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GEOLOGIC, GEOPHYSICAL, GEOCHEMICAL
INVESTIGATION OF THE
SUN- TIE CLAIMS GROUPS

ANVIL PROJECT
ANVIL DISTRICT, YUKON TERRITORY

Longitude: 133^o 15'W
Latitude : 62^o 16'N

Claim Sheet - 105-K-6

By:

Wayne J. Roberts

DYNASTY EXPLORATIONS LIMITED

September 10 - September 30, 1970

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DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

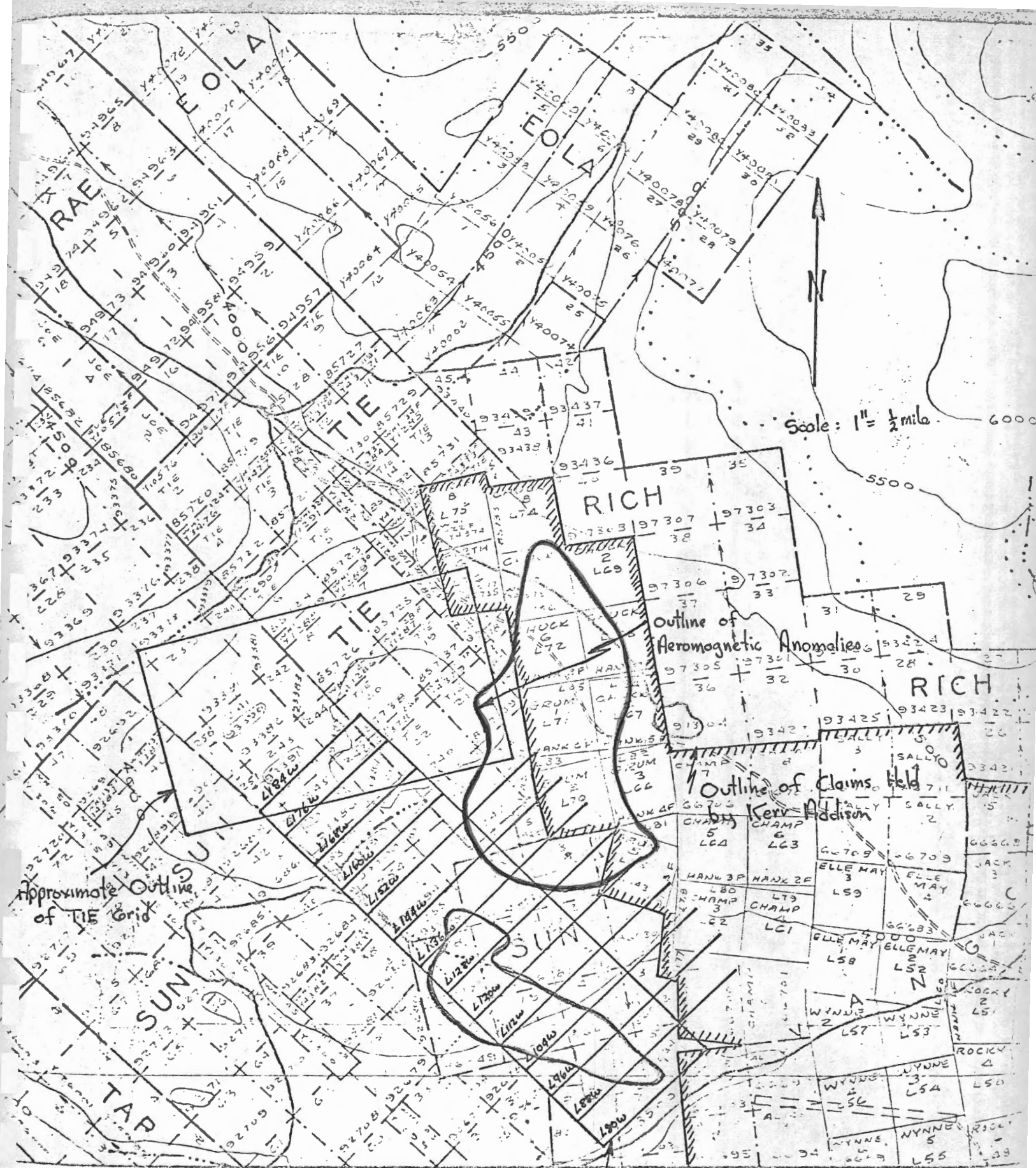
GEOLOGIC, GEOPHYSICAL, GEOCHEMICAL INVESTIGATION OF THE SUN - TIE CLAIM GROUPS

INTRODUCTION

Dynasty Explorations Limited under an agreement with Anvil Mining Corporation, undertook geological, geochemical and geophysical surveys to outline and delineate airborne magnetometer and electromagnetic anomalies located on the Sun and Tie Claim Groups. The Sun and Tie Claims adjoin the Kerr Addison Vangorda Ore deposit to the east as well as reported massive sulphides occurring on the Grum #5, Champ #5 and Champ #3 mineral claims to the north. This mineralization is partially coincident with a large airborne magnetic anomaly extending southward into the Sun - Tie Claims. Possible extensions of the "Champ" massive sulphides may be represented by this feature. A ground magnetometer and gravity survey as well as soil sampling were selected for developing a possible drill target.

LOCATION AND ACCESS

The Sun - Tie Claims are located on the east side of the Pelly River in the Anvil Range, approximately 5 miles south of Mt.



105K-6

Established Sun Grid

Mye and 8 miles southeast of the Anvil Mine.

The Blind Creek Road passes through the northern border of the grid area and provides good access. This road branches off the Anvil-Faro Road approximately 6 miles from Faro.

Rough Bombardier and Cat trails exist in the grid area, the locations of which are noted on the accompanying Geology map.

REGIONAL GEOLOGY

The Sun - Tie Claims lie within an elongate structural feature of approximately 40 miles length and less than 15 miles width, parallel to the northeast side of the Tintina Trench. The rock units are predominantly Paleozoic meta sediments, and meta volcanics that appear to be contained in an arch-like, doubly plunging, overturned anticline around the Anvil batholith. Deformation of metasediments (Cambrian?), is intense with many observable separate phases of foliation. Northeast fracturing is prominent with directions paralleling the Tintina fault. Phyllites and quartz-biotite schists of probable Cambrian age appear to be the host rocks for economic sulphide mineralization throughout the belt.

GEOCHEMICAL SURVEYS

a) Survey Techniques

The entire grid area was soil sampled at 200 foot stations on 800 foot spaced picket lines. All samples

were taken from the B-horizon which generally consisted of a pale green to rusty clay textured soil. All samples were placed in Kraft paper bags and subsequently sent to Atlas Explorations Laboratory in Whitehorse for analysis.

b) Analytical Methods

All soil samples were dried and sieved to - 80 mesh and the fines were retained for analysis. 0.5 grams of each sample was digested in aqua regia, diluted, and allowed to settle. Concentrations of Copper, Lead, and Zinc in solution was determined with a Perkin-Elmer 303AA spectrophotometer. The analytical technique was controlled by selected standardized samples.

c) Presentation of Data

All analytical results were plotted on a grid plan to scale 1 inch equals 400 feet, then contoured for individual element interpretation.

d) Interpretation of Results

Copper values generally range between 5 and 40 ppm with few observed in higher ranges. Concentrations above 40 ppm are above threshold. The most prominent copper anomalous area exists between lines 120W and 104W from 72N to 78N with a peak value of 300 ppm. The 'high' is located in a drainage catchment basin, and its representative value is questionable. All other anomalous areas are very limited in extent.

Values obtained for lead content generally range between 5 and 80 ppm with a maximum value of 380 ppm. Concentrations above 80 ppm lead should be considered anomalous. As can be observed on the accompanying Geochemical Contour Map for lead, a large anomaly exists over the northeastern to central portion of the grid, extending from line 80W westward to line 152W. This anomaly is very linear and crosses both topographic as well as geological contacts. There is a general decrease of values to the west and its strike length is parallel to known glacial movements. Most of the anomaly may represent a dispersion train from a mineralized source in the northeastern portion of the grid. Massive sulphides were reported by Kerr Addison on claims Grum #5 and Bix #2.

Zinc values generally range between 10 and 80 ppm, the highest value obtained was 420 ppm. The large anomalous area in zinc is coincident with the elongate lead anomaly and appears to be largely due to glacial dispersion of zinc from a source to the east. Smaller, sporadically located zinc anomalies, some coincident with lead anomalies, remain unexplained.

GEOPHYSICAL SURVEYS

a) Ground Magnetometer Survey

The magnetic survey was conducted over the grid area to outline the southern portion of a large low intensity aeromagnetic anomaly (obtained from a previous airborne survey conducted by

ANVIL MINING CORP.

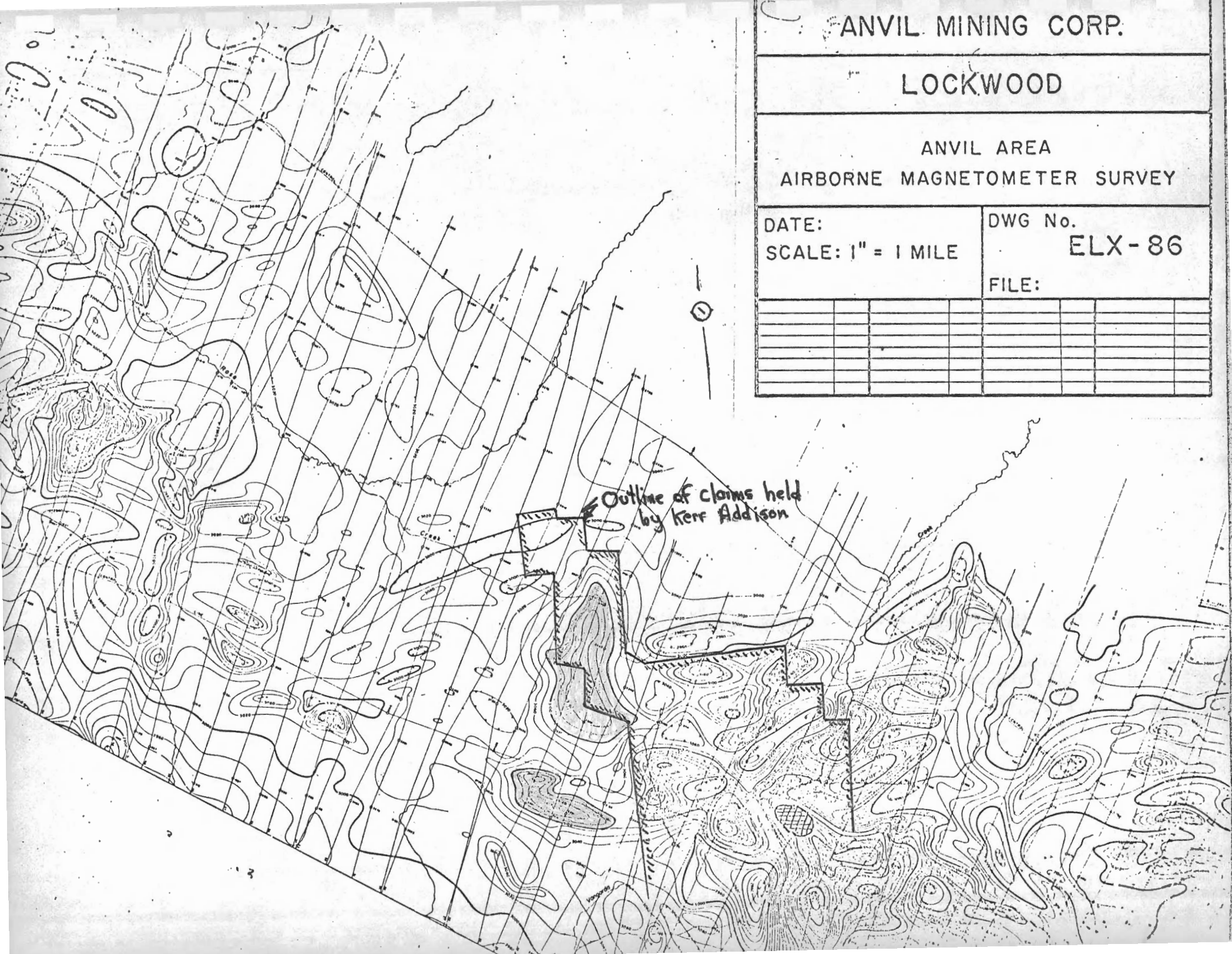
LOCKWOOD

ANVIL AREA
AIRBORNE MAGNETOMETER SURVEY

DATE:
SCALE: 1" = 1 MILE

DWG No.
ELX-86

FILE:



ANVIL MINING CORP.

WHITEHORSE

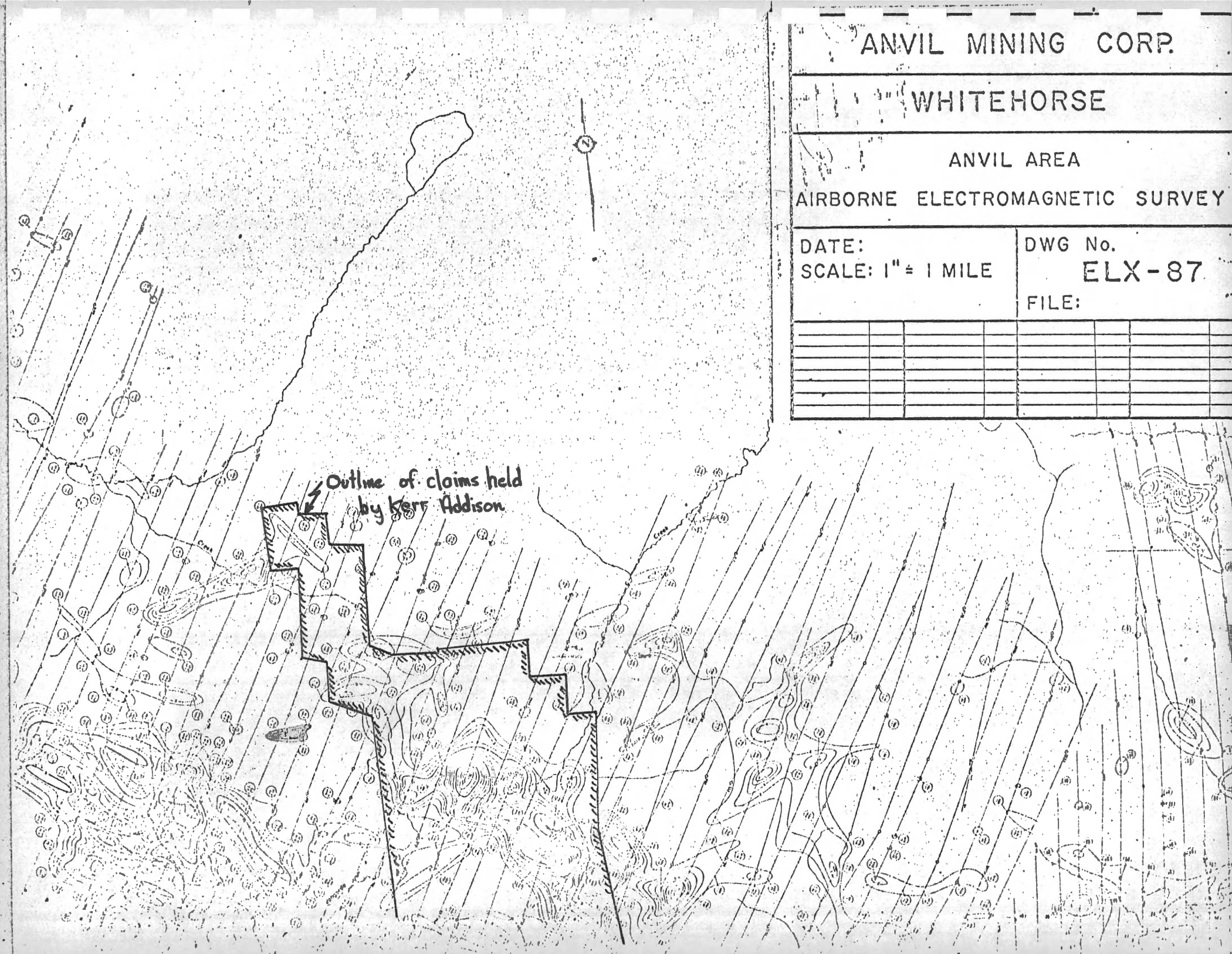
ANVIL AREA

AIRBORNE ELECTROMAGNETIC SURVEY

DATE:
SCALE: 1" = 1 MILE

DWG No.
ELX-87
FILE:

Outline of claims held
by Kerr Addison



Anvil.) The magnetic survey was carried out over 800 foot spaced cut lines, readings were taken every 100 feet. All lines were established by compass and chain methods and were cut approximately 2 to 3 feet wide. Grid control was checked by survey of base and tie lines during the gravity survey.

A sharpe MF-1 magnetometer was used, the instrument is hand held and measures the vertical magnetic component by use of an oil-dampered fluxgate which automatically levels itself in the vertical direction. Gamma values can be directly read from the instrument. Prior to the actual magnetometer survey, readings were taken along the base lines at cross line intersection points. These stations were looped and re-read every hour as a means of controlling drift and diurnal variations. With established base stations a rapid and precise check was kept on magnetic variations. Thus the entire survey was kept on a relative basis during day to day operation. All cross lines were read and re-checked at base stations within every hour as a means of checking magnetic variations.

Magnetic results were corrected for both diurnal and drift then plotted on a grid plan with a scale of 400 feet to 1 inch. The data was then profiled with the resulting map included in this report.

There appears to be very little magnetic relief throughout the grid area with a maximum range of roughly 300 gammas. A comparison of surface geology and magnetic results, shows

higher magnetic values associated with greenstones. One small outcrop of greenstone was noted on line 124W, 82N, it is not of enough extent to explain the relatively high magnetic area between lines 136W and 108W from stations 72N to 85N. The small magnetic high at L 160W, 50N is due to a knob of greenstone. A magnetic low is coincident with a geochemical anomaly (Pb.Zn) in the northeastern corner of the grid.

b) Gravity Survey

GEOLOGY

The grid area appears to be underlain by phyllites and included greenstone lenses, all of probable Cambrian age. The phyllites, mapped as Unit 2, consist of a highly foliated medium grey sericitic type varying to a dark grey to black graphitic phyllite. Outcrop is scarce due to erodiability as compared with the more resistant greenstones. General bedding has strikes of 130 to 170 degrees with gentle dips of less than 30 degrees to the southwest. Major foliations were noted striking 290 degrees and generally plunging less than 20 degrees to the southwest.

Much of the central portion of the grid is underlain by a large elongate body of dark to medium green, foliated to massive chloritic tuffaceous greenstone. Another body has been noted in the southeastern corner of the grid. The greenstone is elongate and parallels the major foliation planes of approximately 300 degrees strike. Gentle dips of less than 30 degrees to the southwest are common along most foliations. Small folds had similar orientations with gentle plunges to the west. In massive material jointing is predominant in a northeast orientation. A small lens of partially dolimitized massive medium grey limestone on lines 128W to 136W at 52N is likely an inclusion in the greenstone unit. A small interval of impure quartzite was also mapped as an interbed within the greenstone body. A small intrusive body formerly mapped to the east of the grid was not observed.

ECONOMIC GEOLOGY

No visible mineralization or pervasive alteration was noted in outcrop within the Sun-Tie grid area. A single boulder containing massive sulphides was found near L 104W, 60N.

CONCLUSIONS AND RECOMMENDATIONS

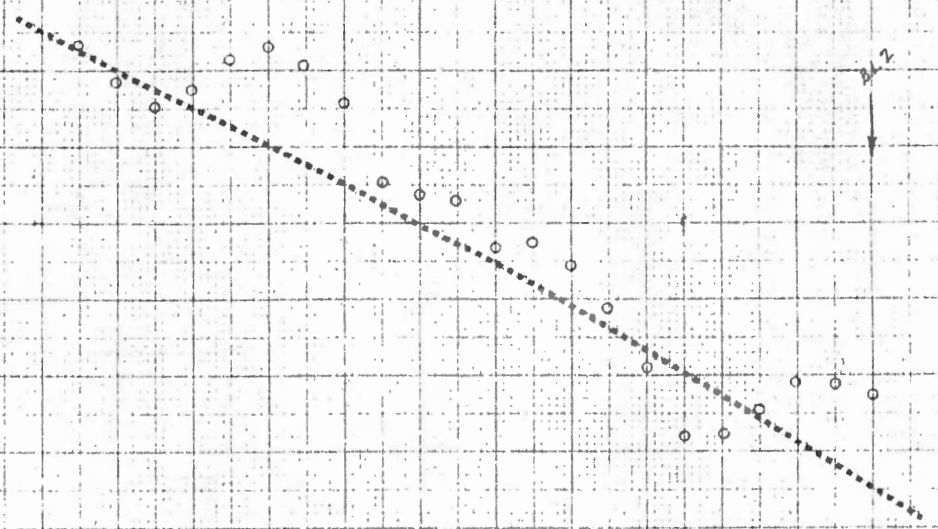
Present results from geological, geophysical, and geochemical surveys have not yet outlined a possible drilling target. A valid decision can only be made when the final gravity survey map is received. An extensive geochemical anomalous zone exists but is likely due to glacial dispersion of sulphides from the Champ claims. It is thought that deeper soil sampling techniques such as rotary or percussion drilling would be useful. Subtle magnetic anomalies appear to be caused by underlying greenstones rather than magnetic sulphides. Higher magnetics are not coincident with anomalous geochemistry. It is recommended that in the absence of final gravity results that any further assessment of the property consist of soil profiles taken within the geochemical anomalous zone to determine if glacial dispersion has occurred.

Respectfully submitted,

Wayne J. Roberts
Geologist

September, 1970

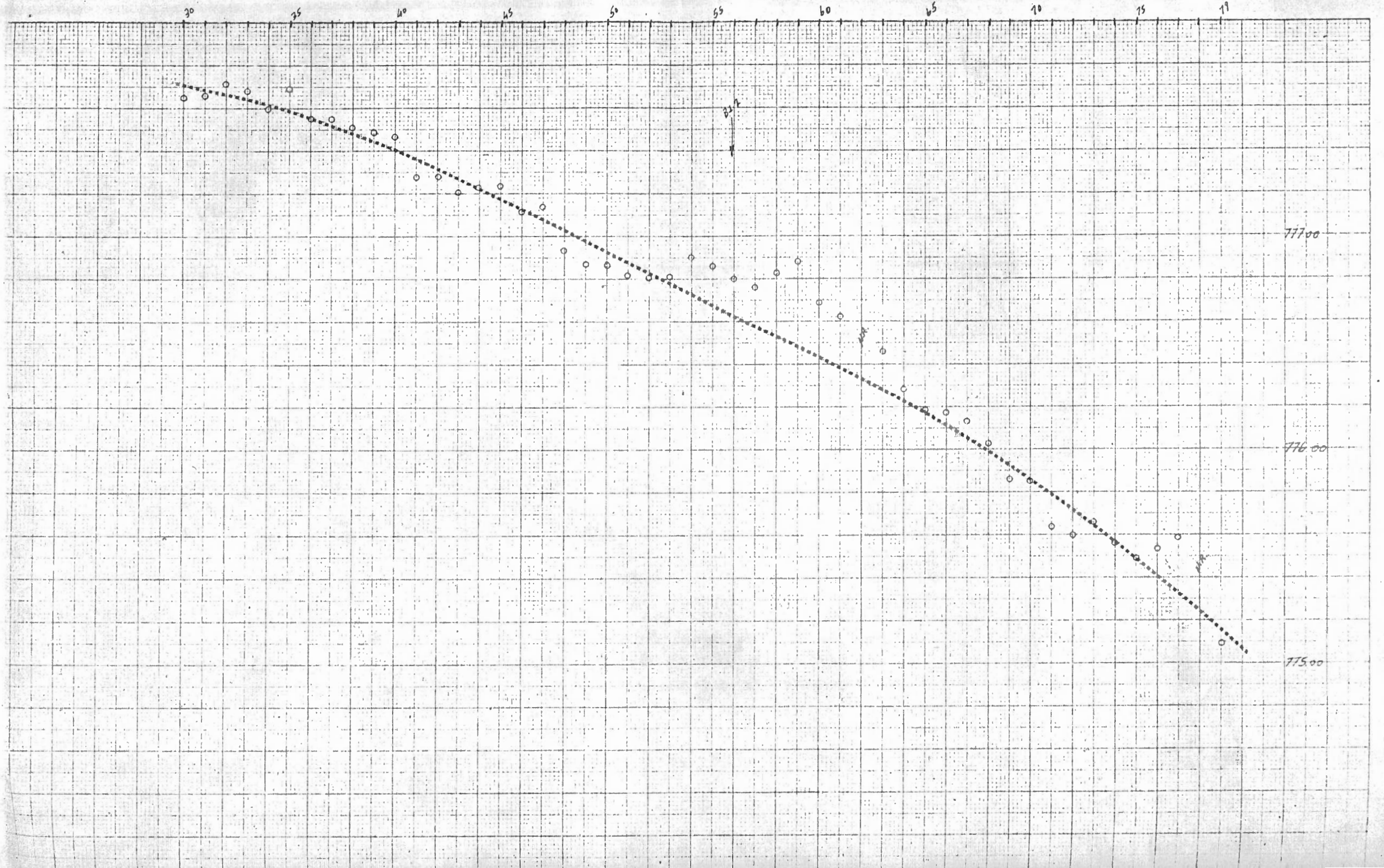
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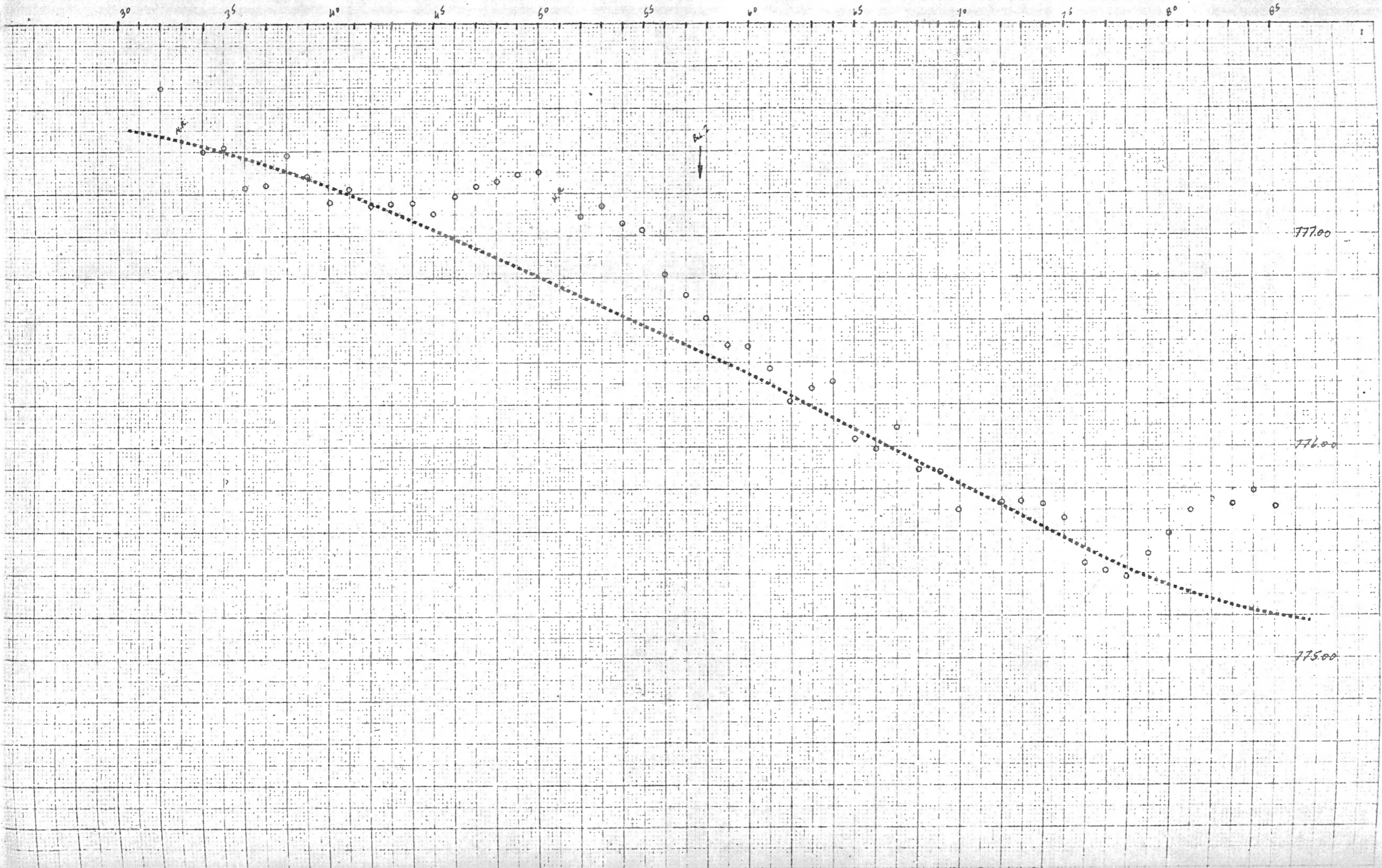


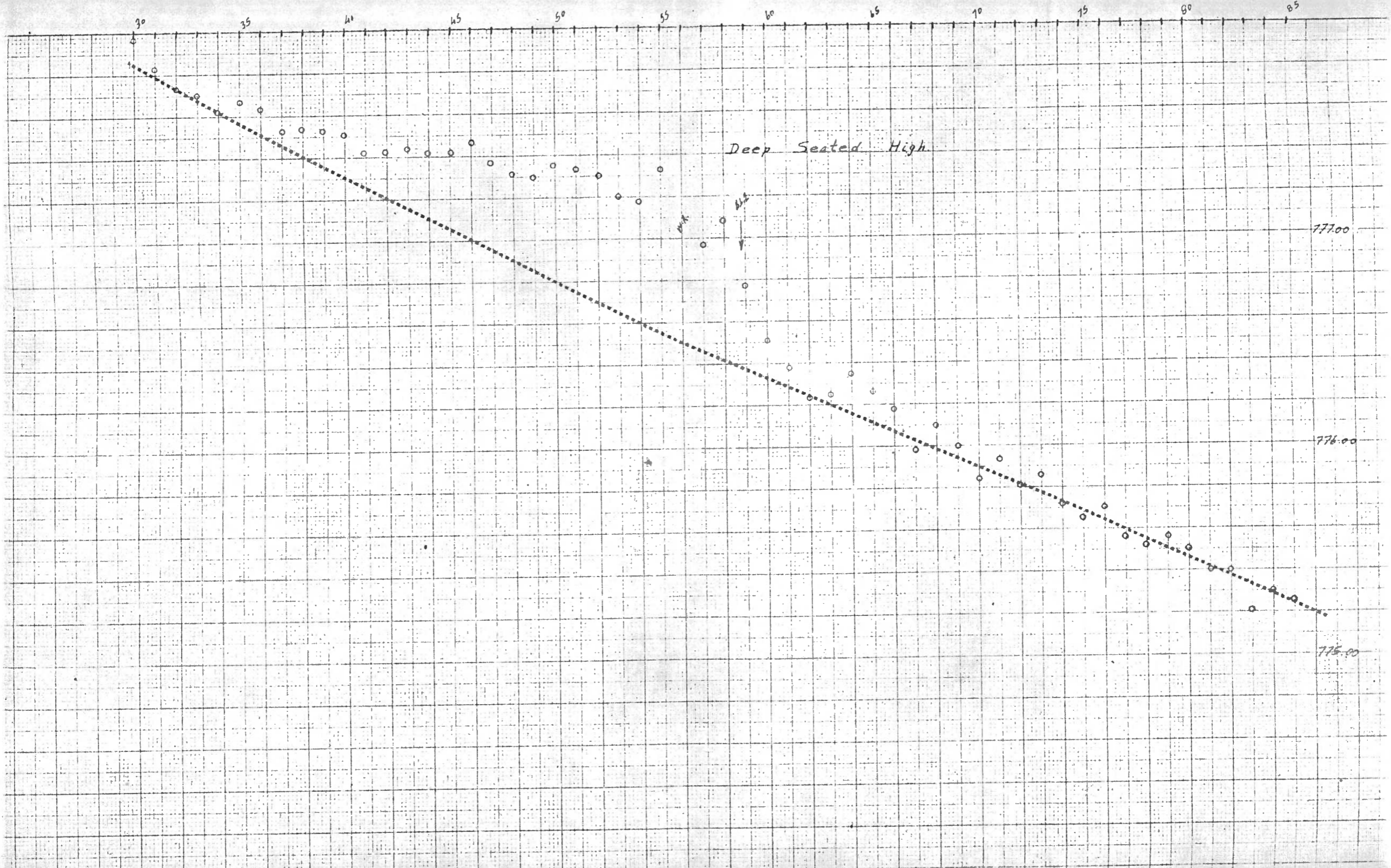
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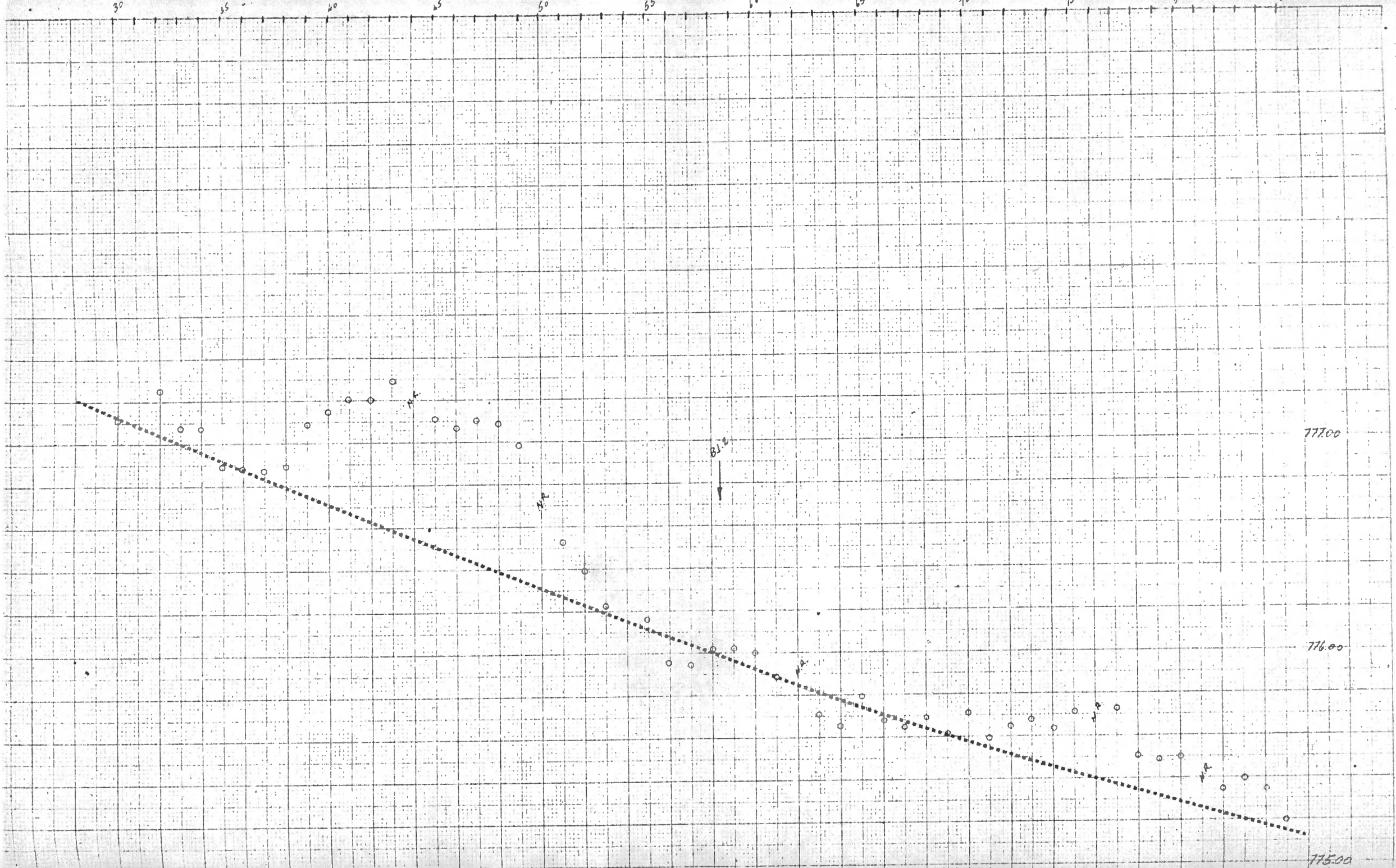
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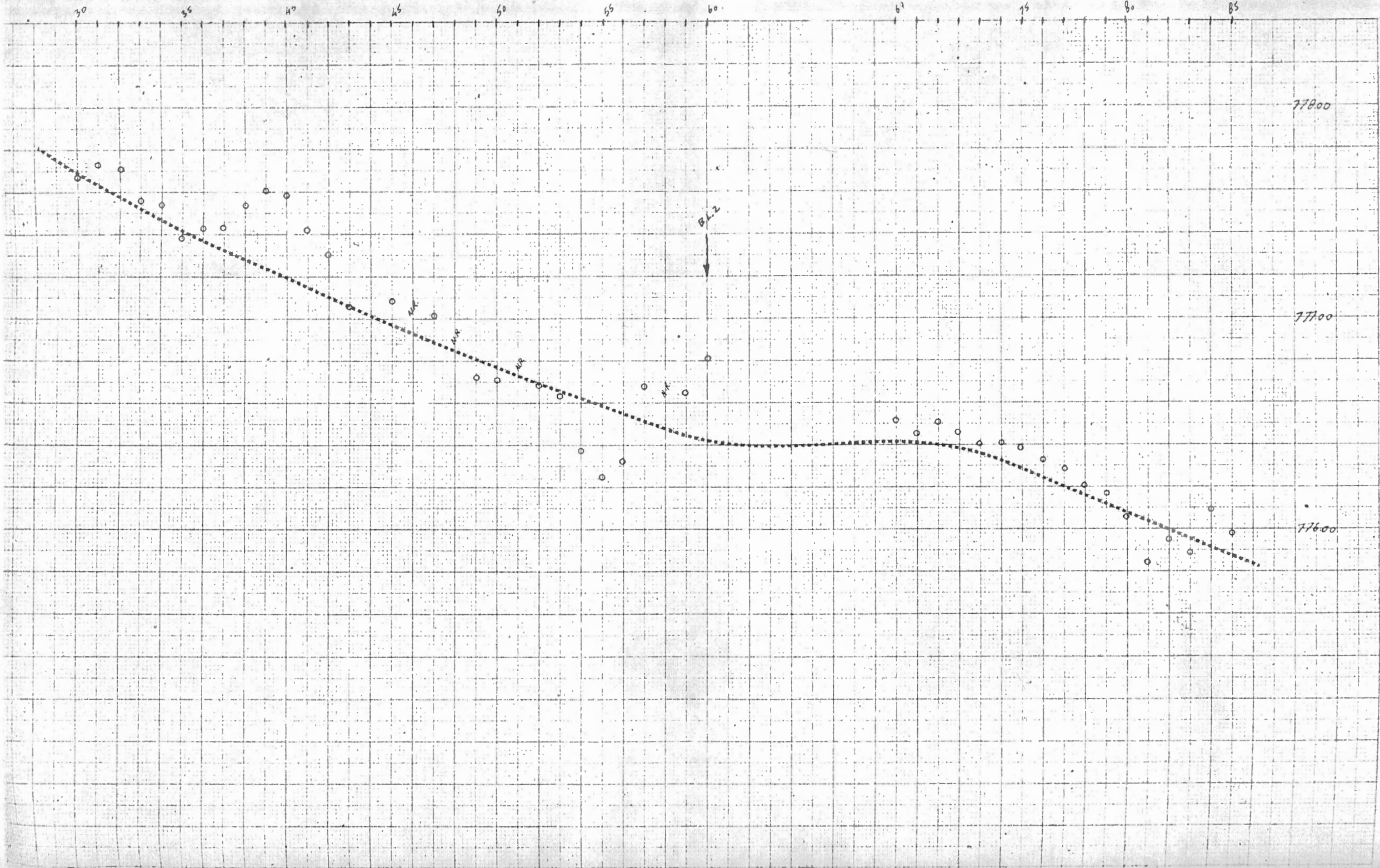


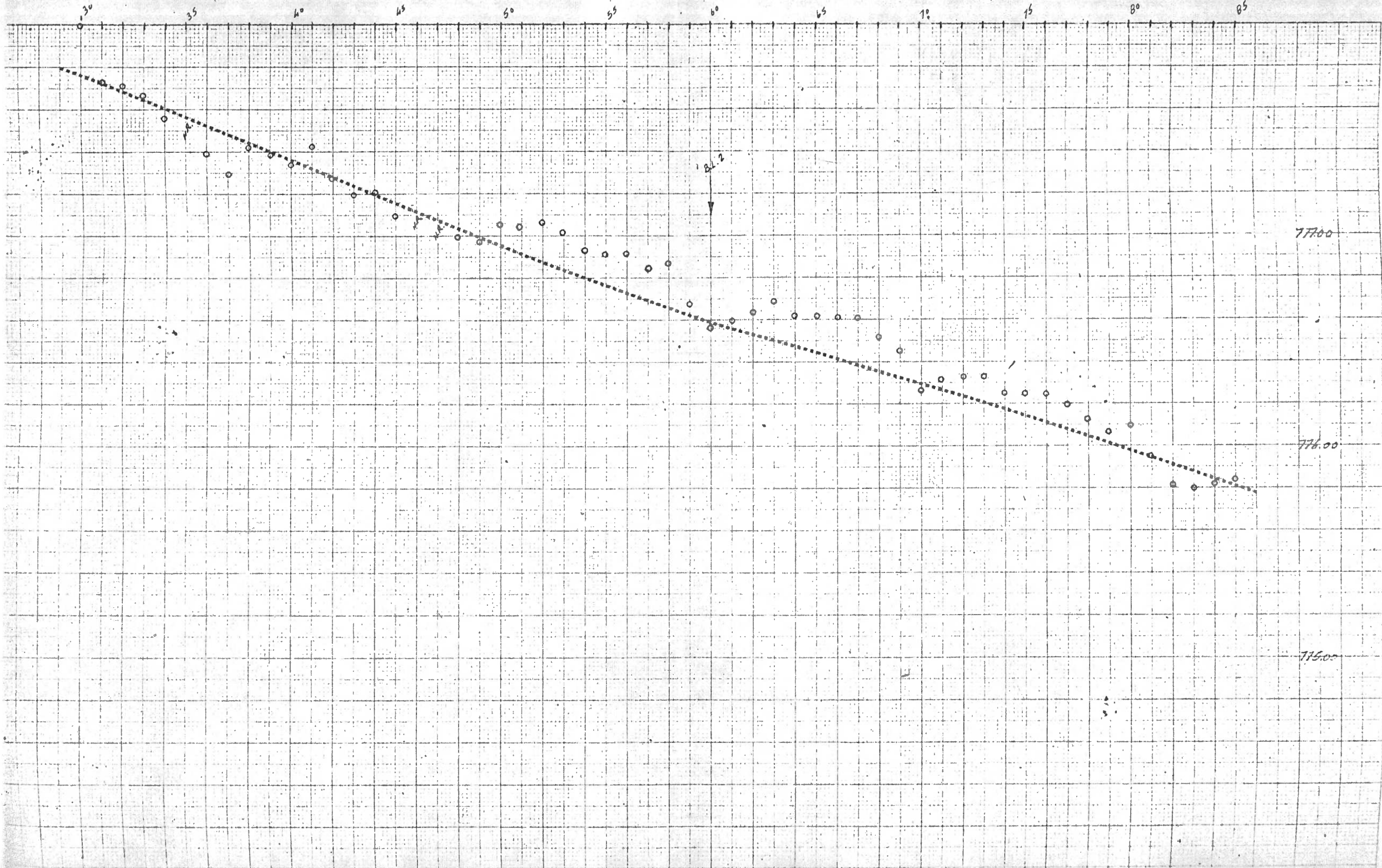




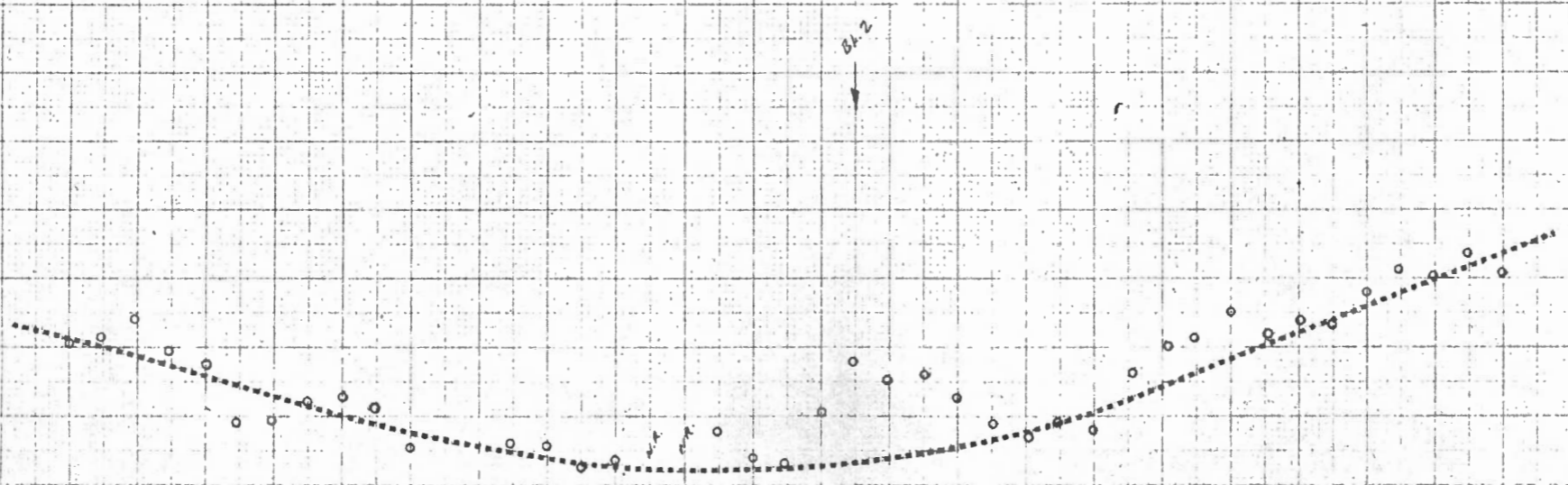
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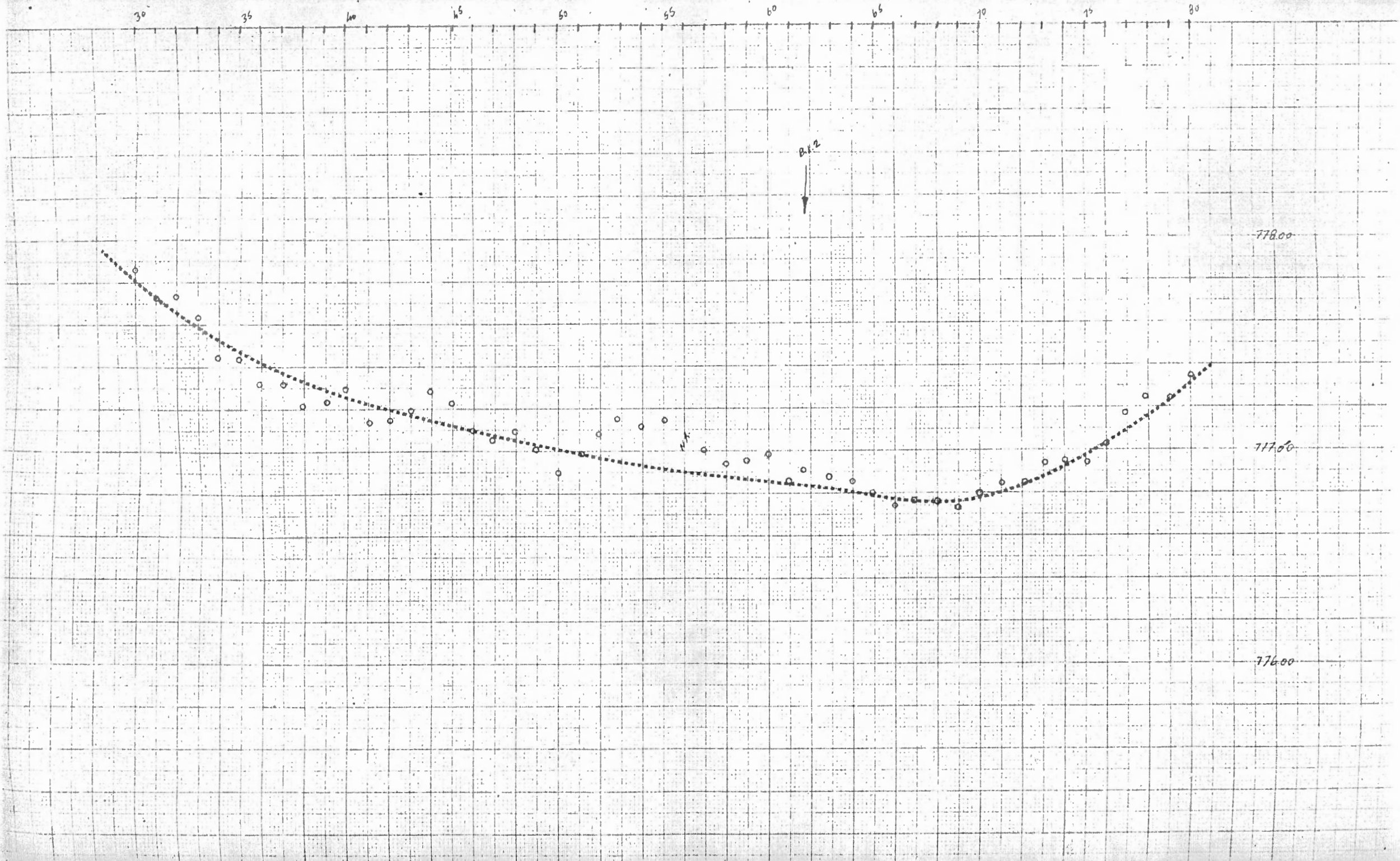
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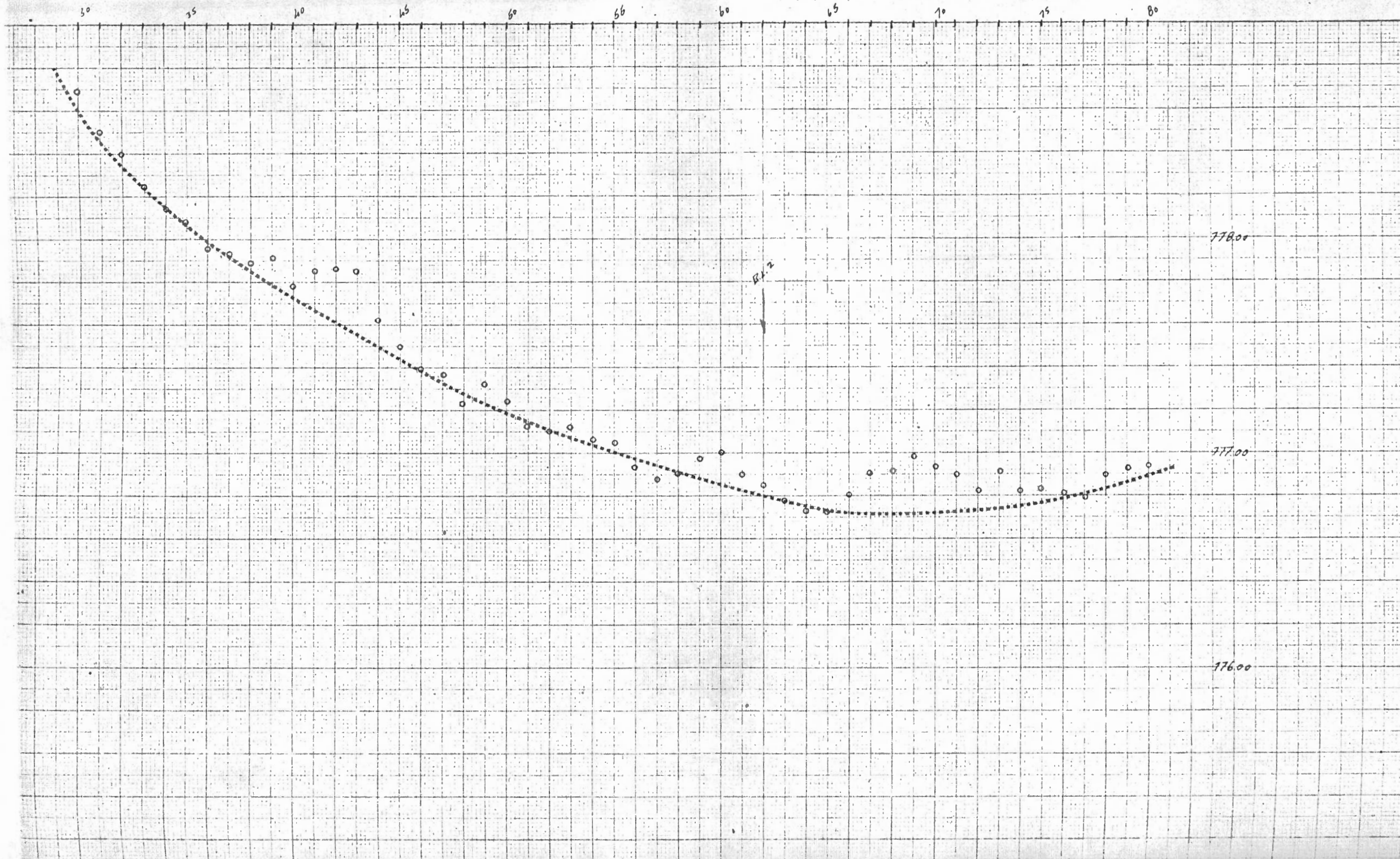


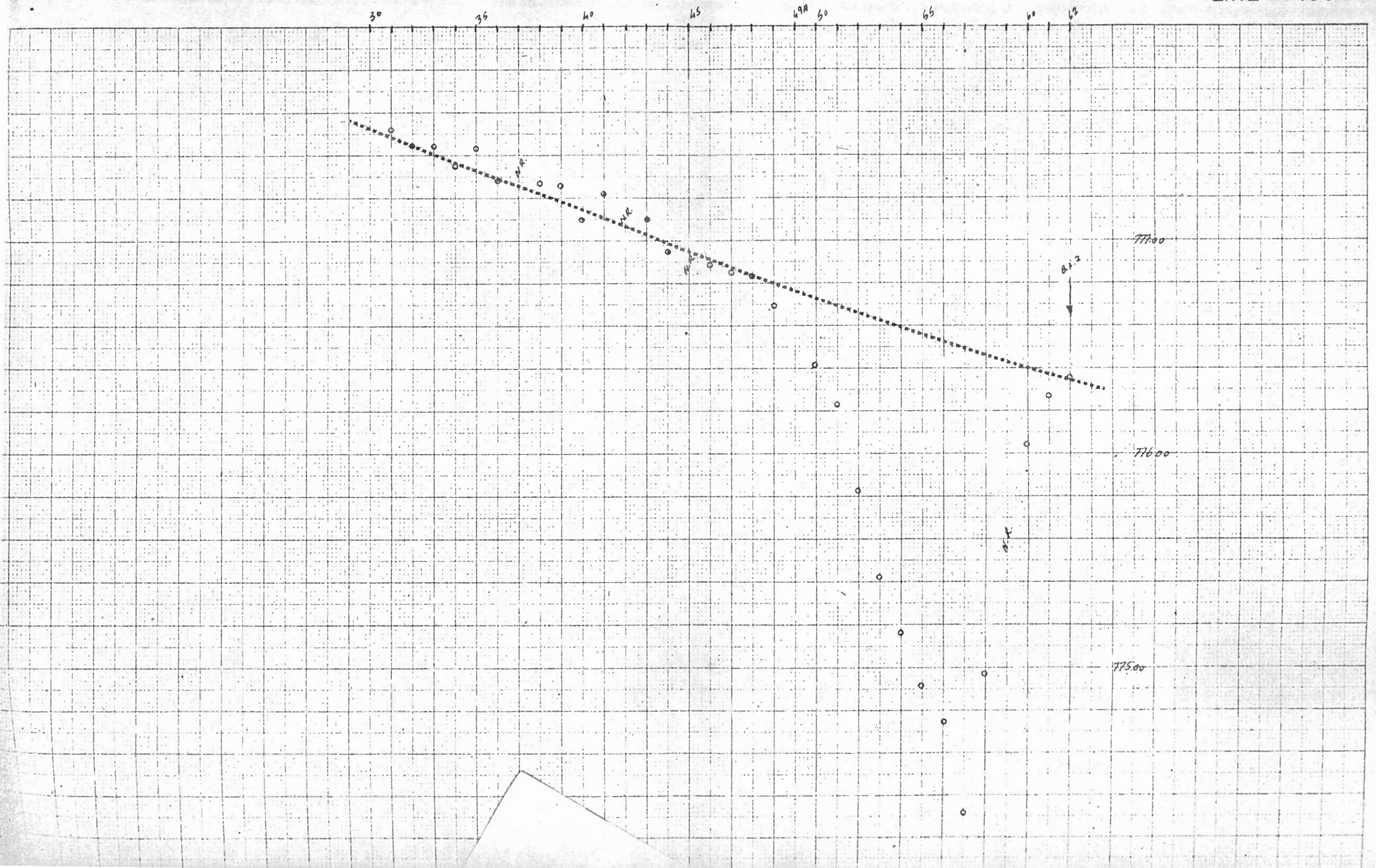
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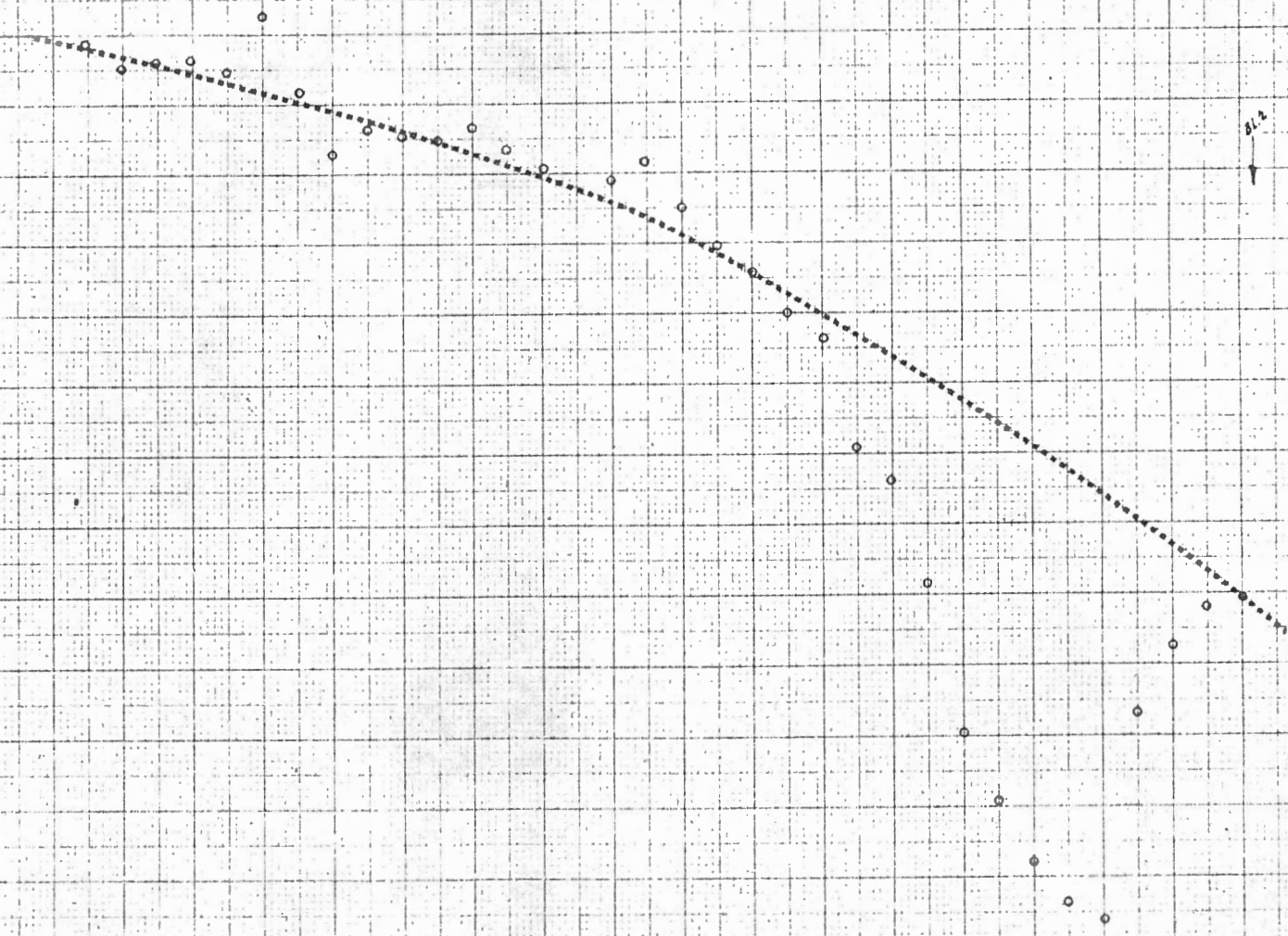
Bk-2



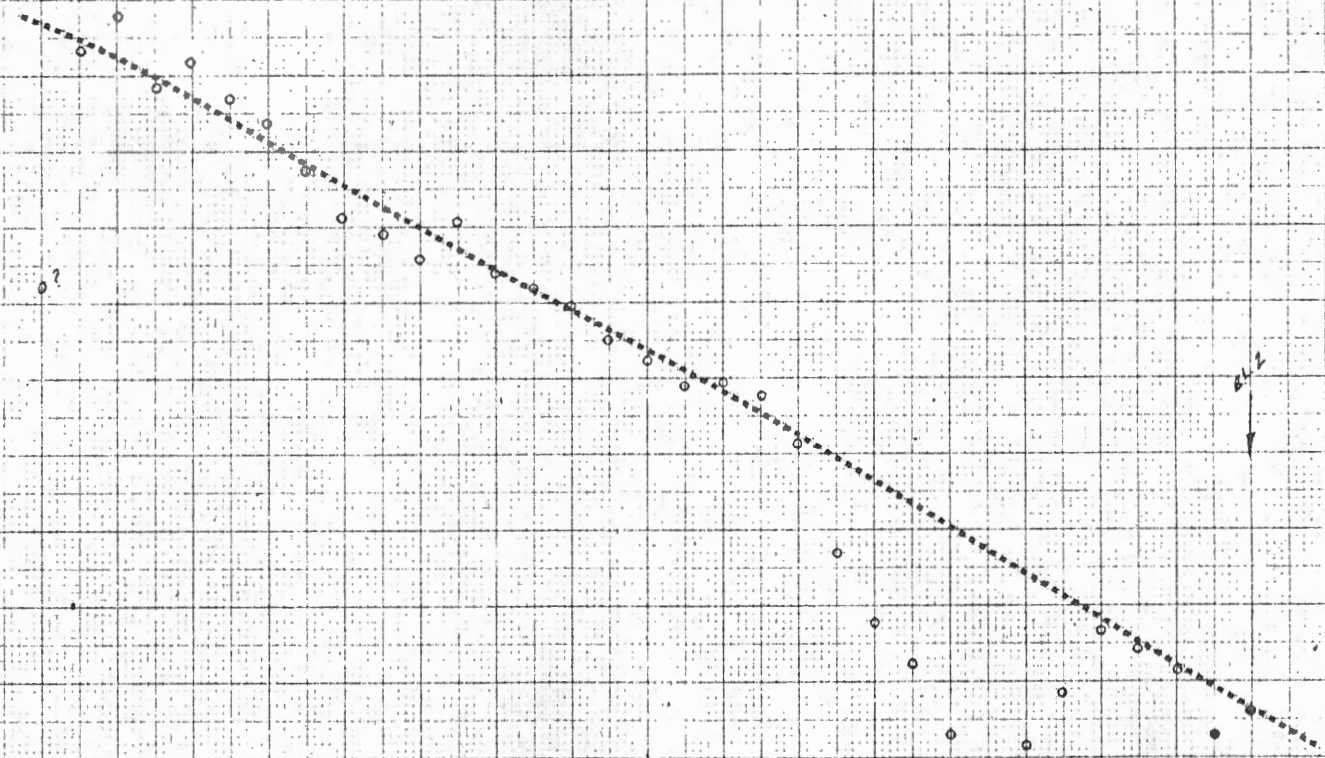




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