GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL ASSESSMENT REPORT ON THE NOREEN PROPERTY

Vernon Mining Division
NTS 82L/10E
Latitude 50° 40.4' Longitude 118° 41.2'

Owner & Operator:
Teck Corp.
#600,200 Burrard St.
Vancouver , B.C.
V6C 3L9

G.Evans
November 1992
Kamloops, B.C.

TABLE OF CONTENTS

LIST OF FIGURES

APPENDICES

1. INTRODUCTION

During 1992, a program of geological mapping and sampling was carried out over the property with concurrent establishment of a grid used for soil sampling and a magnetometer survey . This work has been compiled at 1:10,000 with widespaced coverage of the entire property .

This property was staked to cover a previously outlined Shuswap style system as part of a larger regional program .

This report describes the present program and results .

2. LOCATION AND ACCESS (Fig.1)

The Noreen 1 claim block is located on the west shore of Mabel Lake approximately eight kilometers north of the community of Kingfisher (82L/10E) 50°40.4'N and 118°41.2' West . The property is 34 kilometers by road east of Enderby and can be accessed by travelling 4 km's along the Kingfisher Main logging road and taking a branch road for a further 2.3 km's to the east . Several old logging roads from this point access the central and northeastern portions of the property .

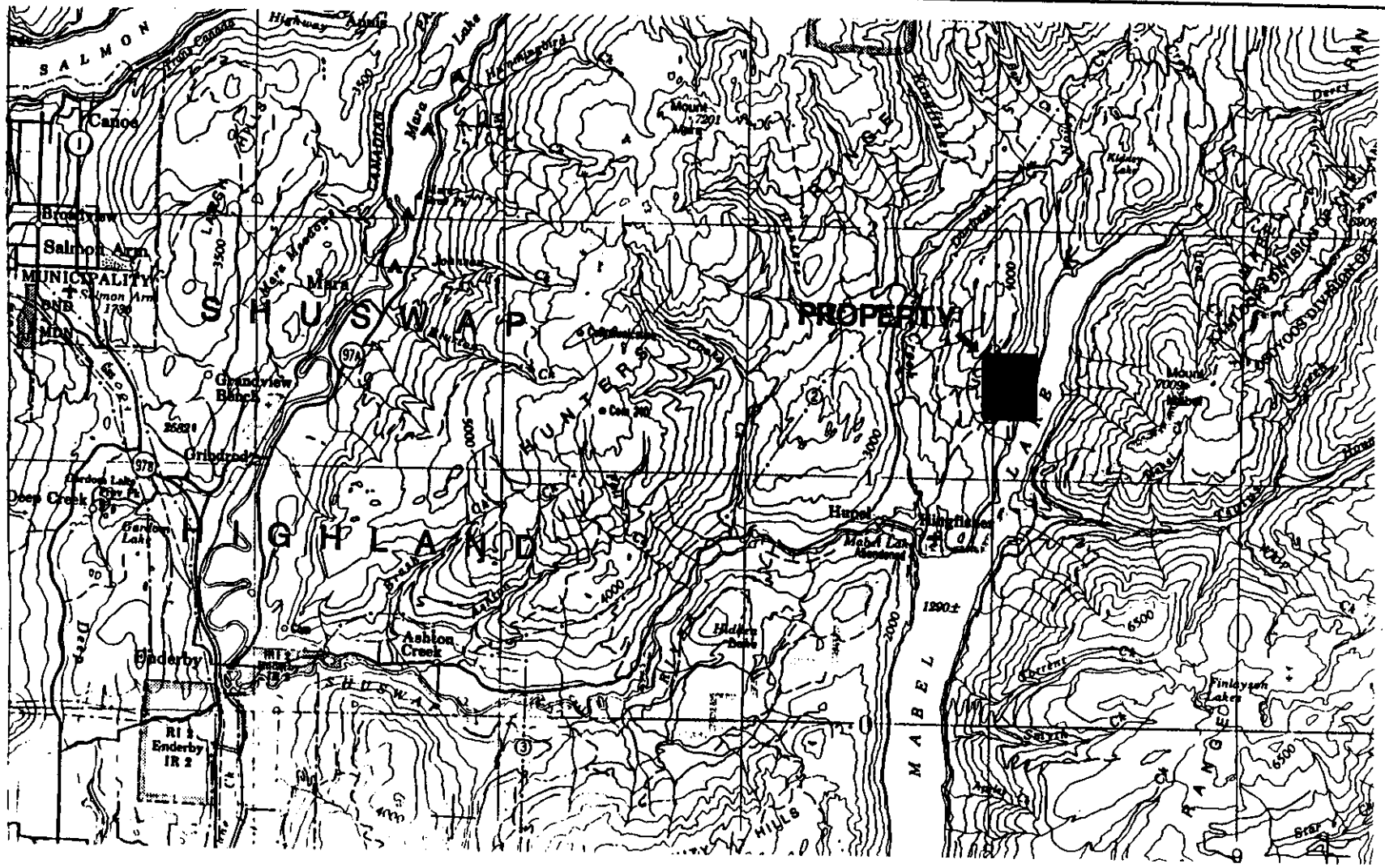
3. TOPOGRAPHY AND VEGETATION

The property is located between the semi-arid Okanagan Valley and wetter conditions of the Monashee mountain range which lies to the east . The eastern portion of the property is located along the steep western shore of Mabel lake at an elevation of approximately 400 meters . The central and western portions of the property are located on a plateau ranging from 600 - 1200 meters in elevation .

Vegetation consists of fir and cedar forest with open underbrush except for devil's club infested creeks . The main land use has been limited logging . Rainfall is moderate in this area which is generally snow covered from November to April.

4. CLAIMS (fig.2)

The Noreen 1 claim block is located in the Vernon Mining Division and consists of 20 contiguous units . The property is owned by Teck Corporation of Vancouver . The record # is 304221 and upon acceptance of this report the new expiry date will be Sept. 04, 1997 .



1:250,000 82/L

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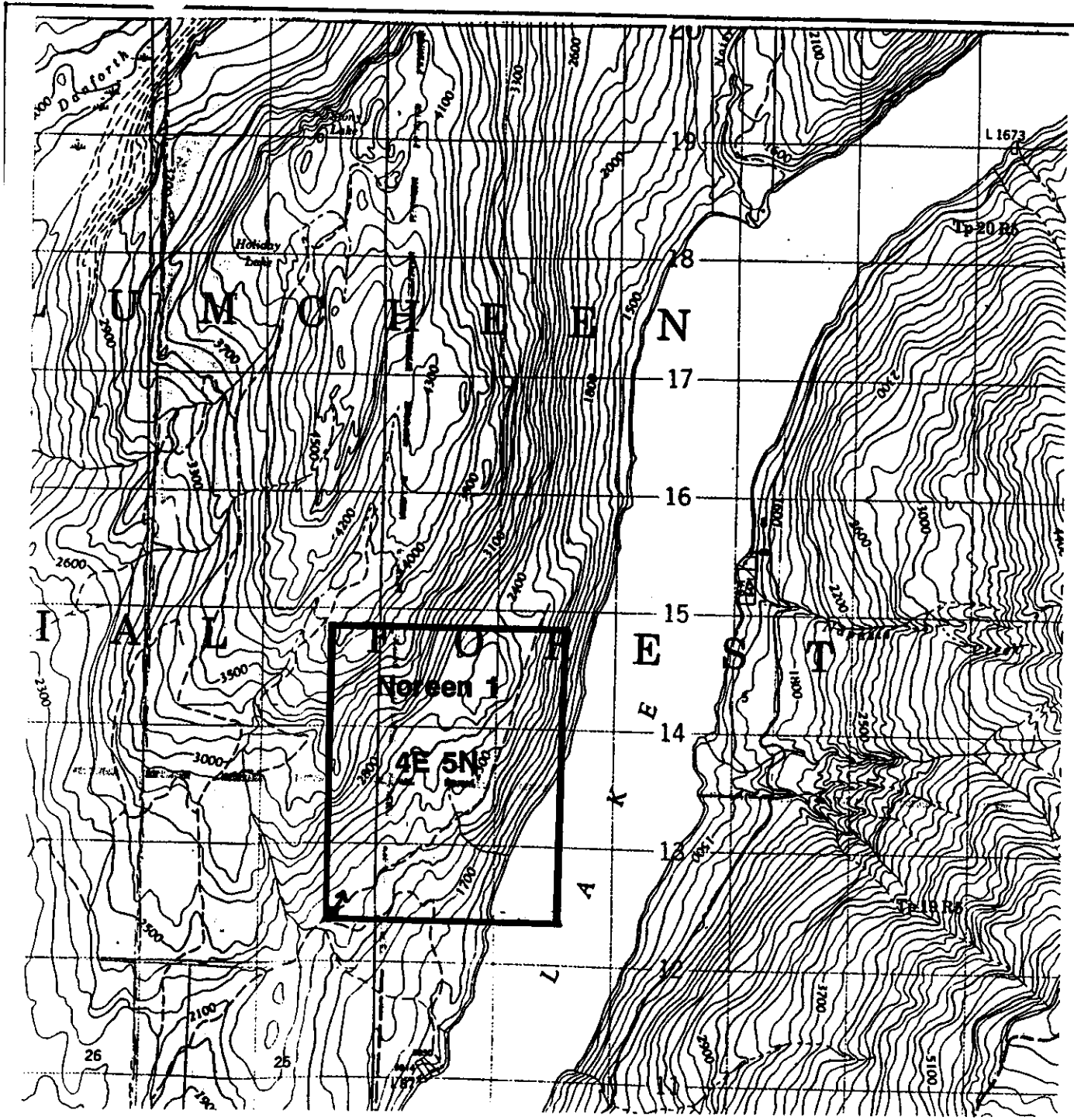
NOREEN PROPERTY

Location Map Fig.1



TECK EXPLORATION LTD.

NOREEN PROPERTY

Claim Map **Fig.2**

5. PREVIOUS WORK and HISTORY

Mineralization was first discovered on the property in 1971 on a regional program directed by K. Daughtry . Prospectors were following up a strong Zn silt anomaly in a small creek and discovered marble boulders carrying low grade Pb-Zn mineralization . The Noreen 1-8 claims were staked on a strong Pb-Zn soil anomaly north of the creek .

In 1973 the property was restaked as the OK 1-8 claims and several excavator trenches and pits were put in to test the soil anomaly . Also the original discovery area was staked as the Rolet 1-6 claims and several pits were excavated in this area . Only narrow mineralized areas were exposed on the Noreen 1-8 claims.

In 1977 the area was again staked by K.L. Daughtry and Associates Ltd. and an airborne magnetic survey was flown over the entire property .

In 1991 the property was staked by Teck Corp. as part of a regional program .

6. 1992 WORK

The following work was completed on the property :

1) Compassed and flagged grid lines spaced 300 meters apart with stations every 25 meters . Total of 13.6 Km's of grid.

2) Soil samples collected every 50 meters along the lines and analyzed for 30 element ICP. Total of 288 soil samples .

3) A magnetometer survey over the grid area with readings taken at 25 meter stations . Total of 13.6 Km's of mag.

4) Geological mapping of the property at 1:10,000 scale . 5 rock samples were taken during the program and analyzed for 30 element ICP.

7. GEOLOGY

a) REGIONAL GEOLOGY

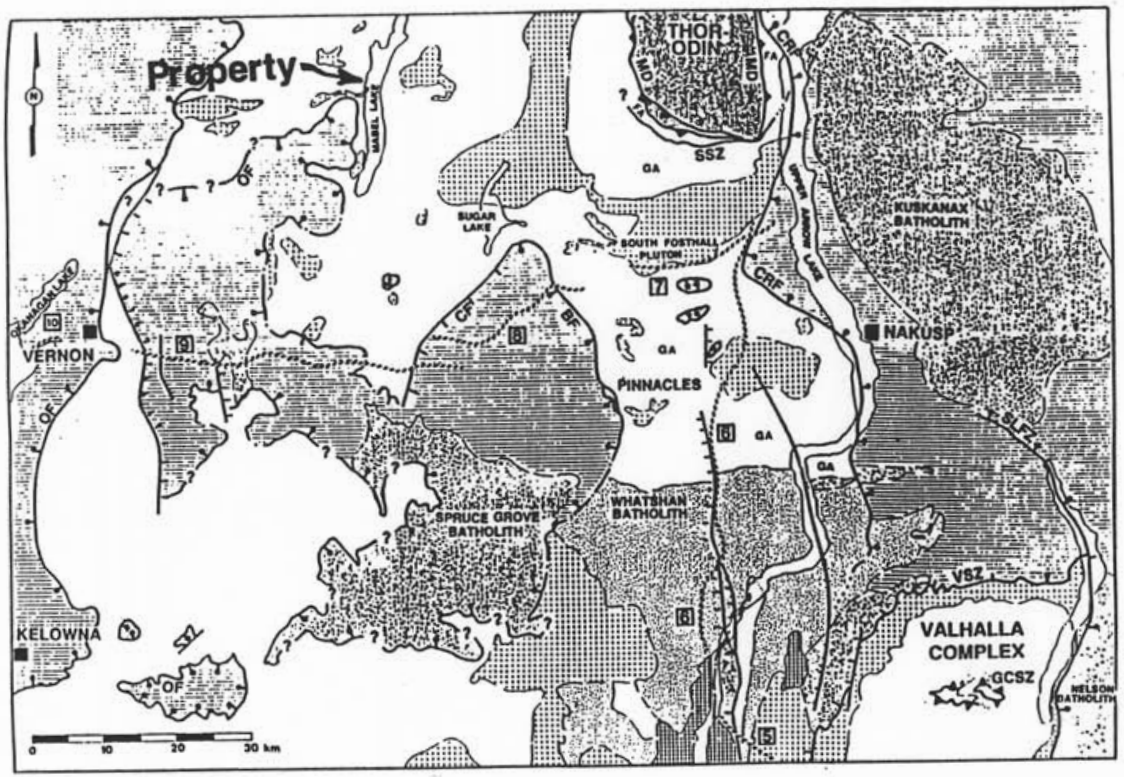
This area has seen relatively little regional mapping with O.F. 637 by Okulitch (1:250,000 scale) providing the foundation . The area is largely underlain by Shuswap metamorphic rocks intruded by Cretaceous - Eocene granodiorites and pegmatites .

The Shuswap metamorphic rocks belong to the Proterozoic - Mesozoic amphibolite grade complex . Ages of the rocks in the area of the property are poorly understood but recent work by B.J. Johnson suggests much of the thick amphibolite sequence correlates to the Proterozoic Horsethief Creek Group . A variety of rocks form a thick overlying sequence consisting of quartzites , marbles , pelites and biotite gneisses in various proportions . These rocks have a complex structural history with at least three phases of folding and several stages of faulting . It is believed the pegmatite dyke swarms and various granodiorite to monzonite intrusives are related to the Eocene Ladybird Pegmatite formed during the unroofing of the complex .

Of particular interest in this area is an extensive marble dominant sequence which contains areas of Pb-Zn-Ag mineralization . The Kingfisher property lies approximately 10 km's to the NW of the Noreen property and has stratabound lenses of massive to disseminated pyrrhotite-sphalerite within the marble quartzite sequence . The Central showing on the property has approx. 1.8 million tons grading 2.6% Zn, 0.6% Pb with minor Ag and Cu. Airphoto work indicates the Kingfisher property occupies the western limb of a large synform with the Noreen property occupying the eastern limb of this same structure . The other area of known mineralization is the Rebar-Sherpa property which is located only three kilometers to the east of the Noreen property . This property has several areas of low grade Zn-Pb mineralization hosted within quartzites in the thick marble package . Again this area is likely structurally related to the Noreen area with a possible antiform with an axial plane along Mabel Lake.

b) PROPERTY GEOLOGY

Greater than 90% of the surface of the Noreen property is covered with overburden so that outcrop is limited to cliff faces and the occasional road cut . Only brief mapping was carried out in the time available and plotted on a 1:10,000 base map .



From Carr 1989

LEGEND

UPPER CRUSTAL ZONE

- MIDDLE JURASSIC NELSON INTRUSIVE SUITE: predominantly granodiorite
- PALEOZOIC - LOWER JURASSIC STRATIFIED ROCKS:

MIDDLE CRUSTAL ZONE

- LATE PALEOCENE - EARLY EOCENE LADYBIRD GRANITE SUITE: biotite granite, quartz monzonite, leucocratic pegmatite (also includes areas with pegmatite with <50% metamorphic rocks
- LATE CRETACEOUS WHATSHAN BATHOLITH (includes Cariboo Creek stock): hornblende biotite bearing K-feldspar megacrystic quartz monzonite, mafic hornblende biotite diorite
- LATE PROTEROZOIC - MESOZOIC AMPHIBOLITE FACIES METAMORPHIC ROCKS: FA = Fawn Lake assemblage; GA = Gold Range assemblage

BASEMENT ZONE

- PROTEROZOIC CRYSTALLINE BASEMENT AND LATE PROTEROZOIC - (?) CAMBRIAN COVER GNEISSES

- GEOLOGIC CONTACT; MAPPED, COMPILED FROM PUBLISHED MAPS, ASSUMED
- LOW - MODERATE ANGLE EOCENE NORMAL FAULT (PEGS ON HANGING WALL)
- STEEP EOCENE NORMAL FAULT (PEGS ON HANGING WALL)
- STEEP EOCENE NORMAL FAULT; SENSE OF DISPLACEMENT UNCERTAIN
- 6 LITHOPROBE LINE

BF	BEAVEN FAULT
CF	CHERRYVILLE FAULT
CRF	COLUMBIA RIVER FAULT
GCSZ	GWILLIM CREEK SHEAR ZONES
MD	MONASHEE DECOLLEMENT
OF	OKANAGAN VALLEY - EAGLE RIVER FAULT SYSTEM
SLFZ	SIOCAN LAKE FAULT ZONE
SSZ	SLATE MOUNTAIN SHEAR ZONE
VSZ	VALKYR SHEAR ZONE

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Regional Geology

Fig.3

The geology consists of amphibolite grade metamorphic rocks that correlate to the sequence of rocks seen on the Kingfisher property . This sequence strikes N-NE with shallow to moderate dips generally to the NW although mesoscopic isoclinal and broad folds complicate and possibly repeat the sequence so that tops evidence and thickness of the sequence are unknown.

The sequence is dominated by biotite schist and quartzites with lesser amounts of marbles , biotite gneisses and only minor amounts of amphibolite . These rocks are interbedded on a 1-10 cm scale in various proportions so that the dominant lithology is plotted on the Geology map . Commonly pegmatite dykes and sills invade all rock types . Large scale structures are difficult to determine due to poor outcrop and poor marker horizons but the magnetic survey , soil anomalies and mineralized float indicates a possible NE trending synform may trace through the central portion of the property with a shallow plunge to the NE .

Commonly biotite schists and quartzites contain trace to 3% disseminated pyrite or pyrrhotite but do not appear to contain base metals . Several pieces of mineralized quartzite and calc-silicate float contain disseminated pyrrhotite with lesser amounts of sphalerite and galena . Of two mineralized float samples collected the best values are 1.06 %Zn and 3.56 % Pb in sample # 27304 . This style of mineralization and the setting is very similar to that at Kingfisher .

SHUSWAP ROCK UNIT DESCRIPTIONS

These units are subdivided into general ages but Shuswap rocks are ordered by lithology with no stratigraphic order:

SHUSWAP ROCKS (Proterozoic - Mesozoic)

Unit 1a) - Masive Amphibolite -A medium-coarse grained groundmass dominated by amphiboles with lesser amounts of biotite and plagioclase . Commonly contains varying amounts of .5-2.0 cm almandine garnets in layered amphibolites .

Unit 1b) - Amphibolite w/ Calc-silicate Laminations - The same amphibolite unit as 1a) with alternating bands of quartzites with diopside - tremolite and actinolite . Laminations generally on a one centimeter scale or less .

Unit 1c) - Amphibolite w/ Biotite Schist - The protolith of this unit is likely a mixture of mafic tuffs and pelitic sediments . The resultant metamorphic rock is a mixture of medium grained amphibolites containing an equal amount of micas (both biotite and muscovite) . This rocktype commonly contains sillimanite aggregates .

Unit 2) - Biotite Schist - Well laminated biotite with lesser muscovite bearing schists . Can contain quartzite laminations and occasionally 0.5 cm. almandine garnets . Commonly the surface is strongly gossanous due to the high iron content and trace amounts of disseminated pyrite and pyrrhotite are present .

Unit 3) - Biotite Gneiss - Matrix is dominated by finely laminated medium grained white - grey quartzite with 20-30% biotite schist laminations varying in thickness from 0.5-10.0 cm.

Unit 4) - Quartzite - Medium grained quartzite grains form beds 10-20 cm. in thickness , which display bedding with preferential weathering of certain beds due to change in grain size and carbonate content . Color varies from white to buff or a grey color . Minor rutile , biotite and muscovite grains are present .

Unit 4a) - Quartzite w/ Flake Graphite - Dull grey colored fine grained quartzite with trace-20% disseminated flake graphite grains . Commonly contains 2 - 10% disseminated pyrite and pyrrhotite with trace amounts of disseminated sphalerite .

Unit 4b) - Quartzite w/ Calcsilicate Laminations - Medium grained quartzite takes on a light green color with diopside in the matrix . Occasional laminations of calcsilicates consisting of diopside, tremolite and actinolite . Calcsilicates contain minor grains of rutile, muscovite and biotite .

Unit 5) - Marble - Marble units normally appear as grey massive weathered units grading to dark grey with increasing graphite component . Calcite grains are 1-3mm and bedding is usually apparent with graphitic beds or minor calcsilicate laminations . Occasionally flake graphite disseminations are present within the marble .

Unit 5a) - Calcsilicates +/- Marble - These rocks are a pale green color with beds and pods of marble preferentially eroded . The calcsilicates consist of impure quartzites containing diopside, amphiboles, biotite with minor rutile and muscovite.

JURRASSIC ROCKS (above Columbia and Okanogan Faults)

Unit 6) - Argillite - Graphitic argillite and phyllite with strong slaty cleavage . Bedding is preserved with interbedded graywackes common .

Unit 6a) - Mafic Volcanics - Pervasive chlorite alteration to various mafic volcanic units with a strong schistosity developed . Remnant textures include laminated tuffs , vesicular flows and lappili tuffs .

TERTIARY LADYBIRD LEUCOGRANITE SUITE

Unit 7) - Pegmatites - Coarse grained dykes sills and small plugs of pegmatites are common throughout all rocktypes . Normally the rock is dominated by 0.5 - 1.0 cm. crystals of quartz, alkali feldspars and plagioclase . Varying lesser amounts of biotite, muscovite and tourmaline are also present.

Unit 7a) - Ladybird Granites - These form fine to medium grained stocks and plutons . Compositionally these rocks range from granite to quartz monzonite . Minerals consist of plagioclase alkali feldspar and quartz with access muscovite biotite and occasionally garnet .

EOCENE DYKES

Unit 8) - Lamprophyre Dykes - Occassional unaltered extremely mafic dykes are present . Matrix is a dark brown fine grained biotite , amphibole and mafic minerals with ocassional vesicles and calcite filled amygdules .

8. SOIL GEOCHEMISTRY (fig.5-9)

Samples were collected along 9 E-W lines every 50 meters for a total of 288 samples . Samples were collected from the B horizon which varied in depth from 25-80 cm's and sample details were noted at each site .

Samples were sent to Echo-Tech Labs Laboratories Ltd. in Kamloops B.C. and were analyzed for the 30 element ICP package . This package includes Zn, Cd, Pb, Ag, Cu, Ni, Ca, Mg, Fe, Mn, Mo, V, Co, Cr, Bi, As, Sb, Ba, Al, K, Na, Sr, Sn, W, La, Y, B, P, Ti, and U. See the appendix #IV for details of the analysis .

Results were put through a preliminary statistical package to determine useful elements which were plotted on the maps included in this report . These include Pb, Zn, Ni, Mn and Ag .

Silver showed incredibly uniform 0.2 ppm values over the entire grid indicating no signifigant anomalies . Pb shows a persistent NE trending anomaly over the entire length of the grid with values greater than the 80th (50ppm) percentile outlining a zone which corresponds to the known float boulder occurences . Zn also outlines this same NE trending anomaly with values in the 200-707 ppm range . Both Pb and Zn outline a weaker but signifigant NE trending anomaly to the west of the main trend (max. values to 102 ppm Pb and 1980 ppm Zn).

Mn and Ni show weaker but signifigant anomalies over these same anomalous target areas . Other elements not plotted but which appear to correspond with the Pb-Zn anomalies include Mg, Fe, V, Cr, and Ba .

9. MAGNETOMETER SURVEY (fig. 10-12)

Previous magnetic surveys have proved quite effective at locating mineralization on the Kingfisher property . In 1992 a Geometrics Model G-816 portable proton magnetometer was used on all grid lines with multiple readings taken at every 25 meter station (Total of 13.6 Km's) . For drift corrections base station points were established and daily and hourly corrections were made where necessary .

Two 1:10,000 plots were made on Geosoft software (Fig.11 line profile and Fig.12 a contour plot) . Both base maps were corrected to a 57,500 gamma baseline as a background level . Several discrete 1000+ gamma anomalies which have not been explained but are likely sulphide occurrences containing pyrrhotite with associated Pb-Zn mineralization .

A broad magnetic high feature (200-700 gamma) trending NE corresponds to the main Pb-Zn anomalies and is likely reflecting sulphide bearing mineralized stratigraphy . This anomaly is quite irregular likely reflecting multiple discrete mineralized horizons and more detailed station readings are required to define discrete mineralized horizons . A second but more erratic NE trending magnetic high feature follows the second Pb-Zn soil anomaly with several spiky (400-500 gamma highs) , again likely reflecting mineralized zones .

10. CONCLUSIONS AND RECOMMENDATIONS

The Noreen property covers a package of mineralized stratigraphy hosting Shuswap type Pb-Zn mineraliztion . This sequence is probably the same stratigraphy hosting mineralization at the nearby Kingfisher and Rebar-Sherpa properties .

The magnetic high anomalies correspond to two NE trending Pb-Zn soil geochemical anomalies and persist across the length of the property . This also corresponds to known mineralized float boulders and is believed to reflect a wide persistent mineralized sequence .

Future work should include trenching several of the co-incident Pb-Zn soil anomalies with a corresponding magnetic anomaly . This will allow an estimate of thickness and tenor of the mineralization . Prior to trenching site specific magnetometer surveys should be run to better define the anomalies on a scale that could be trenched .

11. REFERENCES

K.L. Daughtry	*Report on Aeromagnetic Survey on the Noreen Claim , Assessment Report*
T. Hoy	*FX, FC, Colby (in Lead-Zinc Deposits) BCDM , Geol.Fieldwork, 1974*
B.J. Johnson	*Stratigraphy and Structure of the Shuswap Metamorphic Complex in the Hunters Range, Geological Fieldwork , 1988-1*
A.V. Okulitch	*O.F. # 637 Thompson-Shuswap-Okanagan Stratigraphy and Structure,*

APPENDIX 1

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I , Graeme Evans , do certify that:

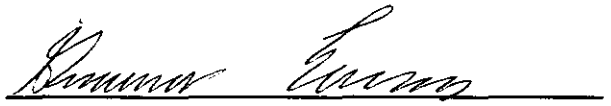
1) I am a geologist and have practiced my profession for the last ten years .

2) I graduated from the University of British Columbia , Vancouver , British Columbia with a Bachelor of Science degree in Geology (1983).

3) I was actively involved and supervised the Noreen program and authored the report herein .

4) All data contained in this report and conclusions drawn from it are true and accurate to the best of my knowledge.

5) I hold no personal interest, direct or indirect in the Noreen property which is the subject of this report .



Graeme Evans
Project Geologist
November , 1992

APENDIX II

Cost Statement

STATEMENT OF EXPENDITURE

1. GEOLOGY	
Fred Daley (Exploration Manager)	
1 Day @ $311.20 /day (July 19)	$ 311.20
Graeme Evans (Project Geologist)	
5 Days @ $261.80 /day (June 8-12)	$1309.00
2. MAGNETOMETER SURVEY	
Hugh Stewart (U.B.C. Eng. Student)	
5 Days @ $191.00 /day (June 8-12)	$ 955.00
Magnetometer Rental	$ 350.00
3. SOIL SURVEY & GRID WORK	
Discovery Consultants Crew (3 Men)	
15 Man Days + Vehicles	$5091.22
4. ANALYTICAL COSTS	
288 Soil Samples for 30 element ICP	
@ Echo-Tech Labs $ 7.28 /sample	$1872.00
5 Rock Samples @ $9.00 /sample	$ 45.00
Field Suplies(Flagging, Topo , Bags etc.)	$ 390.00
5. TRANSPORTATION	
5 Days @ $70 /Day	$ 350.00
6. FOOD & ACCOMMADATION	
11 Man Days @ $ 60/day	$ 660.00
7. PROCESSING DATA & REPORT	
3 Days Magnetic Processing	
H. Stewart @ $ 191.00/day	$ 573.00
Base Map & Soil Compilation	
Steve Archibald 6 days @ $180/day	$ 1080.00
Report Writing & Preparation	
Graeme Evans 4 Days/ $261.80	$ 1047.20
Prints , Copies & Materials	$ 386.38
TOTAL	**$14,420.00**

APENDIX III

Certificate of Analysis

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
00N 0+00E	446	<1	12	<0.2	17	27	0.27	0.58	2.83	193	<1	44	15	39	<5
00N 0+50E	476	<1	48	0.2	15	32	0.26	0.58	2.70	285	<1	44	15	35	<5
00N 1+00E	139	<1	6	<0.2	25	47	0.31	0.98	3.04	247	<1	55	21	65	<5
00N 1+50E	91	<1	6	<0.2	12	30	0.22	0.53	2.41	142	<1	44	15	39	<5
00N 2+00E	77	<1	12	<0.2	14	37	0.25	0.82	2.81	154	<1	57	20	62	5
00N 2+50E	124	<1	8	<0.2	17	38	0.24	0.76	2.92	208	<1	53	20	55	<5
00N 3+00E	147	<1	4	0.2	34	62	0.24	0.59	2.88	360	<1	47	22	49	<5
00N 3+50E	141	<1	6	0.2	17	47	0.27	0.62	2.66	825	<1	43	21	47	<5
00N 4+00E	118	<1	6	<0.2	47	91	0.33	0.91	3.39	335	<1	62	34	77	<5
00N 4+50E	368	<1	60	<0.2	25	43	0.39	0.84	2.75	171	<1	53	20	63	<5
00N 5+00E	317	<1	84	0.2	20	42	0.45	0.52	2.61	263	<1	40	18	39	<5
00N 5+50E	314	<1	14	<0.2	16	40	0.41	0.48	2.37	199	<1	37	15	36	<5
00N 6+00E	194	<1	14	<0.2	19	40	0.41	0.53	2.61	144	<1	39	18	36	<5
00N 6+50E	182	<1	16	<0.2	20	41	0.27	0.48	2.61	251	2	42	19	35	<5
00N 7+00E	209	<1	14	0.2	26	44	0.33	0.68	2.76	232	<1	45	21	45	<5
00N 7+50E	160	<1	12	0.2	56	71	0.59	0.63	3.03	813	<1	38	22	48	<5
00N 8+00E	63	<1	4	<0.2	13	20	0.33	0.66	2.14	192	<1	39	14	40	<5
00N 8+50E	75	<1	6	<0.2	17	24	0.30	0.76	2.84	243	<1	48	17	44	<5
00N 9+00E	107	<1	8	0.2	23	27	0.37	0.31	2.37	174	<1	29	15	16	<5
00N 9+50E	190	<1	24	<0.2	35	60	0.73	0.61	3.05	358	<1	49	19	46	<5
00N 10+00E	117	<1	10	<0.2	26	30	0.65	0.47	2.35	182	<1	38	16	32	<5
00N 10+50E	234	<1	10	<0.2	18	38	0.44	0.44	2.67	266	<1	36	17	28	<5
00N 11+00E	129	<1	12	0.2	23	38	0.42	0.30	2.54	159	<1	31	17	20	<5
00N 11+50E	152	<1	6	0.2	19	38	0.52	0.47	2.67	291	<1	39	16	28	<5
00N 12+00E	119	<1	8	0.2	11	22	0.31	0.25	2.55	423	<1	32	13	17	<5
00N 12+50E	116	<1	4	0.2	9	25	0.94	0.30	2.66	222	<1	34	14	19	<5
00N 13+00E	87	<1	4	0.2	7	24	0.37	0.22	2.03	182	1	26	9	14	<5
03N 0+00E BL	85	<1	6	<0.2	19	58	0.26	0.78	2.67	199	<1	42	21	54	<5
03N 0+50E	104	<1	4	<0.2	23	82	0.39	1.00	3.22	212	<1	54	25	70	5
03N 1+00E	68	<1	2	<0.2	19	45	0.27	0.91	2.99	183	<1	54	23	62	<5
03N 1+50E	89	<1	6	0.2	19	39	0.18	0.53	2.99	191	1	44	21	38	<5
03N 2+00E	109	<1	2	<0.2	33	48	0.27	1.10	3.65	270	<1	67	28	68	<5
03N 2+50E	176	<1	6	0.2	17	30	0.32	0.40	2.89	242	<1	39	18	30	<5
03N 3+00E	118	<1	6	0.2	19	42	0.23	0.64	2.96	253	<1	50	22	41	<5
03N 3+50E	71	<1	4	<0.2	30	43	0.26	0.92	3.20	371	<1	60	24	62	<5
03N 4+00E	103	<1	8	0.2	15	41	0.33	0.43	2.58	201	<1	37	21	31	<5
03N 4+50E	254	<1	6	<0.2	21	51	0.27	0.66	2.75	260	<1	47	19	46	<5
03N 5+00E	520	<1	32	<0.2	14	32	0.22	0.69	2.82	376	<1	50	18	49	<5
03N 5+50E	191	<1	24	0.4	46	77	0.71	0.45	4.04	317	1	54	22	49	<5
03N 6+00E	177	<1	10	0.2	16	29	0.24	0.54	2.57	245	<1	40	16	33	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
00N 0+00E	<5	<5	375	3.02	0.15	0.01	14	<20	<10	10	13	4	1050	0.16	<10
00N 0+50E	<5	<5	655	2.99	0.10	0.01	13	<20	<10	<10	12	6	1600	0.14	<10
00N 1+00E	<5	<5	375	2.50	0.23	<0.01	14	<20	<10	10	16	6	780	0.21	<10
00N 1+50E	5	<5	200	1.96	0.10	0.01	12	<20	<10	<10	12	4	180	0.16	<10
00N 2+00E	<5	5	145	2.30	0.14	<0.01	13	<20	30	<10	15	6	100	0.21	<10
00N 2+50E	<5	<5	265	2.71	0.24	0.01	15	<20	<10	<10	16	6	670	0.22	<10
00N 3+00E	<5	<5	315	3.21	0.13	0.01	13	<20	<10	<10	15	6	2060	0.21	<10
00N 3+50E	5	<5	345	2.60	0.23	0.01	18	<20	<10	<10	15	6	1280	0.21	<10
00N 4+00E	<5	<5	340	2.59	0.25	0.01	17	<20	<10	<10	19	6	710	0.27	<10
00N 4+50E	<5	<5	325	1.77	0.39	0.01	15	<20	<10	10	20	6	490	0.24	<10
00N 5+00E	<5	<5	565	2.84	0.18	0.01	18	<20	<10	<10	15	6	1220	0.18	<10
00N 5+50E	<5	<5	535	2.45	0.14	0.01	18	<20	<10	<10	13	6	710	0.16	<10
00N 6+00E	<5	<5	430	3.35	0.17	0.01	17	<20	<10	10	18	8	980	0.19	<10
00N 6+50E	<5	<5	405	3.68	0.16	0.01	15	<20	30	10	18	8	1690	0.21	<10
00N 7+00E	<5	5	420	3.15	0.20	0.01	16	<20	<10	10	19	6	1500	0.21	<10
00N 7+50E	<5	5	380	2.74	0.21	0.02	31	<20	<10	10	24	6	620	0.17	<10
00N 8+00E	<5	<5	220	1.54	0.26	0.01	15	<20	<10	10	13	6	390	0.16	<10
00N 8+50E	5	<5	265	2.17	0.33	0.01	17	<20	<10	10	15	6	430	0.18	<10
00N 9+00E	<5	<5	250	4.37	0.09	0.01	20	<20	<10	10	23	8	1830	0.17	<10
00N 9+50E	<5	<5	375	2.95	0.23	0.02	35	<20	<10	10	19	6	360	0.18	<10
00N 10+00E	<5	<5	520	2.97	0.16	0.02	31	<20	<10	10	16	6	1160	0.16	<10
00N 10+50E	<5	<5	470	3.35	0.14	0.02	25	<20	<10	<10	14	8	2140	0.18	<10
00N 11+00E	5	<5	310	4.37	0.08	0.02	26	<20	<10	10	18	8	1380	0.17	<10
00N 11+50E	<5	<5	575	4.45	0.15	0.02	30	<20	<10	<10	15	8	1930	0.19	<10
00N 12+00E	<5	<5	315	3.48	0.10	0.01	18	<20	<10	<10	14	8	2280	0.19	<10
00N 12+50E	<5	<5	310	4.47	0.10	0.01	36	<20	<10	<10	13	8	3100	0.18	<10
00N 13+00E	<5	<5	280	4.31	0.08	0.01	17	<20	<10	<10	14	6	2380	0.17	<10
03N 0+00E BL	<5	<5	220	2.69	0.25	0.01	19	<20	<10	<10	15	6	380	0.19	<10
03N 0+50E	<5	5	195	2.90	0.32	0.01	19	<20	<10	<10	19	6	320	0.26	<10
03N 1+00E	<5	<5	175	2.18	0.40	<0.01	16	<20	<10	<10	17	6	280	0.25	<10
03N 1+50E	<5	<5	240	4.22	0.25	0.01	15	<20	<10	<10	20	8	1010	0.25	<10
03N 2+00E	5	5	245	2.56	0.43	<0.01	24	<20	<10	<10	20	6	610	0.29	<10
03N 2+50E	<5	<5	240	4.10	0.16	0.01	19	<20	<10	<10	17	8	2370	0.22	<10
03N 3+00E	<5	<5	375	3.27	0.26	0.01	17	<20	<10	<10	18	6	710	0.24	<10
03N 3+50E	<5	<5	225	2.16	0.42	0.01	15	<20	<10	<10	17	6	400	0.24	<10
03N 4+00E	<5	<5	270	3.92	0.18	0.01	18	<20	<10	10	21	6	1050	0.22	<10
03N 4+50E	<5	<5	575	2.90	0.31	0.01	19	<20	<10	10	19	4	590	0.21	<10
03N 5+00E	<5	<5	625	2.67	0.25	0.01	11	<20	<10	<10	16	4	980	0.22	<10
03N 5+50E	5	<5	975	6.64	0.17	0.01	55	<20	<10	20	31	6	1850	0.23	<10
03N 6+00E	5	<5	555	3.74	0.20	0.01	14	<20	<10	<10	18	8	1480	0.22	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
03N 6+50E	245	<1	18	<0.2	11	23	0.24	0.49	2.19	274	<1	35	13	32	<5
03N 7+00E	124	<1	10	<0.2	21	35	0.45	0.68	2.90	168	<1	50	19	48	<5
03N 7+50E	118	<1	8	<0.2	18	29	0.41	0.51	2.46	165	<1	38	14	33	<5
03N 8+00E	325	<1	32	0.2	36	62	0.64	0.55	3.24	933	<1	44	18	43	<5
03N 8+50E	238	<1	16	0.2	15	35	0.40	0.56	2.70	434	<1	41	18	40	<5
03N 9+00E	207	<1	10	<0.2	26	28	0.63	0.37	2.95	181	<1	36	15	27	<5
03N 9+50E	175	<1	16	0.4	20	35	0.31	0.47	2.80	202	<1	42	17	32	<5
03N 10+00E	149	<1	14	0.2	18	39	0.24	0.46	2.72	243	<1	43	17	31	<5
03N 10+50E	89	<1	6	<0.2	29	40	0.66	0.59	2.76	204	<1	42	18	33	<5
03N 11+00E	75	<1	4	<0.2	29	49	0.74	0.53	2.87	270	<1	39	21	32	<5
03N 11+50E	131	<1	6	<0.2	50	63	0.75	0.73	3.69	476	<1	55	25	46	<5
03N 12+00E	114	<1	10	0.2	27	38	0.66	0.60	2.77	358	<1	40	18	29	<5
03N 12+50E	121	<1	24	0.2	33	43	0.55	0.36	2.70	209	6	37	20	25	10
03N 13+00E	114	<1	10	<0.2	40	48	0.89	0.65	2.95	213	<1	41	21	32	<5
06N 0+00E	114	<1	6	0.2	40	51	1.29	1.55	3.56	278	<1	48	23	33	<5
06N 0+50E	63	<1	2	0.2	34	47	2.78	0.21	3.08	160	1	19	20	9	<5
06N 1+00E	97	<1	4	<0.2	39	70	0.35	1.21	3.59	247	<1	65	29	83	<5
06N 1+50E	201	<1	14	0.2	83	173	0.83	0.97	3.89	736	<1	53	25	84	<5
06N 2+00E	45	<1	2	0.2	15	42	0.52	0.53	2.06	225	<1	30	11	39	<5
06N 2+50E	127	<1	6	0.4	28	92	0.80	0.48	2.77	380	<1	33	17	40	<5
06N 3+00E	79	<1	2	<0.2	11	24	0.33	0.47	1.98	210	<1	32	13	26	<5
06N 3+50E	79	<1	4	<0.2	23	38	0.49	0.51	2.66	222	<1	39	19	30	<5
06N 4+00E	76	<1	2	<0.2	29	44	0.71	0.56	2.78	168	<1	40	18	33	<5
06N 4+50E	118	<1	4	0.2	36	46	0.77	0.63	2.71	141	<1	42	15	52	<5
06N 5+00E	96	<1	4	0.2	19	38	0.47	0.79	3.28	164	<1	58	21	50	<5
06N 5+50E	39	1	4	0.2	31	37	0.59	0.20	2.00	125	<1	23	8	25	<5
06N 6+00E	74	<1	6	<0.2	58	68	0.87	1.03	3.42	300	<1	61	29	94	<5
06N 6+50E	80	<1	8	0.2	31	78	0.61	0.76	3.13	392	<1	51	27	72	<5
06N 7+00E	148	1	6	0.2	38	89	0.62	0.87	3.52	653	1	72	31	82	<5
06N 7+50E	109	<1	6	0.2	31	72	0.48	0.71	2.87	305	<1	48	25	66	<5
06N 8+00E	111	<1	8	0.4	50	58	0.44	0.36	2.82	154	<1	41	17	37	<5
06N 8+50E	131	<1	12	0.2	43	49	0.41	0.63	2.86	193	<1	49	23	36	<5
06N 9+00E	85	<1	4	<0.2	50	55	0.45	0.85	3.03	194	<1	57	27	51	<5
06N 9+50E	268	<1	44	0.2	20	44	0.32	0.49	3.00	341	<1	43	19	33	<5
06N 10+00E	169	<1	32	<0.2	8	14	0.37	0.54	1.92	157	<1	34	11	29	<5
06N 10+50E	390	<1	68	<0.2	13	23	0.56	0.52	2.38	523	<1	37	15	30	<5
06N 11+00E	205	<1	36	<0.2	22	45	0.73	0.63	2.94	208	<1	40	20	31	<5
06N 11+50E	174	<1	28	0.2	23	42	0.55	0.58	3.22	279	<1	44	19	27	<5
06N 12+00E	218	<1	16	0.2	21	27	0.73	0.48	7.78	1741	1	38	18	25	5
06N 12+50E	366	<1	44	<0.2	32	47	1.06	0.93	3.56	271	<1	54	22	40	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
03N 6+50E	<5	<5	450	2.26	0.16	0.01	12	<20	<10	<10	12	6	1110	0.15	<10
03N 7+00E	5	5	360	3.18	0.22	0.01	28	<20	<10	10	18	6	570	0.21	<10
03N 7+50E	<5	<5	250	2.82	0.13	0.01	22	<20	<10	10	14	6	1320	0.14	<10
03N 8+00E	5	<5	500	3.54	0.19	0.02	48	<20	<10	10	19	6	320	0.18	<10
03N 8+50E	<5	5	350	3.07	0.21	0.01	18	<20	<10	<10	15	6	2130	0.20	<10
03N 9+00E	5	<5	210	3.55	0.11	0.01	24	<20	<10	<10	13	8	3390	0.17	<10
03N 9+50E	10	<5	415	4.31	0.15	0.01	16	<20	<10	10	19	6	1670	0.21	<10
03N 10+00E	5	<5	410	3.38	0.14	0.01	16	<20	20	<10	14	8	1320	0.18	<10
03N 10+50E	5	<5	390	2.93	0.20	0.03	42	<20	<10	10	15	6	1070	0.14	<10
03N 11+00E	5	<5	216	3.27	0.17	0.03	49	<20	<10	10	16	2	1022	0.15	<10
03N 11+50E	15	5	445	3.29	0.22	0.03	49	<20	<10	10	17	6	1700	0.21	<10
03N 12+00E	5	<5	355	3.22	0.18	0.03	40	<20	<10	10	16	6	1550	0.17	<10
03N 12+50E	<5	<5	200	3.28	0.09	0.02	28	<20	30	10	16	10	1200	0.16	<10
03N 13+00E	5	<5	535	3.61	0.22	0.04	61	<20	<10	10	16	8	1300	0.17	<10
06N 0+00E	<5	5	400	4.87	0.27	0.06	84	<20	<10	10	22	10	1740	0.22	<10
06N 0+50E	<5	<5	130	4.65	0.08	0.16	205	<20	<10	20	12	12	2820	0.06	<10
06N 1+00E	5	5	230	2.83	0.46	0.01	21	<20	<10	<10	19	6	560	0.27	<10
06N 1+50E	5	<5	335	3.94	0.37	0.02	44	<20	<10	20	41	6	250	0.20	<10
06N 2+00E	<5	<5	175	2.19	0.18	0.01	34	<20	<10	10	14	6	330	0.12	<10
06N 2+50E	<5	<5	335	4.08	0.20	0.01	61	<20	<10	10	22	8	490	0.17	<10
06N 3+00E	<5	<5	250	2.36	0.14	0.01	23	<20	<10	<10	11	6	930	0.13	<10
06N 3+50E	5	<5	205	3.07	0.16	0.02	38	<20	<10	10	13	6	1110	0.15	<10
06N 4+00E	<5	<5	215	3.08	0.16	0.03	54	<20	<10	10	16	8	710	0.15	<10
06N 4+50E	<5	<5	335	2.59	0.34	0.02	45	<20	<10	<10	20	8	480	0.23	<10
06N 5+00E	5	<5	250	3.11	0.24	0.01	24	<20	<10	<10	17	6	1120	0.19	<10
06N 5+50E	<5	<5	215	3.05	0.05	0.01	34	<20	<10	10	18	6	780	0.12	<10
06N 6+00E	<5	5	215	2.53	0.49	0.03	52	<20	<10	10	23	8	1660	0.28	<10
06N 6+50E	<5	<5	385	3.35	0.34	0.02	45	<20	<10	<10	21	8	930	0.28	<10
06N 7+00E	<5	<5	545	3.32	0.37	0.02	35	<20	<10	<10	23	6	2080	0.32	<10
06N 7+50E	5	<5	295	3.21	0.29	0.02	31	<20	<10	<10	21	8	1680	0.27	<10
06N 8+00E	10	<5	445	4.94	0.13	0.02	28	<20	<10	10	23	6	2480	0.21	<10
06N 8+50E	5	<5	390	2.94	0.22	0.01	17	<20	<10	10	23	6	1720	0.25	<10
06N 9+00E	5	<5	365	2.42	0.36	0.01	19	<20	<10	10	22	6	1180	0.26	<10
06N 9+50E	5	<5	445	4.13	0.19	0.01	14	<20	<10	<10	20	8	2460	0.24	<10
06N 10+00E	<5	5	615	1.66	0.22	0.01	13	<20	<10	10	11	6	800	0.12	<10
06N 10+50E	<5	<5	690	2.78	0.19	0.02	22	<20	<10	10	20	8	1060	0.18	<10
06N 11+00E	15	<5	470	3.74	0.17	0.04	37	<20	<10	10	20	2	1740	0.18	<10
06N 11+50E	10	<5	405	4.02	0.16	0.03	32	<20	<10	10	19	2	1540	0.20	<10
06N 12+00E	30	<5	835	3.78	0.20	0.02	39	<20	<10	10	19	2	1080	0.19	<10
06N 12+50E	15	<5	950	3.98	0.25	0.04	49	<20	<10	10	23	2	1290	0.22	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
06N 13+00E	174	<1	18	0.2	18	34	0.52	0.54	2.73	311	<1	40	17	31	<5
09N 0+00E	120	<1	6	0.2	11	40	0.33	0.52	2.72	257	<1	45	18	31	<5
09N 0+50E	56	<1	2	<0.2	16	20	0.38	0.65	2.30	346	<1	42	16	43	<5
09N 1+00E	179	<1	8	0.2	24	40	0.67	0.63	2.72	276	<1	42	19	36	<5
09N 1+50E	119	<1	12	0.2	11	17	2.23	1.41	1.81	379	3	28	10	19	<5
09N 2+00E	957	1	38	0.2	6	19	0.83	0.66	1.92	180	<1	24	9	15	<5
09N 2+50E	1980	2	102	<0.2	37	72	1.35	1.80	4.93	497	<1	87	35	136	5
09N 3+00E	158	<1	8	0.2	15	44	0.45	0.76	3.35	260	<1	41	20	38	<5
09N 3+50E	409	1	10	0.2	38	81	1.13	0.79	3.20	578	<1	42	21	60	<5
09N 4+00E	267	<1	12	0.2	8	17	0.38	0.30	2.05	525	<1	25	11	19	<5
09N 4+50E	148	1	12	0.2	13	28	0.59	0.34	2.29	154	<1	31	12	26	<5
09N 5+00E	70	<1	4	0.2	23	48	0.75	0.49	2.45	490	<1	32	15	34	<5
09N 5+50E	102	<1	6	<0.2	13	32	0.28	0.48	2.43	373	<1	36	15	31	<5
09N 6+00E	83	<1	6	<0.2	48	144	0.39	0.97	3.65	312	<1	53	36	76	<5
09N 6+50E	101	<1	8	<0.2	42	57	0.37	0.94	4.07	380	<1	67	28	63	<5
09N 7+00E	114	<1	8	0.2	28	57	0.32	0.53	3.35	480	<1	50	25	40	<5
09N 7+50E	113	<1	8	0.2	23	58	0.38	0.69	3.13	275	1	51	23	52	<5
09N 8+00E	148	<1	8	0.2	42	66	0.45	0.77	3.52	304	<1	65	27	67	<5
09N 8+50E	363	<1	48	0.2	30	93	1.04	0.55	3.71	242	<1	51	31	53	<5
09N 9+00E	132	<1	10	0.2	26	83	0.40	0.53	3.01	376	<1	51	26	44	<5
09N 9+50E	120	<1	10	0.2	28	53	0.41	0.70	3.14	210	<1	51	24	55	<5
09N 10+00E	102	<1	8	<0.2	30	59	0.41	0.98	3.11	441	<1	56	26	72	5
09N 10+50E	106	<1	10	0.2	46	49	0.43	0.72	3.34	242	<1	54	24	50	<5
09N 11+00E	107	<1	16	<0.2	34	36	0.56	0.53	2.63	217	<1	41	17	33	<5
09N 11+50E	381	<1	56	<0.2	19	29	0.67	0.36	2.29	204	2	35	15	26	<5
09N 12+00E	444	<1	56	<0.2	17	23	0.64	0.55	2.55	387	<1	42	17	32	<5
09N 12+50E	438	<1	56	<0.2	18	36	0.68	0.57	2.89	269	<1	41	19	31	<5
09N 13+00E	164	<1	38	<0.2	23	34	0.72	0.63	2.83	243	<1	43	18	34	<5
09N 13+50E	137	<1	26	<0.2	22	41	0.77	0.57	2.80	336	<1	39	19	31	<5
12N 0+00E	68	<1	8	<0.2	21	25	0.24	0.63	2.81	190	<1	47	16	39	<5
12N 0+50E	121	<1	12	0.2	18	29	0.67	0.33	3.24	765	<1	39	19	25	<5
12N 1+00E	87	<1	14	<0.2	22	45	0.84	0.43	3.41	321	<1	45	25	34	<5
12N 1+50E	96	<1	10	<0.2	40	56	0.63	0.80	4.00	532	<1	68	30	58	5
12N 2+00E	144	<1	8	<0.2	29	81	0.54	0.79	3.68	516	<1	60	32	56	5
12N 2+50E	154	<1	12	<0.2	32	66	0.63	0.83	4.00	317	<1	65	31	50	5
12N 3+00E	162	<1	10	<0.2	16	45	1.06	0.93	3.23	314	1	55	24	45	<5
12N 3+50E	310	<1	26	<0.2	16	33	0.51	0.65	2.89	293	<1	40	16	25	<5
12N 4+00E	116	<1	8	<0.2	11	32	0.28	0.80	3.29	380	<1	52	20	41	<5
12N 4+50E	188	<1	10	0.4	14	42	0.31	0.30	2.05	186	<1	27	13	16	<5
12N 5+00E	405	1	14	<0.2	16	33	0.27	0.56	2.81	433	1	45	16	31	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
06N 13+00E	5	<5	415	3.48	0.20	0.02	26	<20	<10	10	19	2	1570	0.20	<10
09N 0+00E	<5	<5	540	3.35	0.33	0.01	23	<20	<10	10	22	2	820	0.27	<10
09N 0+50E	5	<5	155	1.73	0.40	0.02	24	<20	<10	10	18	<2	420	0.19	<10
09N 1+00E	<5	5	235	3.80	0.32	0.03	65	<20	<10	20	28	2	1400	0.22	<10
09N 1+50E	<5	5	285	3.16	0.15	0.02	35	<20	20	10	19	6	1640	0.15	<10
09N 2+00E	<5	<5	1720	2.86	0.15	0.02	31	<20	<10	<10	10	2	2870	0.09	<10
09N 2+50E	5	5	425	3.32	0.72	0.01	68	<20	<10	20	73	<2	1360	0.47	<10
09N 3+00E	5	<5	445	3.75	0.43	0.01	29	<20	<10	10	18	2	770	0.20	<10
09N 3+50E	<5	<5	555	3.73	0.28	0.02	62	<20	<10	20	28	2	420	0.21	<10
09N 4+00E	5	<5	510	3.47	0.11	0.02	18	<20	<10	10	16	2	3850	0.16	<10
09N 4+50E	<5	<5	350	3.91	0.09	0.02	28	<20	20	10	18	2	940	0.17	<10
09N 5+00E	<5	<5	470	3.08	0.15	0.02	34	<20	<10	10	18	2	310	0.15	<10
09N 5+50E	5	<5	300	3.09	0.15	0.01	21	<20	<10	10	15	2	1180	0.16	<10
09N 6+00E	5	<5	245	3.15	0.33	0.02	28	<20	<10	10	22	<2	760	0.25	<10
09N 6+50E	<5	<5	390	4.15	0.29	0.01	35	<20	<10	10	21	<2	1040	0.27	<10
09N 7+00E	15	<5	275	4.47	0.25	0.02	29	<20	<10	10	22	2	1440	0.28	<10
09N 7+50E	<5	<5	385	4.32	0.25	0.02	25	<20	<10	10	25	2	1750	0.27	<10
09N 8+00E	<5	<5	340	4.43	0.26	0.02	23	<20	<10	10	24	2	2400	0.27	<10
09N 8+50E	5	<5	405	5.10	0.21	0.03	38	<20	<10	20	26	2	4250	0.22	<10
09N 9+00E	10	<5	440	3.68	0.19	0.02	21	<20	<10	10	20	2	2630	0.23	<10
09N 9+50E	5	<5	335	3.62	0.18	0.02	16	<20	<10	10	23	<2	2360	0.27	<10
09N 10+00E	10	5	370	2.69	0.33	0.02	18	<20	<10	10	23	<2	1210	0.29	<10
09N 10+50E	10	<5	275	4.11	0.21	0.02	26	<20	<10	10	22	2	1360	0.24	<10
09N 11+00E	<5	<5	270	3.22	0.13	0.02	33	<20	<10	10	16	2	1240	0.15	<10
09N 11+50E	<5	<5	520	2.68	0.11	0.03	35	<20	<10	10	12	2	1090	0.13	<10
09N 12+00E	5	<5	825	3.10	0.21	0.03	31	<20	<10	10	16	<2	1140	0.18	<10
09N 12+50E	5	<5	495	3.29	0.18	0.03	33	<20	<10	10	17	<2	990	0.18	<10
09N 13+00E	5	<5	395	3.16	0.24	0.03	34	<20	<10	10	18	<2	1120	0.18	<10
09N 13+50E	10	<5	375	3.17	0.20	0.04	38	<20	<10	10	18	2	1260	0.18	<10
12N 0+00E	5	<5	170	2.72	0.14	0.01	18	<20	<10	10	17	<2	730	0.18	<10
12N 0+50E	<5	<5	260	4.70	0.14	0.03	54	<20	<10	10	20	2	940	0.20	<10
12N 1+00E	5	<5	210	5.59	0.20	0.03	96	<20	<10	10	19	2	860	0.20	<10
12N 1+50E	5	<5	245	5.10	0.38	0.02	58	<20	<10	10	28	<2	1190	0.32	<10
12N 2+00E	5	<5	435	4.18	0.48	0.02	59	<20	<10	10	23	2	1380	0.31	<10
12N 2+50E	5	<5	310	3.73	0.36	0.03	53	<20	<10	10	20	2	850	0.25	<10
12N 3+00E	10	5	375	3.99	0.36	0.05	46	<20	<10	10	19	4	1140	0.24	<10
12N 3+50E	5	<5	585	4.04	0.22	0.02	27	<20	<10	10	18	2	2990	0.21	<10
12N 4+00E	5	5	315	2.79	0.44	0.01	17	<20	<10	10	15	<2	440	0.19	<10
12N 4+50E	5	<5	285	3.73	0.15	0.02	23	<20	<10	10	23	2	1850	0.21	<10
12N 5+00E	10	5	650	3.90	0.17	0.01	14	<20	<10	10	18	2	3940	0.19	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
12N 5+50E	207	<1	28	<0.2	17	24	0.35	0.55	2.56	223	<1	41	15	32	<5
12N 6+00E	76	<1	8	0.2	13	19	0.47	0.40	2.16	533	<1	33	12	25	<5
12N 6+50E	159	<1	8	<0.2	12	40	0.44	0.52	2.66	523	<1	37	16	35	<5
12N 7+00E	95	<1	10	<0.2	23	57	0.37	0.41	2.85	348	<1	37	19	35	<5
12N 7+50E	62	<1	6	<0.2	27	65	0.41	1.10	3.40	253	<1	60	27	84	<5
12N 8+00E	100	<1	14	<0.2	14	36	0.51	0.29	2.49	357	<1	33	15	23	<5
12N 8+50E	97	<1	12	<0.2	37	117	1.07	0.78	3.77	350	1	45	24	71	<5
12N 9+00E	103	<1	8	0.2	35	74	0.48	0.85	3.41	280	<1	57	27	72	<5
12N 9+50E	179	<1	8	<0.2	34	94	0.38	1.07	3.45	544	<1	62	31	96	<5
12N 10+00E	111	<1	8	<0.2	35	58	0.39	0.60	3.00	343	<1	49	24	49	<5
12N 10+50E	139	<1	12	0.2	15	33	0.28	0.21	2.60	185	<1	31	18	22	<5
12N 11+00E	81	1	8	0.4	111	65	2.66	0.45	2.54	1375	1	43	15	43	<5
12N 11+50E	295	<1	30	<0.2	14	27	0.32	0.33	2.33	591	6	40	15	26	<5
12N 12+00E	225	<1	36	<0.2	23	42	0.60	0.49	2.95	250	<1	40	20	29	<5
12N 12+50E	362	<1	58	<0.2	17	40	0.46	0.45	2.81	340	<1	41	19	31	<5
12N 13+00E	127	<1	52	<0.2	22	33	0.76	0.81	2.67	268	<1	47	20	43	<5
12N 13+50E	274	<1	42	<0.2	14	39	0.27	0.48	2.98	270	<1	44	17	31	<5
12N 14+00E	264	<1	122	<0.2	20	34	0.48	0.48	3.02	412	<1	43	20	30	<5
12N 14+50E	176	<1	20	0.2	19	38	0.40	0.33	2.82	282	<1	37	17	22	<5
12N 15+00E	196	<1	22	<0.2	18	35	0.57	0.47	2.97	317	<1	43	18	29	<5
15N 0+00E BL	109	<1	14	<0.2	27	31	0.21	0.87	4.32	602	<1	69	20	59	5
15N 0+50E	100	<1	14	0.2	26	44	0.17	0.70	3.88	315	1	57	25	45	5
15N 1+00E	110	<1	12	<0.2	102	69	1.22	0.84	3.88	584	<1	72	42	65	<5
15N 1+50E	90	<1	10	<0.2	15	22	0.31	0.57	2.70	475	<1	45	15	35	<5
15N 2+00E	108	<1	14	<0.2	26	40	1.18	0.47	3.74	695	<1	42	25	32	<5
15N 2+50E	130	<1	10	0.2	13	22	0.23	0.27	2.33	605	<1	31	13	21	<5
15N 3+00E	73	<1	10	<0.2	47	72	0.72	0.64	3.04	207	<1	47	31	46	<5
15N 3+50E	86	<1	12	<0.2	34	31	1.51	1.26	3.11	553	<1	47	19	46	<5
15N 4+00E	84	<1	6	<0.2	19	29	0.31	0.76	2.86	204	<1	54	19	47	<5
15N 4+50E	100	<1	16	<0.2	15	31	0.23	0.96	4.13	405	1	67	25	53	10
15N 5+00E	177	<1	20	<0.2	15	24	1.25	0.84	2.10	223	<1	35	15	33	5
15N 5+50E	138	<1	14	<0.2	17	34	0.34	0.43	2.56	256	<1	37	18	27	<5
15N 6+00E	278	1	12	0.4	93	105	1.00	1.11	5.61	989	1	82	28	88	<5
15N 6+50E	127	<1	4	<0.2	19	25	0.20	0.51	2.28	231	<1	36	14	32	<5
15N 7+00E	131	<1	6	0.2	19	30	0.31	0.42	2.71	426	<1	45	18	27	<5
15N 7+50E	126	<1	2	<0.2	35	58	0.41	1.15	4.19	285	<1	76	29	70	<5
15N 8+00E	109	<1	4	<0.2	21	46	0.24	0.80	3.05	201	2	52	21	54	<5
15N 8+50E	102	<1	8	0.2	32	63	0.80	0.43	2.99	418	5	40	14	38	5
15N 9+00E	37	<1	<2	<0.2	11	19	0.24	0.36	1.76	184	<1	27	10	23	<5
15N 9+50E	73	<1	6	0.2	13	30	0.10	0.30	2.38	403	<1	35	16	24	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
12N 5+50E	<5	<5	835	3.73	0.16	0.01	18	<20	<10	10	18	<2	1120	0.17	<10
12N 6+00E	5	<5	325	3.01	0.12	0.02	22	<20	<10	10	17	<2	1140	0.16	<10
12N 6+50E	5	<5	515	3.67	0.18	0.01	21	<20	<10	10	14	<2	1000	0.17	<10
12N 7+00E	5	<5	325	3.40	0.14	0.01	22	<20	<10	10	16	<2	2730	0.18	<10
12N 7+50E	5	<5	130	2.46	0.42	0.02	24	<20	<10	10	20	<2	440	0.24	<10
12N 8+00E	5	<5	220	4.76	0.11	0.02	29	<20	<10	10	21	2	2810	0.21	<10
12N 8+50E	15	<5	295	4.39	0.23	0.03	56	<20	<10	20	24	2	400	0.23	<10
12N 9+00E	5	5	345	4.39	0.31	0.02	39	<20	<10	10	27	2	1060	0.29	<10
12N 9+50E	10	5	610	3.76	0.24	0.02	26	<20	<10	10	27	2	1400	0.36	<10
12N 10+00E	10	<5	370	4.00	0.20	0.01	25	<20	<10	10	22	2	2600	0.27	<10
12N 10+50E	10	<5	235	4.81	0.06	0.01	19	<20	<10	10	18	2	4530	0.21	<10
12N 11+00E	5	<5	410	2.47	0.19	0.01	76	<20	<10	40	34	4	830	0.10	<10
12N 11+50E	5	<5	435	2.65	0.08	0.01	16	<20	40	10	15	6	1380	0.19	<10
12N 12+00E	<5	<5	440	4.08	0.16	0.03	31	<20	<10	20	20	2	1180	0.20	<10
12N 12+50E	10	<5	525	3.59	0.16	0.02	23	<20	<10	20	21	2	1270	0.21	<10
12N 13+00E	5	5	430	2.52	0.26	0.03	35	<20	<10	10	15	<2	1190	0.16	<10
12N 13+50E	5	<5	505	4.41	0.15	0.01	16	<20	<10	10	18	2	1360	0.22	<10
12N 14+00E	10	<5	380	3.50	0.16	0.02	24	<20	<10	10	18	<2	1240	0.19	<10
12N 14+50E	5	<5	370	5.25	0.10	0.02	25	<20	<10	20	24	2	1600	0.22	<10
12N 15+00E	5	<5	380	4.24	0.16	0.02	31	<20	<10	10	18	2	1480	0.20	<10
15N 0+00E BL	10	<5	360	3.96	0.36	<0.01	19	<20	<10	10	20	<2	480	0.28	<10
15N 0+50E	10	5	290	4.85	0.29	0.01	19	<20	<10	10	25	2	810	0.30	<10
15N 1+00E	10	<5	265	5.00	0.41	0.06	128	<20	<10	10	25	2	1000	0.29	<10
15N 1+50E	5	<5	275	2.85	0.17	0.01	29	<20	<10	20	15	<2	1140	0.18	<10
15N 2+00E	10	<5	315	4.70	0.27	0.04	91	<20	<10	10	18	2	1250	0.20	<10
15N 2+50E	5	<5	215	4.15	0.13	0.01	22	<20	<10	10	18	2	3340	0.19	<10
15N 3+00E	5	<5	200	4.40	0.17	0.04	50	<20	<10	10	21	2	560	0.22	<10
15N 3+50E	<5	5	445	3.72	0.46	0.02	41	<20	<10	20	25	2	840	0.21	<10
15N 4+00E	5	<5	240	2.66	0.29	0.01	20	<20	<10	10	20	<2	520	0.23	<10
15N 4+50E	20	5	285	4.13	0.47	0.01	22	<20	<10	10	28	2	670	0.36	<10
15N 5+00E	5	5	1330	2.27	0.29	0.01	30	<20	<10	10	17	<2	4500	0.16	<10
15N 5+50E	5	<5	325	3.83	0.15	0.01	21	<20	<10	10	19	2	1880	0.20	<10
15N 6+00E	<5	<5	670	6.04	0.66	0.02	52	<20	<10	20	38	6	820	0.27	<10
15N 6+50E	<5	<5	315	2.59	0.13	0.01	19	<20	<10	<10	10	2	640	0.13	<10
15N 7+00E	<5	<5	305	4.21	0.16	0.01	21	<20	<10	<10	17	2	2450	0.22	<10
15N 7+50E	<5	5	305	4.06	0.57	0.01	35	<20	<10	<10	22	2	720	0.32	<10
15N 8+00E	<5	<5	165	2.80	0.42	0.01	21	<20	<10	<10	16	2	520	0.23	<10
15N 8+50E	<5	<5	240	3.89	0.20	0.02	36	<20	10	10	21	6	760	0.17	<10
15N 9+00E	<5	<5	155	2.27	0.10	0.01	19	<20	<10	10	12	<2	580	0.12	<10
15N 9+50E	<5	<5	180	4.14	0.08	0.01	9	<20	<10	<10	15	<2	2030	0.21	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
15N 10+00E	134	<1	4	0.2	24	49	0.42	0.68	3.18	212	<1	54	24	52	<5
15N 10+50E	98	<1	2	0.2	22	41	0.43	0.50	2.75	374	<1	46	19	40	<5
15N 11+00E	136	<1	6	0.2	12	38	0.14	0.22	2.22	291	<1	32	16	19	<5
15N 11+50E	118	<1	4	0.2	28	40	0.33	0.39	2.56	406	<1	38	20	28	<5
15N 12+00E	120	<1	20	<0.2	11	26	0.36	0.52	2.27	108	<1	44	15	38	<5
15N 12+50E	148	<1	8	0.2	15	29	0.19	0.36	2.66	184	4	50	20	31	5
15N 13+00E	183	<1	18	0.2	36	32	1.04	0.49	3.39	823	<1	39	17	20	<5
15N 13+50E	168	<1	22	0.2	53	66	0.60	0.74	3.51	322	<1	54	28	43	<5
15N 14+00E	305	<1	170	0.2	36	60	0.90	0.61	3.71	469	<1	48	26	34	<5
15N 14+50E	313	<1	30	0.2	23	42	0.47	0.59	3.11	302	<1	49	21	34	<5
15N 15+00E	222	<1	14	0.2	15	47	0.51	0.51	2.87	722	<1	41	20	31	<5
15N 15+50E	233	<1	10	0.2	18	41	0.39	0.34	2.73	236	<1	35	17	22	<5
15N 16+00E	193	<1	8	0.2	9	29	0.22	0.27	2.64	211	<1	34	14	21	<5
15N 16+50E	158	<1	8	0.2	30	41	0.47	0.87	3.46	389	<1	57	22	42	<5
15N 17+00E	96	<1	4	0.2	23	39	0.52	0.61	2.94	296	<1	45	21	33	<5
18N 0+00E	116	<1	6	<0.2	21	49	0.20	0.89	3.64	227	1	59	25	59	5
18N 0+50E	176	<1	4	0.2	21	63	0.24	1.13	4.19	511	<1	74	29	69	<5
18N 1+00E	145	<1	2	0.2	14	39	0.24	0.56	2.46	299	<1	37	17	36	<5
18N 1+50E	154	<1	6	0.2	9	20	0.31	0.27	2.40	699	<1	32	15	21	<5
18N 2+00E	66	<1	12	0.2	12	21	0.23	0.35	2.40	267	<1	36	10	18	<5
18N 2+50E	47	<1	<2	<0.2	10	18	0.28	0.51	1.88	270	<1	34	13	33	<5
18N 3+00E	115	<1	10	<0.2	24	27	0.27	0.74	3.16	285	<1	54	19	46	5
18N 3+50E	224	<1	12	0.2	5	12	0.24	0.27	1.56	450	<1	24	8	14	<5
18N 4+00E	70	<1	6	<0.2	21	26	0.42	0.54	2.51	345	<1	43	14	38	<5
18N 4+50E	57	<1	<2	0.2	13	21	0.25	0.43	1.99	197	<1	31	12	29	<5
18N 5+00E	53	<1	<2	0.2	12	52	0.38	0.55	2.05	210	<1	34	13	35	<5
18N 5+50E	87	<1	2	0.2	19	27	0.40	0.62	2.84	302	<1	48	18	36	<5
18N 6+00E	61	<1	<2	0.4	17	29	0.55	0.13	2.03	276	<1	24	14	8	<5
18N 6+50E	71	<1	<2	0.4	38	40	0.34	0.72	3.26	165	<1	59	25	46	<5
18N 7+00E	117	<1	<2	<0.2	86	112	0.59	1.07	3.97	660	<1	81	58	81	<5
18N 7+50E	169	<1	<2	<0.2	63	94	0.69	1.30	4.39	552	<1	93	45	100	<5
18N 8+00E	205	<1	2	<0.2	20	71	0.96	0.88	3.07	374	<1	67	34	64	<5
18N 8+50E	144	<1	2	0.2	15	27	0.53	0.18	1.77	159	<1	22	13	11	<5
18N 9+00E	58	<1	<2	0.4	13	22	0.45	0.34	2.25	342	<1	43	14	27	<5
18N 9+50E	83	<1	2	<0.2	13	19	0.26	0.28	2.23	191	<1	38	11	23	<5
18N 10+00E	117	<1	2	<0.2	31	54	0.30	0.78	2.86	183	<1	55	22	49	<5
18N 10+50E	149	<1	6	0.6	13	31	0.18	0.34	2.54	641	1	38	19	24	<5
18N 11+00E	99	<1	2	0.4	23	56	0.36	0.53	3.07	265	<1	47	22	35	<5
18N 11+50E	173	<1	18	0.2	17	44	0.27	0.49	2.88	397	<1	44	23	34	<5
18N 12+00E	355	<1	88	0.2	18	40	0.31	0.47	2.79	397	<1	42	20	36	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
15N 10+00E	<5	<5	255	3.40	0.27	0.01	23	<20	<10	<10	20	<2	1090	0.28	<10
15N 10+50E	<5	<5	215	3.52	0.18	0.01	22	<20	<10	<10	19	<2	1360	0.25	<10
15N 11+00E	20	5	220	2.79	0.07	0.01	9	<20	<10	<10	14	<2	1980	0.20	<10
15N 11+50E	<5	<5	255	3.13	0.11	0.02	22	<20	<10	<10	14	<2	1500	0.19	<10
15N 12+00E	<5	<5	325	2.45	0.14	0.01	14	<20	<10	<10	13	<2	400	0.17	<10
15N 12+50E	<5	<5	295	3.81	0.18	0.01	13	<20	10	<10	19	4	1580	0.22	<10
15N 13+00E	<5	<5	275	4.80	0.13	0.02	23	<20	<10	20	33	2	2550	0.20	<10
15N 13+50E	5	<5	470	3.68	0.26	0.03	37	<20	<10	10	22	2	950	0.24	<10
15N 14+00E	<5	<5	565	3.85	0.26	0.04	48	<20	<10	<10	18	2	1190	0.20	<10
15N 14+50E	<5	<5	560	3.78	0.22	0.02	22	<20	<10	<10	20	2	1720	0.23	<10
15N 15+00E	<5	<5	515	3.05	0.22	0.02	30	<20	<10	<10	15	2	1730	0.20	<10
15N 15+50E	<5	<5	465	4.44	0.11	0.02	19	<20	<10	<10	16	2	1520	0.18	<10
15N 16+00E	<5	<5	265	3.88	0.08	0.01	12	<20	<10	<10	14	2	2130	0.20	<10
15N 16+50E	<5	<5	450	3.60	0.28	0.02	27	<20	<10	<10	19	<2	1270	0.24	<10
15N 17+00E	5	<5	300	2.78	0.19	0.01	19	<20	<10	<10	17	2	1160	0.19	<10
18N 0+00E	<5	<5	290	3.50	0.54	0.01	21	<20	<10	<10	20	2	290	0.31	<10
18N 0+50E	5	<5	475	4.26	0.95	0.01	27	<20	<10	<10	25	2	450	0.38	<10
18N 1+00E	<5	<5	320	2.52	0.23	0.01	19	<20	<10	<10	14	<2	1920	0.19	<10
18N 1+50E	<5	<5	345	3.04	0.12	0.01	20	<20	<10	<10	12	<2	4180	0.18	<10
18N 2+00E	5	<5	225	3.58	0.09	0.01	25	<20	10	10	15	<2	2130	0.15	<10
18N 2+50E	5	<5	125	1.49	0.27	0.01	18	<20	<10	10	13	<2	630	0.15	<10
18N 3+00E	15	<5	260	2.66	0.36	<0.01	29	<20	<10	10	18	<2	630	0.23	<10
18N 3+50E	5	<5	320	1.76	0.14	0.01	30	<20	<10	10	9	<2	1390	0.08	<10
18N 4+00E	<5	<5	130	2.36	0.29	0.01	37	<20	<10	30	23	<2	290	0.18	<10
18N 4+50E	<5	<5	145	1.96	0.19	0.01	21	<20	<10	10	13	<2	670	0.14	<10
18N 5+00E	5	<5	85	1.72	0.29	0.01	25	<20	<10	<10	13	<2	140	0.17	<10
18N 5+50E	5	<5	280	3.59	0.25	0.02	32	<20	<10	<10	18	<2	930	0.22	<10
18N 6+00E	5	<5	240	4.94	0.05	0.02	38	<20	<10	<10	14	2	2720	0.20	<10
18N 6+50E	5	<5	425	4.05	0.57	0.01	30	<20	<10	<10	24	2	520	0.35	<10
18N 7+00E	30	10	430	3.41	0.69	0.02	35	<20	<10	<10	22	2	580	0.32	<10
18N 7+50E	10	<5	400	3.73	0.83	0.03	44	<20	<10	<10	26	2	680	0.39	<10
18N 8+00E	5	<5	420	3.01	0.77	0.04	64	<20	<10	<10	21	2	980	0.34	<10
18N 8+50E	<5	<5	190	3.77	0.09	0.03	43	<20	<10	<10	18	2	1950	0.16	<10
18N 9+00E	<5	<5	100	3.74	0.10	0.01	23	<20	<10	<10	17	<2	1140	0.18	<10
18N 9+50E	<5	<5	140	3.14	0.07	0.01	17	<20	<10	<10	12	<2	1370	0.14	<10
18N 10+00E	<5	<5	250	2.42	0.19	0.01	15	<20	<10	<10	16	<2	1240	0.21	<10
18N 10+50E	<5	<5	320	4.47	0.11	0.01	18	<20	<10	<10	18	<2	1900	0.23	<10
18N 11+00E	<5	<5	255	4.48	0.16	0.02	26	<20	<10	<10	18	<2	1360	0.23	<10
18N 11+50E	5	<5	340	3.75	0.16	0.01	19	<20	<10	<10	17	2	1650	0.24	<10
18N 12+00E	<5	<5	450	3.52	0.18	0.01	17	<20	<10	<10	19	2	1860	0.23	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
18N 12+50E	301	<1	30	0.2	17	42	0.31	0.43	3.13	361	<1	43	20	29	<5
18N 13+00E	209	<1	10	0.2	22	31	0.44	0.26	2.88	617	<1	31	20	16	<5
18N 13+50E	292	<1	64	0.4	21	72	0.41	0.49	2.98	435	<1	42	27	31	<5
18N 14+00E	492	<1	94	0.2	20	58	0.61	0.77	3.17	937	<1	54	28	50	<5
18N 14+50E	470	<1	70	0.2	17	42	0.49	0.44	2.75	639	<1	40	19	28	<5
18N 15+00E	509	1	34	0.2	10	23	0.43	0.23	2.51	293	<1	32	14	15	<5
18N 15+50E	707	<1	40	0.2	8	22	0.47	0.40	2.34	493	<1	31	14	18	<5
18N 16+00E	823	<1	136	0.2	24	43	0.94	1.03	3.14	278	<1	42	20	27	<5
18N 16+50E	72	<1	4	<0.2	33	42	0.54	0.96	3.30	253	<1	56	19	52	<5
18N 17+00E	120	<1	2	<0.2	31	44	0.46	0.91	3.73	389	<1	59	21	42	<5
21N 0+00E BL	96	<1	6	<0.2	73	145	0.32	1.36	3.60	794	<1	77	36	158	<5
21N 0+50E	92	<1	<2	0.2	58	73	0.32	0.55	2.77	622	<1	43	22	45	<5
21N 1+00E	112	<1	<2	<0.2	59	49	0.37	1.70	3.59	404	<1	99	23	82	<5
21N 1+50E	92	<1	2	0.2	13	14	0.12	0.20	2.17	284	<1	31	11	14	<5
21N 2+00E	98	<1	8	0.2	16	32	0.25	0.55	2.91	184	4	46	19	47	<5
21N 2+50E	101	<1	<2	<0.2	30	72	0.15	0.93	4.42	222	<1	72	34	62	<5
21N 3+00E	136	<1	<2	0.2	14	47	0.23	0.66	2.77	380	<1	44	21	51	<5
21N 3+50E	90	<1	4	0.2	21	37	0.32	0.68	2.89	209	<1	45	17	40	<5
21N 4+00E	145	<1	<2	0.4	21	59	0.30	0.62	3.16	442	<1	52	18	40	<5
21N 4+50E	109	<1	<2	<0.2	10	55	0.28	0.51	2.12	325	<1	34	15	32	<5
21N 5+00E	119	<1	2	0.2	32	44	0.58	0.57	3.49	364	<1	45	25	36	<5
21N 5+50E	92	<1	4	0.2	13	33	0.22	0.41	2.25	487	<1	31	13	26	<5
21N 6+00E	106	<1	2	0.4	14	37	0.27	0.44	2.45	347	<1	36	16	28	<5
21N 6+50E	115	<1	2	0.2	25	33	0.45	0.70	3.28	412	<1	51	21	44	<5
21N 7+00E	108	<1	<2	0.2	25	40	0.62	0.63	3.08	540	<1	49	22	44	<5
21N 7+50E	118	<1	4	0.4	24	38	0.49	0.44	2.78	394	3	46	20	34	<5
21N 8+00E	99	<1	<2	<0.2	43	55	0.51	0.76	3.37	441	<1	67	29	58	<5
21N 8+50E	126	<1	<2	0.2	58	61	0.64	0.90	3.50	598	<1	80	32	65	<5
21N 9+00E	67	<1	<2	0.2	57	46	0.58	0.75	3.18	413	<1	63	27	57	<5
21N 9+50E	130	<1	<2	0.2	34	60	0.54	0.91	3.26	447	<1	71	29	63	<5
21N 10+00E	131	<1	<2	0.2	33	46	0.63	0.70	3.09	284	<1	54	23	47	<5
21N 10+50E	139	<1	4	0.4	27	27	0.38	0.44	2.60	245	<1	43	15	28	<5
21N 11+00E	223	<1	2	0.4	26	36	0.29	0.67	3.87	164	<1	60	23	44	<5
21N 11+50E	187	<1	8	0.4	22	44	0.19	0.44	3.08	209	<1	42	22	28	<5
21N 12+00E	164	<1	36	0.2	20	31	0.85	0.24	2.68	193	<1	27	19	17	<5
21N 12+50E	124	<1	14	0.2	20	49	0.24	0.46	2.83	218	<1	48	25	34	<5
21N 13+00E	106	<1	2	0.4	19	21	0.61	0.14	2.34	677	<1	21	15	10	<5
21N 13+50E	292	<1	46	0.4	10	38	0.31	0.32	2.60	1380	<1	35	18	22	<5
21N 14+00E	254	<1	34	0.4	19	52	0.43	0.43	3.08	232	<1	42	20	26	<5
21N 14+50E	383	<1	54	<0.2	56	69	0.44	0.95	3.74	305	<1	65	33	58	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
18N 12+50E	5	<5	380	4.33	0.14	0.01	20	<20	<10	<10	15	2	2160	0.21	<10
18N 13+00E	<5	<5	445	3.89	0.10	0.03	33	<20	<10	<10	13	2	2120	0.20	<10
18N 13+50E	<5	<5	565	4.31	0.18	0.02	26	<20	<10	<10	18	2	1190	0.23	<10
18N 14+00E	<5	<5	1015	3.08	0.46	0.02	31	<20	<10	<10	19	2	850	0.28	<10
18N 14+50E	5	<5	590	3.48	0.18	0.02	25	<20	<10	<10	16	2	1730	0.21	<10
18N 15+00E	<5	<5	400	4.95	0.08	0.02	26	<20	<10	<10	16	2	1500	0.19	<10
18N 15+50E	<5	<5	410	3.24	0.14	0.02	23	<20	<10	<10	12	2	2310	0.19	<10
18N 16+00E	5	5	570	3.61	0.17	0.04	43	<20	<10	<10	16	2	2340	0.18	<10
18N 16+50E	10	5	215	2.16	0.37	0.02	23	<20	<10	10	20	<2	940	0.22	<10
18N 17+00E	5	<5	320	3.74	0.30	0.02	29	<20	<10	10	24	2	930	0.23	<10
21N 0+00E BL	5	<5	135	2.69	0.08	0.01	21	<20	30	<10	13	<2	870	0.23	<10
21N 0+50E	5	<5	285	2.64	0.09	0.01	21	<20	<10	<10	13	<2	1380	0.20	<10
21N 1+00E	5	5	275	3.68	0.22	0.01	25	<20	<10	<10	28	<2	1060	0.36	<10
21N 1+50E	<5	<5	190	4.80	0.04	0.01	12	<20	<10	<10	15	<2	2070	0.19	<10
21N 2+00E	5	<5	230	4.24	0.12	0.01	20	<20	20	<10	14	6	4420	0.22	<10
21N 2+50E	5	<5	310	3.94	0.52	0.01	15	<20	<10	<10	21	<2	660	0.35	<10
21N 3+00E	5	<5	335	3.00	0.28	0.01	20	<20	<10	<10	17	<2	1730	0.25	<10
21N 3+50E	5	<5	180	3.27	0.32	0.01	28	<20	<10	<10	17	<2	1990	0.23	<10
21N 4+00E	<5	<5	335	4.85	0.51	0.01	30	<20	<10	<10	22	2	750	0.29	<10
21N 4+50E	5	<5	230	2.14	0.29	0.01	23	<20	<10	<10	13	<2	1210	0.19	<10
21N 5+00E	<5	<5	220	4.03	0.27	0.02	47	<20	<10	<10	18	2	940	0.23	<10
21N 5+50E	5	<5	265	2.41	0.21	0.01	24	<20	<10	<10	11	2	1090	0.16	<10
21N 6+00E	<5	<5	265	3.56	0.26	0.02	27	<20	<10	<10	19	2	1440	0.22	<10
21N 6+50E	<5	<5	295	3.36	0.40	0.02	43	<20	<10	<10	16	2	740	0.25	<10
21N 7+00E	5	<5	340	4.13	0.31	0.03	59	<20	<10	10	20	2	1230	0.24	<10
21N 7+50E	<5	<5	235	4.80	0.19	0.01	35	<20	10	10	24	4	1200	0.26	<10
21N 8+00E	10	<5	310	4.03	0.36	0.02	44	<20	<10	<10	21	<2	470	0.30	<10
21N 8+50E	<5	<5	425	3.45	0.59	0.02	41	<20	<10	<10	20	2	770	0.31	<10
21N 9+00E	5	<5	320	3.31	0.39	0.02	39	<20	<10	<10	16	6	650	0.25	<10
21N 9+50E	10	<5	320	3.32	0.53	0.02	39	<20	<10	<10	19	4	1080	0.30	<10
21N 10+00E	10	<5	290	3.85	0.27	0.02	37	<20	<10	<10	17	6	1420	0.22	<10
21N 10+50E	10	<5	235	4.72	0.12	0.01	25	<20	<10	<10	16	6	2500	0.18	<10
21N 11+00E	10	<5	275	5.19	0.27	0.01	24	<20	<10	<10	24	4	2190	0.32	<10
21N 11+50E	10	<5	240	4.44	0.12	0.01	16	<20	<10	<10	14	4	1240	0.22	<10
21N 12+00E	5	<5	185	4.34	0.07	0.03	61	<20	<10	<10	9	4	4430	0.13	<10
21N 12+50E	10	<5	230	3.62	0.17	0.01	18	<20	<10	<10	17	4	1270	0.25	<10
21N 13+00E	5	<5	225	2.93	0.05	0.03	44	<20	<10	<10	7	4	2630	0.11	<10
21N 13+50E	10	<5	575	3.17	0.11	0.01	18	<20	<10	<10	13	4	1450	0.19	<10
21N 14+00E	10	<5	465	4.47	0.14	0.02	25	<20	<10	<10	16	6	1110	0.21	<10
21N 14+50E	10	<5	555	3.56	0.32	0.01	20	<20	<10	<10	22	4	1310	0.31	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
21N 15+00E	355	<1	62	0.2	14	38	0.45	0.44	2.88	505	<1	40	19	26	<5
21N 15+50E	303	<1	60	0.2	23	53	0.44	0.47	3.35	310	<1	45	26	28	<5
21N 16+00E	551	<1	156	<0.2	24	49	0.69	0.58	3.14	517	<1	45	23	35	<5
21N 16+50E	541	<1	278	<0.2	31	46	0.78	0.82	3.89	541	2	56	22	44	<5
21N 17+00E	272	<1	78	0.2	46	49	0.71	0.80	4.36	539	1	60	26	40	<5
21N 17+50E	161	<1	38	0.2	14	32	0.43	0.41	2.79	248	<1	39	17	24	<5
21N 18+00E	108	<1	10	0.2	28	42	0.57	0.71	3.28	293	<1	51	22	39	<5
24N 0+00E BL	117	<1	8	<0.2	34	36	0.56	0.96	5.26	717	1	82	25	51	5
24N 0+50E	32	<1	14	0.2	5	7	0.04	0.10	2.90	75	5	44	7	13	5
24N 1+00E	72	<1	<2	0.2	47	64	0.76	0.88	4.53	391	1	68	26	45	<5
24N 1+50E	136	<1	4	0.2	35	72	0.71	0.99	4.13	531	<1	69	35	68	<5
24N 2+00E	103	<1	2	<0.2	37	37	0.62	0.90	4.90	470	<1	73	22	50	<5
24N 2+50E	78	<1	4	0.2	18	25	0.49	0.49	2.61	633	<1	38	17	30	<5
24N 3+00E	70	<1	2	0.2	13	24	0.38	0.17	2.56	144	<1	29	15	15	<5
24N 3+50E	122	<1	4	0.2	15	39	0.30	0.48	3.32	577	<1	51	28	34	<5
24N 4+00E	70	<1	4	0.2	17	24	0.10	0.39	2.74	208	<1	42	14	29	<5
24N 4+50E	72	<1	2	0.2	12	28	0.10	0.30	2.32	445	<1	34	13	21	<5
24N 5+00E	96	<1	10	0.2	34	78	0.33	0.74	3.47	428	<1	59	32	60	<5
24N 5+50E	42	<1	<2	<0.2	192	146	0.92	0.88	3.12	282	<1	59	42	103	<5
24N 6+00E	171	<1	<2	0.2	27	40	0.54	0.57	2.77	817	<1	37	21	46	<5
24N 6+50E	91	<1	6	<0.2	19	21	0.13	1.00	4.57	246	<1	90	16	73	<5
24N 7+00E	56	<1	26	<0.2	14	11	0.07	0.29	3.02	156	<1	50	8	26	<5
24N 7+50E	118	<1	10	0.2	28	36	0.21	1.05	4.97	1135	6	88	23	72	5
24N 8+00E	130	<1	<2	0.2	12	31	0.15	0.26	2.22	638	<1	30	14	20	<5
24N 8+50E	114	<1	<2	0.2	34	103	0.26	1.00	4.25	281	<1	71	36	72	<5
24N 9+00E	244	<1	4	0.2	14	35	0.60	0.55	3.05	450	<1	42	22	40	<5
24N 9+50E	63	<1	<2	<0.2	54	62	1.69	0.77	4.96	356	<1	56	36	54	<5
24N 10+00E	111	<1	16	<0.2	29	71	1.86	0.77	4.30	742	<1	59	36	53	5
24N 10+50E	152	<1	10	<0.2	43	107	0.43	1.38	4.74	462	<1	124	43	106	5
24N 11+00E	121	<1	12	<0.2	50	84	0.96	1.03	4.16	423	<1	71	35	84	<5
24N 11+50E	114	<1	10	<0.2	41	72	0.93	1.03	4.10	363	<1	70	34	77	5
24N 12+00E	138	<1	14	<0.2	15	27	0.99	0.23	2.29	756	<1	26	15	18	5
24N 12+50E	84	<1	12	0.2	19	24	0.80	0.18	2.43	463	<1	37	15	22	<5
24N 13+00E	95	<1	12	<0.2	19	29	0.25	0.64	3.24	109	3	93	22	65	5
24N 13+50E	57	<1	14	<0.2	22	34	0.16	0.46	3.62	93	1	66	22	48	5
24N 14+00E	114	<1	8	<0.2	37	61	0.39	0.96	3.82	597	<1	76	31	68	5
24N 14+50E	161	<1	10	<0.2	17	35	0.25	0.72	3.05	255	<1	58	24	50	5
24N 15+00E	498	<1	56	<0.2	18	32	0.28	0.65	3.15	345	<1	53	25	44	5
24N 15+50E	293	<1	62	<0.2	12	33	0.26	0.41	2.90	469	<1	43	21	29	<5
24N 16+00E	284	<1	74	<0.2	54	68	0.84	0.77	4.20	556	1	57	38	41	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
21N 15+00E	15	<5	570	3.88	0.18	0.01	20	<20	<10	<10	16	6	1920	0.22	<10
21N 15+50E	10	<5	495	5.13	0.11	0.02	26	<20	<10	<10	18	6	1690	0.22	<10
21N 16+00E	10	<5	780	2.94	0.23	0.02	29	<20	<10	<10	14	4	1580	0.19	<10
21N 16+50E	10	<5	570	3.48	0.30	0.02	39	<20	20	10	23	6	1430	0.18	<10
21N 17+00E	15	<5	495	3.59	0.40	0.03	47	<20	10	<10	22	6	1420	0.28	<10
21N 17+50E	10	<5	285	4.04	0.18	0.02	25	<20	<10	<10	17	6	790	0.22	<10
21N 18+00E	10	<5	260	3.46	0.27	0.02	31	<20	<10	<10	21	4	900	0.21	<10
24N 0+00E BL	10	<5	195	4.93	0.23	0.03	40	<20	<10	30	25	6	1000	0.32	<10
24N 0+50E	10	<5	85	3.59	0.02	<0.01	7	<20	30	<10	9	8	780	0.15	<10
24N 1+00E	15	<5	130	5.23	0.18	0.03	48	<20	<10	10	25	6	1090	0.33	<10
24N 1+50E	15	<5	265	3.50	0.57	0.01	47	<20	<10	<10	20	4	520	0.30	<10
24N 2+00E	20	<5	250	4.32	0.44	0.02	52	<20	<10	<10	15	4	770	0.25	<10
24N 2+50E	5	<5	180	2.71	0.17	0.01	32	<20	<10	<10	13	6	1060	0.18	<10
24N 3+00E	5	<5	155	4.51	0.05	0.02	29	<20	<10	<10	10	6	1400	0.14	<10
24N 3+50E	10	<5	320	3.73	0.12	<0.01	22	<20	<10	<10	15	4	850	0.22	<10
24N 4+00E	10	<5	170	3.60	0.11	<0.01	10	<20	<10	<10	13	6	1050	0.20	<10
24N 4+50E	10	<5	220	3.95	0.06	<0.01	10	<20	<10	<10	13	4	1700	0.18	<10
24N 5+00E	10	<5	545	2.90	0.31	0.01	25	<20	<10	10	22	6	1190	0.33	<10
24N 5+50E	5	<5	200	1.93	0.22	0.03	38	<20	<10	<10	22	4	1300	0.29	<10
24N 6+00E	10	<5	755	2.61	0.31	0.01	38	<20	<10	<10	16	4	4470	0.25	<10
24N 6+50E	10	<5	285	3.53	0.54	<0.01	13	<20	<10	<10	11	2	360	0.22	<10
24N 7+00E	5	<5	170	2.67	0.14	<0.01	9	<20	<10	<10	7	2	1280	0.13	<10
24N 7+50E	5	<5	445	3.70	0.69	<0.01	27	<20	30	<10	21	8	570	0.38	<10
24N 8+00E	10	<5	340	3.53	0.16	0.01	18	<20	<10	<10	13	4	4310	0.22	<10
24N 8+50E	10	5	275	4.22	0.45	0.01	24	<20	<10	<10	19	4	600	0.33	<10
24N 9+00E	5	<5	270	2.78	0.34	0.02	60	<20	<10	<10	14	6	1690	0.24	<10
24N 9+50E	5	<5	200	4.90	0.57	0.07	167	<20	<10	<10	24	8	810	0.24	<10
24N 10+00E	5	<5	345	4.71	0.67	0.06	171	<20	<10	20	22	10	800	0.25	<10
24N 10+50E	10	5	425	3.75	0.96	0.01	36	<20	<10	10	29	6	370	0.39	<10
24N 11+00E	10	<5	290	4.13	0.52	0.03	86	<20	<10	20	27	6	730	0.29	<10
24N 11+50E	20	5	320	3.96	0.64	0.03	91	<20	<10	10	24	8	730	0.29	<10
24N 12+00E	20	<5	285	4.10	0.15	0.03	101	<20	<10	20	26	10	2800	0.17	<10
24N 12+50E	15	<5	125	4.66	0.09	0.03	76	<20	<10	10	25	6	1250	0.18	<10
24N 13+00E	10	<5	115	2.13	0.32	<0.01	19	<20	10	10	22	4	230	0.28	<10
24N 13+50E	15	<5	270	4.47	0.13	<0.01	15	<20	10	10	24	6	230	0.30	<10
24N 14+00E	5	<5	325	2.75	0.20	0.01	19	<20	<10	10	24	6	1170	0.31	<10
24N 14+50E	10	<5	290	3.20	0.26	0.01	14	<20	<10	10	24	6	1560	0.29	<10
24N 15+00E	<5	<5	560	4.00	0.23	<0.01	16	<20	<10	<10	19	2	2180	0.29	10
24N 15+50E	5	<5	515	3.67	0.14	0.01	16	<20	<10	10	19	6	1360	0.23	<10
24N 16+00E	5	5	600	4.23	0.19	0.02	33	<20	<10	20	23	6	2380	0.25	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
24N 16+50E	365	<1	66	<0.2	28	68	0.69	0.84	3.83	463	1	62	35	45	5
24N 17+00E	423	<1	56	<0.2	12	20	0.49	0.50	2.85	1166	<1	43	17	20	5
24N 17+50E	270	<1	70	<0.2	12	23	0.32	0.32	2.66	455	<1	35	17	19	<5
24N 18+00E	351	<1	48	<0.2	8	12	0.20	0.14	1.91	556	<1	24	10	9	5
24N 18+50E	276	<1	28	0.2	8	14	0.19	0.17	2.05	442	<1	28	11	11	<5
24N 19+00E	200	<1	16	<0.2	15	32	0.39	0.52	3.07	552	<1	44	17	25	<5
24N 19+50E	330	<1	56	<0.2	19	44	0.47	0.43	3.35	365	4	46	22	26	5
24N 20+00E	166	<1	24	<0.2	13	36	0.47	0.51	2.82	390	1	45	21	35	5
STATS:															
n=	288														
Max:	1980	2	278	0.6	192	173	2.78	1.80	7.78	1741	6	124	58	158	10
Min:	32	<1	<2	<0.2	5	7	0.04	0.10	1.56	75	<1	19	7	8	<5
25% ile:	98	<1	4	<0.2	15	30	0.29	0.44	2.61	222	<1	38	16	28	<5
50% ile:	126	<1	8	0.2	21	40	0.42	0.56	2.89	311	<1	44	20	36	<5
75% ile:	194	<1	16	0.2	31	55	0.62	0.77	3.32	450	<1	54	24	50	<5
95% ile:	438	<1	66	0.4	56	89	1.06	1.07	4.30	756	2	74	35	81	5
CHECK SAMPLES:															
03N 2+50E	179	<1	8	0.2	18	30	0.32	0.41	2.92	251	<1	40	19	31	<5
06N 4+00E	79	<1	4	<0.2	29	44	0.71	0.58	2.84	175	<1	41	19	35	<5
09N 11+00E	105	<1	18	<0.2	33	37	0.57	0.51	2.56	215	<1	40	16	32	<5
12N 10+00E	107	<1	12	<0.2	34	55	0.37	0.55	2.87	313	<1	46	23	46	<5
18N 4+00E	70	<1	4	0.2	21	27	0.42	0.57	2.58	354	<1	44	15	39	<5
18N 17+00E	118	<1	2	<0.2	31	44	0.45	0.88	3.66	386	1	59	21	41	<5
24N 2+50E	77	<1	8	0.2	17	25	0.49	0.47	2.51	619	4	38	17	29	5
24N 15+00E	367	<1	42	<0.2	13	23	0.21	0.43	2.43	251	<1	37	16	32	5
GEO STANDARDS:															
STANDARD 1991	62	<1	12	1.0	73	21	1.79	0.96	3.84	661	<1	77	20	63	<5
STANDARD 1991	65	<1	12	1.2	71	20	1.74	0.92	3.76	655	<1	71	19	56	<5
STANDARD 1991	61	<1	10	1.0	72	22	1.75	0.94	3.76	655	<1	74	19	61	<5

Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
24N 16+50E	10	5	595	3.52	0.32	0.03	38	<20	<10	20	24	6	1290	0.29	<10
24N 17+00E	10	<5	725	3.66	0.23	0.01	24	<20	<10	10	21	6	2470	0.24	<10
24N 17+50E	10	<5	345	4.43	0.10	0.01	18	<20	<10	10	17	4	1920	0.21	<10
24N 18+00E	5	<5	370	3.76	0.04	0.01	14	<20	<10	10	20	4	1930	0.17	<10
24N 18+50E	10	<5	215	4.19	0.05	0.01	11	<20	<10	10	18	4	2490	0.19	<10
24N 19+00E	5	5	445	3.61	0.16	0.01	18	<20	<10	10	17	6	2320	0.22	<10
24N 19+50E	15	5	480	4.83	0.13	0.01	24	<20	50	20	23	10	1480	0.24	<10
24N 20+00E	5	<5	370	3.06	0.23	0.01	21	<20	<10	10	20	6	1380	0.21	<10
STATS:															
n=	288														
Max:	30	10	1720	6.64	0.96	0.16	205	<20	50	40	73	12	4530	0.47	10
Min:	<5	<5	85	1.49	0.02	<0.01	7	<20	<10	<10	7	<2	100	0.06	<10
25% ile:	<5	<5	245	2.94	0.14	0.01	19	<20	<10	<10	15	2	780	0.18	<10
50% ile:	5	<5	325	3.56	0.20	0.01	25	<20	<10	10	18	2	1200	0.21	<10
75% ile:	10	<5	440	4.10	0.29	0.02	36	<20	<10	10	21	6	1720	0.25	<10
95% ile:	15	5	650	4.90	0.57	0.04	64	<20	10	20	27	8	2870	0.32	<10
CHECK SAMPLES:															
03N 2+50E	<5	<5	245	4.14	0.17	0.01	19	<20	<10	<10	18	4	2400	0.23	<10
06N 4+00E	<5	5	215	3.10	0.18	0.03	55	<20	<10	10	16	8	670	0.16	<10
09N 11+00E	5	<5	260	3.16	0.13	0.02	33	<20	<10	10	16	<2	1250	0.15	<10
12N 10+00E	10	<5	375	3.84	0.19	0.01	24	<20	<10	10	22	2	2491	0.26	<10
18N 4+00E	5	<5	135	2.44	0.30	0.01	38	<20	<10	30	24	<2	260	0.19	<10
18N 17+00E	10	<5	315	3.74	0.28	0.01	28	<20	<10	10	23	2	910	0.23	<10
24N 2+50E	5	<5	160	2.63	0.16	0.01	32	<20	20	<10	12	10	1090	0.17	<10
24N 15+00E	<5	<5	410	2.68	0.19	<0.01	16	<20	<10	<10	12	2	1537	0.18	10
GEO STANDARDS:															
STANDARD 1991	55	5	180	1.85	0.37	0.01	58	<20	<10	10	14	2	660	0.12	<10
STANDARD 1991	55	5	180	1.70	0.33	0.01	51	<20	<10	<10	12	4	640	0.10	<10
STANDARD 1991	55	5	180	1.79	0.35	0.01	57	<20	<10	<10	13	8	630	0.11	<10

Date of Report: 23-Jun-92 Project 221 NOREEN

Soil Sampling Results
1992

Reference: etk92-214

Sample ID	Zn ppm	Cd ppm	Pb ppm	Ag ppm	Cu ppm	Ni ppm	Ca %	Mg %	Fe %	Mn ppm	Mo ppm	V ppm	Co ppm	Cr ppm	Bi ppm
STANDARD 1991	64	<1	8	1.4	76	21	1.86	0.99	3.95	681	<1	77	20	60	<5
STANDARD 1991	61	<1	10	1.2	72	19	1.76	0.95	3.86	655	<1	78	20	60	<5
STANDARD 1991	61	<1	10	1.0	74	23	1.81	0.98	3.85	667	<1	77	20	64	<5
STANDARD 1991	58	<1	12	1.0	71	20	1.71	0.92	3.69	641	<1	73	19	59	<5
STANDARD 1991	61	<1	38	1.2	73	21	1.72	0.94	3.77	657	<1	74	19	60	<5
STANDARD 1991	57	<1	6	1.2	70	20	1.60	0.90	3.65	633	<1	73	18	58	<5
STANDARD 1991	58	<1	8	1.2	72	21	1.73	0.95	3.73	644	<1	74	19	60	<5
STANDARD 1991	63	<1	14	1.0	69	21	1.71	0.92	3.73	641	<1	72	19	59	<5

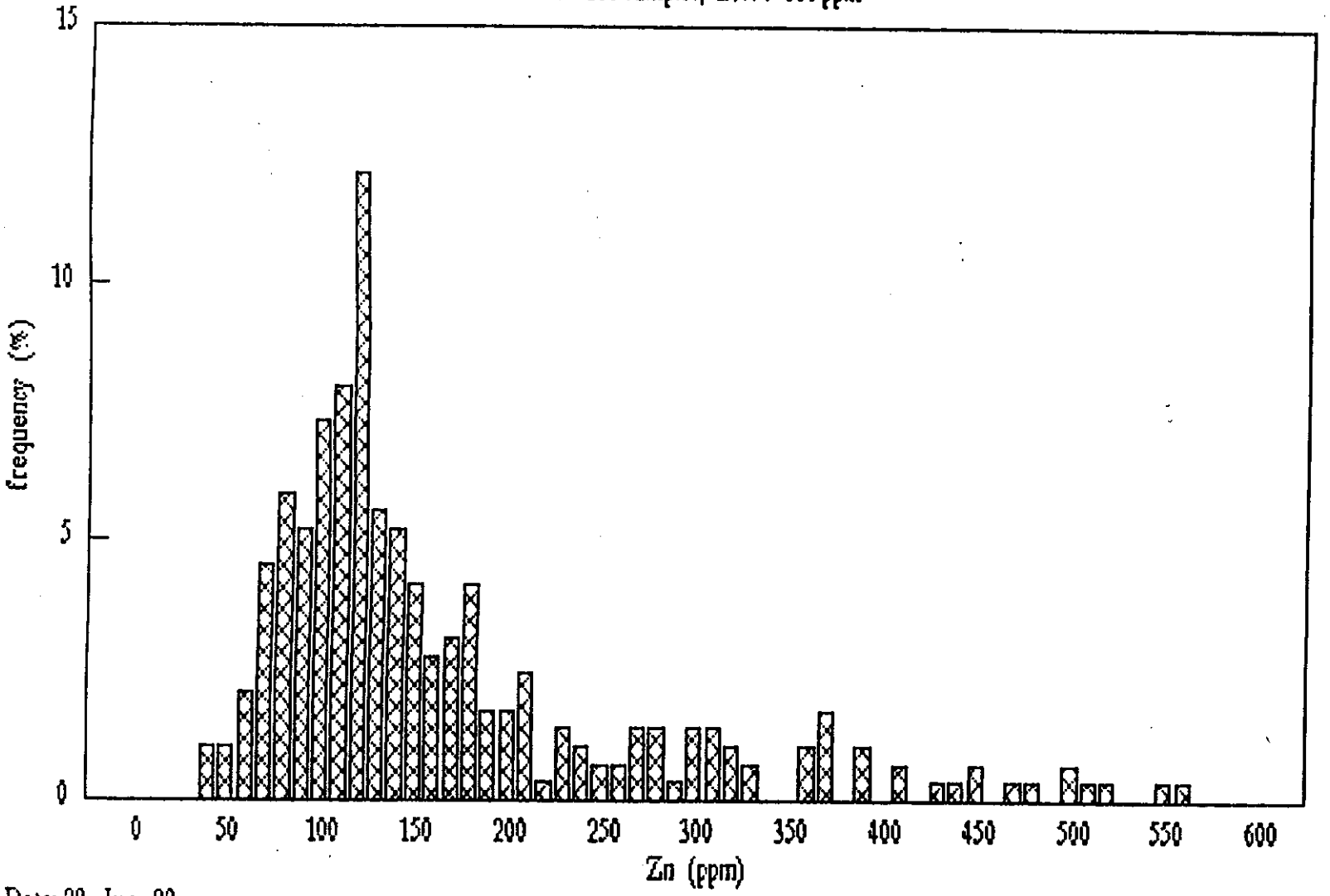
Project 221

Soil Sampling Results (part 2)

Sample ID	As ppm	Sb ppm	Ba ppm	Al %	K %	Na %	Sr ppm	Sn ppm	W ppm	La ppm	Y ppm	B ppm	P ppm	Ti %	U ppm
STANDARD 1991	50	<5	190	1.87	0.37	0.01	60	<20	<10	<10	14	8	660	0.12	<10
STANDARD 1991	50	5	175	1.81	0.35	0.01	57	<20	<10	<10	14	2	630	0.11	<10
STANDARD 1991	55	5	185	1.85	0.35	0.01	59	<20	<10	10	14	2	670	0.11	<10
STANDARD 1991	45	5	180	1.73	0.35	0.01	52	<20	<10	<10	13	6	620	0.11	<10
STANDARD 1991	50	5	180	1.76	0.36	0.01	53	<20	<10	<10	13	6	630	0.11	<10
STANDARD 1991	55	<5	170	1.70	0.33	0.01	50	<20	<10	<10	12	2	560	0.11	<10
STANDARD 1991	55	5	175	1.80	0.35	0.01	56	<20	<10	<10	12	2	610	0.11	<10
STANDARD 1991	55	5	185	1.76	0.33	0.01	53	<20	<10	10	13	6	650	0.11	<10

Noreen – recce soils – Zn histogram

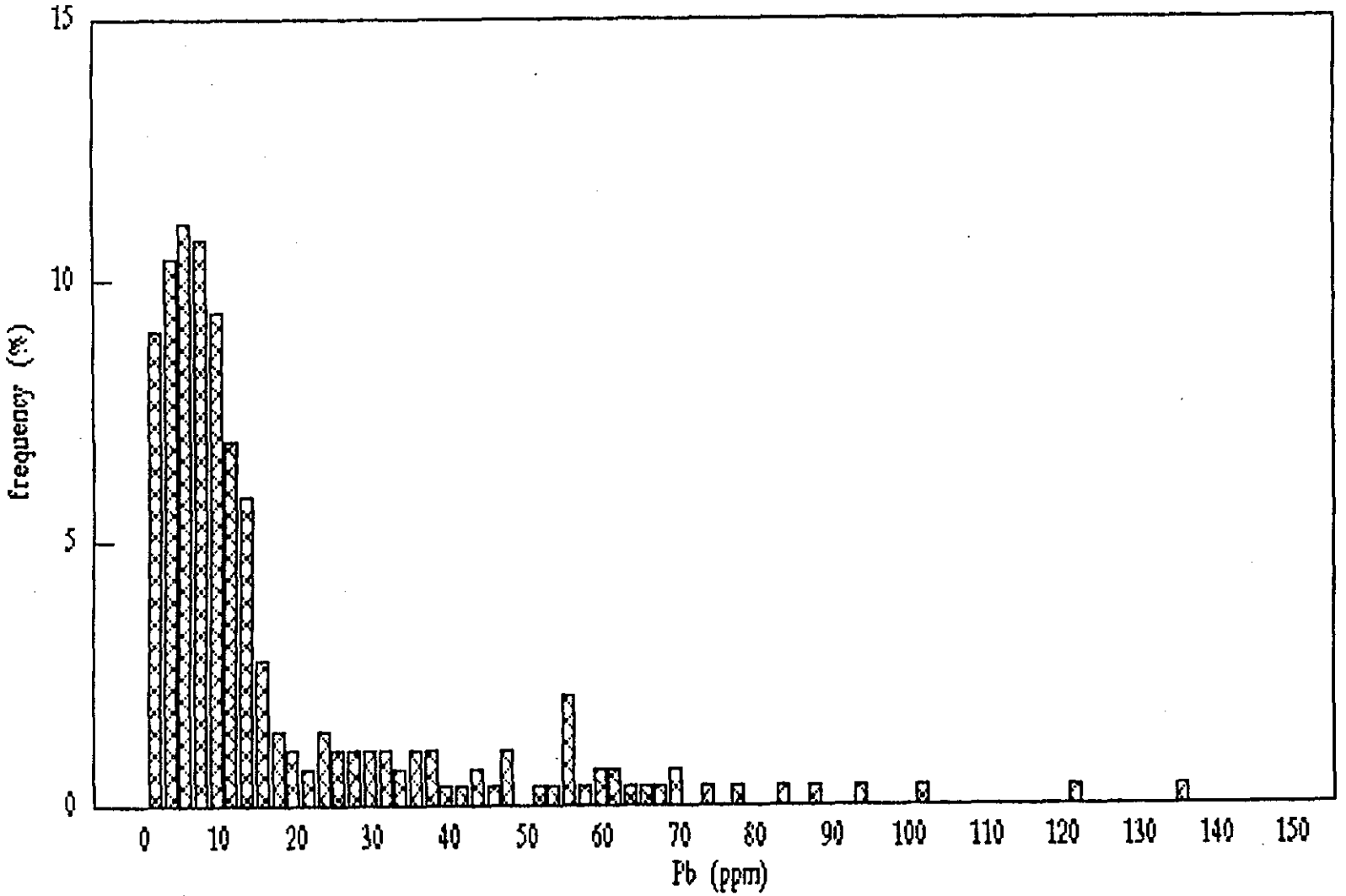
n= 288 samples, 14% >600 ppm



Date: 29–Jun–92

Noreen – recce soils – Pb histogram

n= 288 samples, 1.0% >150 ppm



Date: 29-Jun-92

APPENDIX IV

Analalytical Procedures

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh sieves.

2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.

3. Humus/Vegetation: The dry sample is ashed at 550 C. for 5 hours.

METHODS OF ANALYSIS

All methods have either canmet certified or in-house standards carried through entire procedure to ensure validity of results.

1. MULTI ELEMENT ANALYSES

(a) ICP Packages (6,12,30 element).

Digestion	Finish
Hot Aqua Regin	ICP

(b) ICP - Total Digestion (24 element).

Digestion	Finish
Hot HClO4/HNO3/HF	ICP

(c) Atomic Absorption (Acid Soluble)
Ag*, Cd*, Cr, Co*, Cu, Fe, Pb*, Mn, Mo, Ni*, Zn.

Digestion	Finish
Hot Aqua Regia	Atomic Absorption * = Background corrected

(d) Whole Rock Analyses.

Digestion	Finish
Lithium Metaborate fusion	ICP

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-45

2. Antimony

Digestion	Finish
Hot aqua regia	ICP

3. Arsenic

Digestion	Finish
Hot aqua regia	Hydride generation - A.A.S.

4. Barium

Digestion	Finish
Lithium Metaborate	ICP

5. Beryllium

Digestion	Finish
Hot aqua regia	Atomic Absorption

6. Bismuth

Digestion	Finish
Hot aqua regia	Atomic Absorption (Background Corrected)

7. Chromium

Digestion	Finish
Sodium Peroxide Fusion	Atomic Absorption

8. Flourine

Digestion	Finish
Lithium Metaborate Fusion	Ion Selective Electrode

ECO-TECH LABORATORIES LTD
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-45

9. Gallium

Digestion	Finish
Hot HClO4/HNO3/HF	Atomic Absorption

10. Germanium

Digestion	Finish
Hot HClO4/HNO3/HF	Atomic Absorption

11. Mercury

Digestion	Finish
Hot aqua regia	Cold vapor generation - A.A.S.

12. Phosphorus

Digestion	Finish
Lithium Metaborate Fusion	ICP finish

13. Selenium

Digestion	Finish
Hot aqua regia	Hydride generation - A.A.S.

14. Tellurium

Digestion	Finish
Hot aqua regia Potassium Bisulphate Fusion	Hydride generation - A.A.S. Colorimetric or I.C.P.

APPENDIX V

Rock Sample Descriptions

PROJECT: Noreen (1720)				DATE:		TYPE: ICP GEOCHEM		NAME:		
SAMPLE NO.	Pb	Zn	Ag	LITHOLOGY & SAMPLE TYPE	LOCATION	MINERALIZATION	ALTERATION	VEINING & TEXTURES	STRUCTURAL ASPECTS	COMMENTS
27301	56 ppm	158 ppm	<.2 ppm	Biotite Schist IM CHIP	~26+00N ~17+00E	3-4% po dissem		minor pegmatite	Sol^n 030/15W	
27302	14 ppm	33 ppm	<.2 ppm	Marble IM CHIP	23+00N 16+00E	1-2% po dissem		10% mica	075/15NW	
27303	14 ppm	56 ppm	<.2 ppm	Biotite Schist +Quartzite	24+50N ~2+00W	5% po dissem				
27304	3.56%	1.06%	N/A	Quartzite Float	18+00N 14+00E	3-4% ga 1-2% sp 2-3% po				
27305	6 ppm	308 ppm	.6 ppm	Quartzite Float	22+00N 14+50E	tr ga, sp w/6% po				near old trenches
Trench N	.19%	1.90%	N/A	Quartzite Float	22+00N 14+50E	tr ga, 3% sp 5% po				" "

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 7, 1992

CERTIFICATE OF ASSAY ETK 92-283

TECK EXPLORATION LTD.
350, 272 VICTORIA STREET
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

SAMPLE IDENTIFICATION: 9 ROCK samples received JUNE 26, 1992
---------- PROJECT: 1389-2

ET#	Description	Pb (%)	Zn (%)	
1 -	W1	1.04	14.90	
2 -	W2	.12	2.28	
3 -	W3	1.20	6.36	
4 -	W4	.47	2.28	
5 -	W5	.47	.91	
6 -	W6	1.24	3.14	
7 -	W7	.92	1.76	
8 -	TRENCH N	.19	1.90	NOREEN SAMPLES
9	27304	3.56	1.06	

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

SC92/TECK1389

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
JULY 7, 1992 FAX - 604-573-4557

TECK EXPLORATION ETK 92-282
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT NUMBER: 1716
17 ROCK SAMPLES RECEIVED JUNE 26, 1992

ET#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	- 27301	<.2	2.34	<5	<2	150	<5	1.06	<1	12	123	118	5.44	.82	10	.96	856	4	.05	17	1280	56	<5	<20	61	.17	<10	49	<10	13	158
2	- 27302	<.2	.27	<5	<2	55	<5	>15	<1	<1	6	4	.34	.12	<10	.86	119	<1	<.01	1	100	14	5	<20	401	<.01	<10	2	<10	5	33
3	- 27303	<.2	5.54	<5	8	90	<5	4.09	<1	16	103	46	3.25	.51	10	.71	300	4	.23	22	900	14	<5	<20	209	.13	<10	42	<10	10	56
4	- 27305	.6	1.27	<5	<2	35	<5	13.35	12	5	87	30	1.54	.04	<10	.43	154	44	.01	74	2040	6	<5	<20	822	.04	<10	260	10	14	308
5	- 27306	.6	.70	<5	<2	160	<5	12.26	9	7	83	33	1.53	.25	<10	.87	226	35	.02	86	2180	4	<5	<20	608	.06	<10	118	<10	17	273
6	- 27307	.8	.53	<5	<2	100	<5	7.42	6	11	137	43	1.76	.12	<10	.98	147	31	.03	123	2500	4	<5	<20	308	.07	<10	118	<10	13	194
7	- 27308	1.4	.43	<5	2	120	<5	8.13	3	7	127	24	1.65	.12	<10	.93	129	94	.02	51	1680	2	<5	<20	206	.09	<10	156	<10	14	176
8	- 27309	.4	.51	<5	<2	125	<5	1.32	4	8	174	61	1.65	.09	<10	.58	76	24	.01	65	3480	6	<5	<20	22	.08	<10	225	<10	12	216
9	- 27310	.4	.37	<5	<2	310	<5	8.19	3	5	75	36	1.20	.05	<10	2.36	192	13	.01	43	4630	<2	5	<20	209	.03	<10	77	<10	11	167
10	- 27311	.4	.49	<5	<2	95	<5	.82	1	8	238	37	1.75	.07	<10	.42	87	41	.02	33	2080	6	<5	<20	19	.10	<10	128	10	14	53
11	- 27312	.4	4.51	<5	2	160	<5	2.13	<1	18	214	35	3.95	1.08	<10	1.79	490	4	.16	44	1020	4	5	<20	103	.22	<10	140	<10	18	59
12	- 27313	2.8	1.11	<5	<2	45	<5	1.18	<1	4	121	16	1.73	.12	10	.35	52	9	.08	9	1390	2	<5	<20	62	.10	<10	30	<10	10	26
13	- 27314	2.6	.65	20	<2	35	<5	>15	4	5	152	20	1.02	.03	<10	.90	260	9	<.01	73	1290	<2	<5	<20	1400	<.01	<10	94	<10	12	85
14	- 27315	.2	.36	<5	<2	20	<5	.61	<1	15	97	27	2.76	.05	10	.31	89	5	.03	44	950	2	<5	<20	21	.10	<10	37	<10	11	24
15	- 27316	.6	.78	<5	2	260	<5	13.22	1	2	27	7	.69	.38	<10	2.53	234	2	.01	24	730	<2	5	<20	603	.02	<10	56	<10	9	69
16	- 27317	<.2	.06	5	<2	45	<5	5.86	<1	12	38	27	3.88	<.01	30	.25	283	2	.02	6	3360	12	<5	<20	1129	.24	<10	24	<10	34	26
17	- 27318	.8	.82	<5	<2	100	<5	.77	<1	16	165	37	1.78	.34	<10	.88	304	5	.05	72	620	2	<5	<20	35	.13	<10	39	<10	16	79

QC DATA

REPEAT #:																															
4	- 27305	.6	1.23	<5	<2	40	<5	13.08	11	5	81	31	1.51	.04	<10	.43	153	44	.01	74	2010	6	<5	<20	829	.04	<10	260	<10	14	313
STANDARD 1991	-	.8	1.96	45	2	205	<5	1.84	<1	20	66	73	4.06	.37	<10	.99	682	<1	.01	21	650	10	5	<20	59	.13	<10	81	<10	14	67

NOTE: < = LESS THAN
> = GREATER THAN

NOREEN SAMPLES

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
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KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

JULY 7, 1992

TECK EXPLORATION ETK 92-283
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT NUMBER: 1389-2
9 ROCK SAMPLES RECEIVED JUNE 26, 1992

ET#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	W1	<.2	.62	190	<2	265	5	.93	177	13	15	38	14.86	.36	10	.38	503	29	<.01	12	3880	>10000	<5	<20	13	.03	60	8	<1000	16	>10000
2	W2	<.2	.26	25	<2	85	5	7.04	41	5	65	20	11.06	.19	<10	.59	176	3	<.01	4	400	856	<5	<20	69	<.01	10	<1	<1000	<1	>10000
3	W3	3.8	.25	60	<2	280	30	5.51	119	10	4	107	>15	.09	<10	.26	312	6	<.01	20	640	>10000	<5	<20	41	.01	40	<1	<1000	<1	>10000
4	W4	2.8	.02	15	<2	35	15	.44	27	2	127	24	6.05	<.01	<10	.01	73	6	<.01	4	490	3836	<5	<20	8	<.01	10	17	<1000	<1	>10000
5	W5	1.2	.03	15	<2	45	5	2.78	11	2	123	12	5.83	<.01	<10	.62	98	13	<.01	4	690	3866	<5	<20	47	<.01	10	72	<10	1	9035
6	W6	3.0	.04	20	<2	45	15	8.42	40	3	70	8	7.64	<.01	<10	.93	75	12	<.01	4	670	>10000	5	<20	30	<.01	<10	3	<1000	<1	>10000
7	W7	.2	.02	<5	<2	35	<5	7.54	47	<1	78	3	1.00	<.01	<10	.71	89	6	<.01	2	130	8794	<5	<20	56	<.01	<10	4	<1000	3	>10000
8	-TRENCH N	.2	.46	10	<2	45	<5	1.17	22	8	176	75	4.39	.09	<10	.16	167	20	<.01	13	2510	1578	<5	<20	18	.02	10	22	<1000	13	>10000
9	27304	.2	3.17	<5	<2	60	50	2.79	12	6	87	18	3.77	.18	<10	.10	108	21	.23	5	920	>10000	<5	<20	18	.06	<10	3	<1000	12	>10000

NOREEN SAMPLES

QC DATA

REPEAT #:																															
3	W3	3.8	.25	55	<2	295	20	6.32	124	10	3	60	>15	.08	<10	.25	333	5	<.01	2	650	>10000	<5	<20	41	.01	30	<1	<1000	<1	>10000
STANDARD 1991		1.0	1.71	50	2	210	<5	1.80	<1	19	61	69	4.00	.33	<10	.91	669	<1	.01	21	610	64	5	<20	51	.11	<10	74	<10	13	282

PLEASE NOTE: W detection limits are higher than normal due to massive Zn interference.
NOTE: < = LESS THAN
> = GREATER THAN

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

SHUSWAP LEGEND

EOCENE DYKES
- 8 — Lamprophyre Dykes

LADYBIRD INTRUSIVES
- 7a — Granodiorite → Monzonite
- +7+ — Pegmatite

JURASSIC ROCKS
- 6 — Argillite
- 6a — Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS
- 5a — Calc-Silicates +/- Marble
- 5 — Marble +/- Graphite Laminations
- 4b — Quartzite with Calc-Silicate Beds
- 4a — Quartzite with Flake Graphite (5-20%)
- 4 — Quartzite +/- 20% Biotite Schist Laminations
- 3 — Biotite Gneiss (Quartzite with Biotite Schist Laminations)
- 2 — Biotite Schist

MAFIC VOLCANICS
- 1c — Amphibolite with Biotite Schist (to 50:50)
- 1b — Amphibolite with Calc-Silicate Laminations
- 1a — Massive Amphibolite

MINERALIZATION
- Disseminated Sulphides
- Semi-Massive Sulphides
- Massive Sulphides

SYMBOLS
- Contacts
- Faults
- Normal Fault
- Thrust Fault
- Shear Zone
- Lineation
- Joints
- Foliation, Bedding
- Antiform
- Isoclinal Antiform
- Synform
- Isoclinal Synform
- Outcrop
- Creek
- Road
- Trench
- Drill Hole
- 304 — Rock Sample
- Glacial Striae
- xx — Float

N

L 24+00 N
L 21+00 N
L 18+00 N
L 15+00 N
L 12+00 N
L 9+00 N
L 6+00 N
L 3+00 N
L 0+00 N

20+00E
18+00E
17+00E
17+00E
15+00E
13+50E
13+00E
13+00E
13+00E

303
301
302
305
304

Peg
Qtz
2,4
2-5% po
4,1a
2,1a
2-5%po
3gn+peg
2+qtz,peg
qtz,+ga.sp
3gn
graph'ic
4 qtz
2 bio sch
1a
4,+ga xx sp
2+peg tr po
5,+qtz xx
2,+3%po
CP'S
NOREEN 1&2
ROLET 1&2
LANDING
2gn +qtz
Rolet Trenches
qtz+sp xx
2 graph'c xx
3 graph'c
3 graphitic
NOREEN 1 (LCP)
LANDING
HOUSES
?

Kingfisher Creek
LAKE

2500
2000
3500
3000
2000
1500

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,652

TECK EXPLORATION LTD.

NOREEN PROPERTY

Fig.4

GEOLOGY

0 200 400 600 800 1000 metres

DATE DRAWN: MAY 11, 1992	SCALE: 1:10,000	DWG. NAME
COMPILED BY: C.E.	JOB No. 1720	NOR-TOP
DRAWN BY: S.A.	NTS No. 82L/10	

L 24+00 N
L 21+00 N
L 18+00 N
L 15+00 N
L 12+00 N
L 9+00 N
L 6+00 N
L 3+00 N
L 0+00 N

NOREEN 1

MABEL LAKE

Kingfisher Creek

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,652

CONTOUR INTERVALS:
(KEY for Colour Ranges)

0 – 199 ppm
200 – 399 ppm
400 – 599 ppm
>600 ppm

TECK EXPLORATION LTD.

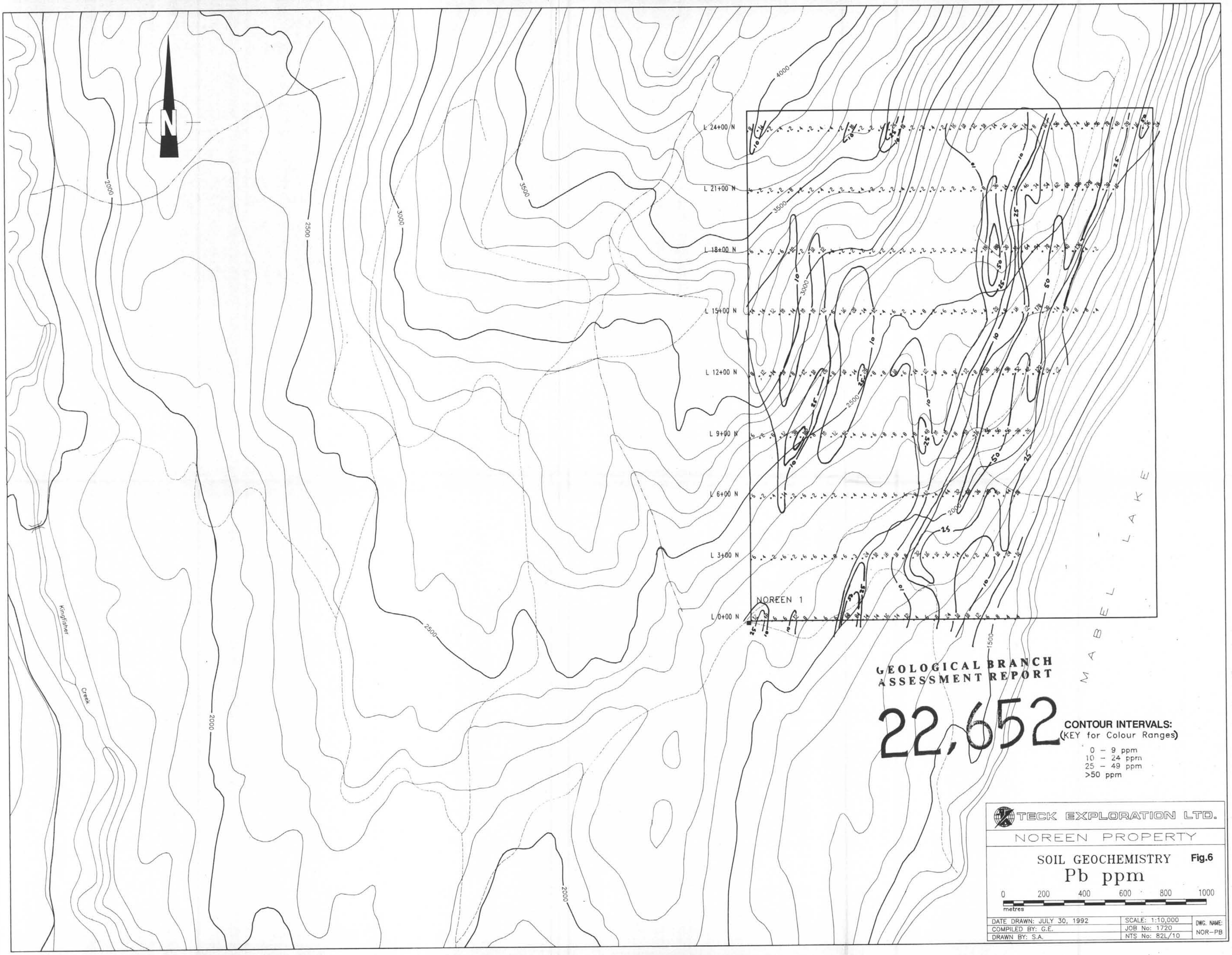
NOREEN PROPERTY

SOIL GEOCHEMISTRY Fig.5

Zn ppm

0 200 400 600 800 1000
metres

DATE DRAWN: JULY 15, 1992	SCALE: 1:10,000	DWG. NAME: NOR–ZN
COMPILED BY: G.E.	JOB No: 1720	
DRAWN BY: S.A.	NTS No: 82L/10	



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22,652

CONTOUR INTERVALS:
(KEY for Colour Ranges)

0 – 9 ppm
10 – 24 ppm
25 – 49 ppm
>50 ppm

TECK EXPLORATION LTD.

NOREEN PROPERTY

SOIL GEOCHEMISTRY **Fig.6**

Pb ppm

0 200 400 600 800 1000
metres

DATE DRAWN: JULY 30, 1992	SCALE: 1:10,000	DWG. NAME:
COMPILED BY: G.E.	JOB No: 1720	NOR-PB
DRAWN BY: S.A.	NTS No: 82L/10	

N

L 24+00 N
L 21+00 N
L 18+00 N
L 15+00 N
L 12+00 N
L 9+00 N
L 6+00 N
L 3+00 N
L 0+00 N

NOREEN 1

MABEL LAKE

Kingfisher Creek

GEOLOGICAL BRANCH
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22,652

CONTOUR INTERVALS:
(KEY for Colour Ranges)

0 – 0.4 ppm
0.5 – 0.9 ppm
1.0 – 1.9 ppm
>2.0 ppm

TECK EXPLORATION LTD.

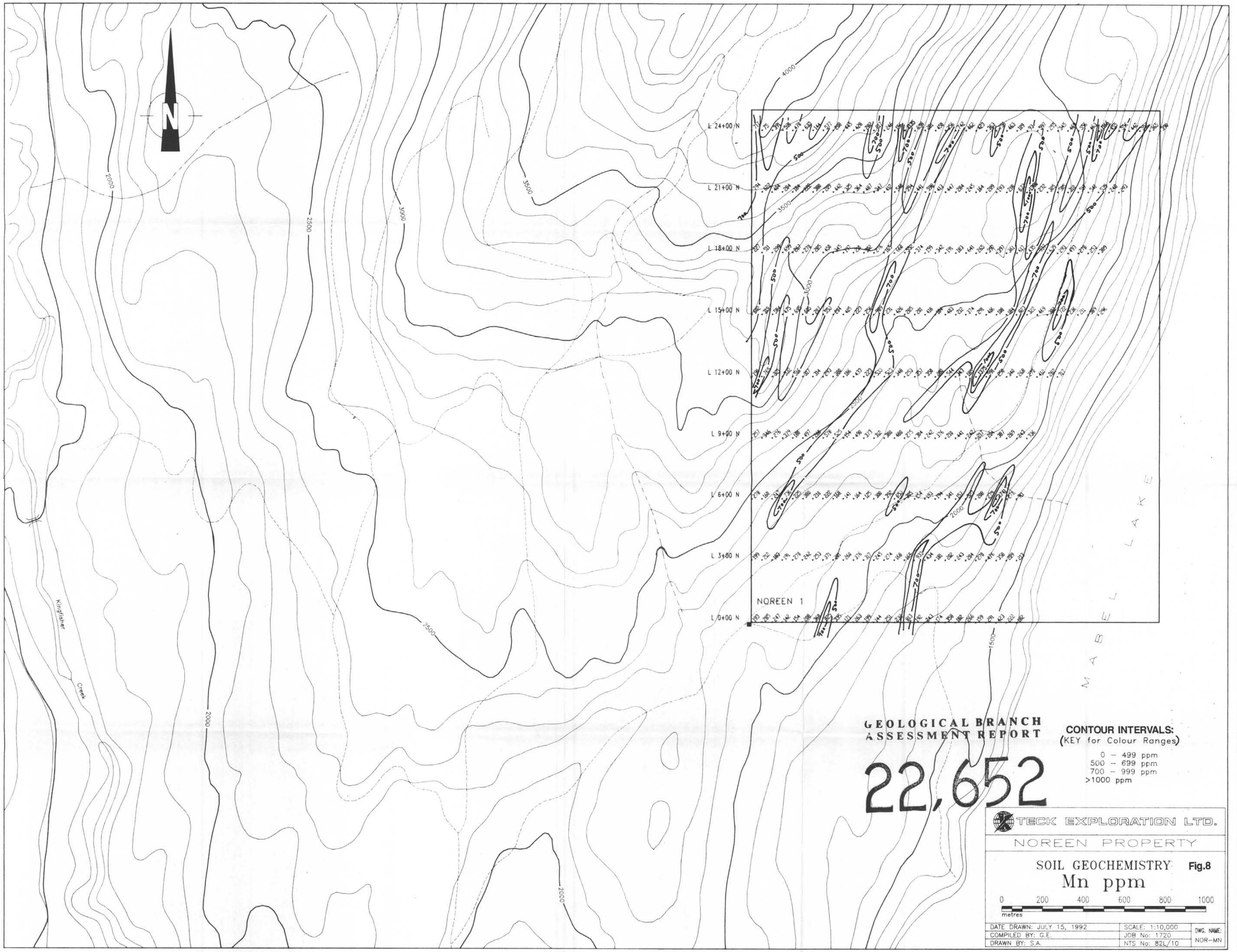
NOREEN PROPERTY

SOIL GEOCHEMISTRY **Fig.7**

Ag ppm

0 200 400 600 800 1000
metres

JULY 31, 1992	SCALE: 1:10,000	DWG. NAME:
COMPILED BY: G.E.	JOB No: 1720	NOR-AG
DRAWN BY: S.A.	NTS No: 82L/10	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,652

CONTOUR INTERVALS:
(KEY for Colour Ranges)

0 – 499 ppm
500 – 699 ppm
700 – 999 ppm
>1000 ppm

TECK EXPLORATION LTD.

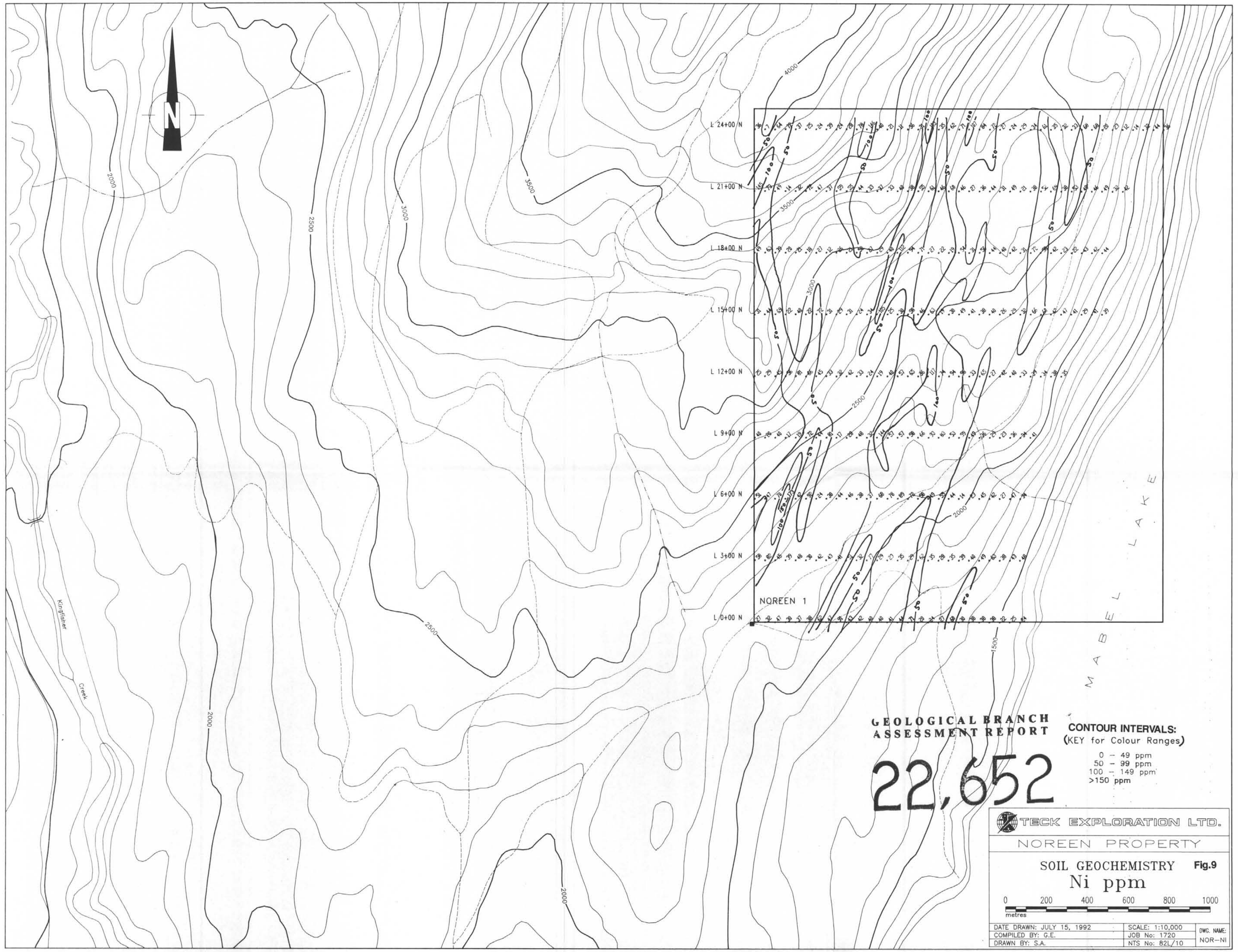
NOREEN PROPERTY

SOIL GEOCHEMISTRY **Fig.8**

Mn ppm

0 200 400 600 800 1000
metres

DATE DRAWN: JULY 15, 1992	SCALE: 1:10,000	DWG. NAME:
COMPILED BY: G.E.	JOB No: 1720	NOR-MN
DRAWN BY: S.A.	NTS No: 82L/10	



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CONTOUR INTERVALS:
(KEY for Colour Ranges)

0 – 49 ppm
50 – 99 ppm
100 – 149 ppm
>150 ppm

TECK EXPLORATION LTD.

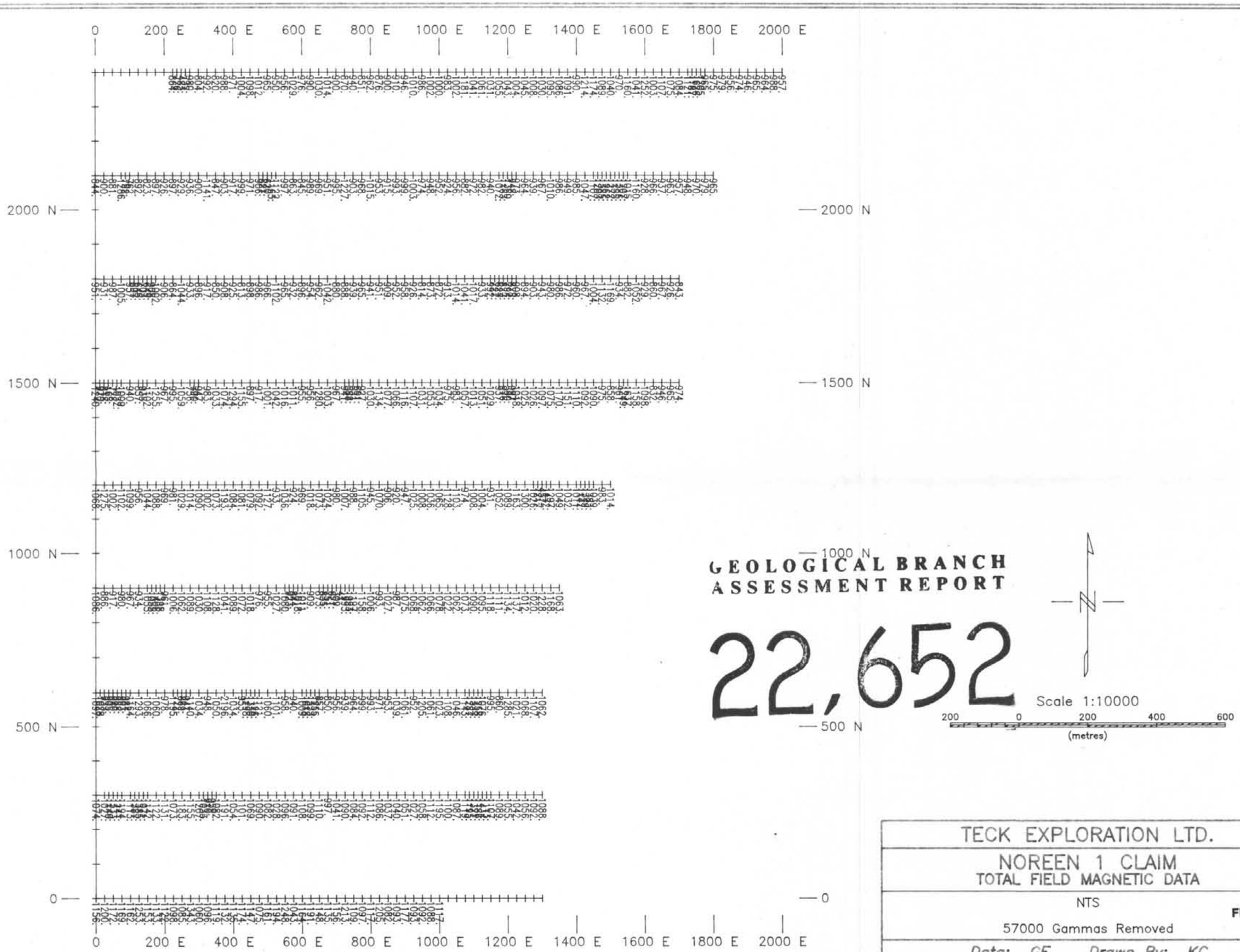
NOREEN PROPERTY

SOIL GEOCHEMISTRY **Fig.9**

Ni ppm

0 200 400 600 800 1000
metres

DATE DRAWN: JULY 15, 1992	SCALE: 1:10,000	DWG. NAME:
COMPILED BY: G.E.	JOB No: 1720	NOR–NI
DRAWN BY: S.A.	NTS No: 82L/10	



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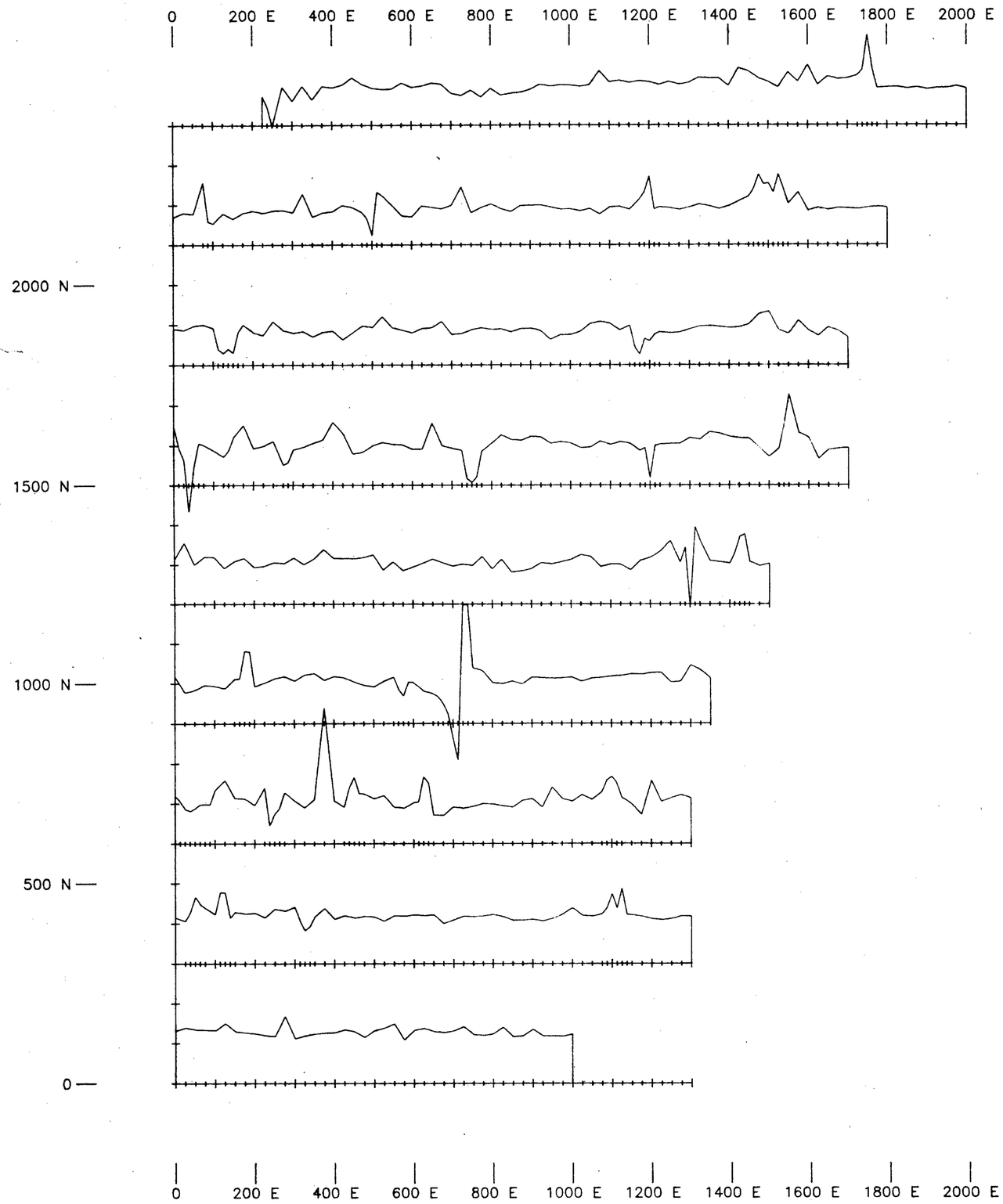
Scale 1:10000

200 0 200 400 600
(metres)

TECK EXPLORATION LTD.	
NOREEN 1 CLAIM TOTAL FIELD MAGNETIC DATA	
NTS 57000 Gammas Removed	Fig. 10
Data: GE *Drawn By: KC*	



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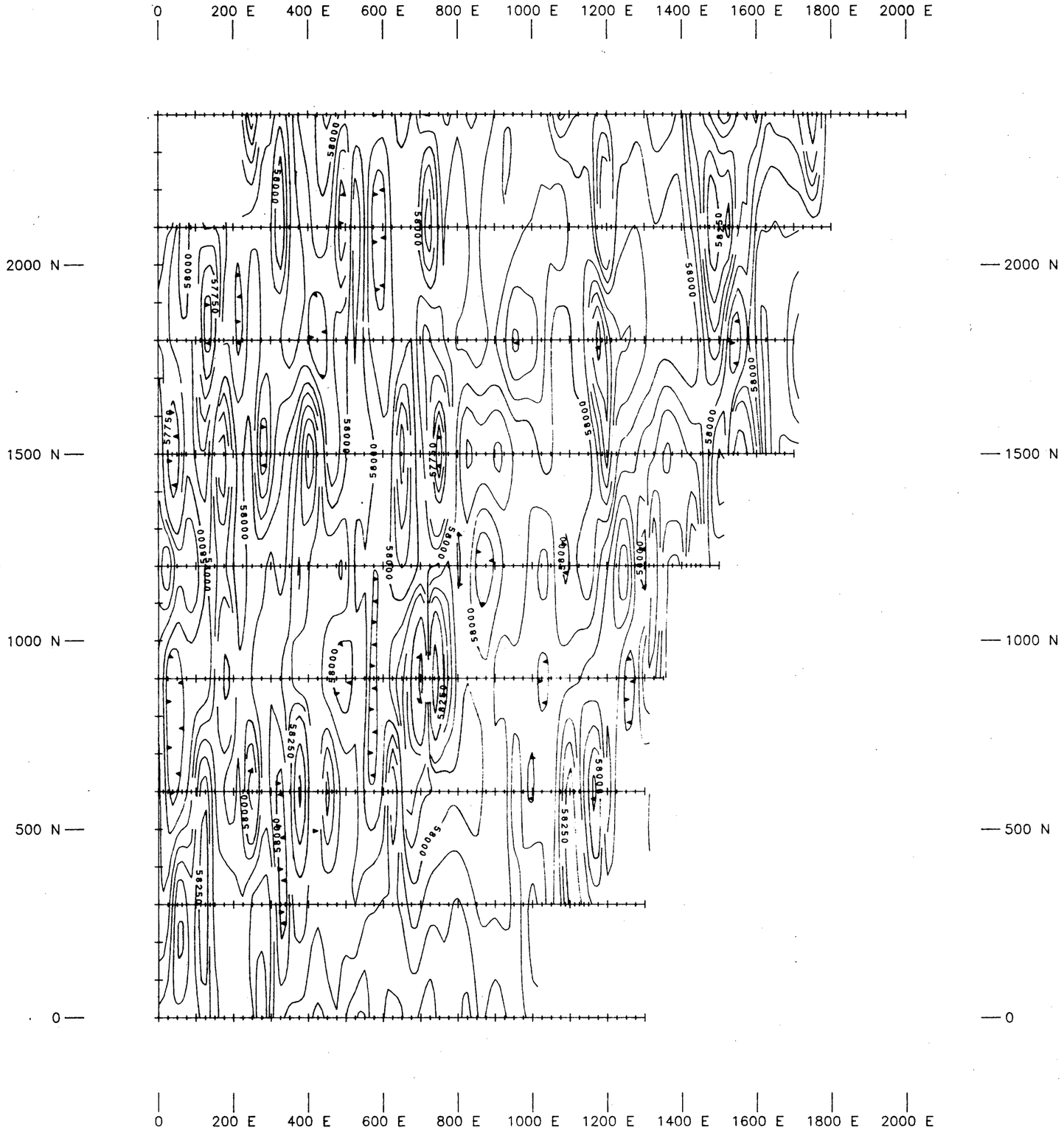
Scale 1:10000

200 0 200 400 600
(metres)

Profile Scale cm = 500 γ

TECK EXPLORATION LTD.
Noreen 1 Claim — Fig.11
Magnetometer Survey Line Profile
57,500 γ Base



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,652

N

Scale 1:10000

200 0 200 400 600
(metres)

TECK EXPLORATION LTD.	
Noreen 1 Claim	Fig.12
Magnetometer Survey Contour	