GEOCHEMICAL & GEOLOGICAL REPORT

ON THE

HOUSTON-TOMMY PROPERTY

(HT 2,3,4, Del 1-8, Ken 1-8, Nels 5-8,
Tel 1-24, Ter 1-8 Claims)

N.T.S. 93 L/06 E

Latitude 54° 23' N
Longitude 127° 06' W

OMINECA MINING DIVISION

NORANDA EXPLORATION COMPANY, LIMITED
(no personal liability)

BY: TERRENCE CAMPBELL, BSc

NOVEMBER, 1988

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SUMMARY:

This report describes a geochemical and geological survey undertaken by Noranda Exploration Company, Limited (NPL) in 1988, to assess the economic potential of the Houston Tommy property, west of Houston, B.C. The Houston Tommy property consists of 107 claim units divided into four groups. The claims were staked in July 1987 to cover stream sediment anomalies from the Regional Geochemical Survey release at Smithers.

The property is underlain by sediments and volcanics of the early to mid Jurassic Hazelton Group. Small masses of grano-diorite and quartz monzonite intrusive occur in the regional map area. (GSC Bulletin 270)

A program consisting of grid soil, reconnaissance soil, silt and rock sampling was undertaken. Analyses of all of the samples revealed several large Au and Pb/Zn soil anomalies, 9 silt anomalies and 9 rock anomalies.

INTRODUCTION:

The Del 1-8, HT-2, HT-3, HT-4, Ken 1-8, Nel 1-8, Tel 1-24 and Ter 1-8 claims were staked by Noranda personnel in July of 1987. The claims were staked to secure anomalous areas shown by the Smithers (93L) map sheet geochemical release.

This report describes the subsequent geological and geochemical survey undertaken in 1988 to assess the economic potential of the claims.

LOCATION & ACCESS:

The property is located approximately 30 kilometers west of Houston, in the Telkwa Range. The property was accessed by helicopter from the town of Houston. Trenches and old cat trails on the property suggest that a cat trail might have been pushed into the property.

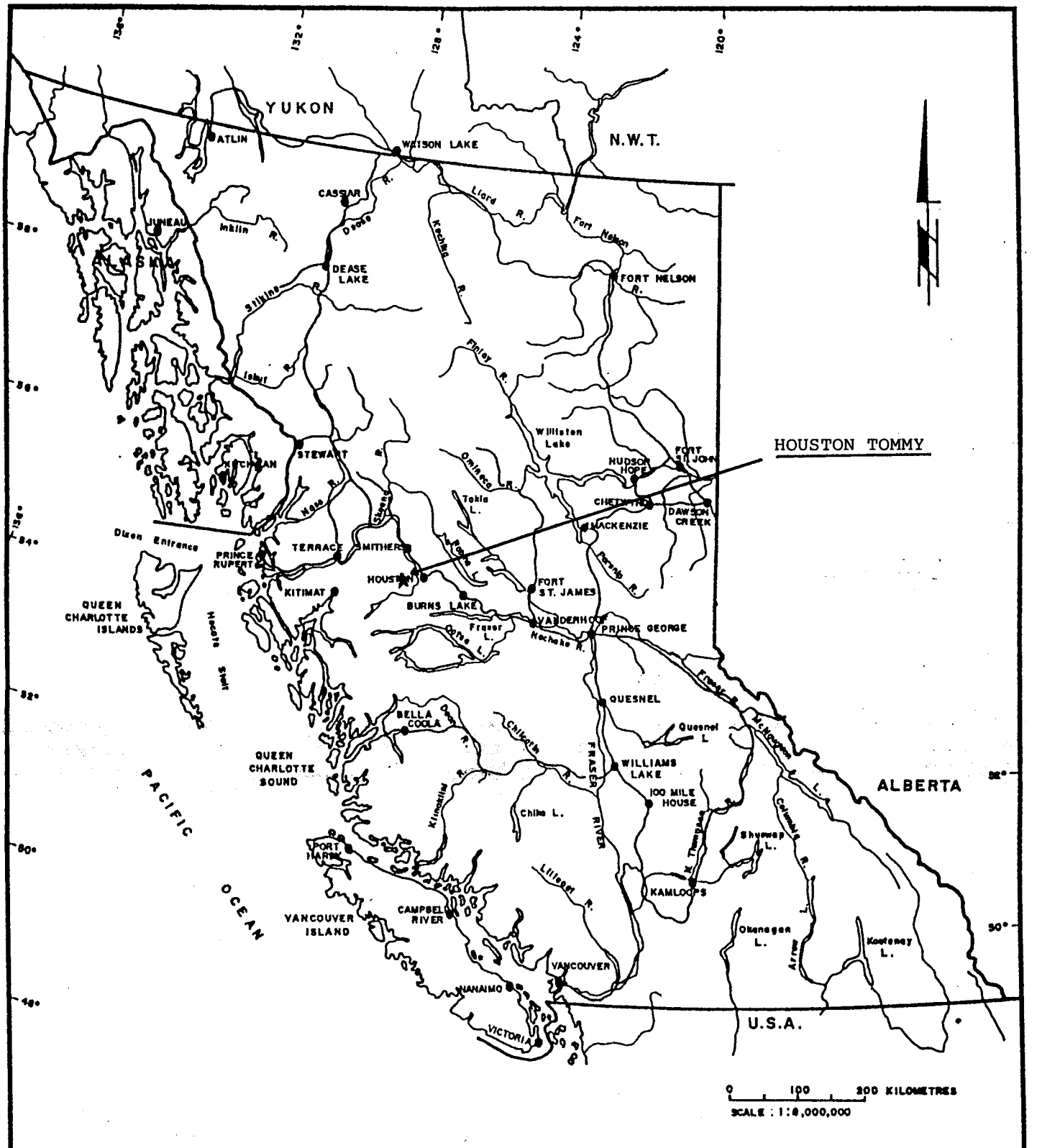
PHYSIOGRAPHY & VEGETATION:

The claims lie within the Telkwa Range of the Hazelton Mountains. The property lies east of Houston Tommy Creek and south of Emerson Creek. The relief ranges from flat alpine plateaus to mountainous creek valleys. The elevation ranges from 1160 to 1830 meters.

The alpine vegetation is composed of alpine mosses, grasses and low lying shrubs. Tree line is at approximately 1500 meters. The creek valleys are heavily forested with spruce and fir trees.

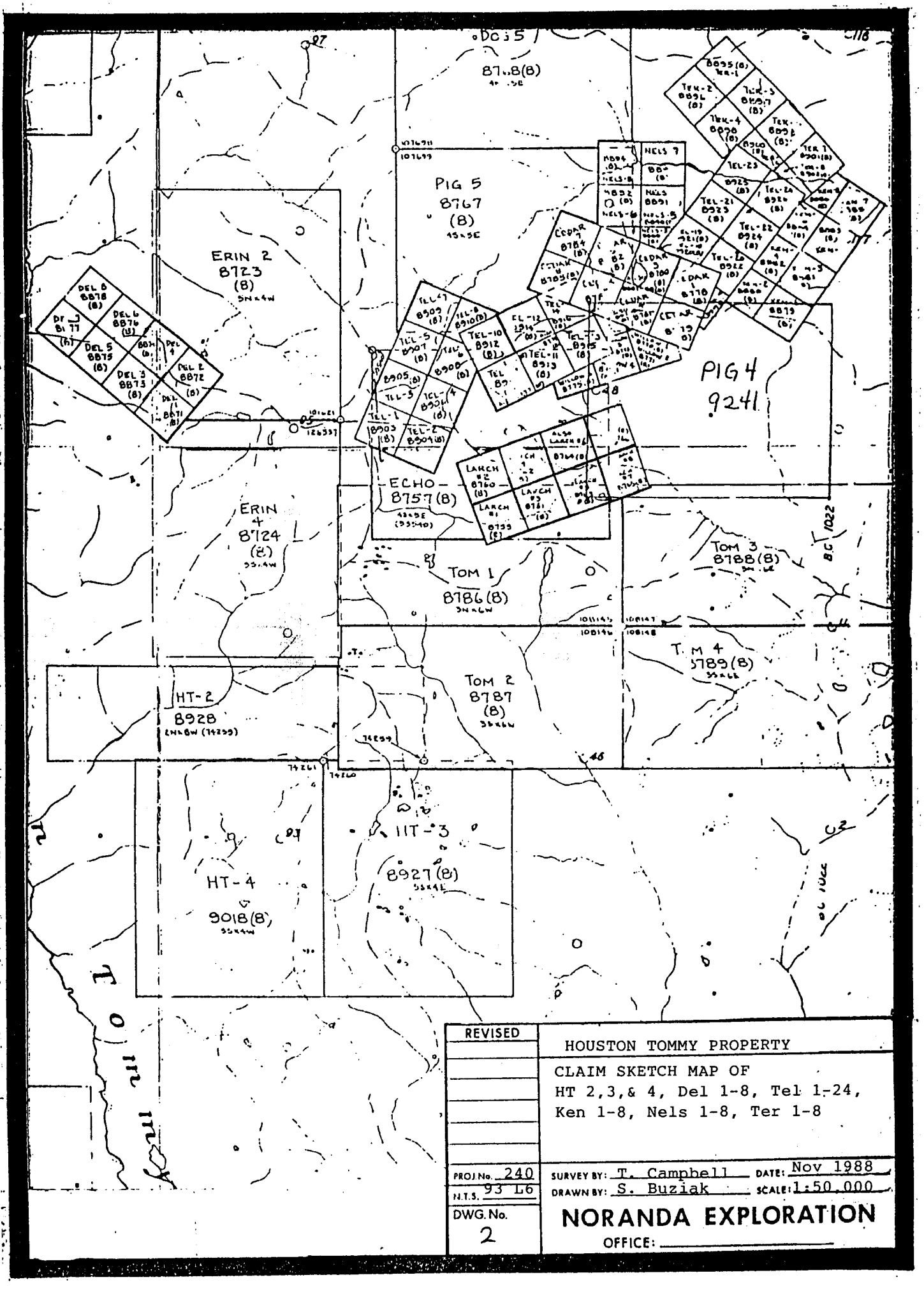
CLAIM STATISTICS:

The property is comprised of a 56 unit block of 3 modified grid claims, HT-2, HT-3 and HT-4 and 7 blocks of 2-post claims. Upon acceptance of this report, the claims will be in good standing until August 31, 1989.



REVISED	HOUSTON TOMMY PROPERTY
	LOCATION MAP
PROJ. No. 240	SURVEY BY: T. Campbell DATE: Nov 1988
N.T.S 93L6	DRAWN BY: B.K.B. SCALE: 1:8,000,000
DWG. No. 1	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.

VANCAL 11827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(8)
ERIN 2
8723
(8)
PIG 4
9241
ECHO
8757(8)
ERIN
4
8724
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TOM 1
8786(8)
TOM 3
8788(8)
TOM 4
8789(8)
TOM 2
8787
(8)
HT-2
8928
HT-3
8927(8)
HT-4
9018(8)
T O
REVISED
HOUSTON TOMMY PROPERTY
CLAIM SKETCH MAP OF
HT 2,3,& 4, Del 1-8, Tel 1-24,
Ken 1-8, Nels 1-8, Ter 1-8
PROJ No. 240
N.T.S. 93 L6
DWG. No.
2
SURVEY BY: T. Campbell
DRAWN BY: S. Buziak
DATE: Nov 1988
SCALE: 1:50,000
NORANDA EXPLORATION
OFFICE:

CLAIM	RECORD #	UNITS	RECORD DATE/DUE		GROUP
Del 1	8871	1	Aug 31	1989	DEL
Del 2	8872	1	Aug 31	1989	DEL
Del 3	8873	1	Aug 31	1989	DEL
Del 4	8874	1	Aug 31	1989	DEL
Del 5	8875	1	Aug 31	1989	DEL
Del 6	8876	1	Aug 31	1989	DEL
Del 7	8877	1	Aug 31	1989	DEL
Del 8	8878	1	Aug 31	1989	DEL
HT 2	8928	16	Aug 31	1989	HT
HT 3	8927	20	Aug 31	1989	HT
HT 4	9018	20	Aug 31	1989	HT
Ken 1	8879	1	Aug 31	1989	TER
Ken 2	8880	1	Aug 31	1989	TER
Ken 3	8881	1	Aug 31	1989	TER
Ken 4	8882	1	Aug 31	1989	TER
Ken 5	8883	1	Aug 31	1989	TER
Ken 6	8884	1	Aug 31	1989	TER
Ken 7	8885	1	Aug 31	1989	TER
Ken 8	8886	1	Aug 31	1989	TER
Nels 5	8891	1	Aug 31	1989	TER
Nels 6	8892	1	Aug 31	1989	TER
Nels 7	8893	1	Aug 31	1989	TER
Nels 8	8894	1	Aug 31	1989	TER
Tel 1	8903	1	Aug 31	1989	TEL
Tel 2	8904	1	Aug 31	1989	TEL
Tel 3	8905	1	Aug 31	1989	TEL
Tel 4	8906	1	Aug 31	1989	TEL
Tel 5	8907	1	Aug 31	1989	TEL
Tel 6	8908	1	Aug 31	1989	TEL
Tel 7	8909	1	Aug 31	1989	TEL
Tel 8	8910	1	Aug 31	1989	TEL
Tel 9	8911	1	Aug 31	1989	TEL
Tel 10	8912	1	Aug 31	1989	TEL
Tel 11	8913	1	Aug 31	1989	TEL
Tel 12	8914	1	Aug 31	1989	TEL
Tel 13	8915	1	Aug 31	1989	TEL
Tel 14	8916	1	Aug 31	1989	TEL
Tel 18	8920	1	Aug 31	1989	TER
Tel 19	8921	1	Aug 31	1989	TER
Tel 20	8922	1	Aug 31	1989	TER
Tel 21	8923	1	Aug 31	1989	TER
Tel 22	8924	1	Aug 31	1989	TER
Tel 23	8925	1	Aug 31	1989	TER
Tel 24	8926	1	Aug 31	1989	TER
Ter 1	8895	1	Aug 31	1989	TER
Ter 2	8896	1	Aug 31	1989	TER
Ter 3	8897	1	Aug 31	1989	TER
Ter 4	8898	1	Aug 31	1989	TER
Ter 5	8899	1	Aug 31	1989	TER
Ter 6	8900	1	Aug 31	1989	TER
Ter 7	8901	1	Aug 31	1989	TER
Ter 8	8902	1	Aug 31	1989	TER

	Total	107 units			

PREVIOUS WORK:

In 1967, a series of silts were collected in the area by Applegate (AR 1189). In 1974, two diamond drill holes were completed by Granges Exploration (AR 5094). The holes are located on the Tel 3 and 4 claims. Approximately 70 boxes of BQ drill core are located on the Tel 4 claim. The holes were drilled to evaluate copper concentrations in the intrusives that underlie the volcanics. Other signs of advanced exploration including trenches, were observed on the Del 1-8 claims. Noranda personnel have collected stream sediment samples in previous years. These have been re-analyzed and have in part, guided the work in 1988. This area is included in the Smithers map sheet RGS release of 1987.

REGIONAL GEOLOGY:

The area is underlain by lower to mid Jurassic volcanics and sediments of the Hazelton group. The group consists primarily of andesitic and rhyolitic flows with associated tuffs and breccias. Small masses of granodiorite and quartz-monzonite intrusives occur in the map area. (GSC Memoir 223) The intrusives are probably part of the Late Cretaceous Bulkley intrusives. The volcanics are most probably part of the Telkwa Formation (GSC Bulletin 270)

RESULTS:

GEOLOGY:

The property is underlain by andesitic flows that overlie rhyolitic flows. These flows are probably part of the Telkwa formation. These flows are intruded by granodiorite and monzonite plugs possibly of the Bulkley intrusive suite. The intrusives are observed topographically below the volcanic beds. Overburden covers the location of the contact with the volcanics.

The andesites that were observed on the property were divided into 7 types. (See figures 7 and 9)

A1 - Grey andesite
A2 - Green calcareous andesite
A3 - Rusty andesite
A4 - Andesite with abundant epidote
A5 - Andesitic feldspar porphyry
A6 - Green and maroon andesite with small amount of fragmental clasts
A7 - Brecciated andesite

The rhyolites that were observed on the property were divided into 3 types. The rhyolites were found in the creek valleys topographically below the andesites.

R1 - Brown rhyolite
R2 - Grey rhyolite
R3 - Red rhyolite

The Intrusives that were observed on the property were divided into 2 types.

I1 - Granite
I2 - Monzonite

Also observed on the property were:

T - Tuffs - composition
H - Dark grey hornfels

GEOCHEMISTRY:

A total of 232 soil, 31 silt and 28 rock samples were collected from the Houston Tommy property during August of 1988.

The soil samples were collected from the 'B' horizon at a depth of 25 cm with augers. The samples were placed in Kraft paper envelopes, air dried, and shipped to ACME Analytical Laboratories at 852 East Hastings St., Vancouver, B.C.

The silt samples were collected from active stream sediments located in the beds of creeks found on the property. The samples were collected by hand, placed in Kraft paper envelopes, air dried, and shipped to ACME Analytical Laboratories.

The rock samples were collected from outcrops and float boulders found on the property. The samples were grab samples removed from the outcrop or boulder with a rock hammer. The samples were placed in plastic bags and shipped to ACME Analytical Laboratories.

All of the samples, soil, silt and rock, were analyzed for 30 elements by I.C.P. and Au by atomic absorption. The analytical data is presented in Appendix III.

Silts:

Tel Creek - (Figure 8)

Five silt samples were collected on a traverse down Tel Creek. Three samples were found to be anomalous for copper, 16498 - 241 ppm, 19822 - 272 ppm and 19825 - 185 ppm.

Nels Creek - (Figure 8)

Two silt samples were collected on a traverse down Nels Creek. No anomalous values were detected in either sample.

Shackles Creek - (Figure 8)

Eight silt samples were collected on a traverse down Shackles Creek. Three samples were found to be anomalous for Au; 32536 - 45 ppb, 32538 - 19 ppb and 32539 - 20 ppb.

HT-2 - (Figure 6)

Six silt samples were collected on a traverse down Rhea Creek. Two samples are anomalous, 1 for Au and the second for Au and Cu:

38151 - 113 ppm Cu, 23 ppb Au
38161 - 79 ppm Cu, 390 ppb Au

HT-3 and HT-4 - (Figure 6)

The silts collected on HT-3 and HT-4 claims revealed no anomalous values.

Ken Creek - (Figure 8)

Four silt samples were collected on traverses down Ken Creek. Sample 38192 collected on Forgiven Creek was analyzed to contain 345 ppb Au.

Tel 17-24 - (Figure 8)

Seven silt samples were reanalyzed for 30 elements by ICP and Au by Atomic Absorption. The samples were collected by Noranda personnel in previous years. Six of the seven silt samples were found to have anomalous ()100 ppm) Cu values.

8282 - 400 ppm Cu
8283 - 560 ppm Cu
8284 - 528 ppm Cu
8285 - 432 ppm Cu
8286 - 320 ppm Cu
8289 - 200 ppm Cu
8291 - 48 ppm Cu

Soils:

1000 Grid - HT 2 Claim -

A 400 x 300 meter grid was compassed and hip-chained to cover an area surrounding a gossan exposed by the down cutting of a creek. 35 soil samples were collected at 50 meter intervals from lines 100 meters apart. Anomalous values of Pb)25 ppm and Zn)250 ppm were chosen. The results are plotted as figures 3 and 4. A 4 sample)250 ppm Zn anomaly trending northeast to southwest from 1000N, 800E to 1150N, 1000E with values up to 409 ppm Zn was detected. Most of the Pb values are over the threshold of 25 ppm. One anomalous Au value of 79 ppb is located at 1100N, 900E. An anomalous Cu value of 113 ppm is located at 1050N, 900E. The Cu and Au values are plotted as Figure 5.

Reconnaissance Soil Lines on HT 3 and HT 4 -

Reconnaissance soil lines were hip chained and compassed following claim boundaries on the HT 3 and HT 4 claims. (See Figure 6) Soil samples were taken at 100 meter and 200 meter spacings. A Zn and Pb anomaly is located along the northern boundary of HT 3 and HT 4. Two soil lines, the first located 300 meters east of the (east-west boundary) HT 3 and HT 4 and the second 300 meters west of the boundary, have anomalous, ()25 ppm Pb) and ()250 ppm) Zn values. The samples that combine to form the Zn anomaly are 36545 - 255 ppm, 36548 - 397 ppm, 36549 - 647 ppm and 36550 - 409 ppm. The samples that combine to form the Pb anomaly are 36546 - 27 ppm, 36548 - 31 ppm and 36549 - 26 ppm.

A second Zn anomaly comprised of samples 06917 (274 ppm) and 06918 (258 ppm) is located 250 meters north of the southern boundary of HT 3 and HT 4. The samples are located to the east and west of the center boundary between the claims.

Del Ridge - (Figure 8)

Soils were collected at 100 meter intervals along Del Ridge. A ()25 ppm) Pb anomaly 500 meters long was defined along the soil line. The samples that form this anomaly are:

38180 - 53 ppm Pb, 143 ppm Zn
38181 - 33 ppm Pb, 219 ppm Zn
38182 - 62 ppm Pb, 283 ppm Zn
38183 - 37 ppm Pb, 335 ppm Zn
38184 - 64 ppm Pb, 184 ppm Zn
38185 -159 ppm Pb, 164 ppm Zn

Tel Creek -

Soil samples were collected along both sides of the Tel Creek at 100 meter intervals. The samples were collected 50 meters, to the right and left, from the center of the creek.

A)100 ppm Cu anomaly with four)250 ppm Zn values and eight)10 ppb Au values extends for 500 meters downstream starting 500 meters north of a small unnamed lake. (Figure 8) The samples that combine to form this anomaly are:

19799 - 186 ppm Cu, 263 ppm Zn, and 28 ppb Au
19800 - 155 ppm Cu, 180 ppm Zn, and 11 ppb Au
19801 - 147 ppm Cu, 259 ppm Zn, and 4 ppb Au
19802 - 149 ppm Cu, 194 ppm Zn, and 11 ppb Au
19803 - 530 ppm Cu, 79 ppm Zn, and 30 ppb Au
19804 - 59 ppm Cu, 120 ppm Zn, and 19 ppb Au
19805 - 402 ppm Cu, 180 ppm Zn, and 16 ppb Au
19806 - 89 ppm Cu, 575 ppm Zn, and 1 ppb Au
19807 - 110 ppm Cu, 440 ppm Zn, and 1 ppb Au

Tel Ridge - (Figure 8)

Two soil lines 300 meters apart were compassed and hip-chained along Tel Ridge. Samples were collected at 100 meter intervals. 17 of 26 soil samples were found to have Au values)10 ppb. The anomalous values form continuous lines up to 500 meters long. Eight Zn values)250 ppm, two Cu values)100 ppm and three Pb values)25 ppm were also detected. The anomalous samples are:

SAMPLE #	Au ppb	Zn ppm	Pb ppm	Cu ppm
26665	29	616	47	58
26667	19	244	13	32
26668	55	199	11	25
26669	15	307	22	83
26673	42	158	15	21
26726	26	182	10	150
26727	14	161	7	57
26728	85	136	12	45
26729	37	195	8	117
26730	25	105	12	31
26731	13	304	10	34
26732	6	301	21	50
26733	230	192	17	73
26734	30	140	9	38
26735	16	190	12	58
26738	33	144	4	33
26739	6	284	19	56
26740	23	337	39	43
26741	46	483	36	51
26742	9	269	10	53

Ken Creek - (Figure 8)

Soil samples were collected along both sides of Ken Creek and the ridge that forms the southern edge of the claim group. Two samples along the creek, 16477 (13 ppb Au) and 16486 (11 ppb Au) were anomalous. Along the ridge, seven soil samples were found to be anomalous for Au. The samples are:

38198 - 21 ppb Au
32527 - 70 ppb Au
32529 - 133 ppb Au
32530 - 26 ppb Au
32531 - 35 ppb Au
32533 - 12 ppb Au
32534 - 17 ppb Au, 143 ppm Cu

Nels Creek - (Figure 8)

Soils were collected at 100 meter intervals along both sides of Nels Creek. A 3 sample >10 ppm molybdenum anomaly is located along the southern edge of the claim group. A single sample number 26657, has anomalous values for Cu 165 ppm, Pb 276 ppm and Zn 528 ppm. The samples that form the molybdenum anomaly are:

26651 - 15 ppm Mo, 14 ppb Au
26652 - 30 ppm Mo, 1 ppb Au
26653 - 14 ppm Mo, 8 ppb Au

Shackles Creek - (Figure 8)

One anomalous Au value of 26 ppb was found at sample location 32540.

Rocks: (Figure 9)

Twenty-eight rocks were collected from outcrops and float boulders throughout the property. Nine samples were found to have anomalous values for Cu, Au, Zn and Pb.

SAMPLE #	CLAIM	LOCATION	ANOMALOUS ELEMENTS			
			Au (ppb)	Cu (ppm)	Pb (ppm)	Zn (ppm)
32508	Ken 2	southern edge	1060	765		
36323	Del 1	southeastern edge	15	61403		
32502	Del 4	northern corner	15	2128		455
36324	Del 2	southwestern edge		313	113	496
36325	Del 1	northern corner		255		281
19821	Tel 5	west side of creek	25	169		
19824	Tel 5	west side of creek		881		
36320	HT-2	south edge of claim		1106		
26674	Nel 6	east side of creek		289		

CONCLUSIONS:

The Houston Tommy property consists of 54 claims that contain 107 units. The claims are divided in 4 claim groups. A total of 232 soil, 31 silt and 28 rocks were collected and analysed for 30 element by ICP and Au by Atomic Absorption. Also, 7 silt samples were reanalyzed for the same elements. Six of the reanalyzed silt samples were anomalous.

8282 - Tel 20 claim
8283 - Tel 19 claim
8284 - Tel 22 claim
8285 - Tel 22 claim
8286 - Tel 24 claim
8289 - Tel 23 claim

Silts -

Nine anomalous silt samples were collected on the property:
16498 - Tel 7 claim
19822 - Tel 8 claim
19825 - Tel 8 claim
32536 - Ter 3 claim
32538 - Ter 5 claim
32539 - Ter 7 claim
38151 - HT-2 claim
38161 - HT-2 claim
38192 - Ken 2 claim

Soils -

The 1000 Grid, HT-2 claim, has a 4 sample Zn anomaly open at both ends and a large open Pb anomaly over the entire grid.

The HT-3 and HT-4 claims have Zn and Pb anomaly that extends for 600 meters along the northern boundary of the two claims. A second smaller Zn anomaly is located 250 meters north of the southern boundary of the two claims.

The Tel 1-8 claims have a copper anomaly that extends 500 meters downstream starting 500 meters north of a small unnamed lake.

The Tel 9-14 claims have a large open Au anomaly that is made up of the 17 of 26 soil samples taken.

The Del 1-8 claims have a 500 meter long Pb anomaly with a small Zn anomaly in the center of the Pb anomaly.

The Nels 5-8 claims have a small molybdenum anomaly along the southern edge of the claim group.

The Ken 1-8 claims have a gold anomaly along a ridge that forms the southern edge of the claim group.

The Ter 1-8 claims have one sample that proved to be anomalous for Au.

Rocks -

Nine anomalous rocks were found on the property:
19821 - Tel 5 claim
19824 - Tel 5 claim
26674 - Nels 6 claim
35202 - Del 1 claim
35208 - Ken 2 claim
36320 - HT-2 claim
36323 - Del 1 claim
36324 - Del 2 claim
36325 - Del 1 claim

RECOMMENDATIONS:

1. Prospect and map the upper region of the Ken 1-8 claim group. Soil sample a 500 x 1100 meter grid to better define the soil Au anomaly along the ridge.

2. Establish a 1500 x 600 meter soil grid to cover the entire Tel 9-14 claim group. Place baseline along the center of the claims and take samples at 25 meter intervals on lines spaced 100 meters apart.

3. Map and sample the trenches on the Del 1 and 2 claims (See Figure 9). Establish a 1 km baseline along the reconnaissance soil line. Soil sample at 25 meter intervals on lines spaced 100 meters apart.

4. Expand the 1000 soil grid on the HT-2 claim to 1000 x 1000 meters. Set up soil grids to cover the Pb, Zn anomaly on the northern edge of HT-3 and HT-4 and the Zn anomaly 250 meters north of the southern HT-3 and HT-4 claim boundary.

5. Establish a 800 x 400 meter soil grid with 25 meter stations and 100 meter line spacing to cover the 500 meter long Cu anomaly on the Tel 1-8 claims.

6. Spend 2 man days on a traverse down the creek on Tel 17-24 claim group.

7. Spend 2 man days on a traverse down the creek to the west of Shackles Creek on the Ter 1-8 claim group.

BIBLIOGRAPHY:

Applegate, L. M., 1967, Geochemical Report, BCMEMPR AR 1189, Victoria, B. C.

Kindle, E. D., 1954, Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia, GSC Memoir 223, Ottawa, Ontario.

Reid, R. E., 1974, Diamond Drilling Report, BCMEMPR AR 5094, Victoria, B. C.

Tipper, H. W. and Richards, T. A., 1976, Jurassic Stratigraphy and History of North Central British Columbia, GSC Bulletin 270, Ottawa, Ontario.

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Terrence Campbell, of Prince George, Province of British Columbia, do hereby certify that:

1. I am a geologist residing at 7740 Gladstone Drive, Prince George, British Columbia.

2. I am a 1985 graduate of the University of British Columbia, B.Sc. (Geology).

3. I am a member in good standing of the British Columbia Yukon Chamber of Mines.

4. I presently hold the position of Field Geologist with Noranda Exploration Company, Limited (no personnal liability) and have been in their employ since 1986.

Terrence Campbell

APPENDIX II

STATEMENT OF COSTS

PROJECT: HOUSTON TOMMY
(HT 2, 3, 4, Del 1-8, Ken 1-8, Nels 5-8, Tel 1-24 and Ter 1-8 claims)

TYPE OF REPORT: GEOLOGICAL, GEOCHEMICAL

a)	Wages:		
	No. of days - 20		
	Rate per day - $120.68		
	Dates from - August 9-14, 1988		
	Total Wages:		$ 2413.60
b)	Food & Accommodation:		
	No. of days - 24		
	Rate per day - $50.00		
	Dates from - August 9-14, 1988		
	Total Cost:		$ 1200.00
c)	Mob/Demob:		
	4 mandays - $120.68 ea		$ 482.72
d)	Transportation:		
	Truck rental and fuel	$ 350.00	
	Helicopter and fuel	$3846.07	
	Total Cost:		$ 4196.07
e)	Equipment, Supplies, Rentals, Repairs:		
	20 days @ $20/day		$ 400.00
f)	Analysis:		
	soils - 232 x .85 prep +(6.25+4.50)	$2691.20	
	silts - 31 x .85 prep +(6.25+4.50)	$ 359.60	
	rocks - 28 x 3.00 prep +(6.25+4.50)	$ 385.00	
	Total Costs:		$ 3435.80
g)	Report Preparation:		
	Author	$ 100.00	
	Drafting	$ 100.00	
	Typing	$ 25.00	
	Total Cost:		$ 225.00
			$12,353.19

APPENDIX III

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

Revised:01/86

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984)

Preparation of Samples

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation. See addendum.

Analysis of Samples.

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

Elements Requiring Specific Decomposition Method

Antimony - Sb: 0.2 g sample is attacked with 3.3 mL of 6% tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc. nitric acid, then heated in a water bath for 3 hours at 95° C. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 mL of 70 % perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10PPB)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

APPENDIX IV

GEOCHEMICAL ANALYSIS CERTIFICATES

Houston Tommy C (TC)

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: P1-P7 SOIL P8 SILT P9 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 26 1988 DATE REPORT MAILED: Sept 2/88 ASSAYER. C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

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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
800E 1150N	1	9	22	175	.1	10	6	428	1.91	2	5	ND	1	20	1	2	2	47	.47	.101	9	25	.67	155	.02	2	2.11	.01	.05	1	6
800E 1100N	1	18	20	159	.4	12	7	769	3.55	15	5	ND	1	9	1	3	2	71	.15	.081	9	37	.99	58	.03	2	2.84	.01	.05	1	2
800E 1050N	1	19	27	131	.1	8	7	1376	4.96	39	5	ND	1	6	1	5	3	102	.09	.127	6	29	.51	64	.03	2	3.03	.01	.03	1	4
800E 1000N	1	43	39	314	.3	17	17	1551	6.11	28	5	ND	1	10	1	2	2	160	.44	.115	4	40	1.63	76	.14	2	3.54	.01	.04	1	1
800E 950N	1	26	27	244	.1	12	10	988	4.97	15	5	ND	1	10	1	5	2	131	.26	.065	5	35	1.17	64	.14	2	2.93	.01	.03	1	1
800E 900N	1	19	24	181	.2	10	7	681	3.83	13	5	ND	1	10	1	5	2	92	.23	.085	6	28	.88	61	.06	2	2.80	.01	.05	1	3
900E 850N	1	23	27	186	.2	9	8	816	4.24	12	5	ND	1	10	1	2	2	95	.24	.084	5	25	.93	60	.07	2	2.87	.01	.05	1	1
900E 1150N	1	29	12	167	.4	13	7	928	3.09	21	5	ND	1	17	1	5	3	56	.33	.133	17	32	.77	235	.01	2	3.22	.01	.07	1	1
900E 1100N	1	9	21	66	.5	4	3	339	1.21	3	5	ND	1	8	1	2	2	32	.12	.060	10	16	.26	117	.03	2	1.67	.01	.03	1	79
900E 1050N	1	113	34	409	3.5	14	12	1016	5.27	17	5	ND	1	9	1	2	2	121	.15	.145	11	39	1.44	150	.03	2	5.05	.01	.06	1	4
900E 1000N	1	9	3	46	.1	1	1	29	.27	2	5	ND	1	24	1	2	2	7	.64	.098	4	3	.04	103	.01	4	.26	.01	.02	3	1
900E 950N	1	11	15	47	1.0	3	1	109	1.27	2	5	ND	1	18	1	2	2	21	.45	.321	7	12	.11	140	.01	2	1.27	.01	.02	2	1
900E 900N	1	18	32	119	.1	4	7	1100	4.08	4	5	ND	1	8	1	2	2	101	.16	.091	4	21	.52	56	.08	2	2.28	.01	.04	1	1
900E 850N	1	16	24	190	.1	4	5	1562	3.68	5	5	ND	1	14	1	2	4	79	.43	.153	7	18	.52	206	.03	2	2.12	.01	.06	1	1
1000E 1150N	1	35	40	395	.1	13	18	2618	5.55	31	5	ND	1	23	1	3	3	144	.75	.173	5	32	1.29	225	.04	2	3.07	.01	.07	1	1
1000E 1100N	1	25	21	174	.1	16	8	841	3.75	18	5	ND	1	12	1	4	2	73	.25	.104	12	34	1.03	118	.03	2	3.39	.01	.05	1	2
1000E 1050N	1	61	31	303	2.4	15	11	1048	4.75	32	5	ND	1	9	1	6	2	104	.18	.070	14	30	1.36	115	.04	2	4.00	.01	.06	1	1
1000E 1000N	1	59	45	310	.1	12	18	1788	5.65	20	5	ND	1	12	1	2	2	133	.41	.078	6	28	1.35	117	.17	12	2.72	.01	.06	1	4
1000E 950N	1	23	35	232	.2	10	9	827	5.20	11	5	ND	1	9	1	3	2	115	.24	.055	4	25	1.05	51	.11	2	2.47	.01	.05	1	3
1000E 900N	2	28	23	198	.3	7	9	2756	5.50	17	5	ND	1	8	1	5	2	104	.11	.171	6	21	.65	103	.03	4	2.82	.01	.06	1	1
1000E 850N	1	28	37	203	.1	12	10	821	4.86	11	5	ND	1	10	1	6	2	99	.18	.086	7	27	.96	78	.06	2	3.13	.01	.08	1	3
1100E 1150N	1	21	27	172	.6	9	7	590	3.80	13	5	ND	1	10	1	2	2	98	.25	.075	6	24	.72	67	.06	2	2.57	.01	.05	1	3
1100E 1100N	1	43	38	174	2.2	18	9	595	3.60	21	5	ND	1	14	1	7	2	77	.20	.087	11	49	1.05	97	.03	4	3.65	.01	.07	1	2
1100E 1050N	2	78	24	241	.4	28	12	1117	4.83	53	5	ND	1	13	1	6	2	90	.34	.152	8	54	1.40	98	.07	4	5.00	.01	.06	1	1
1100E 1000N	1	44	44	234	1.3	9	9	772	5.27	21	5	ND	1	8	1	9	2	124	.17	.060	11	31	.95	94	.08	6	3.71	.01	.06	1	8
1100E 950N	1	17	33	134	.4	5	7	1055	4.80	7	5	ND	1	9	1	3	2	115	.16	.084	5	19	.45	75	.10	2	2.02	.01	.05	1	1
1100E 900N	1	36	38	281	.1	13	16	1582	6.15	24	5	ND	1	9	1	7	2	117	.18	.126	5	29	1.19	70	.08	2	3.50	.01	.07	1	2
1100E 850N	1	34	22	75	.3	3	3	365	2.97	4	5	ND	1	10	1	3	5	69	.11	.094	5	13	.27	68	.03	2	2.27	.01	.04	1	1
1200E 1150N	1	16	36	195	.2	8	9	1940	4.63	22	5	ND	1	13	1	2	2	106	.29	.108	5	24	.54	116	.06	2	2.22	.01	.07	1	1
1200E 1100N	1	38	36	292	.7	12	13	1620	6.71	51	5	ND	1	8	1	8	2	139	.29	.292	4	31	1.16	64	.11	2	3.15	.01	.05	1	2
1200E 1050N	1	16	27	136	.4	7	6	808	3.97	13	5	ND	1	10	1	4	2	99	.19	.083	6	24	.55	75	.08	2	1.91	.01	.05	1	1
1200E 1000N	1	13	29	116	.2	5	6	494	4.35	12	5	ND	1	9	1	5	4	106	.19	.114	4	20	.53	60	.11	3	1.56	.01	.05	1	1
1200E 950N	1	26	32	163	.9	8	9	2104	5.08	17	5	ND	1	7	1	4	2	107	.13	.143	5	25	.52	94	.05	2	2.56	.01	.06	1	2
1200E 900N	1	16	26	117	.4	5	8	2025	4.53	26	5	ND	2	8	1	3	2	94	.19	.144	6	17	.47	78	.04	2	2.17	.01	.07	1	2
1200E 850N	1	19	25	171	.5	6	7	1048	4.53	14	5	ND	1	9	1	6	3	98	.14	.082	6	25	.58	78	.04	2	3.01	.01	.06	1	1
6902	1	25	21	152	.1	7	9	1557	6.48	29	5	ND	1	10	1	3	3	131	.43	.136	5	31	1.17	95	.07	2	3.13	.01	.03	1	1
STD C/AU-S	19	62	43	132	6.7	73	30	1052	4.04	42	19	8	38	49	18	17	22	60	.47	.089	42	59	.93	179	.07	34	2.03	.06	.14	13	52

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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
6903	1	23	19	172	.1	6	12	986	4.55	15	5	ND	1	11	1	2	2	98	.30	.083	4	22	.69	95	.05	2	2.58	.01	.03	1	1
6904	2	34	23	202	.2	8	22	7592	5.63	45	5	ND	1	12	2	2	2	88	.16	.430	5	20	.47	234	.01	2	2.62	.01	.05	1	1
6905	1	24	19	123	.2	12	9	1200	4.42	32	5	ND	1	9	1	3	2	79	.10	.134	5	28	.55	68	.01	2	2.56	.01	.04	1	1
6906	1	19	14	190	.3	14	9	954	3.95	13	5	ND	1	10	1	2	2	70	.10	.126	4	27	.70	78	.01	5	2.36	.01	.04	1	1
6907	1	15	11	85	.1	11	5	1337	3.18	6	5	ND	1	13	1	2	3	59	.10	.117	5	23	.35	123	.01	2	1.71	.01	.03	1	1
6908	1	10	8	56	.1	9	4	222	2.45	7	5	ND	1	8	1	2	3	54	.08	.096	5	24	.32	53	.01	2	1.78	.01	.03	1	1
6909	4	21	19	183	.4	11	7	3354	5.09	42	5	ND	1	8	1	3	3	56	.12	.548	5	16	.17	139	.01	2	1.86	.01	.04	1	2
6911	1	18	15	152	.1	7	12	1451	4.56	11	5	ND	1	24	1	2	3	80	.46	.142	3	21	.52	144	.01	4	1.92	.01	.04	2	1
6912	1	14	11	99	.2	10	7	491	3.68	9	5	ND	1	12	1	2	4	64	.12	.109	4	24	.51	80	.01	3	2.23	.01	.03	1	1
6913	1	13	12	74	.1	11	9	398	4.36	9	5	ND	1	11	1	2	3	78	.10	.089	6	21	.46	72	.03	2	2.29	.01	.03	1	1
6914	2	18	8	132	.2	7	9	1188	4.17	15	5	ND	1	14	1	3	2	74	.21	.182	4	23	.42	105	.01	2	1.89	.01	.05	1	1
6915	1	11	8	68	.1	6	3	389	2.51	3	5	ND	1	11	1	2	3	53	.16	.075	4	16	.28	77	.01	3	1.80	.01	.03	1	1
6916	1	19	8	168	.1	9	14	1646	5.23	18	5	ND	1	14	1	2	2	79	.22	.201	4	19	.55	130	.02	2	2.41	.01	.05	1	2
6917	4	52	20	274	.3	15	16	1077	5.21	34	5	ND	1	13	1	2	2	78	.21	.072	7	20	.76	113	.03	5	2.60	.01	.05	1	1
6918	3	30	18	258	.3	9	13	1882	4.23	20	5	ND	1	24	1	2	2	68	.93	.121	6	21	.68	239	.01	2	2.29	.01	.06	1	1
6919	1	18	14	108	.3	6	12	714	5.01	11	5	ND	1	8	1	3	2	104	.11	.083	5	16	.44	82	.02	2	2.10	.01	.04	1	1
6920	1	25	11	155	.3	3	15	1390	7.06	14	5	ND	1	9	1	2	2	118	.11	.142	4	11	.48	85	.05	3	2.78	.01	.04	1	2
6921	1	17	11	114	.2	5	5	495	3.34	14	5	ND	1	8	1	3	2	54	.09	.149	4	14	.39	69	.01	2	2.04	.01	.04	1	1
6922	1	22	11	133	.6	10	11	514	4.49	13	5	ND	1	12	1	2	2	67	.18	.097	5	19	.55	75	.01	2	3.08	.01	.04	1	1
6923	1	13	16	78	.2	10	4	297	3.37	7	5	ND	1	9	1	2	2	57	.08	.104	5	20	.38	76	.01	2	2.18	.01	.03	1	1
6924	1	25	15	129	.2	4	15	2934	5.70	16	5	ND	1	16	1	2	2	105	.12	.139	4	17	.44	158	.01	4	2.87	.01	.04	1	2
6925	1	25	7	89	.1	6	9	427	5.06	11	5	ND	1	9	1	2	2	85	.10	.110	4	13	.55	58	.03	2	2.30	.01	.03	1	3
16476	2	70	19	152	.3	10	16	10766	5.29	9	5	ND	1	16	1	2	2	68	.07	.187	25	25	.57	306	.01	4	4.30	.01	.11	1	1
16477	1	93	25	300	1.1	22	19	3750	5.58	11	5	ND	1	42	2	9	2	104	.21	.125	4	53	.82	461	.02	2	2.17	.01	.07	1	13
16478	1	24	8	114	.4	8	9	1404	7.45	6	5	ND	1	8	1	2	2	65	.10	.231	4	13	1.06	74	.06	4	2.78	.01	.08	1	1
16479	1	50	16	112	1.0	11	8	575	4.54	12	5	ND	1	16	1	3	2	65	.11	.106	8	32	.59	149	.04	5	3.37	.01	.04	1	1
16480	1	24	16	104	.3	4	14	3580	4.43	7	5	ND	1	19	1	2	2	55	.10	.194	7	11	.61	237	.02	2	2.06	.01	.07	1	1
16481	1	104	36	370	.3	48	24	3243	6.41	14	5	ND	1	19	1	2	2	113	.33	.063	8	90	2.34	260	.06	5	2.83	.01	.06	1	2
16482	1	39	8	144	.2	11	13	736	5.72	5	5	ND	1	11	1	2	2	63	.12	.098	5	23	.87	155	.05	2	2.04	.01	.05	1	4
16483	1	54	14	118	.1	12	16	1553	4.95	9	5	ND	2	10	1	3	2	56	.18	.081	9	20	.88	97	.07	5	1.91	.01	.06	1	1
16484	6	75	13	198	.1	13	15	3065	5.34	11	5	ND	1	19	2	2	2	61	.47	.073	27	38	1.10	318	.04	2	2.09	.01	.07	1	1
16485	1	24	11	87	.1	4	9	823	4.47	7	5	ND	1	6	1	3	2	43	.15	.108	5	12	.70	74	.05	2	1.80	.01	.04	1	8
16486	1	19	2	71	.1	5	6	555	3.98	7	5	ND	1	7	1	2	2	48	.08	.057	4	13	.55	62	.05	2	1.34	.01	.04	1	11
16487	1	13	6	53	.1	3	3	702	3.62	2	5	ND	1	7	1	2	2	38	.08	.064	5	7	.41	84	.05	2	1.15	.01	.04	1	3
16488	1	27	2	95	.1	5	10	937	4.24	8	5	ND	1	8	1	3	3	46	.17	.079	4	15	.81	98	.05	4	1.78	.01	.05	1	2
16489	1	65	22	203	.1	14	14	2171	4.87	14	5	ND	1	12	1	2	2	56	.45	.103	18	22	1.15	137	.06	2	1.88	.01	.07	1	1
STD C/AU-S	18	63	44	132	6.8	72	27	1083	4.19	43	17	8	38	48	18	17	19	59	.48	.090	41	59	.93	179	.06	34	1.97	.06	.14	12	52

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
16490	1	40	23	174	.3	10	10	1501	5.80	11	5	ND	1	15	1	4	4	75	.30	.085	5	33	.71	184	.04	5	2.07	.01	.06	1	2
16491	1	62	28	213	.1	13	13	1149	6.27	16	5	ND	1	11	1	5	3	80	.27	.094	7	33	1.17	91	.08	5	2.29	.01	.06	1	4
16492	1	50	8	162	.7	11	10	1107	5.63	9	5	ND	1	9	1	6	2	63	.15	.092	5	30	.81	125	.06	8	2.64	.01	.06	1	27
16493	1	43	20	185	.1	9	16	2360	8.51	14	5	ND	1	8	1	4	4	72	.12	.132	21	18	.74	176	.02	3	2.22	.01	.04	1	3
16494	1	27	18	160	.2	11	11	1201	6.70	16	5	ND	1	10	1	7	2	90	.17	.110	5	29	.86	59	.06	2	2.01	.01	.06	1	6
16495	1	21	17	102	.1	6	7	564	6.33	10	5	ND	1	9	1	5	2	97	.11	.077	4	21	.54	48	.09	4	1.87	.01	.04	1	1
16496	1	30	14	114	.2	7	10	810	5.87	13	5	ND	1	8	1	5	3	81	.14	.071	5	26	.63	66	.06	2	1.86	.01	.03	1	1
19776	2	24	11	157	.3	8	12	3375	5.23	27	5	ND	1	25	1	3	2	75	.46	.271	6	19	.42	167	.01	2	2.08	.01	.10	1	1
19777	1	11	5	105	.1	5	9	2053	5.16	22	5	ND	1	20	1	4	2	96	.10	.167	3	17	.50	87	.01	2	2.30	.01	.04	1	2
19778	1	41	10	227	.7	17	11	1692	4.39	25	5	ND	1	31	1	4	5	65	1.02	.229	6	41	.89	215	.02	7	2.72	.01	.09	1	1
19779	2	31	9	115	.6	6	10	537	5.04	9	5	ND	1	22	1	4	2	79	1.14	.163	16	15	.24	169	.01	2	2.65	.01	.07	1	1
19780	1	12	8	108	.4	6	6	382	3.24	7	5	ND	1	12	1	2	2	60	.13	.099	6	22	.37	75	.02	2	2.19	.01	.05	1	1
19781	3	29	15	153	.4	8	10	2336	4.76	15	5	ND	1	15	1	5	2	76	.25	.180	7	20	.47	105	.02	10	2.40	.01	.07	2	2
19782	4	29	7	204	.2	4	11	5094	5.81	61	5	ND	1	15	1	2	6	103	.27	.349	5	15	.35	197	.02	4	2.16	.01	.15	1	2
19783	2	26	8	213	.4	5	8	1509	5.41	28	5	ND	1	9	1	2	2	81	.11	.218	4	16	.40	75	.01	3	2.30	.01	.05	1	1
19784	2	20	11	148	.1	7	7	1491	5.72	33	5	ND	1	10	1	3	2	87	.14	.189	5	17	.46	70	.02	4	2.60	.01	.04	1	27
19785	1	17	9	123	.1	5	5	436	3.85	17	5	ND	1	11	1	4	2	57	.12	.145	5	16	.41	100	.01	2	2.61	.01	.05	1	1
19786	1	50	12	331	.2	16	12	1451	4.80	23	5	ND	1	24	1	4	2	73	.23	.114	9	31	1.20	251	.09	4	3.74	.01	.12	1	24
19787	1	134	6	148	.1	12	12	1169	6.01	8	5	ND	1	16	1	3	2	67	.12	.120	10	23	.97	138	.09	5	3.37	.01	.13	1	10
19788	1	32	11	151	.1	10	8	826	3.99	5	5	ND	1	20	1	2	2	82	.20	.127	5	19	.88	107	.08	2	2.64	.01	.06	1	3
19789	1	64	2	157	.1	9	11	741	4.93	10	5	ND	1	20	1	2	3	97	.32	.108	7	24	1.18	129	.13	8	3.20	.01	.06	1	9
19790	13	183	8	107	.1	10	11	664	5.30	11	5	ND	1	28	1	2	2	86	.34	.098	9	29	1.14	147	.15	2	3.55	.01	.12	1	4
19791	2	72	8	140	.1	13	9	981	4.26	8	5	ND	1	20	1	2	2	79	.24	.143	8	29	1.13	101	.10	5	3.21	.01	.10	1	2
19792	3	188	6	131	.1	14	17	828	6.18	15	5	ND	1	34	1	2	2	118	.44	.104	8	37	1.45	131	.17	8	3.81	.01	.11	1	9
19793	2	36	15	129	.1	11	7	1061	3.99	4	5	ND	1	16	1	2	2	54	.16	.098	7	22	.73	110	.07	2	2.16	.01	.16	1	12
19794	3	72	18	147	.3	12	13	1001	5.57	9	5	ND	1	19	1	5	2	110	.17	.075	6	36	1.27	215	.16	2	3.03	.01	.06	1	8
19795	4	66	12	90	.2	7	7	525	3.33	5	5	ND	1	18	1	3	2	78	.14	.109	5	22	.56	174	.04	3	2.83	.01	.04	1	3
19796	3	91	9	184	.1	15	11	1036	5.19	7	5	ND	1	21	1	2	2	100	.25	.089	8	36	1.31	115	.14	4	2.91	.01	.06	1	5
19797	5	368	24	223	1.1	16	32	1695	9.18	14	5	ND	1	31	1	2	2	168	.33	.166	7	33	1.52	1100	.22	2	3.33	.01	.12	1	13
19798	2	209	10	101	.1	22	21	789	4.76	9	5	ND	1	86	1	2	2	67	1.72	.098	9	35	1.23	111	.07	3	3.93	.01	.07	1	8
19799	2	186	21	263	.2	12	14	1294	5.11	14	5	ND	1	57	1	2	2	79	1.09	.109	10	29	1.60	152	.17	9	3.83	.01	.08	1	28
19800	4	155	21	180	.3	13	9	803	4.27	9	5	ND	1	39	1	4	2	75	.38	.112	9	32	1.23	129	.10	2	3.87	.01	.06	1	11
19801	1	147	18	259	.3	13	15	1698	6.36	14	5	ND	1	27	1	3	2	86	.38	.110	9	24	1.70	98	.22	8	4.00	.01	.12	1	4
19802	2	149	14	194	.3	15	13	1590	5.35	14	5	ND	1	52	1	2	2	85	.68	.077	8	31	1.18	200	.10	2	3.44	.01	.06	1	11
19803	2	530	8	79	.7	15	14	642	3.69	7	5	ND	1	96	1	3	2	53	1.60	.076	9	34	1.12	112	.05	2	3.35	.01	.06	1	30
19804	1	59	17	120	.3	17	11	668	4.49	19	5	ND	1	67	1	4	3	81	.83	.066	8	41	.97	113	.09	4	3.95	.02	.05	1	19
STD C/AU-S	18	57	36	132	6.6	68	27	1087	4.20	42	19	8	37	48	18	17	20	58	.48	.087	40	58	.92	179	.06	34	1.96	.06	.13	12	52

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
19805	1	402	8	180	.4	8	11	758	2.27	7	5	ND	1	127	1	2	2	28	1.68	.060	6	17	.78	132	.03	2	2.61	.01	.08	1	16
19806	2	89	28	575	.2	18	16	1751	4.58	28	11	ND	1	51	1	2	2	86	.56	.046	27	30	1.14	107	.10	2	2.84	.02	.05	1	1
19807	1	110	25	440	.1	12	11	1945	4.05	15	5	ND	1	65	1	2	2	52	1.19	.081	8	21	1.12	121	.09	2	2.72	.01	.12	1	1
19808	12	18	12	84	.3	5	5	555	3.98	4	5	ND	1	12	1	2	2	61	.06	.049	5	18	.43	56	.08	2	2.45	.01	.03	1	1
19809	3	34	19	115	.2	10	13	2939	3.70	10	5	ND	1	34	1	2	2	56	.30	.117	3	20	.65	81	.06	3	1.67	.01	.08	1	1
19810	3	16	14	94	.2	5	5	373	4.31	2	5	ND	1	13	1	2	2	79	.08	.056	4	15	.46	48	.12	2	1.69	.01	.03	1	5
19811	1	14	13	60	.1	1	4	441	3.01	3	5	ND	1	15	1	2	2	60	.09	.035	5	18	.36	51	.08	2	2.46	.02	.02	2	3
19812	2	43	20	107	.5	5	9	425	4.39	6	5	ND	1	17	1	2	2	68	.15	.047	6	22	.53	92	.07	2	3.02	.01	.02	2	18
19813	1	41	14	105	.1	6	10	504	4.69	11	5	ND	1	22	1	2	2	75	.29	.073	5	28	.64	77	.08	2	2.62	.01	.03	1	1
19814	2	132	13	178	.1	13	15	1222	4.21	6	5	ND	1	47	1	2	2	71	.73	.073	10	29	.96	136	.08	2	2.99	.01	.06	1	1
19815	2	28	13	101	1.3	7	8	502	5.96	5	5	ND	1	16	1	2	2	101	.11	.035	5	25	.66	67	.11	2	2.52	.01	.02	1	1
19817	2	14	10	67	.7	5	5	316	4.95	5	5	ND	1	60	1	2	2	86	.09	.031	3	26	.39	96	.11	4	2.23	.01	.03	1	1
26651	15	44	11	108	.7	3	8	823	4.90	4	5	ND	1	7	1	3	2	56	.04	.060	5	24	.52	134	.04	2	2.35	.01	.05	1	14
26652	30	28	12	60	.4	2	3	137	6.64	5	5	ND	1	4	1	3	2	85	.06	.085	4	13	.12	70	.02	2	1.52	.01	.06	1	1
26653	14	36	11	83	.3	3	6	266	3.43	2	5	ND	1	13	1	2	2	59	.10	.034	9	14	.57	349	.03	2	1.86	.01	.05	1	8
26654	9	34	7	103	.1	2	4	746	3.52	4	5	ND	1	4	1	2	2	31	.02	.054	6	11	.30	166	.02	2	1.99	.01	.05	1	11
26655	14	20	9	46	.2	2	3	113	2.70	2	5	ND	1	5	1	3	2	33	.08	.035	7	9	.26	217	.01	2	1.38	.01	.03	2	5
26656	1	19	5	54	.1	3	4	257	2.90	3	5	ND	1	3	1	2	2	36	.02	.044	5	20	.44	38	.02	2	1.88	.01	.03	1	4
26657	7	165	276	528	1.0	6	33	1772	8.09	37	5	ND	1	7	4	55	2	27	.06	.039	6	8	.33	207	.01	2	1.16	.01	.05	1	6
26658	2	77	9	84	.1	1	28	1726	4.57	11	5	ND	1	6	1	7	2	14	.01	.018	5	1	.14	245	.01	5	.91	.01	.06	1	3
26659	1	6	7	25	.1	1	2	96	3.92	2	5	ND	1	6	1	2	2	78	.06	.027	4	12	.14	24	.07	2	1.11	.01	.01	2	1
26660	1	3	10	13	.1	1	1	30	.80	2	5	ND	1	6	1	2	2	31	.04	.015	4	4	.03	33	.07	2	.61	.01	.01	2	1
26661	1	6	4	34	.1	1	2	108	2.54	2	5	ND	1	7	1	2	2	64	.04	.035	4	15	.15	76	.04	2	1.21	.01	.01	2	3
26662	1	18	10	77	.4	5	5	425	4.52	5	5	ND	1	7	1	2	2	81	.06	.057	4	29	.42	94	.03	2	1.37	.01	.02	1	1
26663	2	34	8	80	.1	2	5	373	3.92	9	5	ND	1	10	1	6	2	53	.05	.061	5	16	.24	105	.01	2	1.22	.01	.03	1	1
26664	4	55	13	104	.1	2	10	501	4.53	8	5	ND	1	9	1	10	2	41	.09	.055	5	16	.32	205	.01	2	1.08	.01	.04	1	2
26665	1	58	47	616	.6	16	10	3248	5.55	64	5	ND	1	89	1	2	2	83	.16	.099	6	29	1.09	252	.07	2	3.31	.01	.05	1	29
26666	1	26	18	141	.4	3	3	408	2.68	12	5	ND	1	35	1	2	2	43	.10	.125	6	20	.39	121	.02	2	2.18	.01	.06	1	8
26667	1	32	13	244	.2	9	10	1487	3.82	15	5	ND	1	27	1	2	2	54	.10	.160	6	26	.75	207	.02	2	3.15	.01	.05	1	19
26668	1	25	11	199	.2	9	8	1051	3.61	15	5	ND	1	19	1	2	2	57	.09	.099	5	32	.89	226	.03	7	3.20	.01	.07	1	55
26669	1	83	22	307	.2	28	16	2023	5.20	18	5	ND	1	20	1	2	2	79	.12	.056	9	46	1.65	189	.09	3	3.84	.01	.10	1	15
26670	1	16	5	128	.2	6	3	895	2.04	3	5	ND	1	14	1	2	2	27	.14	.173	4	9	.42	260	.01	2	2.32	.01	.12	1	1
26671	1	29	10	220	.3	7	12	1153	4.36	11	5	ND	1	19	1	2	2	74	.07	.078	6	15	1.20	246	.04	2	2.77	.01	.10	1	2
26672	1	26	9	205	.2	9	7	892	3.40	21	5	ND	1	31	1	2	8	54	.15	.116	7	20	.73	391	.02	2	2.72	.01	.06	1	3
26673	1	21	15	158	.1	7	11	862	4.37	11	5	ND	1	13	1	2	2	52	.15	.059	6	17	.68	146	.07	4	2.17	.01	.04	1	42
26675	3	29	18	89	.1	1	16	1166	6.18	20	5	ND	1	11	1	4	2	25	.07	.028	5	6	.24	292	.02	3	.88	.01	.04	1	2
STD C/AU-S	18	58	37	132	6.6	68	30	1041	4.15	44	18	8	36	47	18	16	19	58	.46	.084	40	59	.90	175	.06	33	1.91	.06	.13	12	51

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
26726	7	150	10	182	.3	14	15	1143	4.87	11	5	ND	1	15	1	2	2	70	.14	.072	20	28	1.12	515	.06	2	3.41	.01	.06	1	26
26727	6	57	7	161	.2	11	12	1201	4.55	5	5	ND	1	15	1	2	2	64	.12	.126	5	20	.79	264	.04	2	2.60	.01	.06	1	14
26728	9	45	12	136	.1	5	5	775	4.70	6	5	ND	1	14	1	2	2	53	.08	.082	6	15	.53	215	.06	2	2.23	.01	.07	2	85
26729	11	117	8	195	.1	12	16	1440	4.84	12	5	ND	1	16	1	4	4	50	.13	.069	9	19	.83	366	.06	3	3.31	.01	.10	1	37
26730	5	31	12	105	.1	5	4	618	3.52	4	5	ND	1	16	1	2	2	42	.07	.058	6	13	.45	259	.02	3	1.94	.01	.04	1	25
26731	1	34	10	304	.2	9	15	1953	4.89	6	5	ND	1	16	1	2	3	77	.24	.061	11	14	1.13	965	.06	2	2.67	.01	.05	2	13
26732	1	50	21	301	.1	12	15	2526	5.81	39	5	ND	1	20	1	2	2	69	.11	.118	28	21	1.17	300	.07	3	3.97	.01	.09	1	6
26733	7	73	17	192	.1	13	16	1458	4.74	11	5	ND	1	19	1	3	2	54	.08	.101	8	21	.84	268	.04	3	3.38	.01	.06	1	230
26734	6	38	9	140	.2	6	8	1213	3.92	7	5	ND	1	19	1	2	2	50	.20	.084	5	19	.54	214	.04	3	2.54	.01	.05	1	30
26735	5	58	12	190	.2	12	12	886	4.10	10	5	ND	1	24	1	2	2	52	.10	.099	8	19	.97	246	.07	2	2.72	.01	.09	1	16
26736	2	38	14	196	.4	10	12	1302	4.20	4	5	ND	1	34	1	2	3	68	.58	.180	15	27	.81	397	.02	2	3.12	.01	.05	1	8
26737	2	18	15	179	.5	5	14	1623	5.68	8	5	ND	1	20	1	2	2	109	.14	.094	4	16	.93	116	.10	2	2.31	.01	.07	1	2
26738	4	33	4	144	.2	9	5	1054	4.25	10	5	ND	1	15	1	2	2	55	.07	.076	5	20	.73	301	.04	2	2.67	.01	.06	1	33
26739	1	56	19	284	.7	6	12	914	5.26	12	5	ND	1	55	1	2	2	88	.14	.103	7	11	1.03	173	.04	3	3.34	.01	.06	1	6
26740	1	43	39	337	.5	8	13	1987	5.80	21	5	ND	1	104	1	2	2	116	.22	.072	4	15	1.14	348	.07	3	3.44	.02	.06	2	23
26741	1	51	36	483	.4	10	15	2837	5.53	27	5	ND	1	50	1	2	2	58	.14	.069	6	16	1.11	175	.06	3	3.13	.01	.04	1	46
26742	1	53	10	269	.4	10	19	1957	5.48	20	5	ND	1	27	1	2	2	95	.15	.086	5	15	1.16	129	.06	3	3.35	.01	.05	1	9
26746	1	73	8	96	.1	6	14	2414	5.52	14	5	ND	1	20	1	2	2	58	5.06	.061	20	10	.48	112	.03	2	.86	.01	.07	1	7
26749	1	40	12	131	.1	11	14	1253	5.38	14	5	ND	1	8	1	5	5	59	.39	.067	8	18	.56	93	.05	2	.86	.01	.06	1	6
31162	1	21	11	97	.2	10	9	483	5.16	16	5	ND	1	10	1	2	2	94	.08	.067	3	18	.67	59	.03	2	2.56	.01	.03	1	5
31164	1	14	13	94	.3	6	5	525	3.24	8	5	ND	1	10	1	2	2	72	.12	.078	5	18	.39	63	.02	3	1.64	.01	.06	1	3
32526	1	16	8	71	.1	11	4	261	2.45	3	5	ND	1	13	1	2	2	40	.21	.085	6	25	.48	84	.01	2	1.74	.01	.04	2	5
32527	1	76	32	241	.1	28	14	1110	5.09	17	5	ND	1	14	1	10	3	81	.27	.063	7	50	1.10	249	.04	2	2.40	.01	.06	1	70
32528	1	31	5	83	.2	10	8	424	3.90	8	5	ND	1	7	1	2	2	59	.08	.059	5	26	.52	79	.04	10	2.10	.01	.04	1	9
32529	1	41	8	115	.2	15	15	860	5.01	8	5	ND	1	8	1	2	2	79	.13	.078	4	40	.74	78	.06	5	2.31	.01	.03	1	133
32530	1	49	6	142	.3	19	11	430	3.70	9	5	ND	1	13	1	2	2	69	.19	.047	5	44	.90	129	.05	2	2.57	.01	.03	1	26
32531	3	90	10	131	.2	19	16	837	5.16	11	5	ND	1	13	1	2	2	77	.09	.060	5	49	.70	166	.05	5	2.49	.01	.06	1	35
32532	1	46	10	114	.4	11	9	616	4.34	6	5	ND	1	13	1	2	2	51	.07	.069	5	29	.55	110	.03	2	2.63	.01	.04	1	7
32533	2	63	17	111	.2	14	8	550	4.04	10	5	ND	1	23	1	2	2	60	.08	.088	5	32	.70	201	.02	2	2.70	.01	.04	1	12
32534	4	143	17	181	.4	21	17	1682	5.82	14	5	ND	1	62	1	2	2	100	.10	.109	5	54	1.10	386	.03	2	3.34	.01	.07	1	17
32537	3	23	37	212	.2	7	9	1140	4.01	6	5	ND	3	4	1	3	3	25	.03	.047	9	13	.33	96	.01	2	1.51	.01	.05	1	6
32540	1	19	5	101	.1	13	14	821	3.99	7	5	ND	2	26	1	2	2	60	.40	.072	10	29	1.00	166	.03	2	2.06	.01	.06	1	26
32541	2	19	9	89	.1	6	4	234	3.21	6	5	ND	4	4	1	3	2	22	.07	.077	14	13	.16	95	.01	3	1.49	.01	.06	1	2
32543	1	20	10	74	.1	11	11	709	3.35	7	5	ND	3	29	1	2	2	46	.55	.062	12	27	.68	193	.03	3	1.28	.01	.06	1	4
32544	2	12	3	29	.1	1	4	97	2.76	2	5	ND	1	5	1	2	2	30	.03	.047	23	6	.06	67	.01	2	.77	.01	.02	2	4
32547	1	27	13	92	.1	11	12	1063	3.46	5	5	ND	1	37	1	2	2	45	.65	.054	12	21	.85	225	.04	3	1.74	.01	.07	2	8
STD C/AU-S	18	59	37	132	6.7	70	28	1064	4.12	43	16	8	36	48	18	19	20	58	.47	.087	40	58	.91	178	.06	32	1.92	.06	.13	13	47

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
32548	1	27	14	81	.1	11	13	1031	4.11	7	5	ND	2	36	1	4	2	60	.63	.073	14	32	.78	205	.04	2	1.69	.01	.06	1	1
36527	2	20	11	193	.2	3	5	1018	3.39	10	5	ND	1	14	1	4	3	59	.31	.172	5	17	.30	146	.01	2	1.67	.01	.08	1	2
36543	1	22	12	101	.1	4	7	475	3.82	6	5	ND	1	9	1	2	4	67	.12	.076	4	14	.59	80	.02	2	2.93	.01	.04	1	4
36544	1	31	19	160	.1	8	14	793	4.95	17	5	ND	1	8	1	4	2	77	.17	.087	6	20	.93	106	.02	2	3.25	.01	.04	2	1
36545	1	34	13	255	.1	10	13	1210	4.82	15	5	ND	1	32	1	2	4	80	.87	.113	6	22	.82	211	.02	2	2.58	.01	.07	1	3
36546	1	114	27	169	.1	11	18	3186	6.15	12	5	ND	1	53	1	2	3	143	.53	.157	4	20	.95	379	.09	4	4.19	.01	.07	1	2
36547	1	50	23	182	.1	12	13	878	4.00	13	5	ND	1	13	1	2	3	84	.37	.125	9	24	.84	138	.02	3	3.20	.01	.05	1	17
36548	4	35	31	397	.4	8	13	1586	3.86	31	5	ND	1	19	4	5	2	59	.94	.270	8	21	.57	146	.01	4	2.14	.01	.09	1	2
36549	2	68	26	647	.9	8	15	1511	4.64	39	5	ND	1	31	2	3	2	70	1.24	.224	10	19	.77	155	.01	2	2.38	.01	.08	1	1
36550	1	226	22	409	1.8	11	14	1757	4.18	26	5	ND	1	39	1	4	2	62	1.46	.340	42	36	.87	279	.01	2	3.00	.01	.12	1	1
38152	2	106	22	196	.1	15	15	6448	4.72	91	5	ND	1	42	2	2	2	75	.87	.162	12	21	1.09	673	.02	3	3.14	.02	.11	1	19
38153	2	41	21	193	.1	13	18	5899	4.30	42	5	ND	1	41	1	2	2	56	.52	.230	7	18	.91	504	.02	5	2.79	.02	.10	1	4
38156	2	41	17	168	.1	17	14	2274	4.28	41	5	ND	1	23	1	2	3	73	.35	.147	4	31	1.02	294	.02	2	2.27	.01	.05	1	5
38157	1	58	22	215	.1	23	14	2084	4.47	46	5	ND	1	23	1	3	4	76	.64	.109	12	33	1.15	268	.08	9	2.18	.01	.06	1	1
38160	1	67	25	219	.1	19	15	2681	5.05	48	5	ND	1	36	1	2	4	84	.92	.080	10	30	1.15	332	.05	2	2.89	.01	.06	1	1
38162	1	58	19	217	.2	17	17	3182	5.34	30	5	ND	1	16	1	2	2	85	.36	.183	6	33	1.09	275	.03	4	2.75	.01	.05	1	1
38163	1	98	13	116	.1	18	13	3455	4.16	29	5	ND	1	39	1	2	2	84	1.76	.097	7	36	1.44	334	.06	6	2.77	.01	.09	1	1
38165	1	13	22	124	.2	7	4	459	3.52	6	5	ND	1	7	1	2	2	73	.15	.061	3	20	.51	79	.03	4	2.08	.01	.04	1	1
38166	1	17	23	138	.2	9	9	2409	3.53	2	5	ND	1	10	1	2	3	69	.14	.145	6	20	.44	111	.02	3	2.22	.01	.06	1	2
38167	1	30	29	193	.1	11	14	1343	5.23	13	5	ND	1	11	1	2	2	101	.18	.105	5	22	.94	116	.06	2	3.19	.01	.06	1	1
38168	1	114	23	219	.1	20	15	2696	6.32	13	5	ND	1	12	1	2	2	135	.19	.118	6	25	1.23	129	.07	5	3.34	.01	.07	1	4
38169	1	67	30	182	.2	11	16	1192	5.38	12	5	ND	1	9	1	2	2	108	.20	.082	8	26	.87	120	.06	3	2.91	.01	.05	1	1
38170	1	47	29	274	.1	17	13	1123	6.38	17	5	ND	1	7	1	2	2	121	.16	.041	8	32	1.33	105	.08	3	3.89	.01	.06	1	1
38174	1	26	11	106	.3	8	7	932	3.19	6	5	ND	1	19	1	2	2	53	.19	.092	4	15	.45	144	.01	2	2.69	.01	.04	1	1
38177	1	14	14	93	.2	13	7	449	3.57	6	5	ND	1	17	1	2	2	61	.20	.124	6	22	.44	134	.01	2	2.36	.01	.05	1	2
38178	1	173	11	95	.1	31	19	1251	4.04	17	5	ND	1	23	1	2	2	88	.37	.106	3	80	1.42	122	.05	3	3.39	.01	.03	1	2
38179	1	70	22	126	.1	31	16	1715	5.03	8	5	ND	1	30	1	2	2	114	.53	.111	4	67	1.83	118	.09	4	3.31	.01	.04	1	1
38180	1	34	53	143	.2	20	12	2116	4.43	9	5	ND	1	15	1	2	2	98	.54	.167	4	54	.99	136	.04	3	2.86	.01	.05	1	2
38181	1	30	33	219	.2	9	9	4409	3.58	10	5	ND	1	11	1	2	2	55	.21	.227	6	18	.53	299	.01	3	2.87	.01	.05	1	1
38182	1	27	62	283	.2	6	12	1608	4.83	10	5	ND	1	6	2	2	2	61	.17	.200	5	10	.74	108	.02	2	2.50	.01	.06	1	1
38183	1	28	37	335	.1	5	15	3862	5.67	13	5	ND	1	5	1	3	2	64	.10	.296	5	10	.54	276	.01	3	2.94	.01	.10	1	1
38184	1	24	64	185	.1	2	22	12673	5.15	11	5	ND	1	31	1	2	2	73	.26	.241	4	7	.24	598	.05	3	2.26	.01	.09	1	2
38185	1	63	159	164	.7	7	8	690	3.27	13	5	ND	1	6	1	2	2	43	.11	.217	22	8	.59	222	.01	2	3.95	.01	.07	1	4
38186	1	14	14	112	.2	9	5	492	3.47	4	5	ND	1	8	1	2	5	42	.09	.106	6	13	.31	104	.02	3	1.65	.01	.06	2	1
38187	1	13	33	132	.3	3	5	3044	4.22	2	5	ND	1	9	1	2	2	63	.17	.107	6	7	.28	226	.02	4	1.92	.01	.05	1	2
38188	1	9	13	104	.1	3	5	1043	3.85	2	5	ND	1	6	1	2	2	52	.07	.099	6	6	.24	139	.01	2	1.86	.01	.04	1	1
STD C/AU-S	18	61	44	132	6.7	69	31	1070	4.19	42	16	8	37	48	18	16	25	59	.47	.087	41	59	.93	181	.06	33	1.97	.06	.14	12	49

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
38189	1	11	17	240	.1	6	7	1205	4.07	15	5	ND	1	6	1	4	2	48	.10	.109	6	6	.35	243	.01	2	1.88	.01	.12	1	1
38190	1	10	10	143	.1	3	5	426	4.26	5	5	ND	1	6	1	3	2	43	.07	.059	8	7	.36	581	.02	2	2.06	.01	.05	1	1
38191	1	83	10	100	.1	32	22	1859	4.13	18	5	ND	1	48	1	2	2	103	1.21	.075	4	66	1.80	81	.14	2	3.78	.01	.04	1	2
38193	1	7	8	54	.1	1	5	609	3.57	2	5	ND	1	5	1	2	2	27	.07	.040	4	7	.78	40	.06	2	1.72	.01	.04	1	2
38194	1	7	6	34	.2	2	2	719	2.74	3	8	ND	1	6	1	2	2	27	.03	.063	5	7	.28	57	.03	2	1.41	.01	.05	2	2
38195	1	20	12	91	.1	7	7	872	6.27	8	5	ND	1	6	1	2	2	69	.05	.096	5	19	.85	52	.05	3	2.30	.01	.05	1	1
38196	1	9	8	57	.1	3	3	678	2.97	3	5	ND	1	9	1	3	2	34	.05	.062	5	8	.43	80	.05	3	1.68	.01	.04	1	1
38198	1	10	8	31	.1	3	1	137	1.18	3	5	ND	1	11	1	4	2	29	.06	.030	4	12	.19	57	.03	2	1.32	.01	.03	2	21
38199	1	10	8	44	.2	6	2	237	1.57	3	5	ND	1	11	1	3	2	28	.09	.059	5	15	.29	81	.03	2	1.40	.01	.04	2	4
38200	1	16	10	89	.1	11	5	345	2.73	3	5	ND	1	11	1	2	3	45	.15	.047	4	26	.57	64	.05	3	1.87	.01	.04	1	1
38374	1	12	9	37	.1	1	2	274	1.85	3	5	ND	1	5	1	2	2	39	.04	.073	5	7	.13	68	.01	2	1.72	.01	.05	1	1
38375	1	17	6	93	.1	2	6	486	4.37	3	5	ND	1	7	1	2	2	64	.04	.105	3	9	.49	58	.01	2	2.37	.01	.06	1	2
49744	2	44	32	458	.2	20	20	2360	6.13	22	5	ND	1	16	1	2	2	110	.61	.092	7	33	1.73	145	.12	2	2.49	.03	.07	1	2
49747	1	35	14	231	.1	18	10	1639	3.83	18	5	ND	1	34	1	2	2	69	1.03	.091	8	26	.84	112	.05	7	1.94	.02	.06	1	1
49748	2	45	12	236	.3	14	13	2299	4.85	29	5	ND	1	32	1	4	2	79	.84	.097	9	18	.90	171	.06	2	2.23	.02	.07	1	1
49750	1	11	8	112	.1	3	7	1453	3.92	5	5	ND	1	12	1	4	2	68	.14	.102	3	9	.40	110	.01	2	1.80	.01	.09	1	1
STD C/AU-S	18	60	38	132	6.8	69	30	1075	3.95	42	18	6	37	48	18	17	20	59	.45	.086	40	60	.89	182	.06	33	1.97	.06	.14	13	47

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
6910	1	15	9	102	.1	6	5	1164	2.70	8	5	ND	1	19	1	2	2	48	.27	.187	3	18	.27	123	.01	2	1.48	.01	.06	1	1
16498	1	241	16	205	.4	12	13	1124	5.96	14	5	ND	2	61	1	2	2	122	1.25	.077	9	70	1.13	134	.11	12	2.13	.02	.09	1	4
19816	5	58	3	119	.1	6	11	1106	4.92	10	5	ND	1	9	1	2	2	40	.24	.037	7	17	.69	320	.05	2	1.23	.01	.13	1	10
19818	4	73	16	136	.1	3	13	1080	4.57	11	5	ND	1	14	1	7	2	37	.31	.041	7	15	.50	304	.02	4	1.11	.01	.07	1	1
19819	3	80	6	174	.3	8	11	1331	3.49	13	5	ND	1	44	1	2	2	69	.91	.065	10	26	.95	122	.07	5	1.90	.01	.06	1	10
19820	1	56	12	139	.1	15	11	984	3.97	17	5	ND	1	40	1	2	2	75	.62	.062	7	32	1.12	118	.09	2	1.75	.02	.07	1	7
19822	1	272	11	245	.4	10	9	1182	3.48	18	5	ND	1	78	1	2	2	55	1.64	.056	6	24	1.11	116	.10	6	2.59	.02	.10	1	1
19825	4	185	13	155	.1	14	14	1011	5.33	8	5	ND	1	33	1	2	2	104	.62	.061	7	37	1.63	229	.19	3	2.29	.01	.13	1	4
26744	1	46	13	186	.1	9	13	1852	5.62	19	5	ND	1	9	1	7	3	54	.25	.357	9	20	.55	152	.04	2	1.02	.01	.07	1	7
32535	1	60	14	106	.1	11	16	1440	5.91	9	5	ND	1	10	1	2	2	92	.24	.048	3	21	1.00	135	.07	2	1.72	.01	.08	1	3
32536	1	17	13	88	.1	13	10	994	3.22	4	5	ND	3	12	1	2	2	39	.37	.053	17	24	.80	218	.01	2	1.23	.01	.06	1	65
32538	1	44	5	76	.1	11	10	851	4.00	6	5	ND	2	36	1	2	2	56	.66	.056	11	32	.77	185	.06	4	1.42	.01	.05	1	19
32539	1	47	9	80	.1	14	11	994	3.81	7	5	ND	2	44	1	2	2	52	.77	.058	12	29	.83	204	.07	2	1.67	.01	.05	1	20
32542	1	43	5	76	.1	11	10	927	3.60	7	5	ND	2	40	1	2	2	47	.71	.057	11	27	.82	172	.06	3	1.61	.01	.05	1	5
32545	1	40	11	80	.1	9	10	968	3.82	7	5	ND	3	38	1	2	2	51	.67	.056	14	27	.80	211	.05	3	1.65	.01	.05	1	1
32546	1	26	10	99	.1	7	8	835	3.89	7	5	ND	1	22	1	2	2	54	.48	.052	12	21	.72	172	.01	4	1.95	.01	.05	1	1
32549	1	29	6	91	.1	6	9	844	3.98	5	5	ND	1	20	1	2	2	56	.44	.048	13	24	.70	189	.01	3	1.91	.01	.05	1	9
33151	1	112	16	248	.3	27	16	4324	4.67	59	5	ND	1	45	2	2	2	81	1.00	.111	8	39	1.61	389	.08	11	2.60	.05	.07	1	23
38154	1	80	15	197	.3	16	12	3126	3.55	55	5	ND	1	44	1	2	2	62	1.16	.100	7	30	1.22	366	.05	3	1.94	.03	.05	1	7
38155	1	92	16	231	.3	25	15	4365	4.69	61	5	ND	1	47	1	3	3	80	.94	.117	8	38	1.65	409	.08	6	2.60	.05	.07	1	5
38158	1	66	12	214	.3	18	13	3599	3.93	54	5	ND	1	41	1	2	2	67	1.05	.108	7	36	1.39	360	.05	5	2.32	.04	.06	1	3
38159	1	68	12	217	.2	22	15	3972	4.55	54	5	ND	1	40	2	2	4	78	.88	.100	9	35	1.59	361	.08	2	2.55	.05	.06	1	1
38161	1	79	12	217	.2	20	14	3688	4.31	50	5	ND	1	38	1	2	2	76	.86	.095	9	33	1.40	424	.07	4	2.37	.04	.06	1	390
38164	1	50	12	188	.2	24	14	3406	4.47	45	5	ND	1	34	1	2	3	79	.84	.089	7	36	1.54	320	.09	3	2.46	.05	.06	1	5
38171	1	99	19	253	.3	18	15	1083	5.01	17	5	ND	1	28	1	2	2	102	.74	.059	17	37	1.35	230	.09	4	2.63	.01	.08	1	2
38172	1	47	12	175	.2	12	13	1927	4.36	21	5	ND	1	44	1	2	2	75	1.01	.069	8	20	1.08	213	.08	5	2.30	.04	.08	1	1
38173	1	51	8	197	.4	9	10	1118	3.70	13	5	ND	1	60	1	2	3	65	1.51	.100	11	19	.90	247	.05	4	2.42	.02	.07	1	1
38175	1	29	12	157	.1	8	12	1780	3.99	17	5	ND	1	44	1	2	3	81	1.00	.053	6	18	.94	194	.07	3	2.13	.01	.05	1	1
38176	1	14	8	121	.2	13	8	642	2.80	7	5	ND	1	27	1	2	3	52	.67	.057	6	18	.66	110	.04	6	1.39	.01	.03	1	1
38192	1	62	25	216	.1	25	15	1714	4.81	18	5	ND	1	16	1	9	2	77	.39	.060	5	45	1.04	230	.04	5	1.93	.01	.06	1	345
38197	1	13	8	112	.1	10	8	2243	3.13	4	5	ND	1	12	1	2	3	48	.28	.044	4	23	.77	150	.05	3	1.11	.01	.05	1	1
STD C/AU-S	18	60	38	132	6.6	67	28	1081	4.06	40	19	8	38	48	18	17	21	58	.48	.086	40	57	.91	178	.06	33	1.97	.06	.13	12	53

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
16497	1	17	4	19	.1	2	2	275	1.29	7	5	ND	1	24	1	2	2	42	28.14	.025	2	1	.21	10	.08	2	.50	.01	.01	1	1
19821	1	169	7	26	.1	7	5	198	1.65	26	5	ND	1	63	1	2	2	19	1.21	.061	7	17	.26	21	.06	2	.82	.06	.04	1	4
19824	19	881	2	38	.5	15	10	390	3.12	3	5	ND	1	36	1	2	2	58	1.36	.057	8	38	1.26	81	.11	2	1.48	.04	.08	1	25
26674	1	289	7	28	.2	1	18	382	5.50	23	5	ND	2	3	1	2	2	13	.10	.026	4	2	.16	32	.02	2	.41	.03	.03	1	4
26743	1	16	6	72	.1	3	4	452	3.94	5	5	ND	1	2	1	5	2	11	.13	.057	8	2	.03	22	.02	6	.35	.03	.07	1	1
26745	1	34	2	11	.1	2	7	507	2.82	8	5	ND	1	14	1	2	3	18	2.92	.053	9	1	.30	15	.01	6	.48	.04	.02	1	1
26747	2	108	2	12	.1	5	4	386	3.12	13	5	ND	1	3	1	2	3	5	.49	.016	11	2	.04	9	.01	5	.21	.04	.02	1	1
26748	1	8	2	19	.1	1	3	826	2.19	3	5	ND	1	4	1	2	3	2	.81	.059	19	1	.07	31	.01	5	.40	.03	.10	1	1
35325	1	47	10	42	.1	3	1	265	.49	2	5	ND	4	6	1	2	3	1	.12	.018	8	2	.01	49	.01	8	.31	.04	.14	2	1
32502	4	2128	16	455	1.8	3	6	1931	5.97	1120	5	ND	1	54	6	23	2	16	11.77	.056	5	3	.35	242	.01	4	.76	.01	.09	1	2
32503	1	54	3	140	.2	10	10	920	3.06	38	5	ND	1	47	1	2	2	99	22.31	.025	2	29	1.24	81	.12	4	2.39	.01	.01	1	1
32504	1	28	2	73	.1	23	18	1600	3.36	18	5	ND	1	194	1	2	2	72	2.65	.042	2	55	1.58	36	.15	2	2.15	.01	.02	1	1
32505	7	9	2	22	.1	1	3	354	9.38	14	5	ND	1	5	1	6	2	12	.30	.005	2	4	.04	14	.01	5	.13	.01	.03	4	1
32506	1	10	6	48	.1	1	4	794	4.80	20	5	ND	1	7	1	4	2	14	.21	.054	7	2	.17	29	.01	10	.49	.03	.15	1	1
32508	4	765	11	72	4.0	20	51	441	14.51	8	5	ND	1	18	2	6	13	93	.46	.033	2	61	.71	41	.12	8	1.36	.02	.05	13	1060
32509	1	12	5	34	.1	6	6	488	2.32	3	5	ND	3	16	1	2	3	27	1.24	.043	16	17	.57	63	.01	6	.82	.03	.08	1	1
32510	2	30	6	43	.2	5	5	241	4.20	2	5	ND	1	3	1	2	3	9	.06	.006	2	6	.06	34	.01	4	.28	.04	.01	3	11
32511	1	3	3	37	.1	10	6	430	2.50	2	5	ND	4	23	1	2	2	46	.46	.047	11	22	.76	166	.15	6	.98	.04	.21	1	1
36313	1	1	2	23	.1	1	1	1003	.75	2	5	ND	2	18	1	2	2	1	.75	.022	17	1	.12	93	.01	2	.50	.03	.14	1	1
36314	1	1	2	18	.1	1	1	706	1.19	2	5	ND	1	14	1	2	2	2	.36	.016	9	2	.24	91	.03	5	.69	.03	.10	2	1
36316	1	77	2	23	.1	1	2	427	1.50	25	5	ND	1	62	1	2	2	10	27.28	.048	2	1	.15	23	.02	2	.34	.01	.03	1	2
36317	1	71	8	58	.2	2	4	554	2.48	11	5	ND	1	182	1	2	2	82	22.61	.057	2	5	.30	19	.13	8	1.00	.01	.04	1	1
36319	1	14	9	74	.1	3	9	912	5.56	48	5	ND	1	25	1	2	2	40	3.19	.109	6	7	.48	52	.05	6	1.00	.03	.08	1	1
36320	1	1106	5	21	1.7	1	4	512	1.95	4	5	ND	1	188	1	2	2	87	4.83	.035	2	5	.18	17	.15	3	2.52	.01	.01	2	4
36323	1	61403	5	15	25.3	5	14	482	2.51	12	5	ND	1	254	3	2	2	77	1.80	.019	2	15	.21	16	.14	5	1.13	.01	.01	1	15
36324	1	313	113	496	.4	4	15	1262	5.66	17	5	ND	1	16	1	5	2	90	1.11	.096	8	4	1.77	220	.37	9	2.20	.02	.29	1	1
36325	1	255	15	281	.1	1	3	531	2.92	2	5	ND	1	5	1	2	2	4	.06	.022	8	1	.03	62	.02	8	.34	.04	.03	1	1
49749	1	19	5	23	.1	4	2	499	.57	2	5	ND	1	12	1	2	2	17	1.12	.006	2	13	.10	22	.02	2	.51	.01	.05	5	3
STD C/AU-R	19	62	38	132	7.0	73	28	1088	4.34	42	18	8	38	50	19	17	22	61	.48	.089	42	61	.92	181	.07	34	1.95	.06	.14	12	520

NUMBER		TYPE	UTM COORDINATES			DDI								
CU1B	ZN1B	PB1B	MO1A	PB1A	AG1A	AS1A	AU1E	ZN1A	CU5U	NI5U	MO5P	CU1A	MN1A	SB1Y
2408282		SILT	09 627442	6028972		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	N.A.	25	N.A.	N.A.	N.A.
2408283		SILT	09 627506	6029023		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	560	N.A.	37	N.A.	N.A.	N.A.
2408284		SILT	09 627658	6029165		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	528	N.A.	15	N.A.	N.A.	N.A.
2408285		SILT	09 627910	6029344		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	432	N.A.	12	N.A.	N.A.	N.A.
2408286		SILT	09 627909	6029345		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	320	N.A.	12	N.A.	N.A.	N.A.
2408287		SILT	09 627955	6029458		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	296	N.A.	10	N.A.	N.A.	N.A.
2408288		SILT	09 627956	6029459		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	216	N.A.	10	N.A.	N.A.	N.A.
2408289		SILT	09 628034	6029730		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	200	N.A.	10	N.A.	N.A.	N.A.
2408290		SILT	09 627986	6029899		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	56	N.A.	1	N.A.	N.A.	N.A.
2408291		SILT	09 628008	6029590		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	48	N.A.	1	N.A.	N.A.	N.A.
2408292		SILT	09 627769	6029022		05311								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	216	N.A.	7	N.A.	N.A.	N.A.
2408526		SILT	09 616889	6027930		04415								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	108	N.A.	1	N.A.	N.A.	N.A.
2408527		SILT	09 616953	6028070		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	150	N.A.	1	N.A.	N.A.	N.A.
2408528		SILT	09 617000	6028164		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	210	N.A.	2	N.A.	N.A.	N.A.
2408529		SILT	09 617128	6028246		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	190	N.A.	5	N.A.	N.A.	N.A.
2408530		SILT	09 617226	6028293		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	150	N.A.	5	N.A.	N.A.	N.A.
2408531		SILT	09 617357	6028361		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	350	N.A.	2	N.A.	N.A.	N.A.
2408532		SILT	09 617444	6028427		04416								
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	200	N.A.	7	N.A.	N.A.	N.A.

APPENDIX V

ROCK SAMPLE REPORTS

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY HT 4 Claim

DATE Aug 11/88

ROCK SAMPLE REPORT

PROJECT 240

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
36315	on knob at boundary - fg. granodiorite - garnet phenos., qtz veinlets	trace	rock	grab								Carey Galeschuk
36316	on knob, andesite with calcite - fault zone	–	"	"								"
36317	on knob, vesicular basalt - brecciated, epidote, calcite - trends 036°	–	"	"								"
36318	on knob, slickensides on altered basalt - trend 342° on face but others observed	–	"	"								"
36319	on knob, fault breccia - clasts of andesite and basalt	–	"	"								"
36320	750m from Landing Point Knob - quartz and rhyolite in a bleb - 170°/60°/SW - malchite staining - gossened around contact.	trace	"	"								"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY Houstan Tommy (TER 1-8 Claim) DATE Aug 14/88

ROCK SAMPLE REPORT

PROJECT: 240

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
					Au Grab							
32509	50m downstream from headwaters of Shackles Creek - monzonite,	—	rock	grab								Carey Galeschuk
32510	200m downstream - grey rhyolite - gossoned, hematite	trace	"	"								"
32511	284 m downstream qtz monzonite	—	"	"								"

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY Houstan Tommy (Ken Claim) DATE Aug 13/88

ROCK SAMPLE REPORT

PROJECT 240

AMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au (ppb)	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
32505	on north bank at creek headwaters -red rhyolite w qtz -hematite and pyrite, gossoned	.5	rock	grab								Carey Guleschuk
32506	50m east of 32505 -highly altered andesite -gossoned 5% hematite	trace	"	"								"
32507	On Forgiven Hill -diorific - andesite -no mineralization, grey	-	"	"								"
32508	On ridge at boundary of Ken + Tel claim -sheared gabbro -highly gossoned, 124°/42° NW -pyrite, calco, bornite, malchite staining	5	"	"								"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY Houston Tommy (240)

DATE Aug 22/88

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS	SAMPLED BY
26674	(GCI 50959) medium grey monzonite rusty staining with pyrite and chalcopyrite Nel claims	grab	—		TG, BH
26743	Ken 1-8 claims 200 m downstream from merge point of 2 creeks light - medium grey ryholite with lots of rusty staining	grab	—		"
26745	Ken 1-8 claims 700 m downstream from starting point light - med. grey ryholite with lots of staining	grab	—		"
26747	866 m from starting point on cr. light → med. grey ryholite with a large amount of rusty staining	"	—		"
26748	950 m from start. light-med grey ryholite with no visible sulfides lots of Fe staining	"	—		"

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY Houston Tommy (240)

DATE Aug 22/88

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS	SAMPLED BY
35324	HT3 claim creek near corner post of HT2 dark green slightly calcareous andesite some brecciation	grab	—		TC, BF
35325	SAME location as 35324. light brown ryholite float no visible sulfides	grab float	—		"
49749	(GCI # 50959) Quartz vein float sone staining no visible sulfides	float grab	—		"
16497	(GCI # 50959) calcite veinlet in dark green andesite milky white no visible sulfides	grab	—		"
19824	600m downstream from lake on the Tel 1-8 claims granite type intrusive with a trace of pyrite	grab	—		"
19821	50m North of last sample site granite type intrusive rusty staining and small amount of pyrite and chalcopyrite	grab	—		"

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93L/06

PROPERTY Houstan Tommy / Del 1-8 Claims

DATE Aug 12/88

ROCK SAMPLE REPORT

PROJECT 240

MPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ Au(ppb)	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
32502	On west side Del Ridge -andesite -calco, pyrite, bornite, malchite, azurite staining	1-2	rock	grab								Carey Galeschuk
32503	Far west side Del Ridge -purple + green andesite -no mineralization -±40% calcile -contact 020° -from a trench	—	"	"								"
32504	200m S of Del Ridge andesite	—	"	"								"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93 L/06

PROPERTY Hoostan Tommy / DEL 1-8

DATE Aug 12/88

PROJECT 240

ROCK SAMPLE REPORT

AMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐ (Au(ppb))	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
36323	50m outside Del claim block -quartz in epidote matrix -malachite staining	trace	rock	grab								Carey Galeschuk
36324	200 m from LCP, 10m north -sheared andesite, fault breccia -pyrite, magnetite, quartz	1%	"	"								"
36325	346m from LCP -sheared rhyolite -gossoned, pyrite	trace	"	"								"
36326	labelled 16457 -rhyolitic tuff -gossoned, felt laths, calcite infilling	—	"	"								"
32501	50m east of 38190 ~~basalt~~ andesite -trace pyrite, dark crystalline	trace	"	"								"

G = GEOCHEM A = ASSAY

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93A/6

PROPERTY HT Claim

DATE Aug 10/88

ROCK SAMPLE REPORT

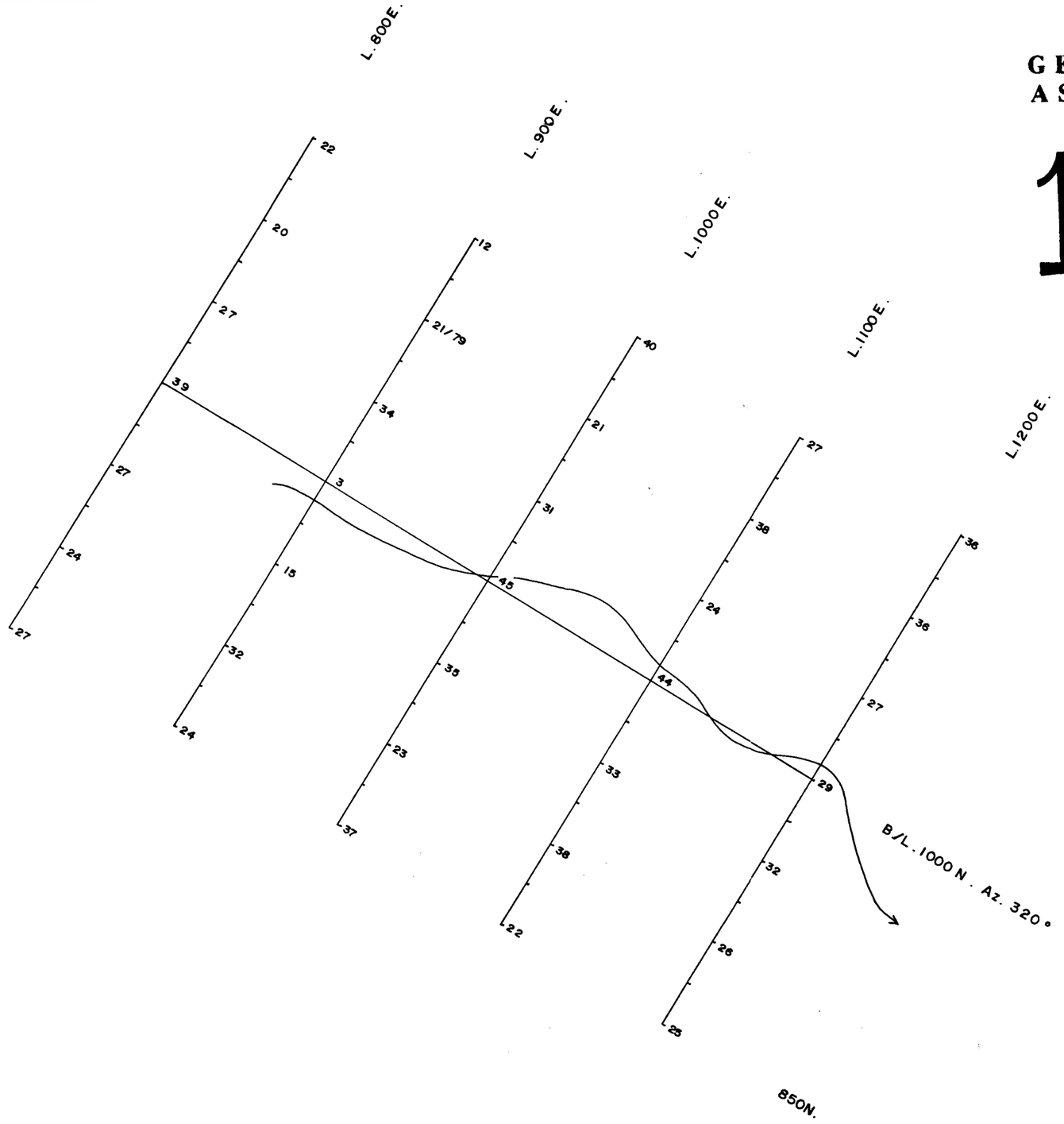
PROJECT 240

SAMPLE NO.	LOCATION & DESCRIPTION	% SULPHIDES	TYPE	WIDTH	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	G☐ A☐	SAMPLED BY
36310	south bank overlooking Rhea Creek -~~green andesite~~ limestone -green.	—	rock	grab								Corey Galtschuk
36311	10m north of fork up Rhea Creek purple andesite tuff -clasts + flow structures -slight gossoning	—	"	"								"
36312	225m from fork upstream North Rhea Ck f.g diorite	—	"	"								"
36313	507m from fork on Rhea Creek light color rhyolite	—	"	"								"
36314	686m from fork on Rhea Creek -grey rhyolite -pyrite, slight gossoning -NW bank	.5	"	"								"

G = GEOCHEM A = ASSAY

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,032



LEGEND

29 SOIL GEOCHEM SURVEY Pb.(ppm)

0 5 10 15 m

SCALE 1 : 250

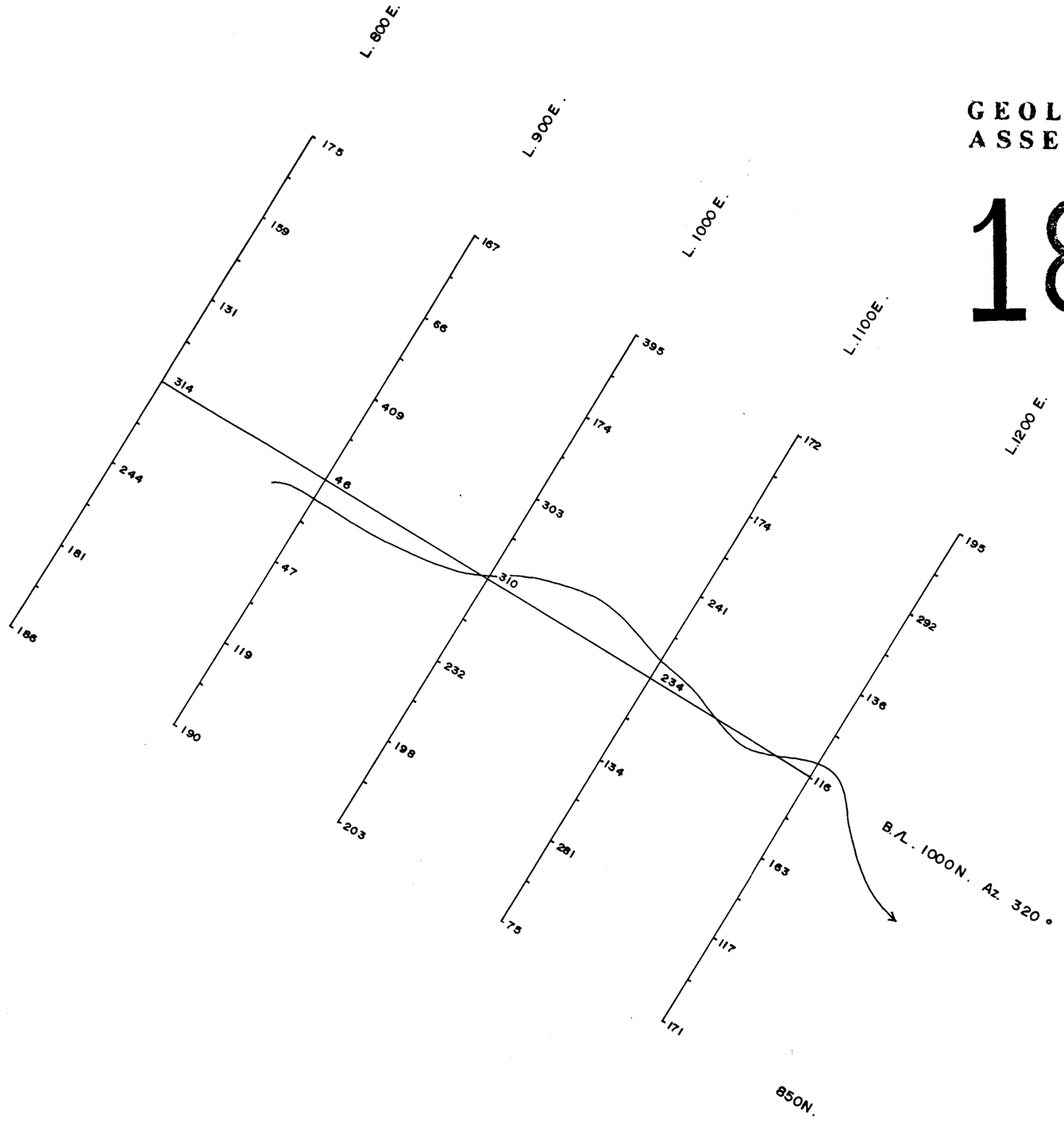
REVISED	HOUSTON - TOMMY
	CLAIM HT - 2 1000 GRID
	SOIL GEOCHEM Pb(ppm)
PROJ.No. 240	SURVEY BY: T.C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S.K.B. SCALE: 1 :250
DWG. No. FIG. 3	NORANDA EXPLORATION OFFICE: PRINCE GEORGE, B.C.

VANCAL 11925

P.J.A.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,032



LEGEND

320 SOIL GEOCHEM SURVEY Zn(ppm)

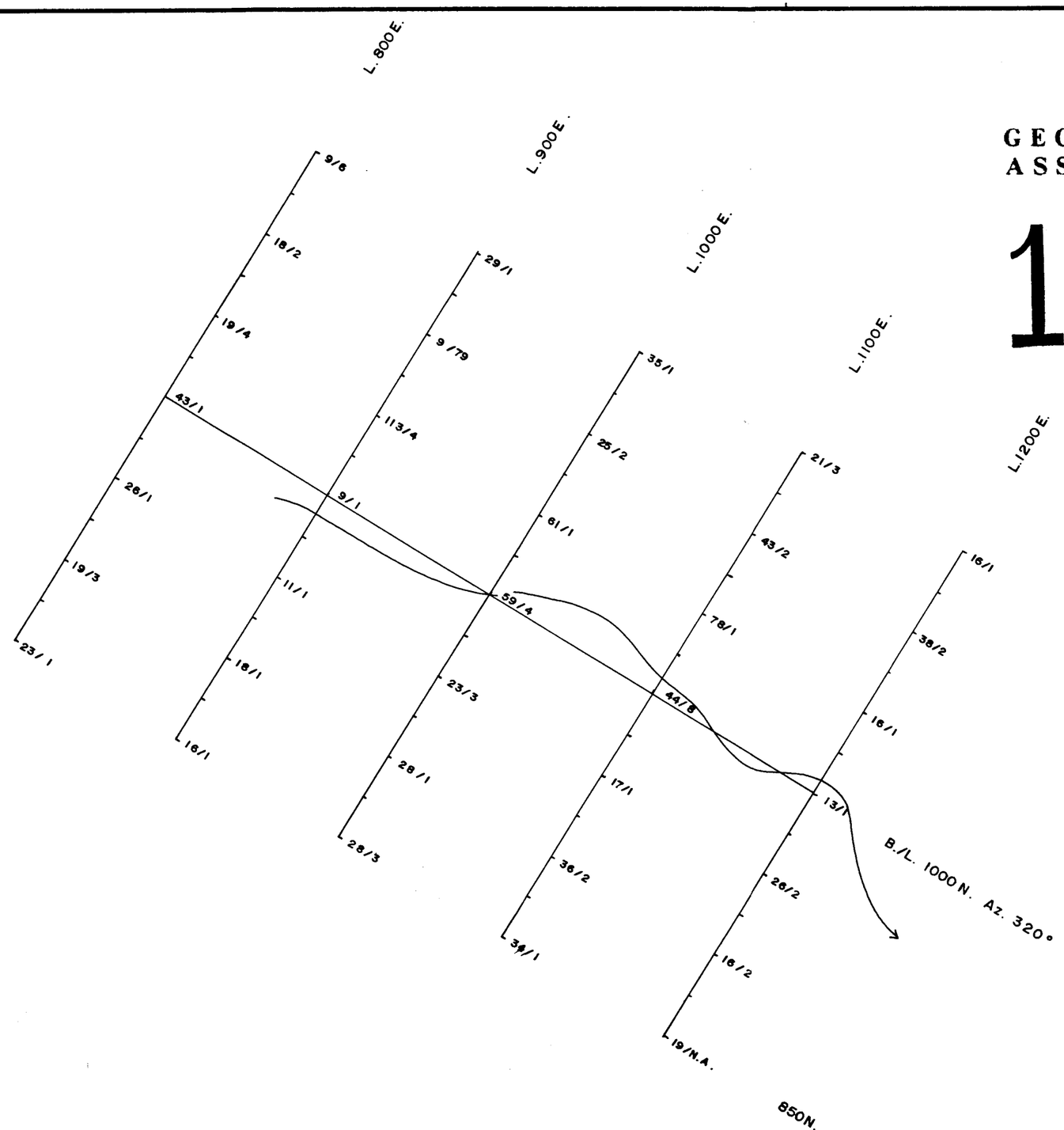
0 5 10 15 m

SCALE 1 : 250

REVISED	HOUSTON - TOMMY
	CLAIM HT - 2
	1000 GRID
	SOIL GEOCHEM Zn(ppm)
PROJ. No. 240	SURVEY BY: T. C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S.K.B. SCALE: 1 : 250
DWG. No. FIG. 4	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.

VANCAL 11925

P.J.A.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,032

LEGEND

21/3 SOIL GEOCHEM SURVEY Cu(ppm/Au(ppb)

0 5 10 15 m

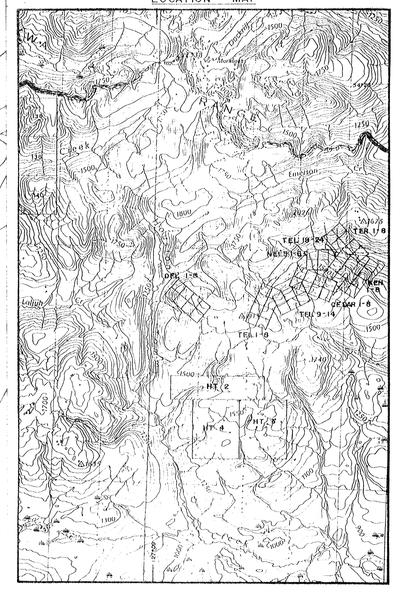
SCALE 1 : 250

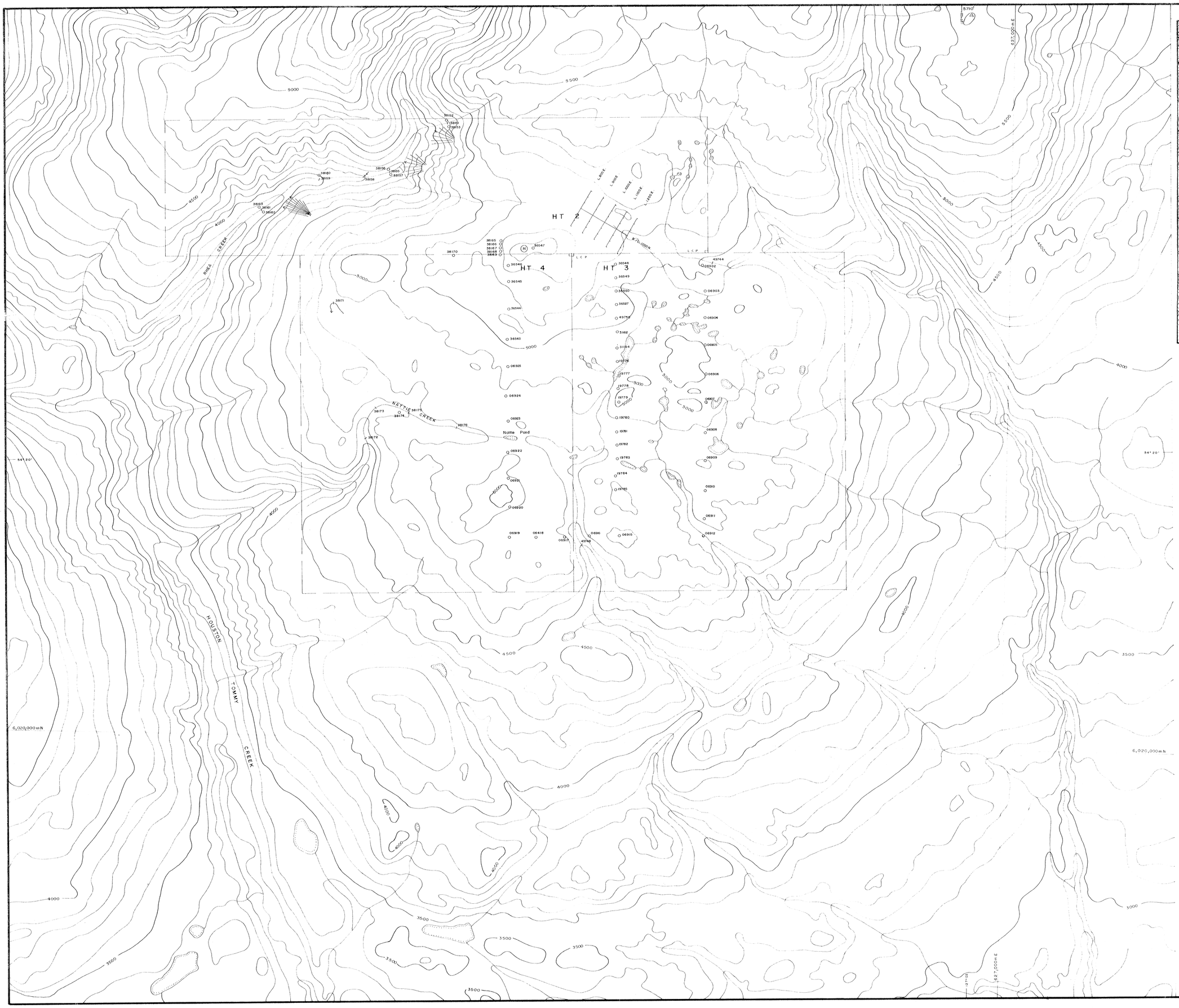
REVISED	HOUSTON - TOMMY
	CLAIM HT - 2 1000 GRID
	SOIL GEOCHEM Cu(ppm)/Au(ppb)
PROJ. No. 240	SURVEY BY: T. C. DATE: Aug. 1988
N.T.S. 93L /6	DRAWN BY: S.K.B. SCALE: 1 : 250
DWG. No. FIG. 5	NORANDA EXPLORATION OFFICE: PRINCE GEORGE, B.C.

VANCAL 11925

P.J.A.

LOCATION MAP





LEGEND

SYMBOLS

- 06907 ○ soil sample
- 38173 ↙ silt
- 36320 × rock
- outcrop
- gossan
- talus fan
- trail
- abd. camp
- cat trench

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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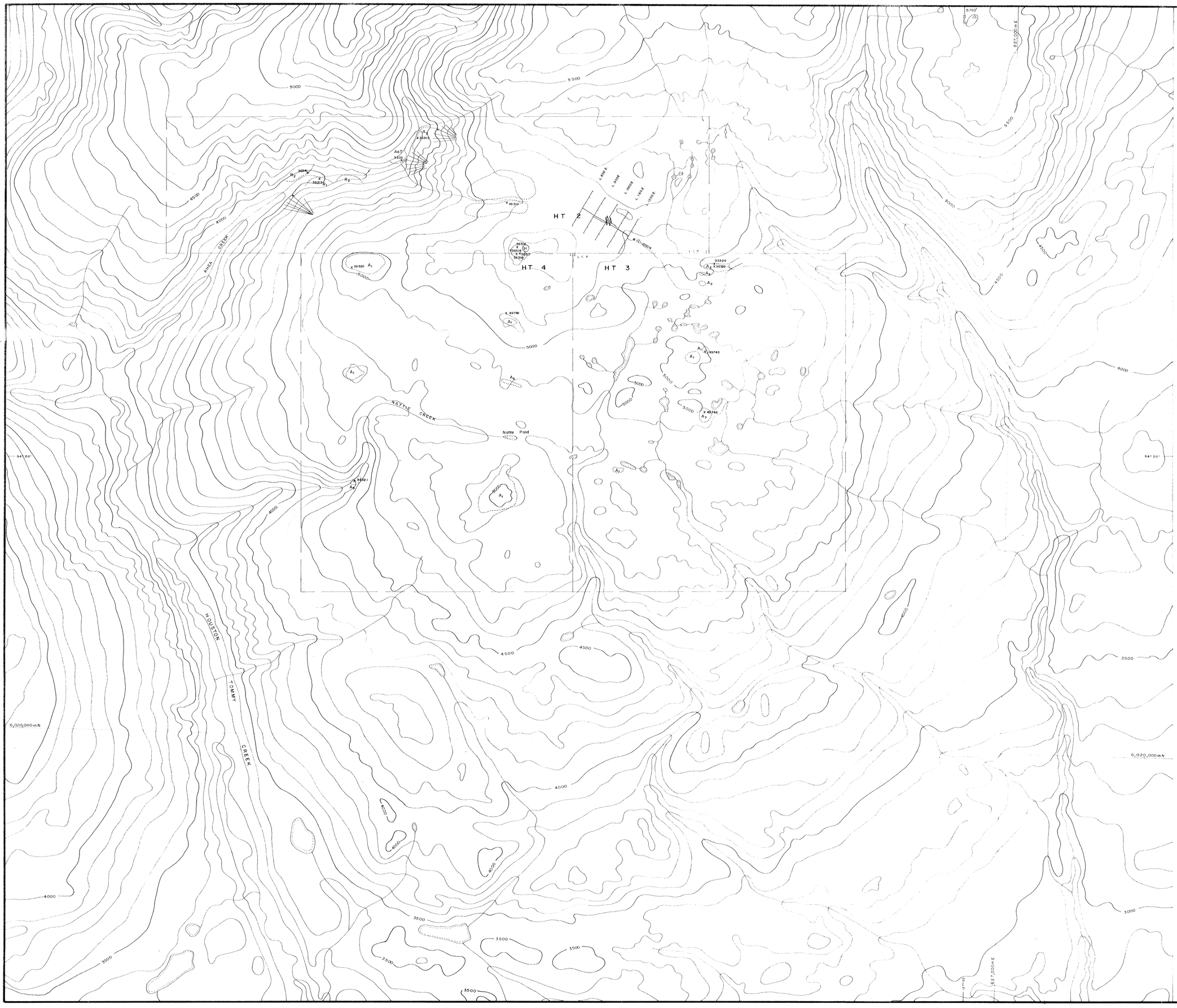
Map Sheet Index

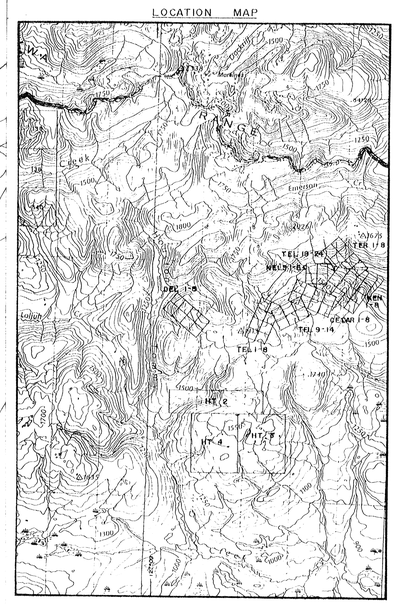
2
1

0 500 1000 metres
SCALE 1 : 10,000

REVISED	HOUSTON – TOMMY
	HT CLAIMS
	SILT AND SOIL SAMPLE LOCATIONS
PROJ. No. 240	SURVEY BY: T.C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S.K.B. SCALE: 1:10,000
DWG No. FIG. 6	NORANDA EXPLORATION
	OFFICE PRINCE GEORGE, B.C.



LOCATION MAP



0 2 4 6 8 Kilometres
SCALE 1 100,000

LEGEND

ROCK TYPES

Andesite

- A1 grey
- A2 chloritic calcareous
- A3 gossaned
- A4 with abundant epidote
- A5 porphyry
- A6 chloritic & purple brx
- A7 brx

Hornfels

- H1 dark grey

Intrusives

- I1 granite
- I2 monzonite

Rhyolite

- R1 brown
- R2 grey
- R3 red

Tuff

- T tuff

cp chalcopyrite
ca calcite
py pyrite
hem hematite
mal malachite

SYMBOLS

- 06907 soil sample
- 36173 silt
- 36320 x rock
- outcrop
- gossan
- talus fan
- trail
- abd. camp
- cat trench

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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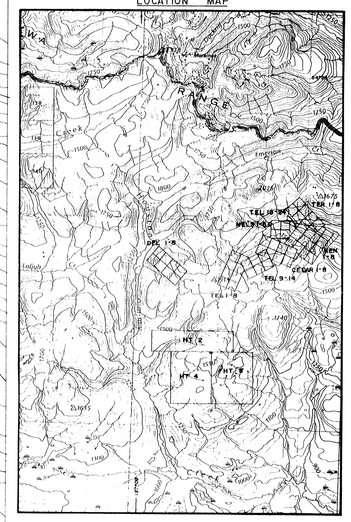
Map Sheet Index

2
1

0 500 1000 metres
SCALE 1 10,000

REVISED	HOUSTON – TOMMY
	HT CLAIMS GEOLOGY AND ROCK SAMPLE LOCATIONS
PROJ. No. 240	SURVEY BY: T.C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S.K.B. SCALE: 1:10,000
DWG. No. FIG. 7	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.

LOCATION MAP



SCALE 1 : 100,000 0 2 4 6 8 Kilometres

LEGEND

SYMBOLS

- 08907 soil sample
- 38173 silt
- 36320 rock
- outcrop
- gossan
- talus fan
- trail
- abd. camp
- cat trench

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,032

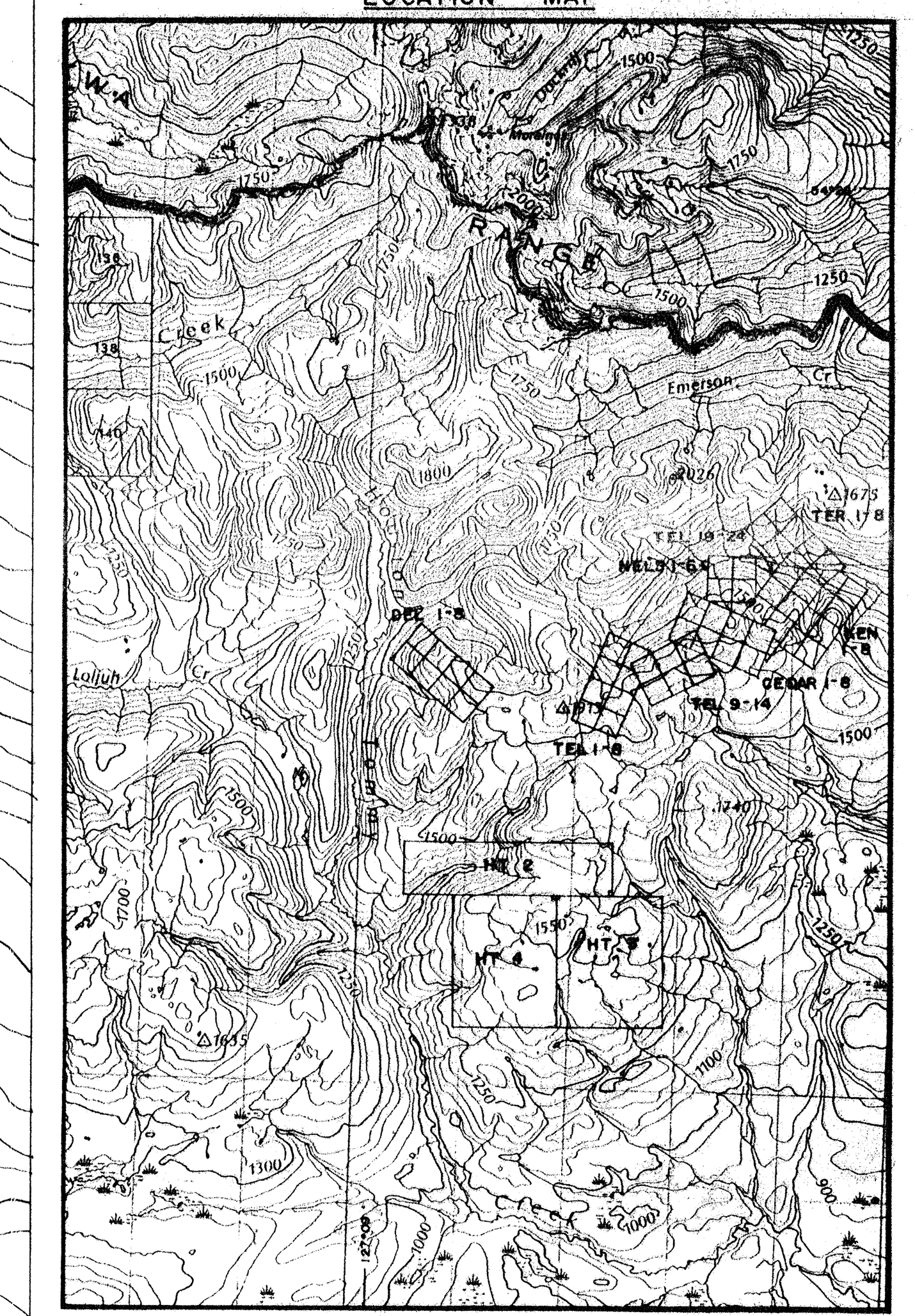
Map Sheet Index

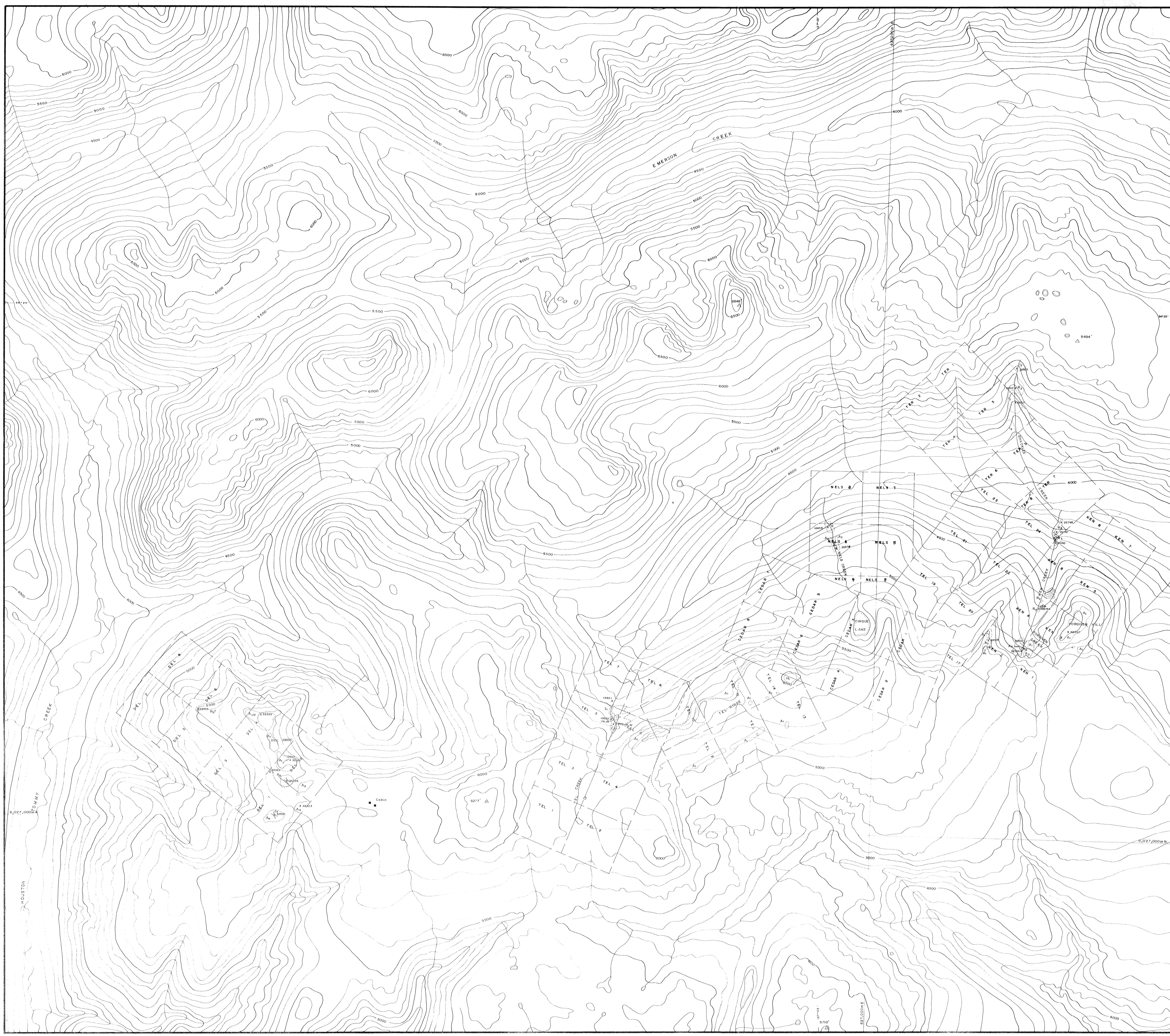
2
1

SCALE 1 : 10,000 0 500 1000 metres

REVISED	HOUSTON - TOMMY
	TEL, KEN, TER, DEL AND NELS CLAIMS
	SILT AND SOIL SAMPLE LOCATIONS
PROJ. No. 240	SURVEY BY: T.C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S.K.B. SCALE: 1 : 10,000
DWG. No. FIG. 8	NORANDA EXPLORATION
	OFFICE PRINCE GEORGE, B.C.

LOCATION MAP





LEGEND

ROCK TYPES

Andesite

- A_1 grey
- A_2 chloritic calcareous
- A_3 gossaned
- A_4 with abundant epidote
- A_5 porphyry
- A_6 chloritic & purple brx
- A_7 brx

Hornfels

- H_1 dark grey

Intrusives

- I_1 granite
- I_2 monzonite

Rhyolite

- R_1 brown
- R_2 grey
- R_3 red

Tuff

- T tuff

- cp chalcopyrite
- ca calcite
- py pyrite
- hem hematite
- mal malachite

SYMBOLS

- 06907 soil sample
- 38173 silt
- 36320 x rock
- outcrop
- gossan
- talus fan
- trail
- abd. camp
- cat trench

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,032

Map Sheet Index

2
1

0 500 1000 metres
SCALE 1 : 10,000

REVISED	HOUSTON - TOMMY
	TEL , KEN , TER , DEL AND NELS CLAIMS GEOLOGY AND ROCK SAMPLE LOCATIONS
PROJ. No. 240	SURVEY BY: T. C. DATE: Aug. 1988
N.T.S. 93L/6	DRAWN BY: S. K. B. SCALE: 1 : 10,000
DWG. No. FIG. 9	NORANDA EXPLORATION OFFICE: PRINCE GEORGE, B.C.