ARIS SUMMARY SHEET

District Geologist, Nelson　　　　　　Off Confidential: 89.06.09

ASSESSMENT REPORT 17472　　　MINING DIVISION: Nelson

PROPERTY: Shaft
LOCATION: LAT 49 26 30 LONG 117 16 30
UTM 11 5476373 480063
NTS 082F06W
CLAIM(S): Magpie,Eldorado
OPERATOR(S): South Pacific Gold
AUTHOR(S): Seywerd, M.
REPORT YEAR: 1988, 85 Pages
GEOLOGICAL
SUMMARY: The property is underlain by Jurassic age Rossland Group volcanics. Mineralization is conformable and structurally controlled and consists of gold and copper with associated pyrite, pyrrhotite, malachite. The occurrence is up to twelve metres thick, and strikes north/northwest and is dips steeply.

WORK
DONE: Geophysical
EMGR 14.4 km;VLF ,PEM
Map(s) - 3; Scale(s) - 1:1250
IPOL 1.6 km
Map(s) - 4; Scale(s) - 1:1250
MAGG 7.2 km
Map(s) - 1; Scale(s) - 1:1250

SOUTH PACIFIC GOLD CORP.
GEOPHYSICAL REPORT ON A MAGNETOMETER,
VLF-EM, PULSE EM AND
INDUCED POLARIZATION SURVEY ON THE
SHAFT PROJECT, NELSON M.D.
LATITUDE: 49°26'30" LONGITUDE: 117°16'30"
NTS 82F/6W

AUTHOR: Markus Seyward, B.Sc.,
Geophysicist

DATE OF WORK: Dec.4-15,1987
DATE OF REPORT: Jan.29,1988

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ILLUSTRATIONS

INTRODUCTION:

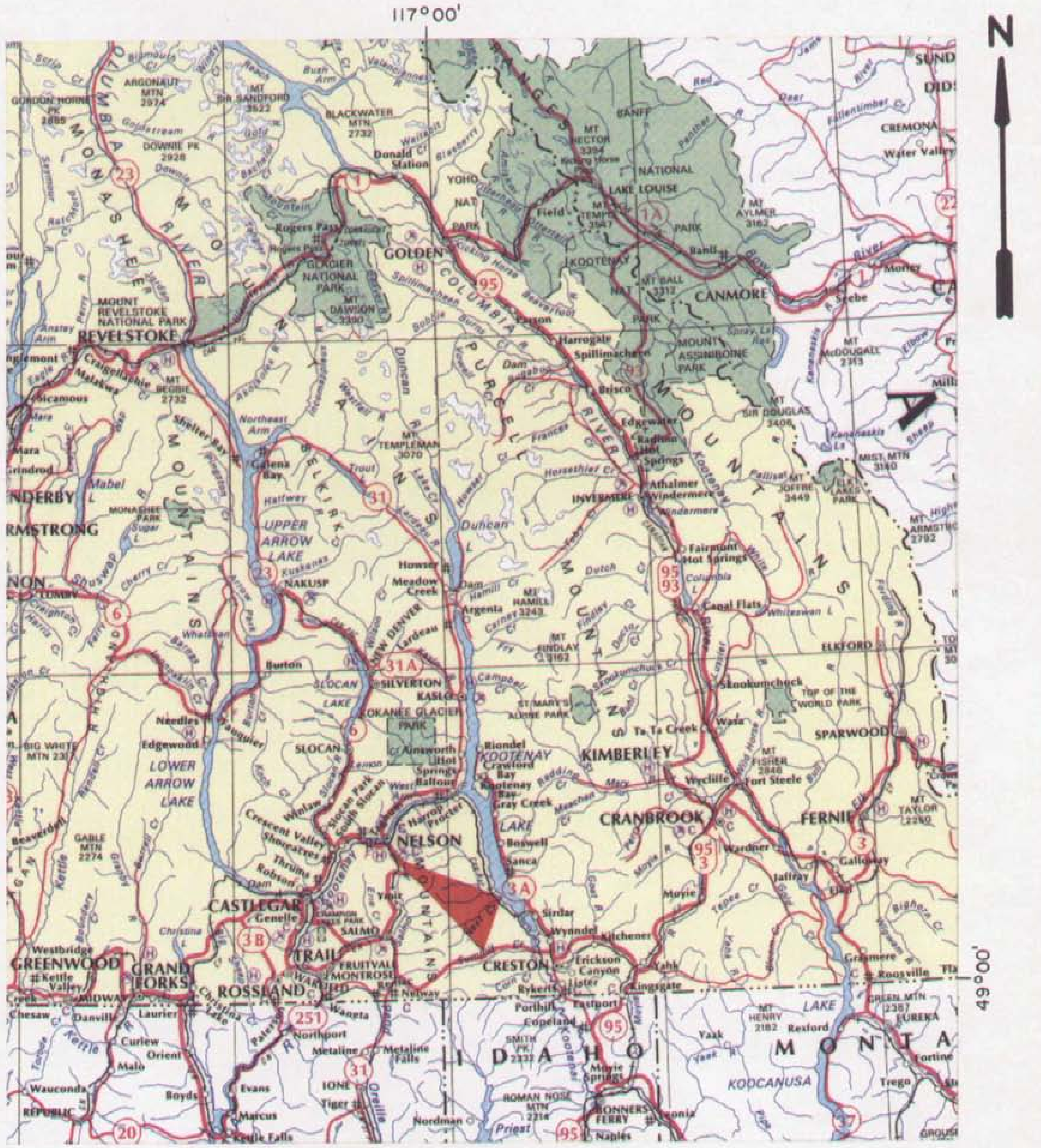
During the month of December 1987, White Geophysical Inc. was contracted by South Pacific Gold Corp. to conduct a program of geophysical surveying on their **Shaft Project.** The objective of these surveys was to aid in the mapping of the property and locate areas of possible gold bearing sulphide mineralization. To this end, four different surveys were conducted: magnetometer, VLF-EM, Crone Pulse EM and Induced Polarization.

MULTIPOLE INDUCED POLARIZATION SURVEY

The survey was conducted utilizing a Huntec Lopo Mark III induced polarization system deployed in a dipole-dipole array with a=25 n=1,2,3,4. Some 3.6 kms of work was completed. An 8 second cycle time was used with a delay of 60ms. The overvoltage discharge was read integrated and is presented as chargeability in milliseconds. The physical parameters which govern the flow of primary field are shown as apparent resistivity in ohm-metres.

PROTON PRECESSION MAGNETOMETER SURVEY

The magnetometer survey was carried out utilizing two GSM-8 proton precession magnetometers. One of these was operated in conjunction with a CMG MR-10 base magnetometer recorder to allow diurnal and micropulsation variation removal. Operator precautions of demagnetization and consistency were observed and field clock to base magnetometer timing skew was maintained within one second per day. Corrected, unfiltered data are plotted on each of the base maps.



South Pacific Gold Corporation
SHAFT PROPERTY
LOCATION MAP
N.T.S. 82F/6W

FIG. 1

VLF-ELECTROMAGNETIC AND MAGNETIC SURVEY

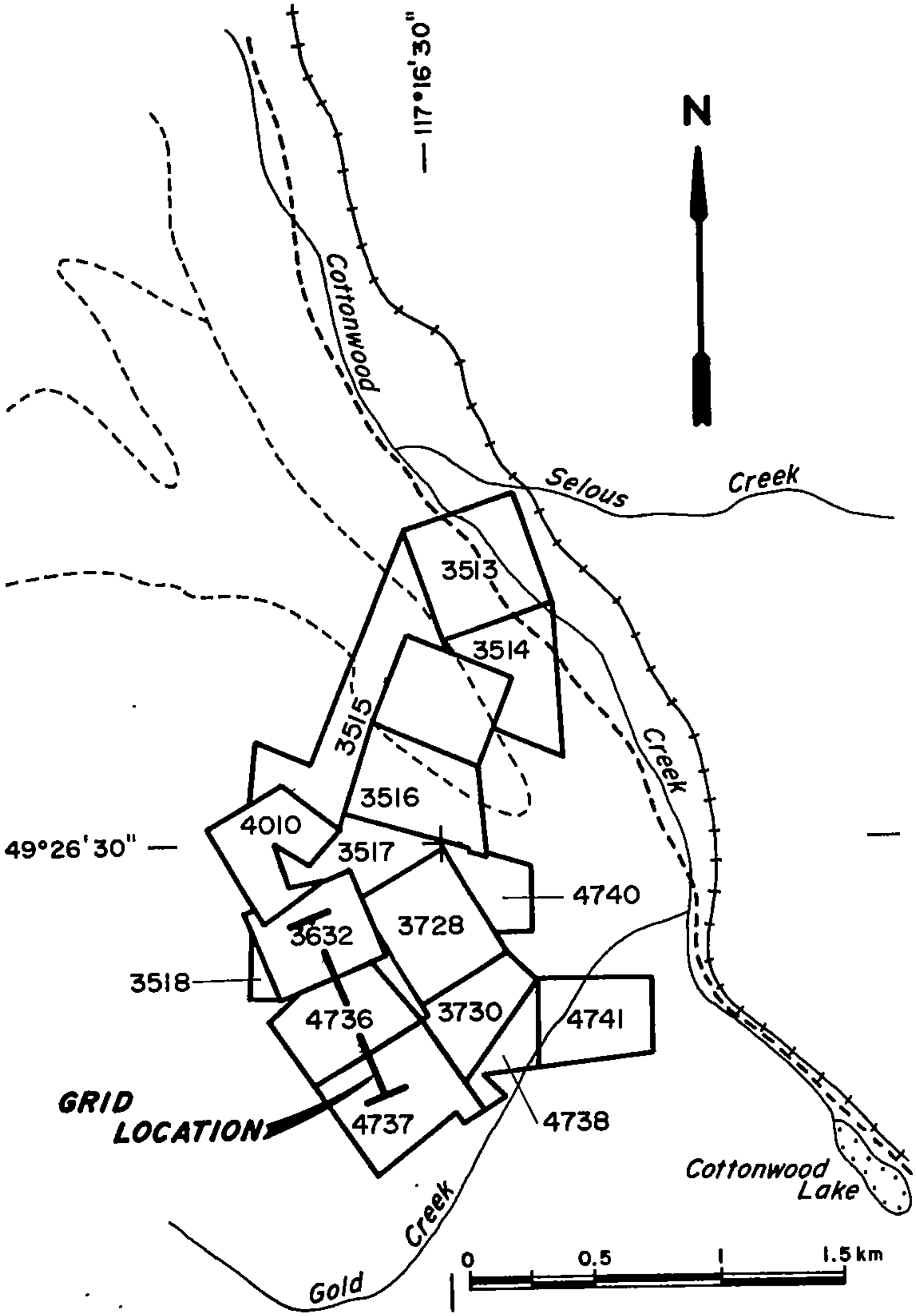
This survey was conducted using a Geonics EM-16 VLF electromagnetometer. This instrument acts as a receiver utilizing the VLF electromagnetic fields generated by VLF submarine navigation and communication stations which operate in the 15-25 kHz frequency band. The field generated by these stations is primarily horizontal. The instrument indicates the presence of a secondary field due to a conductor as a distortion in this horizontal field. This produces an anomaly in the tilt angle and quadrature readings.

For maximum coupling, a transmitter station located in the same direction as the geologic strike should be selected, since the direction of the horizontal electromagnetic field is perpendicular to the direction of the transmitting station.

PULSE ELECTROMAGNETOMETER SURVEY

The Crone pulse electromagnetometer system is a time domain E.M. system which can be used in the standard horizontal loop mode, fixed source mode or in a downhole mode.

The primary field for the standard horizontal loop method is produced by a portable transmitter loop of 6, 10 or 5-metres diameter. A depth of search of approximately 75% of separation is obtainable due to the high sensitivity of the receiver system. As measurements of the time derivative of the secondary field occur during primary field off time the method is relatively free from geometrical restrictions. Interpretation is accomplished with the aid of Slingram horizontal loop curves.



South Pacific Gold Corporation

SHAFT PROPERTY

CLAIMS MAP

N.T.S. 82F/6W

FIG. 2

The primary field for the 2000 watt fixed source system is provided by a 500 by 1000 metre transmitter loop. A 150 by 150 metre loop is utilized with the 500 watt system. The time derivative of the secondary field resulting from the presence of a conductor is sampled at eight windows on the decay curve, during primary field off-time. These eight channels of secondary field information are equivalent to a wide spectrum of frequencies from approximately 2 kHz to 16 Hz thus allowing conductor character and strength determination. The vertical and horizontal components are obtained at each station on the traverse, using the convention of vertical component positive upwards and horizontal component positive away from the transmitter loop. In areas of high surficial conductivity, the primary field on-time of 10.8 ms and the receiver delay times may be doubled in order to obtain late-time information. Time synchronization between transmitter and receiver is by radio or cable link.

The apparent primary field information is recorded at each occupied station. Normalization of the data with respect to instrument gain produces a constant gain plot. In this format a vertical plate-like conductor anomaly would be symmetric. Normalization with respect to the apparent primary field at each station provides a constant primary field plot that is useful in recognizing conductors present in the far primary field and in correlating anomaly amplitudes from line to line. The anomalies lose symmetry in this format but the condition of anomaly amplitude dependence on distance from the loop is relaxed.

DISCUSSION OF RESULTS

I: VLF-EM survey:

The VLF-EM data is presented in plan map form in Figures 9 and 10. A total of 7.2 km of line were surveyed utilizing both Seattle and Annapolis transmitting stations. Neither station is at a very good coupling angle for the local geological strike but Annapolis is the better of the two. On this survey however, Seattle produced greater amplitude responses probably due to its much greater field strength.

Four weak conductive trends are discernible in the data (see Figures 9 and 10). The strongest of these is A. Zone 'A' has an apparent strike of approximately 150 metres and is centered at 375E on line 1150N. Zone A is apparent in both Annapolis and Seattle data.

Zone B, seen only in the Annapolis data set, is on strike with Zone A, but is a much weaker response. This zone is centred at 425E on line 850N. Zone C, seen only in the Seattle data set, has a stronger response than zone B, but not as strong as Zone A. It is centred at 550E on line 750N. Zone D, again seen only in the Annapolis data set, is a very weak response on the two most southerly lines surveyed.

All of these zones are likely sourced in faults or shears and/or sulphides graphite or conductive clays.

II: Pulse Electromagnetic Survey:

The Pulse-EM data is presented in profile form (constant gain and primary field normalized) in Figures 11-60 and a representative sample of the data is plotted in plan map form in Figure 2.

The Pulse-EM survey failed to detect any major-conductors two weak conductors were detected. These are marked as E and F on Figure 2. Conductor E, the stronger of the two, is centred at 450E on line 1300N and has a strike length of 100 metres. Conductor F is a single line intercept at 550E on line 1350N.

Conductors G,H,I,J, and K are extremely weak conductors nearly buried in the noise level of the survey and are marked in Figure 2. All of these conductors may be sourced in shear zones, graphite, conductive clays and/or sulphide mineralization.

III: Magnetometer Survey:

The magnetometer survey was conducted over 7.2 km of line on the shaft property at a maximum station interval of 25 metres. This station interval was reduced to 12.5 and 6.25 metres in areas where strong magnetic gradients exist.

The magnetic data divides the property into two distinct magnetic environments. The western portion of the property, with extremely flat magnetic gradients, and the eastern portion of the property, with steep gradients and much high frequency magnetic information. The likely source for this distribution is a lithological boundary as marked in Figure 7.

On the eastern portion of the property the strongest magnetic feature M1 is centred at 470E on line 650N. This feature is a near surface response, possibly sourced at a depth no greater than 20 metres and appears to be in the immediate proximity of the interpreted geological contact. There are numerous other high frequency magnetic responses on the eastern portion of the grid. These are difficult to correlate from line to line and should be correlated to the known geology. The magnetic highs are sourced in an increased concentration of magnetically susceptible materials such as magnetite and/or pyrrotite.

IV: Induced Polarization Survey:

Approximately 1.6 kilometres of line was surveyed utilizing the Induced Polarization method at a=25m and n=1 and 2. Line 650N was surveyed at a=25 n=1,2,3,4 in an attempt to gain more depth information in the anomalous zone. The data is presented in pseudosection form in Figures 61-68 and in plan map form in Figures 3-6.

The induced polarization survey delineated a zone of high apparent chargeability extending from line 550N to 1100N at approximately 475E. This zone is rather sparcely mapped and is subparallel and in close proximity to the lithological boundary mapped with the total field magnetics. The zone is likely sourced in a variety of sulphide minerals but may be sourced in graphite or chargeable clays. The strongest portion of the zone is centred at approximately 475E on line 650N and is labelled IP1 in Figures 4 and 6. A weak resistivity low is associated with IP1. IP1 is also coincident with M1.

RECOMMENDATIONS AND CONCLUSIONS:

In December of 1987 White Geophysical conducted four geophysical surveys on **South Pacific Gold Corp.'s Shaft Project.**

The results of the VLF-EM and Pulse EM surveys were inconclusive and unless strong correlation exists between these geophysical anomalies and interesting geological structures no further electromagnetic work should be conducted.

The total field magnetic survey and the induced polarization survey were successful in delineating several interesting features. The largest feature delineated is a probable lithological boundary evident in the magnetic data and marked on Figure 7.

The best exploration target is zone IP1. The induced polarization data outlines a substantial chargeability high coincident with a weak resistivity low. This is typical of an increase in sulphide mineralization and/or graphite. The magnetic data tells us this zone is in close proximity to a probable geologic contact and that the zone, being coincident with M1, is highly magnetically susceptible. The zone is probably sourced in an increased concentration of pyrrotite a highly chargeable and magnetically susceptible sulphide, nevertheless in some instances, a concentration of magnetite can give large chargeability responses as well.

Zone IP1 is a near surface zone and therefore a good trenching target. Should a trench from 450E, to 525E, on line 650N, fail to determine the source of the anomaly, a drillhole collared at 480E, on line 650N, azimuth 60^{o}, dip 60^{o}, should intersect the zone.

Respectfully Submitted,

Markus Seywerd, B.Sc.,
Geophysicist

STATEMENT OF QUALIFICATIONS

NAME: SEYWERD, Markus B., B.Sc.

PROFESSION: Geophysicist

EDUCATION: University of British Columbia - B.Sc., Mathematics

EXPERIENCE: Three years of summer field work with Noranda Exploration Company Ltd. in British Columbia, Northwest Territories and Yukon Territories.

Two year Geophysicist with White Geophysical Inc. with work in British Columbia, Saskatchewan and Yukon Territories.

COST BREAKDOWN

Personnel	Dates	Wages Per Diam.	Total
Brent Robertson	Dec.4-15,1987	$300.00	$3,600.00
Tim Langmead	Dec.12-15,1987	275.00	1,100.00
Tyler Purcell	Dec.12-15,1987	225.00	900.00
Mark Niedzewiecke	Dec.6-15,1987	225.00	2,250.00
Luc Rodreque	Dec.4-6,1987	200.00	600.00

Mobilization & demobilization	3,000.00
Truck rental 14 days	1,000.00
Room and board 33 mandays @ $50.00/manday	1,650.00
Instrument rental $100/day 12 days	1,200.00
Drafting, Computer plotting, reproduction	1,000.00
Data Analysis and report writing	1,500.00
Total	$17,800.00

EM 16 - VLF ELECTROMAGNETIC UNIT

SPECIFICATIONS

Source of primary field	- VLF transmitting stations
Transmitting stations used	- Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects units can be plugged in at one time. A switch selects either station.
Operating frequency range	- 15-25 KHz.
Parameters measured	- (1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).
Method of Reading	- In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.
Scale Range	- In-phase ± 150%; quadrature ± 40%.

Readability	- ± 1%.
Reading Time	- 10-40 seconds depending on signal strength.
Operating temperature range	- -40°to 50°C.
Operating Controls	-on-off switch, battery testing push button, station selector switch, volume control, quadrature, dial ± 40%, inclinometer dial ± 150%.
Power Supply	- 6 size AA (penlight) alkaline cells. Life about 200 hours.
Dimensions	- 42x14x9cm (16x5.5x3.5 in.)
Weight	- 1.6 kg. (3.5 lbs.)
Shipping weight	- 4.5 kg. (10 lbs.)

GSM-8 PROTON PRECESSION MAGNETOMETER

SPECIFICATIONS

Resolution:	1 gamma
Accuracy:	± 1 gamma over operating range
Range:	20,000-100,000 gamma in 23 overlapping steps.
Gradient Tolerance:	up to 5000 gamma/metre
Operating Modes:	manual pushbutton - new reading every 1.85 sec., display active between readings.
	cycling - pushbutton initiated, 1.85 sec. period.
	selftest - pushbutton controlled, 7 sec. period.
Output:	visual - 5 digit 1 cm (0.4") high liquid crystal display, visible in any ambient light.
	digital - multiplied precession frequency and gating pulse.
	analog - optional 0-99 or 0-999 gamma.
External Trigger:	permits externally triggered operation with periods longer than 1.85 sec. (optional minimum period 0.9 sec.)
Power Requirements:	12V 0.7A peak, 5mA standby.
Power Source:	internal - 12V 0.75Ah NiCd rechargeable battery 3,000 readings per full charge.
	external - 12-32V
Battery Charger:	input: 110/220V 50/.60Hz
	output: 14V 75mA DC.
Operating Temp.:	-35 to +55C

Dimensions:	console:	15x8x15cm. (6 x 3 1/4 x 6")
	sensor:	14x7cm dia (5 1/2 x 3" dia)
	staff:	175cm (70") extended, 53cm (21") collapsed.
Weight:	2.7kg (6 lb) per standard complete with batteries.	

SPECIFICATIONS – CRONE PULSE EM EQUIPMENT

1. STANDARD RECEIVER

BATTERY SUPPLY:
±12 VDC, two internal, rechargeable, 12V gel type batteries

MEASURED QUANTITIES:
Primary shut-off voltage pulse (PP). Time derivative of the transient magnetic field by integrative sampling over eight, contiguous time gates (microseconds).

CH. NO.	WINDOW	WIDTH	MID PT.	REL. GAIN	WINDOW	WIDTH	MID PT.
PP	-100 to 0	100	-50	1.00	-200 to 0	200	-100
1	100 to 200	100	150	1.00	200 to 400	200	300
2	200 to 400	200	300	1.39	400 to 800	400	600
3	400 to 700	300	550	1.93	800 to 1400	600	1100
4	700 to 1100	400	900	2.68	1400 to 2200	800	1800
5	1100 to 1800	700	1450	3.73	2200 to 3600	1400	2900
6	1800 to 3000	1200	2400	5.18	3600 to 6000	2400	4800
7	3000 to 5000	2000	4000	7.20	6000 to 10K	4000	8000
8	5000 to 7800	2800	6400	10.00	10K to 15.6K	5600	12.8K
	10.8ms. Time Base				21.6ms. Time Base		

READOUT:
Readings are output on an analog meter (6V FSD), over three sensitivity ranges (X1, X10, X100). Data retrieval made by channel select switch.

TIMING:
A telemetry link ("sync.") is maintained by radio signal, or a back-up cable, between the transmitter and the receiver, and is meter monitored.

SENSITIVITY:
Adjustable through a ten turn, calibrated gain pot.

SAMPLING MODES:
"S & H" (Sample & Hold)
The receiver averages 512 (10.8 ms), or 256 (21.6ms), readings for all channels, and stores the results for display.
"CONT" (Continuous)
A running average for all channels is stored, enabling the operator to reject thunderstorm spikes and power line noise by visual inspection.

OPERATING TEMPERATURE RANGE:
-40°C - 50°C (-40°F - 122°F)

DIMENSIONS: 28 cm x 18 cm x 27 cm (11" x 7" x 10½")

SHIPPING DIMENSIONS: 37 cm x 27 cm x 35 cm (14½" x 10½" x 14")

WEIGHT: 7 kg (16 lb)

SHIPPING WEIGHT: 14.5 kg (32 lb)

2. OPTIONAL DATALOGGER RECEIVER

— Uses above receiver in conjunction with Omnidata Polycorder.®
— Data is A/D converted and stored in 32 k memory.
— RS-232C serial interface allows for connection to modem.
— Continual monitoring of readings through LCD.
— Spheric and powerline rejection through software filter.
— Operating temp range from -40°C - 50°C (-40°F - 122°F)

WEIGHT: 14.5 kg (32 lb)

SHIPPING WEIGHT: 21.8 kg (48 lb)

DIMENSIONS: 22 cm x 28 cm x 46 cm (8¾" x 11" x 18")

SHIPPING DIMENSIONS: 35 cm x 30 cm x 53 cm (14" x 11¾" x 21")

SPECIFICATIONS – PULSE EM TRANSMITTER EQUIPMENT

MOTOR GENERATOR:

4-1/2 H.P. Wisconsin, 4 cycle engine with belt drive to D.C. alternator; maximum output 120V, 30 amps; external gas tank; frame unit weight: 33 kg, shipping: 47 kg.

REGULATOR:

Controls and filters the alternator output; continuously variable between 24V and 120V D.C.; 20 amp maximum current; weight: 10 kg, shipping: 24 kg.

PEM WAVEFORM TRANSMITTER:

Controls bipolar, on-off waveform and linear current shut-off ramp time. Radio and cable time synchronization with housing for optional crystal clock sync system; on-off times for 60 Hz areas 8.33ms, 16.66ms, 33.33ms; for 50 Hz areas 10.0ms, 20.0ms, 40ms; for analog PEM operation 10.9ms, 21.8ms; linear controlled current shut-off ramp times of 0.5, 1.0 and 1.5ms; monitors for shut-off ramp operation, instrument temperature, Tx loop continuity, and overload output current; automatic shut-down for open Tx loop. Weight: 12.5 kg, shipping: 22 kg.

REMOTE RADIO, ANTENNA AND MAST:

Used for radio timing synchronization on large survey grids; range up to 2 km; radio has 12V rechargeable gell cell battery supply; antenna is fiberglass mounted on a 4 section aluminum mast each 2m long. Radio weight: 2.7 kg, shipping: 6.0 kg; mast and antenna shipped as bundle: 6.4 kg.

OPTIONAL CRYSTAL CLOCK TIMING LINK:

Installed in the Digital Rx and external box mounted to be plugged into PEM-Tx. Gel rechargeable power supply. Weight: 10 kg, shipping: 15 kg.

WIRE, SPOOLS AND WINDERS:

Transmitter wire is usually No. 10 or No. 12 AWG copper in 310m or 410m lengths, 1 length per spool; 2 spools in a shipping box; winder is mounted on a magnesium packframe.

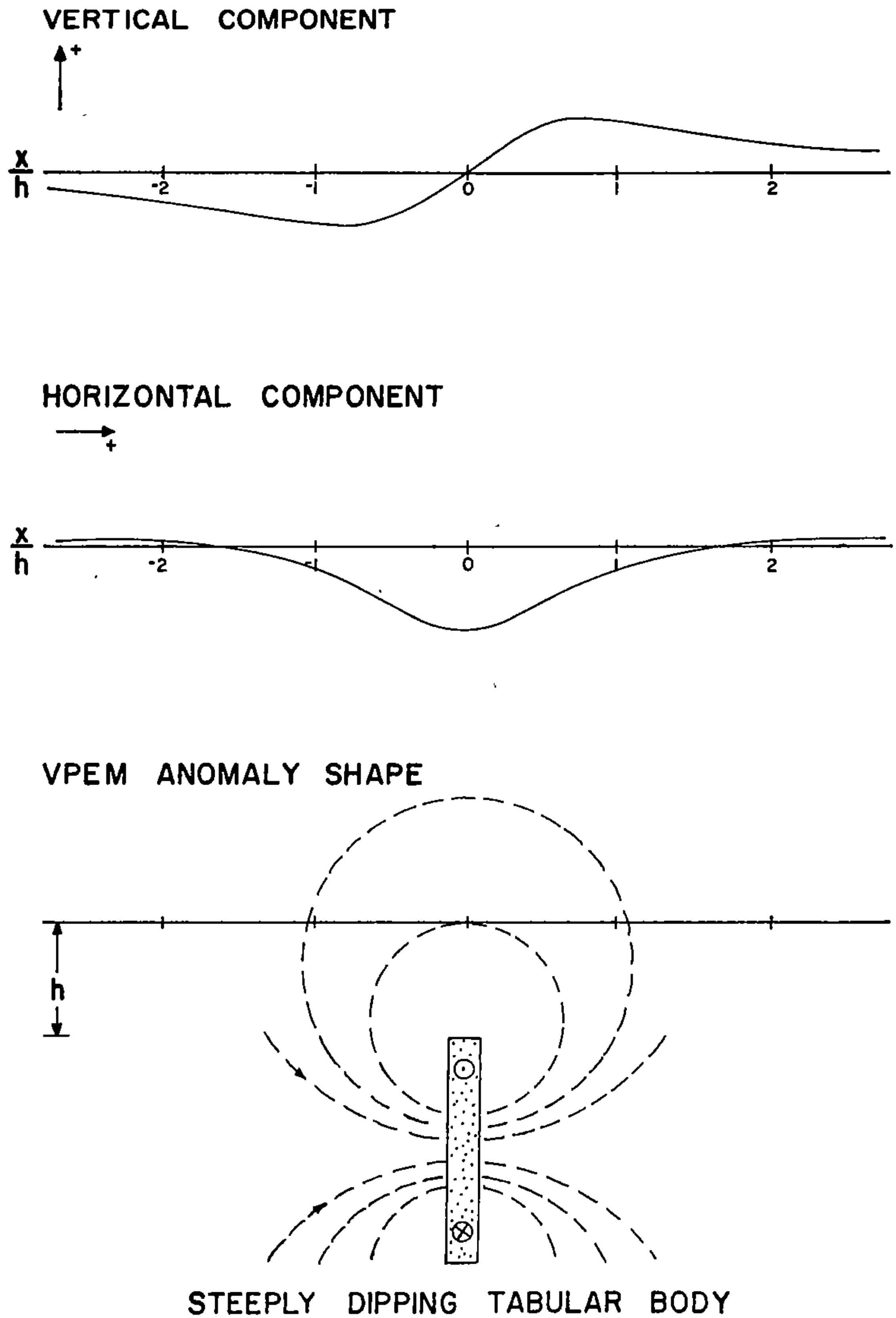
MULTI-TURN MOVING COIL:

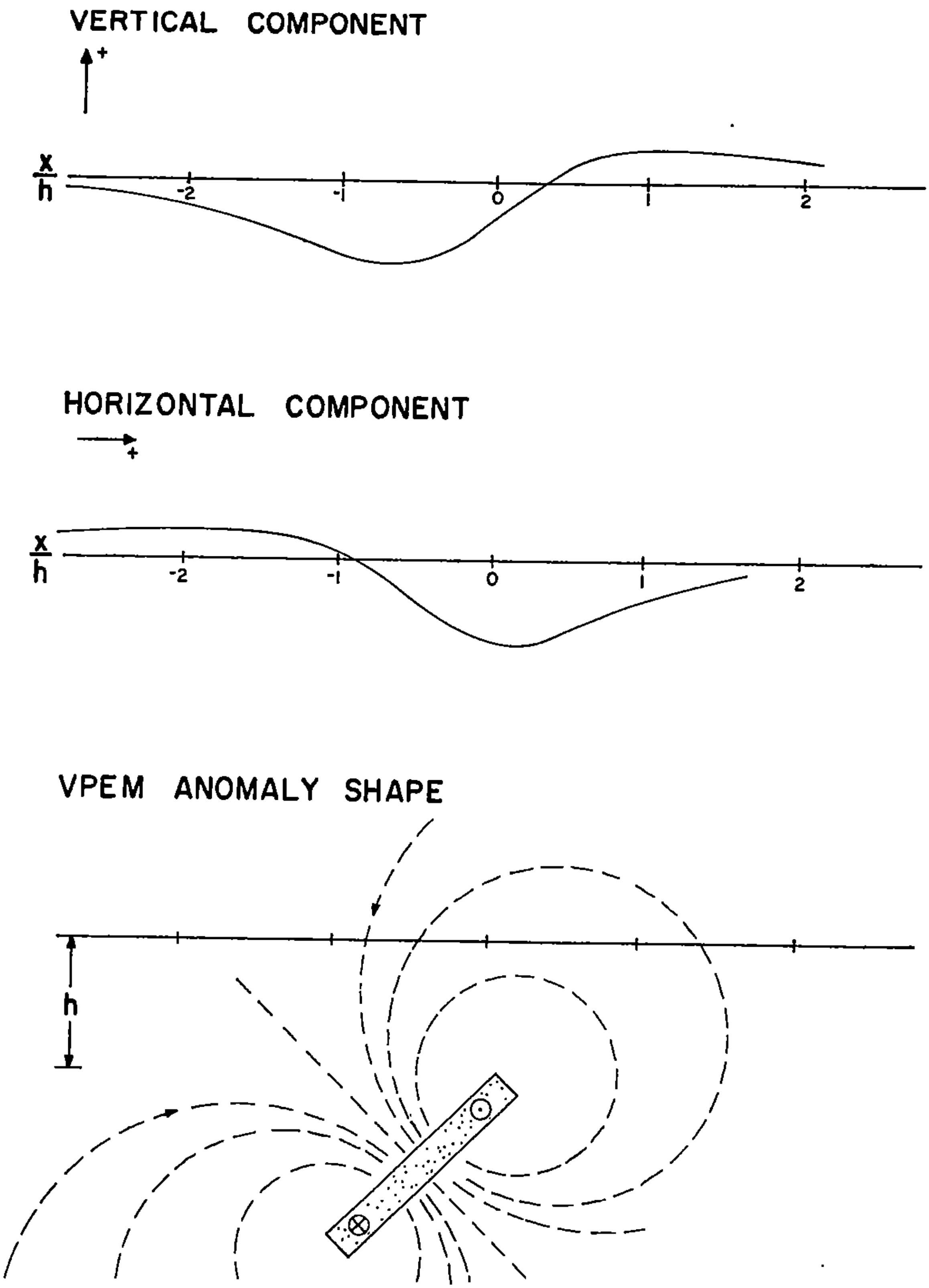
7 turn, 13.7 meter diameter Tx loop with plugs to break into 2 sections. Aluminum or copper wire and various coverings depending on area being used.

BATTERY POWER SUPPLY:

24V, 20 amp hour; rechargeable battery supply for use with PEM-Tx as power source rather than motor-generator-regulator. In aluminum case, with clamp connectors. Weight: 20.5 kg, shipping: 29 kg.

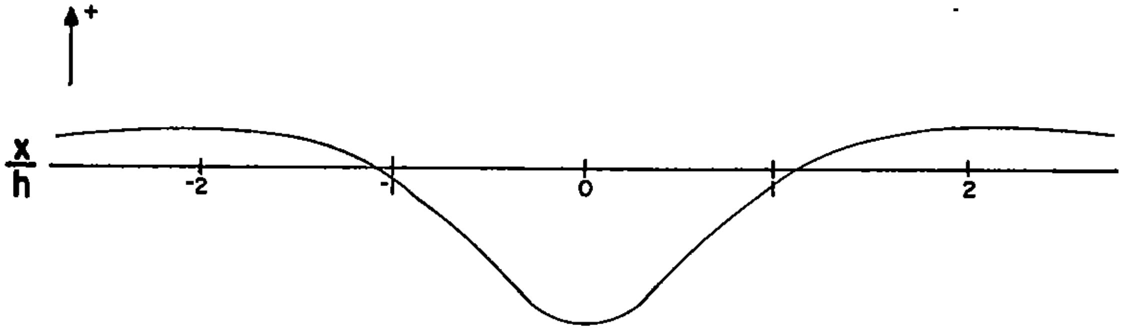
- Battery chargers supplied for all rechargeable battery units.
- All instruments and equipment operational from -40°C to +50°C.
- Shipping boxes are reusable plywood construction with closed cell foam shock protection.


VERTICAL COMPONENT
+
x/h
-2
-1
0
1
2
HORIZONTAL COMPONENT
+
x/h
-2
-1
0
1
2
VPEM ANOMALY SHAPE
h
STEEPLY DIPPING TABULAR BODY



INCLINED TABULAR BODY

VERTICAL COMPONENT



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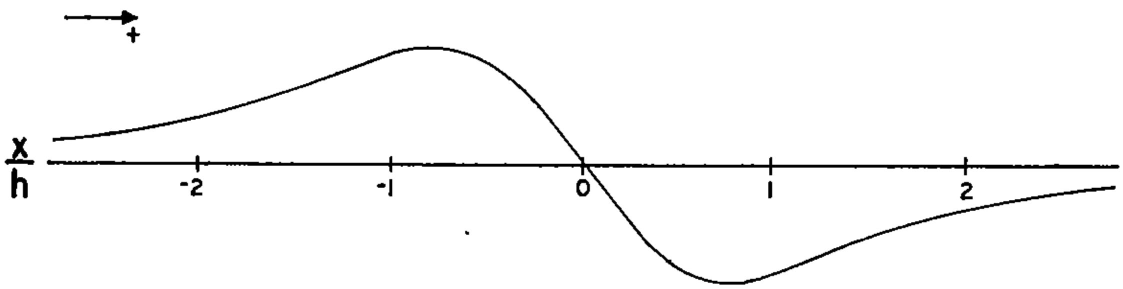
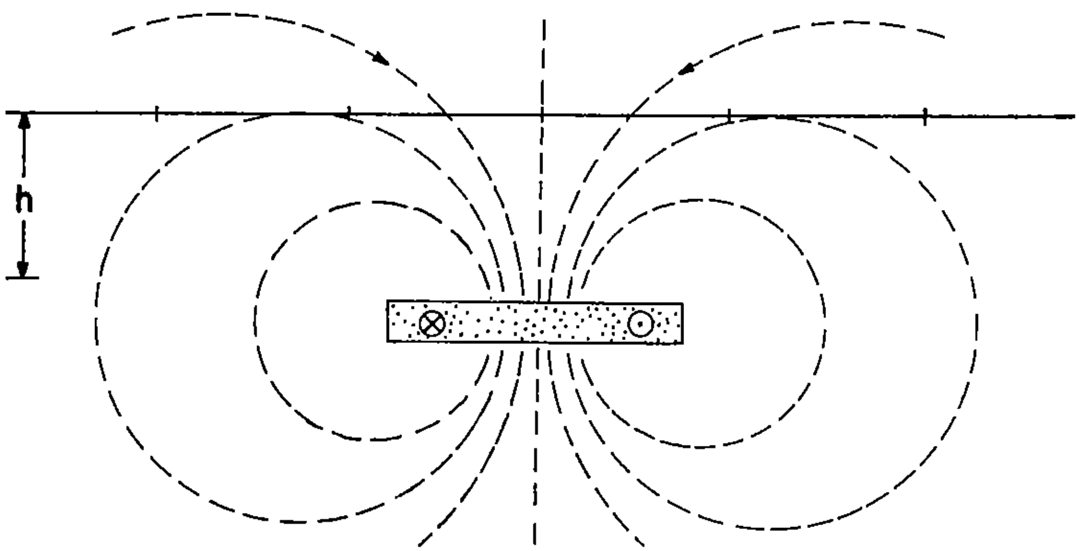


VPEM ANOMALY SHAPE



FLAT LYING TABULAR BODY

LOPO MARK III INDUCED POLARIZATION

SPECIFICATIONS

Maximum Current	1.5A D.C.
Maximum Voltage	1,800V D.C.
Load Range	Zero to infinity in five ranges
Maxium D.C. Load Power	In excess of 160 watts at 75% efficiency into following load resistances.
Load Current	Continuously adjustable, Max. Current/Min. Current = 10/1 When the transmitter is operated at half its available output current, it will hold this current constant to within 1% while the load resistance changes by $\pm$ 100%, or when the input voltage changes by $\pm$20% of its original value.
Turn On Time	Less than 10^{-3} seconds
Turn Off Time	Less than 10^{-3} seconds
Cycle Time	2, 4, 6, 8, or 16 seconds Cycle time is defined as 2 x (current on time + current off time)
Duty Ratio	1:1 Duty ratio is defined as (current on time)/(current off time)

Timing Accuracy	±0.01% Additional timing programmes including square wave output are available as options
Voltages	24 to 36 volts D.C.
Maximum Current	12 amperes
Batteries	Six GC-680-1 lead-acid Gel/Cel, 8 amp-hour The input power source can be batteries or any unregulated D.C. source between 30-40 volts supplying 10 to 15 amperes
Ambient Temperatures	-30°F to +120°F (-35°C to +50°C) Forced air cooling by automatically actuated internal fan
Altitude	-30,000 to +20,000 feet (-9,150 m to +6,100 m)
Humidity	The set may be operated in saturated air, and in rain without damage or risk of malfunction
Instrument Package	14.5 x 6 x 8.5 inches overall (37 x 15.2 x 22.5 cm) 18.5 pounds (8.4 kg)
Battery Package	14.5 x 8.5 x 5.75 inches overall (37 x 22.5 x 14.7 cm) 27 pounds (12.3 kg)

MARK III INDUCED POLARIZATION RECEIVER SPECIFICATIONS

Sensitivity	Vp = 10^{-7} to 10^{-6} volts for low noise 1% resolution Vp = 10^{-6} to 10 volts for 0.1% resolution. Total range 30 x 10^{-6} to 10 volts in 11 ranges
Self Potential	Maximum ± 1 volt
M factors	0.1% plus sign with speed/gain control at position 1.0 0.01% plus sign with speed/gain control set at 0.1
Batteries	Self contained battery pack rechargeable Ni-cads, nominal 12 volts four ampere-hour. Optional separate belt battery pack rechargeable Ni cads. Battery pack weight 4 1/2 lbs.
Power Consumption	0.7 ampere at 12 volts
Dimensions	16" x 9" x 5 3/4"
Weight	Without battery pack 12.5 lbs. (used with optional belt pack)
Optional Accessories	Dual battery charger 110/220 volts, 50 to 400 Hz input

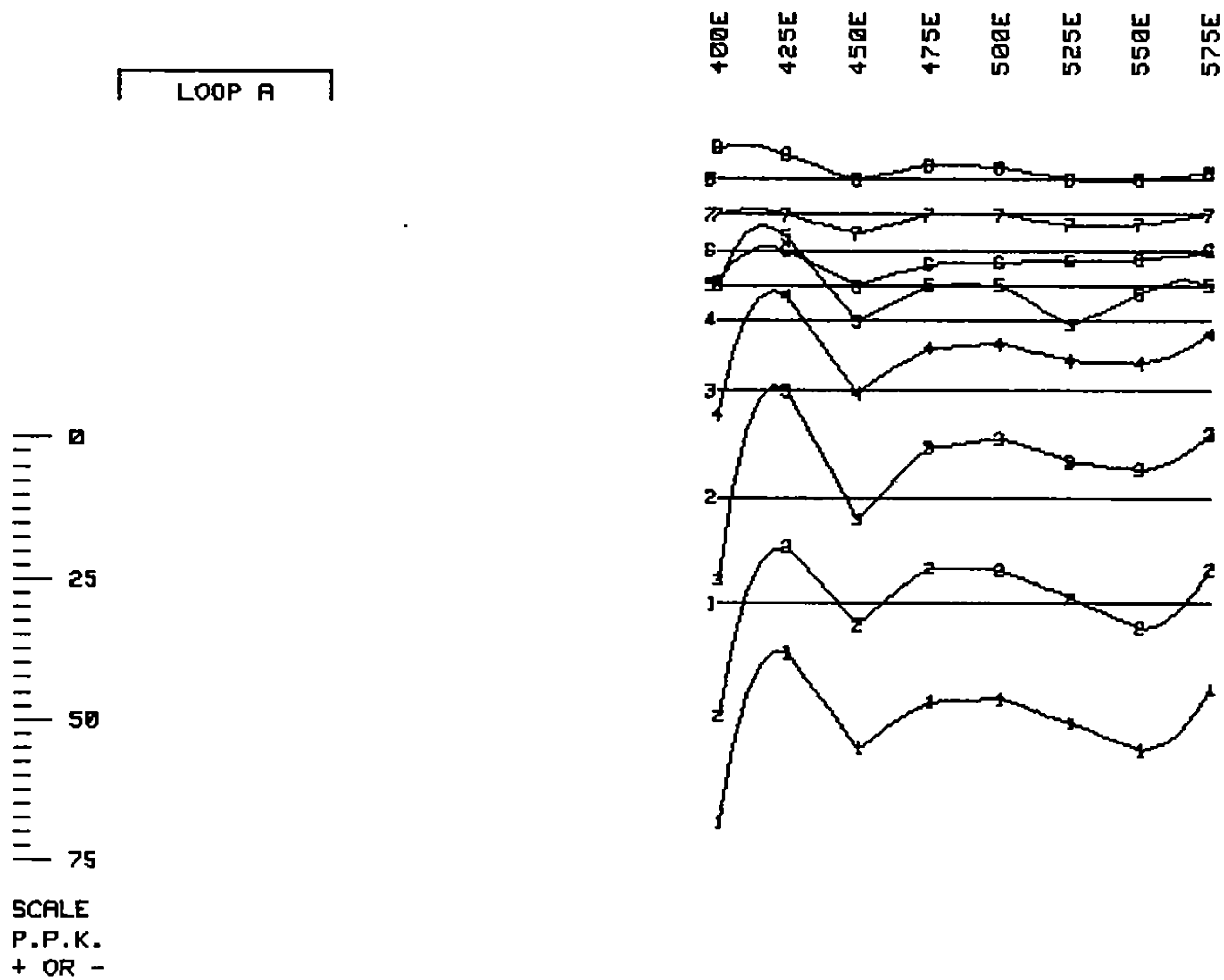
Features

- Adjustable timing cycle.

- Automatic self potential buck out.
- Automatic signal acquisition for triggering.
- Direct digital readout of Vp and four M factors.
- Both Vp and M factors measured and stored in memory registers simultaneously.
- Mistriggering will not affect readings.
- Patented phase lock triggering loop enables operation in high noise areas with Vp levels down to 30 micro volts with 0.1 micro volt resolution.
- Rapid and accurate operation possible with low power transmitters.
- Over 10 megohms input impedance.

VECTOR PULSE ELECTROMAGNETOMETER COMPONENT PROFILES

WHITE GEOPHYSICAL INC.



CONSTANT GAIN DATA, G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES

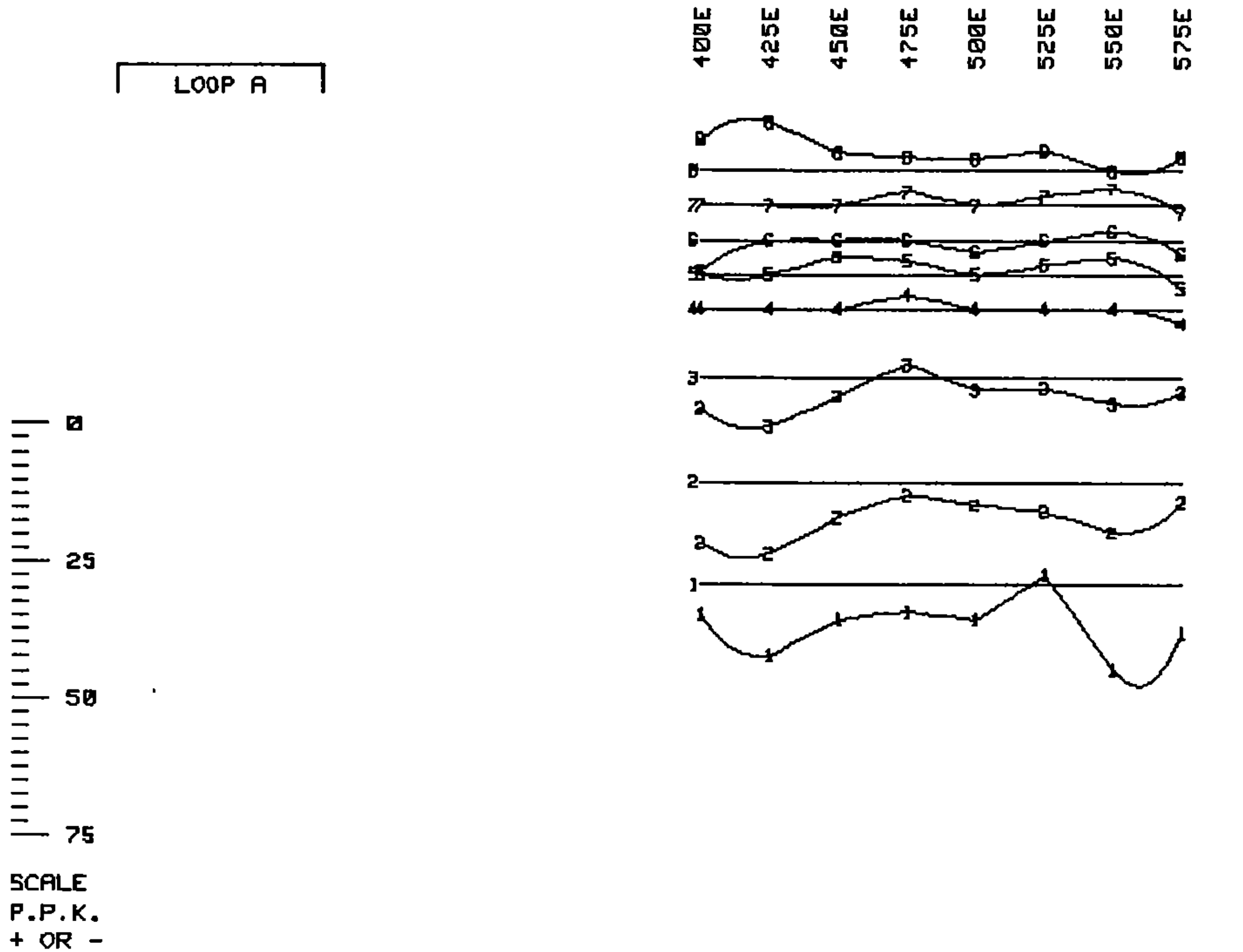
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1400N LOOP A

DATE: DEC/87

FIG.: 11



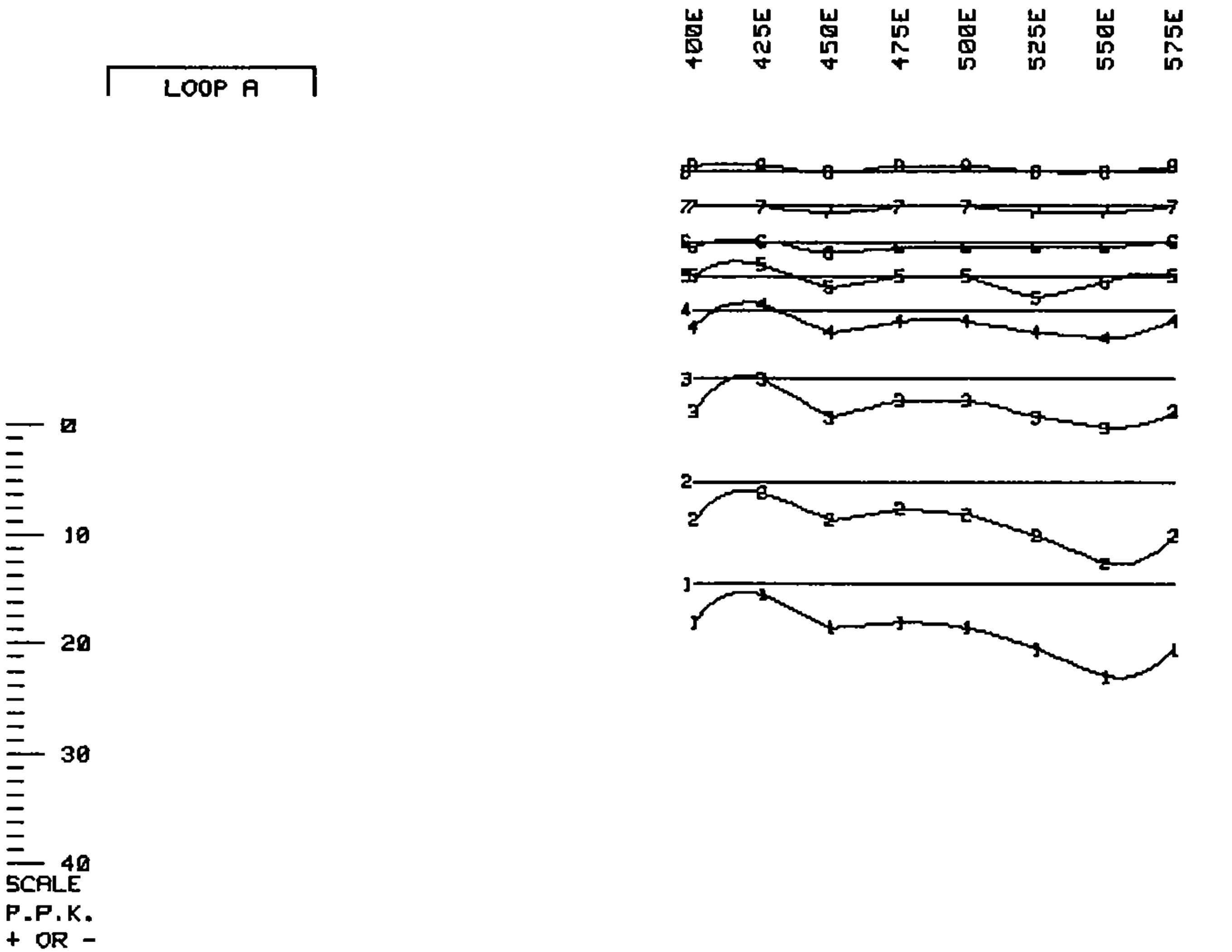
CONSTANT GAIN DATA, G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1400N LOOP A

DATE: DEC/87 | FIG.: 12

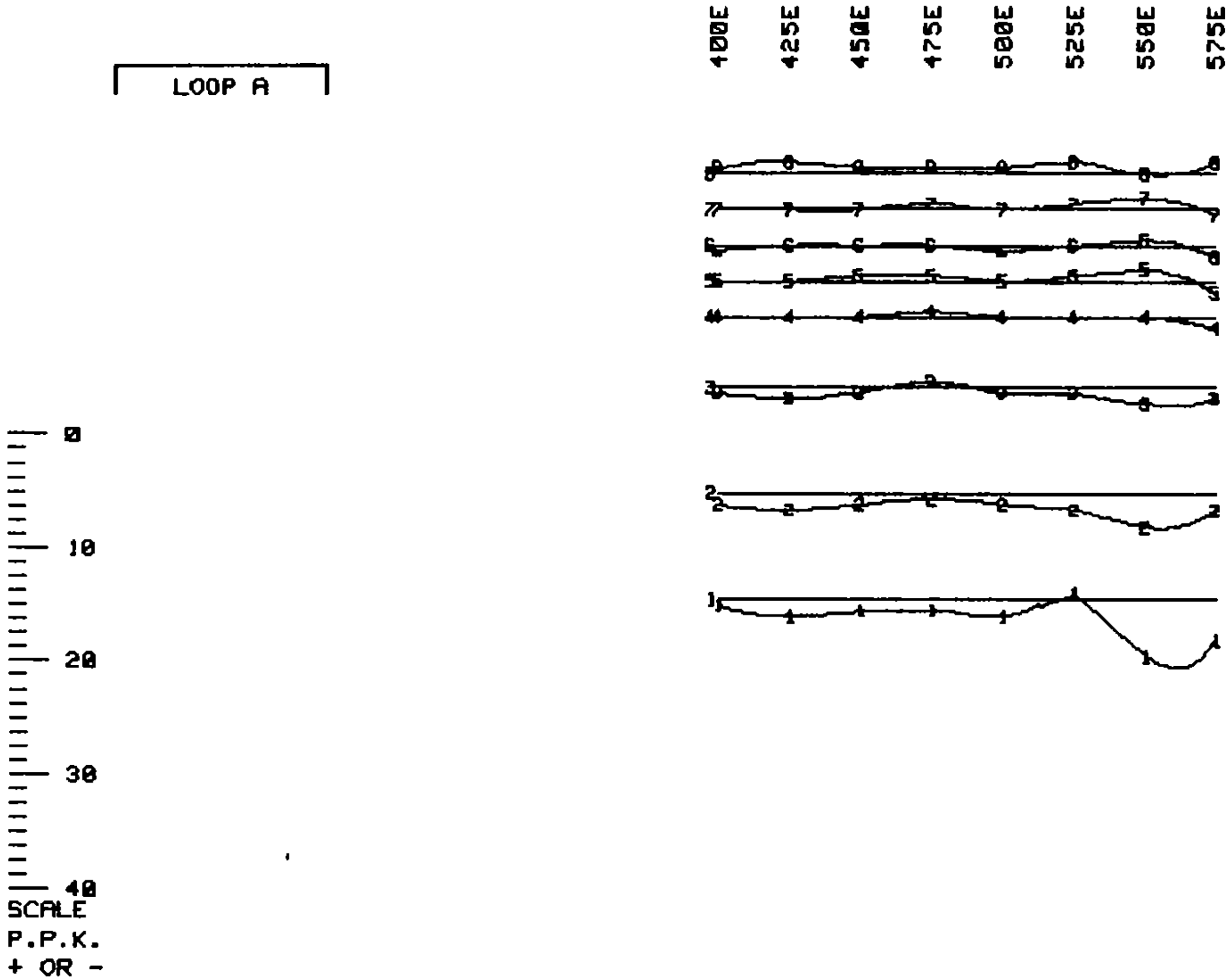


PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1400N LOOP A

DATE: DEC/87 | FIG.: 13



WHITE GEOPHYSICAL INC.

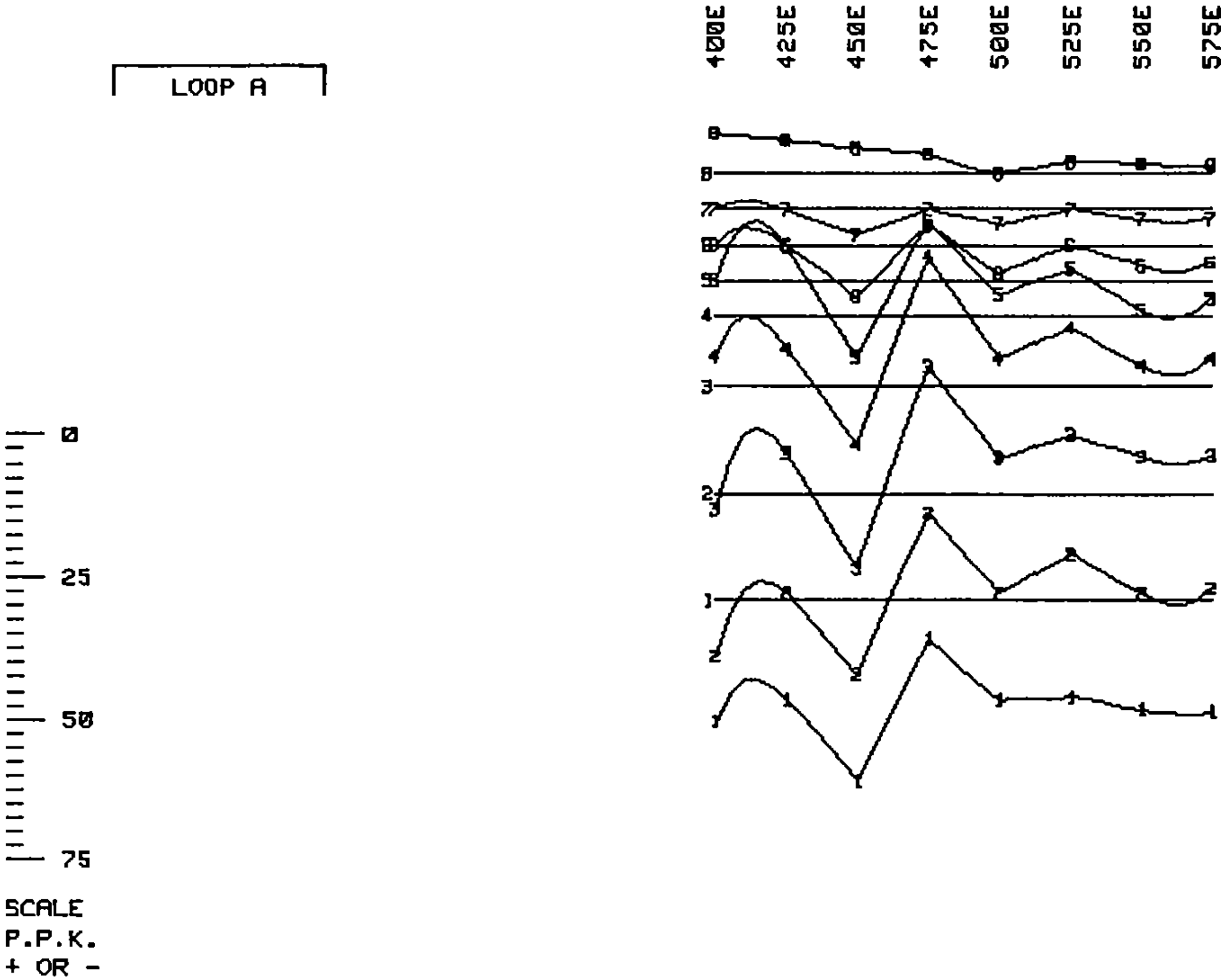
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1400N LOOP A

DATE: DEC/87

FIG.: 14



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

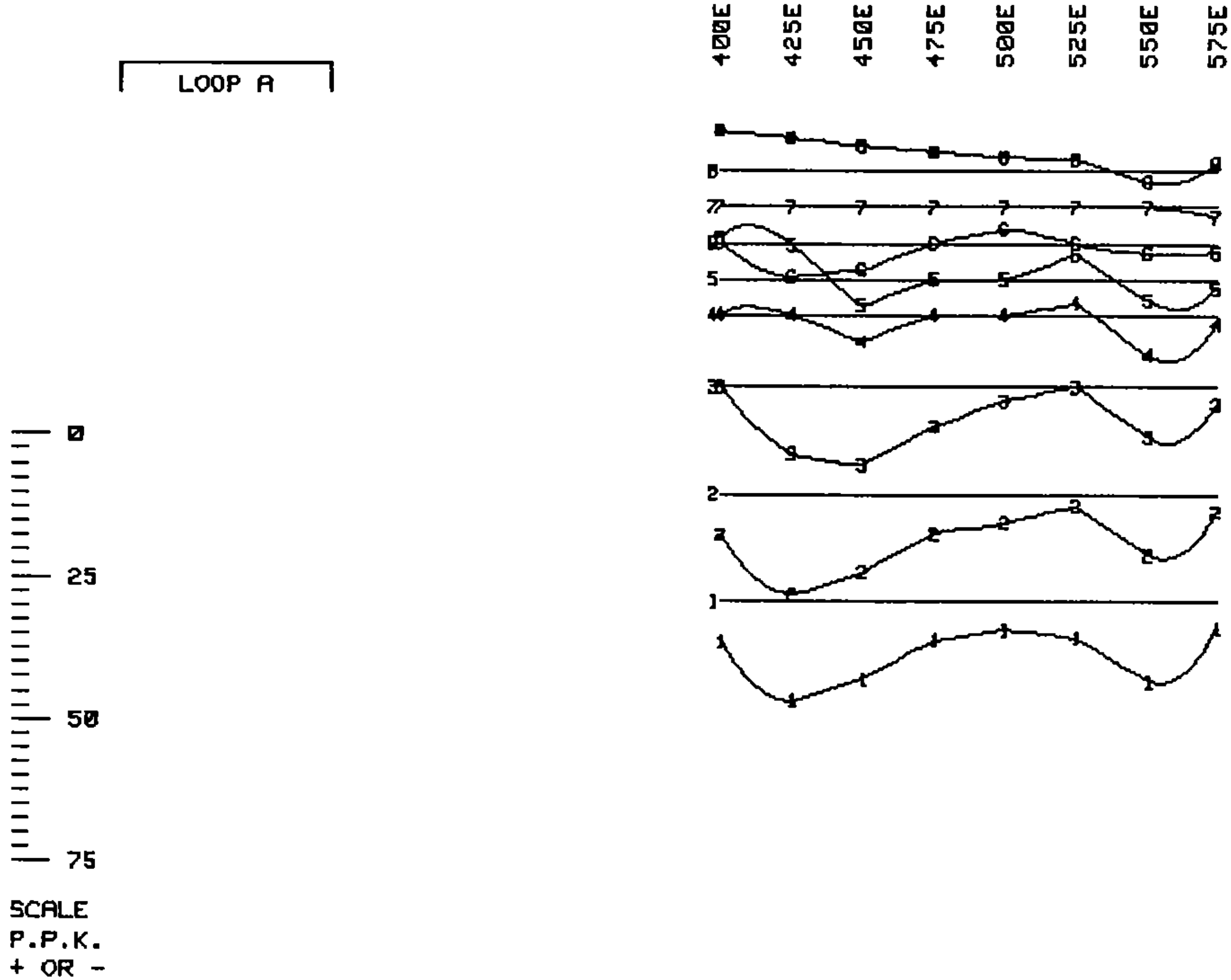
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1350N LOOP A

DATE: DEC/87

FIG.: 15



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

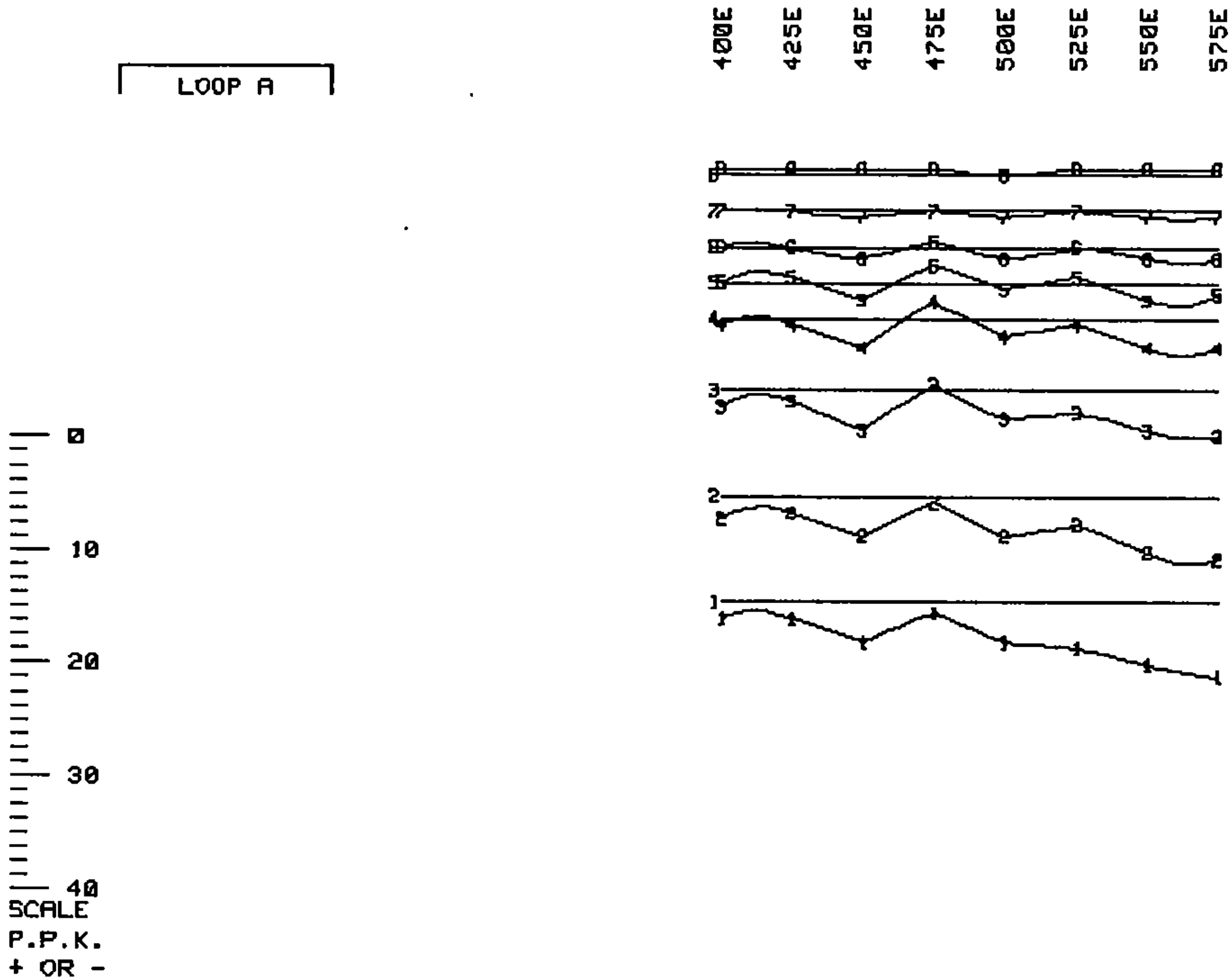
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1350N LOOP A

DATE: DEC/87

FIG.: 16



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

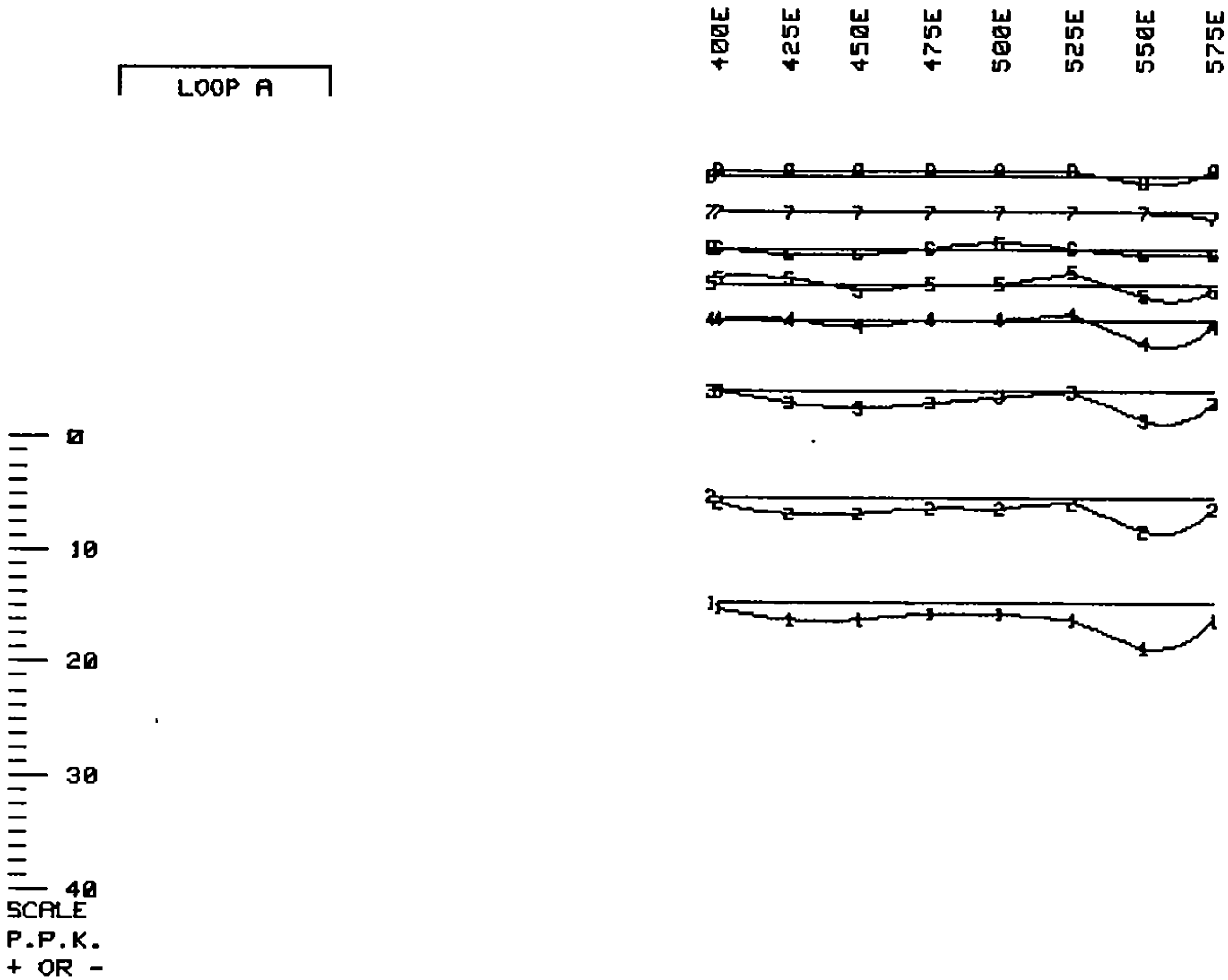
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1350N LOOP A

DATE: DEC/87

FIG.: 17



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

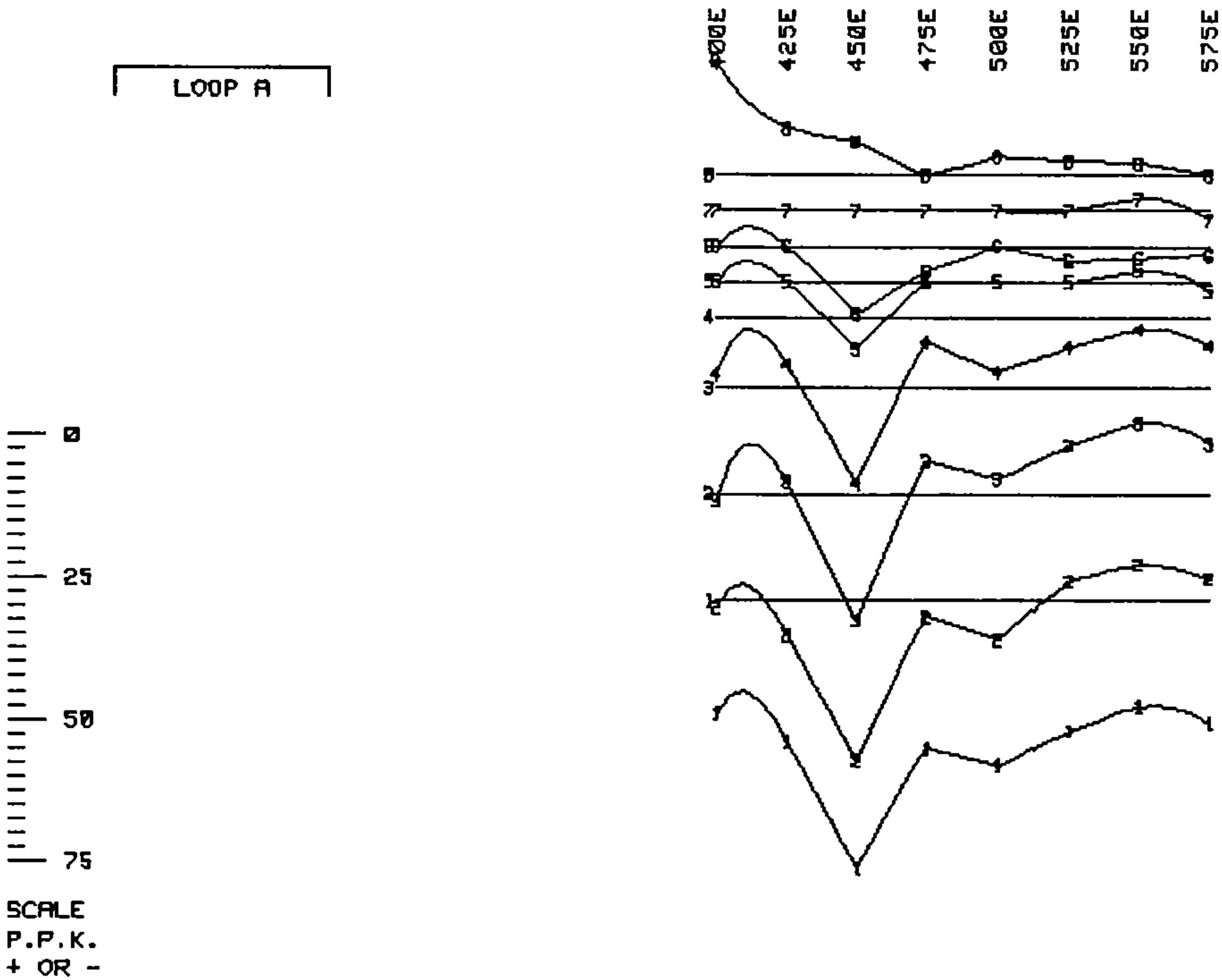
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1350N LOOP A

DATE: DEC/87

FIG.: 18



CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES

0 25 50 75 100

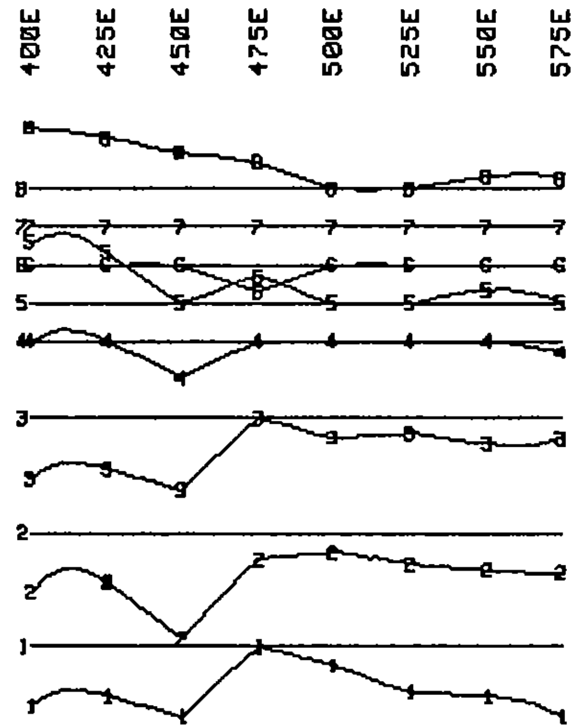
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1300N LOOP A

DATE: DEC/87

FIG.: 19

LOOP A



0
25
50
75

SCALE
P.P.K.
+ OR −

CONSTANT GAIN DATA, G-( )00%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

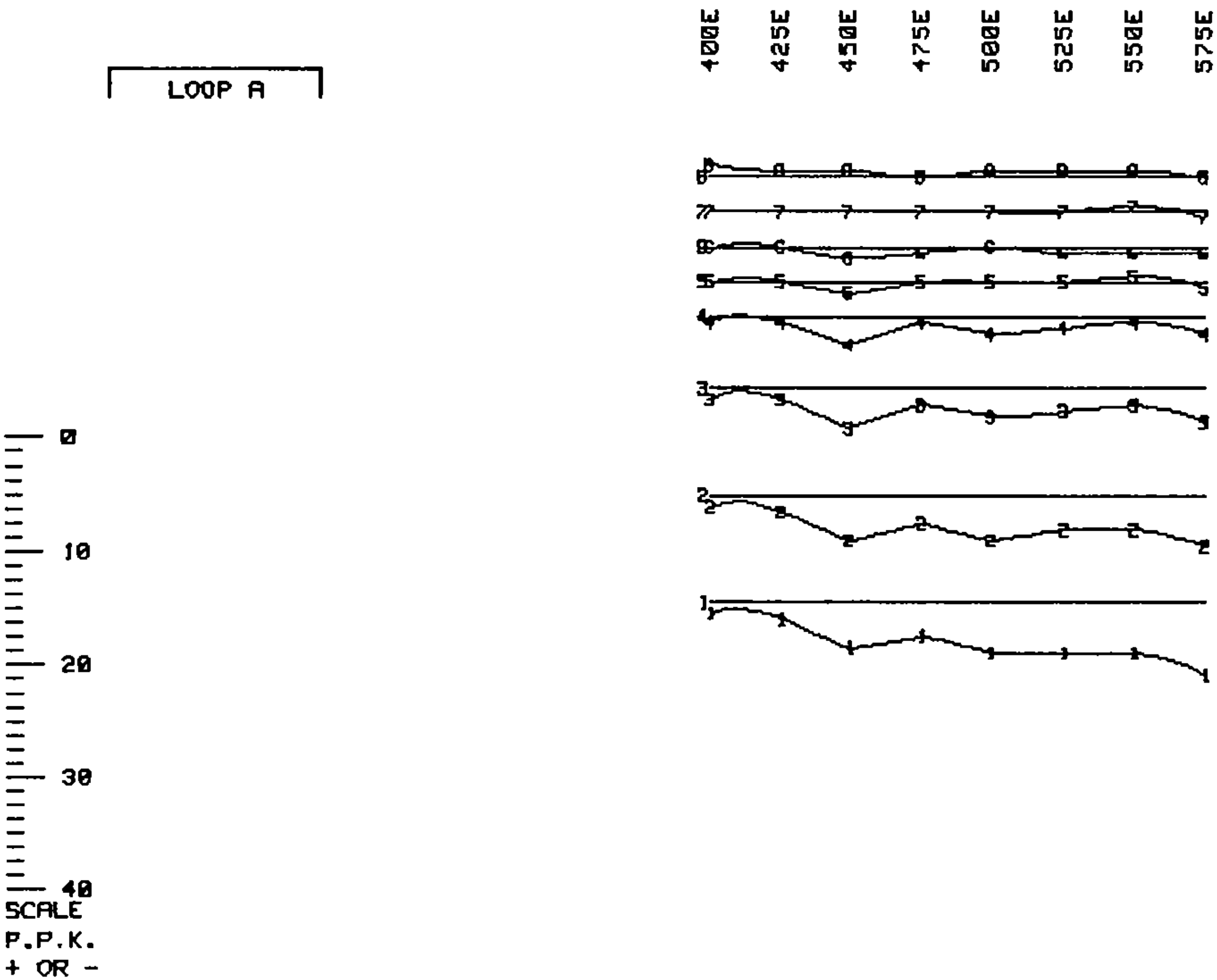
METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1300N LOOP A

WHITE GEOPHYSICAL INC.

DATE: DEC/87

FIG.: 20



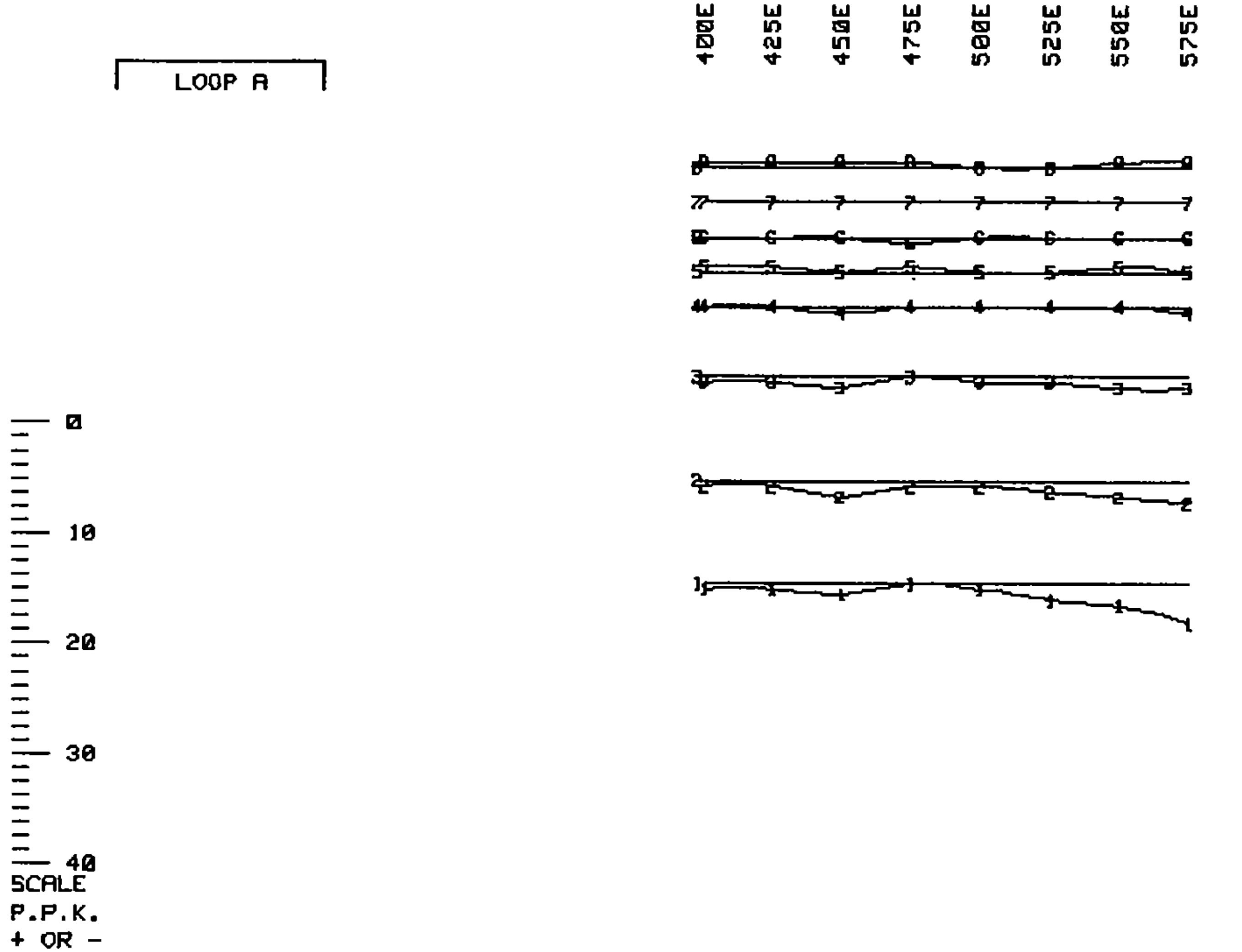
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1300N LOOP A

DATE: DEC/87	FIG.: 21



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

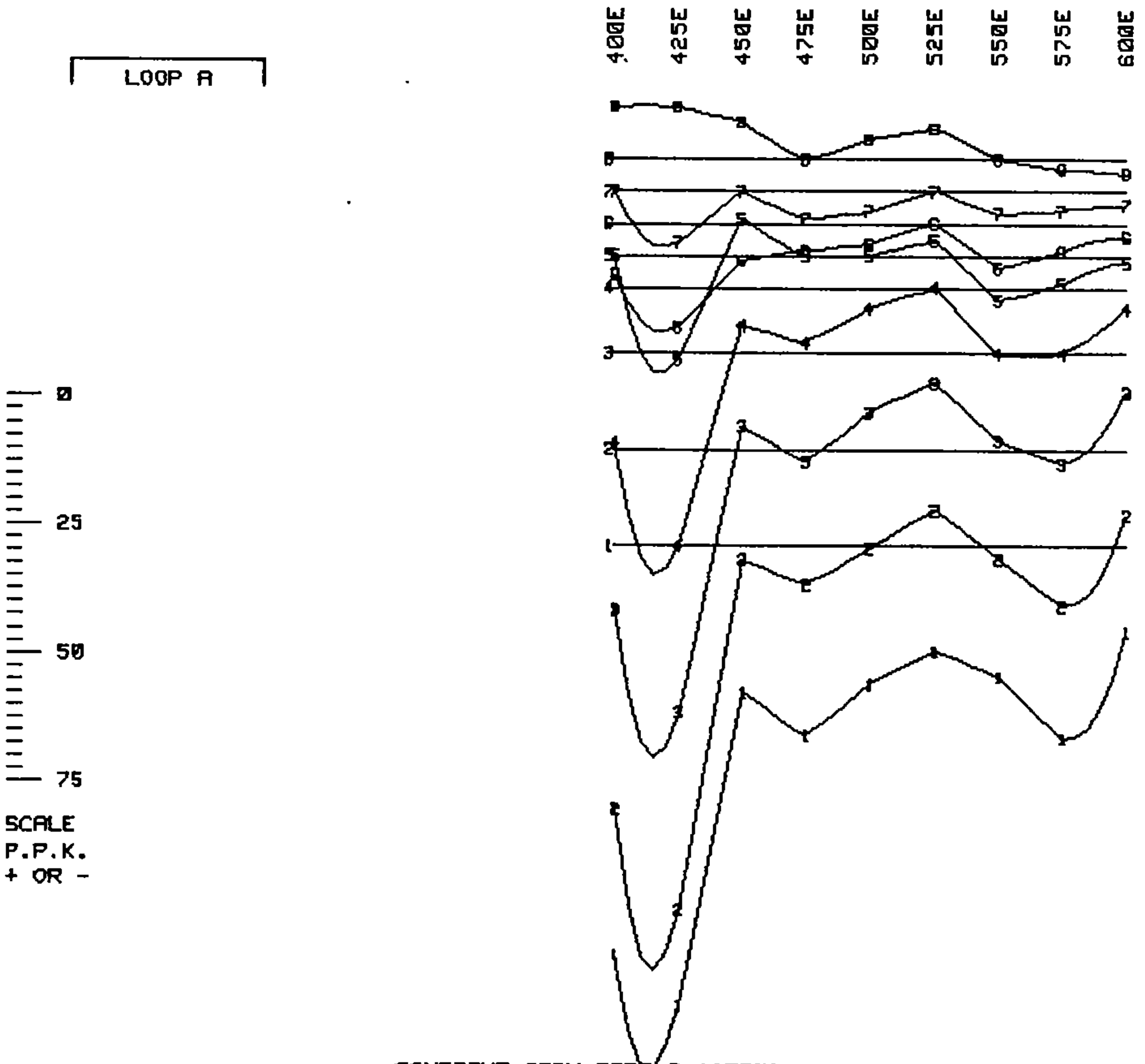
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1300N LOOP A

DATE: DEC/87

FIG.: 22



CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

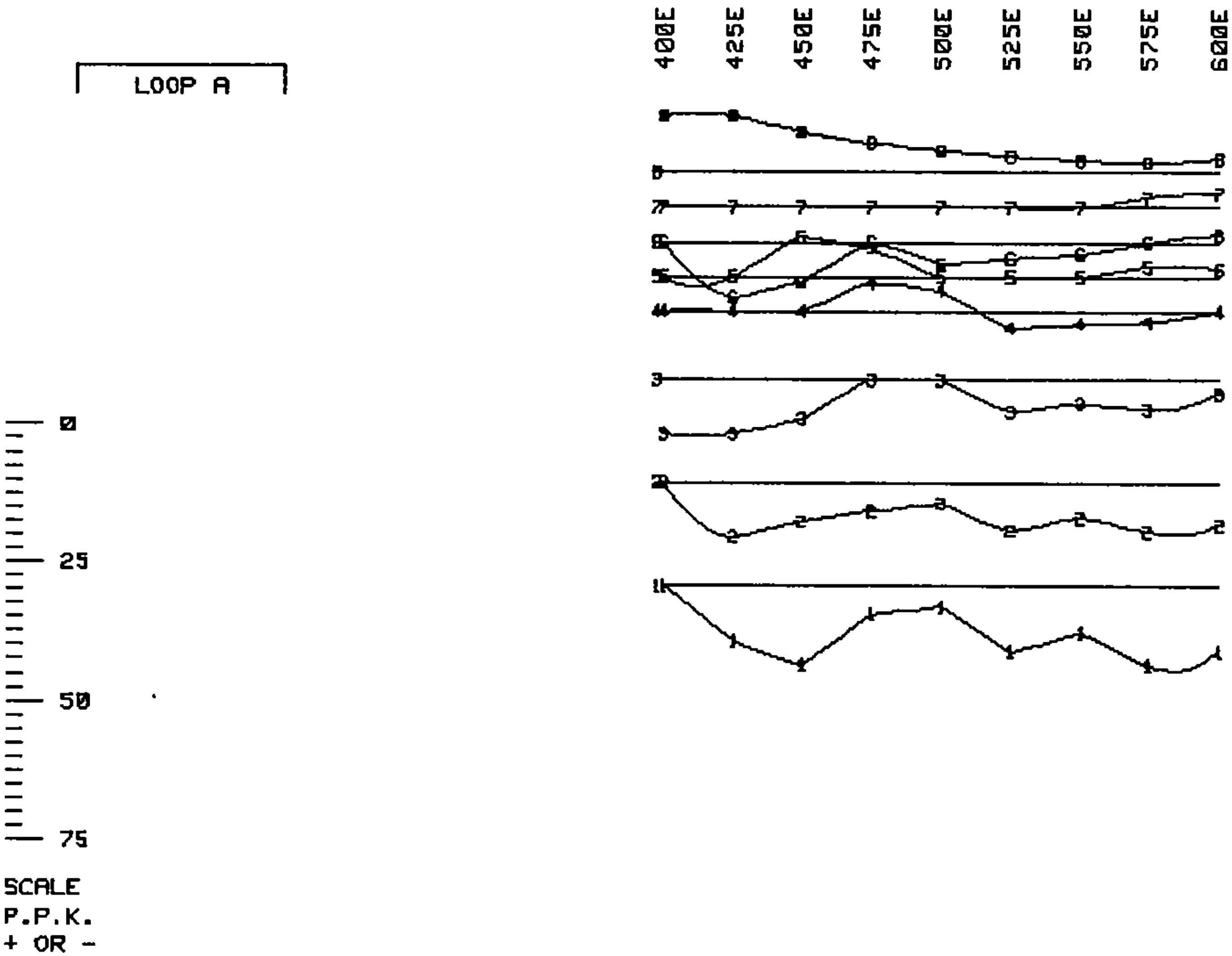
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1250N LOOP A

DATE: DEC/87

FIG.: 23

LOOP A



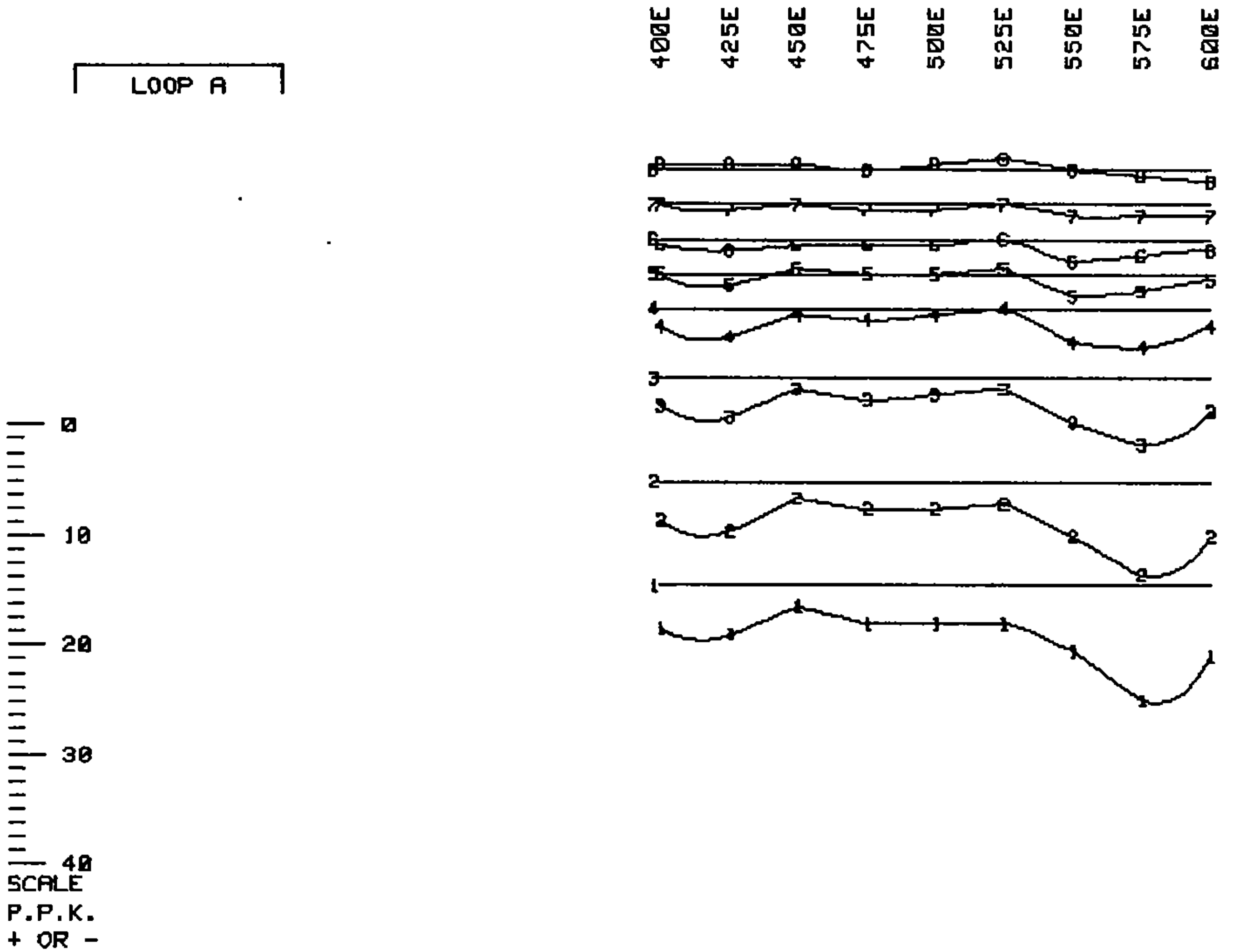
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1250N LOOP A

DATE: DEC/87 | FIG.: 24

WHITE GEOPHYSICAL INC.



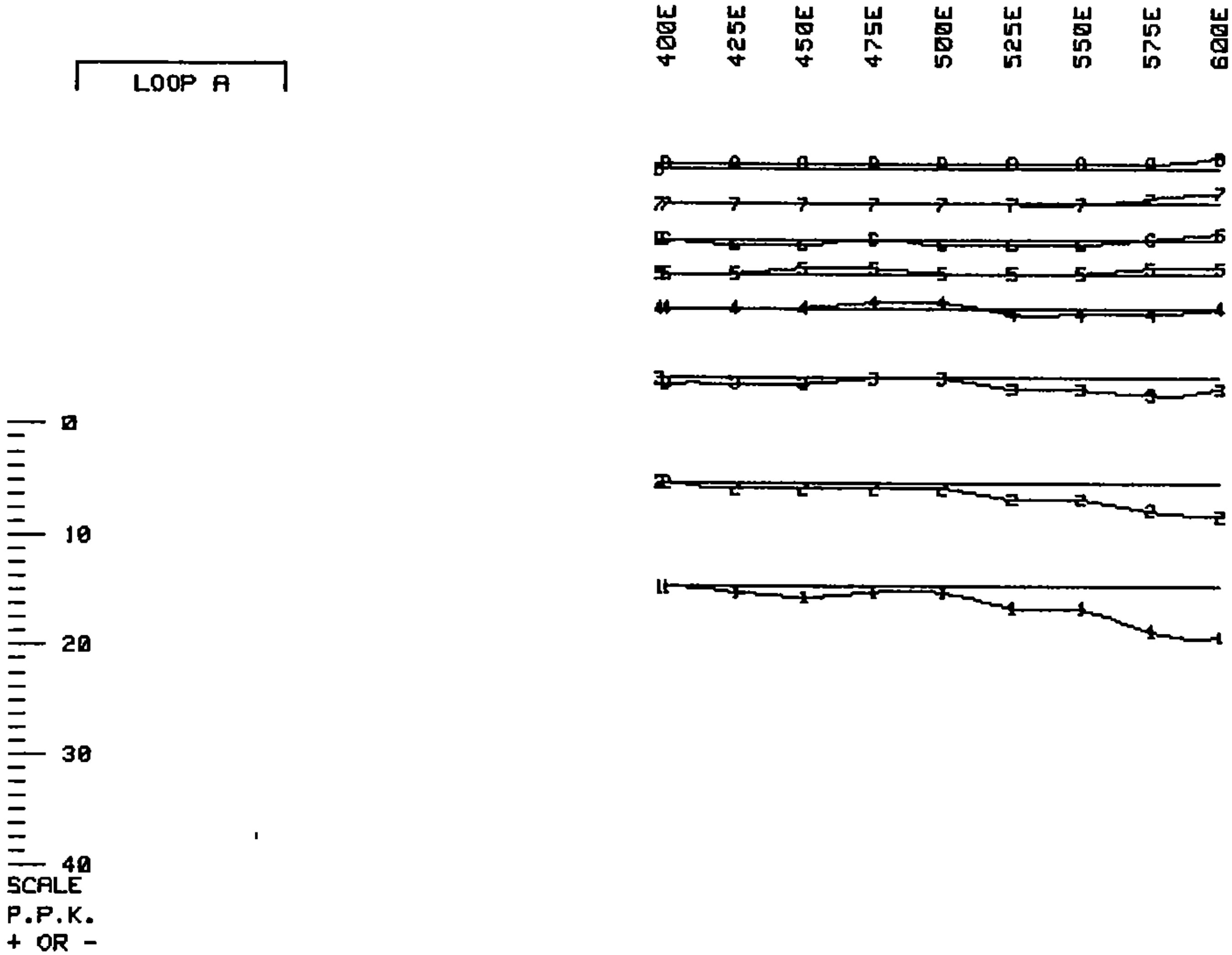
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1250N LOOP A

DATE: DEC/87 | FIG.: 25



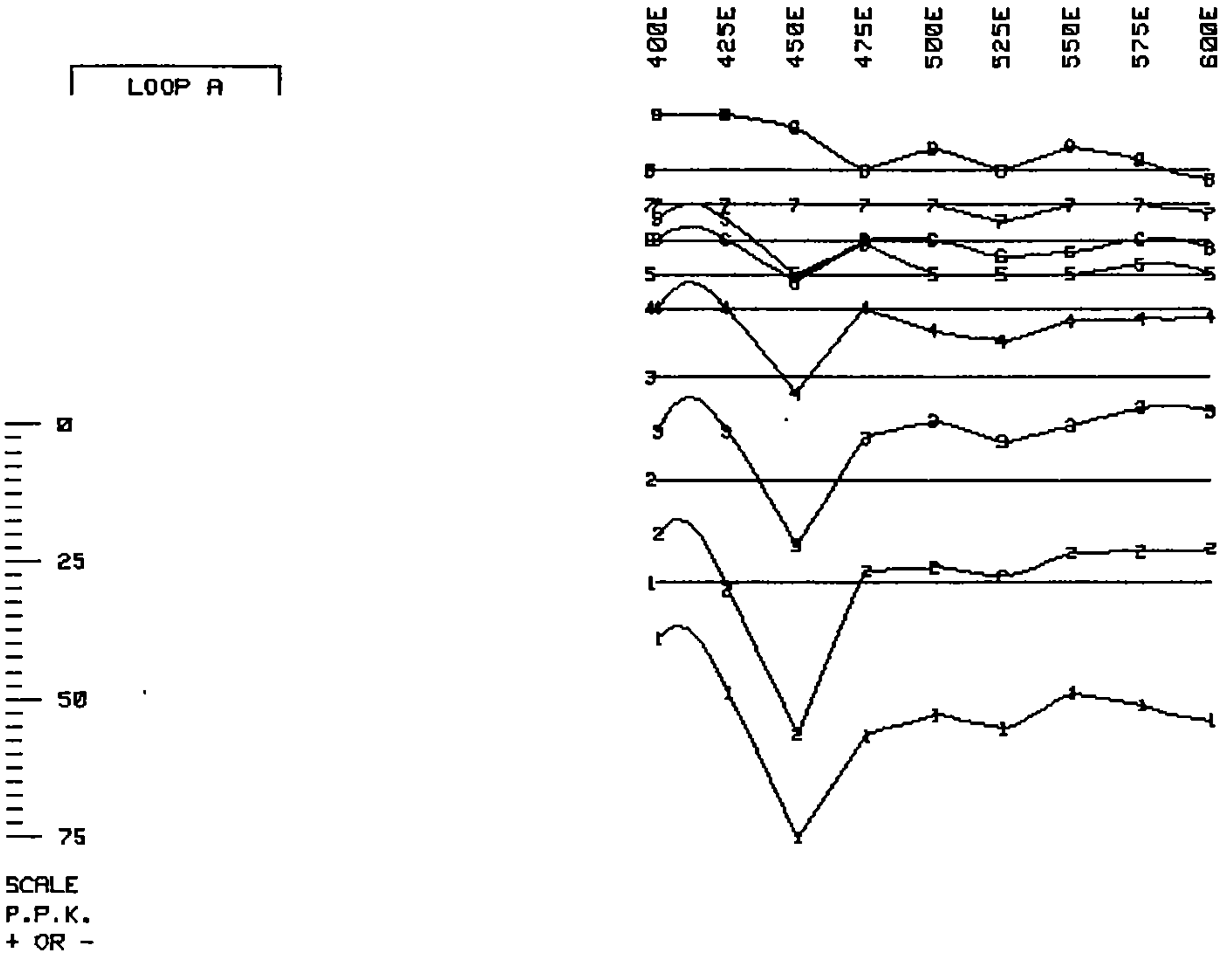
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1250N LOOP A

DATE: DEC/87 | FIG.: 26



CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

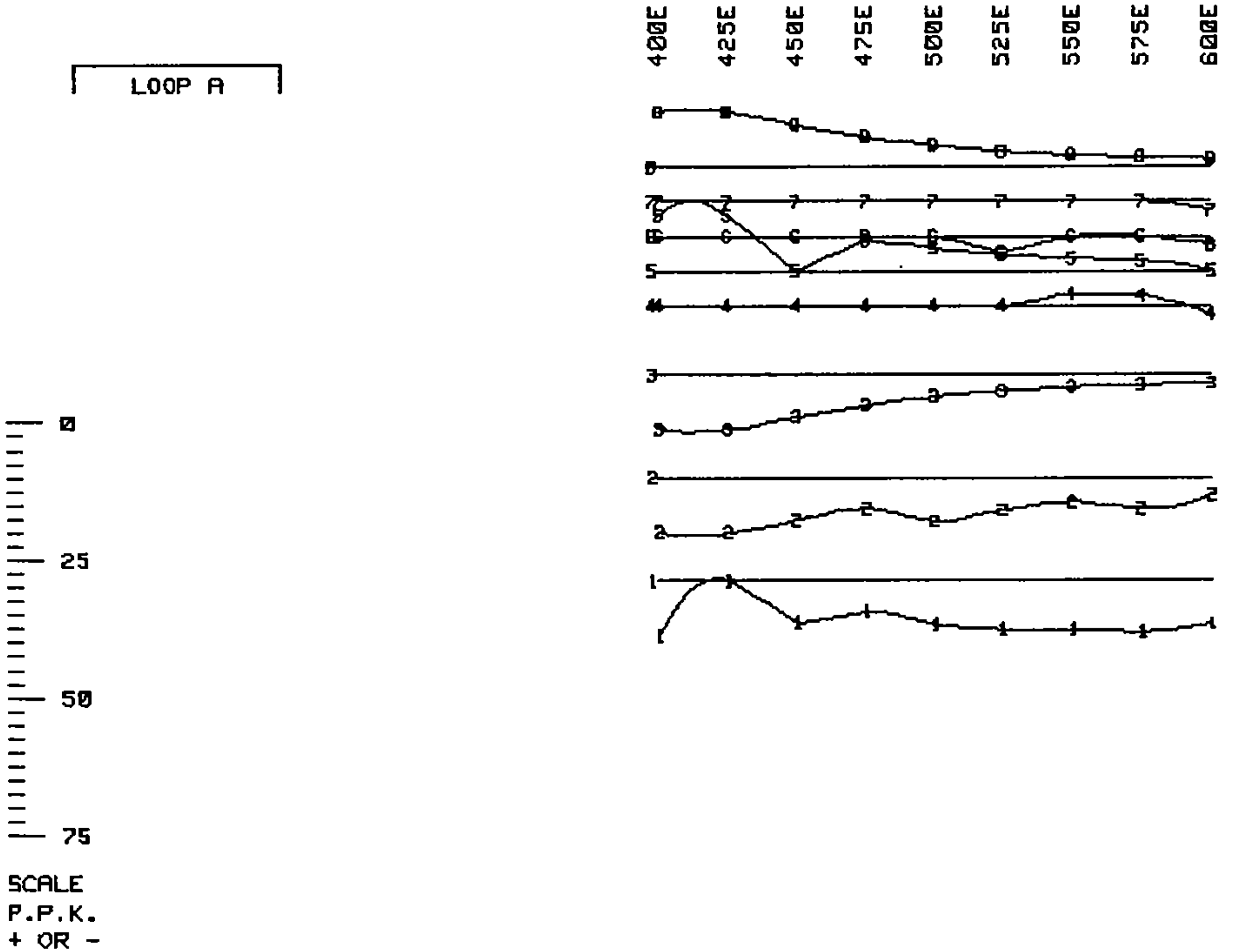
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1200N LOOP A

DATE: DEC/87

FIG.: 27



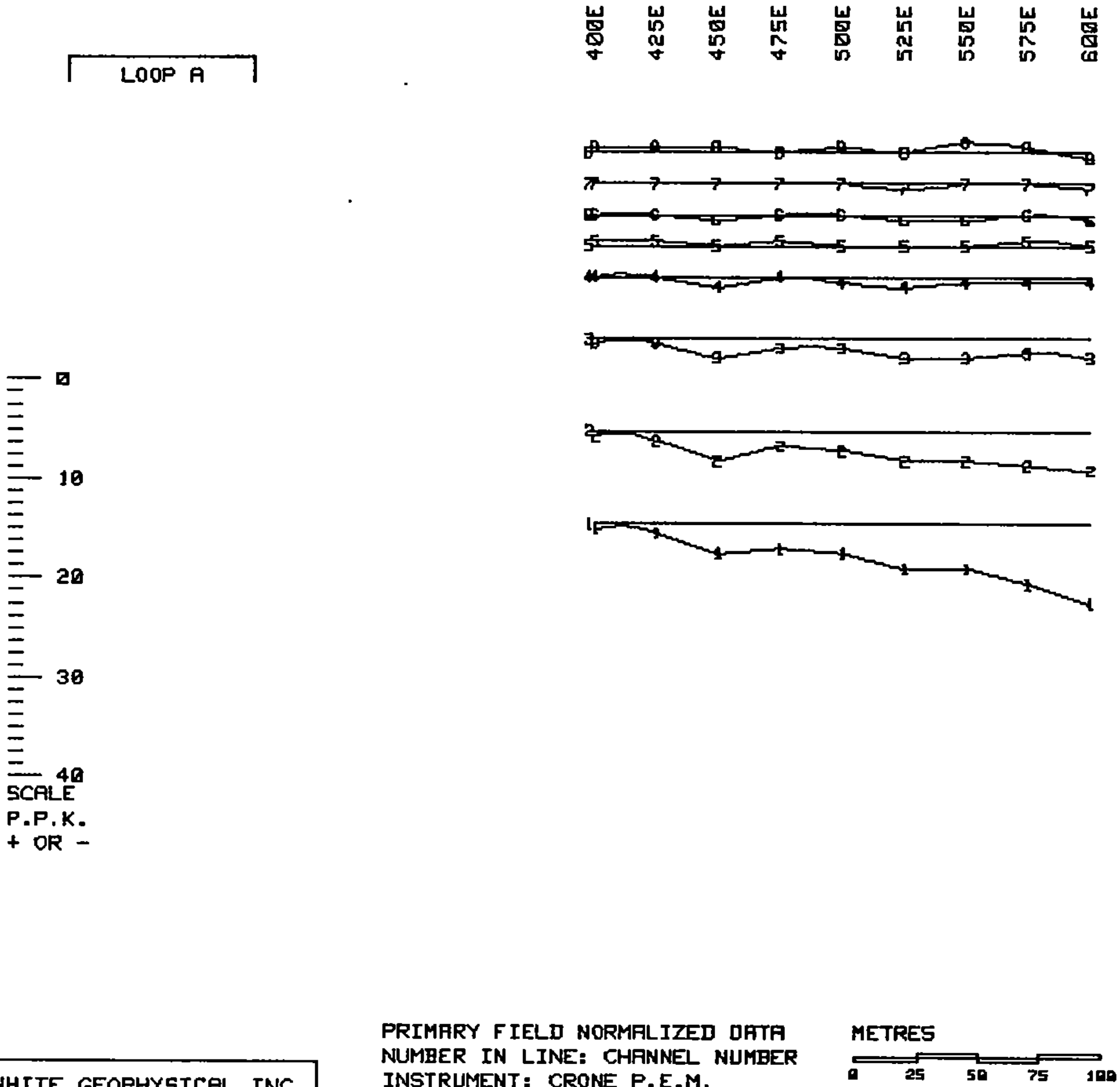
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1200N LOOP A

DATE: DEC/87	FIG.: 28

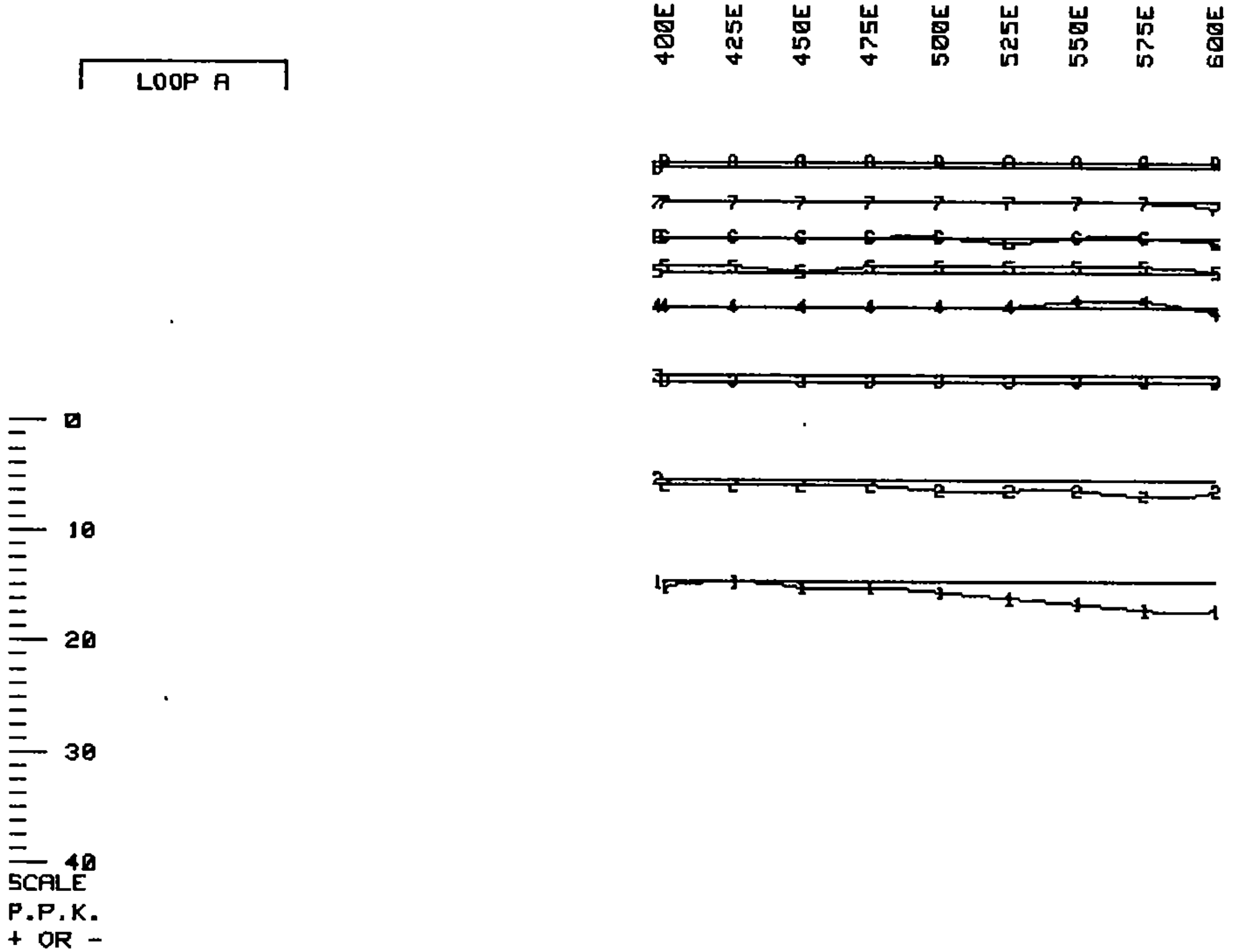


WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1200N LOOP A

DATE: DEC/87

FIG.: 29



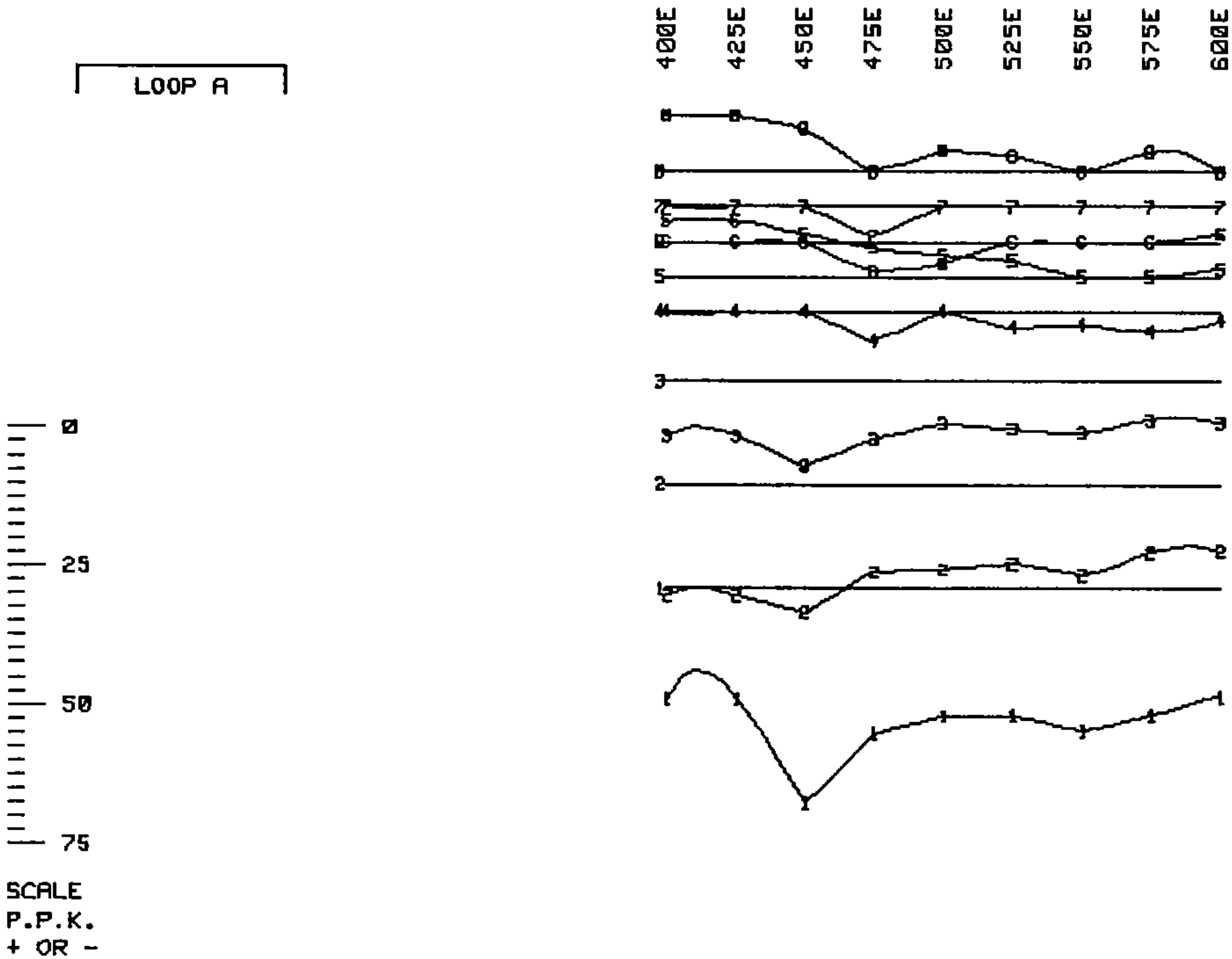
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1200N LOOP A

DATE: DEC/87

FIG.: 30



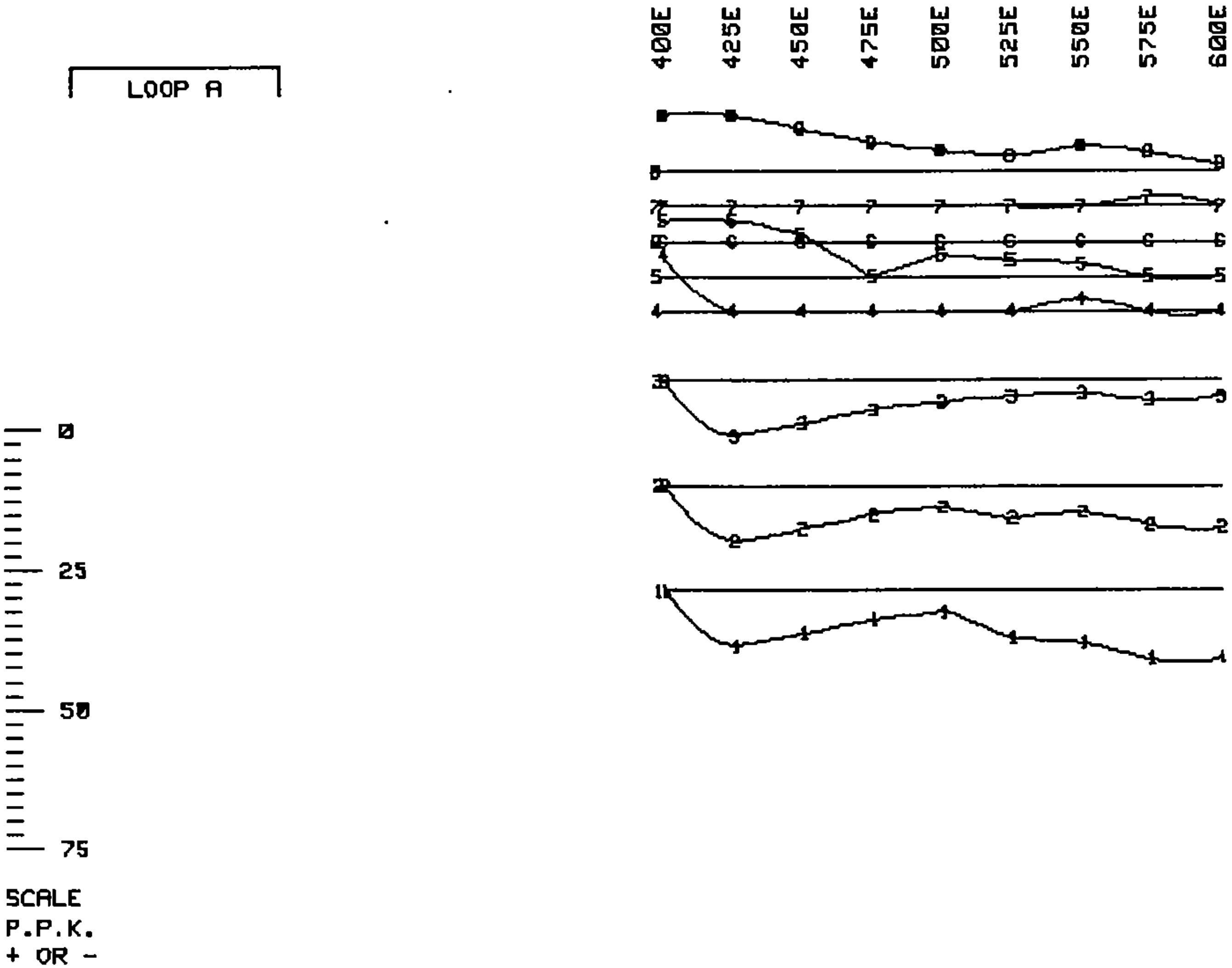
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

HITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1150N LOOP A

DATE: DEC/87	FIG.: 31



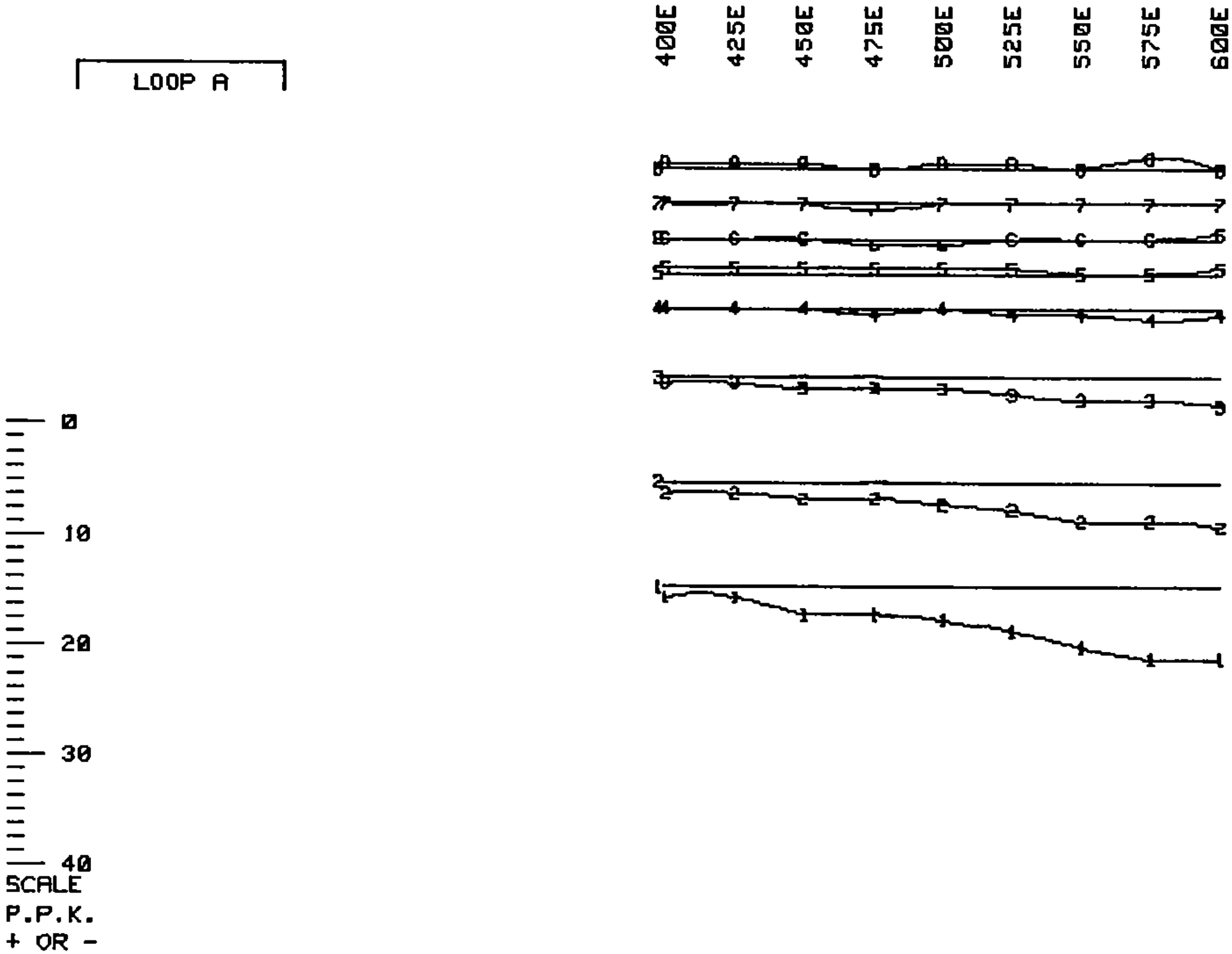
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1150N LOOP A

DATE: DEC/87	FIG.: 32



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

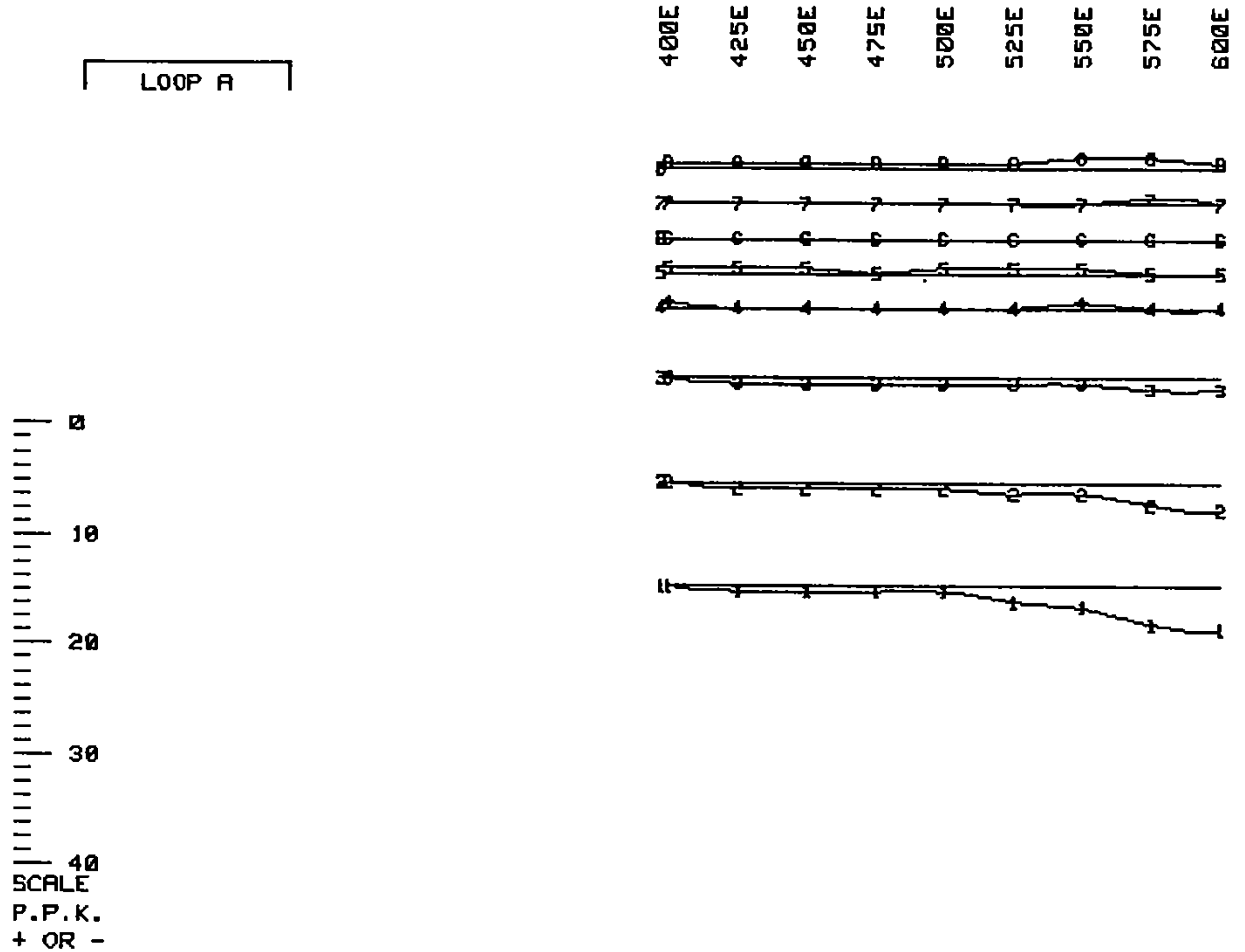
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1150N LOOP A

DATE: DEC/87

FIG.: 33



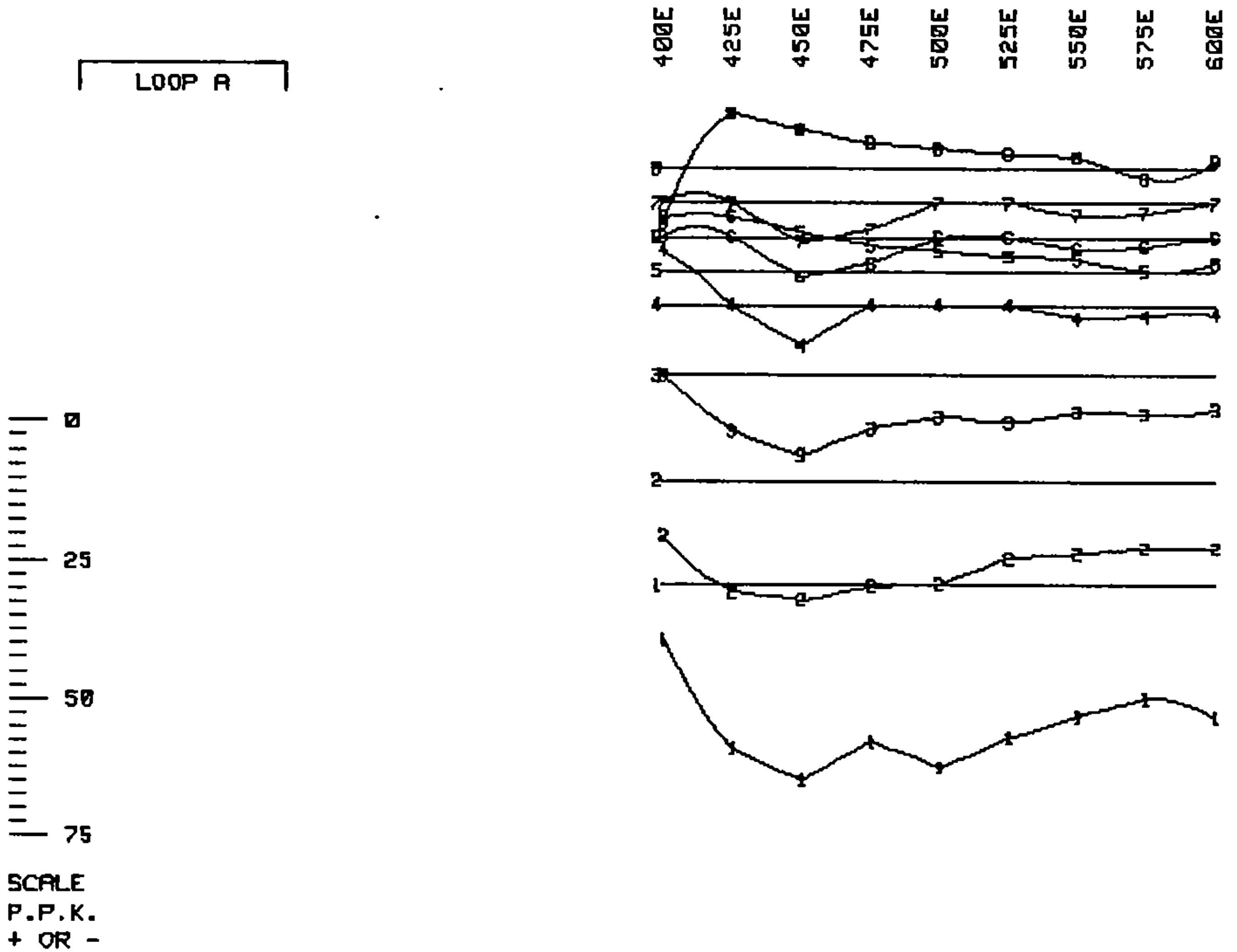
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1150N LOOP A

DATE: DEC/87	FIG.: 34



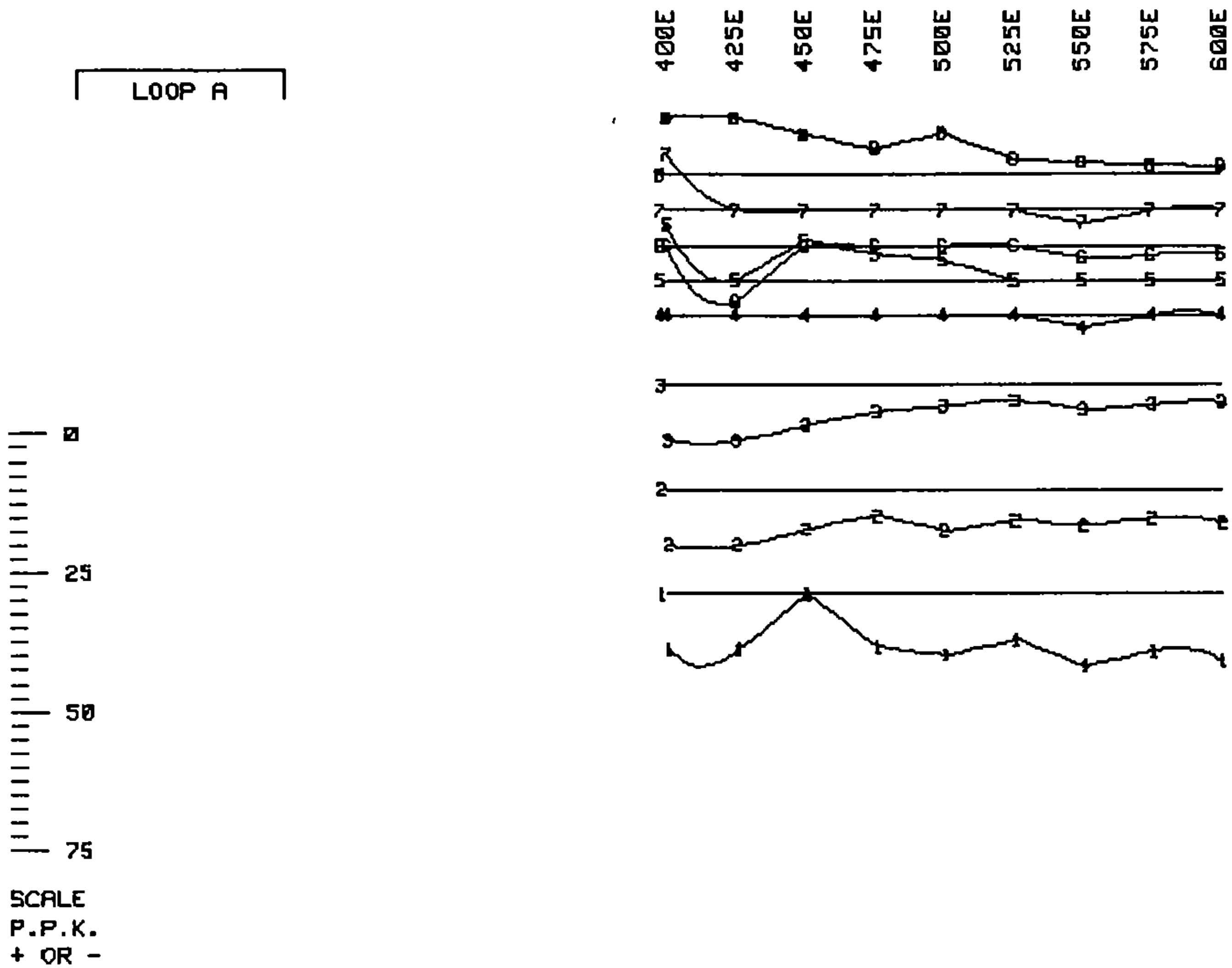
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1100N LOOP A

DATE: DEC/87 | FIG.: 35



CONSTANT GAIN DATA, G-( )00%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

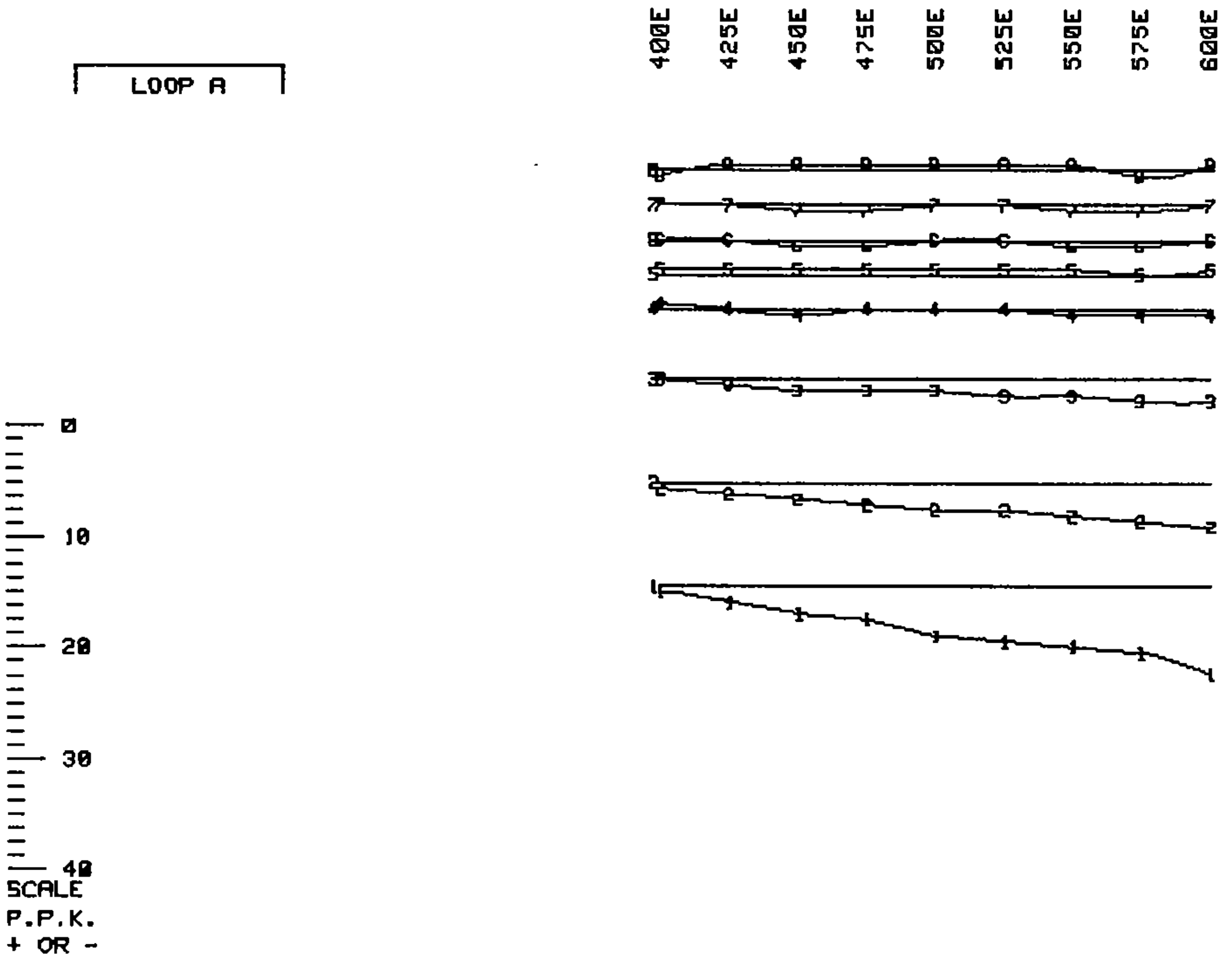
METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1100N LOOP A

DATE: DEC/87

FIG.: 36

WHITE GEOPHYSICAL INC.



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

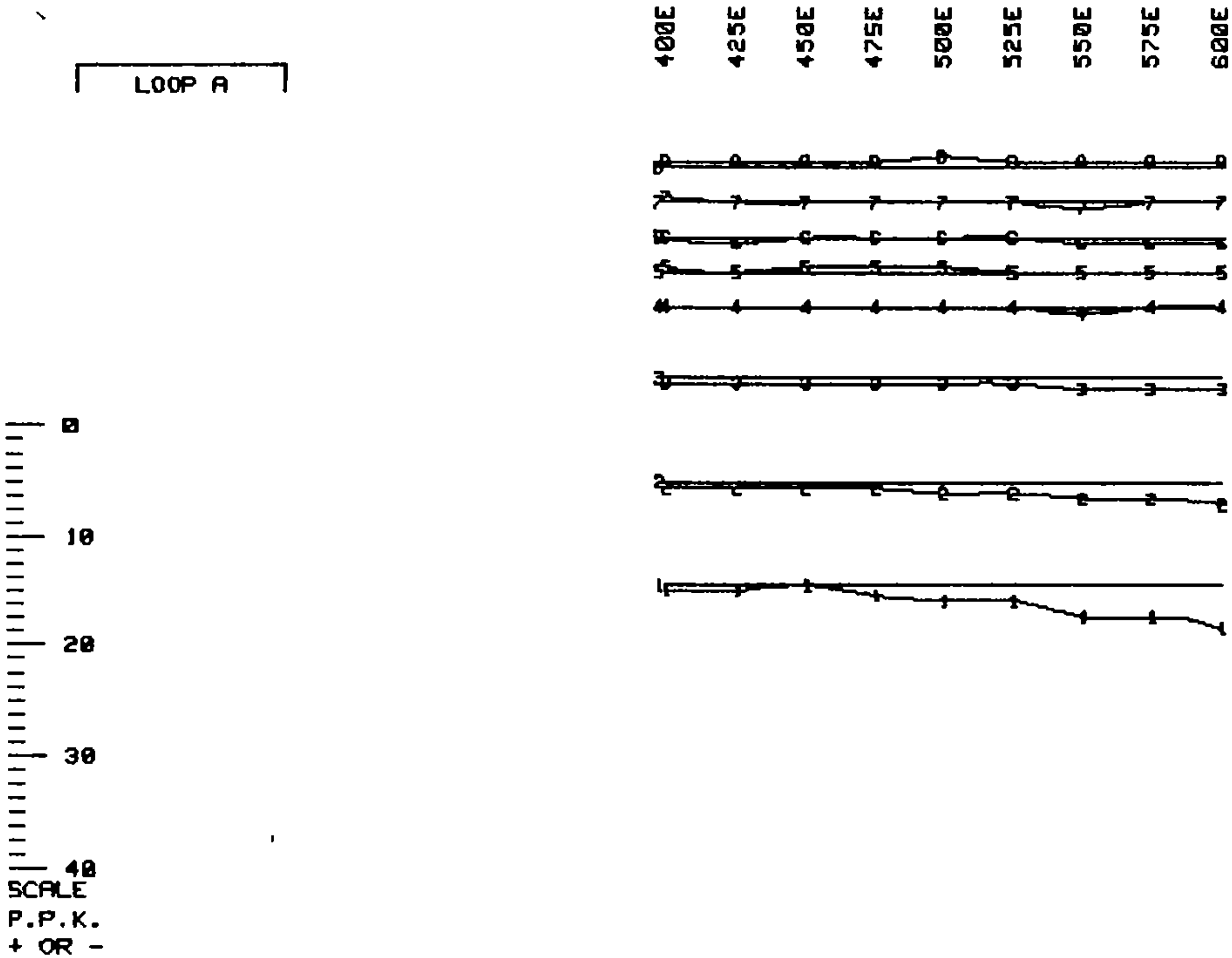
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1100N LOOP A

DATE: DEC/87

FIG.: 37



PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

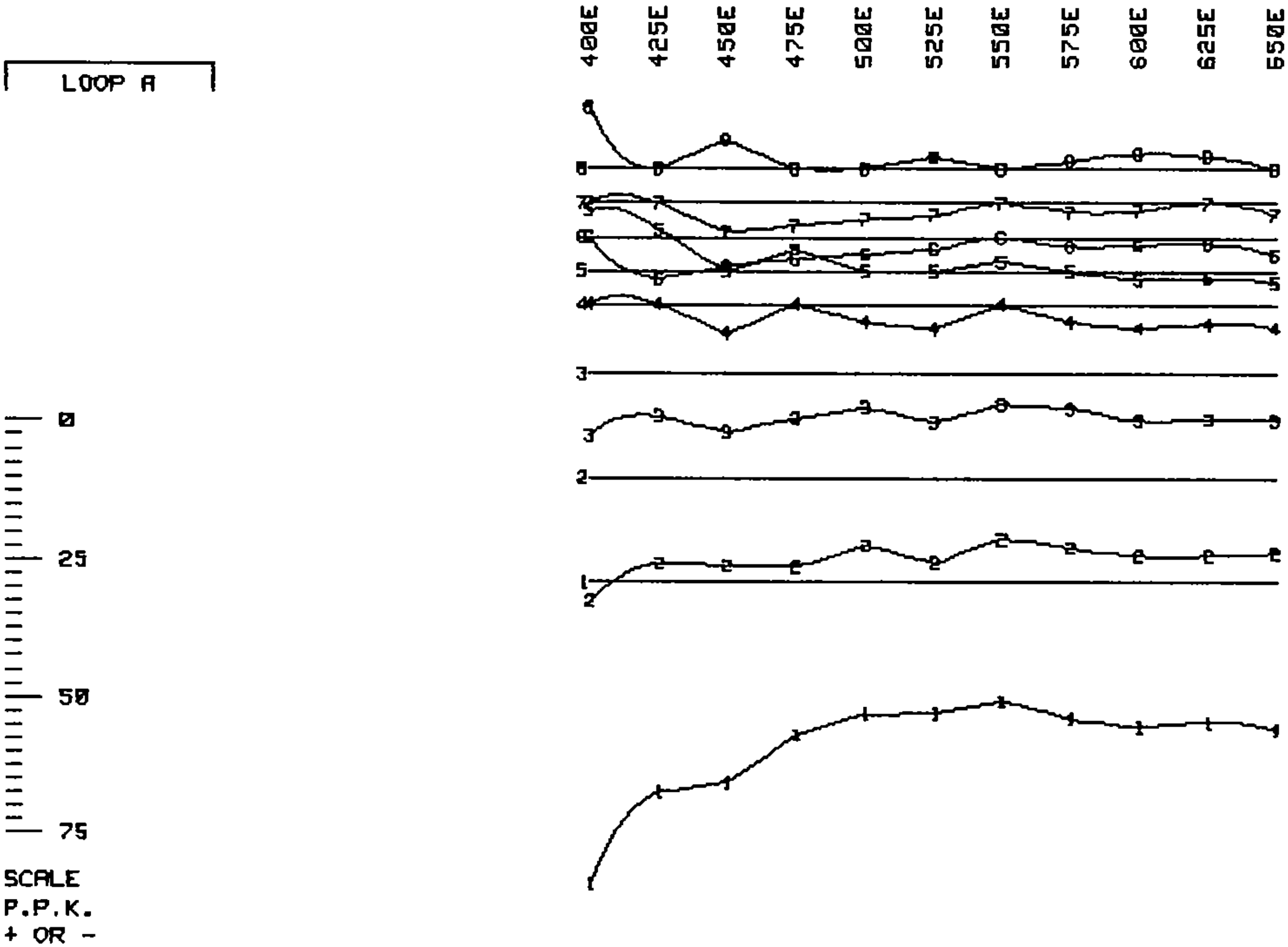
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1100N LOOP A

DATE: DEC/87

FIG.: 38



CONSTANT GAIN DATA, G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

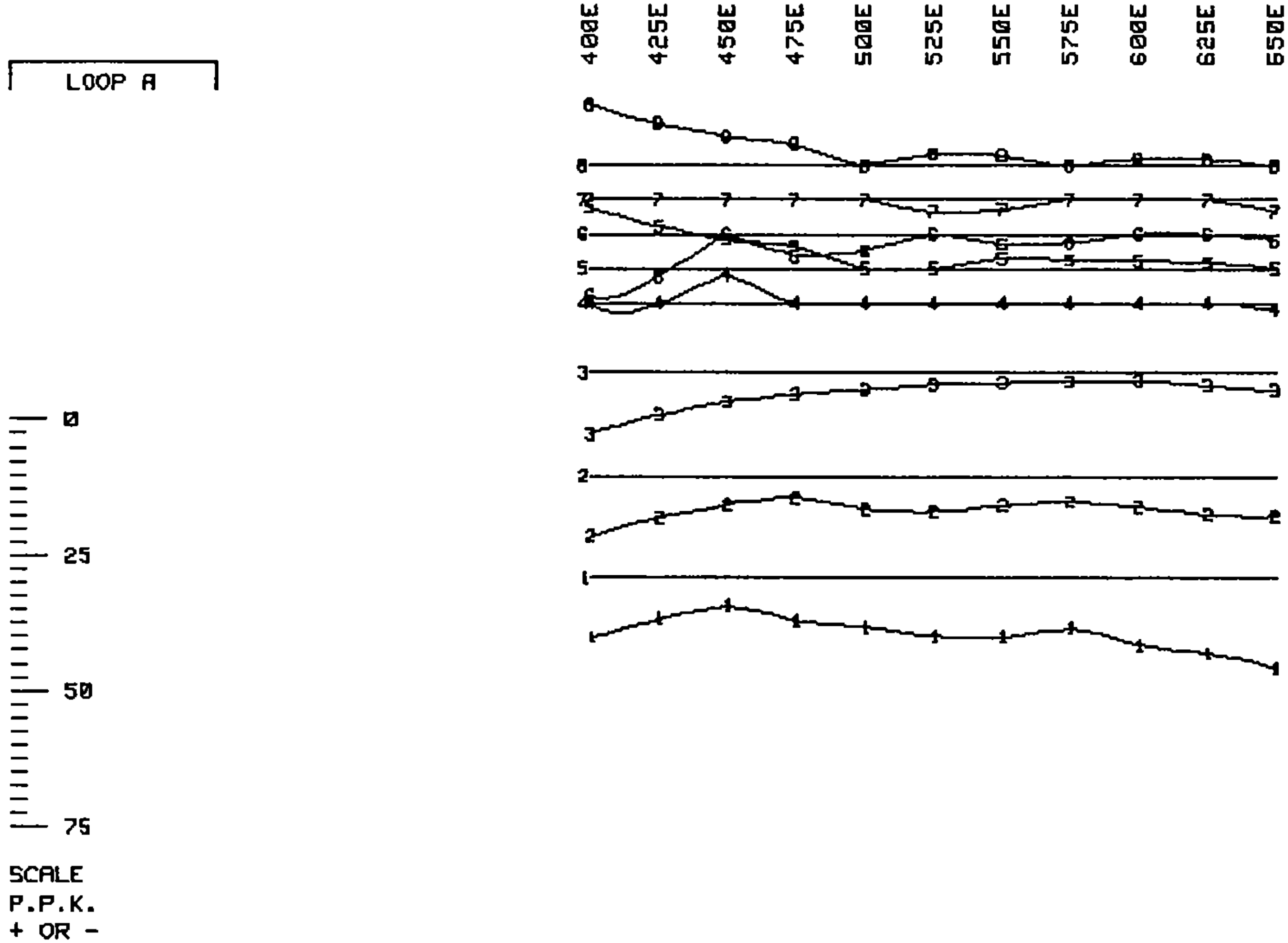
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1050N LOOP A

DATE: DEC/87

FIG.: 39



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

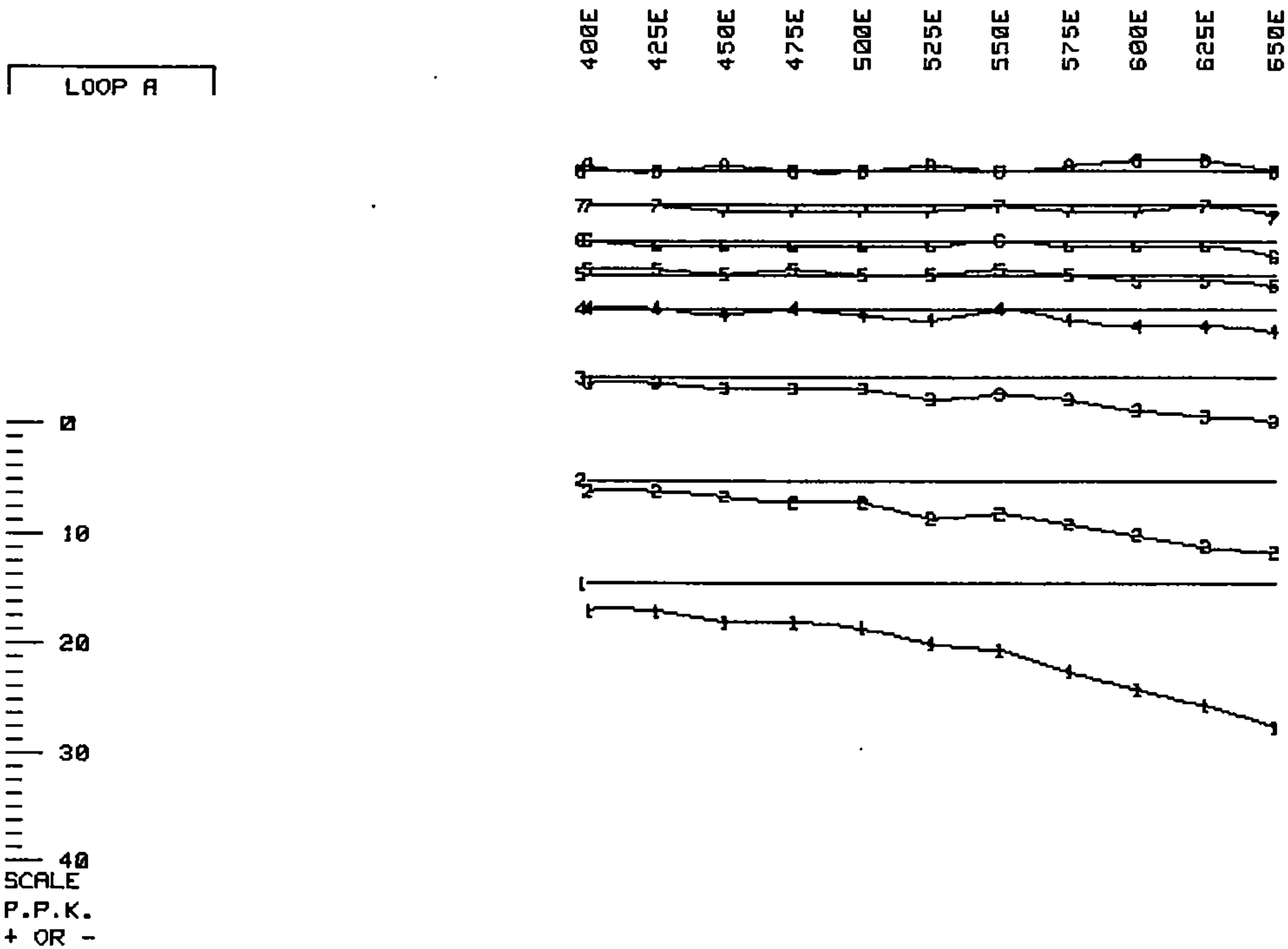
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1050N LOOP A

DATE: DEC/87

FIG.: 40



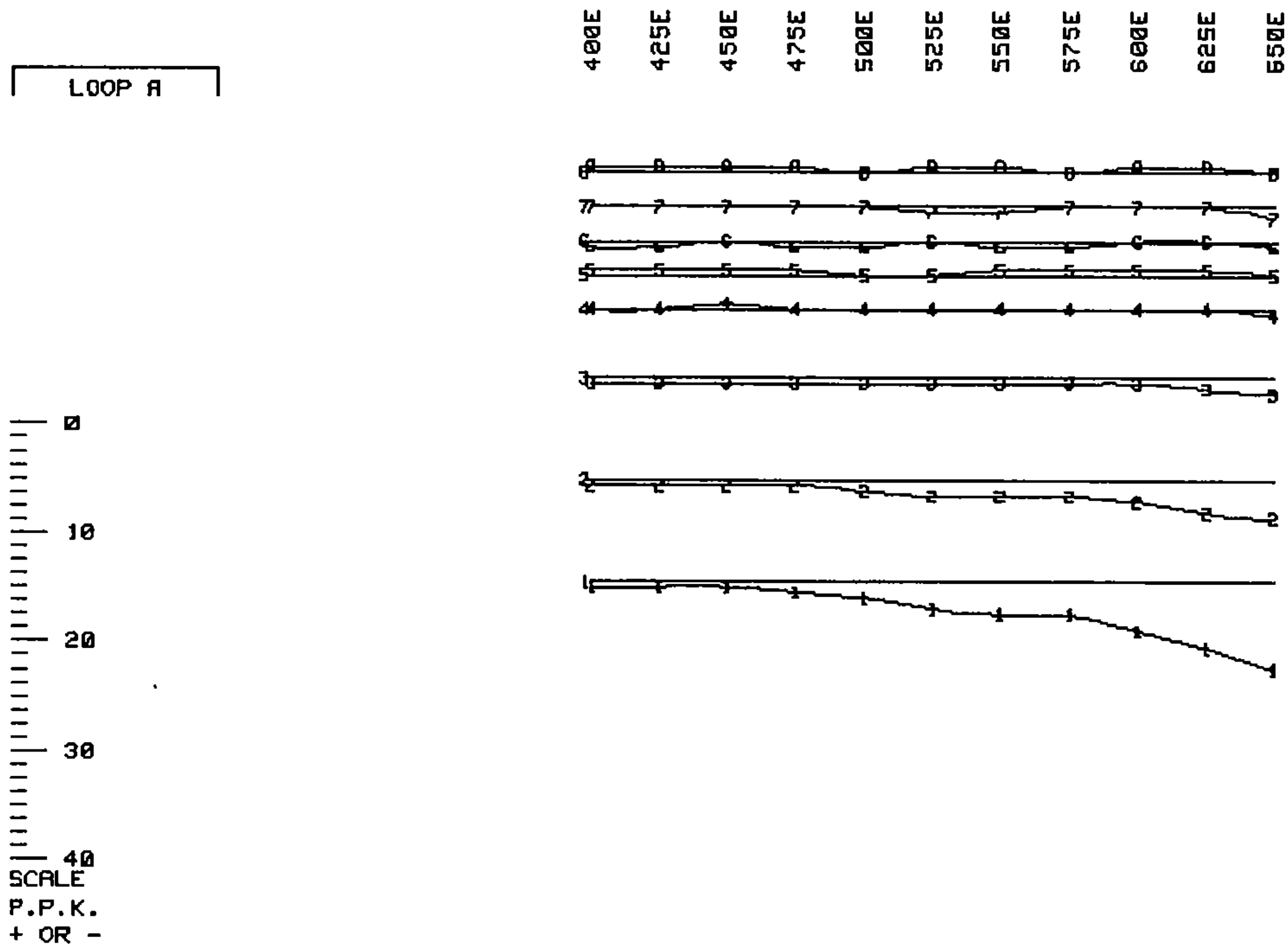
PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1050N LOOP A

DATE: DEC/87	FIG.: 41

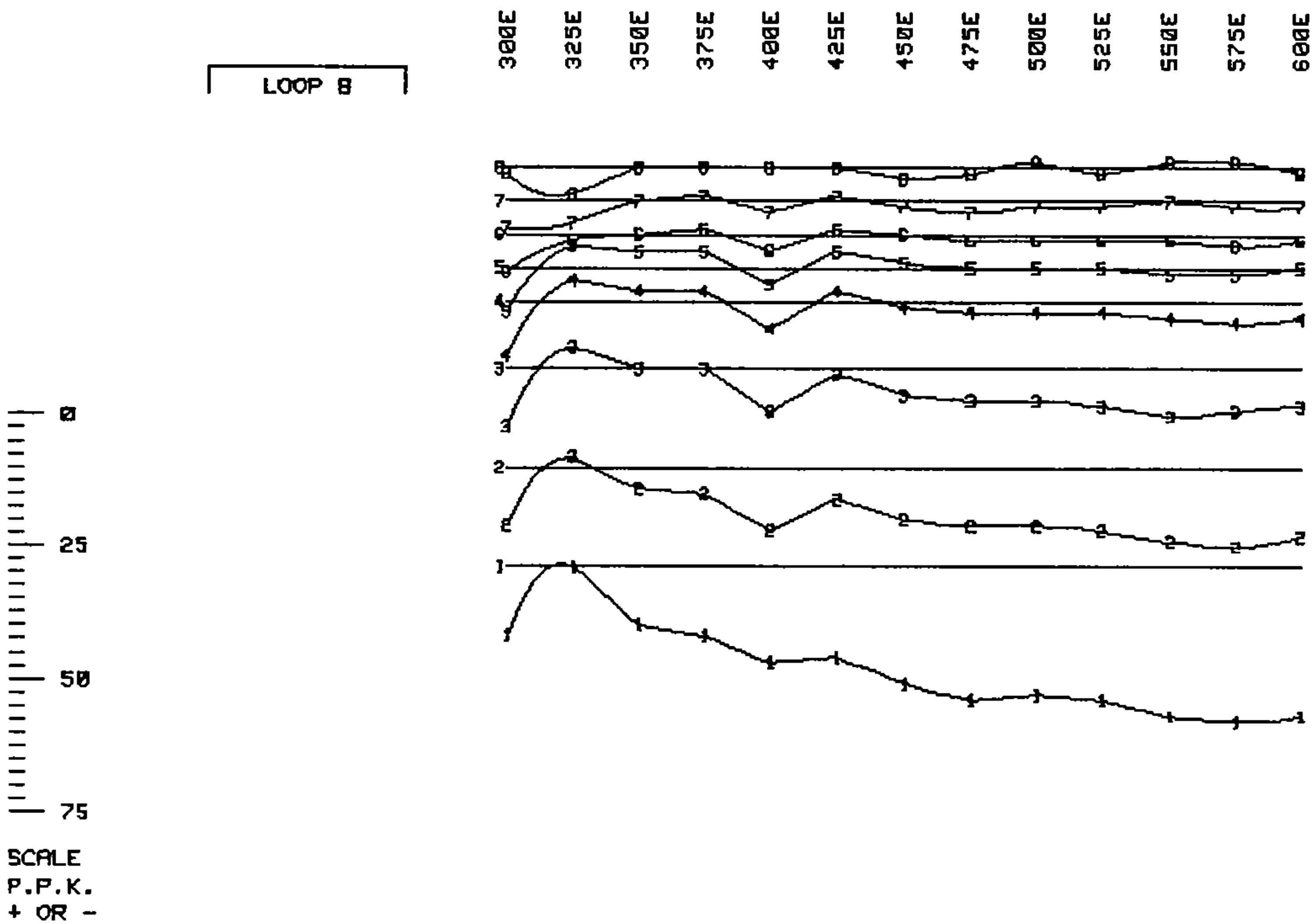


PRIMARY FIELD NORMALIZED DATA
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1050N LOOP A

DATE: DEC/87 | FIG.: 42



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

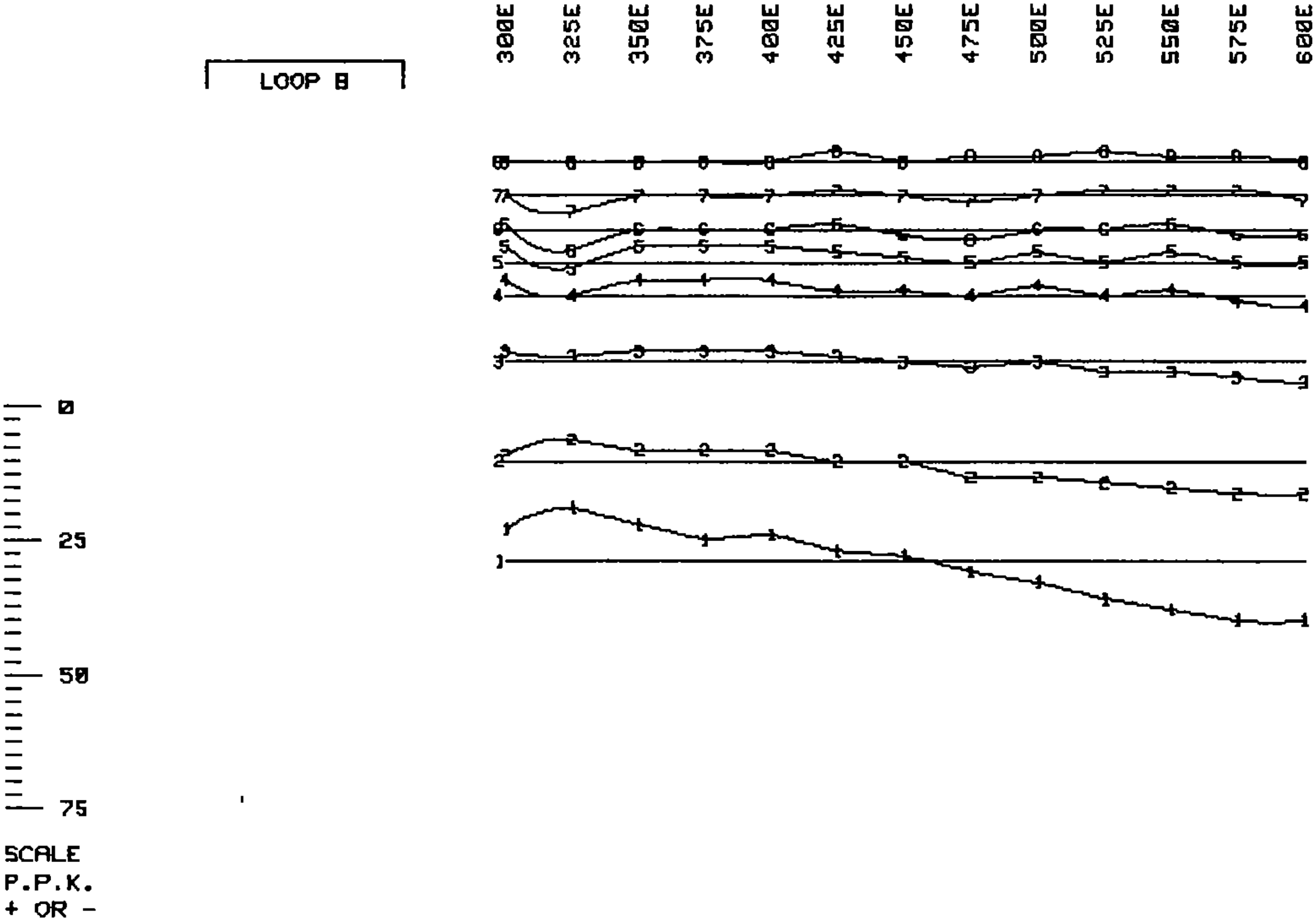
METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 1000N LOOP B

WHITE GEOPHYSICAL INC.

DATE: DEC/87

FIG.: 43



CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

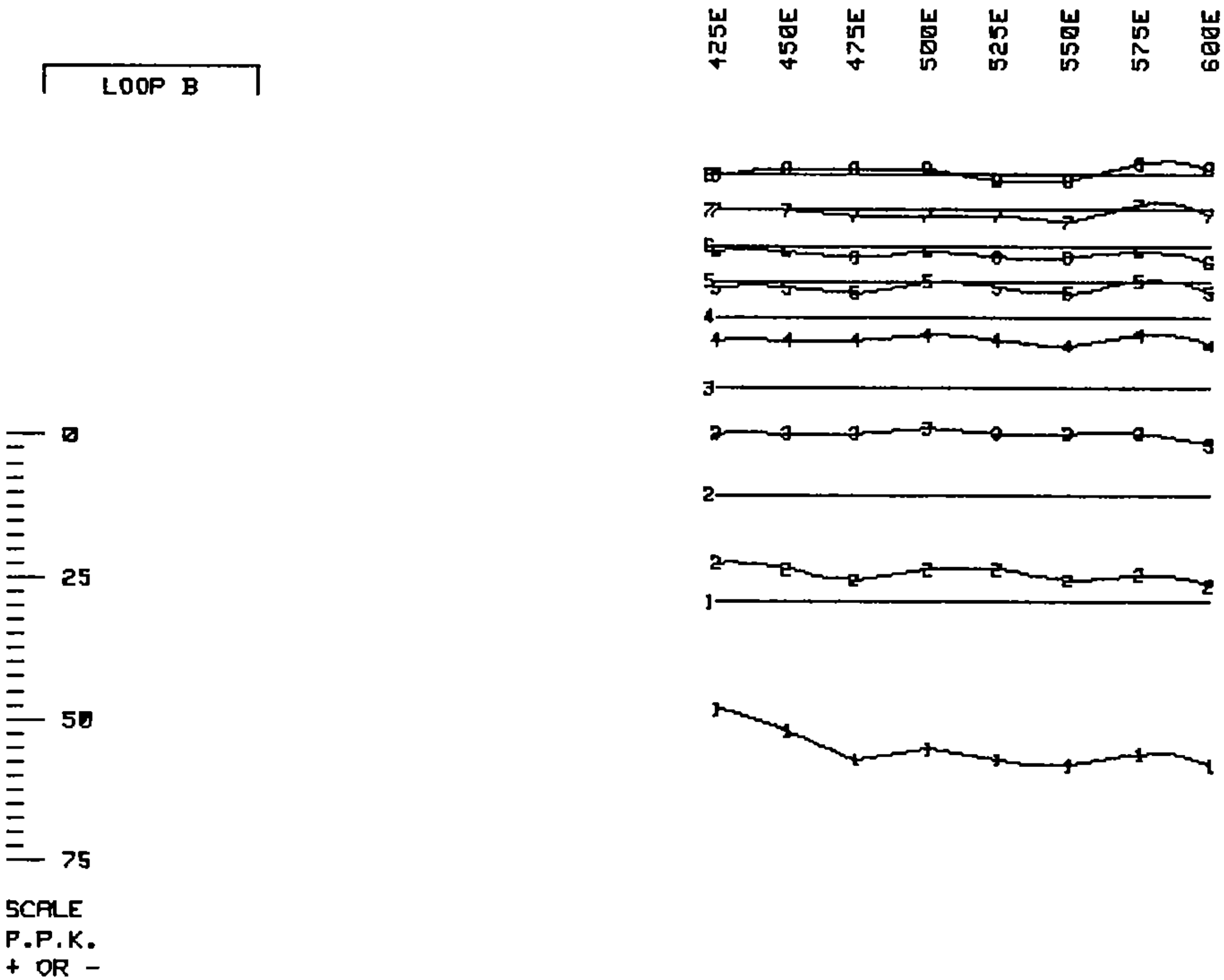
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 1000N LOOP B

DATE: DEC/87

FIG.: 44



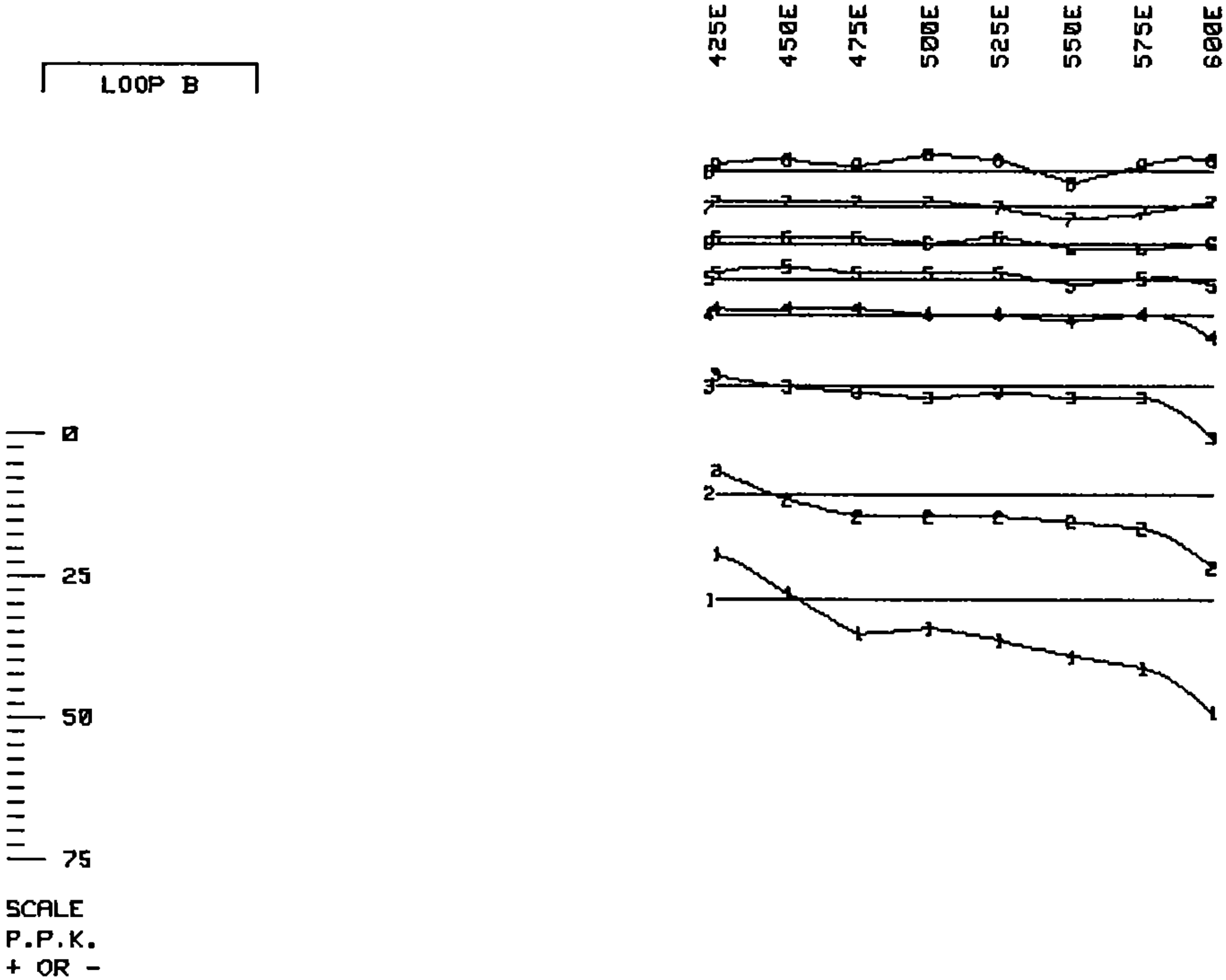
CONSTANT GAIN DATA, G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 950N LOOP B

DATE: DEC/87	FIG.: 45



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

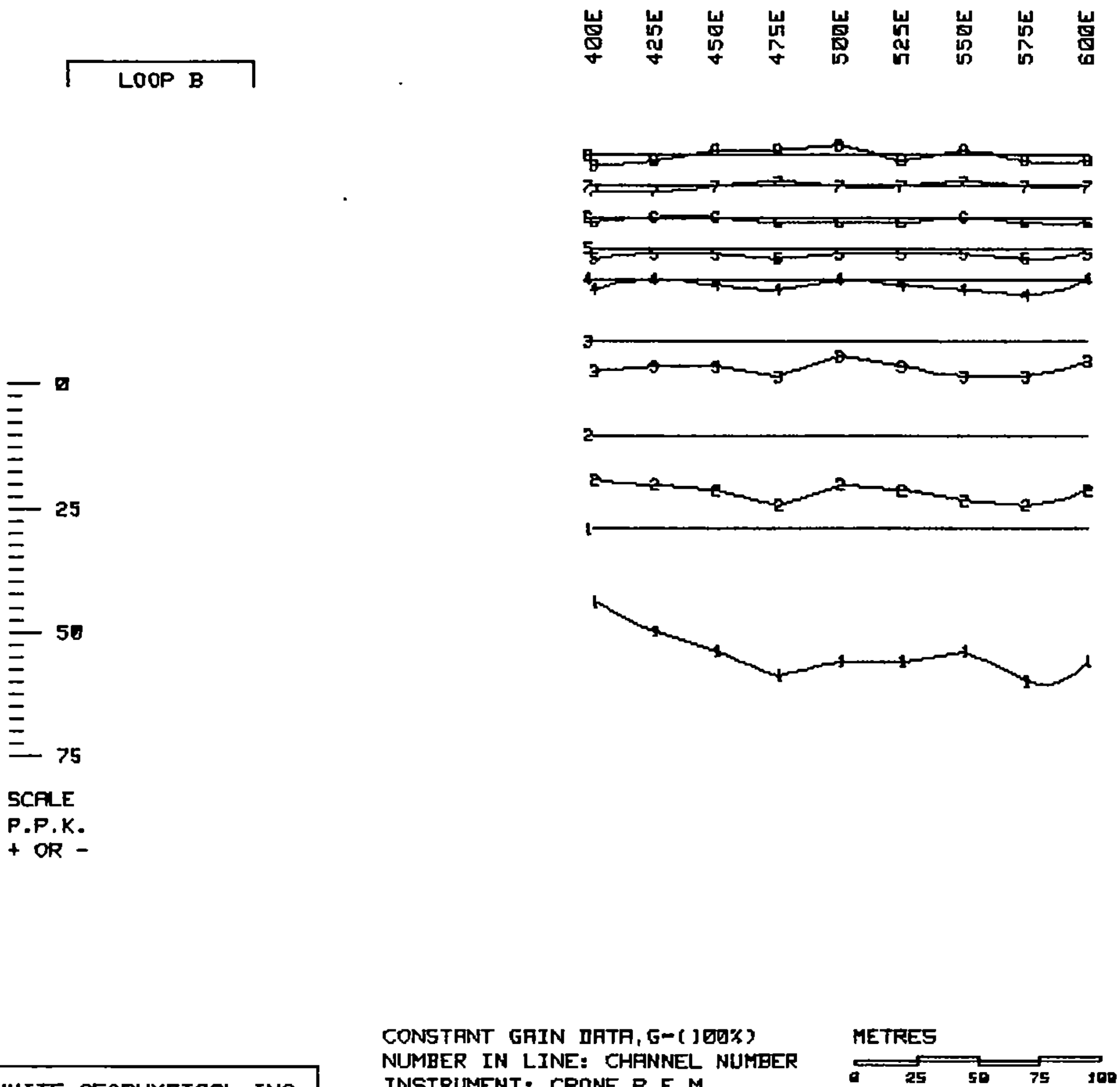
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 950N LOOP B

DATE: DEC/87

FIG.: 46



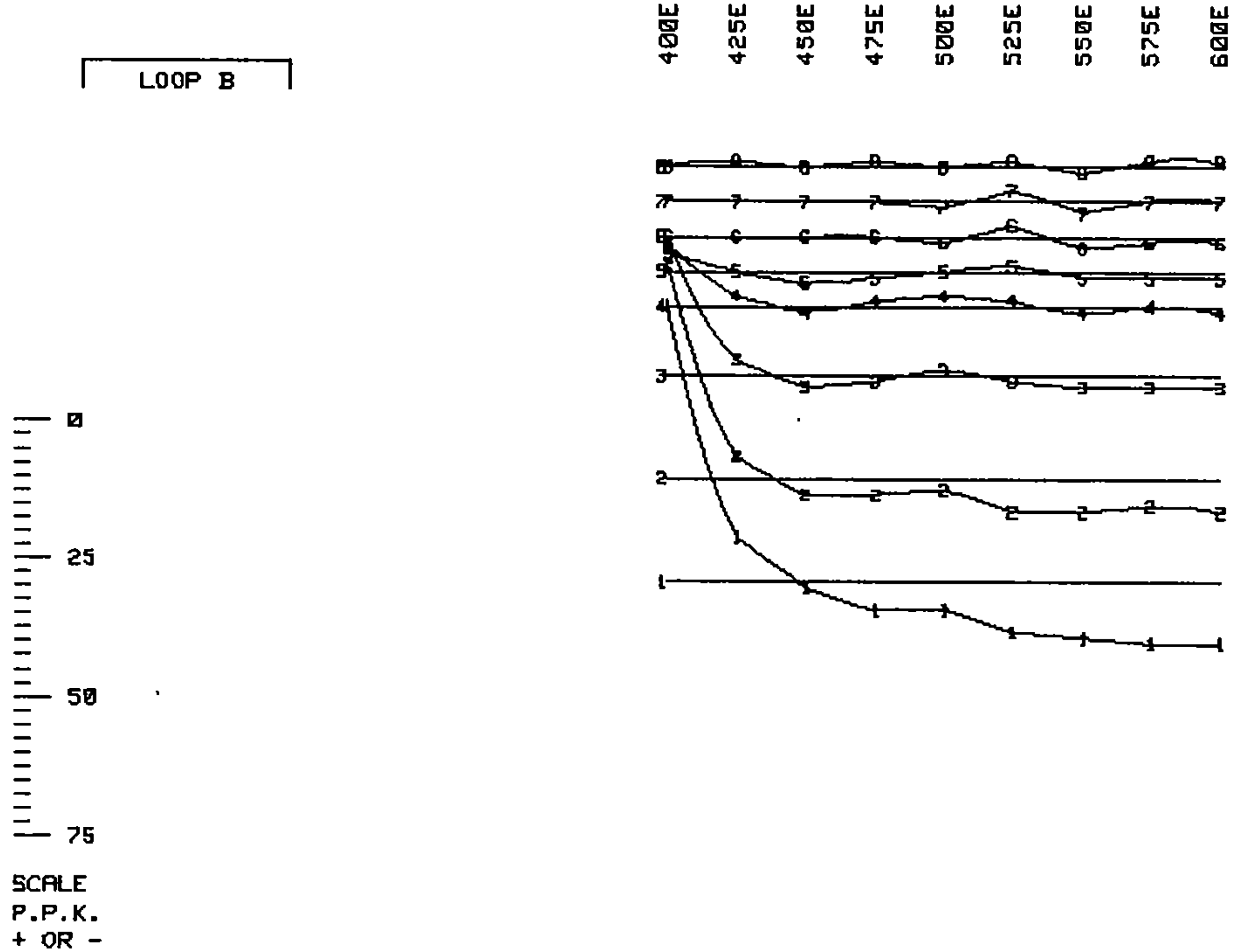
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 900N LOOP B

WHITE GEOPHYSICAL INC.

DATE: DEC/87

FIG.: 47



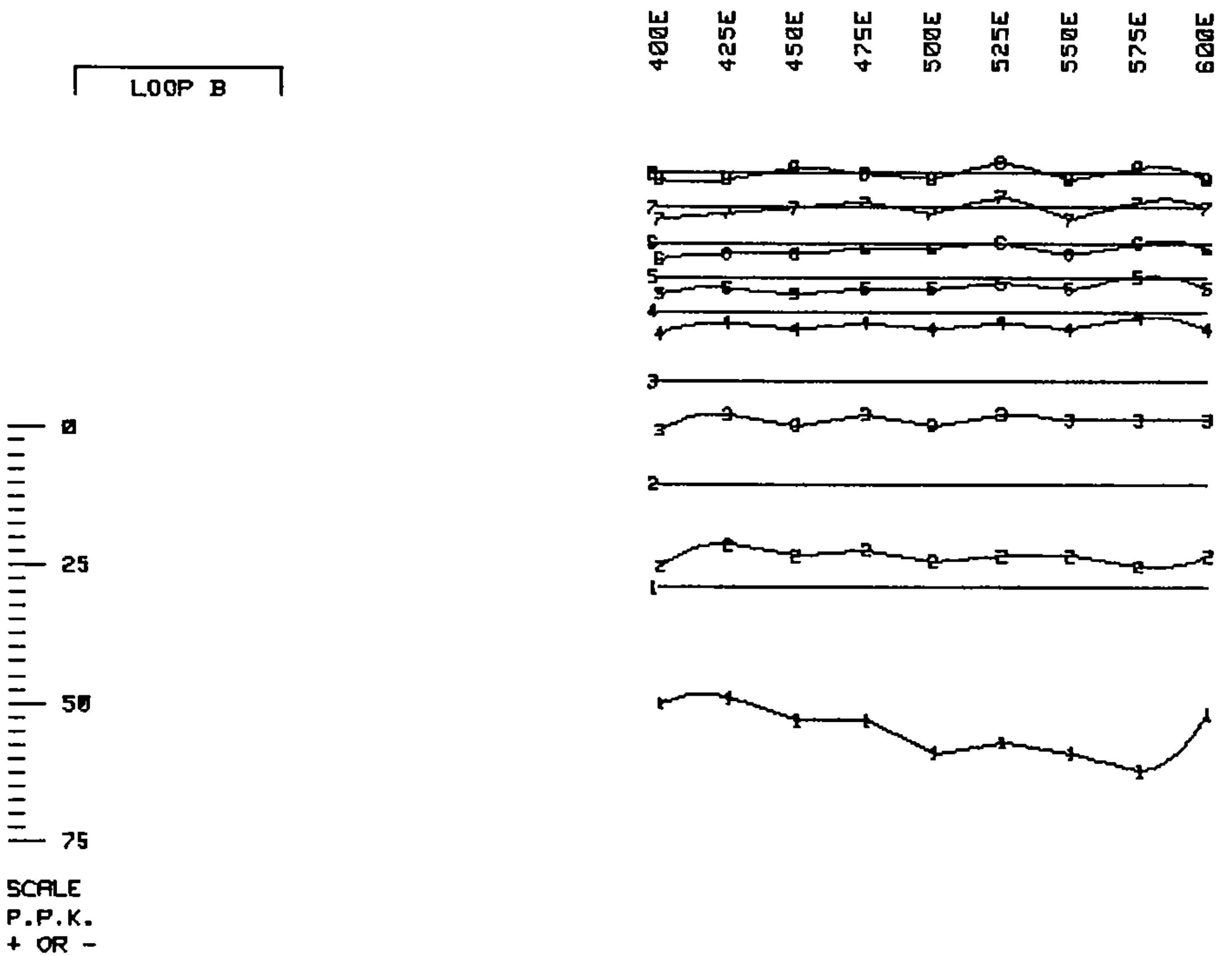
CONSTANT GAIN DATA, G=( )100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 900N LOOP B

DATE: DEC/87	FIG.: 48



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

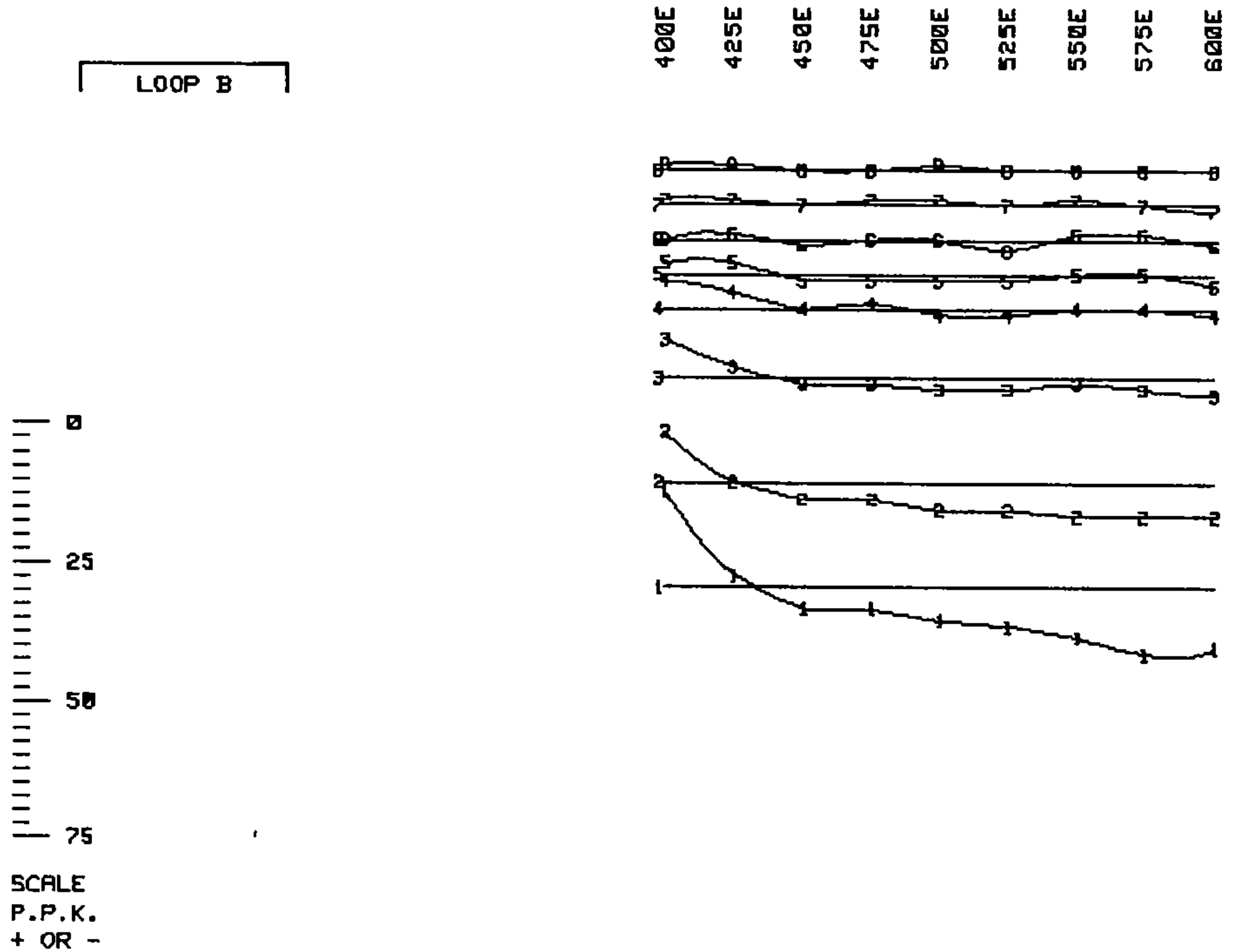
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 850N LOOP B

DATE: DEC/87

FIG.: 49

LOOP B



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

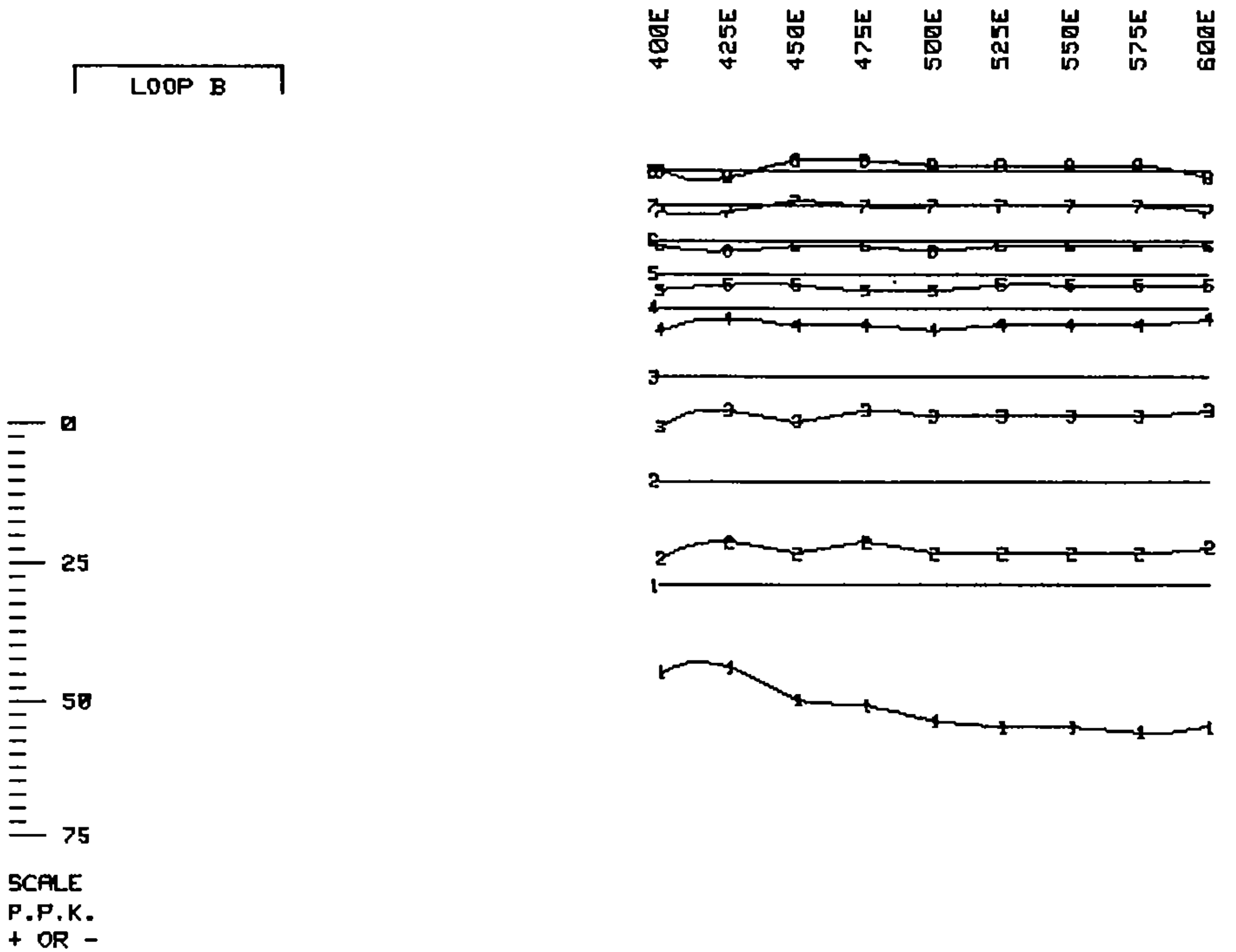
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 850N LOOP B

DATE: DEC/87

FIG.: 50



CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

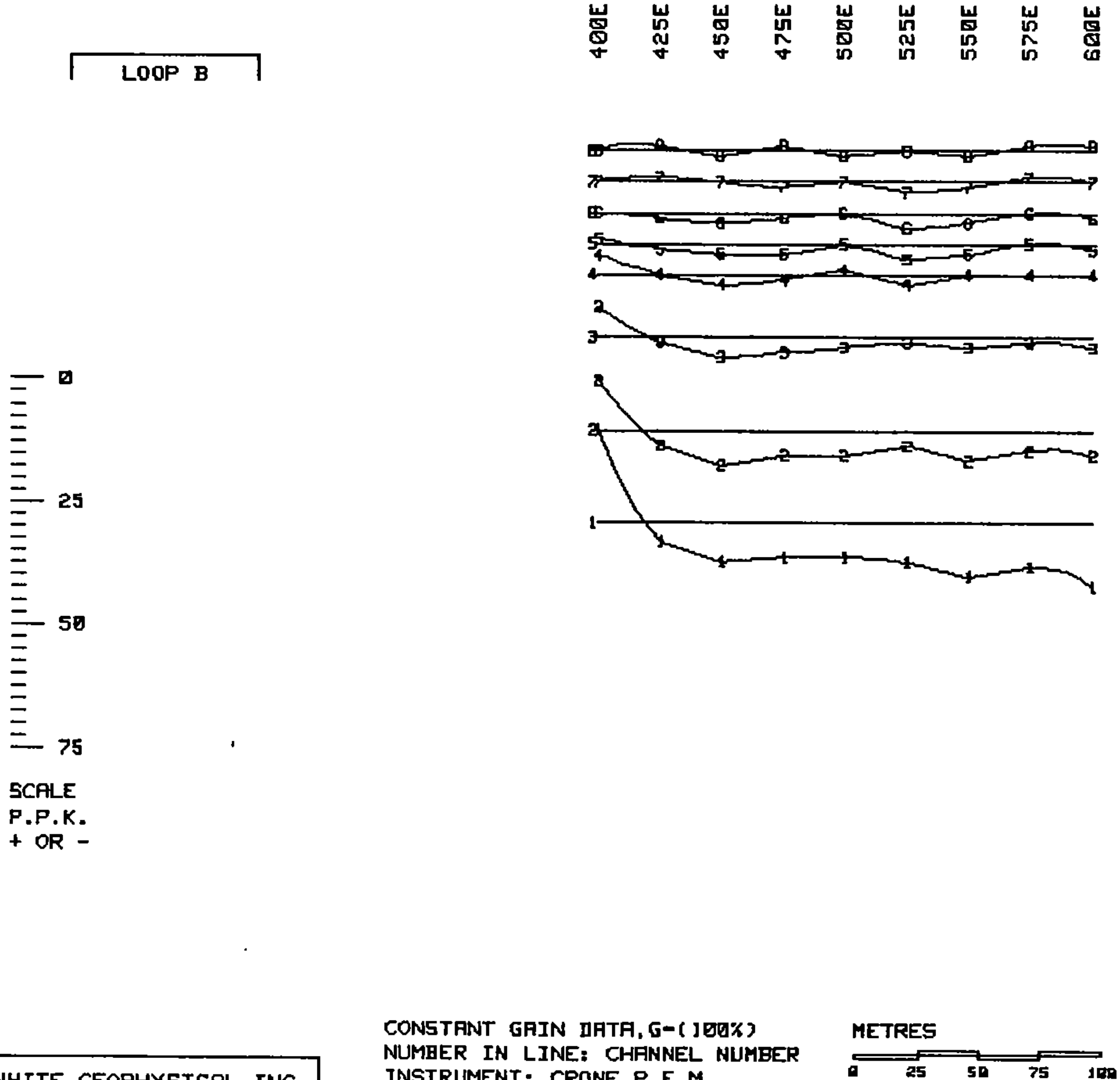
METRES 0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 800N LOOP B

DATE: DEC/87

FIG.: 51

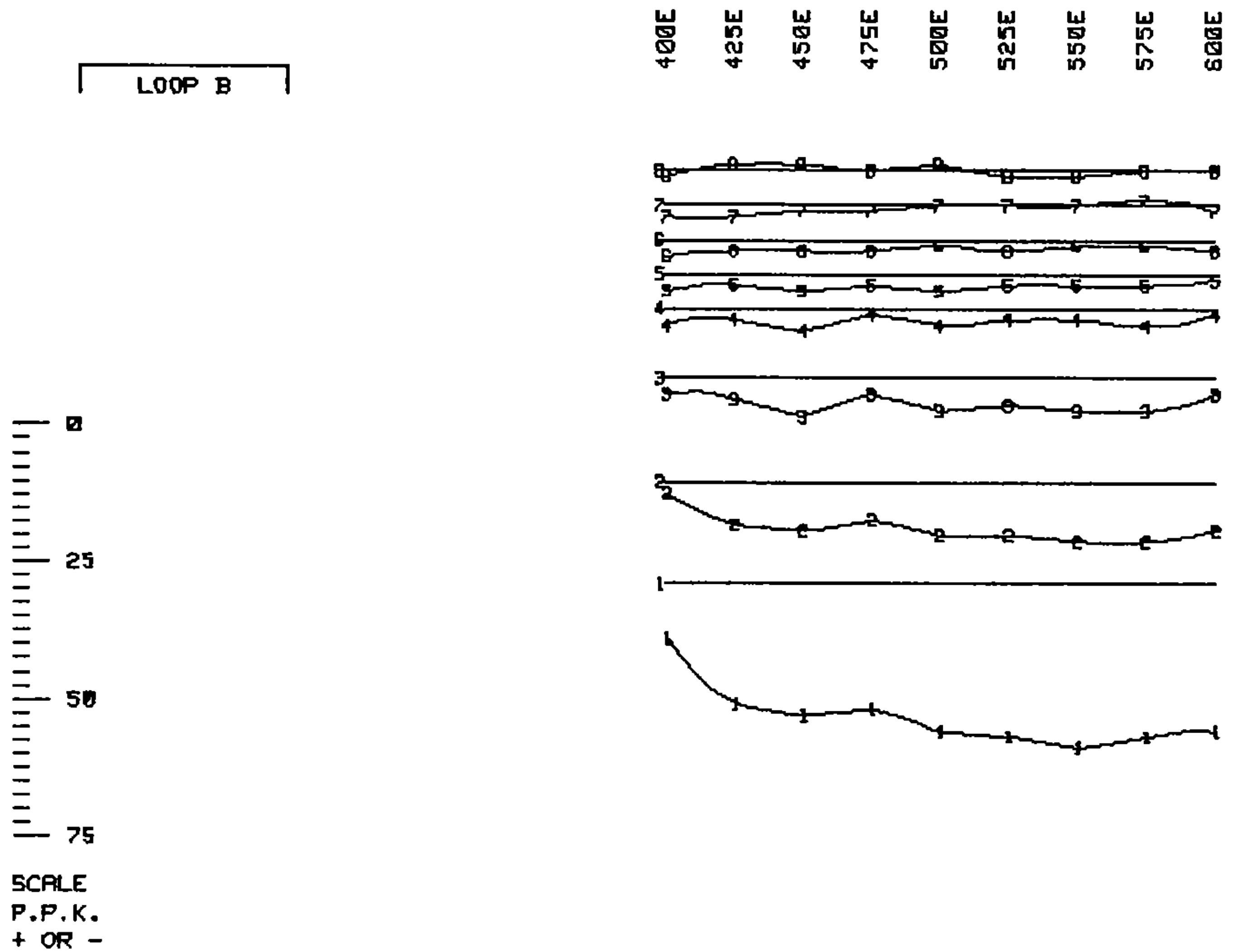


CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 000N LOOP B

DATE: DEC/87	FIG.: 52



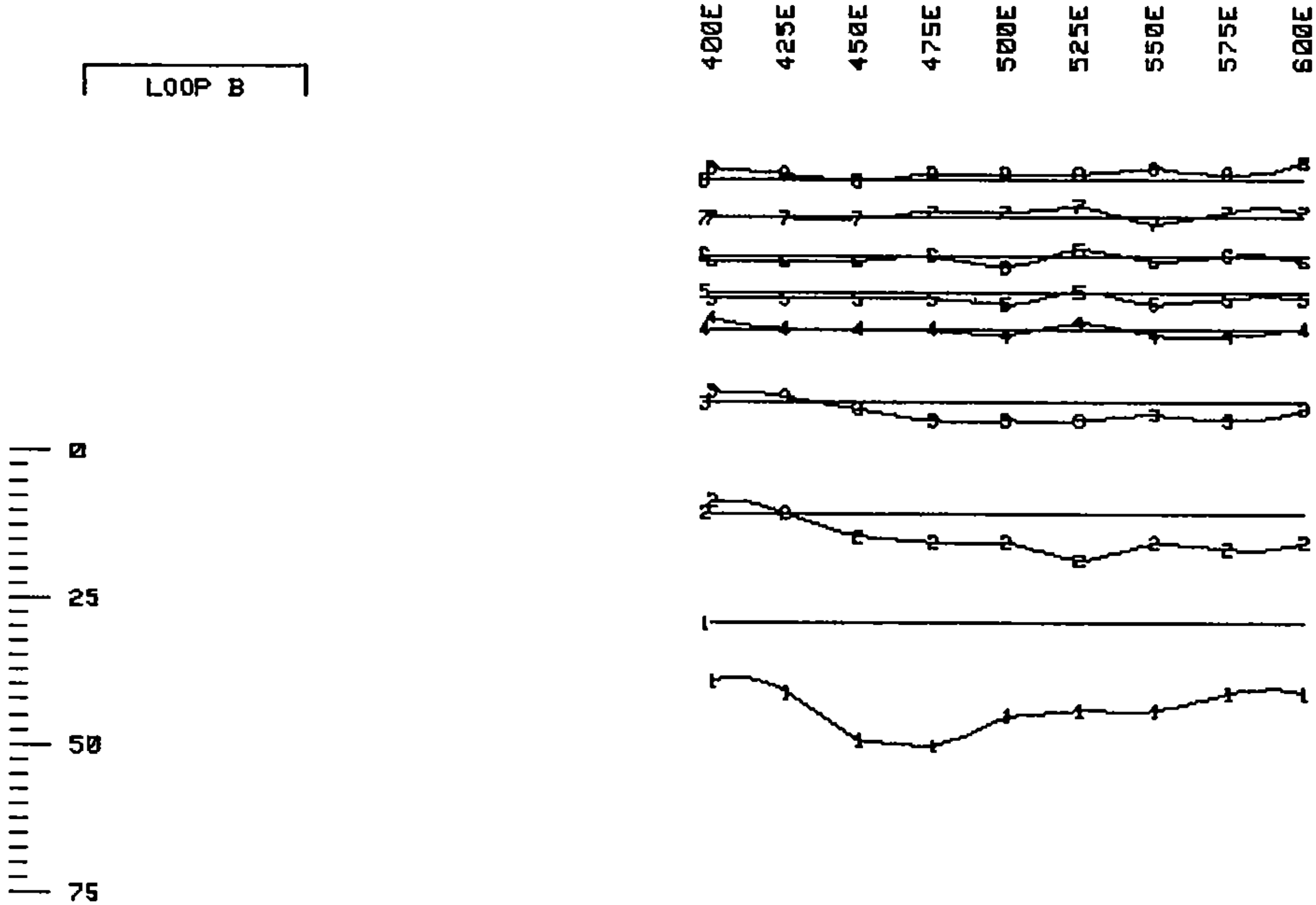
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES 0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 750N LOOP B

DATE: DEC/87	FIG.: 53



SCALE
P.P.K.
+ OR -

CONSTANT GAIN DATA, G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

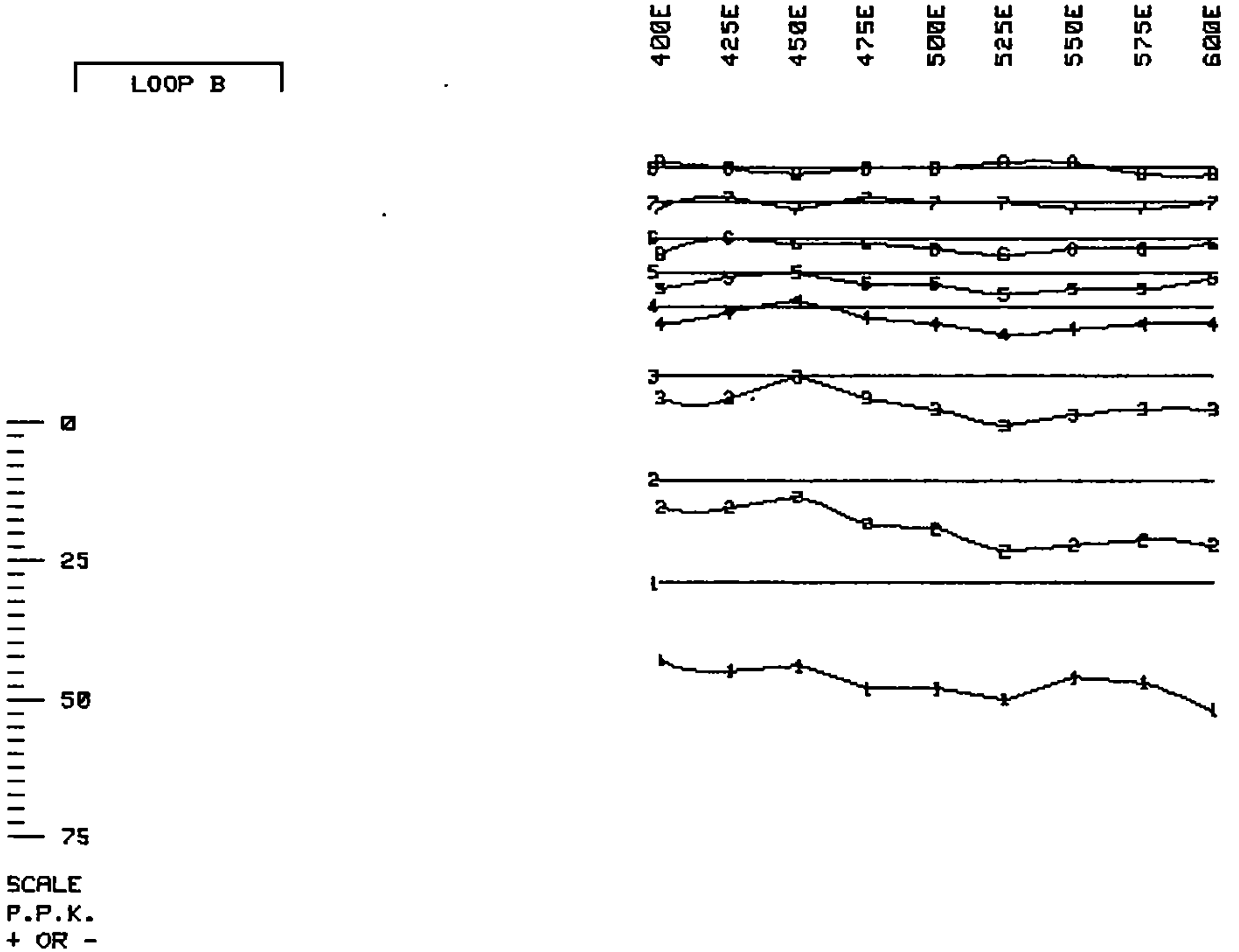
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 750N LOOP B

DATE: DEC/87

FIG.: 54



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

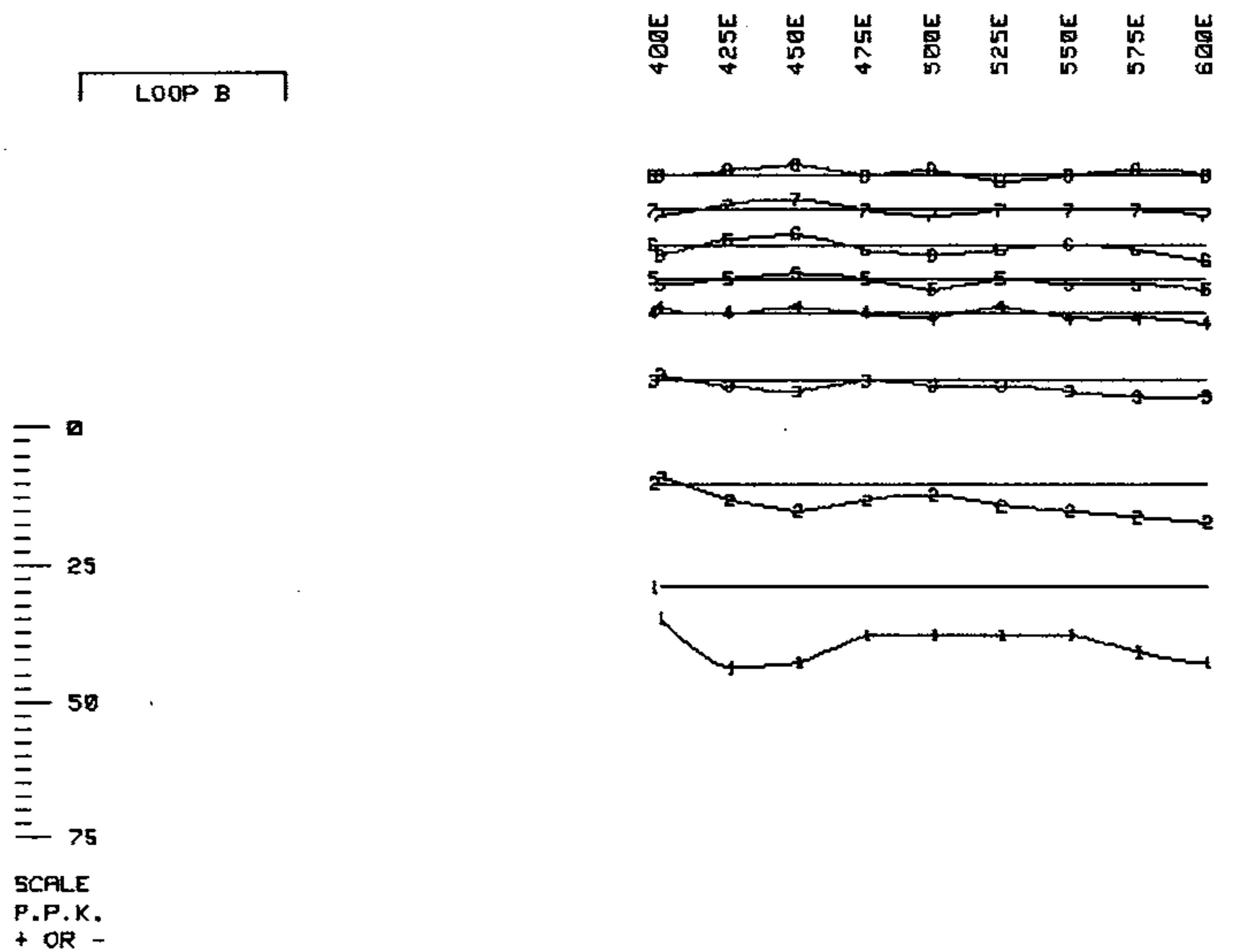
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 700N LOOP B

DATE: DEC/87

FIG.: 55



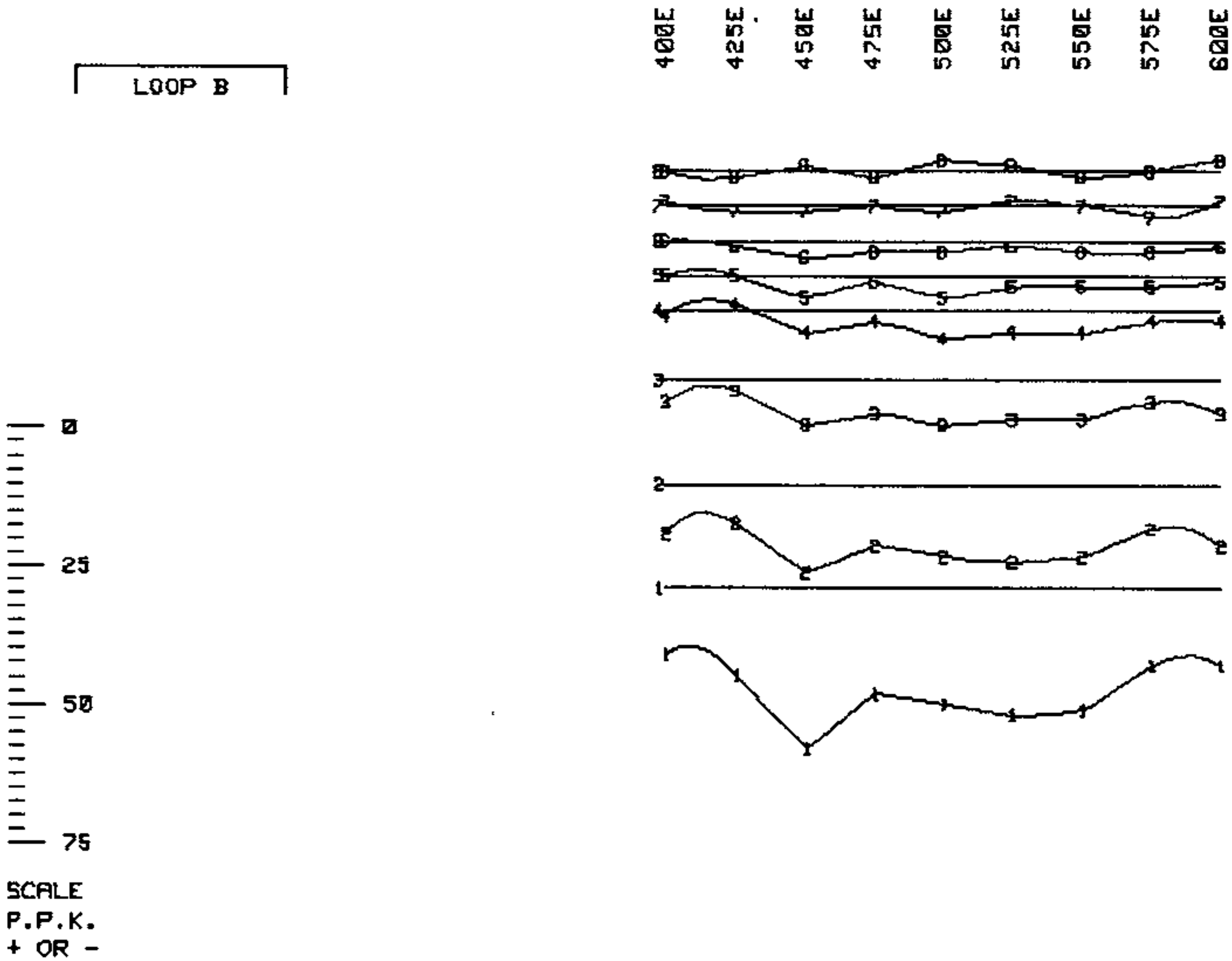
CONSTANT GAIN DATA,G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 700N LOOP B

DATE: DEC/87 | FIG.: 56



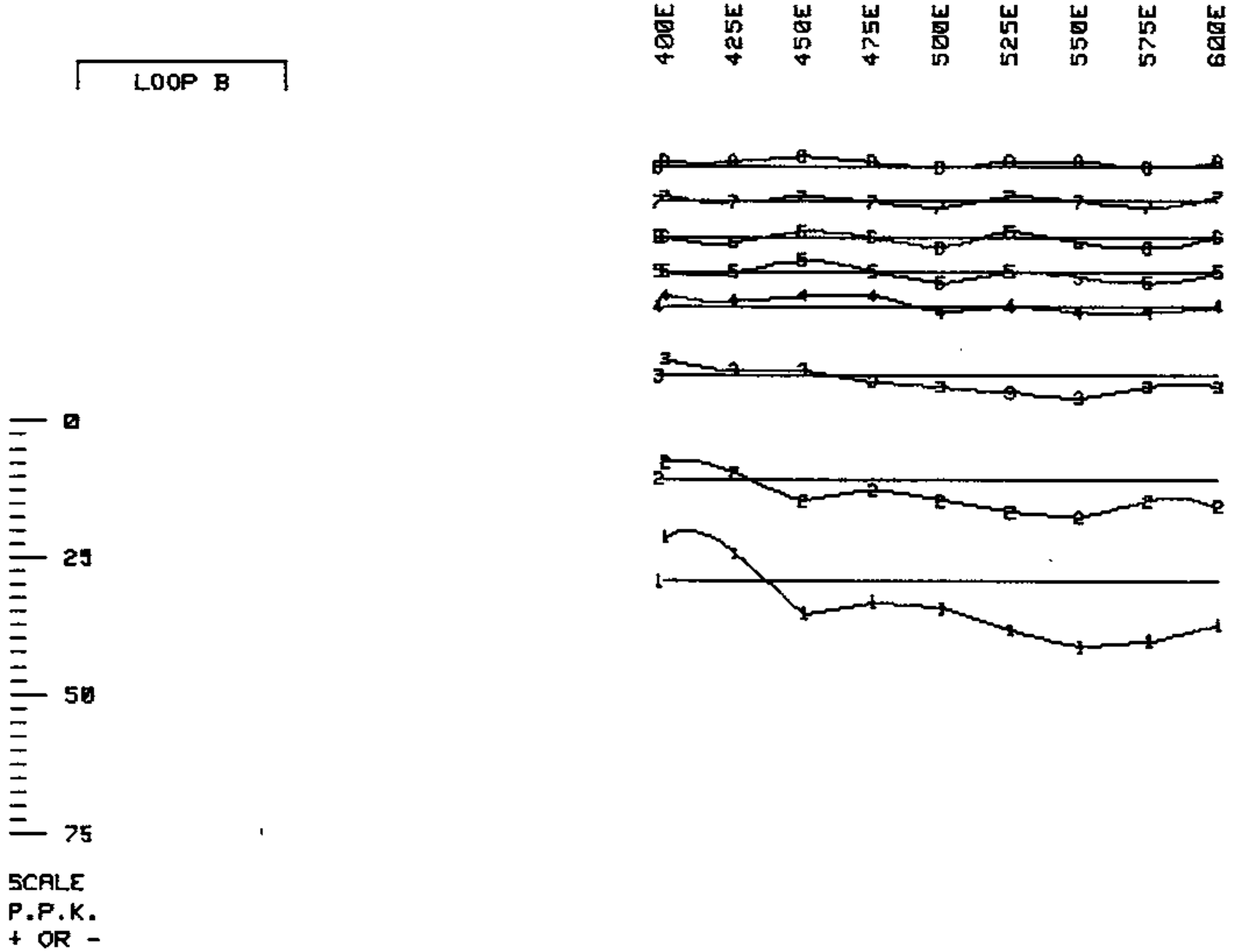
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 650N LOOP B

DATE: DEC/87	FIG.: 57



CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

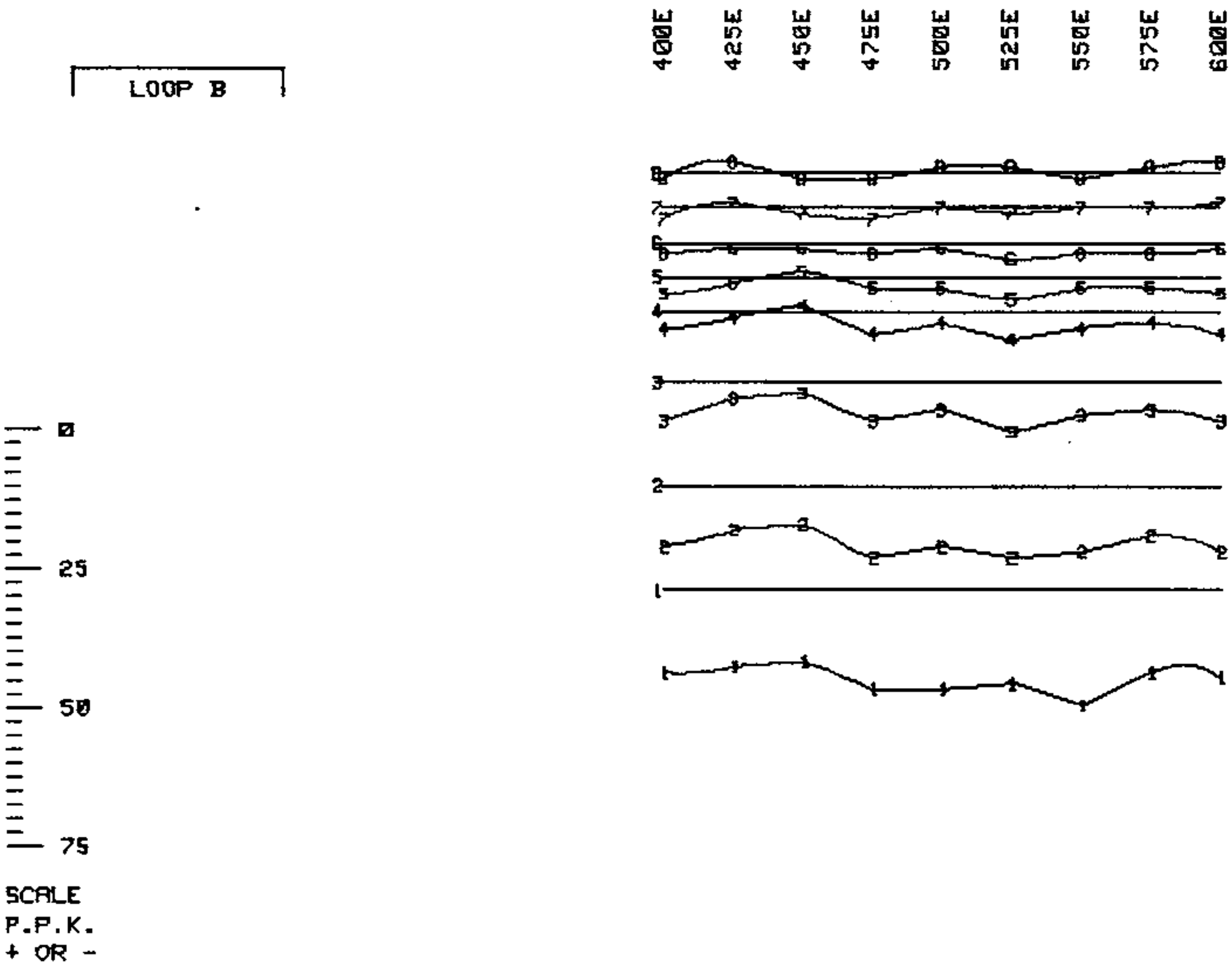
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 650N LOOP B

DATE: DEC/87 | FIG.: 58

LOOP B



CONSTANT GAIN DATA,G-(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

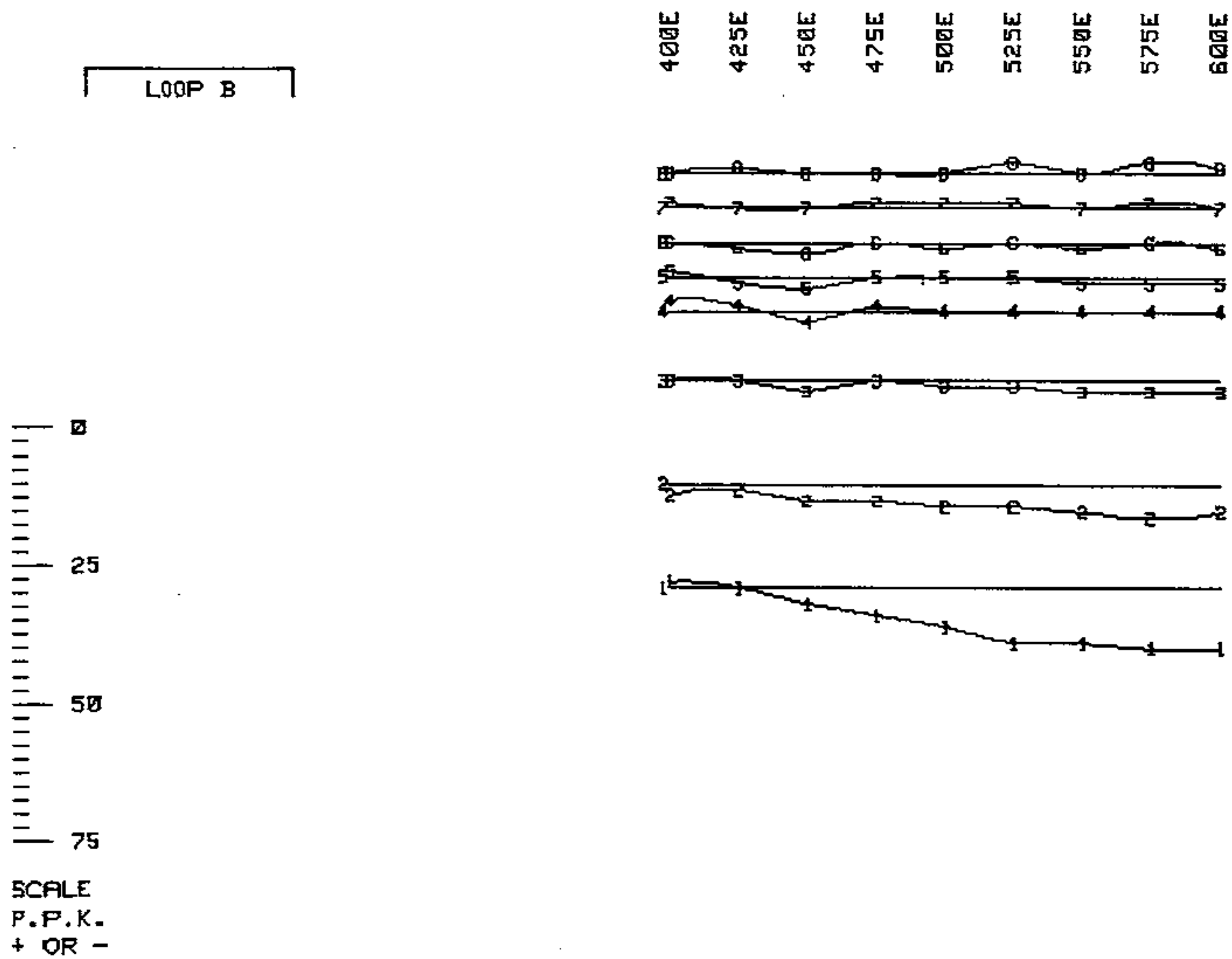
METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
VERTICAL COMPONENT
LINE 600N LOOP B

DATE: DEC/87

FIG.: 59



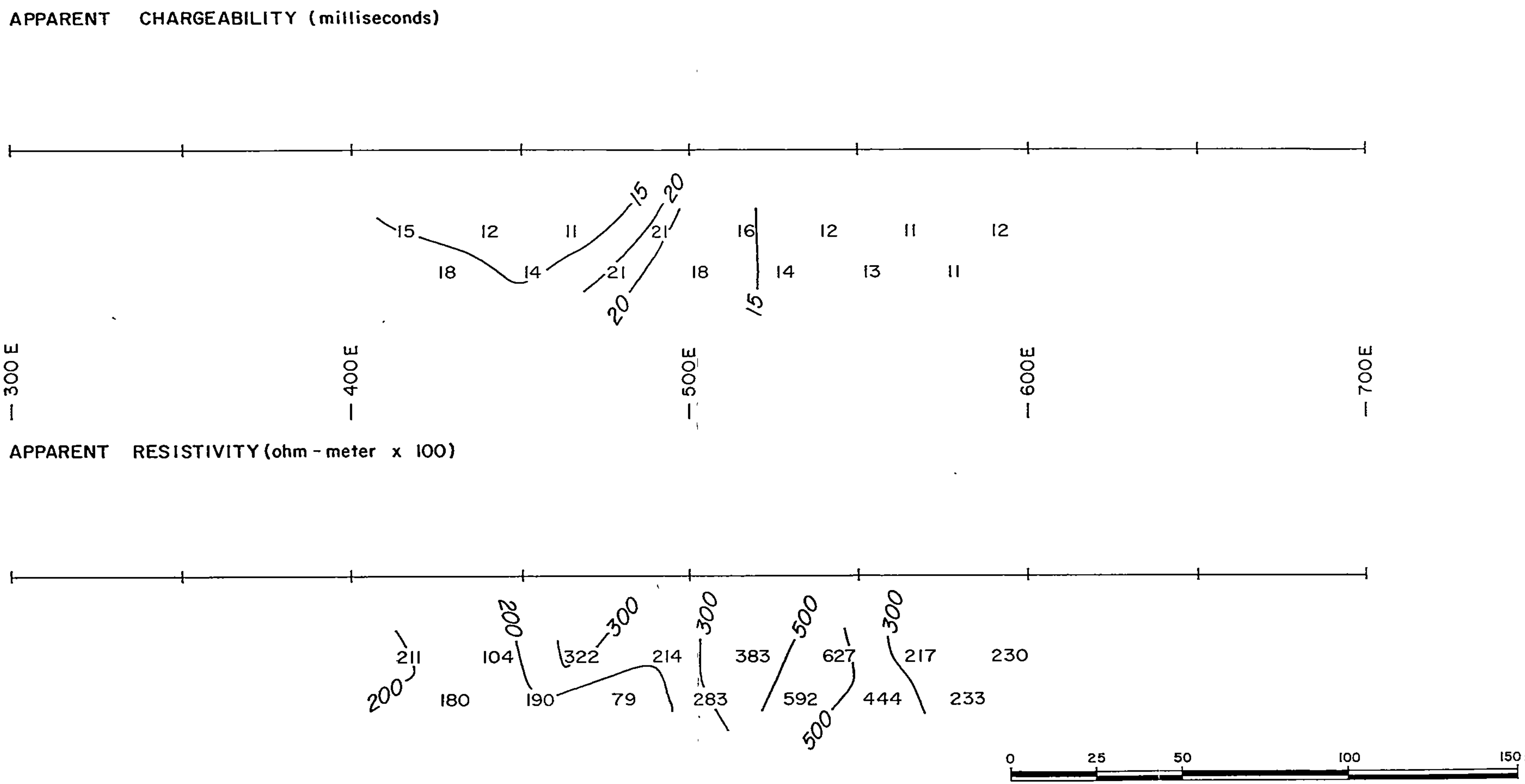
CONSTANT GAIN DATA, G=(100%)
NUMBER IN LINE: CHANNEL NUMBER
INSTRUMENT: CRONE P.E.M.

METRES
0 25 50 75 100

SOUTH PACIFIC GOLD CORP.
SHAFT PROJECT
PULSE ELECTROMAGNETIC SURVEY
HORIZONTAL COMPONENT
LINE 600N LOOP B

DATE: DEC/87 | FIG.: 60

WHITE GEOPHYSICAL INC.



SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 1300 N

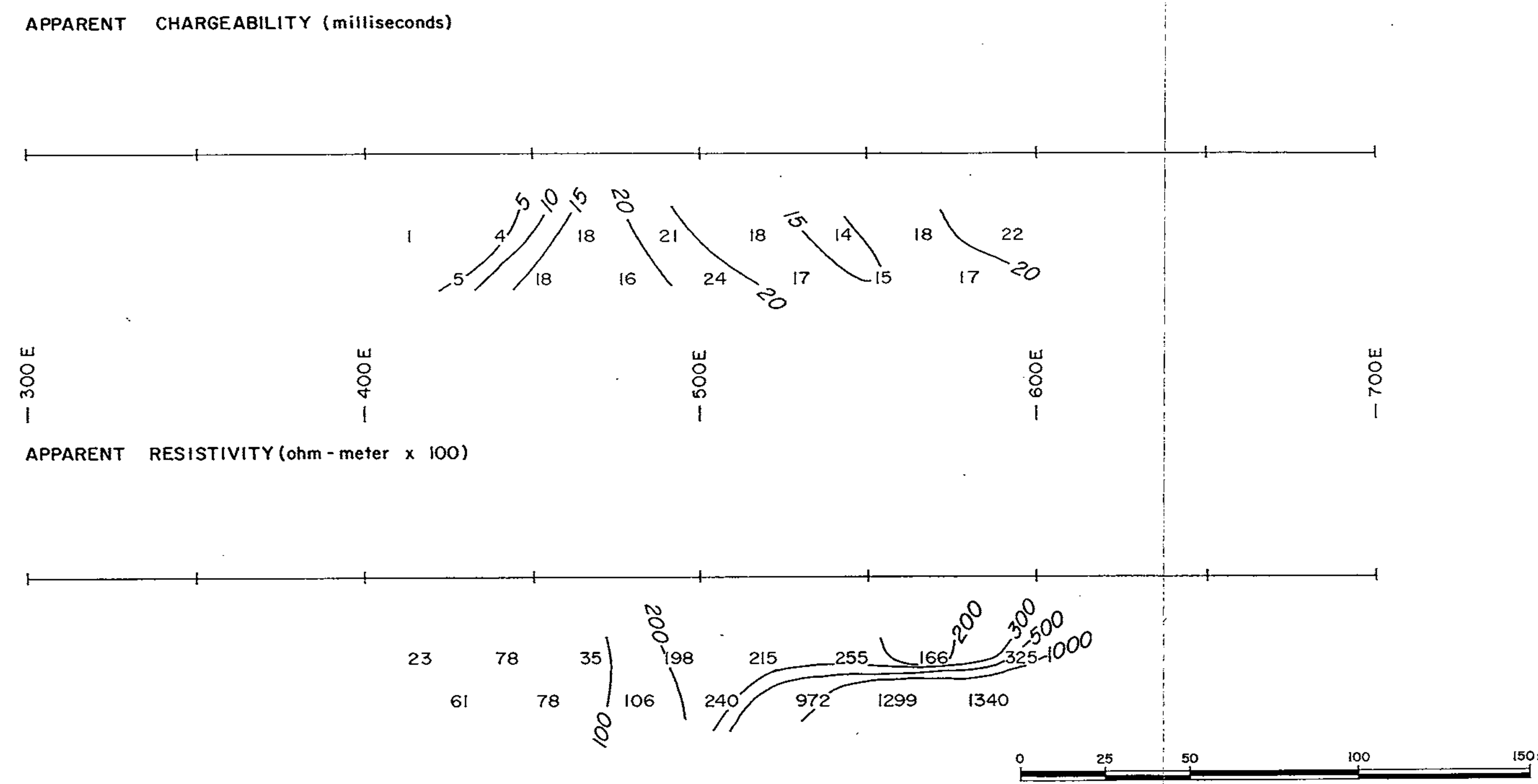
DATE : DEC., 1987

FIG. 61

Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

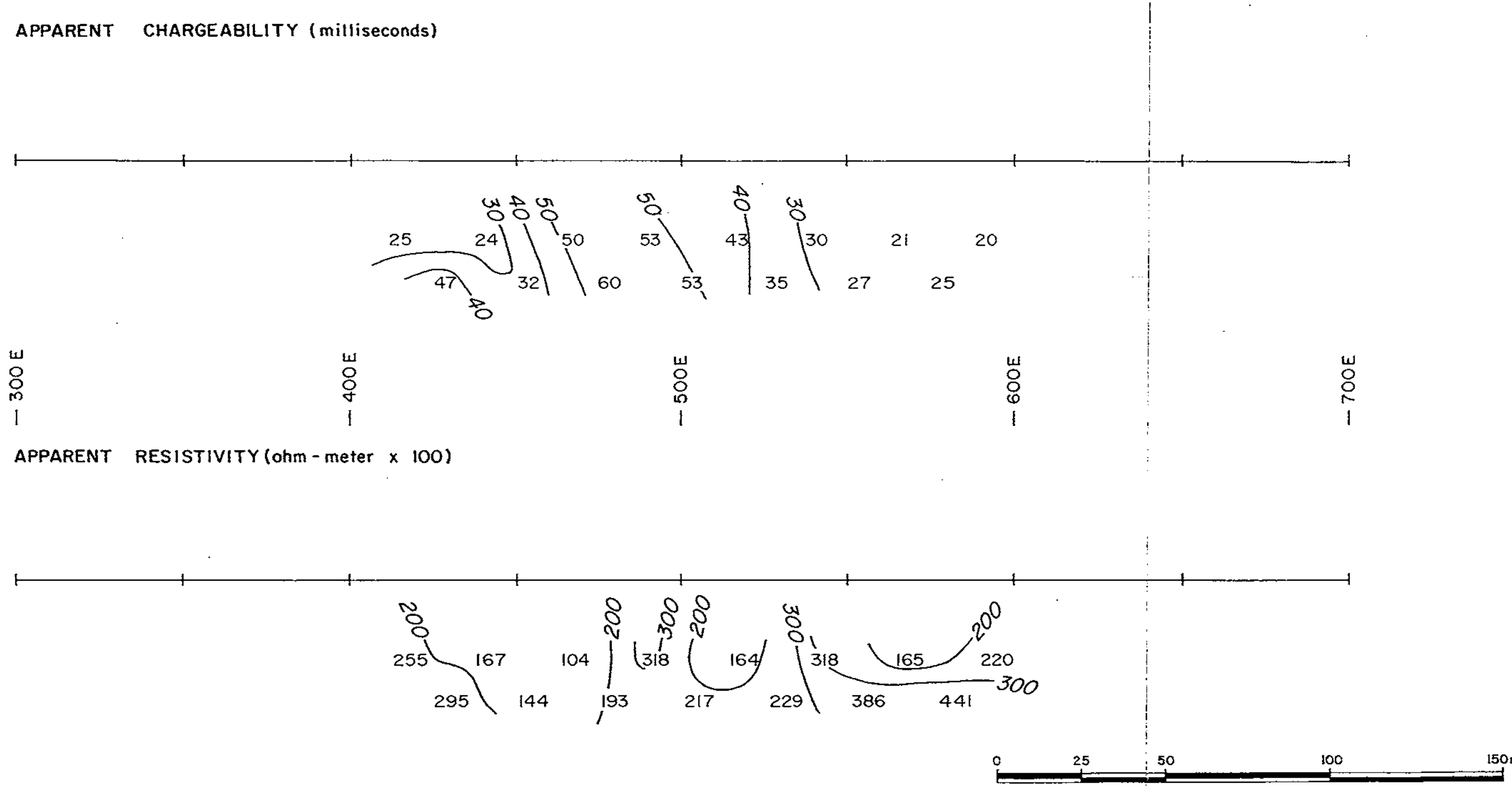
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 1200N

DATE : DEC., 1987

FIG. 62



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

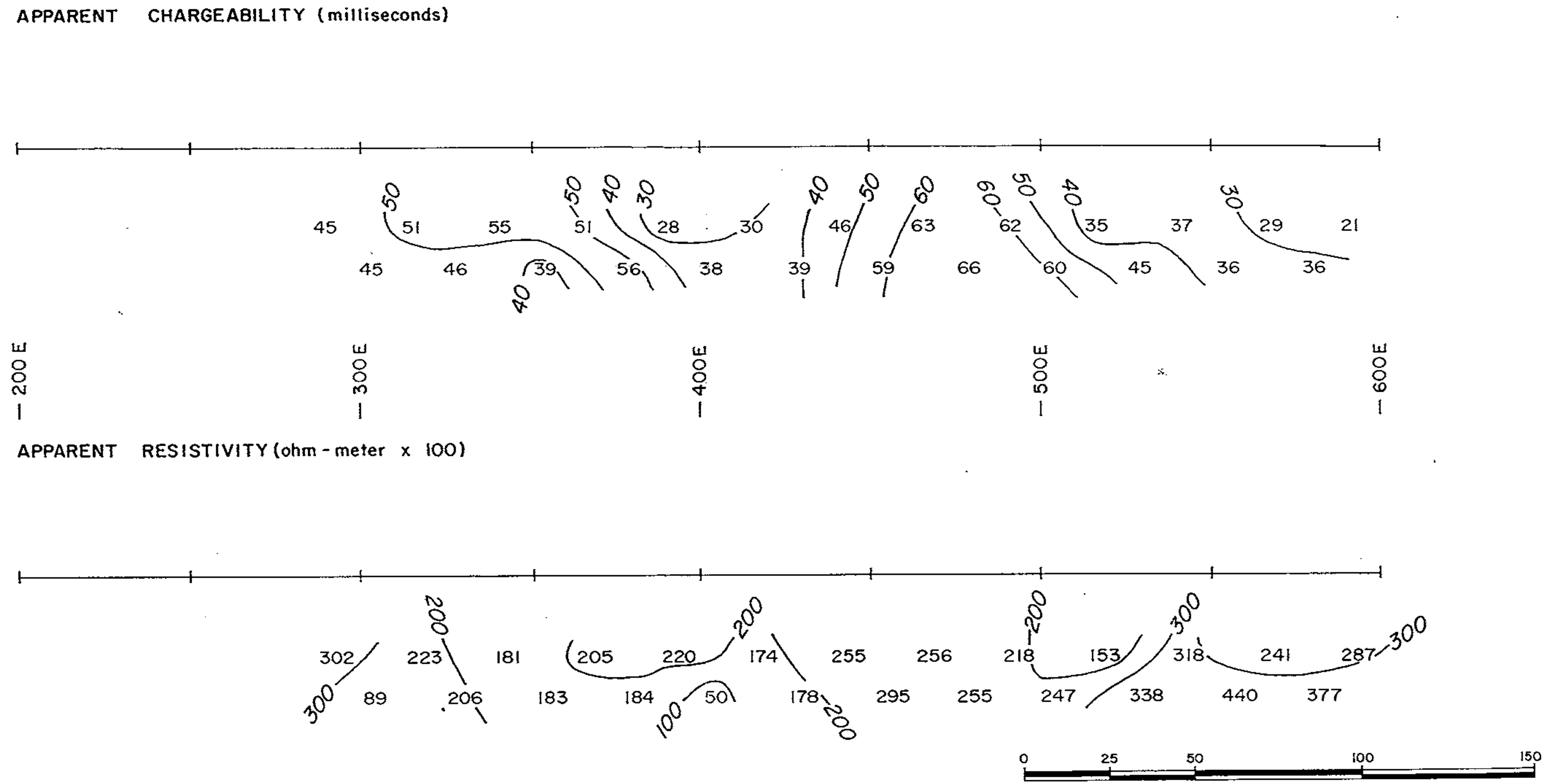
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 1100N

DATE : DEC., 1987

FIG. 63



SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY

LINE 1000N

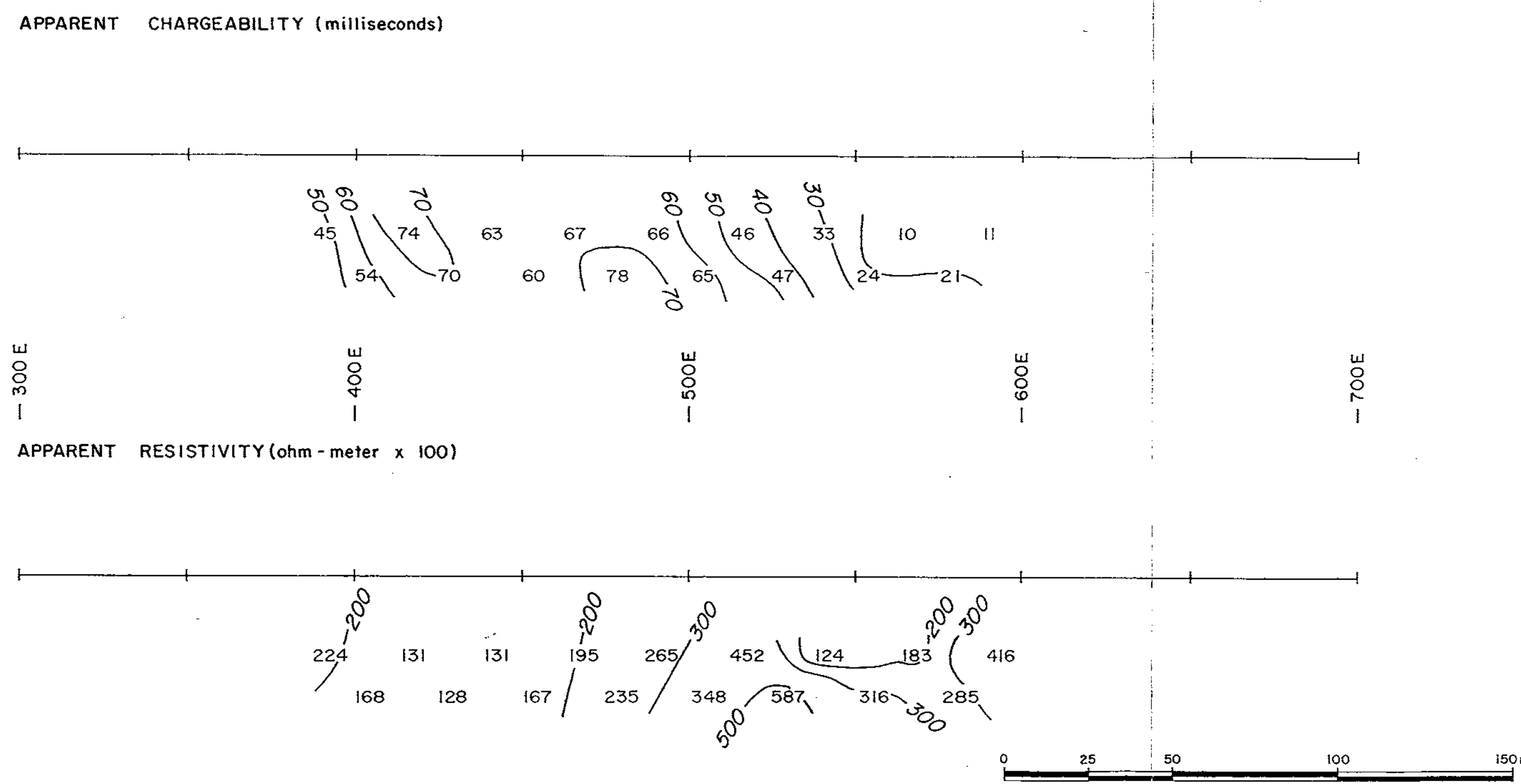
Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

DATE : DEC., 1987

FIG. 64

WHITE GEOPHYSICAL INC.



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

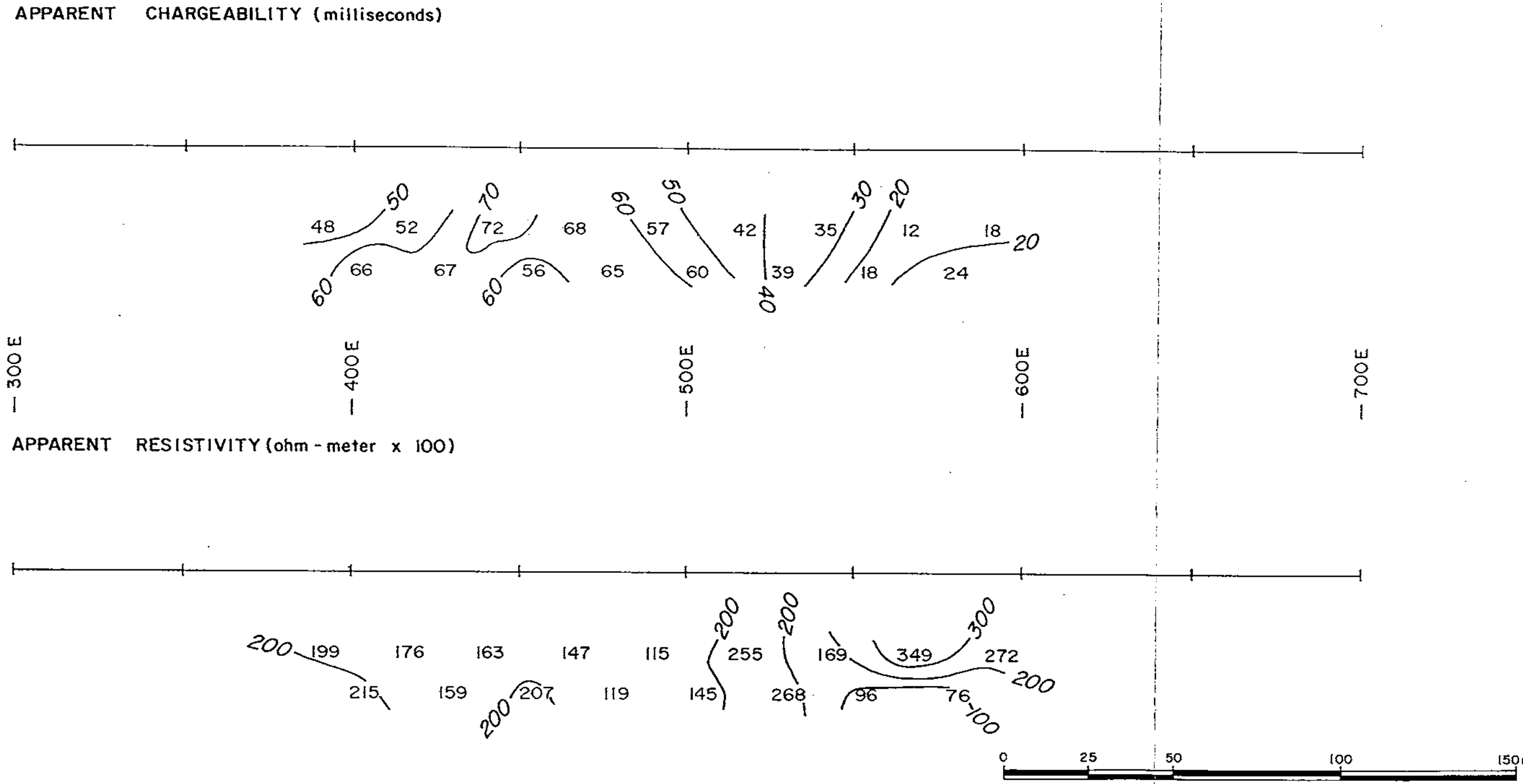
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 850 N

DATE : DEC., 1987

FIG. 65



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

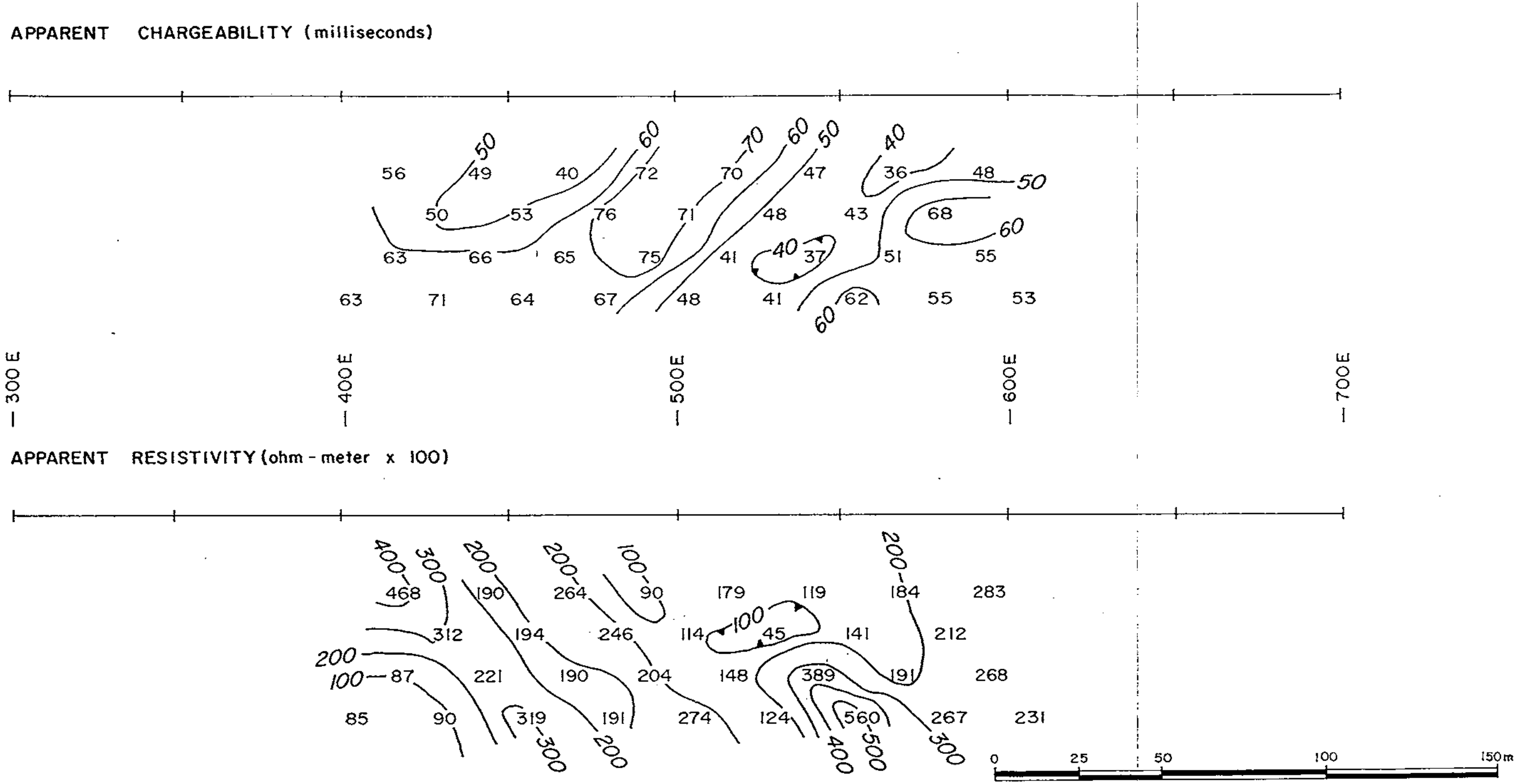
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 750N

DATE : DEC., 1987

FIG. 66



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

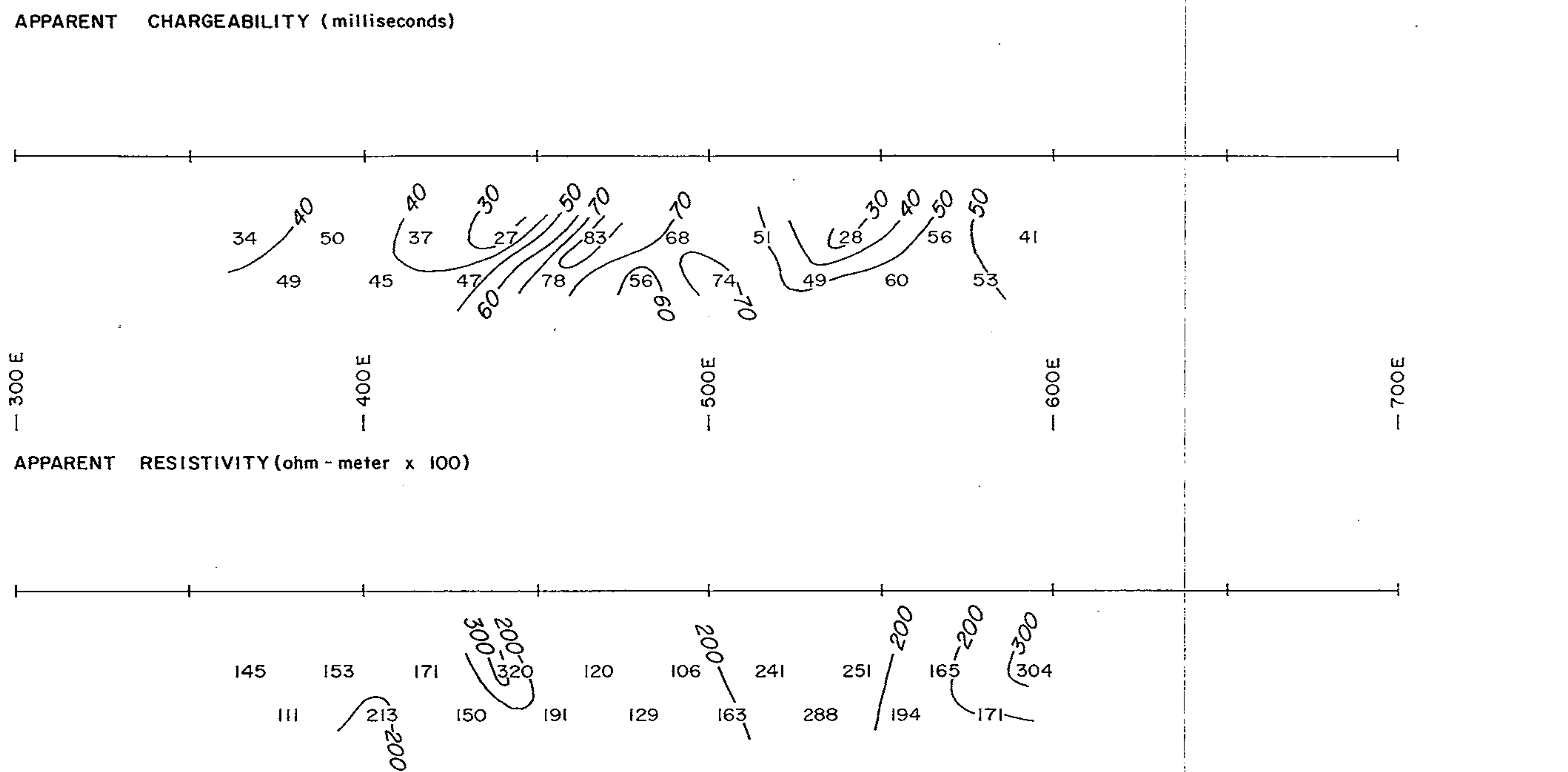
WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 650N

DATE : DEC., 1987

FIG. 67



Instrument : HUNTEC MARK 3

To accompany the Geophysical Report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY
INDUCED POLARIZATION SURVEY
LINE 550N

DATE : DEC., 1987

FIG. 68

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

APPARENT CHARGEABILITY (n=2)

(milliseconds)

DATE: DEC/87

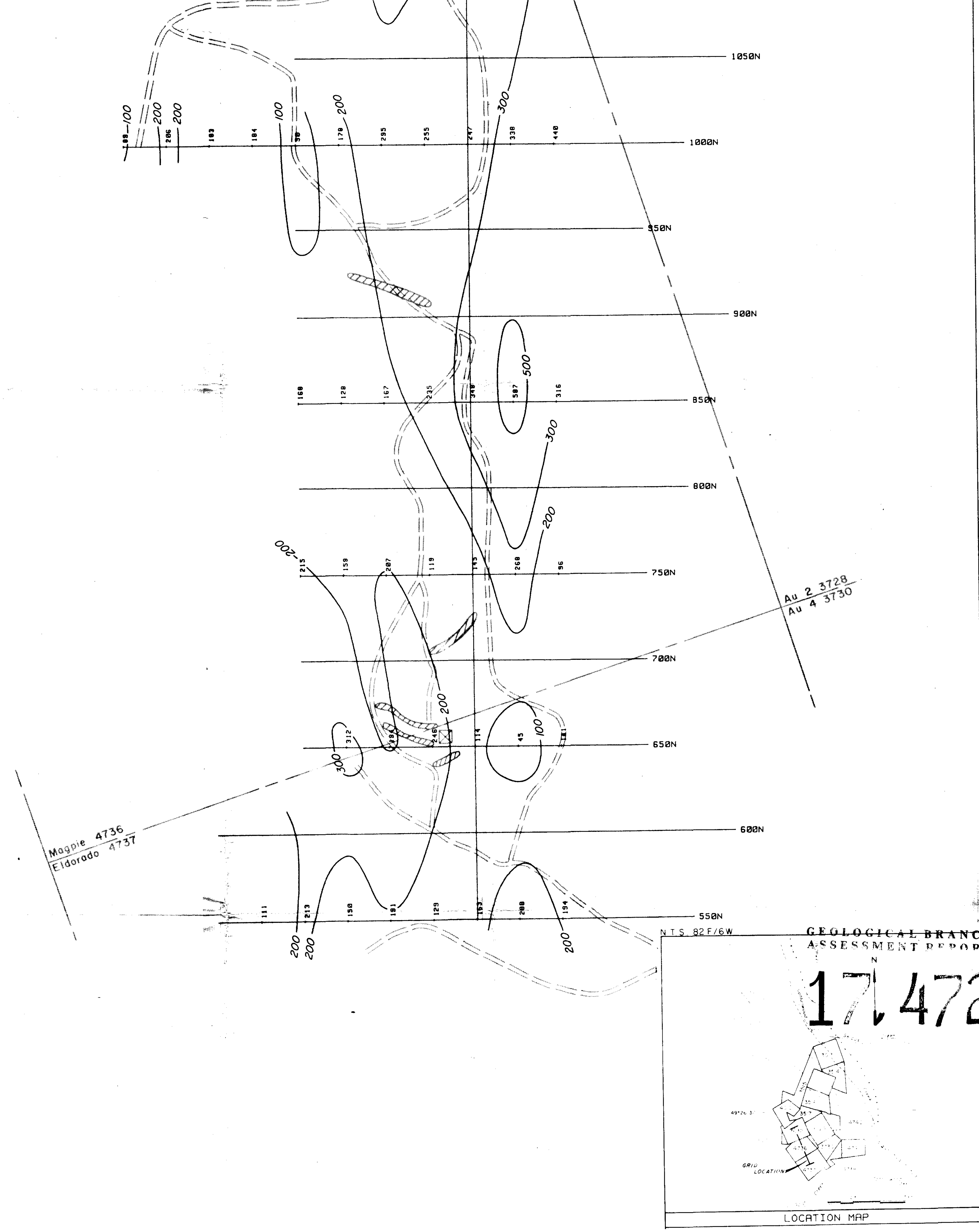
FIG.: 6

INSTRUMENT: HUNTEC MK3 IP RECIEVER

DIPOLE-DIPOLE ARRAY (a=25)

To accompany the report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.



SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

APPARENT RESISTIVITY (n=2)

(ohm-metres*100)

DATE: DEC/87

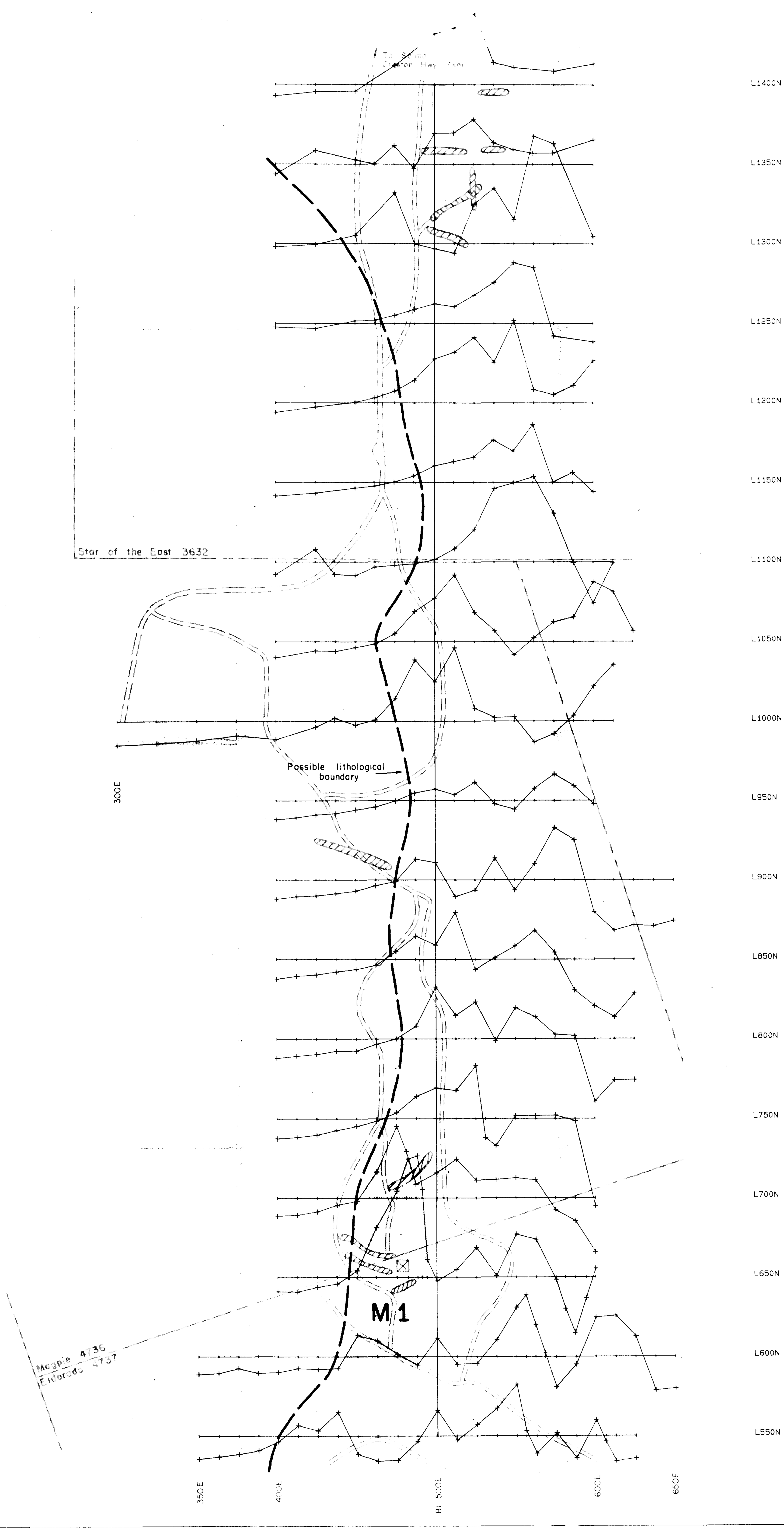
FIG.: 5

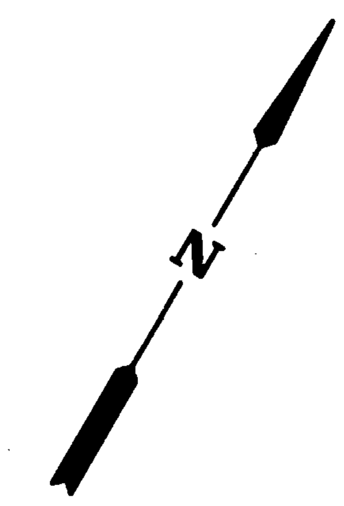
INSTRUMENT: HUNTEC MK3 IP RECIEVER

DIPOLE-DIPOLE ARRAY (a=25)

To accompany the report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.

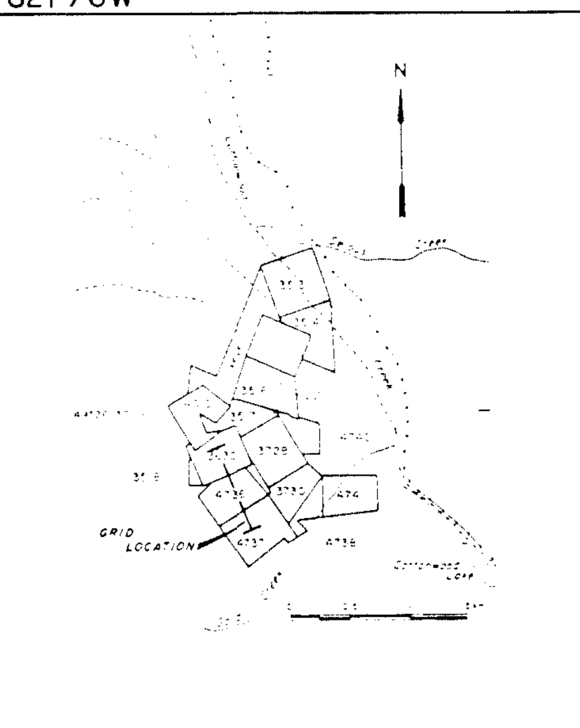




GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,472

N.T.S. 82F/6W



SOUTH PACIFIC GOLD COR

SHAFT PROPERTY

GMS8 PROTON PRECESSION MAGNETICS SUR

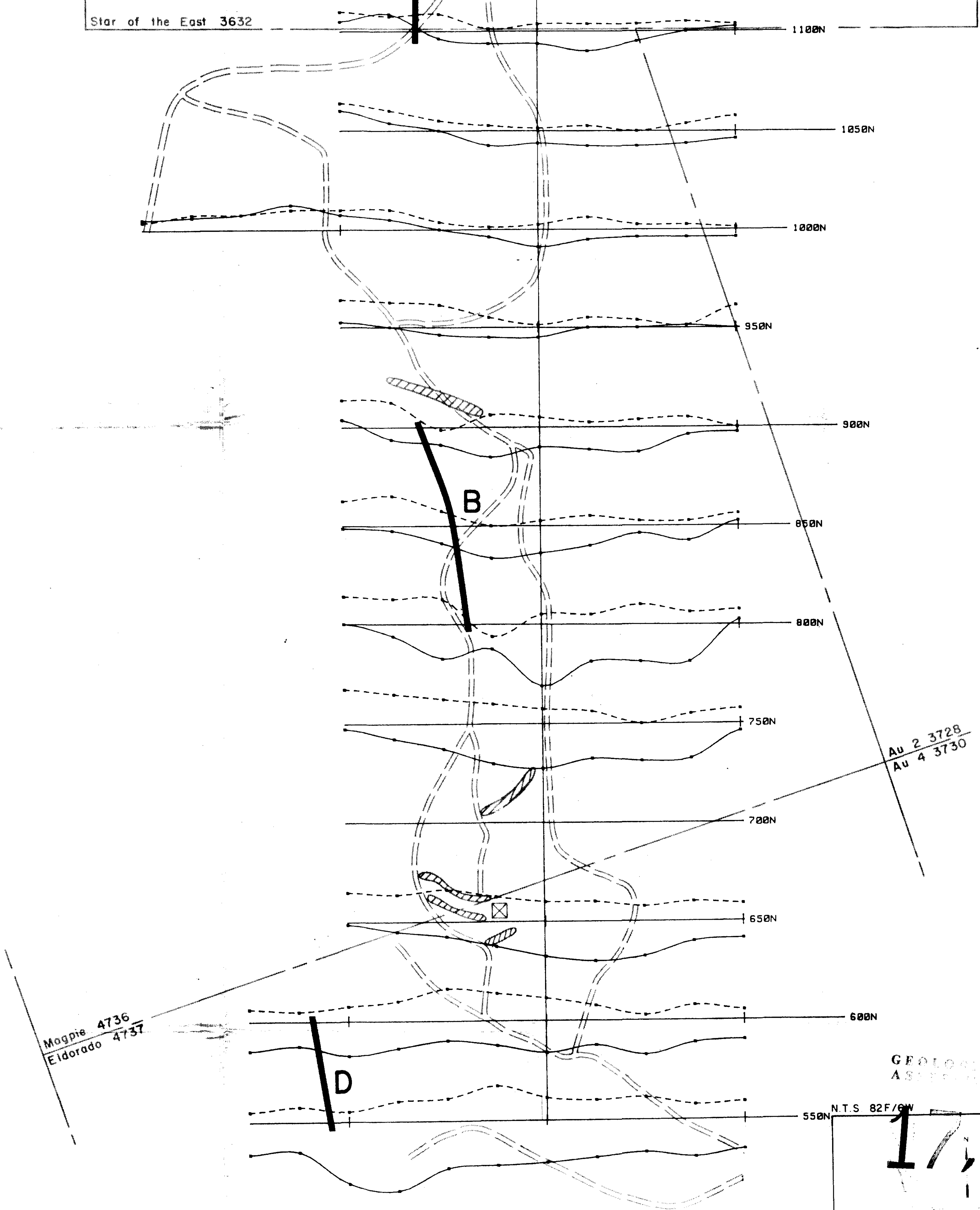
TOTAL MAGNETIC FIELD PROFIL

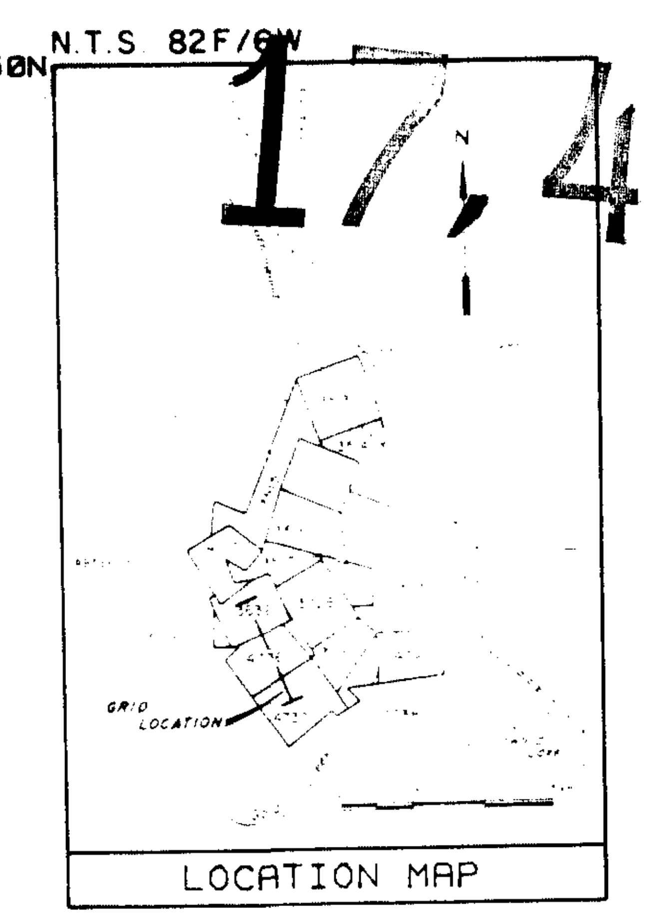
Scale 1: 1250.0

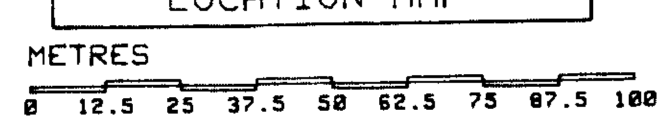
0 25 50 75 100 12

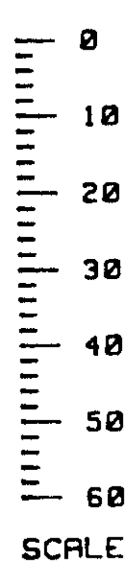
Date: December 1987		Figure 7

White Geophysical Inc.









KEY

VLF Transmitter NSS, Annapolis, Md. 21.4 kHz

Facing East

Unfiltered

Inphase (%) 10 % /cm

Quadrature (%) 10% / cm

Claim Post

Claim Line

Road

INSTRUMENT: RONKA EM16

WHITE GEOPHYSICAL INC.

To accompany Report on the SHAFT PROPERTY

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

VLF-EM PROFILE MAP

INPHASE AND QUADRATURE

DATE: DEC/87

FIG.: 10

0
10
20
30
40
50
60
SCALE

LOCATION MAP

METRES
0 12.5 25 37.5 50 62.5 75 87.5 100

KEY

VLF Transmitter NLK, Seattle, 24.8 kHz

Facing East

Unfiltered

Inphase (%) 10% /cm

Quadrature (%) 10% /cm

Claim Post

Claim Line

Road

INSTRUMENT: RONKA EM16

To accompany Report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

VLF-EM PROFILE MAP

INPHASE AND QUADRATURE

DATE: DEC/87	FIG.: 9

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,472

KEY

Horizontal Component, Channel Two:
Horizontal Component, Channel Four:
Horizontal Component, Channel Six:
Horizontal Component, Channel Eight:
Transmitter Loop: LOOP 'A'
Conductor Axis:
Claim Post:
Claim Line:
Road:

INSTRUMENT: CRONE P.E.M.

To accompany the report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.

SOUTH PACIFIC GOLD CORP.
SHAFT PROPERTY
COMPOSITE PROFILE MAP
HORIZONTAL COMPONENT, CHANNELS 2,4,6,8

DATE: DEC/87

FIG.: 8

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,472

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

APPARENT RESISTIVITY (n=1)

(ohm-metres*100)

INSTRUMENT: HUNTEC MK3 IP RECIEVER

DIPOLE-DIPOLE ARRAY (a=25)

To accompany the report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.

DATE: DEC/87	FIG.: 3

METRES
0 12.5 25 37.5 50 62.5 75 87.5 100

SOUTH PACIFIC GOLD CORP.

SHAFT PROPERTY

APPARENT CHARGEABILITY (n=1)
(milliseconds)

DATE: DEC/87	FIG.: 4

INSTRUMENT: HUNTEC MK3 IP RECIEVER
DIPOLE-DIPOLE ARRAY (a=25)
To accompany the report on the SHAFT PROPERTY

WHITE GEOPHYSICAL INC.