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ASSESSMENT REPORT
ON
GEOPHYSICAL SURVEY

RACKI & LDM CLAIMS
WUHUN CREEK AREA

FORT STEELE MINING DIVISION

NTS 82F/8E

Latitude 49° 30'N
Longitude 116° 04'N

for

CHAPLEAU RESOURCES LTD.
DRAGON RESOURCES LTD.

by

PETER KLEWCHUK
GEOLOGIST

FEBRUARY 7, 1991

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,920

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1.00 INTRODUCTION

1.10 Location and Access

The 'Purcell Camp' claim group presently under option to Dragoon Resources Ltd. from Chapleau Resources Ltd. is located in the drainage areas of Moyie River and Perry Creek, approximately 20 kilometers due west of Cranbrook, B.C., in the Fort Steele Mining Division (Figure 1). The property centers on Latitude $49^{\circ} 30'N$ and Longitude $116^{\circ} 04'W$.

Access to the property is via good active logging roads which join main highways in the Cranbrook area. All the tributary drainages of Moyie River and Perry Creek which occur on the claim block have some road access but areas at higher elevations along the ridge separating Moyie River and Perry Creek must be accessed on foot or by helicopter.

1.20 Physiography

The property is situated west of the Rocky Mountain Trench within the Moyie Range of the Purcell Mountains. Topography is moderate to steep with glacially rounded ridges; elevation ranges from 1220 to 2130 meters.

Vegetation cover varies from immature to mature forests of larch, pine, spruce and fir. considerable clear-cut logging has occurred on the claim group in the recent past and the logged areas are in various stages or regeneration.

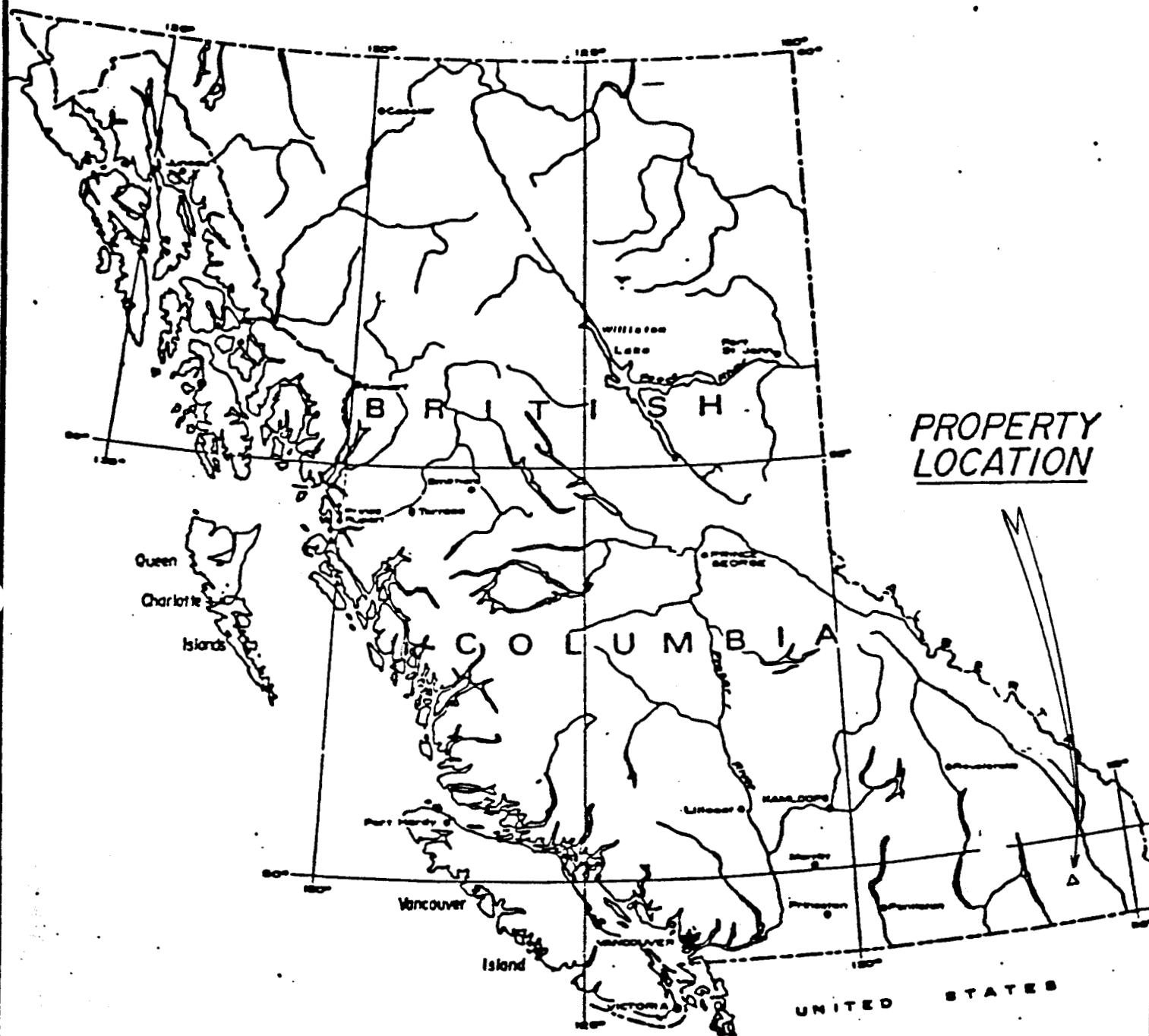
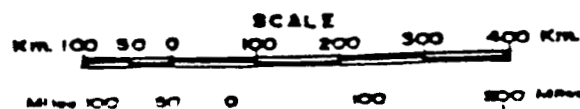


Figure 1
PURCELL CAMP PROPERTY
LOCATION MAP



1.30 History of Previous Exploration

Moyie River, Perry Creek, and numerous of their tributary streams which drain the 'Purcell Camp' claim group have produced considerable placer gold. The Moyie River is presently being actively placer mined by Queenstake Resources Ltd. and many small placer operations are worked on a small scale basis. The knowledge of significant placer gold in the main drainages and tributaries of Moyie River and Perry Creek has resulted in long-standing exploration activity for bedrock sources.

Many small lode gold occurrences have been discovered in the general area of the Purcell property and a few have seen minor production. Virtually all of the lode gold has come from relatively small quartz veins, usually in association with minor base metal sulfides. The advent of historically high gold prices in the late 1970's prompted staking which blanketed these areas of known placer gold production.

Exploration activity has been constrained by the extensive coverage of glacial drift, and although many small programs have been undertaken, few have been successful at delineating drill targets.

Recent logging activity in the area has enhanced the exploration process by providing road access and exposing bedrock and float along haul roads, skid roads and in burned clear-cut areas.

Modern interest in the present 'Purcell Camp' area arose when prospecting discovered widespread quartz float with visible gold in the Palmer Bar Creek area. Since then the present claim block has been staked or optioned by Chapleau Resources Ltd.

Reconnaissance work on the claims in 1986 and 1987 has produced a progressive understanding of sources of lode gold mineralization and of a genetic model for the gold deposits.

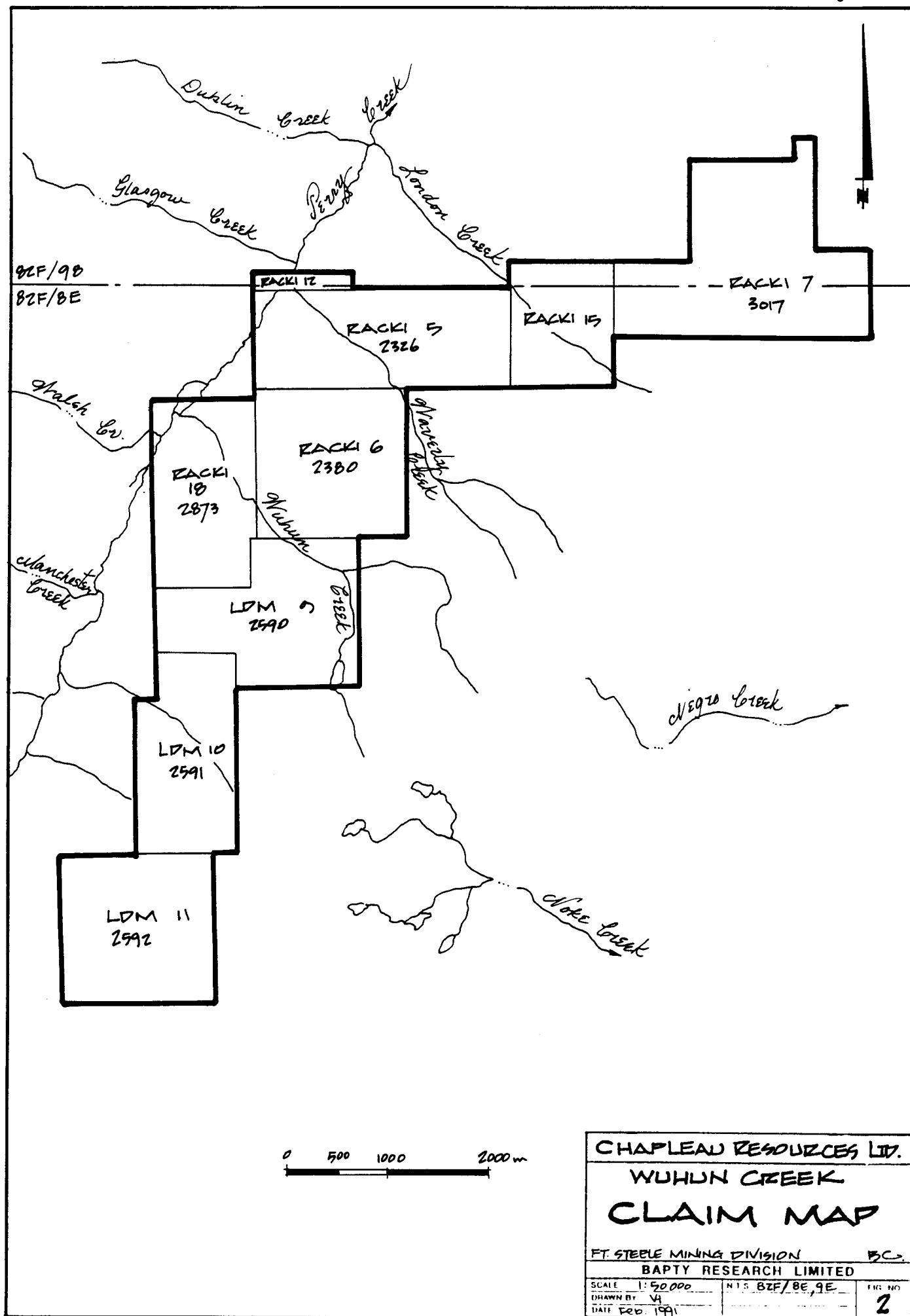
In 1988 Chapleau discovered the Bar Deposit through geologic mapping and trenching. An 8000 foot drill program defined much of the geology of the deposit and demonstrated that widespread anomalous copper and gold mineralization is present although no commercial deposit was outlined.

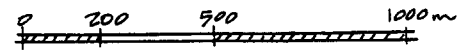
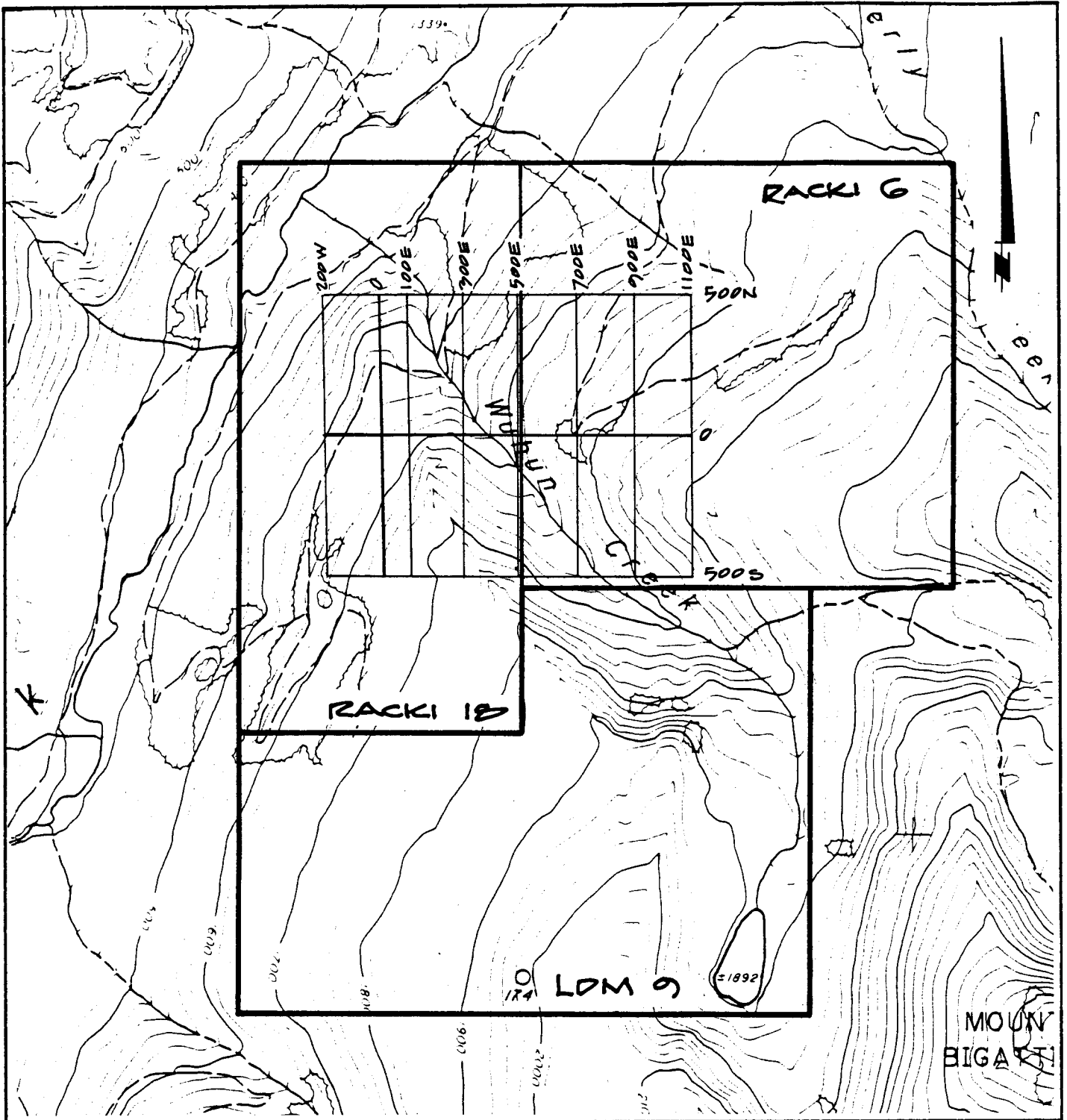
1.40 Property

The 'Purcell Camp' consists of 450 units in 51 mineral claims (Figure 2) either wholly owned or under option to Chapleau Resources Ltd. In turn Dragoon Resources ltd. has an option to acquire a 55% interest in the entire property.

1.50 Objective of Survey

An airborne geophysics survey flown in March 1990 by Aerodat Ltd. over part of the 'Purcell Camp' claim block defined an easterly-oriented magnetic and coincident VLF-EM anomaly in the lower Wuhun Creek area. Furthermore, the anomalies intersect the projected NNE-oriented Perry Creek Fault in the Wuhun Creek area, where previous stream sampling had returned significant gold values.





CHAPLEAU RESOURCES LTD.

WUHUN CREEK
CLAIM #
GRID LOCATION
MAP

FT Steele Mining Division P.C.

BAPTY RESEARCH LIMITED

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To further define the area of the fault intersection, a ground magnetic and VLF-EM survey was conducted in late 1990.

2.00 GEOLOGY

2.10 Regional and Property Geology

The area of the Purcell property is underlain by Precambrian Purcell Supergroup rocks of the Aldridge, Creston and Kitchener Formations. These are intruded by Precambrian age diorite and gabbro composition sills and dykes of the Moyie Intrusions. Cretaceous quartz monzonite and granodiorite stocks occur just off the property to both east and west and these are believed related to gold mineralization on the property.

A complex system of NE to NNE striking normal and reverse faults occur parallel to the regional strike while a series of easterly-striking normal and reverse transverse faults cut across the regional trend at an oblique angle. This block-faulted area appears centered on the area of the best known placer gold and it seems probable that gold mineralization is genetically related to both the structural complexity and the spatially-associated felsic intrusives.

3.00 GEOPHYSICS

To evaluate the easterly-oriented anomalies defined by the airborne survey, an east-oriented base line 1300 meters long was established across the area of interest (Fig. 2).

Initially, north-south lines were surveyed at 200 meter spacings along the baseline. Subsequently, more detailed surveying was conducted once the location of the magnetic anomaly at the west end of the survey was established.

3.10 Total Field Magnetic Survey

A geometrics G 816 portable proton magnetometer was used for the survey. This instrument has a detection capability of one gamma.

Readings were taken at 25 meter spacings along the survey lines, with intermediate readings taken where the magnetic gradient was increased.

A system of closed loop traverses was used to minimize the effect of diurnal variation, using the initially surveyed baseline as control for the survey.

The Total Field Magnetic data is shown on Fig. 3. Most of the survey area is magnetically relatively flat, including the area where an east-striking anomaly was defined by the earlier airborne magnetic survey.

At the western edge of the survey area, a strong linear NNE-oriented magnetic high was partially outlined. The anomaly reaches a peak of 59055 gammas in a background of about 57,600 gammas for an anomaly amplitude of 1450 gammas.

The survey data suggest the southern edge of the anomaly has been defined but the northern end is open.

The magnetic anomaly coincides with a surface exposure of gabbro or diorite within the Kitchener Formation. Evidently the gabbro is locally magnetic.

3.20 VLF-EM Survey

A Crone Radem VLF-EM receiver was used for the VLF survey, with Seattle, Washington used as the transmitting station.

Profiles of Dip Angle and Field strength, along with magnetic profiles, are shown on Figure 4.

No distinct VLF-EM responses were detected by the survey.

Line 0 shows a broad field strength high associated with the magnetic anomaly. A field strength low is associated with the magnetic anomaly on Line 100E.

Lines 300E and 500E both show a field strength low at 150N, associated with a weak change in dip angle. This response may be a reflection of a weak structural break or a change in bedrock lithology.

Lines 1000E and 1100E both show a field strength peak associated with a dip angle change near 100N. This response may also reflect a bedrock structure or change in rock type.

4.00 CONCLUSIONS

A detailed Total Field Magnetic and VLF-EM ground survey in the vicinity of an interpreted coincident anomaly detected by aerial geophysics has produced mixed results.

Weak VLF-EM responses on two separate pairs of lines suggest the presence of easterly-oriented structural breaks.

A strong partially delineated magnetic anomaly at the western edge of the survey area is coincident with a bedrock exposure of gabbro. Magnetite in the gabbro is the probable cause of the anomaly.

5.00 RECOMMENDATIONS

The area of the magnetic anomaly and the weak VLF-EM responses should be evaluated with soil geochemistry to see if gold mineralization is associated with either of these features.

6.00 STATEMENT OF EXPENDITURES

Linecutting	1.3 km @ \$545/km	\$ 710
Field Surveying	19 mandays @ \$230/day	4,370
4x4 Truck Rental	9 days @ \$50/day	450
Magnetometer & VLF-EM Rental	18 days @ \$20/day	360
Field Supplies		40
Report preparation, drafting & Supplies		<u>830</u>
	Total	<u><u>\$6,760</u></u>

7.00 AUTHOR'S QUALIFICATION

I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, British Columbia.
2. I am a graduate geologist with a BSc degree (1969) from the University of British Columbia and an MSc degree (1972) from the University of Calgary.
3. I am a Fellow in good standing of the Geological Association of Canada.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 18 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 5th day of February, 1991.

Peter Klewchuk
Peter Klewchuk
Geologist

500N

400N

300N

200N

100N

0

100S

200S

300S

400S

500S

500N

400N

300N

200N

100N

0

100S

200S

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500S

200W

100W

0

100E

200E

300E

400E

500E

600E

700E

800E

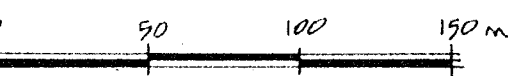
900E

1000E

1100E

58000
57900
57800
57700

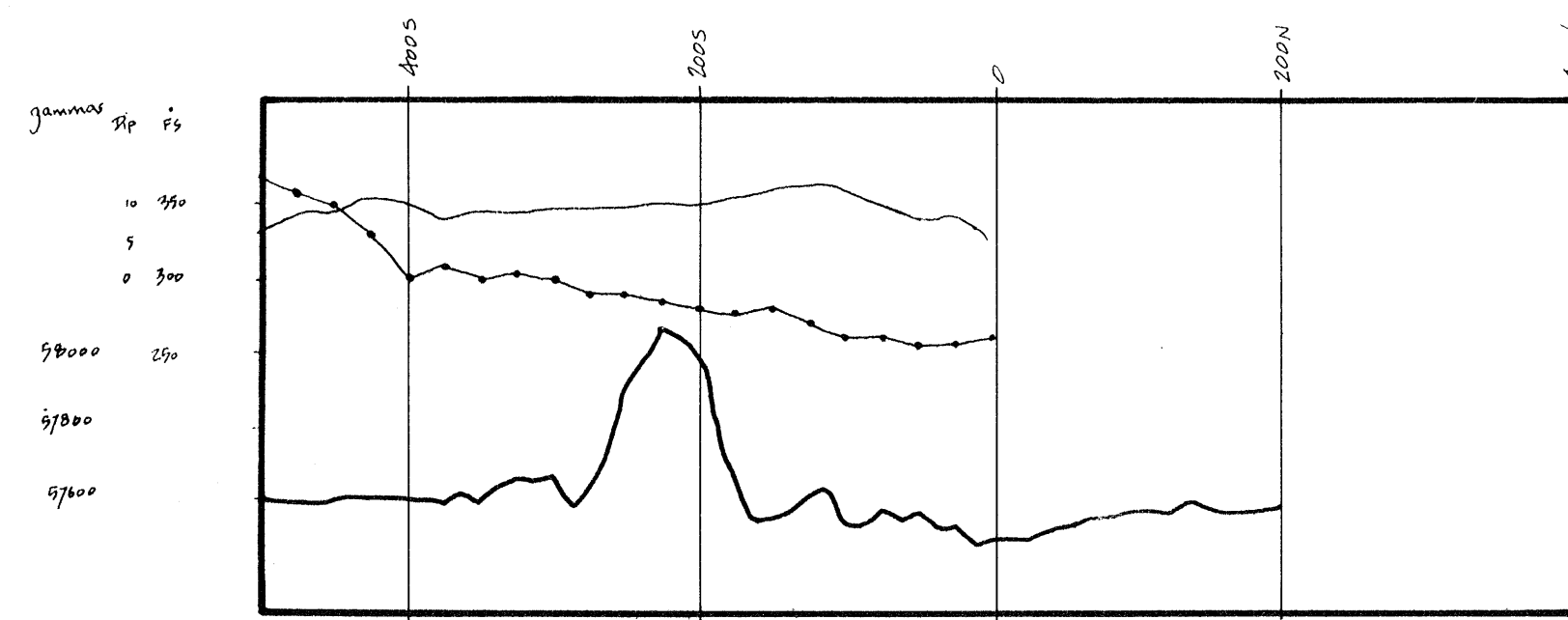
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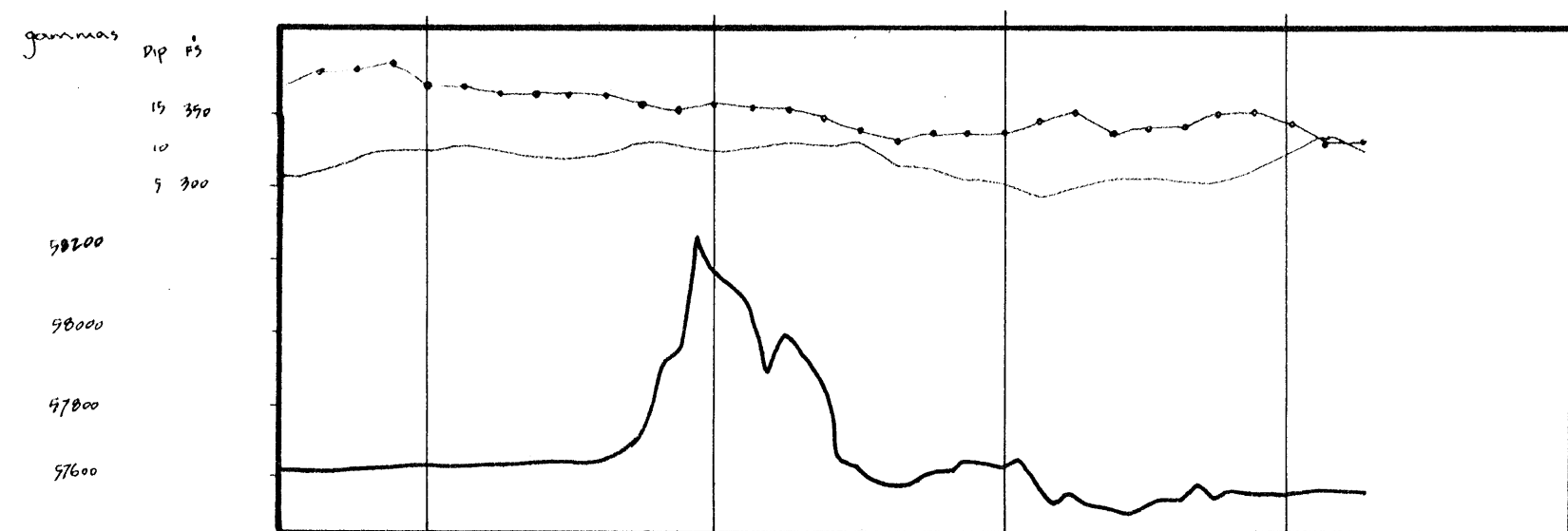
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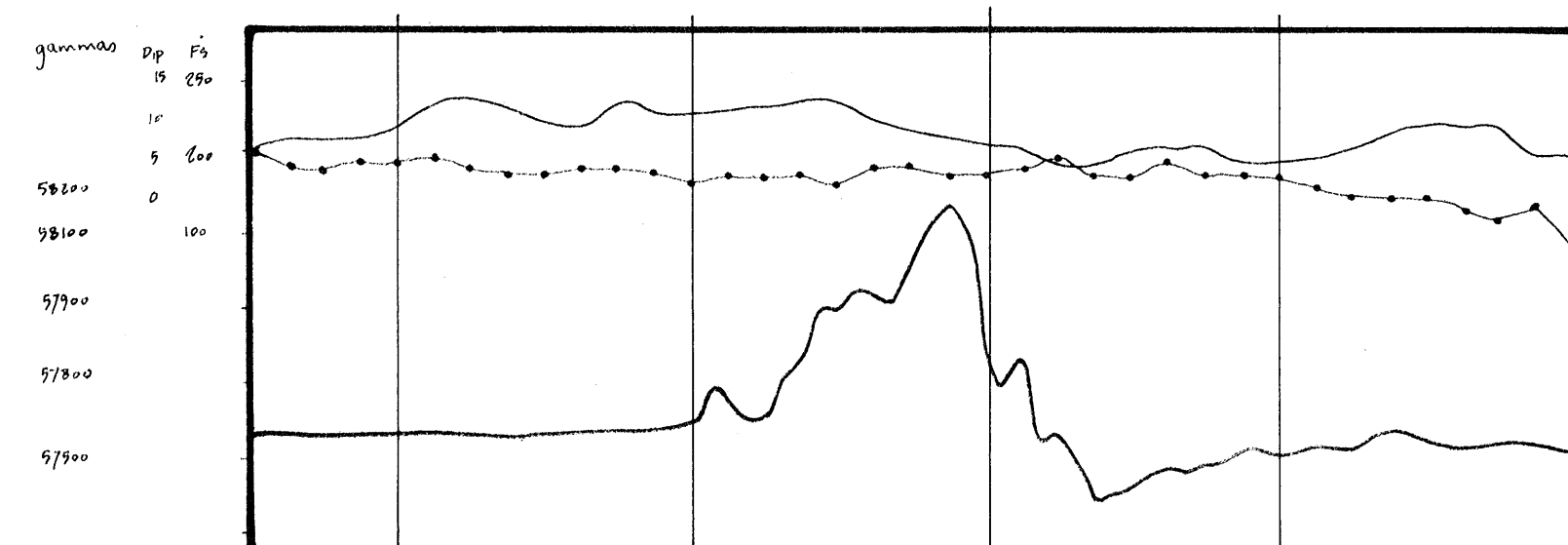
CHAPLEAU RESOURCES LTD.		
WUHUN CREEK TOTAL FIELD GROUND MAGNETICS		
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BAPTY RESEARCH LIMITED		
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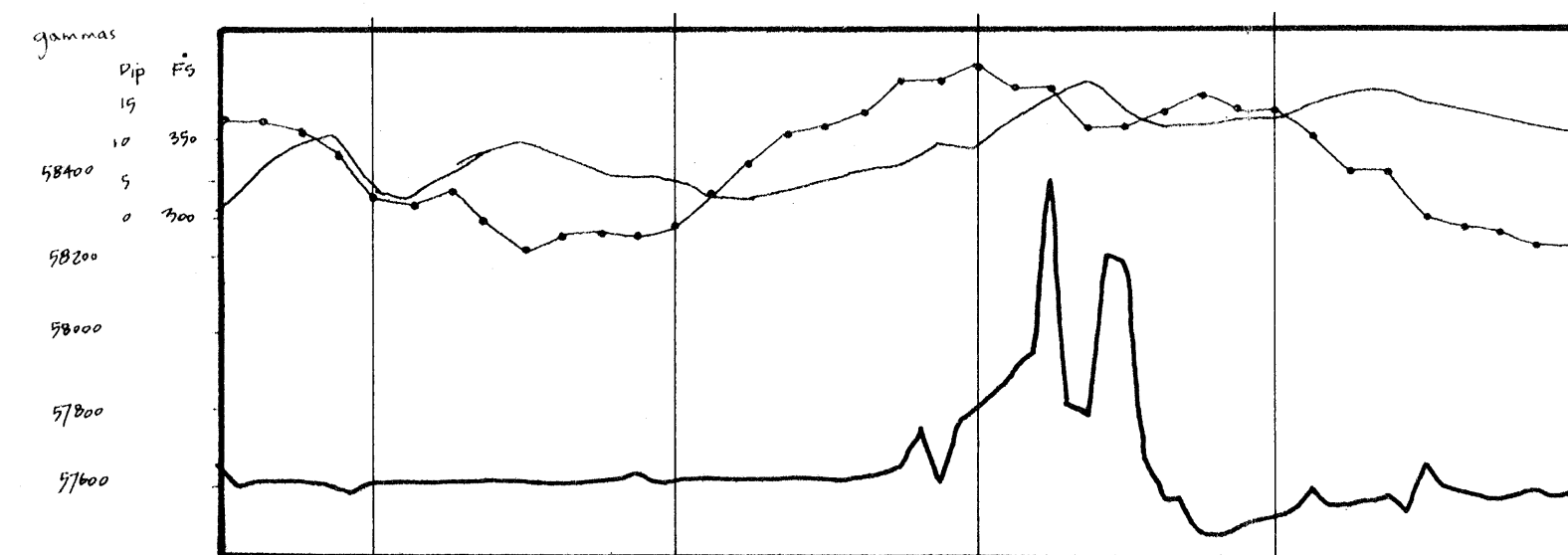
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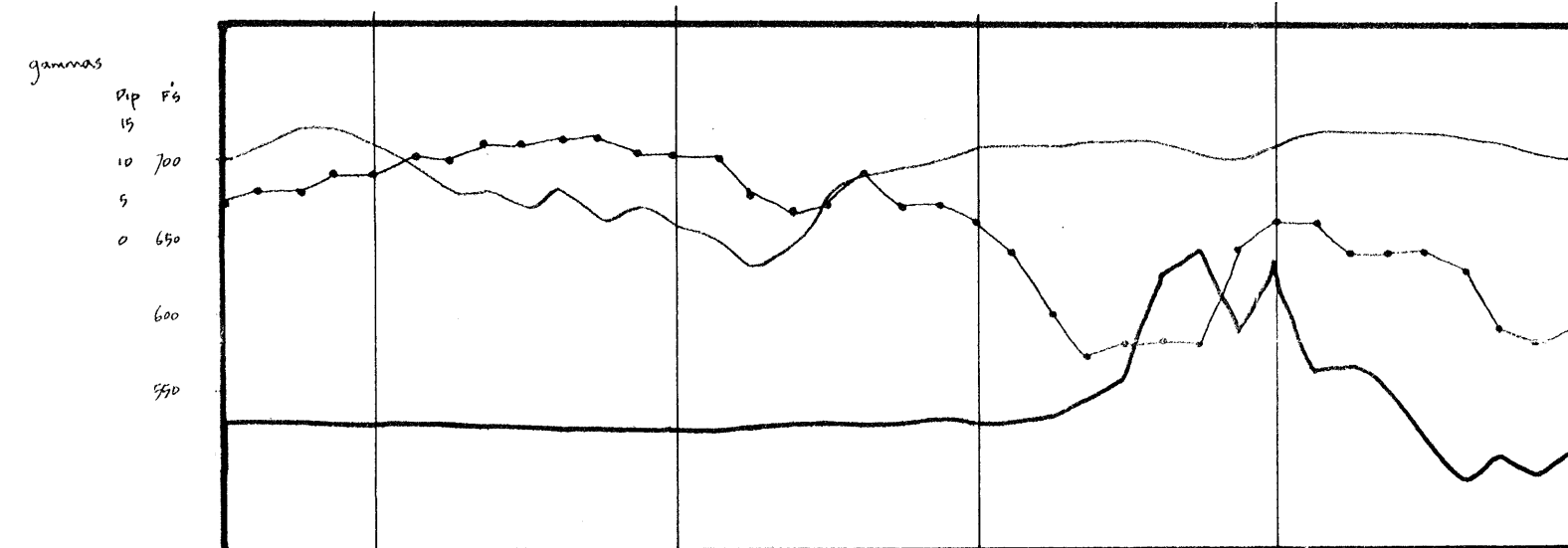
LINE 100W



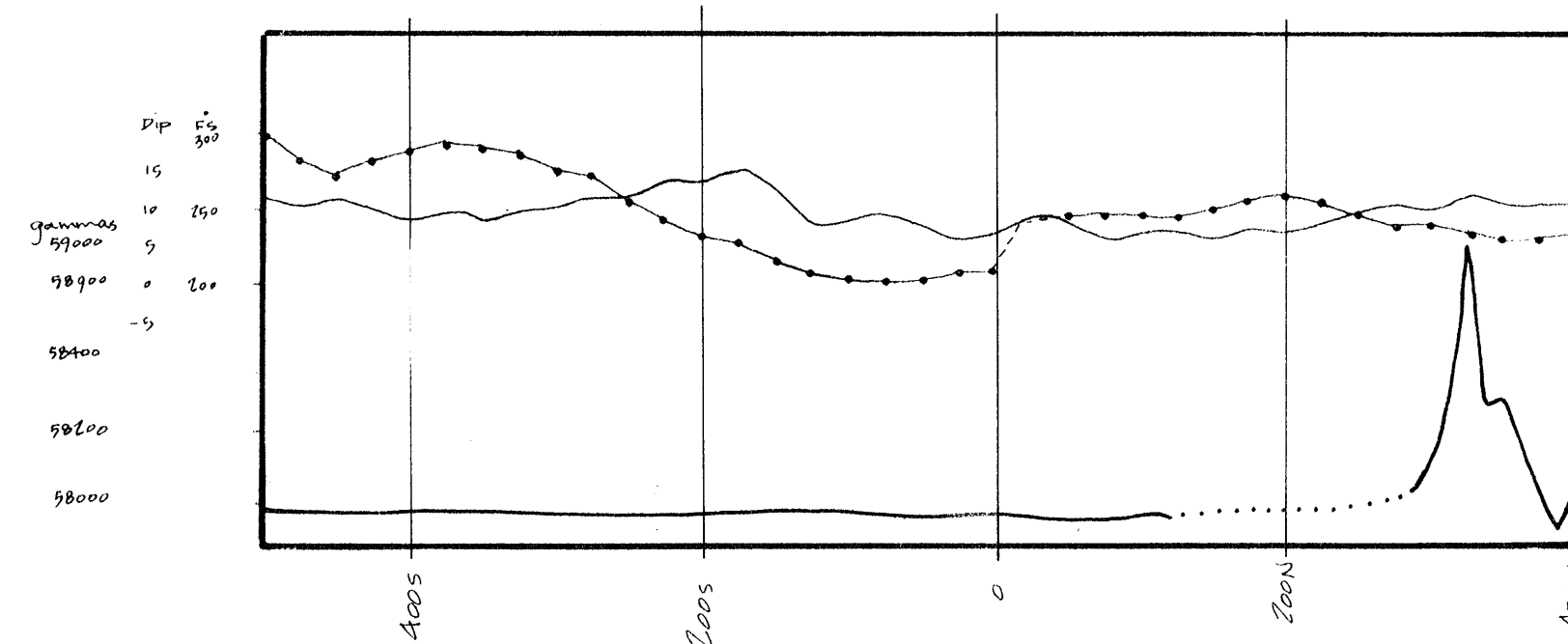
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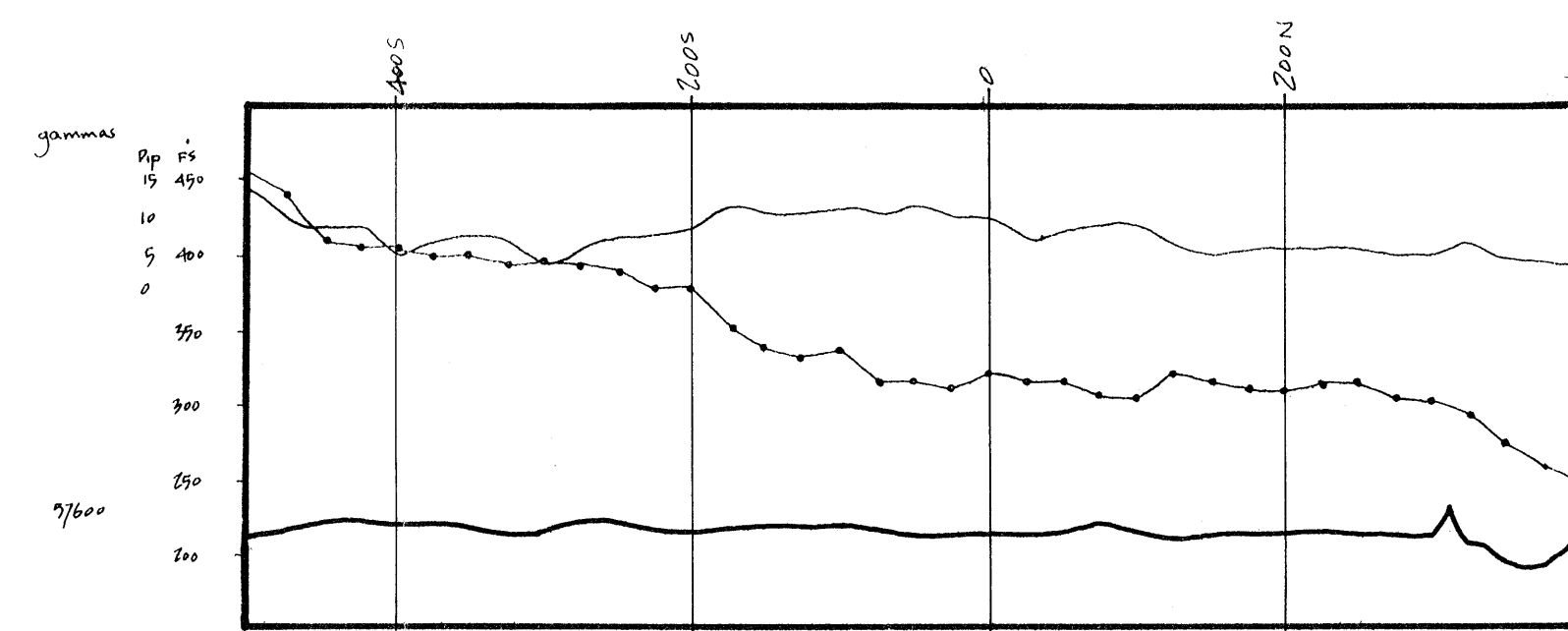
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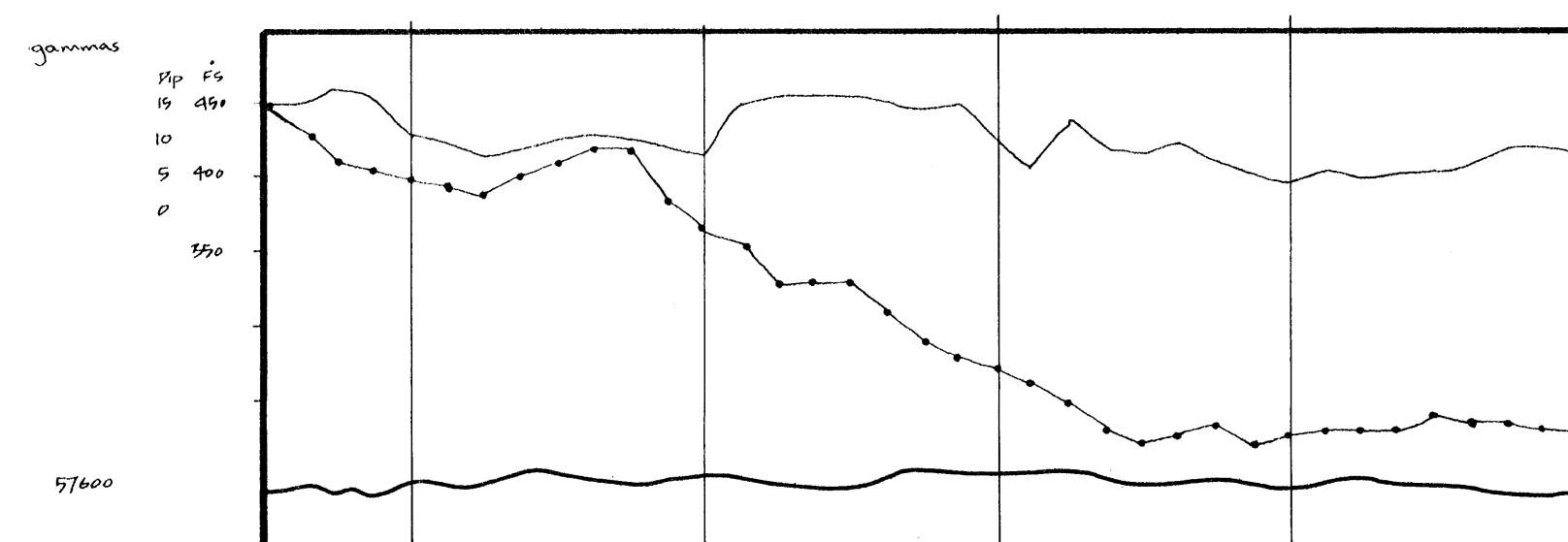
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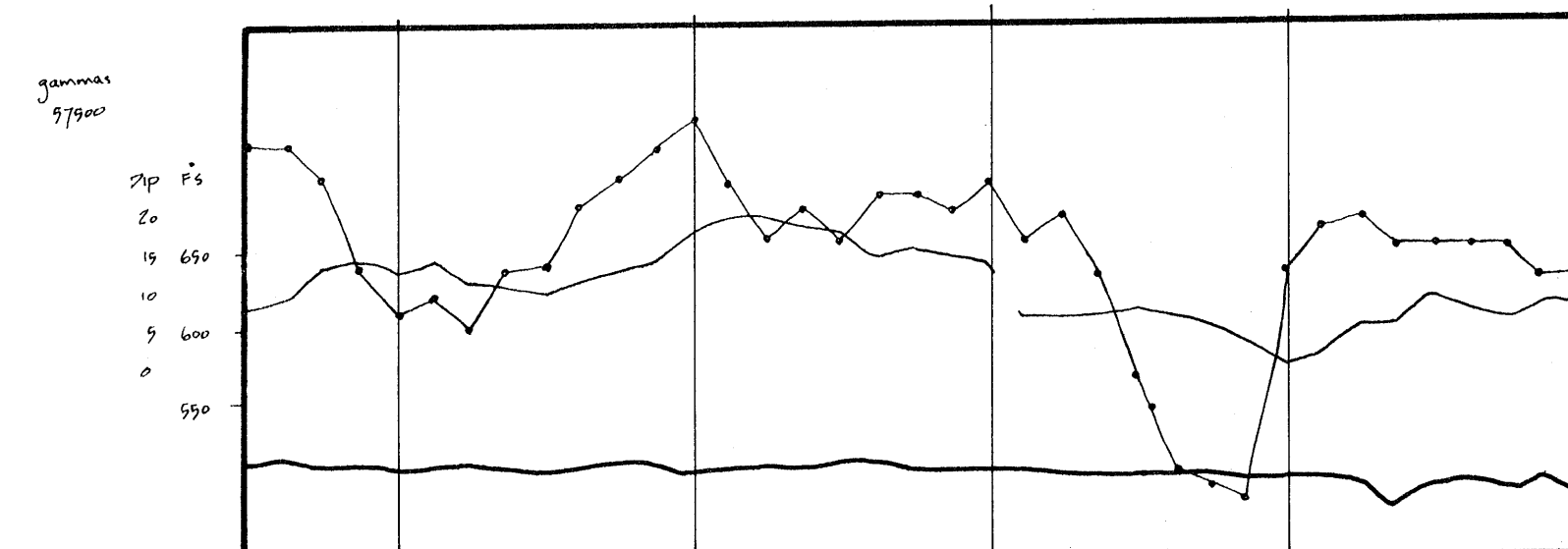
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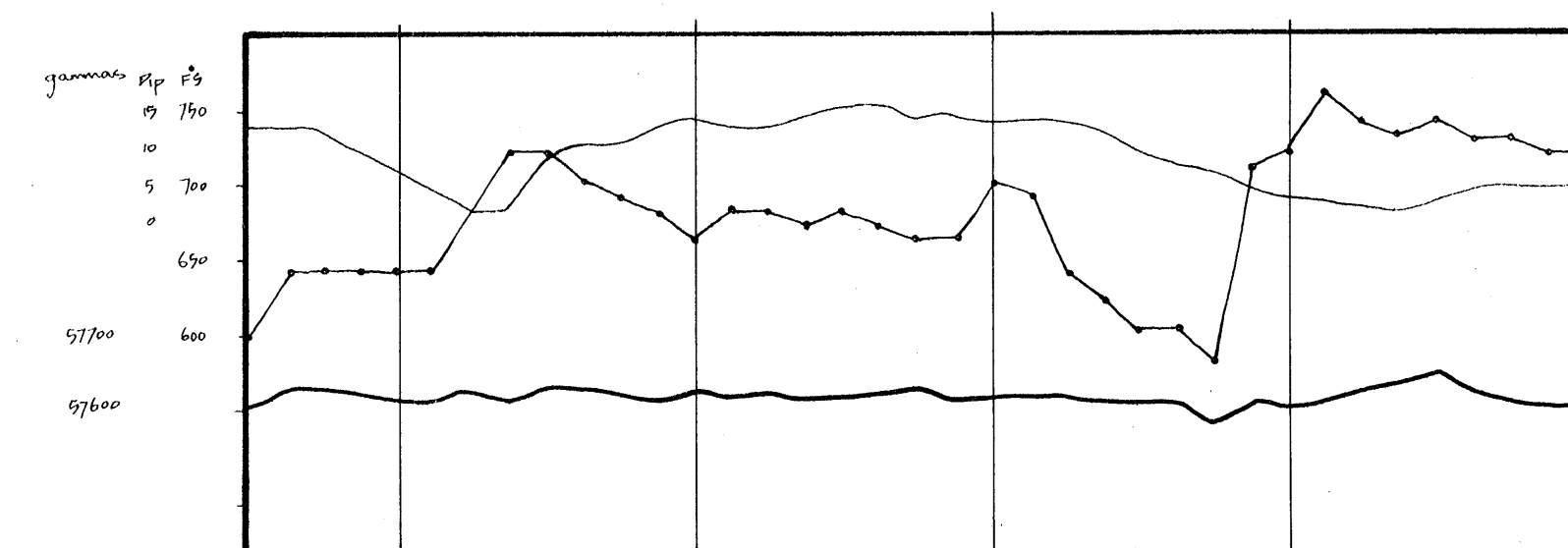
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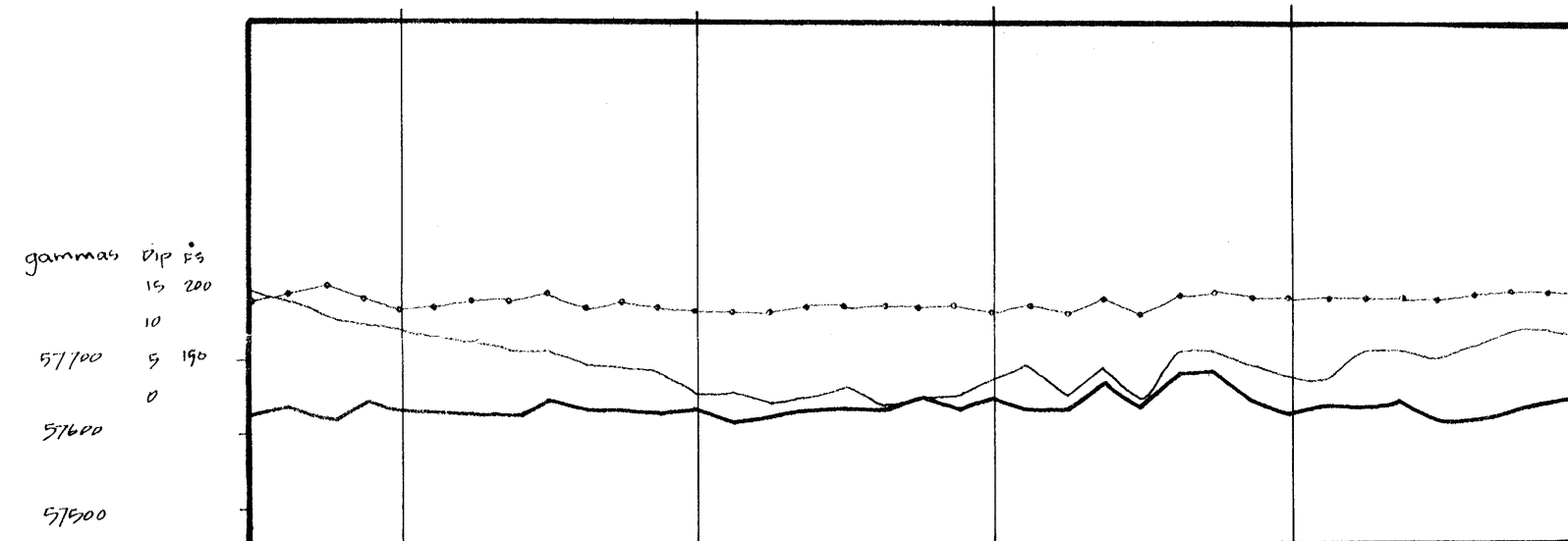
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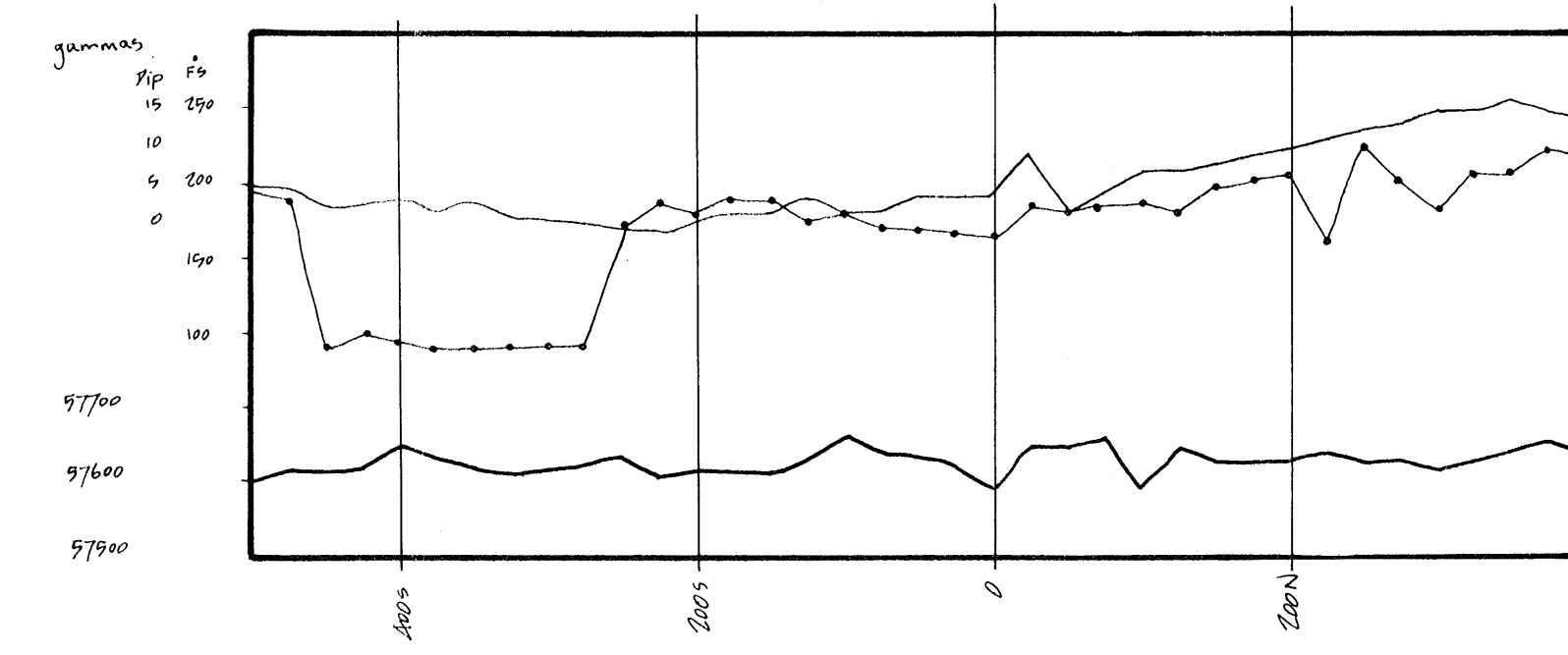
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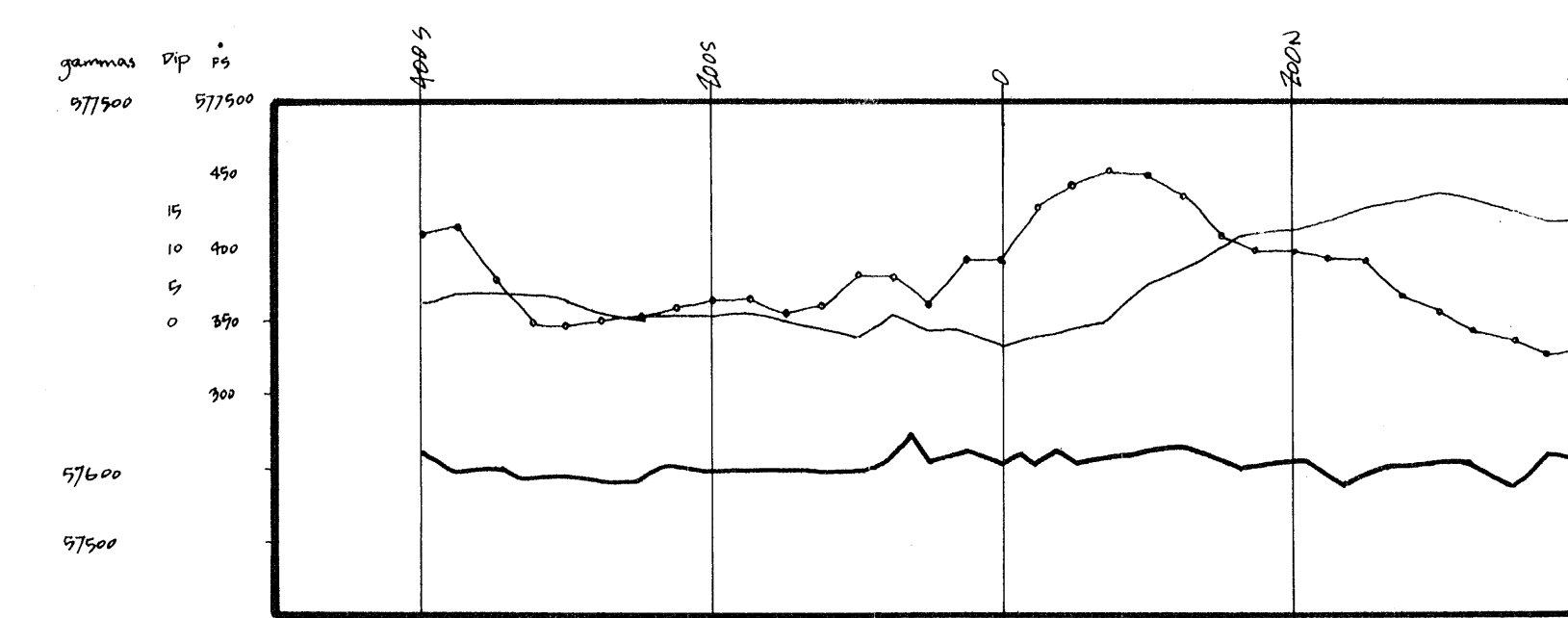
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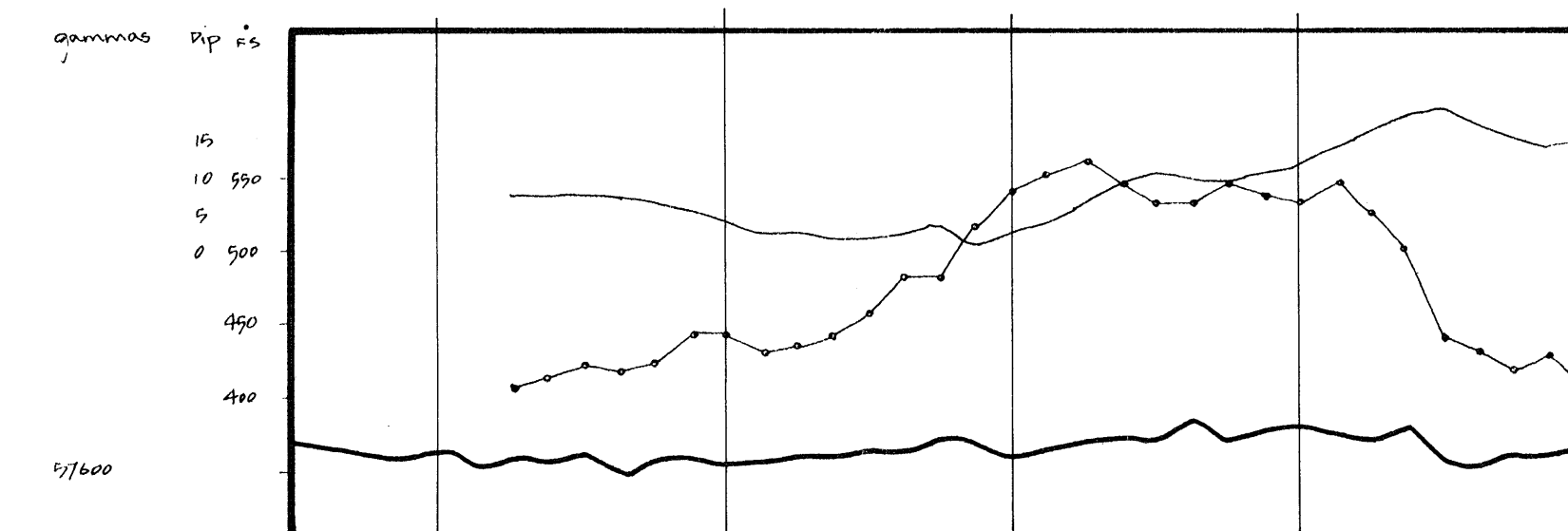
LINE 700E



LINE 900E



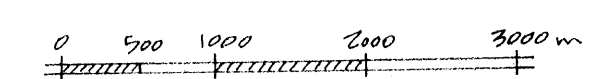
LINE 1000E



LINE 1100E

LEGEND ~

- Dip angle
- Field strength
- Mag



GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,920

CHAPLEAU RESOURCES LTD.		
WOHLN CREEK VLF-EM & MAG PROFILES MAP		
BAPTIST RESEARCH LIMITED		
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