MAP NO.:	ASSESSMENT REPORT	X	DOCUMENT NO: 092676
	PROSPECTUS		MINING DISTRICT: Dawson
116 A 4	CONFIDENTIAL	X	TYPE OF WORK: Geology, Geochemistry
	OPEN FILE		

REPORT FILED UNDER: Noranda Exploration Company Ltd

DATE PERFORMED: October 1988 DATE FILED: November 29, 1988

LOCATION: LAT.: 64° 05' N AREA: Aussie Creek

LONG.: 137° 52' W VALUE $: 13 600.00

CLAIM NAME & NO.: AUS 1-32 YB 04454-YB 04485

WORK DONE BY: K. Galambos

WORK DONE FOR: Noranda Exploration Company Ltd

DATE TO GOOD STANDING: | REMARKS: #30 AUS

GEOLOGICAL & GEOCHEMICAL REPORT

on the

AUS 1 - 32 CLAIMS

Dawson Mining District

N.T.S. 116 A/4

Latitude: 64 05'N

Longitude: 137 52'W

092676

Owner: Noranda Exploration Company, Limited
(no personal liability)

K.D. Galambos, P. Eng.

October, 1988

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 $13,600.00.

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

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SUMMARY

The Panorama Ridge property (Aus Claims) consists of 32 contiguous mineral claims in the Ogilvie Mountains approximately 75km east of Dawson City, Yukon. There is a 4WD road to within 16km of the property but access is currently by helicopter charter from Dawson.

Work completed includes 1:10,000 scale preliminary mapping and a widely spaced soil geochem survey which involved the collection of 583 soil samples at 50m intervals from lines spaced 100m and 200m apart. In addition, 77 rock samples and 6 stream sediments were collected.

Results from the soil geochem survey revealed a 200m - 400m wide zone highly anomalous in arsenic trending east northeast across the property. Contained within this zone are several smaller zones anomalous to highly anomalous in Au and Sb with minor Cu. Maximum values from soils are as follows: Au - 880ppb, As - 11,000ppm, Sb - 250ppm, Cu - 660ppm. The trend(s) of these smaller anomalies have not been established, nor has any bedrock source been located.

Based on the 1988 results, closer spaced soil geochem sampling and geophysics (mag and EM) should be completed to further define present soil anomalies and locate possible buried bedrock sources. Detailed mapping and trenching of any mineralized showings should then follow.

CHAPTER ONE: INTRODUCTION

1-1: Introductory Statement

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

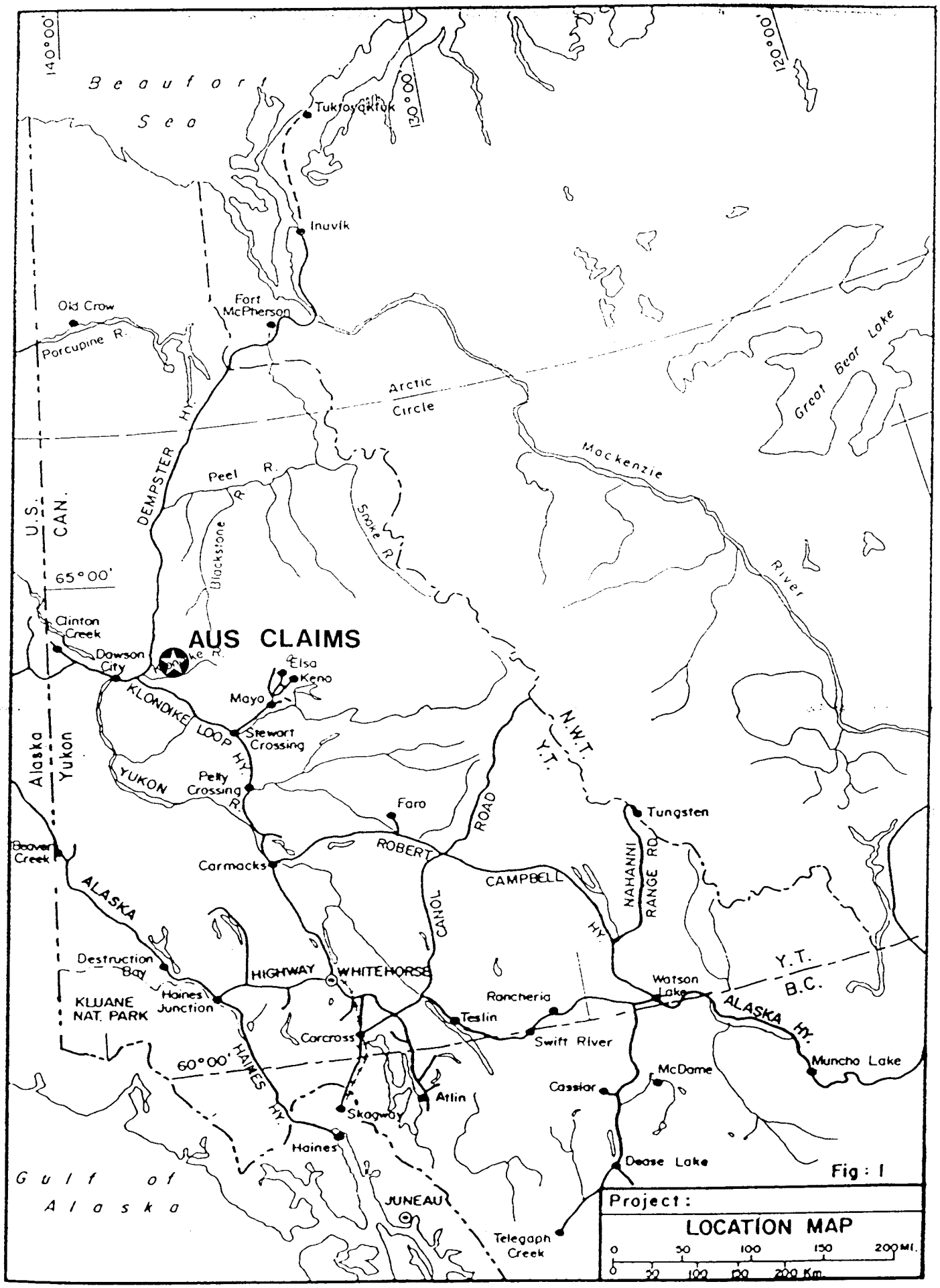
1-2: Location & Access

The Aus 1-32 claim group is located in west central Yukon, approximately 75km east of Dawson City in the Ogilvie Mountains. The property is centered at Latitude 64 05'N, Longitude 137 52'W on the NTS 116 A/4 mapsheet. Access to the property is currently by a 35 minute helicopter charter from Dawson. There is a 4WD road to within 16km of the property but obstacles such as steep cliffs on the Klondike River and major creek crossings exist past its present terminus.

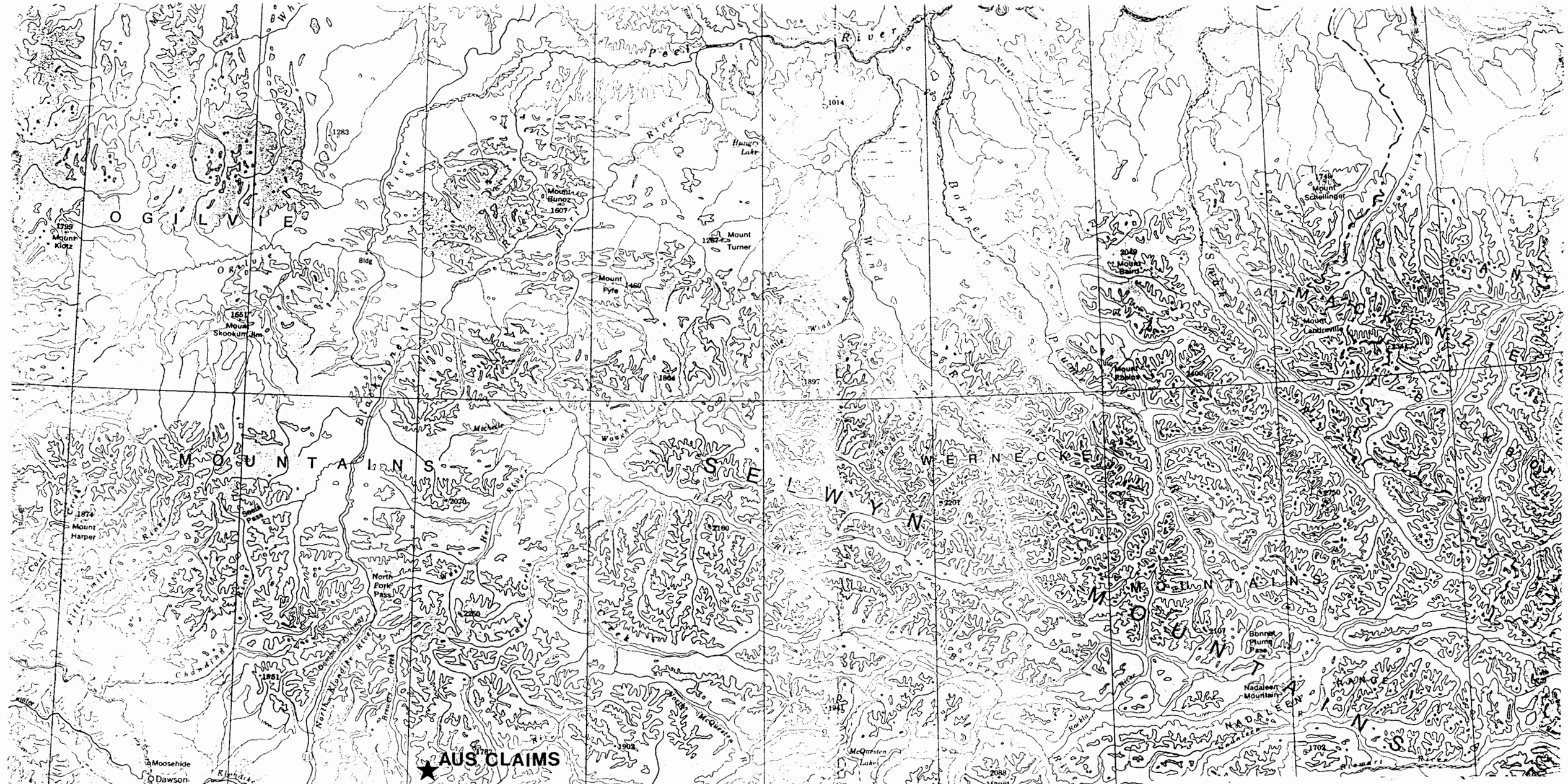
1-3: Physiography & Vegetation

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

Vegetation is concentrated on southern slopes where a thick tangle of buckbrush with sparse cluster of aspen, birch and pine exist. Ridge tops support primarily buckbrush with only the odd stunted pine while north slopes are primarily bare except for grasses. Small groves of spruce and



VANCAL 11878



Lambert Conformal Conic Projection

Projection conique conforme de Lambert

SCALE 1:1,000,000 ÉCHELLE

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

1 Millimetre = 1 Kilometre — 1 Millimètre = 1 Kilomètre

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

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

FIG. 2

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

(Joins Lee Creek 116 B/1)

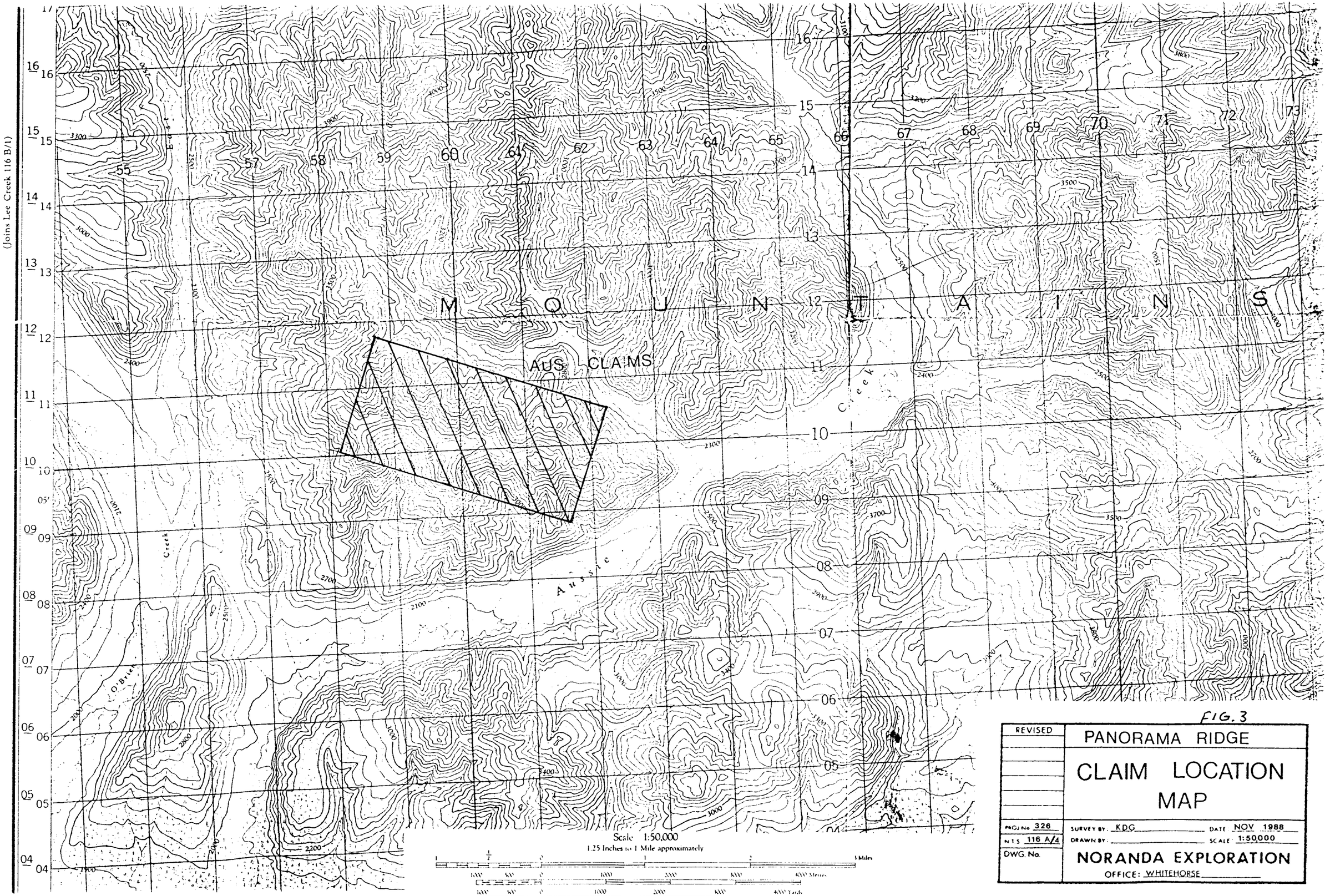


FIG. 3

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

pine exist near creek bottoms at lower elevations.

1-4: History of the Claims

The Aus 1-32 (YB04454 - 483) were staked Oct. 9, 1987 and registered Oct. 20, 1987 by Gordon Clark and Assoc.. Claim ownership was subsequently transfered to Noranda Exploration Company, Limited who remains the sole owner of the property. Upon acceptance of this report the claims shall remain in good standing until January 20, 1993.

1-5: Previous Exploration

The only previous exploration recorded in the area was that completed on the IDA Claims (approximately 15km NE) by Rio Tinto Canadian Exploration Limited between 1979 and 1981. The Aus claims were staked to cover an area of anomalous soils discovered with a reconnaissance program conducted by Norex personnel in 1987.

1-6: Work Program

In 1987, Noranda Exploration Co. Ltd. conducted reconnaissance traverses in the area of the claim group and discovered an area of anomalous soils. The claims were staked and no further work was completed until 1988.

During the current field season a total of 28 person days were spent on the property conducting geological and geochemical surveys. Between June 29 and July 4, 1988 a three person crew placed a 2700m long baseline wth flag lines every 200m for a total of 25.2km of grid lines. Four hundred and sixty-one (461) soil samples were collected every 50m on the crosslines. Thirty (30) rock samples were collected from various posts of the gird. Between August 25 and August 29, 1988 a two person crew placed 7.05km of intermediate line and took 122 soil samples and 45 rock samples. In

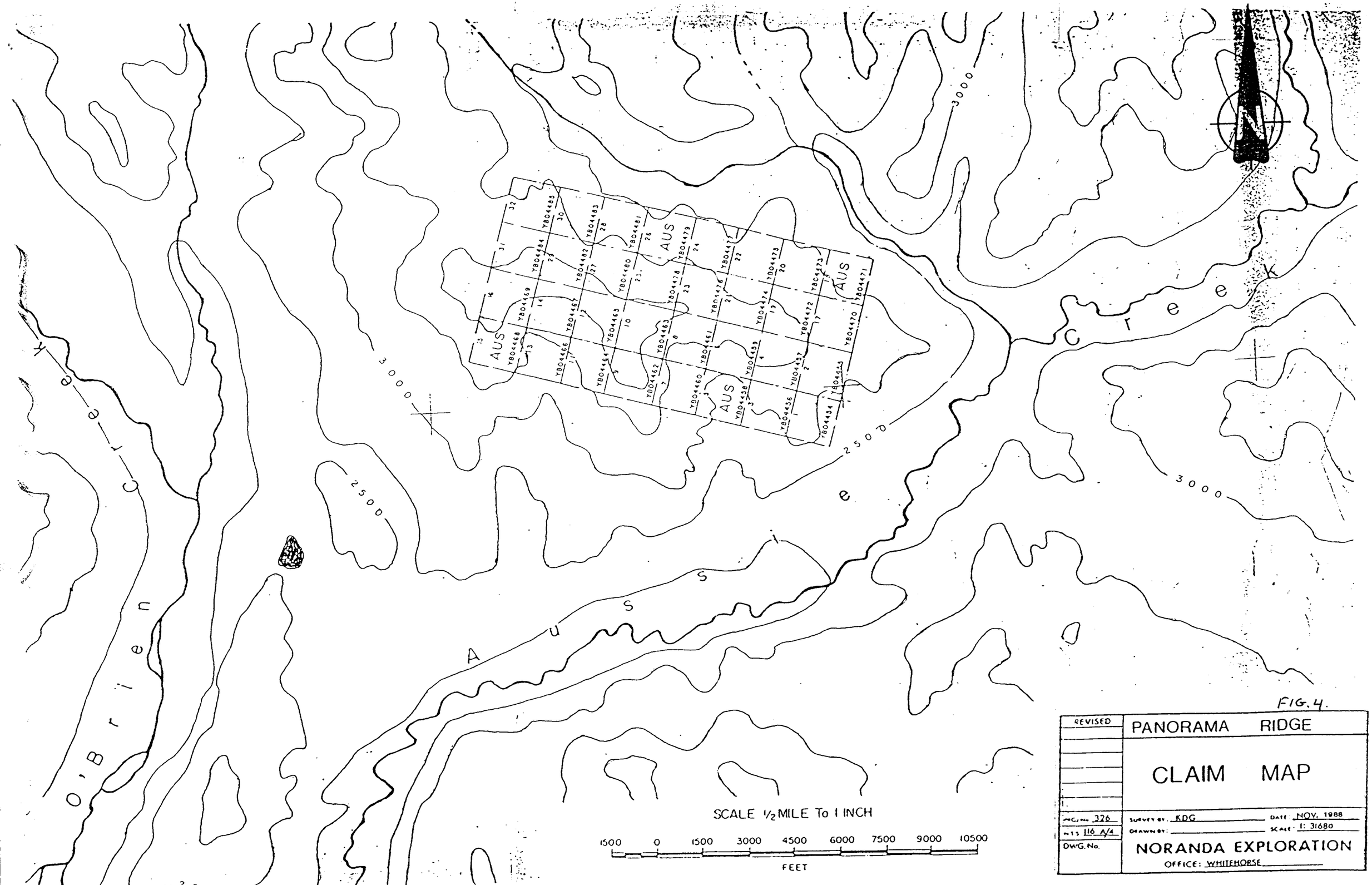


FIG. 4.

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

intermediate line and took 122 soil samples and 45 rock samples. In addition preliminary mapping at 1:10,000 scale was completed over the entire property.

CHAPTER TWO: GEOLOGY

2-1: Regional Geology

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

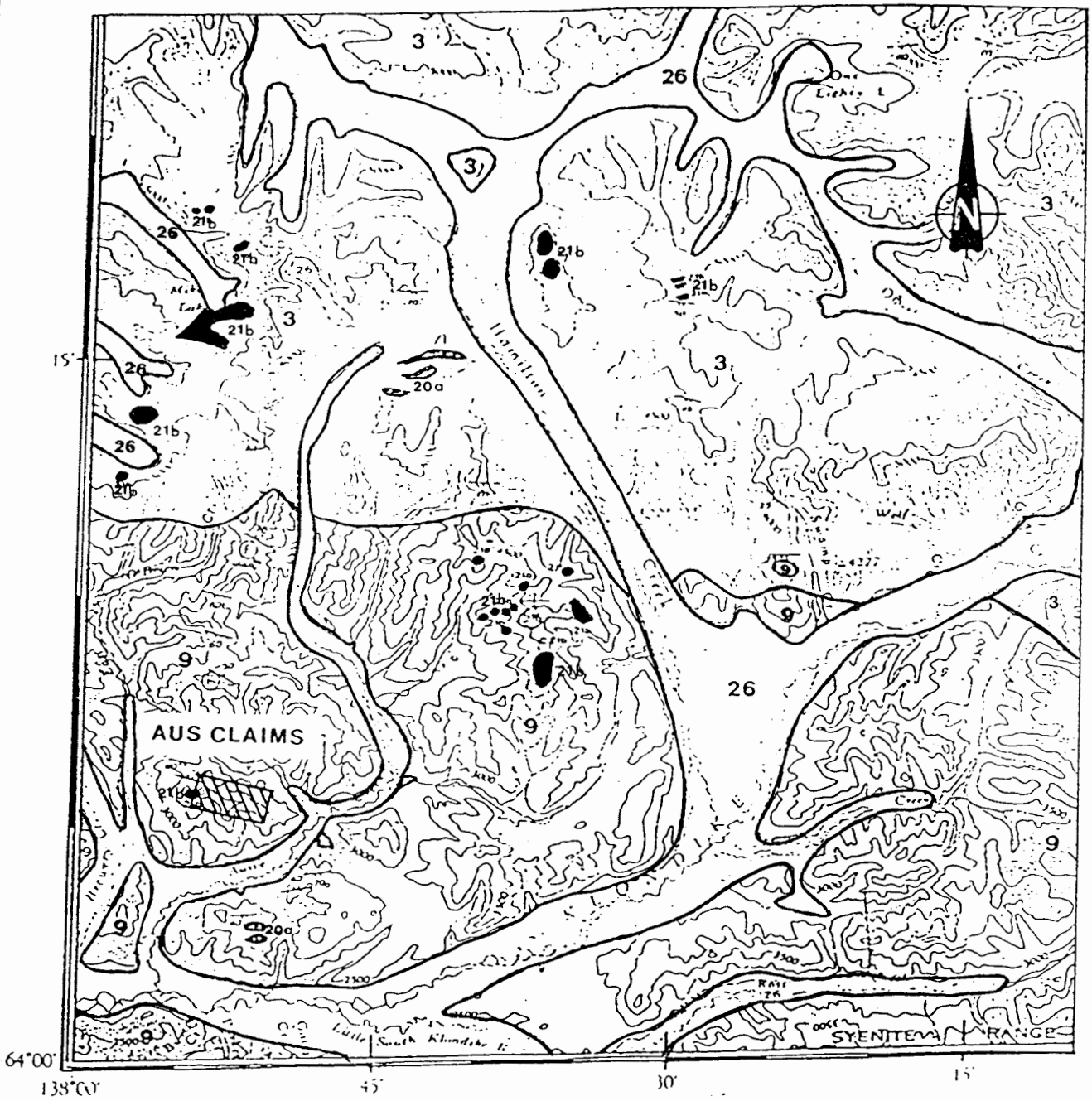
The Selwyn Basin sequence in the project area consists primarily of shale, chert and minor basaltic volcanic rocks of the Ordivician-Silurian Road River Formation. This unit is believed to have a thickness of approximately 300m and may be isoclinally folded with possible infolds of the underlying PreCambrian-Cambrian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

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

2-2: Property Geology

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

Geological 1:10,000 scale mapping was conducted over a five day period in August of 1988. Traverses were primarily along ridges with a few run across-section. Geology on the claim group appears quite simple with a large central, medium to coarse grained dyke intruding into and tilting sediments of the Road River formation. Several smaller dykes flank the



Elevations in feet above mean sea-level

MAP 1283A

GEOLOGY

LARSEN CREEK

YUKON TERRITORY

Scale 1:250,000

Miles 4 0 4 8 12 Miles

Kilometres 6 0 6 12 18 Kilometres

FIG. 5

central one and appear to have intruded along bedding planes in the sediments.

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

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

The major alteration on the property is due to the contact metamorphism of sediments flanking the larger intrusive body. This results primarily in the silcification of the sediments with minor calc-silicate alteration of limy beds.

VANCAL 11928

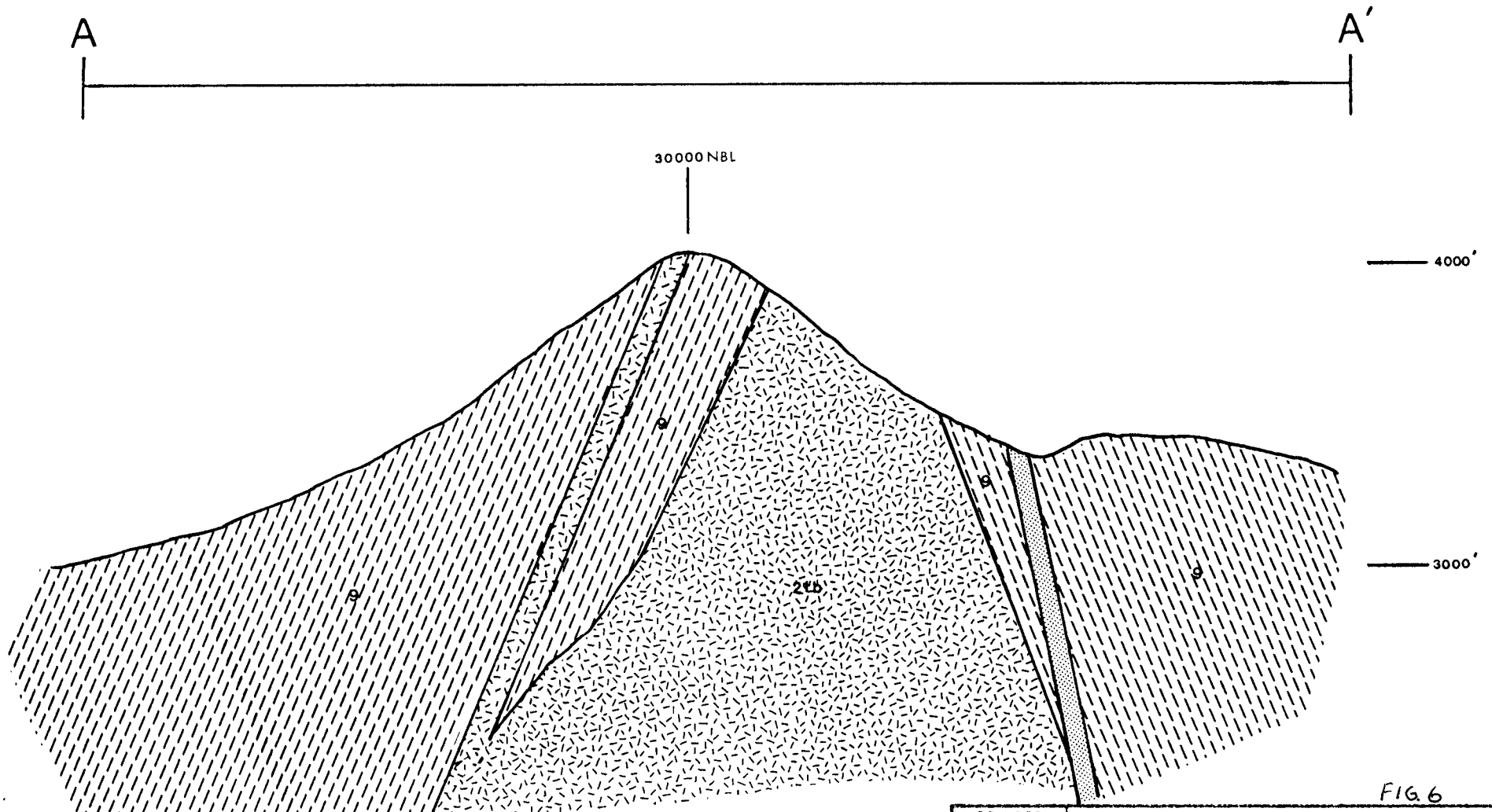


FIG. 6

GEOLOGY

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

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

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

ORDIVICIAN and SILURIAN

9 Road River Formation

interbedded dark grey-black shale, siltstone and chert; their silicified equivalents; 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 equivalents; minor limestone and black chert.

CHAPTER THREE: GEOCHEMISTRY

3-1: Stream Sampling Program

Six stream sediment samples were collected on the soil grid from both active and inactive creeks. The samples collected in each case were silt to sand sized material. Oversize was removed from the sample before it was placed in a gusseted 'Kraft' paper sample bag. The samples were dried and shipped to the Noranda Lab in Vancouver for processing. The samples were screened to -80 mesh prior to standard analysis for Cu, Zn, Pb, Ag, As, Sb, Au, Ba and Hg.

Results returned show some samples to be weakly anomalous in Cu (140ppm) and Ag (1.6ppm) and moderately to highly anomalous in As (up to 1300ppm), Sb (up to 42ppm), Au (up to 170ppb) and Hg (up to 440ppb).

Complete results included in Appendix 1.

3-2: Soil Geochemistry

The 1988 soil surveys were conducted in two parts during the field season. During the initial stage, samples were collected at 50m intervals on lines spaced 200m apart. Sample quality varied quite widely with good quality soils near surface on the ridges and south slopes to frost conditions and unstable talus fields on north facing slopes. The second phase involved placing and sampling intermediate lines to try and define soil anomalies returned from the first survey. Samples in each case were taken from 'B' horizon soils which were often oxidized to a rusty red colour.

A total of 583 soils were collected from both surveys. The samples were placed in gussittal Kraft paper bags, dried and shipped to the Noranda Lab in Vancouver for preparation and analysis for Cu, Zn, Pb, Ag, As, Sb, Au, Ba and Hg.

The surveys outlined a NE trending zone highly anomalous in As (up to 11,000 ppm) between 200 and 400m wide with smaller areas anomalous in Sb (up to 250ppm) and Au (up to 880ppb). No obvious source has been found for these zones of enrichment.

SUMMARY STATISTICAL ANALYSIS

Grid Soils

	Cu	Zn	Pb	Ag	As	Sb	Au	Ba	Hg
samples	617	617	617	617	617	617	617	470	613
High	660	1700	750	5.4	11000	250	880	13912	1400
Low	8	36	1	0.2	1	1	10	5	5
Stnd. Dev.	71.8	109.5	47.4	0.7	646.3	25.1	60.0	719.5	86.0
Distribution (# of values n = Avg.)									
n + 0-0.5 S.D.	324	493	538	337	524	515	551	374	510
n + 0.5-1 S.D.	241	105	45	208	47	56	30	72	58
n + 1-2 S.D.	33	26	19	43	27	30	25	17	27
n + 2-3 S.D.	6	6	4	15	9	5	7	2	7
n + > 3 S.D.	13	7	11	14	10	11	4	5	11
Simple Avg.	68.5	116.3	30.5	0.7	299.1	14.4	27.4	1142.6	59.8
Reduced Avg.	60.7	107.8	25.5	0.6	243.5	11.7	23.3	1091.8	51.4

NOTE: Reduced avg. excludes all values >3 S.D..

Complete results are included in Appendix 2.

3-3: Rock Geochemistry

A total of 77 rock samples were collected on the property, most of which were grab type samples. Fourteen chip samples were taken over widths up to 17m. All samples were prepared and analysis by Acme Analytical Laboratories Ltd. of Vancouver using their 31 element ICP package.

SUMMARY STATISTICAL ANALYSIS

# analysis	77	77	77	77	77	77	77	77
Low	18	2	1	.1	2	2	1	5
High	6488	1392	1460	47.7	15167	962	2745	720
Mean (log)	104.3	25.0	49.8	.42	88.1	4.5	13.6	12.5
Stnd Dev (log)	.488	.419	.490	.509	.957	.576	.791	.583
Mean (arith)	257.8	54.2	101.5	1.53	795.9	28.5	95.5	48.0
Stnd Dev. (arith)	762.18	165.26	200.48	5.831	2207.78	122.55	350.65	117.03

Complete results are included in Appendix 3.

CHAPTER FIVE: CONCLUSIONS & RECOMMENDATIONS

Only limited work has been done to date on the Aus claim group. Fairly widely spaced soil geochemical sampling was completed using 50m intervals on 200m spaced lines. Areas of anomalous soils had intermediate lines placed and sampled at 50m intervals. Preliminary 1:10,000 scale mapping was completed primarily along ridge tops. A total of 583 soils, 77 rock samples and 6 silt samples were collected for analysis during the work programs.

It is recommended that areas of anomalous soils have more samples collected on a more tightely spaced grid to further define areas of possible mineralized bedrock. Geophysical surveys (mag and EM) should be run to try and locate buried sources for Au mineralization followed by hand trenching of any bedrock sources.

Respectfully submitted by;

Kenneth D. Galambos, P. Eng.

REFERENCES

Green, L.H.,

1972; Geology of Nash Creek, Larsen Creek and Dawson Map Area, Yukon Territory. Memoir 364, Geological Survey of Canada.

Hodge, H.J.

1983; Report on the AJ-JA Property of Cody Hawk Resources Inc..

Tempelman-Kluit, D.

1979-80 Yukon Geology and Exploration.

STATEMENT OF COSTS

LABOUR:	
28 person days @ $150/per day	$ 4,200.
SUPPLIES & LODGING	
28 person days @ $50/per day	1,400.
GROUND TRANSPORTATION	
Gas & Oil	280.
Vehicle Rental	750.
CONTRACTOR	
Helicopter 6 hours @ $650./per hour	3,900.
GEOCHEMICAL ANALYSIS	
6 stream sediment samples @ $10/per sample	60.
583 soil samples @ $10/per sample	5,830.
77 rock samples @ $20/per sample	1,540.
2 rock samples fire assayed for Au @ $6./per sample	12.
REPORT WRITING, DRAFTING, ETC.	1,500.
TOTAL	$19,472.

STATEMENT OF QUALIFICATIONS

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

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

2. I am a graduare of the University of Saskatchewan with a B.E. in Geological Engineering.

3. I have practised my profession for the past eight years primarily in the Northern Cordillera.

4. I supervised and participated in field work done on the Aus claims in 1988.

5. I am a member of the Association of Professional Engineers of the Yukon Territory.

Kenneth D. Galambos, P. Eng.

LIST OF PERSONNEL

June 29 - July 4, 1988

Bruce Bark	Field Assistant	Peterborough Ont.
Gordon MacKay	Field Geologist	Whitehorse, Y.T.
Hugh Copland	" "	" "

Aug. 25 - Aug. 29, 1988

Bruce Bark	Field Assistant	Peterborough, Ont.
Ken Galambos	Project Geologist	Whitehorse, Y.T.

APPENDIX 1

Stream Sediment Results

Values in PPM, except where noted.

		SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
84	SILT	10226	100	190	56	1.0	940	40	50
85		16890	82	88	34	0.8	430	18	40
86		22361	18	68	22	0.6	24	8	10
87		22363	140	140	68	0.6	1300	42	90
88		22366	140	310	50	1.6	290	36	40
89	SILT	22370	100	74	28	0.6	380	22	170

APPENDIX 2

Soil Sample Geochemical Results

NORANDA VANCOUVER LABORATORY

****

PROPERTY/LOCATION: SELWYN AU CODE : 8807-039

Project No. : 326 Sheet: 1 of 9 Date rec'd: JUL07
Material : 461 SOILS Geol.: H.C. Date compl: AUG02
Remarks : & 6 SILTS

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
2	15800E-29250N	90	88	70	0.4	120	60	10
3	29300	660	250	34	0.4	500	50	150
4	29350	98	78	130	2.0	700	82	90
5	29400	170	100	54	0.8	560	34	30
6	29450	140	110	56	2.6	940	32	20
7	29500	68	74	26	0.6	470	6	20
8	29550	92	76	18	0.8	700	4	40
9	29600	32	64	10	0.4	280	4	20
10	29650	90	72	18	0.6	940	6	40
11	29700	170	88	46	0.6	680	20	50
12	29750	58	90	20	1.0	420	8	10
13	29800	42	96	24	0.4	690	8	30
14	29850	24	78	10	0.2	40	1	10
15	29900	26	60	10	0.2	260	2	10
16	29950	26	72	8	0.2	500	2	10
17	30000	18	58	8	0.2	320	4	10
18	30050	70	48	12	0.2	700	6	10
19	30100	160	160	8	0.8	740	6	10
20	30150	90	270	28	1.2	880	10	10
21	30200	140	260	30	0.4	380	6	70
22	30250	50	120	14	0.4	20	4	10
23	30300	30	80	8	0.2	160	2	10
24	30350	80	160	22	0.4	200	2	20
25	30400	26	74	12	0.2	200	1	10
26	30450	30	82	6	0.2	220	2	10
27	30500	28	62	6	0.2	120	2	10
28	30550	22	56	8	0.2	120	2	10
29	30600	28	66	8	0.2	180	2	10
30	30650	38	90	12	0.2	280	2	10
31	30700	72	120	10	0.2	140	1	10
32	15800E-30750N	38	94	8	0.2	20	2	10
33	16000E-29250N	48	86	10	1.8	60	2	10
34	29300	290	100	52	1.4	2100	30	60
35	29350	60	60	20	0.6	660	8	30
36	29450	140	82	20	0.8	720	22	20
37	29500	130	190	16	0.6	880	18	10
38	29550	200	130	24	0.6	1800	26	20
39	29600	58	62	16	0.8	190	6	10
40	29650	46	70	16	0.2	320	6	10
41	29700	34	68	12	0.2	150	6	10
42	29750	38	70	18	0.4	310	6	10
43	29800	38	58	36	1.0	110	8	10
44	29850	34	66	18	0.4	86	10	10
45	29900	40	82	12	0.6	42	4	10
46	29950	28	84	10	0.6	40	2	10
47	30000	76	64	30	0.2	130	8	10
48	30050	110	190	22	1.0	560	6	10
49	16000E-30100N	74	46	8	0.8	90	1	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 2 of 9
50	16000E-30150N	92	1400	18	0.4	200	8	10
51	30200	26	42	4	0.6	22	1	10
52	30250	58	120	16	0.6	44	2	10
53	30300	52	190	22	0.2	24	8	10
54	30350	28	78	8	0.2	14	1	10
55	30400	24	94	1	0.8	6	1	10
56	30450	32	84	8	0.2	20	2	10
57	30500	28	130	10	0.2	10	1	10
58	30550	26	100	6	0.2	1	1	10
59	30600	34	130	8	0.2	14	2	10
60	30650	20	94	8	0.2	16	1	10
61	30700	42	100	6	0.2	14	2	10
62	16000E-30750N	24	70	6	0.2	8	4	10
63	16200E-29250N	370	140	54	0.8	1400	26	20
64	29300	190	150	50	0.8	2000	34	60
65	29350	110	72	44	0.8	1700	24	30
66	29400	88	68	46	1.0	1200	24	70
67	29450	70	60	42	1.0	1100	20	40
68	29500	56	62	22	1.0	810	10	50
69	29550	40	82	32	0.6	500	12	20
70	29600	64	82	50	1.0	1400	26	70
71	29650	180	88	24	0.2	2500	44	30
72	29700	200	150	22	0.4	2800	60	60
73	29750	38	62	24	0.2	520	6	70
74	29800	76	66	12	0.2	300	6	50
75	29850	84	64	14	0.2	320	6	20
76	29900	36	60	14	0.2	270	2	10
77	29950	66	58	22	0.2	540	10	70
78	30000	22	68	12	0.2	140	2	10
79	30050	480	220	270	3.4	2100	120	90
80	30100	54	54	22	0.4	180	8	40
81	30150	54	110	32	0.6	380	20	10
82	30200	66	120	32	1.0	170	14	10
83	30250	66	78	14	0.6	62	2	10
84	30300	22	72	10	0.2	52	2	10
85	30350	28	82	14	0.2	64	4	10
86	30400	88	250	30	0.2	200	14	10
87	30450	130	140	18	0.6	18	4	10
88	30500	52	110	12	0.2	8	4	10
89	30550	84	110	12	1.8	2	2	10
90	30600	28	96	12	1.2	2	2	10
91	30650	86	260	36	0.4	26	6	10
92	30700	100	220	20	0.2	34	2	10
93	16200E-30750N	150	220	18	0.2	22	4	20
94	16400E-29250N	60	74	24	0.2	110	6	50
95	29300	74	78	26	0.2	130	4	80
96	29350	48	62	8	0.2	66	2	190
97	29400	120	140	70	0.4	630	36	120
98	29450	78	78	42	0.4	820	22	70
99	16400E-29500N	44	92	28	0.2	700	6	80
100	CHECK NL-6	50	140	60	1.0	100	32	-
101	16400E-29550N	100	120	62	2.4	820	34	120
102	29600	120	92	78	0.6	1500	40	120
103	29650	76	78	30	0.4	1300	20	30
104	29700	76	88	42	0.6	1300	22	40
105	29750	42	82	58	1.6	780	28	70
106	16400E-29800N	58	130	34	1.0	560	1	20

T. T. N	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au	8807-039 Pg. 3 of 9
107	16400E-29850N	54	68	20	0.2	310	4	40	
108	29900	50	76	22	0.4	290	10	50	
109	29950	58	44	20	1.2	88	2	40	
110	30000	96	58	20	0.2	210	2	80	
111	30050	24	50	14	0.2	32	2	20	
112	30100	34	48	14	0.2	210	1	10	
113	30150	30	62	16	0.4	38	2	10	
114	30200	120	220	22	0.2	350	30	40	
115	30250	30	100	64	1.0	700	24	10	
116	30300	68	94	22	0.6	34	6	10	
117	30350	60	110	22	1.6	140	2	10	
118	30400	78	310	14	0.2	64	8	10	
119	30450	48	120	8	0.2	14	6	10	
120	30500	40	160	14	0.2	12	4	10	
121	30550	20	54	10	0.2	8	2	10	
122	30600	22	44	8	0.2	1	1	10	
123	30650	72	110	12	0.6	14	4	10	
124	30700	60	140	22	0.6	12	2	10	
125	16400E-30750N	100	130	10	0.2	10	4	10	
126	16600E-29300N	60	68	14	0.6	32	2	40	
127	29350	100	82	26	0.2	130	8	30	
128	29400	56	96	20	0.2	84	2	10	
129	29450	110	74	28	0.4	270	8	30	
130	29500	170	72	14	0.2	130	2	90	
1	29550	80	54	28	1.2	210	8	10	
13	29600	34	110	54	0.2	320	40	20	
133	29650	24	60	18	0.2	250	6	10	
134	29700	38	62	14	0.2	460	4	40	
135	29750	48	56	28	0.4	1200	16	10	
136	29800	52	100	28	1.0	960	36	50	
137	29850	650	76	52	0.6	11000	38	180	
138	29900	220	460	250	1.0	2600	250	100	
139	29950	100	74	38	1.4	2600	12	110	
140	30000	170	72	18	0.2	2100	10	70	
141	30050	110	66	20	0.4	460	14	70	
142	30100	78	78	18	0.2	360	2	20	
143	30150	42	50	16	1.4	400	10	10	
144	30200	72	44	32	0.4	400	62	20	
145	30250	46	82	24	0.2	280	12	20	
146	30300	28	72	10	0.2	46	4	10	
147	30350	14	80	8	0.2	44	4	10	
148	30400	68	170	20	0.6	54	12	40	
149	30450	28	72	14	0.2	32	8	10	
2	30500	26	48	10	1.0	10	2	20	
3	30550	78	190	10	0.4	30	2	20	
4	30600	40	78	10	1.0	20	6	10	
5	30650	70	92	14	0.4	20	4	10	
6	30700	44	160	14	0.8	20	4	10	
7	16600E-30750N	16	46	8	0.4	20	2	10	
8	16800E-29250N	28	70	6	0.2	40	4	10	
	29300	190	240	54	0.2	350	4	20	
10	29350	64	130	16	0.4	100	4	20	
11	29400	34	200	30	0.2	60	4	20	
12	29450	100	140	36	0.4	70	4	40	
13	29500	90	100	20	0.2	370	12	880	
14	29550	68	70	14	0.2	200	4	40	
15	16800E-29600N	88	110	12	0.2	240	6	80	

T.T. No	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 4 of 9
16	16800E-29650N	140	350	750	1.0	340	90	90
17	29700	64	76	20	0.2	250	20	80
18	29750	46	84	32	0.2	400	20	60
19	29800	28	88	44	0.2	310	20	30
20	29850	54	86	48	0.4	350	20	10
21	29900	38	70	38	0.4	540	14	10
22	29950	190	92	94	0.4	1300	100	50
23	16800E-30000N	160	100	100	1.0	60	120	110
24	17000E-29250N	26	84	10	0.2	50	4	10
25	29300	30	64	8	0.2	20	4	10
26	29350	28	70	12	0.2	50	4	10
27	29400	38	72	18	0.2	240	2	20
28	29450	88	210	24	0.2	60	4	20
29	29500	32	72	12	0.2	40	4	10
30	29550	140	62	36	0.8	40	6	10
31	29600	32	230	12	0.4	30	4	10
32	29650	96	62	16	1.2	60	4	10
33	29700	86	96	50	1.0	260	26	10
34	29750	40	70	42	0.2	470	16	20
35	29800	34	78	20	0.6	380	6	10
36	29850	46	90	22	0.6	300	6	10
37	29900	18	110	18	0.2	180	6	10
38	29950	20	120	20	0.2	90	4	10
39	30000	14	120	20	1.8	40	12	10
40	30050	90	74	38	0.4	1100	16	30
41	30100	170	62	18	0.4	860	6	40
42	30150	460	66	30	0.8	2500	32	80
43	30200	200	62	22	0.6	910	10	50
44	30250	410	100	92	1.4	2000	42	160
45	30300	88	84	20	1.0	340	6	10
46	30350	120	62	24	0.8	440	6	10
47	30400	130	120	420	4.2	560	250	40
48	30450	30	80	10	0.8	20	4	10
49	30500	26	48	6	0.2	20	2	10
50	30550	12	46	14	0.8	20	4	10
51	30600	18	100	4	5.4	10	4	10
52	30650	36	88	8	1.0	1	2	10
53	30700	22	62	10	0.2	1	2	10
54	17000E-30750N	30	94	10	1.2	1	2	10
55	17200E-29250N	42	84	8	0.2	10	4	10
56	29300	44	72	10	0.6	160	2	10
57	29350	60	110	16	0.2	100	6	10
58	29400	90	140	56	0.2	70	8	30
59	29450	38	90	18	0.2	70	1	10
60	29500	120	110	22	0.2	80	2	10
61	29550	140	64	12	0.2	220	4	120
62	29600	130	74	18	0.6	220	2	30
63	29650	180	82	48	0.4	540	10	20
64	29700	290	110	70	0.8	700	32	30
65	29750	66	86	22	1.0	310	4	40
66	29800	52	110	66	1.0	530	32	100
67	29850	82	170	52	0.6	700	48	90
68	29900	40	120	22	1.0	240	4	90
69	29950	56	86	14	0.8	180	2	20
70	30000	56	72	8	0.2	540	2	20
71	30050	82	160	78	0.2	820	20	40
72	17200E-30100N	30	76	26	0.4	160	2	30

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 5 of 9
73	17200E-30150N	100	130	84	1.0	700	14	30
74	30200	110	56	42	1.6	700	12	30
75	30250	84	50	22	0.2	800	6	30
76	30300	38	36	10	0.8	250	2	10
77	30350	52	74	30	0.4	200	6	20
78	30400	40	66	34	0.4	200	16	30
79	30450	46	64	12	0.2	90	2	30
80	30500	28	100	10	0.2	10	1	10
81	30550	42	130	16	0.4	10	2	10
82	30600	92	780	20	0.2	40	12	20
83	30650	74	180	20	0.2	30	6	20
84	30700	54	380	24	0.2	70	8	20
85	17200E-30750N	26	84	10	0.2	20	2	10
86	17400E-29250N	28	90	8	0.2	10	1	20
87	29300	62	88	12	0.2	90	2	10
88	29350	48	480	22	0.2	40	2	10
89	29400	44	94	12	0.2	1	2	10
90	39450	30	100	16	0.2	30	2	10
91	29500	36	120	30	0.4	40	10	10
92	29550	200	84	66	1.2	630	50	50
93	29600	86	78	62	0.8	520	46	160
94	29650	76	64	46	0.4	310	30	50
95	29700	110	66	70	1.4	450	42	20
96	29750	92	56	38	1.2	350	18	20
97	29800	58	62	24	0.8	360	10	20
98	29850	70	72	26	0.6	620	16	20
99	17400E-29600N	58	70	18	0.2	430	8	30
100	CHECK NL-6	48	140	62	1.0	94	34	-
101	17400E-29950N	32	72	12	1.0	50	6	10
102	30000	16	48	12	0.2	140	4	10
103	30050	190	160	64	0.6	1200	48	50
104	30100	42	78	20	0.6	380	10	10
105	30150	24	68	12	0.2	180	8	10
106	30200	50	76	26	0.2	270	12	10
107	30250	350	180	32	0.6	700	42	40
108	30300	120	130	92	1.4	950	60	20
109	30350	48	72	20	0.4	200	18	20
110	30400	82	60	18	0.8	40	8	20
111	30450	50	82	26	0.4	50	10	20
112	30500	52	78	10	0.2	20	2	20
113	30550	58	110	14	0.2	70	6	20
114	30600	56	140	22	0.6	160	14	20
115	30650	62	180	18	0.4	90	6	20
116	30700	50	230	20	1.0	30	4	10
117	17400E-30750N	58	180	22	0.4	20	2	20
118	17600E-29000N	26	54	6	0.2	1	1	10
119	29050	34	110	12	0.4	1	4	10
120	29100	30	100	12	0.2	1	4	10
121	29150	16	46	6	0.2	1	4	10
122	29200	16	58	2	0.4	1	1	10
123	29250	20	60	6	0.2	1	1	10
124	29300	26	72	12	0.4	20	1	10
125	29350	100	160	50	2.2	280	8	20
126	29400	80	68	42	0.8	380	26	20
127	29450	88	78	34	0.8	580	32	20
128	29500	42	100	22	0.6	160	14	10
129	17600E-29550N	38	130	32	1.0	120	12	10

T.T. No	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 6 of 9
130	17600E-29600N	30	84	28	0.4	50	16	10
131	29650	32	66	28	0.8	50	6	10
132	29700	72	82	88	1.4	280	52	20
133	29750	50	84	38	1.0	350	20	10
134	29800	28	120	32	1.2	150	10	10
135	29850	24	100	26	1.2	150	8	10
136	29900	30	58	16	0.8	250	8	10
137	29950	42	74	22	0.2	220	10	10
138	30000	48	44	16	2.6	220	20	40
139	30050	42	42	18	0.4	120	12	20
140	30100	22	42	16	0.2	210	12	10
141	30150	20	64	8	1.2	70	10	10
142	30200	110	170	92	1.2	700	120	20
143	30250	22	54	12	0.8	20	6	10
144	30300	16	60	12	0.4	70	4	10
145	30350	16	46	18	0.4	120	6	10
146	30400	12	62	12	0.4	20	8	10
147	30450	26	62	12	0.2	30	2	30
148	30500	28	70	14	0.4	70	4	20
149	30550	28	68	20	0.2	240	14	20
2	30600	22	42	10	0.2	24	10	10
3	30650	26	74	10	0.2	30	10	10
4	30700	58	420	32	1.2	42	8	10
5	30750	46	300	18	0.8	20	6	10
6	30800	62	330	24	0.4	28	14	10
7	30850	50	270	20	0.8	14	6	10
8	30900	70	170	16	0.2	24	16	10
9	30950	56	100	14	1.4	34	10	10
10	17600E-31000N	70	200	20	1.4	110	10	10
11	17800E-29000N	72	120	20	0.8	16	6	10
12	29050	24	58	10	0.2	18	12	10
13	29100	76	140	24	1.0	16	8	10
14	29150	36	120	24	0.6	10	6	10
15	29200	64	100	26	0.4	20	6	10
16	29250	28	60	8	0.4	18	6	10
17	29300	22	82	14	0.4	28	4	10
18	29350	140	180	28	0.8	130	10	20
19	29400	120	82	16	0.8	140	8	20
20	29450	120	78	16	1.0	180	6	10
21	29500	130	92	20	2.8	150	6	10
22	29550	26	62	12	1.0	54	6	10
23	29600	28	62	12	0.4	52	4	10
24	29650	18	66	10	0.6	34	6	10
25	29700	74	100	34	0.6	570	12	10
26	29750	44	110	14	0.6	56	4	10
27	29800	54	100	26	1.0	290	14	10
28	29850	30	84	32	1.4	84	14	10
29	29900	52	100	30	1.0	180	24	10
30	29950	110	140	26	2.8	720	6	10
31	30000	100	66	20	0.8	120	28	10
32	30050	38	42	6	0.8	14	10	10
33	30100	220	62	16	2.8	420	18	60
34	30150	190	100	24	0.8	600	26	10
35	30300	70	58	12	1.0	110	4	10
36	30350	86	54	22	1.0	120	6	10
37	30400	60	100	38	1.4	110	14	10
38	17800E-30500N	60	140	14	0.4	12	2	10

T.T. No	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 7 of 9
39	17800E-30550N	48	210	22	0.6	8	2	10
40	30600	26	70	16	0.4	4	2	10
41	30650	150	150	12	0.6	50	12	10
42	30700	26	68	20	1.0	28	8	20
43	30750	36	120	10	0.2	18	6	10
44	30800	32	120	10	0.2	14	6	10
45	30820	44	130	12	0.4	12	4	10
46	30900	22	78	8	0.2	2	4	10
47	30950	18	74	12	0.4	12	4	10
48	17800E-31000N	34	490	34	0.8	32	12	10
49	18000E-29000N	130	360	32	0.8	50	10	10
50	29050	22	96	12	0.4	10	8	10
51	29100	32	150	22	0.6	38	4	10
52	29150	68	180	46	1.0	26	1	10
53	29200	74	200	38	1.0	180	10	10
54	29250	120	230	26	0.2	94	8	10
55	29300	46	220	50	0.8	150	16	10
56	29350	120	170	180	2.0	740	80	20
57	29400	94	130	48	1.0	230	6	20
58	29450	72	90	62	0.4	300	8	10
59	29500	96	100	20	2.2	120	6	10
60	29550	72	160	36	1.0	100	4	10
61	29600	90	200	44	1.0	140	16	10
62	29650	66	100	20	0.8	42	8	10
63	29700	48	100	14	0.8	50	10	10
64	29750	230	180	34	0.8	360	20	10
65	29800	34	84	30	1.0	120	10	10
66	29850	26	88	12	0.4	30	8	10
67	29900	22	66	16	0.6	24	10	10
68	29950	70	150	250	2.0	280	150	10
69	30000	66	160	86	2.0	510	40	10
70	30050	60	88	22	1.0	140	6	10
71	30100	180	70	20	1.6	850	12	20
72	30150	170	96	24	1.4	360	24	30
73	30200	240	200	24	2.2	220	30	10
74	30250	56	66	46	0.6	310	34	10
75	30300	84	50	30	0.6	72	66	10
76	30350	30	76	22	0.6	62	14	10
77	30400	34	54	72	3.0	40	20	10
78	30450	16	70	18	0.2	4	6	10
79	30500	28	74	14	0.2	20	6	10
80	30550	46	160	14	0.2	18	8	10
81	30600	32	150	16	0.4	12	6	10
82	30650	68	370	22	0.4	22	14	10
83	30700	50	78	14	0.2	14	4	10
84	30750	28	68	14	0.2	10	4	10
85	30800	30	82	20	1.8	36	14	10
86	30850	26	82	12	0.2	8	6	10
87	30900	28	130	14	0.4	16	4	10
88	30950	44	260	14	0.2	16	12	10
89	18000E-31000N	54	110	34	2.4	180	26	10
90	18200E-29250N	20	120	22	0.6	16	2	10
91	29300	26	160	20	0.4	26	4	10
92	29350	28	180	170	2.4	260	50	10
93	29400	84	130	56	0.8	210	10	10
94	29450	46	100	20	0.8	28	6	10
95	18200E-29500N	18	60	12	1.8	14	4	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8807-039 Pg. 8 of 9
96	18200E-29550N	34	150	32	1.0	28	2	10
97	29600	28	86	22	3.0	12	4	10
98	29650	8	130	12	0.6	12	2	10
99	18200E-29700N	54	230	26	1.4	26	4	10
100	CHECK NL-6	48	130	58	1.0	90	30	-
101	18200E-29750N	22	250	16	2.2	20	20	10
102	29800	32	88	14	1.2	14	8	10
103	29850	24	110	18	0.6	24	8	10
104	29900	24	130	12	0.6	28	6	10
105	29950	30	120	16	0.4	26	14	10
106	30000	20	110	14	0.6	16	4	10
107	30050	20	100	28	0.4	26	22	10
108	30100	46	66	18	3.2	20	6	10
109	30150	54	96	22	0.6	88	14	10
110	30200	66	120	18	0.6	28	16	10
111	30250	30	62	12	1.2	10	2	10
112	30300	42	120	34	0.4	22	20	10
113	30350	42	100	26	0.6	84	12	10
114	30400	52	86	30	1.4	80	18	10
115	30450	30	100	14	1.2	30	8	10
116	30500	44	120	40	1.8	28	10	10
117	30550	30	66	36	2.4	68	16	10
118	30600	14	60	18	0.6	44	6	10
119	30650	22	72	20	0.6	30	6	10
120	18200E-30750N	18	62	12	0.8	16	6	10
121	18400E-29250N	28	120	20	0.2	24	2	10
122	29300	38	200	22	1.0	12	4	10
123	29350	34	240	18	0.6	14	2	10
124	29400	26	180	14	0.4	16	6	10
125	29450	60	190	64	1.4	34	10	10
126	29500	28	150	16	1.0	22	2	10
127	29550	30	100	54	2.2	44	8	10
128	29600	30	110	30	1.2	26	2	10
129	29650	34	130	28	0.6	36	10	10
130	29700	36	150	22	1.4	28	10	10
131	28750	16	70	14	0.6	4	4	10
132	29800	26	78	30	1.4	8	6	10
133	29850	28	86	10	0.6	1	8	10
134	29900	16	92	8	0.6	2	6	10
135	29950	30	150	16	2.0	4	4	10
136	30000	32	280	30	2.2	14	10	10
137	30050	18	150	22	1.0	20	4	10
138	30100	30	220	34	0.8	18	16	10
139	30150	18	100	30	0.4	56	18	10
140	30200	16	100	16	0.4	30	4	10
141	30250	150	240	24	0.8	16	10	10
142	30300	28	150	80	0.6	14	12	10
143	30350	24	120	54	0.6	30	4	10
144	30400	48	200	120	1.4	34	12	10
145	30450	56	180	50	2.4	100	8	10
146	30500	40	100	16	0.6	30	4	10
147	30550	40	82	16	0.4	22	4	10
148	30600	68	130	16	0.6	20	4	10
149	18400E-30650N	36	82	10	0.2	12	4	10
150	CHECK NL-6	50	140	60	1.0	90	30	-
151	18400E-30700N	160	140	16	0.4	20	20	20
152	18400E-30750N	54	76	14	0.8	20	6	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au	8807-039 Pg. 9 of 9
153	18600E-29250N	40	110	22	0.8	24	10	10	
154	29300	160	160	34	2.0	40	10	10	
155	29350	38	100	14	0.4	30	6	10	
156	29400	20	150	14	0.4	10	4	10	
157	29450	24	84	14	0.6	6	10	10	
158	29500	34	160	32	0.6	12	4	10	
159	29550	28	130	30	1.2	10	12	10	
160	29600	60	190	38	0.8	4	14	10	
161	29650	26	78	12	0.6	6	6	10	
162	29700	26	90	10	0.6	1	4	10	
163	29750	34	72	12	1.0	1	10	10	
164	29800	28	100	12	0.2	2	8	10	
165	29850	30	250	60	0.6	38	20	10	
166	29900	30	110	28	2.2	14	16	10	
167	29950	42	72	8	0.2	20	10	10	
168	30000	48	180	54	1.0	26	16	10	
169	30050	30	330	130	1.8	84	26	10	
170	30100	24	100	34	4.2	44	12	10	
171	30150	34	120	92	2.6	54	24	10	
172	30200	24	82	12	0.4	10	8	10	
173	30250	34	72	12	0.2	20	10	10	
174	30300	22	82	18	0.6	6	4	10	
175	30350	36	110	54	0.4	150	12	10	
176	30400	22	74	20	0.4	10	4	10	
177	30450	24	58	28	0.4	24	10	10	
17	30500	56	120	36	0.8	28	4	10	
179	30550	30	100	48	2.0	40	12	10	
180	30600	40	80	34	1.4	22	12	10	
181	30650	24	68	16	0.4	12	8	10	
182	30700	32	110	12	0.4	18	8	10	
183	18600E-30750N	52	720	8	0.6	20	16	10	
184	SILT 10226	100	190	56	1.0	940	40	50	
185	16890	82	88	34	0.8	430	18	40	
186	22361	18	68	22	0.6	24	8	10	
187	22363	140	140	68	0.6	1300	42	90	
188	22366	140	310	50	1.6	290	36	40	
189	SILT 22370	100	74	28	0.6	380	22	170	

Au S Selwyn Au (HC) 8807-039

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
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DATE RECEIVED: JUL 28 1988
DATE REPORT MAILED: Aug. 4./88.

GEOCHEMICAL ANALYSIS CERTIFICATE

TOTAL Ba BY LiBO2 FUSION/ICP.
- SAMPLE TYPE: P1-P14 SOIL PULP P15 SILT PULP HG ANALYSIS BY FLAMLESS AA.

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8807-039 326 FILE # 88-3068 Page 1

SAMPLE#	Ba PPM	Hg PPB
15800E 29250N	1062	60
15800E 29300N	988	20
15800E 29350N	951	70
15800E 29400N	1102	30
15800E 29450N	1046	30
15800E 29500N	1096	30
15800E 29550N	1002	40
15800E 29600N	875	40
15800E 29650N	1154	40
15800E 29700N	1195	20
15800E 29750N	1138	30
15800E 29800N	1098	60
15800E 29850N	1080	30
15800E 29900N	900	40
15800E 29950N	1140	60
15800E 30000N	5	30
15800E 30050N	1090	50
15800E 30100N	989	120
15800E 30150N	1316	310
15800E 30200N	958	40
15800E 30250N	1143	40
15800E 30300N	1318	20
15800E 30350N	1119	30
15800E 30400N	1010	20
15800E 30450N	1064	30
15800E 30500N	2697	20
15800E 30550N	1267	30
15800E 30600N	972	20
15800E 30650N	1133	20
15800E 30700N	1357	40
15800E 30750N	1017	30
16000E 29250N	714	90
16000E 29300N	1082	110
16000E 29350N	881	50
16000E 29450N	616	180
16000E 29500N	802	130
std SO-4	731	-

8 Au. HC

SAMPLE#	Ba PPM	Hg PPB
16000E 29550N	1162	110
16000E 29600N	1115	50
16000E 29650N	1087	60
16000E 29700N	1135	60
16000E 29750N	1060	110
16000E 29800N	1212	60
16000E 29850N	1265	180
16000E 29900N	1225	40
16000E 29950N	985	60
16000E 30000N	926	40
16000E 30050N	1088	170
16000E 30100N	551	200
16000E 30150N	1068	40
16000E 30200N	677	60
16000E 30250N	1215	70
16000E 30300N	1696	30
16000E 30350N	1114	50
16000E 30400N	567	100
16000E 30500N	1542	30
16000E 30550N	1342	40
16000E 30600N	1287	20
16000E 30650N	912	40
16000E 30700N	885	50
16000E 30750N	830	30
16200E 29250N	1070	110
16200E 29300N	935	50
16200E 29350N	852	10
16200E 29400N	756	15
16200E 29450N	757	20
16200E 29500N	786	10
16200E 29550N	734	30
16200E 29600N	814	20
16200E 29650N	883	60
16200E 29700N	694	130
16200E 29750N	890	20
std SO-4	728	-

SAMPLE#	Ba PPM	Hg PPB
16200E 29800N	1285	20
16200E 29850N	1349	20
16200E 29900N	1181	20
16200E 29950N	1017	10
16200E 30000N	674	50
16200E 30050N	1444	10
16200E 30100N	895	40
16200E 30150N	1162	60
16200E 30200N	1208	120
16200E 30300N	805	40
16200E 30350N	1082	50
16200E 30400N	1071	40
16200E 30450N	1137	75
16200E 30500N	1089	40
16200E 30550N	826	120
16200E 30600N	520	100
16200E 30650N	1489	30
16200E 30700N	1525	40
16200E 30750N	849	30
16400E 29250N	1096	20
16400E 29300N	1111	30
16400E 29350N	1197	20
16400E 29400N	884	40
16400E 29450N	766	20
16400E 29500N	964	20
16400E 29550N	710	5
16400E 29600N	601	5
16400E 29650N	723	160
16400E 29700N	750	50
16400E 29750N	764	20
16400E 29800N	818	50
16400E 29850N	795	40
16400E 29900N	690	40
16400E 29950N	691	50
16400E 30000N	784	20
std SO-4	737	-

SAMPLE#	Ba PPM	Hg PPB
16400E 30050N	1432	20
16400E 30100N	1209	90
16400E 30150N	942	60
16400E 30200N	1336	5
16400E 30250N	848	100
16400E 30300N	1263	40
16400E 30350N	784	110
16400E 30400N	1393	20
16400E 30450N	1346	20
16400E 30500N	1232	30
16400E 30550N	984	20
16400E 30600N	1057	30
16400E 30650N	1730	20
16400E 30700N	967	60
16400E 30750N	1001	30
16600E 29300N	652	110
16600E 29350N	1014	30
16600E 29400N	1094	30
16600E 29450N	1742	30
16600E 29500N	1701	40
16600E 29550N	837	40
16600E 29600N	821	30
16600E 29650N	2955	40
16600E 29700N	828	20
16600E 29750N	769	50
16600E 29800N	791	50
16600E 29850N	784	90
16600E 29900N	916	1400
16600E 29950N	913	40
16600E 30000N	916	40
16600E 30050N	1018	50
16600E 30100N	925	30
16600E 30150N	578	250
16600E 30200N	696	100
16600E 30250N	1021	20
16600E 30300N	1081	30
std SO-4	788	-

SAMPLE#	Ba PPM	Hg PPB
16600E 30350N	781	30
16600E 30400N	946	120
16600E 30450N	1122	60
16600E 30500N	659	60
16600E 30550N	1605	230
16600E 30600N	1085	60
16600E 30650N	1182	40
16600E 30700N	1021	30
16600E 30750N	885	30
16800E 29250N	1516	30
16800E 29300N	823	100
16800E 29350N	1044	30
16800E 29400N	1003	30
16800E 29450N	825	40
16800E 29500N	984	20
16800E 29550N	1089	30
16800E 29600N	905	20
16800E 29650N	902	40
16800E 29700N	1169	20
16800E 29750N	759	40
16800E 29800N	859	50
16800E 29850N	832	40
16800E 29900N	773	60
16800E 29950N	854	50
16800E 30000N	1040	30
17000E 29250N	1241	30
17000E 29300N	1302	40
17000E 29350N	993	70
17000E 29400N	996	40
17000E 29450N	953	30
17000E 29500N	1354	30
17000E 29550N	988	40
17000E 29600N	1534	30
17000E 29650N	1002	50
17000E 29700N	1037	20
17000E 29750N	805	40
std SO-4	820	-

SAMPLE#	Ba PPM	Hg PPB
17000E 29800N	905	20
17000E 29850N	852	50
17000E 29900N	823	20
17000E 29950N	862	40
17000E 30050N	930	20
17000E 30100N	1081	40
17000E 30150N	1443	5
17000E 30200N	1328	10
17000E 30250N	1192	15
17000E 30300N	830	70
17000E 30350N	861	70
17000E 30400N	897	170
17000E 30450N	1798	100
17000E 30500N	1067	40
17000E 30550N	774	70
17000E 30600N	354	90
17000E 30650N	1259	60
17000E 30700N	919	40
17000E 30750N	851	60
17200E 29250N	1524	50
17200E 29300N	1275	40
17200E 29350N	1184	370
17200E 29400N	1765	60
17200E 29450N	936	50
17200E 29500N	1080	20
17200E 29550N	1178	30
17200E 29600N	1275	40
17200E 29650N	963	40
17200E 29700N	991	50
17200E 29750N	1023	30
17200E 29800N	1087	30
17200E 29850N	1013	50
17200E 29900N	1007	15
17200E 29950N	902	20
17200E 30000N	998	30
std SO-4	755	-

SAMPLE#	Ba PPM	Hg PPB
17200E 30050N	883	30
17200E 30100N	743	70
17200E 30150N	1096	70
17200E 30200N	843	50
17200E 30250N	1221	50
17200E 30300N	1654	30
17200E 30350N	907	50
17200E 30400N	1107	100
17200E 30450N	1410	30
17200E 30500N	958	40
17200E 30550N	1210	60
17200E 30600N	1676	70
17200E 30650N	1695	30
17200E 30700N	1915	40
17200E 30750N	887	40
17400E 29250N	1200	30
17400E 29300N	1229	40
17400E 29350N	1271	20
17400E 29400N	959	40
17400E 29450N	1107	30
17400E 29500N	1139	40
17400E 29550N	1206	40
17400E 29600N	1115	20
17400E 29650N	1076	10
17400E 29700N	803	50
17400E 29750N	841	30
17400E 29800N	871	20
17400E 29850N	956	25
17400E 29900N	880	20
17400E 29950N	938	50
17400E 30000N	820	20
17400E 30050N	13912	10
17400E 30100N	825	50
17400E 30150N	910	20
17400E 30200N	862	50
17400E 30250N	1124	70
std SO-4	754	-

SAMPLE#	Ba PPM	Hg PPB
17400E 30300N	1396	40
17400E 30350N	911	50
17400E 30400N	995	80
17400E 30450N	824	50
17400E 30500N	1140	20
17400E 30550N	1063	40
17400E 30600N	1085	50
17400E 30650N	1061	40
17400E 30700N	1304	50
17400E 30750N	1141	60
17600E 29000N	831	20
17600E 29050N	815	30
17600E 29100N	1016	60
17600E 29150N	784	10
17600E 29200N	253	100
17600E 29250N	1161	70
17600E 29300N	1149	130
17600E 29350N	1137	160
17600E 29400N	918	30
17600E 29450N	989	30
17600E 29500N	968	20
17600E 29550N	924	130
17600E 29600N	914	5
17600E 29650N	998	60
17600E 29700N	958	20
17600E 29750N	1084	10
17600E 29800N	909	30
17600E 29850N	1103	20
17600E 29900N	1031	20
17600E 29950N	746	20
17600E 30000N	816	60
17600E 30050N	707	50
17600E 30100N	714	60
17600E 30150N	613	100
17600E 30200N	1121	50
17600E 30250N	748	40
std SO-4	755	-

SAMPLE#	Ba PPM	Hg PPB
17600E 30300N	764	30
17600E 30350N	734	40
17600E 30400N	757	20
17600E 30450N	903	20
17600E 30500N	988	30
17600E 30550N	1174	20
17600E 30600N	1076	30
17600E 30650N	1139	40
17600E 30700N	1348	100
17600E 30750N	1327	40
17600E 30800N	1227	50
17600E 30850N	1208	90
17600E 30900N	1107	60
17600E 30950N	807	150
17600E 31000N	823	130
17800E 29000N	1919	20
17800E 29050N	857	30
17800E 29100N	885	40
17800E 29150N	3616	40
17800E 29200N	1517	20
17800E 29250N	1264	30
17800E 29300N	942	160
17800E 29350N	1461	30
17800E 29400N	1320	40
17800E 29450N	1658	50
17800E 29500N	1337	30
17800E 29550N	1025	20
17800E 29600N	1104	20
17800E 29650N	1241	30
17800E 29700N	1376	350
17800E 29750N	998	10
17800E 29800N	898	30
17800E 29850N	1152	30
17800E 29900N	914	20
17800E 29950N	1115	10
17800E 30000N	979	20
std SO-4	754	-

SAMPLE#	Ba PPM	Hg PPB
17800E 30050N	800	40
17800E 30100N	931	60
17800E 30150N	1024	50
17800E 30300N	868	190
17800E 30350N	734	150
17800E 30400N	1087	160
17800E 30500N	1052	30
17800E 30550N	1675	20
17800E 30600N	1114	60
17800E 30650N	658	30
17800E 30700N	1130	230
17800E 30750N	1172	20
17800E 30800N	2147	10
17800E 30850N	1706	30
17800E 30900N	1025	30
17800E 30950N	1021	20
17800E 31000N	2027	170
18000E 29000N	1184	40
18000E 29050N	978	10
18000E 29100N	1055	30
18000E 29150N	2046	50
18000E 29200N	1330	70
18000E 29250N	1584	60
18000E 29300N	1210	30
18000E 29350N	2025	40
18000E 29400N	1971	50
18000E 29450N	1170	10
18000E 29500N	945	70
18000E 29550N	3996	40
18000E 29600N	1038	70
18000E 29650N	1456	10
18000E 29700N	1144	20
18000E 29750N	1830	40
18000E 29800N	1216	20
18000E 29850N	1216	10
18000E 29900N	1540	20
std SO-4	747	-

SAMPLE#	Ba PPM	Hg PPB
18000E 29950N	979	80
18000E 30000N	1068	50
18000E 30050N	691	100
18000E 30100N	1027	60
18000E 30150N	1153	100
18000E 30200N	1295	280
18000E 30250N	847	270
18000E 30300N	1092	50
18000E 30350N	1172	100
18000E 30400N	803	560
18000E 30450N	876	20
18000E 30500N	1096	50
18000E 30550N	2313	20
18000E 30600N	2088	60
18000E 30650N	1945	50
18000E 30700N	1092	60
18000E 30750N	1097	120
18000E 30800N	1899	80
18000E 30850N	1001	20
18000E 30900N	1109	230
18000E 30950N	1564	50
18000E 31000N	2100	110
18200E 29250N	1035	30
18200E 29300N	1177	40
18200E 29350N	1141	30
18200E 29400N	1350	40
18200E 29450N	1137	40
18200E 29500N	1110	20
18200E 29550N	1164	50
18200E 29600N	1041	50
18200E 29650N	792	30
18200E 29700N	1075	60
18200E 29750N	1005	40
18200E 29800N	1399	40
18200E 29850N	1547	30
18200E 29900N	1320	40
std SO-4	727	-

SAMPLE#	Ba PPM	Hg PPB
18200E 29950N	1539	30
18200E 30000N	986	20
18200E 30050N	1153	40
18200E 30100N	536	190
18200E 30150N	928	210
18200E 30200N	827	70
18200E 30250N	548	140
18200E 30300N	1328	40
18200E 30350N	1177	90
18200E 30400N	1121	270
18200E 30450N	567	260
18200E 30500N	1058	380
18200E 30550N	1008	390
18200E 30600N	994	130
18200E 30650N	1006	190
18200E 30750N	1019	150
18400E 29250N	1250	20
18400E 29300N	1325	20
18400E 29350N	1180	20
18400E 29400N	1304	20
18400E 29450N	2154	30
18400E 29500N	1492	20
18400E 29550N	1067	30
18400E 29600N	1485	20
18400E 29650N	1100	15
18400E 29700N	1021	60
18400E 29750N	1006	30
18400E 29800N	1544	50
18400E 29850N	1476	30
18400E 29900N	1299	20
18400E 29950N	1121	50
18400E 30000N	1061	30
18400E 30050N	973	20
18400E 30100N	1054	140
18400E 30150N	1197	20
18400E 30200N	553	80
std SO-4	760	-

SAMPLE#	Ba PPM	Hg PPB
18400E 30250N	1016	90
18400E 30300N	1017	50
18400E 30350N	1017	50
18400E 30400N	929	130
18400E 30450N	889	240
18400E 30500N	1083	50
18400E 30550N	970	90
18400E 30600N	1421	60
18400E 30650N	895	30
18400E 30700N	948	50
18400E 30750N	1084	20
18600E 29250N	1446	200
18600E 29300N	4492	400
18600E 29400N	1247	40
18600E 29450N	1159	20
18600E 29500N	965	30
18600E 29550N	1109	70
18600E 29600N	1047	20
18600E 29650N	924	50
18600E 29700N	1025	30
18600E 29750N	976	60
18600E 29800N	1060	30
18600E 29850N	1769	40
18600E 29900N	2350	40
18600E 29950N	1113	30
18600E 30000N	1640	50
18600E 30050N	1169	40
18600E 30100N	841	80
18600E 30150N	1144	490
18600E 30200N	923	160
18600E 30250N	970	50
18600E 30300N	816	5
18600E 30350N	1138	70
18600E 30400N	1007	40
18600E 30450N	866	30
18600E 30500N	1434	80
std SO-4	744	-

SAMPLE#	Ba PPM	Hg PPB
18600E 30550N	1371	380
18600E 30600N	1359	440
18600E 30650N	1058	30
18600E 30700N	1189	30
18600E 30750N	3343	200

SAMPLE#	Ba PPM	Hg PPB
10226	985	50
16890	1041	50
22361	1041	120
22363	1056	840
22366	1164	150
22370	1013	70

Au Soils

NORANDA VANCOUVER LABORATORY

****

PR :RTY/LOCATION:SELWYN GOLD CODE :8809-017

Project No. :326 Sheet:1 of 3 Date rec'd:SEP.02
Material :122 SOILS Geol.:K.G. Date compl:SEP.14
Remarks :

Values in PPM, except where noted.

T. o.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
2	16000E-28500N	18	120	8	0.4	10	8	10
3	28550	54	360	14	0.2	16	6	10
4	28600	30	170	8	0.6	4	4	10
5	28650	42	190	8	1.0	12	4	10
6	28700	28	300	14	0.4	4	2	10
7	28750	18	90	10	1.0	4	1	10
8	28800	22	230	10	0.4	10	2	10
9	28850	28	110	24	0.6	50	10	10
0	28900	38	150	14	0.4	8	8	10
1	28950	26	150	18	0.8	18	6	10
2	29000	22	120	14	0.4	22	8	10
3	29050	28	110	10	0.4	18	4	10
4	29100	58	220	24	0.8	230	6	10
5	29150	26	76	32	0.4	42	10	10
6	16000E-29200N	44	58	16	0.2	6	6	10
7	16100E-28500N	34	120	6	0.4	4	6	10
8	28550	18	140	6	0.4	6	10	10
9	28600	12	74	6	0.2	6	2	10
0	28650	24	160	6	0.4	10	4	10
1	28700	18	250	6	0.2	4	6	10
2	28750	20	110	6	0.4	12	4	10
3	28800	12	62	10	0.6	16	6	10
4	28850	34	120	8	0.2	26	2	10
5	28900	56	170	12	0.2	34	2	10
6	28950	26	88	8	0.2	20	6	10
7	29000	18	96	12	0.2	32	1	10
8	29050	16	52	8	0.6	28	4	10
9	29100	42	110	18	0.6	170	4	10
0	29150	36	180	30	0.4	78	8	10
1	29200	68	110	30	0.6	92	24	20
2	29250	140	74	20	0.6	160	16	10
3	29300	210	130	170	1.0	1700	54	60
4	29350	70	68	24	0.6	770	14	10
5	29400	96	100	24	0.6	1100	20	20
6	29450	48	54	14	0.4	800	14	10
7	29500	60	58	18	0.4	320	18	10
8	29550	74	78	18	0.8	340	14	10
9	29600	72	100	28	0.2	650	14	10
0	29650	48	56	20	0.6	170	12	10
	29700	48	68	24	0.4	330	14	10
2	29750	72	62	26	0.6	230	14	10
3	100E-29800N	70	50	26	1.2	120	14	10
4	16300E-28700N	30	100	8	0.2	24	8	10
5	28750	30	66	10	0.2	16	10	10
6	28800	52	150	10	0.8	18	12	10
7	28850	88	150	18	3.0	12	2	10
8	28900	56	100	10	0.4	30	8	10
9	16300E-28950N	50	110	16	0.4	46	10	10

½ to follow

. T. o.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	PPB Au
								8809-017 Pg. 2 of 3
50	16300E-29050N	80	110	22	0.4	98	14	10
51	29100	180	180	24	0.6	190	12	30
52	29150	52	86	10	0.2	160	2	10
53	29200	50	70	16	0.2	76	4	40
54	29250	64	88	30	0.8	320	10	80
55	29300	30	82	22	0.6	220	12	20
56	29350	110	70	38	1.2	290	18	80
57	29400	110	96	44	1.4	750	30	50
58	29450	130	84	52	1.2	980	32	110
59	29500	150	110	62	1.2	850	64	70
60	29550	280	100	52	1.0	1100	48	370
61	29600	620	160	90	1.8	1300	56	710
62	29650	74	86	28	0.4	880	24	70
63	29700	66	90	22	0.6	780	18	50
64	29750	50	64	24	0.4	240	12	30
65	16300E-29800N	40	68	20	0.4	380	10	30
66	16400E-28700N	34	130	8	0.2	1	12	10
67	28750	40	110	12	0.2	1	8	10
68	28800	48	120	4	0.2	1	12	10
69	28850	48	130	10	0.8	1	12	10
70	28900	44	100	14	0.2	2	10	10
71	28950	58	190	18	0.8	1	4	10
72	29000	44	120	16	0.4	2	4	10
73	29050	46	66	8	0.6	4	2	10
74	29100	18	70	10	0.6	12	2	10
75	3400E-29200N	88	76	30	0.6	26	4	10
76	16500E-29250N	30	78	18	0.2	34	4	10
77	29300	32	64	18	0.2	24	2	40
78	29350	54	72	20	0.2	32	2	40
79	29400	64	86	14	0.2	72	1	140
80	29450	180	130	84	1.4	700	42	100
81	29500	100	96	64	0.6	580	32	20
82	29550	54	86	68	0.8	560	28	30
83	29600	30	90	54	0.6	780	20	120
84	29650	74	96	54	0.4	960	58	40
85	29700	98	94	48	0.6	2900	64	80
86	29750	48	72	22	0.2	910	16	10
87	29800	52	70	32	0.8	560	14	30
88	29850	74	82	36	0.6	1200	18	30
89	29900	78	62	20	0.2	880	22	40
90	29950	82	92	28	0.6	270	10	60
91	16500E-30000N	110	74	26	0.4	240	4	120
92	16700E-29250N	20	68	6	0.2	58	6	10
93	29275	110	170	24	0.4	140	4	10
94	29300	210	190	22	0.4	130	6	10
95	29325	50	80	14	0.8	22	4	10
96	29350	140	150	40	0.4	84	2	10
97	29375	340	170	14	0.4	50	1	180
98	29400	52	110	20	0.4	26	4	30
99	29425	84	110	26	0.2	56	1	10
00	CHECK NL-6	50	140	60	1.0	82	32	-
01	29450	60	110	22	0.2	230	6	30
02	29475	66	74	36	0.4	200	1	50
03	29500	86	78	54	0.4	170	20	90
04	29525	80	76	14	0.2	140	2	30
05	29550	120	88	48	0.2	130	12	30
06	16700E-29575N	70	80	24	0.4	100	8	50

PPB 8809-017
Pg. 3 of 3

T. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	Sb	Au
107	16700E-29600N	40	80	14	0.4	130	8	10
108	29650	280	280	230	3.8	1000	150	100
109	29700	24	78	12	0.2	140	8	20
110	29750	210	94	220	4.4	3200	86	140
111	29800	72	110	50	0.4	800	58	50
112	29850	140	120	80	1.0	1600	62	10
113	29900	96	92	50	0.4	1300	38	30
114	29950	48	100	36	0.4	780	28	10
115	30000	54	82	28	0.4	1000	30	10
116	16700E-30050N	50	74	32	0.4	1200	32	10
117	16900E-29250N	28	82	10	0.2	190	8	10
118	29300	16	70	14	0.2	66	8	10
119	29350	22	82	14	0.2	58	8	10
120	29400	34	90	12	0.2	40	10	10
121	29450	130	80	10	0.2	190	6	80
122	29500	30	110	14	0.8	140	4	10
123	29550	18	56	10	0.2	62	1	10
124	29600	66	62	12	0.2	100	2	10
125	29650	88	76	20	0.2	58	4	40
126	29700	120	72	48	0.8	220	10	30
127	29750	44	76	36	0.2	470	14	60
128	29800	38	110	32	0.4	350	6	10
129	29850	66	120	94	1.0	1200	52	30
130	29950	76	130	340	1.0	1300	180	50
131	16900E-30000N	170	130	270	1.6	3200	250	110
132	7100E-30000N	66	150	110	1.0	980	42	140
133	30050	50	160	180	0.4	700	70	170
134	30100	340	80	64	1.2	1300	44	660
135	30150	330	130	120	2.8	3500	36	90
136	30200	32	68	24	0.4	360	10	10
137	30300	10	56	10	0.2	110	1	10
138	30350	8	38	10	0.2	24	6	10
139	30400	20	36	10	0.2	58	4	10
140	30450	20	60	26	0.2	24	16	10
141	30500	28	44	10	0.2	6	8	10
142	30550	180	1700	42	2.0	310	14	70
143	30600	50	230	12	0.2	36	8	10
144	30650	26	90	18	1.6	28	10	10
145	17100E-30700N	8	66	8	0.2	14	6	10
146	40068	52	38	34	0.6	6600	44	20

Schwyn Au (K6)

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: SEP 22 1988
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Sept. 30/88.

GEOCHEMICAL ANALYSIS CERTIFICATE

- SAMPLE TYPE: SOIL PULP HG ANALYSIS BY FLAMLESS AA.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8809-017 326 FILE # 88-4708 Page 1

SAMPLE#	HG ppb
16000E 28500N	30
16000E 28550N	40
16000E 28600N	20
16000E 28650N	20
16000E 28700N	10
16000E 28750N	50
16000E 28800N	20
16000E 28850N	30
16000E 28900N	20
16000E 28950N	20
16000E 29000N	180
16000E 29050N	50
16000E 29100N	220
16000E 29150N	30
16000E 29200N	50
16100E 28500N	20
16100E 28550N	10
16100E 28600N	10
16100E 28650N	20
16100E 28700N	20
16100E 28750N	10
16100E 28800N	20
16100E 28850N	20
16100E 28900N	10
16100E 28950N	50
16100E 29000N	50
16100E 29050N	40
16100E 29100N	60
16100E 29150N	60
16100E 29200N	50
16100E 29250N	40
16100E 29300N	60
16100E 29350N	80
16100E 29400N	90
16100E 29450N	80
16100E 29500N	50

SAMPLE#	HG ppb
16100E 29550N	40
16100E 29600N	20
16100E 29650N	20
16100E 29700N	30
16100E 29750N	20
16100E 29800N	50
16300N 28700E	20
16300N 28750E	40
16300N 28800E	60
16300N 28850E	80
16300N 28900E	50
16300N 28950E	40
16300N 29050E	30
16300N 29100E	60
16300N 29150E	20
16300N 29200E	20
16300N 29250E	50
16300N 29300E	30
16300N 29350E	40
16300N 29400E	50
16300N 29450E	40
16300N 29500E	70
16300N 29550E	30
16300N 29600E	60
16300N 29650E	40
16300N 29700E	20
16300N 29750E	40
16300N 29800E	20
16400E 28700N	30
16400E 28750N	20
16400E 28800N	30
16400E 28850N	50
16400E 28900N	20
16400E 28950N	50
16400E 29000N	20
16400E 29050N	40

SAMPLE#	HG ppb
16400E 29100N	20
16400E 29200N	30
16500E 29250N	20
16500E 29300N	20
16500E 29350N	10
16500E 29400N	20
16500E 29450N	70
16500E 29500N	60
16500E 29550N	20
16500E 29600N	30
16500E 29650N	60
16500E 29700N	80
16500E 29750N	30
16500E 29800N	70
16500E 29850N	60
16500E 29900N	20
16500E 29950N	30
16500E 30000N	40
16700E 29250N	20
16700E 29275N	40
16700E 29300N	60
16700E 29325N	50
16700E 29350N	30
16700E 29375N	100
16700E 29400N	60
16700E 29425N	30
16700E 29450N	20
16700E 29475N	20
16700E 29500N	10
16700E 29525N	10
16700E 29550N	30
16700E 29575N	20
16700E 29600N	30
16700E 29650N	560
16700E 29700N	30
16700E 29775N	170
16700E 29800N	80

SAMPLE#	HG ppb
16700E 29850N	50
16700E 29900N	30
16700E 29950N	40
16700E 30000N	40
16700E 30050N	30
16900E 29250N	20
16900E 29300N	30
16900E 29350N	40
16900E 29400N	20
16900E 29450N	20
16900E 29500N	40
16900E 29550N	10
16900E 29600N	20
16900E 29650N	30
16900E 29700N	50
16900E 29750N	30
16900E 29800N	20
16900E 29850N	30
16900E 29950N	100
16900E 30000N	220
17100E 30000N	60
17100E 30050N	120
17100E 30100N	50
17100E 30150N	40
17100E 30200N	60
17100E 30300N	20
17100E 30350N	50
17100E 30400N	40
17100E 30450N	30
17100E 30500N	40
17100E 30550N	80
17100E 30600N	20
17100E 30650N	30
17100E 30700N	10
40068	130

APPENDIX 3

Rock Sample Descriptions

Selwyn A. /AUS (HC) 8807-039

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

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: JULY 08 1988 DATE REPORT MAILED: July 13/88 ASSAYER C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-88-07-039-326 File # 88-2546

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
R-10191	16	37	103	51	.4	7	2	83	2.49	213	5	ND	3	41	1	9	2	151	2.72	1.108	24	81	.05	161	.01	15	.90	.01	.18	2	7	160
R-10192	5	156	33	184	.5	179	13	205	2.85	67	5	ND	5	105	1	2	4	72	1.00	.037	5	32	.88	64	.09	4	2.75	.13	.12	1	2	40
R-10193	2	234	24	63	.2	54	7	122	4.22	25	5	ND	2	34	1	2	3	51	1.03	.306	10	60	.85	88	.06	13	1.51	.03	.04	1	2	20
R-10194	17	442	22	325	.1	228	16	236	2.38	211	5	ND	3	89	5	4	6	223	2.07	.062	11	33	.74	205	.12	9	2.26	.12	.05	1	13	10
R-10195	20	67	44	44	.9	31	14	352	2.15	2677	5	ND	6	91	1	8	38	9	6.53	.030	6	10	.88	35	.04	5	2.61	.12	.02	1	25	5
R-10196	2	123	22	319	.2	52	8	155	2.37	23	5	ND	4	124	1	3	3	34	1.89	.137	11	38	.77	106	.09	12	2.62	.26	.32	1	2	5
R-10197	23	24	21	25	.3	11	2	40	1.14	33	8	ND	3	9	1	7	2	176	.08	.036	7	34	.05	121	.02	17	.30	.01	.08	1	23	5
R-10198	23	90	31	106	.5	149	6	144	1.85	32	9	ND	5	67	1	2	4	120	1.11	.083	17	18	.38	163	.07	2	1.80	.11	.08	1	8	5
R-10199	3	58	38	111	.6	24	11	244	3.87	3	5	ND	16	98	1	2	2	39	1.35	.116	48	21	.66	53	.15	13	2.44	.14	.08	1	2	5
R-10200	3	365	14	42	.7	97	45	179	3.41	5184	5	ND	9	16	1	4	40	149	.49	.127	34	58	1.69	292	.20	13	1.68	.04	1.02	1	240	5
R-10227	1	6488	23	28	47.7	8	16	34	12.96	9721	5	5	7	8	1	463	1227	5	.02	.005	2	1	.01	13	.01	12	.13	.02	.05	873	1390	220
R-10228	2	204	44	85	.2	13	7	142	2.61	776	5	ND	21	60	1	3	5	19	.79	.088	21	9	.35	58	.11	11	1.09	.09	.09	9	21	5
R-10229	2	199	34	73	.7	10	9	203	3.67	1240	5	ND	20	123	1	3	5	41	1.09	.087	42	19	.77	84	.16	7	1.96	.16	.41	8	59	5
R-10230	1	701	65	72	.9	202	54	195	7.66	16	5	ND	1	116	1	2	2	32	1.89	.271	83	29	.11	25	.17	11	1.72	.13	.03	1	128	5
R-16891	1	41	19	44	.2	17	5	141	1.47	73	5	ND	4	52	1	6	3	39	.60	.018	9	35	.97	158	.09	9	1.89	.11	.22	2	8	5
R-16892	1	68	7	18	.3	41	6	81	.77	47	5	ND	1	31	1	3	4	45	.39	.024	9	37	.45	152	.04	11	1.17	.05	.26	2	3	5
R-16893	2	42	27	9	.7	5	2	41	.93	45	5	ND	2	25	1	3	3	20	.01	.017	6	7	.01	284	.01	4	.15	.01	.06	1	5	20
R-16894	1	35	9	32	.1	11	2	100	1.06	3	5	ND	1	7	1	2	2	11	.05	.005	2	12	.29	75	.01	7	.55	.01	.10	1	15	10
R-16895	4	18	11	8	.4	7	1	43	.79	58	5	ND	1	20	1	9	3	22	.01	.011	5	6	.01	66	.01	6	.14	.01	.07	1	4	140
R-22362	1	26	14	13	.2	5	2	79	.97	3	7	ND	3	4	1	3	2	35	.02	.004	4	12	.18	152	.01	7	.30	.01	.11	1	1	20
R-22364	11	139	43	808	.8	43	6	233	2.50	13	5	ND	3	79	11	2	2	54	.84	.107	10	19	.59	171	.07	15	1.51	.05	.11	1	17	20
R-22365	5	34	33	344	.6	15	5	198	1.64	2	5	ND	8	201	4	2	2	21	3.52	.063	19	11	.26	123	.11	7	4.14	.30	.07	1	2	5
R-22367	2	40	14	16	1.0	12	1	51	.85	10	5	ND	3	9	1	7	2	8	.01	.012	8	12	.05	339	.01	7	.25	.01	.12	1	4	5
R-22368	9	24	35	30	.6	9	2	82	2.29	41	9	ND	2	216	1	13	4	429	2.30	.966	29	98	.11	755	.01	10	1.02	.01	.18	1	3	20
R-22369	5	50	20	19	.4	9	2	97	1.65	2	5	ND	4	153	1	3	2	55	.94	.174	9	14	.59	149	.05	4	1.01	.02	.10	1	2	5
R-22371	1	202	13	23	.1	5	3	93	6.74	21	5	ND	2	2	1	8	9	14	.16	.012	2	5	.19	6	.01	2	.12	.01	.03	1	1	5
R-22372	3	157	7	20	.2	27	6	291	4.24	2	5	ND	2	230	1	6	2	24	2.81	.060	19	3	.17	11	.05	10	2.58	.08	.05	1	7	5
R-22373	1	98	1392	88	10.5	7	2	22	3.49	15167	5	ND	1	8	4	962	21	17	.01	.028	2	10	.03	76	.01	3	.23	.01	.09	1	79	100
R-22374	1	67	21	35	.2	19	6	132	1.98	88	8	ND	5	44	1	6	4	18	.27	.018	15	16	.75	159	.02	4	1.76	.04	.37	1	5	5
R-22375	2	198	27	54	.2	62	7	189	2.50	126	5	ND	2	96	1	6	5	30	1.23	.023	11	25	.54	56	.07	10	2.03	.06	.11	1	154	20
R-35878	1	24	7	26	.1	21	4	90	1.88	10	5	ND	3	11	1	2	2	13	.06	.012	9	16	.54	272	.01	14	.96	.01	.18	1	7	5
R-35879	1	25	21	57	.3	27	3	101	.75	31	5	ND	8	142	1	2	2	40	1.62	.052	25	35	.64	155	.15	5	2.47	.26	.27	1	10	5
STD C/AU-R	17	57	37	132	7.0	67	29	1071	3.96	41	18	7	36	45	17	17	19	55	.49	.086	38	56	.89	174	.06	32	1.89	.06	.13	12	510	1300

28/July HC

Schwyn Au 8807-039

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

DATE RECEIVED: JUL 25 1988
DATE REPORT MAILED: July 30/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 88-07-039-326 FILE # 88-2546R

SAMPLE#	AU** oz/t
R 10227	.037

hy HC

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

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: SEP 6 1988 DATE REPORT MAILED: Sept 14/88 ASSAYER C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 326/8809-017 File # 88-4257 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
R 39551	3	58	12	27	.3	49	7	126	2.00	42	5	ND	7	99	1	2	2	100	1.75	.060	19	56	1.03	88	.14	11	3.14	.25	.31	1	3	10
R 39552	2	115	34	51	.3	22	10	111	3.44	23	5	ND	15	221	1	2	6	22	2.05	.102	41	17	.28	55	.13	6	2.77	.26	.11	1	6	5
R 40057	2	56	17	76	.2	8	6	312	2.25	107	5	ND	17	50	1	2	2	48	.45	.057	35	29	.85	342	.19	5	1.38	.07	.65	1	74	5
R 40058	2	605	24	36	1.6	10	8	150	1.72	148	5	ND	25	80	1	2	50	45	.62	.055	21	32	1.13	124	.10	4	1.76	.04	.32	2	83	5
R 40059	9	458	28	62	.8	51	6	100	1.75	451	5	ND	6	196	1	2	15	55	1.42	.029	15	48	.71	118	.14	6	3.00	.16	.50	1	350	5
R 40060	2	220	25	58	.4	26	5	108	1.82	468	5	ND	7	191	1	2	12	85	1.53	.028	14	52	.99	193	.18	5	3.32	.18	.62	1	118	5
R 40061	1	50	12	34	.1	34	5	136	1.58	47	5	ND	3	19	1	2	2	42	.20	.009	10	34	.77	336	.07	4	1.64	.03	.59	1	9	5
R 40062	11	43	29	40	.2	34	1	92	.60	45	5	ND	7	297	1	2	2	14	1.84	.095	9	5	.18	132	.05	3	2.09	.12	.09	1	18	5
R 40063	7	76	24	14	.2	43	2	70	2.46	89	5	ND	1	38	1	2	2	325	1.44	.410	19	69	.35	164	.03	8	.95	.02	.23	1	9	5
R 40064	3	175	52	86	.6	52	6	137	2.40	14	7	ND	20	59	1	2	2	29	.70	.075	27	13	.32	56	.11	4	1.41	.10	.10	1	23	10
R 40065	3	247	29	73	1.0	7	3	308	1.42	4686	5	ND	14	17	1	8	26	54	.50	.078	10	31	.79	62	.02	2	1.00	.02	.06	1	7	20
R 40066	2	84	27	62	.3	11	5	303	2.01	1186	5	ND	17	42	1	2	2	50	.66	.059	34	27	.86	171	.12	6	1.21	.05	.37	1	17	10
R 40067	1	62	43	66	.5	6	4	125	1.48	1652	5	ND	14	166	1	39	2	27	.16	.043	30	23	.08	129	.01	2	.56	.01	.07	1	3	720
R 40069	3	232	41	51	1.2	4	1	45	1.32	1180	5	ND	22	12	1	27	29	22	.17	.059	47	20	.03	28	.01	8	.50	.01	.05	1	127	320
R 40070	2	38	7	23	.1	45	17	57	.80	1097	5	ND	5	73	1	3	27	10	1.80	.021	13	13	.31	61	.09	6	2.65	.16	.08	1	51	10
R 40071	3	1641	461	88	17.0	33	6	255	11.66	521	5	ND	7	5	1	146	62	38	.11	.053	13	30	1.94	46	.01	10	2.34	.01	.19	1	14	70
R 40072	11	47	84	4	.9	20	1	26	1.25	261	5	ND	1	24	1	25	2	148	.56	.326	7	66	.03	51	.01	4	.40	.01	.05	19	7	340
R 40073	2	62	19	637	.3	26	7	96	2.23	8	5	ND	7	159	6	2	2	35	1.83	.095	16	16	.56	100	.07	11	3.36	.20	.20	1	7	10
R 40074	1	50	156	1460	2.5	27	15	559	4.65	4	5	ND	7	236	15	2	2	54	1.97	.042	18	46	2.43	106	.11	6	5.32	.16	1.26	1	1	30
R 40075	4	33	7	139	.1	17	1	112	.53	3	5	ND	1	9	1	2	2	13	.08	.006	3	19	.25	97	.02	7	.52	.01	.16	1	12	10
R 40076	55	58	17	1	.9	42	2	15	3.01	565	9	ND	2	14	1	38	2	618	.02	.140	8	72	.01	37	.01	2	.24	.01	.04	1	4	250
R 40077	2	26	14	101	.1	26	9	393	4.24	6	5	ND	15	39	1	2	2	81	.53	.064	32	65	1.62	843	.26	4	2.36	.03	1.06	1	2	30
R 40078	8	192	18	35	.6	161	3	41	2.24	18	5	ND	4	60	1	9	2	27	.02	.066	9	43	.03	303	.01	16	.43	.01	.04	1	250	500
R 40079	2	71	12	39	.1	20	6	172	3.02	547	5	ND	12	103	1	4	8	74	1.27	.123	34	46	1.00	134	.17	22	2.32	.17	.83	2	1	5
R 40080	4	237	57	151	.4	42	8	64	2.36	186	5	ND	19	49	1	69	2	93	.44	.081	31	21	.14	84	.08	5	1.31	.05	.09	1	3	10
R 40081	1	62	17	112	.4	10	3	543	1.04	2767	5	ND	13	19	3	13	2	8	2.32	.069	16	8	.13	61	.01	9	.60	.01	.31	1	2	60
R 40082	14	314	15	42	.3	8	4	226	1.60	1365	5	ND	9	88	1	2	2	35	.69	.044	29	26	.78	139	.06	9	1.01	.03	.24	1	29	10
R 40083	38	414	4	24	.3	16	3	114	3.04	161	19	ND	3	37	1	2	60	16	.88	.066	12	8	.70	85	.05	18	.91	.10	.22	1	136	5
R 40084	3	1235	69	76	1.2	14	15	148	4.85	322	5	ND	16	37	1	2	2	32	.36	.057	50	16	.59	61	.14	7	1.23	.03	.38	1	158	5
R 40085	5	383	13	24	.4	84	11	59	2.01	126	5	ND	6	95	1	2	2	23	1.32	.019	5	9	.26	61	.07	23	2.91	.14	.04	1	65	10
R 40086	7	239	25	176	.9	13	12	229	3.11	1756	5	ND	19	44	2	12	6	72	.54	.079	42	60	1.12	243	.21	9	1.62	.06	.77	1	78	10
R 40087	2	347	177	156	7.8	47	3	33	2.46	3769	5	ND	3	76	1	160	2	25	.01	.011	5	15	.05	224	.01	8	.38	.01	.15	1	38	220
R 40088	2	25	52	116	.5	11	6	216	2.63	53	5	ND	17	72	2	2	2	55	.49	.070	32	37	.93	367	.22	4	1.51	.07	.73	1	12	10
R 40089	2	30	4	18	.1	14	2	65	1.15	20	5	ND	1	5	1	2	2	11	.02	.005	5	15	.26	76	.01	4	.41	.01	.05	1	20	10
R 40090	5	31	2	5	.1	9	1	34	1.41	19	5	ND	1	21	1	2	2	73	.01	.026	13	27	.27	115	.01	8	.36	.01	.20	1	1	5
R 40091	1	341	35	33	.6	19	6	241	6.29	67	5	ND	6	59	1	2	20	25	2.14	.066	27	7	.05	13	.05	4	2.74	.03	.02	2	410	5
STD C/AU-R	20	62	42	132	7.1	71	31	1113	4.10	44	18	8	37	49	20	16	22	61	.49	.085	40	61	.96	182	.07	33	1.95	.06	.15	11	520	1300

NORANDA EXPLORATION PROJECT 326/8809-017 FILE # 88-4257

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB	Hg PPB
R 40092	38	221	32	36	.8	6	7	179	9.57	12	5	ND	3	60	1	2	4	27	.74	.057	44	5	.10	14	.04	2	1.23	.05	.05	1	6	5
R 40093	8	116	16	42	.3	31	5	87	2.12	9	5	ND	3	66	1	2	2	73	.94	.035	9	31	.77	111	.07	3	1.75	.07	.40	1	55	10
R 40094	2	131	39	78	.2	39	12	184	2.94	47	5	ND	11	139	1	2	3	47	1.88	.107	16	24	.74	100	.11	2	2.80	.21	.15	1	1	5
R 40095	8	180	56	74	.4	35	6	142	2.56	18	5	ND	13	135	1	2	4	25	1.57	.151	15	8	.17	46	.08	3	1.55	.16	.06	1	4	10
R 40096	2	31	26	43	.4	8	5	225	1.83	498	5	ND	14	26	1	2	12	36	.28	.054	23	21	.65	159	.12	2	1.05	.04	.35	2	1	5
R 40097	2	52	24	52	.1	16	5	221	2.19	67	5	ND	8	11	1	2	5	67	.14	.026	16	55	.87	165	.23	4	1.49	.03	.78	1	4	5
R 40098	4	105	23	50	.5	6	3	180	.69	25	5	ND	17	95	1	3	4	15	.78	.071	21	11	.34	243	.07	3	1.03	.04	.14	2	63	5
R 40099	4	93	18	53	.1	7	6	201	2.07	172	5	ND	18	71	1	2	3	39	.46	.066	39	22	.56	284	.17	18	1.17	.07	.48	1	75	5
R 40100	2	66	18	23	.4	10	3	204	1.41	453	5	2	1	18	1	2	218	36	.39	.004	2	12	.55	46	.02	4	.35	.01	.01	1	2745	5
STD C/AU-R	17	57	43	132	6.5	68	30	1030	4.15	40	17	8	37	47	18	17	22	59	.47	.091	38	56	.52	180	.07	31	1.91	.06	.15	13	520	1300

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

DATE RECEIVED: SEP 23 1988
DATE REPORT MAILED: Sept. 27/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 326/8809-017 FILE # 88-4257R

SAMPLE#	AU** oz/t
R 40100	.095

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A-4

PROPERTY SELWYN AU "AUS" "PANORAMA RIDGE" DATE

ROCK SAMPLE REPORT PROJECT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
R40057	FELD-PORPH GD INTRUSIVE WITH MINOR WHITE QTZ VEINLETS		CHIP	3½m	
R40058	FRESH INTRUSIVE WITH TR Py 1-2% MARIPOSITE?	TR	GRAB		
40059	SILICEOUS BANDED SEDS. WITH 1% Py TR CPy, TR. AsPy? Po? (WEAKLY MAGNETIC)	1%	CHIP	20 cm	
40060	SILICIFIED SEDS WITH MINOR QTZ VEINLETS. TR AsPy?	TR	CHIP	3 m	
40061	SILICEOUS SEDIMENTS (CHERT) WITH MINOR VEINING + BLEACHING OF IMMEDIATE SURROUNDING AREA TR-1% Py, TR CPy, TR AsPy?	TR-1%	GRAB		
40062	PALE GREEN CALC SILICATE WITH TR-1% Py, TR CPy	TR-1%	GRAB		
40063	DK. GREY SILICEOUS SEDIMENT (SILICIFIED SILTSTONE?) WITH 1-2% DISS. Py + Py RICH QTZ VEINING, TR-CPy. ROCK IS RUSTY WEATHERING.	1-2%	CHIP	5 m	

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A-4

PROPERTY PANORAMA RIDGE

DATE

ROCK SAMPLE REPORT

PROJECT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
240064	ALT'D + SILICIFIED INTRUSIVE (BIO-PORPH) DIKE WITH 1-2% Py		CHIP	~17m	
240065	BLEACHED + ALT'D INT. (QTZ-EYE + F. PORPH) Bio ALT'D TO CHLORITE. HBLEND XTLS MOD. ALT'D. MINOR QTZ VEINING TR. Py, TR CPy	TR !	GRAB		
40066	BLEACHED INT. WEAKLY IRON STAINED + SILICIFIED? 16600E 27950N		GRAB		
240067	BLEACHED, MOD-STRONGLY CLAY ALT'D (WEATHERED?) INT. (Q-PORPH)		CHIP	4m	
40069	RUSTY WEATHERING. BLEACHED + MOD CLAY ALT'D INT.		GRAB		
400 70	GREY CHERT? AT CONTACT WITH ^10m WIDE INTR. DIKE. Bx + MINOR VEINING CONTAIN TR Py, CPy, AsPy?, Po		GRAB		
240071	CHERT WITH MANGANESE STAINED COCKSCOMB QTZ VEINING WITH MUSC.		GRAB		

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A-4

PROPERTY PANORAMA RIDGE

DATE

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
40072	MOD. RUSTY QTZ FLOODED GREY CHERT?		GRAB		
40073	RUSTY WEATHERING THINLY LAMINATED, HIGHLY SILICIFIED MED-DK GREY SILTSTONE WITH 1-2% Py ALONG BANDING, TR cPy TR Po. WEAK-MOD MAGNETIC LOCALLY TR AsPy?	1-2%	GRAB		
40074	RUSTY WEATHERING SILICIFIED SEDS. WITH 1-2% Py, TR-1% AsPy	2-3%	GRAB		
40075	GREY SILICIFIED SILTSTONE (ARGILLITE) TR. DISS. Py	TR	CHIP	1m	
40076	BANDED SILICIFIED + Bx'd SEDS. SILTSTONE TR. Py	TR	GRAB		
40077	FRESH F-PORPH G.D. DYKE		CHIP	1m	
40078	RUSTY WEATHERING Bx'd + SILICIFIED SEDIMENT.		GRAB		

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116A-4

PROPERTY PANORAMA RIDGE

DATE

ROCK SAMPLE REPORT

PROJECT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐	SAMPLED
40079	FINE - M.G INTERMEDIATE DYKE TR-1% Py, CPy	TR-1%	GRAB			
40080	BLUE GREY STRONGLY SILICIFIED? + ALT'D INT. WITH 2-3% SULFIDES. WEAKLY MAGNETIC TR. CPy	? 2-3%	CHIP	3m		
40081	RUSTY WEATHERING ALT'D INT. 2-3% Py, TR AsPy?	2-3%	GRAB			
40082	FRESH - WEAKLY RUSTY WEATHERING INT. QTZ VEINING UP TO 2cm WITH 1% Py, TR CPy, TR AsPy		GRAB			
40083	F.G. INTERMEDIATE DYKE FLOAT WITH 4-5% DISS SULFIDES	4-5%	GRAB			
40084	RUSTY WEATHERING INT. WITH 20-30% SULFIDES AsPy, Py, Po, CPy	20-30%	GRAB			
40085	DK. GREY SILICEOUS SEDS. CHERT? WITH 2-3% DISS Py + Py ALONG FRACTURES	2-3%	GRAB			

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116-A-4

PROPERTY PANORAMA RIDGE

DATE

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
40086	SILICEOUS C.G. INT. MOD. RUSTY WEATHERING CONTAINING 1cm QTZ VEIN WITH 1% AsPy, TR Py	1%	GRAB		
40087	SILICIFIED SEDS. WITH MINOR CALCISOMB QTZ VEINING TR AsPy	TR	GRAB		
40088	MOD RUSTY WEATHERING SILICEOUS INT. TR PYRRHOTITE Py	TR.	GRAB		
40089	BANDED CHERT		CHIP	1m	
40090	SILICIFIED SEDS WITH MED GREY QTZ VEINING.				
40091	EXTREMELY RUSTY ZONE IN SILICEOUS SEDS NON OXIDIZED ZONES CONTAIN UP TO 3% AsPy? AT 1670E 29784N	3-5%	CHIP	1.3 m	
40092	VERY RUSTY SECTIONS IN SILICIFIED SEDS. TR Py, TR AsPy AT 1670E, 29380N	TR.	GRAB		

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 A-4

PROPERTY PANORAMA RIDGE

DATE

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
40893	SILICIFIED SEDS WITH BANDED QTZ VEINING +1% SULFIDES	1%	GRAB		
40894	SILICIFIED? + ALT'D BLUE GREY INT. 2-3% SULFIDES. RUSTY WEATHERING	2-3%	GRAB		
40895	BLUE GREY INT. WITH 2-3% SULFIDES	2-3%	CHIP	1m	
40896	FRESH C.G. INT. WITH QTZ VEINING TR AsPy	TR	GRAB		
40897	F.G. INT. WITH QTZ VEINING.		GRAB		
40898	ALT'D + SILICIFIED INT. TR-1% OXIDIZED PY		GRAB		
40899	FRESH INT. WITH COARSE XTL'N AsPy ON FRACTURES.		GRAB		
40900	QTZ VEINING WITH 60% HNBL'D TR. AsPy		GRAB		

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY PANORAMA RIDGE

N.T.S. 116 A-4

DATE

PROJECT 326

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
339551	SILICEOUS SEDS WITH TR-1% Py TR CPy, TR AsPy	TR-1%	CHIP	1m	
339552	OXIDIZED, SILICEOUS C.G. DYKE WITH TR-1% Py, TR CPy, TR AsPy	TR	RANDOM CHIP	5m	

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus - Selwyn Au.

N.T.S. 116 A 1

DATE June 29th → July 4th/88

PROJECT 326

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G A G A G A G A G A G A G A	SAMPLED
10191	BL 30000N 15850E Very local sgree. Hydrothermally altered & silicified sediment-breccia? Limonitic weathering. Blue in fresh surface	—	Float	—		
10192	location Same. Similar to -191 less weathered, moderately magnetic, pervasively silicified 2-5% sulfides Asp, Py, Po	2-5%	Float	—		
10193	10m up slope on Ridge from 91-92 V. Similar in O/C Fe & As? stain Weathered.	Minor	Grab. O/C	4m by 25m		

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus - Selwyn Au

N.T.S. 116A-1

DATE

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G A G A G A G A G A G A G A	SAMPLED
?10194	L 15800E 29288N					
	Silicified Meta sed.					
	2-3% Asp, minor py, po					
	Magnetic Some silicified					
	sections have distinctive					
	pink colour.	2-3%	Float	—		
?10195	L 15800E 30000N					
	Med. green meta sed?					
	Mod. silicification.					
	2-3% sulphides po, asp, cpy	2-3%	Float			
?10196	15800E 30128N					
	Med dark grey. Rusty					
	weathering, highly silicified					
	2-3% diss. sxs po, py					
	Mod. Magnetic	2-3%	Float	—		
?10197	L 15800E 29250N					
	Brecciated & silicified					
	Meta sed. Tan fragments					
	w Black Qz veins.	—	Float	—		

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus - Selwyn Au

N.T.S. _____

DATE _____

PROJECT _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐A☐ G☐A☐ G☐A☐ G☐A☐ G☐A☐ G☐A☐ G☐A☐	SAMPLED
R10198	10m uphill from 29450N Highly altered - 17200E and silicified Meta sed. Greenish Grey w pink siliceous zones 2-5% sulfides - fine diss. Asp, py, po?	2-5%	Float	—		
R10199	L 17200E 29333N Pervasively altered intrusive 5-10% sxs py. Some reaction to HCl light grey fresh surface Rusty weathering	5-10%	Float	—		
R10200	L17200E 30146N. Recrystalized Meta sed. Near contact w intrusive. 2-5% sxs, Asp, py, cpy in veinlets & diss.	2-5%	float	—		

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aur - Selwyn Au

N.T.S. 116 A 1

DATE

PROJECT 326

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G A G A G A G A G A G A G A G A SAMPLED
~~10226~~	17200E 30248N				
10227	Qz vein w 25-30%				
	SXS. Asp, Py				
	4 cm across	25-30%	Float		
10228	L16800E 29460N				
	Pervasive epidote alt.				
	Intrusive (Porphyritic)				
	1% diss SXS py Asp cp	1%	Scree		
10229	L16800E 29450N				
	O/C exposed for ≈50M				
	up scree slope. ≈ Homogeneous				
	sample V. Representative				
	plag. Porphyry w secondary				
	Biotite chlorite alt.				
	Silica rich (secondary?)				
	≈ 5% diss SXS Asp? (py?)				
	minor cpy. Mod. grey.				
	Fresh surface rusty				
	weathering.				

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus: Selwyn Au.

N.T.S. _____

DATE _____

PROJECT _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED
10230	L16800E 29440 N Pervasively Chloritic altered Intrusive. (Andesitic Colour) No biotite-silica rich. Med time grained ≈ 15% Sx's Po, Cpy & Asp?	15%	Float	—								
	Magnetic											

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Ius Selwyn

N.T.S. 116 A/14

DATE July 88

PROJECT

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G A G A G A G A G A G A G A SAMPLED
16891	L178E 29625N bleached, silicified, granitic siltstone cut by numerous dark micro quartz veinlets		grab talus		
16892	L178E 29700N bleached light grey chert, gossanous on weathered surface, fractured cut by numerous glassy qtz veinlets, minor sulph.		grab talus		
22362	L184E 29500N pervasively silicified dark grey - black mudstone fractured with minor veinlets granitic		grab subcrop		

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus

N.T.S. _____

DATE _____

PROJECT _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐	SAMPLED
22364	L162E 30490N limonitic, brecciated blk siliceous argillite (chert?) cut by dark glassy qtz veinlets to 5 mm, diss lyPy, aspy (?) to 5%.		talus grab			
22365	L162E 30410N limonitic siliceous mudstone (chert?) light to dark grey, diss py pY & blebby aspy 1-3%.		outcrop grab			
22367	L162E 30200#N black argillaceous silicified mudstone, limonitic on fractured surface cut by numerous vuggy glassy quartz veinlets to 10%		grab			

3/5

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus

N.T.S. _____

DATE _____

PROJECT _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED
?22368	L162E 30195 N grey-white, bleached sugary textured rock, silicified, limonitic vuggy originally a carbonate(?)		grab	g.								
22369	L174E 29370N highly altered sediment, bleached limonite, highly silicified, dark glassy quartz blebs & stringers to 15%, hematite stain, sugary texture, 1st float marker		grab									
22371	L174E 30410 N limonitic, highly silicified sed (original rx type?) boxwork texture, later quartz stringers, asp stain		grab									

4/5

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus

N.T.S. _____

DATE _____

PROJECT: _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
22372	L174E 30365IN extremely gossanous & silicified green mudstone, diss & blebby stringer aspy, py, ↑ PØ to 30% of rx		grab subcrop		
22373	L174E 30300IN totally bleached & altered sediment, sugary texture, numerous crosscutting silica veinlets slightly brecciated, vuggy, blebby py massive to 2%		talus grab		
22375	L164E 29310N dark green silicified sediment, extremely hard, limonitic diss py, PØ ± aspy 2-3%. Numerous rx of this type in area				
22374	L164E 29255N as 22375				

5/5

NORANDA EXPLORATION COMPANY, LIMITED

PROPERTY Aus

N.T.S. _____

DATE _____

PROJECT _____

ROCK SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ G☐ A☐ G☑ A☐ G☐ A☐ G☐ A☐ G☐ A☐ G☐ A☐ SAMPLED
16893	L164E 30575N Lst(?) black, silicified sed. pervasively & stockwork quartz limonite, fractured w/ minor argy stain				
16894	L164E 30510N as 893 only more silicified				
16895	L164E 30220N as 893 & 94 only not as pervasively silicified clear, glassy stringers of coarse quartz to 5mm in size.				

APPENDIX 4

Petrographic Examinations

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
V0X 1J0

PHONE (604) 888-1323

PETROGRAPHIC EXAMINATION OF TWO SPECIMENS FROM YUKON

Report for: Ken Galambos, Geologist
Noranda Exploration Co. Ltd.
Suite 203-107 Main Street
Whitehorse, Yukon
Y1A 2A7.

Invoice 7651

Sept. 30, 1988

Samples submitted: R40063, R40064.

SAMPLE R40063: QUARTZ-TREMOLITE-PYRRHOTITE ALTERED ?CHERT

This is a black, flinty, extremely well indurated ?cherty sediment. The black colouration is mainly due to the very finely divided sulfide content of around 10%. A suggestion of fine, wispy layering may be seen on the slabbed surface, suggested by alternating discontinuous bands, about 1 mm thick, of lighter and darker material. Lenses of more sulfide-rich material also enhance the layered impression. The stained slab shows a weak, erratic reaction for K-feldspar, so there may be some present, but it is impossible to be sure optically in this extremely fine grained rock. In thin section, the minerals that can be identified are:

Quartz	40%
Tremolite (secondary)	35%
Sulfides:	
Pyrrhotite	10%
Chalcopyrite	<1%
Carbonate	<1%

The rest of the rock may be composed of:

?K-feldspar	10%
Opaque oxides (?sphene, rutile)	5%

The grain size of the matrix of the rock is too fine (in the 1-10 micron range) for positive identification. Only those minerals occurring in veinlets and crystalloblastic clots in the rock are identifiable, since their grain size is up to 0.02 to 0.1 mm. In the matrix of the rock, grains of the few micron size look to be quartz,

with low relief, low birefringence, and clear character; plus a higher relief, occasionally higher birefringence mineral that looks similar to the tremolite identified in the veins. Some of the material that looks like quartz may in fact be K-feldspar, by the staining test, but this is very tentative without X-ray confirmation. The micron-sized semi-opaque material could be a Fe-Ti oxide, or sphene or rutile; or it may be simply tremolite that is so fine that light can hardly pass through it without total internal refraction.

Quartz forms small, clear, anhedral grains in veins with pyrrhotite and tremolite that cross the layering of the rock, occasionally broadening out into irregular, anastamosing patches of alteration. The quartz does not show signs of strain since its growth. The veinlets range in thickness from 0.02 to 0.5 mm.

Tremolite forms small subhedral grains with a weak tendency towards bladed habit and amphibole cross-section. The extinction angle, Z to c, is about 15 degrees; there is no colour or pleochroism. Relief is positive with respect to quartz. There are three modes of occurrence of the tremolite: (1) as relatively coarse grains in the quartz-tremolite-pyrrhotite veins that traverse the slide; (2) as small grains in ovoid clots of tremolite-pyrrhotite, about 0.1 to 0.2 mm in diameter, that are sparsely distributed throughout the rock; and (3) ? minute grains in the matrix of the rock.

Pyrrhotite grains are generally anhedral, ranging from 0.02 to 0.1 mm in diameter in the matrix (below this size, it is not clear what the identity of the opaque minerals are), and up to 0.4 mm across in the veins. Chalcopyrite is sparingly present as fine grains, 0.01 to 0.03 mm across, either associated with the pyrrhotite or separate. There are a few 0.03 mm grains of very high relief, high birefringence material in the veins with a rhombic outline, that may be carbonate.

The ovoid clots of tremolite and pyrrhotite all have their long axes parallel to the layering of the rock, implying a weak foliation to the rock; however, the lack of strain in, or elongation of, quartz grains, suggests deformation was not strong.

At first glance, the rock looks like a simple quartz-sericite-pyrrhotite altered cherty sediment. However the presence of the tremolite (Ca-Mg silicate) implies the presence of at least some ?volcanic detritus in the sediment before alteration. I do not believe the ovoid patches were former phenocrysts, or that the rock was volcanic, but a volcanic component to the sedimentary input is likely. The tremolite appears to be an alteration mineral formed by hydrothermal fluids at the time of quartz veining and pyritization. I regret that more cannnot be said about the protolith of this extremely fine grained rock. More field data included with your request (setting, geochemistry, etc, if known), would have helped me to help you.

SAMPLE R40064: SULFIDIZED, WEAKLY CLAY-SERICITE-ACTINOLITE-BIOTITE ALTERED, K-FELDSPAR-HORNBLENDE-BIOTITE MONZONITE

Light grey, iron-stained, fine to medium grained felsic to intermediate igneous plutonic rock, possibly a high-level intrusive. The slab has stained strongly for K-feldspar, including sparsely scattered K-spar phenocrysts and K-spar groundmass. The mineralogy in thin section is:

K-feldspar (groundmass)	30%
(phenocrysts)	5%
Plagioclase (relict andesine-labradorite)	30%
Secondary amphibole (?actinolite)	20%
Biotite (partly secondary?)	5%
Pyrrhotite (includes some pyrite/marcasite)	5%
Chalcopyrite	tr
Clay-sericite (secondary)	3%
Quartz	2%

The texture of the rock is weakly porphyritic, with sparse 1-2 mm long phenocrysts of K-feldspar, set in smaller plagioclase and amphibole relics that tend to be seriate-textured (i.e. range in size, from about 0.5 to 2.0 mm, averaging about 1 mm long). There are also relict biotite crystals, generally smaller than the amphibole. The matrix to these minerals is principally K-feldspar, as anhedral grains about 0.1 to 0.2 mm in diameter.

K-feldspar phenocrysts are clear, with only minor fracturing and dusty clay alteration along cracks. A few of these euhedral crystal show faint oscillatory zoning, especially near their rims. They have a moderate (negative) 2V, and so are probably orthoclase. Simple Carlsbad twinning and interpenetrative growths of crystals are common, as are inclusions of biotite and plagioclase. Slight attack of the phenocrysts by the groundmass is evident around their margins.

Plagioclase forms smaller grains that are only occasionally clear and original, having mostly been weakly to moderately albitized and altered to fine flecks of clay-sericite, plus lesser amphibole and biotite. The original plagioclase appears to have been calcic, about at the andesine-labradorite boundary, based on extinction angles of about 25 degrees for X^001, and positive 2V of about 80 degrees. Slight oscillatory zoning is still visible, from about An50 cores to rims of An45.

Most of the original mafic mineral was apparently amphibole (?hornblende), now replaced by finer aggregates of matted amphibole that may be actinolite, although it is very pale green and does not show acicular shapes. The original hornblende crystals were about the same size as the plagioclase grains, but the actinolite grains are about 0.02 to 0.1 mm long. The extinction angle is about 16 degrees. Small amounts of very fine-grained, indeterminate semi-opaque material with the secondary amphibole is probably a

mixture of sphene and included ilmenite grains, plus some leucoxene, as an alteration product of the original Ti-bearing minerals.

Biotite phenocrysts were small, about 0.5 mm maximum diameter, and are now variably replaced at their margins by minor amounts of fine, apparently secondary biotite and ?sericite, with the TiO2 of the original biotite now in minute grains of sphene plus ilmenite at the margins of the phenocrysts. Occasionally, fine secondary biotite may replace an elongate former hornblende needle.

In one part of the slide, a fragment of holocrystalline plutonic rock, composed almost entirely of K-feldspar, has been biotitized along fractures, so the secondary biotite is probably hydrothermal. The 2V of some of this K-spar is small (30 degrees), raising the possibility of sanidine.

The groundmass K-feldspar is indeterminate due to its fine grain size, but is distinctly cloudy due to attack by fine clay particles. Quartz forms anhedral grains about 0.2 mm across, scattered sparsely through the rock.

Pyrrhotite forms small disseminated subhedral to anhedral grains generally about 0.2 mm across, without preference for mafic sites. The pyrrhotite grains are mildly altered to lamellar pyrite/marcasite, a common oxidation product of pyrrhotite. Traces of chalcopyrite are also present, as in R40063. Minor limonite stain has developed in response to oxidation of the rock, especially at its outer rim.

In summary, this specimen was a weakly porphyritic high-level intrusive of about monzonitic composition, with primary hornblende and biotite, before weak to moderate alteration to clay-sericite, albite, actinolite, and attendant pyritization.

Craig H.B. Leitch, M. Phil, P. Eng.

September 27, 1988

(604) 921-8780

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist
A.L. LITTLEJOHN, M.Sc. Geologist
JEFF HARRIS, Ph.D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
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PHONE (604) 888-1323

Report for: Ken Galambos,
Noranda Exploration Co. Ltd.,
203-107 Main St.,
WHITEHORSE,
Yukon, Y1A 2A7

Invoice 7789

November 7th, 1988

Samples:

One rock sample, numbered R 40100, for sectioning and petrographic description.

Description:

Sample R 40100 QUARTZ-ACTINOLITE ROCK

Estimated mode

Quartz	70
Actinolite	30
Chlorite	trace
Sphene	trace
Rutile	trace
Limonite	trace

This is a rock of simple mineralogy, composed almost entirely of quartz and pale-coloured amphibole.

The quartz matrix is a varigranular aggregate of equant, sub-polygonal mosaic type. The grain size shows patchy, random variations in the range 0.05 - 1.0mm or more. The quartz is not noticeably strained.

The amphibole forms randomly oriented clumps of ragged-ended, subhedral crystals up to 5.0mm in size. The mode of growth is typically porphyroblastic - ranging from small, acicular wisps and skeletal forms, through semi-coalescent, parallel growths to more or less well-formed, coarse, prismatic masses.

The amphibole is a very pale green in colour, and shows moderate birefringence. It does not exhibit the lamellar twinning and higher birefringence characteristic of grunerite, and is probably an aluminous species of actinolitic type.

The amphibole is fresh but for mild, diffuse, limonitic staining.

Other constituents are very minor. They consist of rare pockets of fibrous chlorite (marginal to amphibole), tiny irregular grains of sphene, and diffuse flecks of sub-opaque material (rutile?).

No sulfides are present.

This rock has a non-foliated fabric of granoblastic aspect. Its texture and simple mineralogy suggest possible affinities with silicate iron formation (meta-chert).

J.F. Harris Ph.D.

(phone: (604) 929-5867)

Sample AUS-1 QUARTZ-RICH DIORITE WITH INTERSTITIAL SULFIDES

Estimated mode

Plagioclase	45
Quartz	15
Diopside	9
Hornblende	8
Secondary amphibole(?)	1
Acmite(?)	2
Sphene	2
Apatite	2
Pyrrhotite	12
Pyrite	3
Chalcopyrite	trace
Limonite	1

This is a medium-grained rock of igneous intrusive aspect. Its mineralogy is somewhat unusual, and its proper classification debatable.

The principal constituent is fresh plagioclase, as aggregates of subhedral grains, 0.2 - 1.0m in size. Twinning is not well developed, but available measurements of extinction angles suggest a composition of andesine.

Quartz is relatively abundant. It tends to occur in rather strongly segregated mode, as scattered, coarse patches, typically sieved with small grains of the mafic silicates. It also forms an interstitial continuum, as small, semi-connected, angular pockets within the close-packed plagioclase aggregates.

Three types of mafic silicates are present. The commonest is a colourless to pale green clinopyroxene, as subhedral prismatic grains, 0.02 - 0.5mm in size. These crystals are partly skeletal/fragmentary, consisting of clumps of optically continuous granules within quartz or plagioclase.

A pale green hornblende is intimately associated with the amphibole, and appears to be a late magmatic reaction product, representing the partial conversion of pyroxene.

The third mafic is apparently another pyroxene, of a distinctive, strongly pleochroic red-brown colour. It occurs as scattered, individual, subhedral grains, 0.2 - 1.0mm in size. It is probably a Na-rich pyroxene (tentatively classified as acmite).

Sample AUS-1 cont.

Other features suggestive of the specialized composition of this rock are the abundance of accessory sphene and apatite. Both occur as clumps of small euhedra, mainly closely associated with the diopside and hornblende, and sometimes - like them - scattered as poikilitic inclusions through quartz or plagioclase.

All the silicate constituents are notably fresh and clear. However, the rock does contain some pockets and irregular veinlets of a greenish, fibrous/spherulitic, secondary product. It also shows some diffuse, pervasive limonite staining.

Another distinctive feature is its high content of sulfides. These consist mainly of pyrrhotite, which occurs intimately permeated through the silicate matrix as irregular pockets and intergranular networks, sometimes surrounding and incorporating silicate grains. The pyrrhotite typically shows more or less strong alteration on a concentric zonal or colloform pattern.

Pyrite is the accessory sulfide. It occurs independently of the pyrrhotite as delicate networks of very fine-grained type - often intimately dispersed through pyroxene or amphibole crystals.

Rare, segregated clusters of chalcopyrite grains are also seen, intergrown with pyrrhotite or magnetite.

The sulfides are unaccompanied by any introduced gangue or associated alteration, and they may be of late-magmatic derivation.

The mineralogy of this rock suggests alkaline affinities. However, the lack of K-feldspar and the relative abundance of quartz, are conflicting properties. The sample could be classified as a soda granite or a quartz-rich diorite. It may be a specialized differentiate associated with a more normal intrusive.

Sample AUS-2 **BEDDED CHERT**

Estimated mode

Quartz	100
Opaques	trace

This rock is a chert composed of a homogenous, minutely fine-grained/cryptocrystalline aggregate of quartz. Its grain size is in the order of 5 - 10 microns.

It is notably free of the clumpy or streaky areas of coarser granularity typical of most silicified rocks, and there is no evidence to suggest that it originated as a limestone. Certainly no trace of remnant carbonate is seen.

The faint, varve-like banding, visible on the etched cut-off block, is manifested in the thin section by slight variations in the grain size and abundance of the micron-sized opaque dust which occurs lightly dispersed throughout, and/or in the grain size of the silica itself.

The discordant zones of apparent bleaching (or greater etchability) are not recognizable in thin section. They appear to relate to a series of cross-cutting microfractures, and may be a weathering phenomenon. Most of these micro-structures are seen, in thin section, to be hairline veinlets containing remobilized quartz. A few are demarked by lines of micron-sized opaques (sulfides?), with slight marginal limonitic staining.

Noranda Aus Claims

A

A'

GEOLOGY

SILICIFIED DYKE 2-3% SULPHIDES

21b MEDIUM & COARSE-GRAINED GRANODIORITE

ROAD RIVER FORMATION

9 SEDIMENTS: SHALES, SILTSTONES AND SILICIFIED EQUIVALENTS; CHERT

× ROCK

• SILT

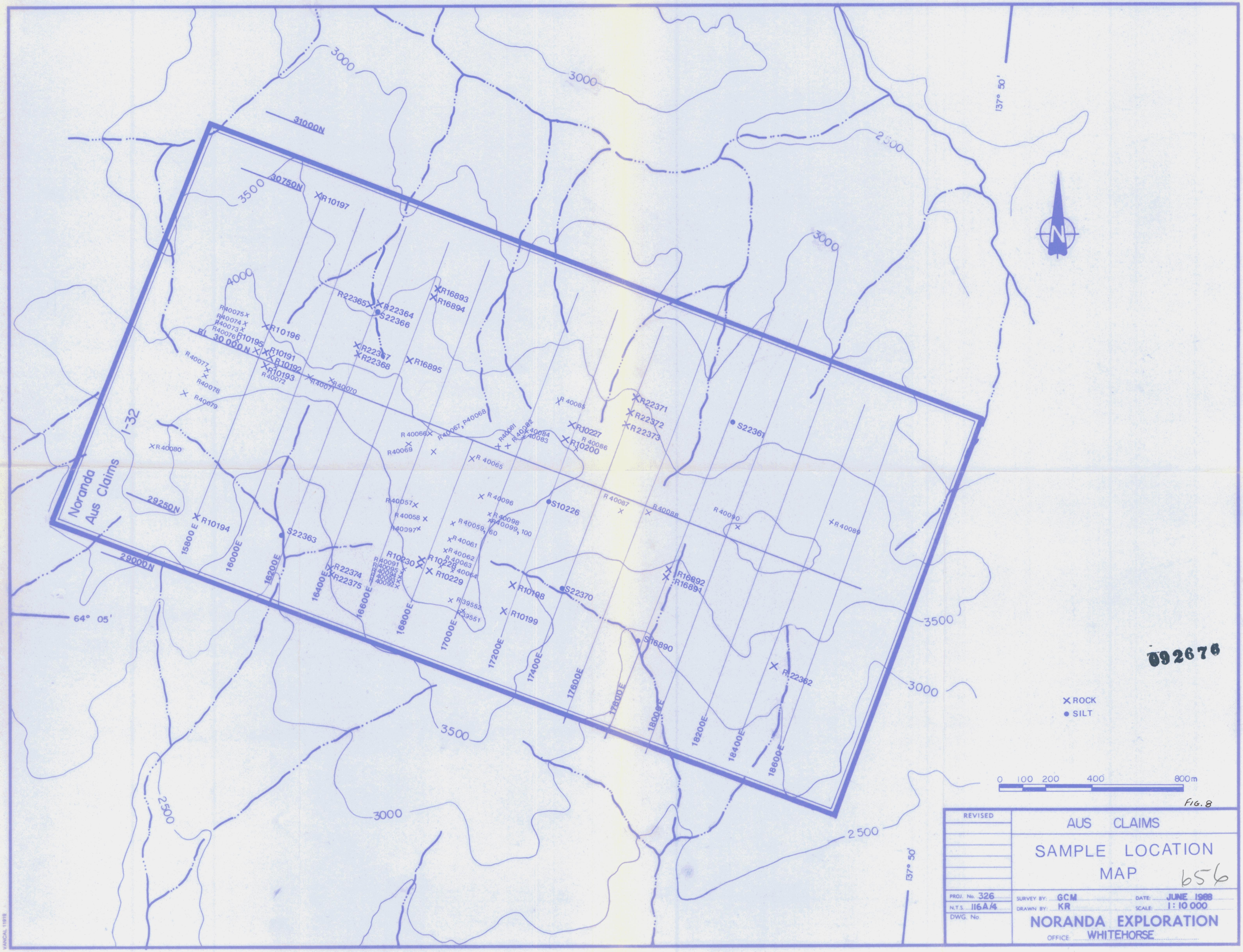
092676

0 100 200 400 800m

FIG. 7

REVISED	AUS CLAIMS
	GEOLOGY & SAMPLE LOCATIONS (PANORAMA RIDGE) 655
PROJ No. 326	SURVEY BY GCM DATE JUNE 1988
N.T.S. 116A/4	DRAWN BY KR SCALE 1:10 000
DWG No	NORANDA EXPLORATION
	OFFICE WHITEHORSE

YUKON 11/88



AUS CLAIMS
SAMPLE LOCATION MAP
656
FIG. 8
REVISED
PROJ. No. 326
N.T.S. 116A/4
DWG. No.
SURVEY BY: GCM
DRAWN BY: KR
DATE: JUNE 1988
SCALE: 1:10 000
NORANDA EXPLORATION
OFFICE: WHITEHORSE
X ROCK
• SILT
0 100 200 400 800m
092676
Noranda Aus Claims
I-32
137° 50'
64° 05'
31000N
30750N
30 000 N
29250N
29000N
15800 E
16000E
16200E
16400E
16600E
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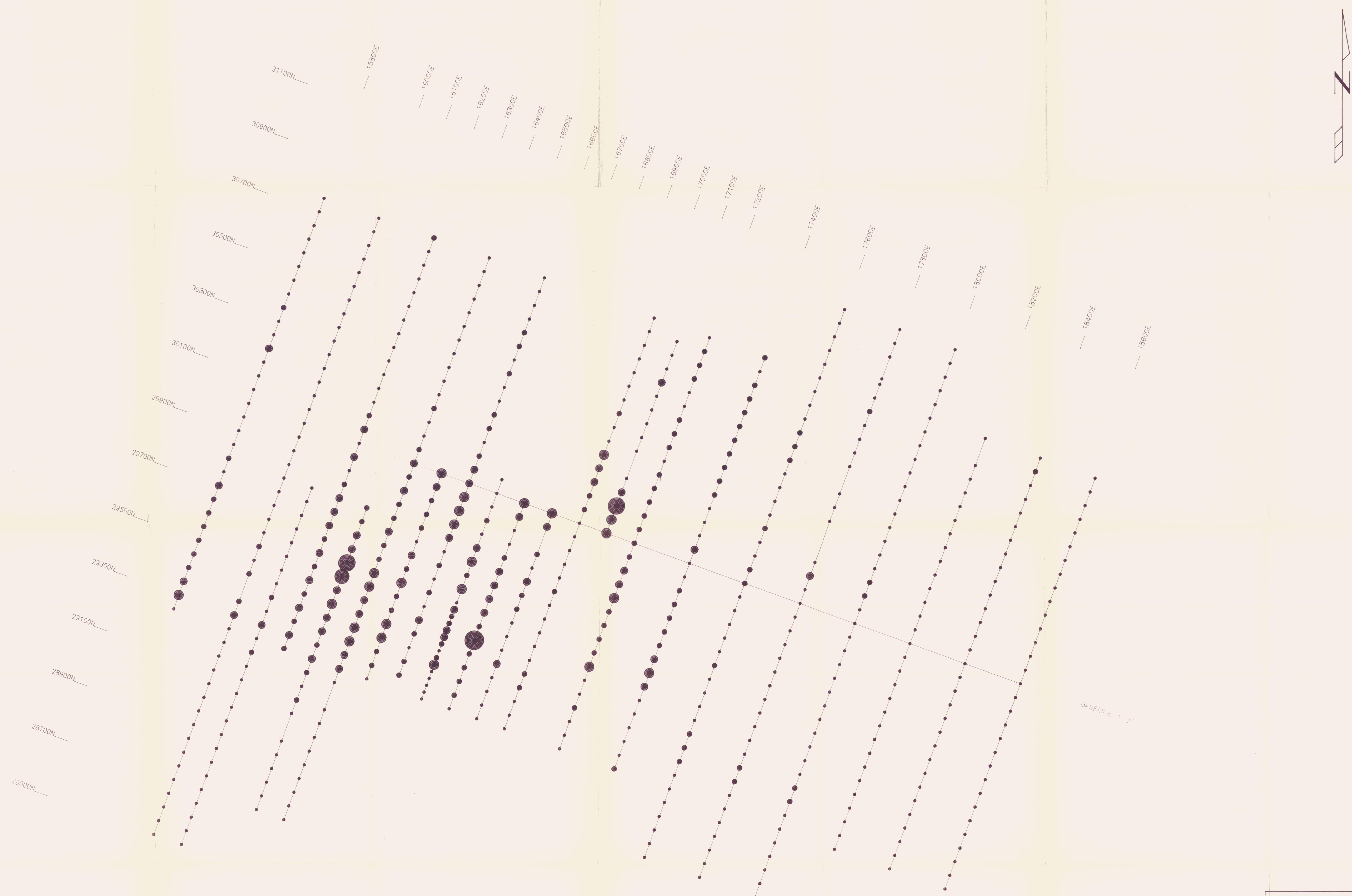


092676

Contour Interval :

:

100m 50m 0m 100m 200m

FIG. 9

>0 <20	>=20 <50	>=50 <100	>=100 <200	>=200 <300	>=300 <500	>=500 <750	>=750

PPB Au

AUS GRID

GEOCHEMICAL SURVEY

PPB Au

PROJECT: SELWYN GOLD PROJECT # : 326

BASELINE AZIMUTH : 110 Deg.

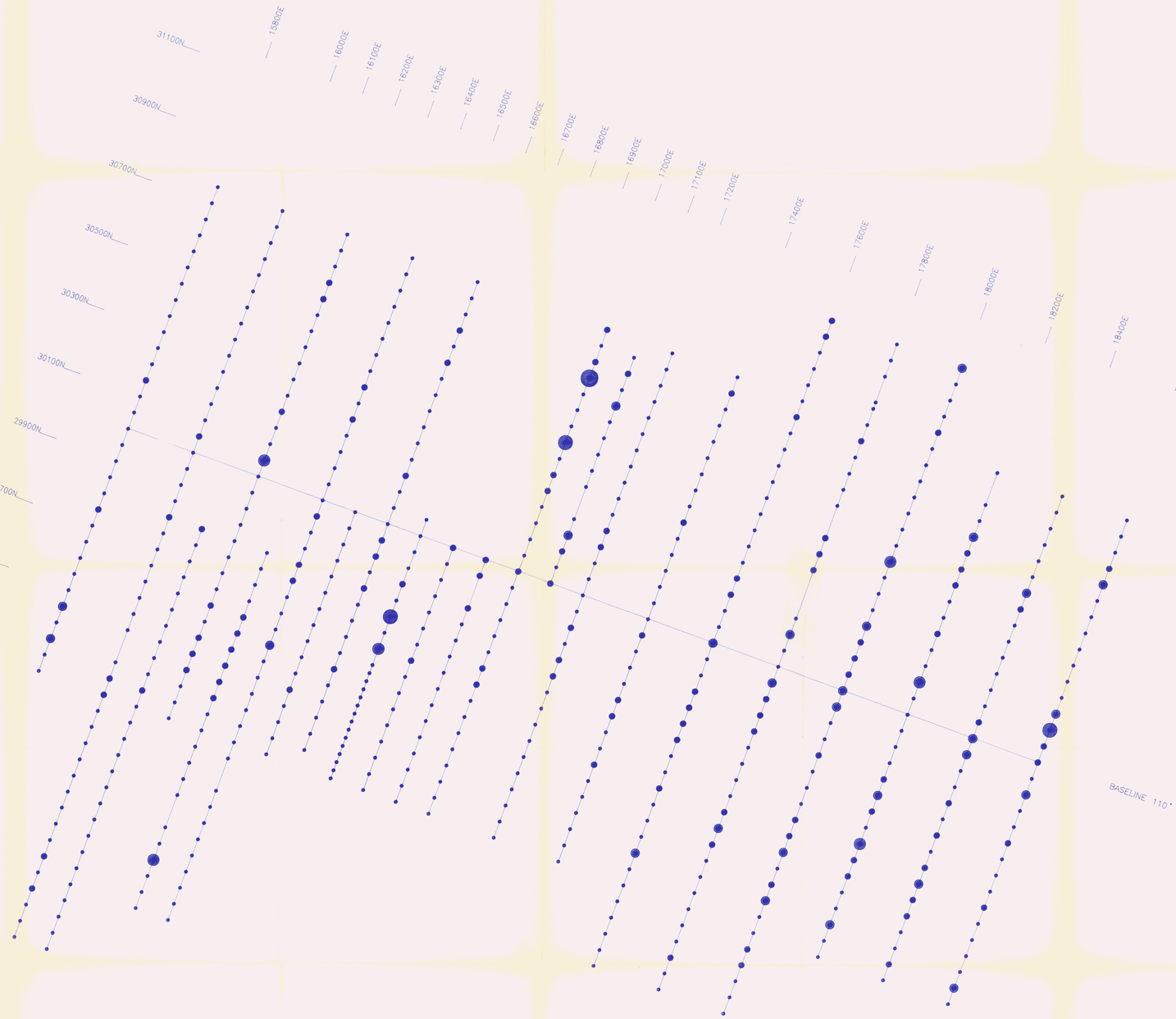
SCALE = 1: 5000 DATE : 7/ 7/88

SURVEY BY : HC NTS :

FILE: C326AUS

657

NORANDA EXPLORATION



Contour Interval :

100m 50m 0m 100m 200m

FIG 10

>0 <1.0	>=1.0 <2.0	>=2.0 <3.0	>=3.0 <4.0	>=4.0 <5.0	>=5.0

PPM Ag

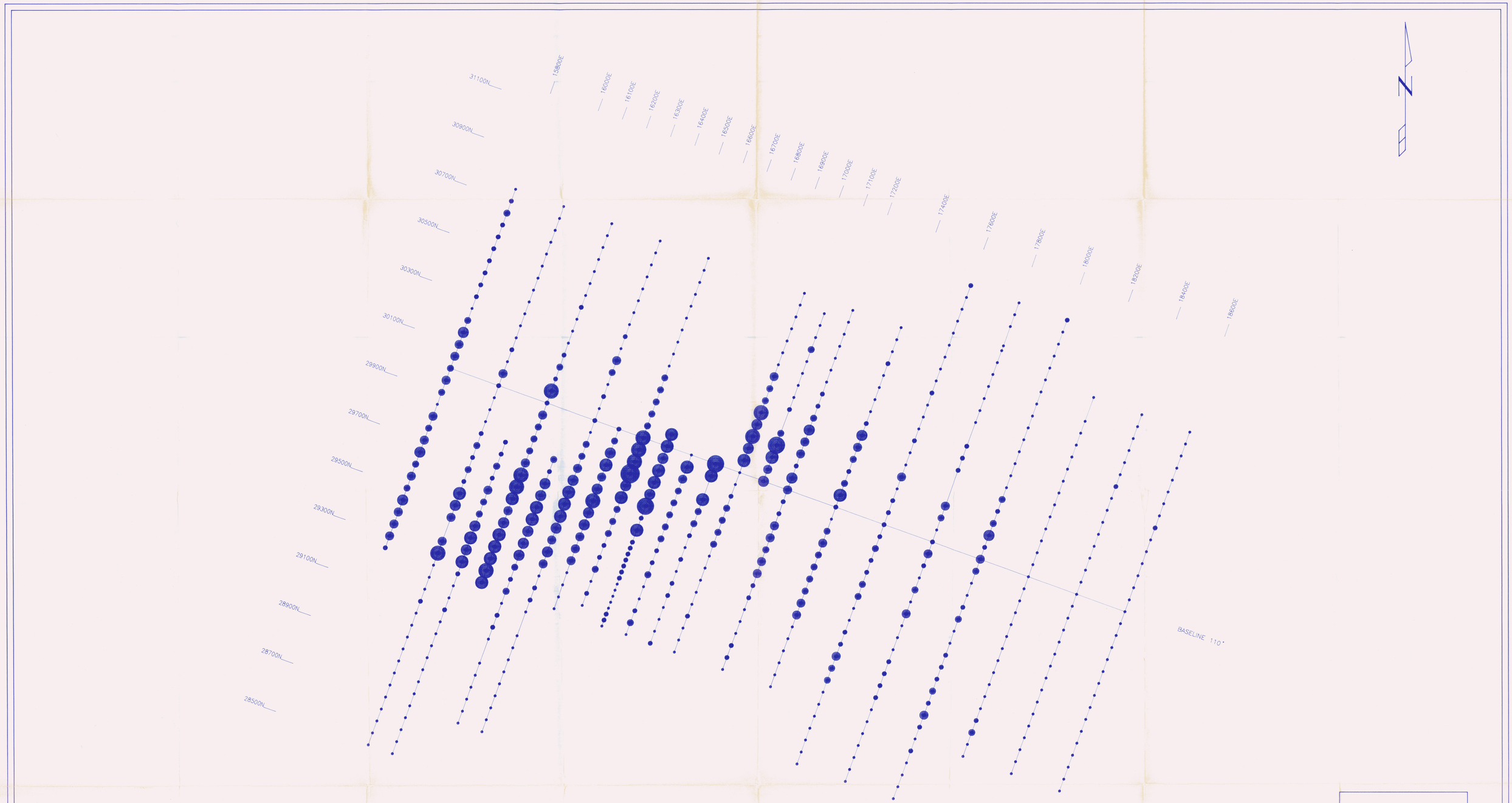
AUS GRID

GEOCHEMICAL SURVEY
PPM Ag
PROJECT: SELWYN GOLD PROJECT # : 326
BASELINE AZIMUTH : 110 Deg.

SCALE = 1: 5000 DATE : 7/ 7/88
SURVEY BY : HC NTS :
FILE: C326AUS
NORANDA EXPLORATION

658

082678



Contour Interval :

100m 50m 0m 100m 200m

FIG 11

>0 <100	>=100 <250	>=250 <500	>=500 <750	>=750 <1000	>=1000 <2000	>=2000 <3000	>=3000 <5000	>=5000

PPM As

AUS GRID

GEOCHEMICAL SURVEY

PPM As

PROJECT: SELWYN GOLD PROJECT # : 326

BASELINE AZIMUTH : 110 Deg.

659

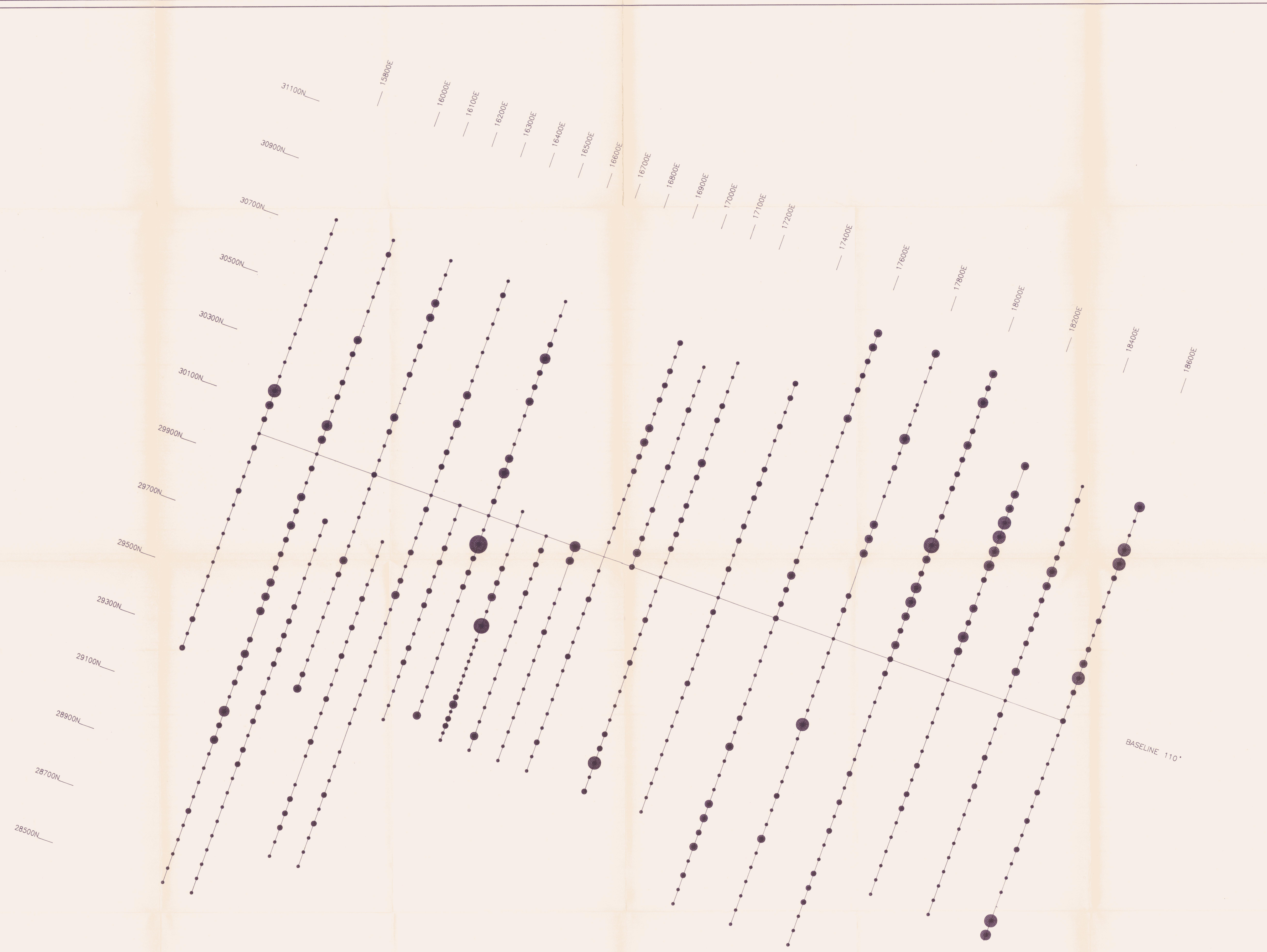
SCALE = 1: 5000 DATE : 7/ 7/88

SURVEY BY : HC NTS :

FILE: C326AUS

NORANDA EXPLORATION

092676



Contour Interval :
:

100m 50m 0m 100m 200m

FIG 12

>0 <50	>=50 <100	>=100 <200	>=200 <300	>=300 <500	>=500 <1000	>=1000

PPB Hg

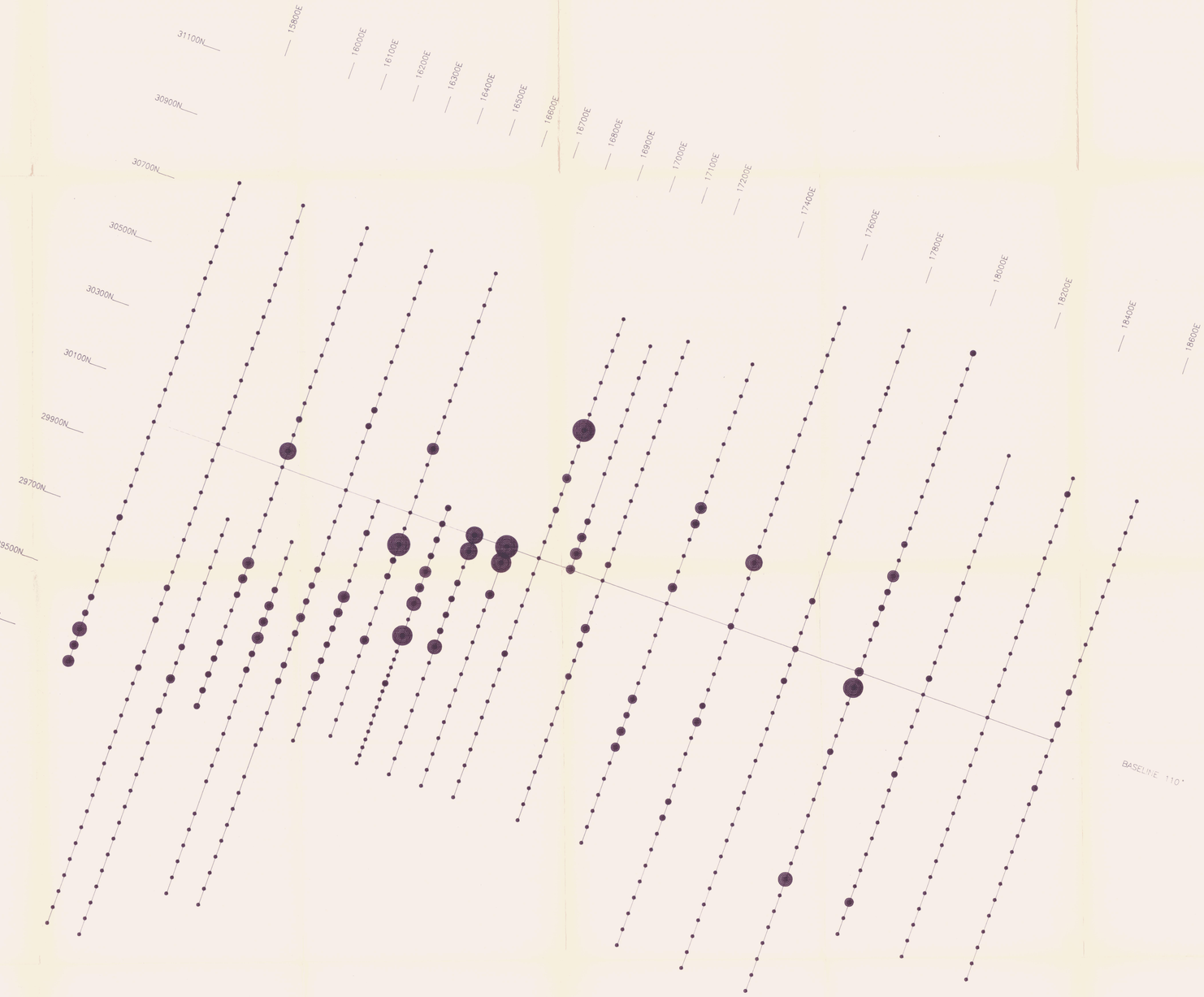
AUS GRID

GEOCHEMICAL SURVEY
PPB Hg
PROJECT: SELWYN GOLD PROJECT # : 326
BASELINE AZIMUTH : 110 Deg.

SCALE = 1: 5000 DATE : 7/ 7/88
SURVEY BY : HC NTS :
FILE: C326AUS
NORANDA EXPLORATION

660

D92676



N

Contour Interval :

100m 50m 0m 100m 200m

FIG 13

>0 <20	>=20 <40	>=40 <60	>=60 <80	>=80 <100	>=100 <150	>=150 <200	>=200

PPM Sb

AUS GRID

GEOCHEMICAL SURVEY

PPM Sb

PROJECT: SELWYN GOLD PROJECT # : 326

BASELINE AZIMUTH : 110 Deg.

SCALE = 1: 5000 DATE : 7/ 7/88

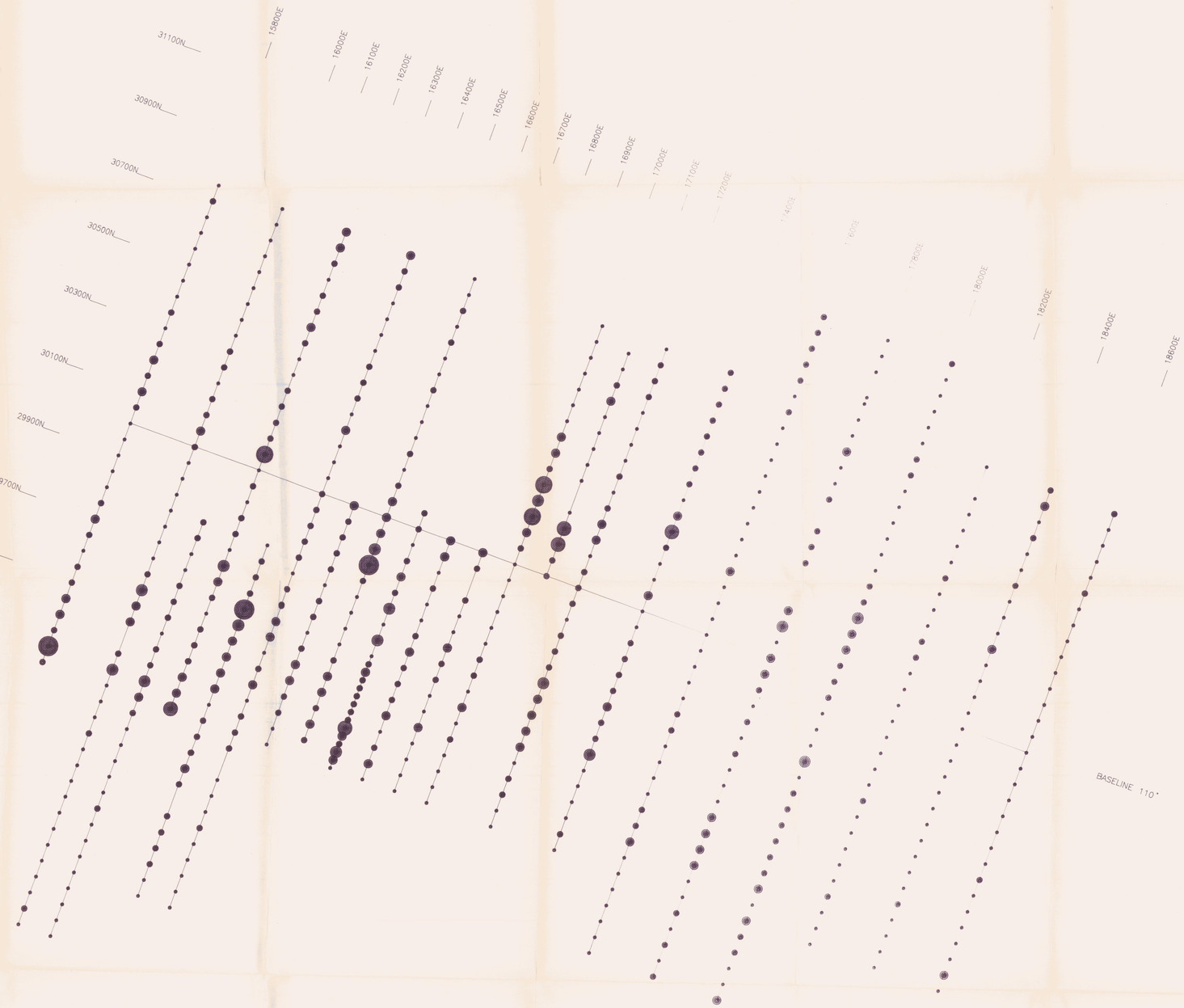
SURVEY BY : HC NTS :

FILE: C326AUS

NORANDA EXPLORATION

661

092676



Contour Interval :

100m 50m 0m 100m 200m

FIG 14

>0 <50	>=50 <100	>=100 <200	>=200 <300	>=300 <400	>=400 <500	>=500

PPM Cu

AUS GRID

GEOCHEMICAL SURVEY
PPM Cu
PROJECT: SELWYN GOLD PROJECT # : 326
BASELINE AZIMUTH : 110 Deg.

SCALE = 1: 5000 DATE : 7/ 7/88
SURVEY BY : HC NTS :
FILE: C326AUS
NORANDA EXPLORATION

662

D9878

NORANDA EXPLORATION

FILE: G326AUS

663

SURVEY BY : HC NTS :

SCALE = 1: 5000 DATE : 7/ 7/88

BASELINE AZIMUTH : 110 Deg.

PROJECT: SELWYN GOLD PROJECT # : 326

GEOCHEMICAL SURVEY

PPM Pb

AUS GRID

Fig 15

Contour Interval :

10m= 20m= 50m= 100m= 200m=

PPM Pb

<30 <50 <100 <200 <300 <500

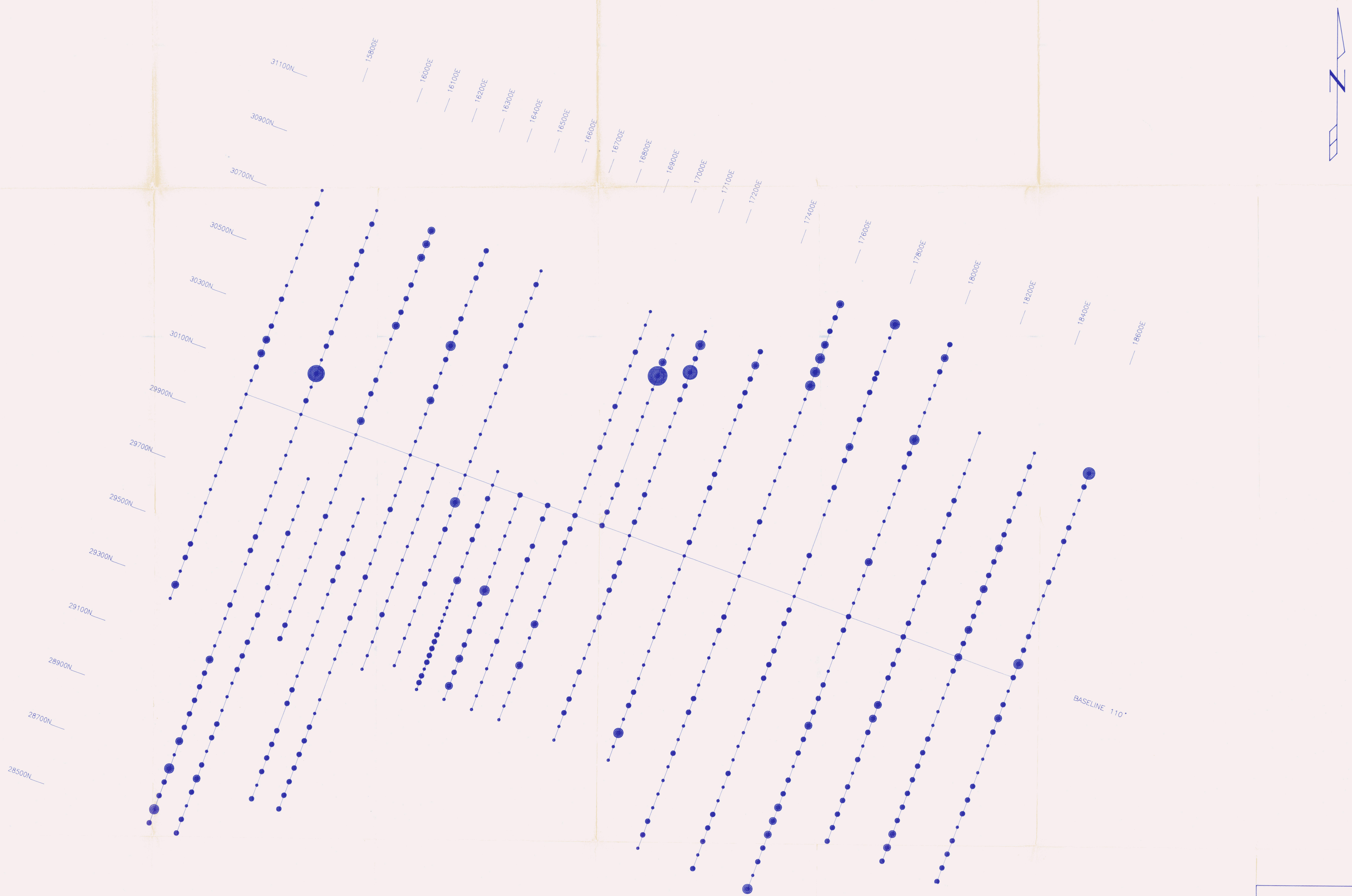
>=30 >=50 >=100 >=200 >=300 >=500

BASELINE 110°

1800E 1820E 1840E 1860E 1880E 1900E 1920E 1940E 1960E 1980E 2000E 2020E 2040E 2060E 2080E 2100E 2120E 2140E 2160E 2180E 2200E

2850ON 2870ON 2890ON 2910ON 2930ON 2950ON 2970ON 2990ON 3010ON 3030ON 3050ON 3070ON 3090ON 3110ON

N



Contour Interval :
:

100m 50m 0m 100m 200m

FIG 16

>0 <100	>=100 <200	>=200 <300	>=300 <500	>=500 <750	>=750 <1000	>=1000 <1500	>=1500

PPM Zn

AUS GRID

GEOCHEMICAL SURVEY

PPM Zn

PROJECT: SELWYN GOLD PROJECT # : 326

BASELINE AZIMUTH : 110 Deg.

SCALE = 1: 5000 DATE : 7/ 7/88

SURVEY BY : HC NTS :

FILE: C326AUS

NORANDA EXPLORATION

664

092676