

FIRC 36

No 19.85...114.....

- NEW PROPOSAL
- CONTINUING PROJECT
- FINAL REPORT
- PROGRESS REPORT

FISHING INDUSTRY RESEARCH TRUST ACCOUNT

TITLE OF PROPOSAL/PROJECT: LINE FISHING ON THE OFF SHORE SEA MOUNTS OF TASMANIA.

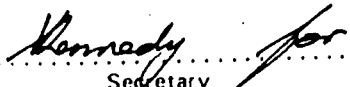
ORGANISATION: RICHEY FISHING CO Pty Ltd & PACIFIC FISHERIES Pty Ltd.

PERSON(S) RESPONSIBLE: Mr S RICHEY / Mr W EDWARDS

FUNDS SOUGHT/GRANTED		
YEAR	SOUGHT	GRANTED
<u>1985/86</u>	<u>\$59,268</u>	<u>\$59,268</u>

RELATED APPLICATIONS: _____

RECEIVED 6...11...1986 DISTRIBUTED/...../19...


 Secretary
 Fishing Industry Research Committee
 F139-12/84

PACIFIC FISHERIES, PTY. LTD.
15 BEDDOME ST.,
SANDY BAY 7005
TASMANIA, AUSTRALIA.
PHONE (002) 251511 TLX. 58134

20th. October, 1986.

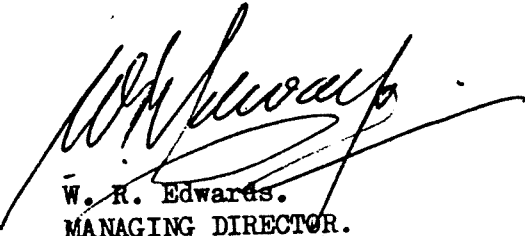
S
Secretary,
Fishing Industry Research Committee.
Dept. Primary Industry.
CANBERRA. A.C.T. 2600

Dear Sir, Re F.I.R.T.A. Grant 85/114.

On behalf of the Leader, Mr. Wayne Baker, of the abovementioned grant and in compliance with Section 11 (3) d&e of the criteria covering same, we enclose 10 copies of Mr. Baker's report.

Yours faithfully,

PACIFIC FISHERIES PTY. LTD.


W. R. Edwards.
MANAGING DIRECTOR.

Ms Kennedy,

*Also do cover sheet
for this final rpt.*

*~~Will go~~
4/3/11*

80 001 53 11:02

TITLE:

LINE FISHING ON THE OFF SHORE SEA MOUNTS OF TASMANIA.

This report is furnished as a requirement of the F.I.R.C by PACIFIC FISHERIES PTY. LTD. of Hobart, and the RICHEY FISHING CO., PTY. LTD. of Devonport.

OBJECTIVES OF SURVEY:

To examine the line fishing resources of the Tasman Rise, Cascade Plateau, Macquarie Ridge, and any other likely sea mount within reasonable fishing distance from the Tasmanian coastline.

Target species being principally Trevalla, Ling, and deep water sharks.

To test and develop suitable fishing equipment to cope with the rough weather conditions in deep water, fast running tides and rough steep bottom.

OPERATION:

The survey commenced on Monday 20th. January, 1986, with the departure of the L.F.B. "TASMANIAN ENTERPRISE" from Hobart, steaming a course to a position of 43.55S/150.28E.

As the "TASMANIAN ENTERPRISE" had fished this peak for the previous 12 months, it was decided to take the opportunity to completely sound the area. (Refer to Fig. 2)

"MERINDAH PEARL" joined the "TASMANIAN ENTERPRISE" on the 4th. day, and both vessels were compelled to lay on sea anchors in deteriorating sea conditions. During this period the "MERINDAH PEARL" lost her sea anchor in heavy seas. Subsequently both vessels proceeded towards Pedra Blanca looking for probable sea mounts en route. The first cruise was completed on Monday 27th. January, 1986.

SECOND CRUISE:

Both vessels left Hobart on Friday, 31st. January 1986, the destination being the South Tasman Rise. However both vessels were compelled to take shelter due to strong South Westerly gales which inflicted considerable damage to both vessels. The crews repaired the damage, replacing glass ports etc., and made up replacement fishing lines for those washed overboard.

After sheltering for two days, and with no foreseeable abatement in the gale force winds, both vessels returned to Hobart on the 5th. of February 1986.

"MERINDAH PEARL" then completed repairs and left the survey.

THIRD CRUISE:

"TASMANIAN ENTERPRISE" left Hobart on Monday 10th. February 1986 bound for the South Tasman Rise, a journey which took 31 hours steaming in moderate weather. Sounded continuously on a course which showed the greatest promise of sea mounts en route. (Refer figure 3)

On arrival, commenced a detailed sounding of the South Tasman Rise together with accurate satellite navigational fixes, and also took the opportunity to set 17 drop lines whilst the weather was tolerable. The catch resulted in 6 large commercial fish and an abundance of deep sea black dog sharks which are not commercial.

Sounded north to 45.00S. and laid on sea anchor during the build up of heavy weather with gales gusting to 50/60 knots. "SOELA" passed during the night on her way to the South Tasman Rise. Communication was made between the vessels. On the 16th. of February 1986 entered Storm Bay and sheltered at Adventure for a well earned rest.

On the night of the 17th. of February 1986 left for 45.20S/149.50E as indicated on chart. Unable to locate the sea mount within the immediate area, but this region warrants further work in fair weather.

Moved to 41.00S/150.00E (off St. Helens) looking for a sea mount from information supplied by the Tasmanian Department of Sea Fisheries. Sounded extensively in the area but was unable to locate the mount. This area also warrants further work.

Looked for a sea mount at 43.40S/150.20E, but was once again unable locate the sea mount. Returned to Hobart on the 5th. March 1986.

SUMMARY:

This survey was targeted for the time period of late January/February 1986 during which time settled weather can normally be expected. However this was not the experience this year. Strong winds were encountered on all voyages resulting in considerable vessel damage and loss of fishing equipment.

Pacific Fisheries Pty. Ltd.'s vessel "TASMANIAN ENTERPRISE" was employed for 45 days on the survey, and the Richey Fishing Company Pty.Ltd's "MERINDAH PEARL" for 15 days, making up a total of 60 days survey work.

Both vessels are considered to be substantial sea going vessels in the size range of 24 metres to 30 metres. Yet both vessels sustained damage due to rough conditions. Rough weather and fast flowing tides at the Cascade Plateau made it impossible to set fishing lines, so catches were limited to few fish. However experience over the past 12 months has indicated that there is a fishery capable of supporting perhaps one or two vessels on a full time basis, subject to the limiting factor of the weather.

Droplining requires the accurate setting of lines in an area of steep inhospitable topography, and therefore a fast flowing tide invalidates this accuracy. If attempted, the inevitable result is the loss of a line which can cost up to \$700:00.

The South Tasman Rise, on the one day suitable for fishing resulted in a very disappointing catch of commercial species. The trevalla catch of six fish on 17 lines each set with 100 hooks was certainly uneconomic, whilst large numbers of deep water black dog sharks were caught. Sounding of the area revealed large areas of possible target trawling bottom.

This survey used the Admiralty Chart No. INT 601 corrected to November 1985. Positions marked on this chart were found to be inaccurate, and consequently minor sea mounts were not found in the areas marked, nor within the immediate vicinity. More work on the minor sea mounts is justified when the weather conditions are more conducive.

GEAR AND EQUIPMENT:

Navigation was computed through a Furuno Model FSN 70 satellite navigator, with a Walker 801 and a Furuno Model FSN 40 back-up sets. The sounder was a Furuno FCV 120 colour sounder.

Drop lines were made from 8 and 9 mm. P.E. rope with 30Kg. anchors. Up to 120 hooks were used to a line, which were attached to the main line by means of stainless steel shark clips with 5mm. braided snooding. A variety of hooks were used; i.e. standard Mustad 7897/3020 double hooks, normal shark hooks and circle hooks. A deepsea float was deployed immediately above the hooks, as well as a large inflatable surface float. A variety of bait was taken on the survey, but unfortunately was not tested due to the bad weather conditions. From previous experience it has been ascertained that normal shark hooks and squid as bait catch as well as any other combination.

CONCLUSION:

The "TASMANIAN ENTERPRISE" fished on the Cascade Plateau for a period of 12 months prior to this survey together with several smaller vessels on a sporadic basis. At first satisfactory catches were maintained, but these diminished to zero three months before the commencement of the survey. This was partly due to the fast running tides in the area which caused the inability to set lines in the target areas. Lines dropped in the deep holes resulted in the loss of costly gear. Therefore it has been established that the Cascade Plateau would support a major vessel fishing the area on a regular basis.

Due to the weather conditions normally prevailing in areas such as the Cascade Plateau, vessels should ideally be in the 30 metre plus class with a deep draught and adequate safety standards. A rescue operation of smaller vessels would be considered extremely hazardous and expensive.

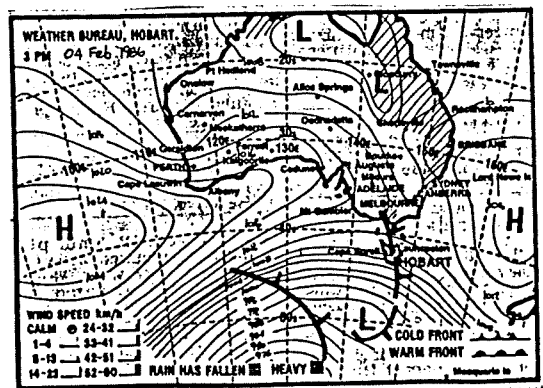
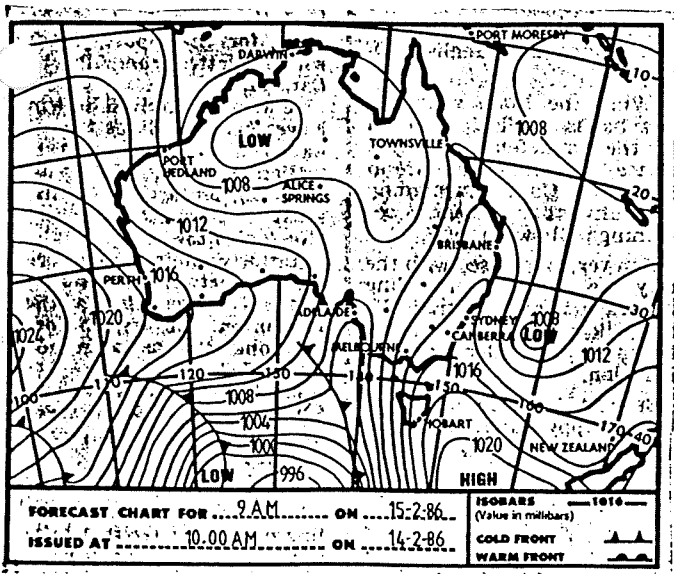
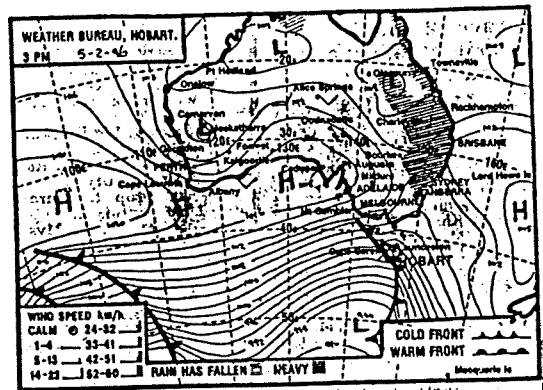
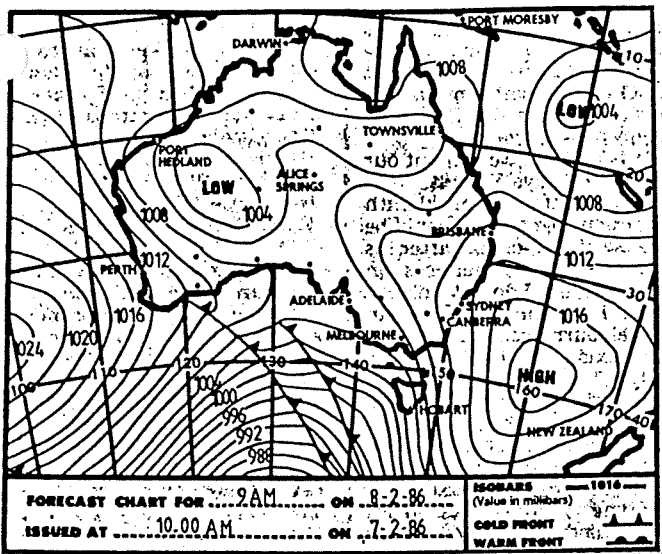
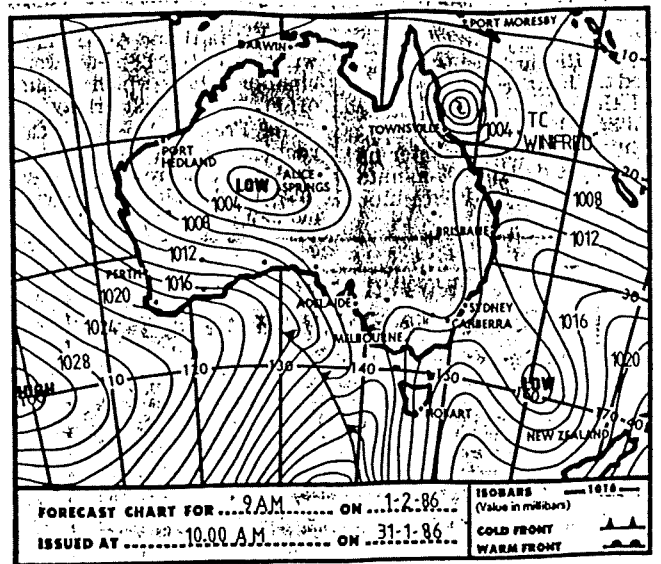
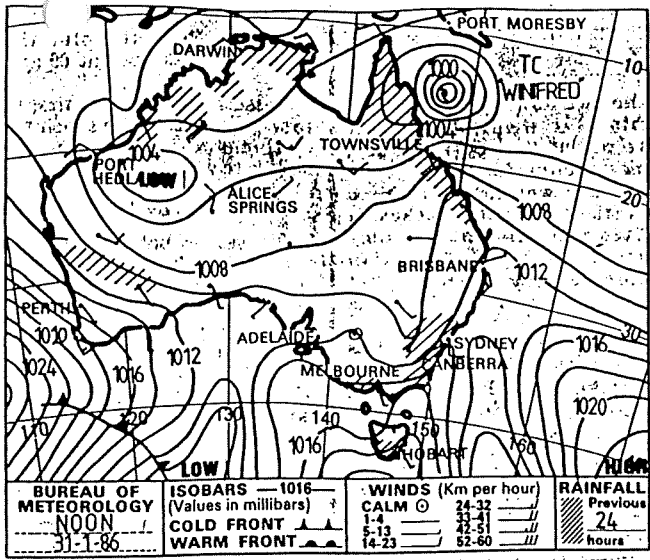
Most of the sea mounts marked on the Chart No. INT601 were not found at the positions marked and require further investigation in reasonable weather to accurately locate and mark the positions by satellite navigation fixes.

The South Tasman Rise was very disappointing as only non-commercial species were taken in any quantity. Soundings were taken over the Rise and there appears to be some potential for target trawling.

Fishing on the Tasmanian seamounts is an exercise fraught with great danger due to the exposure to rough seas normally encountered in this area. The "TASMANIAN ENTERPRISE" is a major vessel of 100 tonnes, yet suffered considerable damage to her superstructure. At various times up to 8 vessels have fished on the Cascade Plateau, several of which were tempting fate should the weather conditions suddenly turn foul, bearing in mind the long run back to safety and the problems involved in mounting a rescue mission.

With this factor in mind, Pacific Fisheries Pty. Ltd. applied to the Australian Government to import a large second hand vessel some 18 months ago, but a negative response from the Authorities indicated that the Government was not prepared to encourage fishermen of enterprise and ability.

As aforesaid, the Cascade Plateau appears to be the only seamount capable of providing commercial catches of trevalla on a managed basis over an extended period. Catches up to 10/15 tonnes were the norm in the previous 12 months, but this diminished with fishery pressure to 2/3 tonnes after 6 months fishing by an increased number of boats. This reduced catch rate is marginally viable based on the prices being offered to fishermen for trevalla by processors.



Typical weather charts during survey.

PACIFIC FISHERIES PTY. LTD.
HOBART, TASMANIA,

(Research & Development Division.)

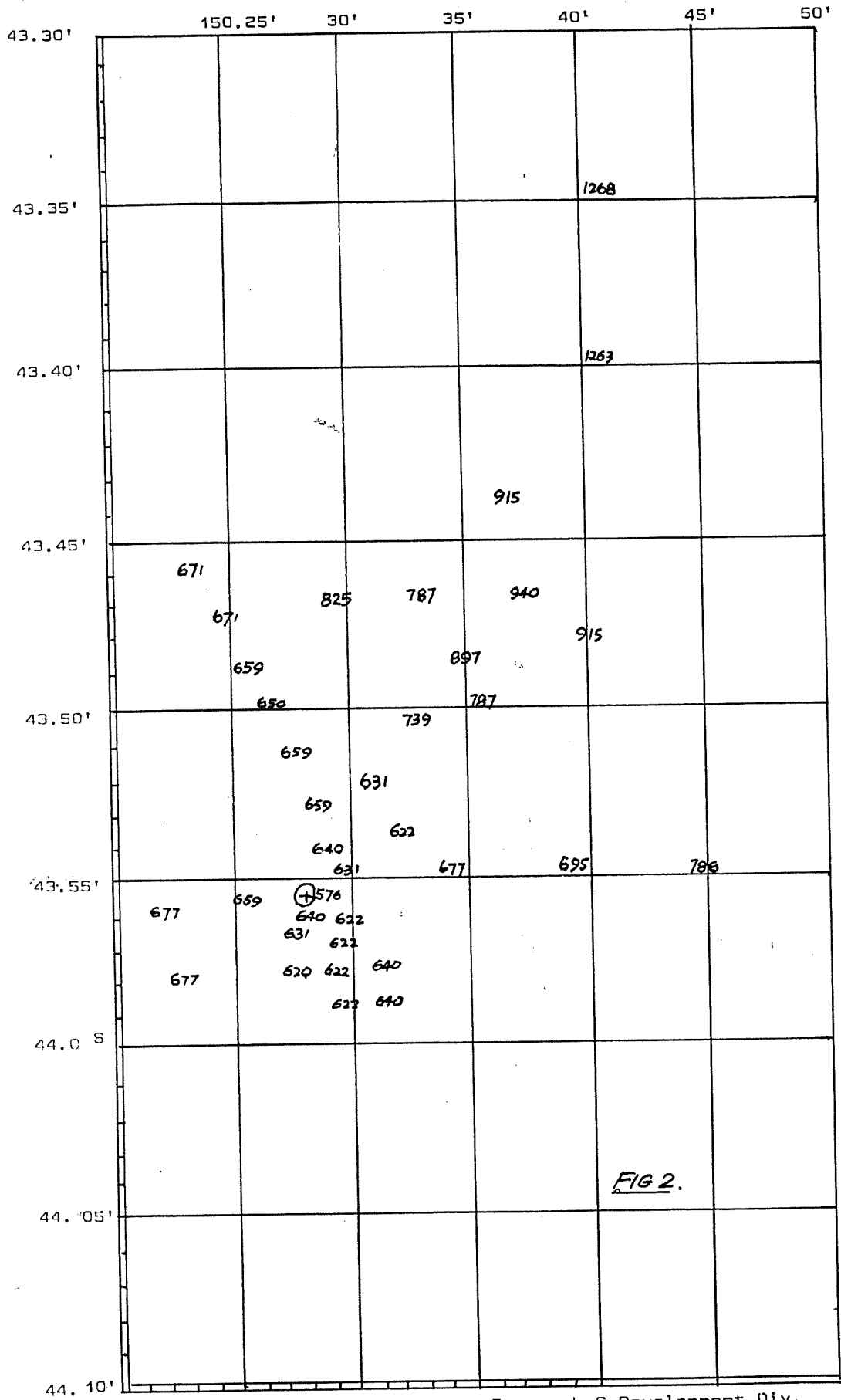
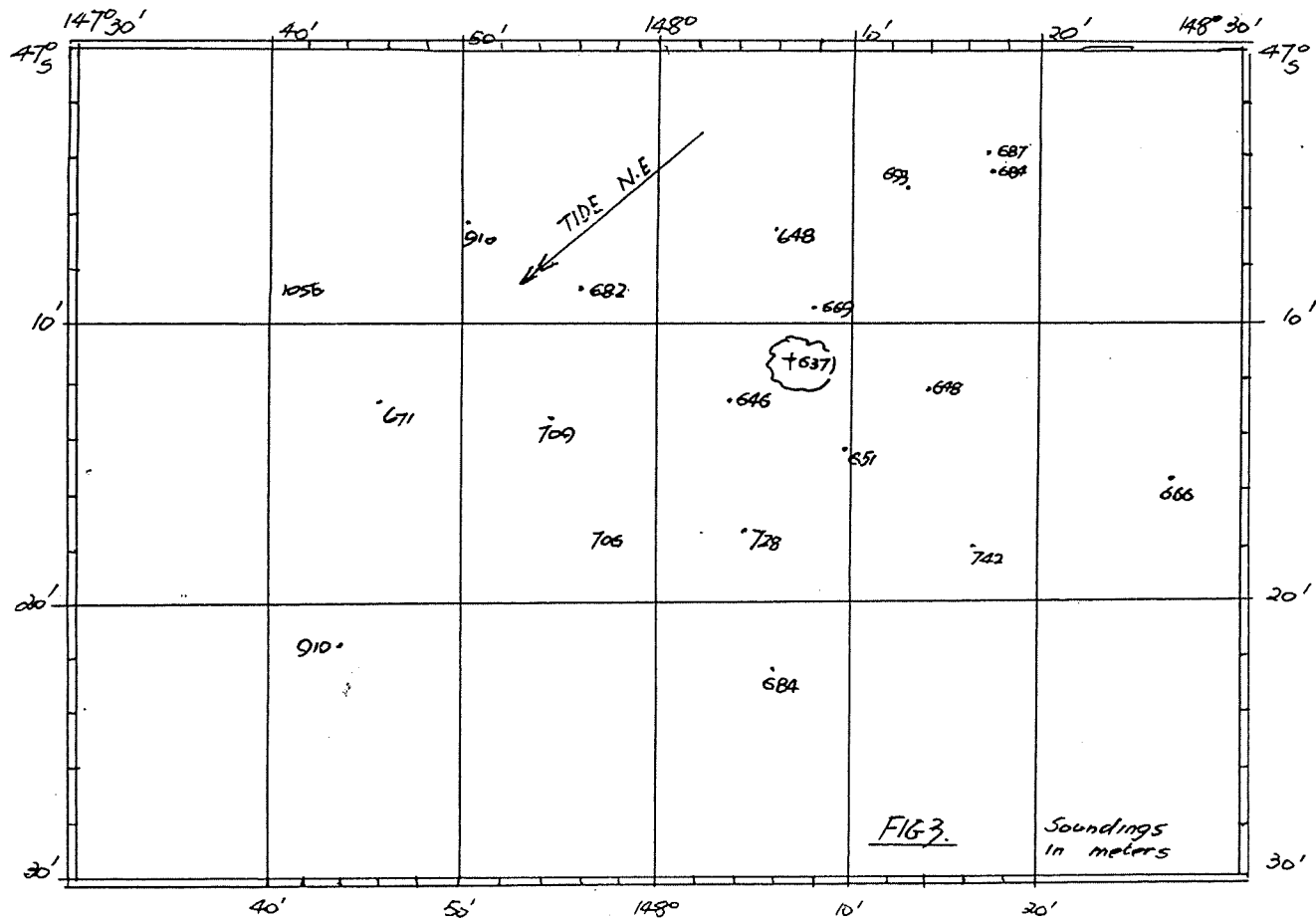
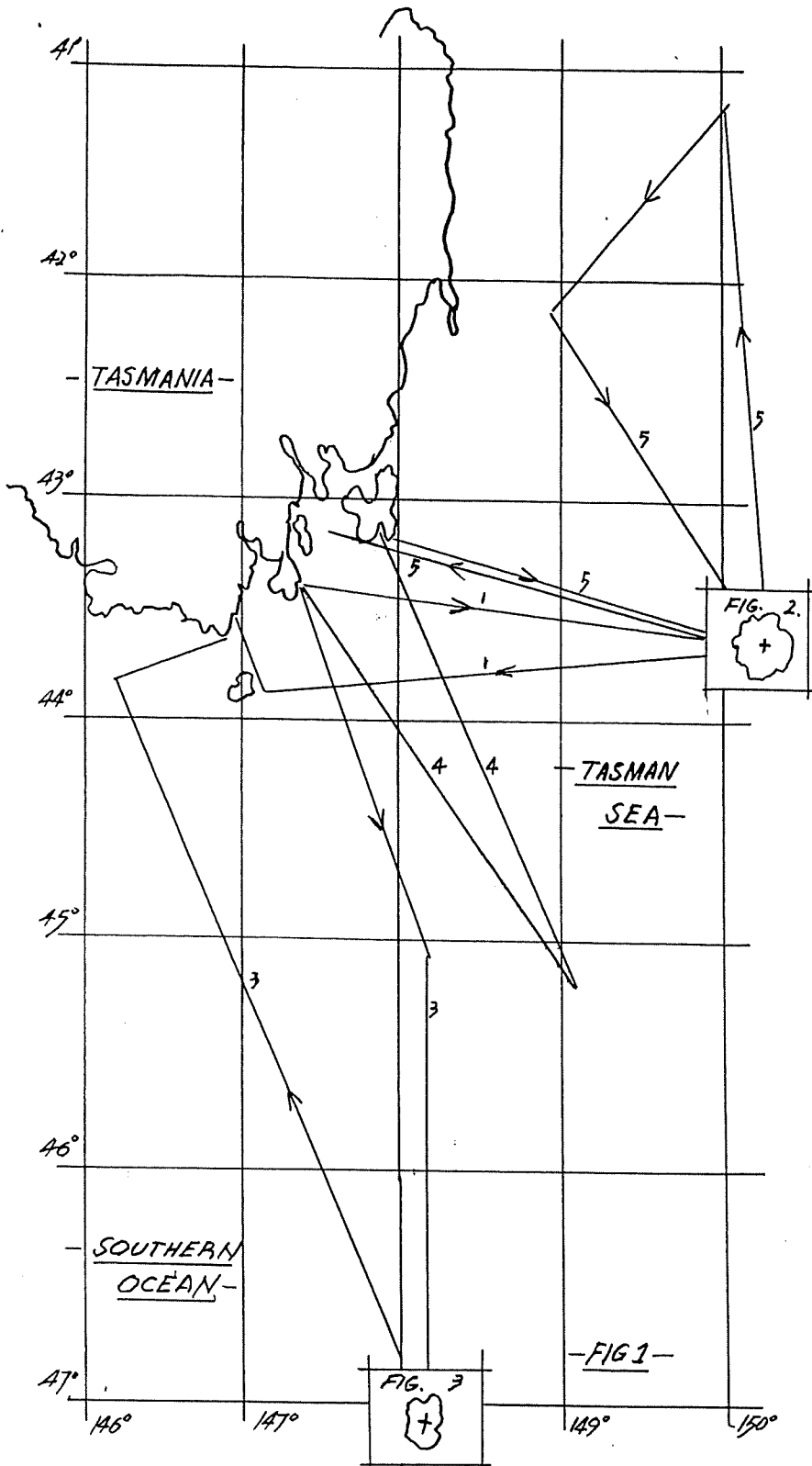


FIG 2.

Pacific Fisheries Pty. Ltd. Research & Development Div.
 HOBART, TASMANIA. Phone (002) 251-511
Soundings in metres.



Pacific Fisheries Pty. Ltd. Research & Development Division.
 Hobart, Tasmania. Phone (002) 251-511.



Pacific Fisheries Pty. Ltd. Research & Development
 Division. Hobart, Tasmania. Phone (002) 251511.

DATE:05/9/85

CODE:E/1

DEPTH:328-350

TIME IN:0630

TIME OUT:1100

NO. OF LINES:14

NO. OF HOOKS:1680

NO. OF FISH:275

STRIKE RATE (FISH/HOOKS):1/6.1;(FISH/100 HOOKS):16.36

EST. AVERAGE WEIGHT:13 KG EST. TOTAL WEIGHT:3575 KG

AVERAGE LENGTH:2' 6"

BAIT:SQUID

CONDITION OF ROE:
SMALL

FOOD EATEN:

WEATHER:

OBSERVATIONS:

DATE:06/9/85

CODE:E/2

DEPTH:328-350

TIME IN:0630

TIME OUT:1100

NO. OF LINES:18

NO. OF HOOKS:2160

NO. OF FISH:380

STRIKE RATE (FISH/HOOKS):1/5.6;(FISH/100 HOOKS):17.59

EST. AVERAGE WEIGHT:13 KG EST. TOTAL WEIGHT:4940 KG

AVERAGE LENGTH:2' 6"-3' 0"

BAIT:SQUID

CONDITION OF ROE:
SMALL

FOOD EATEN:

WEATHER:

OBSERVATIONS:

TRIP SUMMARY

DATES:5/9/85

TRIP CODE: E

TOTAL LINES:32

TOTAL HOOKS:3840

TOTAL FISH:655

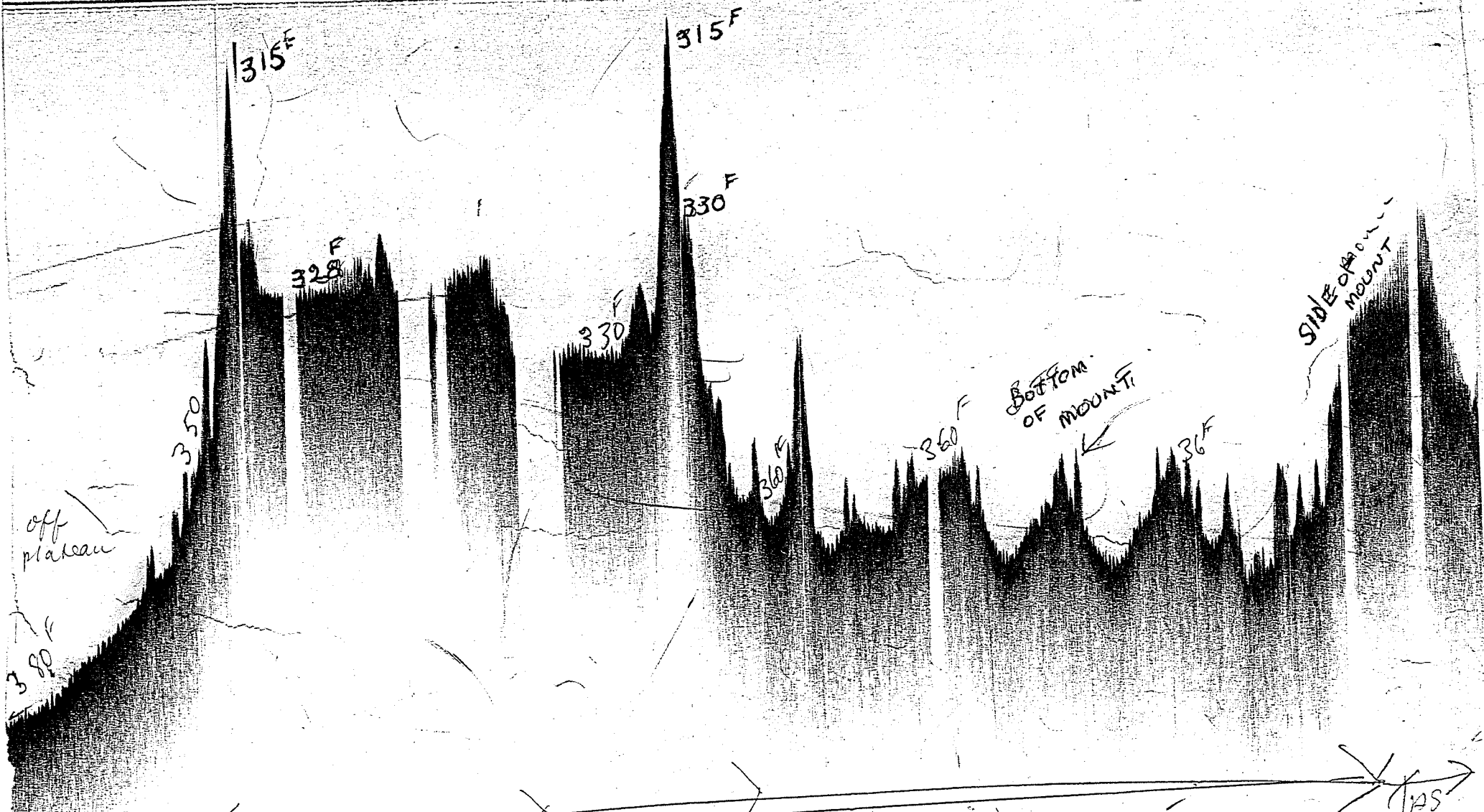
ESTIMATED WEIGHT:8515 KG

ACTUAL WEIGHT:8554 KG

AVERAGE WEIGHT PER FISH:13.05 KG

AVERAGE STRIKE RATE PER 100 HOOKS:17.05

23. - 5 - 85



A8

NZ

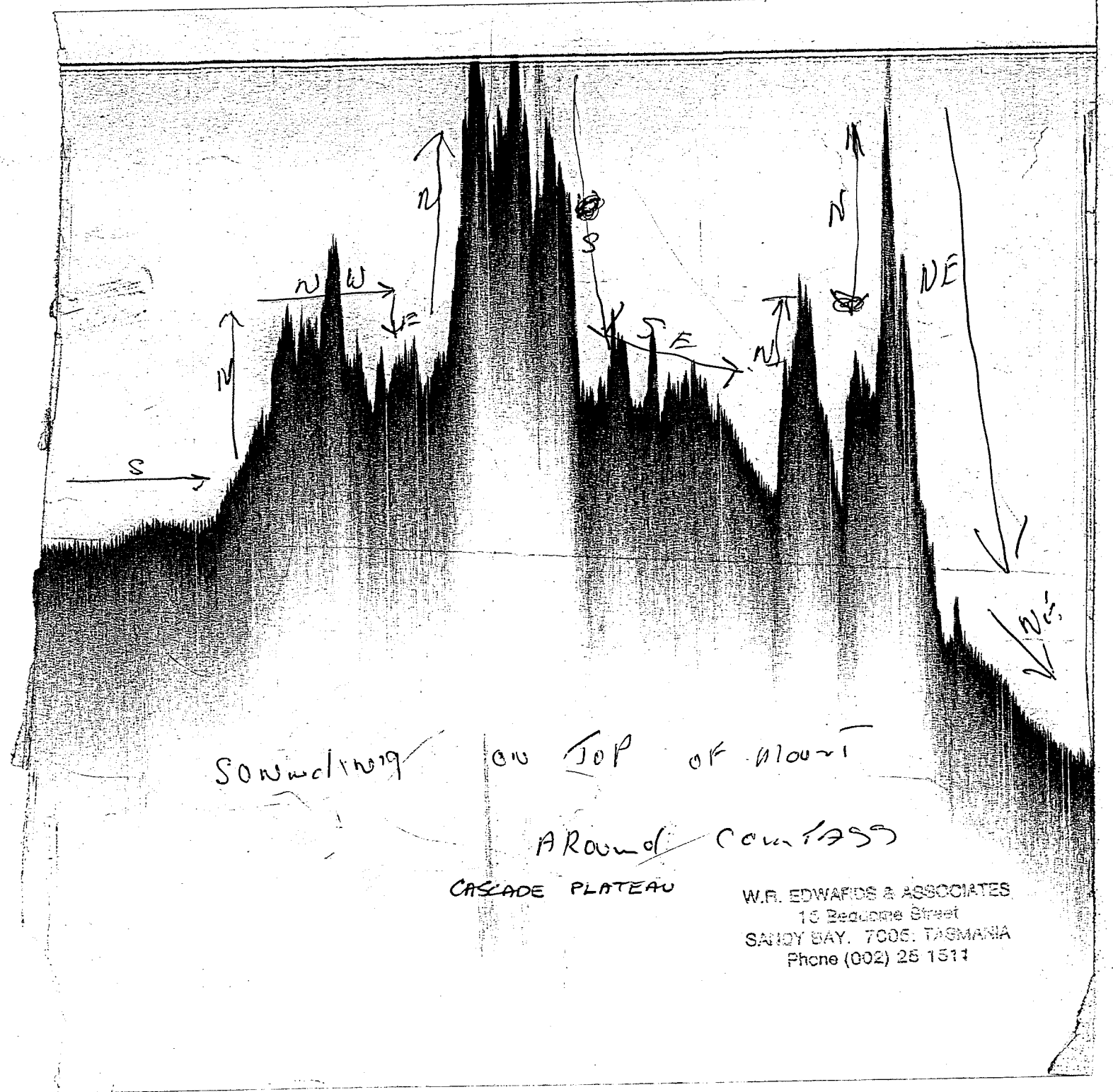
W.R. EDWARDS & ASSOCIATES
 15 Beddome Street
 SANDY BAY, 7005, TASMANIA
 Phone (002) 25 1511

SOUTH TO N.W
 CASCADE PLATEAU

approx 2 tests

48. 50 - 89 S

TAS
 TAS

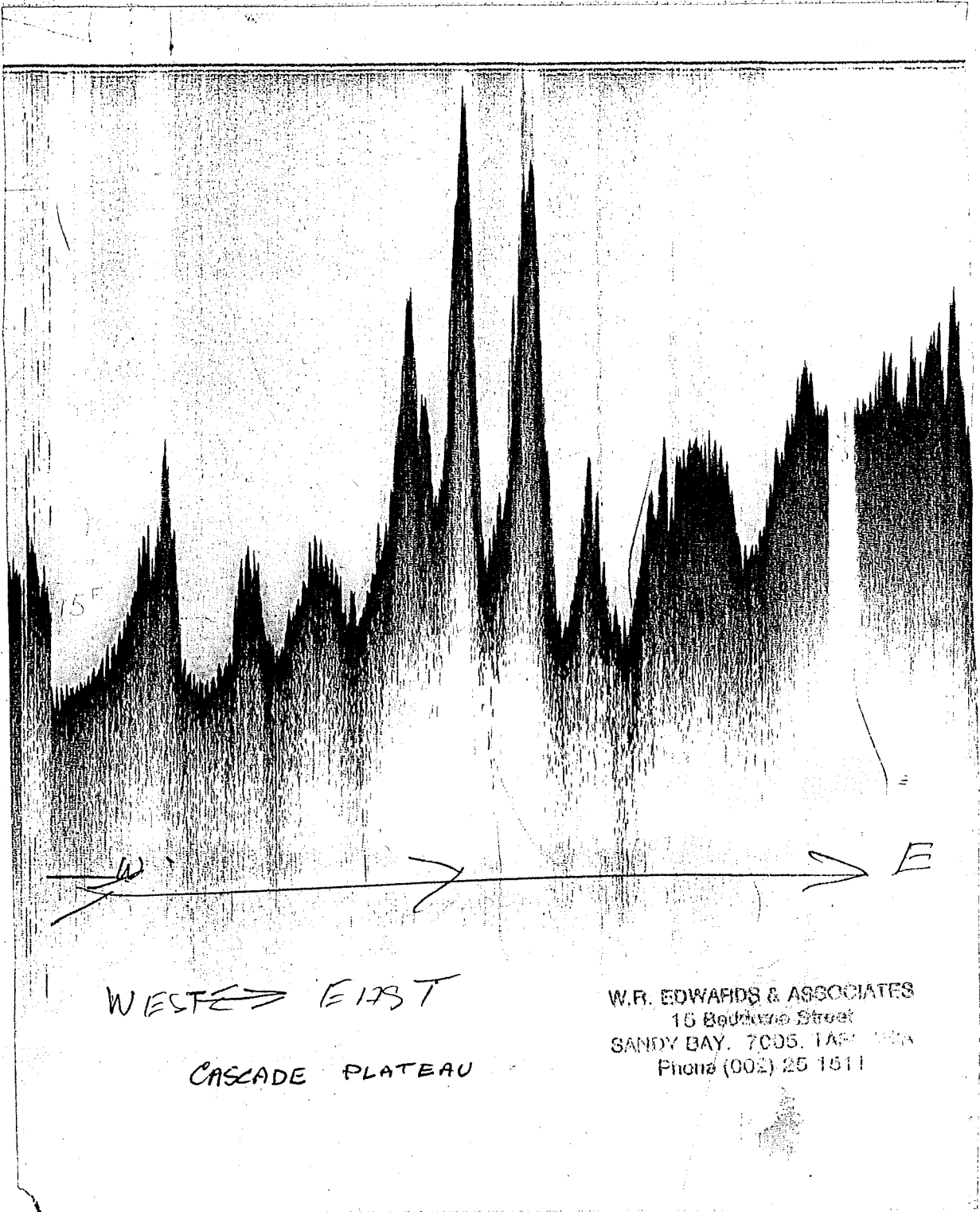


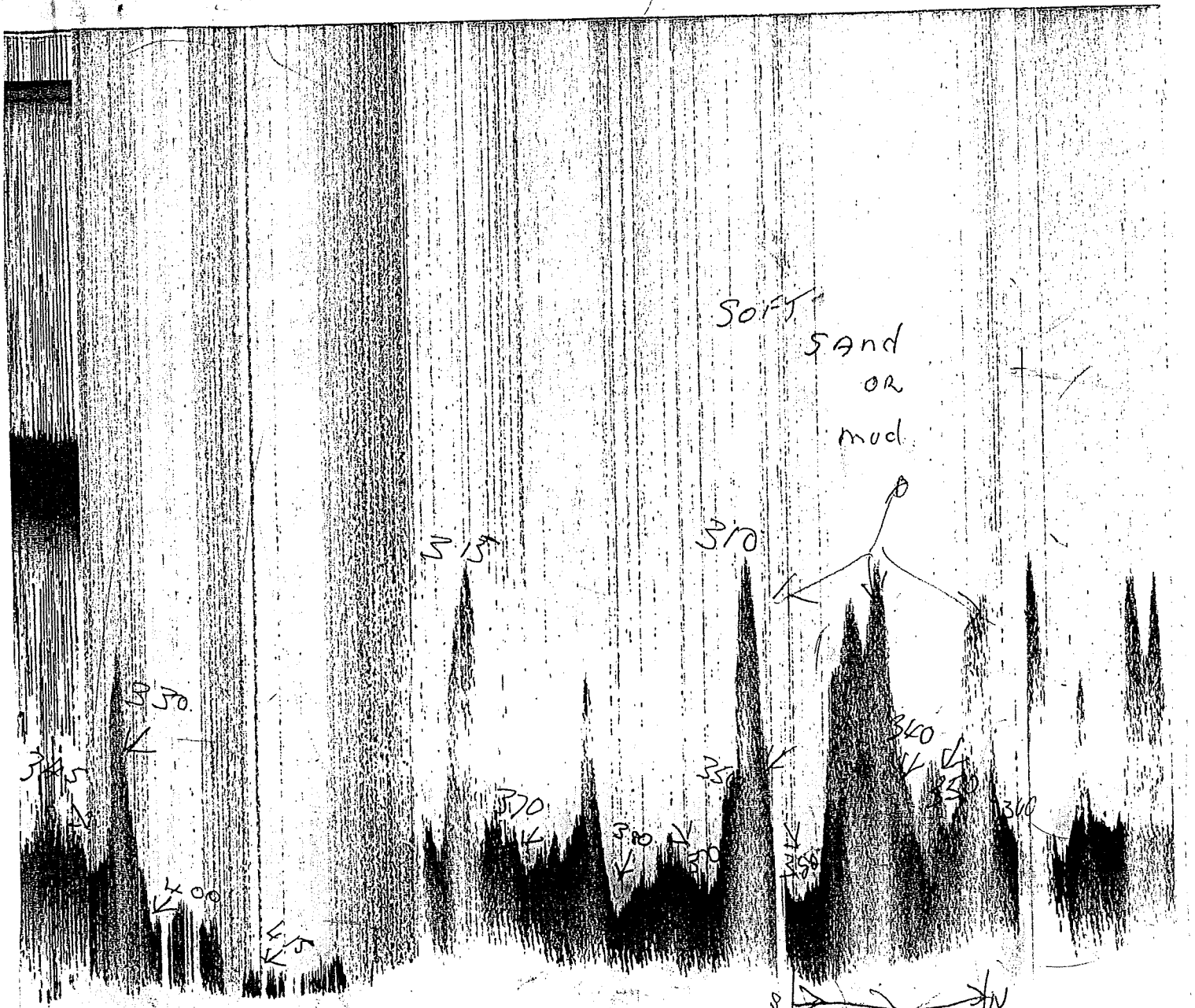
Somewhere on top of Mount

AROUND COMPASS

CASCADE PLATEAU

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 15 Bedoune Street
 SANDY BAY, 7005, TASMANIA
 Phone (002) 25 1511





W.R. EDWARDS & ASSOCIATES
 15 Beddomb Street
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