MAP NO.	ASSESSMENT REPORT	X	DOCUMENT NO.:092523
105 A 15	PROSPECTUS		MINING DISTRICT: WATSON LAKE
	CONFIDENTIAL	X	TYPE OF WORK: GEOPHYSICAL
	OPEN FILE		

REPORT FILED UNDER: Alex Black

DATE PERFORMED: July 5-30,1987 **DATE FILED:** August 25,1988

LOCATION: **LAT.:** 60° 55'N **AREA:** Mt.Murray

LONG.: 128° 50' W **VALUE $:** 2,000.00

CLAIM NAME & NO.: JACK 5-8 YB00418 - YB00421

WORK DONE BY: T. Liverton

WORK DONE FOR: Alex Black

DATE TO GOOD STANDING		REMARKS:
		#31 MOLLY Trail access was cut and reblazed, 3.1km of grid were cut, and magnetic and VLF-EM surveys were done. Two negative magnetic anomalies located. At the main showing, quartz-sericite-pyrite-molybdenite veins contain up to 0.48 g/t Au and 0.072 % Mo.

PRELIMINARY GRID PREPARATION AND GEOPHYSICAL WORK ON THE MOLLY (JACK) GOLD-MOLYBDENUM PROSPECT, WATSON LAKE MINING DISTRICT.

N.T.S. 105A-15

CLAIMS: JACK 5 to 8
YB00418 to YB00421

LATITUDE: 60° 55'N
LONGITUDE: 128° 50'W

OWNER: ALEX BLACK

WORK PERFORMED BETWEEN JULY 5th AND 30th 1987.

T. Liverton, June 1988.

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $2090.00.

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

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MAGNETIC PROFILE 1500N
MAGNETIC PROFILE 1650N
MAGNETIC PROFILE DETAIL

The Molly Gold - Molybdenite Property

Location

The Molly property (Jack claims) are 100 Km. North of Watson Lake, Yukon Territory, on the North side of Mount Murray. The original showing is 2.3 Km. South of the Nahanni Range Road at Km. 28.5. It is possible to walk into the property in about 1½ hours following a cut trail.

Geological Description

The Molly prospect is a quartz stockwork within a large alteration zone in the Billings Batholith. Exposure of the quartz vein and alteration system is found over an area of 1200 metres by 220 metres. Rock exposure is found in prominent cliffs and along the creek bed to the West. Scree covers the ground between these outcrop areas.

Jointing in the quartz - monzonite follows four attitudes. Strikes and dips are as follows :

1) 022° True /75°W to 90°
2) 093° T /60° to 80°S
3) 102° T /72° to 80°S
4) 105° T /20°N

The first set controls the orientation of the mineralised quartz veins. The second and third sets are most prominent in the alteration zones and at least partially form the local boundary of the pervasive alteration. The fourth flat - lying set shows no particular association with either the alteration or mineralisation.

The very obvious alteration consists of a brilliant pink colourisation, which in the absence of microscopic or X - ray data is suggested to be a gypsumzeolite mixture. It follows the second and third joint sets, frequently penetrating a few centimetres out from the jointing. Where the joints are close - spaced the alteration forms an anastamosing system affecting all of the country - rock. The pink alteration is visible in several zones which are bounded by the East - West joint sets and intensity of alteration appears to increase toward the North and is most obvious near the Northern limit of exposure.

The first joint set controls the mineralised stock-

work. The veins are either quartz, in pinching and swelling veins up to a few centimetres wide and from centimetres to one metre apart or wider mostly sericitic material with masses of pyrite (fist-sized lumps). These North-South striking veins obviously post-date the main pink alteration, but do in some places show a selvedge (1 Cm or so) of the same pink minerals. Whithin the quartz small pyrite crystals (under 2 CM typically) and molybdenite flakes are found. The tighter joint planes on the same trend show central chlorite surrounded by sericite and the pink minerals. The pink alteration is also seen alone along short, tiny, oblique joints which "feather out" from the main set.

The Quartz Veins at the Main Showing

The quartz-sericite-pyrite-molybdenite veins have shown from the very limited amount of sampling so far attempted assay values to 0.014 ozs per ton of gold and 0.072% Mo. Gold values in the wider (0.5 metre) sericite-pyrite portions of the vein system are much lower. This suggests that the gold is present as the free metal in the quartz rather than being tied to the pyrite.

Between the quartz veins the quartz-monzomite shows microscopic joints at oblique angles to the main system. These joints contain pyrite and molybdenite usually much finer grained than in the quartz. Some disseminations within a few centimetres of joints have also been noted.

Other Structures

Two interesting stuctures are found in the creek exposures: a highly altered dyke and an E-W trending chloritic shear zone. The dyke is of a highly chloritised aplite to diorite rock which contains a significant amount of small (1 mm or less) pyrite cubes. The shear zone, about 1 metre thick, shows much slickensided chlorite and quartz.

Extent of Alteration and Known Mineralisation

The pink alteration occurs in lically quite abruptly bounded zones, parallel to the E-W joint pairs, which are in the order of 20 metres wide. The extent of the (?) zeolite - gypsum alteration seems to increase to the North and very obviously diminishes rapidly to the South, past the vein exposures in the creek. The quartz systems do not persist to the South of the cirque. Exposures of quartz-monzomite on the ridge, almost a kilometre South of the showing, do not show such pervasive jointing.

To the North the mineralisation is open-ended. Lack of exposure prevents the tracing of the vein system directly. A recconnaisance magnetic survey has suggested that the vein system is a zone of magnetic disturbance, perhaps reflecting differences in magnetic susceptability of the rock due to alteration of the ferromagnesian minerals. The magnetic zone has so far been traced to the North of the original showing for 1150 metres (horizontal projection).

Potential

The grades of gold observed in the few veins sampled at the original creek showing are quite low (to 0.014 oz per ton) and subeconomic. This showing is, however, at the extreme Southern end of the vein and alteration system. Certainly intensity of rock alteration increases Northward. There is potential for a larger and hopefully higher grade of mineralisation to the North, below the eluvial and glacial cover.

The 1987 Work Programme

Physical Work - Trail

The old walking trail from the Nahanni Range Road to the original camp site was cut out and re - blazed to allow easier access to the claims. A small clearing was made at the camp site and logs were sawn to produce a base for a large tent camp. The trail was continued for a further kilometre up the creek to a point just within the area mapped at 1:2000 scale in 1981 - 4.

Grid

Because of practical difficulties the cutting of a grid for geophysics was commenced from the Northern end. An attempt was made to cut a baseline along the trend of the mineralisation from the known exposures Northward. After spending a day cutting only 300 metres through the balsam (3 men) the baseline was abandoned.

A careful transit trverse was run down the valley to tie the various grid lines to a single coordinate system and the lines were turned off from the nearest instrument station. Lines 700N, 1500N and 1650N were cut and also and additional 150 metres of offset baseline (100W) Northward from the 1650 line. Total length of cutting was approximately 3.1 kilometres.

Surveying

Two days were spent running the traverse down the creek and turning off lines. The length of traverse from the showings to the 1650 line was 1326 metres horizontal projection.

Geophysics

A magnetic survey, using avertical component fluxgate magnetometer, was run over the 500N and 700N lines for orientation and then on the 1500N and 1650N lines of the Northern claim block. In addition, measurements were made with a Phoenix V.L.F. electromagnetic receiver, using the Seattle and Buenos Aires transmitters. No satisfactory signal was obtained from the other stations. No anomalous results were obtained with the V.L.F., so the data is not reproduced.

Magnetic Results

Profiles are shown, the values being in gammasrelative to an arbitrary datum. Correction has been made for diurnal drift after several stations were repeatedly re occupied along the lines. The 500N line shows some obvious variation in field strength, but the length traversed was too short (due to cliffs) to allow any erudite conclusions to be made. Line 700N does show a negative anomaly around 100E. Line 1500N shows aregional gradient of approximately 200 gammas over the 1200 metre length traversed. A similar gradient was observed over thw 1650N line, the field strength increasing to the East. The 1500N line has a magnetically disturbed zone from 25W to 100E and the 1650N line an anomally from 25W to 75E. Both of the negative anomalies correspond to a location just East of the creek and it is hoped that the effects represent a difference in magnetic susceptibility of the granitic rocks due to alteration of the ferromagnesians.

Further Work - Recommendations

The grid should be completed to cover both the old and new claims, at least at 200 metre line spacing, and preferably 100 metre, to test whether the magnetic anomaly is one continuous zone and to gather sufficient data to enable a contour plot to be made. Other features than the obvious quartz stock-work (the pyritic dykes - float in the creek indicates that there is more than the one - and the chloritic shear zone) might have an expression. Further geological work is needed on these structures.
If a continuous magnetic anomaly is demonstrated Northward from the mineralisation, then some means of obtaining samples from the 1500 and 1650 lines is needed. This would involve the excavation of some deep pits by hand (perhaps to 10 metres deep). Mineralisation at this distance from the Southernmost showings might give sufficient encouragement to warrent a drilling programme.

T. Liverton

T. Liverton, Watson Lake, Yukon Territory
7th. June 1988.

Chronology of Work

Trail cutting, clearing July 5th on
- T.Liverton 5 days
- A. Black 4 days
- F. Black 2 days

Surveying July 10th on
- T. Liverton 2 days
- A. Black 2 days
- F. Black 2 days

Line Cutting
- T. Liverton 4 days
- A. Black 4 days

Geophysics
- T. LIverton 3 days (July 27th, 28th, 30th.)

Cost Statement

T. LIverton	14 days at $150-	$2100.00
A. Black	10 days at $100-	$1000.00
F. Black	4 days at $ 80-	$ 320.00
Vehicles: 4 trips of 164 miles each, 50c per mile		$ 328.00
Supplies		$ 525.00
Instrument and transciever batteries		$ 61.00
Chainsaw use		$ 100.00
	Total	$4434.00

T. Liverton

STATEMENT OF QUALIFICATIONS OF AUTHOR

Timothy Liverton - Graduated from the University of Sydney with a B Sc degree in Geology and Geophysics in 1964.

Experience:

(In Australia)

1965 - Employed by R. Hare & Associates (consultants) to work on tin, tungsten, and copper mines and prospects in Queensland and Western Australia. Work included surface and underground surveying and geological mapping, supervision of diamond drilling and regional mapping.

1966 - 1967 - Employed by the Electrolytic Zinc Company of A'Asia Limited. to work on base metal exploration in southern N.S.W. and uranium prospect in South Australia. Work involved detailed mapping, supervision of drilling, geochemcial surveys and geophysics and petrographic studies.

1968 - 1970 - Employed by Trans Australiam Exploration (Mc Phar, Sumitomo, St. Joseph, Bethlehem Copper) to carry out regional mapping and prospecting over 2000 square miles of Queensland to explore for copper, molybdenum and tungsten.

1971 & 1972 - Employed by ANZ Exploration (Union Carbide) to carry out uranium exploration in the Northern Territory in the Alligator River region.

(In Canada & Abroad)

1973 - Working as a civil engineer in England, supervising harbour construction.

1974 to 1979 - Employed by Union Carbide Canada Limited to work in Yukon and Northern British Columbia tungsten projects during the summer. During the winter months working on reconnaissance for quartz in Greenland, for Manganese in Amazonia, Brazil; as a mine geologist at the Pine Creek Mine, California, on Tungsten exploration in Norway and development work in Portugal.

1980 [illegible] - Self-employed, carrying out various projects in the Yukon, Northern B.C, and Saskatchewan (Geological mapping, surveying and property examination) for exploration companies.

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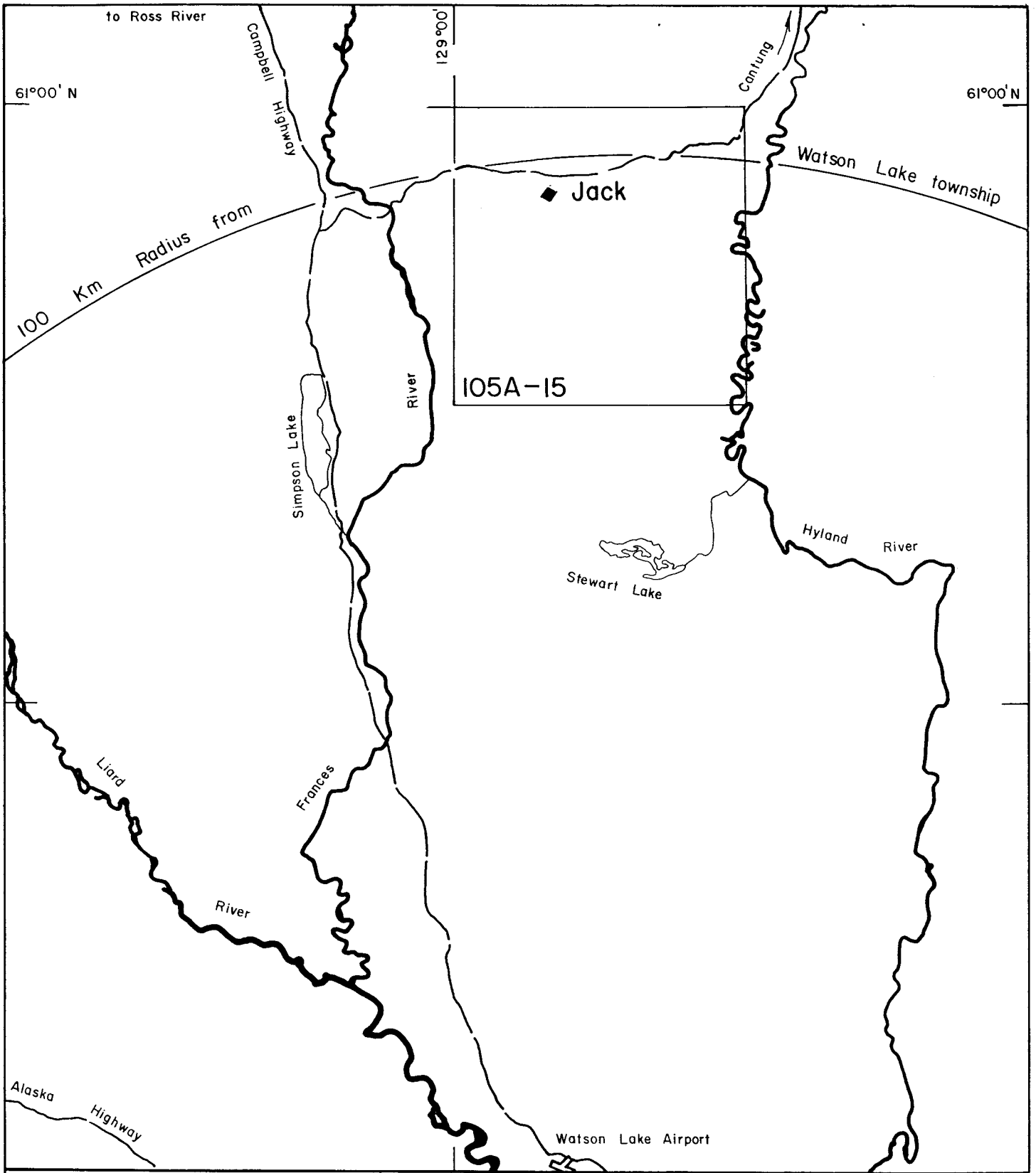
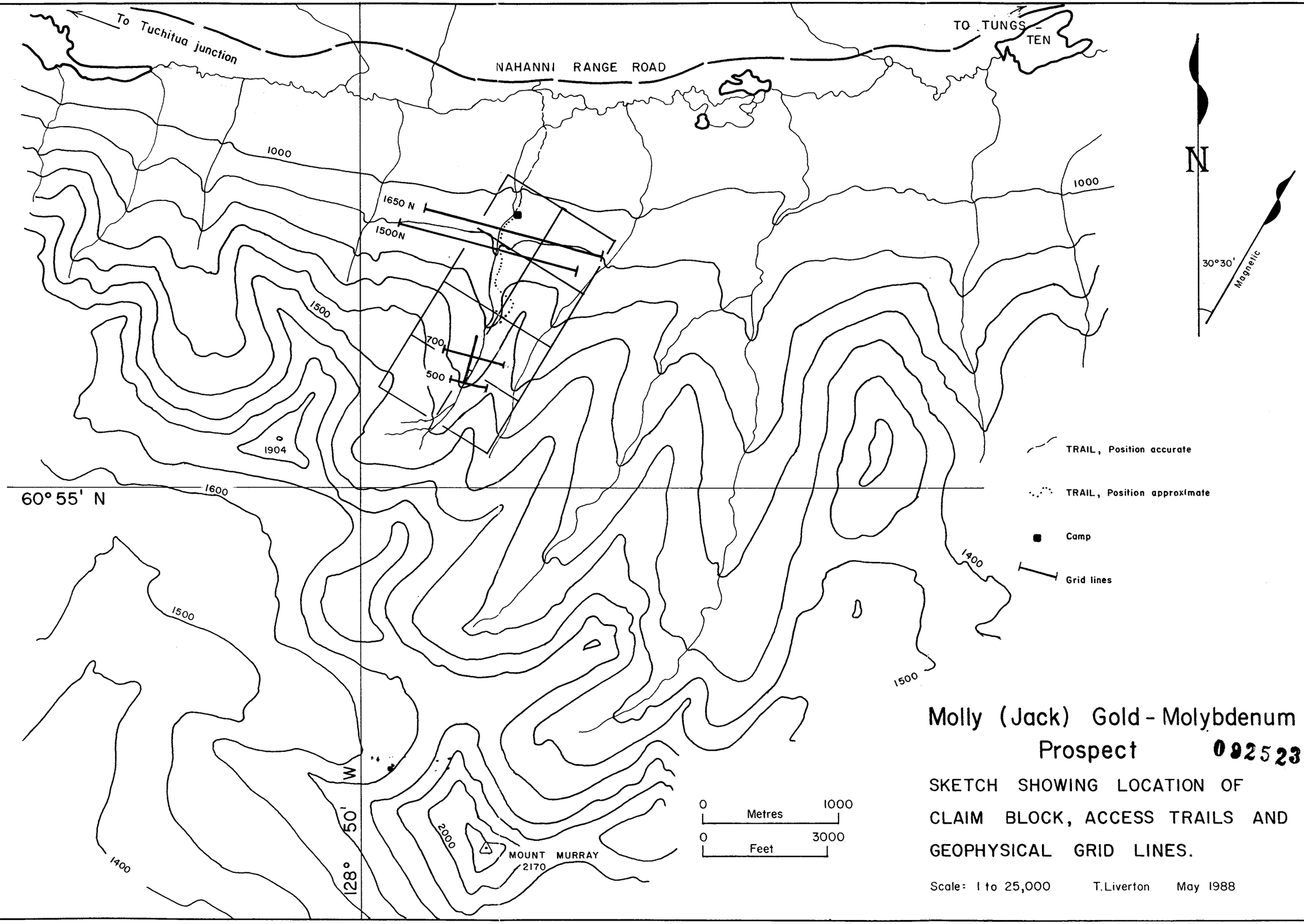


Molly Prospect (Jack Claims) - Location
105A -15, Watson Lake Mining District, Yukon.

Scale : 1 to 500 000

T.L. MAY 1988

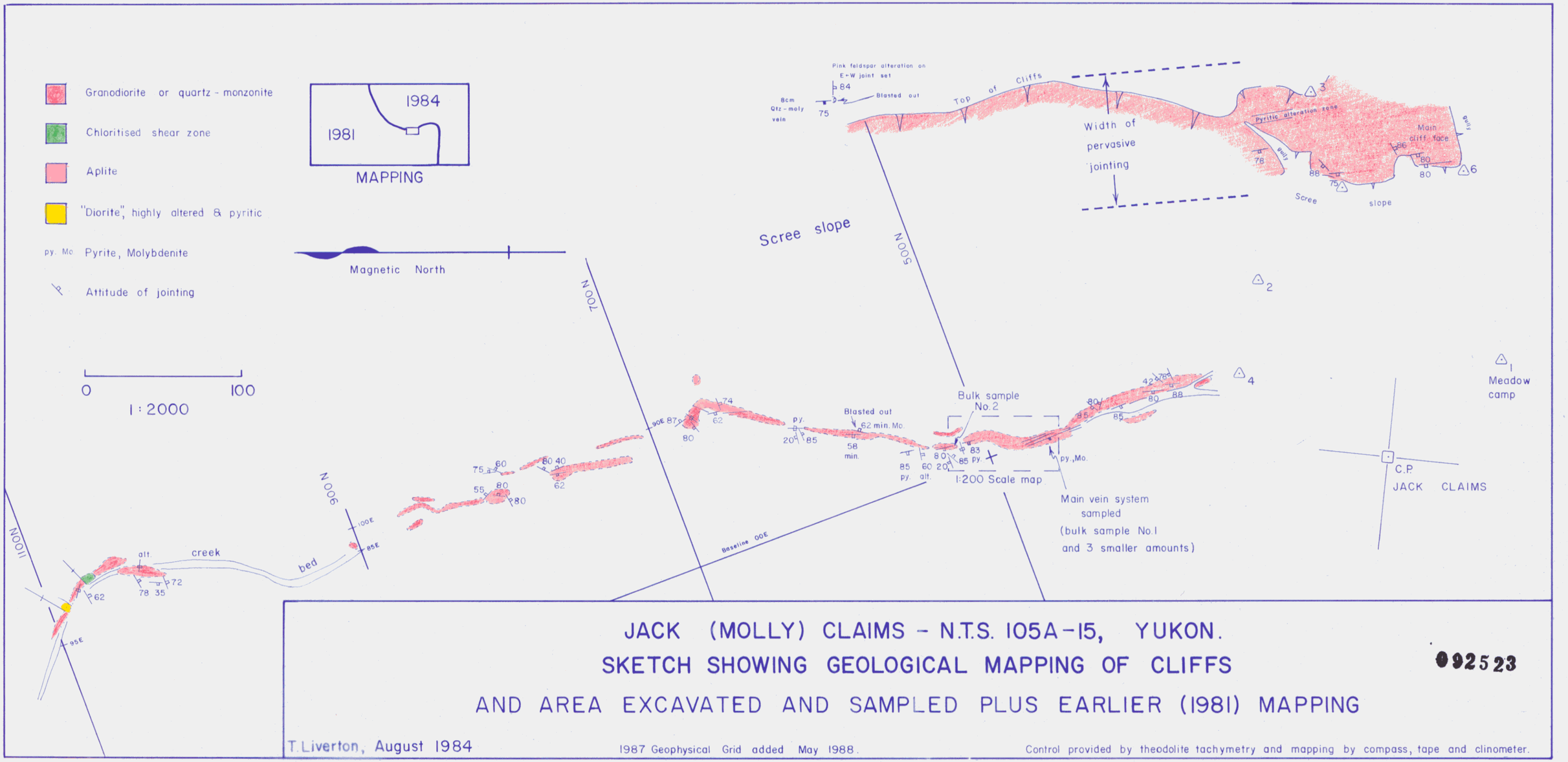
092523



Molly (Jack) Gold - Molybdenum Prospect 092523

SKETCH SHOWING LOCATION OF CLAIM BLOCK, ACCESS TRAILS AND GEOPHYSICAL GRID LINES.

Scale: 1 to 25,000 T.Liverton May 1988



JACK (MOLLY) CLAIMS - N.T.S. 105A-15, YUKON.

SKETCH SHOWING GEOLOGICAL MAPPING OF CLIFFS

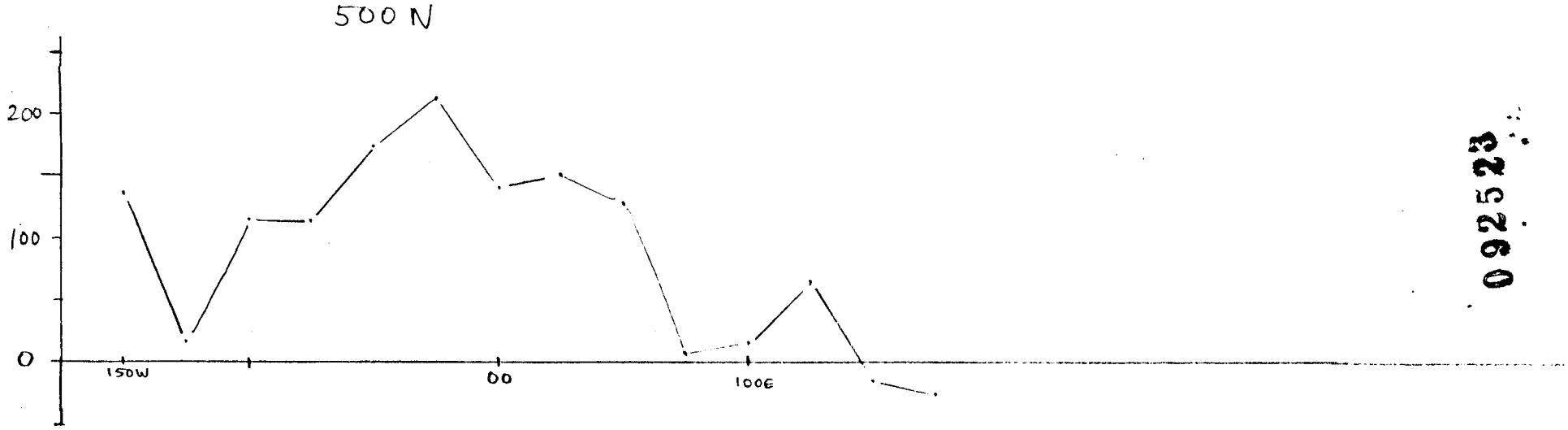
AND AREA EXCAVATED AND SAMPLED PLUS EARLIER (1981) MAPPING

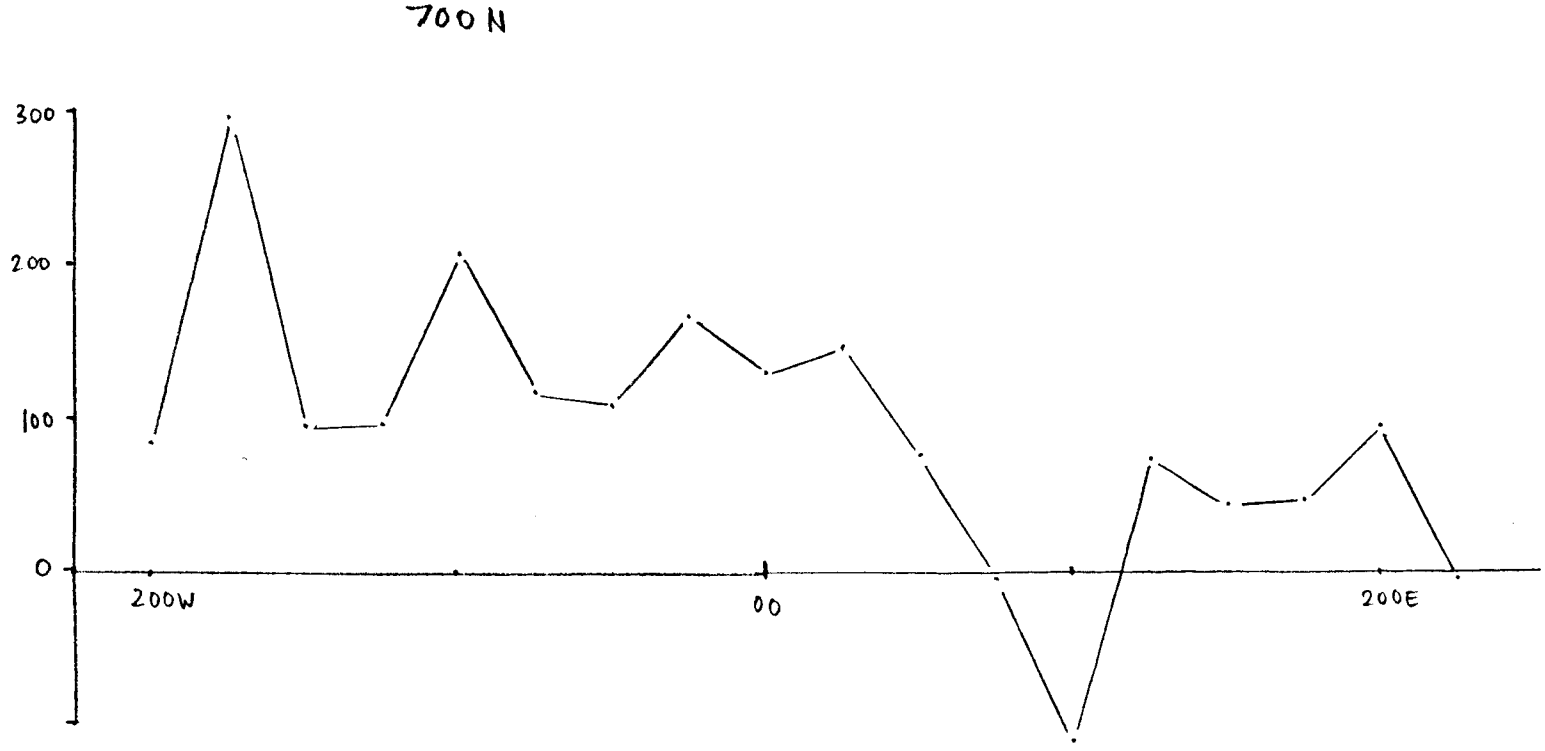
092523

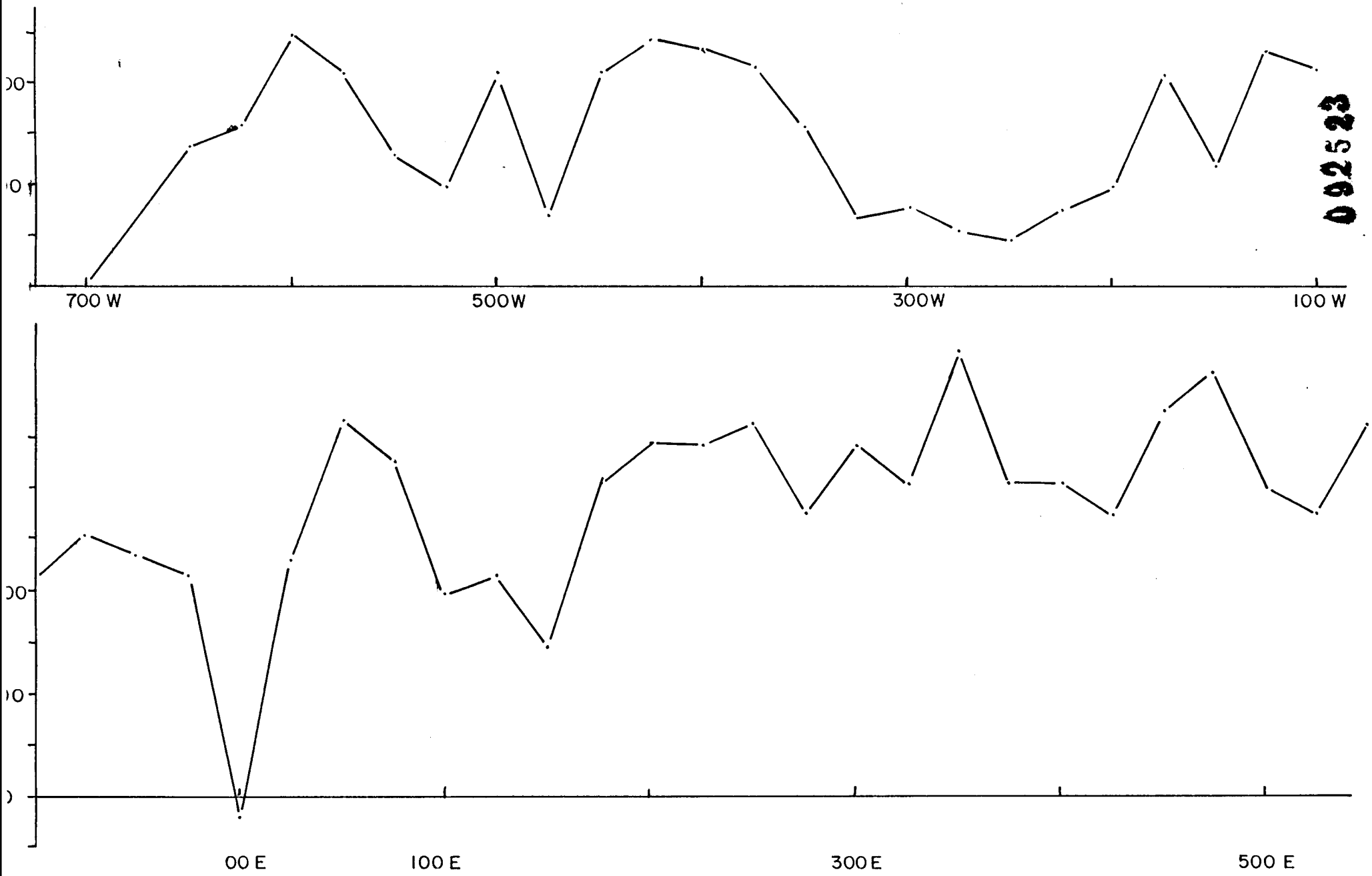
T. Liverton, August 1984

1987 Geophysical Grid added May 1988.

Control provided by theodolite tachymetry and mapping by compass, tape and clinometer.







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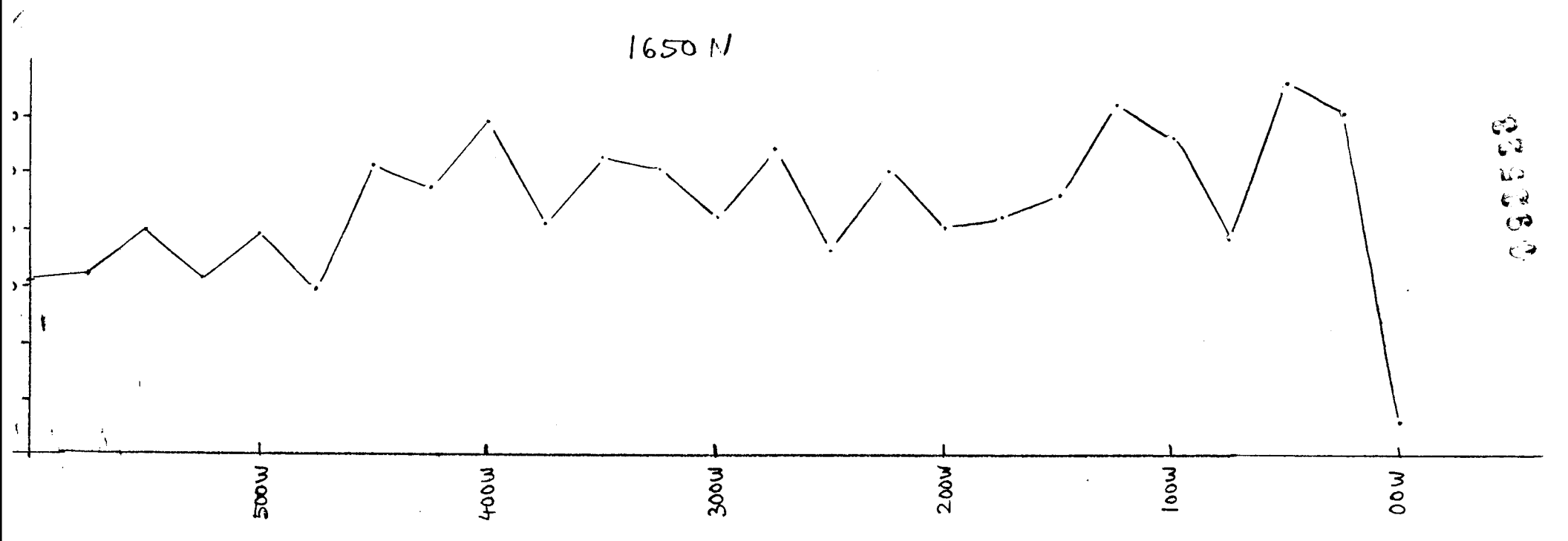
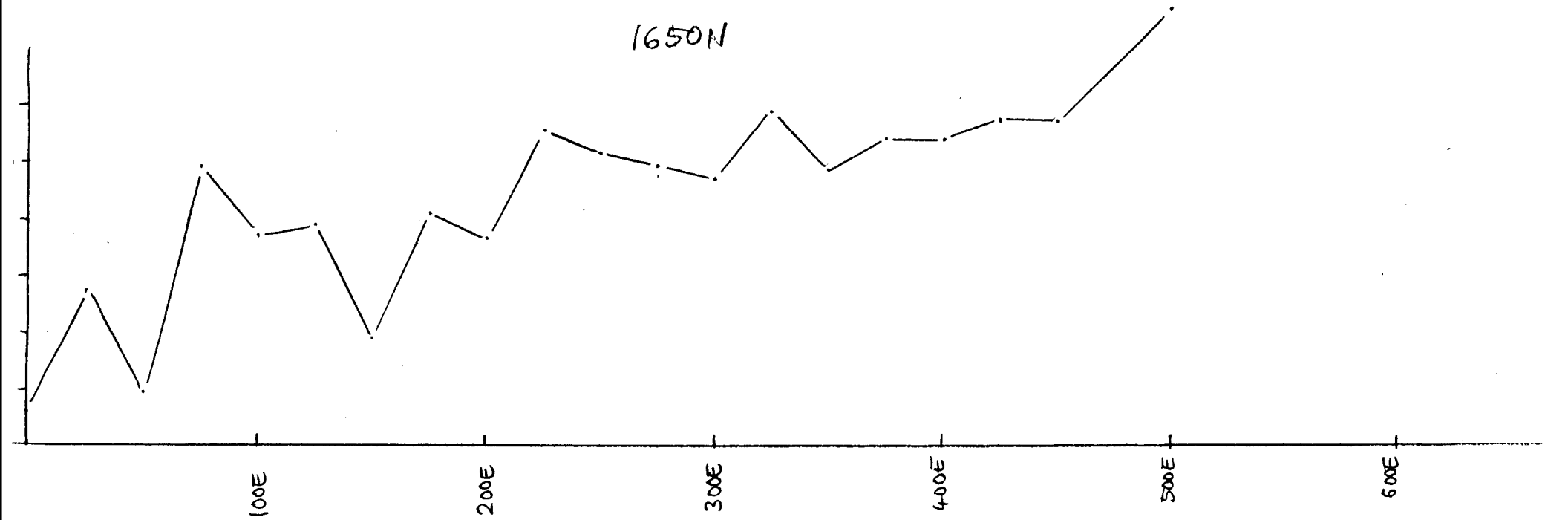
1500 N


1650 N
500W
400W
300W
200W
100W
00W


1650N
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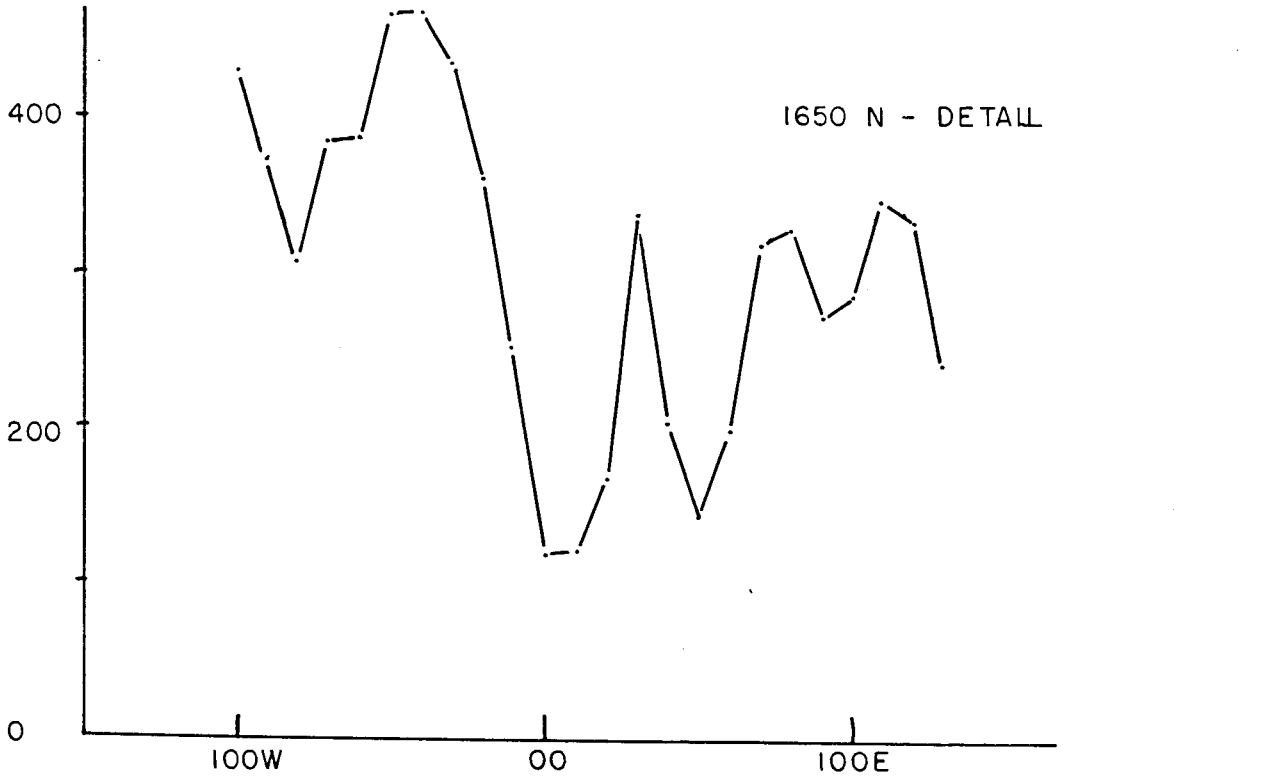

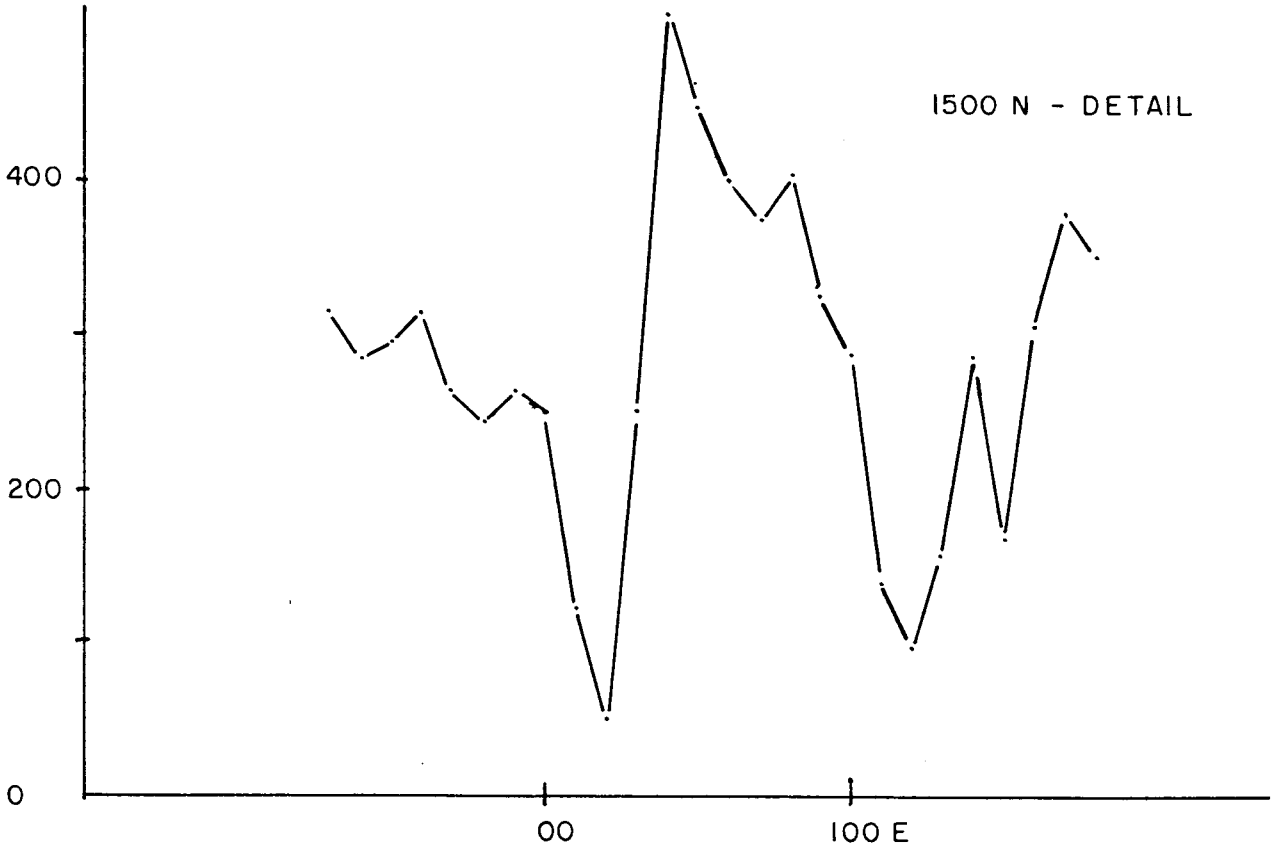

STATIONS AT 10 METRE INTERVALS