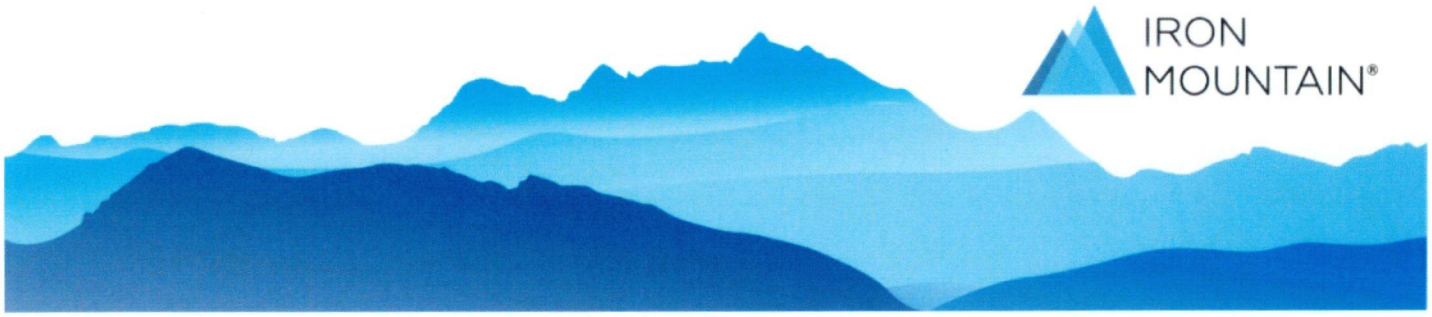
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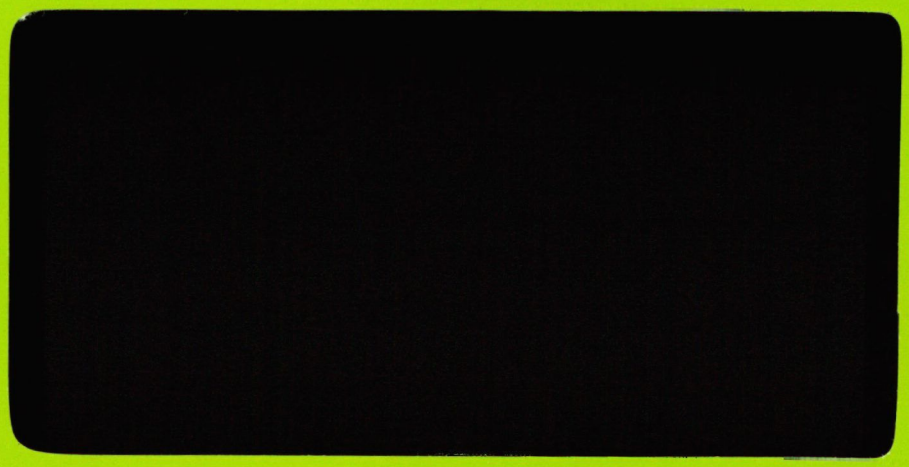
BRISBANE RIVER MEASUREMENTS

12th March, 1983

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Attention: Mr. S.R. Carr

Dear Sir,

Re: MEASUREMENTS OF THE BRISBANE RIVER SALT WEDGE, 12TH ~~MARCH~~ May, 1983

We have pleasure in submitting herewith the results of the measurements undertaken in the Brisbane River on the 12th ~~March~~ May, 1983.

Yours faithfully,
OCEANICS AUSTRALIA PTY. LTD.

Paul Harding.

(P. HARDING)

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1.0 INTRODUCTION

The increase in flow in the Brisbane River following an extended period of rain during late April, 1983, created a salt wedge in its lower reaches. A salt wedge is usually characterized by a layer of turbid fresh water overlying a layer of denser, less turbid salt water. It is presently believed that in the region of the salt wedge, there is increased deposition of the suspended sediments due to flocculation as the turbid fresh water mixes with the more saline water.

This report presents the results of a series of measurements of the turbidity variations at the toe of the salt wedge. The work was performed in two stages, consisting of a series of measurements to record the salinity, temperature and turbidity profiles at the centre of the Brisbane River at selected sites to

i) locate the toe of the salt wedge, and then,

ii) measure the turbidity profiles at a series of cross-sections both upstream and downstream of the toe of the salt wedge.

The temperature and salinity were recorded throughout the water column using a YSI Salinity/ Temperature Meter at two-metre intervals starting at 1 metre depth. One litre samples of water were also collected at these depths using a pump. The turbidity of these samples was then measured at the Queensland Institute of Technology using a Hach Model 2100A Turbidimeter. A description of the turbidity measurements is given in Appendix A. The suspended sediment concentrations of five samples were measured to provide a correlation between the turbidity and the suspended sediment concentration. The results of the analysis of these samples are presented in Appendix B where the correlation between the turbidity (in F.T.U.'s) and suspended sediment concentration (in mg/l) is also described.

(Formazin Turbidity Units)

(No real meaning unless correlated to susp. solids etc., as we have here)

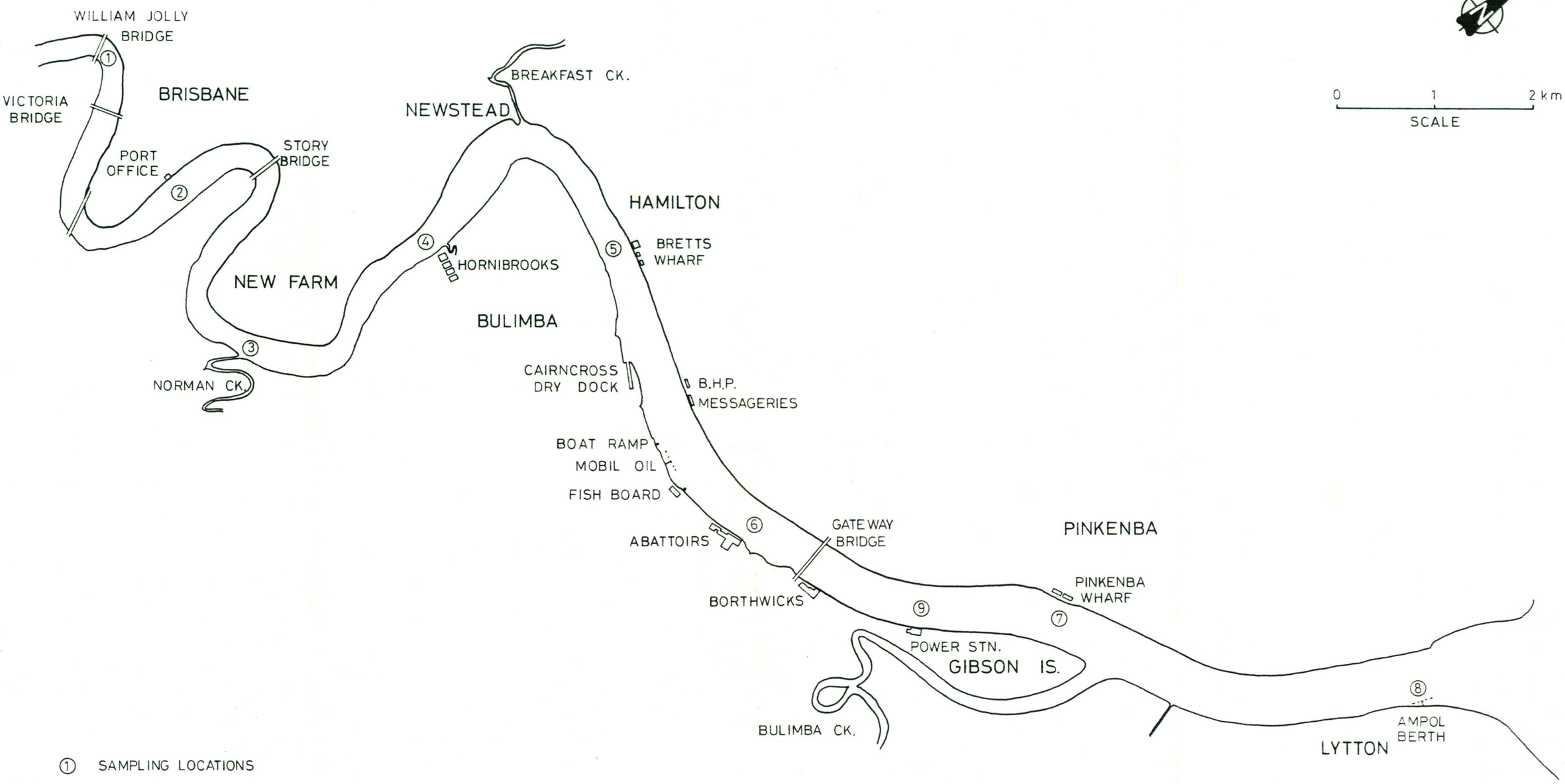


Fig. 1.
INITIAL SURVEY LOCATIONS.

As the shape and position of the salt wedge is determined by the interaction of the freshwater flow with the varying tidal flows, the state of the tide is an important consideration in the interpretation of these results. The predicted tide levels at the Brisbane Bar, at the mouth of the river, are presented in Table 1. These times may have been affected by the fresh water flow. The initial survey was carried out between 0545 and 0830 on the 12th May, 1983 during a flood tide. High tide occurred during the initial detailed measurements at the toe of the salt wedge, so that these initial measurements were recorded during the maximum penetration of the salt wedge. The rest of the detailed survey was carried out during the ebb tide when the salt wedge would have been receding downstream.

TABLE 1 - PREDICTED TIDE AT THE BRISBANE BAR, 12TH MAY, 1983

Predicted Water Level (m. Chart Datum)	Time
0.45	0310
2.05	0900
0.25	1518
2.37	2132

2.0 INITIAL RIVER SURVEY

The salinity, temperature and turbidity profiles at the centre of the Brisbane River were recorded at eight sites between the Grey Street Bridge and the Ampol Products Wharf. Table 2 and Figure 1 give the locations of the measurements presented in Tables 3 to 10.

Figure 2 presents the longitudinal profile of the salinity measurements during the initial survey. The water was fresh at the Grey Street Bridge and the salinity gradually increased downstream to the Ampol Products Wharf. All profiles showed the salinity increased with depth as the fresh water was overlying the denser more saline water.

Towards the mouth of the river, the salinity was more uniformly distributed throughout the water column and was only 24.5 ppt which suggested that there had already been some dilution of the waters of Moreton Bay with the fresh water. The temperature of the fresh water was about 1°C colder than the saline water at the downstream section. The toe of the salt wedge was taken to be at the Abattoirs where the salinity profile clearly showed a salt layer underlying a fresher layer.

The longitudinal turbidity profile from the initial survey is presented in Figure 3. The turbidity varied from 148 FTU to 335 FTU (corresponding to 178 mg/l to 870 mg/l) in the fresh water at the Grey Street Bridge to 5 FTU to 77 FTU (corresponding to 19 mg/l to 99 mg/l) in the more saline water at the Ampol Products Wharf. However, most of the decrease in turbidity occurred between the Grey Street Bridge and Norman Creek where the salinity had increased to 10 ppt. All profiles showed an increase in the turbidity with depth.

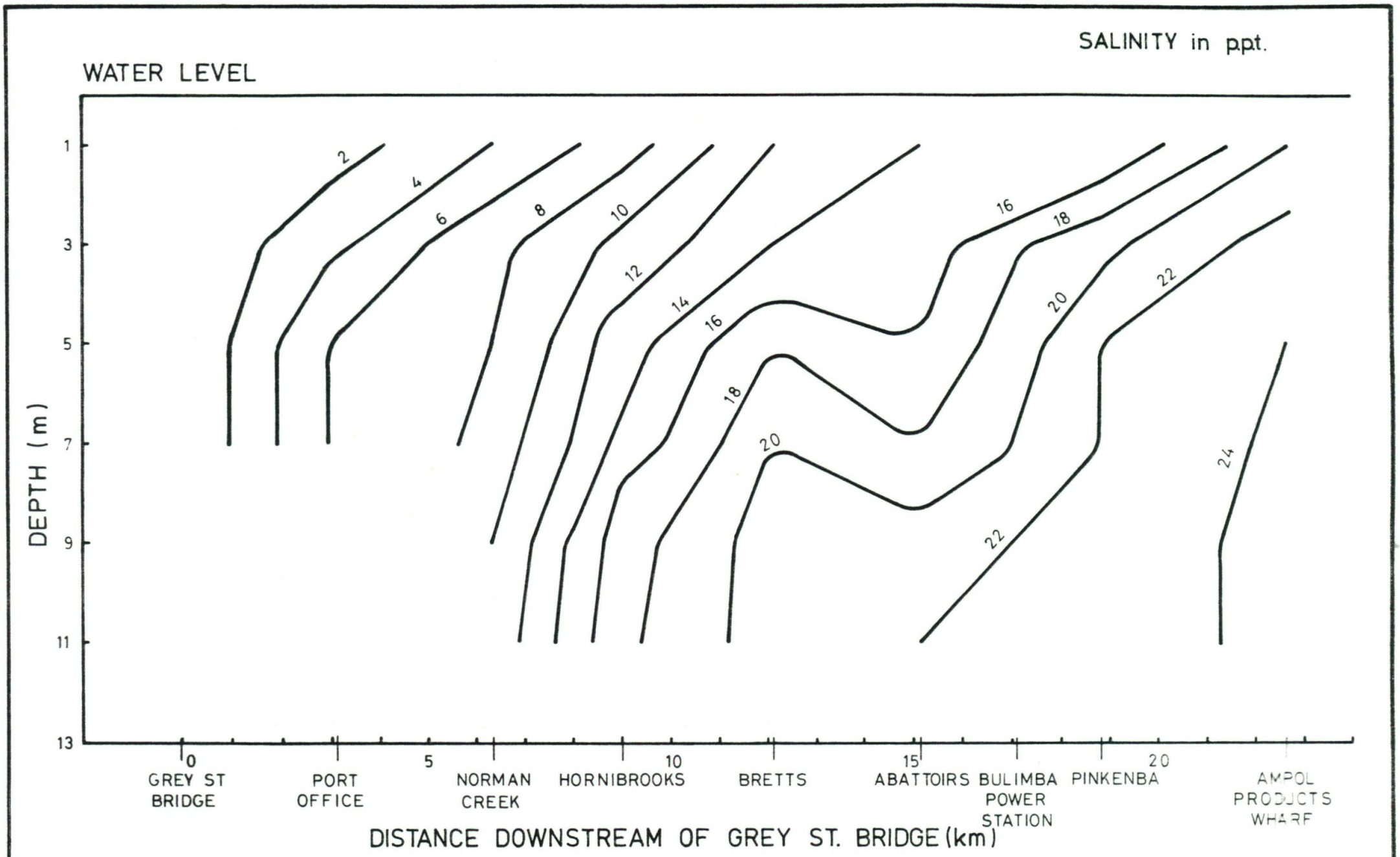


Fig. 2. LONGITUDINAL SALINITY PROFILE 0632-0818 12 MAY 1983

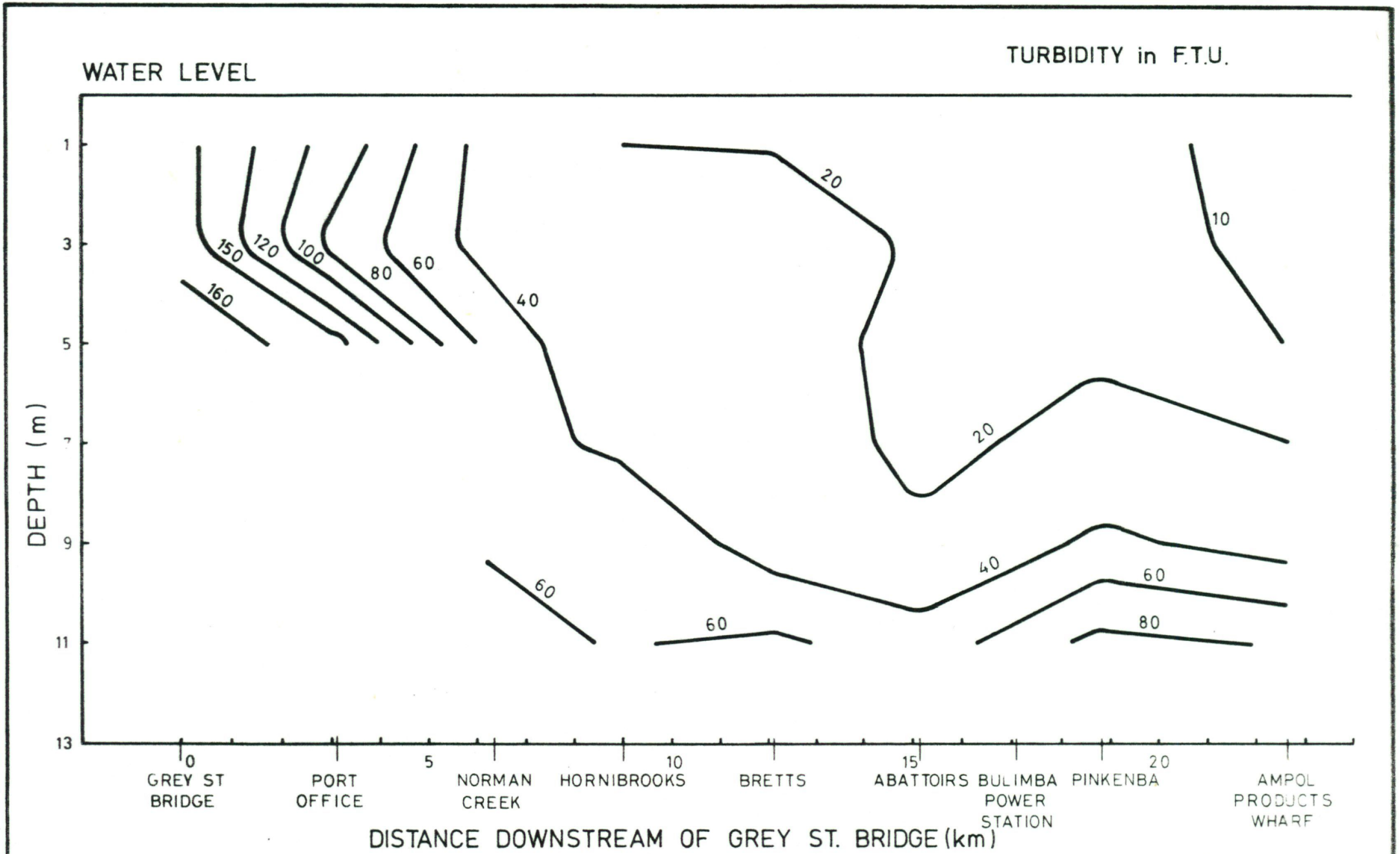


Fig. 3. LONGITUDINAL TURBIDITY PROFILE 0632-0818 12 MAY 1983

TABLE 2 - DESCRIPTION OF INITIAL SURVEY LOCATIONS

Station No.	Description of Location
1	Downstream side of the Grey Street Bridge
2	Downstream of the ferry crossing at the Brisbane Port Office
3	In the Humbug Reach opposite the mouth of Norman Creek
4	Opposite Hornibrooks
5	Opposite Bretts Wharf
6	Opposite the abandoned Abbattoirs building
7	Opposite to downstream end of Pinkenba Wharf
8	Opposite the Ampol Products Wharf
9	Opposite the Bulimba Power Station

To check the movement of the salt wedge before starting the intensive measurements, a salinity profile was measured at the Bulimba Power Station (location 9 on Figure 1). The measurements are presented in Table 11. A comparison of this profile with the interpolated values on Figure 2 shows that the salt water was still encroaching upstream at 0912.

During most of this survey, the surface water was flowing downstream even during the flood tide.

TABLE NO. 3

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
1C	0556	1	19.	0.0	148. **	178.
		3	19.	0.0	152.	182.
		5	19.	0.0	175.	260.
		7	19.5	0.0	180.	225.
		9	19.5	0.0	215.	305.
		11	19.5	0.0	260.	460.
	0559	13	19.5	0.5	335.	870.

** See Appendix A

TABLE NO. 4

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
2C	0640	1	19.	1.	92.**	116.
		3	19.5	3.5	74.	96.
		5	19.5	6.	150.	180.
		7	19.5	6.	-	

** See Appendix A

TABLE NO. 5

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
3C	0651	1	20.	4.	32.	49.
		3	20.	7.5	32.	49.
		5	20.	8.	53.	72.
		7	20.	8.5	47.5	66.
		9	20.	10.	39.	57.
		11	20.	10.5	148.	178.
	0703	13	20.	12.5	-	

TABLE NO. 6

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
4C	0711	1	19.5	7.	20.**	36.
		3	20.	10.5	21.	37.
		5	20.	13.	22.	38.
		7	20.	14.5	36.	53.
		9	20.	17.	57.5	77.
	0719	11	20.	17.5	59.	79.

** See Appendix A

TABLE NO. 7

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
5C	0726	1	20.	12.	19.**	34.
		3	20.	14.	31.	48.
		5	20.5	18.	25.	41.
		7	20.5	20.	27.	43.
		9	20.5	21.	30.**	47.
		11	20.5	21.	64.	84.

** See Appendix A

TABLE NO. 8

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
6C	0744	1	19.5	14.	18.	33.
		3	20.	15.	18.	33.
		5	20.	16.	17.	32.
		7	20.5	18.	17.	32.
		9	21.	21.	22.	38.
		11	21.	22.	48.	67.

TABLE NO. 9

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
7C	0801	1	20.	14	15.**	30.
		3	20.5	19.5	16.	31.
		5	20.5	22.	18.	33.
		7	21.	22.	24.	40.
		9	21.	23.	44.	62.
		11	21.	23.	86.	109.
		13	21.	23.	160.	195.

** See Appendix A

TABLE NO. 10

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
8C	0818	1	20.	20.	5.*	19.
		3	20.	23.	5.9	20.
		5	20.5	24.	9.8	24.
		7	20.5	24.5	20.**	36.
		9	20.5	24.5	32.	49.
		11	20.5	24.5	77.	99.

* See Appendix A

** See Appendix A

TABLE NO. 11

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
9C	0912	1	20.	15.	-	-
		3	20.	17.	-	-
		5	20.	20.	-	-
		7	20.	23.	-	-
		9	20.5	23.	-	-
		11	20.5	23.5	-	-

3.0 INTENSIVE SURVEY OF THE SALT WEDGE

An intensive survey of the salt wedge was carried out by measuring salinity, temperature and turbidity profiles at a series of cross-sections at various intervals both upstream and downstream of the toe of the salt wedge located at the Abattoirs Wharf at the beginning of the survey. The survey was conducted mainly during the ebb tide, when the salt water was receding downstream. The locations of the cross-sections are given on Figure 4. A description of the locations is also given in Table 12. The downstream stations had to be shifted further downstream to avoid the vehicular ferry. Five sites were chosen across the river at each location and are labelled from A to E with site A closest to the northern side of the river. The results are presented in Tables 13 to 23.

The salinity profiles measured at the deeper sites showed a layer of the denser saline water underlying a layer of fresher water. The depth of the surface layer diminished in the downstream direction. Stations 15 and 17 showed a anomalous decrease in the salinity particularly in the surface layer, which was possibly caused by fresh water runoff from the Royal Queensland Gold Course. The salinity variation across each section showed that the shallower sections consisted mainly of the fresher water while the denser saline water was mainly confined to the bottom of the deeper dredged channel.

There was little variation in the turbidity across each section while in the deeper dredged channels, the turbidity profiles generally showed an increase with depth (the profiles at section 19 were disturbed by a docking ship). Unfortunately, the variation in turbidity along the salt wedge was not as well defined as the variation in the salinity profiles.

The results of the initial survey indicate that most of the decrease in turbidity occurred upstream of the salt wedge where the

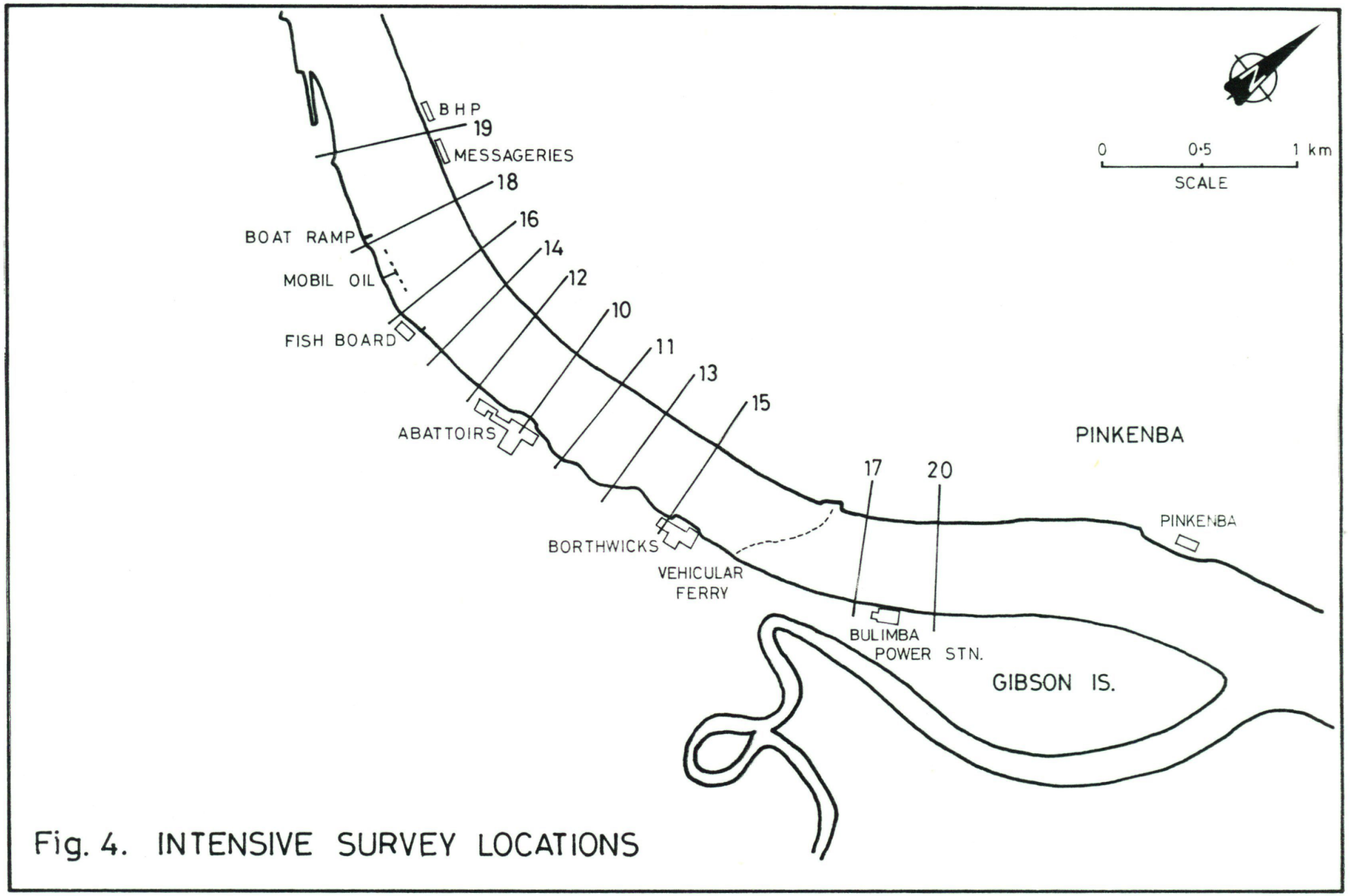


Fig. 4. INTENSIVE SURVEY LOCATIONS

salinity increased to only 10 ppt.

No velocity measurements were taken during the survey. High tide occurred during the first series of measurements during the intensive survey. As the surface layer was always flowing downstream, irrespective of the state of the tide, it was not possible to accurately determine the time of slack water. During the afternoon, strong ebb currents were observed to extend throughout the water column.

TABLE 12 **DESCRIPTION OF INTENSIVE SURVEY LOCATION**

Station No.	Description of Location
10	Opposite the middle of the Abattoirs Wharf (estimated toe of the salt wedge)
11	Approximately 240m downstream of the toe of the salt wedge
12	Approximately 260m upstream of the toe of the salt wedge
13	Approximately 550m downstream of the toe of the salt wedge
14	Approximately 530m upstream of the toe of the salt wedge
15	Opposite Borthwick's wharf, approximately 840m downstream of the toe of the salt wedge
16	Approximately 770m upstream of the toe of the salt wedge
17	Approximately 1800m upstream of the toe of the salt wedge
18	Opposite Colmslie Boat Ramp, approximately 1100m upstream of the toe of the salt wedge
19	Opposite the downstream end of Cairnscross Drydock, approximately 1500m upstream of the toe of the salt wedge
20	Opposite the navigational beacon downstream of the Bulimba Power Station, approximately 2200m downstream of the toe of the salt wedge.

TABLE NO. 13

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
10A	0944	1	20.	14.	13.	28.
10B	0935	1	20.	14.	12.	27.
10C	0924	1	20.	14.	12.	27.
		3	20.	15.5	12.	27.
		5	20.5	17.	15.	30.
		7	21.	22.	25.	41.
		9	21.	22.	41.	59.
		11	21.	23.	-	-
10D	0917	1	19.5	14.5	12.**	27.
		3	20.	15.5	11.	26.
		5	20.	17.0	11.	26.
		7	20.	21.0	23.	39.
		9	20.	22.5	35.	52.
		11	20.	23.0	44.	62.
	0923	13	20.	23.0	155.	185.
10E	0951	1	20.	15	14.	29.
		3	20.5	21	14.	29.
		5	20.5	19.5	17.	32.
		7	21.	21.5	27.	43.
		9	21.	23	49.	68.

** See Appendix A

TABLE NO. 14

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
11A	1000	1	20.	16.	20.5	36.
11B	1003	1	20.	16.	17.	32.
		2	20.	16.5	17.	32.
11C	1006	1	20.	15.	16.	31.
		3	20.	16.	19.	34.
		5	20.5	20.	27.	43.
		7	20.5	22.5	33.5	51.
		9	20.5	23.	-	-
		11	21.	23.5	65.**	86.
		13	21.	23.5	170.	210.
11D	1017	1	20.	15.	16.	31.
		3	20.	16.	15.	30.
		5	20.5	18.5	16.	31.
		7	21.5	22.	27.5	44.
		9	21.	23.	19.	34.
		11	21.	23.5	-	-
11E	1027	1	20.	15.5	16.	31.
		3	21.	15.5	16.	31.

** See Appendix A

TABLE NO. 15

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
12A	1105	1	20.5	14.	15.**	30.
12B	1051	1	20.5	13.5	4.8*	19.
	1100	3	20.5	16.	5.4	19.
		5	20.5	16.5	28.	44.
12C	1044	1	20.5	14.	5.2	19.
		3	20.5	16.	5.3	19.
		5	21.	21.5	21.**	37.
		7	21.	22.5	20.**	36.
		9	21.	23.	22.	38.
		11	21.	23.5	19.	34.
12D	1038	1	20.5	14.	16.	31.
		3	21.	17.	16.	31.
		5	21.	20.	17.	32.
		7	21.	21.5	24.5	41.
		9	21.	23.	32.	49.
		11	21.	23.5	32.	49.
12E		1	20.5	15.	17.	32.
		3	20.5	15.	16.	31.

* See Appendix A

** See Appendix A

TABLE NO. 16

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
13A	1141	1	20.	14.	13.	28.
13B	1139	1	20.	14.	13.	28.
13C	1132	1	20.	15.5	18.	33.
		3	20.	16.5		
13D	1122	1	20.5	15.	4.3*	18.
		3	20.5	16.	5.1	19.
		5	20.5	19.5	5.2	19.
		7	21.	23.5	9.6	24.
		9	21.	24.	17.**	32.
		11	21.	24.	18.	33.
13E	1116	1	20.	16.	4.7*	19.
		3	20.	17.	4.7	19.
		5	20.5	23.5	9.6	24.
		7	20.5	24.	20.**	36.
		9	20.5	24.5	26.	42.

* See Appendix A

** See Appendix A

TABLE NO. 17

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
14A	1307	1	20.5	11.	17.	32.
14B	1300	1	20.5	11.	21.	37.
		3	20.5	15.	15.	30.
		5	20.5	21.	17.	32.
		7	20.5	23.	21.	37.
		9	20.5	23.	-	-
14C	1247	1	20.	11.	14.	29.
		3	20.	13.	14.	29.
		5	20.	16.5	15.	30.
		7	20.5	21.	17.	32.
		9	20.5	22.	17.	32.
		11	20.5	23.	21.	37.
14D	1235	1	20.5	12.5	13.	28.
		3	20.5	15.	14.	29.
		5	21.	19.	16.**	31.
		7	21.	21.	17.	32.
		9	21.	23.5	24.	40.
		11	21.	23.5	39.	57.
14E	1228	1	20.5	13.5	15.	30.
		3	20.5	16.5	16.5**	32.

** See Appendix H

TABLE NO. 18

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
15A+	-	-	-	-	-	-
15B	1330	0.5	21.	10.5	47.	66.
15C	1334	1	21.	9.	18.	33.
		3	20.5	15.	18.	33.
		5	20.5	19.5	31.	48.
		7	20.5	20.	32.	49.
		9	21.	20.	32.**	49.
		11	21.	20.5	38.	56.
15D	1342	1	20.5	10.5	16.	31.
		3	20.5	14.5	17.**	32.
		5	20.5	18.5	17.5	33.
		7	20.5	23.	24.5	41.
		9	20.5	23.	36.	53.
15E	1315	1	20.5	11.	17.	32.
		3	20.5	20.	20.	36.
		5	20.5	19.5	28.	44.
		7	20.5	23.	55.	74.
		9	21.	23.	64.	84.

+ No record taken as it was too shallow

** See Appendix A

TABLE NO. 19

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
16A	1355	0.5	20.5	13.	19.	34.
16B	1401	1	20.5	13.5	16.5	32.
		3	20.5	15.	17.	32.
16C	1409	1	20.5	14.	18.	33.
		3	20.5	16.	19.	34.
		5	20.5	20.	21.	37.
16D	1415	1	20.5	14.	17.	32.
		3	20.5	14.5	19.5	35.
		5	20.5	19.5	22.	38.
		7	20.5	21.	24.	40.
16E	1422	1	21.	14.	18.**	33.
		3	21.	14.	19.5	35.
		5	21.	19.	22.	38.

** See Appendix A

TABLE NO. 20

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
17A	1430	1	20.5	13.5	21.	37.
17B	1435	1	20.5	12.5	17.	32.
		3	20.5	20.5	18.5	34.
		5	20.5	22.5	31.	48.
17C	1452	1	20.5	13.	17.**	32.
		3	20.5	18.	18.	33.
		5	20.5	22.	21.	37.
		7	20.5	23.	26.	42.
		9	21.	24.	30.	47.
		11	21.	24.5	33.	50.
17D	1445	1	20.5	14.	19.	34.
		3	20.5	19.	18.	33.
		5	20.5	21.	17.	32.
		7	20.5	23.	28.**	44.
		9	21.	24.	31.	48.
17E	1440	1	20.5	11.	18.	33.
		3	20.5	14.	18.	33.
		5	20.5	19.5	32.	49.

** See Appendix A

TABLE NO. 21

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
18A+	-	-	-	-	-	-
18B++	1550	1	20.5	13.5	28.	44.
		3	20.5	15.5	88.	111.
		5	20.5	17.5	140.	169.
		7	20.5	17.5	175.	210.
		9	20.5	17.5	48.	67.
18C	1540	1	20.5	14.	31.	48.
		3	20.5	14.	33.	50.
		5	20.5	17.	37.	54.
		7	20.5	19.	42.	60.
		9	20.5	21.	37.	54.
18D	1535	1	20.5	14.	27.**	43.
		3	20.	15.5	28.	44.
		5	20.5	16.	27.	43.
		7	20.5	19.5	31.	48.
18E	1530	1	20.5	14.	19.	34.
		3	20.5	15.	24.	40.
		5	20.5	18.	30.	47.

+ No record taken as it was too shallow

++ This section was close to a berthing ship, so that its propeller's probably stirred the bottom sediments whilst mooring.

** See Appendix A

TABLE NO. 22

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
19A	1610	1	20.5	6.	25.	41.
		3	21.	6.	25.	41.
		5	21.	9.	26.5	43.
		7	21.	10.	27.5	44.
		9	21.	17.5	55.**	74.
19B	1640	1	21.	11.	25.	41.
		3	21.	12.	28.	44.
		5	21.	13.	26.	42.
		7	21.	17.	27.	43.
		9	21.	20.	44.	62.
19C	1630	1	21.	12.	20.**	36.
		3	21.	12.	51.	70.
		5	21.	13.5	29.	46.
		7	21.	16.5	27.	43.
		9	21.	20.	31.	48.
19D	1625	1	20.5	12.	27.	43.
		3	21.	13.	26.**	42.
		5	21.	14.	25.	41.
19E	1622	1	20.5	12.	24.	40.

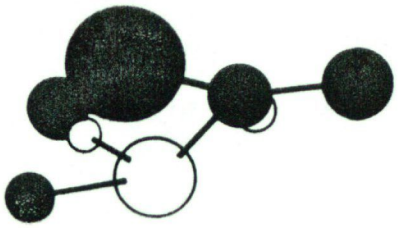
** See Appendix A

TABLE NO. 23

Station No.	Time	Depth (m)	Temperature (°C)	Salinity (ppt.)	Turbidity (F.T.U.)	Suspended Sediment Conc. (mg/l)
20A	1725	1	21.	14.	18.	33.
		3	21.	17.	18.	33.
20B	1715	1	21.	14.5	18.	33.
		3	21.	16.	19.	34.
		5	21.	19.	19.	34.
		7	21.	22.	18.	33.
		9	21.	24.	20.**	36.
		11	21.	24.5	53.	72.
20C	1705	1	21.	15.	19.	34.
		3	21.	18.	18.	33.
		5	21.	19.	18.	33.
		7	21.	20.	19.	34.
		9	21.	23.	18.	33.
		11	21.	24.	52.	71.
20D	1700	1	21.	14.5	14.5	29.
		3	21.	18.5	15.5	31.
		5	21.	20.	17.	32.
		7	21.	22.	21.	37.
20E	1655	1	21.	14.	14.5**	29.
		3	21.	15.	13.5	28.
		5	21.	17.	27.5	44.

** See Appendix A

APPENDIX A DESCRIPTION OF TURBIDITY MEASUREMENT TECHNIQUE



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TEST REPORT NO: CET 1069 DATE: 17 May, 1983

CLIENT: Oceanics Australia Pty Ltd

REFERENCE: Order No. 1805

DESCRIPTION OF TEST: Turbidity Tests on 238 x 1L Samples as supplied by Oceanics Australia on the 13th May, 1983.

TEST METHOD: The 238 samples supplied on the 13th May, 1983 were analysed for turbidity using the Hach Model 2100 A. Turbidimeter. 109 samples were analysed on the 13th May, 1983. The remainder were stored at 4°C in darkness prior to analysis on the 16th May, 1983. All samples were at room temperature when tested.

TEST PROCEDURE: All sample bottles were shaken prior to being tested. The turbidimeter cell was first rinsed with the test sample before the test aliquot was taken. The cell was carefully wiped before being placed in the instrument for measurement.

Calibration checks on the instrument were done at the frequency indicated by asterisks in the result columns. The single asterisk (*) indicates a calibration against a standard of 10 FTU. The double asterisk (**) indicates a calibration against a standard of 72 FTU.

APPENDIX B DETAILED ANALYSIS OF SUSPENDED SEDIMENT CONCENTRATION

Five water samples were further analysed by Simmonds & Bristow to determine the suspended sediment concentration. Table B.1 and Figure B.1 presents a comparison of the turbidity measurements and the suspended sediment concentration. Below a turbidity of 150 FTU, the correlation between turbidity and suspended sediment concentration is approximately linear, while above 150 FTU, the correlation is non-linear. The suspended sediment concentration presented in Tables 3 to 11 and 13 to 23 have been derived using the curve presented in Figure B.1.

TABLE B.1 **THE SUSPENDED SEDIMENT CONCENTRATIONS OF SELECTED SAMPLES**

Sample No.	Turbidity F.T.U.	Suspended Sediment Conc. (mg/l)
1C13	335.	870.
1C11	260.	460.
2C5	150.	180.
5C9	30.	48.
8C1	5.	18.

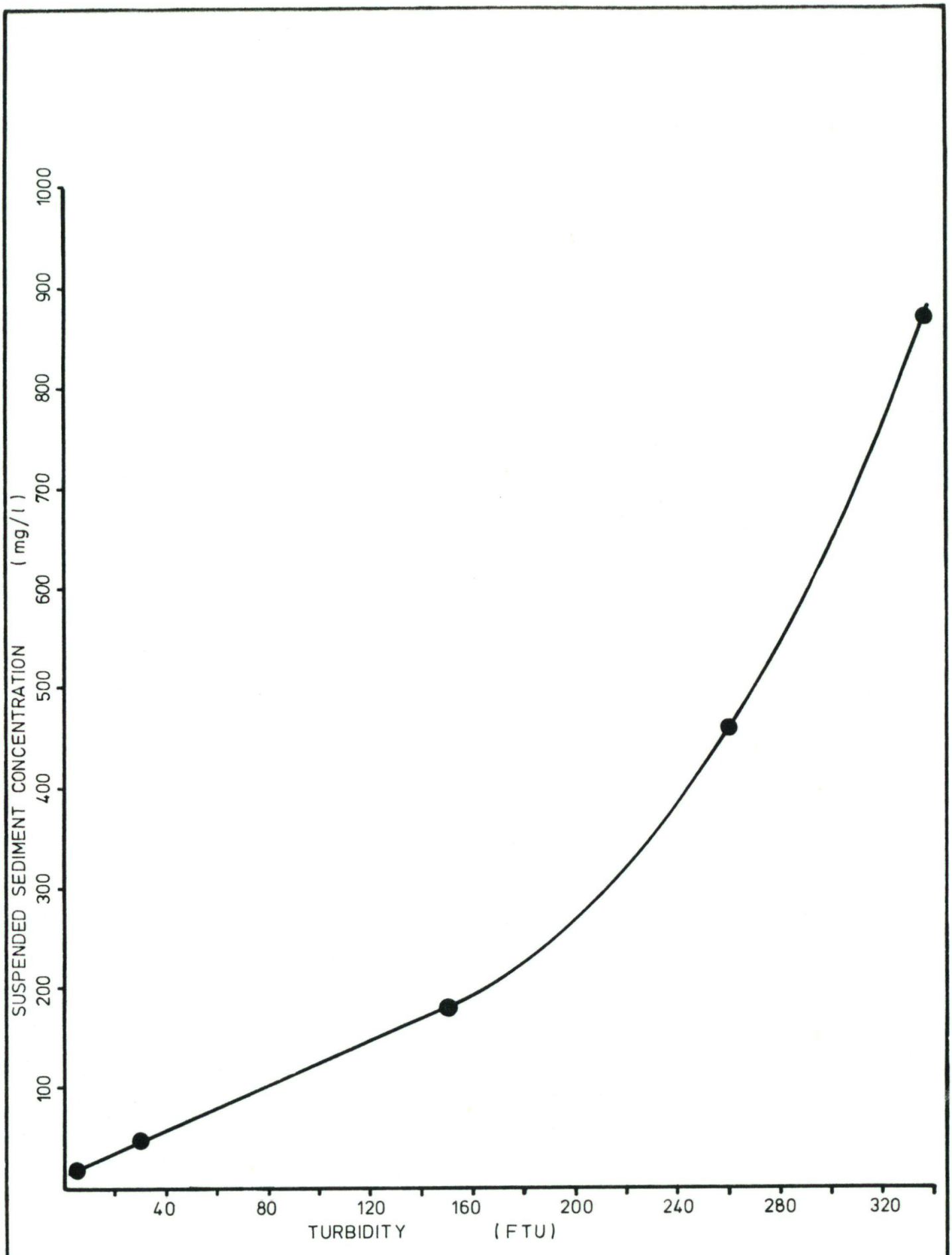


Fig. B.1. CORRELATION BETWEEN SUSPENDED SEDIMENT CONCENTRATION AND TURBIDITY.