MAP NO.:			
116A/04	**ASSESSMENT REPORT** X **PROSPECTUS** **CONFIDENTIAL** X **OPEN FILE**	**DOCUMENT NO:** 092933 **MINING DISTRICT:** Dawson **TYPE OF WORK:** Geology, geochemistry	

REPORT FILED UNDER: Noranda Exploration Company Limited

DATE PERFORMED: July 1990 **DATE FILED:** February 18, 1991

LOCATION: **LAT.:** 64°05'N **AREA:** Aussie Creek (near Brewery Creek)

LONG.: 137°52'W **VALUE $:** 16,800.00

CLAIM NAME & NO.: AUS 1-52 YB04454-04485;YB31209-31212

WORK DONE BY: Jessie L. Duke (Noranda Exploration Company Limited)

WORK DONE FOR: Noranda Exploration Company Limited

DATE TO GOOD STANDING:	

REMARKS: MINFILE #116A - 31 AUSSIE (Noranda calls it PANORAMA RIDGE) Exploration in 1990 consisted of line-cutting, and soil and rock samp-ling. Ten kilometres of IP surveys were conducted and six hundred metres of trenches were completed with a Kubota hoe, which was mobiliz-ed by helicopter.

indexed Feb21/91

summarized Feb25/91

GEOLOGICAL & GEOCHEMICAL REPORT

ON THE

AUS 1 - 52 CLAIMS

Dawson Mining District

N.T.S.: 116 A/4

Latitude: 64 05' N

Longitude: 137 52' W

092933

Owner: Noranda Exploration Company Limited
(no personal liability)

J.L. Duke

RECEIVED
FEB 15 1991
MINING
RECORDERS OFFICE
DAWSON, Y.T.

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 $ 16,800.00.

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

SUMMARY

The Aus 1 -52 claims are located 75 km east of Dawson City, Yukon and 17 km east northeast of the Brewery Creek gold deposit.

The 1990 geophysical program completed and extended the 1989 work that was interrupted by a wild fire. This year 6.75 km of line was cut, 9.45 km of I.P. was done, and 836 metres of trenching was completed on the property. Most of the trenching was done by a helicopter portable Kabota backhoe.

A total of seven trenches were completed. The best value obtained was 1673 ppb gold over 2 metres in hornfelsed sediments near an intrusive contact.

Four additional claims were added in 1990 to the northwest to explore the northwestern extent of the 900 metre by 1800 metre gold geochem anomaly outlined on the property in 1989. The soil survey show the extent of the anomaly is now fully defined.

Trenching has confirmed the existence of elevated values of gold in the bedrock. Results suggest that enrichment is typically in the 100 to 400 ppb range and can occur within the intrusive and in its hornfelsed aureole. The best results were obtained at or near the contact between the two. Better grade samples (up to several grams gold) invariably exhibit arsenopyrite, scorodite, or actinolite.

The central part of the coincident gold and arsenic soil anomaly marks the intersection of an east-west trending strong magnetic break and a strong northwest trending physiographic linear. Surface work on this part of the property was not conclusive and diamond drilling would be necessary to properly test for a mineralized source for this anomaly at depth.

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h. Trench 5 page 2 34

i. Trench 6 35

j. Trench 7 page 1 36

k. Trench 7 page 2 37

l. Trench 7 page 3 38

Fig. 5: Compilation Map 1:5000 In Pocket

Fig. 6: Gold geochemistry 1:5000 In Pocket

Fig. 7: Arsenic geochemistry 1:5000 In Pocket

Fig. 8: Resistivity Survey 1:5000 In Pocket

Fig. 9: Chargeability Survey 1:5000 In Pocket

Fig. 10: Magnetometer Survey 1:5000 In Pocket

I.P. Survey Pseudosections in Pocket

Line 15800 E

Line 15900 E

Line 16000 E

Line 16100 E

Line 16200 E

Line 16300 E

Line 16400 E

Line 16500 E

Line 16600 E

Line 16700 E

Line 16900 E

Line 17000 E

Line 17100 E

Line 17200 E

Line 17300 E

Line 17400 E

Line 17500 E

CHAPTER ONE: INTRODUCTION

1-1: Introductory Statement

The Aus 1-52 claims are located about 17 km east-northeast of the Brewery Creek gold deposit. The property covers an area of anomalous gold and arsenic in soils staked by Noranda in 1987 as part of a regional reconnaissance program being conducted in the area. Since that time work on the property has included various geophysical and geochemical surveys and backhoe trenching.

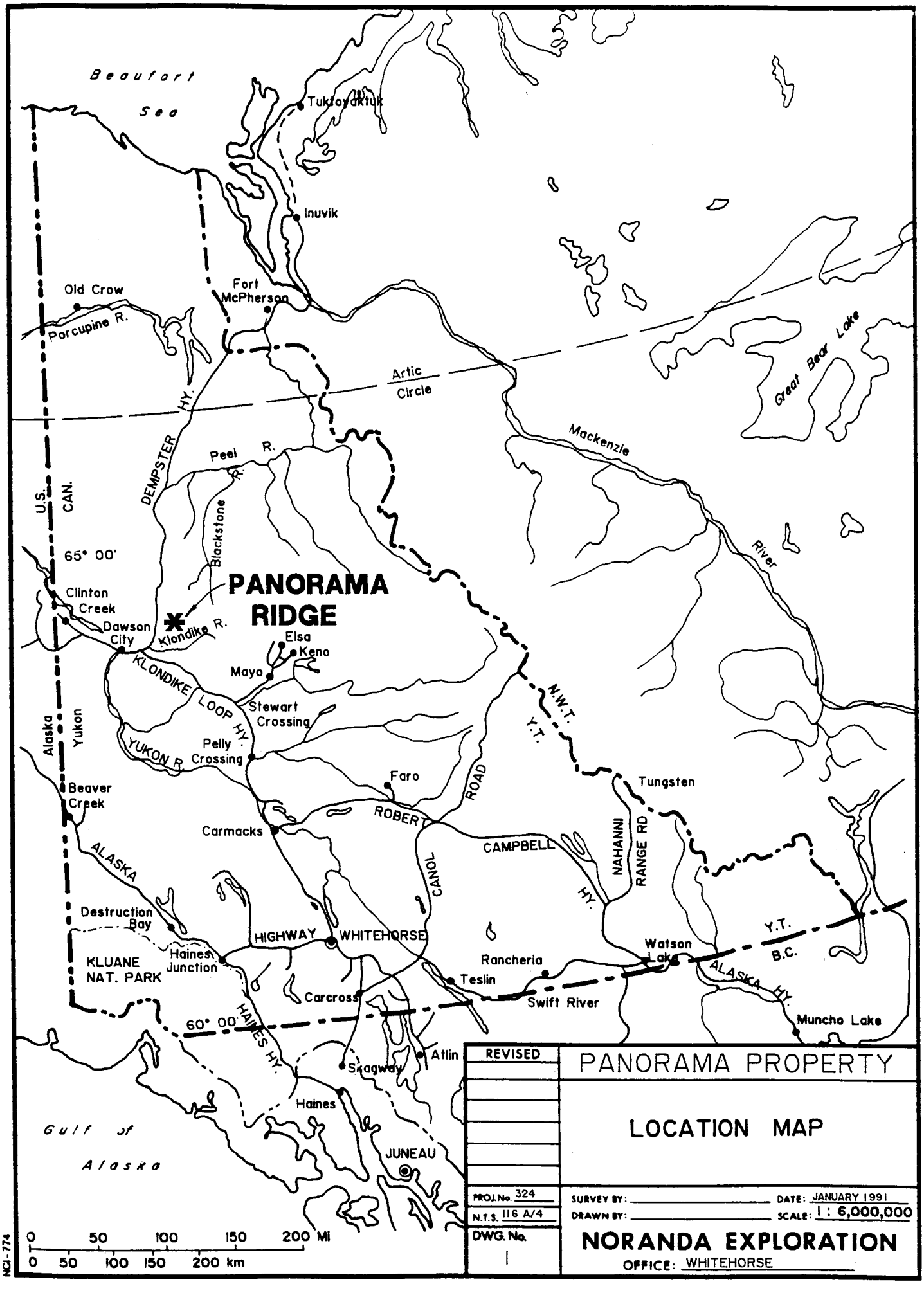
1-2: Location & Access

The property is located in west central Yukon Territory, approximately 75 km east of Dawson City in the Ogilvie Mountains. The claims are centered at Latitude 64 05'N, Longitude 137 52'W on NTS mapsheet 116 A/4. Access is currently by helicopter from Dawson City. The nearest 4 X 4 road is at the Brewery Creek deposit 17 km to the west.

1-3: Physiography & Vegetation

The claims straddle a steep east-southeast - west-northwest trending ridge in the Ogilvie Mountains. Elevations vary between 760 metres to 1280 metres. Bedrock is exposed on the steeper parts of the property and along some of the ridges. Elsewhere talus or soil predominate.

Vegetation consists of buckbrush, willows, spruce, and aspen. Ridge tops are near the tree line and are sparsely



REVISED	PANORAMA PROPERTY
	LOCATION MAP
PROJ.No. 324	SURVEY BY: _____ DATE: JANUARY 1991
N.T.S. 116 A/4	DRAWN BY: _____ SCALE: 1 : 6,000,000
DWG. No. 1	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

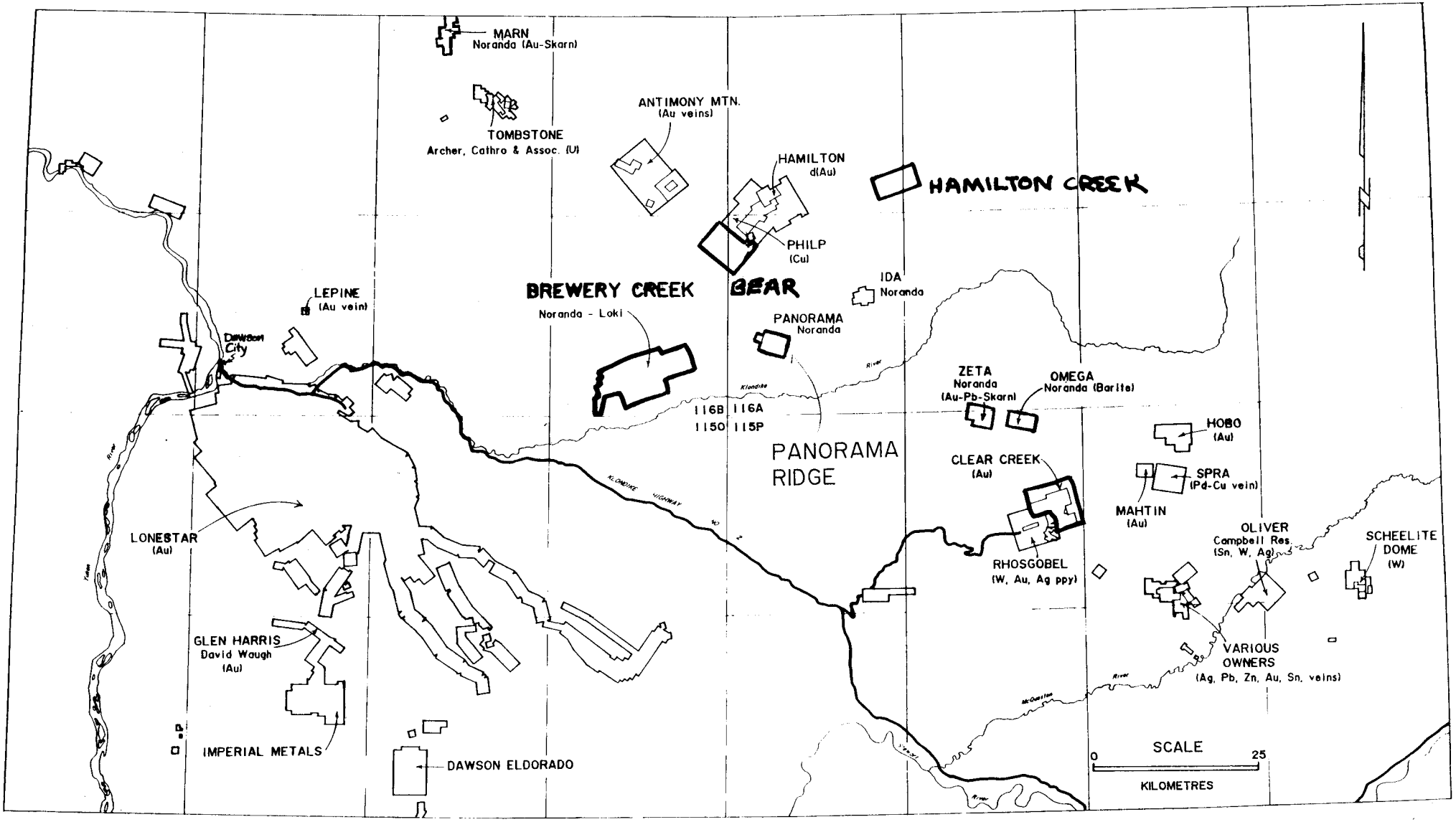
NCI-774

vegetated. Two thirds of the property was burned in July of 1989.

1-4: History of the Property

The Aus 1-32 (YB04454-469) were staked on October 9, 1987. The Aus 33-48 claims (YB23557-572) were added June 20 and 21 of 1989. The Aus 49-52 (YB31209-312) were staked July 8, 1990. The Aus 1-32 claims are currently in good standing until January 20, 1997. The Aus 33-48 are good until January 20, 1995. The area these claims cover was completely destroyed by fire in 1989. The Aus 49-52 are due July 16, 1991. All of the claims are solely owned by Noranda Exploration Company Limited and are registered in Dawson with the Dawson Mining District Mining Recorder. Upon acceptance of this report the claims will have the following status:

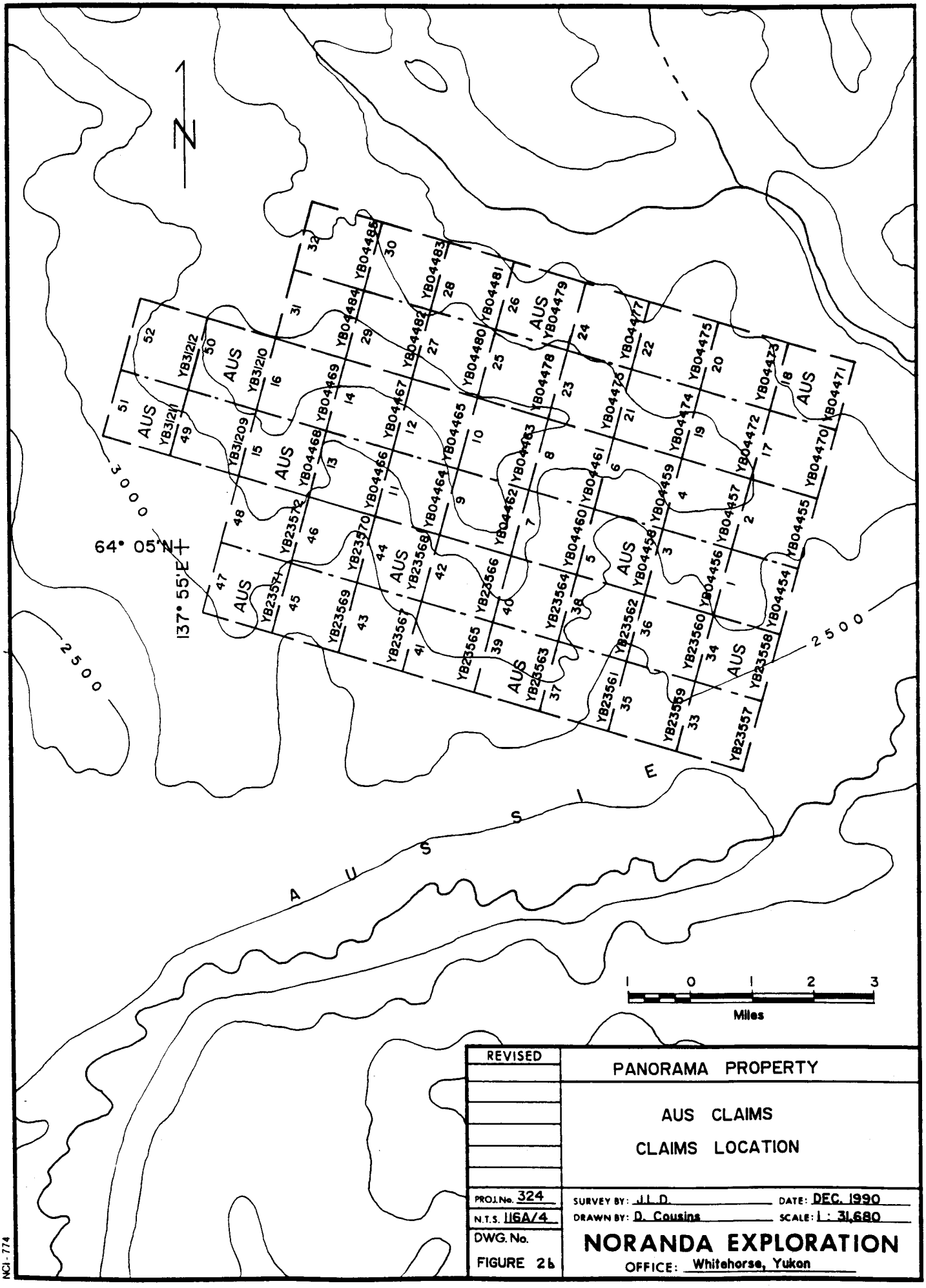
Grant Number	Claim Name	Expiration Date
YB04454 -	Aus 1 -	January 20, 2001
YB04469	Aus 16	
YB04470 -	Aus 17 -	January 20, 1999
YB04485	Aus 32	
YB31209 -	Aus 49 -	July 16, 1996
YB31212	Aus 52	



CLAIM STATUS

NORANDA PROPERTY

REVISED	PANORAMA RIDGE
	CLAIM STATUS
PROJ No 312 A6	SURVEY BY JD DATE SEPTEMBER 19??
NTS	DRAWN BY JF SCALE 1 250,000
DWG No 2a	NORANDA EXPLORATION
	OFFICE WHITEHORSE


N
64° 05'N
137° 55'E
3000
2500
2500
AUS
AUS
AUS

1-5: Previous Exploration

The Aus claims were staked by Noranda in 1987. In 1988 Noranda completed geochemical and geophysical surveys on the property outlining an area of elevated arsenic and gold. In 1989 additional work done on the claims included prospecting, soil sampling, linecutting, I.P. and magnetometer surveys. A total of 112 person days were spent on the property collecting 366 soil samples, and 102 rock samples. Ten kilometres of grid was cut with 68 km of mag and 6 km of I.P. being completed. A forest fire on the property interrupted work in the middle of the field season.

1-6: Work Program

A six man crew was mobilized to the property in late June. Cut lines that were burned were repicketed. An additional 6.75 km of line was cut. A total of 201 soil samples and 10 rock samples were collected at this time.

In July, Amerok Geophysics of Whitehorse spent 11 days conducting 9.45 km of I.P. to extend and complete the work interrupted by fire in 1989. Six hundred metres of trenches were dug by a helicopter-portable Kubota backhoe under contract from Alta Engineering of Burnaby, Vancouver. A total of 130 chip samples were collected and sent for analysis.

The Aus 1-32 claims were tagged. Posts that were destroyed by fire were replaced and tagged.

On September 26, the Kubota was moved back onto the property. Fourteen days of additional trenching were completed. A total of 128 samples were collected and analysed.

One 10 X 12 foot tent frame with floor and one 14 X 16 foot floor, a plywood table, benches and shelves were left on the property. Water must be flown in for camp use.

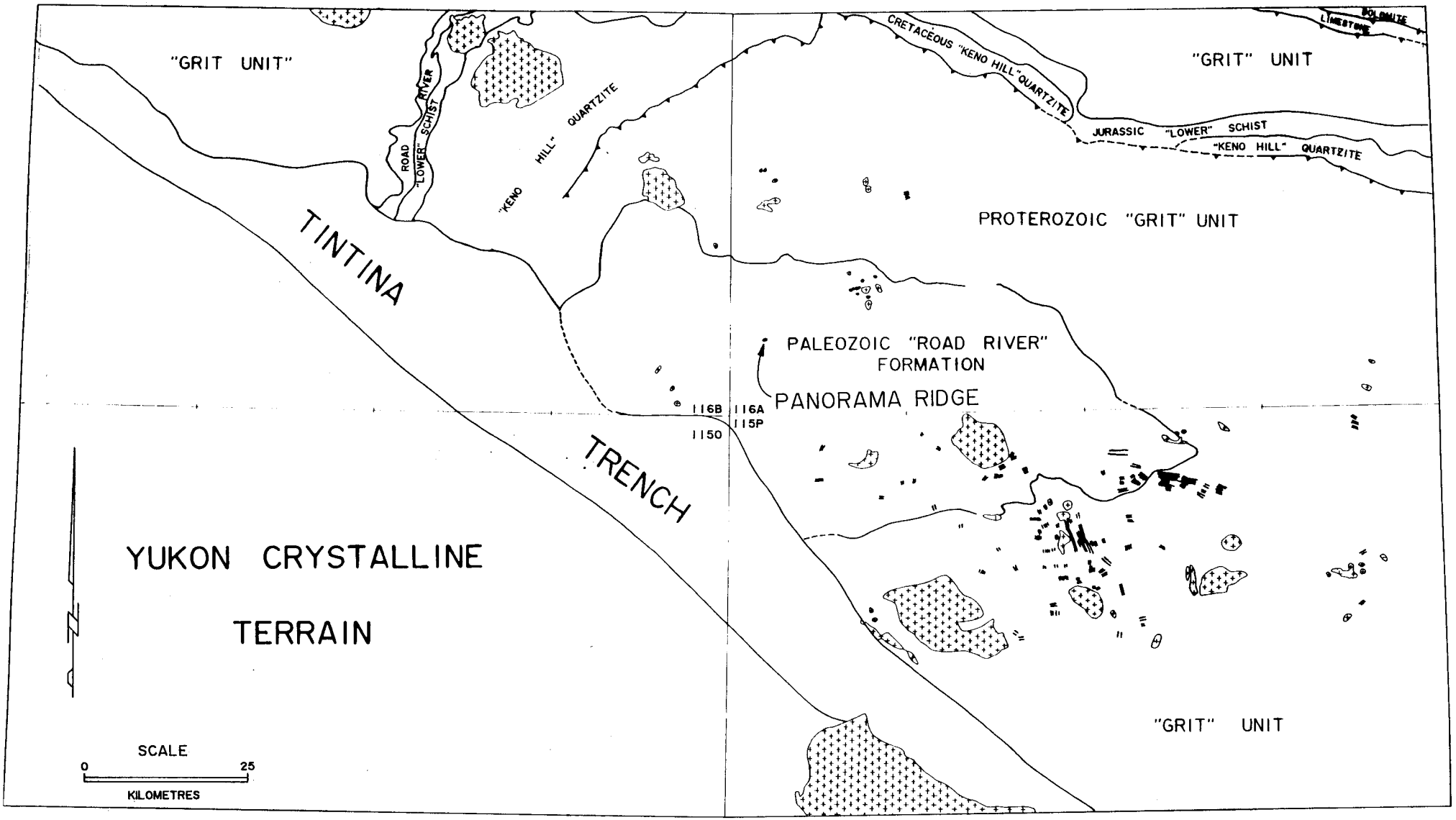
CHAPTER TWO: GEOLOGY

2-1: Regional Geology

The area occurs in Selwyn Basin and is underlain by shale, argillite, and cherty argillite of the Ordovician to Silurian age Road River Formation. These rocks have undergone at least two periods of deformation. Evidence of Early Paleozoic north and northeast directed thrusting is documented in areas of better exposure. Evidence of possible post Cretaceous thrusting is documented at the nearby Brewery Creek Property (MacKay, 1990) These rocks have been intruded by a dominately alkaline plutonic suite of Cretaceous age. These rocks generally occur as small stocks and dykes of hornblende-biotite syenite, k-feldspar porphyritic syenite to quartz-monzonite, granodiorite, and minor amounts of diorite.

2-2: Property Geology

The property is underlain by a steeply dipping sequence of fine-grained sediments. These include grey siltstone, grey shale, black to grey chert, and cherty shale. These have been intruded by k-spar megacrystic rock that ranges in composition from syenite to granodiorite. They occur as sills trending parallel to the strike of the bedded sediments. A central lense-shaped body up to 500 m thick is flanked by thin sills. The trends range from 070 to 120 degrees.



REGIONAL GEOLOGY

FELSIC INTRUSIVE DYKE

CRETACEOUS INTRUSIVE

REVISED	PANORAMA RIDGE
	REGIONAL GEOLOGY (After Green and Roddick, 1961)
FROM No.	SURVEY BY J.D. DATE September 1990
N.T.S.	DRAWN BY J.F. SCALE 1 : 250,000
DWG No. 3	NORANDA EXPLORATION OFFICE WHITEHORSE

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.

The general orientation of the intrusives appears parallel to a airphoto linear which crosses the property at about 084 degrees. The central part of the property defines the intersection of this linear and another linear with an orientation of 020 degrees. The intersection of these linears is coincident with breaks in the magnetic, resistivity, and chargeability signatures of the rocks and is centered over the area of anomalous gold and arsenic in soils.

CHAPTER THREE: GEOCHEMISTRY

Work done in 1989 outlined a multi-element soil anomaly centered over the intrusives exposed on the property. This was open to the west along the western strike extension of the intrusives. In 1990 additional lines were run to test this western extension. A strong arsenic response in soils continues to line 15000E. The gold response was erratic and generally weak.

Some check sampling was also done on lines 16500E and 16600E. Previous anomalies were confirmed.

Soil samples were shipped to the Noranda Vancouver laboratory and analysed for gold by AA using an Aqua Regia digestion. Then 30 element ICP was run at Acme Analytical Laboratories Ltd. in Vancouver. Rock samples were analysed for gold by Northern Analytical Laboratories of Whitehorse by Fire Assay on a 30 gram sample with an AAS finish. and for 30 element ICP by Acme in Vancouver. Results are appended. Gold and arsenic dot plots are on Figures 6 and 7. Gold results have been contoured at >59 ppb gold on the compilation map (Figure 5).

The gold in soil anomalies occur over a 900 metre wide by 1800 metre long area. The anomalies are irregular and discontinuous. The arsenic anomaly is coincident with the gold but more extensive with a similar width and a 3000 metre strike length.

CHAPTER FOUR: GEOPHYSYICS

A geophysical report on the I.P. survey is in appendix I.

The following is a geological interpretation of the geophysical work done to date.

4-1: I.P. Survey

The target areas identified focus on the occurrence of minor disseminated pyrite, pyrrhotite, and arsenopyrite that occurs in the dykes and sedimentary host peripheral to the main intrusive body. Most of the target areas lie outside the soil anomalies.

On the southern edge of the property between lines 15800E and 16700E an east-west trending gold in soil anomaly is roughly coincident with marked changes in polarization and resistivity. Steep terrain and lack of outcrop prevented esting of this anomaly.

Generally the areas of strong polarization and resistivity occur within the sedimentary host. Exceptions to this occur on lines 17400E and across the two narrow dykes that flank the main intrusive body. The hornfelsed host and the peripheral dykes locally contain minor amounts of disseminated pyrite, arsenopyrite or pyrrhotite. The central part of the intrusive body generally exhibits flat polarization and local changes in resistivity.

4-2: Magnetometer Survey

A ground magnetometer map is provided as figure 10.

A zone of low magnetic response trending at 098 degrees crosses the baseline at 16950E. Its orientation roughly parallels the intrusive exposure. It has been tested in Trench Five at 16600E, 29900N. Evidence of faulting is exposed in this trench with associated anomalous gold values (390ppb Au - R139616).

A weaker magnetic break occurs south of the baseline at an orientation of 020 degrees. This break is not tested by trenching. A mixture of intrusive boulders and intensely altered grus-like soil occurs on top of the ridge at 16650E, 99800N over this break. A grab of this altered material returned 76ppb Au (R52247). Nearby, Trench Five returned weakly anomalous gold results. This break is roughly coincident with a well defined physiographic linear which runs at 020 degrees across the grid (see figure 10).

There is no obvious geophysical signature within the intrusive in identified areas of structural complexity that could which reflect significant mineralization at depth (Ted Wong, personal communication).

CHAPTER FIVE: TRENCHING

A total of 836 metres of trenching was completed in seven trenches. The work was done by a helicopter portable Kabota backhoe on contract from Alta Engineering in Burnaby, B.C..

This machine has been modified to form four 850 pound loads which can be moved by Bell 206 Helicopter. All of the contractor's equipment can be moved in five trips.

An average of 36.3 metres of trenching per day was completed over 23 days of trenching. Trench depths varied from one to two metres. Trenches deeper than two metres significantly reduce production due to the requirement for benching. Most trench exposures were satisfactory. Trench targets and significant results are summarized below:

TR-1:

Target: Grab sample of actinolite-bearing sediment returned 3660 ppb gold.

Program: Thirty-five metres of hand trenching was completed and sampled across the area of interest.

Results: All gold values were low.

TR-2:

Target: Line 16500E, 30150N defines a high chargeability - low resistivity target. Depth to the chargeability target was estimated at

10 metres. A piece of float returned 3580 ppb Au downslope of the target. Brecciated hornfelsed sediments, often scorodite stained, occur as occasional float in the area.

Program: Fifty metres of trenching were complete to bedrock. The target evaluation was not finished due to deep talus cover.

Results: The best value was 480 ppb Au over a two metre interval which contained a 2-3 cm wide arsenopyrite vein.

TR-3:

Target: A grab sample of altered intrusive returned 1100 ppb Au. Potential for intrusive-hosted mineralization was tested.

Program: A total of 120 m of bedrock was exposed across the target and sampled.

Results: 108 ppb Au over a 5 m interval containing a pyritic biotite-monzonite dyke was the best result.

TR-4:

Target: This trench tests the northern contact of the main intrusive body and a gold-arsenic soil geochem anomaly associated with this contact.

Program: 260 m of trenching along the ridge was completed.

Results: 210 ppb Au over five metres was the best result obtained.

TR-5:

Target: Red altered intrusive rock forms a saddle on a ridge. One grab returned 410 ppb Au. The target is on the uphill flank of a 200 by 500 metre gold in soil anomaly. It crosses a strong magnetic break oriented at 210 degrees

Program: Sixty metres of trenching was completed across the target.

Results: The best result was 390 ppb Au over 5 m in a wet, intensely altered fault zone. A mixture of competent boulders and intensely altered grus-like soil in the trench and immediate area suggest extensive frost heaving and solifluction has occurred and the sampling may not reflect underlying bedrock.

TR-6:

Target: To test a possible northwest-trend to the mineralization suggested by soil geochemistry one the central part of the property over altered intrusive rock.

Program: 50 m of trenching was completed over the target area.

Results: 166 ppb Au over 2 m was the best result. A mixture of boulders and grus-like red soil in the immediate area suggest extensive frost heaving and solifluction has occurred. The sampling may not reflect underlying bedrock mineralization.

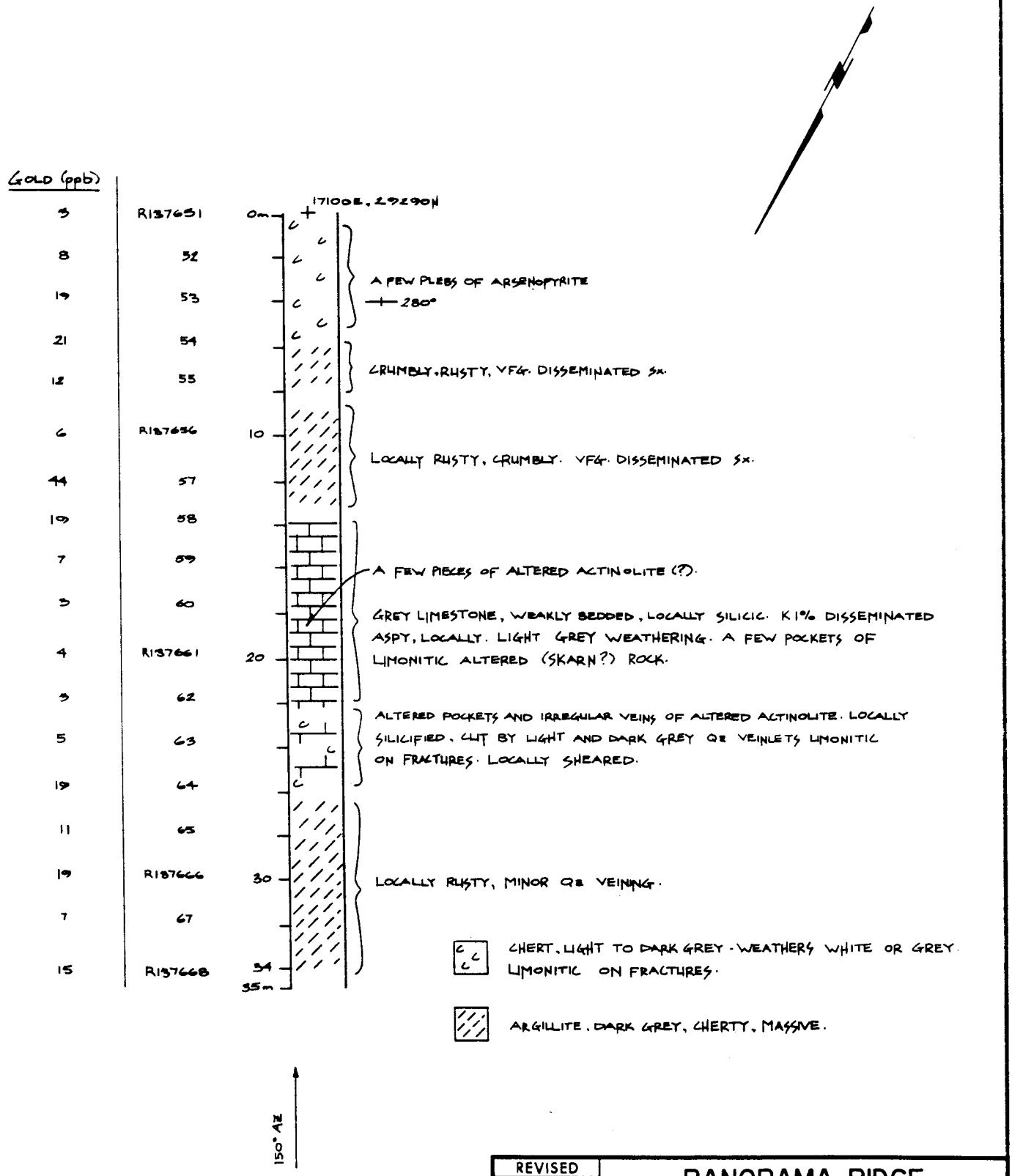
TR-7:

Target: Grab samples of float near a contact of the intrusive with sediments returned several values in the 1-2 gmt Au range.

Program: A total of 186 m of trenching was completed across the contact.

Results: 1673 ppb Au over 2 m in hornfelsed sediments near the contact was the best result.

Trenching targets were limited to areas accessible by the machine. Topography and boulder fields precluded trenching some of the anomalies.



GOLD (ppb)		
3	R137651	
8	52	
19	53	
21	54	
12	55	
6	R137656	
44	57	
109	58	
7	59	
3	60	
4	R137661	
3	62	
5	63	
19	64	
11	65	
19	R137666	
7	67	
15	R137668	

REVISED	PANORAMA RIDGE
	TRENCH No. 1 34m (HAND TRENCH) -2m chips-
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4a	NORANDA EXPLORATION OFFICE: WHITEHORSE

NCI - 774

GOLD (ppb)		
12	R137669	0m
30	70	
9	71	
14	72	
30	73	
7	74	10
45	75	
5	76	
4	77	
9	78	
9	79	20
20	R137680	
46	81	
11	82	
92	85	
35	84	30
25	85	
56	86	
480	87	
42	88	
75	89	40
44	90	
21	91	
17	92	
15	R137693	
		50m

164 95E, 3015 0N



CHERT - LIGHT TO DARK GREY - LIGHTER COLOURS DOMINATE (MAY BE BLEACHING) - OCCASSIONAL QUARTZ VIENLETS - CLEAR SOMETIMES S_x - BEARING (PYRITE?). LIMONITIC VUGS - COMMON IN 'BLEACHED ZONES' (SMALL : < 1mm) DARKER CHERT OFTEN CONTAINS DISSEMINATED VFG. S_x.

DARK - GREY BANDED SHALE. MAY BE GRAPHITIC (?)

AVERAGE TRENCH DEPTH : 1.5 m

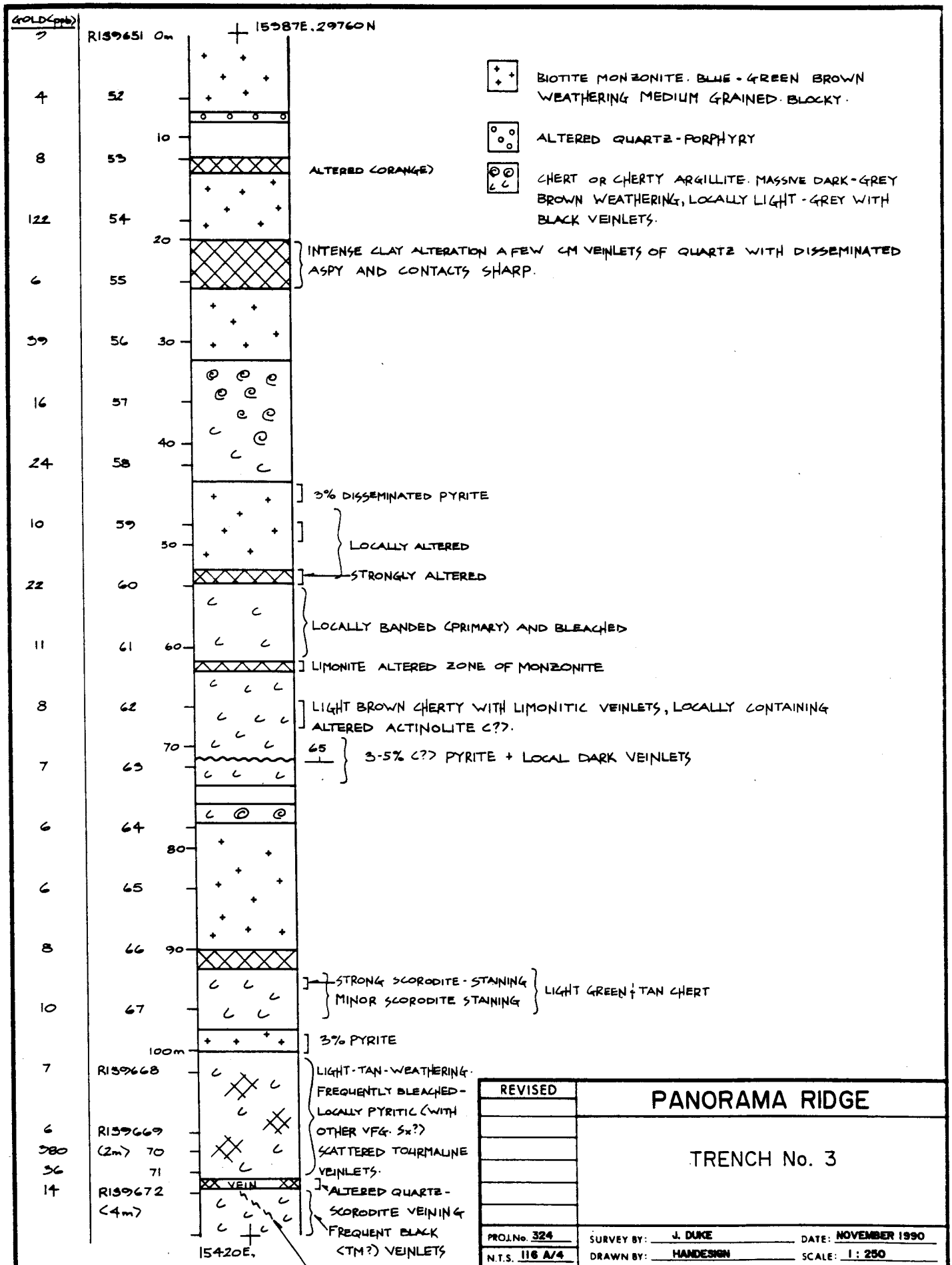
2-3 cm (?) VUGGY ASPY + SCORODITE VEIN - IRREGULAR IN SHAPE

MINOR SCORODITE - STAINING AND QUARTZ - VEINLETS

MOSTLY DARK - GREY LOCALLY BANDED - SILICEOUS SHALE OR ARGILLITE. OCCASSIONAL RUSTY VUGS OR VEINLETS - AND BLEACHED PATCHES.

REVISED	PANORAMA RIDGE
	TRENCH No. 2 50m -25 2m chips-
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4b	NORANDA EXPLORATION OFFICE: WHITEHORSE

NGI - 774



REVISED	PANORAMA RIDGE
	TRENCH No. 3
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1:250
DWG. No. 4c	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

NCI-774

GOLD (ppb)		
28	R139569	0m
22	70	
14	71	
5	72	
6	73	
6	74	
22	75	
18	76	
15	77	
5	78	
15	79	
32	80	
11	81	
6	82	
46	83	
14	84	
14	85	
11	R139586	100m

16152E, 30025N



CHERT, LIGHT TO DARK GREY - BANDED AND MASSIVE - LOCALLY RUSTY. SOME VFG. DISSEMINATED Sx.

RUSTY ZONE - VUGGY QUARTZ VEINLETS FORM A THIN ZONE.

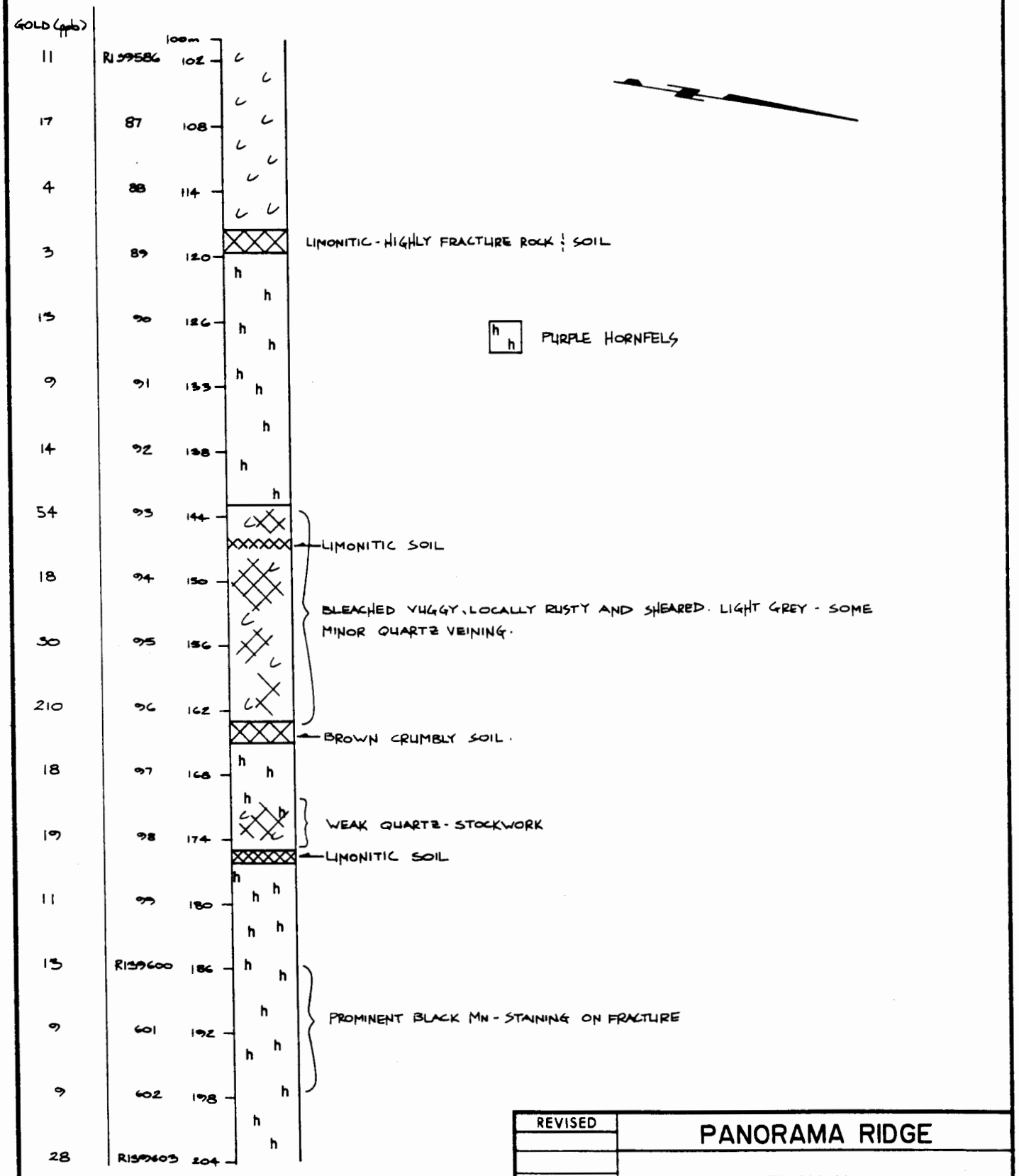
BLEACHED LOCALLY VUGGY. GREEN STAINING

LOCALLY: HORNFELSED (PURPLE); BLEACHED; MINOR RUSTY VUGS.

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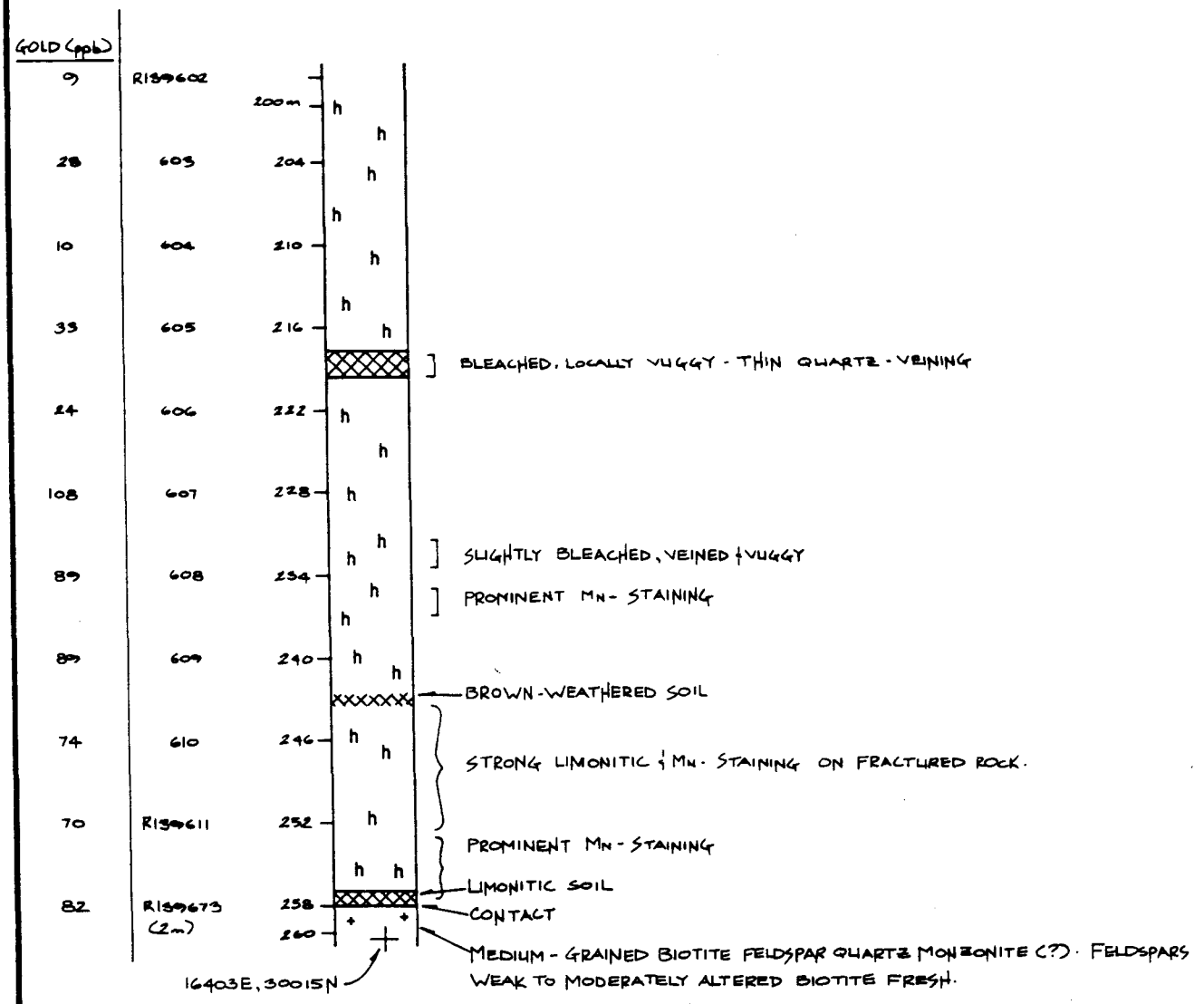
REVISED	PANORAMA RIDGE
	TRENCH No. 4 0-100m -260m 6m chips- 44 Samples Page 1 of 3
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1:250
DWG. No. 4d	NORANDA EXPLORATION OFFICE: WHITEHORSE

NCI-774



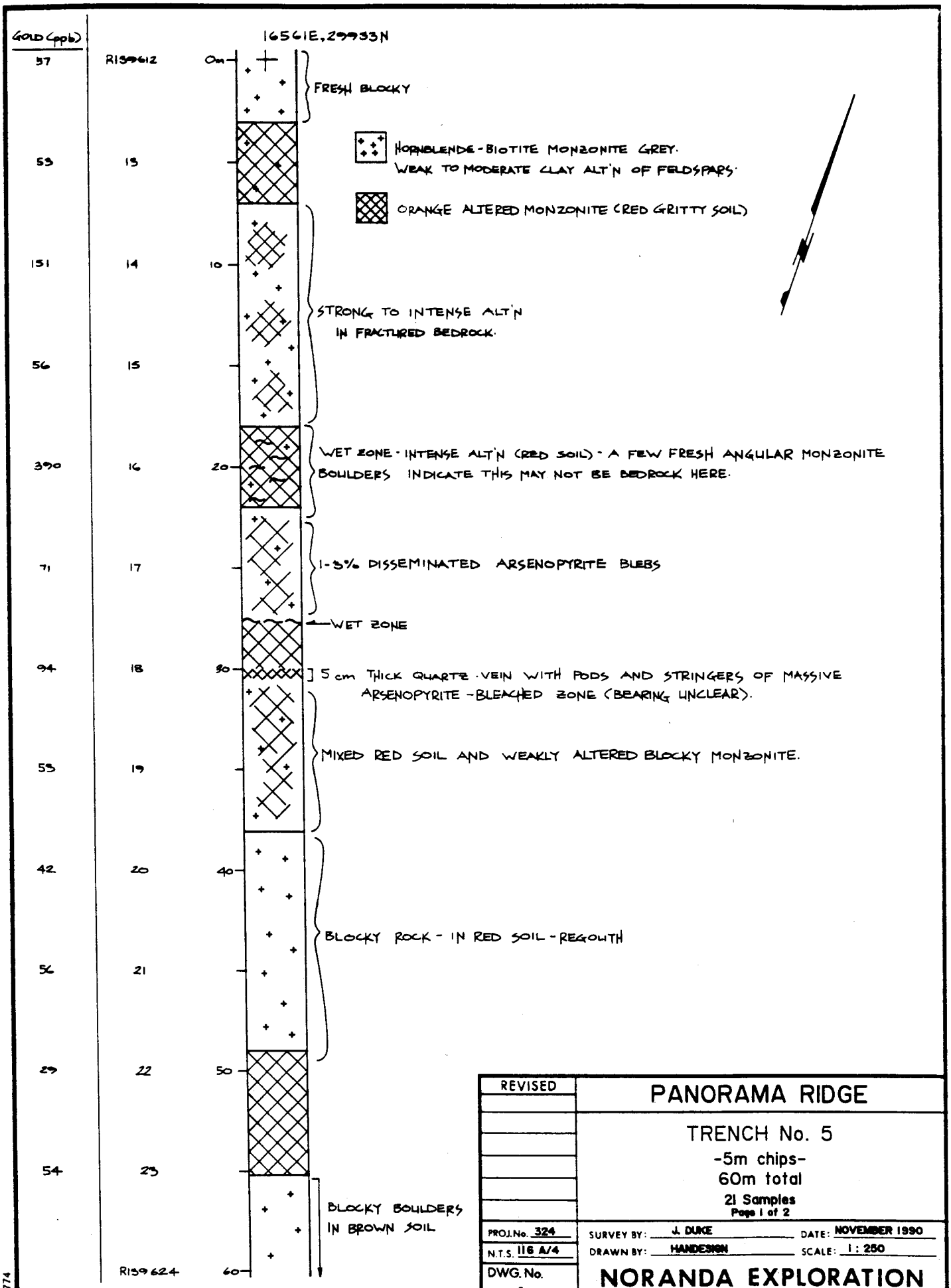
REVISED	**PANORAMA RIDGE**
	TRENCH No. 4
	100-200m
	Page 2 of 3
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4e	**NORANDA EXPLORATION**
	OFFICE: WHITEHORSE

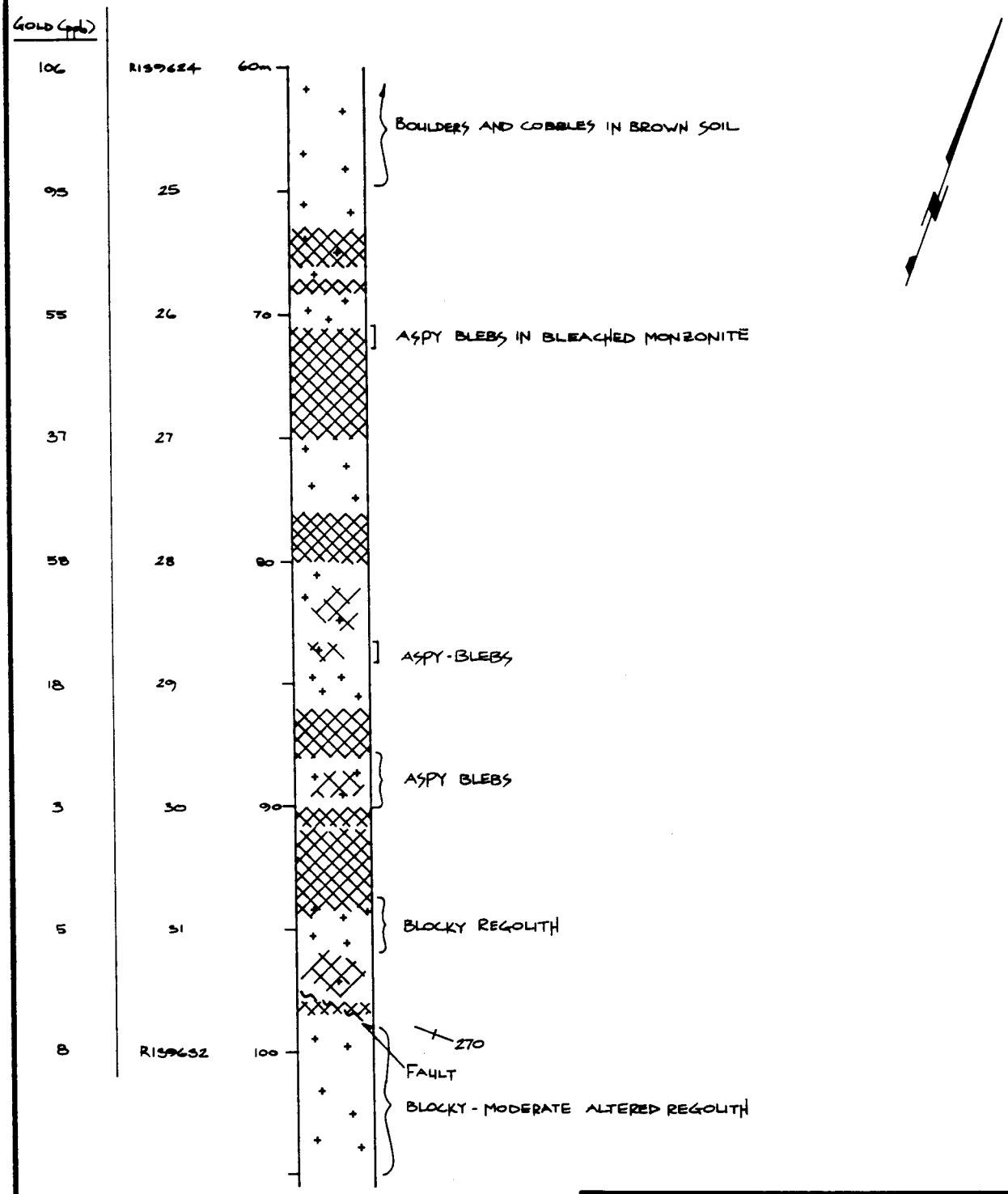
NCI - 774



REVISED	PANORAMA RIDGE
	TRENCH No. 4 200-260m -6m chips- 44 Samples Page 3 of 3
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4f	NORANDA EXPLORATION OFFICE: WHITEHORSE

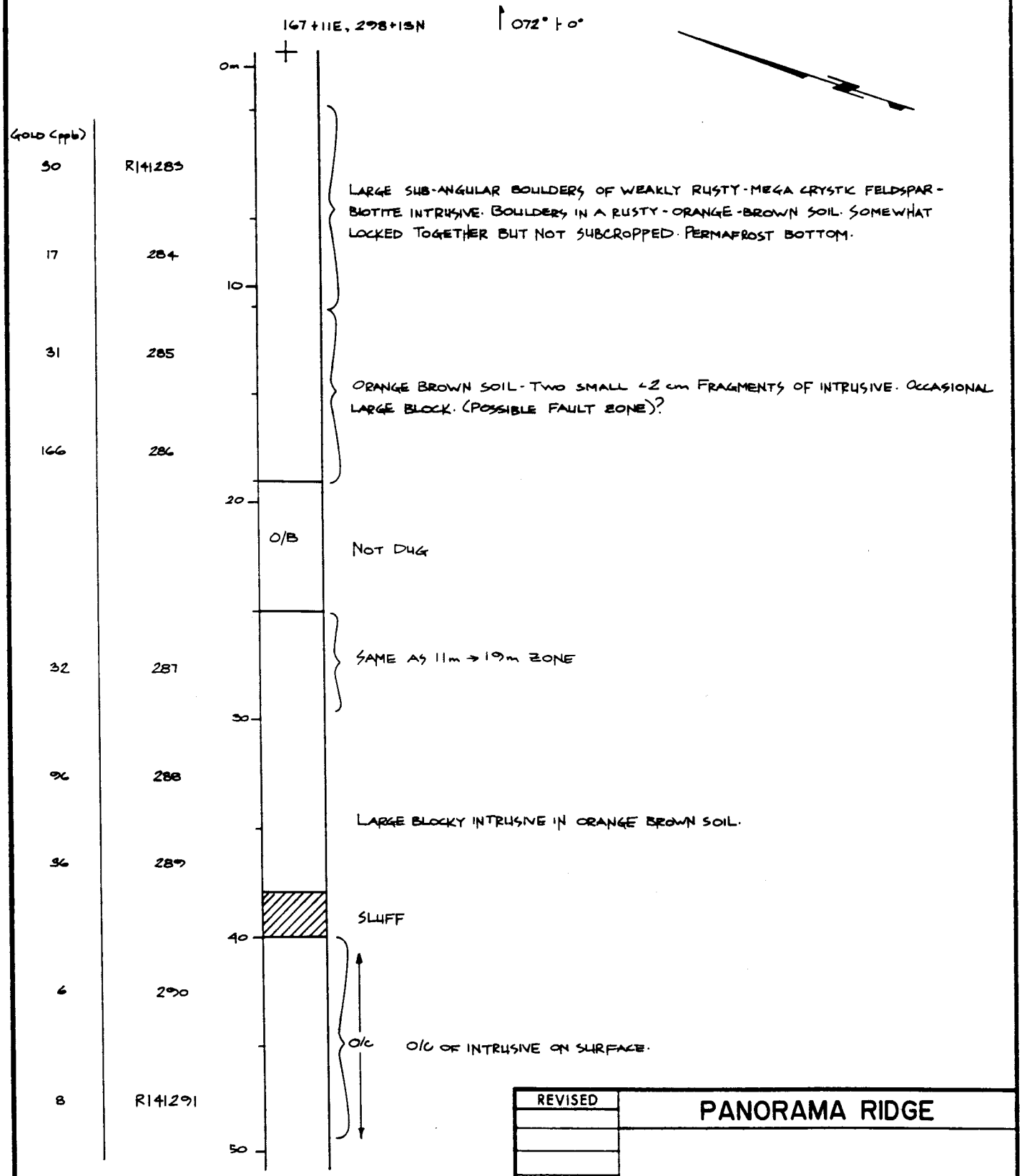
NCI-774


GOLD (ppb)
165 61E, 29933N
57
R159612
0m
FRESH BLOCKY
HORNBLENDE-BIOTITE MONZONITE GREY.
WEAK TO MODERATE CLAY ALT'N OF FELDSPARS.
53
15
ORANGE ALTERED MONZONITE (RED GRITTY SOIL)
151
14
10
STRONG TO INTENSE ALT'N
IN FRACTURED BEDROCK.
56
15
390
16
20
WET ZONE - INTENSE ALT'N (RED SOIL) - A FEW FRESH ANGULAR MONZONITE
BOULDERS INDICATE THIS MAY NOT BE BEDROCK HERE.
71
17
1-3% DISSEMINATED ARSENOPYRITE BLEBS
WET ZONE
94
18
30
5 cm THICK QUARTZ VEIN WITH PODS AND STRINGERS OF MASSIVE
ARSENOPYRITE - BLEACHED ZONE (BEARING UNCLEAR).
53
19
MIXED RED SOIL AND WEAKLY ALTERED BLOCKY MONZONITE.
42
20
40
BLOCKY ROCK - IN RED SOIL - REGOLITH
56
21
29
22
50
54
23
BLOCKY BOULDERS
IN BROWN SOIL
R159624
60
REVISED
PANORAMA RIDGE
TRENCH No. 5
-5m chips-
60m total
21 Samples
Page 1 of 2
PROJ. No. 324
N.T.S. 116 A/4
DWG. No. 4g
SURVEY BY: J. DUKE
DRAWN BY: HANDESIGN
DATE: NOVEMBER 1990
SCALE: 1 : 250
NORANDA EXPLORATION
OFFICE: WHITEHORSE
NCI-774



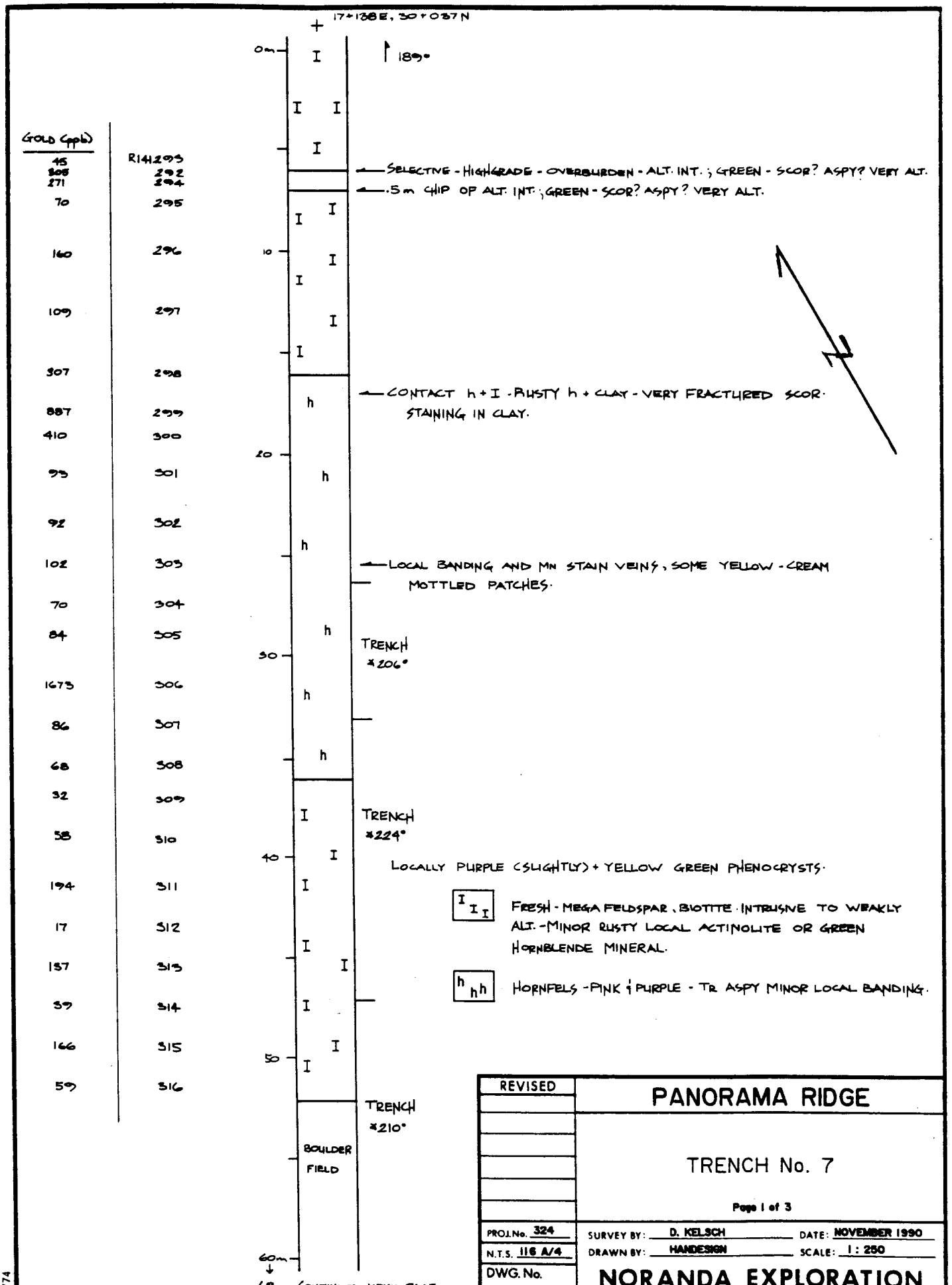
REVISED	PANORAMA RIDGE
	TRENCH No. 5 -5m chips- 21 Samples Page 2 of 2
PROJ. No. 324	SURVEY BY: J. DUKE DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4h	NORANDA EXPLORATION

774



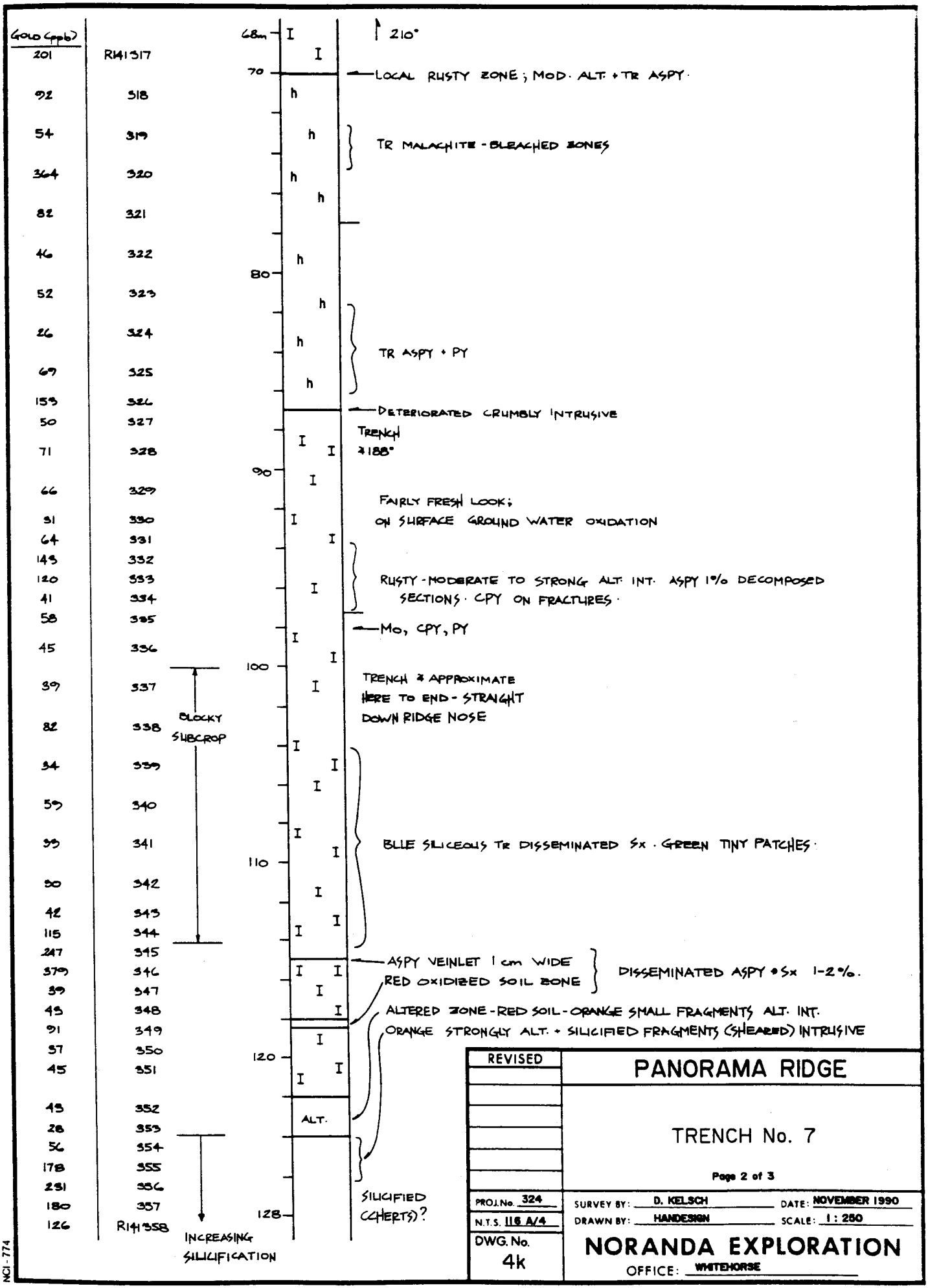
REVISED	PANORAMA RIDGE
	TRENCH No. 6
PROJ. No. 324	SURVEY BY: D. KELSCH DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4i	NORANDA EXPLORATION OFFICE: WHITEHORSE

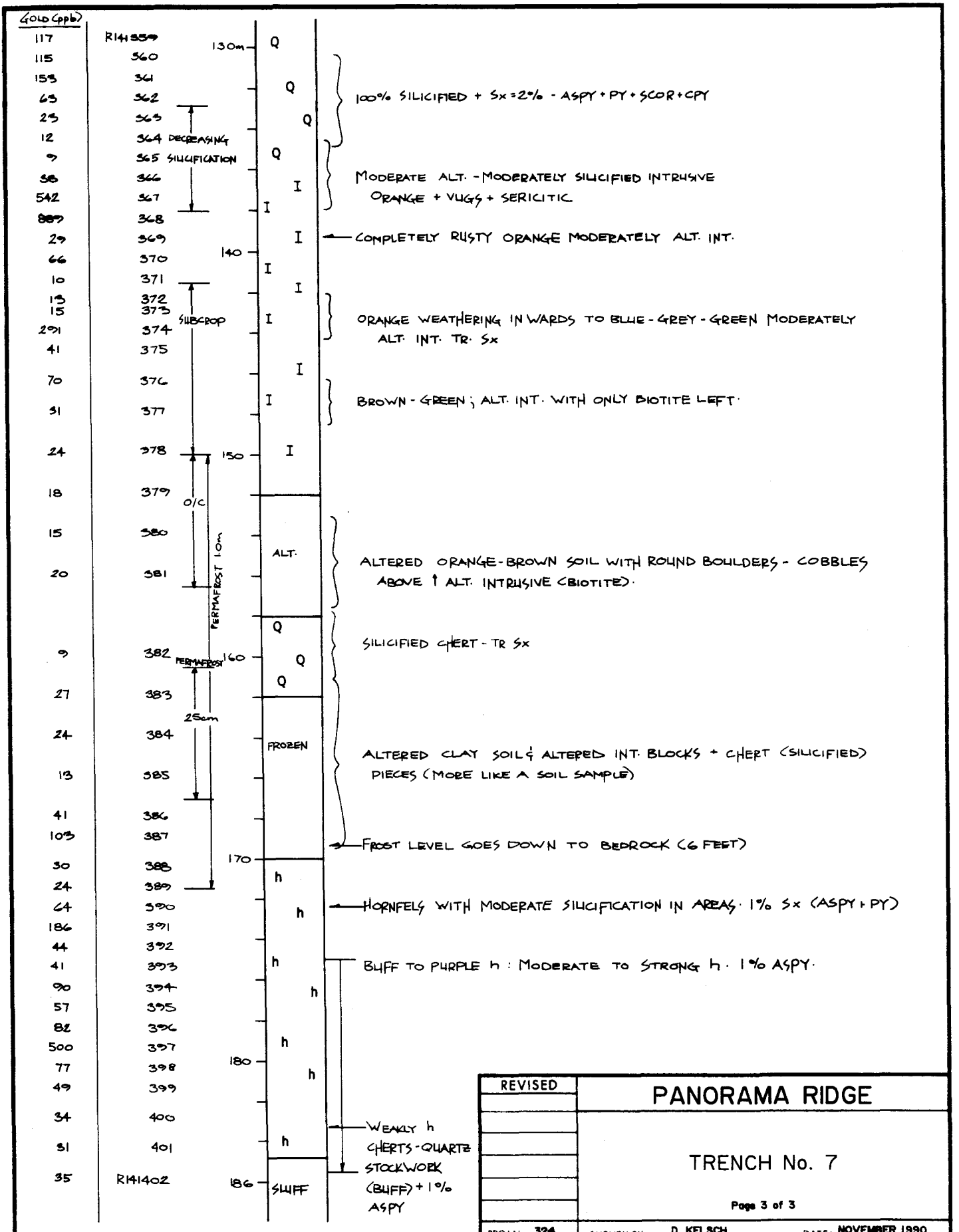
NCI-774



REVISED	PANORAMA RIDGE
	TRENCH No. 7
	Page 1 of 3
PROJ. No. 324	SURVEY BY: D. KELSCH DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 4j	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

NCI - 774


Gold (ppb)
201
92
54
364
82
46
52
26
69
155
50
71
66
91
64
145
120
41
58
45
39
82
34
59
99
50
42
115
247
379
39
45
91
57
45
45
28
56
178
251
180
126
R141317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
R141358
68m
70
80
90
100
110
120
128
210°
LOCAL RUSTY ZONE; MOD. ALT. + TR ASPY.
TR MALACHITE - BLEACHED ZONES
TR ASPY + PY
DETERIORATED CRUMBLY INTRUSIVE
TRENCH
188°
FAIRLY FRESH LOOK;
ON SURFACE GROUND WATER OXIDATION
RUSTY - MODERATE TO STRONG ALT. INT. ASPY 1% DECOMPOSED
SECTIONS. CPY ON FRACTURES.
Mo, CPY, PY
TRENCH # APPROXIMATE
HERE TO END - STRAIGHT
DOWN RIDGE NOSE
BLUE SILICEOUS TR DISSEMINATED Sx. GREEN TINY PATCHES.
ASPY VEINLET 1 cm WIDE
RED OXIDIZED SOIL ZONE
DISSEMINATED ASPY + Sx 1-2%.
ALTERED ZONE - RED SOIL - ORANGE SMALL FRAGMENTS ALT. INT.
ORANGE STRONGLY ALT. + SILICIFIED FRAGMENTS (SHEARED) INTRUSIVE
ALT.
SILICIFIED (CHERTS)?
BLOCKY SUBCROP
INCREASING SILICIFICATION
REVISED
PANORAMA RIDGE
TRENCH No. 7
Page 2 of 3
PROJ. No. 324
N.T.S. 116 A/4
DWG. No. 4k
SURVEY BY: D. KELSCH
DRAWN BY: HANDESIGN
DATE: NOVEMBER 1990
SCALE: 1:250
NORANDA EXPLORATION
OFFICE: WHITEHORSE
NCI-774



REVISED	PANORAMA RIDGE
	TRENCH No. 7
	Page 3 of 3
PROJ. No. 324	SURVEY BY: D. KELSCH DATE: NOVEMBER 1990
N.T.S. 116 A/4	DRAWN BY: HANDESIGN SCALE: 1 : 250
DWG. No. 41	NORANDA EXPLORATION
	OFFICE: WHITEHORSE

NCI - 774

CHAPTER SIX: MINERALIZATION

6-1: Regional Mineralization

The mineralization at Panorama Ridge is associated with a small intrusive body that is part of a suite of dominantly alkaline intrusives. Regionally this suite exhibits a distinct gold, arsenic, antimony and mercury signature. Several other properties in the region have been explored by Noranda that have similar characteristics similar to Panorama Ridge.

Throughout the suite gold mineralization is invariably associated with arsenic (Brewery Creek, Ida, Hamilton Creek, Bear Mountain, Clear Creek, Hobo). Mercury is not always a significant component (Ida, Panorama, Clear Creek). Other indicator elements include antimony and bismuth.

Gold mineralization generally occurs in hornfelsed sediments near and at the contact with the intrusives. It occurs as weak to strong anomalies (30-500 ppb Au, + As, +/- Hg, Sb, Bi) in soils and/or rocks, sometimes over hundreds of metres. These anomalies are primarily and variously associated with tourmaline, pyrrotite, arsenopyrite (or scorodite), pyrite and chalcopyrite which occur as disseminations, blebs, fracture coatings, and within quartz and quartz-carbonate veins and vein stockworks.

Where faulting has cut these low-grade zones, remobilization has resulted in higher-grade quartz + arsenopyrite veining of typically narrow width. Tourmaline is a common accessory in these veins.

Classic porphyry-style mineralization has been noted in many of these intrusives. Disseminated chalcopyrite, molybdenite, pyrite, usually with anomalous gold values, have been described. Arsenopyrite is also noted as a porphyry-style occurrence at Brewery Creek and Clear Creek. To date the most significant intrusive hosted deposit is at Brewery Creek. No significant copper or molybenum potential has yet been identified in the region.

Mineralization at Panorama is typical of the region. The minor occurrence of tourmaline and the lack of significant mercury suggest a deeper setting than at Brewery Creek, yet not as deep as at the Ida, which exhibits considerably more tourmaline.

6-2: Property Mineralization

At Panorama Ridge, gold mineralization occurs associated with arsenopyrite within the intrusive and in the hornfelsed aureole around the intrusive. The best results are obtained at or near the contact between the two. Where the sediments are limey, small pods of actinolite skarn also carry gold values.

Trenching has confirmed the existence of elevated values of gold in the underlying rocks. Trench results suggest that enrichment is typically in the 30 to 400 ppb range with occasional pockets of material that can run up to several grams. Better grade samples exhibit either arsenopyrite, scorodite or actinolite. Brecciation of the

hornfelsed sediments is often associated with arsenopyrite veining.

In the central parts of the anomalous area within the intrusive, anomalous gold values occur within red soil mixed with unaltered, or weakly altered angular boulders of intrusive float. This suggests that considerable solifluction and frost-heaving have occurred even on top of the ridge over the target areas.

In Trench Three anomalous gold mineralization is found in hornfelsed sediments associated with tourmaline veinlets and a strong Hg, Pb, Ag, As, Bi and Sb signature. In trench seven, again at an intrusive - hornfels contact, and hosted within the hornfels, gold mineralization (1673 ppb Au over 2 m -R141306) does not have this strong multi-element signature. In this case arsenic is the primary association.

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

Preliminary work has outlined an irregular gold-arsenic in soil anomaly roughly 800 by 1800 metres in size. The anomalous area is associated with a multiphase Cretaceous intrusive sill. Elevated background values of gold and arsenic occur within altered intrusive rock near its contact with the hornfelsed sediments and along faults cutting the intrusive. it also occurs within the hornfelsed sediments, often associated with actinolite. Arsenopyrite is commonly observed in mineralized specimens.

Trenching confirmed the elevated background values, but did not expose any economically significant intersections. The best intersection was obtained in Trench Seven which returned 1673 ppb gold over 2 metres in hornfelsed sediments at their contact with the intrusive. Trench locations were constrained due to topography and talus cover.

An I.P. Survey over the anomalous area was inconclusive. Geophysical targets identified were not consistent with the expected mineralized soil disbursion.

The size of the gold-arsenic anomaly and geological setting indicates the potential for low-grade bulk tonnage gold reserves. This preliminary work confirms the mineralization on the property. However surface work was unable to obtain results which indicate a potentially economic deposit. Testing of the central part of the gold-arsenic in soil in Trenches Five and Six were inconclusive due to surface frost action. This area also marks the

intersections of magnetic, chargeability and resistivity breaks and coincident airphoto linears. Diamond drilling would be required at this location to test for structurally controlled mineralization within the intrusive. However there is no clear geophysical signature there indicative of mineralization.

Respectfully submitted by;



Jesse L Duke
Project Geologist

LIST OF REFERENCES

Galambos K.
1990: Geological, Geochemical, & Geophysical Report on the Aus 1 - 48 Claims. Assessment Report.

Galambos K.
1988: Geological and Geochemical Report on the Aus 1-32 Claims. Assessment Report.

Green L.H.
1972: Geology of Nash Creek, Larsen Creek and Dawson Map Area Yukon Territory. Memoir 364, Geological Survey of Canada.

MacKay G.
1990: 1990 Exploration Program on the Brewery Creek Property (In Press) #092928

Templeman-Kluit, D.
1981: Geology and Mineral Deposits of Southern Yukon, in Yukon Geology and Exploration 1979-80. D.I.A.N.D.

STATEMENT OF COSTS

LABOUR:	60 man-days at $150.00/day	$ 9,000.
CAMP SUPPORT:	104 man days at $50./day	5,200.
GROUND TRANSPORT:	Truck rental and fuel	2,000.
AIR TRANSPORT:	Helicopter Charter	23,748.
CONTRACTORS:	Linecutting (9 X $450/day)	4,050.
	Geophysics (I.P.)	17,259.
	Kabota rental:	18,900.
ANALYSIS:	Soil geochem (201 X $15)	3,015.
	Rock geochem (347 X $20)	6,940.
OFFICE SUPPORT:	Report writing, drafting, etc.	2,000.
	TOTAL	$83,112.

I.P. Survey related costs (I.P. + linecutting):	$21,309.
Soil Survey costs:	$ 3,015.
Trenching related costs:	$55,788.
Other costs:	$ 3,000.
Cost per metre for trenching: ($55,788/600m):	$ 92.98

STATEMENT OF QUALIFICATIONS

I, Jesse Duke of the City of Whitehorse, Yukon, do hereby certify that:

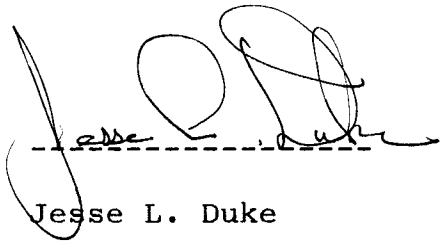
1. I have been an employee of Noranda Exploration Company Limited (NPL) in Whitehorse since April, 1988.

2. I am a graduate of the University of Alaska with a B. Sc. in Geology.

3. I am a member of the Geological Society of Canada, the Association of Exploration Geochemists, and the Yukon Professional Geoscientist Society.

4. I have practice my profession continuously since 1986.

5. I supervised field work performed on the Aus 1-52 claims in 1990.



Jesse L. Duke

Project Geologist

APPENDIX I

GEOPHYSICAL REPORT

I.P. SURVEY

(Ted Wong)

noranda

NORANDA EXPLORATION CO. LTD.

VANCOUVER, B.C.

MEMO TO: J. Duke **C.C.:** L. Bradish

FROM : T. Wong

SUBJECT: **GEOPHYSICAL INTERPRETATION, 1990, PANORAMA RIDGE**

DATE : January 14, 1991

During late June to early July, 1990, a time-domain Induced Polarization Survey was carried out on the Panorama Ridge Property, Yukon. The purpose of the survey was primarily to delineate potential areas of possible economic mineralization with a secondary objective of mapping the local geology.

The survey was performed by Amerok Geophysics of Whitehorse. A total of 10.7 Km. of line was surveyed. The 1990 work was an extension of I.P. and magnetometer surveys completed in 1989. The results of the 1989 work are detailed in a memo dated January 17, 1990 from the writer to K. Galambos.

The I.P. survey utilized a Phoenix IPT-1 transmitter powered by a Phoenix MG-1 motor generator capable of producing 1.2 Kw of power; the receiver was a BRGM IP-6 unit. The transmitted signal had a period of 8 seconds, 50% duty. The double dipole electrode array was used with a dipole spacing of 25 m. with readings recorded to the fifth or sixth separation. Chargeability was measured in mV/V.

The 1989 I.P. results have been re-interpreted and incorporated with the 1990 data. The I.P. interpretation has been compiled onto the 1989 magnetic interpretation plan map.

DISCUSSION OF RESULTS

Background chargeability is considered to be 10 mV/V or less within the survey grid.

A moving triangular filter was applied to the 1:2500 scale chargeability and apparent resistivity values of the pseudosections and 1:5000 contour plan maps of the filtered values were then generated. Both the chargeability and resistivity plan maps show a quiet central zone south of the baseline which also corresponds to a magnetically low and inactive zone. This geophysically quiet zone roughly corresponds in part to a wide central intrusive zone

as outlined by 1989 mapping. The I.P./resistivity activity appears proximal to the contact between the central intrusives and adjacent sediments. While the contact alteration is invisible to magnetics (as stated in the 1989 memo), it may best be indicated by the increase in resistivity values which reflect silicification of the sediments.

The relatively low resistivity values of the intrusive may be explained by its physical properties such as moisture and ionic content, grain size, and density.

Surficial (n=1) high resistivities such as found on L.16500E/30075 - 30200N and the south and north ends of L.15900E are attributed to boulder talus.

The I.P./resistivity survey has defined 4 anomalous areas as shown on the chargeability plan map.

Area 1 lies to the north of the baseline and is open to the north on Lines 16100E, 16200E, 16400E, 16500E. The I.P. anomalies lie within low - moderate resistive rocks under very resistive boulder talus. Several targets of varying I.P./resistivity signatures may be tested. These are:

L.16000E/30112.5N/depth to top = 12.5 m
L.16100E/29912.5N/depth to top = 60 m
L.16100E/30162.5N/depth to top = 20 m
L.16500E/30137.5N/depth to top = 35 m

Area 2 lies at the south end of Lines 15800E - 16600E and is also associated with low - moderate resistivities. Possible targets include:

L.15900E/29225N/depth to top = surface to 12.5 m
L.15900E/29325N/depth to top = 25 m.
L.16200E/29212.5N/depth to top = surface, depth limited response
L.16200E/29375N/depth to top = 25 m
L.16600E/29300N/depth to top = 40 m

Area 3 extends from L.16700E to L.17100E and is sourced by a well defined feature associated with high resistivities. This feature is sharpely cut off at its northern edge and on L.17100E it appears centred at 29575N as part of a strong, broad chargeability expression. Area 3 could be tested at three locations:

L.16800E/ 29500N/depth to top = 25 m
L.16800E/29437.5N/depth to top = 45 m
L.16900E/29412.5N/depth to top = 12.5 m

The strong and broad anomaly of Area 4 remains open to the south. High chargeability values directly associated with pronounced low resistivities may be sourced by clays eg. south end of L.17300E. Possible targets to test within this area are:

L.17200E/29462.5N/depth to top = surface to 12.5 m
L.17400E/29525N/depth to top = 25 m
L.17300E/29612.5N/depth to top = surface

SUMMARY

The I.P./resistivity survey has defined 4 major areas of potential mineralization that merit further investigation. Anomalous chargeability zones are associated with low to moderate resistivity values and are located proximal to the contact between intrusive and sedimentary packages. The targets outlined above must be constrained by the geological and geochemical data to effectively evaluate the property.

noranda

NORANDA EXPLORATION CO. LTD.

VANCOUVER, B.C.

MEMO TO: J. Duke **C.C.:** L. Bradish

FROM : T. Wong

SUBJECT: **ADDENDUM TO PANORAMA MEMO OF JANUARY 14, 1991**

DATE : January 23, 1991

I have reviewed the interpretation of the geophysical data taking into account the information you have outlined in our phone conversation of January 21, 1991. The following notes may be of interest to you:

1) From the chargeability plan map there is evidence of a structural break or feature coinciding with L.16500E.

2) A resistivity low that is coincident with the lowest chargeability values of the grid is found on L.16700 may be an expression of an underlying structural feature.

3) Evidence of a structural feature located on L.16600E on the magnetics map. A magnetic plateau appears east of this line in contrast to the very moderate activity west of the line.

A structural break is concluded to exist in the vicinity of the above mentioned lines with its location "eyeball" averaged to be at L.16600E. These points are illustrated in the accompanying map (on file in the whitehorse office).

Pyrite within the cherty sediments could be a source of the strong I.P. responses.

With regards to possible anomalous geophysical responses within the intrusives, I have re-evaluated the I.P. responses and considered any responses equal to or greater than 5 mV/V to be anomalous. This interpretation scheme is also illustrated in the enclosed map.

The best place to test the intrusive and the above scenario of breaks and I.P. responses would be in the vicinity of L.16500E.

APPENDIX II

ROCK RESULTS AND DESCRIPTIONS

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 Page 1

PROPERTY PANORAMA DATE 28/6/90

ROCK SAMPLE REPORT

PROJECT 324

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ AU PPB	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
52247	30000N 16900E Fine Grained biotite porphyry (dyke) in contact with altered intrusive. Arsenopyrite: massive blebs & Disseminated in intrusive. Tr. Malachite	50	TALUS		327							DJK.
			TALUS		60							"
52248	17000E 29660N Sugary pink, siliceous with actinolite pods											
52249	17000E 29475N Grey beige weathered intrusive. + small Feldspar laths Pyrite	2	TALUS		42							"
37301	17090E 30070N Altered intrusive - Sugary Texture. Rusty + black weathering disseminated Aspy	5	TALUS		346							"
37302	17100E 30070N Purple Hornfels rocks. Rusty + yellow oxidation oxidized Six holes Aspy <2%	2	TALUS		879							"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4

PROPERTY PANORAMA

DATE 28/6/90

PROJECT 324

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au ppb	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
37303	17101E 30078N buff-Pink silicified bx frags disseminated aspy <1%	<1	TALUS		274							DJK
37304	17090E 30090N Silicified light Pink Breccia fragments + Limonitic fractures weathered out 5x holes. Aspy blebs up To 1cm in size Aspy <5%	<5	TALUS		245							"
37305	17080E 30080N Buff-Pink Finegrained silicified sediments. Some is brecciated. Zones of massive aspy (3-4 cm blebs) One round blob of Coarse (Py/Po)?	50	TALUS		117							"
37306	17076E 30075N Purple hornfelsed sediment Aspy <5%	4	TALUS		92							"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 Page 3 of 9

PROPERTY PANORAMA DATE 28/6/90

ROCK SAMPLE REPORT

PROJECT 324

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ Au PPB	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
137307	17055E 30060N Dark green brown altered biotite porphyry		TALUS		5							DJK
137308	17-150E 30150 N massive Aspy coating on grey fine-grained biotite porphyry.	30	TALUS		552	(STRONG MULTIELEMENT ANOMALY)						"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 Page 4 of 9

PROPERTY Panorama.

DATE June 28/90.

PROJECT 324

ROCK SAMPLE REPORT

AMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☒ AU	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
16506	15750E, 30325N near ridge top. outcrop, altered sedimentary rock, grey with rusty red on outside, quartz veining throughout. Outcrop is 2meters x 3meters.		float		28						✓	wilson
116507	15615 E, 30300 N outcrop on ridge. altered sedimentary rock, grey with qu. veining. green and red staining throughout. outcrop is 5m x 3m		float		27						✓	wilson
116508.	15000E, 29200N, Large outcrop dark grey rock with quartz veining. altered. red staining on outside.		float		10						✓	wilson

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 page 5 of 9

PROPERTY PANORAMA

DATE 10/10/90

PROJECT 324

ROCK SAMPLE REPORT

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☒ Au	G☐ A☐ Pt	G☐ A☐ Pd	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
91403	L 29600N Soil from bedrock c/B contact - just to see if it compares well to surface soil		grab		16							DJK
91404	16300E 29600N Bleached intrusive with 1cm bull quartz vein Intrusive has 1% ASPY blebs Intrusive is moderately chloritic		FLOAT		9							"
191405	16300E 29600N Feldspar porphyry + biotite + quartz. Euhedral feldspar. blue grey Cpy + Po on fracture surface + some in microfractures through rock (ie through feldspars, etc.) Several blocks show clasts of purple hornfels (minor amount CPY < 1% Po ≤ 1%	2	FLOAT		16							"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 Page 6 of 9

PROPERTY RAINORAMA

DATE 10/10/90

PROJECT 324

ROCK SAMPLE REPORT

AMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☒ Au PPB	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
141406	Same as R141405 but sent in as a rush sample.	2	FLOAT		28							DJK
												"
141407	Same as R141405 % L1630OE 29600N Hand Trench ± bedrock.	2	CHIP	1m	14							
141408	Rush sample from trench #7 13.2m – 13.4 m Silicified chert (sels) - buff - grey porosity 3% Fractured + STOCKWORK - yellow + orange oxidized areas. Aspy stringers + blebs.		CHIP	2m	127							"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4

PROPERTY PANORAMA

DATE July

PROJECT 324 ( )

ROCK SAMPLE REPORT

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ AU	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
136006	154005 29[illegible] Ridge Top. CHIPS OF INTENSELY [illegible] QUARTZ [illegible] WITH PERVASIVE YELLOW & GREEN (SERICITE?) ALTN occurs as float & in situ WHERE SAMPLE A CONTACT BETWEEN SEDIMENTS & QUARTZ-[illegible]. FRACTURE UNIT IS BRECCIATED & [illegible], LOCALLY VUGGY ROCK.		Float		1105	(Strong multi-element response. 3 PPM Au are by ICP.)					✓	DUKE
136007	152[illegible]5E 29675N (about 100m below Ridge Top. BRECCIATED, LOCALLY SILICIFIED, & VUGGY. IRREGULAR PATCHES OF CLAY ALT'N AND FREQUENT THIN QUARTZ VEINS. - TIMED FROM AN EXPOSURE HIGH IN THIS TYPE OF UNIT. (THIS IS ON CLAIM LINE).		FLOAT		<5						✓	DUKE

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/7

PROPERTY PANDORA (INT)

DATE June 25

PROJECT 324

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ AU	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
136020	1680m E, 30200 N HORNBLENDE, BIOTITE HORNFELS - MODERATE PERVASIVE ALTERATION GIVING A DARK GREEN-RED COLOR - CLOSE NEAR CONTACT WITH HORNFELSED CHERTY BLACK SEDIMENTS.	—	FLOAT	—	<5						✓	JLD
136021	16625E 30200N BRECCIATED, SILICIFIED, (irregular fracture veining) HORNFELSED SEDIMENTS WITH LIMONITE STAINING VUGS AND YELLOW AND GREEN (SULPHIDE?) STAINING. LOCAL INTENSE ARGILLIC ALT'N. THIS TYPE OF [illegible] FLOAT ACCROSS 20m [illegible] @ ABOUT 60° FOR AT LEAST 20m.		FLOAT		<5						✓	
R136022	16[illegible]E 30100N BRECCIATED, SILICIFIED STRONGLY LIMONITIC CHERTY [illegible].		FLOAT		19						✓	

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A/4 Page 9 of 9

PROPERTY Pilgrim

DATE June 25, 1991

PROJECT 324

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☑ AU	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
136026	21+42.5 N, 1685 E -	1% ?	CHIP		20						✓	JHD
	THE "SILICIFIED DYKE" THIS APPEARS TO BE A 5-10 m											
	THICK UNIT OF MIXED, (WITH											
	BEDDING LOCALLY) DISRUPTED											
	AND BRECCIATED DARK GREY,											
	WHITE WEATHERING CHERT -											
	LOCALLY IT CONTAINS VFG. DISSEMIN-											
	ATED DARK GREY SX. - SOME											
	VUGGY [illegible] AND NEAR											
	[illegible] NEAR											
	THIS UNIT'S CONTACT WITH											
	OTHER SEDIMENTS.											

G = GEOCHEM A = ASSAY

Northern Analytical Laboratories ltd.

July 11,1990

Work Order # [illegible]

Noranda Exploration Company Ltd.
Suite 208, 107 Main St.
Whitehorse, Yukon
Y1A 2A7

Project # [illegible]

Assay Certificate for Samples Provided

Sample	ppb Au
B116606	29
B116607	27
B116608	10
B6L847	387
B6L848	60
B6L849	42
B137301	346
B137302	879
B137303	274
B137304	245
B137306	117
B137308	92
B137307	5
B137309	452
B136006	1105
B136007	<5
B136020	5
B136021	<5
B136022	19
B136023	20

Panorama

Panorama

Au -- 10g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
6992
GERALD F. HAYES
A.Sc.T.

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

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 (JD) 1.0

Noranda Exploration Co. Ltd. PROJECT 9007-028 324 File # 90-2819

P.O. Box 2380, 1050 Davie St., Vancouver BC V6B 3T5

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
R 52247	16	375	25	61	.6	22	4	223	1.68	64	5	ND	1	19	.5	4	11	43	1.07	.054	7	109	.55	100	.01	3	.56	.02	.05	1
R 52248	3	94	555	119	.8	52	20	638	4.03	5586	5	ND	13	200	1.6	250	8	55	4.21	.113	32	214	2.00	233	.07	7	1.03	.03	.50	1
R 52249	4	165	60	95	.4	39	12	113	2.53	43	5	ND	21	49	1.7	5	6	19	.56	.095	29	32	.39	108	.10	4	1.08	.07	.12	1
R 116506	18	38	20	20	.6	8	3	49	.87	295	5	ND	1	11	.3	6	13	13	.03	.007	4	230	.13	176	.01	4	.31	.01	.09	2
R 116507	12	24	7	31	.2	10	3	66	1.32	6	5	ND	1	8	.2	2	2	15	.04	.008	6	165	.41	157	.02	5	.74	.01	.15	1
R 136006	9	575	1774	28	56.7✓	17	28	15	9.88	99999✓	5	3	10	60	.2	1276✓	2933✓	19	.02	.103	10	85	.02	102	.01	7	.37	.01	.15	11
R 136007	9	20	14	16	.2	5	1	27	1.33	244	5	ND	7	30	.2	11	10	18	.04	.026	18	96	.06	280	.01	28	.32	.01	.15	2
R 136020	6	71	39	117	.5	49	11	701	4.00	73	5	ND	10	30	.7	16	2	25	.64	.106	31	38	.09	149	.01	10	.65	.01	.20	1
R 136021	12	146	60	182	.7	50	16	389	6.15	401	5	ND	2	9	.2	15	4	48	.03	.045	5	99	.02	78	.01	8	.29	.01	.04	2
R 136022	9	116	374	96	3.6	27	4	29	2.67	1043	5	ND	2	39	.2	157	6	34	.01	.037	5	89	.03	287	.01	10	.27	.01	.09	1
R 136026	20	204	18	37	.7	24	4	100	2.12	621	5	ND	5	170	.8	6	21	21	1.67	.077	7	99	.13	55	.05	5	2.17	.24	.04	2
R 137301	25	1345	26	62	3.7	141	54	122	3.96	22331✓	5	ND	5	22	1.0	16	44	74	.29	.067	15	147	.98	125	.04	5	1.03	.05	.32	1
R 137302	12	444	64	81	2.0	81	30	141	3.52	3357	5	ND	9	25	1.6	29	51	119	.50	.189	31	109	.95	367	.12	10	1.23	.05	.52	2
R 137303	15	66	38	34	.3	36	9	76	.59	411	5	ND	2	13	.6	11	18	22	.13	.033	17	191	.15	76	.01	11	.29	.01	.09	1
R 137304	8	616	61	33	3.6	41	18	89	4.72	40117✓	5	ND	6	14	.3	33	56	39	.06	.012	13	89	.37	82	.04	9	.54	.02	.23	1
R 137305	14	522	64	43	10.2	46	16	61	3.62	12406✓	5	ND	4	17	1.3	37	26	27	.07	.021	12	88	.30	124	.03	4	.52	.02	.19	1
R 137306	24	450	18	39	2.4	36	19	120	4.34	16830✓	5	ND	9	18	.9	11	22	222	.35	.155	36	131	1.58	177	.17	9	1.86	.06	1.03	1
R 137307	2	81	25	111	.1	75	29	832	4.89	152	5	ND	12	115	1.3	3	2	112	2.81	.169	38	309	3.22	804	.26	3	2.22	.08	1.26	2
R 137308	14	12266✓	272	112	169.9✓	35	1	57	8.00	66756✓	5	2	3	7	.5	444	4537✓	215	.15	.048	5	126	.26	43	.06	11	.51	.01	.15	1
STANDARD C	19	59	43	132	7.3	72	32	1077	4.16	43	18	7	36	53	18.5	16	19	55	.53	.096	37	58	.97	179	.07	40	2.01	.06	.14	11

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 Pulp

DATE RECEIVED: JUL 25 1990 **DATE REPORT MAILED:** July 26/90 **SIGNED BY** C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

✓ ASSAY RECOMMENDED

Northern Analytical Laboratories ltd.

October 19,1990

Work Order # 08475

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08475e

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141403	16
R141404	9
R141405	16
R141407	14

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
6992
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A.Sc.T.

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

NORANDA VANCOUVER ABORATORY

Geochemical Analysis

Project Name & No. PANORAMA - 324 | Geol.: D.K. | Date rec'd: OCT. 16 | LAB CODE: 9010-053

Material: 2 TRENCH | Sheet: 1 of 1 | Date comp OCT. 19

Remarks: * Sample screened @ -35 MESH (0.5 mm).

¤ Organic

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO4/HNO3 (4:1) at 203 °C for 4 hours diluted to 11 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li are rarely dissolved completely from geological materials with this acid dissolution method.

T. No	SAMPLE No.	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
92	141406	1.8	0.89	482	347	1.0	2	0.86	0.7	82	10	47	483	2.23	0.34	36	22	0.68	241	19	0.06	9	0.07	128	30	0.20	45	123
93	141408	6.2	1.53	3271	279	1.0	12	0.07	2.0	31	2	56	85	0.94	0.72	16	9	0.17	41	4	0.01	5	0.03	577	22	0.02	106	80

Northern Analytical Laboratories ltd.

October 15,1990

Work Order # 08467

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08467a

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141406	28
R141408	127

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
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A. Sc. T.

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

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

DATE RECEIVED: OCT 19 1990

DATE REPORT MAILED: Oct. 23/90

GEOCHEMICAL ANALYSIS CERTIFICATE

Noranda Exploration Co. Ltd. PROJECT 9010-053 324 FILE # 90-5413

P.O. Box 2380, 1050 Davie, Vancouver BC V6B 3T5

SAMPLE#	HG ppb
141406	5
141408	80

- SAMPLE TYPE: TRENCH PULP HG ANALYSIS BY FLAMELESS AA.

SIGNED BY. C. Leong. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Northern Analytical Laboratories ltd.

September 26,1990

Work Order # 08403

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08403a

Project # 324 F/3

Assay Certificate for Samples Provided

Sample	ppb Au
R138261	76

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
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APPENDIX III

TRENCH RESULTS

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 (JD)

Noranda Exploration Co. Ltd. PROJECT 9008-036 324 File # 90-3334 Page 1

P.O. Box 2380, 1050 Davie, Vancouver BC V6B 3T5

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	SAMPLE lb
R 137651	9	52	14	38	.8	65	4	121	1.38	139	5	ND	6	106	.3	2	4	95	1.61	.115	12	32	.81	52	.10	5	2.45	.23	.19	2	3	30	10
R 137652	2	40	15	37	1.1	27	6	87	1.51	120	5	ND	5	60	.2	4	7	24	.76	.022	7	32	.91	101	.10	2	2.01	.12	.56	2	8	20	9
R 137653	4	62	9	15	.2	38	8	65	2.70	30	5	ND	7	65	.2	6	2	98	.27	.079	9	62	1.06	107	.06	4	2.03	.09	.72	1	19	60	12
R 137654	15	68	14	16	.2	40	4	40	3.18	76	5	ND	3	64	.2	10	2	617	.47	.206	8	134	.56	126	.06	2	1.54	.09	.41	2	21	40	9
R 137655	17	123	10	35	.1	99	10	79	3.00	115	5	ND	3	68	.3	2	2	544	.78	.208	17	125	.71	159	.15	4	1.66	.11	.36	2	12	20	11
R 137656	11	79	10	29	.1	56	8	83	2.36	195	5	ND	5	53	.4	5	2	149	.90	.292	14	44	.61	155	.11	4	1.38	.06	.14	3	6	20	12
R 137657	3	6	11	52	.7	55	7	643	1.98	697	5	ND	9	102	1.0	2	3	107	7.56	.100	3	42	3.10	23	.05	3	3.81	.04	.03	2	44	10	15
R 137658	6	1	9	35	.7	24	2	457	1.17	300	5	ND	5	118	.2	2	10	91	6.24	.208	2	34	1.91	40	.04	6	3.36	.06	.07	1	19	10	10
R 137659	7	14	2	53	.3	29	3	423	1.28	335	5	ND	5	69	.2	2	4	138	4.97	.178	5	29	1.98	28	.04	2	2.14	.04	.04	1	7	60	10
R 137660	5	27	6	32	.1	19	2	274	1.26	75	5	ND	2	131	.2	2	2	78	3.05	.074	2	29	1.35	56	.05	2	1.82	.04	.09	2	3	10	13
R 137661	4	44	12	53	.2	29	3	263	1.26	137	5	ND	2	46	.2	3	2	39	2.46	.039	5	23	.95	94	.06	3	1.26	.03	.08	1	4	20	11
R 137662	3	77	15	103	.2	62	7	178	1.74	90	5	ND	1	23	.4	3	2	35	.31	.012	3	29	.57	90	.07	3	.90	.02	.10	1	3	10	16
R 137663	3	112	22	47	.4	49	5	183	2.44	65	5	ND	1	55	.4	4	6	23	.75	.015	2	22	.61	86	.06	8	1.07	.03	.06	1	5	5	15
R 137664	17	109	24	47	.3	98	8	74	2.21	94	5	ND	3	33	.7	4	6	383	.24	.035	11	110	.51	148	.14	5	1.23	.04	.18	1	19	5	12
R 137665	32	116	25	98	.1	166	7	116	2.25	55	7	ND	4	64	1.1	2	4	841	.85	.088	18	129	.76	124	.15	4	1.84	.14	.27	1	11	10	15
R 137666	45	108	27	79	.2	92	6	94	2.41	71	8	ND	4	53	1.4	4	2	632	.63	.061	16	62	.63	177	.17	9	1.59	.11	.16	1	19	5	13
R 137667	35	75	15	40	.1	47	3	52	2.02	46	9	ND	3	15	.5	3	2	228	.34	.137	14	28	.29	187	.08	9	.62	.01	.09	1	7	5	18
R 137668	14	39	23	13	.5	15	3	43	4.04	95	5	ND	2	40	.2	3	3	157	.66	.365	22	35	.09	186	.02	17	.36	.02	.23	1	15	10	9
R 137669	2	54	20	59	.2	21	8	150	1.14	24	5	ND	5	74	.5	5	3	19	.63	.024	12	21	.52	134	.03	3	1.87	.08	.29	1	12	5	15
R 137670	1	31	14	105	.1	42	7	197	1.75	21	5	ND	4	41	1.3	4	2	32	.41	.018	7	33	.91	177	.09	2	2.25	.08	.57	1	38	5	18
R 137671	2	36	13	87	.1	47	7	182	2.18	27	5	ND	4	66	1.8	2	2	40	.70	.015	8	41	1.37	250	.13	3	3.01	.15	.91	1	9	5	18
R 137672	20	60	14	89	.2	63	11	178	2.32	21	5	ND	4	98	1.0	2	2	91	1.09	.023	7	43	1.27	151	.12	5	3.20	.28	.75	1	14	10	23
R 137673	4	52	24	53	.1	33	8	95	1.72	18	5	ND	4	138	.7	3	5	16	1.77	.367	16	16	.36	146	.04	7	2.08	.15	.22	1	30	5	22
R 137674	2	38	16	19	.2	9	2	66	1.29	43	5	ND	5	27	.4	5	2	12	.09	.022	17	12	.34	212	.01	3	1.10	.02	.33	1	7	20	23
R 137675	2	31	30	33	.5	12	3	153	2.26	72	5	ND	4	14	.3	5	5	27	.05	.012	9	26	.90	282	.08	6	1.77	.02	.64	1	45	5	21
R 137676	3	26	44	25	.5	14	2	82	1.60	97	5	ND	5	15	.2	12	2	18	.02	.016	15	20	.48	212	.02	6	1.28	.01	.44	1	5	30	18
R 137677	3	58	24	34	.2	19	3	96	1.69	77	5	ND	5	24	.6	16	5	24	.08	.019	15	19	.61	224	.02	5	1.48	.03	.37	1	4	20	17
R 137678	3	35	29	26	.3	16	2	84	1.66	88	5	ND	5	16	.2	15	2	24	.04	.020	13	18	.61	175	.02	4	1.50	.01	.33	1	9	30	18
R 137679	4	45	25	36	.4	12	3	108	2.75	94	5	ND	5	16	.3	30	2	28	.03	.030	17	18	.43	238	.02	6	1.06	.01	.41	2	9	20	16
R 137680	4	59	43	38	.6	14	4	133	3.32	132	5	ND	5	40	.2	25	8	48	.14	.056	15	20	.43	186	.04	4	1.49	.02	.28	1	20	80	17
R 137681	6	56	25	69	.3	17	4	55	3.86	170	5	ND	5	28	.2	36	7	70	.02	.078	19	25	.14	304	.02	5	.54	.01	.23	1	46	150	20
R 137682	6	36	30	27	.4	13	2	27	2.81	220	5	ND	3	45	.2	74	8	57	.01	.071	14	16	.04	408	.01	3	.27	.01	.18	1	11	380	18
R 137683	24	74	21	41	.5	29	2	57	2.69	234	5	ND	4	28	.9	24	8	141	.22	.112	9	35	.71	335	.04	6	1.29	.02	.42	1	92	200	17
R 137684	15	60	20	56	.1	87	4	47	1.60	240	5	ND	2	30	.3	23	2	334	.36	.183	13	73	.06	202	.02	8	.51	.01	.14	1	35	220	16
R 137685	17	33	49	33	.7	27	1	32	1.45	660	5	ND	3	32	.2	45	5	222	.03	.047	13	52	.04	351	.02	8	.34	.01	.12	1	25	210	18
R 137686	18	54	88	39	1.6	32	3	54	2.92	708	5	ND	3	32	.7	49	12	304	.09	.093	14	59	.08	509	.02	9	.37	.01	.21	1	56	400	15
STANDARD C/AU-R	19	59	38	130	6.9	72	32	1052	3.99	41	18	7	38	52	18.6	14	20	56	.52	.096	38	56	.89	181	.07	38	1.89	.06	.14	11	540	1300	-

TR-1 ↓ TR-2

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: AUG 8 1990 DATE REPORT MAILED: Aug 15/90 SIGNED BY: C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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	SAMPLE lb
R 137687	17	97	1479	59	5.8	20	3	70	3.33	9477	8	ND	3	33	2.1	449	24	178	.04	.079	17	46	.07	458	.01	12	.42	.01	.19	2	480	160	16
R 137688	21	43	74	40	1.1	18	2	48	2.67	1268	8	ND	4	32	1.8	68	4	322	.02	.080	22	67	.07	478	.03	12	.38	.01	.22	2	42	250	17
R 137689	38	62	134	83	1.2	56	4	67	2.68	1449	7	ND	5	46	2.6	62	2	538	.06	.084	23	68	.14	453	.05	15	.54	.01	.27	2	73	300	18
R 137690	35	138	36	359	.9	64	5	106	3.98	372	5	ND	5	35	4.2	54	6	617	.11	.082	15	67	.86	380	.05	13	1.70	.02	.33	1	44	470	16
R 137691	29	55	121	53	1.1	26	4	43	3.57	255	6	ND	3	44	.2	67	3	358	.05	.156	19	62	.09	438	.03	10	.50	.01	.27	1	21	850	15
R 137692	12	63	49	30	2.0	13	3	25	3.22	140	5	ND	4	36	.3	49	4	275	.04	.279	29	74	.06	318	.02	9	.43	.01	.19	2	17	880	14
R 137693	17	147	37	35	.9	18	4	41	2.83	277	5	ND	3	34	.8	37	3	442	.05	.138	27	111	.08	510	.04	8	.50	.01	.25	2	15	250	13
R 139569	3	60	107	36	1.5	8	3	35	1.67	884	5	ND	5	38	1.8	32	2	40	.02	.037	16	22	.19	177	.02	5	.71	.01	.29	1	28	180	33
R 139570	2	36	63	22	.5	9	3	49	1.48	504	5	ND	6	50	.2	16	3	59	.03	.029	15	34	.38	244	.05	8	1.09	.01	.43	2	22	130	32
R 139571	2	40	77	16	.4	10	4	45	1.56	223	5	ND	6	57	.5	16	2	28	.02	.027	17	29	.37	300	.05	8	1.08	.01	.48	2	14	170	30
R 139572	3	59	69	36	.5	14	6	57	1.37	624	5	ND	4	61	.7	18	2	18	.09	.060	9	10	.07	267	.01	15	.59	.01	.11	1	5	400	31
R 139573	2	25	21	12	.2	6	2	20	1.25	107	5	ND	4	20	.2	10	2	18	.01	.015	10	15	.17	221	.02	6	.68	.01	.26	1	6	520	29
R 139574	2	50	48	29	.3	15	4	44	2.00	224	5	ND	6	41	.2	18	2	23	.28	.030	10	23	.49	232	.05	6	1.49	.05	.45	2	6	330	26
R 139575	3	98	14	58	.2	42	11	103	2.91	254	5	ND	6	66	1.4	15	10	34	1.45	.022	9	35	1.02	210	.14	3	3.66	.21	.64	1	22	40	25
R 139576	2	64	13	48	.2	34	8	73	2.09	60	5	ND	5	37	.5	16	6	20	.69	.018	10	24	.49	199	.09	7	2.09	.08	.38	1	18	50	25
R 139577	4	22	19	10	.2	4	1	25	1.40	144	5	ND	4	66	.2	23	2	43	.09	.097	13	14	.14	480	.01	12	.80	.01	.31	1	13	430	24
R 139578	4	42	35	18	.3	10	3	31	1.82	213	5	ND	5	29	.4	19	2	29	.07	.051	10	17	.14	250	.01	11	.82	.01	.24	1	5	700	11
R 139579	2	110	65	43	.4	27	5	35	2.33	246	5	ND	4	37	1.1	26	2	15	.40	.028	11	12	.18	226	.05	3	1.53	.04	.21	2	13	460	12
R 139580	3	132	38	75	.4	66	10	80	2.44	154	5	ND	6	52	2.0	25	2	22	.98	.024	10	27	.51	204	.14	4	3.16	.11	.29	1	32	70	11
R 139581	1	30	55	28	.2	12	4	52	1.94	98	5	ND	5	31	.4	15	2	25	.05	.029	15	21	.32	329	.04	9	1.13	.01	.45	2	11	150	12
R 139582	2	33	34	30	.2	12	4	54	2.35	254	5	ND	6	23	1.0	26	2	29	.02	.023	15	30	.43	292	.06	5	1.35	.01	.50	1	6	80	13
R 139583	11	97	63	62	.3	7	4	51	4.11	2074	5	ND	8	33	3.4	49	2	61	.03	.039	18	40	.79	488	.08	8	2.01	.01	.58	1	46	150	12
R 139584	2	30	33	13	.4	5	2	21	1.46	154	5	ND	5	31	.2	14	2	18	.02	.025	14	16	.17	240	.02	8	.84	.01	.29	2	14	190	14
R 139585	3	33	36	25	.3	8	2	32	1.54	360	5	ND	4	39	.2	18	2	16	.10	.059	11	12	.10	232	.01	8	.69	.01	.21	1	14	310	13
R 139586	2	39	18	23	.1	11	3	44	2.00	254	5	ND	6	17	.8	20	2	27	.04	.016	15	27	.46	218	.07	3	1.32	.02	.48	2	11	70	12
R 139587	1	39	17	27	.1	15	3	67	2.03	100	5	ND	6	18	.5	15	2	38	.11	.017	15	32	.71	319	.10	5	1.73	.03	.69	2	17	20	13
R 139588	1	70	13	56	.2	45	10	122	2.39	47	5	ND	6	68	1.5	13	2	43	.61	.014	9	41	1.31	366	.13	3	3.06	.12	.92	1	4	30	12
R 139589	1	67	31	106	.3	48	13	210	2.34	62	5	ND	5	41	2.1	7	4	41	.53	.014	8	42	1.49	256	.15	8	3.01	.15	.94	3	3	20	19
R 139590	1	54	17	58	.1	30	8	137	2.02	155	5	ND	5	32	1.0	5	4	41	.40	.015	9	38	1.25	240	.14	6	2.46	.12	.82	1	13	10	13
R 139591	2	73	19	48	.2	24	7	133	2.48	211	5	ND	6	36	1.4	7	3	44	.46	.015	10	39	1.24	243	.14	4	2.63	.14	.92	2	9	20	12
R 139592	7	97	33	54	.2	40	8	146	2.50	181	5	ND	6	37	.9	7	2	79	.39	.021	9	47	1.17	266	.15	3	2.66	.11	.84	2	14	5	14
R 139593	12	68	47	34	.2	14	3	52	3.09	226	5	ND	4	31	.4	28	2	73	.04	.072	16	24	.41	210	.04	5	1.12	.01	.25	1	54	160	20
R 139594	3	25	48	14	.3	4	1	22	1.92	234	5	ND	4	43	.2	19	2	22	.02	.052	20	10	.06	238	.01	4	.40	.01	.15	2	18	300	19
R 139595	4	124	31	56	.4	33	6	152	3.45	363	5	ND	7	58	.8	25	6	56	.33	.089	23	47	.89	408	.12	2	2.43	.05	.72	2	30	360	15
R 139596	1	58	24	48	.1	15	4	143	2.43	83	5	ND	6	11	.4	10	2	36	.02	.025	15	35	.74	355	.09	2	1.65	.01	.67	1	210	50	12
R 139597	2	61	19	31	.1	21	2	43	1.36	96	5	ND	5	29	.3	12	3	32	.10	.066	13	18	.26	231	.03	4	.90	.01	.34	2	18	40	13
STANDARD C/AU-R	19	58	38	132	6.8	70	31	1050	3.94	42	20	7	38	53	18.6	15	20	55	.51	.094	38	56	.89	181	.07	33	1.92	.06	.13	11	550	1400	-

TR-2

TR-4

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	SAMPLE lb
R 139598	1	107	22	48	.1	26	7	126	1.77	68	5	ND	6	29	.2	9	2	37	.58	.022	13	34	.67	188	.09	4	2.08	.06	.52	2	19	20	18
R 139599	3	90	12	50	.1	57	8	120	2.28	42	5	ND	6	47	.4	7	2	53	.87	.041	10	46	1.23	314	.15	8	3.08	.10	.74	2	11	30	19
R 139600	1	46	17	37	.1	22	5	112	1.50	15	5	ND	5	8	.2	2	2	47	.18	.052	11	36	.92	193	.08	8	1.57	.02	.56	1	13	10	20
R 139601	1	69	10	39	.1	28	7	123	2.24	18	5	ND	5	34	.2	5	2	45	.40	.018	7	43	1.25	331	.13	6	2.32	.06	.78	1	9	20	15
R 139602	1	72	19	47	.1	42	9	129	2.37	27	5	ND	6	26	.6	4	4	64	.35	.023	9	51	1.47	265	.15	5	2.54	.05	.86	2	9	40	14
R 139603	5	83	24	54	.1	63	8	120	1.95	28	5	ND	6	47	.5	5	7	80	.61	.077	11	39	1.03	214	.08	6	2.51	.06	.55	1	28	20	17
R 139604	2	78	16	40	.1	37	7	111	1.79	19	5	ND	5	75	.2	3	3	38	1.10	.044	10	32	.84	233	.09	6	2.75	.10	.48	1	10	10	20
R 139605	7	116	23	52	.1	46	9	134	1.82	22	5	ND	5	145	.2	2	2	41	1.53	.029	10	34	.70	147	.11	5	3.28	.17	.37	1	33	5	17
R 139606	2	146	41	57	.4	24	6	146	1.78	62	5	ND	6	80	.2	7	2	27	.38	.012	11	22	.78	190	.05	6	1.93	.08	.34	1	24	20	15
R 139607	2	65	26	23	.1	7	4	128	2.23	177	5	ND	7	17	.2	3	8	35	.07	.012	16	28	.96	252	.06	5	1.78	.03	.58	1	108	30	14
R 139608	26	295	27	52	.2	68	8	162	4.00	126	10	ND	9	108	.5	2	5	227	1.29	.141	19	65	1.10	354	.15	2	3.92	.22	.71	2	89	20	15
R 139609	7	179	31	25	.3	20	9	144	4.57	218	5	ND	10	68	.3	4	8	193	.52	.158	19	72	.84	320	.10	7	2.24	.10	.62	1	89	10	14
R 139610	9	201	60	32	.2	26	6	231	3.57	82	7	ND	8	78	.2	6	7	139	.54	.126	18	51	.96	351	.09	3	2.67	.09	.55	2	74	10	13
R 139611	8	170	35	65	.2	66	7	166	2.01	82	8	ND	9	51	.2	5	8	106	.57	.068	18	41	1.05	246	.12	6	2.21	.09	.54	1	70	5	19
R 139612	3	253	50	75	.7	11	6	381	2.69	2616	5	ND	18	53	.5	22	16	52	.50	.088	39	28	.51	183	.09	7	1.31	.06	.33	2	57	180	15
R 139613	6	201	43	114	.6	15	9	483	2.37	1528	5	ND	19	56	.2	67	10	43	.38	.077	36	23	.24	119	.04	4	.98	.02	.18	1	53	760	14
R 139614	4	203	228	161	3.5	5	6	205	3.23	6772	5	ND	21	105	6.4	154	86	31	.23	.068	32	16	.12	121	.02	6	.69	.01	.17	1	151	610	14
R 139615	3	214	53	114	1.5	7	7	299	2.69	4919	5	ND	21	140	.4	34	10	37	.36	.075	36	22	.36	214	.11	6	1.07	.04	.40	1	56	640	13
R 139616	5	293	2900	98	9.1	5	5	130	2.86	14489	7	ND	21	317	.9	610	67	20	.14	.057	24	12	.17	184	.03	7	.90	.01	.24	1	390	1500	15
R 139617	4	128	444	147	.7	11	7	237	2.29	1597	5	ND	25	101	.8	156	9	42	.32	.069	33	28	.50	197	.12	5	1.23	.06	.41	1	71	1100	14
R 139618	4	124	266	85	.5	8	8	284	2.32	1316	5	ND	26	46	.2	45	12	46	.40	.072	40	30	.61	201	.15	5	1.33	.07	.48	1	94	400	11
R 139619	2	65	51	111	.2	9	8	296	2.38	439	5	ND	23	42	.5	13	8	50	.39	.073	32	33	.72	231	.19	5	1.37	.09	.55	2	53	80	13
R 139620	3	161	1238	198	1.2	7	6	263	2.37	1057	5	ND	20	47	4.8	471	6	37	.36	.077	34	22	.43	169	.12	6	1.06	.05	.42	1	42	1200	15
R 139621	2	195	37	69	.6	10	12	218	1.97	1258	7	ND	22	44	.2	14	14	41	.40	.074	31	27	.56	148	.11	9	1.19	.07	.35	2	56	190	14
R 139622	2	112	48	73	.1	9	9	313	2.43	671	5	ND	24	47	.2	7	6	48	.43	.077	34	32	.81	228	.17	5	1.38	.09	.50	2	29	40	11
R 139623	2	80	49	80	.2	13	8	258	2.34	403	5	ND	22	49	.2	6	5	49	.44	.077	31	35	.84	219	.16	3	1.50	.10	.49	3	54	20	10
R 139624	1	107	32	56	.3	10	8	211	2.10	734	5	ND	27	42	.2	7	10	46	.39	.074	33	31	.80	164	.13	3	1.34	.08	.44	1	106	30	15
R 139625	2	299	37	59	.4	12	11	209	2.16	1614	5	ND	25	43	.2	8	16	43	.38	.068	36	30	.74	170	.12	8	1.29	.08	.41	1	95	20	14
R 139626	1	224	45	84	1.1	12	8	320	2.23	2847	5	ND	20	64	.2	43	11	35	.41	.080	39	26	.20	97	.02	5	.82	.02	.11	1	55	400	13
R 139627	2	102	21	44	.2	10	5	199	1.63	894	5	ND	23	40	.2	8	8	35	.45	.072	31	34	.49	88	.09	7	.98	.07	.21	1	37	30	15
R 139628	1	90	62	57	.6	12	7	198	1.68	1690	5	ND	20	195	.2	38	16	30	.33	.067	27	24	.38	220	.03	7	1.09	.03	.21	1	58	260	12
R 139629	2	219	98	131	1.3	13	10	261	2.50	3876	7	ND	17	200	1.7	63	28	24	.29	.058	40	26	.09	238	.01	4	.79	.01	.11	1	18	620	14
R 139630	1	72	23	30	.1	8	6	189	1.97	1000	5	ND	20	63	.4	13	7	40	.37	.074	40	35	.76	77	.03	8	1.27	.03	.07	1	3	160	15
R 139631	1	53	23	28	.1	13	11	186	2.09	992	5	ND	18	36	.2	6	12	47	.70	.080	40	53	1.07	67	.02	13	1.36	.04	.10	2	5	20	13
R 139632	1	35	35	29	.1	12	8	189	2.13	931	5	ND	18	26	.2	8	40	44	.38	.078	28	39	1.10	113	.04	9	1.45	.04	.17	1	8	10	14
STANDARD C/AU-R	18	57	38	131	6.7	70	31	1048	3.95	39	21	7	38	52	18.8	15	19	55	.50	.091	38	56	.88	180	.07	36	1.87	.06	.14	11	490	1300	-

TR-4

TR-5

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	SAMPLE lb
R 139651	2	34	39	52	.2	9	6	304	4.15	72	5	ND	18	40	.4	34	2	60	.35	.081	41	62	1.35	395	.21	2	2.69	.06	.68	1	3	10	21
R 139652	1	147	43	68	.5	12	10	331	5.15	179	10	ND	19	39	1.1	27	2	63	.26	.090	32	56	1.26	462	.22	6	2.57	.05	.78	1	4	110	20
R 139653	2	249	30	96	.4	30	12	303	4.18	326	5	ND	16	80	1.8	29	5	76	.64	.123	35	75	1.37	458	.27	9	2.73	.10	1.10	1	8	150	22
R 139654	2	514	521	73	9.6	25	14	167	5.74	14500	5	ND	13	106	1.2	280	129	81	.46	.138	34	88	1.17	362	.15	13	2.04	.07	.95	1	122	730	21
R 139655	3	240	32	54	2.3	29	10	222	3.34	849	5	ND	13	83	.5	17	5	73	.75	.127	28	81	1.38	342	.23	12	2.38	.11	1.01	5	6	80	20
R 139656	10	188	73	62	2.3	43	5	104	2.53	3334	10	ND	9	63	.9	57	36	193	.54	.091	23	53	1.08	289	.13	9	1.91	.09	.71	1	39	170	21
R 139657	4	111	31	42	.7	40	2	66	1.40	1727	5	ND	4	23	.3	23	3	43	.30	.032	11	58	.58	204	.06	8	1.12	.05	.35	1	16	30	19
R 139658	4	238	26	53	.4	74	4	113	2.55	710	11	ND	11	77	.7	17	6	77	1.11	.332	25	79	.69	263	.08	9	1.55	.06	.32	1	24	30	23
R 139659	5	152	22	60	.3	84	4	105	2.30	574	12	ND	15	97	.8	15	4	58	1.51	.499	29	66	.53	179	.07	9	1.51	.06	.18	1	10	10	22
R 139660	28	194	9	177	.8	165	5	160	1.57	577	26	ND	5	168	.9	23	6	472	2.95	.884	24	126	.99	210	.07	7	1.27	.05	.37	1	22	20	21
R 139661	46	166	43	156	2.1	95	4	80	1.40	1450	24	ND	7	167	2.6	47	10	338	.65	.175	23	48	.32	602	.04	15	1.10	.05	.14	1	11	900	22
R 139662	24	121	28	185	.4	77	5	110	2.41	959	13	ND	8	84	1.5	45	6	190	.60	.088	20	47	1.12	382	.10	7	2.02	.10	.66	1	8	1050	20
R 139663	31	124	18	251	.5	83	8	220	2.82	707	15	ND	13	60	3.1	20	2	267	.70	.063	27	57	1.31	411	.16	9	2.27	.13	.66	1	7	110	20
R 139664	1	75	21	51	.1	14	7	252	3.27	1007	5	ND	19	53	.9	15	3	64	.41	.069	34	31	1.30	520	.15	2	2.30	.08	.45	1	6	120	21
R 139665	2	99	24	54	.2	9	6	196	3.29	793	5	ND	18	65	.4	19	2	59	.35	.068	30	34	1.00	453	.13	5	2.05	.06	.36	1	6	660	22
R 139666	4	211	168	71	4.2	21	4	119	2.78	2280	8	ND	9	61	.6	59	12	58	.26	.032	21	31	.41	257	.06	4	1.19	.06	.38	1	8	850	21
R 139667	3	98	27	28	.4	23	6	109	2.07	751	7	ND	11	74	.4	10	4	81	.70	.080	22	59	.91	265	.14	11	1.91	.12	.62	1	10	30	23
R 139668	2	495	10	59	.6	38	5	89	1.93	660	5	ND	8	43	1.0	18	8	31	.54	.028	15	38	.92	196	.11	5	2.25	.08	.58	1	7	170	21
R 139669	2	125	77	31	1.1	7	1	28	1.07	1622	5	ND	8	50	.5	29	2	25	.02	.023	18	20	.06	233	.01	14	.92	.01	.09	1	6	510	20
R 139670	2	524	1582	10	30.0	6	2	48	7.19	76916	5	ND	4	80	.4	567	1032	13	.01	.028	9	12	.04	316	.01	18	.47	.01	.13	3	380	1800	17
R 139671	1	102	300	38	2.3	6	2	34	1.51	3742	5	ND	8	62	.2	48	18	19	.03	.022	17	19	.05	181	.01	16	.70	.01	.09	1	36	500	19
R 139672	2	107	26	34	.9	22	3	78	2.04	556	5	ND	8	14	.3	19	2	49	.07	.013	20	52	.92	237	.11	19	1.62	.03	.72	1	14	110	20
R 139673	2	186	20	55	.3	49	6	179	2.11	95	5	ND	23	52	.8	3	2	84	.51	.089	32	38	.93	278	.19	2	1.74	.10	.62	1	82	20	10
STANDARD C/AU-R	19	62	39	133	7.1	72	31	1054	3.97	41	21	8	39	52	18.6	15	19	56	.51	.090	38	60	.91	182	.07	34	1.88	.07	.13	12	510	1400	-

TR-3

Northern Analytical Laboratories ltd.

October 19,1990

Work Order # 08475

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08475a

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141283	30
R141284	17
R141285	31
R141286	166
R141287	32
R141288	96
R141289	36
R141290	6
R141291	8
R141292	305
R141293	45
R141294	271
R141295	70
R141296	160
R141297	109
R141298	307
R141299	887
R141300	410
R141301	93
R141302	92
R141303	102
R141304	70
R141305	84
R141306	1673
R141307	86
R141308	68
R141309	32
R141310	58
R141311	194
R141312	17

TR-6

TR-7

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
6992
CERALD F. HAYES
A.Sc.T.

Northern Analytical Laboratories ltd.

October 19,1990

Work Order # 08475

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08475b

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141313	137
R141314	39
R141315	166
R141316	59
R141317	201
R141318	92
R141319	54
R141320	364
R141321	82
R141322	46
R141323	52
R141324	26
R141325	69
R141326	153
R141327	50
R141328	71
R141329	66
R141330	31
R141331	64
R141332	143
R141333	120
R141334	41
R141335	58
R141336	45
R141337	39
R141338	82
R141339	34
R141340	59
R141341	33
R141342	30

TR-7

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
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CERALD F. HAYES
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Northern Analytical Laboratories ltd.

October 19,1990

Work Order # 08475

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08475c

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141343	42
R141344	115
R141345	247
R141346	379
R141347	39
R141348	43
R141349	91
R141350	37
R141351	45
R141352	43
R141353	28
R141354	56
R141355	178
R141356	231
R141357	180
R141358	126
R141359	117
R141360	115
R141361	153
R141362	63
R141363	23
R141364	12
R141365	9
R141366	38
R141367	542
R141368	889
R141369	29
R141370	66
R141371	10
R141372	13

TR-7

Au -- 30g Fire Assay/AAS

Applied Science Technologists and Technicians of British Columbia
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Northern Analytical Laboratories ltd.

October 19,1990

Work Order # 08475

Noranda Exploration Company Limited
201 - 107 Main St.
Whitehorse, Yukon
Y1A 2A7

File # 08475d

Project # 324 Panorama

Assay Certificate for Samples Provided

Sample	ppb Au
R141373	15
R141374	291
R141375	41
R141376	70
R141377	31
R141378	24
R141379	18
R141380	15
R141381	20
R141382	9
R141383	27
R141384	24
R141385	13
R141386	41
R141387	103
R141388	30
R141389	24
R141390	64
R141391	186
R141392	44
R141393	41
R141394	90
R141395	57
R141396	82
R141397	500
R141398	77
R141399	49
R141400	34
R141401	31
R141402	35

TR-7

Au -- 30g Fire Assay/AAS

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NORANDA VANCOUVER LABORATORY
Geochemical Analysis

Project Name & No.: PANORAMA TRENCH – 324 Geol.: D.K. Date rec'd: OCT. 23 LAB CODE: 9010-071

Material: 124 TRENCH Sheet: 1 of 4 Date comp OCT. 31

Remarks: * Sample screened @ –35 MESH (0.5 mm).

¤ Organic, ▲ Humus

Au – 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP – 0.2 g sample digested with 3 ml HClO4/HNO3 (4:1) at 203 °C for 4 hours diluted to 11 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
2	141283	0.8	2.20	818	246	1.4	5	0.40	2.9	69	8	43	95	2.19	0.47	30	26	0.52	419	2	0.04	8	0.08	64	35	0.17	59	184
3	141284	1.0	2.47	841	210	1.9	3	0.41	1.8	77	6	34	157	2.05	0.44	33	24	0.47	269	2	0.03	7	0.07	52	39	0.11	50	125
4	141285	2.4	5.05	1837	173	3.0	6	0.32	3.4	58	6	13	181	1.83	1.20	28	30	0.37	207	1	0.01	5	0.08	244	26	0.03	50	163
5	141286	2.4	4.73	2853	223	2.9	23	0.45	5.6	54	8	15	105	1.97	1.22	21	29	0.45	227	2	0.02	6	0.10	284	30	0.04	56	208
6	141287	0.8	3.01	1107	238	1.8	10	0.37	2.0	67	7	33	69	2.26	0.44	31	27	0.61	325	1	0.02	8	0.08	80	30	0.13	55	112
7	141288	1.4	3.03	1748	239	1.8	52	0.49	0.8	72	7	40	104	2.16	0.43	32	30	0.63	316	1	0.03	11	0.08	66	35	0.13	60	59
8	141289	0.6	2.17	884	280	0.9	13	0.38	0.6	63	8	52	55	2.20	0.38	27	26	0.60	323	2	0.04	14	0.07	32	35	0.16	65	53
9	141290	0.2	1.19	51	318	0.6	2	0.39	0.5	64	6	53	20	2.09	0.57	30	36	0.66	269	5	0.06	7	0.08	24	33	0.22	50	72
10	141291	0.2	1.10	156	269	0.6	2	0.47	0.4	74	6	56	36	2.15	0.50	34	38	0.76	276	4	0.07	7	0.07	26	35	0.20	49	74
11	141292	16.0	4.75	42083	244	2.8	21	0.08	6.0	36	5	21	232	5.68	2.14	19	21	0.40	74	12	0.02	2	0.07	4611	140	0.02	67	159
12	141293	2.0	1.86	1204	277	0.8	5	0.36	1.8	78	7	37	156	2.14	0.68	34	33	0.74	225	1	0.04	7	0.08	102	30	0.24	54	173
13	141294	16.0	4.07	13252	243	2.2	28	0.30	8.2	66	7	27	239	3.83	1.36	30	35	0.58	190	9	0.03	6	0.08	3378	99	0.10	69	329
14	141295	4.6	3.10	2075	318	1.6	10	0.36	2.2	77	8	32	213	2.30	0.97	35	39	0.84	273	2	0.04	9	0.08	265	35	0.18	66	133
15	141296	4.0	2.92	1223	346	1.3	22	0.43	2.1	69	9	39	201	2.55	0.61	31	30	0.75	324	3	0.04	14	0.08	284	43	0.17	76	150
16	141297	1.2	2.60	484	785	2.4	9	0.81	2.0	92	20	97	141	3.89	0.83	39	28	2.12	658	1	0.05	51	0.15	212	63	0.23	107	137
17	141298	2.4	2.28	1388	444	1.5	31	0.48	5.3	86	17	65	290	2.81	0.74	39	40	1.31	380	3	0.04	21	0.10	560	46	0.21	75	337
18	141299	4.8	3.05	5123	350	2.3	155	0.62	3.3	90	23	52	830	2.40	1.05	43	46	1.10	144	4	0.03	62	0.21	139	40	0.09	144	99
19	141300	3.0	1.94	2148	277	1.3	68	0.27	1.6	41	27	56	604	1.51	0.58	18	24	0.48	143	4	0.02	27	0.07	143	35	0.05	72	66
20	141301	5.4	1.93	1226	262	1.3	22	0.17	2.6	46	11	65	226	1.05	0.62	17	25	0.28	132	3	0.02	21	0.04	202	17	0.04	101	78
21	141302	2.2	2.76	1148	253	1.8	14	0.26	2.6	43	8	31	272	1.21	0.80	17	27	0.50	140	2	0.03	32	0.05	103	24	0.07	67	168
22	141303	4.4	1.79	1377	266	1.3	11	0.22	1.5	33	7	51	230	1.18	0.59	17	16	0.38	133	2	0.02	18	0.07	52	22	0.05	90	71
23	141304	2.0	2.08	1722	210	1.4	12	0.19	2.1	44	15	54	735	2.32	0.70	16	22	0.81	177	5	0.02	24	0.04	83	18	0.06	89	113
24	141305	2.8	2.54	1685	203	1.8	15	0.76	5.7	73	12	58	405	1.68	0.84	29	31	0.87	191	4	0.03	45	0.30	400	27	0.05	239	210
25	141306	1.6	1.78	1119	232	1.4	36	1.17	2.8	76	15	125	214	1.26	0.56	39	28	0.71	160	4	0.02	75	0.47	217	27	0.09	536	110
26	141307	1.2	1.24	559	240	1.1	6	1.54	1.2	102	6	146	179	0.93	0.39	54	28	0.57	111	5	0.03	78	0.49	30	22	0.10	1169	47
27	141308	0.8	1.27	552	202	0.9	7	1.06	1.2	91	8	142	106	1.00	0.47	52	29	0.64	123	2	0.02	73	0.37	29	18	0.08	895	53
28	141309	1.4	1.15	1321	251	0.7	8	0.54	0.8	65	7	46	611	1.93	0.37	31	30	0.66	196	5	0.04	26	0.11	24	29	0.20	126	59
29	141310	0.8	1.29	1158	301	0.7	9	0.39	0.5	71	9	41	175	2.11	0.54	34	37	0.82	250	4	0.04	19	0.08	23	23	0.22	85	57
30	141311	1.2	1.46	706	357	0.6	36	0.39	0.7	59	9	41	250	2.17	0.68	27	40	0.98	253	3	0.04	14	0.08	21	24	0.22	111	66
31	141312	2.2	1.70	1500	340	0.9	6	0.34	1.4	79	9	31	318	2.27	0.69	38	33	0.69	244	2	0.04	11	0.08	56	36	0.23	55	109

T.T. No.	SAMPLE No.	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	9010-071 Pg. 2 of 4
32	141313	1.4	1.66	431	328	0.9	11	0.41	0.6	70	6	39	295	2.26	0.64	33	36	0.81	273	8	0.05	9	0.08	18	50	0.25	53	72	
33	141314	2.6	2.45	1170	325	1.3	8	0.38	1.0	67	5	25	308	2.15	0.90	29	37	0.82	208	1	0.04	8	0.08	130	40	0.20	64	89	
34	141315	1.2	2.33	1592	351	1.2	16	0.61	0.7	94	12	67	251	1.90	0.75	45	42	0.99	164	3	0.07	29	0.12	36	44	0.21	344	51	
35	141316	2.0	3.02	1721	215	2.0	10	0.96	1.0	97	8	35	339	2.41	0.71	42	42	1.00	270	1	0.04	15	0.10	54	52	0.09	88	70	
36	141317	3.4	3.29	2732	392	1.7	21	0.45	2.2	60	20	18	369	2.44	0.95	27	57	0.72	238	1	0.05	12	0.08	402	43	0.14	83	124	
37	141318	1.2	2.17	757	305	1.1	8	0.84	0.9	72	7	45	248	1.72	0.59	32	38	0.77	176	2	0.05	22	0.19	40	39	0.11	310	66	
38	141319	4.2	1.72	693	203	1.1	6	0.83	1.3	115	6	158	230	1.17	0.61	63	27	0.40	137	3	0.02	47	0.31	84	22	0.06	684	63	
39	141320	1.0	1.26	437	177	0.9	58	1.60	0.7	91	7	159	76	0.76	0.37	50	23	0.41	94	4	0.02	62	0.66	26	32	0.06	435	27	
40	141321	0.4	1.36	589	239	1.1	12	1.80	1.0	198	9	162	50	0.93	0.47	117	29	0.50	118	4	0.03	57	0.75	28	29	0.08	556	67	
41	141322	0.4	1.19	635	165	1.0	7	0.34	1.9	125	9	129	50	0.96	0.36	80	26	0.32	111	5	0.01	62	0.10	44	15	0.04	745	78	
42	141323	0.2	1.18	580	165	1.0	6	1.06	1.0	65	6	94	47	0.71	0.35	34	34	0.21	87	3	0.01	54	0.41	31	21	0.02	388	41	
43	141324	0.8	1.87	1075	238	1.2	16	1.68	0.7	69	14	105	101	1.66	0.98	33	46	1.26	133	4	0.05	82	0.66	28	37	0.09	331	44	
44	141325	2.2	1.98	2370	231	1.4	24	0.83	1.1	54	12	85	212	1.28	0.60	26	35	0.30	106	6	0.02	103	0.33	56	34	0.07	235	52	
45	141326	2.8	1.53	1090	140	0.9	11	0.33	0.8	31	6	51	160	0.75	0.42	15	42	0.21	71	3	0.01	29	0.11	147	16	0.02	106	33	
46	141327	1.0	2.03	1146	215	0.9	12	0.49	0.6	85	7	31	221	1.95	0.48	43	41	0.93	169	1	0.03	32	0.09	38	32	0.25	75	44	
47	141328	0.8	1.92	1745	233	1.0	9	0.46	0.5	89	6	42	234	1.96	0.58	45	43	0.87	161	2	0.05	40	0.08	27	33	0.20	67	55	
48	141329	0.6	1.84	1460	275	0.9	7	0.45	1.5	86	8	32	220	2.39	0.56	41	39	0.81	223	2	0.06	23	0.09	54	41	0.22	70	87	
49	141330	1.8	2.07	2701	292	1.1	14	0.47	1.0	90	11	46	314	2.53	0.64	41	41	0.92	234	6	0.04	27	0.11	49	44	0.21	116	67	
51	141331	3.8	3.72	3581	260	2.1	15	0.54	2.1	61	10	27	308	1.91	1.10	28	60	0.67	251	2	0.03	33	0.09	141	31	0.06	164	126	
52	141332	1.4	4.26	2511	321	2.6	12	0.61	2.1	51	9	21	167	2.20	1.33	19	51	0.90	302	3	0.06	33	0.09	338	43	0.06	81	138	
53	141333	2.2	4.48	4624	313	2.4	22	0.68	3.5	79	12	12	259	2.14	1.27	35	53	0.86	256	2	0.04	21	0.10	185	41	0.05	71	164	
54	141334	3.0	4.44	4005	386	2.5	12	0.42	6.1	91	8	11	222	2.18	1.56	46	51	0.64	294	2	0.03	10	0.10	555	28	0.09	63	213	
55	141335	1.6	2.93	2345	281	1.6	13	0.47	1.1	81	8	18	251	2.37	0.90	39	40	0.86	209	1	0.05	10	0.08	62	37	0.14	58	81	
56	141336	1.2	2.02	1747	266	1.0	12	0.47	0.8	86	9	25	253	2.45	0.64	42	36	0.81	231	2	0.05	11	0.09	51	38	0.19	70	67	
57	141337	1.2	2.46	1486	285	1.3	10	0.43	1.5	88	8	23	191	2.33	0.60	44	36	0.87	256	1	0.04	11	0.08	68	44	0.18	74	80	
58	141338	1.8	3.00	1705	324	1.6	21	0.54	1.6	87	9	32	187	2.43	0.89	43	38	0.92	294	1	0.05	18	0.12	113	46	0.16	102	91	
59	141339	0.8	2.10	910	312	1.2	9	0.48	1.0	91	9	40	166	2.52	0.76	40	40	1.16	225	1	0.06	14	0.10	42	37	0.23	87	76	
60	141340	1.0	1.78	1328	300	0.9	18	0.54	0.8	78	11	48	140	2.47	0.78	38	38	1.08	201	2	0.08	15	0.10	43	46	0.25	75	63	
61	141341	3.2	1.83	1365	213	1.1	11	0.57	1.0	90	11	37	379	2.25	0.60	42	35	0.92	211	2	0.07	14	0.10	40	41	0.24	72	60	
62	141342	1.0	3.20	1174	271	1.7	8	0.74	1.0	87	10	29	146	3.13	0.69	39	47	1.05	451	1	0.04	23	0.12	59	35	0.15	130	94	
63	141343	1.8	2.28	768	272	1.3	7	0.69	0.9	74	8	27	208	2.57	0.53	35	40	0.93	331	1	0.04	20	0.11	41	37	0.17	91	76	
64	141344	2.2	2.38	1590	335	1.2	28	0.45	1.0	80	11	42	176	2.41	0.77	39	41	1.01	232	1	0.05	19	0.12	77	30	0.20	117	66	
65	141345	4.2	2.83	23203	234	1.8	156	0.82	0.8	75	14	40	576	4.21	0.82	34	46	1.19	305	2	0.05	14	0.11	22	37	0.14	82	61	
66	141346	3.8	1.57	32380	169	1.0	365	0.39	0.3	60	12	55	439	4.26	0.47	30	27	0.69	163	3	0.05	14	0.09	28	30	0.15	106	43	
67	141347	1.4	1.94	3415	216	1.3	18	0.51	1.0	82	11	39	254	2.66	0.55	41	33	0.85	280	1	0.06	17	0.11	28	47	0.21	81	69	
68	141348	2.8	2.19	4918	226	1.3	26	0.49	1.3	71	10	47	177	2.48	0.65	35	33	0.81	240	2	0.05	15	0.13	95	34	0.18	122	85	
69	141349	4.0	3.16	3276	214	2.2	17	0.43	5.3	86	12	42	261	3.09	0.91	42	33	0.79	369	1	0.04	12	0.11	522	34	0.13	87	203	
70	141350	1.8	2.29	2482	240	1.5	11	0.54	1.5	84	11	58	181	2.76	0.75	41	37	1.03	323	2	0.06	13	0.10	103	43	0.19	88	89	
71	141351	1.8	2.38	1779	269	1.5	14	0.48	1.2	78	10	56	254	2.58	0.76	39	35	0.89	288	2	0.05	17	0.11	61	35	0.16	94	74	
72	141352	1.6	2.85	1577	149	1.9	9	0.44	0.5	90	10	33	439	2.65	0.50	36	26	0.40	402	2	0.04	12	0.11	42	43	0.09	83	77	

T.T. No.	SAMPLE No.	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Tl %	V ppm	Zn ppm
73	141353	1.2	2.91	1351	253	2.1	13	0.44	0.6	92	11	35	265	2.86	0.79	39	35	0.82	364	1	0.06	13	0.10	38	42	0.15	77	69
74	141354	1.8	3.12	1691	226	1.9	23	0.48	0.9	100	11	35	201	2.56	0.81	43	37	0.88	294	1	0.05	14	0.11	58	44	0.16	81	67
75	141355	3.0	3.21	1890	432	2.1	27	0.16	4.2	56	10	26	193	1.97	1.03	29	18	0.32	197	3	0.02	23	0.07	360	175	0.05	65	174
76	141356	6.4	1.69	2757	229	1.0	75	0.09	5.0	31	6	40	464	1.94	0.69	17	11	0.18	91	3	0.01	12	0.04	562	58	0.02	79	150
77	141357	6.6	2.27	2076	223	1.4	53	0.11	2.0	45	11	34	330	1.65	0.69	18	12	0.18	178	5	0.01	25	0.04	207	31	0.03	71	86
78	141358	3.8	2.98	2316	412	1.9	19	0.18	3.0	67	23	32	410	2.17	0.85	31	16	0.24	474	3	0.01	50	0.06	182	84	0.04	83	238
79	141359	4.8	1.79	2030	402	1.2	13	0.07	1.9	43	4	58	146	1.20	0.73	19	9	0.17	73	4	0.01	13	0.04	186	74	0.02	102	98
80	141360	9.2	1.72	3028	244	1.2	23	0.38	3.9	54	6	60	129	1.36	0.74	24	10	0.17	95	7	0.01	11	0.18	452	53	0.02	220	104
81	141361	9.0	1.63	4494	265	1.2	39	0.23	4.6	41	4	52	94	1.50	0.75	26	11	0.18	79	7	0.01	7	0.13	743	38	0.02	250	65
82	141362	5.0	5.49	2869	762	3.6	8	0.16	8.9	97	10	12	254	3.30	2.22	50	26	0.48	231	4	0.03	33	0.11	478	109	0.05	109	437
83	141363	6.4	3.56	3985	340	2.1	11	0.08	4.5	62	4	29	113	2.08	1.67	35	21	0.37	92	4	0.02	11	0.05	629	44	0.04	175	118
84	141364	4.8	4.32	5389	423	2.7	6	0.15	6.4	75	5	18	157	2.63	1.97	38	36	0.44	105	4	0.02	14	0.08	336	65	0.04	151	260
85	141365	2.6	6.02	2633	718	3.7	5	0.17	8.6	91	7	11	149	3.02	2.63	47	36	0.54	369	4	0.03	17	0.11	307	75	0.06	130	299
86	141366	2.6	6.35	1423	1381	4.0	4	0.14	5.4	103	16	8	126	3.89	2.02	48	42	0.40	1116	3	0.03	28	0.14	115	351	0.05	96	318
87	141367	0.6	6.15	771	2058	2.9	2	0.26	2.5	109	11	6	46	3.75	1.06	50	22	0.18	759	2	0.02	22	0.17	31	698	0.05	103	181
88	141368	0.6	4.98	694	581	2.7	2	0.67	1.3	106	11	11	54	3.56	0.74	39	22	0.20	743	1	0.01	21	0.14	27	134	0.07	106	119
89	141369	0.4	6.06	871	1794	3.1	2	1.39	1.0	114	14	9	57	3.90	0.97	48	27	0.22	1227	2	0.02	21	0.14	36	449	0.04	107	160
90	141370	0.2	4.69	451	557	3.0	2	0.72	0.7	103	11	17	58	3.64	1.04	43	26	0.34	596	1	0.02	17	0.14	25	119	0.06	93	103
91	141371	1.0	6.14	675	1669	3.9	3	0.24	2.6	109	11	11	144	3.93	1.83	51	41	0.38	795	2	0.03	22	0.17	60	459	0.05	115	169
92	141372	3.0	6.32	710	1386	3.7	5	0.35	2.0	109	8	10	127	5.05	2.00	53	37	0.42	446	2	0.03	17	0.15	125	458	0.05	109	100
93	141373	1.2	5.41	453	500	3.3	2	0.62	1.0	103	10	11	99	4.41	1.59	48	38	0.50	380	2	0.02	13	0.14	46	76	0.06	101	74
94	141374	0.8	5.37	363	461	3.5	2	0.95	1.2	111	10	11	93	4.14	1.38	50	48	0.59	626	1	0.02	17	0.15	42	76	0.06	109	95
95	141375	1.2	5.92	511	993	3.7	2	0.49	1.3	110	11	10	113	4.32	1.82	50	46	0.50	507	1	0.03	19	0.16	53	273	0.05	112	108
96	141376	1.2	6.20	492	781	3.6	2	0.33	0.9	109	9	12	94	4.55	1.71	52	37	0.51	534	2	0.02	16	0.14	51	263	0.05	113	80
97	141377	0.8	5.41	656	603	3.3	3	0.43	1.2	104	11	12	97	4.17	1.43	47	36	0.64	567	1	0.02	22	0.14	40	196	0.05	104	97
98	141378	0.4	4.20	769	337	2.8	4	0.68	0.8	99	12	20	79	3.53	0.66	43	35	0.90	686	1	0.02	36	0.14	37	47	0.10	110	118
99	141379	0.6	3.92	740	415	2.8	3	0.63	0.7	95	10	24	75	3.54	0.57	42	36	0.89	551	1	0.02	33	0.14	36	51	0.13	119	107
101	141380	0.2	3.97	644	438	3.3	2	0.76	0.7	107	12	19	57	3.53	0.38	43	31	0.82	664	1	0.02	24	0.14	33	48	0.17	115	115
102	141381	0.4	4.54	635	457	4.3	2	0.87	1.7	111	13	18	238	3.97	0.46	52	39	0.98	544	1	0.03	100	0.15	94	62	0.20	110	232
103	141382	0.2	2.34	742	546	2.1	16	0.81	1.5	51	6	88	107	1.37	0.54	25	12	0.26	148	2	0.02	62	0.32	38	120	0.07	534	80
104	141383	0.6	4.74	924	651	3.9	6	0.69	1.7	96	15	32	225	3.47	0.56	48	28	0.71	430	2	0.02	105	0.17	51	250	0.14	174	174
105	141384	0.4	3.40	599	522	2.5	2	0.79	0.8	99	10	50	84	3.24	0.43	45	36	0.89	544	2	0.03	42	0.22	42	66	0.18	214	112
106	141385	0.2	3.24	339	657	2.2	2	0.87	0.7	100	9	32	60	3.14	0.45	46	40	0.87	433	1	0.04	49	0.25	28	108	0.21	169	107
107	141386	1.6	2.00	1474	446	1.7	4	0.20	0.6	35	2	124	73	1.75	0.45	18	19	0.25	68	11	0.02	23	0.12	20	48	0.09	588	38
108	141387	1.0	1.79	1054	508	1.5	3	0.15	1.7	29	2	90	137	1.13	0.54	10	15	0.23	75	3	0.01	81	0.06	19	14	0.07	424	59
109	141388	0.6	2.31	1042	549	1.7	2	0.27	0.6	57	9	72	93	1.78	0.49	22	20	0.28	191	6	0.02	41	0.13	22	59	0.07	337	60
110	141389	1.4	1.26	787	394	1.1	2	0.11	0.8	24	1	84	118	1.76	0.41	14	9	0.12	49	8	0.01	12	0.08	86	48	0.02	110	44
111	141390	0.6	1.46	1545	344	1.3	28	0.19	0.5	43	4	88	106	1.62	0.39	23	19	0.19	58	7	0.01	13	0.11	29	48	0.02	61	28
112	141391	1.0	2.39	2387	396	1.3	30	0.23	0.5	68	7	67	173	3.37	0.53	38	24	0.43	73	8	0.02	15	0.14	22	45	0.10	104	34
113	141392	4.2	3.54	2373	582	2.1	19	0.54	0.3	113	5	53	264	4.46	0.73	54	33	0.67	77	4	0.05	20	0.20	24	188	0.13	102	40

T.T. No.	SAMPLE No.	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm	9010-071 Pg. 4 of 4
114	141393	2.4	2.85	4806	345	2.1	20	0.42	0.8	110	6	70	289	3.95	0.84	59	27	0.81	112	4	0.02	29	0.25	22	49	0.11	151	49	
115	141394	2.6	2.96	10079	642	2.0	50	0.63	0.6	107	13	76	505	3.90	1.22	48	46	1.26	118	17	0.04	45	0.28	16	24	0.18	290	37	
116	141395	2.0	1.88	5768	703	1.6	27	0.42	0.6	108	8	68	420	3.95	0.72	51	25	0.67	108	5	0.04	20	0.23	28	31	0.13	154	36	
117	141396	5.4	2.26	4714	368	1.9	29	0.71	2.3	99	6	68	285	3.78	0.84	47	25	0.62	116	8	0.04	17	0.36	129	32	0.11	168	61	
118	141397	2.4	2.42	5804	239	1.6	117	0.44	2.9	80	12	87	434	2.97	0.80	40	33	0.94	130	4	0.06	35	0.15	112	28	0.15	149	55	
119	141398	2.2	3.32	5214	249	1.9	41	0.39	1.4	66	9	71	366	3.31	1.39	33	63	1.94	111	7	0.07	38	0.08	73	24	0.20	163	50	
120	141399	2.4	2.78	2781	215	1.7	18	0.44	1.2	56	6	69	218	2.39	0.92	26	38	1.19	102	8	0.06	36	0.07	72	30	0.13	136	49	
121	141400	2.2	2.64	1787	239	1.7	8	0.22	1.1	54	7	59	194	1.82	0.93	23	34	1.00	83	7	0.04	37	0.04	56	17	0.10	94	56	
122	141401	1.2	2.19	844	200	1.7	6	0.31	1.1	45	9	59	190	0.91	0.63	16	32	0.68	78	3	0.06	37	0.03	21	25	0.05	35	45	
123	141402	1.4	2.83	771	227	1.7	2	0.56	0.9	51	7	72	138	1.19	0.84	20	33	0.84	86	5	0.05	30	0.03	52	36	0.09	33	55	
124	141403	0.8	1.94	1666	201	1.3	63	0.31	1.1	77	12	53	152	2.18	0.34	37	22	0.45	301	3	0.04	11	0.06	98	34	0.14	52	61	
125	141404	0.8	1.20	484	73	0.9	11	0.47	0.8	41	7	61	75	1.05	0.27	16	28	0.57	166	7	0.07	7	0.05	41	15	0.10	35	45	
126	141405	0.4	0.97	231	268	0.8	2	0.64	0.5	77	8	46	203	2.25	0.42	36	25	0.67	237	12	0.07	8	0.08	17	30	0.23	45	46	
127	141407	1.2	1.07	1343	142	1.3	7	0.66	0.6	91	9	44	572	1.98	0.37	46	29	0.82	214	6	0.04	11	0.07	16	23	0.20	52	45	

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
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DATE RECEIVED: OCT 31 1990

DATE REPORT MAILED: Nov 7/90

GEOCHEMICAL ANALYSIS CERTIFICATE

oranda Exploration Co. Ltd. PROJECT 9010-071 324 FILE # 90-5644 Page 1

P.O. Box 2380, 1050 Davie, Vancouver BC V6B 3T5

SAMPLE#	Hg ppb
141283	120
141284	160
141285	280
141286	150
141287	40
141288	10
141289	5
141290	10
141291	5
141292	310
141293	20
141294	380
141295	100
141296	50
141297	520
141298	70
141299	5
141300	5
141301	10
141302	5
141303	5
141304	5
141305	5
141306	5
141307	5
141308	5
141309	5
141310	5
141311	5
141312	5
141313	5
141314	10
141315	5
141316	30
141317	20
141318	10
STANDARD C	1500

- SAMPLE TYPE: TRENCH PULP HG ANALYSIS BY FLAMELESS AA.

SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Hg ppb
141319	5
141320	5
141321	5
141322	5
141323	5
141324	5
141325	5
141326	5
141327	5
141328	5
141329	5
141330	5
141331	20
141332	60
141333	10
141334	70
141335	20
141336	10
141337	5
141338	5
141339	5
141340	5
141341	5
141342	5
141343	5
141344	5
141345	5
141346	5
141347	5
141348	5
141349	5
141350	5
141351	5
141352	5
141353	50
141354	60
STANDARD C	1500

SAMPLE#	Hg ppb
141355	80
141356	30
141357	90
141358	820
141359	140
141360	570
141361	540
141362	1400
141363	1900
141364	2800
141365	3900
141366	6400
141367	1300
141368	1600
141369	1100
141370	1200
141371	5200
141372	2400
141373	2700
141374	820
141375	4300
141376	1100
141377	720
141378	150
141379	190
141380	260
141381	150
141382	140
141383	300
141384	40
141385	50
141386	110
141387	30
141388	130
141389	540
141390	80
STANDARD C	1300

SAMPLE#	Hg ppb
141391	20
141392	140
141393	120
141394	5
141395	10
141396	20
141397	5
141398	5
141399	5
141400	5
141401	10
141402	5
141403	5
141404	5
141405	5
141407	5
STANDARD C	1500

APPENDIX IV

SOIL RESULTS

NORANDA VANCOUVER LABORATORY

PERTY/LOCATION:PANORAMA CODE : 9007-028

Project No. :324 Sheet:1 of 4 Date rec'd:JUL.09
Material :192 SOILS Geol.:J.D. Date compl:JUL.23
Remarks :

Values in PPM, except where noted.

.T. No.	SAMPLE No.		PPB Au
8E	14800E-29200N		5
69	29250		5
70	29300		5
71	29350		5
72	29400		5
73	29450		5
74	29500		5
75	29550		5
76	29600		5
77	29650		5
78	29700		5
79	29750		5
80	29800		5
81	29850		5
82	29900		5
	29950	-35 MESH 5.0g	5
84	14800E-30000N		5
85	14900E-29200N	-35 MESH	5
86	29250		5
87	29300		5
88	29350		5
89	29450		5
90	29500		5
91	29550		5
92	29600		5
93	29650		5
94	29700		5
95	29750		5
96	29800		5
97	29850		30
98	14900E-30000N	-35 MESH	10
99	15000E-29250N		10
00E	29300		5
2D	29350		5
3	29400		5
4	29450		5
5	29500		5
6	29550		5
7	29600		5
8	29650		5
9	29700		5
	29750		5
11	29800		5
12	29850		5
13	29900	-35 MESH	5
14	29950		5
15	15000E-30000N	-35 MESH	5
16	15100E-29200N		5

T.	SAMPLE No.		PPB Au
17	15100E-29250N		5
18	29300		5
19	29350		5
20	29400		5
21	29450		5
22	29500		5
23	29550		5
24	29600		5
25	29650		5
26	29700		5
27	29750		5
28	29800		5
29	29850		5
30	29900		5
31	29950	-35 MESH	5
32	15100E-30000N	-35 MESH	5
33	15200E-000S	30000 N	5
34	100	-35 MESH 29900 N	5
35	200	29900N	5
36	250	29750 N	5
37	300	29700N	30
38	350	29650 N	5
39	400	29600 N	5
[illegible]	450	29550 N	5
	500	29500 N	5
42	550	29450 N	5
43	600	29400 N	5
44	650	29350 N	5
45	700	29300 N	5
46	750	29250 N	5
47	800	29200 N	5
48	850	29150 N	5
49	900	29100 N	5
30D	950	29050 N	5
51B	15200E-1100S	29000 N	5
52	15300E-000S	30000 N	5
53	50	-35 MESH 29950N	5
54	100	29900N	5
55	150	29850N	5
56	250	29750N	10
57	300	29700N	5
58	350	29650 N	5
59	400	29600 N	5
60	450	29550 N	5
61	500	29500 N	100
62	550	29450N	5
63	600	29400 N	5
64	650	29350 N	5
65	700	29300 N	60
	750	29250 N	5
	800	29200 N	5
68	850	29150 N	5
69	900	29100 N	5
70	950	29050 N	5
71	15300E-1000S	29000 N	5
72	15400E-29000N	-35 MESH	5
73	15400E-29050N		5

T.	SAMPLE No.		PPB Au
74	15400E-29100N		5
75	29150		5
76	29200		5
77	29250		5
78	29300		5
79	29350		5
80	29400		5
81	29450		5
82	29500		5
83	29550		5
84	29600		5
85	29650		5
86	29700		5
87	29750		5
88	29800		5
89	29850		5
90	29900		5
91	29950		5
92	15400E-30000N		5
93	15500E-050S	-35 MESH 29950 N	5
94	100	29900 N	5
95	200	29850 N	5
96	250	[illegible]	5
97	300	29[illegible]	5
	350	29650 N	5
99	400	29600 N	5
100B	450	29550 N	5
30Y	500	29500 N	5
31	550	29450 N	5
32	600	[illegible]	5
33	650	[illegible]	90
34	700	[illegible]	5
35	750	29350 N	110
36	800	29300 N	5
37	850	29250 N	5
38	900	29200 N	5
39	950	29150 N	5
40	15500E-1000S	29100 N	5
41	15600E-29000N	-35 MESH	5
42	29050		5
43	29100		600
44	29150		5
45	29200		5
46	29250		5
47	29300		5
48	29350		30
49	29400		5
50Y	29450		5
52D	29500		5
	29550		5
	29600		40
55	29650		50
56	29700		10
57	29750		5
58	29800		20
59	29850		5
60	15600E-29900N	-35 MESH	5

T. No.	SAMPLE No.		PPB Au
61	15600E-29950N		5
62	15600E-30000N	-35 MESH	5
63	16500E-30000N		100
64	30025		170
65	30050		80
66	30075		200
67	30100		90
68	30125		10
69	30150		5
70	30175		5
71	30200		10
72	30225		5
73	30250		5
74	30275		5
75	16500E-30300N		5
76	16600E-29925N		50
77	29950		130
78	29975		70
79	30000		80
80	30025		130
81	30050	-35 MESH	30
82	30075		20
83	30100	-35 MESH 5.0g	5
84	30125		20
	30150		20
[illegible]	30175		30
87	30200	-35 MESH	5
88	30225		5
89	30250	-35 MESH	5
90	16600E-30300N		20

ACME ANAL AL LABORATORIES LTD. 852 E. HASTINGS ST. VA IVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(6 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Noranda Exploration Co. Ltd. PROJECT 9007-028 324 File # 90-2643 Page 1

P.O. Box 2380, 1050 Davie St., Vancouver BC V6B 3T5

SELECTED Au PPB

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	
14800E 29200N	2	49	19	108	.6	22	5	184	2.15	33	5	ND	2	21	1.0	4	2	77	.15	.083	15	29	.42	215	.02	4	1.43	.01	.08	1	
14800E 29250N	3	43	24	176	.7	30	7	202	3.05	31	5	ND	2	19	1.2	4	2	92	.10	.057	18	31	.35	278	.04	2	1.86	.01	.07	1	
14800E 29300N	5	69	35	318	.4	50	11	499	4.09	39	5	ND	1	36	3.1	6	2	126	.14	.094	19	36	.26	429	.03	2	1.60	.01	.08	1	
14800E 29350N	7	47	30	221	.7	41	6	171	2.76	29	5	ND	3	45	1.3	7	2	185	.07	.077	19	46	.37	296	.03	4	1.67	.01	.08	1	
14800E 29450N	8	45	45	325	.7	48	8	305	3.63	42	5	ND	4	27	2.0	6	2	131	.14	.120	17	35	.48	232	.04	4	1.80	.01	.09	1	
14800E 29450N	2	35	18	106	.5	22	6	179	2.76	23	5	ND	2	14	.6	2	2	76	.09	.053	14	31	.40	164	.04	2	1.74	.01	.06	1	
14800E 29500N	2	22	21	110	1.0	21	7	294	3.09	24	5	ND	2	16	.6	2	2	77	.12	.067	13	30	.40	222	.04	2	1.78	.01	.06	1	
14800E 29550N	3	32	36	227	1.3	31	9	305	3.64	46	5	ND	2	20	1.6	6	2	106	.15	.144	14	36	.50	219	.04	2	1.85	.01	.07	1	
14800E 29600N	8	51	102	274	2.0	40	12	959	3.40	98	5	ND	2	40	1.9	16	2	240	.15	.133	24	46	.42	335	.03	3	1.63	.01	.09	1	
14800E 29650N	2	78	37	117	1.3	34	11	432	3.52	58	6	ND	7	28	.7	7	2	121	.22	.114	19	52	.64	341	.06	5	2.22	.01	.08	1	
14800E 29700N	2	47	58	53	1.5	11	3	121	1.71	22	5	ND	2	25	1.0	3	2	87	.12	.169	16	38	.21	291	.02	2	1.21	.01	.07	1	
14800E 29750N	2	23	29	103	1.4	14	6	415	3.81	25	5	ND	2	15	.7	3	2	83	.10	.080	13	32	.32	190	.05	2	1.77	.01	.05	1	
14800E 29800N	2	36	20	106	.3	28	11	468	3.43	44	5	ND	2	23	.9	4	2	56	.14	.071	17	31	.49	198	.04	4	1.70	.01	.07	1	
14800E 29850N	2	29	19	66	.3	14	6	269	3.04	29	5	ND	1	16	.3	2	2	62	.08	.045	13	22	.24	110	.05	2	1.34	.01	.05	1	
14800E 29900N	1	29	22	94	.2	26	10	413	3.19	36	5	ND	3	16	.3	2	2	47	.14	.042	14	27	.49	139	.05	2	1.59	.01	.06	1	
14800E 29950N	5	44	8	167	1.7	32	4	153	1.27	19	5	ND	2	68	4.2	5	2	35	1.01	.136	12	18	.24	192	.01	6	.68	.01	.07	1	
14800E 30000N	3	22	18	120	.5	22	5	157	1.77	23	5	ND	1	32	1.0	2	2	79	.25	.068	13	28	.41	204	.02	3	1.13	.01	.06	3	
14900E 29200N	6	67	35	360	.6	57	20	1737	2.83	99	5	ND	2	67	11.3	13	3	129	.50	.137	24	37	.71	536	.05	3	1.40	.01	.11	2	
14900E 29250N	2	31	19	118	.6	25	7	321	2.23	64	5	ND	2	28	1.1	5	4	91	.20	.060	15	29	.46	231	.05	3	1.24	.01	.06	1	
14900E 29300N	3	72	30	169	3.3	36	9	548	3.01	69	5	ND	1	21	2.6	5	2	134	.12	.166	21	34	.46	268	.03	4	1.76	.01	.07	1	
14900E 29350N	1	33	22	123	.7	22	4	131	1.82	36	5	ND	1	22	1.2	4	2	82	.11	.085	15	29	.38	187	.01	3	1.29	.01	.05	1	
14900E 29400N	1	36	27	165	.5	31	6	194	2.53	43	5	ND	1	26	.7	5	2	85	.16	.081	16	35	.58	159	.04	3	1.57	.01	.06	1	
14900E 29500N	3	28	25	221	.8	30	6	183	3.14	46	5	ND	2	22	1.1	6	2	171	.12	.078	17	35	.57	207	.04	2	1.69	.01	.08	1	
14900E 29550N	1	61	21	129	.9	30	8	335	2.79	42	5	ND	1	22	1.0	3	2	111	.13	.076	17	38	.55	206	.04	3	1.82	.01	.06	1	
14900E 29600N	1	39	54	175	.8	30	6	207	2.62	34	5	ND	1	23	1.1	4	2	83	.11	.075	15	33	.55	184	.03	3	1.71	.01	.07	1	
14900E 29650N	2	66	24	142	2.6	36	38	3126	2.99	31	5	ND	1	29	3.0	2	2	102	.17	.173	15	34	.39	320	.02	4	1.82	.01	.05	1	
14900E 29700N	1	21	16	55	.4	13	4	187	1.70	20	5	ND	1	18	.3	2	2	87	.07	.080	16	30	.26	145	.01	3	1.42	.01	.03	1	
14900E 29750N	2	38	21	113	.4	30	8	340	3.09	35	5	ND	2	32	.4	2	2	76	.11	.067	19	32	.53	207	.05	2	1.78	.01	.09	1	
14900E 29800N	1	12	16	55	.1	15	5	175	2.28	21	5	ND	1	14	.2	2	2	60	.09	.027	14	26	.39	109	.07	3	1.46	.01	.04	1	
14900E 29850N	5	34	39	337	.4	51	9	339	2.85	61	5	ND	2	29	1.4	7	2	260	.22	.054	22	35	.88	121	.08	3	1.71	.01	.05	1	30
14900E 30000N	4	15	12	119	.5	10	2	57	.72	11	5	ND	1	34	2.9	2	2	56	.27	.079	10	21	.14	116	.01	4	.63	.01	.04	1	10
15000E 29250N	2	129	20	139	.5	22	5	209	4.11	34	5	ND	1	15	1.9	5	2	84	.07	.068	20	32	.07	319	.03	2	1.01	.01	.05	1	10
15000E 29300N	1	38	13	34	.3	10	3	47	1.14	43	5	ND	1	16	.3	2	2	37	.07	.044	12	18	.15	237	.01	3	1.14	.01	.02	2	
15000E 29350N	1	41	20	131	.6	23	9	344	3.77	99	5	ND	1	19	.3	4	2	76	.13	.092	13	33	.38	268	.05	2	2.12	.01	.05	1	
15000E 29400N	1	14	16	32	.3	9	2	46	1.57	61	5	ND	1	16	.2	2	2	46	.12	.062	9	19	.19	187	.01	2	1.01	.01	.03	1	
15000E 29450N	5	47	28	134	.8	33	8	447	3.39	134	5	ND	2	16	.3	7	2	90	.09	.060	15	33	.73	176	.05	2	1.94	.01	.07	1	
15000E 29500N	2	31	24	44	.1	14	3	77	2.18	140	5	ND	1	16	.2	6	3	73	.11	.062	13	28	.34	127	.01	2	1.25	.01	.02	1	
STANDARD C	18	57	37	132	7.3	71	31	1000	3.91	38	17	7	38	53	18.5	15	19	57	.50	.091	38	60	.91	181	.09	35	1.93	.06	.14	14	

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: Pulp

DATE RECEIVED: JUL 18 1990 DATE REPORT MAILED: July 21/90 SIGNED BY C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

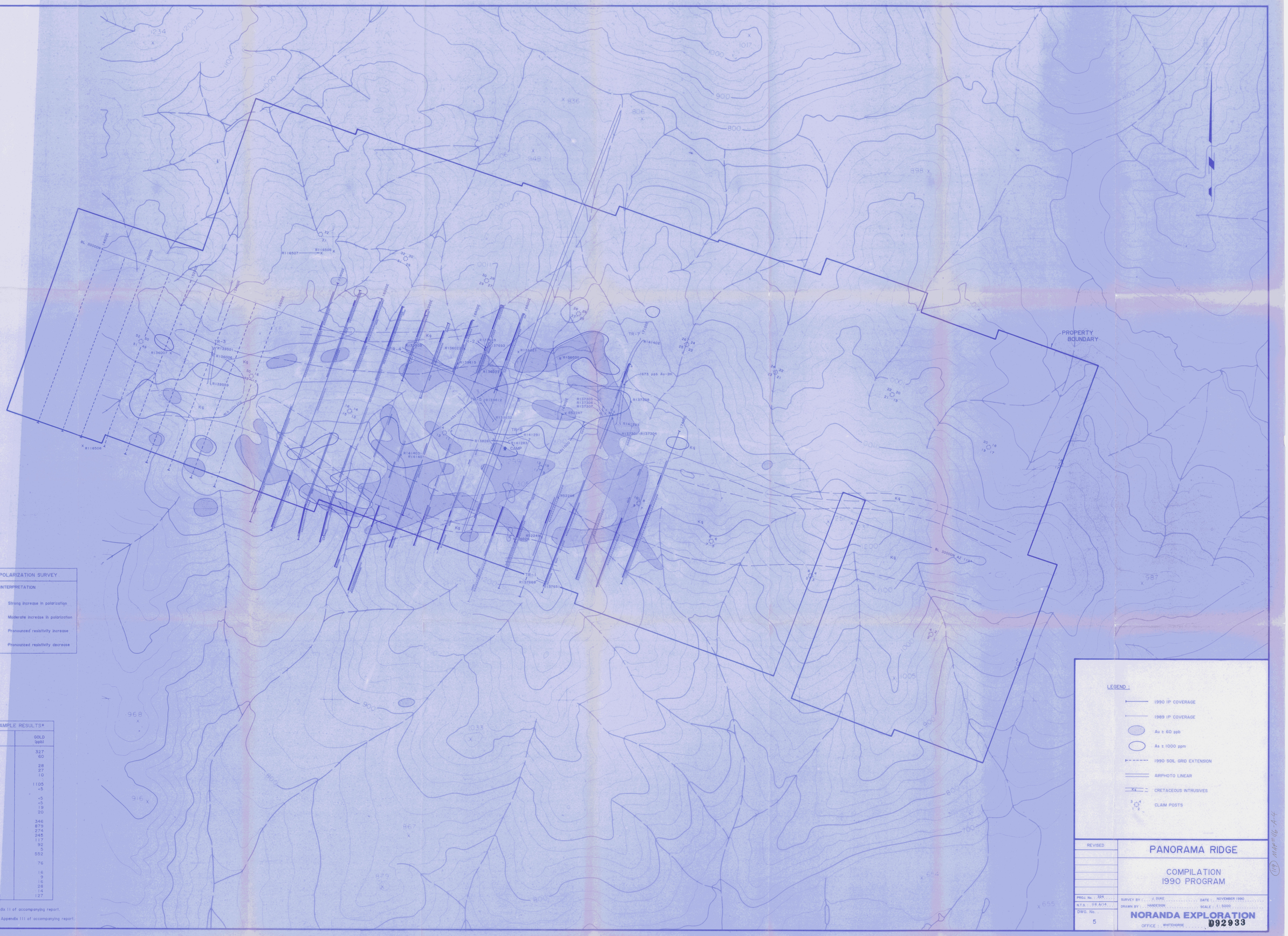
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
15000E 2955ON	2	26	22	79	.2	15	5	195	2.36	78	5	ND	1	14	.6	4	2	57	.10	.034	14	25	.43	172	.05	3	1.49	.01	.04	1
15000E 2960ON	2	38	21	212	.1	65	9	277	3.54	60	5	ND	5	11	.5	3	2	73	.16	.023	18	56	3.41	95	.19	7	3.08	.01	.14	1
15000E 2965ON	2	43	30	123	.5	28	5	153	2.79	218	5	ND	1	18	.7	8	3	93	.14	.056	15	33	.59	112	.03	3	1.63	.01	.05	1
15000E 2970ON	1	41	26	171	.9	30	23	2339	3.27	63	5	ND	1	31	6.1	2	2	95	.24	.155	15	29	.42	310	.05	3	1.75	.01	.06	1
15000E 2975ON	1	30	14	76	.3	21	6	278	3.01	143	5	ND	2	18	.4	4	2	57	.11	.062	16	32	.55	192	.05	2	1.70	.01	.09	1
15000E 2980ON	1	61	17	127	.3	39	11	286	3.93	82	9	ND	6	27	.9	10	2	50	.12	.045	19	31	.59	169	.07	2	2.01	.01	.11	1
15000E 2985ON	4	48	22	121	.5	37	8	297	3.47	65	8	ND	1	36	.7	8	2	75	.16	.077	24	34	.73	259	.04	3	1.79	.01	.12	1
15000E 2990ON	1	33	64	124	1.8	19	19	908	3.53	165	6	ND	3	49	.5	7	2	50	.63	.132	47	28	.54	375	.02	3	2.14	.01	.06	1
15000E 2995ON	1	45	36	119	.4	26	6	263	2.84	103	5	ND	1	32	.7	6	2	72	.24	.089	17	33	.62	217	.04	3	1.71	.01	.06	1
15000E 3000ON	2	88	19	103	5.5	16	2	69	.91	5	7	ND	2	50	4.2	3	3	67	.24	.178	10	32	.06	162	.01	3	.59	.01	.06	2
15100E 2920ON	2	32	23	51	.7	14	4	179	1.48	56	5	ND	1	26	.5	2	2	53	.16	.106	15	20	.25	270	.03	3	1.23	.01	.06	3
15100E 2925ON	4	48	19	87	.2	26	5	203	2.95	145	5	ND	2	23	.4	5	2	85	.17	.066	14	30	.57	187	.07	2	1.73	.01	.06	1
15100E 2930ON	3	61	29	108	.7	27	6	365	2.41	92	5	ND	1	44	1.5	5	2	77	.45	.121	13	28	.54	302	.04	3	1.57	.01	.09	1
15100E 2935ON	5	60	48	87	.4	34	10	516	3.61	285	5	ND	1	31	.6	14	4	107	.23	.082	18	37	.65	342	.09	4	1.61	.01	.09	1
15100E 2940ON	11	69	68	109	3.5	28	5	274	3.40	221	5	ND	1	38	.9	15	5	244	.27	.172	19	40	.48	280	.04	2	1.60	.01	.11	1
15100E 2945ON	4	48	33	106	.8	14	8	405	3.67	162	5	ND	1	32	1.0	13	2	64	.21	.060	15	32	.78	328	.07	2	2.23	.01	.14	1
15100E 2950ON	2	47	45	86	1.2	19	7	296	3.39	274	5	ND	1	22	.8	7	5	73	.13	.070	13	30	.46	239	.05	2	1.63	.01	.08	1
15100E 2955ON	3	24	37	70	.5	17	7	280	2.89	305	6	ND	1	16	.5	3	2	70	.13	.063	13	26	.41	143	.05	2	1.39	.01	.07	1
15100E 2960ON	9	45	50	71	1.4	25	6	574	2.99	441	5	ND	1	20	.8	8	5	166	.14	.102	12	24	.34	229	.05	2	1.05	.01	.09	1
15100E 2965ON	3	57	69	72	1.6	18	5	227	2.69	399	5	ND	1	16	1.3	21	5	43	.10	.170	11	26	.23	173	.01	2	1.39	.01	.06	1
15100E 2970ON	3	42	33	103	.6	25	4	523	2.23	125	7	ND	1	47	2.6	8	2	40	.36	.146	14	18	.16	263	.03	2	.92	.01	.10	1
15100E 2975ON	1	20	12	117	.3	22	10	1150	2.85	47	5	ND	1	67	3.9	2	2	51	.73	.131	9	22	.30	268	.06	3	1.15	.01	.07	1
15100E 2980ON	1	60	12	78	.3	30	7	211	3.98	120	5	ND	3	45	.2	9	2	51	.20	.051	19	28	.70	188	.08	2	2.10	.01	.20	1
15100E 2985ON	1	46	56	269	.3	29	10	469	4.07	336	5	ND	1	44	3.6	19	2	46	.26	.106	37	32	.47	220	.01	2	1.89	.01	.05	1
15100E 2990ON	1	27	249	122	1.2	23	10	369	3.67	404	5	ND	6	37	.7	24	4	65	.45	.058	19	38	.97	224	.05	2	2.56	.01	.06	1
15100E 2995ON	2	48	25	223	.7	46	8	292	3.18	64	5	ND	1	59	4.7	5	2	89	.36	.111	20	29	.40	378	.02	3	1.43	.01	.07	1
15100E 3000ON	21	99	49	638	2.0	92	10	463	3.29	77	6	ND	1	107	11.2	16	2	354	.43	.185	28	54	.40	489	.01	6	1.53	.01	.12	1
15200E 000S	4	69	126	273	.9	50	14	1475	4.28	468	5	ND	1	51	3.4	20	9	53	.28	.102	17	27	.50	282	.02	3	1.34	.01	.10	1
15200E 100S	9	108	45	296	1.7	62	8	300	4.06	179	9	ND	1	100	1.5	11	2	126	.33	.221	29	45	.64	277	.02	3	1.78	.01	.19	1
15200E 200S	2	110	147	152	1.6	49	12	459	4.67	652	5	ND	1	98	2.0	5	14	57	.39	.122	24	34	.69	234	.03	6	1.72	.01	.10	2
15200E 250S	3	41	366	71	1.3	17	4	147	2.99	247	5	ND	1	17	.3	27	6	88	.13	.207	6	26	.11	112	.01	2	1.18	.01	.01	1
15200E 300S	13	536	472	324	5.3	137	36	1099	7.33	2182	7	ND	1	42	6.7	70	19	78	.21	.146	12	31	.55	173	.02	5	1.77	.01	.06	1
15200E 350S	16	95	58	97	1.1	73	5	222	4.22	730	6	ND	1	31	.7	25	26	222	.32	.168	16	36	.65	239	.03	3	1.34	.01	.12	1
15200E 400S	9	97	40	88	.9	43	11	601	3.64	534	5	ND	1	24	.3	8	7	204	.25	.147	16	35	.51	193	.07	5	1.59	.01	.09	1
15200E 450S	4	58	19	122	.8	22	8	666	3.18	525	5	ND	1	29	1.9	3	6	88	.23	.069	12	29	.49	249	.05	2	1.38	.01	.09	1
15200E 500S	2	74	56	123	1.6	25	9	477	3.79	1390	5	ND	1	25	1.0	15	22	61	.16	.077	15	30	.59	291	.07	5	1.45	.01	.11	1
STANDARD C	18	57	37	132	7.2	72	31	1006	3.97	38	21	7	38	52	18.5	14	18	57	.50	.094	38	60	.92	182	.09	35	1.96	.06	.14	12

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
15200E 550S	5	162	55	97	2.5	33	6	251	3.45	1050	7	ND	2	34	.9	22	23	102	.21	.070	21	34	.70	368	.08	2	1.65	.01	.19	1
15200E 600S	6	272	232	121	11.5	27	6	184	5.99	3450	8	ND	6	51	.7	127	93	125	.15	.118	27	44	.70	294	.09	4	2.39	.01	.19	3
15200E 650S	5	121	75	130	1.8	23	11	478	4.13	852	7	ND	1	41	1.1	35	28	105	.25	.147	22	31	.45	344	.06	2	1.57	.01	.18	1
15200E 700S	7	69	35	64	1.8	14	5	136	3.33	281	5	ND	2	18	.4	15	15	140	.10	.113	18	40	.18	408	.07	2	1.35	.01	.10	1
15200E 750S	1	49	19	76	1.4	17	6	186	3.59	221	5	ND	3	23	.4	10	2	74	.14	.047	13	33	.33	162	.05	2	2.00	.01	.07	1
15200E 800S	1	52	20	94	.8	25	8	282	3.61	134	5	ND	4	13	.2	3	2	73	.09	.037	12	39	.44	194	.08	2	2.58	.01	.08	1
15200E 850S	2	41	14	70	.8	22	6	179	3.18	93	5	ND	4	16	.2	6	2	64	.10	.042	15	35	.47	274	.06	2	2.16	.01	.07	1
15200E 900S	5	76	27	100	.9	29	5	115	2.99	46	5	ND	1	26	.2	8	2	108	.08	.061	18	33	.32	421	.03	3	1.38	.01	.11	1
15200E 950S	1	86	19	161	.8	30	9	269	3.96	139	5	ND	3	32	.8	31	2	78	.19	.073	15	37	.41	506	.05	2	2.22	.01	.09	1
15200E 1100S	1	30	18	143	.7	18	8	475	3.06	54	5	ND	1	34	.9	7	2	74	.28	.072	14	29	.29	604	.05	3	1.56	.01	.08	1
15300E 00S	1	28	12	92	1.5	18	3	50	1.14	12	6	ND	1	16	1.5	2	3	22	.11	.121	6	15	.07	242	.01	3	.63	.01	.07	1
15300E 50S	4	65	38	101	1.9	18	3	113	2.02	61	5	ND	1	35	.9	4	3	53	.08	.098	16	27	.16	294	.01	3	1.16	.01	.10	1
15300E 100S	8	132	58	315	1.3	62	18	652	5.49	155	5	ND	1	93	.9	11	3	83	.07	.192	22	32	.28	418	.02	3	1.32	.01	.24	1
15300E 150S	2	50	32	160	.8	26	8	416	3.44	149	7	ND	3	148	.5	6	2	84	.53	.092	17	41	1.33	244	.06	3	2.80	.01	.17	1
15300E 250S	12	121	32	87	1.3	32	7	235	3.69	875	5	ND	1	24	.9	20	20	105	.12	.074	20	28	.39	196	.08	3	1.33	.01	.13	1
15300E 300S	1	100	19	77	.1	26	6	252	3.92	476	5	ND	1	21	.3	8	3	77	.10	.047	15	40	1.03	149	.11	3	2.56	.01	.15	1
15300E 350S	1	165	29	82	.4	34	9	219	3.48	687	5	ND	3	44	.5	14	10	50	.16	.047	21	34	.79	268	.09	3	2.06	.01	.14	1
15300E 400S	1	255	31	78	1.8	30	8	247	3.35	770	6	ND	2	21	.6	16	10	52	.13	.143	19	40	.80	223	.10	3	2.29	.01	.18	1
15300E 450S	2	137	56	54	1.2	17	4	152	2.72	1138	5	ND	1	19	.5	24	19	49	.10	.084	20	27	.25	172	.03	2	1.19	.01	.08	1
15300E 500S	6	213	154	91	18.8	30	6	354	3.70	3882	5	ND	1	31	.8	104	37	145	.24	.160	17	43	.61	260	.03	3	1.69	.01	.12	1
15300E 550S	1	201	25	68	.9	20	6	245	2.98	1015	5	ND	1	17	.4	9	16	53	.13	.040	16	34	.62	160	.09	2	1.66	.01	.11	1
15300E 600S	1	158	33	60	1.1	19	5	132	3.46	787	5	ND	1	18	.3	19	9	56	.10	.035	16	32	.54	175	.08	3	1.86	.01	.11	1
15300E 650S	1	62	32	65	1.9	18	6	172	3.42	570	5	ND	1	18	.4	9	12	64	.12	.065	14	31	.37	199	.05	2	1.78	.01	.07	2
15300E 700S	2	63	161	80	3.0	18	7	225	3.44	722	5	ND	1	25	.3	28	24	61	.16	.137	15	31	.41	292	.04	2	1.79	.01	.06	1
15300E 750S	3	59	40	58	2.0	15	4	119	3.04	465	5	ND	1	17	.2	13	8	59	.08	.050	14	31	.34	179	.05	2	1.65	.01	.07	1
15300E 800S	1	77	23	74	.9	20	9	487	2.91	344	5	ND	1	18	.3	10	5	58	.11	.048	13	34	.44	198	.06	2	1.83	.01	.06	1
15300E 850S	3	77	31	76	1.8	14	4	202	2.69	317	5	ND	1	26	.4	26	6	62	.11	.084	16	26	.21	209	.04	2	.96	.01	.07	1
15300E 900S	2	30	76	83	1.8	11	4	184	3.56	118	5	ND	1	16	.3	22	2	87	.10	.071	14	25	.14	203	.07	2	1.00	.01	.10	1
15300E 950S	1	29	20	144	.4	25	7	264	3.71	48	5	ND	2	15	.5	4	2	70	.13	.042	13	30	.62	159	.11	2	1.60	.01	.09	1
15300E 1000S	1	25	62	311	.8	28	7	289	3.21	64	5	ND	2	9	1.6	6	2	70	.10	.029	11	42	1.17	131	.13	2	2.06	.01	.08	1
15400E 29000N	3	38	16	110	.9	28	12	756	2.58	10	5	ND	2	27	1.8	2	2	63	.26	.052	19	23	.20	851	.04	2	1.14	.01	.08	1
15400E 29050N	2	24	26	102	.5	22	10	473	3.33	29	5	ND	2	24	.8	3	2	91	.10	.062	16	34	.35	405	.06	3	1.79	.01	.11	1
15400E 29100N	1	13	18	60	.2	13	5	162	2.46	22	5	ND	2	15	.4	2	2	66	.13	.029	12	26	.29	230	.06	2	1.70	.01	.05	1
15400E 29150N	6	68	21	118	.5	21	4	147	4.43	43	5	ND	1	31	.6	8	2	212	.09	.176	18	68	.28	451	.04	2	1.73	.01	.11	1
15400E 29200N	1	22	15	79	.2	25	8	182	3.25	25	5	ND	2	12	.2	2	2	57	.09	.031	14	31	.52	138	.07	3	1.71	.01	.08	1
15400E 29250N	2	31	42	189	.6	31	7	230	3.76	39	5	ND	1	11	1.4	6	2	68	.08	.037	13	28	.36	131	.08	2	1.42	.01	.08	1
STANDARD C	18	57	38	132	7.1	72	29	992	3.86	42	16	7	38	53	18.5	15	19	57	.49	.092	38	59	.90	181	.09	35	1.91	.06	.14	13

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
15400E 29300N	11	42	99	97	2.0	21	3	110	2.60	95	5	ND	1	21	1.2	21	3	212	.22	.126	13	32	.25	141	.02	3	1.04	.01	.06	1
15400E 29350N	4	72	155	85	3.1	14	4	271	3.46	460	5	ND	1	23	.8	43	3	86	.13	.094	16	27	.20	188	.06	2	1.18	.01	.08	1
15400E 29400N	2	96	37	96	1.4	22	7	286	3.77	362	5	ND	1	26	.6	32	5	58	.20	.076	18	31	.44	266	.05	3	1.90	.01	.12	2
15400E 29450N	2	183	58	83	4.1	19	5	172	4.02	1310	5	ND	2	22	.6	26	22	65	.11	.060	17	35	.54	256	.06	2	2.03	.01	.10	1
15400E 29500N	1	89	62	61	2.5	14	4	132	2.84	1234	5	ND	3	18	.3	20	19	48	.12	.027	14	25	.33	170	.07	2	1.27	.01	.08	5
15400E 29550N	1	204	28	67	1.1	25	6	183	2.99	1274	5	ND	2	17	.5	16	14	49	.13	.033	17	34	.75	182	.10	3	1.88	.01	.11	3
15400E 29600N	1	59	38	102	1.1	19	6	298	3.28	1450	5	ND	3	14	.5	15	21	54	.12	.030	14	33	.59	172	.10	5	1.78	.01	.09	1
15400E 29650N	1	156	104	77	2.2	17	6	301	4.23	10305	5	ND	1	23	.7	69	98	51	.11	.060	18	32	.50	185	.03	2	1.82	.01	.09	2
15400E 29700N	2	101	23	102	.7	48	6	239	3.24	780	5	ND	1	86	.7	15	8	90	1.25	.522	16	71	.49	196	.01	3	1.81	.01	.10	1
15400E 29750N	1	204	40	70	.5	21	18	469	3.44	1458	5	ND	5	69	.8	39	26	43	.19	.060	23	32	.60	300	.08	3	1.90	.01	.10	1
15400E 29800N	2	196	64	92	.6	29	9	370	3.41	1627	5	ND	3	166	1.1	30	12	68	.41	.090	28	40	1.05	398	.08	2	2.87	.01	.28	1
15400E 29850N	2	46	17	72	.2	34	5	165	2.86	87	5	ND	2	33	.6	4	2	57	.11	.072	14	33	.65	132	.06	4	2.00	.01	.10	16
15400E 29900N	2	30	9	66	.9	14	3	46	1.33	42	5	ND	1	22	.3	2	2	36	.15	.144	5	17	.13	155	.01	3	.72	.01	.07	2
15400E 29950N	5	75	35	173	.4	66	12	427	4.64	130	5	ND	1	28	.8	10	2	75	.12	.093	25	40	1.03	239	.05	3	2.25	.01	.19	1
15400E 30000N	1	47	38	163	.1	46	7	277	3.99	50	5	ND	1	46	.7	13	2	66	.10	.073	18	39	1.05	144	.07	3	1.96	.01	.15	1
15500E 050S	14	170	76	88	2.0	15	6	315	7.06	99	6	ND	4	115	2.4	14	2	173	.22	.376	40	66	.64	110	.04	5	1.88	.03	.49	1
15500E 100S	6	55	20	75	.5	31	4	131	3.52	102	12	ND	2	24	.3	6	9	125	.09	.166	15	41	.21	163	.01	2	1.16	.01	.09	2
15500E 200S	3	109	284	78	3.0	35	8	381	3.49	556	5	ND	1	16	.6	20	17	70	.12	.095	21	31	.23	120	.02	2	1.35	.01	.05	1
15500E 250S	2	73	150	80	.4	41	9	338	3.97	866	5	ND	2	23	.4	46	9	66	.25	.095	16	50	.89	162	.07	4	1.94	.01	.14	1
15500E 300S	1	36	45	70	.6	25	7	350	3.03	353	5	ND	1	20	.4	5	2	53	.16	.071	15	31	.48	148	.03	2	1.81	.01	.07	1
15500E 350S	1	84	40	77	1.4	17	9	435	2.93	1307	5	ND	3	24	1.0	10	18	53	.16	.049	18	32	.56	237	.09	3	1.76	.01	.11	1
15500E 400S	1	69	56	69	.7	18	6	210	2.92	1209	5	ND	3	20	.5	14	14	55	.16	.038	16	31	.56	188	.09	2	1.79	.01	.08	1
15500E 450S	1	101	24	58	.6	17	6	145	2.93	998	5	ND	2	27	.3	3	10	54	.20	.037	17	30	.54	176	.08	3	1.67	.01	.09	1
15500E 500S	1	632	54	108	6.5	10	6	147	5.71	2498	5	ND	9	122	.7	24	18	87	.18	.108	65	58	.90	247	.19	5	3.63	.05	.34	3
15500E 550S	1	43	35	115	.7	13	10	537	3.58	386	5	ND	2	17	1.5	2	6	72	.11	.058	13	25	.29	177	.11	5	1.47	.01	.07	1
15500E 600S	2	80	28	109	1.5	19	9	694	3.72	364	7	ND	3	25	2.1	6	6	83	.16	.080	15	38	.56	284	.09	6	2.07	.01	.11	1
15500E 650S	3	85	1480	86	11.6	15	5	344	4.02	4294	5	ND	1	15	.7	755	40	71	.12	.059	14	27	.27	140	.06	2	1.44	.01	.05	3
15500E 700S	3	26	66	63	.5	13	4	272	3.41	93	5	ND	1	21	.2	16	2	74	.13	.070	13	26	.21	158	.03	2	1.14	.01	.07	1
15500E 750S	7	303	608	162	4.3	53	9	393	4.79	950	5	ND	2	24	2.1	328	7	160	.28	.219	23	51	.74	241	.05	2	2.05	.01	.19	1
15500E 800S	4	50	42	121	.7	13	6	253	4.89	82	5	ND	6	17	1.2	14	2	73	.16	.056	13	32	.54	135	.13	3	1.86	.01	.06	1
15500E 850S	1	24	23	138	.5	18	11	882	3.09	23	5	ND	3	25	2.6	6	2	55	.22	.085	11	28	.55	282	.10	2	1.72	.01	.11	1
15500E 900S	2	31	42	118	1.4	30	11	321	3.72	34	5	ND	3	28	1.3	11	2	68	.18	.043	11	37	.66	169	.10	2	2.23	.01	.10	1
15500E 950S	1	26	31	432	.4	31	13	370	3.54	37	5	ND	5	15	2.0	8	2	65	.11	.037	14	39	.70	171	.10	3	2.42	.01	.09	1
15500E 1000S	3	23	194	267	2.8	23	7	417	3.13	53	5	ND	2	21	1.4	43	2	75	.13	.056	14	30	.49	317	.07	3	1.61	.01	.09	1
15600E 29000N	6	45	27	234	1.4	38	6	219	3.23	26	5	ND	3	59	1.7	6	2	133	.25	.115	19	41	.25	560	.04	4	1.16	.01	.18	1
15600E 29050N	6	75	330	881	2.8	99	23	1423	7.11	292	5	ND	3	65	9.5	35	2	178	.32	.136	28	55	1.05	694	.05	7	2.74	.01	.16	1
STANDARD C	18	58	39	132	7.1	71	31	1003	3.93	39	15	7	40	53	18.5	15	18	57	.50	.091	38	60	.92	181	.09	35	1.95	.06	.14	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au PPB
15600E 29100N	2	24	23	148	.4	21	11	694	3.25	19	5	ND	3	31	.8	5	2	92	.21	.068	13	33	.41	426	.05	2	1.49	.01	.11	1	60
15600E 29150N	3	38	62	131	2.2	32	8	229	3.31	46	5	ND	3	31	.7	19	2	68	.15	.081	16	34	.65	268	.05	3	2.02	.01	.13	2	
15600E 29200N	1	22	22	92	.3	29	8	190	2.87	27	5	ND	5	22	.3	11	2	55	.17	.021	13	32	.77	171	.10	3	2.00	.01	.15	1	
15600E 29250N	1	27	101	237	.7	33	9	193	3.02	62	5	ND	5	18	1.3	33	2	59	.17	.033	15	34	.75	148	.09	3	1.91	.01	.11	1	
15600E 29300N	1	33	22	290	.7	41	13	195	3.16	31	5	ND	5	16	1.5	13	2	62	.15	.046	13	39	.88	163	.07	3	2.44	.01	.12	1	
15600E 29350N	4	211	73	572	.2	191	19	300	4.07	126	5	ND	1	18	2.0	56	2	117	.16	.072	14	50	1.08	193	.04	2	2.91	.01	.08	1	30
15600E 29400N	4	52	113	71	7.2	16	5	198	3.67	386	5	ND	4	20	.4	39	7	72	.09	.052	16	30	.33	175	.05	2	1.82	.01	.08	1	
15600E 29450N	4	26	22	68	.4	20	6	162	3.62	139	5	ND	3	22	.4	9	3	175	.21	.184	15	36	.36	185	.05	4	1.35	.01	.11	1	
15600E 29500N	3	64	46	66	1.7	17	6	188	3.37	616	7	ND	5	16	.4	16	13	87	.13	.032	15	25	.32	150	.09	2	1.35	.01	.08	3	
15600E 29550N	1	43	19	58	.6	18	7	157	2.75	319	5	ND	4	26	.6	2	5	53	.20	.026	13	25	.48	125	.08	2	1.74	.01	.06	1	
15600E 29600N	1	140	19	75	.7	21	10	315	3.03	1341	5	ND	4	38	.5	4	21	50	.27	.049	16	31	.64	171	.08	2	2.05	.01	.10	1	40
15600E 29650N	1	211	58	101	1.6	20	10	490	3.16	1510	5	ND	2	34	.9	16	25	49	.22	.092	23	30	.56	228	.04	3	1.93	.01	.10	1	50
15600E 29700N	3	37	29	70	.5	33	7	206	3.51	790	5	ND	5	28	.2	3	13	153	.25	.067	16	35	.81	178	.09	4	1.83	.01	.09	1	10
15600E 29750N	3	41	24	73	2.0	38	9	433	2.47	179	5	ND	1	35	.9	2	7	95	.27	.170	9	30	.20	345	.01	2	1.05	.01	.09	1	
15600E 29800N	4	92	73	72	.8	43	8	207	3.55	674	5	ND	2	29	.6	11	14	95	.18	.062	20	35	.65	208	.07	3	1.57	.01	.09	1	20
15600E 29850N	1	40	39	68	.4	21	8	209	3.76	488	5	ND	4	15	.3	14	15	55	.11	.032	15	33	.61	134	.07	2	2.12	.01	.10	5	
15600E 29900N	5	111	25	67	.5	20	4	167	4.45	193	5	ND	1	38	.5	10	2	102	.11	.104	17	37	.54	260	.04	4	1.99	.03	.18	1	
15600E 29950N	15	233	53	78	1.4	40	12	422	6.86	142	11	ND	3	61	.4	24	10	120	.28	.221	28	50	.91	242	.06	2	3.11	.04	.36	2	
15600E 30000N	2	38	11	74	1.3	13	4	155	2.02	41	6	ND	3	23	.9	2	2	36	.13	.123	7	19	.19	107	.02	2	1.01	.02	.10	1	
16500E 30000N	1	107	24	68	.9	20	4	161	2.13	177	5	ND	3	15	.4	4	2	56	.14	.037	10	35	.67	176	.14	5	1.34	.01	.24	1	100
16500E 30025N	2	120	17	50	.6	20	4	131	1.50	126	5	ND	1	24	2.9	2	2	45	.19	.045	12	29	.47	158	.09	4	1.14	.01	.14	2	170
16500E 30050N	3	109	26	85	.1	27	5	190	2.89	307	5	ND	3	17	.9	4	5	115	.17	.042	13	38	.69	131	.15	3	1.90	.01	.13	1	80
16500E 30075N	9	429	38	82	1.0	39	6	261	5.92	350	5	ND	4	94	.7	10	8	133	.31	.232	23	57	1.03	352	.11	2	2.46	.09	.48	1	400
16500E 30100N	4	224	23	71	.6	43	7	301	2.93	109	5	ND	1	31	.5	2	3	121	.20	.126	15	66	.82	280	.05	3	2.36	.02	.28	1	90
16500E 30125N	2	56	34	91	.1	26	6	316	3.82	96	5	ND	3	15	.4	2	2	90	.09	.049	14	39	.66	140	.14	2	1.98	.01	.15	1	
16500E 30150N	3	60	91	92	2.0	17	6	435	3.39	371	5	ND	1	19	1.1	27	3	79	.11	.082	14	32	.33	171	.05	2	1.55	.01	.09	1	
16500E 30175N	2	26	40	86	.4	19	9	507	4.49	405	5	ND	1	17	.5	12	2	114	.14	.058	13	38	.53	141	.05	2	1.69	.01	.07	1	
16500E 30200N	1	24	20	112	.1	25	10	353	3.60	30	5	ND	4	14	.8	2	2	57	.12	.034	13	38	.62	142	.09	2	2.63	.01	.06	1	
16500E 30225N	1	13	22	40	.1	9	3	96	1.80	43	5	ND	1	17	.6	2	2	65	.06	.022	14	17	.14	93	.08	2	.99	.01	.03	2	
16500E 30250N	1	22	19	66	.1	18	7	308	3.34	50	5	ND	4	12	.4	2	2	52	.09	.027	13	28	.47	79	.08	2	1.75	.01	.04	1	
16500E 30275N	7	66	22	73	.2	32	4	113	2.30	73	5	ND	1	16	.9	3	3	95	.10	.083	13	31	.30	140	.02	2	1.46	.01	.04	1	
16500E 30300N	6	29	20	62	.1	17	5	221	2.88	57	5	ND	1	14	.4	2	2	102	.10	.060	14	32	.34	103	.05	2	1.67	.01	.04	1	
16600E 29925N	1	231	69	96	4.2	14	7	362	3.23	3548	5	ND	2	55	1.3	19	28	47	.47	.059	25	26	.46	184	.03	3	1.68	.01	.05	1	50
16600E 29950N	2	114	70	118	.7	10	6	359	3.34	2081	5	ND	7	41	3.2	32	28	55	.27	.043	18	27	.37	204	.11	2	1.19	.01	.09	1	130
16600E 29975N	1	109	39	85	.4	16	6	206	2.55	1519	5	ND	2	30	.6	8	20	39	.25	.044	17	23	.40	161	.06	2	1.14	.01	.07	1	70
16600E 30000N	1	207	28	81	.3	22	10	393	2.86	1768	5	ND	4	47	.6	12	22	42	.45	.069	24	27	.52	156	.07	2	1.57	.01	.08	1	80
STANDARD C	18	58	38	132	7.2	70	31	991	3.87	38	16	7	38	53	18.4	15	18	56	.50	.090	38	59	.91	181	.09	34	1.92	.06	.14	11	

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
16600E 30025N	2	221	26	71	1.0	20	7	202	3.57	1043	7	ND	5	21	.6	9	11	58	.29	.082	43	40	.62	100	.05	2	1.95	.01	.09	1
16600E 30050N	3	207	32	98	1.0	23	10	244	2.61	369	6	ND	2	51	1.5	18	4	48	.51	.094	40	29	.54	171	.04	2	1.46	.01	.14	1
16600E 30075N	2	41	23	50	.5	9	3	153	2.48	123	6	ND	3	11	.2	2	5	74	.16	.031	15	27	.28	64	.09	2	1.27	.01	.06	1
16600E 30100N	1	37	14	60	.3	14	3	73	1.42	44	5	ND	1	19	.6	2	2	32	.15	.075	6	18	.24	88	.04	2	.98	.02	.05	1
16600E 30125N	1	112	24	92	.1	24	7	257	3.56	326	5	ND	1	16	.7	2	4	76	.11	.048	13	37	.54	106	.12	2	2.33	.01	.05	1
16600E 30150N	9	59	32	76	.4	42	6	272	2.62	410	7	ND	1	18	.5	4	6	193	.19	.075	14	34	.38	149	.05	2	1.56	.01	.07	1
16600E 30175N	7	63	82	60	1.4	20	4	181	2.61	581	5	ND	2	22	.3	21	5	103	.13	.099	12	34	.26	167	.03	6	1.11	.02	.08	1
16600E 30200N	5	65	22	83	.8	15	3	104	2.16	178	5	ND	1	22	.6	13	2	96	.15	.144	8	34	.08	155	.01	2	.85	.01	.05	1
16600E 30225N	3	35	15	69	.8	9	2	56	1.21	66	5	ND	3	16	1.0	8	2	32	.13	.148	5	15	.06	109	.01	3	.55	.02	.06	1
16600E 30250N	1	65	21	174	.6	32	7	490	1.00	23	5	ND	1	37	16.3	2	2	20	.27	.075	6	13	.07	226	.01	2	.55	.02	.03	1
16600E 30200N	2	38	22	48	.1	9	3	155	2.46	138	5	ND	2	10	.2	2	7	70	.14	.032	14	26	.27	63	.09	2	1.23	.01	.03	1
STANDARD C	18	63	39	132	7.2	72	30	996	3.91	43	20	8	40	52	18.6	16	20	59	.50	.092	40	61	.91	182	.09	35	1.94	.06	.13	12



INDUCED POLARIZATION SURVEY

INTERPRETATION

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

GRAB SAMPLE RESULTS*

SAMPLE NUMBER	GOLD (ppb)
R52247	327
R52248	60
R116506	28
R116507	27
R116508	10
R136006	1105
R136007	>5
R136020	>5
R136021	>5
R136022	19
R136026	20
R137301	346
R137302	879
R137303	274
R137304	245
R137305	117
R137306	92
R137307	5
R137308	552
R138261	76
R141403	16
R141404	9
R141405	16
R141406	26
R141407	14
R141408	127

*I.C.P. data in Appendix II of accompanying report.

Trench results are in Appendix III of accompanying report.

LEGEND :

- 1990 IP COVERAGE
- 1989 IP COVERAGE
- Au ≥ 60 ppb
- As ≥ 1000 ppm
- 1990 SOIL GRID EXTENSION
- AIRPHOTO LINEAR
- Kg — CRETACEOUS INTRUSIVES
- CLAIM POSTS

REVISED

PANORAMA RIDGE

COMPILATION
1990 PROGRAM

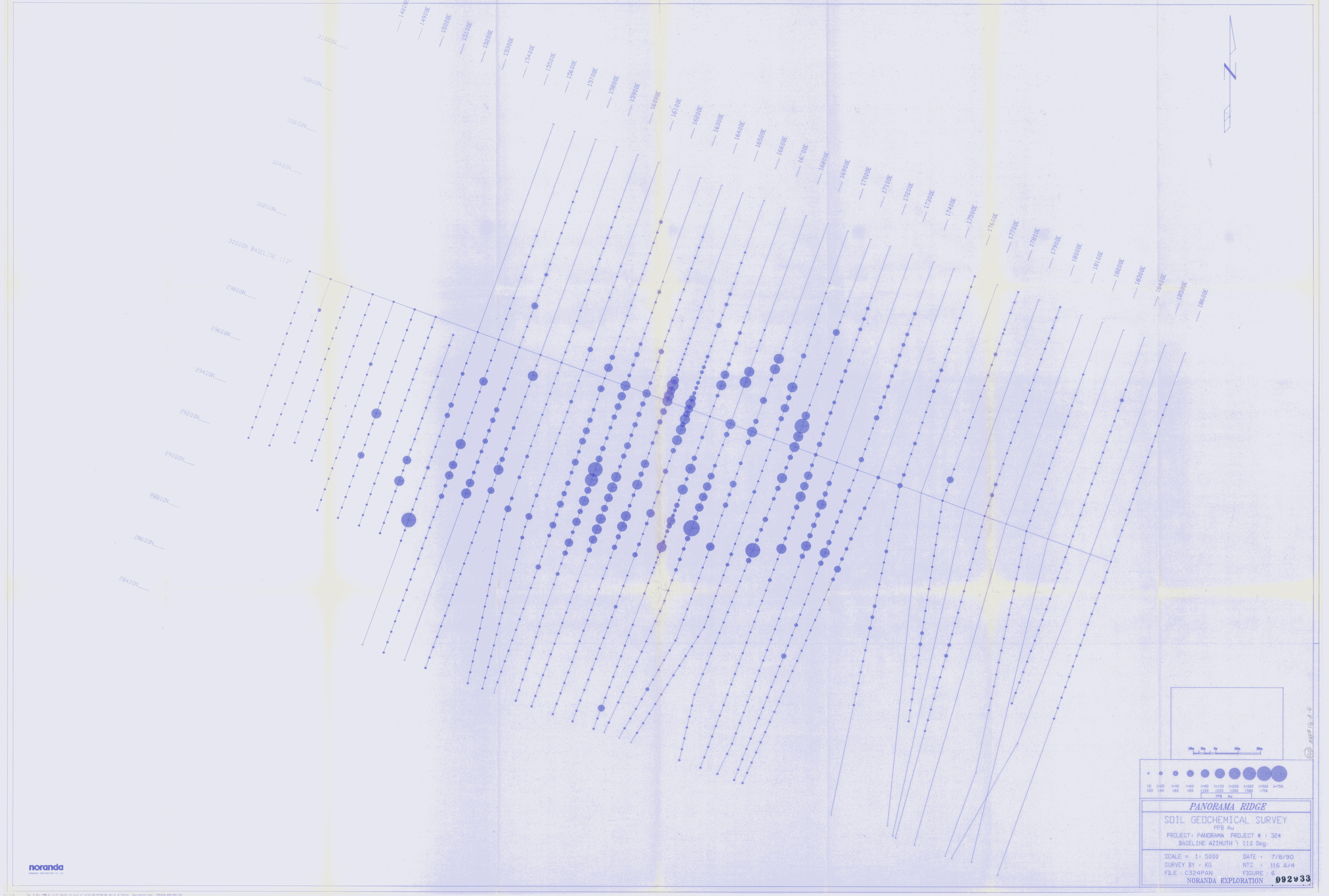
PROJ. No. : 324
N.T.S. : 116 A/14
DWG. No. : 5

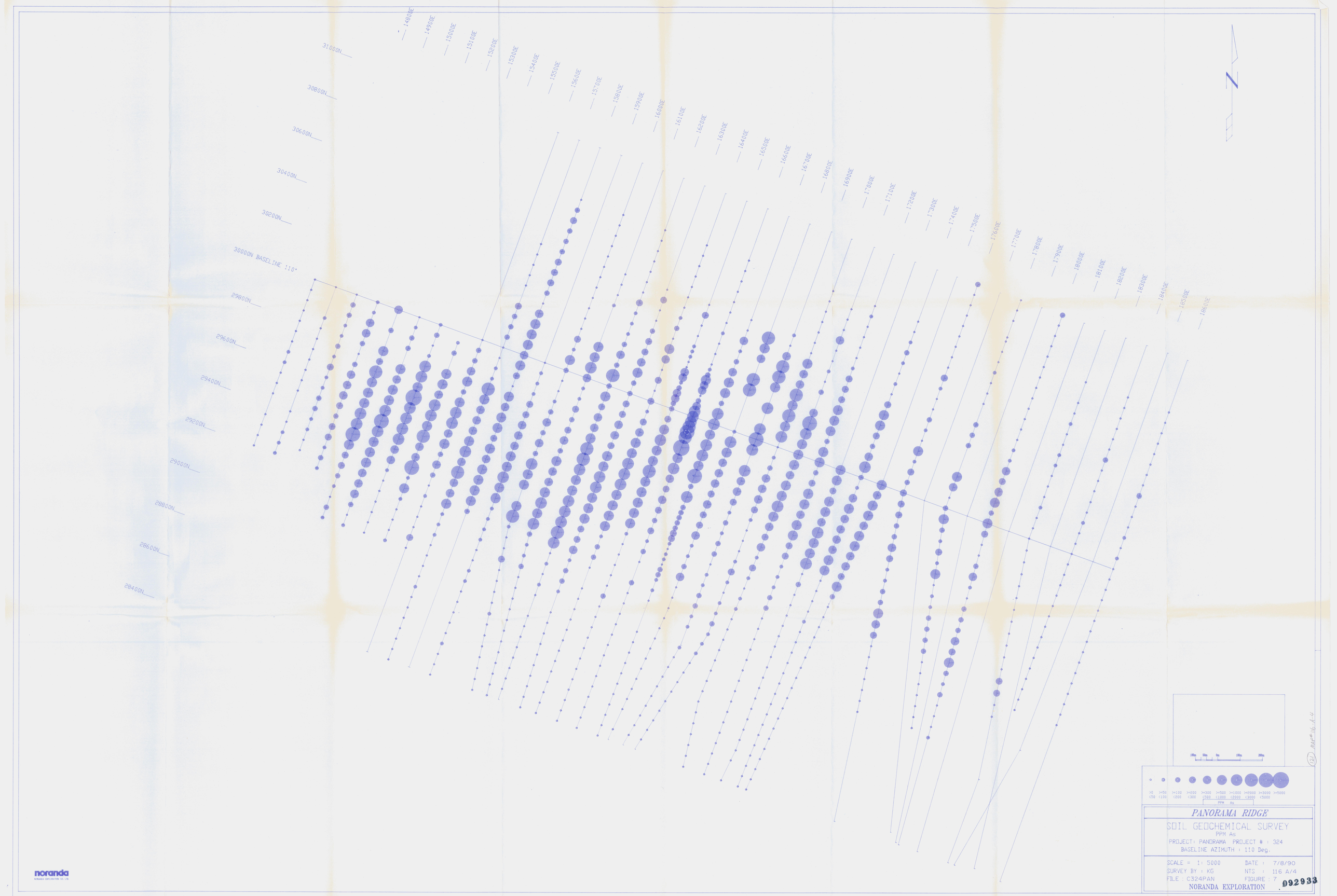
SURVEY BY : J. DUKE — DATE : NOVEMBER 1990
DRAWN BY : HANDESON — SCALE : 1:5000

NORANDA EXPLORATION
OFFICE : WHITEHORSE

092933

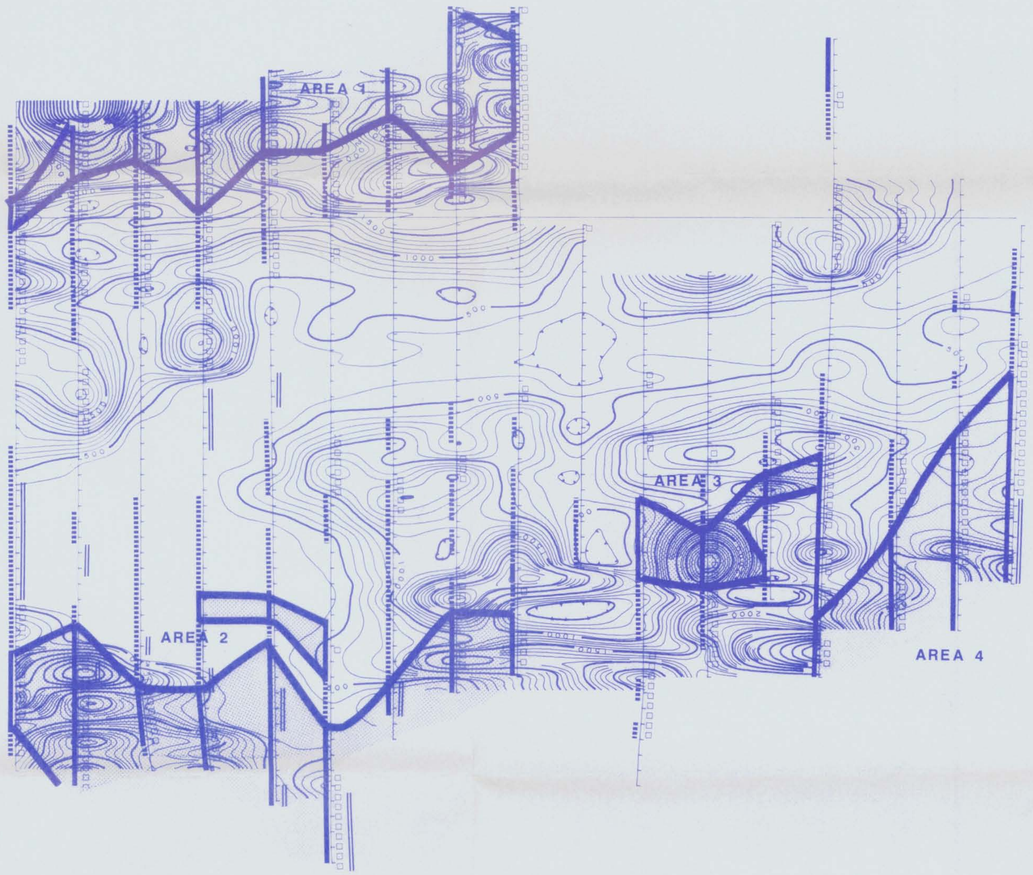
(19) MAP 116 A-14


1480E
1490E
1500E
1510E
1520E
1530E
1540E
1550E
1560E
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
31000N
30800N
30600N
30400N
30200N
30000N BASELINE 110°
29800N
29600N
29400N
29200N
29000N
28800N
28600N
28400N
N
100m 50m 0m 100m 200m
>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 : 7/8/90
SURVEY BY : KG
NTS : 116 A/4
FILE : C324PAN
FIGURE : 6
NORANDA EXPLORATION
092933
noranda
NORANDA EXPLORATION CO. LTD.


1480E
1490E
1500E
1510E
1520E
1530E
1540E
1550E
1560E
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
31000N
30800N
30600N
30400N
30200N
30000N BASELINE 110°
29800N
29600N
29400N
29200N
29000N
28800N
28600N
28400N
N
>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 : 7/8/90
SURVEY BY : KG
NTS : 116 A/4
FILE : C324PAN
FIGURE : 7
NORANDA EXPLORATION
092933
noranda
NORANDA EXPLORATION CO. LTD.

15800E 15900E 16000E 16100E 16200E 16300E 16400E 16500E 16600E 16700E 16800E 16900E 17000E 17100E 17200E 17300E 17400E

30300N
30100N
30000N BASELINE 110°
29900N
29700N
29500N
29300N
29100N
28900N



High I.P. Effect
Moderate I.P. Effect
Low Resistivity Zone
High Resistivity Zone

FIGURE No. 8

Instrument : BRGM IP-6
Field : ohm-m
Datum : 0.0 ohm-m

Contour Interval : 100 ohm-m

Moving Triangular Filter

100m 50m 0m 100m 200m

PANORAMA

RESISTIVITY SURVEY

PROJECT: PANORAMA RIDGE PROJECT # : 327
BASELINE AZIMUTH : 110 Deg.

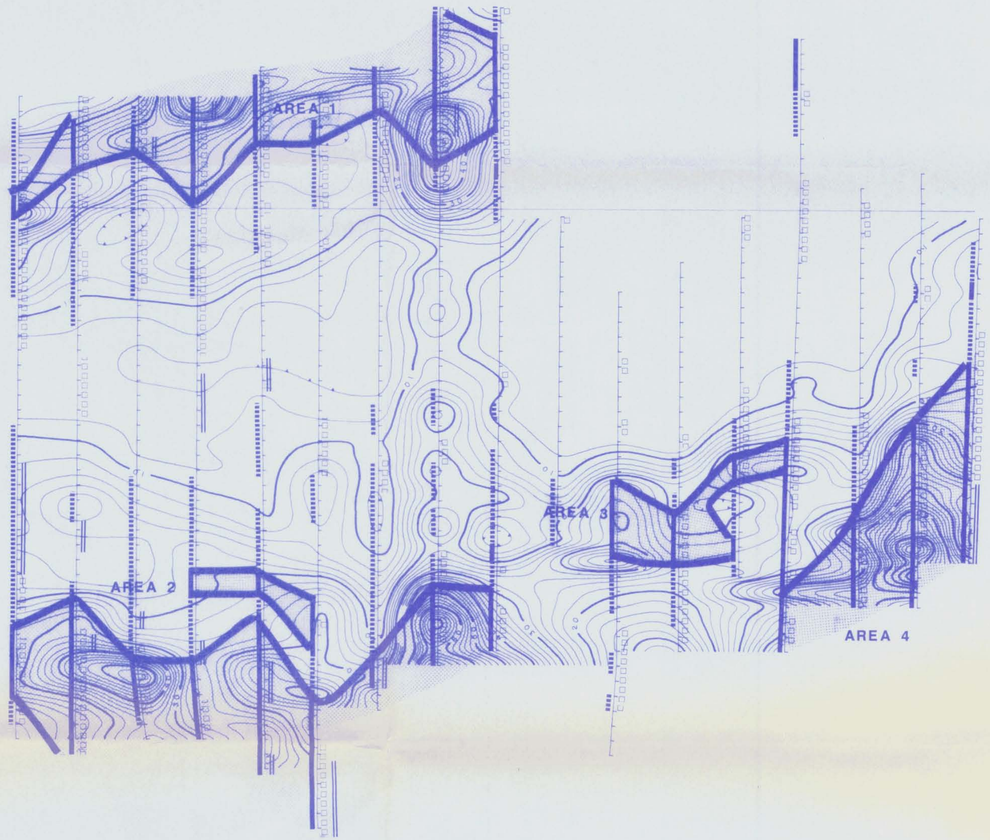
SCALE = 1 : 5000 DATE : 7/22/90
SURVEY BY : AMEROK NTS :
FILE: Mpan90
NORANDA EXPLORATION 092933

(122) MAP# 116-A-4

Vers. 5.02 Fri 11 Jan 1991 at 14:11 Centre of plot at 16500.0E/29650.0N Serial # 690140 Registered User : NORANDA EXPLORATION

15800E 15900E 16000E 16100E 16200E 16300E 16400E 16500E 16600E 16700E 16800E 16900E 17000E 17100E 17200E 17300E 17400E

30300N
30100N
30000N BASELINE 110°
29900N
29700N
29500N
29300N
29100N
28900N



High I.P. Effect
Moderate I.P. Effect
Low Resistivity Zone
High Resistivity Zone

Instrument : BRGM IP-6
Field : mV/V
Datum : 0.0 mV/V

Contour Interval : 2 mV/V

Moving Triangular Filter :

100m 50m 0m 100m 200m

FIGURE No. 9

PANORAMA

CHARGEABILITY SURVEY

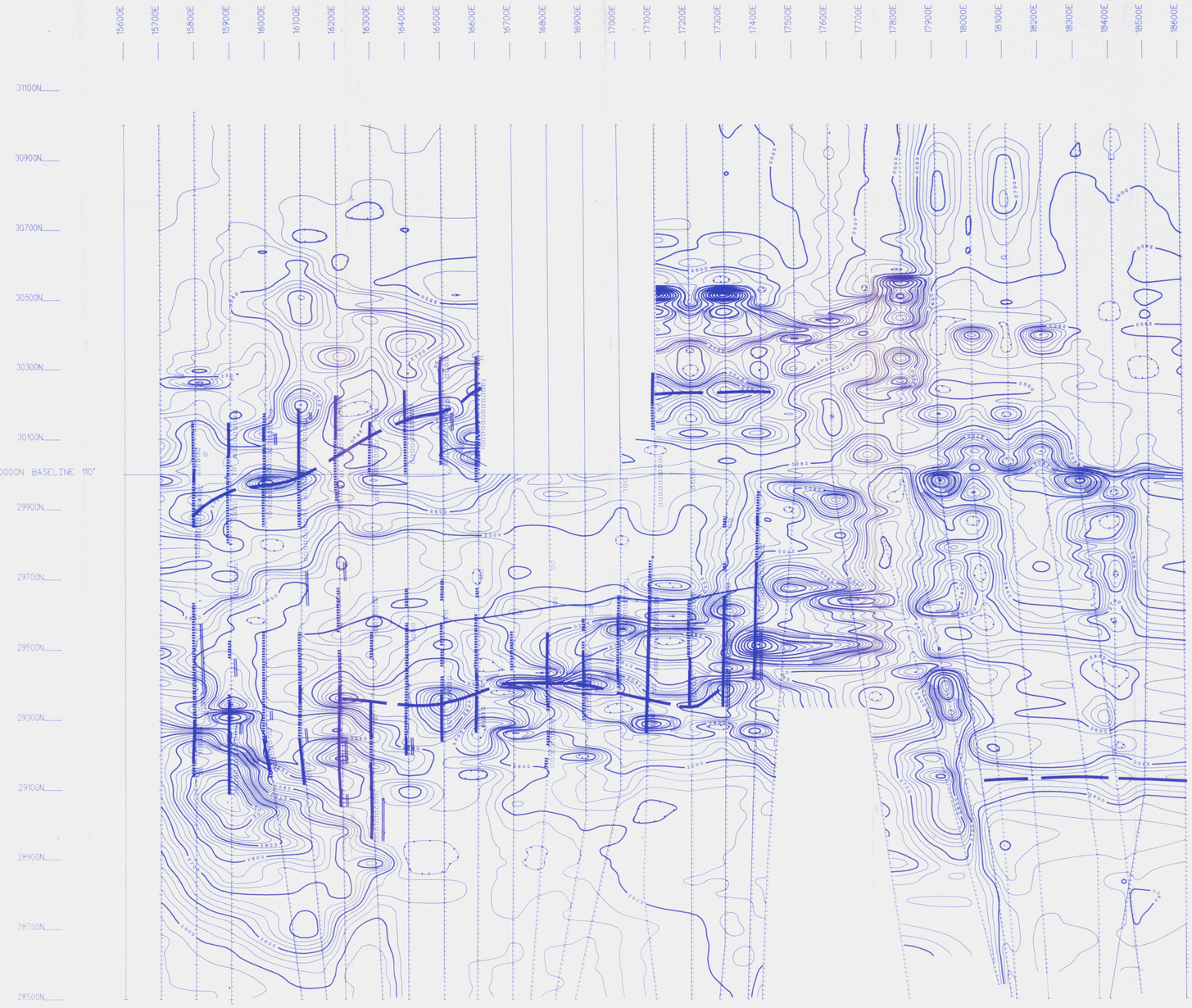
PROJECT: PANORAMA RIDGE PROJECT # : 327
BASELINE AZIMUTH : 110 Deg.

SCALE = 1 : 5000 DATE : 7/22/90
SURVEY BY : AMEROK NTS :
FILE: Mpan90
NORANDA EXPLORATION

092933

(123) MAP# 116-A-4

Vers. 5.02 Fri 11 Jan 1991 at 14:11 Centre of plot at 16600.0E/29650.0N Serial # M90140 Registered User : NORANDA EXPLORATION



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

(24) MAP 16-A-4

PANORAMA RIDGE

MAGNETOMETER SURVEY

FIGURE No. 10

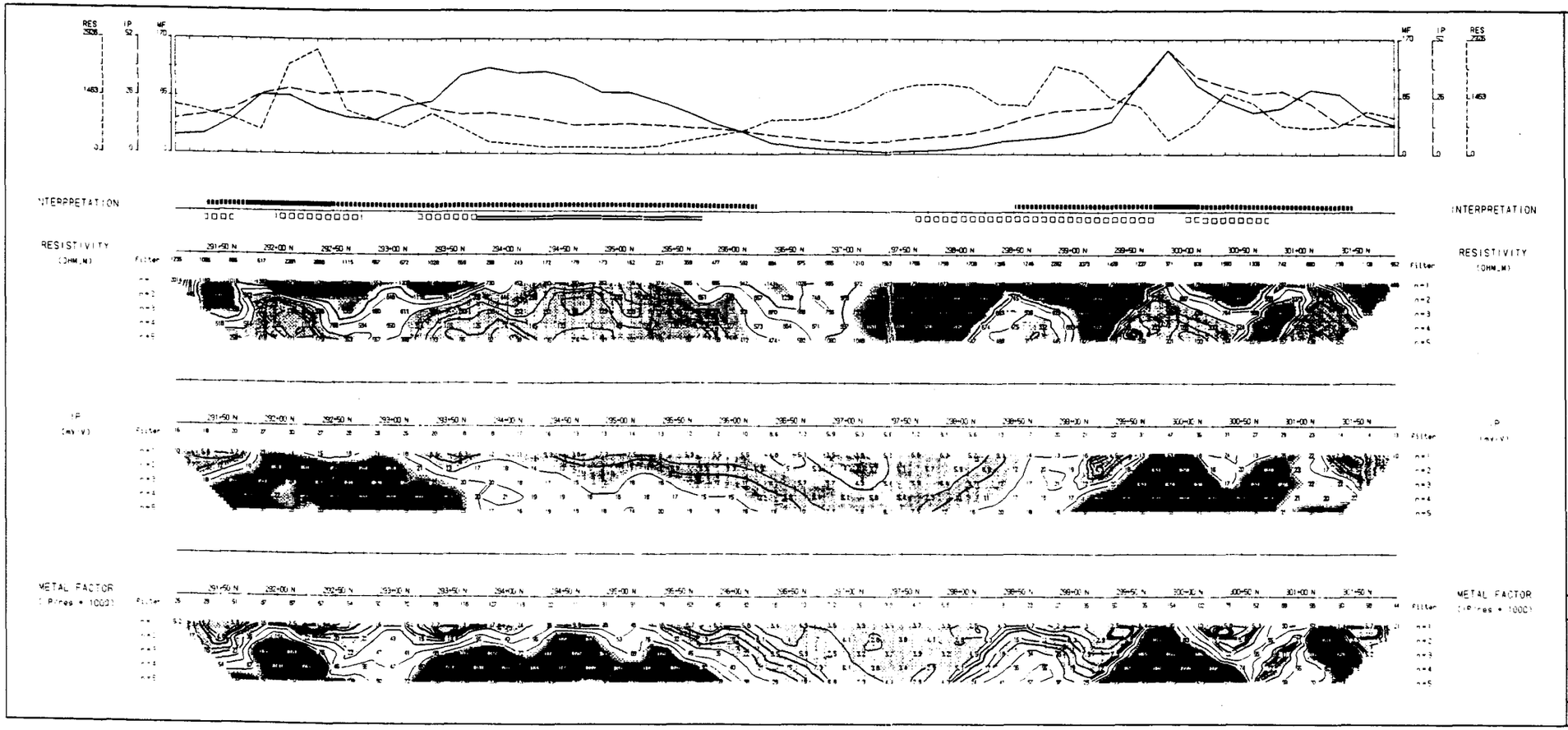
PROJECT: PANORAMA PROJECT # : 324
BASELINE AZIMUTH : 110 Deg.

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

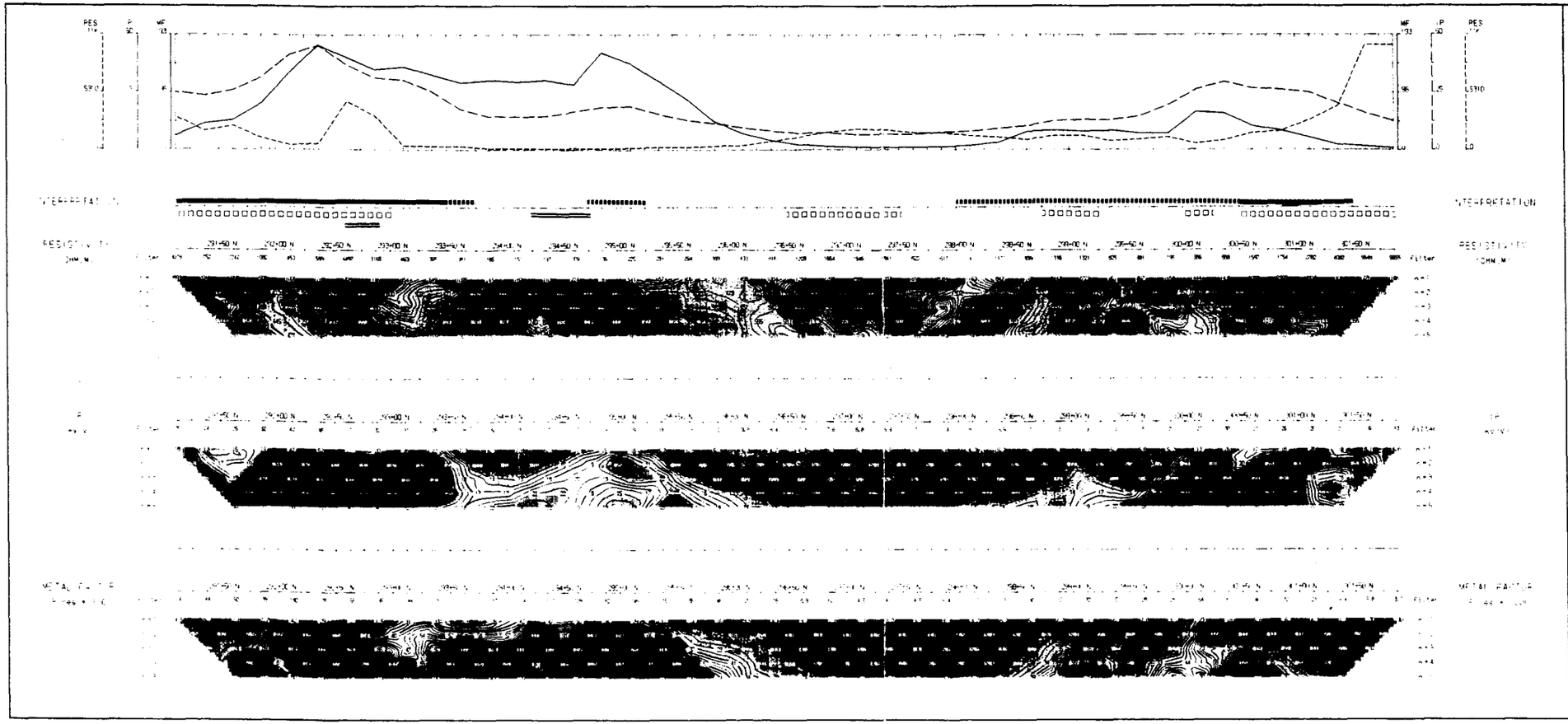
Revised: January 1991

092933

Vers. 5.01 Tue 16 Jan 1990 at 1130 Centre of plot at 17001.0E/29762.2N Serial # MB9940 Registered User : NORANDA COPLOMATTZIK


RES
IP
MF
INTERPRETATION
RESISTIVITY
(OHM_M)
IP
(mv/V)
METAL FACTOR
(Pfres * 1000)
Filter
Line 15800 E
Dipole-Dipole Array
a = 25 M
plot point
Logarithmic Contours
INTERPRETATION
Strong increase in polarization
Moderate increase in polarization
Pronounced resistivity increase
Pronounced resistivity decrease
Scale
PANORAMA RIDGE
INDUCED POLARIZATION SURVEY
Line 15800 E
Project 32A
Date: 90/07/22
Interpretation by: Lyndon Bradish
noranda

092933



Line 15900 E

Dipole-Dipole Array

a = 15 M

Plot Point

Filter

INTERPRETATION

Strong increase in polarization

Moderate increase in polarization

Pronounced resistivity increase

Pronounced resistivity decrease

Scale

metres

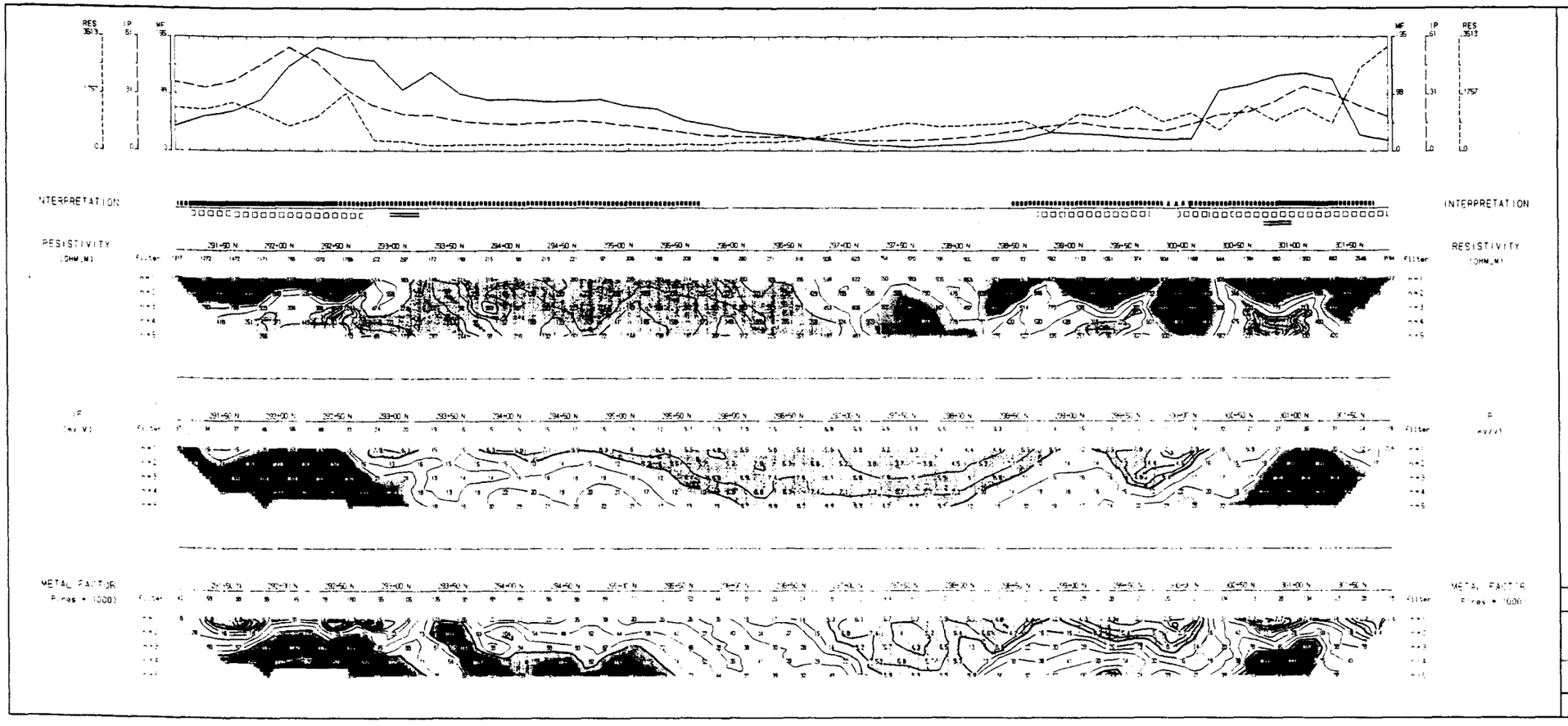
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 15900 E
Project 324

Data and Grid
Interpretation by Hunton Bratzer

norenda

092933



Line 16000 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

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

INTERPRETATION

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

Scale

metres

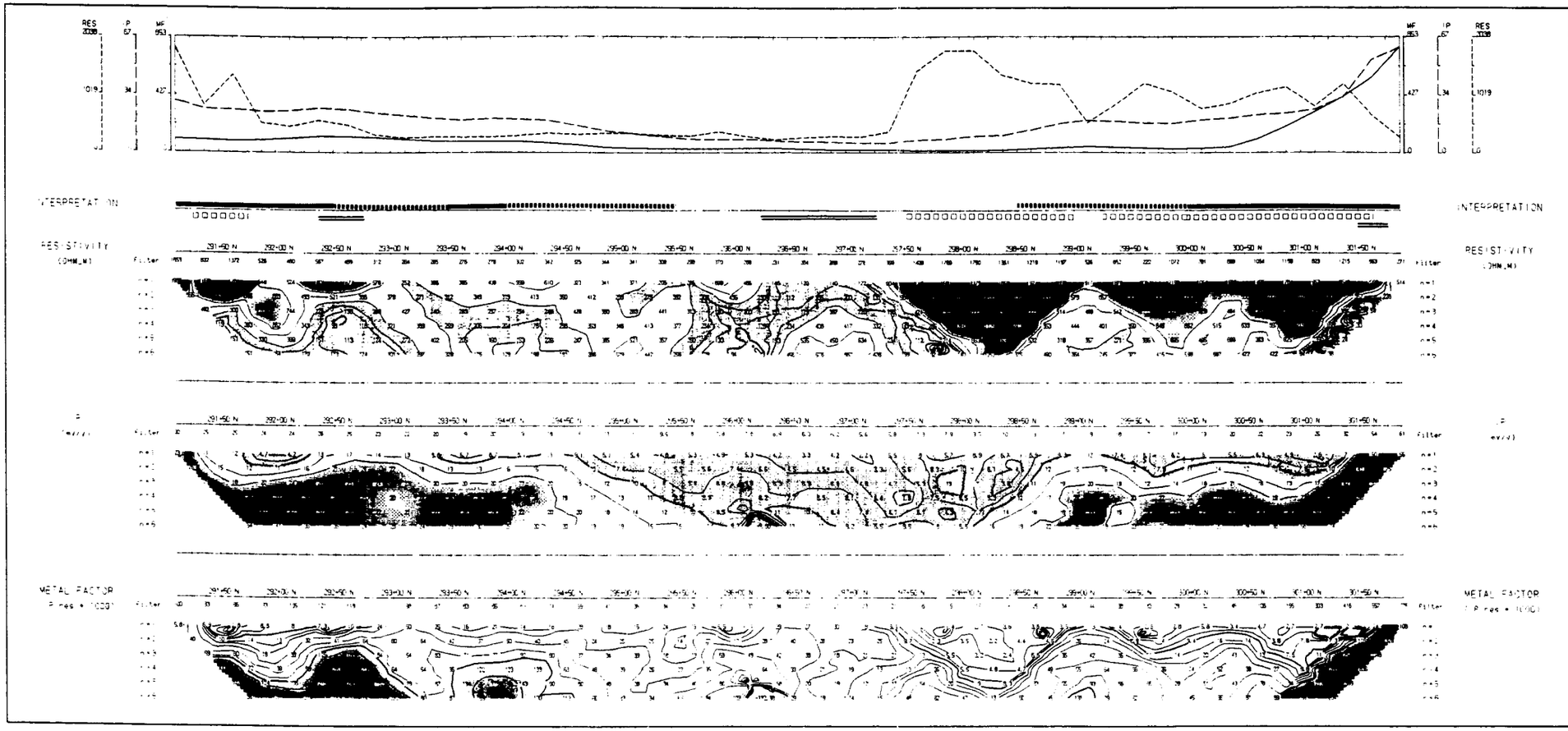
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16000 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

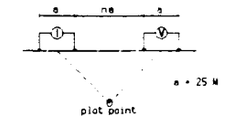
noranda

092933



Line 16100 E

Dipole-Dipole Array



Filter

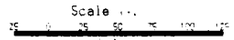


Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10...

INTERPRETATION

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

Scale ...



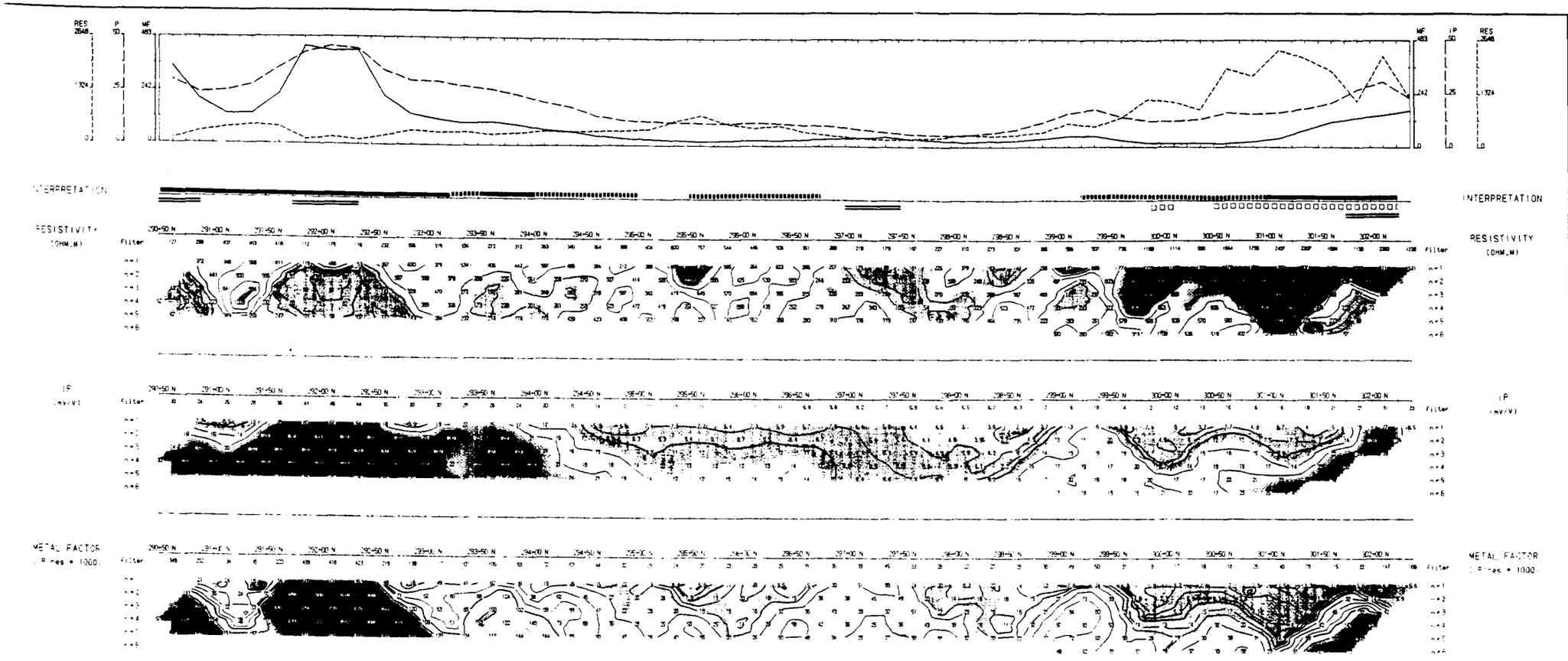
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16100 E
Project 327

Date: 90/07/20
Interpretation by: Lyndon Bradish

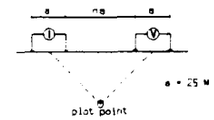
norende

092933



Line 16200 E

Dipole-Dipole Array



Filter



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

INTERPRETATION

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

Scale 1:2500

0 25 50 75 100 125 metres

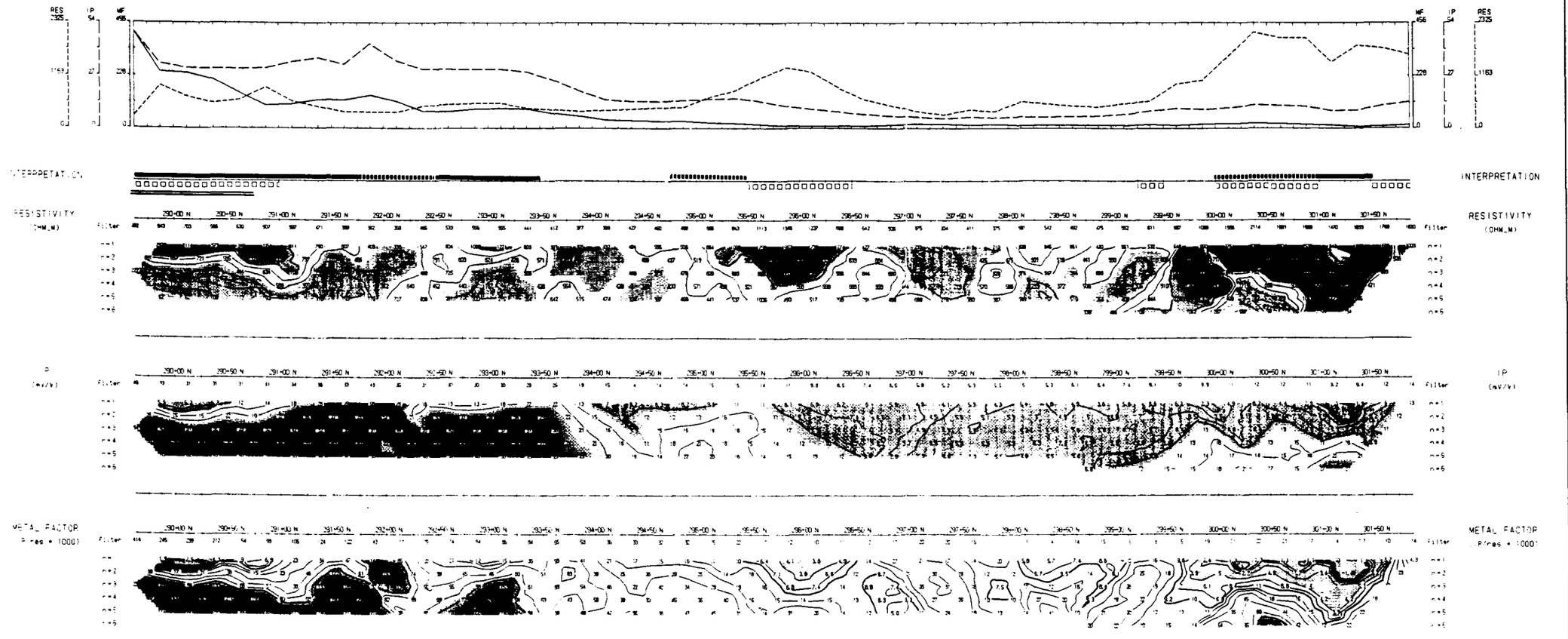
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16200 E
Project 327

Date: 90/07/22
Interpretation by: Lundon Bradish

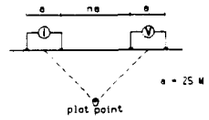
norande

092933



Line 16300 E

Dipole-Dipole Array



Filter

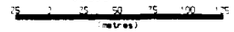


Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,....

INTERPRETATION

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

Scale

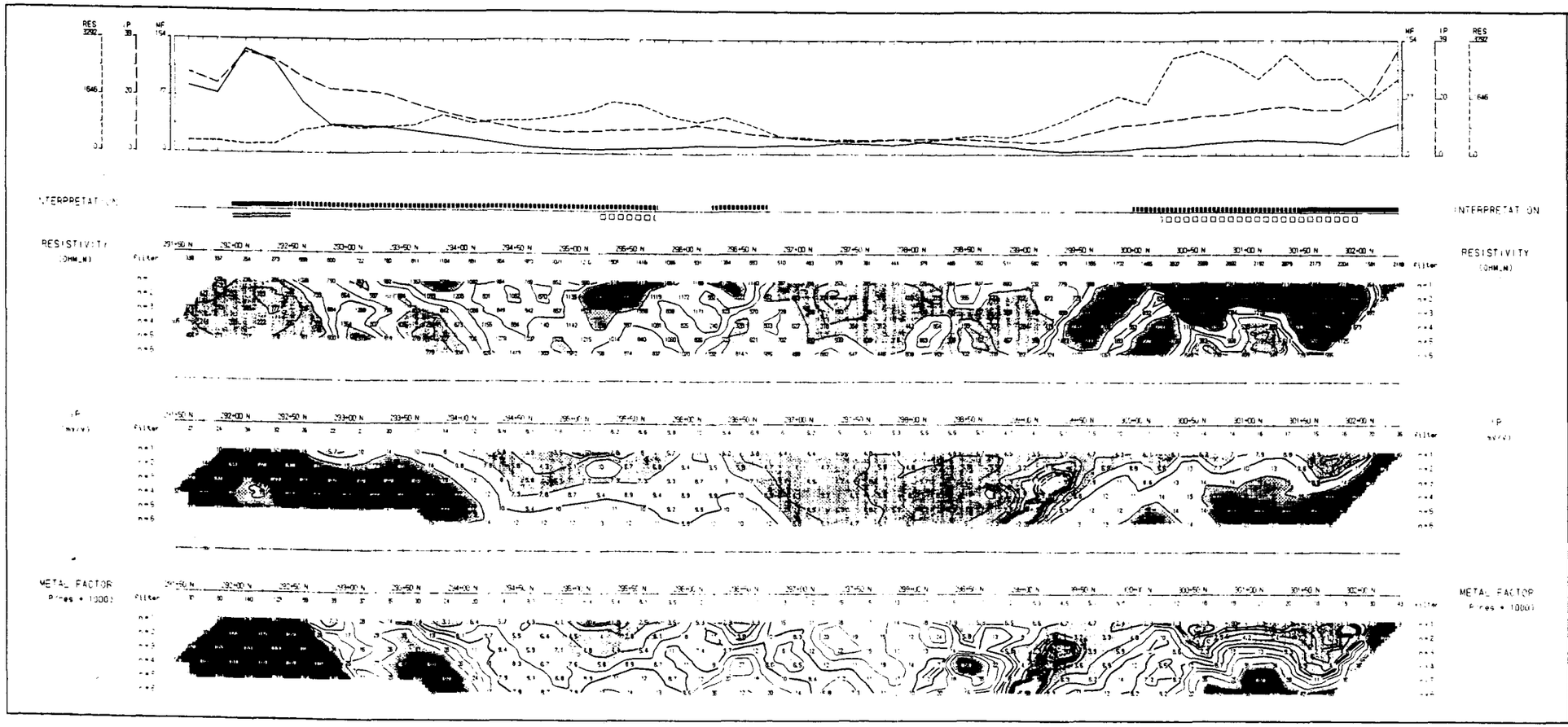


PANORAMA RIDGE

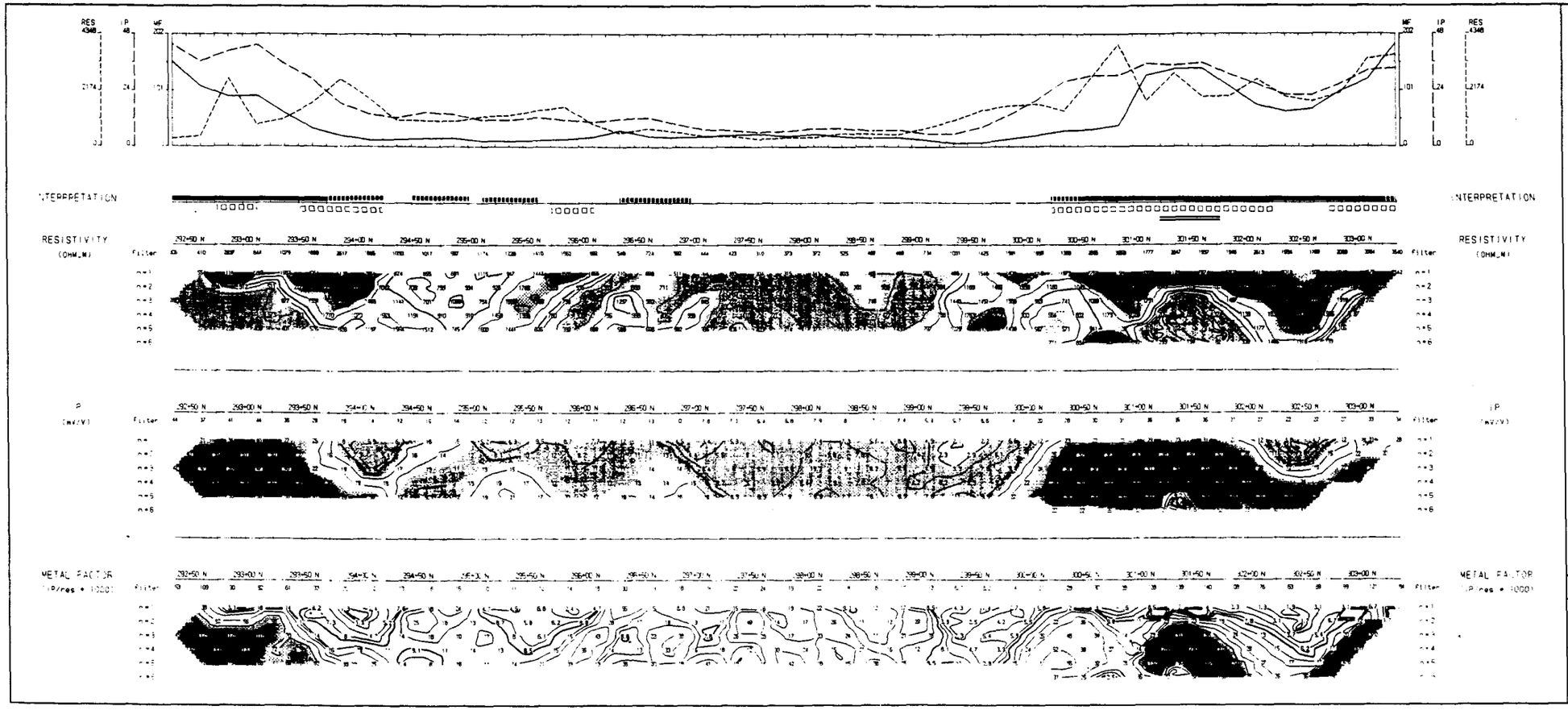
INDUCED POLARIZATION SURVEY
Line 16300 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

noranda


RES
IP
MF
INTERPRETATION
RESISTIVITY
(OHM-M)
METAL FACTOR
Filter
Line 16400 E
Dipole-Dipole Array
a = 25 M
plot point
Filter
Logarithmic Contours
INTERPRETATION
Strong increase in polarization
Moderate increase in polarization
Pronounced resistivity increase
Pronounced resistivity decrease
Scale
(metres)
PANORAMA RIDGE
INDUCED POLARIZATION SURVEY
Line 16400 E
Project 327
Date: 30/07/22
Interpretation by: Lyndon Bradish
norenda

092933



Line 16500 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

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

INTERPRETATION

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

Scale

(metres)

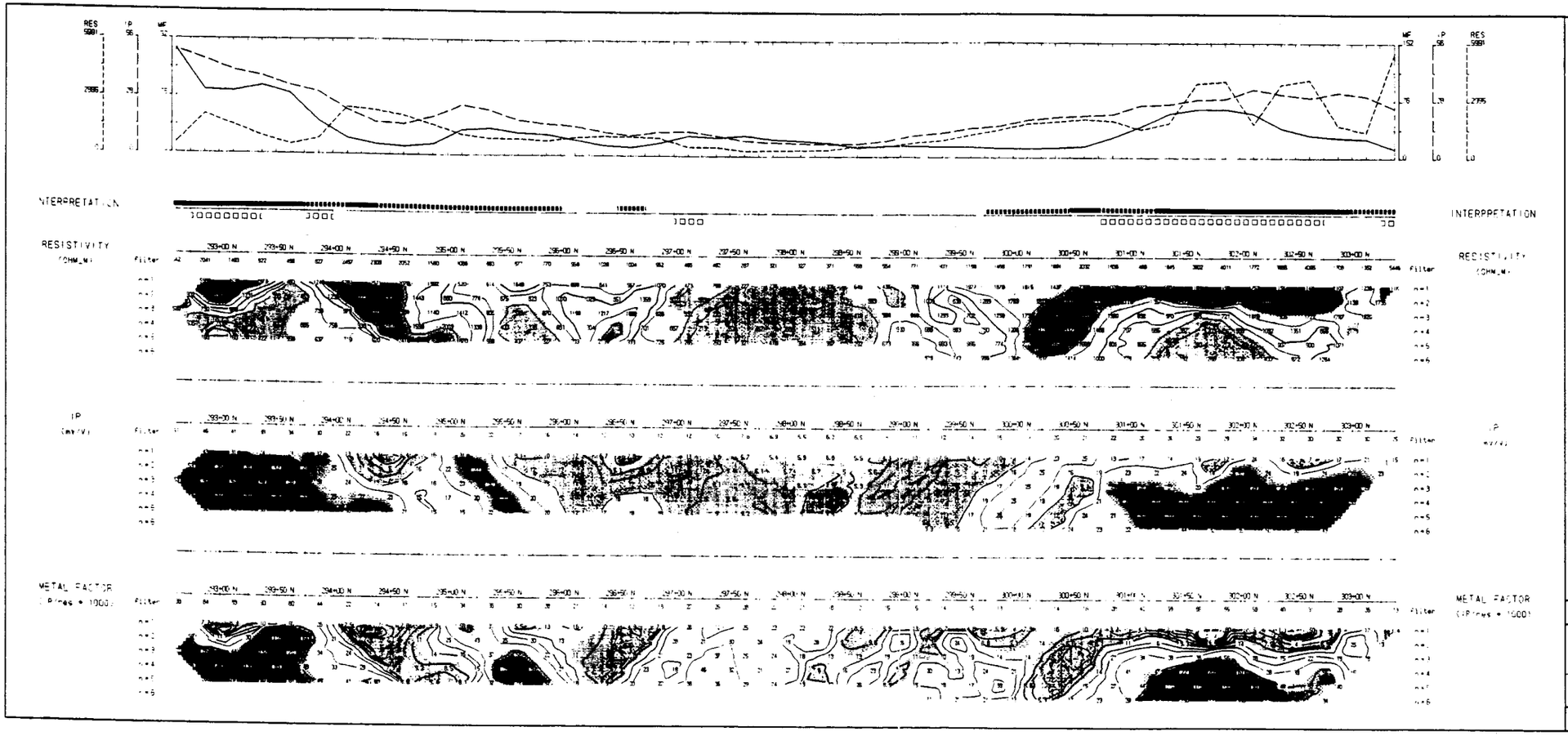
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16500 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

norende

092933



Line 16600 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

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

INTERPRETATION

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

Scale

(metres)

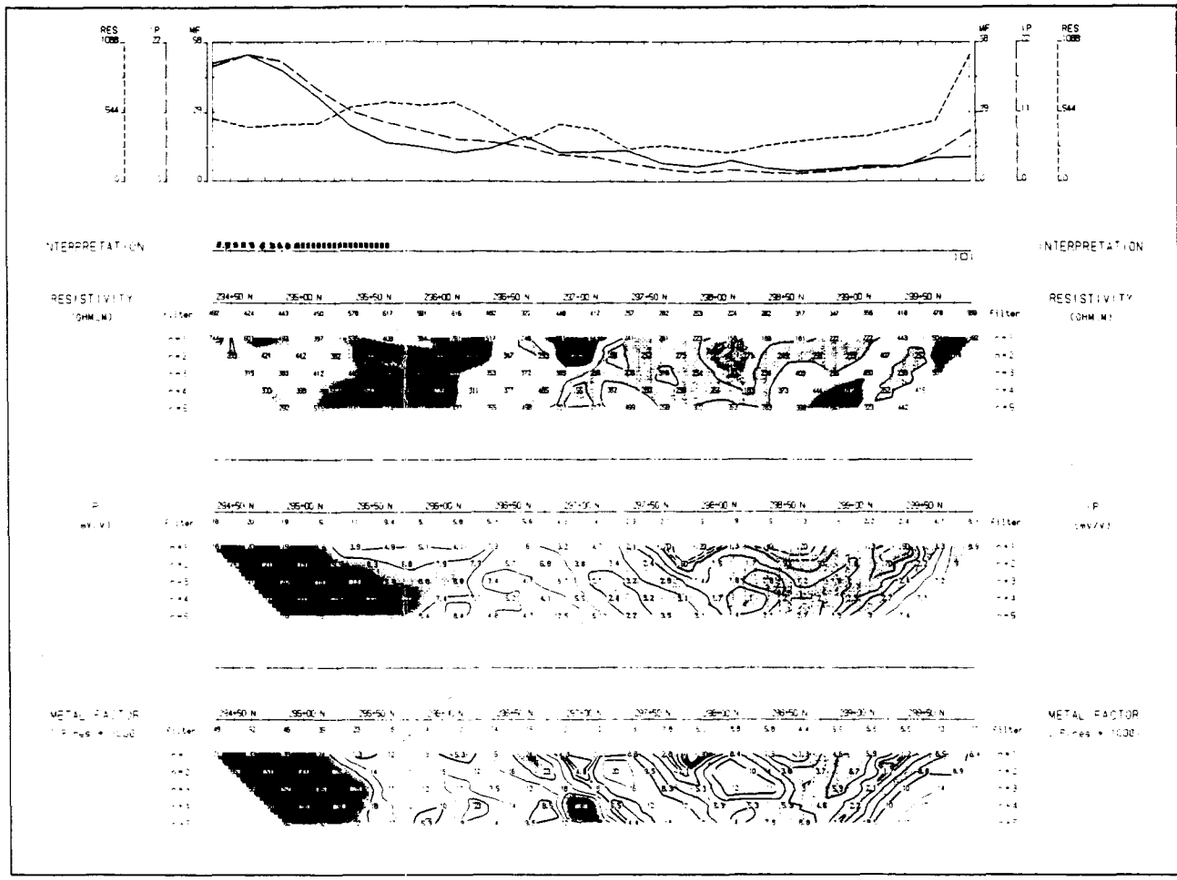
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16600 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

noranda

092933



Line 16700 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

INTERPRETATION

Strong increase in polarization

Moderate increase in polarization

Pronounced resistivity increase

Pronounced resistivity decrease

Scale

(metres)

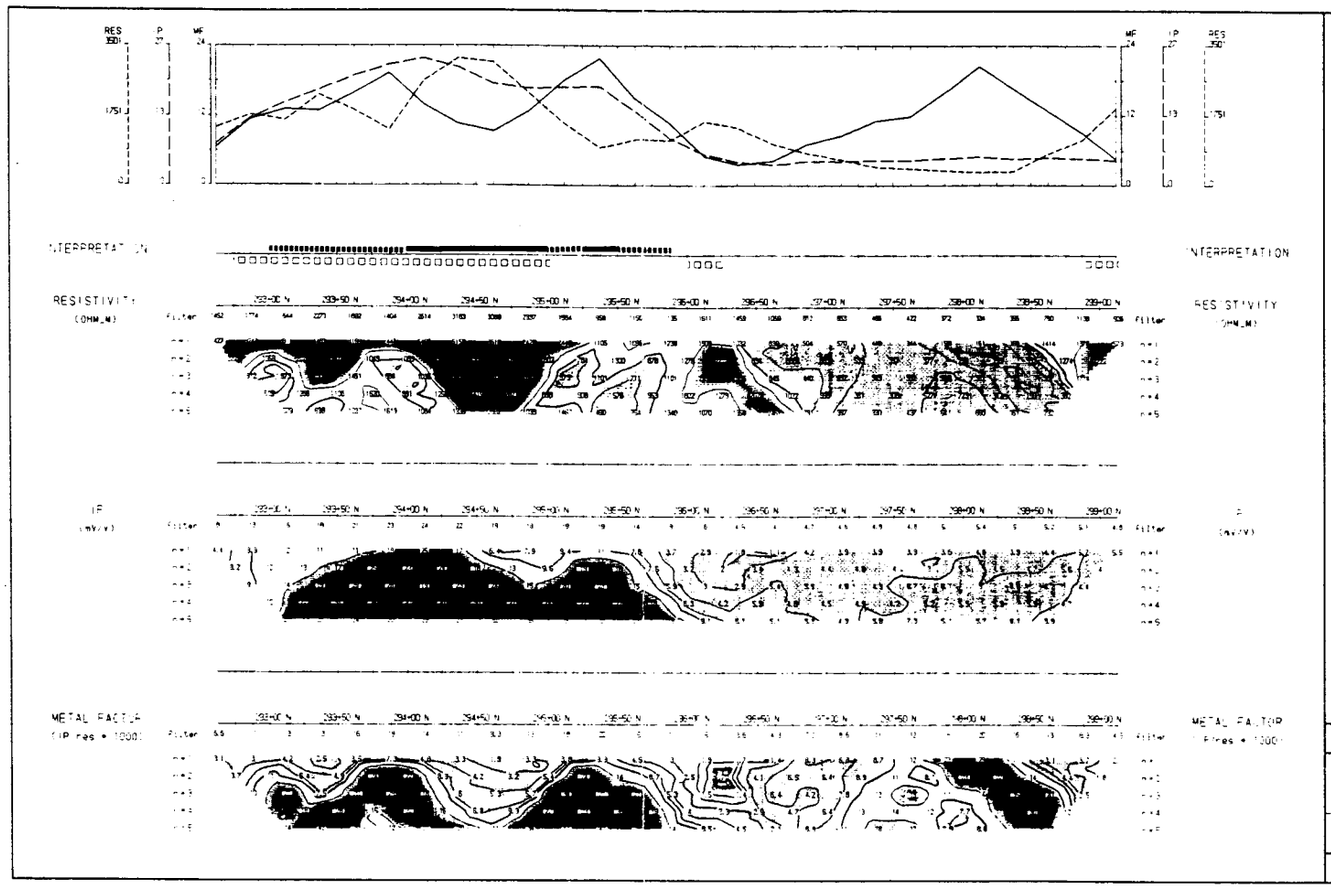
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16700 E
Project 327

Interpretation by Lyndon Bradish

norando

092438



Line 16900 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

Logarithmic Contours: .1, .15, .2, .3, .5, .7, .5, 1.0....

INTERPRETATION

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

Scale

metres

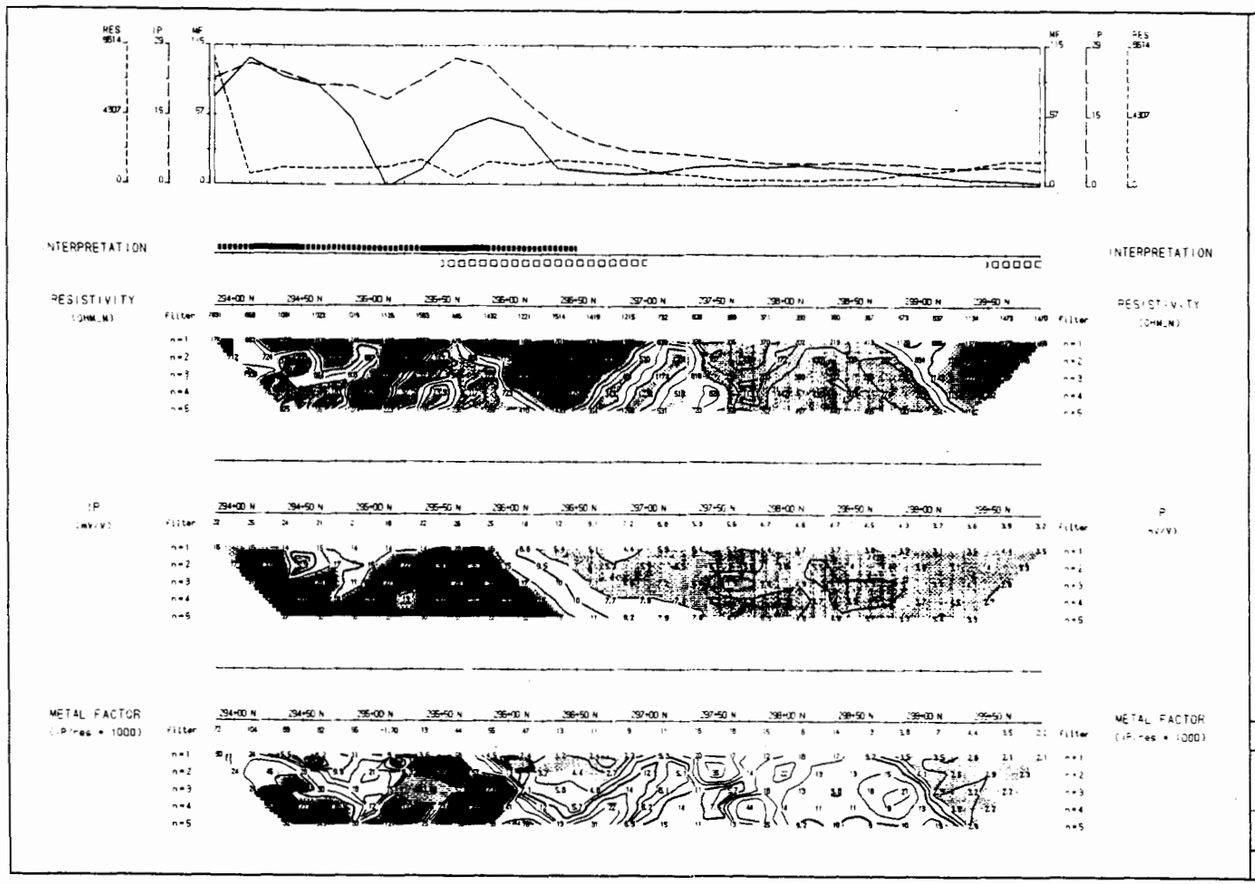
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 16900 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

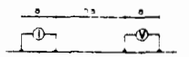
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Line 17000 E

Dipole-Dipole Array



a = 25 M

plot point

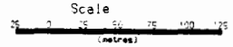
Filter

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

INTERPRETATION

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

Scale

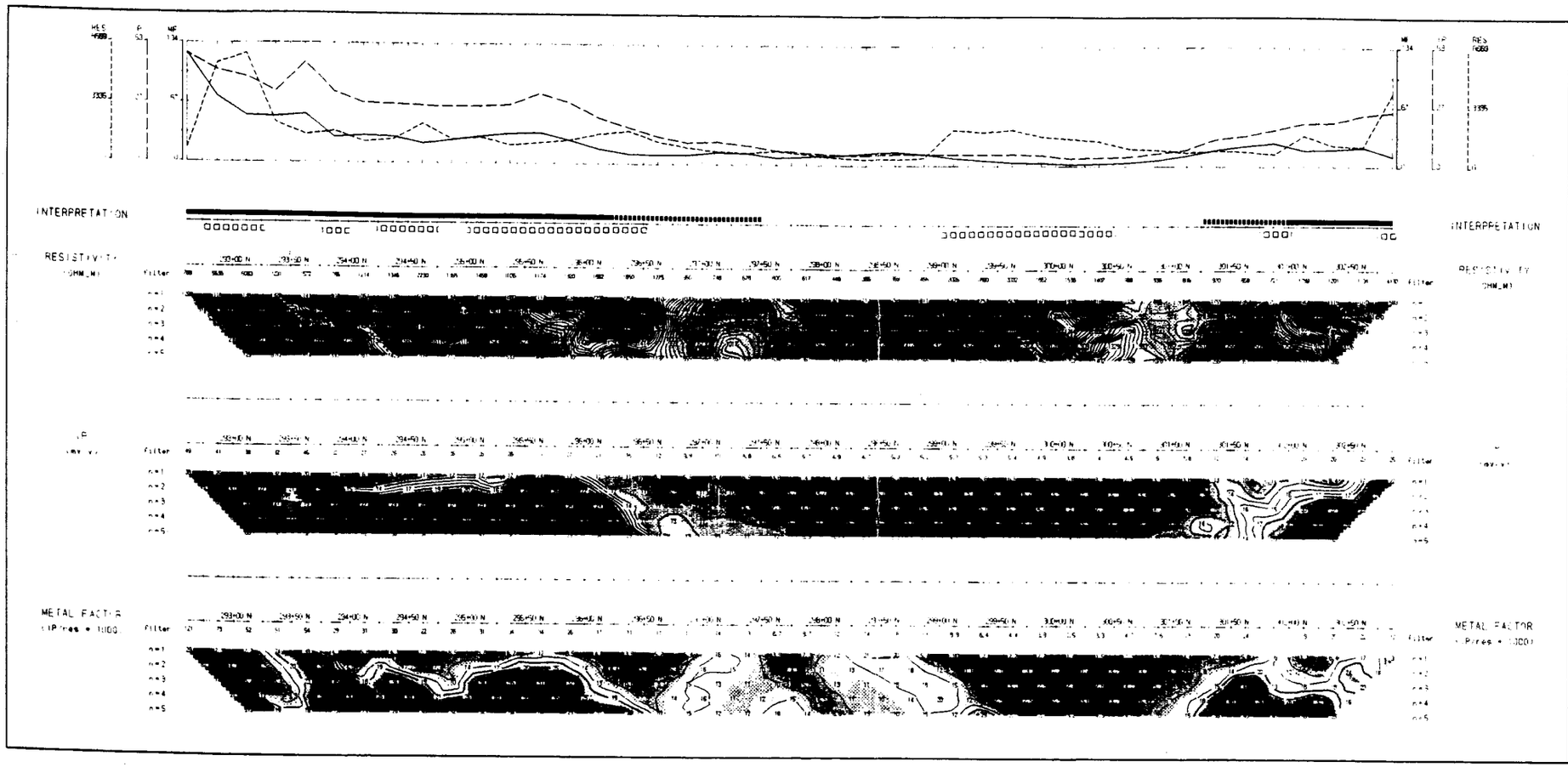


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INDUCED POLARIZATION SURVEY
Line 17000 E
Project 327

Date: 90/07/22
Interpretation by: Lyndon Bradish

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Line 17100 E

Dipole Dipole Array

a = 25 M

Plot Point

Filter

Logarithmic contours

INTERPRETATION

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

Scale

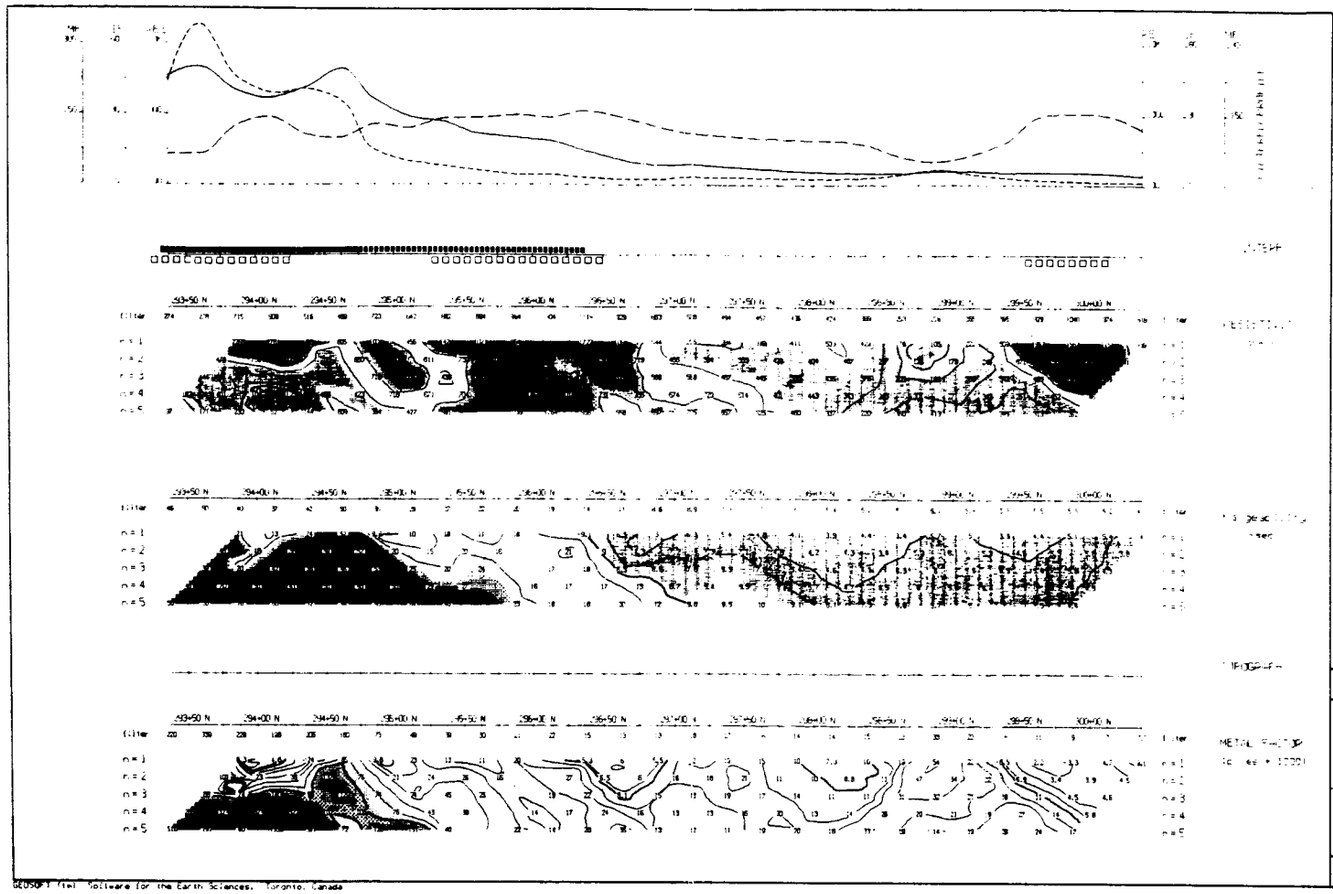
PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 17100 E
Project 324

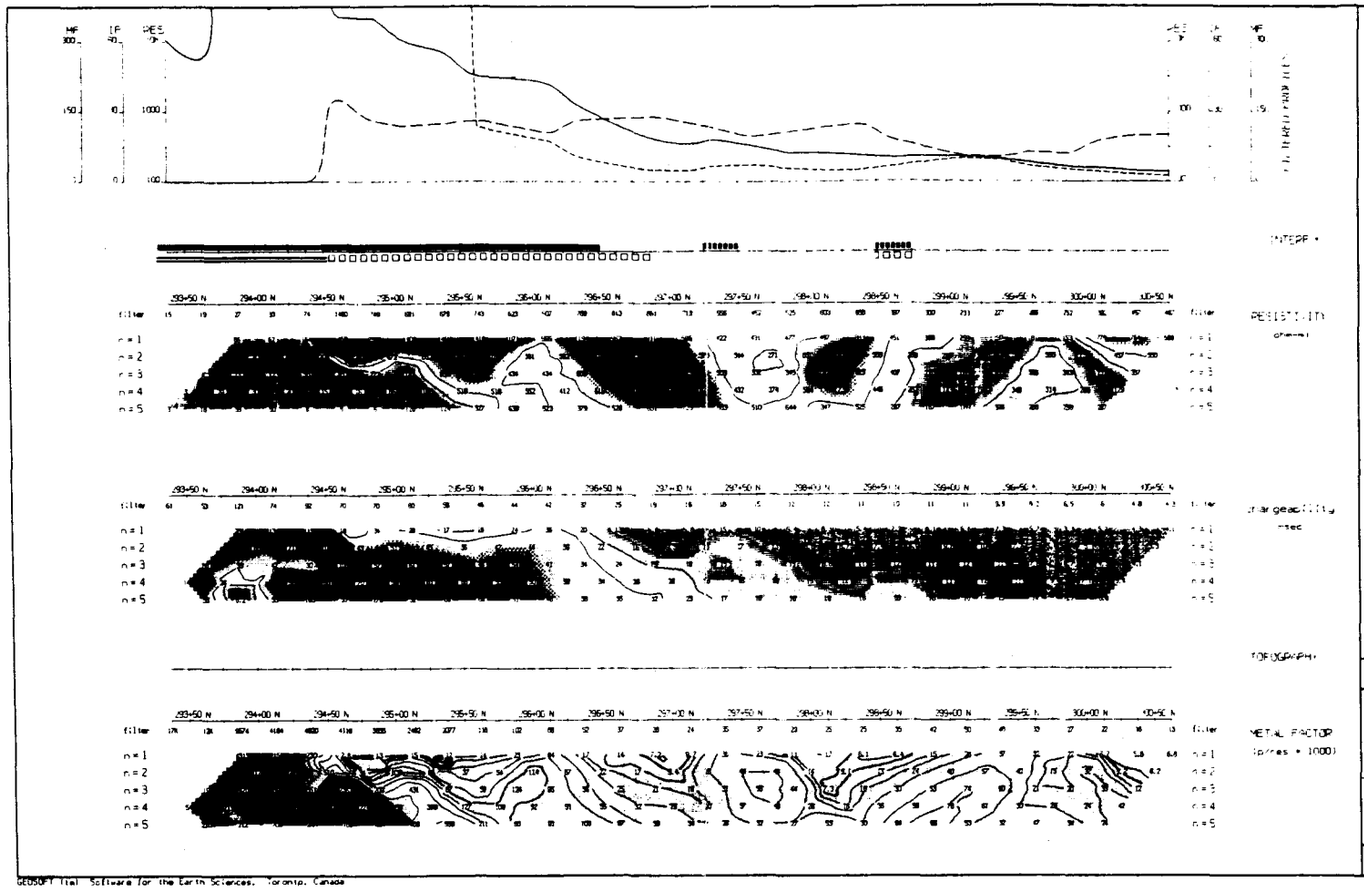
Date: 92/07/18
Interpretation by: Lyndon Bradish

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Line 17200 E
Filtered Profiles
Resistivity
Polarization
Metal Factor
Filter
Logarithmic contours
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: 89/07/19
N.T.S.:
Interpretation by: L. Bradish
Scale: 1 : 2500
noranda
GEOSOFT (tm) Software for the Earth Sciences, Toronto, Canada

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GEOSOFT Ltd. Software for the Earth Sciences, Toronto, Canada

Line 17300 E

Dipole-Dipole Array

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

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

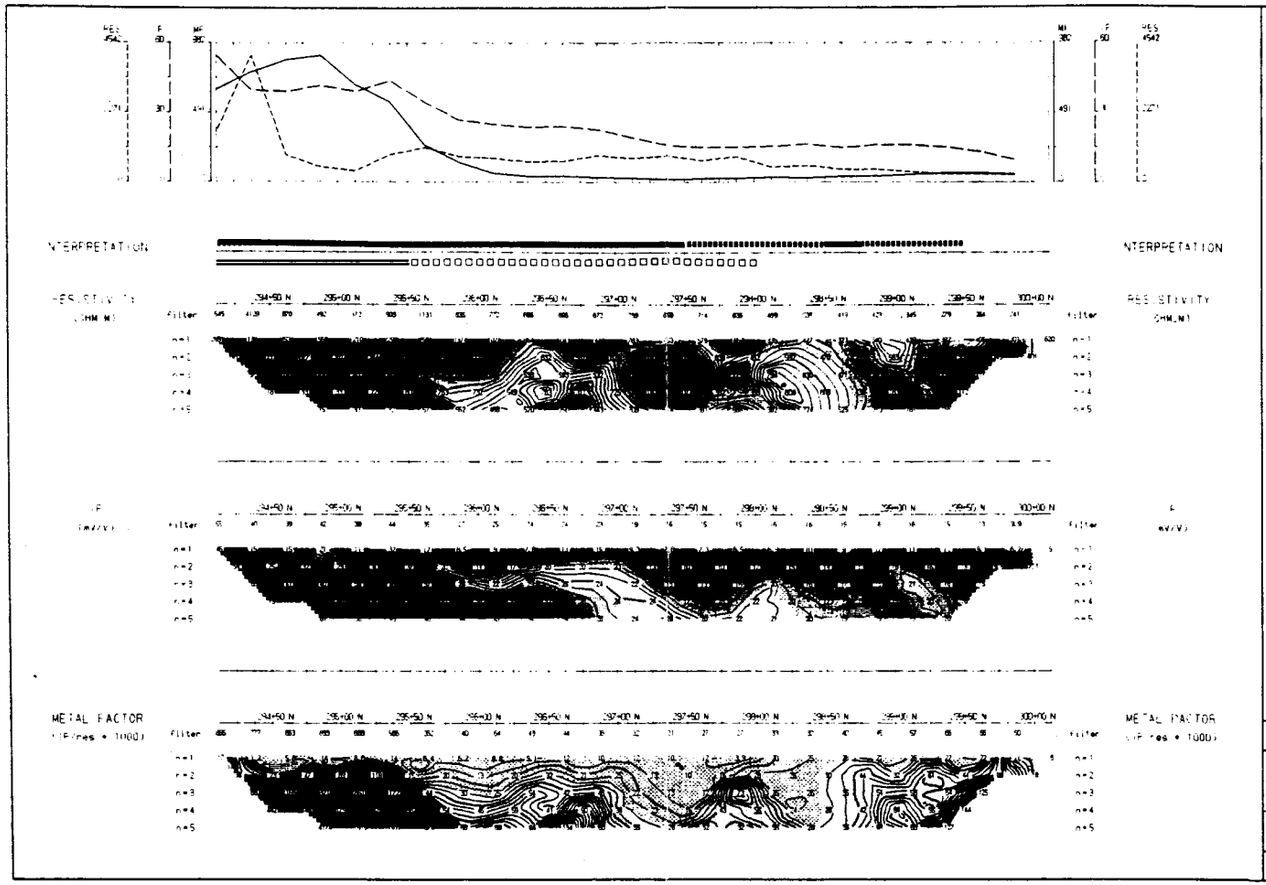
Line 17300 E

YUKON

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

n o r a n d a

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Line 17400 E

Dipole-Dipole Array

a = 25 M

plot point

Filter

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

INTERPRETATION

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

Scale

(metres)

PANORAMA RIDGE

INDUCED POLARIZATION SURVEY
Line 17400 E
Project 324

Date: 90/07/16
Interpretation by: Lyndon Bradish

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