

## **MON-T-1**

### **Original Data of In-situ Water Quality Observation Results**

- 1. February 1999**
- 2. March 1999**
- 3. April 1999**
- 4. May 1999**
- 5. June 1999**
- 6. July 1999**
- 7. August 1999**

**February 1999**

POINT R-1  
 DATE 11 /02 /99  
 TIME 7:26  
 Temp. °C  
 Atm. Pressure 1012hPa  
 Dep. 10.5m  
 pH upper layer:0.5m below sea surface 7.5  
 lower layer:1.0m above sea bottom 7.0  
 Transparency 1m  
 Turbidity upper layer:0.5m below sea surface 32NTU  
 lower layer:1.0m above sea bottom 47NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.2	0.0	8.4	0.0	
1	24.2	0.0	8.6	0.0	
2	24.2	0.0	8.4	0.0	
3	24.2	0.0	8.2	0.0	
4	24.2	0.0	8.0	0.0	
5	24.2	0.0	8.2	0.0	
6	24.2	0.0	8.5	0.0	
7	24.2	0.0	8.2	0.0	
8	24.2	0.0	8.5	0.0	
9	24.1	0.0	8.5	0.0	
10	24.1	0.0		0.0	

Remarks: Weather Fine  
 Wind 5-10m/s,S  
 Wave 0.5m/s

POINT P-1  
 DATE 11 /02 /99  
 TIME 1:00  
 Temp. °C  
 Atm. Pressure 1011hPa  
 Dep. 6.5m  
 pH upper layer:0.5m below sea surface 8.0  
 lower layer:1.0m above sea bottom 8.0  
 Transparency m  
 Turbidity upper layer:0.5m below sea surface 114NTU  
 lower layer:1.0m above sea bottom 115NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.5	0.0	8.1	0.0	
1	24.6	0.0	7.8	0.0	
2	24.5	0.0	7.5	0.0	
3	24.5	0.0	8.0	0.0	
4	24.5	0.0	8.2	0.0	
5	24.5	0.0	8.0	0.0	
6	24.2	0.0	7.9	0.0	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-2  
 DATE 10 /02 /99  
 TIME 22:55  
 Temp. 22.5°C  
 Atm. Pressure 1010hPa  
 Dep. 6.5m  
 pH upper layer:0.5m below sea surface 8.3  
 lower layer:1.0m above sea bottom 8.1  
 Transparency m  
 Turbidity upper layer:0.5m below sea surface 88NTU  
 lower layer:1.0m above sea bottom 92NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.6	0.0	8.5	0.0	
1	24.5	0.0	8.0	0.0	
2	24.5	0.0	8.1	0.0	
3	24.5	0.0	8.4	0.0	
4	24.2	0.0	8.3	0.0	
5	23.9	0.0	8.2	0.0	
6	23.9	0.0	8.2	0.0	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-3  
 DATE 10 /02 /99  
 TIME 20:49  
 Temp. 22.4°C  
 Atm. Pressure 1010hPa  
 Dep. 6.5m  
 pH upper layer:0.5m below sea surface 8.3  
 lower layer:1.0m above sea bottom 8.1  
 Transparency m  
 Turbidity upper layer:0.5m below sea surface 53NTU  
 lower layer:1.0m above sea bottom 54NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	26.2	0.2	8.8	0.3	
1	26.2	0.2	8.4	0.3	
2	24.7	0.1	8.2	0.3	
3	23.9	0.1	7.8	0.2	
4	23.8	0.1	8.0	0.3	
5	24.0	0.3	8.2	0.6	
6	24.0	0.4	7.9	0.8	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-4  
 DATE 10 /02 /99  
 TIME 17:12  
 Temp. °C  
 Atm. Pressure 1011hPa  
 Dep. 5.5m  
 pH upper layer:0.5m below sea surface 7.7  
 lower layer:1.0m above sea bottom 7.6  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 4NTU  
 lower layer:1.0m above sea bottom 5NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	25.2	3.0	8.2	5.5	
1	25.0	3.0	8.0	5.5	
2	24.8	3.0	8.5	5.5	
3	24.0	3.0	8.5	5.4	
4	23.9	3.0	8.0	5.4	
5	23.9	3.0	8.2	5.4	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-5  
 DATE 10 /02 /99  
 TIME 14:52  
 Temp. °C  
 Atm. Pressure 1012hPa  
 Dep. 6.5m  
 pH upper layer:0.5m below sea surface 7.6  
 lower layer:1.0m above sea bottom 7.4  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 3NTU  
 lower layer:1.0m above sea bottom 4NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.5	3.5	7.7	6.3	
1	24.6	3.4	7.8	6.2	
2	24.2	3.4	7.8	6.2	
3	24.1	3.5	7.9	6.2	
4	24.0	3.5	8.0	6.2	
5	23.9	3.5	8.1	6.2	
6	23.9	3.5	7.7	6.2	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-6  
 DATE 10 /02 /99  
 TIME 12:49  
 Temp. °C  
 Atm. Pressure 1014hPa  
 Dep. 5.5m  
 pH upper layer:0.5m below sea surface 7.7  
 lower layer:1.0m above sea bottom 8.1  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 14NTU  
 lower layer:1.0m above sea bottom 10NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.1	4.0	8.2	7.1	
1	24.1	4.0	8.3	7.1	
2	24.0	4.0	8.5	7.1	
3	23.6	4.2	8.4	7.5	
4	23.5	4.4	8.5	7.8	
5	23.8	4.4	8.1	7.9	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-7  
 DATE 10 /02 /99  
 TIME 11:26  
 Temp. °C  
 Atm. Pressure 1014hPa  
 Dep. 9.5m  
 pH upper layer:0.5m below sea surface 8.1  
 lower layer:1.0m above sea bottom 8.1  
 Transparency 2.2m  
 Turbidity upper layer:0.5m below sea surface 5NTU  
 lower layer:1.0m above sea bottom 7NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	23.8	11.7	7.9	19.4	
1	23.7	12.4	8.1	20.4	
2	23.5	12.8	8.2	20.8	
3	23.7	14.6	7.4	23.5	
4	23.8	14.8	7.3	23.8	
5	23.8	17.2	7.0	27.3	
6	23.8	19.4	7.2	30.3	
7	23.8	20.0	7.3	31.1	
8	23.7	20.4	7.3	31.9	
9	23.6	21.3		32.9	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT P-8  
 DATE 10 /02 /99  
 TIME 8:43  
 Temp. °C  
 Atm. Pressure 1014hPa  
 Dep. 7.5m  
 pH upper layer:0.5m below sea surface 8.4  
 lower layer:1.0m above sea bottom 8.4  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 10NTU  
 lower layer:1.0m above sea bottom 10NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	22.0	28.8	8.2	42.2	
1	22.3	28.8	8.1	42.2	
2	23.1	30.0	8.1	44.3	
3	23.1	30.2	8.2	44.8	
4	23.1	30.5	8.5	45.2	
5	23.1	30.5	8.6	45.2	
6	23.1	30.5	8.8	45.3	
7	23.1	30.5	8.7	45.3	

Remarks: Weather Fine  
 Wind 2-5m/s,N  
 Wave 0.5m/s

POINT O-1  
 DATE 09 /02 /99  
 TIME 17:00  
 Temp. 23.7°C  
 Atm. Pressure 1017hPa  
 Dep. 16.5m  
 DO upper layer:0.5m below sea surface 7.5(mg/L)  
 lower layer:1.0m above sea bottom 6.2(mg/L)  
 pH upper layer:0.5m below sea surface 8.4  
 lower layer:1.0m above sea bottom 8.4  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 10NTU  
 lower layer:1.0m above sea bottom 10NTU

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)	Remarks
0.5	24.4	31.2	7.5	47.2	
1	24.3	31.3	7.5	47.3	
2	24.3	31.2	7.5	46.8	
3	23.1	31.2	7.7	46.0	
4	22.9	31.2	7.8	46.0	
5	22.9	31.2	7.3	46.0	
6	22.9	31.2	6.9	45.9	
7	22.9	31.2	7.2	45.9	
8	22.9	31.1	7.6	45.9	
9	22.9	31.2		45.9	
10	22.9	31.2		45.9	
11	22.9	31.2		45.9	
12	22.9	31.2		45.9	
13	22.9	31.2		45.9	
14	22.9	31.1		45.8	
15	22.9	31.2	6.2	45.8	
16	22.8	31.1		45.8	

Remarks: Weather Fine  
 Wind 7.8m/s,SSE  
 Wave 1.0m

**March 1999**



POINT	R-1
DATE	2-Mar-99
TIME	16:04
Temp.	31°C
Atm. Pressure	1005hPa
Dep.	9.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	9.18
lower layer:1.0m above sea bottom	8.63
DO upper layer:0.5m below sea surface	8.1(mg/L)
lower layer:1.0m above sea bottom	8.0(mg/L)
Transparency	0.6m
Turbidity upper layer:0.5m below sea surface	27NTU
lower layer:1.0m above sea bottom	44NTU
<b>Bottom Materials</b>	
Temp.	27°C
pH	6.85
ORP	-100mV
Color	5YR4/4

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	28.9	0.0	8.1	0.0
1	28.9	0.0	8.2	0.0
2	28.9	0.0	8.1	0.0
3	28.6	0.0	7.9	0.0
4	28.2	0.0	8.1	0.0
5	28.0	0.0	8.0	0.0
6	27.8	0.0	7.8	0.0
7	27.8	0.0	8.0	0.0
8	27.8	0.0	8.0	0.0
9	27.8	0.0		0.0
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 16knots,SW  
 Wave 1.0-1.5m

POINT	P-1
DATE	2-Mar-99
TIME	18:45
Temp.	28°C
Atm. Pressure	1005hPa
Dep.	7.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	8.31
lower layer:1.0m above sea bottom	7.92
DO upper layer:0.5m below sea surface	7.5(mg/L)
lower layer:1.0m above sea bottom	6.7(mg/L)
Transparency	0.4m
Turbidity upper layer:0.5m below sea surface	33NTU
lower layer:1.0m above sea bottom	33NTU
<b>Bottom Materials</b>	
Temp.	26°C
pH	6.61
ORP	-156mV
Color	10YB2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	28.1	0.0	7.5	0.0
1	27.9	0.0	7.6	0.0
2	27.5	0.0	7.6	0.0
3	26.7	0.0	6.7	0.0
4	26.7	0.0	6.8	0.0
5	26.7	0.0	6.7	0.0
6	26.7	0.0	6.7	0.0
7	26.7	0.0	6.7	0.0
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 10knots,SE  
 Wave 1.0-1.5m

POINT	P-2
DATE	2-Mar-99
TIME	20:45
Temp.	26.1°C
Atm. Pressure	1006hPa
Dep.	6.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	8.23
lower layer:1.0m above sea bottom	7.44
DO upper layer:0.5m below sea surface	6.6(mg/L)
lower layer:1.0m above sea bottom	6.0(mg/L)
Transparency	-
Turbidity upper layer:0.5m below sea surface	60NTU
lower layer:1.0m above sea bottom	60NTU
<b>Bottom Materials</b>	
Temp.	23°C
pH	6.52
ORP	-82mV
Color	10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.6	0.0	6.6	0.0
1	27.6	0.0	6.6	0.0
2	27.5	0.0	6.5	0.0
3	27.1	0.0	6.3	0.0
4	26.6	0.0	6.2	0.0
5	26.6	0.0	6.0	0.0
6	26.4	0.0	6.0	0.0
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
Wind 11-12knots,E  
Wave 1.0-1.5m

POINT	P-3
DATE	2-Mar-99
TIME	21:30
Temp.	26°C
Atm. Pressure	1008hPa
Dep.	6.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	7.87
lower layer:1.0m above sea bottom	7.73
DO upper layer:0.5m below sea surface	6.4(mg/L)
lower layer:1.0m above sea bottom	5.8(mg/L)
Transparency	--
Turbidity upper layer:0.5m below sea surface	15NTU
lower layer:1.0m above sea bottom	13NTU
<b>Bottom Materials</b>	
Temp.	26°C
pH	6.66
ORP	-134mV
Color	10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.7	0.7	6.4	1.5
1	27.7	0.7	6.3	1.5
2	27.7	0.7	6.2	1.5
3	27.5	0.7	6.2	1.5
4	27.2	0.7	6.1	1.5
5	27.0	0.7	5.8	1.5
6	26.6	0.8	5.8	1.7
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
Wind 11-12knots,E  
Wave 1.0-1.5m

POINT	P-4
DATE	3-Mar-99
TIME	0:20
Temp.	27°C
Atm. Pressure	1008hPa
Dep.	6.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	7.16
lower layer:1.0m above sea bottom	7.16
DO upper layer:0.5m below sea surface	6.7(mg/L)
lower layer:1.0m above sea bottom	6.4(mg/L)
Transparency	-
Turbidity upper layer:0.5m below sea surface	3NTU
lower layer:1.0m above sea bottom	3NTU
<b>Bottom Materials</b>	
Temp.	22°C
pH	6.56
ORP	-96mV
Color	10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.5	2.6	6.7	5.2
1	27.5	2.6	6.6	5.2
2	27.5	2.6	6.5	5.2
3	27.5	2.6	6.6	5.2
4	27.5	2.7	6.5	5.2
5	27.3	2.7	6.5	5.3
6	26.8	3.1	6.4	6.0
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind  
 Wave 1.0m

POINT	P-5
DATE	3-Mar-99
TIME	2:25
Temp.	27°C
Atm. Pressure	1008hPa
Dep.	7.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	6.62
lower layer:1.0m above sea bottom	7.25
DO upper layer:0.5m below sea surface	5.4(mg/L)
lower layer:1.0m above sea bottom	5.1(mg/L)
Transparency	-
Turbidity upper layer:0.5m below sea surface	6NTU
lower layer:1.0m above sea bottom	5NTU
<b>Bottom Materials</b>	
Temp.	26°C
pH	6.7
ORP	-150mV
Color	10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.4	3.3	5.4	6.4
1	27.4	3.3	5.4	6.4
2	27.4	3.3	5.4	6.4
3	27.4	3.3	5.4	6.4
4	27.4	3.3	5.4	6.4
5	27.4	3.3	5.3	6.4
6	26.5	3.6	5.1	6.9
7	26.5	3.5	5.1	6.9
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 9knots,E  
 Wave 1.0m

POINT P-6  
 DATE 3-Mar-99  
 TIME 4:10  
 Temp. 27°C  
 Atm. Pressure 1008hPa  
 Dep. 6.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 7.35  
 lower layer:1.0m above sea bottom 7.50  
 DO upper layer:0.5m below sea surface 7.5(mg/L)  
 lower layer:1.0m above sea bottom 7.3(mg/L)  
 Transparency -  
 Turbidity upper layer:0.5m below sea surface 5NTU  
 lower layer:1.0m above sea bottom 4NTU  
 Bottom Materials  
 Temp. 27°C  
 pH 6.19  
 ORP -156mV  
 Color 10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.8	3.7	7.5	7.2
1	27.8	3.7	7.4	7.2
2	27.8	3.7	7.4	7.2
3	27.8	3.7	7.3	7.2
4	27.8	3.7	7.3	7.2
5	27.8	3.7	7.3	7.2
6	27.8	3.7	7.3	7.2
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 12knots,E  
 Wave 0.5-1.0m

POINT P-7  
 DATE 3-Mar-99  
 TIME 6:35  
 Temp. 26°C  
 Atm. Pressure 1008hPa  
 Dep. 8.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 6.66  
 lower layer:1.0m above sea bottom 7.44  
 DO upper layer:0.5m below sea surface 5.6(mg/L)  
 lower layer:1.0m above sea bottom 5.2(mg/L)  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 3NTU  
 lower layer:1.0m above sea bottom 10NTU  
 Bottom Materials  
 Temp. 27°C  
 pH 5.72  
 ORP -157mV  
 Color black,gray

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.9	3.5	5.6	6.7
1	27.9	3.5	5.5	6.7
2	27.9	3.5	5.5	6.7
3	27.9	3.6	5.6	6.8
4	27.8	3.7	5.6	7.1
5	27.8	3.8	5.4	7.3
6	27.9	5.2	5.4	10.3
7	27.4	9.0	5.2	16.2
8	27.2	10.1	4.8	25.1
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 14knots,E  
 Wave 1.0m

POINT P-8  
 DATE 3-Mar-99  
 TIME 9:05  
 Temp. 25°C  
 Atm. Pressure 1010hPa  
 Dep. 7.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 7.63  
 lower layer:1.0m above sea bottom 7.85  
 DO upper layer:0.5m below sea surface 6.8(mg/L)  
 lower layer:1.0m above sea bottom 6.0(mg/L)  
 Transparency 2m  
 Turbidity upper layer:0.5m below sea surface 7NTU  
 lower layer:1.0m above sea bottom 8NTU  
 Bottom Materials  
 Temp. 25°C  
 pH 6.56/6.28  
 ORP -170mV/-158mV  
 Color 5Y3/2,10YR4/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	27.6	6.2	5.1	12.4
1	27.6	14.0	5.0	19.4
2	25.8	22.3	4.3	36.0
3	25.5	27.2	4.0	42.8
4	25.4	28.2	3.9	44.1
5	25.3	30.0	4.0	45.2
6	25.2	29.3	4.0	45.4
7	25.2	29.3	4.1	45.4
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather Cloudy  
 Wind 11-12knots,SE  
 Wave 1.0m

POINT O-1  
 DATE 3-Mar-99  
 TIME 12:00  
 Temp. 28°C  
 Atm. Pressure 1010hPa  
 Dep. 16.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 7.99  
 lower layer:1.0m above sea bottom 8.04  
 DO upper layer:0.5m below sea surface 5.8(mg/L)  
 lower layer:1.0m above sea bottom 6.1(mg/L)  
 Transparency 7.0m  
 Turbidity upper layer:0.5m below sea surface 0NTU  
 lower layer:1.0m above sea bottom 0NTU  
 Bottom Materials  
 Temp. 25°C  
 pH 4.85  
 ORP -22mV  
 Color 10YR4/2,10YR2/2

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	26.2	31.3	5.8	49.3
1	26.3	31.3	5.8	49.3
2	26.3	31.3	5.9	49.3
3	26.2	31.4	5.9	49.2
4	25.9	31.6	5.9	49.2
5	25.7	31.7	6.0	49.2
6	25.2	32.1	6.0	49.3
7	25.1	32.1	6.2	49.2
8	24.9	32.1	6.2	49.1
9	25.0	32.1		49.2
10	24.9	32.1		49.1
11	24.8	32.2		49.0
12	24.8	32.2		49.1
13	24.8	32.2		49.1
14	24.7	32.2		49.0
15	24.5	32.2	6.1	48.5
16	24.2	32.2		48.8

Remarks: Weather Cloudy  
 Wind  
 Wave

**April 1999**

6-92

POINT	R-1
DATE	11-Apr-99
TIME	18:10
Temp.	22°C
Atm. Pressure	
Dep.	8.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.56
lower layer:1.0m above sea bottom	7.08
DO upper layer:0.5m below sea surface	9.3(mg/L)
lower layer:1.0m above sea bottom	8.8(mg/L)
Transparency	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]

Remarks: Weather

### Wind

**Wave**

POINT	P-1
DATE	11-Apr-99
TIME	20:00
Temp.	20°C
Atm. Pressure	
Dep.	6.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	7.56
lower layer:1.0m above sea bottom	7.90
DO upper layer:0.5m below sea surface	9.8(mg/L)
lower layer:1.0m above sea bottom	9.8(mg/L)
<b>Transparency</b>	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
<b>Bottom Materials</b>	
Temp.	
pH	
ORP	
Color	

[illegible]

Remarks: Weather

Wind

Wave

6-93

POINT	P-2
DATE	11-Apr-99
TIME	21:26
Temp.	20.0°C
Atm. Pressure	
Dep.	7.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.80
lower layer:1.0m above sea bottom	7.77
DO upper layer:0.5m below sea surface	9.8(mg/L)
lower layer:1.0m above sea bottom	10.4(mg/L)
Transparency	-
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]Remarks: Weather

### Wind

**Wave**

POINT	P-3
DATE	11-Apr-99
TIME	23:00
Temp.	20°C
Atm. Pressure	
Dep.	7.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.39
lower layer:1.0m above sea bottom	7.40
DO upper layer:0.5m below sea surface	10.0(mg/L)
lower layer:1.0m above sea bottom	9.6(mg/L)
Transparency	-
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]

Remarks: Weather

Wind

**Wave**



POINT P-4  
 DATE 12-Apr-99  
 TIME 1:45  
 Temp. 20°C  
 Atm. Pressure \_\_\_\_\_  
 Dep. 7.5m  
 Water Quality \_\_\_\_\_  
 pH upper layer:0.5m below sea surface 7.84  
 lower layer:1.0m above sea bottom 7.86  
 DO upper layer:0.5m below sea surface 9.8(mg/L)  
 lower layer:1.0m above sea bottom 8.6(mg/L)  
 Transparency \_\_\_\_\_  
 Turbidity upper layer:0.5m below sea surface \_\_\_\_\_  
 lower layer:1.0m above sea bottom \_\_\_\_\_  
 Bottom Materials \_\_\_\_\_  
 Temp. \_\_\_\_\_  
 pH \_\_\_\_\_  
 ORP \_\_\_\_\_  
 Color \_\_\_\_\_

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	21.0	3.1		5.3
1	21.0	3.1		5.3
2	21.0	3.1		5.3
3	21.0	3.1		5.3
4	21.0	3.2		5.3
5	21.0	3.2		5.4
6	22.5	22.5		34.0
7	22.5	22.5		34.0

Remarks: WeatherWindWave

POINT P-5  
 DATE 12-Apr-99  
 TIME 3:45  
 Temp. 20°C  
 Atm. Pressure \_\_\_\_\_  
 Dep. 7.5m  
 Water Quality \_\_\_\_\_  
 pH upper layer:0.5m below sea surface 6.75  
 lower layer:1.0m above sea bottom 7.06  
 DO upper layer:0.5m below sea surface 10.3(mg/L)  
 lower layer:1.0m above sea bottom 9.9(mg/L)  
 Transparency \_\_\_\_\_  
 Turbidity upper layer:0.5m below sea surface \_\_\_\_\_  
 lower layer:1.0m above sea bottom \_\_\_\_\_  
 Bottom Materials \_\_\_\_\_  
 Temp. \_\_\_\_\_  
 pH \_\_\_\_\_  
 ORP \_\_\_\_\_  
 Color \_\_\_\_\_

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	20.6	4.9		8.1
1	20.6	4.9		8.1
2	20.6	4.9		8.1
3	20.6	5.0		8.1
4	20.6	5.1		8.3
5	20.6	5.1		8.4
6	20.6	22.7		27.0
7	22.5	24.0		36.8
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: WeatherWindWave

POINT P-6  
 DATE 12-Apr-99  
 TIME 5:20  
 Temp. 20°C  
 Atm. Pressure  
 Dep. 6.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 6.94  
 lower layer:1.0m above sea bottom 7.17  
 DO upper layer:0.5m below sea surface 11.0(mg/L)  
 lower layer:1.0m above sea bottom 9.5(mg/L)  
 Transparency  
 Turbidity upper layer:0.5m below sea surface  
 lower layer:1.0m above sea bottom  
 Bottom Materials  
 Temp.  
 pH  
 ORP  
 Color

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	20.1	3.4		5.7
1	20.2	3.5		5.8
2	20.2	3.6		6.0
3	20.4	4.4		7.2
4	20.4	4.5		7.3
5	20.4	4.5		7.3
6	20.4	4.5		7.3
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather

Wind

Wave

POINT P-7  
 DATE 12-Apr-99  
 TIME 7:10  
 Temp. 20°C  
 Atm. Pressure  
 Dep. 6.5m  
 Water Quality  
 pH upper layer:0.5m below sea surface 7.06  
 lower layer:1.0m above sea bottom 6.76  
 DO upper layer:0.5m below sea surface 9.5(mg/L)  
 lower layer:1.0m above sea bottom 9.8(mg/L)  
 Transparency  
 Turbidity upper layer:0.5m below sea surface  
 lower layer:1.0m above sea bottom  
 Bottom Materials  
 Temp.  
 pH  
 ORP  
 Color

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	20.1	4.4		7.1
1	20.1	4.4		7.1
2	20.1	4.5		7.3
3	20.2	4.6		7.4
4	20.2	4.7		7.7
5	20.2	4.8		7.8
6	20.2	5.1		8.3
7				
8				
9				
10				
11				
12				
13				
14				
15				

Remarks: Weather

Wind

Wave

6-96

POINT	P-8
DATE	12-Apr-99
TIME	9:15
Temp.	20°C
Atm. Pressure	
Dep.	7.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.05
lower layer:1.0m above sea bottom	6.77
DO upper layer:0.5m below sea surface	10.0(mg/L)
lower layer:1.0m above sea bottom	10.6(mg/L)
Transparency	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]Remarks: Weather

### Wind

Wave

POINT	O-1
DATE	12-Apr-99
TIME	11:30
Temp.	22°C
Atm. Pressure	
Dep.	15.5m
Water Quality	
pH upper layer:0.5m below sea surface	8.07
lower layer:1.0m above sea bottom	7.95
DO upper layer:0.5m below sea surface	9.4(mg/L)
lower layer:1.0m above sea bottom	9.1(mg/L)
Transparency	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	21.1	23.7		34.7
1	21.2	26.9		35.7
2	21.2	29.3		43.3
3	21.4	31.4		45.2
4	21.4	33.0		46.2
5	21.4	33.0		46.8
6	21.5	33.0		46.8
7	21.5	33.0		46.9
8	21.5	33.0		46.9
9	21.5	33.0		46.9
10	21.5	33.0		46.9
11	21.5	33.1		46.9
12	21.5	33.1		46.9
13	21.5	33.1		47.0
14	21.5	33.1		47.0
15	21.5	33.1		47.0

Remarks: Weather

Wind

Wave

**May 1999**

6-98

POINT	R-1
DATE	18-May-99
TIME	7:00
Temp.	16°C
Atm. Pressure	
Dep.	5.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	7.01
lower layer:1.0m above sea bottom	6.92
DO upper layer:0.5m below sea surface	10.7(mg/L)
lower layer:1.0m above sea bottom	10.7(mg/L)
<b>Transparency</b>	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
<b>Bottom Materials</b>	
Temp.	
pH	
ORP	
Color	

[illegible]

Remarks: Weather

### Wind

**Wave**

POINT	P-1
DATE	18-May-99
TIME	3:15
Temp.	16°C
Atm. Pressure	
Dep.	6.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.33
lower layer:1.0m above sea bottom	7.23
DO upper layer:0.5m below sea surface	10.9(mg/L)
lower layer:1.0m above sea bottom	10.6(mg/L)
Transparency	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]

Remarks: Weather

Wind

**Wave**



POINT	P-4
DATE	17-May-99
TIME	22:00
Temp.	17°C
Atm. Pressure	
Dep.	6.5m
<b>Water Quality</b>	
pH upper layer:0.5m below sea surface	7.66
lower layer:1.0m above sea bottom	7.60
DO upper layer:0.5m below sea surface	10.4(mg/L)
lower layer:1.0m above sea bottom	11.7(mg/L)
<b>Transparency</b>	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
<b>Bottom Materials</b>	
Temp.	
pH	
ORP	
Color	

[illegible]Remarks: Weather

### Wind

## Wave

POINT	P-5
DATE	17-May-99
TIME	20:00
Temp.	17°C
Atm. Pressure	
Dep.	6.5m
Water Quality	
pH upper layer:0.5m below sea surface	7.56
lower layer:1.0m above sea bottom	7.65
DO upper layer:0.5m below sea surface	11.1(mg/L)
lower layer:1.0m above sea bottom	10.8(mg/L)
Transparency	
Turbidity upper layer:0.5m below sea surface	
lower layer:1.0m above sea bottom	
Bottom Materials	
Temp.	
pH	
ORP	
Color	

[illegible]Remarks: Weather

### Wind

**Wave**





POINT P-8  
 DATE 17-May-99  
 TIME 15:45  
 Temp. 18°C  
 Atm. Pressure \_\_\_\_\_  
 Dep. 8.5m  
 Water Quality \_\_\_\_\_  
 pH upper layer:0.5m below sea surface 7.81  
     lower layer:1.0m above sea bottom 7.88  
 DO upper layer:0.5m below sea surface 9.1(mg/L)  
     lower layer:1.0m above sea bottom 9.5(mg/L)  
 Transparency \_\_\_\_\_  
 Turbidity upper layer:0.5m below sea surface \_\_\_\_\_  
     lower layer:1.0m above sea bottom \_\_\_\_\_  
 Bottom Materials \_\_\_\_\_  
 Temp. \_\_\_\_\_  
 pH \_\_\_\_\_  
 ORP \_\_\_\_\_  
 Color \_\_\_\_\_

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	17.3	8.1		11.9
1	17.5	8.3		12.2
2	17.5	9.0		13.3
3	17.5	9.4		13.8
4	17.5	9.6		14.0
5	17.5	9.7		14.1
6	17.5	11.7		16.8
7	17.6	19.7		26.5
8	17.6	25.0		33.6

Remarks: WeatherWindWave

POINT O-1  
 DATE 17-May-99  
 TIME 13:30  
 Temp. 19°C  
 Atm. Pressure \_\_\_\_\_  
 Dep. 14.5m  
 Water Quality \_\_\_\_\_  
 pH upper layer:0.5m below sea surface 8.13  
     lower layer:1.0m above sea bottom 8.26  
 DO upper layer:0.5m below sea surface 10.2(mg/L)  
     lower layer:1.0m above sea bottom 8.7(mg/L)  
 Transparency \_\_\_\_\_  
 Turbidity upper layer:0.5m below sea surface \_\_\_\_\_  
     lower layer:1.0m above sea bottom \_\_\_\_\_  
 Bottom Materials \_\_\_\_\_  
 Temp. \_\_\_\_\_  
 pH \_\_\_\_\_  
 ORP \_\_\_\_\_  
 Color \_\_\_\_\_

Dep.(m)	TEMP.(°C)	SAL.(‰)	DO(mg/L)	COND.(mmho/cm)
0.5	18.2	24.8		
1	18.2	24.9		
2	18.1	27.3		
3	18.0	28.3		
4	17.9	29.0		
5	17.8	29.0		
6	17.8	29.0		
7	17.8	29.0		
8	17.8	29.0		
9	17.9	29.0		
10	17.7	29.0		
11	17.7	29.0		
12	17.7	29.0		
13	17.7	29.0		
14	17.7	29.0		

Remarks: WeatherWindWave