BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1995/1996
REPORT #:	PAP 95-12
NAME:	ALLAN INGELSON

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

* One technical report to be completed for each project area
* Refer to Program Requirements/Regulations, section 15, 16 and 17
* If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT

Name Allan Ingelson Reference Number 95/96 P024

LOCATION/COMMODITIES

Project Area (as listed in Part A.) Lavington Creek Minfile No. if applicable _____

Location of Project Area NTS 82J/4W Lat 50°01'30"N Long 115°59'30"E

Description of Location and Access Altroy Group - By Helicopter from Invermere;
Copper Lake - By the Skookumchuck and Copper Creek logging roads

Main Commodities Searched For Altroy - Ag,Pb,Zn Copper Lake - Cu

Known Mineral Occurrences in Project Area Altroy - Marmot and Packrat Showings

WORK PERFORMED

1. Conventional Prospecting (area) 300 ha
2. Geological Mapping (hectares/scale) 100 ha 1:1200 and 1:2500
3. Geochemical (type and no. of samples) soil,silt,rock (250 samples)
4. Geophysical (type and line km) Magnetometer and VLF
5. Physical Work (type and amount) --
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS (if any)

Commodities Ag,Pb,Cu Claim Names: Silver and Hummingbird

Location (show on map) Lat 50 01' Long 115 59' Elevation

Best assay/sample type Ag 20.87 oz/ton Pb 18.50% Cu 3.78% Zn 15.10%
Rock - Grab

Description of mineralization, host rocks, anomalies see attached report Galena and lead carbonates in calcareous argillites and siltstones
Chalcopyrite and Pyrite in a Quartz vein in the Dutch Creek Schists

Supporting data must be submitted with this TECHNICAL REPORT.

GEOLOGICAL REPORT ON THE

ALTROY AND COPPER LAKE PROSPECTS

NTS 82J/4W

GOLDEN MINING DIVISION

by

Allan Ingelson B.Sc. and Paul Whitby M.Sc.

TABLE OF CONTENTS

ILLUSTRATIONS:

APPENDICES:

INTRODUCTION

During July and August of 1995 an exploration program, consisting of geological mapping, reconnaissance geophysical surveys, prospecting, rock, soil and silt sampling, was carried out on the Altroy Group, located at 50o01'30"N, 115o59'30"E and on the Hummingbird Prospect at Copper Lake (Figure 1).

At the south end of the Altroy Group on the Silver Claims mineralised showings consist of trenches. At the north end of the Altroy Group on the Lead Claims there are three adits. Previous work during the summer of 1993 focused on prospecting, mapping and sampling the adits on the Lead Claims. In 1995 most of the prospecting and geological mapping was completed on the Silver Claims. From the Silver #4 claim, the north-south baseline was extended further south. Soil samples were collected at 50 metre intervals to investigate the potential for lead-zinc-silver mineralization south of the known showings.

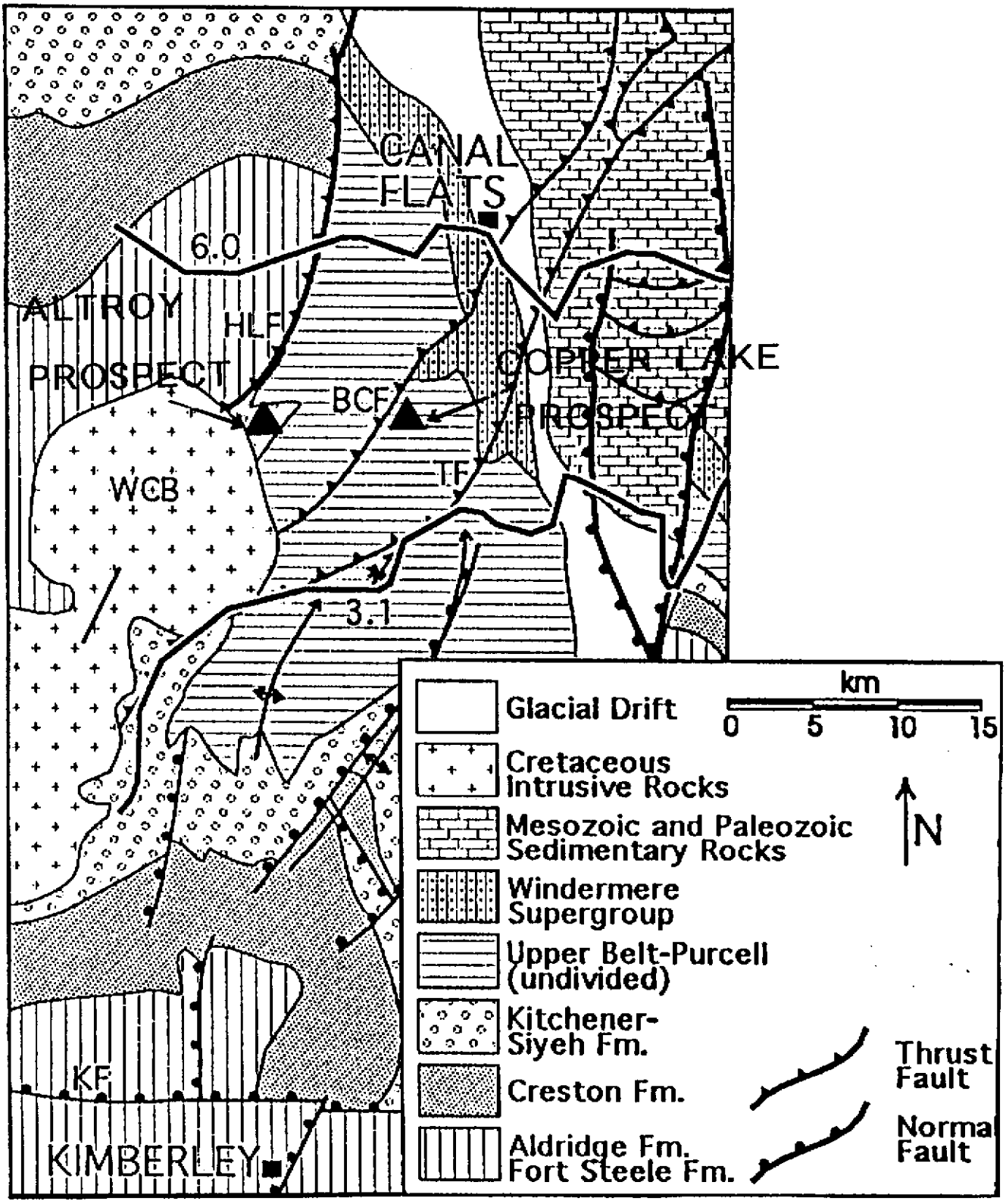
A silt survey was completed in the densely forested area between the Lead Claims and Silver Claims. One sample weakly anomalous in lead was collected in the survey area.

On the Lead Claims, magnetometer and VLF-EM orientation surveys were carried out to evaluate the effectiveness of these geophysical techniques in exploring narrow quartz-sulphide veins which contain silver, lead, zinc, gold and copper values hosted within Proterozoic metasediments.

A total of 159 rock, soil and silt samples were analyzed. Samples from the Altroy Group were analyzed for lead, silver and zinc. Samples from the Copper Lake prospect were analyzed for copper, lead, and silver. The analytical results are listed in Appendix A. Rock samples were collected from mineralized outcrop and float where appropriate.

CLAIM STATUS

Four new claims, the Hummingbird Claims on Copper Lake and Marmot Claims south of the Altroy Group were staked during 1995. The Altroy Group consists of 20 claims, including the Lead #1 to #4, Altroy #1 to #10, Silver #1 to #4 claims and the Marmot two-post claims. The Altroy property straddles the boundary of the Fort Steele and Golden mining divisions (Figure 2). The claims are owned by Allan Ingelson.



ALTROY PROSPECT	
PROPERTY LOCATION REGIONAL GEOLOGICAL MAP OF CANAL FLATS - KIMBERLEY AREA AREA, S.E. BRITISH COLUMBIA	
DATE: JULY 1995	NTS : 82J/4W
	Fig. No.: 1

PROPERTY HISTORY

A general description of the geology of the Silver Claims is provided in the 1926 B.C. Ministry of Mines Annual Report on p. A245:

"The general formation of the area consists of schist and altered sedimentary rocks intruded by stocks and sills of granite. The Silver group deposit, consisting of oxidised silver-lead-zinc ore, occurs in a band of altered and in places decomposed limestone. At an elevation of about 7,300 feet, or a few hundred feet below the summit of the ridge forming the rim of a small glacial basin, shallow outcrop workings expose oxidised material containing streaks and bunches of carbonates containing small nuggets of galena. The rocks are considerably disturbed and shattered locally and the strike and dip of the strata could not be determined with accuracy. The shallow workings do not definitely indicate the character of the deposit, but the vein apparently strikes southerly or diagonally along the steep hillside, with very steep dip to the west, conforming to the bedding of the enclosing rock...The shallow cuts and inconclusive work done in the tunnel do not supply enough information to enable one to from any definite opinions regarding the extent or continuity of the deposit, which requires further exploration."

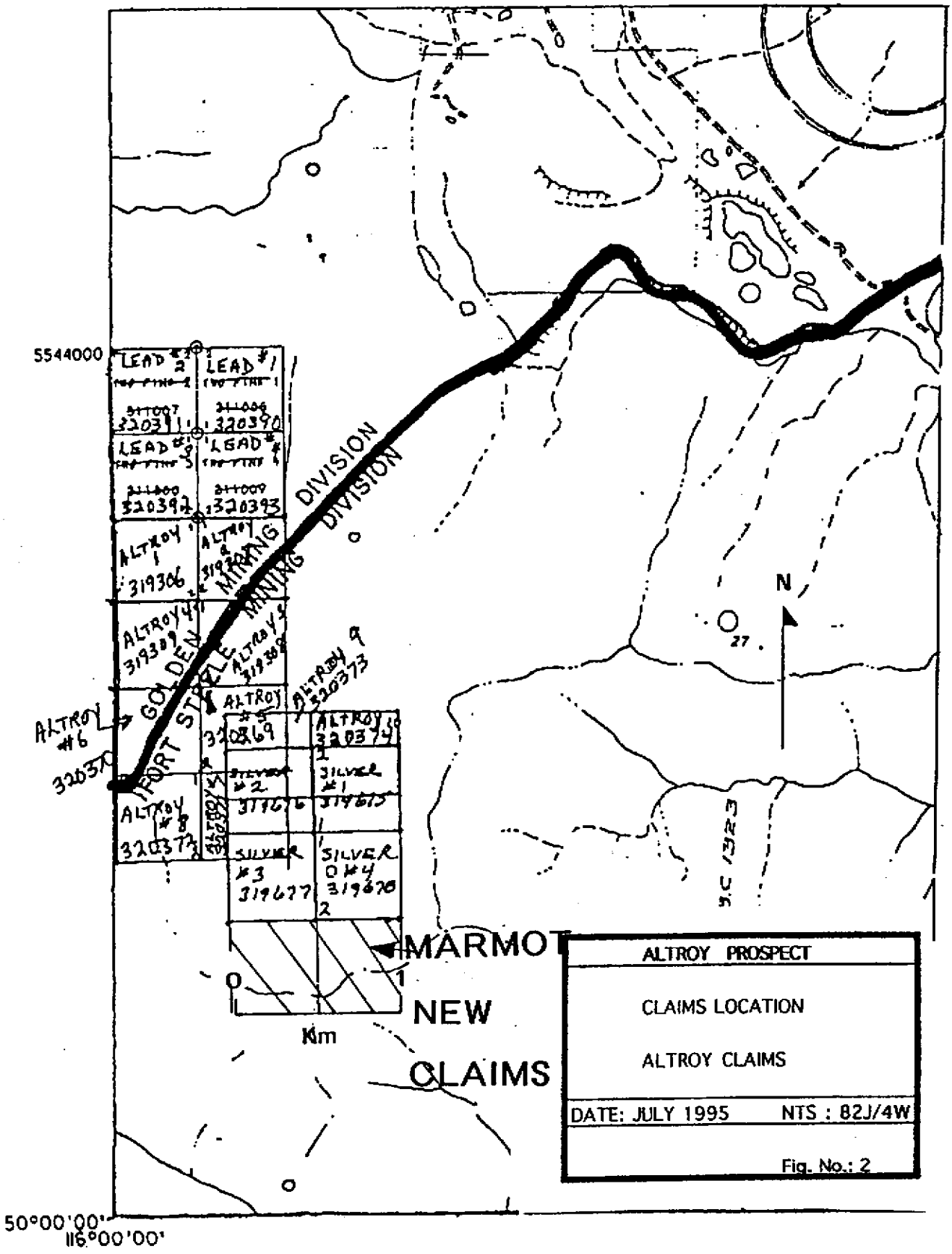
On the Silver claims the following values were reported in samples taken from the Upper Marmot workings in 1926 within sheared sediments at an elevation of 2380 metres:

Description	Au oz/t	Ag oz/t	Pb %	Zn %
Sorted and sacked carbonates from open cut above tunnel	0.04	10.6	10.8	10.7
Streak of galena and oxidised ore in open cut above tunnel	0.03	20.4	22.1	26.5
Green-stained oxidised material from same place	0.02	2.7	18.1	----

Two types of mineralisation have been noted on the Silver Claims:

(1). Narrow quartz-sulphide veins hosted within Kitchener Formation rocks. The veins often contain patchy or disseminated pyrite, sphalerite, galena and chalcopyrite. Veining crosscuts the foliation of the host rocks and in some cases appears to parallel the axial planar surfaces of small scale folds. Iron carbonate alteration often forms a narrow halo around the veins.

(2). Disseminated sulphides within highly sheared and altered rocks. Alteration consists of silicification and carbonatization. The most common sulphides observed are galena, sphalerite and pyrite.


5544000
LEAD #2
LEAD #1
320391
320390
LEAD #3
LEAD #4
320392
320393
ALTROY #1
319306
ALTROY #2
319308
ALTROY #4
319309
ALTROY #5
319310
ALTROY #9
320373
ALTROY #6
320374
ALTROY #7
320369
ALTROY #8
320375
SILVER #1
319675
SILVER #2
319676
SILVER #3
319677
SILVER #4
319678
GOLDEN
FORT STEELE MINING DIVISION
MINING DIVISION
MARMOT
NEW
CLAIMS
0
1
Km
N
27
S.C. 1323
ALTROY PROSPECT
CLAIMS LOCATION
ALTROY CLAIMS
DATE: JULY 1995
NTS : 82J/4W
Fig. No.: 2
50°00'00"
116°00'00"

REGIONAL GEOLOGY

Figure 1 is a geological map of the region. The area is mainly underlain by rocks of the Proterozoic Purcell Supergroup, consisting of the Creston, Kitchener and the Dutch Creek Formations. In the vicinity of the Altroy Group the Proterozic Purcell Supergroup comprises a thick succession of clastic and carbonate sedimentary lithologies. These rocks reflect shallow-water depositional facies within the larger Belt-Purcell basin. Syndepositional faulting has controlled facies changes in some areas of this basin. Subsequent folding, faulting and intrusion by granitic batholiths and stocks have further modified the original sedimentary lithologies.

The bedding dips southwesterly and the stratigraphy is overturned. The northeast-trending Hall Lake (HLF) and Copper Lake thrust (BCF) faults cut the map area . The oldest rocks in the area are those of the Creston Formation. This sequence of tightly folded quartz siltstones and quartz arenites occupies the northwestern part of the map area. The Creston Formation rocks are often altered to quartz-sericite phyllites and biotite schist (McLaren et al, 1990). These rocks are exposed in the northwestern part of the Altroy Property.

Towards the southeast, the Creston Formation contacts the Kitchener Formation, which consists of interbedded carbonates, siltstones and argillite. The Kitchener Formation underlies the southern part of the Altroy Property. To the east of the claims, Purcell group strata are composed of metasediments of the Van Creek and Dutch Creek Formations.

The Purcell rocks have been intruded by the Cretaceous White Creek batholith, as shown in the western part of the map area. It is a well-differentiated intrusion ranging from quartz-monzonite to granodiorite in composition.

PROPERTY GEOLOGY

The Altroy Property is in an area of rugged topography (figure 3), and is underlain by metasediments of the Purcell Supergroup. Quartz-monzonite of the White Creek batholith has intruded these rocks from the west. Detailed geological mapping was completed on the Silver Claims as part of the 1995 program. Grid reference points on the Marmot Grid established in 1993 over the Silver Claims were relied upon for the detailed mapping program in 1995.

The geology of the Marmot Grid is illustrated in Figure 4. The area is mainly underlain by sediments of the Proterozoic Creston and Kitchener Formations. These slightly metamorphosed rocks consist of an interbedded sequence of green and grey banded argillite, blocky, light green calc-silicate and fine-grained grey marble. Foliation appears to parallel bedding and the rocks strike northeasterly with steep, variable dips. Microfolding is common.

In the western part of the grid area, quartz-monzonite of the Cretaceous White Creek Batholith has intruded the sediments. The intrusive is generally pinkish-white and porphyritic, with feldspar phenocrysts up to 4 centimetres long in a medium-grained groundmass. In the central part of the grid numerous fine grained felsic dykes, presumably associated with the White Creek intrusion, cut the metasediments. Two small outcrops of a dark green, chloritic andesite have been mapped near the centre of the grid.

The Silver Claims are characterised by talus cover and generally poor outcrop along the mineralized trend (figure 4). This is a function of the recessive nature of the Purcell metasediments in which the mineralised zones are found. Hand trenching in the early workings has exposed some of these zones, and several of the samples are from mineralized float. The most common sulphide observed in rock samples collected from the Upper and Lower trenches is galena. The galena occurs as blebs and nuggets within altered carbonates.

Critical to the presence of mineralization is the presence of a recessive Kitchener "facies" of finely bedded, rusty weathering, vari-coloured (red, purple and green) argillite-siltite metasediments. Much of the succession is dolomitic and altered Carbonate is present in the mineralized zones. Massive, yellowish sphalerite was observed in the upper Marmot trenches. Sphalerite often weathers leaving a limonite residue. Many of the samples examined in the upper trenches are coated with limonite. X-Ray Diffraction analysis completed on November 21, 1995 of one sample collected from a trench in the Upper Marmot Showings has been identified as the hydrous zinc silicate hemimorphite. Massive white hemimorphite, often on iron stained samples occurs in the oxidised zone of zinc deposits as an alteration product of Sphalerite.

The Kitchener type "facies" are found in a 50 to 100m wide band that is sub-parallel to the strike of the bedding and a regional northeast-southwest joint set and enclosed in Creston formation lithologies. A chute parallel to bedding delineating the lateral extent of this zone is present in both worked areas and is on trend between the Upper and Lower Marmot sites, a horizontal distance of at least 500 metres (figures 4,5 & 6).

Current ripples, flaser bedding and scour and fill present in these beds, suggest deposition in a shallow marine environment, and have similar characteristics to the Lower Kitchener unit as described by McMechan (1981) from the Southern Purcells. Creston-type lithologies found stratigraphically above and below this unit suggest a gradational-type contact where shallower water facies is interdigitating into the generally deeper water turbiditic environment typical of the enclosing Creston Formation. Another possibility is that the Lower Kitchener sequence is thrust emplaced into Creston strata. However poor exposure makes verifaction of thrusting difficult. Both explanations for the above stratigraphical relations do however permit the lateral continuation of mineralized zone along strike between the Upper and Lower Marmot workings and this is the critical point for the mineral potential of the claimed area.

Mineralization is confined to this zone and is intimately associated with parasitic Quartz-Monzonite stocks and Felsic intrusions. A conjugate joint pattern trending 030/120 deg. is present with mineralized zones confined to the NE/SW set which is subparallel to the bedding of the enclosing sediments. The NW/SE set where exposed is quartz bearing and barren.

The Lower Marmot showings (2+00E/5+00N) have a critical outcrop which demonstrates the geology of the deposit (figure 6). Here in the worked face, sericitized greenish granitic rock (Kwc) intrudes into Kitchener metasediments with a sharp contact and with a cross-cutting relationship to bedding. Joints cross-cut the contact of Kwc and Pck and therefore post-date the intrusion. The joints are subparallel, hairline to open fractures within the granite and form a conjugate set at 194/112 deg. orientation. Mineralization in the rusty colored weathered Kitchener zone parallels the 112 deg. set and is up to five metres wide close to the contact. A minor offshoot, ten to twenty centimeters wide extrudes a couple of metres along a quartz vein filled-joint into the granite.

RECONNAISANCE GEOPHYSICS - SILVER CLAIMS

The surveys completed on the Silver Claims were reconnaissance surveys to test whether these geophysical methods would be helpful in future exploration of the prospect. The instruments used were a Phoenix VLF-EM and a Geometrics Model 856 proton magnetometer. Reconnaissance geophysical surveys (magnetic and VLF-EM) were undertaken over the grid laid out for the soil geochemical survey. On the Silver claims the magnetometer survey, was initiated to aid in mapping larger scale geological features. The VLF-EM survey was implemented to detect any significant fault or shear structures on the property. Readings were taken at 5 metre intervals using a hip chain and compass lines were used where no grid lines were available. The steepness of the terrain, the grid line direction and the formation strike made interpretation of the VLF-EM data to extend or follow known zones impossible.

The magnetometer provided data while not directly related to the known mineral shows was thought to provide some useful data and was continued over parts of the Upper Marmot and Lower Marmot grid. Profiles of all lines were made and the location of all anomalies were plotted. The profiles are included in Appendix C.

None of the "anomalies" were thought to be directly related to the known shows but they were interpreted as being contact type anomalies (formation contact). On the Upper Marmot part of the grid (figure 8), anomalous high values from the magnetometer survey were found. Between 0+50N and 1+00N on the O+50W line, values of of over 550103 Nanotesslas (Nt) were recorded. A similar range of values were recorded between 2+50N and 3+00N on the 0+00 BL. In contrast, a low area with values below 500103 Nt was recorded for the quadrant 0+00 to 0+50E, 1+00N to 1+50N. Over the Lower Marmot workings on the grid (figure 9), the data is hard to interpret. There seems to be some correlation with one of the "anomalies" and the known shows. Anomalous values of over 600 *103 Nt were recorded between 2+00E to 2+50E and 4+00N to 4+50N. Low values of below 350 *103 Nt were recorded between 4+30N to 5+00N on line 1+50E.

SOIL GEOCHEMISTRY

The results of the soil sampling program were tied into the Marmot Grid, and have been plotted on figures 7, 9 and 12. The four anomalies detected in the 1993 program were prospected carefully and samples collected at 25 metre spacings where possible. It should be noted that over part of the grid area large boulders (in some cases one to two meters wide) prevented sampling at some locations on the talus slope. For the purposes of this report a statistical analysis of the soil sample results was conducted in order to determine "anomalous levels" for the various metals. The mean and standard deviation was determined for each metal. If a metal value is less than or equal the mean + 1 standard deviation then the value is said to lie within the "background" range. If a value lies within the range mean + 1 to mean + 2 standard deviations then it is said to be "weakly anomalous". If a value is greater than the mean + 2 standard deviations then it is said to be "anomalous". This data is summarised below. Many factors such as population size and the presence of highly mineralised areas can bias the statistics. The classification system shown below should therefore be used as a guide rather than a precise determination of what constitutes an anomalous sample.

Classification of Soil Sample Results

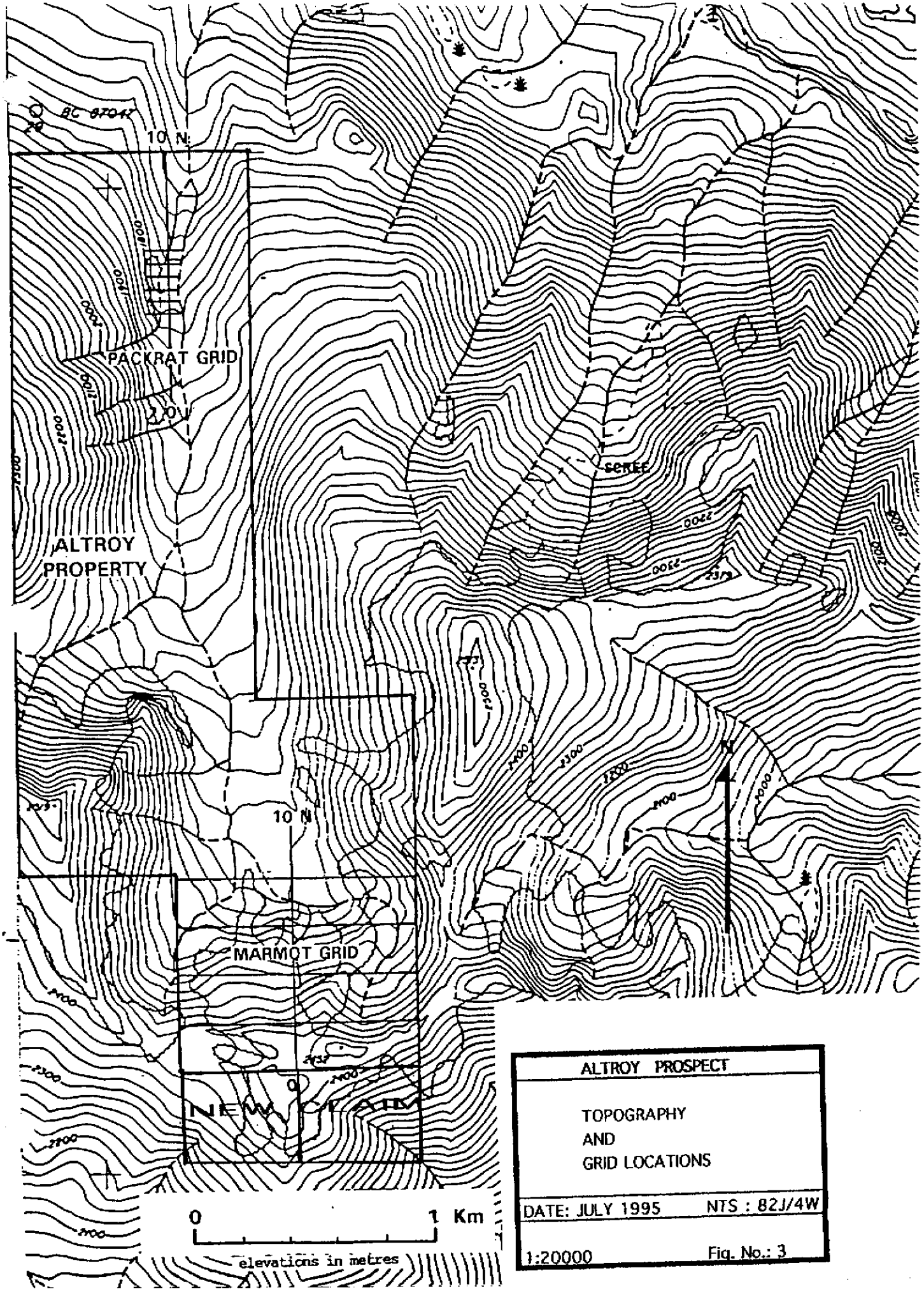
Metal	Background	Weakly Anomalous	Anomalous
Silver	0-0.7 ppm	0.7-1.2 ppm	>1.2 ppm
Copper	0-37 ppm	37-55 ppm	>55 ppm
Lead	0-79 ppm	79-126 ppm	>126 ppm

In respect to the area sampled near the Upper Marmot trenches on the Silver Claims, (plotted on figure 7), the twenty soil samples collected, average 798.7 ppm Pb and several are anomalous in silver. These samples collected along the baseline between 2+00N and 1+00N contain from 29 ppm Pb to a high 4350 ppm Pb. Values of 2250, 3300 and 4350 ppm Pb were found at 1+60N, 1+65N and 1+70N respectively, (figure 7).

Soil samples anomalous in lead and silver were also collected along the 2+00N grid line between 0+10W and 0+20W. Soil samples 95580 and 95581 contain 609 ppm Pb and 1150 ppm Pb respectively. Soil samples anomalous in lead and silver were found along the 1+75N grid line between 0+10W 0+20W. Samples 95583 and contain 411 ppm Pb and 677 ppm Pb respectively.

ROCK SAMPLE ASSAYS

Significantly anomalous grab sample assays were obtained on the Silver Claims from the Upper and Lower Marmot trenches and open cuts (figure 7). Seventeen grab samples collected from the workings average 3.78% Pb and 4.23 oz. Ag/ton.



ALTROY PROSPECT	
TOPOGRAPHY AND GRID LOCATIONS	
DATE: JULY 1995	NTS : 82J/4W
1:20000	Fig. No.: 3

Initial sampling and geochemical analysis of one float sample collected at BL 1+75N, indicated 10,000 ppm lead. Near the Lower Marmot workings, samples were taken on a line perpendicular to the strike of the bedding, and on a line across slope from the highest trench of the Lower Workings. At LM 5+40N/1+95E and LM 5+55N/1+75E, assays of 5.25 and 5.15% Pb respectively, were obtained from float samples. At LM 5+70N/1+70E, an assay of 18.5% Pb, 20.87oz Ag/ton and 15.10% Zn was obtained from a grab sample. At LM5 +45N/ 1+85E, sample 95694 contained 3.26% Pb and 9.01 oz/ton Ag and 7.60% Zn. At UM1+30N/0+10W, two grab samples contain values of 0.86% and 1.33% Pb and 1.27 and 1.48 oz/ton Ag, respectively.

After receiving the X-Ray diffraction identification of hemimorphite in a sample from an Upper Marmot trench, three samples were subsequently assayed for zinc. The results reported in the December 13, 1995, certificate of assay are 6.95% ,7.60% and 15.10% Zn.

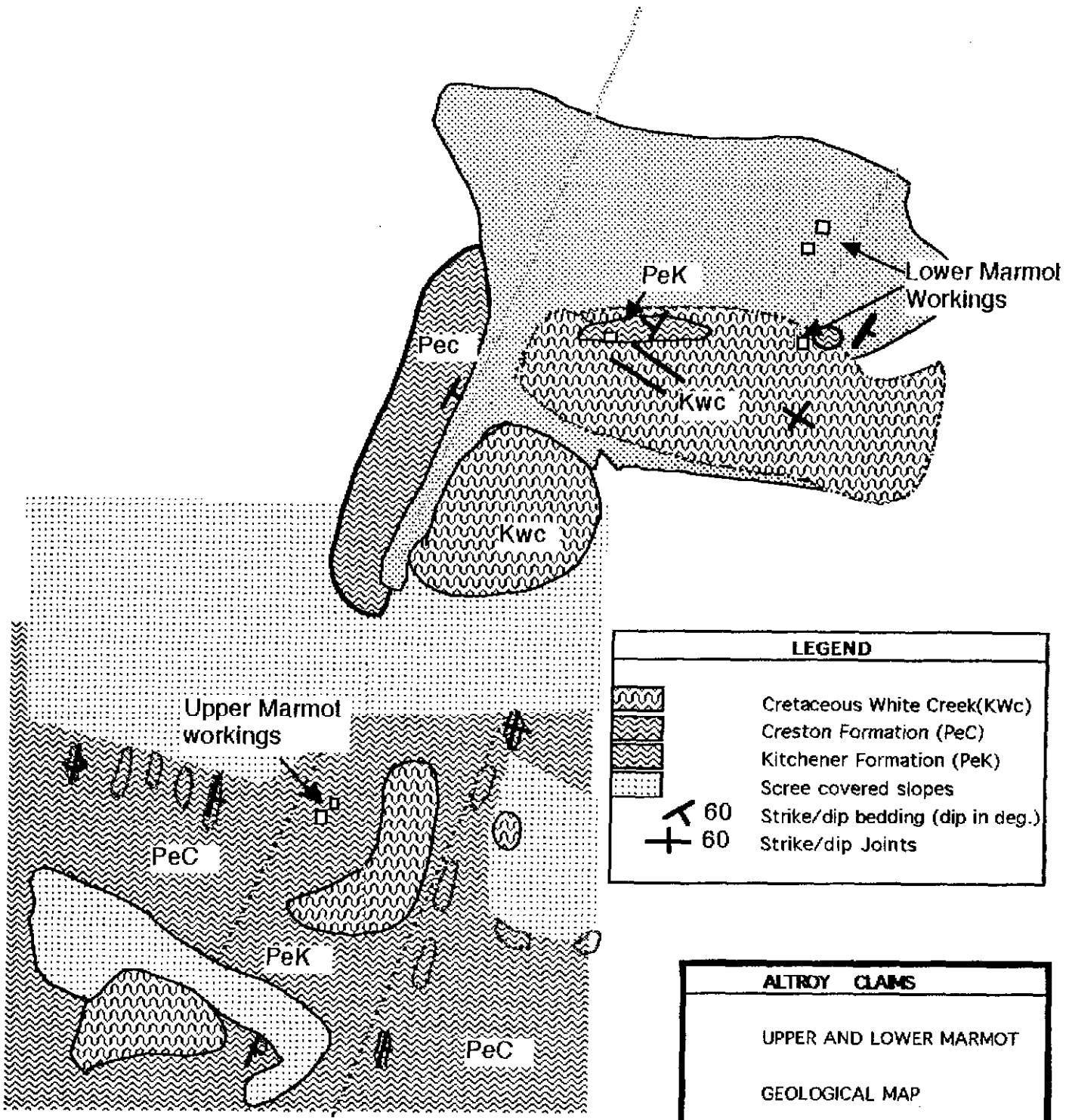
During the 1995 program, the baseline between the Silver #3 and Silver #4 claims was extended 500 metres to the south on to the newly staked Marmot claims. Soil samples were taken every 50 metres along this line. (figure 12). None of these samples contained anomalous values for lead or silver.

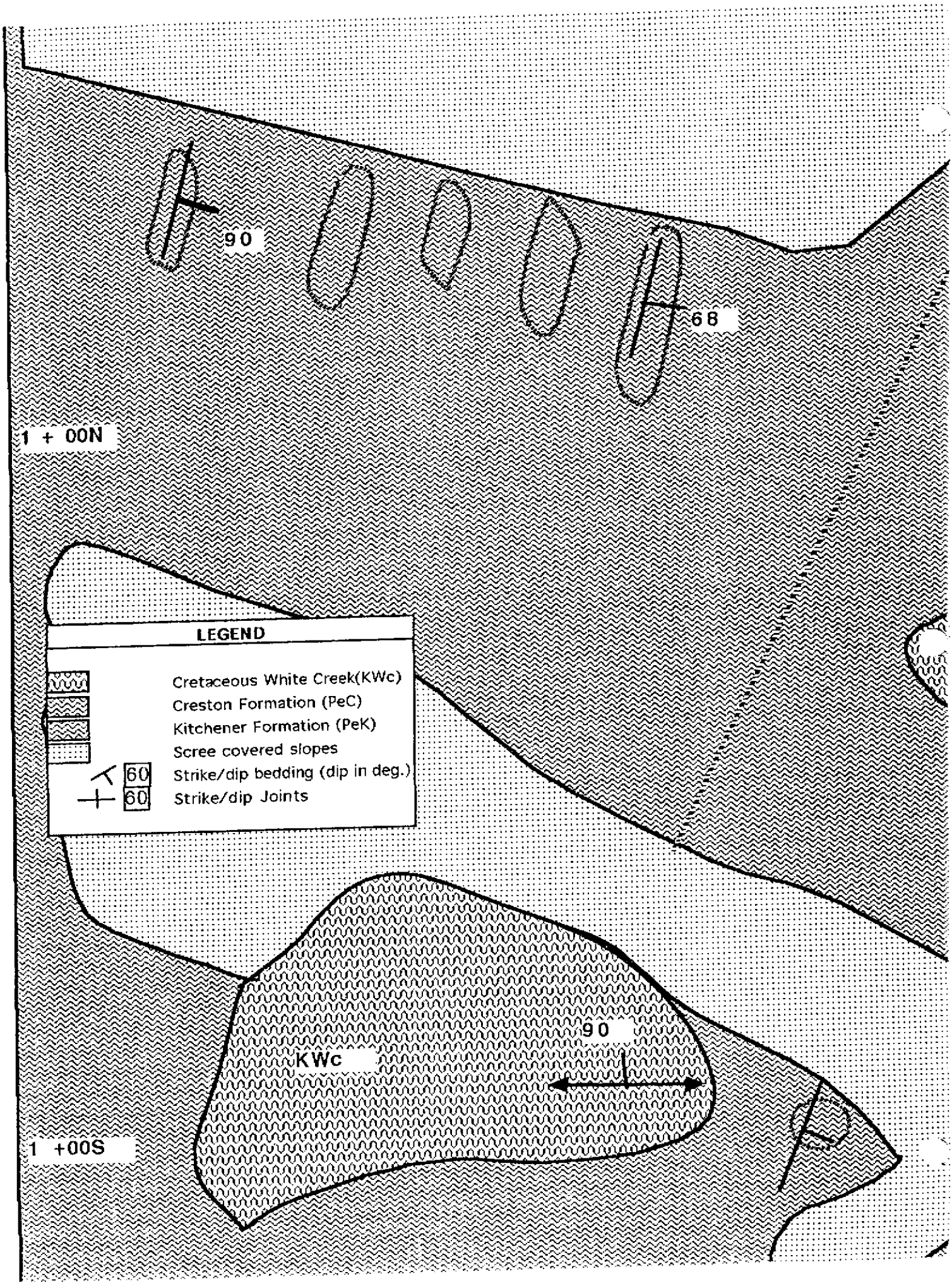
SILT SURVEY BETWEEN THE SILVER AND LEAD CLAIMS

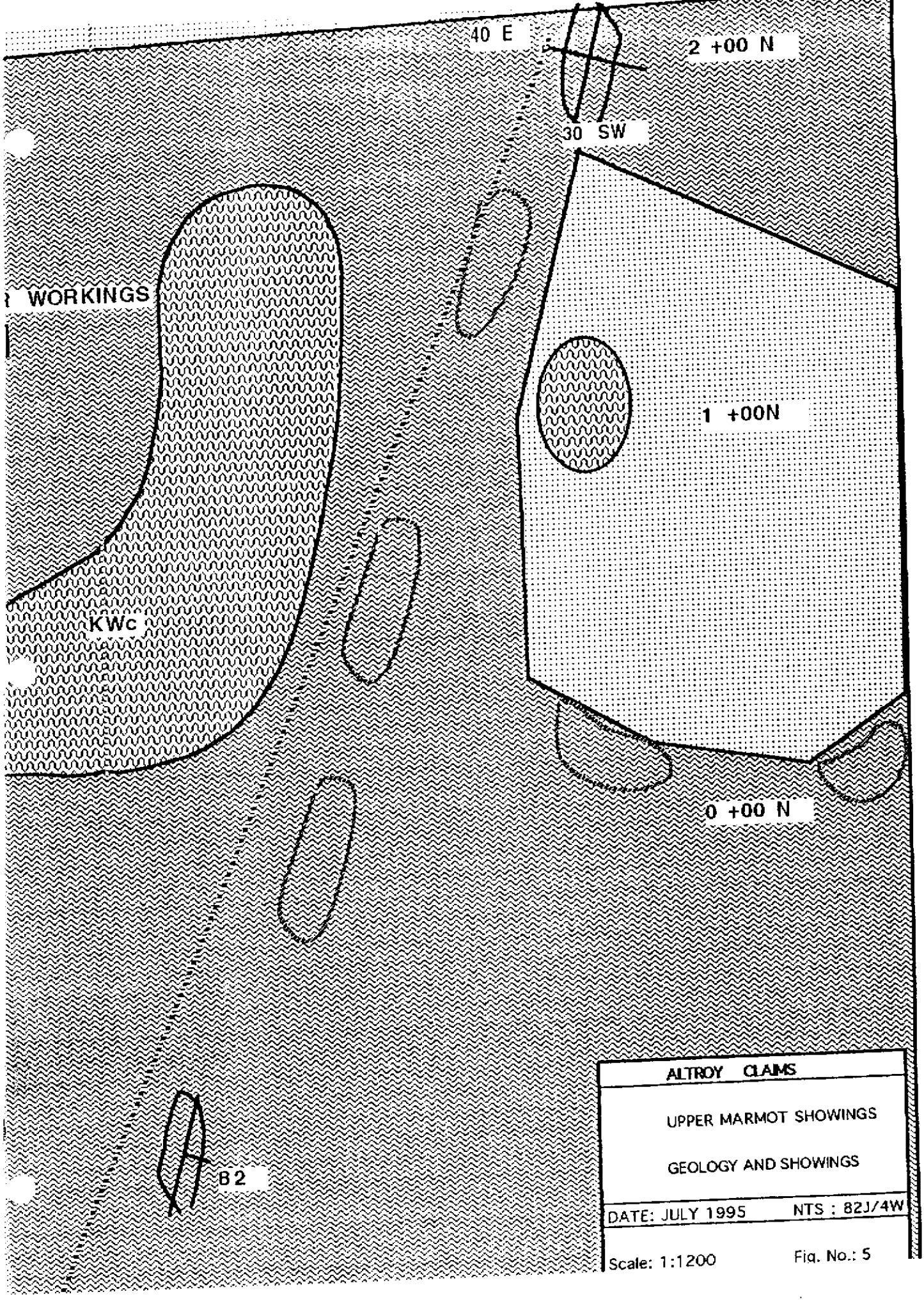
In the heavily forested area between the Silver and Lead Claims silt samples were collected from tributaries to Blake Creeks (figure 10). Sample locations were flagged and for part of the survey during which a GPS system was available, the GPS system was used to record the UTM coordinates, to plot more accurate sample locations. In addition some of the sample location sites were tied into the Packrat and Marmot grids where possible. Only one of the twenty silt samples analyzed contains weakly anomalous amounts of lead. Sample #95659 assayed 92 ppm lead and was taken from a tributary to Blake creek which drains from the eastern part of the glacial basin.

RECONNAISSANCE GEOPHYSICS & GEOLOGY - LEAD CLAIMS

VLF-EM and Magnetometer orientation surveys were also carried out on the Lead claims. Access to the Lead claims from the Silver Claim base camp was via an old horse trail along Blake Creek, down the valley to elevation of 1780 metres). The Lead Claims are located four kilometres north of the Silver Claim base camp. Three lines were laid out starting at the Cabin at 0+30W/4+10N (figure 11). A magnetometer survey was run over them. Anomalous readings were found in the vicinity of the central adit and are interpreted to be related to faults and fractures which control the mineralization in the area of the adit. The VLF-EM survey failed to detect any conductors.


PeK
Lower Marmot
Workings
Pec
Kwc
Kwc
Upper Marmot
workings
PeC
PeK
PeC
LEGEND
Cretaceous White Creek(KWc)
Creston Formation (PeC)
Kitchener Formation (PeK)
Scree covered slopes
60
Strike/dip bedding (dip in deg.)
60
Strike/dip Joints
ALTROY CLAIMS
UPPER AND LOWER MARMOT
GEOLOGICAL MAP
DATE: JULY 1995
NTS : 82J/4W
Scale: 1: 5000
Fig. No.: 4


90
68
1 + 00N
LEGEND
Cretaceous White Creek(KWc)
Creston Formation (PeC)
Kitchener Formation (PeK)
Scree covered slopes
60
Strike/dip bedding (dip in deg.)
60
Strike/dip Joints
90
KWc
1 +00S



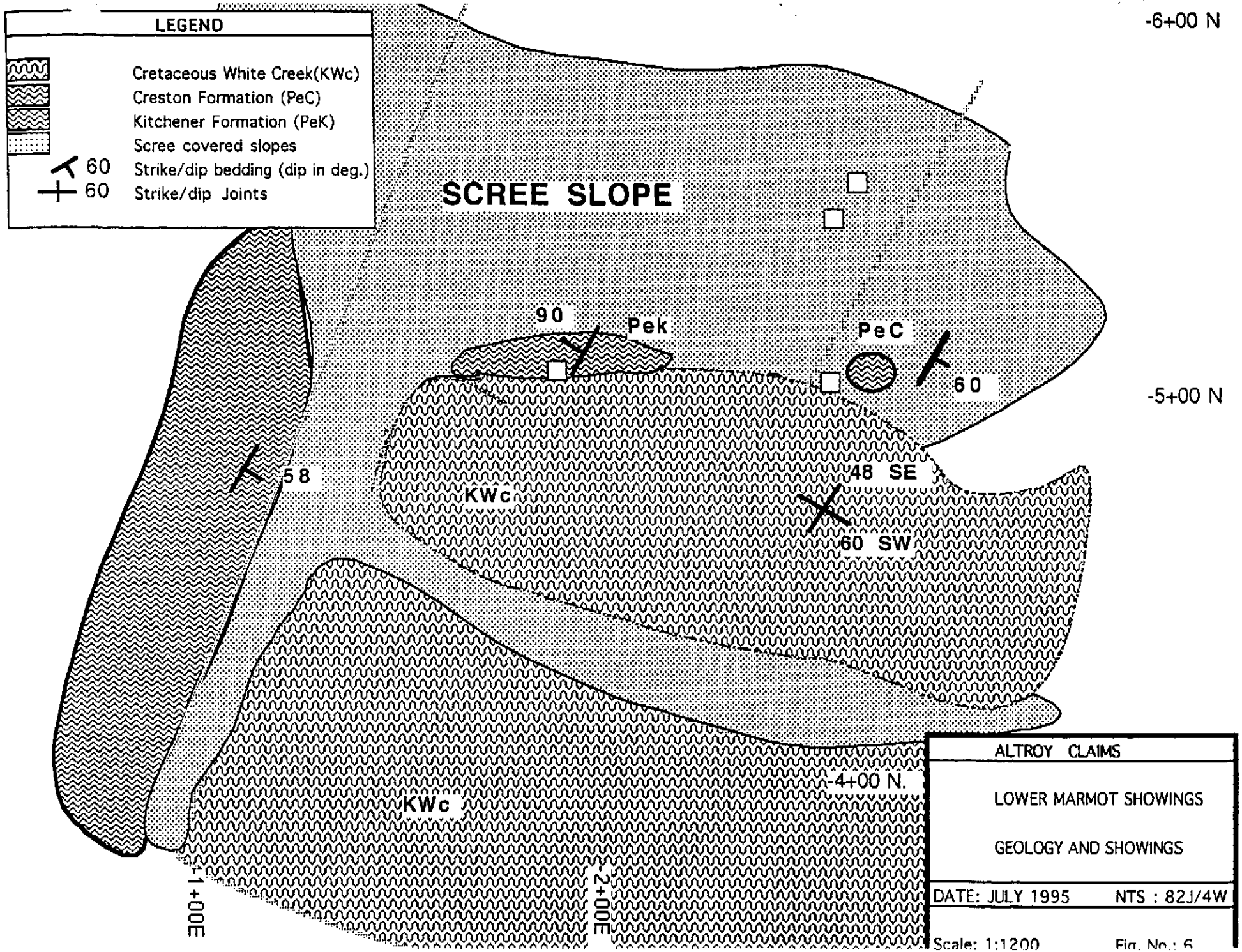
ALTROY CLAIMS

UPPER MARMOT SHOWINGS

GEOLOGY AND SHOWINGS

DATE: JULY 1995 NTS : 82J/4W

Scale: 1:1200 Fig. No.: 5

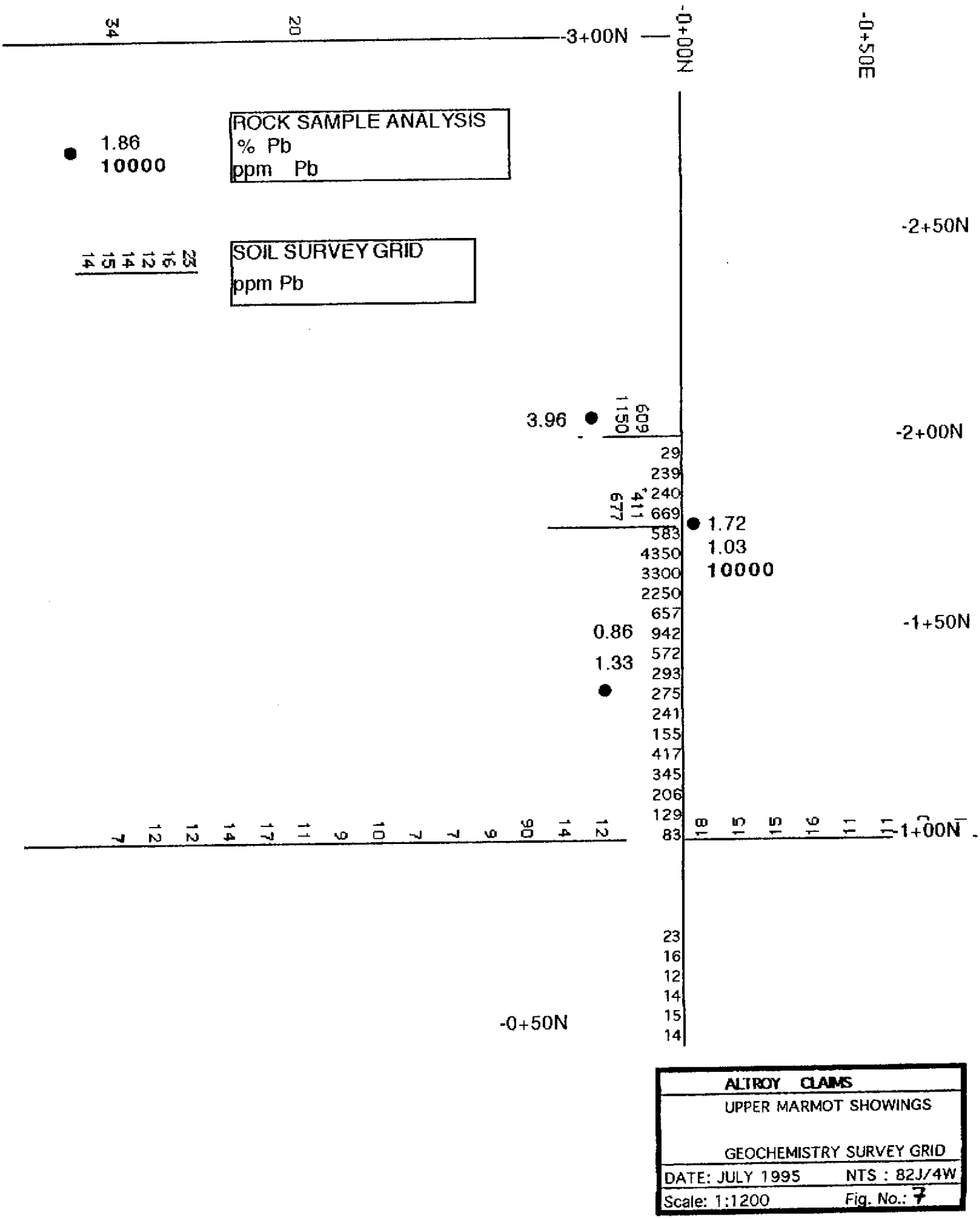

LEGEND
Cretaceous White Creek(KWc)
Creston Formation (PeC)
Kitchener Formation (PeK)
Scree covered slopes
60 Strike/dip bedding (dip in deg.)
60 Strike/dip Joints
SCREE SLOPE
-6+00 N
-5+00 N
-4+00 N.
90
Pek
PeC
60
58
48 SE
60 SW
KWc
KWc
1+00E
2+00E
ALTROY CLAIMS
LOWER MARMOT SHOWINGS
GEOLOGY AND SHOWINGS
DATE: JULY 1995
NTS : 82J/4W
Scale: 1:1200
Fig. No.: 6

On the Lead claims three parallel, southwest-trending mine adits have been driven into an east facing bluff. The adits expose sub-horizontal quartz-sulphide veins, hosted within quartz-monzonite and pellitic schist. Falls and Ingelson mapped and sampled the adits in 1993. The southwest-trending roughly parallel adits are spaced at fifty metre intervals along the base of the east-facing cliff. The adits expose narrow (1 to 5 centimetre) quartz-sulphide veins. The veins are sub-horizontal and cut both Creston schist and the White Creek quartz-monzonite. The quartz veins are structurally controlled, parallelling foliation within the schist. Mineralization is patchy and consists of pyrite, arsenopyrite, sphalerite and galena. Five to ten centimetre alteration halos adjacent to the veining are typical. Disseminated pyrite with minor galena is commonly present within the alteration zone. Although the veining occurs near the intrusive-sediment contact it is unclear whether the intrusion is the source of the veining as the veins appear to postdate the intrusion. Copper values are generally low. Higher gold values correspond to higher arsenic values, suggesting an association between gold and arsenopyrite. The presence of sulphide stringers suggests the possible existence of a main fissure, the presence or absence of which remains to be tested by drilling.

Biotite-quartz schist of the Proterozoic Creston Formation, intruded by quartz-monzonite dykes and sills from the White Creek Batholith, are exposed in an east facing bluff. The schist is blocky and consists of layers of aligned biotite clots within fine-grained, grey quartz. These rocks probably represent the metamorphic equivalent of an impure quartz sandstone. The schist strike northeasterly and dip moderately towards the northwest. The intrusive has irregular contacts and subsurface exposures suggest a crosscutting relationship with the schist. The intrusive is generally white, fine to medium-grained, equigranular and well jointed.

The Altroy Group showings are analogous to the Kootenay King Mine located 19 miles due east of the Sullivan Mine at Kimberly, and to some of the ore deposits in the Coeur d'Alene lead-zinc-silver mining district in Idaho.

The Kootenay King Mine mine orebody as described by Charles S. Ney in 1957, produced 14,000 tons grading 11.1% zinc, 11.1% lead, and 3.8 oz/ton silver from an area of 250' x 6-20' x 160' deep. As in the Altroy showings, the most common sulphides at the Kootenay King Mine are galena, sphalerite, and pyrite and are finely laminated mimicking minor folds. The host is a dolomitic argillite. At the Kootenay King Mine a diorite sill intrudes within 2000' of the orebody while irregular dykes of monzonite and porphyritic monzonite are common within the mine area and the main fault zone. In the Kootenay King Mine the mineralization is concentrated in the drag-folded crestal region of an anticlinal fold. Vein-type mineralization consisting of coarse ore minerals and up to 6" thick quartz-carbonate stringers parallels the ore zone but also persists beyond the limits of the ore. Mineralization dies out to the west of the crest and below towards a disturbed region above a fault. Minor mineralization is found in the fault as irregular veinlets of coarse ore minerals with quartz gangue away from the ore zone. Irregular monzonite dykes have a preference for the fault zone and are also cut by later monements along the fault. There appears to be a genetic relationship between monzonite, ore, and the fault.



ALTROY CLAIMS	
UPPER MARMOT SHOWINGS	
GEOCHEMISTRY SURVEY GRID	
DATE: JULY 1995	NTS : 82J/4W
Scale: 1:1200	Fig. No.: 7

"Dolomitic argillite" type alteration appears throughout the mine as a variably intense unit. Crystals of dolomite lie in an irregular halo up to 20' wide around the ore zone. Fractures and planes of schistosity may facilitate replacement. Ore minerals occasionally display a lineation along planes which transect the bedding, while small faults or fractures follow the walls. Bands and fragments of unreplaced rock are seen laterally from ore zones. In the Kootenay King Mine, sills, dykes, porphyritic monzonite, and drag folds in the region of anticlinal folds and faults are important factors in localizing sulphide mineralization.

The Altroy prospect and a number of the Coeur d'Alene ore deposits are similar in respect to their host rocks, fault/joint trends, bleaching of country rock, sericitization and late stage remobilization. The Coeur d'Alene Belt rocks consist principally of quartzites, argillites, and calcareous rocks. Abundant mud cracks, ripple marks, crossbedding, and stromatolites indicate that most of the sequence is of shallow-water origin as in the case of the Altroy Group. Most of the ore deposits lie along fractures and shear zones in the Belt Supergroup rocks. Important Coeur d'Alene ore minerals include galena, sphalerite, tetrahedrite, and arsenopyrite. Arsenopyrite is an indicator of economically favorable areas because it forms envelopes around ore shoots. Quartz, siderite, other carbonates, pyrite, and locally, barite are the principal gangue minerals.

CONCLUSIONS

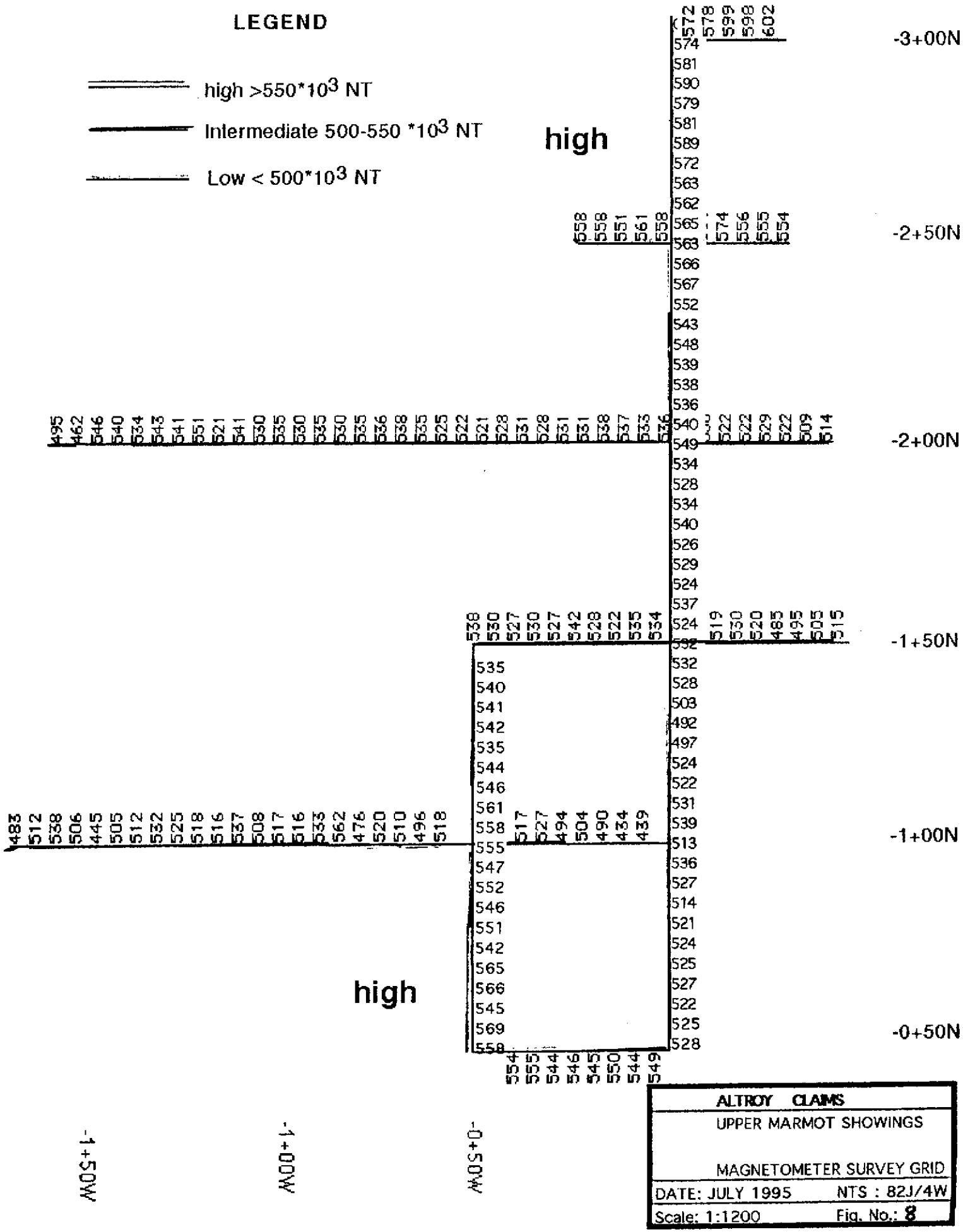
The Upper Marmot and Lower Marmot Workings lie within a 50 to 100 metre band of Kitchener type rocks and are located along strike, separated by a distance of approximately 500 metres. This is encouraging as the lithology may be a controlling factor in mineralization. The occurrence of "satellite" stocks and sills of the Cretaceous White Creek in association, and close to both workings also suggests that there is potential for mineralization between the two worked areas. The enclosing Creston Formation consists of grey to green, 30 centimetre to 1 metre sandstone-argillite couplets, which are almost invariably barren where crosscut by veining.

Soil sample and grab sample analysis from both the Upper and Lower Marmot workings indicate a relationship between the areas previously worked by the Blake brothers and elevated silver and lead values. Many of grab samples were taken as float, downslope from the original workings and may not be indicative of in-situ grades. Recognizing the extensive talus cover over much of the area between the Upper and Lower Marmot workings, additional trenching should be considered. Drilling could provide information on the continuity of the mineralization at depth. Lack of mineralized outcrop in the Kitchener Formation is a problem in evaluating the extent of the mineralization.

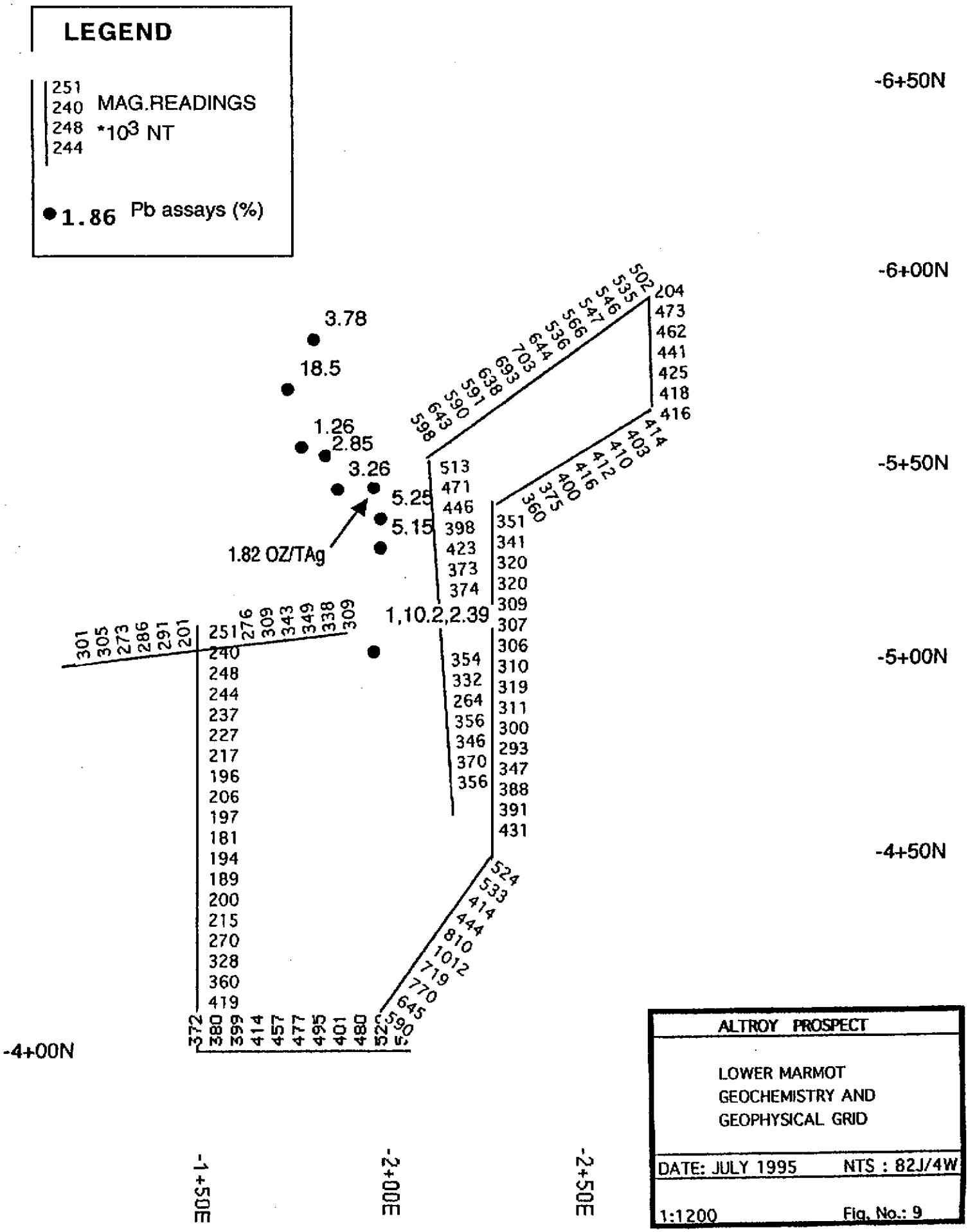
There seems generally to be very little correlation between the magnetometer survey and mineralized areas. On the Upper Marmot grid (figure 8) slightly elevated readings occur just south of the upper workings, but not directly over the workings themselves. This seems to correlate with the margin of a quartz Monzonite stock against the Kitchener sediments. (figure 6). Values decrease again where the survey crosses the stock itself and may indicate more magnetic material. If this is the case, then a similar " high" area is located between 2+50N and 3+00N.

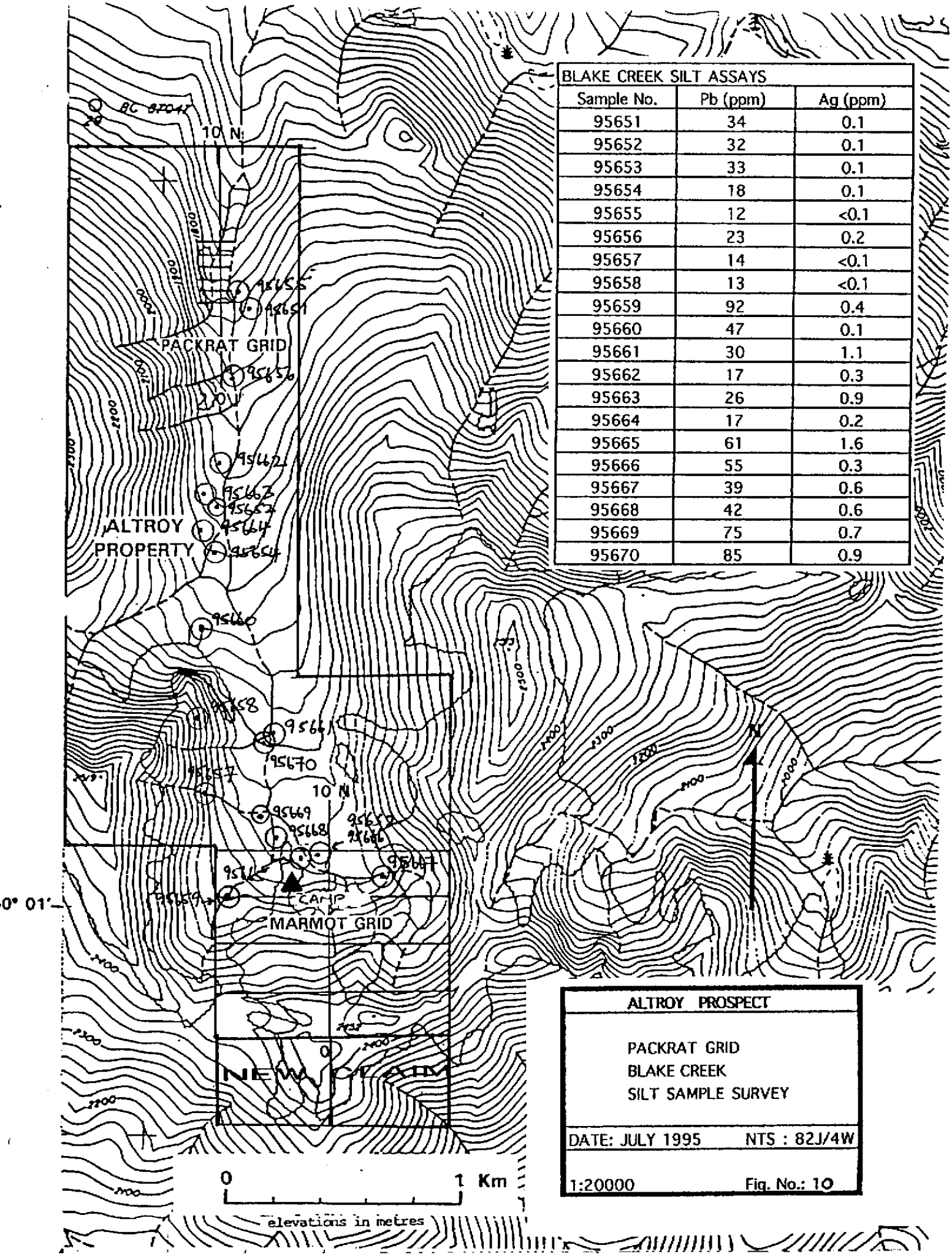
A similar situation exists on the Lower Marmot grid. At 2+20E /4+30N, elevated magnetometer readings are found (figure 9). This corresponds to the break between two quartz Monzonite stocks as seen on the geological map (Figure 6) and may represent the contact. The low readings measured north from 4+00N on the 1+50E baseline are aligned subparallel to the strike of the Kitchener beds and were found in a gully that was orientated along strike. A sample of basalt was found close to a pit in the gully area. The topographic expression, samples and low magnetometer readings could suggest the presence of a basalt sill in the Kitchener strata. Hoy (1989) has described basalt sills from other formations in the Purcell Group.

Additional zinc assays should be completed to provide a better evaluation of the zinc values present in the Altroy prospect.



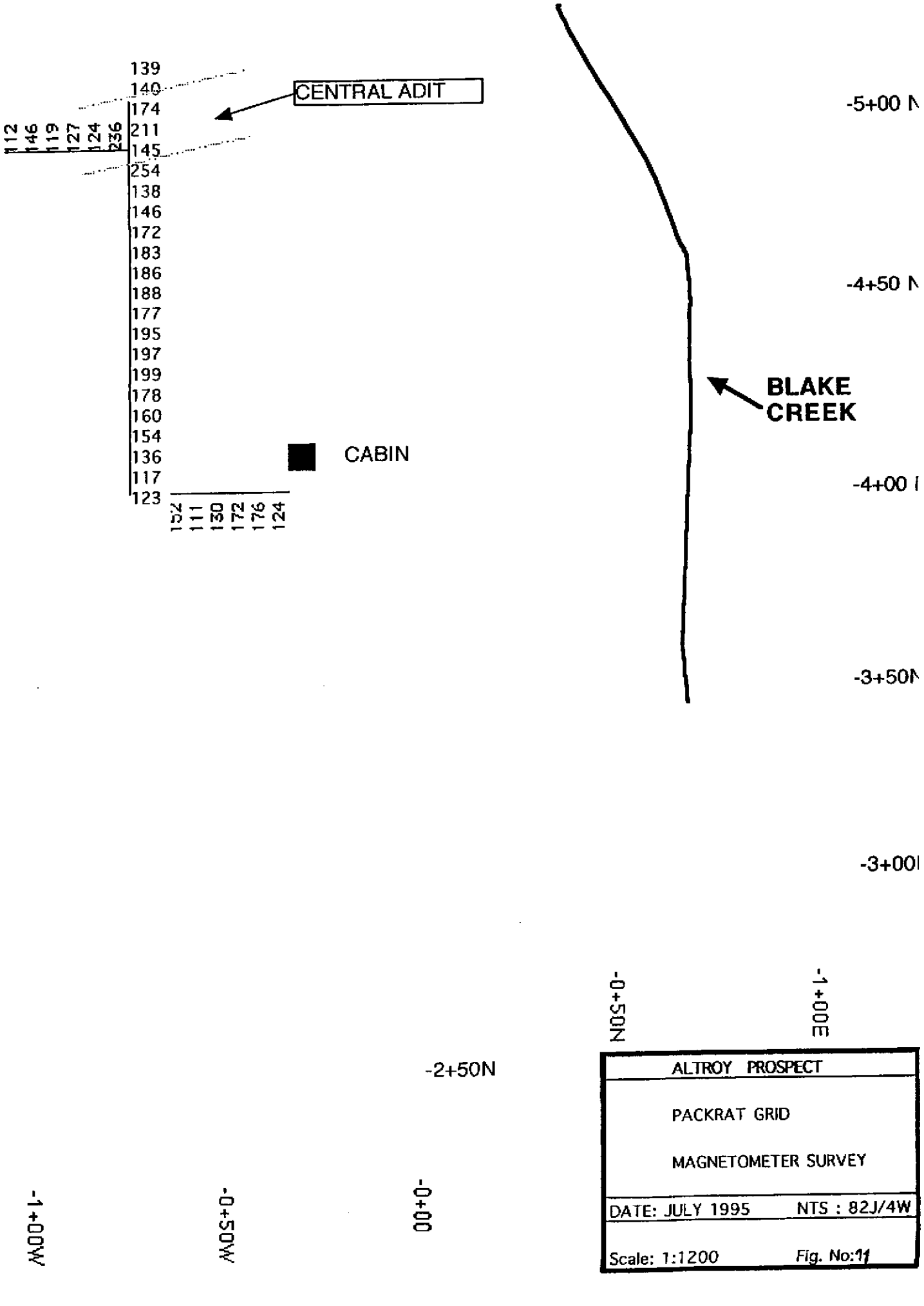
ALTROY CLAIMS	
UPPER MARMOT SHOWINGS	
MAGNETOMETER SURVEY GRID	
DATE: JULY 1995	NTS : 82J/4W
Scale: 1:1200	Fig. No.: 8

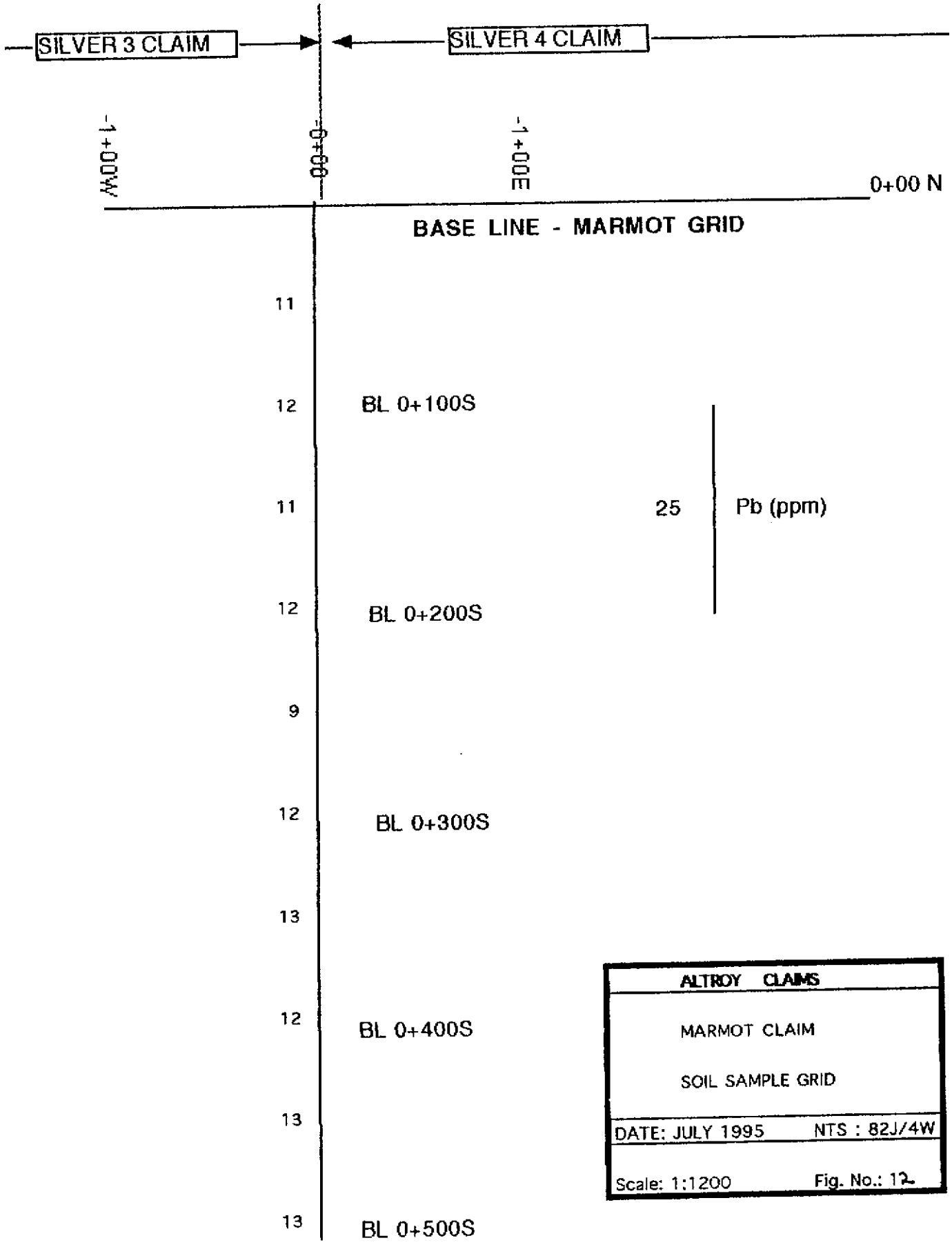

LEGEND
251
240 MAG.READINGS
248 *10^3 NT
244
1.86 Pb assays (%)
-6+50N
-6+00N
-5+50N
-5+00N
-4+50N
-4+00N
-1+50E
-2+00E
-2+50E
3.78
18.5
1.26
2.85
3.26
5.25
5.15
1.82 OZ/TAg
1,10.2,2.39
ALTROY PROSPECT
LOWER MARMOT
GEOCHEMISTRY AND
GEOPHYSICAL GRID
DATE: JULY 1995
NTS : 82J/4W
1:1200
Fig. No.: 9



BLAKE CREEK SILT ASSAYS		
Sample No.	Pb (ppm)	Ag (ppm)
95651	34	0.1
95652	32	0.1
95653	33	0.1
95654	18	0.1
95655	12	<0.1
95656	23	0.2
95657	14	<0.1
95658	13	<0.1
95659	92	0.4
95660	47	0.1
95661	30	1.1
95662	17	0.3
95663	26	0.9
95664	17	0.2
95665	61	1.6
95666	55	0.3
95667	39	0.6
95668	42	0.6
95669	75	0.7
95670	85	0.9

ALTROY PROSPECT
PACKRAT GRID BLAKE CREEK SILT SAMPLE SURVEY
DATE: JULY 1995 NTS : 82J/4W
1:20000 Fig. No.: 10


139
140
174
211
145
254
138
146
172
183
186
188
177
195
197
199
178
160
154
136
117
123
112
146
119
127
124
236
152
111
130
172
176
124
CENTRAL ADIT
CABIN
BLAKE CREEK
-5+00 N
-4+50 N
-4+00 I
-3+50N
-3+00I
-0+50N
-1+00E
-2+50N
-1+00W
-0+50W
-0+00
ALTROY PROSPECT
PACKRAT GRID
MAGNETOMETER SURVEY
DATE: JULY 1995
NTS : 82J/4W
Scale: 1:1200
Fig. No:11


SILVER 3 CLAIM
SILVER 4 CLAIM
1+00W
0+00
1+00E
0+00 N
BASE LINE - MARMOT GRID
11
12
BL 0+100S
11
25
Pb (ppm)
12
BL 0+200S
9
12
BL 0+300S
13
12
BL 0+400S
13
13
BL 0+500S
ALTROY CLAIMS
MARMOT CLAIM
SOIL SAMPLE GRID
DATE: JULY 1995
NTS : 82J/4W
Scale: 1:1200
Fig. No.: 12

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COPPER LAKE, HUMMINGBIRD CLAIMS

Location and Access

The Hummingbird Claims were staked during the 1995 program on the southwest shore of Copper Lake. Copper Creek is located 14.6 km from the turn-off onto the Skoomchuck Road, from Findlay Creek Road. From there it is 3.3 km along Copper Creek road to the trail to Copper Lake (figure 13). The Copper lake showing is located on the southwest of Copper lake, west of an outfitters cabin. A promontory of the mineralized quartz vein dump, occurs on the lake shore (figure 14). Grab samples and one chip sample from the exposed vein were analysed for silver, lead and copper and the results are as follows:

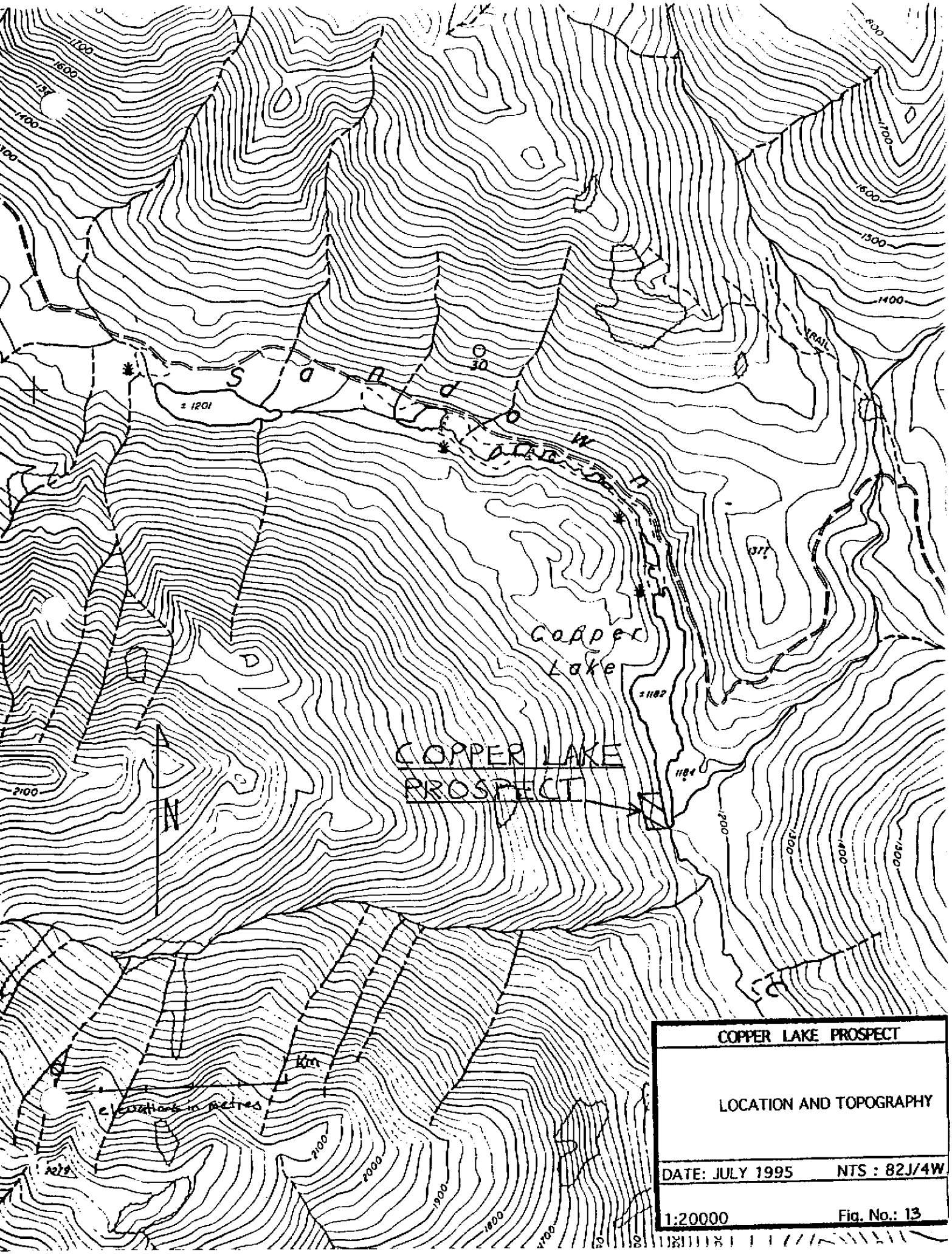
ASSAY RESULTS

Type	Sample No.	Sample Type	Ag (oz/ton)	Pb %	Cu %
DUMP COMP.	95681	ROCK GRAB	-	-	1.1
DUMP COMP.	95682	ROCK GRAB	-	-	3.78
DUMP COMP.	95685	ROCK GRAB	-	-	0.46
			(ppm) Pb	Ag	Cu
DUMP COMP.	95683	ROCK GRAB	4	<0.1	237
Sample taken from mineralized vein	95684	CHIP SAMPLE	31	0.2	105

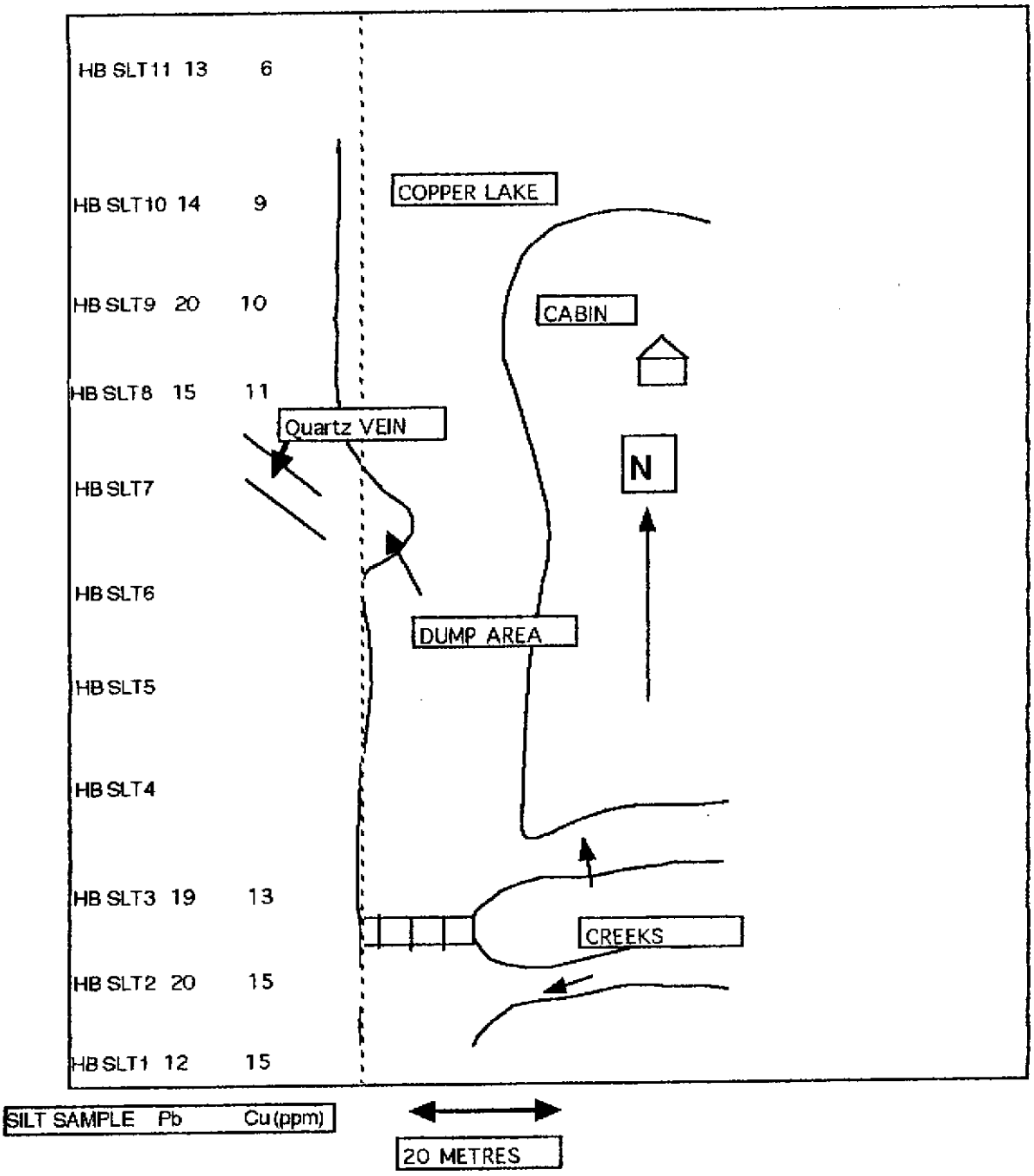
The vein is exposed 7 metres into the cliff face, in an overgrown cut. The vein is one metre wide, sub-vertical, highly brecciated, with sub-horizontal fractures. The vein consists of oxidized, milky quartz. The vein is intruded into an olive brown to grey-brown foliated quartz schist (Dutch Creek Formation) and the vein parallels schistosity and is sub-vertical.

MINERALIZATION

Malachite, pyrite and chalcopyrite in quartz were found in samples collected from a small dump. Pyrite is the most common sulphide. One centimeter euhedral pyrite cubes in quartz associated with malachite stained milky quartz were found. In the course of completing prospecting traverses along the east side of Copper lake, one sample of rusty stained quartz mineralized with pyrite and chalcopyrite was collected. Traverses over the heavily forested area failed to detect the bedrock source of the float.



COPPER LAKE PROSPECT	
LOCATION AND TOPOGRAPHY	
DATE: JULY 1995	NTS : 82J/4W
1:20000	Fig. No.: 13



ALTROY PROSPECT	
COPPER LAKE SHOWINGS HUMMINGBIRD PROSPECT WORKINGS AND SAMPLE GRID	
DATE: JULY 1995	NTS : 82J/4W
Scale: 1:1200	Fig. No.: 14

GEOCHEMISTRY

A silt survey was undertaken, parallel to the shore, in a south to north direction. Eleven sampling points were marked out, but because of lack of sediments at some of the locations, only seven samples were analysed for copper and lead . No anomalous lead and copper values were observed in the silt samples (figure 14), and no sulphide mineralization was observed in any of the rock samples collected at the sample locations. Prospecting, mapping and sampling of the only copper showing located in the Copper Lake area, suggests that copper mineralization is limited to the one metre wide quartz vein, mapped and sampled as part of the 1995 program.

APPENDIX A

ANALYTICAL RESULTS

ASSAY RESULTS

PROJECT	location	Sample No.	Sample Type	Ag (oz/ton)	Pb %	Cu %
ALTROY	UM 1+75N	95687	ROCK GRAB	1.58	1.72	-
ALTROY	UM1+30N/0+10W	95688	ROCK GRAB	1.48	1.33	-
ALTROY	UM1+30N/0+10W	95689	ROCK GRAB	1.27	0.86	-
ALTROY	LM5+55N/1+75E	95693	ROCK GRAB	2.4	1.26	-
ALTROY	LM5+45N/1+85E	95694	ROCK GRAB	9.01	3.26	-
ALTROY	LM5+52N/1+80E	95695	ROCK GRAB	3.62	2.85	-
ALTROY	LM5+40N/1+95E	95696	ROCK GRAB	5.85	5.25	-
ALTROY	LM5+33N/1+95E	95697	ROCK GRAB	7.31	5.15	-
ALTROY	LM5+43N/1+96E	95698	ROCK GRAB	2.01	1.73	-
ALTROY	LM5+80N/1+77E	95699	ROCK GRAB	5.88	3.78	-
ALTROY	LM5+70N/1+70E	95700	ROCK GRAB	20.87	18.5	-
ALTROY	UM2+00N/0+30W	95582	ROCK GRAB	7.3	3.96	-
ALTROY	LM 5.10N/1.90E	95626	ROCK GRAB	-	1	-
ALTROY	LM 5.10N/1.90E	95627	ROCK GRAB	-	10.2	-
ALTROY	LM 5.10N/1.90E	95629	ROCK GRAB	-	2.39	-
ALTROY	LM 5.40N/1.90E	95630	ROCK GRAB	1.82	-	-
ALTROY	UM 1+75N	95686	ROCK GRAB	1.55	1.03	-
		Sample No.		Pb PPM	Ag PPM	
ALTROY	UM BL1+95N	95501	SOIL	29	0.4	
ALTROY	UM BL1+90N	95502	SOIL	239	0.9	
ALTROY	UM BL1+85N	95503	SOIL	1240	2.4	
ALTROY	UM BL1+80N	95504	SOIL	669	2.1	
ALTROY	UM BL1+75N	95505	SOIL	583	1.7	
ALTROY	UM BL1+70N	95506	SOIL	4350	5.7	
ALTROY	UM BL1+65N	95507	SOIL	3300	5.1	
ALTROY	UM BL1+60N	95508	SOIL	2250	6.1	
ALTROY	UM BL1+55N	95509	SOIL	657	3.5	
ALTROY	UM BL1+50N	95510	SOIL	942	2.1	
ALTROY	UM BL1+45N	95511	SOIL	572	1.4	
ALTROY	UM BL1+40N	95512	SOIL	293	1.5	
ALTROY	UM BL1+35N	95513	SOIL	275	0.9	
ALTROY	UM BL1+30N	95514	SOIL	241	0.6	
ALTROY	UM BL1+25N	95515	SOIL	155	1.2	
ALTROY	UM BL1+20N	95516	SOIL	417	0.8	
ALTROY	UM BL1+15N	95517	SOIL	345	0.7	
ALTROY	UM BL1+10N	95518	SOIL	206	0.6	
ALTROY	UM BL1+05N	95519	SOIL	129	0.6	
ALTROY	UM BL1+00N	95520	SOIL	83	0.6	
ALTROY	UM BL0+75N	95521	SOIL	23	0.5	
ALTROY	UM BL0+70N	95522	SOIL	16	0.3	
ALTROY	UM BL0+65N	95523	SOIL	12	0.4	
ALTROY	UM BL0+60N	95524	SOIL	14	0.4	
ALTROY	UM BL0+55N	95525	SOIL	15	0.4	

ALTROY	UM BL0+50N	95526	SOIL	14	0.4			
ALTROY	UM 0+00N/0+90W	95532	SOIL	36	0.4			
ALTROY	UM 0+00N/0+80W	95533	SOIL	18	0.2			
ALTROY	UM 0+00N/0+50W	95536	SOIL	20	0.2			
ALTROY	UM 1+00N/0+10W	95537	SOIL	96	0.5			
ALTROY	UM 1+00N/0+20W	95538	SOIL	12	0.4			
ALTROY	UM 1+00N/0+30W	95539	SOIL	14	0.6			
ALTROY	UM 1+00N/0+40W	95540	SOIL	90	0.5			
ALTROY	UM 1+00N/0+50W	95541	SOIL	9	0.3			
ALTROY	UM 1+00N/0+60W	95542	SOIL	7	0.7			
ALTROY	UM 1+00N/0+70W	95543	SOIL	7	0.1			
ALTROY	UM 1+00N/0+80W	95544	SOIL	10	0.5			
ALTROY	UM 1+00N/0+90W	95545	SOIL	9	0.3			
ALTROY	UM 1+00N/1+00W	95546	SOIL	11	0.9			
ALTROY	UM 1+00N/0+10W	95547	SOIL	17	1.3			
ALTROY	UM 1+00N/1+20W	95548	SOIL	14	1.1			
ALTROY	UM 1+00N/1+30W	95549	SOIL	12	0.2			
ALTROY	UM 1+00N/1+35W	95550	SOIL	9	1.8			
ALTROY	UM 1+00N/1+40W	95551	SOIL	12	0.3			
ALTROY	UM 1+00N/1+50W	95552	SOIL	7	0.7			
ALTROY	UM 1+00N/1+10E	95563	SOIL	18	0.7			
ALTROY	UM 1+00N/1+20E	95564	SOIL	15	1.7			
ALTROY	UM 1+00N/1+30E	95565	SOIL	15	1.1			
ALTROY	UM 1+00N/1+40E	95566	SOIL	16	0.7			
ALTROY	UM 1+00N/1+50E	95567	SOIL	11	0.5			
ALTROY	UM 1+00N/1+60E	95568	SOIL	11	1.3			
ALTROY	UM 1+00N/1+70E	95569	SOIL	10	0.4			
ALTROY	UM 1+00N/1+80E	95570	SOIL	11	0.4			
ALTROY	UM 1+00N/1+90E	95571	SOIL	14	1.3			
ALTROY	UM 1+00N/1+100E	95572	SOIL	11	1			
ALTROY	UM 1+00N/1+125E	95573	SOIL	9	0.5			
ALTROY	UM 1+00N/1+150E	95574	SOIL	18	0.4			
ALTROY	UM 1+00N/1+175E	95575	SOIL	8	1.3			
ALTROY	UM 1+00N/1+200E	95576	SOIL	9	0.7			
ALTROY	UM 1+00N/1+225E	95577	SOIL	8	0.4			
ALTROY	UM 1+00N/1+250E	95578	SOIL	11	0.3			
ALTROY	UM 1+00N/1+275E	95579	SOIL	14	0.3			
ALTROY	UMBL2+00N/010W	95580	SOIL	609	1.1			
ALTROY	UMBL2+00N/020W	95581	SOIL	1150	3.4			
ALTROY	UM 1+75N/010W	95583	SOIL	411	1.7			
ALTROY	UM 1+75N/020W	95584	SOIL	677	1.6			
ALTROY	UM3+00N	95586	SOIL	20	0.3			
ALTROY	UM3+00N/0+100W	95587	SOIL	34	0.3			
ALTROY	UM3+00N/0+150W	95588	SOIL	12	<0.1			
ALTROY	UM3+00N/0+200W	95589	SOIL	4	0.2			
ALTROY	UM3+00N/0+250W	95590	SOIL	5	<0.1			
ALTROY	UM3+00N/0+300W	95591	SOIL	14	0.3			
ALTROY	UM4+00N/0+075W	95592	SOIL	16	0.2			

ALTROY	UM4+00N/0+100W	95593	SOIL	7	0.1			
ALTROY	UM4+00N/0+125W	95594	SOIL	15	<0.1			
ALTROY	UM4+00N/0+150W	95595	SOIL	13	0.4			
ALTROY	UM6+00N/0+075W	95596	SOIL	9	0.3			
ALTROY	UM6+00N/0+100W	95597	SOIL	9	<0.1			
ALTROY	UM6+00N/0+125W	95598	SOIL	17	0.1			
ALTROY		95599	SOIL	24	0.3			
ALTROY		95600	SOIL	18	0.2			
ALTROY		95678	SOIL	9	0.1			
ALTROY	LM 7+50N/0+25E	95679	SOIL	12	0.1			
ALTROY	LM 7+75N	95680	SOIL	15	<0.1			
ALTROY	UM 500N 450E	95690	SOIL	13	0.1			
ALTROY	UM 50M - 90?	95691	SOIL	15	0.5			
ALTROY	UM 500M-FOREST	95692	SOIL	48	<0.1			
		Sample No.		Pb PPM	Ag PPM	Cu PPM		
PACKRAT	1+00E/3+25N	95651	SILT	34	0.1	-	BLAKE CR. 75M S. OF BL START	
ALTROY	E572386/N5542907	95652	SILT	32	0.1	-		
ALTROY	E572319/N5542799	95653	SILT	33	0.1	-		
PACKRAT	E572296/N5542799	95654	SILT	18	0.1	-		
PACKRAT	GR. 4+00N/0+75E	95655	SILT	12	<0.1	-		
PACKRAT	65M N OF 000N/0+75E	95656	SILT	23	0.2	-		
PACKRAT	UTM 724 415	95657	SILT	14	<0.1	-		
PACKRAT	UTM 723 418	95658	SILT	13	<0.1	-		
PACKRAT	6+00N 0+427W	95659	SILT	92	0.4	-		
PACKRAT	UTM 723 422	95660	SILT	47	0.1	-		
PACKRAT	E572582/N5541754	95661	SILT	30	1.1	-		
PACKRAT	E572386/N5542907	95662	SILT	17	0.3	-		
PACKRAT	E572319/N5542799	95663	SILT	26	0.9	-		
PACKRAT	E572296/N5542620	95664	SILT	17	0.2	-		
PACKRAT	E572701/N5541172	95665	SILT	61	1.6	-		
PACKRAT	50M.E OF PREV.	95666	SILT	55	0.3	-		
PACKRAT	WH LAKE W. SH.	95667	SILT	39	0.6	-		
PACKRAT	WH LAKE N. SH.	95668	SILT	42	0.6	-		
PACKRAT	WH LAKE S. SH.	95669	SILT	75	0.7	-		
PACKRAT	WH SMALL CK.	95670	SILT	85	0.9	-		
				PPM	PPM	PPM		
		Sample No.		Pb	Ag	Cu		
ALTROY	UM0+30W	95582	COMP. GRAB	10000	40	-		
ALTROY	LM 5+010N/1+085E	95626	COMP. GRAB	10000	7.1	-		
ALTROY	LM 5+010N/1+085E	95627	COMP. GRAB	10000	21.1	-		
ALTROY	LM 5+010N/1+085E	95628	COMP. GRAB	2300	7.9	-		
ALTROY	LM 5+010N/1+085E	95629	COMP VEIN	10000	9.6	-		
ALTROY	LM 5+010N/1+085E	95630	COMP. GRAB	5400	40	-		
ALTROY	LM 5+010N/1+085E	95631	COMP. VEIN	3700	10.9	-		
ALTROY	UM1+75N	95686	COMP. GRAB	10000	40	-		

		Sample No.		Pb PPM	Ag PPM			
NEW CLAIM	MAR 1 BL0+50M	95553	SOIL	11	0.6			
NEW CLAIM	MAR 2 BL0+100M	95554	SOIL	12	0.7			
NEW CLAIM	MAR 3 BL0+150M	95555	SOIL	11	0.5			
NEW CLAIM	MAR 4 BL0+200M	95556	SOIL	12	0.6			
NEW CLAIM	MAR 5 BL0+250M	95557	SOIL	9	1.6			
NEW CLAIM	MAR 6 BL0+300M	95558	SOIL	12	1.3			
NEW CLAIM	MAR 7 BL0+350M	95559	SOIL	13	0.7			
NEW CLAIM	MAR 8 BL0+400M	95560	SOIL	12	0.4			
NEW CLAIM	MAR 9 BL0+450M	95561	SOIL	13	1.1			
NEW CLAIM	MAR10BL0+500M	95562	SOIL	13	1.5			

COPPER LAKE ASSAY RESULTS

PROJECT	location	Sample No.	Sample Type	Ag (oz/ton)	Pb %	Cu %
COPPER LAKE	DUMP COMP.	95681	ROCK GRAB	-	-	1.1
COPPER LAKE	DUMP COMP.	95682	ROCK GRAB	-	-	3.78
COPPER LAKE	DUMP COMP.	95685	ROCK GRAB	-	-	0.46
		Sample No.		Pb (ppm)	Ag (ppm)	Cu
COPPER LAKE	DUMP HEAP	95681	COMP. GRAB	-	-	10000
COPPER LAKE	DUMP HEAP	95682	COMP. GRAB	-	-	10000
COPPER LAKE	DUMP HEAP	95683	COMP. GRAB	4	<0.1	237
COPPER LAKE	VEIN	95684	WORK. GRAB	31	0.2	105
		Sample No.		Pb (ppm)	Cu (ppm)	
COPPER LAKE	HB SLT 1	95671	SILT	12	15	
COPPER LAKE	HB SLT 2	95672	SILT	20	15	
COPPER LAKE	HB SLT 3	95673	SILT	19	13	
COPPER LAKE	HB SLT 8	95674	SILT	15	11	
COPPER LAKE	HB SLT 9	95675	SILT	20	10	
COPPER LAKE	HB SLT 10	95676	SILT	14	9	
COPPER LAKE	HB SLT 11	95677	SILT	13	6	

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
H 1J5

File No. 37554
Date August 11, 1995
Samples Soil

Certificate of Assay
LORING LABORATORIES LTD.

Geochemical Analysis

SAMPLE NO.	PPM Pb	PPM Ag
95501	29	0.4
95502	239	0.9
95503	1240	2.4
95504	669	2.1
95505	583	1.7
95506	4350	5.7
95507	3300	5.1
95508	2250	6.1
95509	657	3.5
95510	942	2.1
95511	572	1.4
95512	293	1.5
95513	275	0.9
95514	241	0.6
95515	155	1.2
95516	417	0.8
95517	345	0.7
95518	206	0.6
95519	129	0.6
95520	83	0.6
95521	23	0.5
95522	16	0.3
95523	12	0.4
95524	14	0.4
95525	15	0.4
95526	14	0.4
95532	36	0.4
95533	18	0.2
95536	20	0.2
95537	96	0.5

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month unless specific arrangements are made in advance.

Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T . 1J5

File No. 37554
Date August 11, 1995
Samples Soil

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPM Pb	PPM Ag
95538	12	0.4
95539	14	0.6
95540	90	0.5
95541	9	0.3
95542	7	0.7
95543	7	0.1
95544	10	0.5
95545	9	0.3
95546	11	0.9
95547	17	1.3
95548	14	1.1
95549	12	0.2
95550	9	1.8
95551	12	0.3
95552	7	0.7
95553	11	0.6
95554	12	0.7
95555	11	0.5
95556	12	0.6
95557	9	1.6
95558	12	1.3
95559	13	0.7
95560	12	0.4
95561	13	1.1
95562	13	1.5
95563	18	0.7
95564	15	1.7
95565	15	1.1
95566	16	0.7
95567	11	0.5
95568	11	1.3
95569	10	0.4

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

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Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T 1J5

File No. 37554
Date August 11, 1995
Samples Soil

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPM Pb	PPM Ag
95570	11	0.4
95571	14	1.3
95572	11	1.0
95573	9	0.5
95574	18	0.4
95575	8	1.3
95576	9	0.7
95577	8	0.4
95578	11	0.3
95579	14	0.3
95580	609	1.1
95581	1150	3.4
95583	411	1.7
95584	677	1.6
95586	20	0.3
95587	34	0.3
95588	12	<0.1
95589	4	0.2
95590	5	<0.1
95591	14	0.3
95592	16	0.2
95593	7	0.1
95594	15	<0.1
95595	13	0.4
95596	9	0.3
95597	9	<0.1
95598	17	0.1
95599	24	0.3
95600	18	0.2
95678	9	0.1
95679	12	0.1
95680	15	<0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

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Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T 1J5

File No. 37554
Date August 11, 1995
Samples Soil

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPM Pb	PPM Ag
95690	13	0.1
95691	15	0.5
95692	48	<0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T , 1J5

File No. 37554
Date August 11, 1995
Samples Sediment

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPM Pb	PPM Ag	PPM Cu
Geochemical Analysis			
95651	34	0.1	-
95652	32	0.1	-
95653	33	0.1	-
95654	18	0.1	-
95655	12	<0.1	-
95656	23	0.2	-
95657	14	<0.1	-
95658	13	<0.1	-
95659	92	0.4	-
95660	47	0.1	-
95661	30	1.1	-
95662	17	0.3	-
95663	26	0.9	-
95664	17	0.2	-
95665	61	1.6	-
95666	55	0.3	-
95667	39	0.6	-
95668	42	0.6	-
95669	75	0.7	-
95670	85	0.9	-
95671	12	-	15
95672	20	-	15
95673	19	-	13
95674	15	-	11
95675	20	-	10
95676	14	-	9
95677	13	-	6

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T3 1J5

File No. 37554
Date August 11, 1995
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

Geochemical Analysis

SAMPLE NO.	PPM Pb	PPM Ag	PPM Cu
95681	-	-	+10000
95682	-	-	+10000
95683	4	<0.1	237
95684	31	0.2	105
95582	+10000	+40.0	-
95626	+10000	7.1	-
95627	+10000	21.1	-
95628	2300	7.9	-
95629	+10000	9.6	-
95630	5400	+40.0	-
95631	3700	10.9	-
95686	+10000	+40.0	-

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month unless specific arrangements are made in advance.

Assayer

To: MR. ALLAN INGELSON,
48 Strathroy Bay S.W.,
Calgary, Alberta
T 1J5

File No. 37554
Date August 11, 1995
Samples

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	OZ./TON SILVER	% Pb	% Cu
"Assay Analysis"			
95681	-	-	1.10
95682	-	-	3.78
95685	-	-	0.46
95687	1.58	1.72	-
95688	1.48	1.33	-
95689	1.27	0.86	-
95693	2.40	1.26	-
95694	9.01	3.26	-
95695	3.62	2.85	-
95696	5.85	5.25	-
95697	7.31	5.15	-
95698	2.01	1.73	-
95699	5.88	3.78	-
95700	20.87	18.50	-
95582	7.30	3.96	-
95626	-	1.00	-
95627	-	10.20	-
95629	-	2.39	-
95630	1.82	-	-
95686	1.55	1.03	-

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

, jects retained one month.
Pulps retained one month unless specific arrangements are made in advance.

Assayer

To : MR. ALLAN INGELSON
48 Strathroy Bay S.W.
Calgary, Alberta
T3H 1J5

File No : 37554-1
Date : December 13, 1995
Samples :
Project :
P.O.#

Certificate of Assay
Loring Laboratories Ltd.

Sample No.	% Zn
"Assay Analysis"	
95693	6.95
95694	7.60
95700	15.10

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples :

Assayer

Rejects and pulps are retained for one month unless specific arrangements are made in advance.

APPENDIX B

RAW GEOPHYSICAL DATA

UPPER MARMOT
VLF- EM
RAW DATA

CUTLER MAINE
24.0 Khz.

	L 1+50N	L 1+30N	L 1+00N
+50E	-10	-2	
0+45E	0	-5	
0+40E	-10	-10	
0+35E	-6	-7	
0+30E	-1	-5	
0+25E	-5	-12	
0+20E	-4	-4	
0+15E	-8	-8	
0+10E	-1	-10	
0+05E	-4	0	
0+00BL	-1	-3	-5
0+05W	-8	-12	-10
0+10W	-5	0	-8
0+15W	-2	-4	-8
0+20W	0	-3	-2
0+25W	-15	-12	-4
0+30W		-8	-5
0+35W			-6
0+40W			-10
0+45W			-10
0+50W			-8
0+55W			-8
0+60W			-5
0+65W			-2
0+70W			-4
0+75W			-12
0+80W			-2
0+85W			-7
0+90W			-7
0+95W			-10
1+00W			-12

UPPER MARMOT

VLF FRASER FILTER

RESULTS

	L 1-50N	L 1+30N	L 1+00N
0+50E			
0+45E		6	
0+40E	-10	-3	
0+35E	3	-10	
0+30E	0	2	
0+25E	-4	6	
0+20E	5	0	
0+15E	-2	-7	
0+10E	2	-4	
0+05E	15	4	
0+00BL	-5	8	
0+05W	-9	-2	
0+10W	11	-11	-1
0+15W	5	8	8
0+20W	-11		10
0+25W	-13		1
0+30W			-5
0+35W			-7
0+40W			-9
0+45W			-2
0+50W			4
0+55W			5
0+60W			9
0+65W			7
0+70W			-9
0+75W			-8
0+80W			7
0+85W			0
0+90W			-8
0+95W			-8
1+00W			

UPPER MARMOT
MAGNETOMETER DATA
units= NT (nanoteslas)

	L 3+00N	L 2+50N	L 2+00N	L 1+50N	L 1+00N	L 0+50N
0+50E						
0+45E						
0+40E				57513.5		
0+35E			57514.4	57505.5		
0+30E			57509.8	57495.5		
0+25E	57602.5	57554.6	57522.1	57485		
0+20E	57598.2	57555.7	57529.7	57520.8		
0+15E	57599.3	57556.7	57522.3	57530.7		
0+10E	57578.9	57574	57522	57519.7		
0+05E	57572.8	57564	57530.3	57528.7		
0+00BL	57578.5	57563.4	57527.3	57523.9	57439	57546.8
0+05W		57558.7	57536.1	57534.4	57434	57549.8
0+10W		57561.6	57533.1	57535	57490	57549.6
0+15W		57551.3	57537.1	57522.7	57504	57544.9
0+20W		57558.6	57538.1	57528.8	57494	57550.3
0+25W		57558.1	57531.8	57542.6	57527	57546.4
0+30W			57531.2	57527.5	57517	57546.2
0+35W			57528.8	57530.9	57536	57544.6
0+40W			57531.9	57527.1	57499	57555.3
0+45W			57522.9	57530.1	57503	57554.2
0+50W			57525.2	57538.8	57525	57558.4
0+55W			57535.8		57518	
0+60W			57538.8		57496	
0+65W			57536.4		57510	
0+70W			57535.1		57520	
0+75W			57530.5		57476	
0+80W			57535.8		57502	
0+85W			57530.9		57533	
0+90W			57541.1		57516	
0+95W			57521		57517	
1+00W			57551		57508	
1+05W			57541		57522	
1+10W			57543.3		57516	
1+15W			57534.4		57518	
1+20W			57540.3		57525	
1+25W			57546		57532	
1+30W			57462		57512	
1+35W			57495		57505	
1+40W					57445	
1+45W					57506	
1+50W					57538	
1+55W					57512	
1+60W					57483	

UPPER MARMOT
MAGNETOMETER DATA
units=NT (nanoteslas)

LINE 0+50 W

	L 0+50 W
1+45N	57535.2
1+40N	57540.2
1+35N	57541.5
1+30N	57542.5
1+25N	57535.8
1+20N	57544.4
1+15N	57546.4
1+10N	57561
1+05N	57558.7
1+00N	57555
0+95N	57547.3
0+90N	57552.2
0+85N	57546.8
0+80N	57551.3
0+75N	57542.1
0+70N	57565.3
0+65N	57566
0+60N	57545.8
0+55N	57569.2
0+50N	57558.4

UPPER MARMOT

LINE 0+00 BL

MAGNETOMETER DATA

units = NT (nanoteslas)

	L 0+00BL
3+00N	57574.1
2+95N	57581.1
2+90N	57590.2
2+85N	57579.9
2+80N	57581.1
2+75N	57589.8
2+70N	57572.4
2+65N	57562.2
2+60N	57567
2+55N	57565.1
2+50N	57572.7
2+45N	57566.8
2+40N	57567.5
2+35N	57552
2+30N	57543.9
2+25N	57548.9
2+20N	57539.4
2+15N	57538.5
2+10N	57536.3
2+05N	57540.8
2+00N	57549.2
1+95N	57534.3
1+90N	57528.7
1+85N	57534.4
1+80N	57540.5
1+75N	57526.7
1+70N	57529.2
1+65N	57524.5
1+60N	57537.4
1+55N	57524.7
1+50N	57532.8
1+45N	57532.8
1+40N	57528.6
1+35N	57523.7
1+30N	57492.9
1+25N	57497.9
1+20N	57524.1
1+15N	57522.5
1+10N	57531.4
1+05N	57539.6
1+00N	57513.8
0+95N	57530.8
0+90N	57527.6
0+85N	57514.1
0+80N	57521.9
0+75N	57524
0+70N	57525.4
0+65N	57527.6
0+60N	57522.7
0+55N	57525.1

UPPER MARMOT

LINE 0+00 BL

MAGNETOMETER DATA

units = NT (nanoteslas)

0+50N	57528.8

LOWER MARMOT
MAGNETOMETER DATA
units = NT (nanoteslas)

LINE A
SEE SKETCH MAP

	LINE A	(172 deg az)	
0+00S	57595.3		
0+05S	57513.1		
0+10S	57411.5		
0+15S	57446.1		
0+20S	57398.6		
0+25S	57423.2		
0+30S	57373.5		
0+35S	57374.2		
0+40S	57354.6		
0+45S	57332.4		
0+50S	57264.2		
0+55S	57356.1		
0+60S	57346.4		
0+65S	57370.1		
0+70S	57350		

LOWER MARMOT
MAGNETOMETER DATA
units = NT (nanoteslas)

LINE B
SEE SKETCH MAP

	LINE B	254 deg @ 5+05N		# 2 workings	
0+00W	57309.8				
0+05W	57330.1				
0+10W	57349.1				
0+15W	57343.1				
0+20W	57309.3				
0+25W	57276.4				
0+30W	57272.7				
0+35W	57261.4				
0+40W	57291.1				
0+45W	57286.5				
0+50W	57273.7				
0+55W	57305.5				
0+60W	57301				

LOWER MARMOT
MAGNETOMETER DATA
units = NT (nanoteslas)

LINE C
SEE SKETCH MAP

	LINE C	1+50E
5+00N	57251.4	
4+95N	57240.4	
4+90N	57248.3	
4+85N	57244.7	
4+80N	57257.3	
4+75N	57227.9	
4+70N	57217.9	
4+65N	57196.4	
4+60N	57206.5	
4+56N	57197.8	
4+53N	57187.8	
4+50N	57181.3	
4+45N	57194.2	
4+40N	57189.1	
4+35N	57200.3	
4+30N	57215.8	
4+25N	57270.1	
4+20N	57328.9	
4+15N	57360.2	
4+10N	57419.3	

LOWER MARMOT

MAGNETOMETER DATA

units = NT (nanoteslas)

LINE D

SEE SKETCH MAP

	LINE D	4+00N
1+50E	57372	
1+55E	57380.3	
1+60E	57399.4	
1+65E	57414.1	
1+70E	57457.2	
1+75E	57472.5	
1+80E	57495.8	
1+85E	57401.6	
1+90E	57480.6	
1+95E	57528.5	
2+00E	57544.1	

LOWER MARMOT
MAGNETOMETER DATA
units = NT (nanoteslas)

LINE E
SEE SKETCH MAP

	LINE E	trail down hill from 4+ooN 2+00E see sketch				
0+00	57590.5					
0+05	57665.8					
0+10	57770.6					
0+15	57719.6					
0+20	58012.1					
0+25	57810.7					
0+30	57444.8					
0+35	57414.3					
0+40	57533.7					
0+45	57524.4					
0+50	57431.9					
0+55	57391					
0+60	57388.8					
0+65	57347.5					
0+70	57293.3					
0+75	57300.2					
0+80	57311.8					
0+85	57319.3					
0+90	57310.1					
0+95	57306.2					
1+00	57307					
1+05	57309.6					
1+10	57320.9					
1+15	57320.8					
1+20	57341.8					
1+25	57351.6					
1+30	57360.6					
1+35	57375.7					
1+40	57400.7					
1+45	57416					
1+50	57412.6					
1+55	57412.9					
1+60	57410.7					
1+65	57403.5					
1+70	57414.3					
1+75	57416.3					
1+80	57418.4					
1+85	57425.6					
1+90	57441.7					
1+95	57462.8					
2+00	57473.3					
2+05	57503.2					
2+10	57535.3					
2+15	57546.8					
2+20	57547.2					
2+25	57566.5					
2+30	57536.5					
2+35	57644.7					
2+40	57703.5					
2+45	57693.7					

LOWER MARMOT
MAGNETOMETER DATA
units = NT (nanoteslas)

LINE E
SEE SKETCH MAP

2+50	57638.6					
2+55	57591					
2+60	57590					
2+65	57643.5					
2+70	57598					

PACKRAT SEE KETCH

MAGNETOMETER DATA

units = Nt (nanoteslas)

	PACKRAT LINE W STARTS AT CABIN			
0+00	57124.1			
0+05W	57176			
0+10W	57172.2			
0+15W	57130.6			
0+20W	57111.3			
0+25W	57152.4			
0+30W	57131.8			
0+35W	57123.6			

PACKRAT

SEE SKETCH

MAGNETOMETER DATA

units = NT (nanoteslas)

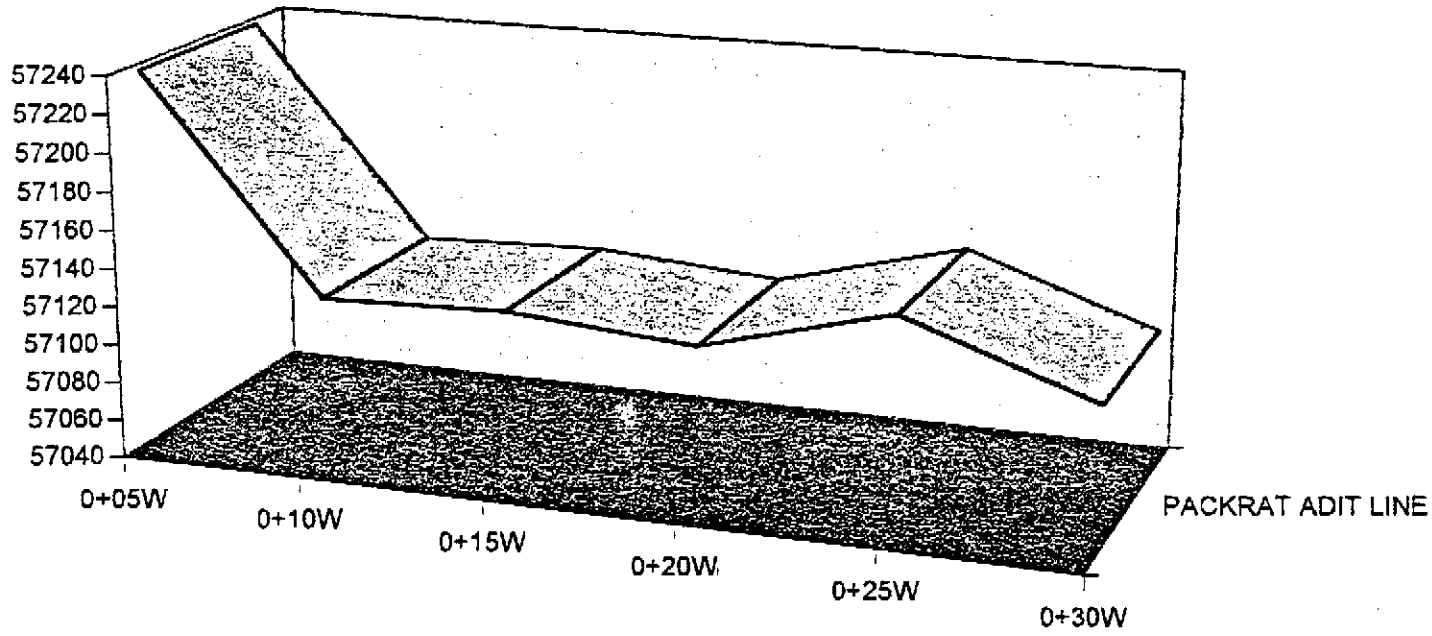
	PACKRAT LINE N		
0+05N	57117.5		
0+10N	57136.8		
0+15N	57154.4		
0+20N	57160.1		
0+25N	57178.7		
0+30N	57199.5		
0+35N	57197.2		
0+40N	57195.3		
0+45N	57177.8		
0+50N	57188		
0+55N	57186.7		
0+60N	57183.5		
0+65N	57172.9		
0+70N	57146.2		
0+75N	57134.8		
0+80N	57254.5		
0+85N	57145		
0+90N	57211.4		
0+95N	57170		
1+00N	57174.5		
1+05N	57140.6		
1+10N	57139.5		
	PACKRAT ADIT LINE		
0+05W	57236.1		
0+10W	57124.1		
0+15W	57127.5		
0+20W	57119.7		
0+25W	57145.8		
0+30W	57112		

APPENDIX C

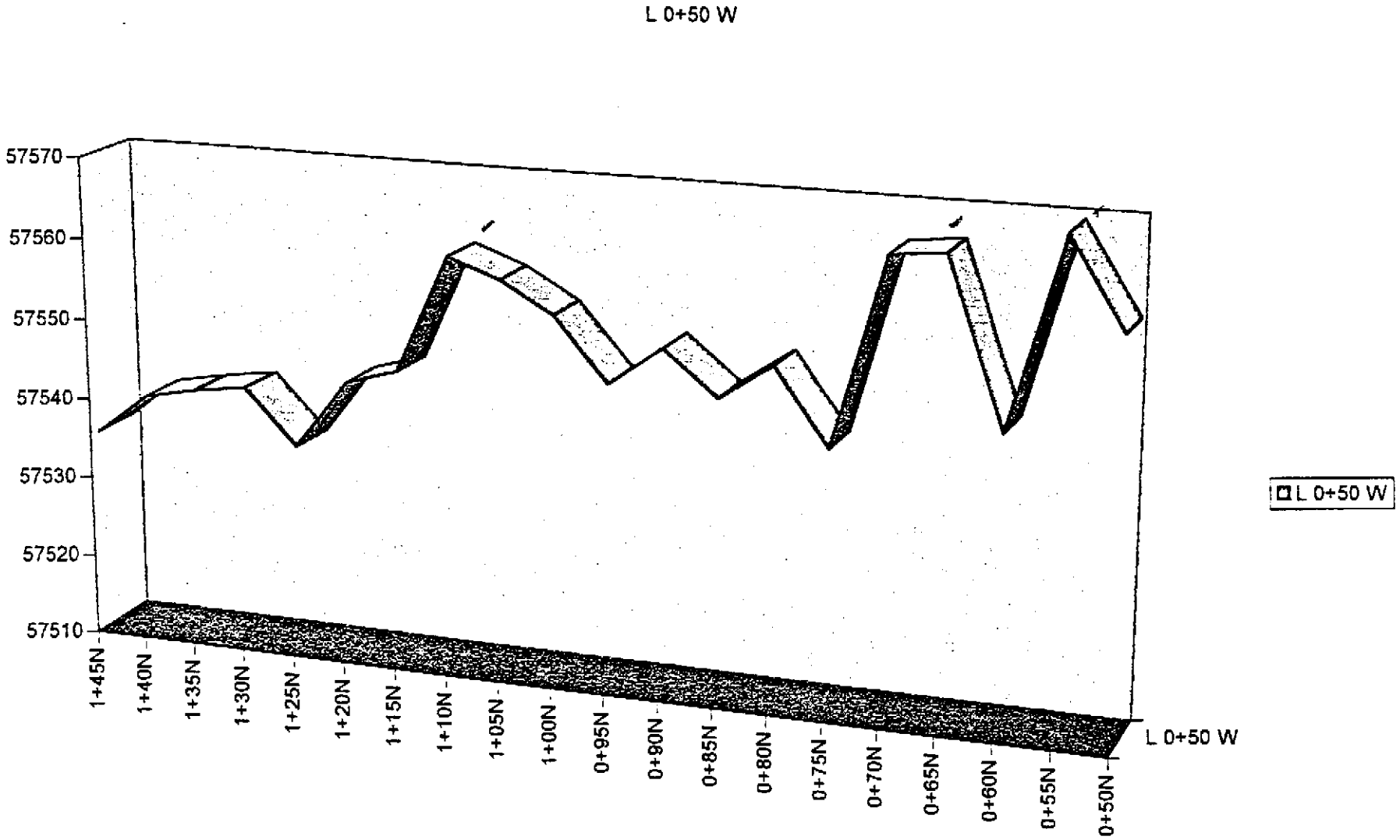
GEOPHYSICAL PROFILES

PACKRAT
MAGNETOMETER PROFILE
LOOKING SOUTH

PACKRAT ADIT LINE

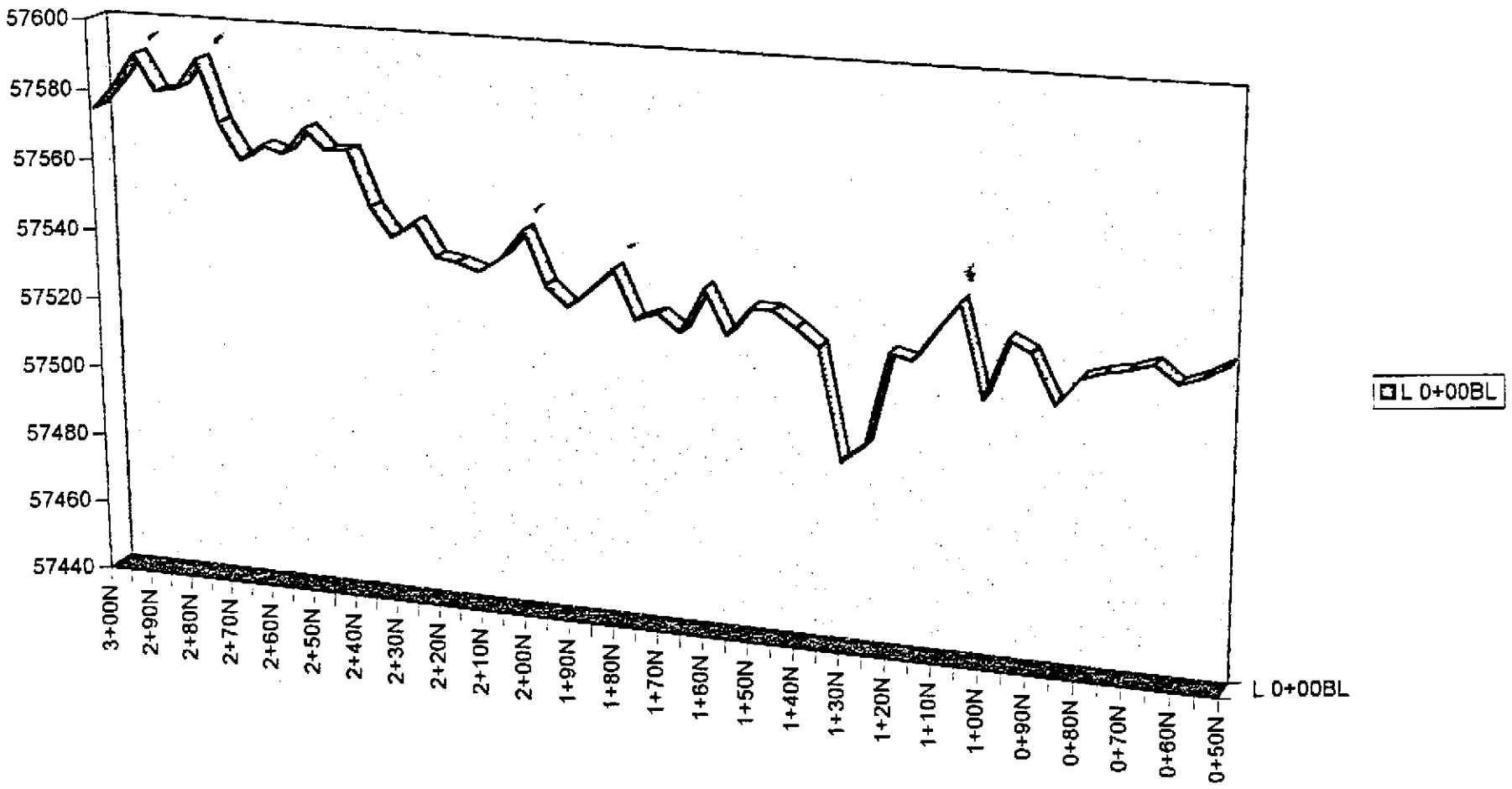


UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING EAST

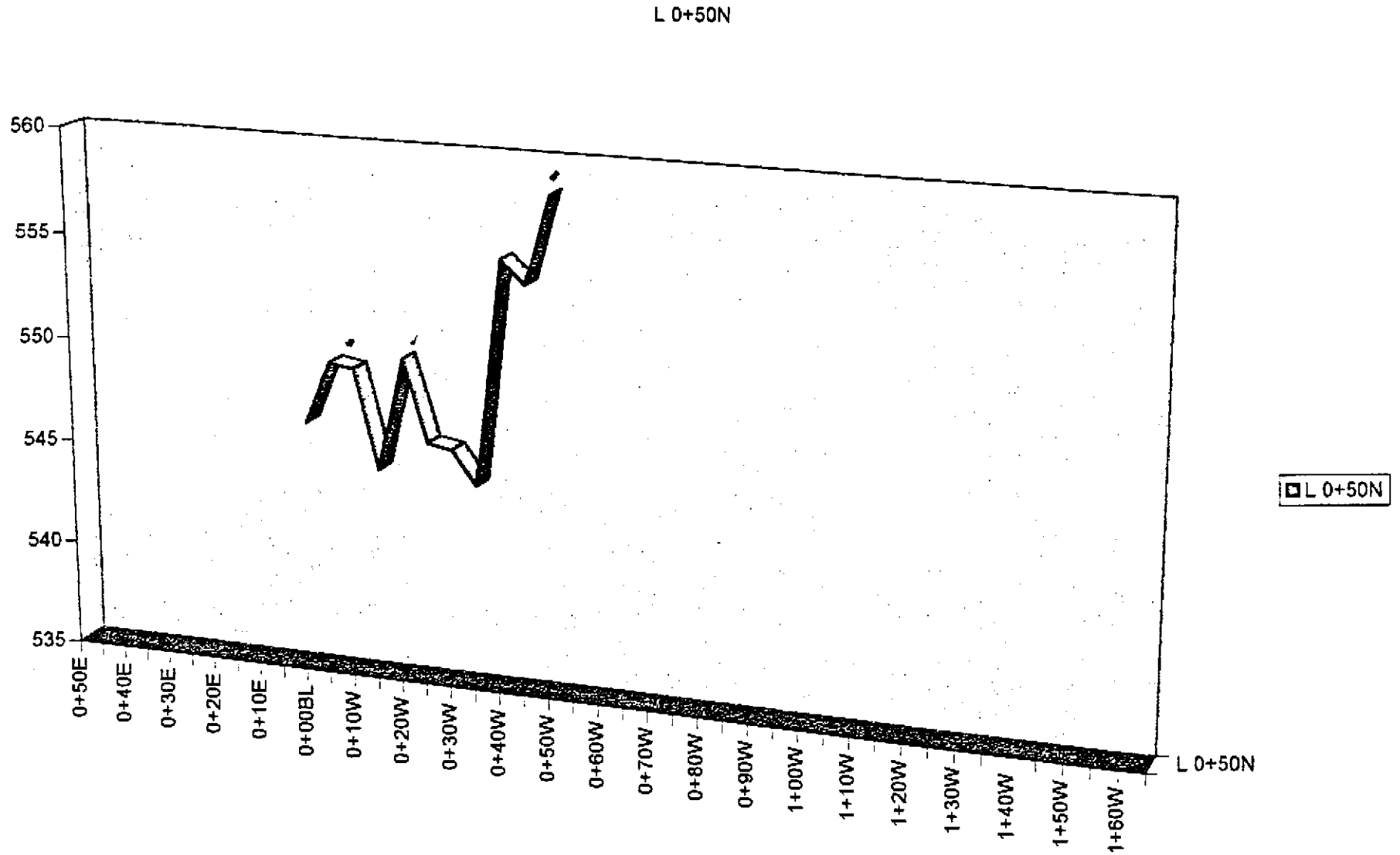


UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING EAST

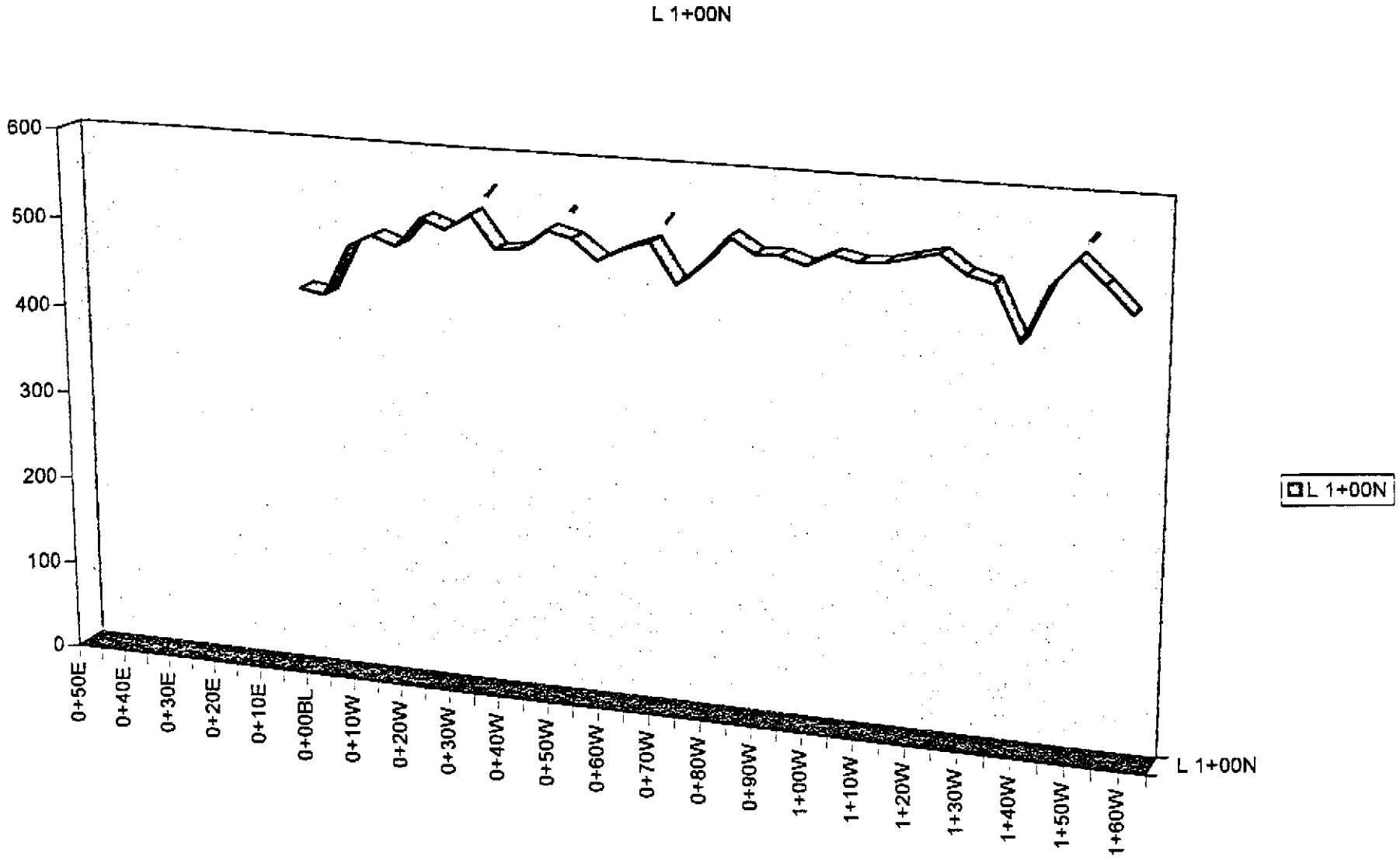
L 0+00BL



UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

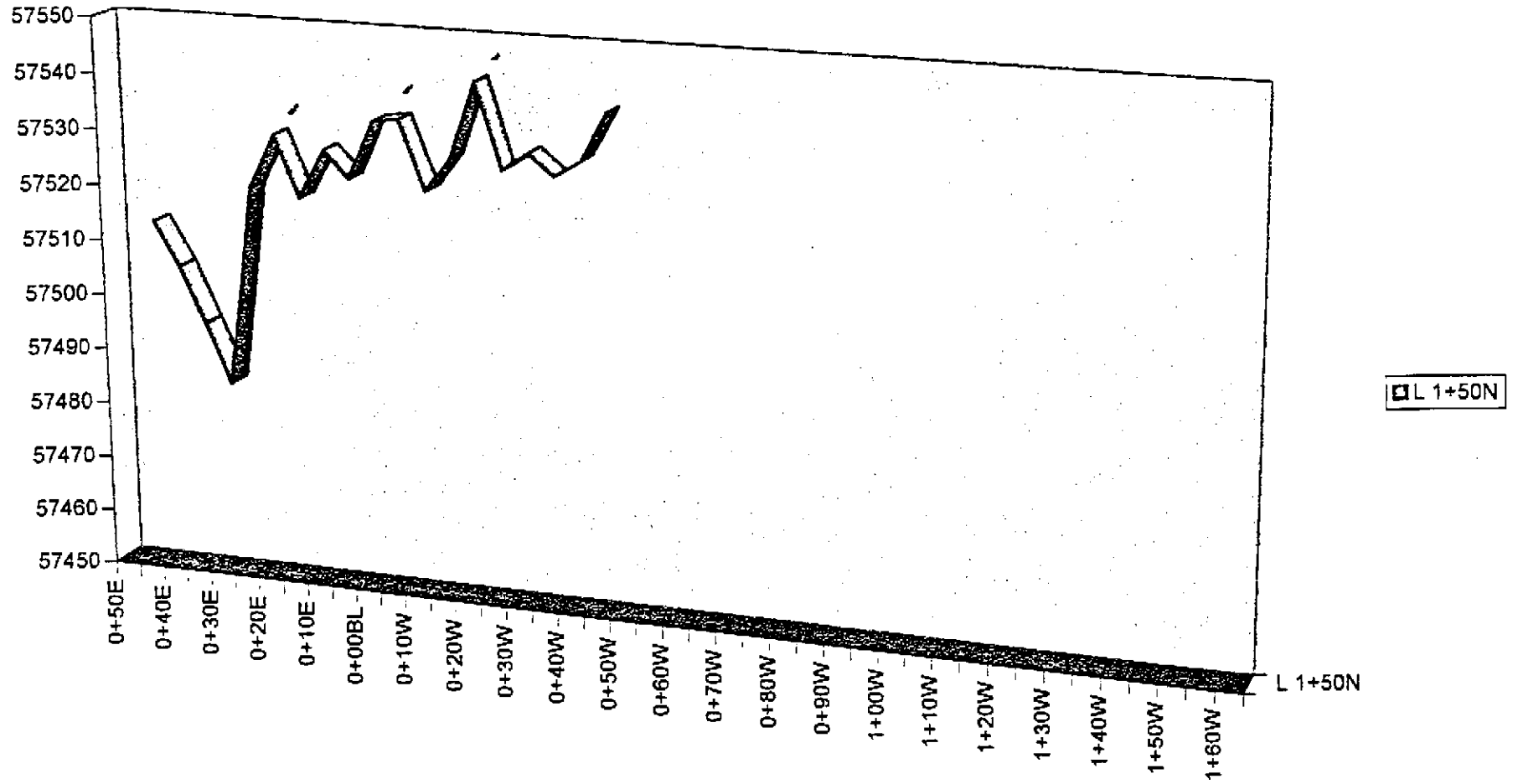


UPPER MARMOT
MAFNETOMETER PROFILE
LOOKING SOUTH



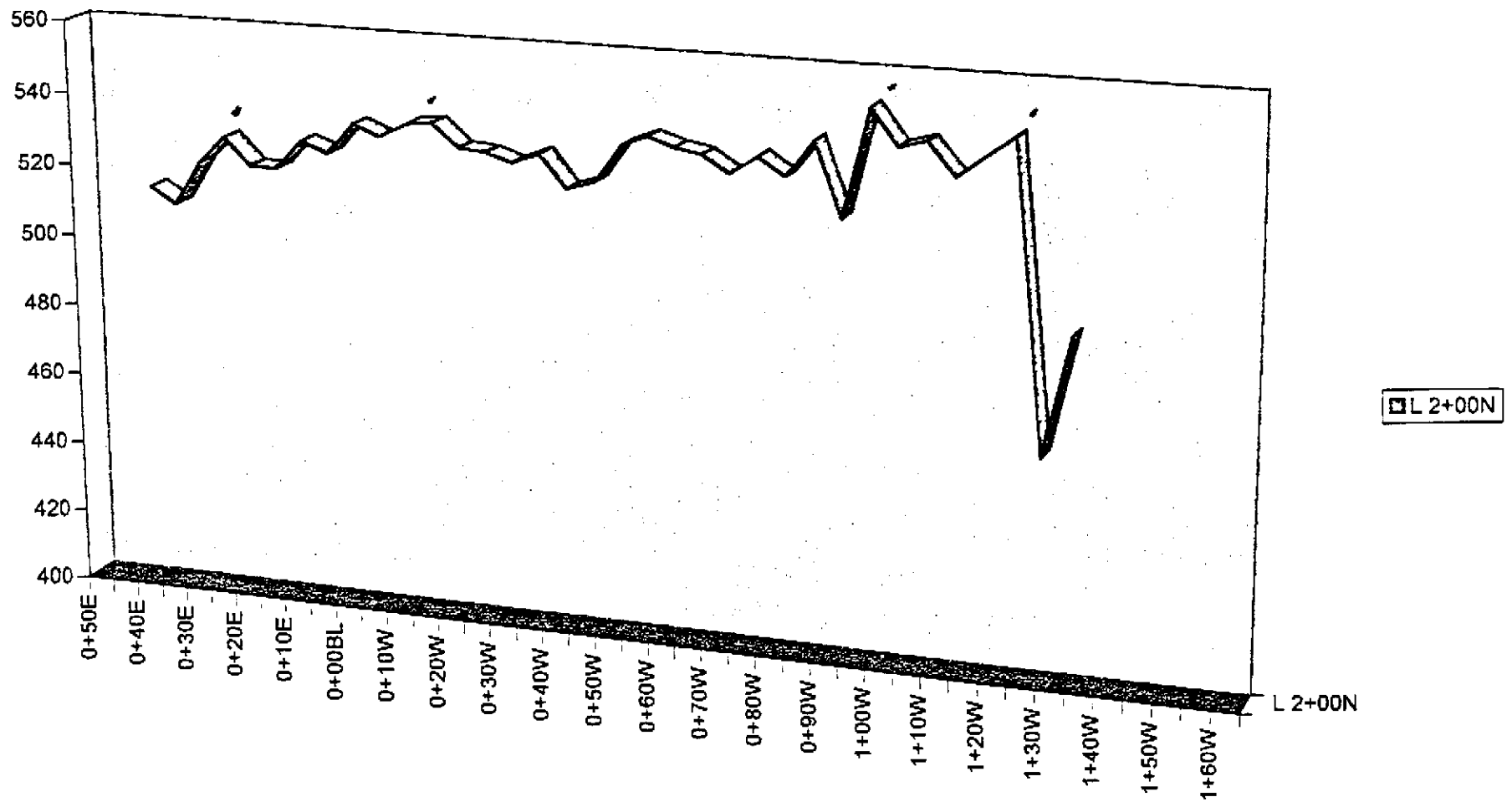
UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

L 1+50N

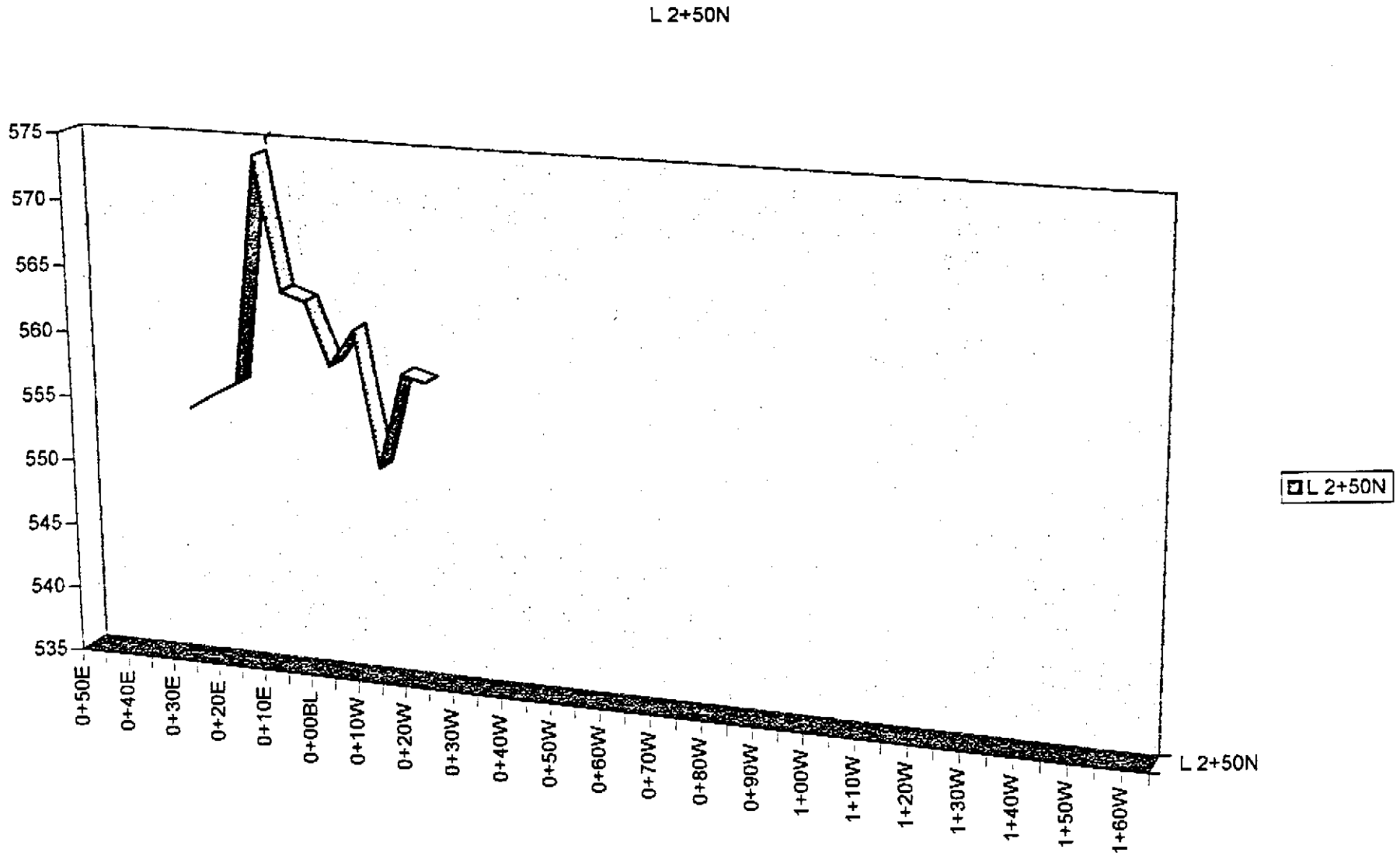


UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

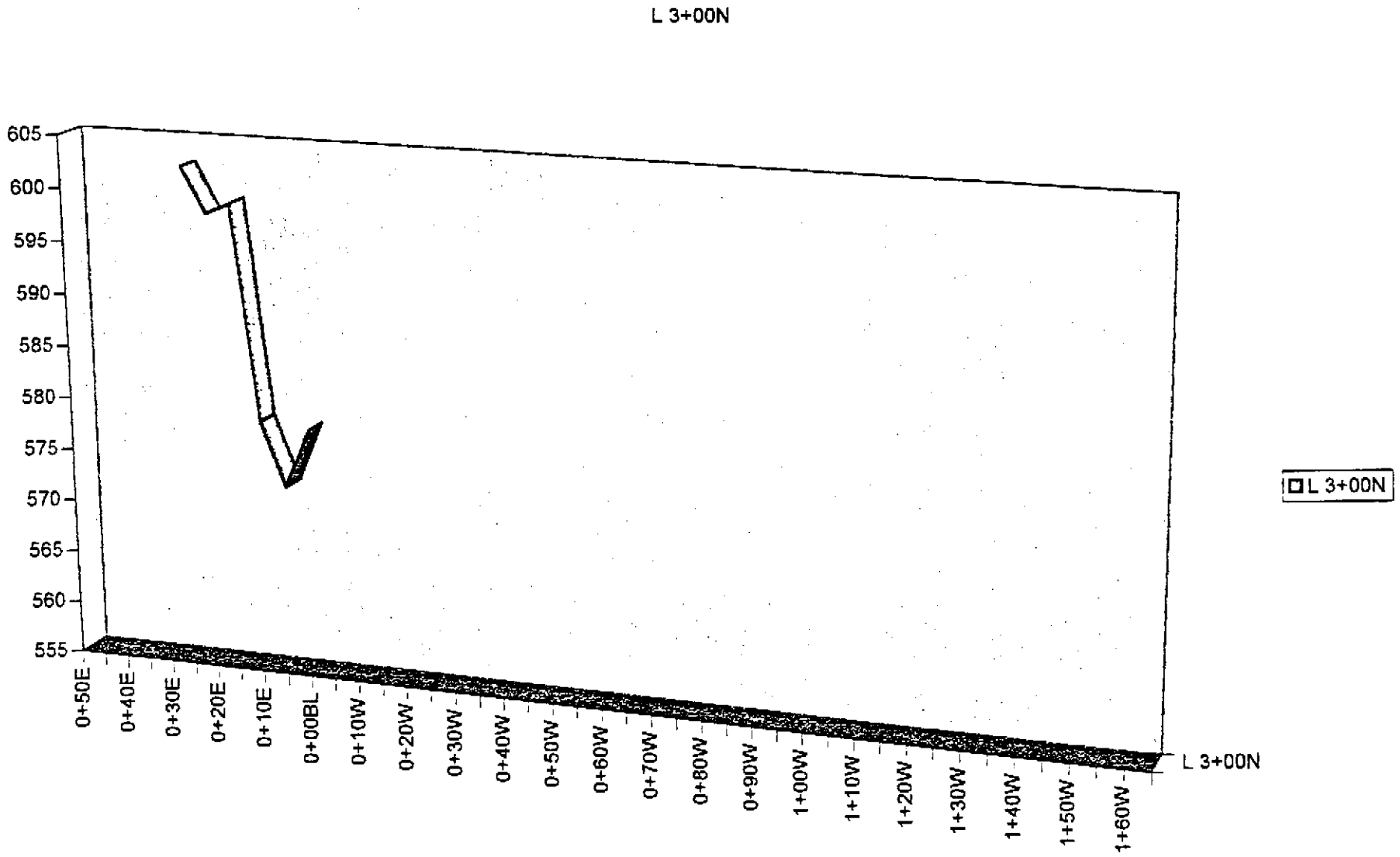
L 2+00N



UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

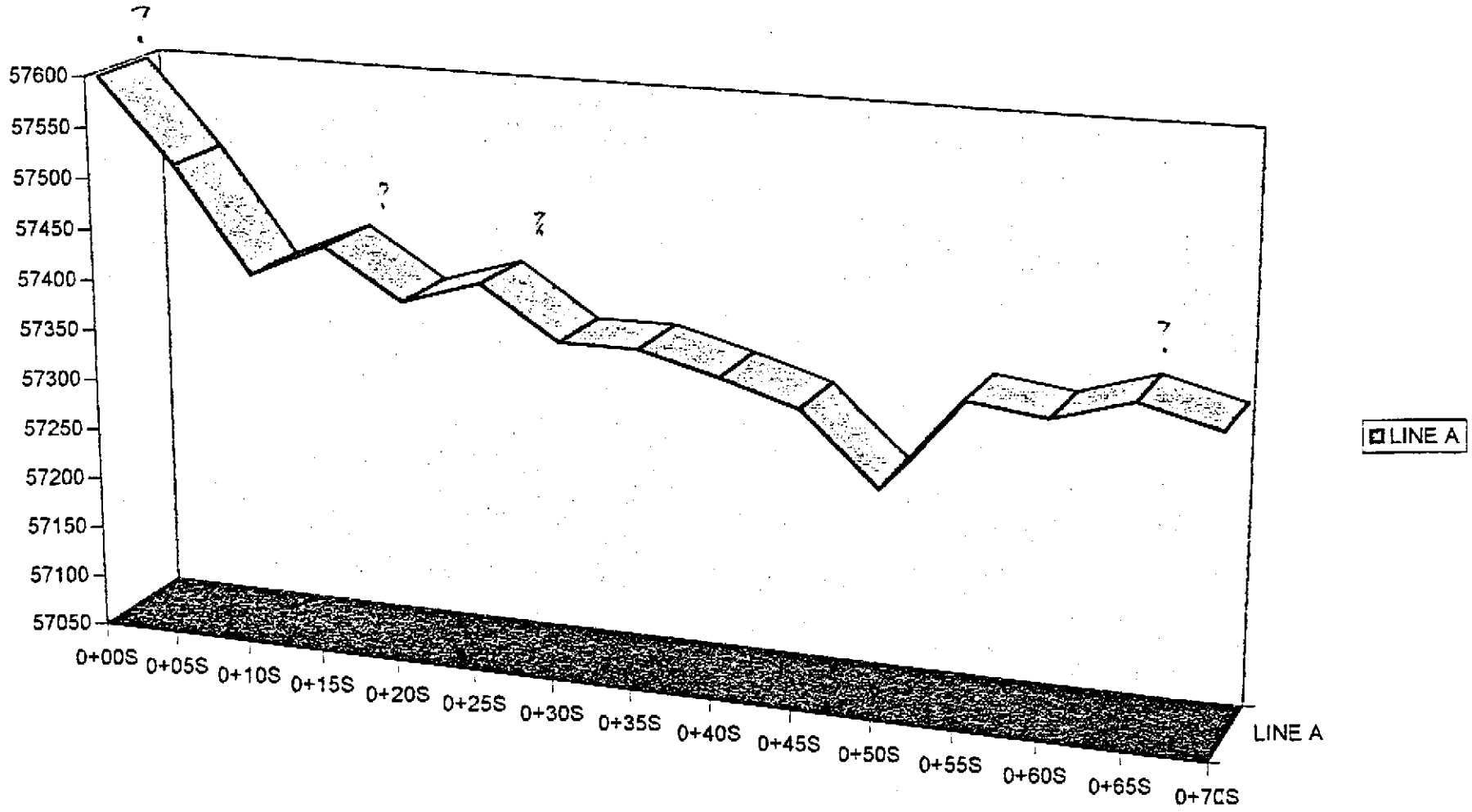


UPPER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH



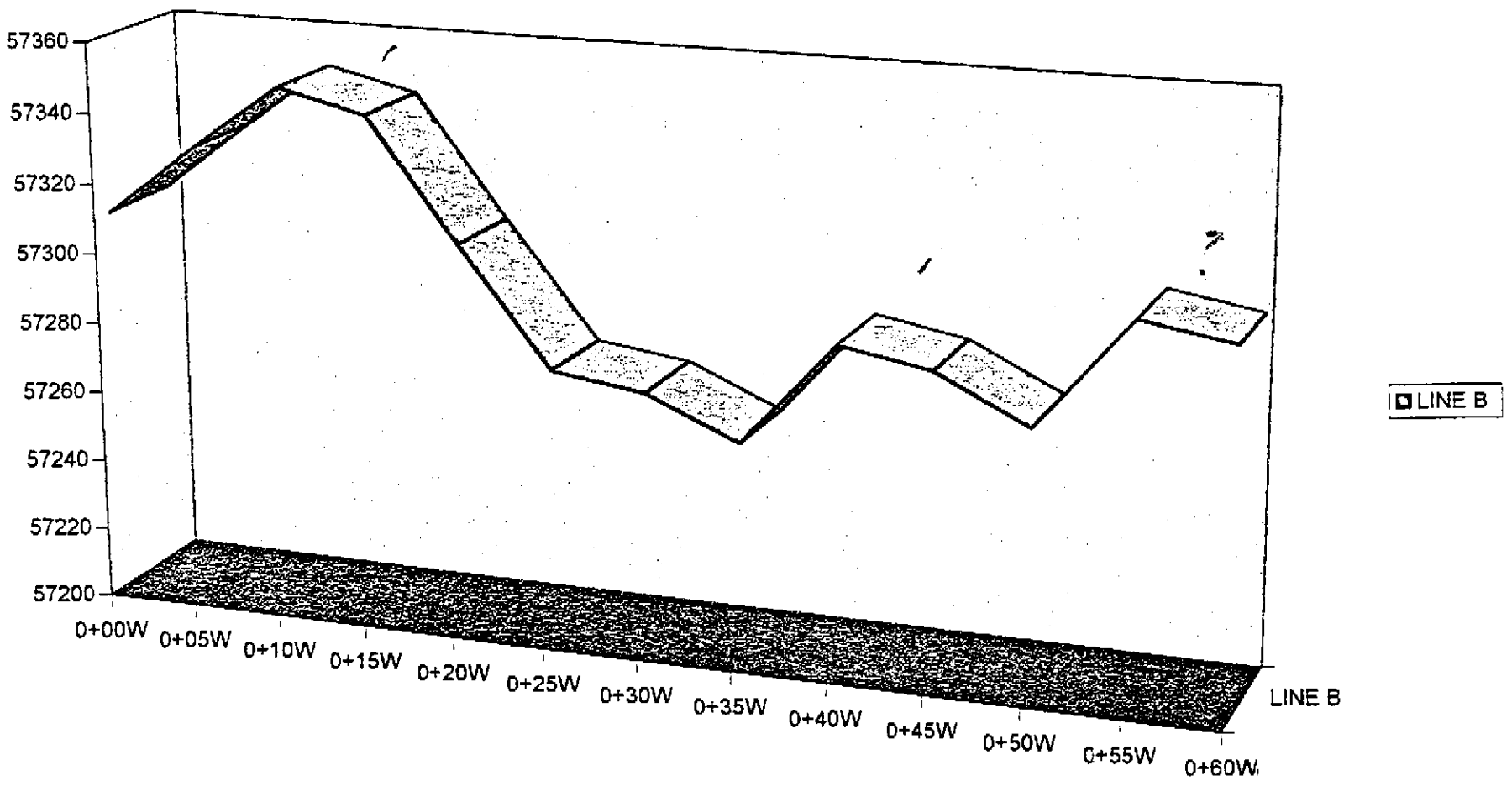
LOWER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

LINE A



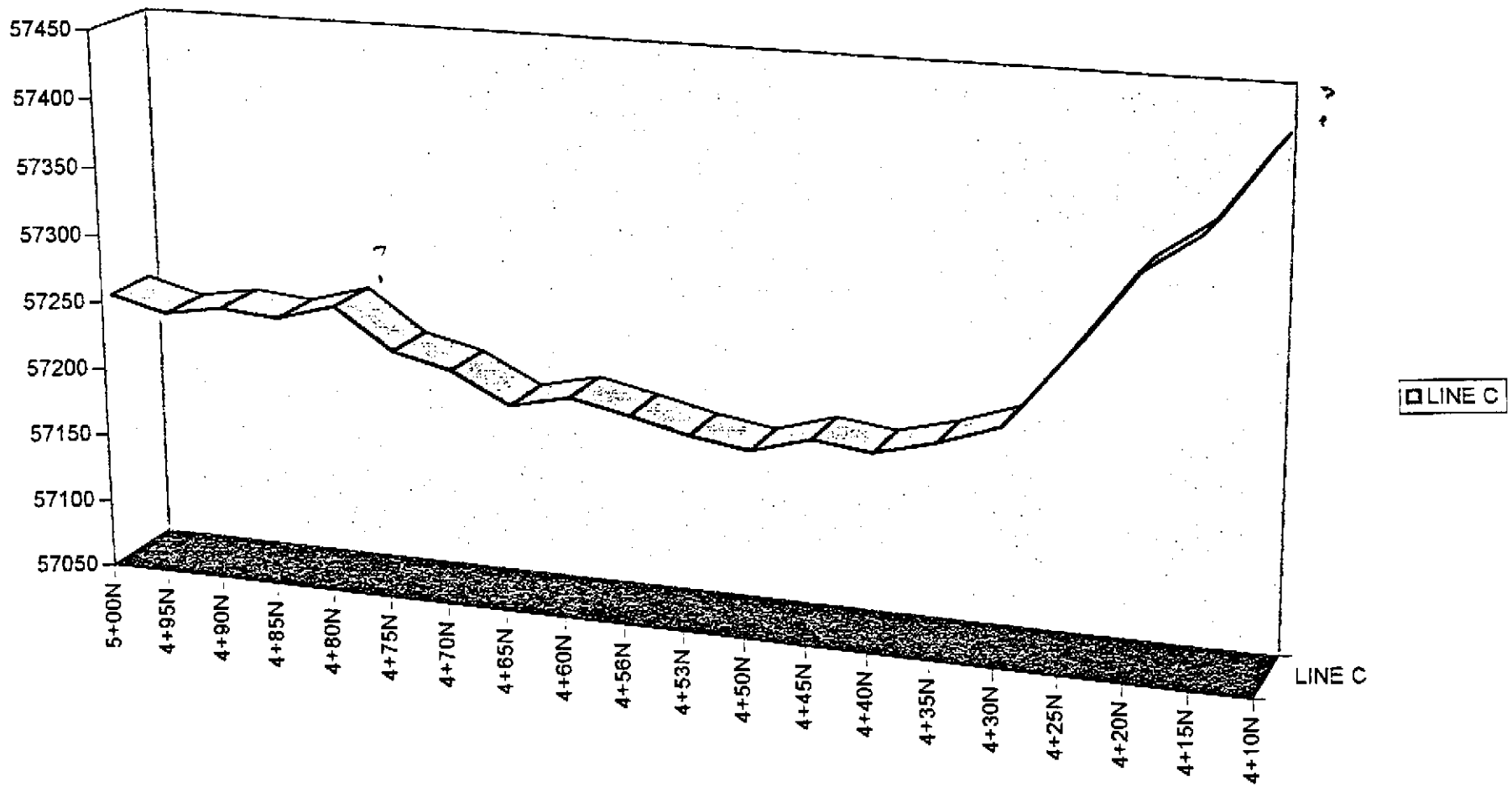
LOWER MARMOT
MAGNETOMETER PROFILE
LOOKING NORTH

LINE B



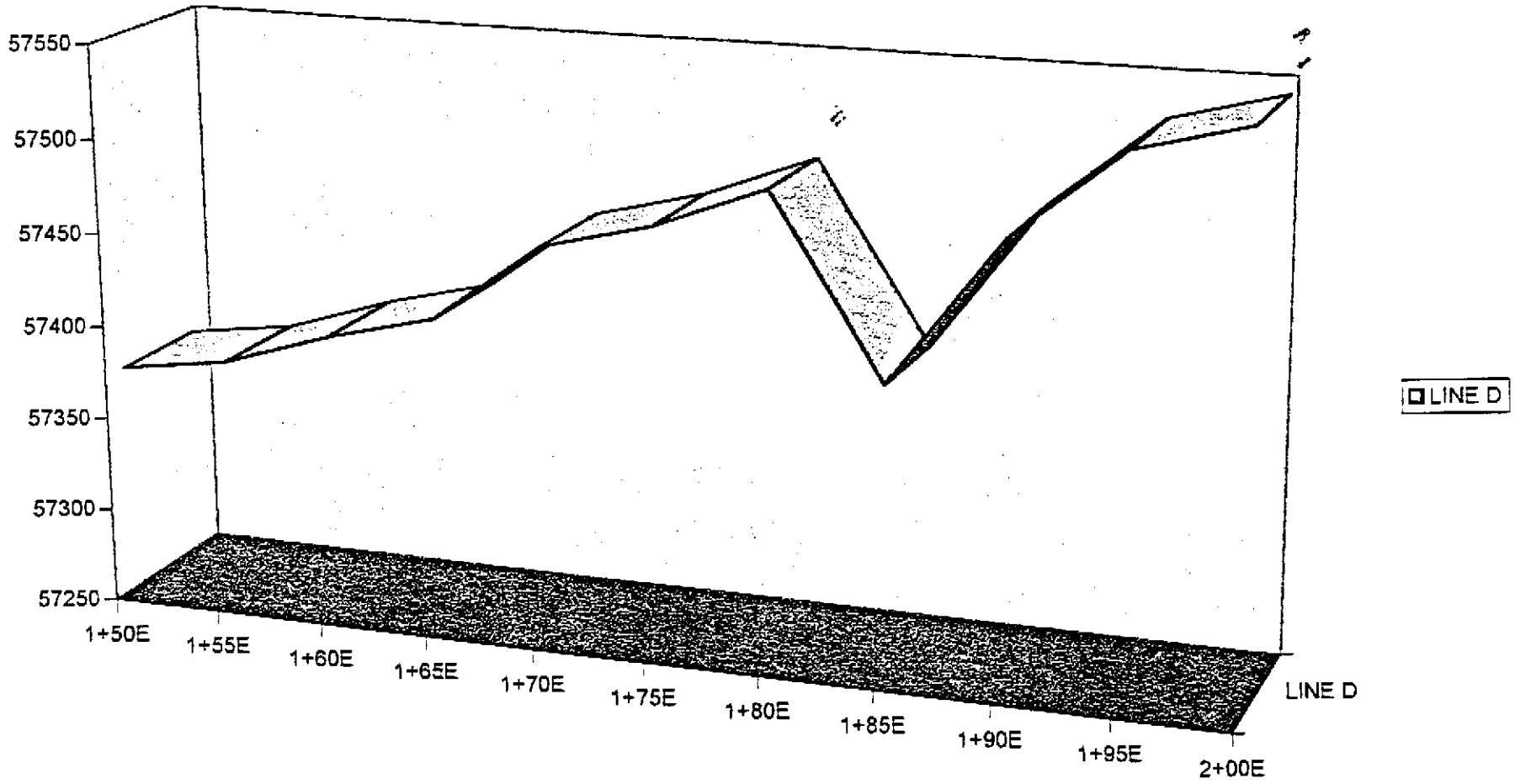
LOWER MARMOT
MAGNETOMETER PROFILE
LOOKING EAST

LINE C



LOWER MARMOT
MAGNETOMETER PROFILE
LOOKING SOUTH

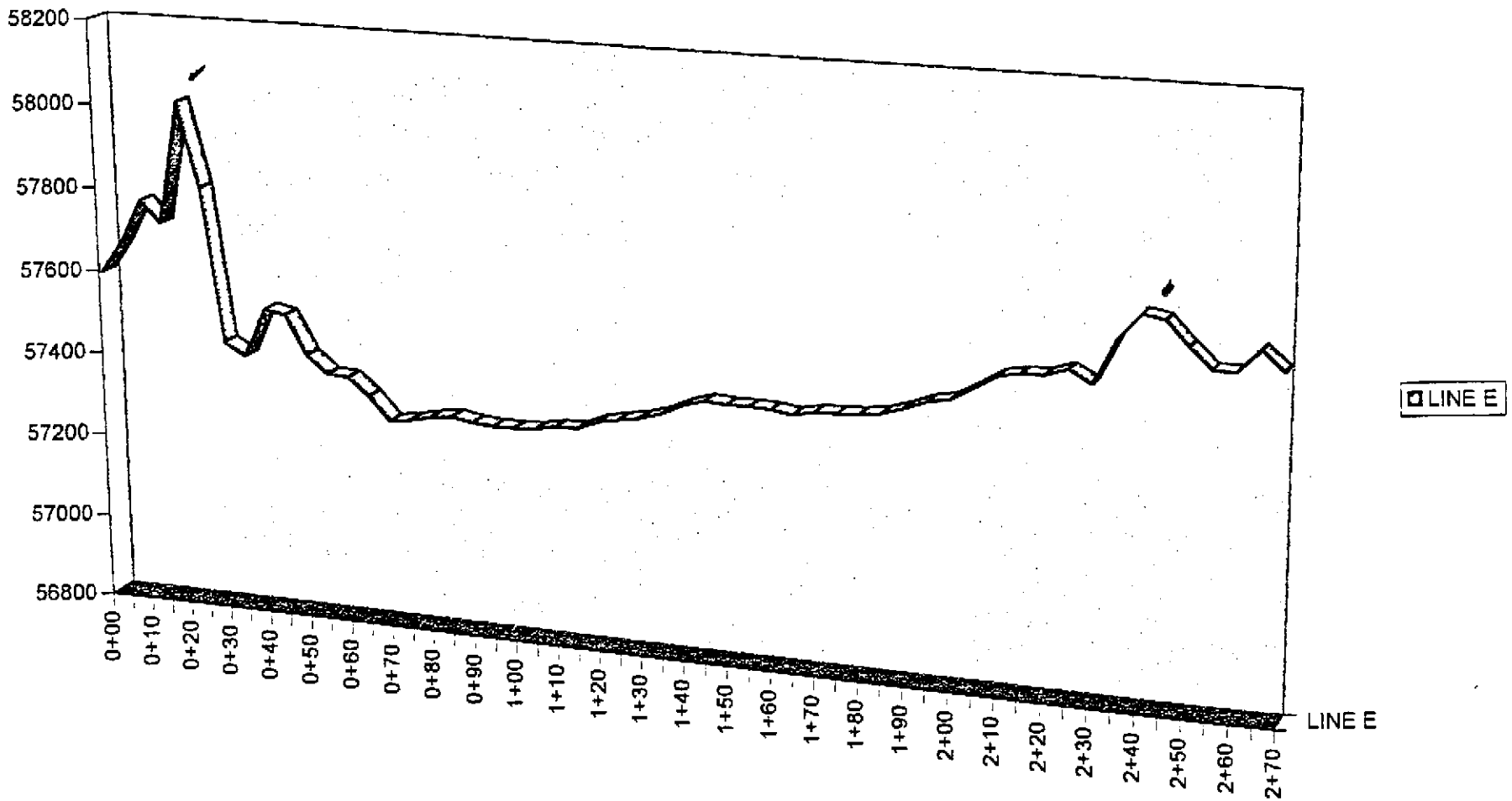
LINE D



LOWER MARMOT
MAGNETOMETER PROFILE

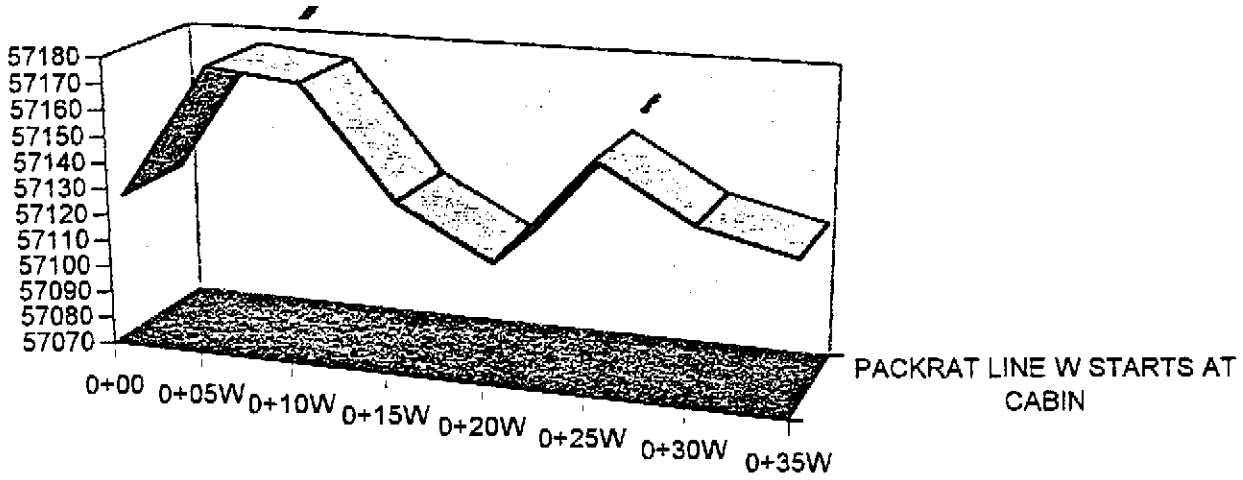
SEE SKETCH

LINE E



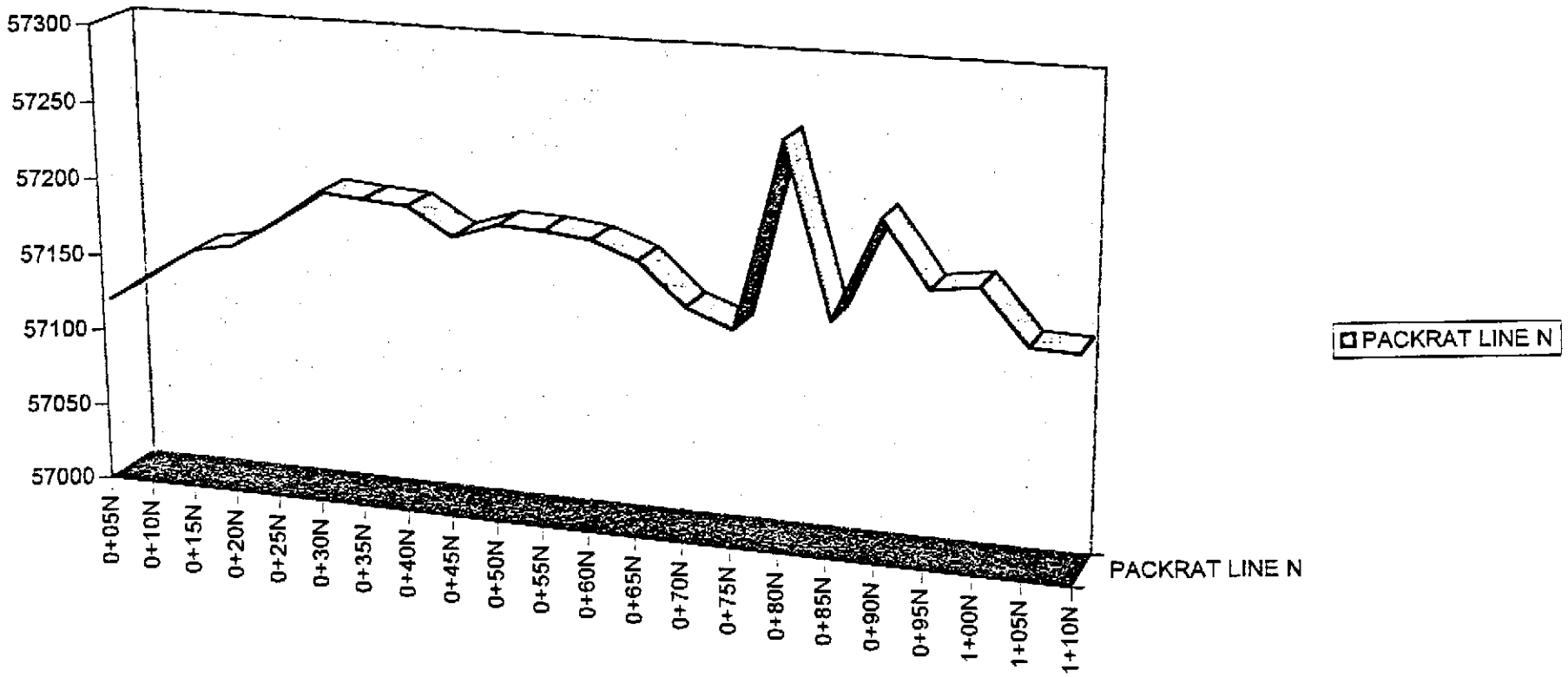
PACKRAT
MAGNETMETER PROFILE
LOOKING SOUTH

PACKRAT LINE W STARTS AT CABIN



PACKRAT
MAGNETOMETER PROFILE
LOOKING WEST

PACKRAT LINE N



APPENDIX D

ROCK SAMPLE DESCRIPTIONS

Sample Descriptions

Silver Claims, Altroy Group

Sample Number

95582 Altered limonitic sedimentary rock with traces of galena

95626 Altered schist with sphalerite, hemimorphite and smithsonite?

95627 Sericite schist with fine-grained sulphides

95628 Sericite schist with fine grained sulphides

95629 Altered iron stained granite

95630 Altered iron stained metamorphic rock

95631 Altered iron stained metamorphic rock

95687 Siliceous sedimentary or metamorphic rock? with traces of galena

95688 Siliceous sedimentary rock with dark fine-grained sulphides

95689 Siliceous metamorphic rock

95693 Siliceous sedimentary rock and carbonates with possible fine-grained sulphides

95694 Siliceous, limonitic rock with possible fine-grained sulphides

95695 Altered limonitic and ankeritic sedimentary rock with traces of galena

95696 Altered ankeritic sedimentary rock with traces of galena

95697 Altered limonitic sedimentary rock with patches of galena (<2%)

95798 Siliceous altered sedimentary rock, traces of sphalerite

95699 1 cm. wide quartz-ankerite-siderite vein with patches of galena, <1%, vein cuts altered sedimentary rock

95700 Limonitic rock containing up to 5% galena

95582 Siliceous sedimentary rock with galena

95628 Sericite schist

95629 Greenish iron stained metamorphic? rock

95630 Fine grained limonitic metamorphic? rock

95631 Sericite Schist

Hummingbird Claims, Copper Lake

95681 Quartz with chalcopyrite and pyrite

95682 Quartz with chalcopyrite and pyrite

95683 Cubic pyrite crystals in quartz

95684 Pyrite in milky quartz - Chip Sample from quartz vein

95685 Rusty quartz with chalcopyrite, pyrite and malachite