

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT, 1986

on the

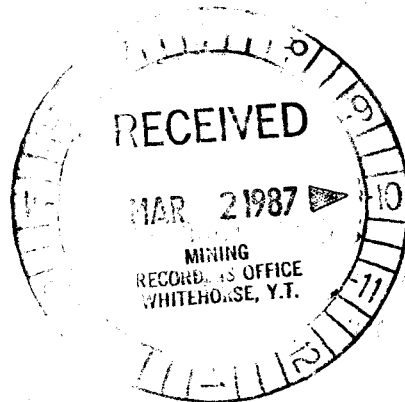
TES 30-35 CLAIMS

Whitehorse Mining District

N.T.S. 105 C/11

Latitude 60°33'N

Longitude 133°28'W



Author: H. Copland

Owner: Noranda Exploration Company, Limited
(No Personal Liability)

Date: February, 1987

091919

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 \$ 4,800.00.

for *D. Diamond*

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

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SUMMARY

The TES 30-35 claims are located 90 kilometres east of Whitehorse, 5 kilometres from the Alaska Highway. A weak EM response was obtained from airborne geophysics flown in the fall of 1985. Subsequent mapping, geochemistry and ground based magnetometer and EM indicated an anomalous zone 100 metres wide by 400 metres long related to altered basic volcanic rocks. Significant, coincident Au, Cu, Ag and Pb values in soils extend over a zone of low resistivity and high magnetometer response. A program of trenching followed by diamond drilling is proposed to test the anomalies.

CHAPTER ONE: INTRODUCTION

1-1: INTRODUCTORY STATEMENT

The TES 30-35 claims are located 90 kilometres east of Whitehorse near the Alaska Highway. The claims were staked in 1986 to cover a coincident geophysical and geochemical anomaly. During 1986, 1:2,500 scale geological mapping, soil sampling and geophysics were conducted over the property.

1-2: LOCATION AND ACCESS

The property (N.T.S. 105 C/11; latitude 60°33'N, longitude 133°28'W) is located 90 kilometres east of Whitehorse and 60 kilometres northwest of Teslin, Yukon (Figure 1). At present, access is via helicopter from Whitehorse. A 5 kilometre trail connecting the property to the Alaska Highway is presently being planned for future access.

1-3: TOPOGRAPHY AND VEGETATION

The claims lie southwest of the Teslin River and northeast of Squanga Lake. The area is characterized by low rolling mountains, averaging 5,000 to 6,000 feet in elevation, surrounded by numerous lakes, marshes and creeks. Elevation on the property varies from a low of 2,500 feet in the northeast to 3,500 feet in the southwest.

The property is located on a moderate northeast facing slope down to

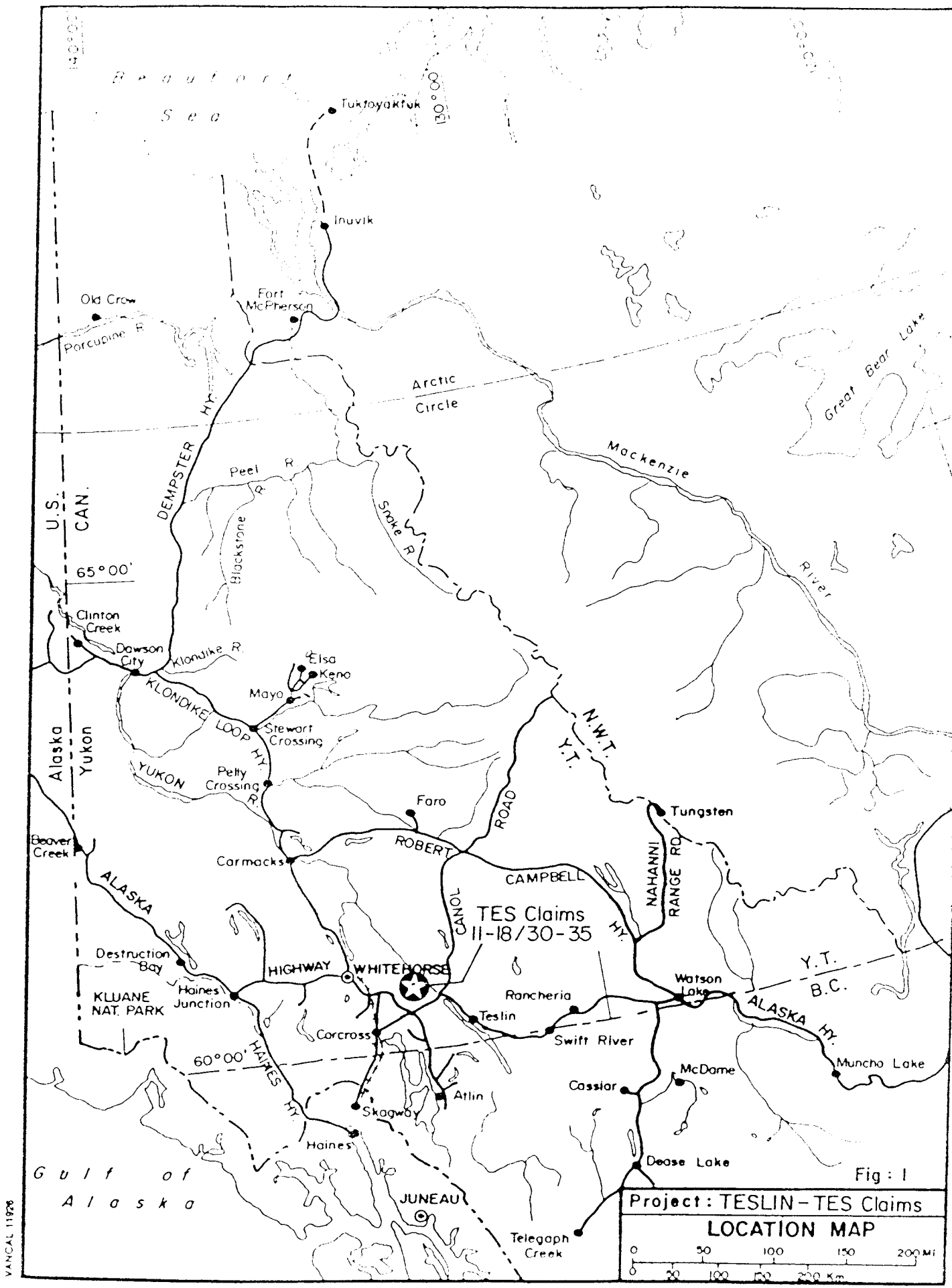


Fig: 1

Project: TESLIN - TES Claims
LOCATION MAP

0 50 100 150 200 Mi
 0 50 100 150 200 Km

VANCAL 11978

the Teslin River. The slope is treed with abundant spruce and minor pine and poplar. Several small creeks drain northeast into the Teslin River.

1-4: CLAIM DEFINITION

The TES 30-33 (YA95029-YA95032) were staked on June 13, 1986 and recorded on June 23. TES 34-35 (YA95972-YA95973) were staked on August 17, 1986 and recorded on August 19 (Figure 2). Upon acceptance of this report, the claims will be in good standing until June, 1991. No recorded instances of work have been found in this area.

1-5: WORK PROGRAM

An airborne geophysical survey (Dighem AEM) was flown for Noranda over the Teslin-Johnson's Crossing area in the fall of 1985. Follow-up, consisting of reconnaissance GENIE (SE-88), magnetometer and limited gravity surveys were conducted on the ground in February, 1986. One of the anomalies (751E) was subsequently staked as the TES 30-33 claims in June, 1986 and reconnaissance soil sampling and mapping were carried out over a rough grid totalling 2.5 line kilometres. In August 1986, a new grid totalling 3.75 line kilometres was cut on the property and soil sampling, GENIE (SE-88) and magnetometer, along with 1:2,500 scale geological mapping were conducted. Two additional claims (TES 34-35) were also added at this time. November, 1986 saw the addition of 14 more claims (TES 36-49) to the original block.

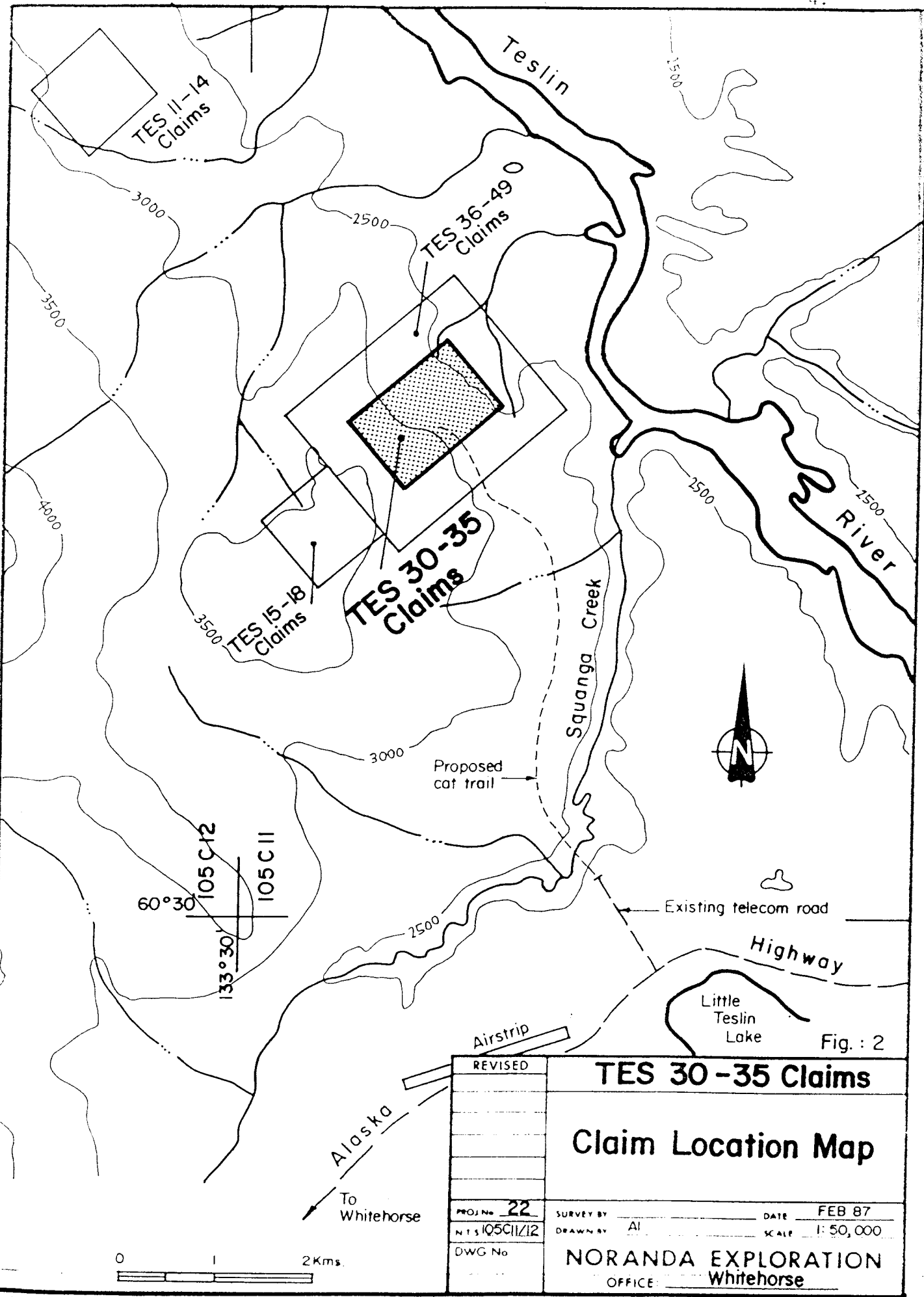


Fig. : 2

REVISED	TES 30-35 Claims	
	Claim Location Map	
PROJ No <u>22</u>	SURVEY BY _____	DATE <u>FEB 87</u>
N T S <u>105C11/12</u>	DRAWN BY <u>AI</u>	SCALE <u>1:50,000</u>
DWG No _____	NORANDA EXPLORATION	
	OFFICE: <u>Whitehorse</u>	

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CHAPTER TWO: GEOLOGY

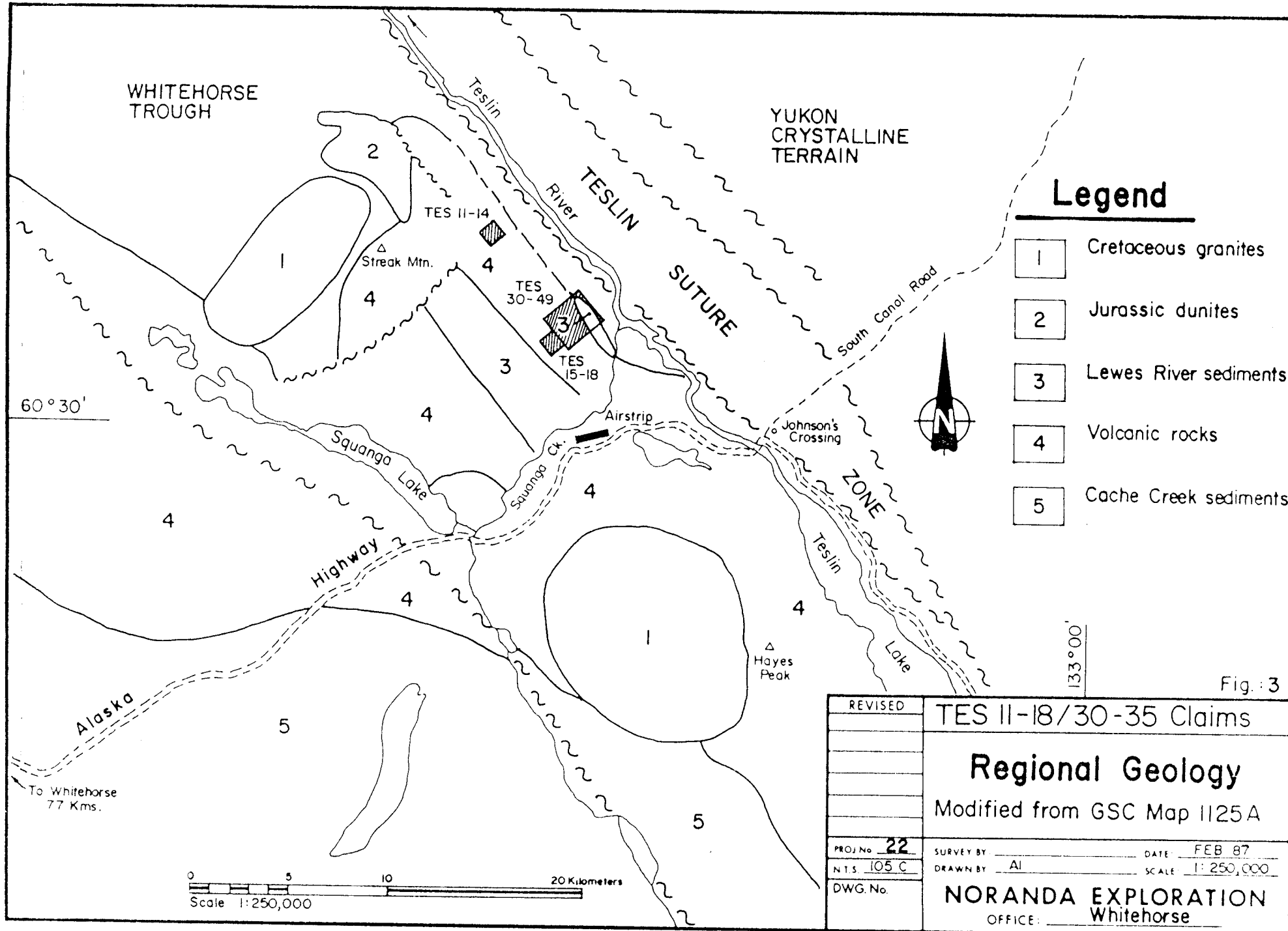
2-1: REGIONAL GEOLOGY

The TES claims are located in the Intermontane Belt of the northern Cordillera (Figure 3). More specifically, they lie along the eastern margin of the Mesozoic Whitehorse Trough. The trough consists primarily of the Pennsylvanian/Permian Cache Creek Group: limestone, chert and basalt; the Upper Triassic Lewes River Group: basic volcanic rocks and limestone reefs; and the Lower Jurassic Laberge Group clastic units. All units are intruded by granitic rocks of the Cretaceous Coast and Cassiar intrusives.

To the east of the claims across the Teslin River, a thin slice of sheared and metamorphosed rocks of the Yukon Cataclastic Complex crop out. Just to the east of this, the Teslin Suture separates rocks of the Yukon Cataclastic Terrane from those of the Cassiar Platform, part of the ancient North American Margin. Further details on regional geology may be found in Mulligan (1963).

2-2: PROPERTY GEOLOGY

The claims are underlain by volcanic and volcanoclastic rocks, probably Triassic in age, possibly related to the Lewes River Group (Figure 4). Limited mapping has delineated two major units: i) a basic tuff with intercalated chert and siltstone, and ii) a felsic tuff and tuff breccia to



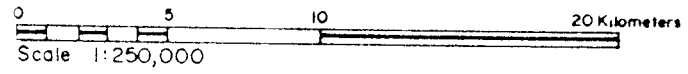
Legend

- 1 Cretaceous granites
- 2 Jurassic dunites
- 3 Lewes River sediments
- 4 Volcanic rocks
- 5 Cache Creek sediments



Fig. 3

REVISED	TES II-18/30-35 Claims	
	Regional Geology	
	Modified from GSC Map 1125A	
PROJ No. <u>22</u>	SURVEY BY: _____	DATE: <u>FEB 87</u>
N.T.S. <u>105 C</u>	DRAWN BY: <u>Al</u>	SCALE: <u>1:250,000</u>
DWG. No. _____	NORANDA EXPLORATION	
	OFFICE: <u>Whitehorse</u>	



60°30'

133°00'

Alaska
To Whitehorse
77 Kms.

the west of the first. A zone of alteration approximately 300 metres long and 75 metres wide occurs in the basic volcanic unit. This zone is gossanous, silicified, clay altered and contains up to 10% pyrite, pyrrhotite and minor chalcopyrite, related to quartz veinlets (Table 1).

A brief description of the major units observed follows:

Basic Tuff: This unit is dark green and ranges from fine to coarse grained. Laths of hornblende up to 1 mm in size have been observed locally. Interbedded grey chert, siltstone, cherty siltstone, tuffaceous siltstone occur throughout this unit, but do not constitute separate mappable lithologies.

Felsic Tuff: This rock is typically cream coloured and locally gossanous. Fragmented textures with angular clasts ranging in size from a few millimetres to 2 cm commonly occur. Thin section and whole rock analysis of similar rocks in the area indicate them to be dacitic in composition. One to two percent pyrite and a weak sericitic alteration occurs locally. Limited bedding observed reveals a northwest strike with moderate dips to the southwest.

TABLE 1
TABLE OF FORMATIONS

CRETACEOUS

Coast Range and Cassiar Intrusions

- 9 - granite, granodiorite

TRIASSIC?

Lewes River Group(?)

- 8 - felsic volcanics, pyroclastics, tuffs and flows
- 7 - intermediate volcanic rocks, flows
- 6 - basic volcanic rocks, agglomerates, lavas and tuffs
- 5 - epiclastic rocks
- 5a - volcanic sandstone
- 5b - conglomerate, tuff
- 5c - argillite, tuff

PERMIAN AND CARBONIFEROUS

Cache Creek Group

- 4 - limestone, interbedded chert and argillite
- 3 - basic volcanic rocks, minor chert and carbonates
- 2 - mafic and ultramafic intrusives
- 2a - ultramafic rocks
- 2b - diorite

MISSISSIPPIAN or EARLIER

Big Salmon Complex

- 1 - schist, gneiss, quartzite and greenstone

CHAPTER THREE: GEOCHEMISTRY

3-1: SOIL GEOCHEMISTRY

A total of 186 soil samples were collected during 1986. The samples were taken at a 25 metre spacing on lines 100 metres apart. Soil was collected from the "B" horizon where possible. Frozen ground and bogs prevented complete grid coverage. The samples were dried and shipped to Noranda's laboratory in Vancouver, B.C. for preparation and standard analysis for Cu, Pb, Zn, Ag, As and Au.

Results of the geochemistry reveal a distinct multi-element pattern exists on the property (see Figures 5, 6, 7 and 8). Values as high as 730 ppb Au, 4,300 ppm Pb, 320 ppm Zn and 95.0 ppm Ag are reported at 10050N, 9900E. From this point, a northeast trending band of coincident Au, Cu, Ag and Pb anomalies 100 metres wide extends for 400 metres downslope. Copper (1,200 ppm) and arsenic (3,200 ppm) highs occur within this band. Arsenic and zinc patterns are not as well defined as the other elements. Complete results are included in Appendix 1.

3-2: ROCK GEOCHEMISTRY

A total of 34 rock samples were collected at various locations throughout the grid (Figure 4). All samples were analyzed using standard procedures for Cu, Pb, Zn, Ag, As and Au. In addition, nine of the rocks

were analyzed for Hg and Sb and three were assayed for Au, Ag, Cu, Pb and Zn.

The most consistent anomalies come from the altered basic volcanic rocks. These rocks are consistently high in copper (>150 ppm) and to a lesser extent silver (>2.0 ppm). Only sporadic anomalies turned up in the other elements. The best sample (R90215), a quartz vein in the altered volcanic rock, returned 4,400 ppm Cu, 20.0 ppm Ag, 820 ppm Pb and 260 ppm Sb. Best gold value in rock was 130 ppb (sample 72654) occurring in silicified volcanic rock. Complete results are included in Appendix 2.

CHAPTER FOUR: GEOPHYSICS

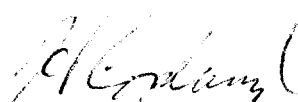
Geophysical surveys were conducted over the TES 30-35 claims during August, 1986. Approximately 3.4 kilometres of GENIE (SE-88) and 4.5 kilometres of magnetometer were completed over the claim grid. The results indicate that an easterly trending zone of low resistivity approximately 5-25 metres wide and 300 metres long occurs near the baseline (Figure 9). This zone very closely follows the altered volcanic rock and the geochemical footprint. No depths or conductivity can be interpreted as the zone exhibits very low conductivity. A strong magnetic dipole occurs coincident with the low conductivity source on line 10000E (Figure 10).

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

The TES 30-35 claims were initially pinpointed with an airborne geophysical program. Follow-up groundwork revealed a favourable geological environment for volcanogenic massive sulphide mineralization. Subsequent soil geochemistry has defined a distinct multi-element anomaly which coincides with silicified, clay altered and pyritiferous basic tuffs and intercalated sediments. Ground based magnetometer and EM surveys have also delineated a zone related to the altered volcanic rocks.

It is recommended that trenching be undertaken across the anomalous zone in at least two locations followed by diamond drilling if warranted. A snowmobile trail approximately 5 kilometres long exists into the property from the Alaska Highway. Upgrading of this into a cat track appears to be feasible.

Respectfully submitted,



Hugh Copland
Geologist

REFERENCES

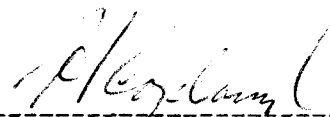
Bradish, L., 1986. Tes Grid Geophysical Survey. Internal Noranda Memo.

Mulligan, R., 1963. Teslin Map Area (105C). G.S.C. Memoir 326.

STATEMENT OF QUALIFICATIONS

I, Hugh Copland, do hereby certify that:

1. I am a geologist residing at Kilometre 127.1 of the Klondike Highway, Yukon Territory.
2. I am a graduate of the University of B.C. with a B.Sc. in Geological Sciences.
3. I have practised my profession for the past six years mainly in the Northern Cordillera.
4. I participated in field work done on the TES 30-35 claims in 1986.
5. I am a member of the Society of Professional Geoscientists of the Yukon Territory and an Associate of the Geological Association of Canada.



Hugh Copland
Geologist

STATEMENT OF COSTS

PROJECT: TES 30-35 Claims

Labour:

12 mandays @ \$130 1560.00

Supplies and Lodging:

12 mandays @ \$30 360.00

Helicopter:

6 hours @ \$550 3300.00

Geophysics:

Equipment rental 3 days @ \$40 120.00

Ground Transport:

150.00

Contractor - linecutting, soil sampling:

1068.00

Analysis:

186 soils @ \$9.00 1674.00

34 rocks @ \$13.00 442.00

2116.00

Report writing, drafting, etc.:

1200.00

TOTAL \$10414.00



Legend

- 8 Acid volcanics: pyroclastics, tuffs, breccias & flows.
- 6 Basic volcanics: agglomerates, tuffs w/ intercalated chert & siltstone
- Alteration zone: silica ± clay, pyrite, pyrrhotite
- Conductor axis
- Geological contact
- Fault

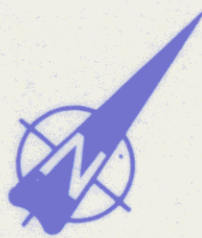
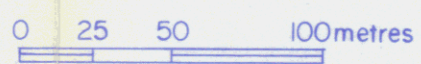
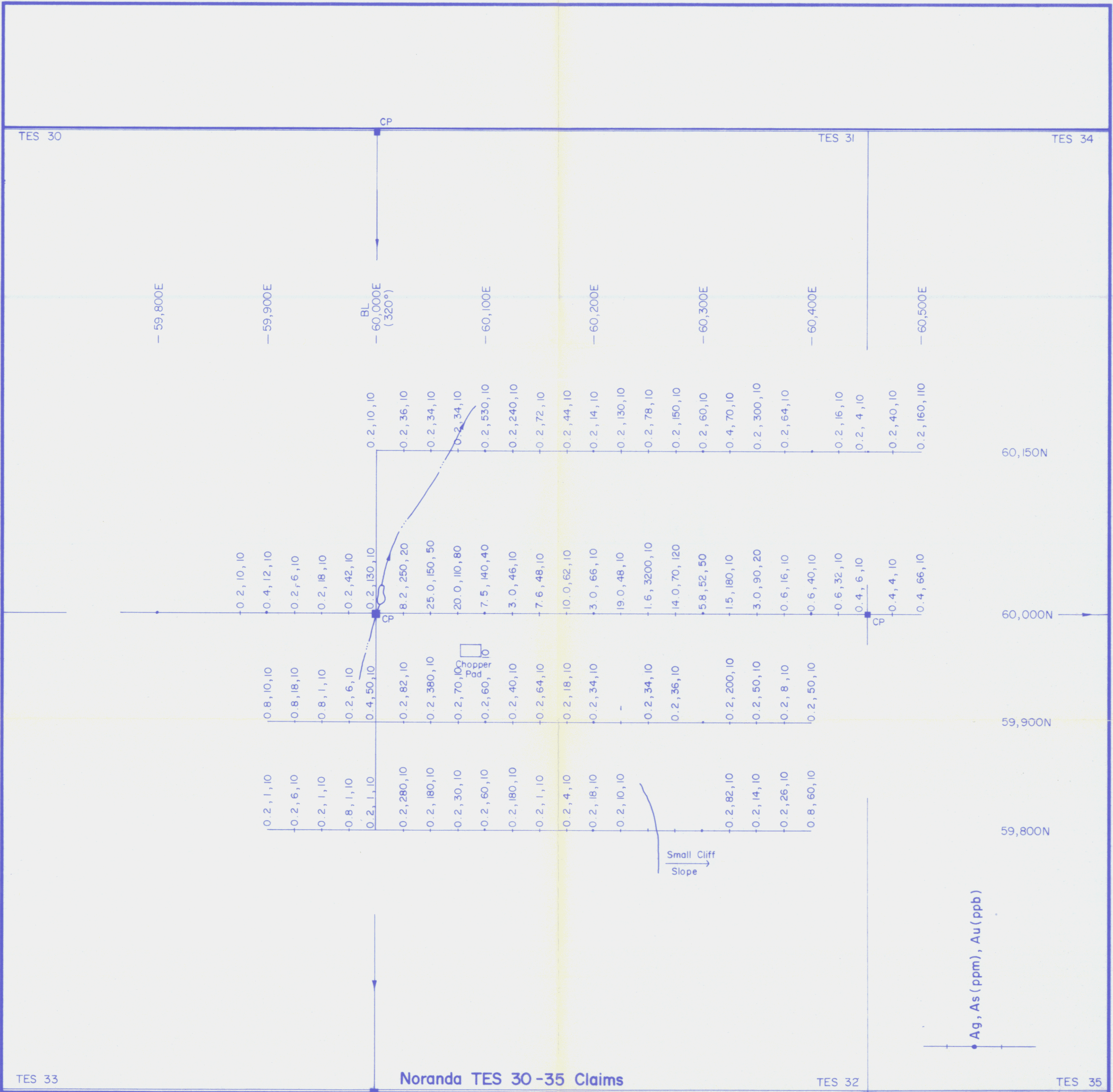


Fig. : 4

REVISED	TESLIN AEM (TES Claims)	
	AEM Anomaly 75IE	
	Geology	
PRJ. No. 22	SURVEY BY: HC	DATE: FEB 87
N.T.S. 105 C II	DRAWN BY: AI	SCALE: 1:2500
DWG. No.	NORANDA EXPLORATION	
	OFFICE Whitehorse	



REVISED	TESLIN AEM (TES Claims)	
	AEM Anomaly 75IE	
	Soil Geochem Results	
	(Ag, As in ppm, Au in ppb)	
PROJ. No 22	SURVEY BY	DATE JUL 86
N.T.S. 105 C II	DRAWN BY AI	SCALE 1: 2500
DWG. No	NORANDA EXPLORATION	
	OFFICE Whitehorse	

Fig. : 5

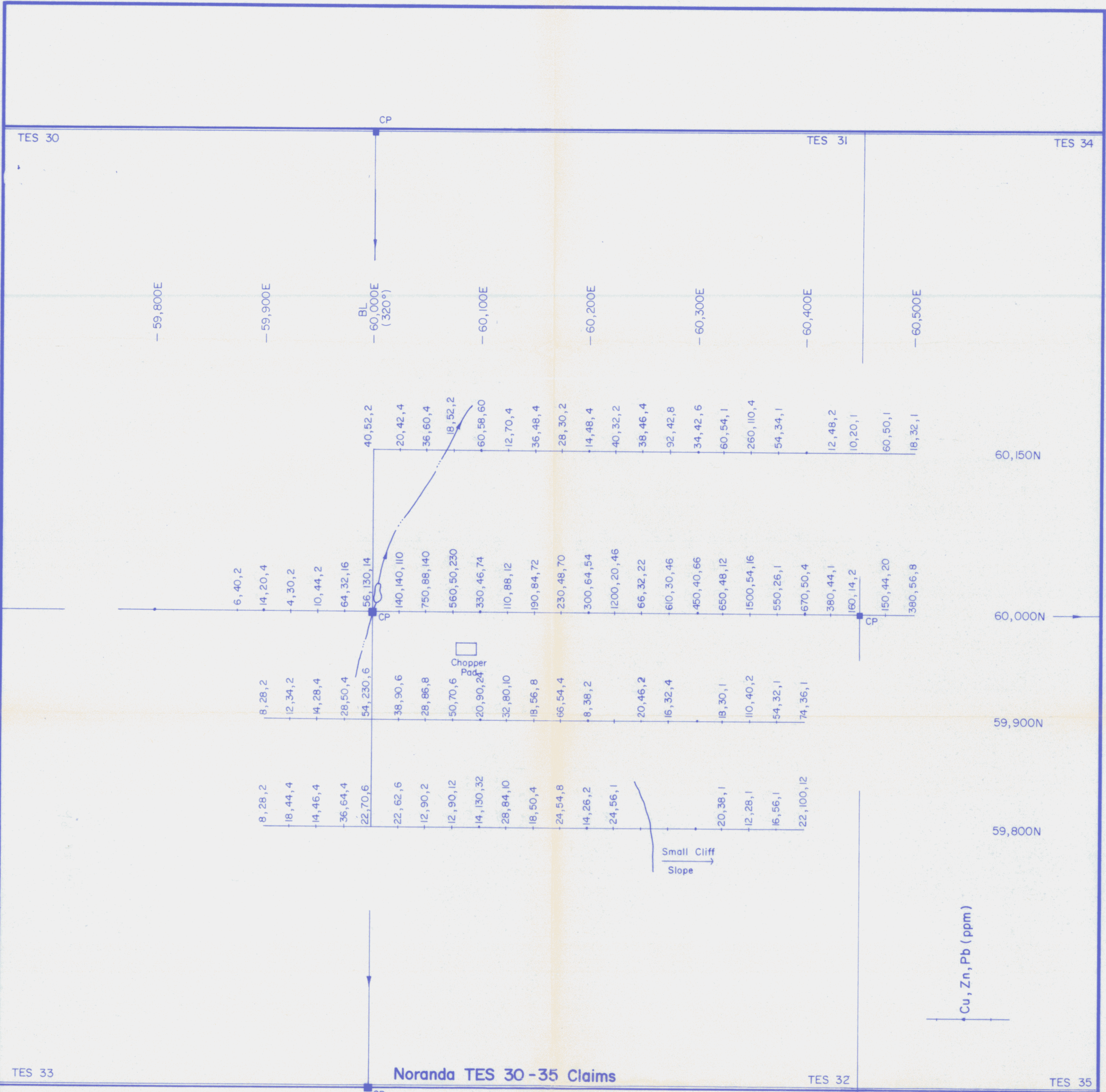
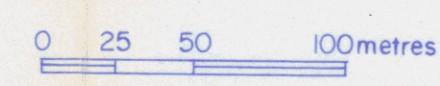
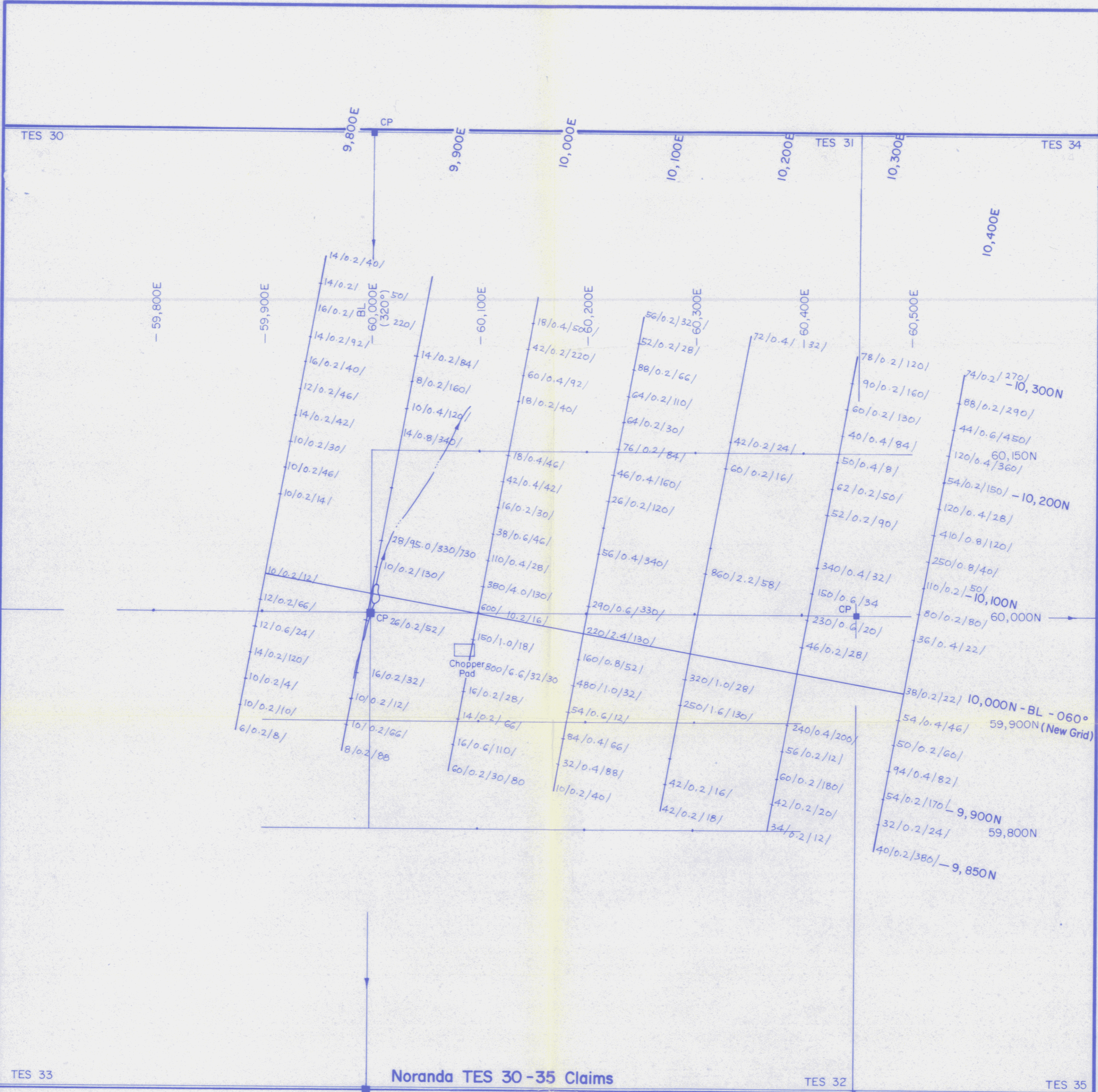


Fig. : 6

REVISED	TESLIN AEM (TES Claims)	
	AEM Anomaly 751E	
	Soil Geochem Results	
	(Cu, Zn, Pb in ppm)	
PROJ. No. 22	SURVEY BY: AI	DATE: JUL 86
N.T.S. 1:105 C II	DRAWN BY: AI	SCALE: 1:2500
DWG No	NORANDA EXPLORATION	
	OFFICE Whitehorse	





Cu/Ag/As/Au
in ppm

All values at 10 ppb except where noted.

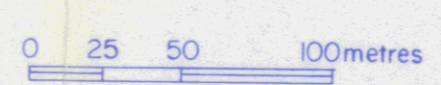
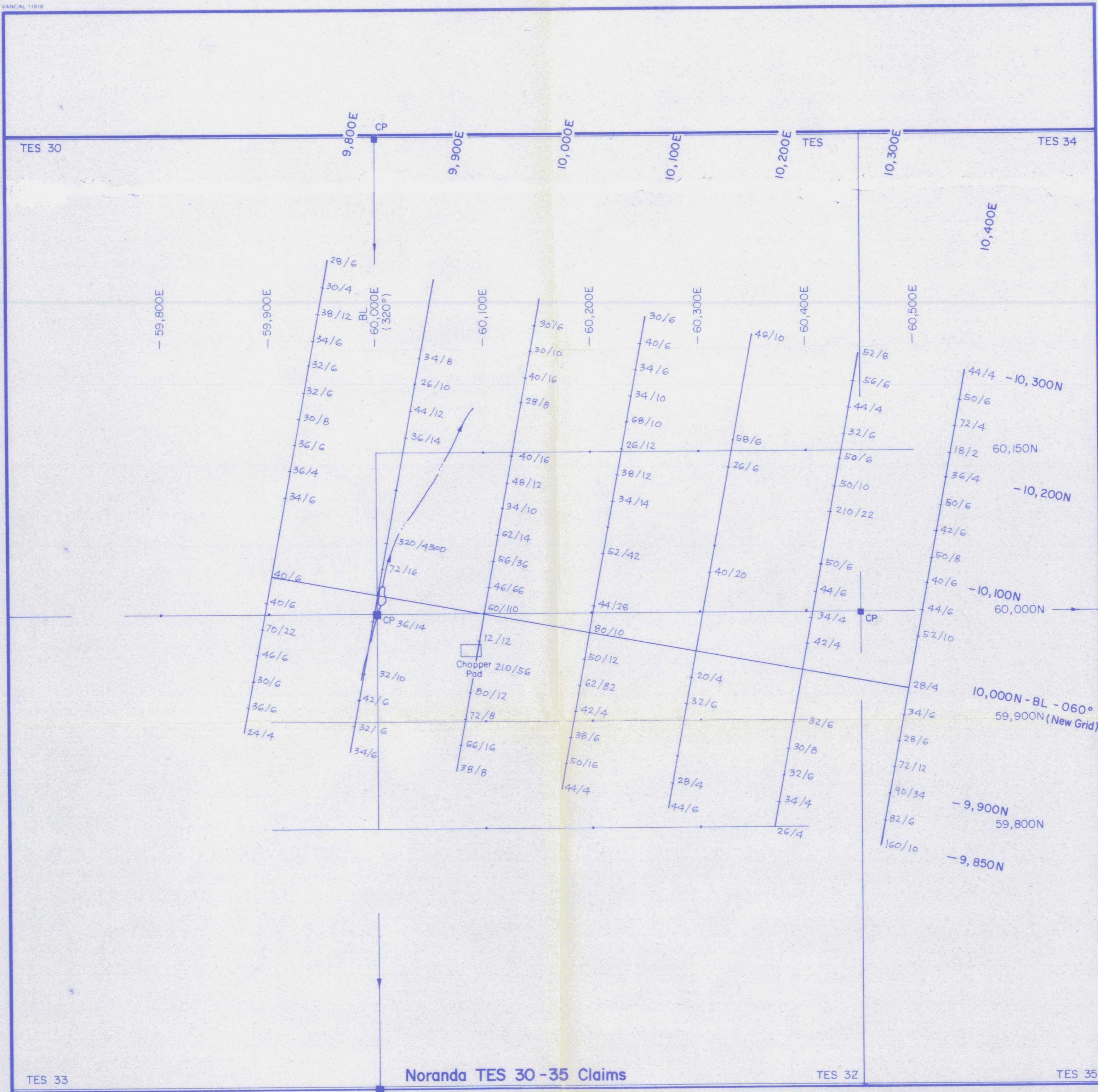


Fig. : 7

REVISED	TESLIN AEM (TES Claims)	
	AEM Anomaly 75IE	
	Soil Geochem Results	
	(Cu/Ag/As/Au)	
PROJ. No. 22	SURVEY BY: AI	DATE: SEP 86
N.T.S. 105 C II	DRAWN BY: AI	SCALE: 1:2500
DWG. No.	NORANDA EXPLORATION	
	OFFICE	Whitehorse



Noranda TES 30-35 Claims

Zn/Pb in ppm

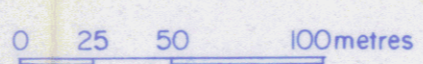
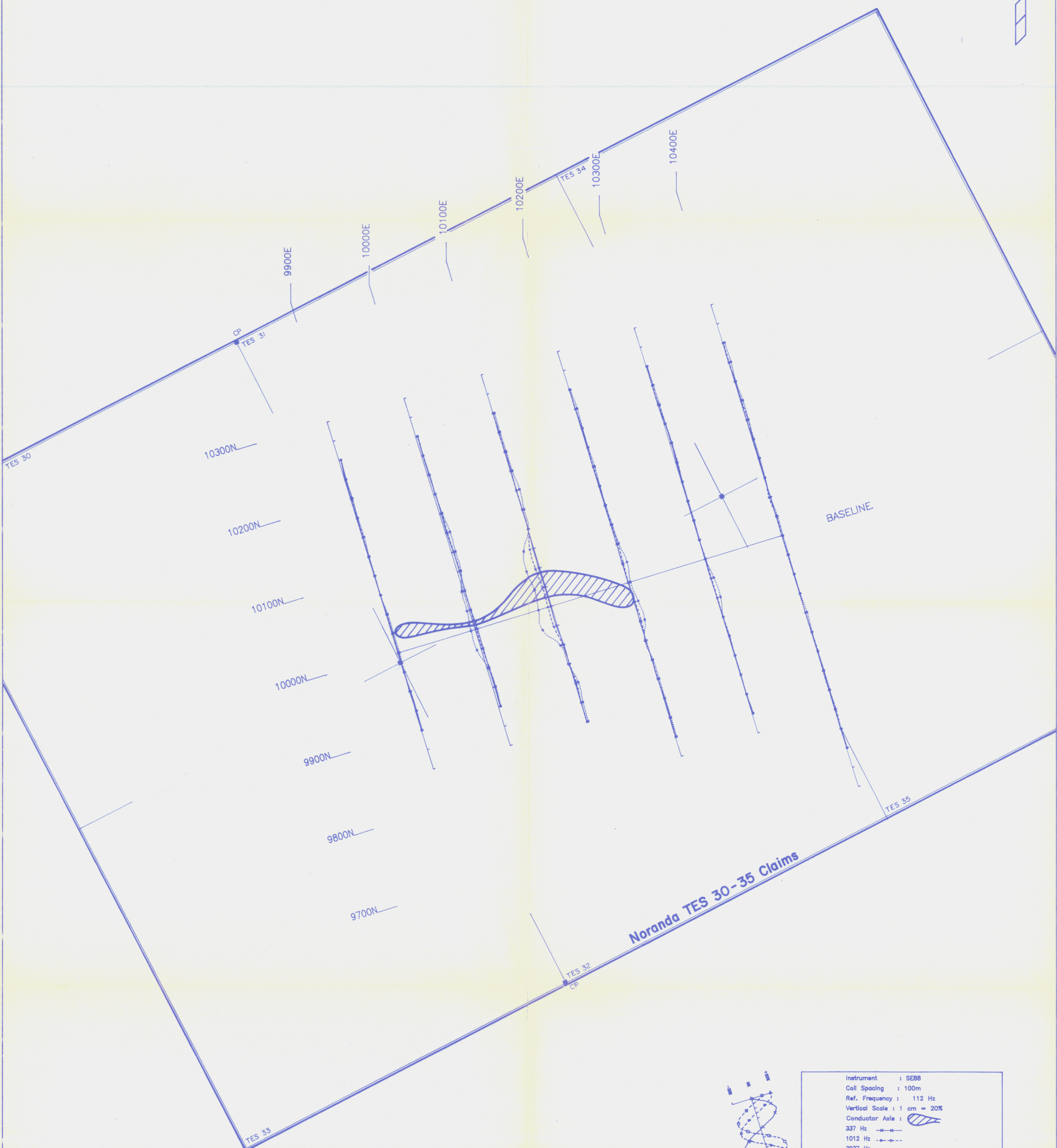


Fig. : 8

REVISED	TESLIN AEM (TES Claims)	
	AEM Anomaly 751E	
	Soil Geochem Results	
	(Zn/Pb)	
PROJ. No. 22	SURVEY BY: AI	DATE: SEP 86
N.T.S. 105 C II	DRAWN BY: AI	SCALE: 1:2500
DWG No.	NORANDA EXPLORATION	
	OFFICE Whitehorse	



Instrument : SE88
 Coil Spacing : 100m
 Ref. Frequency : 112 Hz
 Vertical Scale : 1 cm = 20%
 Conductor Axis :

337 Hz

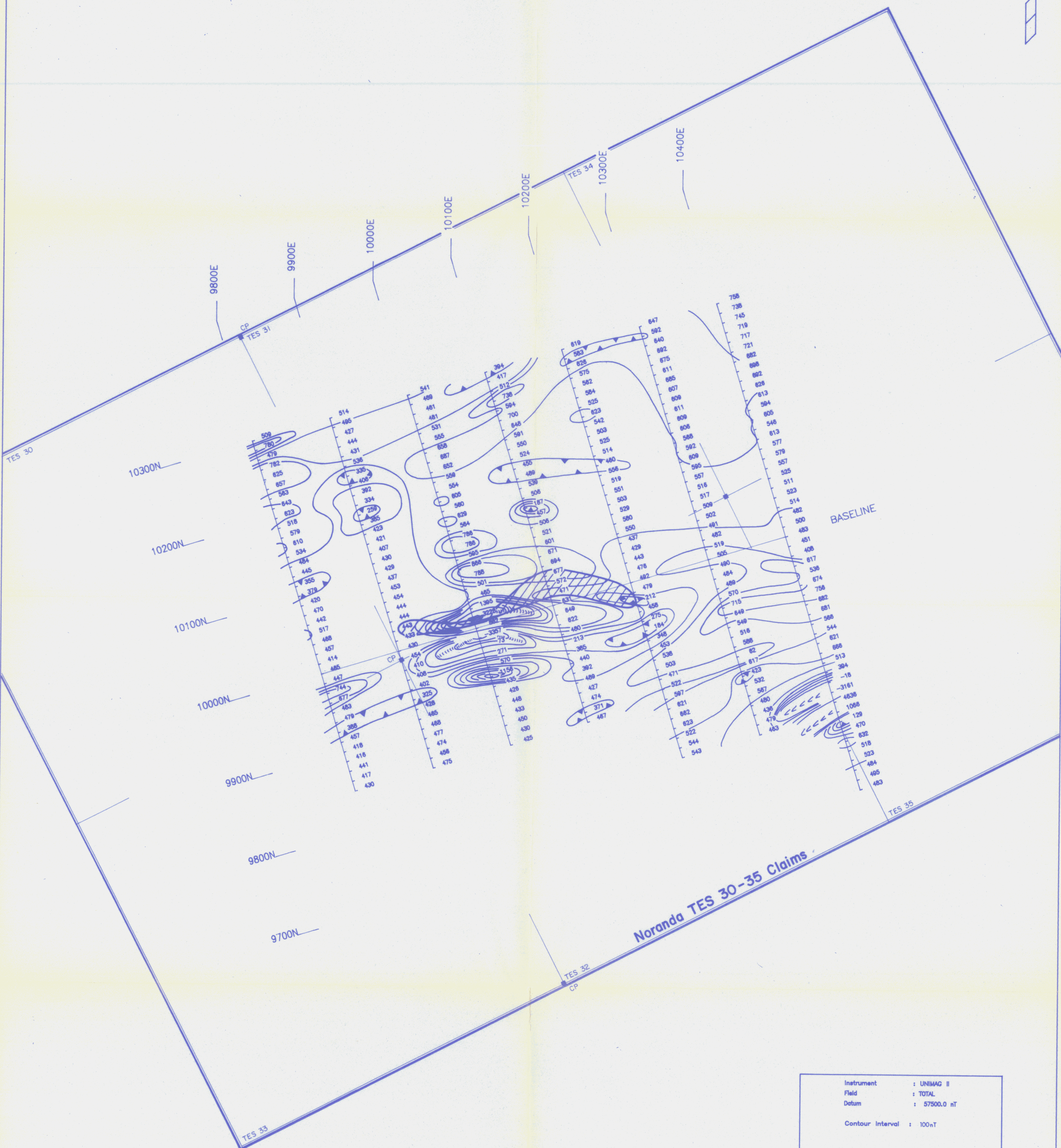
1012 Hz

3037 Hz

50m 25m 0m 50m 100m

Fig. 9

TES CLAIMS	
SE-88 SURVEY	
PROJECT: TESLIN	PROJECT # : 322
BASELINE AZIMUTH : 73 Deg.	
SCALE = 1: 2500	DATE : 8/17/86
SURVEY BY: KL/TL NTS :	
FILE: S322TES.ZAT	
NORANDA EXPLORATION	091919



Noranda TES 30-35 Claims

Instrument	: UNIMAG II
Field	: TOTAL
Datum	: 57500.0 nT
Contour Interval	: 100nT
Conductor Axis	:

Fig. 10

TES CLAIMS	
MAGNETOMETER SURVEY	
PROJECT: TESLIN PROJECT # : 322	
BASELINE AZIMUTH : 73 Deg.	
SCALE = 1: 2500	DATE : 8/17/86
SURVEY BY: G.C.M. NTS :	
FILE: M322TES.ZAT	
NORANDA EXPLORATION	

091919

APPENDIX 1

SOIL SAMPLE GEOCHEMICAL RESULTS

TES 30-35
red gold

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: TESLIN

CODE : 8606-070

Project No. : 322 Sheet: 1 of 2 Date rec'd: JUN. 25
 Material : SDIL Geol.: W. R. Date compl: JUL. 08
 Remarks : Additional Au determination requested by W. R. (21/07)
 Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
14	59800N-59900E	8	28	2	0.2	1	10
15	59925	18	44	4	0.2	6	10
16	59950	14	46	4	0.2	1	10
17	59975	36	64	4	0.8	1	10
18	60000	22	70	6	0.2	1	10
19	60025	22	62	6	0.2	280	10
20	60050	12	90	2	0.2	180	10
21	60075	12	90	12	0.2	30	10
22	60100	14	130	32	0.2	60	10
23	60125	28	84	10	0.2	180	10
24	60150	18	50	4	0.2	1	10
25	60175	24	54	8	0.2	4	10
26	60200	14	26	2	0.2	18	10
27	60225	24	56	1	0.2	10	10
28	60325	20	38	1	0.2	82	10
29	60350	12	28	1	0.2	14	10
30	60375	16	56	1	0.2	26	10
31	59800N-60400E	22	100	12	0.8	60	10
32	59900N-59900E	8	28	2	0.8	10	10
33	59925	12	34	2	0.8	18	10
34	59950	14	28	4	0.8	1	10
35	59975	28	50	4	0.2	6	10
36	60000	54	230	6	0.4	50	10
37	60025	38	90	6	0.2	82	10
38	60050	28	86	8	0.2	380	10
39	60075	50	70	6	0.2	70	10
40	60100	20	90	24	0.2	60	10
41	60125	32	80	10	0.2	40	10
42	60150	18	56	8	0.2	64	10
43	60175	66	54	4	0.2	18	10
44	60200	8	38	2	0.2	1	10
45	60250	20	46	2	0.2	34	10
46	60275	16	32	4	0.2	36	10
47	60325	18	30	1	0.2	200	10
48	60350	110	40	2	0.2	50	10
49	60375	54	32	1	0.2	8	10
50	59900N-60400E	74	36	1	0.2	50	10
51	60000N-59875E	6	40	2	0.2	10	10
52	60000N-59900E	14	20	4	0.4	12	10
53	60000N-59925E	4	30	2	0.2	6	10
54	59950	10	44	2	0.2	18	10
55	59975	64	32	16	0.2	42	10
56	60000	56	130	14	0.2	130	10
57	60025	140	140	110	8.2	250	20
58	60050	750	88	140	25.0	150	50
59	60075	560	50	230	20.0	110	80
60	60100	330	46	74	7.5	140	40
61	60000N-60125E	110	88	12	3.0	46	10

T. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	
62	60000N-60150E	190	84	72	7.6	48	10
63	60175	230	48	70	10.0	62	10
64	60200	300	64	54	3.0	66	10
65	60225	1200	20	46	19.0	48	10
66	60250	66	32	22	1.6	3200	10
67	60275	610	30	46	14.0	70	120
68	60300	450	40	66	5.8	52	50
69	60325	650	48	12	1.5	180	10
70	60350	1500	54	16	3.0	90	20
71	60375	550	26	1	0.6	16	10
72	60400	670	50	4	0.6	40	10
73	60425	380	44	1	0.6	32	10
74	60450	160	14	2	0.4	6	10
75	60475	150	44	20	0.4	4	10
76	60000N-60500E	380	56	8	0.4	66	10
77	60150N-60000E	40	52	2	0.2	10	10
78	60025	20	42	4	0.2	36	10
79	60050	36	60	4	0.2	34	10
80	60075	18	52	2	0.2	34	10
81	60100	60	58	60	0.2	530	10
82	60125	12	70	4	0.2	240	10
83	60150	36	48	4	0.2	72	10
84	60175	28	30	2	0.2	44	10
85	60200	14	48	4	0.2	14	10
86	60225	40	32	2	0.2	130	10
87	60250	38	46	4	0.2	78	10
88	60275	92	42	8	0.2	150	10
89	60300	34	42	6	0.2	60	10
90	60325	60	54	1	0.4	70	10
91	60350	260	110	4	0.2	300	10
92	60375	54	34	1	0.2	64	10
93	60425	12	48	2	0.2	16	10
94	60450	10	20	1	0.2	4	10
95	60475	60	50	1	0.2	40	10
96	60150N-60500E	18	32	1	0.2	160	110

8608.076

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 1M9
TEL : (604) 299-8917

CERTIFICATE OF ANALYSIS

TO : MURPHY ENTERPRISES LTD.
1000 DAVIL STREET
VANCOUVER B.C.
PROJECT: 22-8601-01
TYPE OF ANALYSIS: FERRIC

CERTIFICATE#: 15301
INVOICE#: 107
DATE ENTERED: 11-09-06
FILE NAME: 8608076
PAGE #: 1

RE IX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au	PPB Hg	PPM Sb	PPM As
5	60000N-60000F	2780	5.8	118	102	10	40	36	386
6	60000F	1240	4.6	82	140	20	20	26	510
7	60070E	1000	17.8	62	346	210	80	82	166
8	60000N-60175E	610	2.6	54	22	20	20	4	50

ANALY. CALIBRATION SAMPLES FOR Zn, Pb, Cu, Ag, Au, Hg, Sb, As ON 11/09/06

8/9/06 WJ
 CERTIFIED BY: *Rossbach*

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: TESLIN

CODE : 8608-093

Project No. : 322

Sheet: 1 of 2

Date rec'd: AUG 19

Material : SOIL

Geol.: WR

Date compl: AUG 26

Remarks :

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
113	9800E-9850N	6	24	4	0.2	8	10
114	9875	10	36	6	0.2	10	10
115	9900	10	30	6	0.2	4	10
116	9925	14	46	6	0.2	120	10
117	9950	12	70	22	0.6	24	10
118	9975	12	40	6	0.2	66	10
119	10000	10	40	6	0.2	12	10
120	10075	10	34	6	0.2	14	10
121	10100	10	36	4	0.2	46	10
122	10125	10	36	6	0.2	30	10
123	10150	14	30	8	0.2	42	10
124	10175	12	32	6	0.2	46	10
125	10200	16	32	6	0.2	40	10
126	10225	14	34	6	0.2	92	10
127	10250	16	38	12	0.2	220	10
128	10275	14	30	4	0.2	50	10
129	9800E-10300N	14	28	6	0.2	40	10
130	9900E-9850N	8	34	6	0.2	88	10
131	9875	10	32	6	0.2	66	10
132	9900	10	42	6	0.2	12	10
133	9925	16	32	10	0.2	32	10
134	9975	26	36	14	0.2	52	10
135	10025	10	72	16	0.2	130	10
136	10050	28	320	4300	95.0	330	730
137	10150	14	36	14	0.8	340	10
138	10175	10	44	12	0.4	120	10
139	10200	8	26	10	0.2	160	10
140	9900E-10225N	14	34	8	0.2	84	10
141	10000E-9850N	60	38	8	0.2	30	80
142	9875	16	66	16	0.6	110	10
143	9900	14	72	8	0.2	66	10
144	9925	16	80	12	0.2	28	10
145	9950	800	210	56	6.6	32	30
146	9975	150	12	12	1.0	18	10
147	10000	600	60	110	10.2	16	10
48	10025	380	46	66	4.0	130	10
49	10000E-10050N	110	56	36	0.4	28	10
2	10000E-10075N	38	62	14	0.6	46	10
3	10100	16	34	10	0.2	30	10
4	10125	42	48	12	0.4	42	10
5	10150	18	40	16	0.4	46	10
6	10200	18	28	8	0.2	40	10
7	10225	60	40	16	0.4	92	10
8	10250	42	30	10	0.2	220	10
9	10000E-10275N	18	30	6	0.4	50	10
10	10100E-9850N	10	44	4	0.2	40	10
11	9875	32	50	16	0.4	88	10
12	10100E-9900N	84	38	6	0.4	66	10

T. I. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au	8608-093 Pg. 2 of 3
13	10100E-9925N	54	42	4	0.6	12	10	
14	9950	480	62	82	1.0	32	10	
15	9975	160	50	12	0.8	52	10	
16	10000	220	80	10	2.4	130	10	
17	10025	290	44	28	0.6	330	10	
18	10075	56	52	42	0.4	340	10	
19	10125	26	34	14	0.2	120	10	
20	10150	46	38	12	0.4	160	10	
21	10175	76	26	12	0.2	84	10	
22	10200	64	68	10	0.2	30	10	
23	10225	64	34	10	0.2	110	10	
24	10250	88	34	6	0.2	66	10	
25	10275	52	40	6	0.2	28	10	
26	10100E-10300N	56	30	6	0.2	32	10	
27	10200E-9850N	42	44	6	0.2	18	10	
28	9875	42	28	4	0.2	16	10	
29	9950	250	32	6	1.6	130	10	
30	9975	320	20	4	1.0	28	10	
31	10075	860	40	20	2.2	58	10	
32	10175	60	26	6	0.2	16	10	
33	10200	42	58	6	0.2	24	10	
34	10200E-10300N	72	46	10	0.4	32	10	
35	10300E-9850N	34	26	4	0.2	12	10	
36	9875	42	34	4	0.2	20	10	
37	9900	60	32	6	0.2	180	10	
38	9925	56	30	8	0.2	12	10	
39	9950	240	32	6	0.4	200	10	
40	10025	46	42	4	0.2	28	10	
41	10050	230	34	4	0.6	20	10	
42	10075	150	44	6	0.6	34	10	
43	10100	340	50	6	0.4	32	10	
44	10150	52	210	22	0.2	90	10	
45	10175	62	50	10	0.2	50	10	
46	10200	50	50	6	0.4	8	10	
47	10225	40	32	6	0.4	84	10	
48	10250	60	44	4	0.2	130	10	
49	10275	90	56	6	0.2	160	10	
50	10300E-10300N	78	52	8	0.2	120	10	
51	10400E-9850N	40	160	10	0.2	380	10	
52	9875	32	82	6	0.2	24	10	
53	9900	54	90	34	0.2	170	10	
54	9925	94	72	12	0.4	82	10	
55	9950	50	28	6	0.2	60	10	
56	9975	54	34	6	0.4	46	10	
57	10000	38	28	4	0.2	22	10	
58	10050	36	52	10	0.4	22	10	
59	10075	80	44	6	0.2	80	10	
60	10100	110	40	6	0.2	50	10	
61	10125	250	50	8	0.8	40	10	
62	10150	410	42	6	0.8	120	10	
63	10175	120	50	6	0.4	28	10	
64	10200	54	36	4	0.2	150	10	
65	10225	120	18	2	0.4	360	10	
66	10250	44	72	4	0.6	450	10	
67	10275	88	50	6	0.2	290	10	
68	10400E-10300N	74	44	4	0.2	270	10	

APPENDIX 2

ROCK SAMPLE DESCRIPTIONS and

GEOCHEMICAL RESULTS

NORANDA EXPLORATION COMPANY, LIMITED
ROCK SAMPLE DESCRIPTIONS AND GEOCHEMICAL RESULTS

PROJECT: TES 30-35

N. T. S. 105 C/11

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	ASSAYS							
			ppm Cu	ppm Ag	ppm Zn	ppm Pb	ppb Au	ppm As	ppm Sb	ppm Hg
41226	Siliceous hornblende porphyry with qtz veining land diss. Py	Comp.	6	.6	68	1060	5	14		
41227	Black argillite with minor Py, moderate fol- liation (L8000N, 8125E)	Grab Float	136	.2	60	38	5	22		
41228	As above, argillite (L8025N, 8075E)	O/C	20	.2	106	4	10	4		
41229	Siliceous basic tuff (L8025N, 8075E)	Grab	88	.2	82	2	5	10		
41235	Felsic light maroon coloured tuff-siltstone (poss. dyke), quite siliceous with 5% diss Po	Grab	298	.6	66	2	5	8		
41236	Hematite and Mn stained quartz vein material.	Grab	82	.4	8	2	10	322		
41237	Rusty malachite stained altered tuff with 20% quartz veins	Grab	3800	11.4	186	2	20	28		
41238	Quartz veined altered tuff with minor pyrite (poss. sphalerite)	Grab	640	5.0	96	48	5	22		
41239	From outcrop and talus, weathered rusty vol- canic and quartz vein material	Comp.	970	10.8	106	24	40	4		
41240	Light maroon chert with 2% diss. Py-Po, minor siltstone (L6000N, 60050E)	Grab	304	.8	38	2	5	2		
41241	Siltstone as above	Grab	208	.4	48	2	5	10		
41242	Rusty weathering volcanic tuff with minor qtz vein and sulphides (60000N, 60070E)	Comp. Comp.	152 192	4.0 1.8	42 58	68 48	5 5	24 18		
41243	Rusty quartz veined altered volcanic, 5% diss pyrite (59980N, 60200E)									
41244	As above (59985N, 60250E)	Comp.	208	1.4	82	2	5	10		
41245	Altered volcanic tuff with minor quartz veins, Py + Po (brecciated) (60000N, 60350E)	Grab	560	1.2	54	2	5	14		
41246	Gossanous rusty tuff, completely weathered (60000N, 60350E)	Grab	530	2.4	44	4	5	14		
41247	Chert to cherty siltstone, medium green grey with diss. Py-Po (60000N, 60460E)	Grab	54	.2	42	2	5	10		
41248	Medium grey cherty tuff with 2-3% diss. Py (60150N, 60900E)	Grab	100	.2	46	2	5	8		
41249	Rhyolite fragmental and tuff with up to 4% diss. and wispy layered Po-Py (60000N, 59830E)	Grab	180	.6	56	20	10			
41250	Cream coloured altered rhyolite fragmental with 1% diss. pyrite (60000N, 59820E)	Grab	12	.2	28	6	5	6		

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
			Cu	Ag	Zn	Pb	Au	As	Sb	Hg
72442	Rusty weathering bleached sandy tuff with minor diss. pyrite (L59975N, 60000E)	Comp.	272	2.0	14	12	5	16		
72443	Light grey, fine gr. volcanic with up to 3% diss. euhedral pyrite (L59975N, 60000E)	Grab	190	.8	38	2	5	52		
72444	Up to 20% massive to euhedral quartz in rusty volcanic tuff (L59975N, 60000E)	Grab	154	6.0	26	40	5	8		
72445	Rusty, gossanous tuff with up to 5% diss. sulphides (L60000N, 59900E)	Comp.	60	.4	26	1	10			
72446	Similar to above (L60000N, 59900E)	Comp.	42	.6	26	8	5	10		
72447	10% euhedral quartz in vuggy gossanous tuff (L60000N, 59975E)		200	1.6	34	2	5	14		
72654	Banded and diss. Py + Po 10% in gossanous, highly silicified rock, white to black in colour	S/C	310 .03%	.8 .1 oz/t	28 (0.01%	1 (0.01%	130 (0.01 oz/t	(geochem)		(Bondar Clegg assays)
72655	Up to 40% sulphides in interbedded sequence of cherty rocks and basic tuffs. Sulphides mainly pyrite with minor Po +/- minor galena, sphalerite and Cp. Occurs as bands and blebs very fine grained.	O/C	820 .09%	1.8 .09 oz/t	44 (0.01%	8 (0.01%	10 (0.01 oz/t			
90213	Altered basic tuff (60000E)	O/C	186	.8	60	8	5	20	8	20
90214	Silicified pyrrhotite bearing altered tuff (60050E)	Grab	540	1.4	44	14	5	34	8	20
90215	Quartz vein in altered tuff (5995N, 60050E)	Grab	4400	20.0	130	820	5	12	260	60
90216	Sheared basic tuff (60075E)		358	2.6	56	38	5	22	14	20
90217	Silicified tuff with 5% pyrite (60100E)		484	2.0	56	8	5	14	4	20
90218	Basic volcanic 5% pyrite (59900N, 60050E)		80	.6	94	6	5	14	2	10
90219	Altered basic tuff (60125E)		270	1.0	48	18	5	12	2	10
90220	Chloritic, silicified tuff (60250E)		346	1.0	56	22	5	1620	700	20
90221	Typical alteration of basic tuff, 10% pyrite on fractures (60275E)		810	5.4	72	12	5	22	8	20