1470	26	105
23	29550	0.4	710	12	10
24	29600	0.5	320	12	15
25	29650	0.7	310	10	5
26	29700	0.6	460	12	15
27	29750	0.6	510	14	10
28	29800	1.2	2260	20	95
29	29850	0.6	70	8	5
30	29900	0.3	60	6	5
31	29950	0.2	30	2	5
32	30000	0.6	22	1	5
33	30050	0.9	180	14	5
34	30100	0.7	190	14	5
35	30150	0.8	160	1	5
36	30200	0.8	270	12	5
37	30300	0.5	8	2	5
38	30350	0.2	16	6	5
39	30400	0.2	6	1	5
40	30450	1.2	2	2	5
41	15700E-30500N	0.3	1	6	5
42	16100E-29800N	1.2	170	10	5
43	29850	1.4	240	14	25
44	29900	0.6	98	8	5
45	29950	0.7	92	10	5
46	30000	0.2	380	20	5
47	30050	2.5	1480	32	10
48	30100	1.2	930	22	40
49	16100E-30150N	0.8	600	16	10

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. T. o.	SAMPLE No.	Ag	As	Sb	PPB Au

50	16100E-30350N	0.6	74	4	10
51	30400	0.9	10	4	5
52	30450	0.4	10	8	5
53	16100E-30500N	0.3	18	10	5
54	16300E-28500N	0.2	4	6	5
55	28550	0.1	6	6	5
56	28600	0.3	10	4	5
57	28650	0.1	10	2	5
58	28700	0.1	4	1	10
59	29800	0.6	580	8	50
60	29850	0.3	320	6	50
61	29900	0.3	260	6	65
62	29950	0.3	230	6	90
63	30000	0.1	140	8	150
64	30050	0.2	190	6	30
65	30100	0.4	600	22	35
66	30150	1.2	300	30	50
67	30200	0.4	260	22	30
68	30250	0.6	290	20	15
69	30300	0.4	110	6	15
70	30350	0.1	44	4	10
71	30400	0.2	30	4	10
72	30450	0.9	290	14	25
73	16300E-30500N	0.2	18	8	15
74	16400E-28500N	1.4	14	4	5
75	28550	0.1	8	2	5
76	28600	0.1	10	1	5
77	16400E-28650N	0.2	14	1	5
78	16500E-28500N	0.8	20	4	5
79	28550	0.8	10	2	5
80	28600	0.2	6	4	5
81	28650	0.2	10	4	5
82	28700	0.3	10	4	5
83	28750	0.4	8	2	5
84	28800	0.3	16	8	5
85	28850	0.4	1	4	5
86	28900	0.7	6	2	5
87	28950	0.7	4	2	5
88	29000	0.8	8	2	5
89	29050	0.7	28	1	5
90	29100	1.1	140	10	5
91	29150	0.6	44	6	5
92	29200	0.2	32	4	5
93	29250	0.9	380	4	5
94	30000	0.7	250	8	250
95	30050	0.3	360	6	130
96	30100	0.6	150	10	170
97	30150	0.4	310	12	5
98	30200	0.4	20	8	5
99	30250	0.1	270	12	40
00	CHECK NL-6	0.9	88	34	-
01	30300	0.3	58	4	10
02	30350	0.4	44	8	5
03	30400	0.5	18	6	5
04	30450	1.7	230	6	5
05	16500E-30500N	0.3	6	2	5
06	16600E-28500N	0.3	1	2	5

.T. o.	SAMPLE No.	Ag	As	Sb	PPB Au
07	16600E-28550N	0.4	12	4	5
08	28600	0.3	1	4	5
09	28650	0.3	8	4	5
10	28700	0.1	4	6	5
11	28750	0.5	4	6	5
12	28800	0.1	2	4	5
13	28850	0.2	1	4	5
14	28900	0.4	4	6	5
15	28950	0.9	16	8	5
16	29000	0.3	26	6	5
17	29050	0.4	32	6	20
18	29100	0.2	18	4	5
19	29150	0.1	30	6	5
20	29200	0.5	130	10	10
21	30000	0.4	1020	20	30
22	30050	0.2	88	10	5
23	30100	0.6	170	4	20
24	30150	0.9	870	20	110
25	30200	0.4	900	26	90
26	30250	0.1	430	28	20
27	30300	0.1	130	8	10
28	30350	0.1	80	4	20
29	30400	0.3	390	14	30
30	30450	0.7	2	2	5
31	16700E-30500N	0.1	2	1	5
32	16800E-28550N	0.1	10	1	5
33	28650	0.3	12	1	5
34	28700	0.4	6	1	5
35	28750	0.6	8	1	5
36	28800	0.1	10	4	5
37	28850	0.1	4	2	5
38	28900	0.1	10	1	5
39	28950	0.3	2	2	5
40	29000	0.3	24	4	5
41	29050	0.3	2	6	5
42	29100	0.5	4	4	5
43	29150	1.9	14	6	5
44	29200	0.6	46	2	5
45	29250	0.3	36	1	5
46	30200	1.8	2400	320	280
47	30250	0.7	2780	70	190
48	30350	2.5	370	260	10
49	30400	1.6	850	150	5
50	CHECK NL-6	~~1.0~~	~~80~~	~~34~~	
51	16800E-30450N	1.0	2300	200	10
52	16900E-30000N	1.0	2150	140	170
53	30050	1.6	1240	102	50
54	30150	0.5	1650	22	60
55	30250	0.5	770	16	25
56	30300	1.7	2640	70	155
57	30350	1.9	2130	62	105
58	30400	0.6	350	30	5
59	30450	0.2	36	4	5
60	16900E-30500N	0.5	68	24	5
61	17300E-28500N	0.6	8	4	5
62	28600	0.3	12	2	5
63	17300E-28650N	0.1	4	2	5

. T. o.	SAMPLE No.	Ag	As	Sb	PPB Au
					8907-013 Pg. 4 of 4
54	17300E-28700N	0.3	20	4	5
55	28750	0.4	16	2	5
56	28800	0.2	14	6	5
57	28850	0.1	2	6	5
58	28900	0.3	1	4	5
59	28950	0.4	1	4	5
70	29000	0.2	22	2	5
71	29050	0.6	1	2	5
72	29100	1.1	1	2	5
73	29150	0.6	1	4	5
74	29200	1.9	12	4	5
75	29250	0.4	6	1	15
76	29300	0.6	42	6	5
77	29350	0.4	14	1	15
78	29400	0.5	30	4	5
79	29450	0.4	120	6	5
80	29500	0.6	46	4	15
81	29550	0.9	**1040**	18	40
82	29600	0.5	**580**	10	**150**
83	29650	0.8	**570**	14	**50**
84	29700	1.6	**1310**	32	**50**
85	29750	0.6	**460**	12	45
86	29800	1.1	**850**	26	100
87	29850	1.0	**630**	22	**50**
88	29900	1.0	**290**	2	**50**
89	29950	0.6	**710**	1	5
90	17300E-30000N	3.0	**510**	6	10
91	17400E-28500N	0.1	6	1	5
92	28550	0.1	2	4	5
93	28600	0.3	4	4	5
94	28650	0.1	2	4	5
95	28700	0.3	1	2	5
96	28750	0.1	8	2	5
97	28800	0.1	12	2	5
98	28850	0.2	1	1	5
99	28900	0.2	4	2	5
00	28950	0.6	1	4	5
01	29000	0.1	2	1	5
02	29050	0.1	6	1	5
03	29100	0.6	1	1	50
04	29150	1.0	2	1	10
05	29200	1.4	16	4	10
06	17400E-29250N	0.1	4	1	5

APPENDIX II

ROCK SAMPLE DESCRIPTIONS & GEOCHEMICAL RESULTS

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
R40332	2	70	67	73	.9	11	6	231	2.12	266	5	ND	21	29	1	28	23	37	.36	.066	29	23	.84	209	.12	9	1.34	.05	.50	1	56	5
R40333	2	48	23	28	.5	26	9	163	2.10	19	5	ND	5	88	1	3	2	6	2.55	.021	9	10	.30	92	.07	8	2.85	.18	.08	1	4	10
R52301	2	66	21	52	.4	8	5	194	1.74	211	5	ND	22	41	1	2	2	33	.66	.055	42	20	.46	162	.12	18	.88	.07	.34	1	15	5
R52302	6	27	13	40	.2	10	4	191	1.48	246	5	ND	14	28	1	2	2	28	.32	.052	27	17	.51	119	.10	2	1.06	.04	.24	1	6	5
R52303	2	65	12	26	.2	9	12	136	2.31	8542	5	ND	14	58	1	17	2	45	2.58	.067	31	36	1.37	75	.01	6	1.73	.03	.08	1	5	5
R52304	2	802	13	58	2.0	9	7	207	3.39	4330	5	ND	14	97	1	6	25	58	1.15	.073	34	44	1.34	459	.19	2	2.06	.06	.76	1	105	10
R52305	4	161	184	57	5.5	14	12	43	1.34	2174	5	4	17	9	1	110	356	6	.14	.037	10	7	.06	248	.01	10	.59	.01	.15	1	2840	70
R52306	3	29	16	38	.3	11	3	212	1.14	368	5	ND	16	26	1	2	2	22	.62	.041	20	17	.52	105	.02	5	.86	.04	.18	1	36	20
R52307	12	30	32	43	.4	7	3	205	1.27	231	5	ND	21	24	1	2	19	24	.92	.048	11	18	.69	124	.01	5	1.00	.03	.12	1	450	10
R52308	2	110	22	44	.2	7	4	151	1.49	296	5	ND	24	38	1	3	2	31	.48	.060	28	16	.64	151	.11	2	.93	.06	.30	2	49	5
R52309	2	132	33	103	.5	18	10	151	3.11	33	5	ND	12	183	2	14	2	44	2.58	.098	28	26	1.00	141	.07	7	3.71	.17	.16	1	12	40
R52310	1	12	8	16	.1	5	1	136	.55	5	5	ND	6	131	1	5	2	14	4.15	.076	51	5	.09	7	.08	14	3.44	.15	.02	1	8	5
R52311	1	241	26	26	.6	4	5	129	9.83	13	5	ND	5	40	1	2	2	25	.94	.029	21	8	.13	28	.05	12	1.36	.07	.05	1	9	10
R52312	1	324	14	57	.7	9	7	290	4.31	38	5	ND	13	162	1	2	2	84	1.61	.140	27	37	1.67	691	.29	5	3.12	.19	1.45	1	108	30
R52313	6	165	10	51	.3	91	3	252	1.65	138	5	ND	3	147	1	2	2	134	7.65	1.711	36	93	.98	83	.03	3	.63	.02	.13	1	63	20
R52314	1	26	17	181	.1	35	3	166	1.74	13	5	ND	1	4	1	2	2	61	.11	.021	8	22	.86	49	.01	2	.81	.01	.04	1	3	10
STD C/AU-R	18	63	43	132	6.6	70	31	944	4.16	36	19	7	36	48	18	14	21	58	.52	.086	38	56	.90	175	.07	33	2.03	.06	.14	11	510	1400

Kanaram - Kdg (K6)

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-3216

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: JUL 5 1989 DATE REPORT MAILED: July 11/89 SIGNED BY. C. Leong ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-013 324 File # 89-1947 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB	Hg PPB
R 07054	5	29	11	85	.1	62	4	116	.31	15	5	ND	5	58	1	2	2	24	1.07	.166	11	13	.17	85	.05	6	1.11	.06	.01	1	19	10
R 40324	1	133	36	39	.8	11	4	81	.55	1936	5	ND	20	99	1	14	22	15	.23	.070	67	11	.04	107	.01	10	.71	.01	.04	3	33	450
R 40325	14	236	11391	520	20.2	2	3	94	5.99	4691	8	ND	12	29	39	5180	62	11	.03	.012	17	14	.04	73	.01	29	.41	.01	.22	2	410	6000
R 40326	1	67	24	29	.5	16	3	77	1.54	69	5	ND	7	13	1	14	2	55	.08	.018	13	53	1.04	350	.12	23	1.55	.02	.64	3	11	10
R 40327	5	77	45	56	.1	8	3	166	1.66	43	5	ND	13	34	1	19	2	37	.40	.062	29	33	.54	231	.13	2	1.11	.05	.38	1	7	20
R 40328	1	140	20	40	.2	25	3	77	.97	81	5	ND	6	81	1	2	2	21	.94	.016	10	31	.45	359	.11	17	2.05	.15	.23	1	19	5
R 40329	2	39	8	11	.1	52	8	56	.55	452	5	ND	4	108	1	2	2	18	2.14	.022	13	28	.32	145	.12	2	3.19	.32	.22	1	78	5
R 40340	1	51	65	46	.7	7	2	31	2.23	9969	5	ND	11	144	1	36	14	20	.02	.051	30	12	.03	818	.01	2	.40	.01	.22	3	32	150
R 40341	2	50	19	35	.2	12	2	160	.77	66	5	ND	5	182	1	2	2	24	1.57	.021	12	68	.51	102	.11	10	2.22	.15	.31	1	55	5
R 40342	4	32	28	41	.1	13	1	134	.69	90	5	ND	18	80	1	2	2	19	.80	.069	19	14	.29	78	.07	19	.93	.08	.11	2	43	5
R 40343	9	299	9	37	.7	33	6	102	1.47	15	5	ND	5	125	1	2	2	25	1.74	.014	9	32	.64	190	.10	15	2.80	.12	.37	1	29	5
R 40344	5	123	57	106	3.8	35	9	478	3.93	539	5	ND	1	73	1	3	1071	15	3.84	.050	55	7	.14	15	.03	29	1.54	.06	.02	1	510	5
R 40345	8	171	19	45	1.5	23	6	264	4.46	756	5	ND	1	98	1	4	452	14	3.39	.045	47	10	.09	28	.03	8	1.27	.12	.05	1	131	5
R 40346	10	17	17	23	.3	13	2	243	.75	71	5	ND	1	100	1	2	56	11	4.28	.058	23	4	.08	15	.05	3	1.96	.10	.02	1	47	5
R 40347	1	70	40	69	.1	17	4	197	1.27	76	5	ND	14	96	1	2	2	16	1.22	.130	19	20	.27	78	.09	4	1.40	.14	.09	1	13	5
R 40348	1	31	28	43	.1	10	2	128	.53	17	5	ND	12	119	1	2	3	8	1.33	.133	15	6	.05	77	.07	2	1.46	.08	.10	1	6	5
R 40349	1	53	36	103	.2	14	2	192	.78	5	5	ND	14	442	1	2	2	13	5.13	.122	10	18	.16	49	.06	6	5.40	.52	.06	1	2	10
R 40350	2	29	13	38	.1	28	3	142	.45	21	5	ND	5	67	1	2	2	14	1.24	.107	9	6	.22	96	.06	4	.87	.08	.06	1	20	5
R 52315	3	4052	41	187	6.6	25	14	102	1.80	10591	5	ND	13	577	1	19	42	25	1.02	.063	42	20	.36	258	.01	2	.65	.01	.12	1	10	130
R 52316	1	162	24	42	.1	12	10	236	2.44	3027	5	ND	10	37	1	3	30	46	.32	.069	43	33	.68	128	.03	2	1.45	.02	.13	1	9	60
R 52317	2	69	31	59	.3	11	5	163	1.74	442	5	ND	27	45	1	3	2	44	.48	.069	52	27	.55	192	.14	4	1.11	.06	.47	1	106	10
R 52318	1	65	125	88	.7	3	1	21	.83	1773	5	ND	15	86	5	115	12	17	.07	.025	17	9	.02	69	.01	11	.50	.01	.09	2	28	2300
R 52319	1	97	22	119	.5	13	7	217	2.31	551	5	ND	17	36	1	3	2	48	.33	.075	25	31	.88	224	.12	12	1.56	.05	.45	1	168	10
R 52320	1	174	24	50	.5	7	3	133	1.14	215	5	ND	13	52	1	2	2	27	.50	.072	20	18	.40	136	.11	23	.88	.07	.22	1	101	20
R 52321	2	558	321	199	11.0	10	5	50	2.99	4187	5	ND	17	36	2	51	26	17	.50	.079	20	11	.41	325	.01	13	1.54	.01	.14	1	24	1000
R 52322	1	114	9	37	.1	36	6	101	1.11	474	5	ND	3	10	1	2	45	44	.24	.049	12	26	.61	108	.07	2	1.00	.03	.32	1	1430	5
R 52323	11	155	10	42	5.3	5	5	119	3.11	5559	5	ND	1	83	1	4	22	62	.38	.063	10	15	6.28	931	.08	2	2.20	.02	2.95	1	110	20
R 52324	1	190	22	59	.7	22	2	120	1.11	462	5	ND	11	30	1	11	2	42	.37	.044	9	25	.69	55	.05	2	.94	.05	.07	1	250	10
R 52325	2	290	26	35	.2	9	2	105	1.27	1422	5	ND	13	79	1	2	2	31	.49	.060	29	23	.52	148	.09	9	1.02	.07	.26	1	224	5
R 52326	1	386	34	56	.6	9	7	166	2.76	9993	5	ND	9	105	1	12	20	37	2.47	.076	35	32	.91	65	.01	2	1.40	.01	.15	1	11	70
R 52351	1	132	70	40	1.0	12	5	88	1.67	2540	5	ND	15	325	1	37	36	26	.29	.051	30	18	.03	252	.01	11	.53	.01	.11	1	15	250
R 52352	1	33	29	29	.5	7	1	90	.77	72	5	ND	18	94	1	2	2	13	.56	.070	13	10	.18	93	.07	4	.75	.05	.07	1	7	20
R 52353	3	165	23	47	.1	9	6	194	1.91	251	5	ND	17	44	1	2	4	40	.48	.067	40	26	.69	211	.15	2	1.05	.07	.45	1	20	10
R 52354	1	114	13	32	.1	25	4	104	.36	24	5	ND	1	62	1	2	2	26	1.34	.016	9	30	.61	311	.09	2	2.42	.06	.38	1	113	5
R 52376	2	100	24	40	.9	16	2	123	1.10	920	5	ND	4	212	1	2	44	51	.31	.048	6	26	.69	65	.03	2	.79	.04	.06	1	600	5
R 52377	1	14	16	27	.1	11	2	103	.90	1013	5	ND	5	116	1	2	2	53	.46	.118	13	25	.68	49	.03	16	.77	.04	.08	1	167	5
STD C/AU-R	18	59	40	132	6.9	71	30	1027	4.08	42	17	7	36	50	18	14	20	61	.50	.099	40	57	.85	182	.07	33	1.95	.06	.14	11	490	1300

11 July WLSC

NORANDA EXPLORATION CO. LTD. PROJECT 8907-013 324 FILE # 89-1947

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Pt**
R 52378	1	75	2	73	.1	76	23	834	4.85	15	5	ND	12	129	1	3	2	124	2.75	.149	42	299	2.72	1047	.27	2	1.95	.07	1.48	1	13	880
R 52379	1	73	31	65	.7	7	5	432	2.72	1253	5	ND	16	40	1	18	10	40	.35	.053	44	22	.36	163	.06	9	1.52	.01	.14	1	34	380
R 52380	2	446	2	177	.4	19	6	580	1.99	222	5	ND	15	12	3	22	2	43	.30	.070	40	19	.03	53	.01	2	.62	.01	.04	1	80	1300
R 52381	9	85	16	19	1.0	33	2	29	1.60	423	5	ND	5	15	1	4	2	120	.02	.030	14	34	.06	134	.01	10	.44	.01	.11	3	101	20
R 52382	2	109	11	44	.1	8	2	155	.69	48	5	ND	15	86	1	3	2	16	.58	.070	22	13	.25	133	.09	2	.90	.05	.13	1	18	10
R 52383	1	360	28	40	3.0	5	1	112	1.37	99	5	ND	18	25	1	5	36	32	.29	.061	10	22	.51	92	.04	13	1.29	.04	.07	4	121	5
R 52384	4	96	16	33	.1	10	4	159	1.89	197	5	ND	15	26	1	4	5	58	.31	.064	26	23	.57	188	.13	2	1.36	.04	.39	1	410	10
R 52385	326	3053	20997	1688	258.0	1	2	25	20.15	45130	5	ND	1	95	43	15369	2	19	.03	.130	20	16	.03	37	.01	2	.48	.02	.22	1	620	19600
R 52386	3	103	111	66	.8	42	13	150	2.43	103	5	ND	16	147	1	22	2	59	1.26	.131	24	46	.75	261	.20	11	2.20	.13	.60	1	12	20
R 52387	3	79	564	45	1.9	7	1	24	2.09	253	5	ND	4	22	1	119	2	104	.01	.022	13	20	.01	134	.01	12	.41	.01	.03	4	10	180
R 52388	2	22	15	71	.1	17	10	550	4.01	19	5	ND	9	29	1	2	2	92	.40	.105	26	50	1.79	487	.08	2	2.29	.03	.29	1	3	10
R 52389	7	25	97	270	1.0	29	4	946	1.49	54	5	ND	5	165	2	14	2	68	13.75	.095	16	32	2.07	65	.06	15	2.90	.07	.04	1	2	30
R 52390	2	22	23	45	.1	5	3	159	3.71	49	5	ND	15	51	1	2	2	58	.29	.077	26	30	.82	407	.18	2	1.92	.03	.58	1	1	20
R 52391	3	389	46	44	1.5	15	3	47	2.49	52	5	ND	15	34	1	77	2	26	.53	.115	24	16	.31	203	.12	6	1.17	.02	.09	2	2	20
R 52392	4	141	89	71	.2	12	6	194	2.92	30	5	ND	18	251	1	6	6	48	1.95	.083	33	24	.73	122	.16	8	3.33	.35	.65	1	104	10
R 52393	2	450	50	37	.9	21	7	71	2.43	42	5	ND	1	266	1	4	3	12	1.73	.041	13	13	.28	81	.04	2	2.43	.09	.10	1	260	10
R 52394	4	157	24	62	.1	30	3	143	1.34	47	5	ND	4	70	1	2	2	105	.50	.016	10	46	.83	227	.11	2	1.37	.05	.51	1	32	5
R 52395	2	26	27	37	.1	16	2	129	.81	21	5	ND	22	86	1	3	2	47	.73	.030	15	19	.49	117	.07	14	1.40	.08	.29	2	34	10
R 52396	9	84	24	64	.1	43	3	151	1.57	44	5	ND	14	239	1	2	2	202	2.36	.216	20	46	.86	242	.14	32	3.23	.29	.63	1	39	5
R 52397	1	74	36	63	.6	5	4	171	1.63	361	5	ND	19	73	1	2	2	35	.47	.065	32	15	.50	165	.10	10	1.20	.07	.29	1	13	5
R 52398	2	762	22	102	1.2	7	19	259	3.25	1209	5	ND	15	45	2	3	2	42	.85	.061	38	19	.72	310	.12	2	1.38	.04	.48	1	37	20
R 52399	2	25	966	29	28.1	3	1	41	.75	1342	5	ND	1	25	2	436	291	4	.04	.010	2	5	.01	33	.01	3	.03	.01	.02	5	760	30
R 52400	2	326	59	126	1.8	5	3	203	2.23	3533	5	ND	13	141	2	73	9	28	.11	.057	22	16	.02	352	.01	2	.49	.01	.11	1	27	1400
R 52401	2	7	31	53	.6	7	2	296	.78	468	5	ND	13	34	1	2	9	19	.39	.040	9	16	.35	62	.03	13	.69	.04	.04	2	430	10
R 52402	261	84	34	23	.9	9	3	91	.79	304	5	ND	13	17	1	14	12	11	.19	.041	15	12	.20	53	.02	12	.48	.03	.12	1	73	20
R 52403	3	39	40	18	.3	4	2	123	.60	428	5	ND	6	5	1	14	8	6	.10	.024	8	8	.11	32	.01	2	.29	.01	.09	3	13	10
R 52404	3	7	114	4	1.8	8	1	30	.44	1163	5	ND	1	4	1	28	52	1	.01	.002	2	5	.01	21	.01	2	.01	.01	.01	2	46	20
R 52405	1	99	11	56	.1	6	3	156	1.11	242	5	ND	19	48	1	3	9	29	.46	.069	32	18	.55	86	.07	11	1.04	.05	.15	1	7	10
R 52406	146	572	8031	49	70.6	2	2	28	23.02	99999	5	ND	1	4	6	5389	1589	76	.01	.163	2	39	.01	20	.01	2	.10	.01	.01	1	3580	720
R 52407	5	35	32	21	2.6	88	8	208	1.69	756	5	ND	1	57	1	26	26	27	1.31	.028	2	11	1.37	37	.02	2	1.00	.01	.02	1	3660	5
R 52414	7	33	269	12	2.6	10	1	51	1.03	7369	5	ND	6	9	1	160	63	7	.07	.017	5	9	.06	21	.01	5	.26	.01	.06	3	690	80
R 54051	1	169	12	39	.7	16	4	266	1.41	1170	5	ND	26	30	1	2	5	43	.96	.066	20	33	1.09	63	.03	15	1.32	.04	.14	1	11	10
R 54052	3	51	56	133	.7	12	7	279	2.59	149	5	ND	19	81	1	2	2	54	.64	.081	35	38	.91	330	.14	14	1.45	.10	.64	5	84	20
R 54053	1	22	7	94	.1	13	9	517	3.99	25	5	ND	10	123	1	3	2	90	1.26	.120	23	28	1.04	529	.28	9	2.05	.06	.45	1	4	10
R 54055	2	21	9	94	.1	18	10	670	4.10	29	5	ND	12	94	1	2	2	89	1.28	.117	22	34	1.20	820	.17	23	2.16	.02	.17	1	2	20
R 54056	1	18	15	58	.2	10	5	238	3.43	4	5	ND	18	63	1	3	2	58	.44	.069	24	47	1.17	380	.16	13	1.83	.04	.26	1	3	10
R 54057	2	33	11	64	.1	15	10	262	3.20	77	5	ND	16	53	1	2	2	58	.57	.065	34	46	1.09	292	.18	5	1.75	.04	.52	1	1	10
STD C/AU-R	18	59	37	130	7.1	70	30	1013	4.10	40	21	6	36	50	18	14	20	60	.49	.088	39	55	.84	178	.07	35	1.87	.06	.14	11	515	1400

• ASSAY REQUIRED FOR CORRECT RESULT •

for Pb, Zn > 1%
Ag > 30 ppm
Sb > 1000 ppm

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

PANORAMA

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

DATE RECEIVED: JUL 17 1989 DATE REPORT MAILED: July 24/89 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION CO. LTD. PROJECT 8907-053 324 File # 89-2231

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
7151	13	9	20	45	.1	42	6	110	.34	329	5	ND	4	61	1	2	2	21	1.90	.350	9	10	.29	96	.06	9	.79	.08	.05	2	7
7152	8	205	26	47	.3	154	17	59	1.71	62	5	ND	2	85	1	2	2	32	2.11	.357	3	37	.20	78	.21	4	1.81	.10	.15	2	4
7153	4	23	63	64	.1	16	4	121	.55	64	5	ND	12	252	1	6	2	11	2.77	.111	12	9	.12	70	.11	14	2.92	.30	.09	2	17
7154	1	194	88	28	.3	9	3	167	6.29	6	5	ND	4	16	1	2	2	14	1.14	.062	20	3	.15	27	.02	2	.53	.02	.04	2	113
7155	1	83	25	22	.2	13	4	219	1.74	6	5	ND	2	276	1	2	2	14	6.59	.053	16	5	.14	20	.06	9	3.35	.19	.04	2	70
7156	191	1753	17766 /	1041	166.4 /	1	1	42	24.46	43571 /	75	ND	3	38	90	22957 /	443	5	.05	.113	7	3	.01	49	.01	2	.14	.01	.16	2	400
7157	7	28	2400	92	10.9	5	1	44	2.01	5047	5	ND	17	25	5	432	21	6	.05	.067	25	7	.07	105	.01	11	.43	.01	.26	2	79
7158	2	26	72	79	.1	10	6	296	2.25	146	7	ND	17	46	1	25	2	53	.43	.030	40	27	.96	347	.23	19	1.52	.07	.62	2	2
7159	1	51	42	115	.1	14	9	213	2.03	304	5	ND	16	99	1	13	2	47	.54	.092	32	29	.66	249	.20	10	1.50	.09	.44	2	18
7160	14	70	3784	96	6.0	11	6	204	2.65	1372	10	ND	15	63	6	1408 /	20	43	.46	.087	32	24	.56	302	.20	10	1.17	.08	.51	1	20
7161	2	164	36	32	.1	9	5	136	1.33	1613	5	ND	15	121	1	8	7	21	.99	.078	29	23	.72	92	.07	36	1.14	.07	.09	2	1
7162	3	407	65	120	3.7	8	2	263	1.25	615	5	ND	15	19	2	44	7	12	.21	.059	11	12	.22	61	.01	12	.55	.03	.13	2	7
7163	7	73	3738	51	24.2	5	2	290	1.21	4690	5	ND	12	14	14	1409 /	6	5	.13	.040	13	9	.08	190	.01	12	.36	.01	.17	3	99
STD C/AU-R	17	57	41	132	6.5	67	30	957	3.85	45	19	7	35	48	18	15	19	60	.46	.098	38	56	.92	172	.07	35	1.85	.06	.13	13	520

/ - ASSAY REQUIRED FOR CORRECT RESULT -

At Bottom Hole

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 B-4

PROPERTY PANORAMA RIDGE DATE

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Hg	Au	SAMPLED BY
R52301	AT ~ 16620E 29850N TALUS SILICEOUS (SILICIFIED?) M.G. INTRUSIVE WITH FRESH BIOT. (SECONDARY?) TR TARNISHED Py, CPy, AsPy? 2 POSSIBLE V.G. (1 SAMPLED) HBLD HAS BEEN COMPLETELY ALT'D	GRAB	—	66	21	2	5	211	.4	15	K.G
R52302	AT ~ 16770E 29900N TALUS MOD. CLAY ALT'D BIOT-HBLD INT. FINE QTZ STOCKWORK + VEINLETS UP TO 1cm. TR AsPy IN BOTH MINOR RUSTY HALOS ON SOME STRINGERS	GRAB	—	27	13	2	5	246	.2	6	K.G.
R52303	AT ~ 16725E 30000 NRL TALUS RUSTY WEATHERING, VUGGY, STRONGLY CLAY ALT'D INT. WITH VERY LITTLE BIOT. 1% Py (TARNISHED), SILVERY AsPy	GRAB	—	65	12	17	5	8542	.2	5	K.G
R52304	AT ~ 16325E, 29830N TALUS MED. DK. GREY, SILICEOUS INT., MINOR FRESH BIOT, NO. HBLD. 1% Py/AsPy TR CPy	GRAB	—	802	13	6	10	4330	2.0	105	K.G.

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY PANORAMA

DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				Cu	Pb	Sb	Hg	As	Ag	Au	
R52305	AT ~16365E, 29830N TALUS BLEACHED, MOD. CLAY ALT'D INT. HRLD COMPLETELY ALT'D, NO BIOT SMALL SAMPLE CONTAINS 1cm QTZ VEINLET WITH 1-2% AsPy BLEBS + SEAMS.	GRAB	—	161	184	110	70	2174	5.5	2840	K G
R52306	AT ~16525E 29640N TALUS MOD. BLEACHED INT. WITH FRESH BIOT, WEAKLY ALT'D HBLD. SAMPLE HAS A RIND OF WHITE-CLEAR QTZ, TR AsPy BLEBS	GRAB	—	29	16	2	20	368	.3	36	K.G
R52307	AT N 16580E, 29650N SAMPLE OF QTZ VEIN MTL COATING A FRACTURE IN WEAKLY ALT'D INT. INCLUDES MT'L FROM A 1-2 cm VEIN 3m E.	GRAB	—	30	32	2	10	231	.4	450	K.G.
R52308	16685E 29700N SUGARY BUFF COLORED DISCONTINUOUS VEIN? WITH 1% Py	GRAB	—	110	22	3	5	296	.2	49	K.G.

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52309	AT 15900E, 28970N HORNFELSED F.G. SED. WITH 1% DISS Py, AsPy	GRAB	—	132	33	14	40	33	.5	12	K.G
R52310	AT 15900E, 29310N GREY-GREEN CHERT WITH QTZ (AsPy) VEINLETS + STRINGERS	GRAB	—	12	8	5	5	5	.1	8	
R52311	AT 15900E 29310N LIMONITE + MANGANESE STAINED ZONE WITH 2-3% SULPH.	GRAB	—	241	26	2	10	13	.6	9	
R52312	AT 17000E 29671N MED GREY-GREEN F.G. INT. DYKE WITH QTZ EYES, MINOR LARGE (1cm) FELDSPAR PHENOCRYSTS, BIOT + FRESH ACTINOLITE. TR Py, CPy	GRAB	10cm	324	14	2	30	38	.7	108	
R52313	AT 17000E 29650N HORNFELSED SEDIMENTS WITH 1cm DISJOINTED QTZ VEINLETS. TR. SULPH.			165	10	2	20	138	.3	63	

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52314	AT 17100E 29225N	~~Eb~~		26	17	2	10	13	.1	3	K.G
	Bx'd CHERT WITH GREY QTz STOCKWORK.										
R40332	SAMPLED AT 16200E - 29575N			70	67	28	5	266	.8	56	
	MEDIUM GRAINED HORNBLENDE, BIOTITE INTRUSIVE WITH FELDSPAR PHENOCRYSTS UP TO 0.6 cm in LENGTH. ABUNDANT SILICA IN MATRIX. FRESH MOTTLED GREY AND WHITE, WEATHERS TAN/BRN. CARBONATE ALT'N ON WEATHERED RIND. 5% DISSEM										
	PRESENT: PY 2%, ASP 3%, CPY - TRACE	—	—								LKB
R40333	SAMPLED AT 17400E - 30525N			48	23	3	10	19	.5	4	
	BLUE GREY SILICIFIED SEDIMENTARY RX. WEATHERS RUSTY ORANGE/BROWN. 5% PRESENT										
	DISSEM PY - 3%; BLEBS ASPY - 2%	—	—								LKB
R40345	Sampled at 16800E 29425N			171	19	4	5	756	1.5	131	MJC
	Blue-green aphanitic calcareous sediments. vuggy texture, open space filling of Qtz xtls. ± actinolite xtls? Limonitic to hematite weathered surface	—	—								

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Zn	Hg	As	Ag	Au	SAMPLED BY
R54056	Line 17800E ~~30325~~N 30325N.			18	15	3	10	4	.2	3	
	Qtz, biotite, hornblende porphyry.										
	Argillic alteration? limonite coating of										
	surfaces (fresh) Disseminated sulphides										
	<1% pyrite?										
R54057	Line 17800E 30200E			33	11	2	10	77	.1	1	
	Qtz, biotite, feldspar, hbl porphory. Euhedral										
	(xtls) phenocrysts of FD. (0.5mm)										
	weathered disseminated sulphides <1%.										
R40334	Sampled at 16600E - 29975			133	36	14	450	1936	.8	33	LKB
	Qtz, feldspar porphyry. The lighter coloured										
	feldspars are argillically altered. Some fldspars are orange										
	coloured. Limonitic weathering present. Mn-oxide										
	also present. TRACE Asp.										
R40335	Sampled at 16600E - 30020N			236	11381	5188	4800	4891	10.2	410	LKB
	Weathered out quartz vein in altered quartz										
	feldspar porphyry. Arsenopyrite is present in trace										
	amounts. Limonitic staining and manganese										
	oxide also present.										

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R40336	Sampled at 17300E - 29655N Silicified fine grained blue grey intrusive rock which appears to be hornfelsed. Lacks sx. Weathers rusty orange.			67	24	14	10	60	.5	11	LKB
R40337	Sampled at 17300E-29650N Medium grained intrusive rock. Blue/grey colour. Rich in biotite, hornblende and feldspar. Has small parallel fractures which are infilled by qtz. Fractures are up to 0.8 cm thick. Lacks sulphides.			77	45	19	20	43	.1	7	LKB
R40338	Sampled at 17300E - 29625N Silicified blonde coloured sedimentary rock. Has sx veining throughout. (Pyrite - trace) Orange - brown weathered surfaces.			140	20	2	5	81	.2	19	LKB
R40339	Sampled at 17300E -29595N Blue-grey siliceous rock. Sedimentary. Weathers white. Disseminated sx present: aspy - trace, pyrite - trace.			39	8	2	5	452	.1	78	LKB

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R40340	SAMPLED AT 16100E - 30050N										LKB
	Qtz rich intrusive rx. Lacks biotite and hornblende. Has qtz eyes. Green sericite alt'n present. Weathers rusty brown. Sx: pyrite - dissem; trace asp - dissem; trace.			51	65	36	15	9966	.7	32	
R40341	SAMPLED AT 16600E - 28400N			50	19	2	5	68	.2	55	LKB
	Green coloured actinolite rock with white qtz sweats (?). Weathers a rusty orange/ red colour.										
R40342	SAMPLED AT 16600E - 28400N										LKB
	Quartz, feldspar porphyry. Contains abundant actinolite. White coloured fresh, weathers greenish brown. Appears to have contained sx at one time.			32	28	2	5	90	.1	43	
R40343	SAMPLED AT 16600E - 28400N			299	9	2	5	15	.7	29	LKB.
	Silicified sedimentary rock. Purple and green fresh surface weathers brown. Actinolite veining present. Actinolite also present on the fracture surfaces. Lacks visible sx.										

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R40344	SAMPLED AT 16800 E - 29425 N										LkB.
	Calcareous, blue-green, sedimentary rx. Limonitic to hematitic weathering with abundant mn-oxide. Vuggy, open space qtz infilling on one surface. Sx present: Asp <2% in form of stringers and disseminations.			123	57	3	5	539	3.8	510	"
R40346	SAMPLED AT 16800 E - 29425 N										LkB.
	Silicified green sedimentary rx. Limonitic weathering. Sx present: Asp - trace; dissem & stringers Py - trace; disseminated. Calcareous in places.			17	17	2	5	71	.3	47	
R40347	SAMPLED AT 16700 E - 29345 N										LkB.
	Siliceous light blue/grey intrusive. Weathers rusty orange coloured. Abundant actinolite coating on fracture surfaces. Some calcareous altn.			70	40	2	5	76	.1	13	
R40348	SAMPLED AT 16700 E - 29355 N										LkB
	Pale blue intrusive rx. Weathers rusty orange. Calcareous with blue-grey qtz eyes. Sx present is Asp <2% - disseminated & blebs.			31	28	2	5	17	.1	6	

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R40349	SAMPLED AT 16700E - 29355N										LKB
	Blue-grey silicified rx. Asp present as blebs			53	36	2	10	5	.2	2	
	and stringers (<2%). Wollastonite appears as a										
	fracture coating on outside edge. Weatless rusty										
	brown colour.										
R40350	SAMPLED AT 16725E - 29400N			29	13	2	130	21	.1	10	
	Blue green coloured qtz fldspr porphyry with										
	actinolite. Asp stringers and blebs present (<1%)										
	Weathers rusty brown and contains abundant										
	mn-oxide as fracture coatings.										
R07054	SAMPLED AT 16800E - 29425N										
	Qtz porphyry with abundant actinolite. Weathers			29	11	2	10	15	.1	19	
	white and has a green fresh surface. Sulphide										
	stringers (Asp < 1%) are present. Abundant										
	mn-oxide on fracture surfaces.										

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52351	Sampled at L16610E - 29 875 N - top of hill Biotite-poor qtz-fsp porphyry typified by qtz stringers (1 mm thickness). Weathers orange-brown.	grab		132	70	37	250	2540	1.0	15	J.L.K.
R52352	Medium to fine-grained biotite-poor qtz-fsp porphyry with biotite rich pods of various size. Fresh surface is light grey. Contains rare sulfides (arsenopyrite). Sampled at L17300E - 29640N. - talus	Grab		33	28	2	20	72	.5	7	T.L.K.
R52353	Sampled at L16300E - 29550N - talus Biotite-actinolite rich qtz-~~actinolite~~ feldspar porphyry containing sulfides (pyrite, pyrhotite)	Grab		165	23	2	10	251	.1	20	T.L.K.
R52354	Sampled at L16400E - 29375N - talus Qtz-act veining in buff-coloured sediments.	Grab		114	13	2	5	24	.1	113	T.L.K.
R54052	Sampled at L16600E at 29250N Biotite poor. Qtz-FD porphyry. Fresh surface dark grey. Contains disseminated sulphides arseno. < 1%.			51	56	2	20	149	.7	84	MJC

NORANDA EXPLORATION COMPANY, LIMITED

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SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				Cu	Pb	Sb	Hg	As	Ag	Au	
R54053	Qtz-FD porphyry biotite poor. Fresh grey surfaces. light brown weathered surface. Euhedral phenocysts of FD. fresh (0.4 mm) Dissimenated Sx <1% At L116600 2.9000N			22	7	3	10	25	.1	4	
R54051	At L116900E 2.9850N Talus slope. Qt-FD porphyry-biotite poor. Light grey weathered surface. Qtz veining present (2-5mm) actinolite/tr present??			169	12	2	10	1170	.7	11	

NORANDA EXPLORATION COMPANY, LIMITED

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PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52315	AT 16600E 29850N	GRAB	—								K.G
	WEAK - MOD CLAY ALT'D INT.			4052	41	19	130	10591	6.6	10	
	FELD ALT'D TO WHITE +/OR LIGHT APPLE										
	GREEN (SERICITE) CLAY										
	2-3% SULPH (Py - AsPy)										
	TR CpY										
	1% FINE QTZ STRINGERS + SULPHIDES										
	GRAB FROM 1m PIT										
R52316	~16605E 29847N	GRAB	—	162	24	3	60	3027	.1	9	
	RUSTY WEATHERING RESIDUAL BEDROCK										
	GRAB OF MT'L AT BOTTOM OF 1m PIT										
R52317	~16610E 29845N	GRAB	—	69	31	3	10	442	.3	106	
	FRESH BIOT RICH QFP FROM										
	BOTTOM OF 1m PIT										
R52318	16600E 29900N	GRAB	—	65	125	115	2300	1773	.7	28	
	CLAY ALT'D Q-F-P AS IN 52315										
	ONLY TR Sx AS MOST HAVE BEEN										
	WEATHERED OUT.										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				Cu	Pb	Sb	Hg	As	Ag	Au	
R52319	17100E 30000N	GRAB	—	97	22	3	10	551	.5	168	I.C.G.
	QTZ COATINGS SOME XTLS ON INT.										
R52320	17100E 31000N	GRAB	—	174	24	2	20	215	.5	101	
	LIGHT GREY-GREEN, F.G. MATRIX WITH QTZ EYES, GREEN ACTINOLITE XTLS + M.G. WHITE FELDS, MINOR BIOT TR. 5%										
RS2321	~~RUSTY~~ 17150E 30105N	GRAB	—	558	321	51	1400	4187	11.1	24	
	RUSTY WEATHERING BIOT-HBLD INT. TR Aspy										
	FROM BOTTOM OF IMPIT										
RS2322	17090E 30100N	GRAB	—	114	9	2	5	474	.1	1430	
	3 cm WIDE QTZ VEIN IN SEDS										
RS2323	17080E 30100N	GRAB		155	10	4	20	5558	5.3	110	
	RUSTY WEATHERING SEDS WITH 2cm WIDE LIMONITE STAINED QTZ VEIN.										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				Cu	Pb	Sb	Hg	As	Ag	Au	
RS2324	17080E 30095N	GRAB	—	190	22	11	10	462	.7	250	K.G
	QTZ ACTINOLITE VEINING (1.5cm)										
	IN QTZ-ACT INT.										
RS2325	~ 17080E 30085N	GRAB	—	290	26	.2	5	1422	.2	224	
	BIOT-ACT INT. WITH MINOR QTZ-										
	ACT VEINING - TR Py, AsPy										
RS2376	~ 17080E 30070N	GRAB	-	100	24	2	5	920	.9	600	
	QTZ-FELD VEINING WITH BIOT-ACT										
	INT TR AsPy										
RS2377	~ 17085E 30055N	GRAB	—	14	17	2	5	1013	.1	167	
	QTZ-ACT VEINING										
RS2378	~17085E 30040N	GRAB	—	75	2	3	880	16	.1	13	
	XENOLITH ? OF BIOT PORPH										
	GABBRO (ONLY WEAKLY MAGNETIC)										
	~4m ACCROSS										
RS2379	16700E 29750N	GRAB	—	73	31	18	380	1253	.7	34	
	RESIDUAL BEDROCK FROM 1m PIT										
	ORG-BRN SILTY SAND										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52380	16700E 29650N	GRAB	—	446	2	22	1300	222	.4	80	K.G
	RUSTY WEATHERING, SHEARED INT WITH MINOR SLICKENSIDES + FINE QTZ STRINGERS FROM IN PIT										
R52381	16800E 29500N	GRAB	—	85	16	4	20	423	1.0	101	
	SEDS WITH WHITE + BLUE GREY QTZ VEINING + STRINGERS										
R52382	16850E 29630N	GRAB	—	100	11	3	10	48	.1	18	
	FRESH ACT - QFP (BIOT POOR)										
R52383	16850E 29625N	GRAB	—	360	28	5	5	99	3.0	121	
	RUSTY WEATHERED ACT-QFP.										
R52384	16900E 29750N	GRAB	—	86	16	4	10	187	.1	410	
	BIOT RICH QFP.										
R52385	16795E 29875N	GRAB	—	3053	20997	15369	15600	45730	258	620	
	RUSTY + MANGANESE STAINED VUGGY VEINING? WITH BIOT POOR QFP (LIMONITE STAINED)										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				Cu	Pb	Sb	Hg	As	Ag	Au	
RS2386	15700E 29770N	GRAB	—	103	111	22	20	103	.8	12	K.G
	MED GREY FRESH - MOD SILICEOUS										
	INT. (MINOR BIOT) 1% Py										
RS2387	15700E 29300N	GRAB	—	78	564	119	180	263	1.9	10	
	SEDS WITH MINOR WHITE + BLUE-GREY										
	QTZ STRINGERS										
RS2388	15700E 28850N	GRAB		22	15	2	10	18	.1	3	
	RUSTY WEATHERING BIOT RICH QFP										
RS2389	15700E 28950N	GRAB		25	97	14	30	54	1.0	2	
	HORNFELSED SEDS WITH DK GREY										
	QTZ VEINLETS ~2mm IN SIZE										
	FORMING STOCKWORK. SX?										
RS2390	RN RIDGE WEST OF CAMP NEAR	GAAB		22	23	2	20	48	.1	1	
	R40080										
	RUSTY WEATHGRING BIOT-ACT										
	QTZ-EYE FELD PORPH INT. DYKE										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
RS2391	TOP OF RIDGE SOUTH OF R40080 TO WEST OF CAMP. RUSTY WEATHERING BLEACHED INT. RELIC ACTy MOD ALT'D FELDS. NO BLOT 2-3% Sx	GRAB	—	389	46	77	20	52	1.5	2	K.G.
RS2392	16500E 29295N GREEN BRN F.G. INT MOD BIOT 3-5% AsPy? PATCHES	GRAB	~	141	85	6	10	30	.2	104	
RS2393	16510E 29345N DIOP-ACT SKARN WITH 5% V F.G. AsPy TR CPy	GRAB	—	450	50	4	10	42	.9	260	
RS2394	16500E 29425N BK. GREEN ACT VEINING IN PALE BUFF SEDS	GRAB	—	157	24	2	5	47	.1	32	
RS2395	16500E 29430N COCKSCOMB QTZ-FELD VEINING ON F.G. SILICEOUS MED. GRY SEDS ~4cm WIDE	GRAB	—	26	17	3	10	21	.1	34	

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
R52396	16500E 29450N	GRAB	—	84	24	2	5	44	.1	39	K.G
	F.G BIOT/ACT QFP INT DYKE										
	15-20 cm ACCROSS CUTTING SEDS										
	ACT + TR-1% Sb ON FRACTURE SURFACES										
RS2397	16500E 29615N	GRAB	—	74	36	2	5	361	.6	13	
	F.G. BIOT-HBLD QFP INT										
RS2398	16800E 29610N	GRAB	—	762	22	3	20	1208	1.2	37	
	10 cm RUSTY WEATHERING QTZ										
	VEINING 1% Sb										
RS2399	16500E 29610N	GRAB	—	25	966	436	30	1342	28.1	760	
	F.G. BIOT QFP INT WITH POUS										
	OF Py										
RS2400	16293E 29720	GRAB	—	326	59	73	1400	3933	1.8	27	
	RUSTY WEATHERING ACT-QFP										
	(RELIC ACT) BIOT POOR INT										
	TR-1% AsPy										
R52401	16285E 29680N	GRAB	—	7	31	2	10	468	.6	430	
	QTZ-ACT VEINING .5-2cm IN BLEACHED INT			*5m DOWNSLOPE FROM BEAR SOUTH							

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	Hg	As	Ag	Au	SAMPLED BY
RS2402	16270E 29550N QTZ VEINING (~6 cm) + COATINGS ON ACT-QFP INT. (BIOT POOR) (16300E 2955 FLAG LINE)	GRAB	—	84	34	14	20	804	.9	73	K.G.
RS2403	16300E 29500N QTZ VEINING UP TO 5cm IN TALUS SLOPE	GRAB	—	39	40	14	10	428	.3	13	
RS2404	16400E 29535N QTZ VEINING (4cm) IN TALUS	GRAB	—	7	114	28	20	1163	1.8	46	
RS2405	16400E 29570N ACT-RICH QFP (BIOT) INT. RANDOM CHIP ACCROSS TALUS SLOPE	GRAB	—	89	11	3	10	242	.1	7	
RS2406	16600E 30220N DENSE PALE GREEN (SERICITE) + GREY (QTZ ± Sx?) VEINING WITH LIMONITE STAINING.	GRAB	—	572	8031	5389	720	99999	70.6	3580	

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. _____

PROPERTY _____ DATE _____

ROCK SAMPLE REPORT

PROJECT _____

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Cu	G☐ A☐ Pb	G☐ A☐ Sb	G☐ A☐ Hg	G☐ A☐ As	G☐ A☐ Ag	G☐ A☐ Au	SAMPLED BY
RS2407	17295E TOP OF RIDGE				35	32	26	5	756	2.6	3660	KDG
	LIGHT GREEN (RUSTY BROWN PATCHES)											
	DENSE F.G. INTERBEDDED SED.											
RS2414	NEAR 16600E 29900N COMPOSITE OF				33	269	160	80	7369	2.6	690	↓
	QTZ VEIN MT'L FLOAT AT TOP OF RIDGE											

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A4

PROPERTY PANARAMA RIDGE DATE

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	~~Hg~~	As	Ag	Au	SAMPLED BY
R07151	LOCATED AT 16850E - 29320N			8	20	2		329	.1	7	LKB
	Blue-grey chert ŵ dark grey extension gashes composed of qtz. Weathers rusty brown ± white. Mn-oxide on fracture surfaces ± chlorite alth. Sx-disseminated : asp-trace, py-trace.										
R07152	LOCATED AT 16800E - 29330N			205	26	2		62	.3	4	JRB
	Pale blue-grey siliceous sedimentary rock. Weathers rusty brown colour. Sx occur as disseminations, blebs, and stringers (<1mm ϕ) - aspy <2%. Slightly calcareous.										
R07153	LOCATED AT 16800E - 29375N			23	63	6		64	.1	17	JRB
	Seritized and slightly calcareous igneous rx. White fresh surfaces with patchy pale green seritized areas. Weathers white. Disseminated Sx : asp <2%										
R07154	LOCATED AT 16720E - 29400N			194	88	2		6	.3	113	LKB
	Limonitic weathered rx located in contact of sed rxs and dyke (?). Vuggy textured, abundant mn-oxide. Sx - disseminated : asp (?) - trace.										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4

PROPERTY PANARAMA RIDGE DATE

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	As	Ag	Au		SAMPLED BY
R07155	LOCATED AT 16805E - 2941ON			83	25	2	6	.2	70		JKB
	Blue-green dyke between chert units. Limonitic staining on weathered surfaces. Sx are dissem throughout rock as well as along & within fractures. Asp - trace, py < 2%.										
R07156	LOCATED AT 16705E - 28855N			1753	17766	22957	43571	166.4	400		JRB.
	Limonitic weathered rock w abundant quartz eyes and stringers of quartz. Minor mn-oxide present. Rock is quite vuggy.										
R07157	LOCATED AT R705E - 28856N			28	2400	432	5047	10.9	79		JKB.
	On talus slope. Pale grey intrusive rx w abundant qtz eyes. Weathered limonitic brown to yellow in colour. Very porous. No visible Sx.										
R07158	LOCATED AT 17000E - 30030N			26	72	25	146	.1	2		JRB
	QFP + biotite + actinolite. 0.3 cm Ø qtz fracture infilling on one edge. Fresh surface green-grey, weathers white. Sx present : py ; trace along qtz selvage.										

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/14

PROPERTY PANARAMA RIDGE DATE

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS Cu	Pb	Sb	As	Ag	Au		SAMPLED BY
R07163	LOCATED AT 16650 E - 30030N			73	3738	1409	4690	24.2	89		JRB.
	Blonde qtz with blebs and stringers of Sx.										
	Asp < 2%. Very vuggy and weathered a rusty										
	orange colour. Open space infilling of qtz.										

APPENDIX III

DETAILED GEOPHYSICAL REPORT

NORANDA EXPLORATION CO. LTD
Vancouver, B.C.

MEMO TO: K. Galambos
FROM : T. Wong
SUBJECT: Panorama Ridge Geophysical Survey
DATE : January 17, 1990

During early-mid July 1989, geophysical surveys consisting of total field magnetics and time-domain I.P. were completed on the grid of the Panorama Ridge property. The magnetometer survey was completed on most lines of the survey grid while I.P. was performed on selected lines. Both surveys were completed by MPH Consulting Ltd. of Toronto, Ontario. The magnetics survey utilized an EDA Omni-Plus magnetometer system with a basestation configuration. The I.P. survey utilized an EDA IP-6 time-domain receiver. A 25 meter dipole-dipole array was used with readings taken down to the fifth separation (n=5). The I.P. data is presented in pseudo-section form at a scale of 1:2500 while the magnetic data and I.P. interpretation are presented at a scale of 1:5000 on a plan map.

DISCUSSION OF SURVEY RESULTS

Geological work at a scale of 1:10000 on the grid has mapped a large central, medium to coarse grained dike intruding onto fine grained sediments. The sediments contact an intrusive body that appears to be granodiorite located in the central area of the grid. More detailed geological information and maps may be found in a 1988 Norex report entitled "Geological & Geochemical Report 1988 on the Aus 1 - 32 Claims".

The magnetic map correlates well with the geological picture. The silicified dikes, containing 2 - 3% sulphides, are considered to be linear features possessing the highest magnetic expressions and are traced as shown on the magnetic map. These dikes appear to occur within the sediments. Discrimination between the sedimentary and granodiorite rocks is difficult since the magnetic signatures of these rock types appear to be quite similar here, i.e., the contact zone between these rocks are not well defined with the magnetics. A large plug-like plutonic feature is prominently centred at L.15900E/29100N. The moderate magnetic nodes in the NW corner may represent an intermediate plutonic feature. Data quality is somewhat suspect in the eastern portion of the grid. The two isolated high nodes at 30800N on Lines 17900E and 18100E, the very sharp gradient between Lines 17700E and 17900E at 29000N - 29400N as well as the data along the baseline from Lines 17900E to 18300E are dubious features.

Background chargeability values can be considered to be 10 mV/V and less. The anomalous I.P. responses occur within or follow the dike trend. The anomalies are quite wide, especially at L.16300E, and form a broad package within which are found strong chargeability sources from Lines 16200E to 16600E. Note that the

strong I.P. expressions lie open at the south ends of Lines 16200E, 16300E, 16500E and 16600E, and open to the north at Lines 16500E and 16600E.

There is quite a sharp change into background chargeability values that is marked with a corresponding increase of a set of resistivity values which could indicate the contact zone, i.e. silicification as noted in the geological report, between the sediments and intrusives. This contact is seen on all lines except L.16400E.

The shallow but strong chargeability at the south end of L.17300E is directly associated with pronounced low resistivities which could be indicative of clays.

It is interesting to note that anomalous Au geochemical values are found in the intrusives or contact zone while the I.P. responses are found mainly within or close to the dike structures.

CONCLUSIONS AND RECOMMENDATIONS

The I.P. and magnetics surveys have identified a number of targets that warrant further investigation. Magnetics are an effective technique to outline the dike structures within and around which strong I.P. responses are found. Consideration should be given to re-survey the questionable areas of magnetic coverage mentioned. Follow-up detailed I.P. surveys can be used to delineate targets within favourable areas outlined by magnetics. The extent of the open I.P. anomalies should also be determined.

The geophysical data must be compiled with the geological and geochemical data to obtain the most information about the property. Based on the geophysical information there are some priorities that can be set as follows:

Priority 1:
1. L.16800E/29425N/d=65m
2. L.16800E/29500N/d=50m Alternate to above
3. L.16500E/30125N/d=65m
4. L.16600E/29300N/d=65m
5. L.16300E/29275N/d=70m

Priority 2:
1. L.16200E/29212.5N/d=10m
2. L.16300E/28987.5N/d=75m
3. L.16500E/29312.5N/d=30m
4. L.17300E/29537.5N/d=70m
5. L.16300E/29600N/d=65m Test contact zone

As mentioned above these priorities are based solely upon geophysical data and will need to be compiled with geological and geochemical data and possibly reprioritized. Other geophysical anomalies not specifically mentioned may then be warranted a priority rating.

PRODUCTION

I.P.: 6.1 Km Mag.: 68.0 Km

Noranda Aus Claims

3000
3100 0N
3075 0N
3500
R10197
R22365
R22364
R22366
R16893
R16894
90° 165°
R10196
R16895
R22371
R22377
S22361
R10200
R10199
R10198
R22370
R16892
R16891
S16890
R22362
3000
2500
3000
2500
3500
3000
2500
137° 30'
64° 05'
29250N
29000N
15800E
16000E
16200E
16400E
16600E
16800E
17000E
17200E
17400E
17600E
17800E
18000E
18200E
18400E
18600E

GEOLOGY

SILICIFIED DYKE 2-3% SULPHIDES

216 MEDIUM & COARSE-GRAINED GRANODIORITE

ROAD RIVER FORMATION

9 SEDIMENTS: SHALES, SILTSTONES AND SILICIFIED EQUIVALENTS; CHERT

× ROCK
• SILT

0 100 200 400 800m

334

FIG. 7

REVISED	AUS CLAIMS
	GEOLOGY & SAMPLE LOCATIONS (PANORAMA RIDGE)
	092815
PROJ. No. 326	SURVEY BY GCM DATE JUNE 1988
N.T.S. 116A/4	DRAWN BY KR SCALE 1:10 000
DWG. No	NORANDA EXPLORATION
	OFFICE WHITEHORSE

CANCAL 1189

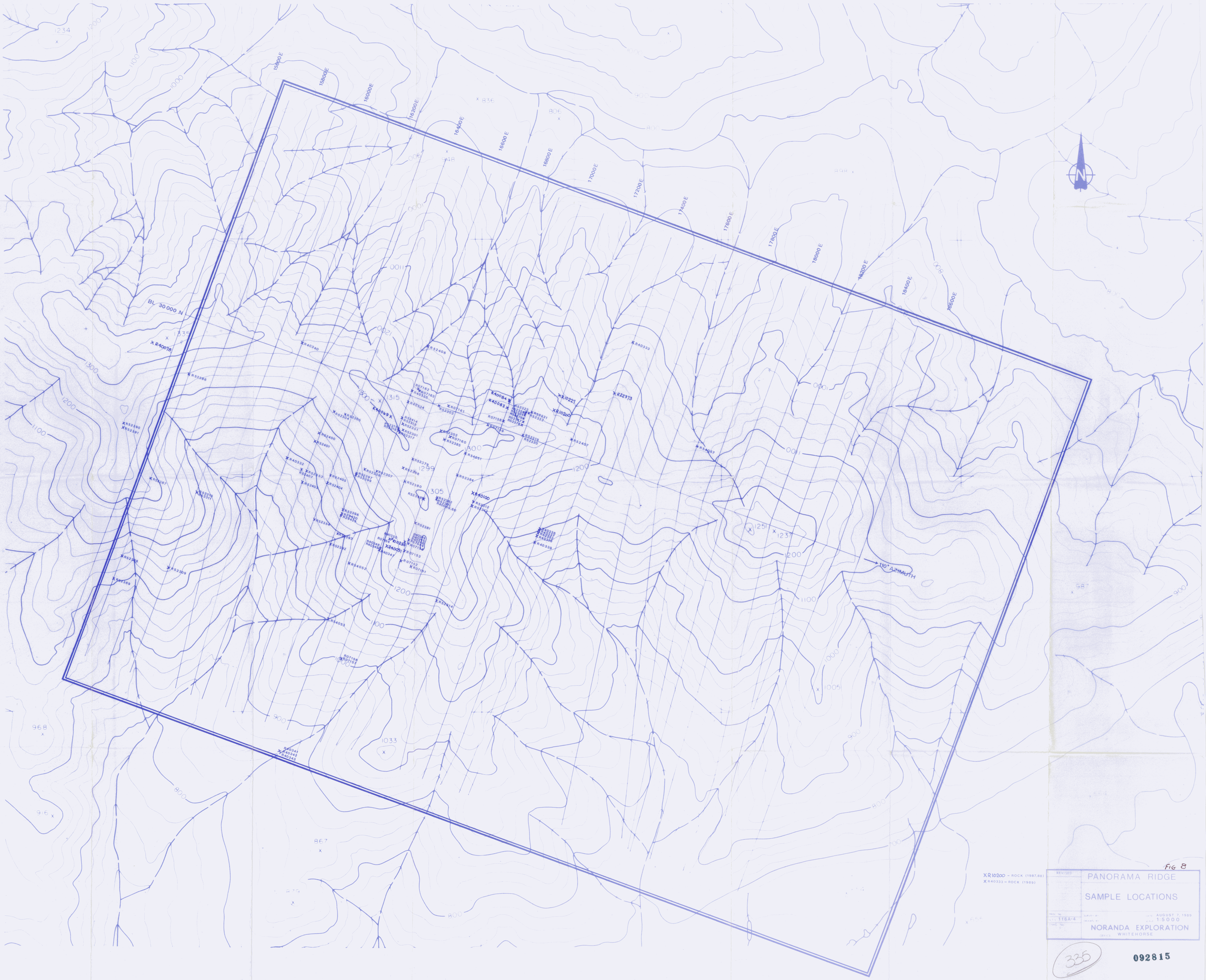


FIG 8

PANORAMA RIDGE

SAMPLE LOCATIONS

116A-4

AUGUST 7, 1989

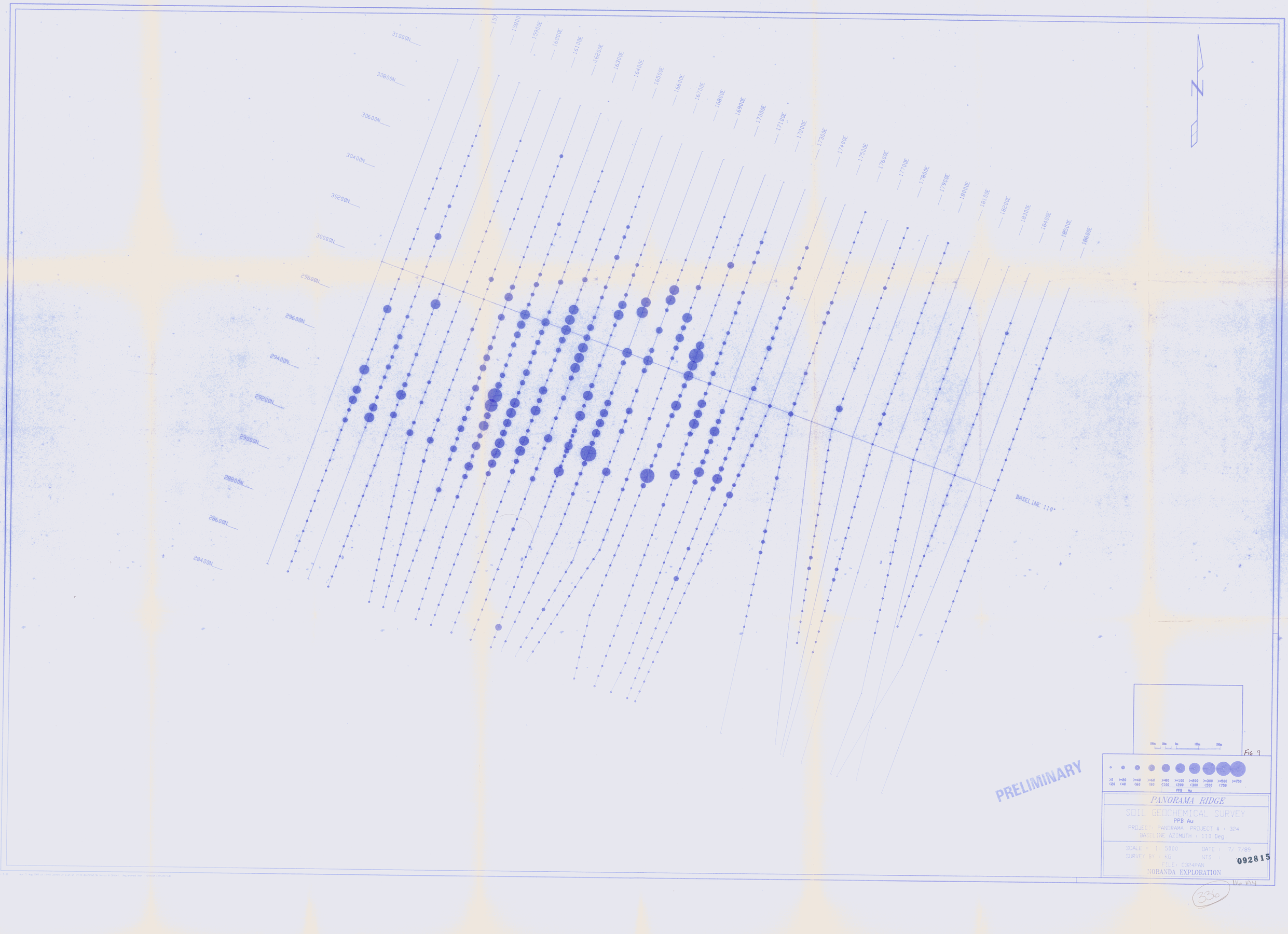
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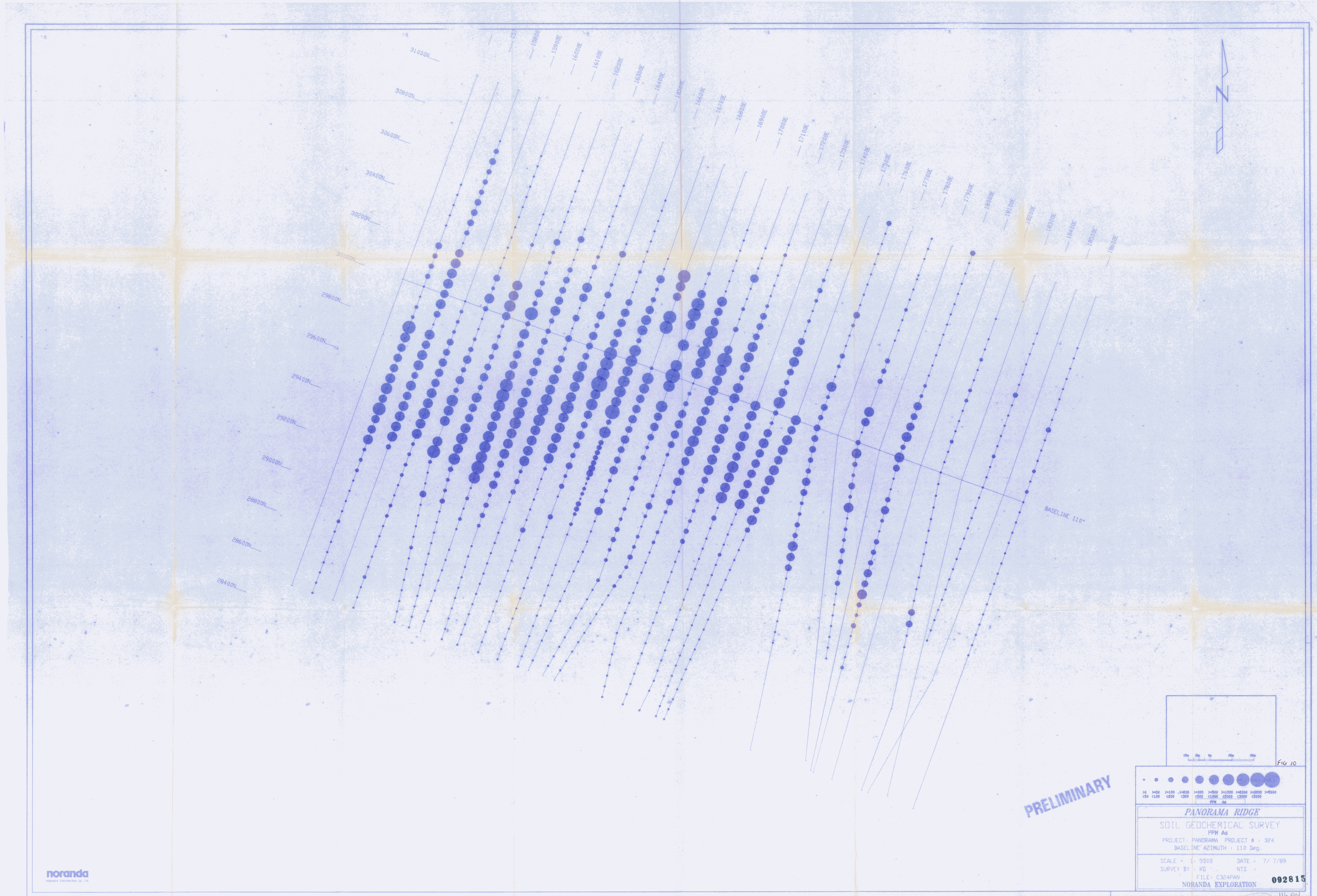
NORANDA EXPLORATION

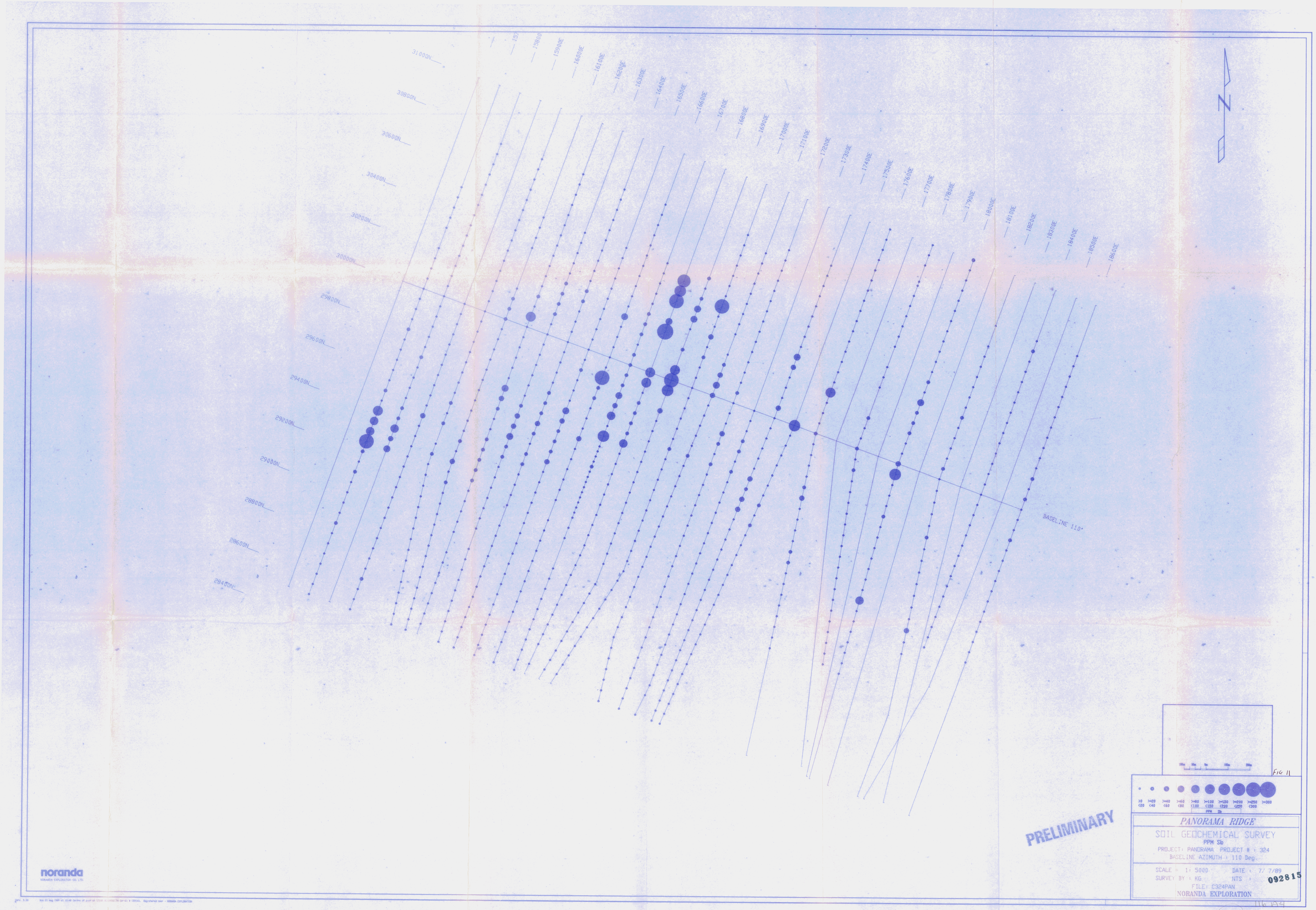
WHITEHORSE

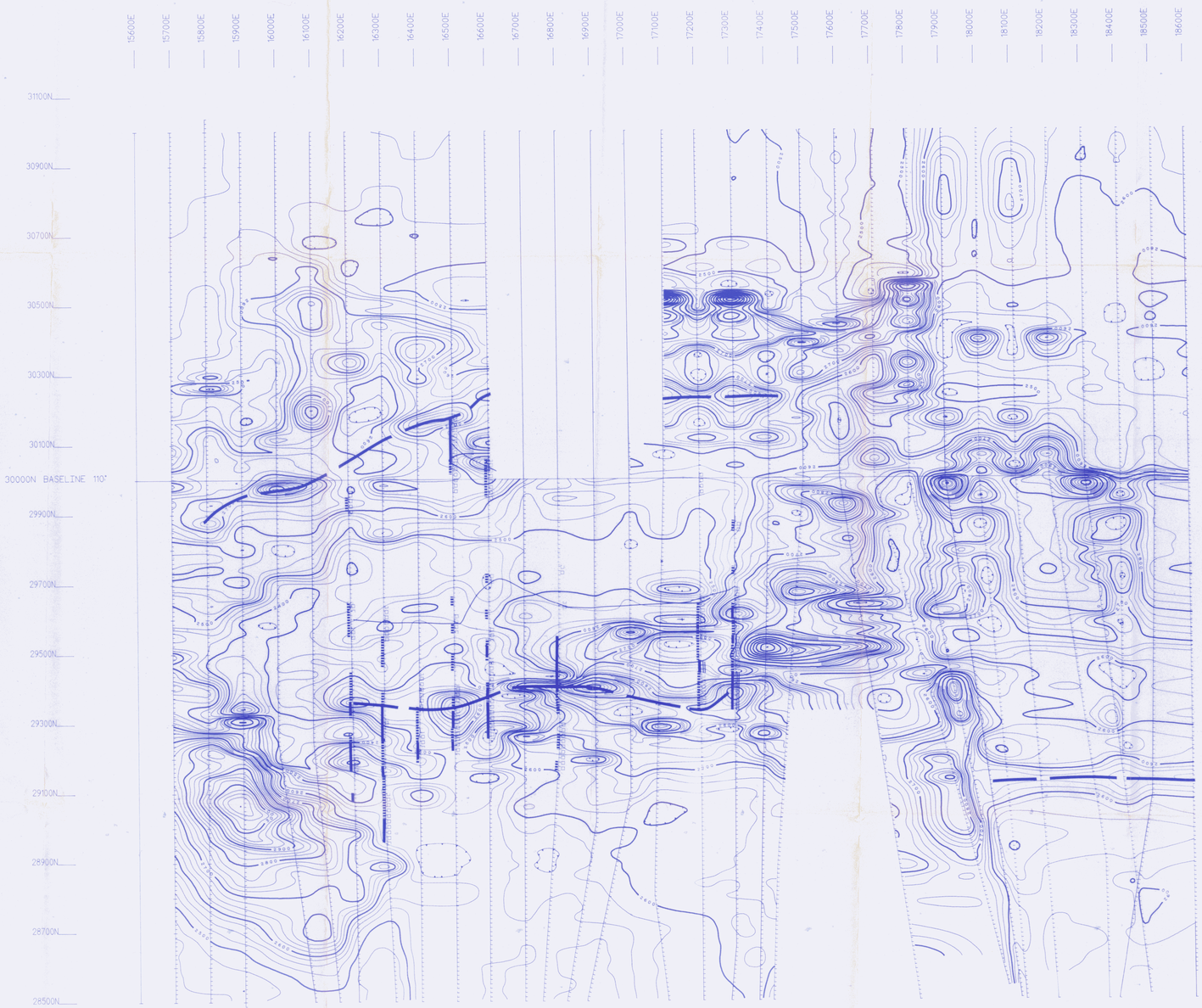
335

092815


31000N
30800N
30600N
30400N
30200N
30000N
29800N
29600N
29400N
29200N
29000N
28800N
28600N
28400N
15900E
16000E
16100E
16200E
16300E
16400E
16500E
16600E
16700E
16800E
16900E
17000E
17100E
17200E
17300E
17400E
17500E
17600E
17700E
17800E
17900E
18000E
18100E
18200E
18300E
18400E
18500E
18600E
BASELINE 110°
PRELIMINARY
FIG 9
>0 <20
>=20 <40
>=40 <60
>=60 <80
>=80 <100
>=100 <200
>=200 <300
>=300 <500
>=500 <750
>=750
PPB Au
PANORAMA RIDGE
SOIL GEOCHEMICAL SURVEY
PPB Au
PROJECT: PANORAMA PROJECT # : 324
BASELINE AZIMUTH : 110 Deg.
SCALE : 1: 5000 DATE : 7/ 7/89
SURVEY BY : KG NTS :
FILE: C324PAN
092815
NORANDA EXPLORATION
116 P9
330


31000N
30800N
30600N
30400N
30200N
30000N
29800N
29600N
29400N
29200N
29000N
28800N
28600N
28400N
1570E
1580E
1590E
1600E
1610E
1620E
1630E
1640E
1650E
1660E
1670E
1680E
1690E
1700E
1710E
1720E
1730E
1740E
1750E
1760E
1770E
1780E
1790E
1800E
1810E
1820E
1830E
1840E
1850E
1860E
BASELINE 110°
N
PRELIMINARY
100m 50m 0m 100m 200m
FIG 10
>0 <50
>=50 <100
>=100 <200
>=200 <300
>=300 <500
>=500 <1000
>=1000 <2000
>=2000 <3000
>=3000 <5000
>=5000
PPM As
PANORAMA RIDGE
SOIL GEOCHEMICAL SURVEY
PPM As
PROJECT: PANORAMA PROJECT # : 324
BASELINE AZIMUTH : 110 Deg.
SCALE = 1: 5000 DATE : 7/ 7/89
SURVEY BY : KG NTS :
FILE: C324PAN
092815
NORANDA EXPLORATION
noranda
NORANDA EXPLORATION CO. LTD.
337
116 PH


31000N
30800N
30600N
30400N
30200N
30000N
29800N
29600N
29400N
29200N
29000N
28800N
28600N
28400N
1590OE
1600OE
1610OE
1620OE
1630OE
1640OE
1650OE
1660OE
1670OE
1680OE
1690OE
1700OE
1710OE
1720OE
1730OE
1740OE
1750OE
1760OE
1770OE
1780OE
1790OE
1800OE
1810OE
1820OE
1830OE
1840OE
1850OE
1860OE
BASELINE 110°
N
PRELIMINARY
FIG 11
PPM Sb
PANORAMA RIDGE
SOIL GEOCHEMICAL SURVEY
PPM Sb
PROJECT: PANORAMA PROJECT # : 324
BASELINE AZIMUTH : 110 Deg.
SCALE = 1: 5000 DATE : 7/ 7/89
SURVEY BY : KG NTS : 092815
FILE: S324PAN
NORANDA EXPLORATION
noranda
NORANDA EXPLORATION CO. LTD.
(339)



N

High I.P. Effect

Moderate I.P. Effect

Low Resistivity Zone

High Resistivity Zone

Dike

Probable Contact

Instrument : EDA
Field : TOTAL
Datum : 55000.0 nT
Contour Interval : 25 nT
Conductor Axis :

100m 50m 0m 100m 200m

FIG 12

PANORAMA RIDGE

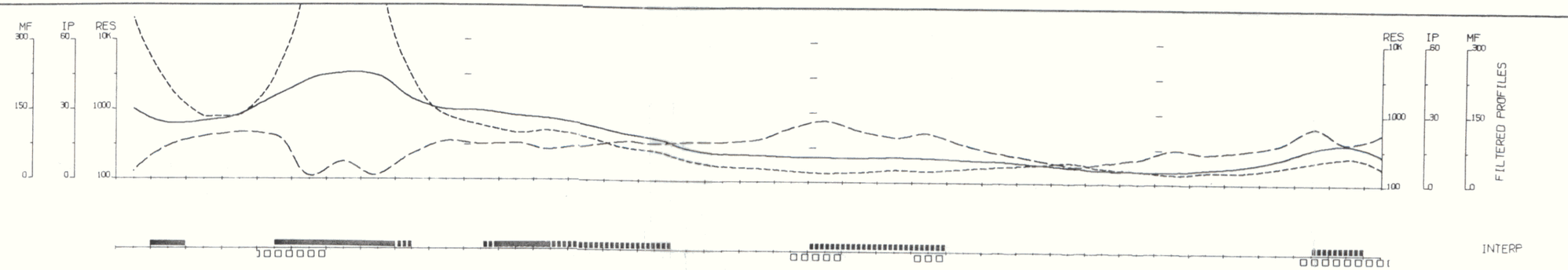
MAGNETOMETER SURVEY

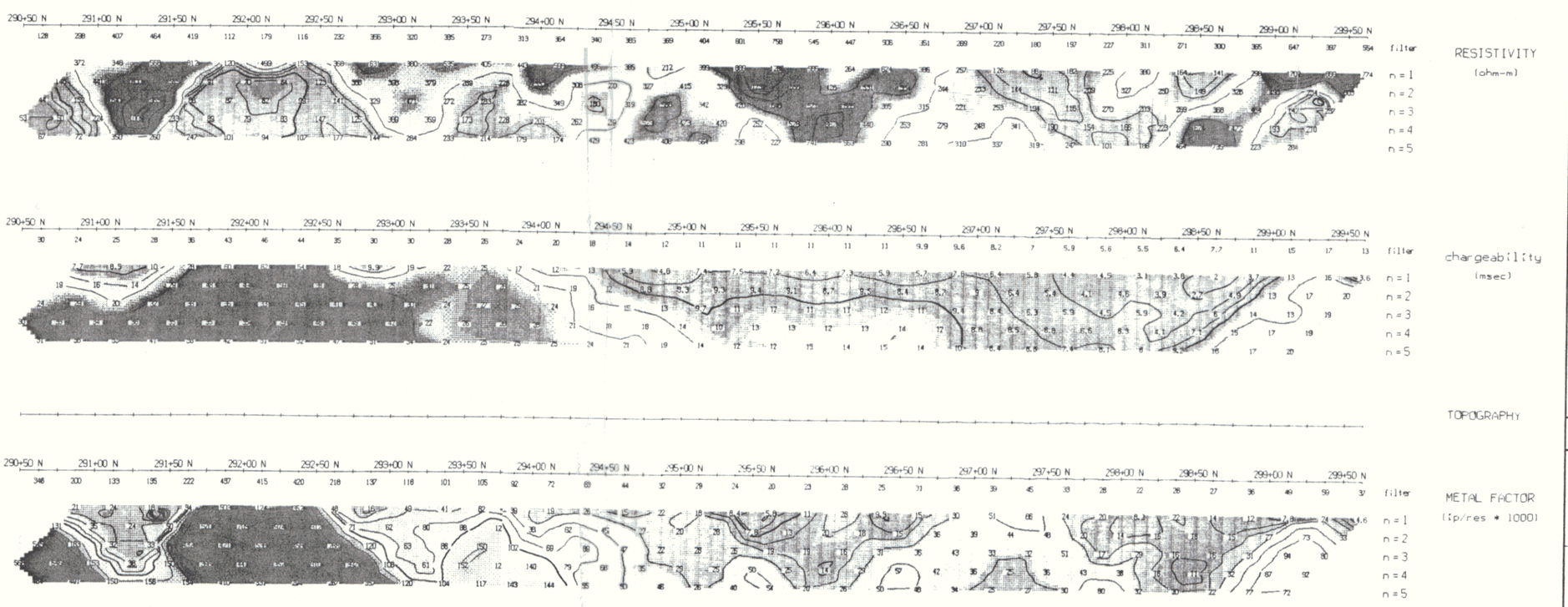
PROJECT: PANORAMA PROJECT # : 324
BASELINE AZIMUTH : 110 Deg.

SCALE = 1 : 5000 DATE : 7/ 7/89
SURVEY BY : MPH NTS :
FILE: M324PAN 092815
NORANDA EXPLORATION

116 K/4

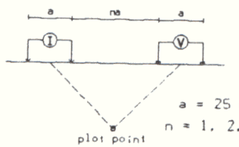
339





Line 16200 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

Resistivity
Polarization
Metal Factor

filter
*
* *
* * *
* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

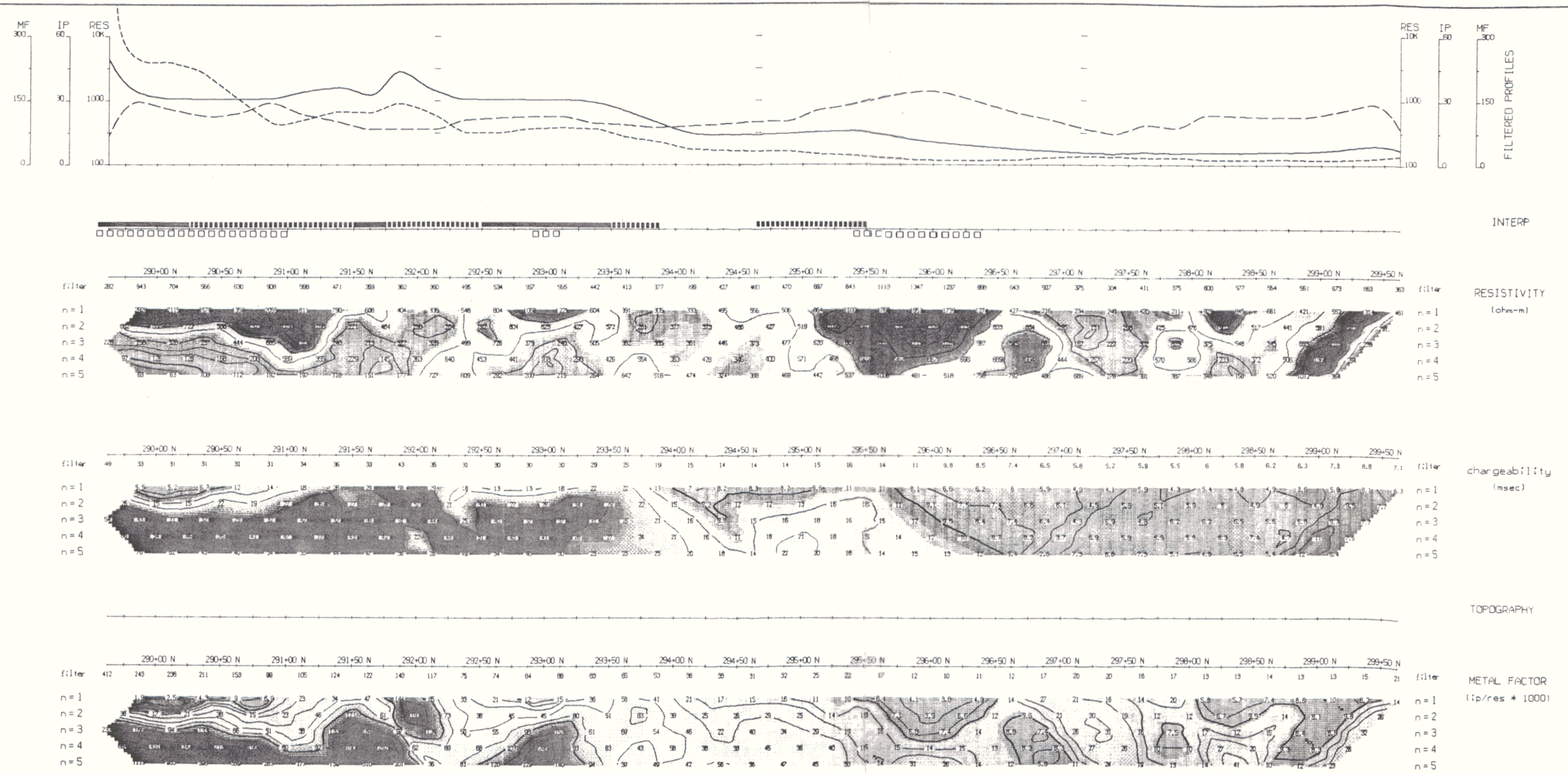
Line 16200 E

YUKON

Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

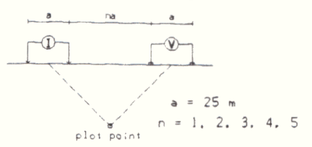
noranda

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Line 16300 E

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

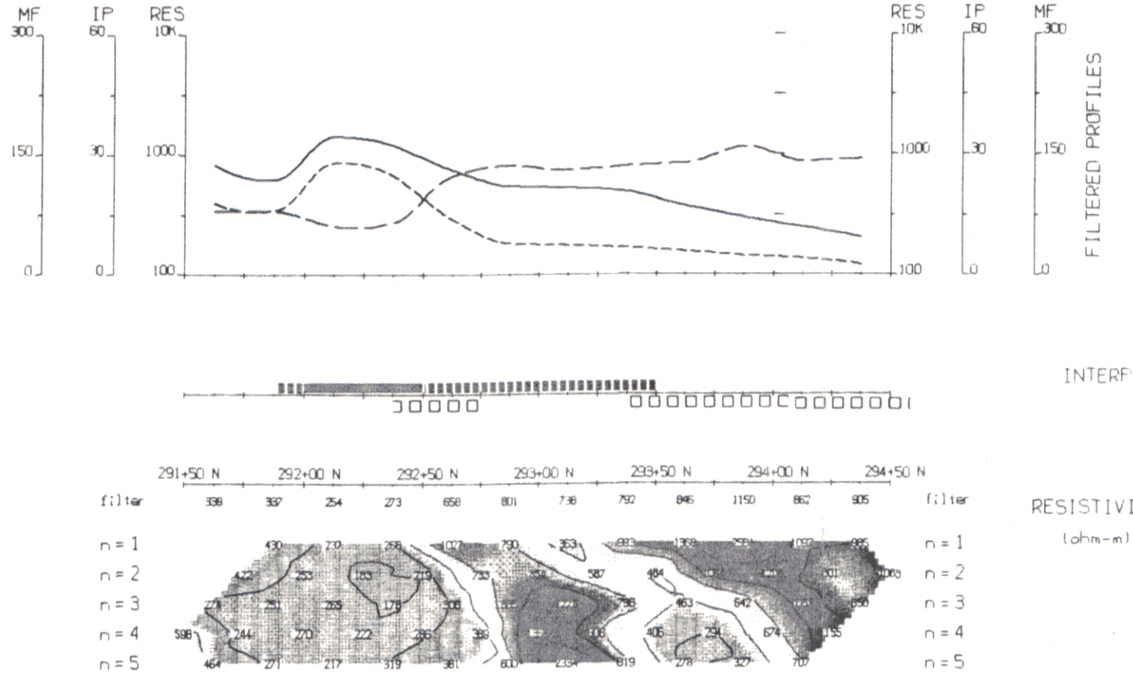
Line 16300 E

YUKON

Date: 89/07/28 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

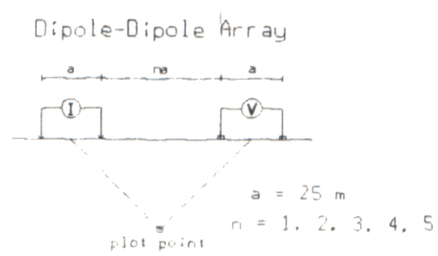
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Line 16400 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

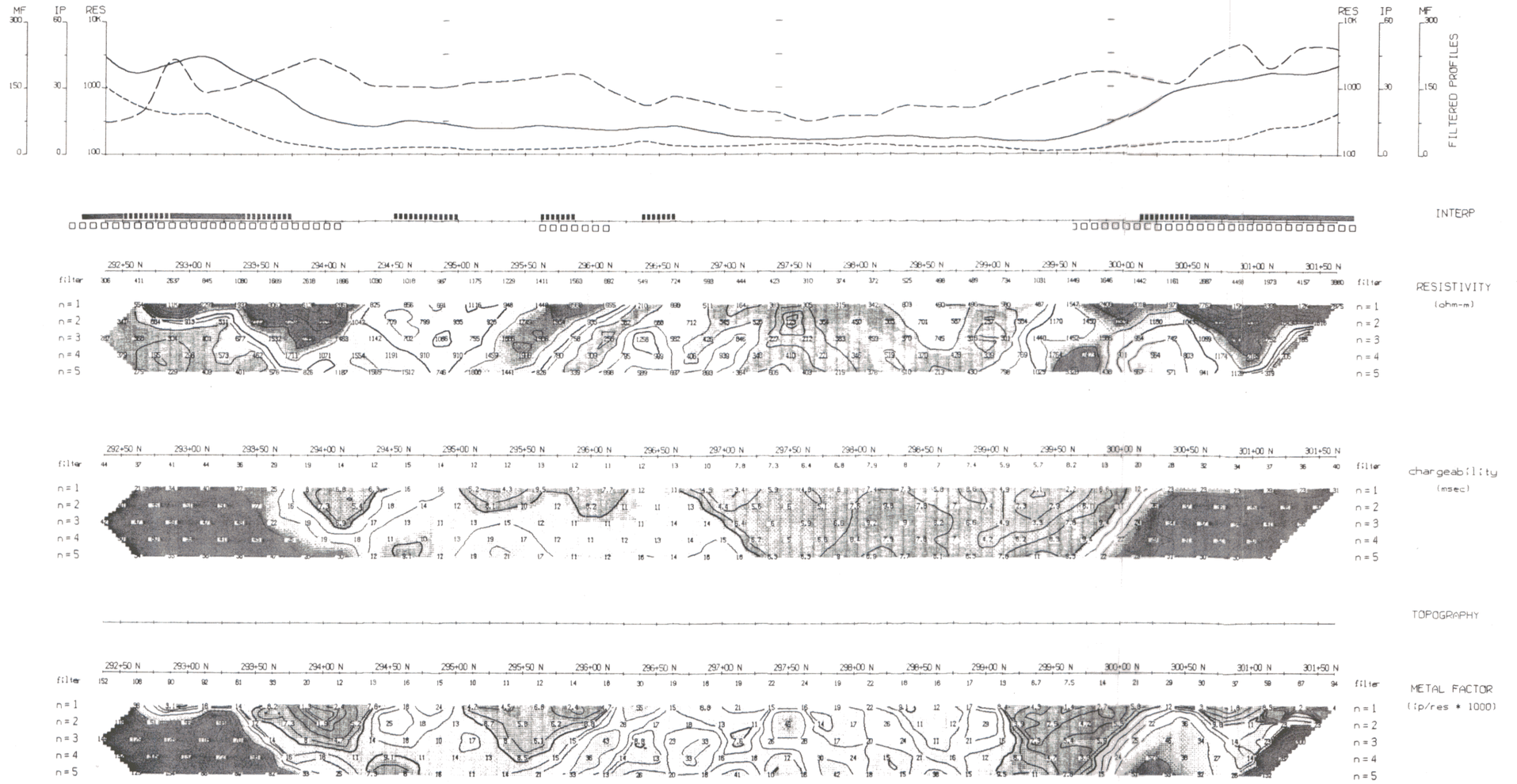
Line 16400 E

YUKON

Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

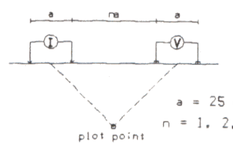
n o r a n d a

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Line 16500 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

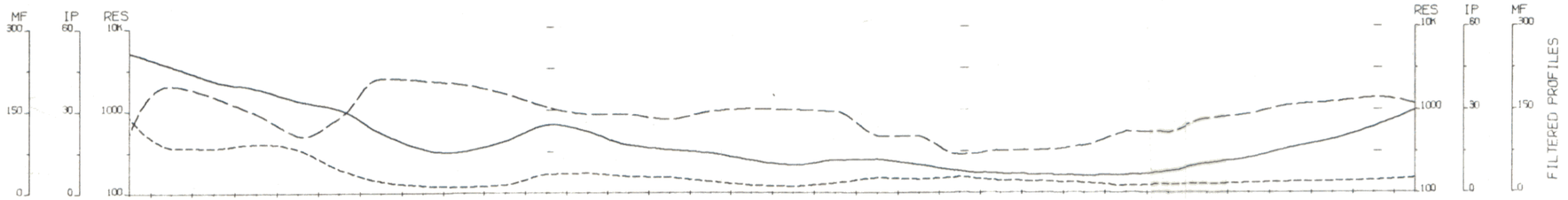
Line 16500 E

YUKON

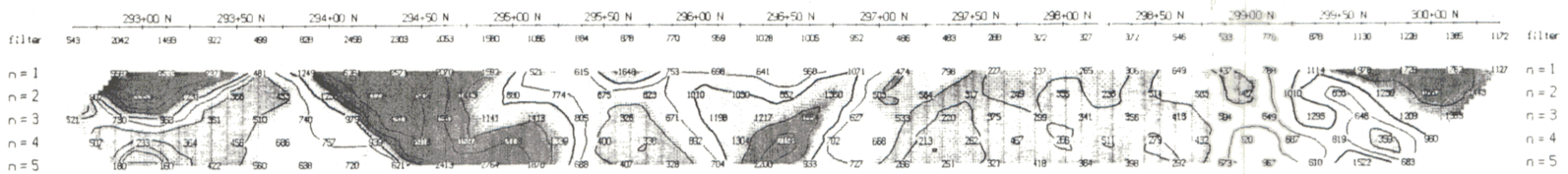
Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

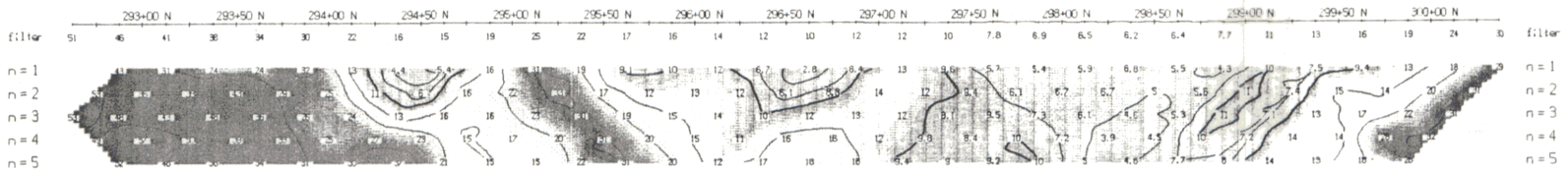
noranda

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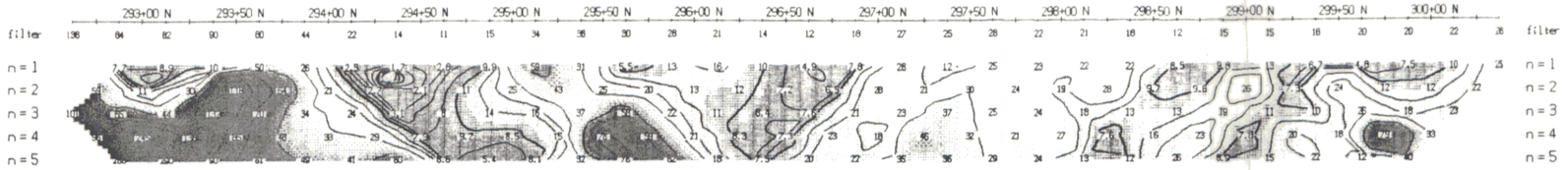






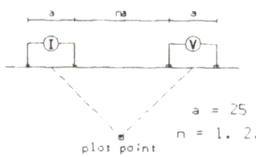






Line 16600 E

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

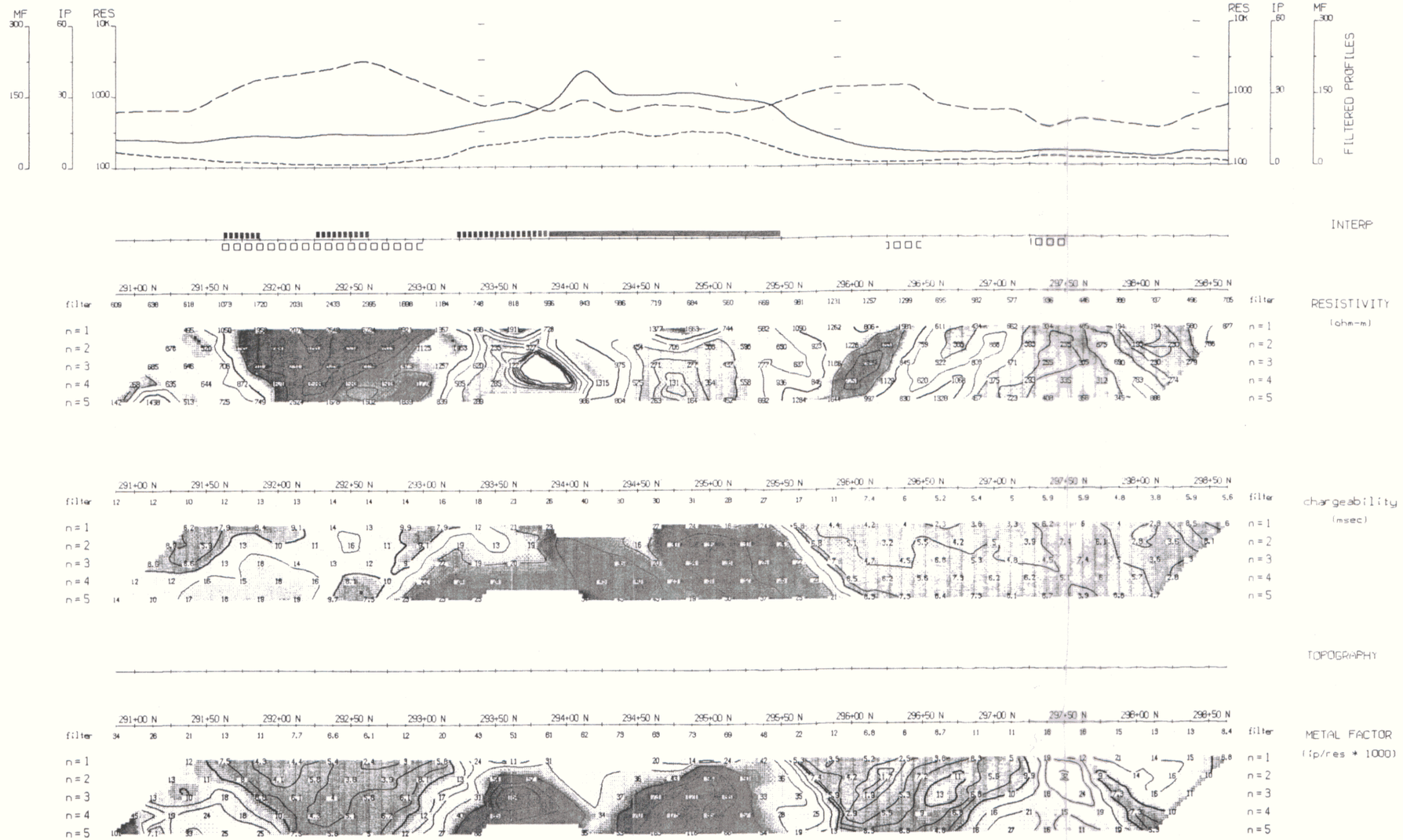
INDUCED POLARIZATION SURVEY

Line 16600 E
YUKON

Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

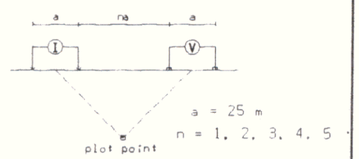
n o r a n d a

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Line 16800 E

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

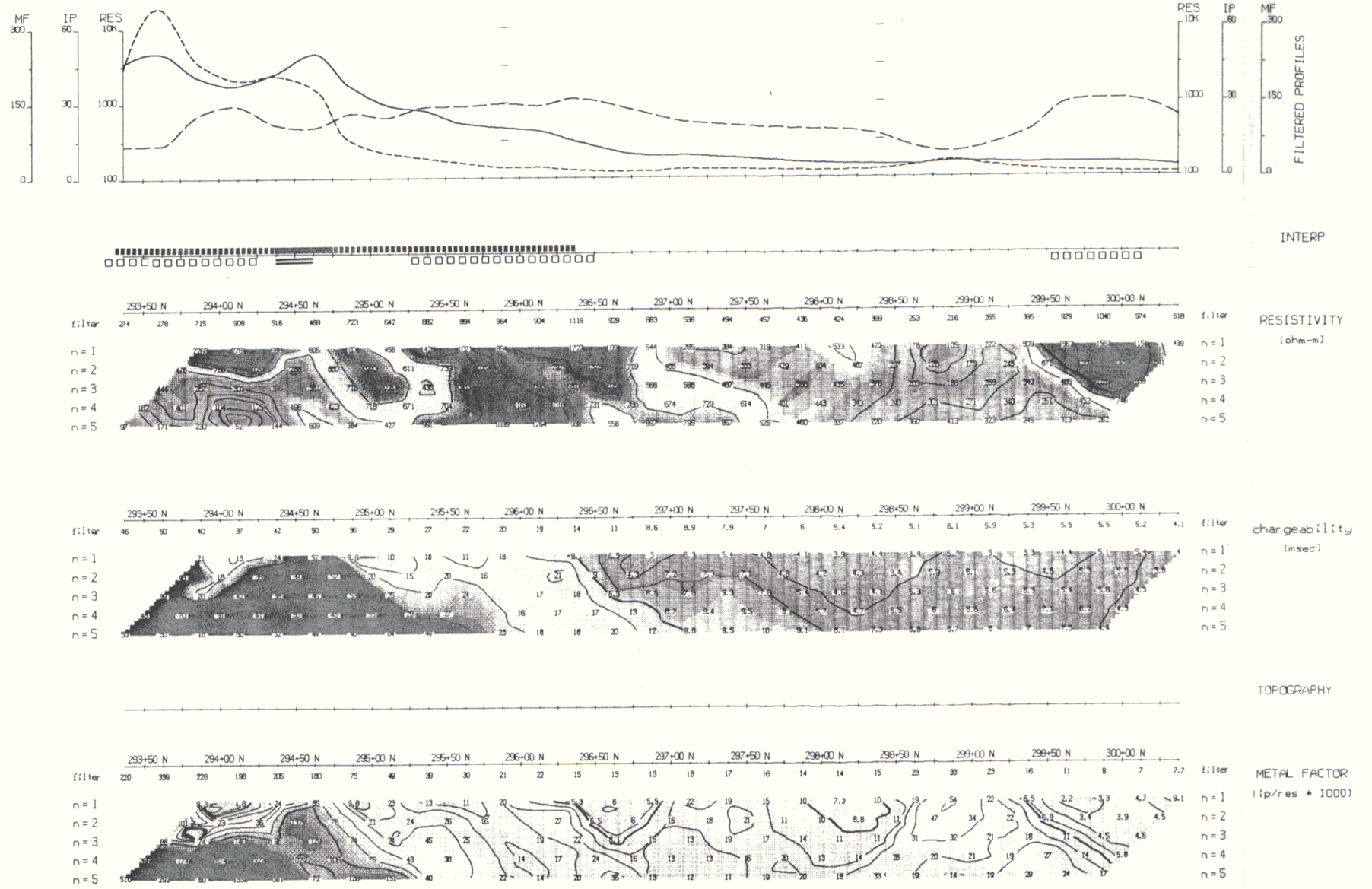
INDUCED POLARIZATION SURVEY

Line 16800 E
YUKON

Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

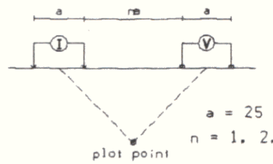
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Line 17200 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

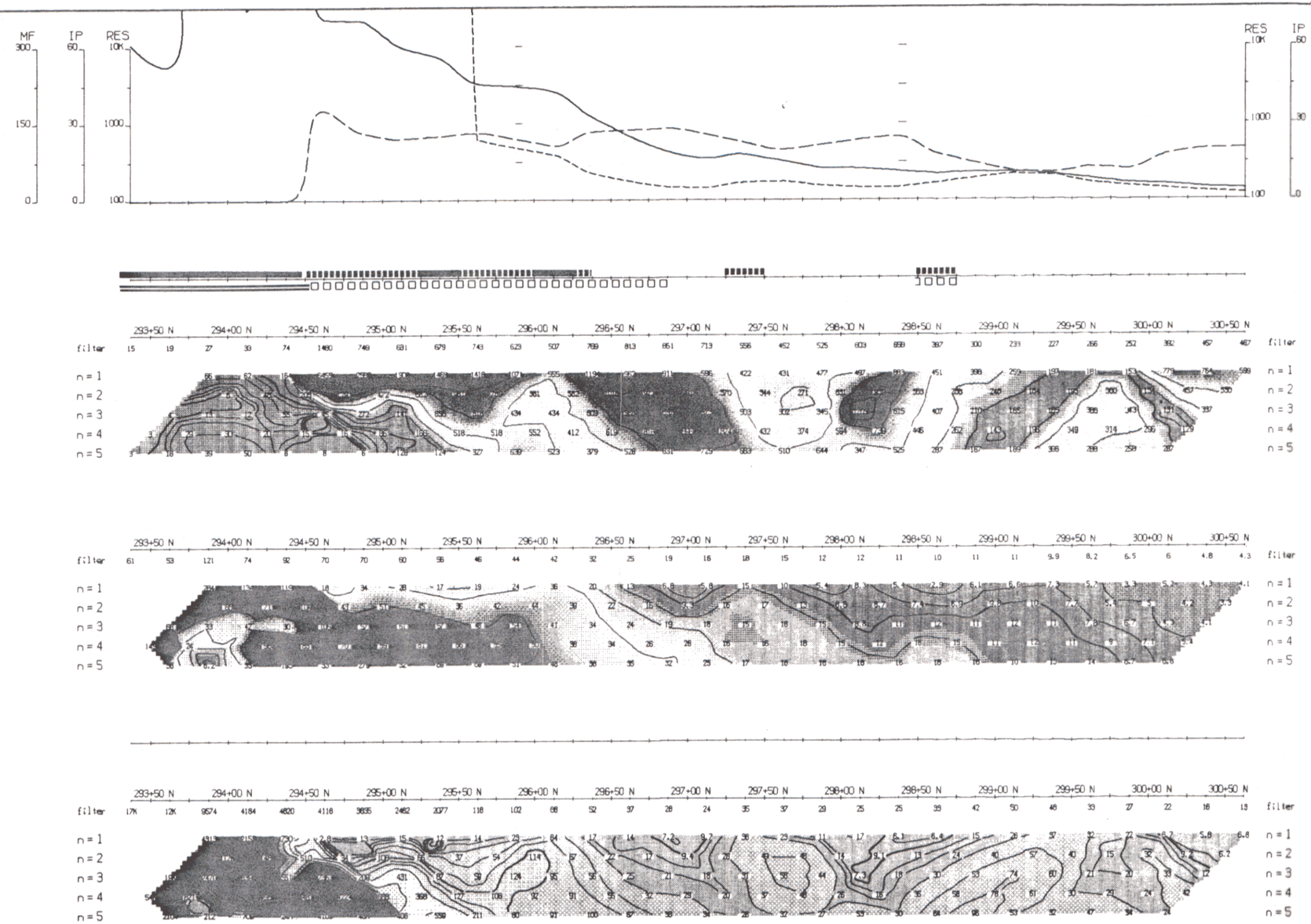
Line 17200 E

YUKON

Date: 89/07/18 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

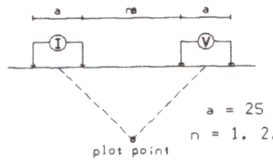
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Line 17300 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: EDA IP 6
Time Base: 2 sec.
Operator: MPH

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY

Line 17300 E

YUKON

Date: 89/07/28 N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500

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