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(978) 744-4550
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S o u t h E s s e x S e w e r a g e D i s t r i c t



November 13, 2000

Ms. Nancy O'Keeffe
National Parks Service
Water Resource Division
1201 Oak Ridge Drive, Suite 250
Fort Collins. CO 80525

Dear Ms. O'Keeffe:

Enclosed is information as discussed. If you have any questions please do not hesitate to contact me.

Sincerely,

SOUTH ESSEX SEWERAGE DISTRICT

Mark A. Allain
Chief of Monitoring & Enforcement

/ap

Enclosure

MEMORANDUM

TO: Nancy O'Keeffe

FROM: Mark A. Allain, Chief of Monitoring & Enforcement

DATE: October 17, 2000

SUBJECT: **Harbor Data**

It was a pleasure to speak with you last week. Enclosed is the Salem Sound data I promised. It is important that you realize that this data was not collected under rigorous QA/QC procedures. I am fairly comfortable with all results except dissolved oxygen. As mentioned during our conversation, bacteria data is as fecal coliform, reported as colonies per 100 ml. The procedure used was the membrane filter technique. I do not expect that collection of this data will continue in future years as we are not required to collect it. If you have any questions, please do not hesitate to call me at (978) 744-4550, ext. 122.

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: June 29, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	6/26/98 - 10:15 AM	< 10
2. Red Buoy # 18	6/26/98 - 10:20 AM	< 10
3. Plummer School 100 yds. off shore	6/26/98 - 10:25 AM	10
4. Little Haste @ Spindle	6/26/98 - 10:30 AM	90
5. Red Buoy # 16	6/26/98 - 10:40 AM	30
6. Red Buoy # 2	6/26/98 - 10:40 AM	160
7. Juniper Beach @ Storm Drain	6/26/98 - 11:20 AM	6100

In my opinion, these test results indicate that the fecal coliform bacteria detected in this test series come from sources other than the SESD pipe break.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: June 30, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	6/29/98 - 8:55 AM	< 10
2. Red Buoy # 18	6/29/98 - 8:58 AM	10
3. Plummer School 100 yds. off shore	6/29/98 - 9:00 AM	< 10
4. Little Haste @ Spindle	6/29/98 - 9:05 AM	< 10
5. Red Buoy # 16	6/29/98 - 9:08 AM	20
6. Red Buoy # 2	6/29/98 - 9:10 AM	20
7. Juniper Beach @ Storm Drain	6/29/98 - 9:50 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 1, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	6/30/98 - 8:25 AM	< 10
2. Red Buoy # 18	6/30/98 - 8:20 AM	< 10
3. Plummer School 100 yds. off shore	6/30/98 - 8:15 AM	< 10
4. Little Haste @ Spindle	6/30/98 - 8:30 AM	10
5. Red Buoy # 16	6/30/98 - 8:40 AM	10
6. Red Buoy # 2	6/30/98 - 8:35 AM	10
7. Juniper Beach @ Storm Drain	6/30/98 - 9:00 AM	90

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 2, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/1/98 - 8:37 AM	< 10
2. Red Buoy # 18	7/1/98 - 8:35 AM	90
3. Plummer School 100 yds. off shore	7/1/98 - 8:30 AM	70
4. Little Haste @ Spindle	7/1/98 - 8:40 AM	50
5. Red Buoy # 16	7/1/98 - 8:45 AM	160
6. Red Buoy # 2	7/1/98 - 8:50 AM	50
7. Juniper Beach @ Storm Drain	7/1/98 - 9:05 AM	150

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 6, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/2/98 - 8:45 AM	< 10
2. Red Buoy # 18	7/2/98 - 8:50 AM	10
3. Plummer School 100 yds. off shore	7/2/98 - 8:53 AM	< 10
4. Little Haste @ Spindle	7/2/98 - 8:58 AM	20
5. Red Buoy # 16	7/2/98 - 9:02 AM	20
6. Red Buoy # 2	7/2/98 - 9:10 AM	10
7. Juniper Beach @ Storm Drain	7/2/98 - 9:30 AM	30

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 6, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/3/98 - 7:35 AM	< 10
2. Red Buoy # 18	7/3/98 - 7:40 AM	20
3. Plummer School 100 yds. off shore	7/3/98 - 7:43 AM	< 10
4. Little Haste @ Spindle	7/3/98 - 7:53 AM	50
5. Red Buoy # 16	7/3/98 - 7:54 AM	< 10
6. Red Buoy # 2	7/3/98 - 7:57 AM	20
7. Juniper Beach @ Storm Drain	7/3/98 - 8:20 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 6, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/4/98 - 7:30 AM	< 10
2. Red Buoy # 18	7/4/98 - 7:35 AM	< 10
3. Plummer School 100 yds. off shore	7/4/98 - 7:40 AM	< 10
4. Little Haste @ Spindle	7/4/98 - 7:50 AM	< 10
5. Red Buoy # 16	7/4/98 - 7:55 AM	< 10
6. Red Buoy # 2	7/4/98 - 8:00 AM	< 10
7. Juniper Beach @ Storm Drain	7/4/98 - 9:300 AM	220

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 7, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/6/98 - 10:30 AM	< 10
2. Red Buoy # 18	7/6/98 - 10:35 AM	< 10
3. Plummer School 100 yds. off shore	7/6/98 - 10:40 AM	< 10
4. Little Haste @ Spindle	7/6/98 - 10:15 AM	< 10
5. Red Buoy # 16	7/6/98 - 10:20 AM	< 10
6. Red Buoy # 2	7/6/98 - 10:25 AM	< 10
7. Juniper Beach @ Storm Drain	7/6/98 - 11:10 AM	< 10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 7/6/98 SAMPLER(S): PB/DTTIDE: L-3:30A, H-9:42A, L-3:38A WIND: NORTHEAST - 10-20SEA: CALM WEATHER: SUNNY

STATION NUMBER	BUOY TYPE COLOR/NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100mL)
B1	RED 2	SALEM NECK	11	10:25 AM	<10
A1	GREEN 13	BEVERLY COVE	8	10:10 AM	<10
A2	RED 18	WINTER ISLAND	13	10:35 AM	<10
A3	SPINDLE	LITTLE HASTE R	9	10:15 AM	<10
A4	BOIL	CENTER OF BOIL			
A5	GREEN 7	EAST OF BOIL	7	10:00 AM	<10
B2	GREEN 5	CONEY LEDGE	6	9:55 AM	<10
A6	RED 6	EAGLE ISLAND	5	9:50 AM	<10
B3	RED 4	BACKER'S ISLAND	4	9:20 AM	<10
A7	GREEN 3	CHAPPEL LEDGE	3	9:15 AM	<10
B4	RED 2	M-HEAD NECK	2	9:10 AM	<10
B5	RIG BELL	M-HEAD CHANNEL	1	9:05 AM	<10
		RED 16	10	10:20 AM	<10
		NEW BOIL	12	10:30 AM	<10
		PLUMBER HOUSE	14	10:40 AM	<10
		JUNIPER BEACH	15	11:10 AM	<10

MEHARBOR

JUNIPER BEACH - PIPE SUBMERGED

APPROVED BY: WOL 7/8/98

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 8, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/7/98 - 8:40 AM	20
2. Red Buoy # 18	7/7/98 - 8:37 AM	20
3. Plummer School 100 yds. off shore	7/7/98 - 8:35 AM	30
4. Little Haste @ Spindle	7/7/98 - 8:43 AM	50
5. Red Buoy # 16	7/7/98 - 8:45 AM	< 10
6. Red Buoy # 2	7/7/98 - 8:48 AM	< 10
7. Juniper Beach @ Storm Drain	7/7/98 - 9:10 AM	10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 9, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/8/98 - 8:40 AM	< 10
2. Red Buoy # 18	7/8/98 - 8:45 AM	10
3. Plummer School 100 yds. off shore	7/8/98 - 8:47 AM	< 10
4. Little Haste @ Spindle	7/8/98 - 8:50 AM	30
5. Red Buoy # 16	7/8/98 - 8:55 AM	10
6. Red Buoy # 2	7/8/98 - 9:00 AM	10
7. Juniper Beach @ Storm Drain	7/8/98 - 9:45 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 13, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/9/98 - 7:20 AM	< 10
2. Red Buoy # 18	7/9/98 - 7:23 AM	< 10
3. Plummer School 100 yds. off shore	7/9/98 - 7:25 AM	10
4. Little Haste @ Spindle	7/9/98 - 7:00 AM	10
5. Red Buoy # 16	7/9/98 - 7:03 AM	< 10
6. Red Buoy # 2	7/9/98 - 7:05 AM	< 10
7. Juniper Beach @ Storm Drain	7/9/98 - 7:40 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 13, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/10/98 - 8:58 AM	< 10
2. Red Buoy # 18	7/10/98 - 9:05 AM	< 10
3. Plummer School 100 yds. off shore	7/10/98 - 9:08 AM	30
4. Little Haste @ Spindle	7/10/98 - 8:55 AM	30
5. Red Buoy # 16	7/10/98 - 8:58 AM	< 10
6. Red Buoy # 2	7/10/98 - 9:00 AM	< 10
7. Juniper Beach @ Storm Drain	7/10/98 - 9:28 AM	< 10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 13, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/11/98 - 7:15 AM	< 10
2. Red Buoy # 18	7/11/98 - 7:30 AM	10
3. Plummer School 100 yds. off shore	7/11/98 - 7:33 AM	10
4. Little Haste @ Spindle	7/11/98 - 7:18 AM	10
5. Red Buoy # 16	7/11/98 - 7:23 AM	300
6. Red Buoy # 2	7/11/98 - 7:26 AM	500
7. Juniper Beach @ Storm Drain	7/11/98 - 7:55 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 16, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/15/98 - 8:45 AM	< 10
2. Red Buoy # 18	7/15/98 - 9:05 AM	< 10
3. Plummer School 100 yds. off shore	7/15/98 - 9:10 AM	< 10
4. Little Haste @ Spindle	7/15/98 - 8:50 AM	< 10
5. Red Buoy # 16	7/15/98 - 8:55 AM	< 10
6. Red Buoy # 2	7/15/98 - 9:00 AM	20
7. Juniper Beach @ Storm Drain	7/15/98 - 9:35 AM	110

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 17, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/16/98 - 9:05 AM	< 10
2. Red Buoy # 18	7/16/98 - 9:20 AM	< 10
3. Plummer School 100 yds. off shore	7/16/98 - 9:22 AM	< 10
4. Little Haste @ Spindle	7/16/98 - 9:09 AM	< 10
5. Red Buoy # 16	7/16/98 - 9:13 AM	< 10
6. Red Buoy # 2	7/16/98 - 9:16 AM	< 10
7. Juniper Beach @ Storm Drain	7/16/98 - 9:55 AM	110

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 20, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/17/98 - 8:55 AM	< 10
2. Red Buoy # 18	7/17/98 - 9:15 AM	<10
3. Plummer School 100 yds. off shore	7/17/98 - 9:17 AM	<10
4. Little Haste @	7/17/98 - 9:00 AM	10
5. Red Buoy # 16	7/17/98 - 9:05 AM	<10
6. Red Buoy # 2	7/17/98 - 9:10AM	< 10
7. Juniper Beach @ Storm Drain	7/17/98 - 9:40 AM	2,700

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 20, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/18/98 - 7:25 AM	<10
2. Red Buoy # 18	7/18/98 - 7:20 AM	10
3. Plummer School 100 yds. off shore	7/18/98 - 7:15 AM	<10
4. Little Haste @	7/18/98 - 7:29 AM	<10
5. Red Buoy # 16	7/18/98 - 7:31 AM	10
6. Red Buoy # 2	7/18/98 - 7:33 AM	90
7. Juniper Beach @ Storm Drain	7/18/98 - 7:50 AM	<10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 20, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/19/98 - 7:25 AM	<10
2. Red Buoy # 18	7/19/98 - 7:24 AM	<10
3. Plummer School 100 yds. off shore	7/19/98 - 7:20 AM	<10
4. Little Haste @	7/19/98 - 7:30 AM	40
5. Red Buoy # 16	7/19/98 - 7:32 AM	<10
6. Red Buoy # 2	7/19/98 - 7:35 AM	<10
7. Juniper Beach @ Storm Drain	7/19/98 - 8:00 AM	10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 22, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/20/98 - 11:42 AM	<10
2. Red Buoy # 18	7/20/98 - 11:40AM	<10
3. Plummer School 100 yds. off shore	7/20/98 - 11:58 AM	<10
4. Little Haste @ Spindle	7/20/98 - 11:46AM	40
5. Red Buoy # 16	7/20/98 - 11:50 AM	<10
6. Red Buoy # 2	7/20/98 - 11:54AM	10
7. Juniper Beach @ Storm Drain	7/20/98 - 12:15 PM	190

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 22, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/21/98 - 8:35 AM	< 10
2. Red Buoy # 18	7/21/98 - 8:30 AM	10
3. Plummer School 100 yds. off shore	7/21/98 - 8:55 AM	10
4. Little Haste @ Spindle	7/21/98 - 8:40 AM	< 10
5. Red Buoy # 16	7/21/98 - 8:43 AM	< 10
6. Red Buoy # 2	7/21/98 - 8:48 AM	< 10
7. Juniper Beach @ Storm Drain	7/21/98 - 9:20 AM	30

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 24, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/22/98 - N/A	N.T.
2. Red Buoy # 18	7/22/98 - 8:45 AM	10
3. Plummer School 100 yds. off shore	7/22/98 - 9:05 AM	< 10
4. Little Haste @ Spindle	7/22/98 - 8:50 AM	10
5. Red Buoy # 16	7/22/98 - 8:55 AM	< 10
6. Red Buoy # 2	7/22/98 - 9:00 AM	< 10
7. Juniper Beach @ Storm Drain	7/22/98 - 9:25 AM	10

N.T.: No sample taken due to repair barge on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall

M. Allain ✓

R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 24, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/23/98 - N/A	N.T.
2. Red Buoy # 18	7/23/98 - 8:25 AM	10
3. Plummer School 100 yds. off shore	7/23/98 - 8:20 AM	< 10
4. Little Haste @ Spindle	7/23/98 - 8:30 AM	40
5. Red Buoy # 16	7/23/98 - 8:35 AM	< 10
6. Red Buoy # 2	7/23/98 - 8:40 AM	10
7. Juniper Beach @ Storm Drain	7/23/98 - 9:00 AM	< 10

N.T.: No sample taken due to repair barge on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 29, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
7. Juniper Beach @ Storm Drain	7/24/98 - 8:00 AM	360
7. Juniper Beach @ Storm Drain	7/27/98 - 8:00 AM	10
1. Upwelling @ Break	7/28/98 - N/A	N.T.
2. Red Buoy # 18	7/28/98 - 9:00 AM	< 10
3. Plummer School 100 yds. off shore	7/28/98 - 8:55 AM	10
4. Little Haste @ Spindle	7/28/98 - 9:05 AM	10
5. Red Buoy # 16	7/28/98 - 9:10 AM	< 10
6. Red Buoy # 2	7/28/98 - 9:15 AM	20
7. Juniper Beach @ Storm Drain	7/28/98 - 9:30 AM	< 10

N.T.: No sample taken due to work taking place on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 30, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/29/98 - N/A	N.T.
2. Red Buoy # 18	7/29/98 - 8:40 AM	< 10
3. Plummer School 100 yds. off shore	7/29/98 - 8:35 AM	< 10
4. Little Haste @ Spindle	7/29/98 - 8:45 AM	20
5. Red Buoy # 16	7/29/98 - 8:50 AM	< 10
6. Red Buoy # 2	7/29/98 - 8:55 AM	10
7. Juniper Beach @ Storm Drain	7/29/98 - 9:10 AM	10

N.T.: No sample taken due to repair barge on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: July 31, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	7/30/98 - N/A	N.T.
2. Red Buoy # 18	7/30/98 - 8:45 AM	30
3. Plummer School 100 yds. off shore	7/30/98 - 8:40 AM	20
4. Little Haste @ Spindle	7/30/98 - 8:50 AM	50
5. Red Buoy # 16	7/30/98 - 8:55 AM	440
6. Red Buoy # 2	7/30/98 - 9:00 AM	70
7. Juniper Beach @ Storm Drain	7/30/98 - 9:17 AM	90

N.T.: No sample taken due to repair barge on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall

M. Allain ✓

R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 3, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated. Note: only one sample taken on 7/31/98 due to rain.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
7. Juniper Beach @ Storm Drain	7/31/98 - 8:40 AM	1000
1. Upwelling @ Break	8/1/98 - N/A	N.T.
2. Red Buoy # 18	8/1/98 - 7:15 AM	40
3. Plummer School 100 yds. off shore	8/1/98 - 7:10 AM	10
4. Little Haste @ Spindle	8/1/98 - 7:20 AM	20
5. Red Buoy # 16	8/1/98 - 7:25 AM	< 10
6. Red Buoy # 2	8/1/98 - 7:30 AM	20
7. Juniper Beach @ Storm Drain	8/1/98 - 7:50 AM	40

N.T.: No sample taken due to work taking place on site.

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall

M. Allain

R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 3, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Upwelling @ Break	8/2/98 - 7:35 AM	< 10
2. Red Buoy # 18	8/2/98 - 7:30 AM	< 10
3. Plummer School 100 yds. off shore	8/2/98 - 7:25 AM	20
4. Little Haste @ Spindle	8/2/98 - 7:40 AM	10
5. Red Buoy # 16	8/2/98 - 7:45 AM	< 10
6. Red Buoy # 2	8/2/98 - 7:50 AM	< 10
7. Juniper Beach @ Storm Drain	8/2/98 - 8:00 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall

M. Allain

R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 4, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site 50 yards north	8/3/98 - 8:52 AM	< 10
2. Red Buoy # 18	8/3/98 - 8:49 AM	< 10
3. Plummer School 100 yds. off shore	8/3/98 - 9:15 AM	< 10
4. Little Haste @ Spindle	8/3/98 - 8:59 AM	10
5. Red Buoy # 16	8/3/98 - 9:06 AM	< 10
6. Red Buoy # 2	8/3/98 - 9:10 AM	< 10
7. Juniper Beach @ Storm Drain	8/3/98 - 9:36 AM	8000

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 5, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site (approximate location)	8/4/98 - 8:20 AM	< 10
2. Red Buoy # 18	8/4/98 - 8:18 AM	10
3. Plummer School 100 yds. off shore	8/4/98 - 8:15 AM	10
4. Little Haste @ Spindle	8/4/98 - 8:23 AM	< 10
5. Red Buoy # 16	8/4/98 - 8:30 AM	10
6. Red Buoy # 2	8/4/98 - 8:32 AM	< 10
7. Juniper Beach @ Storm Drain	8/4/98 - 8:35 AM	590

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 6, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site (taken at marker)	8/5/98 - 8:13 AM	< 10
2. Red Buoy # 18	8/5/98 - 8:10 AM	< 10
3. Plummer School 100 yds. off shore	8/5/98 - 8:05 AM	< 10
4. Little Haste @ Spindle	8/5/98 - 8:19 AM	30
5. Red Buoy # 16	8/5/98 - 8:25 AM	< 10
6. Red Buoy # 2	8/5/98 - 8:28 AM	< 10
7. Juniper Beach @ Storm Drain	8/5/98 - 8:50 AM	720

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 7, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/6/98 - 8:32 AM	< 10
2. Red Buoy # 18	8/6/98 - 8:30 AM	< 10
3. Plummer School 100 yds. off shore	8/6/98 - 8:26 AM	10
4. Little Haste @ Spindle	8/6/98 - 8:36 AM	60
5. Red Buoy # 16	8/6/98 - 8:55 AM	20
6. Red Buoy # 2	8/6/98 - 8:57 AM	< 10
7. Juniper Beach @ Storm Drain	8/6/98 - 9:15 AM	3900

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 10, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/7/98 - 8:30 AM	< 10
2. Red Buoy # 18	8/7/98 - 8:25 AM	10
3. Plummer School 100 yds. off shore	8/7/98 - 8:20 AM	10
4. Little Haste @ Spindle	8/7/98 - 8:35 AM	60
5. Red Buoy # 16	8/7/98 - 8:45 AM	< 10
6. Red Buoy # 2	8/7/98 - 8:50 AM	< 10
7. Juniper Beach (sampled @ pipe mouth)	8/7/98 - 9:15 AM	TNTC

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 12, 1998

Subject: Harbor and Beach Testing

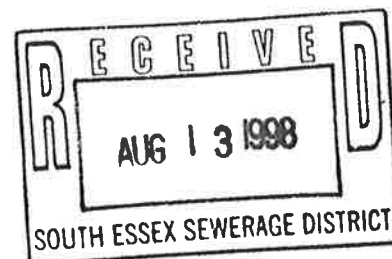
As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/10/98 - 8:40 AM	20
2. Red Buoy # 18	8/10/98 - 8:35 AM	< 10
3. Plummer School 100 yds. off shore	8/10/98 - 8:30 AM	< 10
4. Little Haste @ Spindle	8/10/98 - 8:49 AM	10
5. Red Buoy # 16	8/10/98 - 8:51 AM	< 10
6. Red Buoy # 2	8/10/98 - 8:55 AM	10
7. Juniper Beach (Pipe flowing)	8/10/98 - 9:15 AM	23,000

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM



To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 12, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/11/98 - 8:03 AM	< 10
2. Red Buoy # 18	8/11/98 - 8:02 AM	< 10
3. Plummer School 100 yds. off shore	8/11/98 - 8:00 AM	< 10
4. Little Haste @ Spindle	8/11/98 - 8:05 AM	20
5. Red Buoy # 16	8/11/98 - 8:07 AM	10
6. Red Buoy # 2	8/11/98 - 8:09 AM	10
7. Juniper Beach (Pipe flowing)	8/11/98 - 8:25 AM	70

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 18, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/12/98 - 8:25 AM	< 10
2. Red Buoy # 18	8/12/98 - 8:22 AM	50
3. Plummer School 100 yds. off shore	8/12/98 - 8:20 AM	40
4. Little Haste @ Spindle	8/12/98 - 8:29 AM	< 10
5. Red Buoy # 16	8/12/98 - 8:31 AM	70
6. Red Buoy # 2	8/12/98 - 8:35 AM	50
7. Juniper Beach (Pipe flowing)	8/12/98 - 8:50 AM	600

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 18, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/13/98 - 8:34 AM	< 10
2. Red Buoy # 18	8/13/98 - 8:32 AM	10
3. Plummer School 100 yds. off shore	8/13/98 - 8:30 AM	50
4. Little Haste @ Spindle	8/13/98 - 8:36 AM	60
5. Red Buoy # 16	8/13/98 - 8:40 AM	40
6. Red Buoy # 2	8/13/98 - 8:42 AM	160
7. Juniper Beach (Pipe flowing)	8/13/98 - 8:55 AM	480

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 18, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/14/98 - 8:35 AM	10
2. Red Buoy # 18	8/14/98 - 8:33 AM	10
3. Plummer School 100 yds. off shore	8/14/98 - 8:30 AM	< 10
4. Little Haste @ Spindle	8/14/98 - 8:40 AM	< 10
5. Red Buoy # 16	8/14/98 - 8:47 AM	10
6. Red Buoy # 2	8/14/98 - 8:51 AM	< 10
7. Juniper Beach (Pipe flowing)	8/14/98 - 9:10 AM	70

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 25, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Juniper Beach	8/17/98 - 8:20 AM	30

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 20, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/18/98 - 8:36 AM	130
2. Red Buoy # 18	8/18/98 - 8:34 AM	20
3. Plummer School 100 yds. off shore	8/18/98 - 8:29 AM	< 10
4. Little Haste @ Spindle	8/18/98 - 8:40 AM	80
5. Red Buoy # 16	8/18/98 - 8:45 AM	< 10
6. Red Buoy # 2	8/18/98 - 8:50 AM	< 10
7. Juniper Beach	8/18/98 - 9:06 AM	10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 21, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/19/98 - 8:45 AM	< 10
2. Red Buoy # 18	8/19/98 - 8:40 AM	20
3. Plummer School 100 yds. off shore	8/19/98 - 8:35 AM	< 10
4. Little Haste @ Spindle	8/19/98 - 8:52 AM	< 10
5. Red Buoy # 16	8/19/98 - 8:54 AM	20
6. Red Buoy # 2	8/19/98 - 8:56 AM	10
7. Juniper Beach	8/19/98 - 8:15 AM	410

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 21, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/20/98 - 10:19 AM	< 10
2. Red Buoy # 18	8/20/98 - 10:22 AM	< 10
3. Plummer School 100 yds. off shore	8/20/98 - 10:25 AM	< 10
4. Little Haste @ Spindle	8/20/98 - 10:10 AM	< 10
5. Red Buoy # 16	8/20/98 - 10:12 AM	< 10
6. Red Buoy # 2	8/20/98 - 10:16 AM	< 10
7. Juniper Beach	8/20/98 - 8:15 AM	< 10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 06/20/90 SAMPLERS: PB/DTTIDE: HIGH 10:46 am LOW: 4:31 am WIND: ^{out of} NNW 5-10SEA: Calm WEATHER: Clear

STATION NUMBER	BOUY TYPE COLOR NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#100 ml)
X1	New Boil	Center of New Boil	1	10:19 am	< 10
A2	Red 18	Winter Island	2	10:22 am	< 10
X2		Plummer's Shore	3	10:25 am	< 10
A3	Spindle	Little Hast Rock	4	10:10 am	< 10
X3	Red 16	Salem Willows	5	10:12 am	< 10
B1	Red 2	Salem Neck	6	10:16 am	< 10
X4		Juniper Beach Shore	7	10:15 am	< 10

→ PIPE FLAWING

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATA

DATE: 8/20/98 SAMPLER(S): PB/OT
TIDE: L 4:31 am H 10:46 am WIND: ^{OUT OF} NNW 5-10
SEA: CALM WEATHER: CLEAR

STATION NUMBER	BUOY TYPE COLOR\NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
~~B1~~	~~RED 2~~	~~SALEM NECK~~	~~B1~~	~~10:06 am~~	~~< 10~~
A1	GREEN 13	BEVERLY COVE	A1	10:06 am	< 10
~~B2~~	~~RED 18~~	~~WINTER ISLAND~~	~~B2~~	~~10:27 am~~	~~< 10~~
~~A3~~	~~SPINDLE~~	~~LITTLE HASTER~~	~~A3~~	~~10:00 am~~	~~< 10~~
~~B4~~	~~BOIL~~	~~CENTER OF BOIL~~	~~B4~~	~~10:05 am~~	~~< 10~~
A5	GREEN 7	EAST OF BOIL	A5	10:04 am	< 10
B2	GREEN 5	CONEY LEDGE	B2	959 am	< 10
A6	RED 6	EAGLE ISLAND	A6	945	< 10
B3	RED 4	BAKER'S ISLAND	B3	924 am	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	905 am	< 10
B4	RED 2	M-HEAD NECK	B4	850 am	< 10
B5	R/G BELL	M-HEAD CHANNEL	B5	835 am	10

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 24, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/21/98 - 10:04 AM	< 10
2. Red Buoy # 18	8/21/98 - 10:10 AM	10
3. Plummer School 100 yds. off shore	8/21/98 - 10:08 AM	< 10
4. Little Haste @ Spindle	8/21/98 - 9: 45 AM	10
5. Red Buoy # 16	8/21/98 - 9:55 AM	< 10
6. Red Buoy # 2	8/21/98 - 9:56 AM	< 10
7. Juniper Beach	8/21/98 - 10:30 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 25, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/24/98 - 8:50 AM	10
2. Red Buoy # 18	8/24/98 - 8:48 AM	10
3. Plummer School 100 yds. off shore	8/24/98 - 8:45 AM	40
4. Little Haste @ Spindle	8/24/98 - 8:55 AM	< 10
5. Red Buoy # 16	8/24/98 - 8:58 AM	20
6. Red Buoy # 2	8/24/98 - 9:02 AM	< 10
7. Juniper Beach	8/24/98 - 9:20 AM	20

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall

M. Allain ✓

R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 26, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/25/98 - 8:50 AM	10
2. Red Buoy # 18	8/25/98 - 8:47 AM	< 10
3. Plummer School 100 yds. off shore	8/25/98 - 8:45 AM	< 10
4. Little Haste @ Spindle	8/25/98 - 8:55 AM	10
5. Red Buoy # 16	8/25/98 - 9:05 AM	10
6. Red Buoy # 2	8/25/98 - 9:08 AM	< 10
7. Juniper Beach	8/25/98 - 9:25 AM	10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 27, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Juniper Beach	8/26/98 - 9:35 AM	< 10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: William W. Liss, Laboratory Manager

Date: August 28, 1998

Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/27/98 - 8:10 AM	< 10
2. Red Buoy # 18	8/27/98 - 8:09 AM	< 10
3. Plummer School 100 yds. off shore	8/27/98 - 8:06 AM	< 10
4. Little Haste @ Spindle	8/27/98 - 8:14 AM	< 10
5. Red Buoy # 16	8/27/98 - 8: 17 AM	< 10
6. Red Buoy # 2	8/27/98 - 8:20 AM	< 10
7. Juniper Beach	8/27/98 - 8:35 AM	10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain ✓
R. Taylor

MEMORANDUM

To: Raymond G. Bouchard, Executive Director

From: Glen Wilson, Chief Lab Technician

Date: September 1, 1998

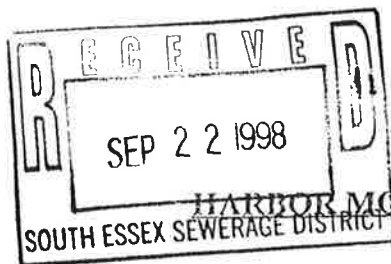
Subject: Harbor and Beach Testing

As requested, the SESD Lab Staff has tested the following samples which were collected by SESD Monitoring and Enforcement Personnel in the Salem-Beverly Harbor area as indicated.

<u>SAMPLE SOURCE</u>	<u>DATE / TIME</u>	<u>FECAL COLIFORM / 100mL</u>
1. Pipe Break Site	8/28/98 - 9:07 AM	< 10
2. Red Buoy # 18	8/28/98 - 9:05 AM	< 10
3. Plummer School 100 yds. off shore	8/28/98 - 9:00 AM	< 10
4. Little Haste @ Spindle	8/28/98 - 9:12 AM	< 10
5. Red Buoy # 16	8/28/98 - 9:20 AM	< 10
6. Red Buoy # 2	8/28/98 - 9:24 AM	< 10
7. Juniper Beach	8/28/98 - 9:55 AM	< 10

If I can be of further assistance in this matter, please call me at any time.

c: H. Newhall
M. Allain
R. Taylor



SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATA

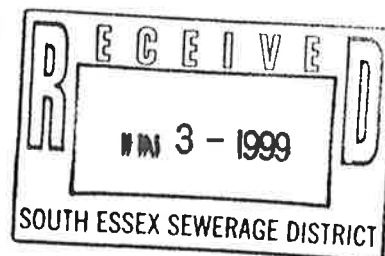
DATE: 9/21/98 SAMPLER(S): PB/DT

TIDE: 6:16am # 12:29pm WIND: 5 10-20

SEA: 2-4 GPM WEATHER: OVERCAST
CHOPPY IN SOUND

STATION NUMBER	BUOY TYPE COLOR NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	1044	< 10
A1	GREEN 13	BEVERLY COVE	A1	10 ²⁵ _{am}	10
A2	RED 18	WINTER ISLAND	A2	1048	< 10
A3	SPINDLE	LITTLE HASTER	A3	10 ⁴⁰ _{am}	10
A4	BOIL	CENTER OF BOIL	A4	10 ³⁰	< 10
A5	GREEN 7	EAST OF BOIL	A5	10 ²⁴ _{am}	< 10
B2	GREEN 5	CONEY LEDGE	B2	10 ¹⁸ _{am}	< 10
A6	RED 6	EAGLE ISLAND	A6	10 ¹² _{am}	< 10
B3	RED 4	BAKER'S ISLAND	B3	10 ¹⁰ _{am}	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	953	< 10
B4	RED 2	M-HEAD NECK	B4	946	< 10
B5	RNG BELL	M-HEAD CHANNEL	B5	943	< 10

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 6/1/99 SAMPLER(S): MA PC DTTIDE: H 1:10A L 7:31A 1:46P 7:39P WIND: _____SEA: _____ WEATHER: Clear

STATION NUMBER	BUOY TYPE COLOR/NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	11:10A	<10
A1	GREEN 13	BEVERLY COVE	A1	11:05A	<10
A2	RED 18	WINTER ISLAND	A2	11:15A	<10
A3	SPINDLE	LITTLE HASTE R	A3	11:00A	10
A4	BOIL	CENTER OF BOIL	No SAMPLE		—
A5	GREEN 7	EAST OF BOIL	A5	10:50A	<10
B2	GREEN 5	CONEY LEDGE	B2	10:45A	<10
A6	RED 6	EAGLE ISLAND	A6	10:40A	<10
B3	RED 4	BAKER'S ISLAND	B3	10:30A	<10
A7	GREEN 3	CHAPPEL LEDGE	A7	10:20A	<10
B4	RED 2	M-HEAD NECK	B4	10:15A	<10
B5	R/G BELL	M-HEAD CHANNEL	B5	10:05A	<10

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATA

DATE: 6/22/99 SAMPLER(S): DT MA

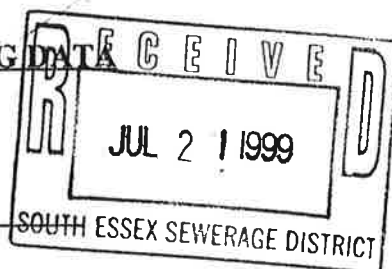
TIDE: ^H 7:09 AM 7:41 PM
_L 12:55 AM 1:17 PM WIND: Variable

SEA: 1-2 calm WEATHER: Clear

STATION NUMBER	BUOY TYPE COLOR/NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	9:45 ^A	<10
A1	GREEN 13	BEVERLY COVE	A1	9:30 ^A	<10
A2	RED 18	WINTER ISLAND	A2	9:50 ^A	<10
A3	SPINDLE	LITTLE HASTE R	A3	9:40 ^A	10
A4	BOIL	CENTER OF BOIL	—	—	—
A5	GREEN 7	EAST OF BOIL	A5	9:15 ^A	<10
B2	GREEN 5	CONEY LEDGE	B2	9:05 ^A	40
A6	RED 6	EAGLE ISLAND	A6	9 AM	<10
B3	RED 4	BAKER'S ISLAND	B3	8:50 ^A	<10
A7	GREEN 3	CHAPPEL LEDGE	A7	8:40 ^A	<10
B4	RED 2	M-HEAD NECK	B4	8:30 ^A	<10
B5	R/G BELL	M-HEAD CHANNEL	B5	8:25 ^A	<10

SOUTH ESSEX SEWERAGE DISTRICT

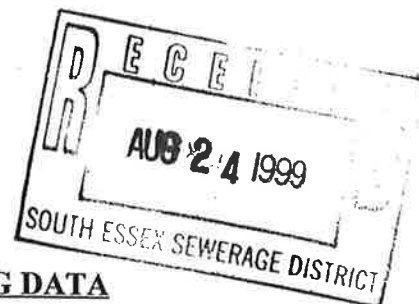
HARBOR MONITORING - FECAL COLIFORM SAMPLING DATA



DATE: 7/20/99 SAMPLER(S): M.A. D.T.
 TIDE: H 5:33 AM L 11:42 AM WIND: NE 10-15 mph
 SEA: 1-2 feet WEATHER: Clear, cool

STATION NUMBER	BUOY TYPE COLOR/NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	9:30A	10
A1	GREEN 13	BEVERLY COVE	A1	9:15A	< 10
A2	RED 18	WINTER ISLAND	A2	9:35A	10
A3	SPINDLE	LITTLE HASTE R	A3	9:20A	10
A4	BOIL	CENTER OF BOIL	—	—	—
A5	GREEN 7	EAST OF BOIL	A5	9:05A	< 10
B2	GREEN 5	CONEY LEDGE	B2	9:00A	< 10
A6	RED 6	EAGLE ISLAND	A6	8:55A	< 10
B3	RED 4	BAKER'S ISLAND	B3	8:45A	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	8:35A	< 10
B4	RED 2	M-HEAD NECK	B4	8:30A	< 10
B5	R/G BELL	M-HEAD CHANNEL	B5	8:20A	< 10

SOUTH ESSEX SEWERAGE DISTRICT

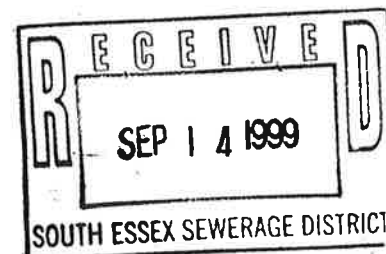
HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 8/23/99 SAMPLER(S): MA DTTIDE: H 9:30A 9:41P L 3:15A 3:23P WIND: SE NW ~ 5 mphSEA: calm WEATHER: mostly sunny

STATION NUMBER	BUOY TYPE COLOR\NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	11:40 ^A	< 10
A1	GREEN 13	BEVERLY COVE	A1	11:30 ^A	< 10
A2	RED 18	WINTER ISLAND	A2	11:45 ^A	< 10
A3	SPINDLE	LITTLE HASTE R	A3	11:35 ^A	< 10
A4	BOIL	CENTER OF BOIL	—	—	N/A
A5	GREEN 7	EAST OF BOIL	A5	11:20 ^A	< 10
B2	GREEN 5	CONEY LEDGE	B2	11:05 ^A	< 10
A6	RED 6	EAGLE ISLAND	A6	10:50 ^A	< 10
B3	RED 4	BAKER'S ISLAND	B3	10:40 ^A	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	10:15 ^A	< 10
B4	RED 2	M-HEAD NECK	B4	10A	< 10
B5	R/G BELL	M-HEAD CHANNEL	B5	9:45 ^A	< 10

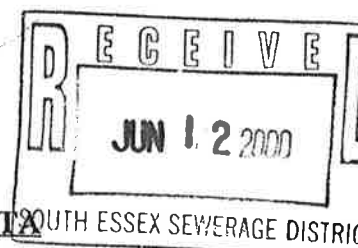
SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 9/13/99 SAMPLER(S): MA DTTIDE: H 2:02^A L 8:04^A 2:22^P 8:33^P WIND: calm variable (SE 5-10 mph)SEA: Calm 1-2 feet WEATHER: Clear

STATION NUMBER	BUOY TYPE COLOR NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#100ml)
B1	RED 2	SALEM NECK	B1	11:50 ^A	< 10
A1	GREEN 13	BEVERLY COVE	A1	11:45 ^A	< 10
A2	RED 18	WINTER ISLAND	A2	11:52 ^A	< 10
A3	SPINDLE	LITTLE HASTE R	A3	11:47 ^A	10
A4	BOIL	CENTER OF BOIL	—	—	No Sample
A5	GREEN 7	EAST OF BOIL	A5	11:42 ^A	< 10
B2	GREEN 5	CONEY LEDGE	B2	11:40 ^A	< 10
A6	RED 6	EAGLE ISLAND	A6	11:35 ^A	< 10
B3	RED 4	BAKER'S ISLAND	B3	11:20 ^A	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	11 ^A	< 10
B4	RED 2	M-HEAD NECK	B4	10:45 ^A	10
B5	R/G BELL	M-HEAD CHANNEL	B5	10:30 ^A	< 10



SOUTH ESSEX SEWERAGE DISTRICT

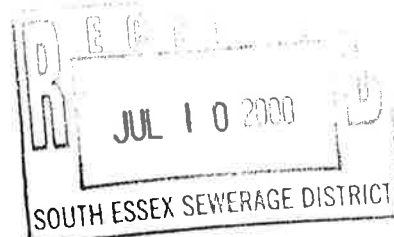


HARBOR MONITORING - FECAL COLIFORM SAMPLING DATA

DATE: 6/8/00 SAMPLER(S): MA 1 DTTIDE: 4 4:36A 5:22P
L 10:58A 11:22P WIND: SW 10-15 knotSEA: Calm / rolling wave
3-4 WEATHER: Mostly clear

STATION NUMBER	BUOY TYPE COLOR/NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	10:50 ^A	100
A1	GREEN 13	BEVERLY COVE	A1	10:40 ^A	80
A2	RED 18	WINTER ISLAND	A2	10:55 ^A	40
A3	SPINDLE	LITTLE HASTE R	A3	10:45 ^A	40
~~A4~~	~~BOIL~~	~~CENTER OF BOIL~~	~~—~~	~~—~~	~~—~~
A5	GREEN 7	EAST OF BOIL	A5	10:35 ^A	40
B2	GREEN 5	CONEY LEDGE	B2	10:30 ^A	60
A6	RED 6	EAGLE ISLAND	A6	10:15 ^A	80
B3	RED 4	BAKER'S ISLAND	B3	10 ^A	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	9:50 ^A	10
B4	RED 2	M-HEAD NECK	B4	9:35 ^A	< 10
B5	R/G BELL ✓	M-HEAD CHANNEL	B5	9:28 ^A	30

SOUTH ESSEX SEWERAGE DISTRICT

HARBOR MONITORING - FECAL COLIFORM SAMPLING DATADATE: 7/5/00 SAMPLER(S): MA / DT

TIDE: _____ WIND: _____

SEA: 1-2 Sea WEATHER: Mostly clear

STATION NUMBER	BUOY TYPE COLOR NO.	LOCATION DESCRIPTION	BOTTLE NUMBER	TIME	RESULTS (#/100ml)
B1	RED 2	SALEM NECK	B1	1050 ^A	< 10
A1	GREEN 13	BEVERLY COVE	~~144~~ A1	1040 ^A	< 10
A2	RED 18	WINTER ISLAND	A2	1055 ^A	10
A3	SPINDLE	LITTLE HASTE R	A3	1045 ^A	40
A4	BOIL	CENTER OF BOIL	—	—	N.T
A5	GREEN 7	EAST OF BOIL	A5	1033 ^A	< 10
B2	GREEN 5	CONEY LEDGE	B2	1030 ^A	20
A6	RED 6	EAGLE ISLAND	A6	1024 ^A	< 10
B3	RED 4	BAKER'S ISLAND	B3	1016 ^A	< 10
A7	GREEN 3	CHAPPEL LEDGE	A7	1010 ^A	< 10
B4	RED 2	M-HEAD NECK	B4	1005 ^A	< 10
B5	R/G BELL	M-HEAD CHANNEL	B5	10 ^A	< 10

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. R/G Ben M-HEAD Channel

DATE 7/10/98 TIME 9:45 AM

PERSONNEL: PBLOT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9

DEPTH TO REAPPEARANCE: 9

DEPTH TO BOTTOM: 46

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	~~4DS~~ ~~(21)~~ %
2	16.71	29.34	10.11	7.74	129.8
5	18.13	29.40	10.32	7.74	130.2
10	15.92	29.65	10.35	7.71	126.9
15	14.88	29.82	10.22	7.68	121.2
20	13.79	30.01	10.29	7.67	119.5
25	11.85	30.41	10.42	7.62	116.2
30	10.41	30.74	9.68	7.56	105.3
35	8.75	31.05	9.19	7.49	96.6
40	8.57	31.08	9.06	7.46	94.8
45	8.36	31.12	9.02	7.47	94.0

COMMENTS: _____

Probe R/G 101.2 % SAT AIR BEFORE
USE

TIDES	H 12:04 A	L 6:27 AM
	~~6:27 A~~	L 6:37 PM
	12:41 P	

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RE02 N-HEAMDATE 7/10/98 TIME 10:00AMPERSONNEL: PB/PRSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9DEPTH TO REAPPEARANCE: 9DEPTH TO BOTTOM: 30

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~92~~)%
2	14.82	29.28	9.93	7.76	127.9
5	14.57	29.30	10.40	7.79	132.2
10	15.08	29.72	10.26	7.73	122.9
15	13.98	29.52	10.32	7.70	120.2
20	13.92	29.92	10.13	7.68	118.7
25	11.54	30.43	10.08	7.62	111.8
30	11.10	30.55	9.68	7.62	106.7

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 3

DATE 7/10/96 TIME 10:10 AM

PERSONNEL: PB/DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10

DEPTH TO REAPPEARANCE: 10

DEPTH TO BOTTOM: 50

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~g/l~~) %
2	19.18	29.27	10.12	7.81	129.8
5	19.8	29.27	10.29	7.82	132.2
10	16.95	29.51	10.72	7.70	131.8
15	13.68	29.98	10.24	7.73	118.6
20	12.65	30.19	10.27	7.70	116.6
25	11.21	30.47	10.33	7.62	113.6
30	9.96	30.77	9.59	7.56	103.3
35	9.43	30.85	9.43	7.51	99.9
40	9.32	30.84	9.22	7.49	98.0
45	8.74	30.99	9.06	7.44	95.0
50	8.57	31.00	8.79	7.40	92.1

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 4DATE 7/10/94 TIME 10:30 AMPERSONNEL: AB/DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11DEPTH TO REAPPEARANCE: 11DEPTH TO BOTTOM: 53

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	~~IDS~~ ~~(94)~~ ⁹
2	18.43	29.42	9.72	7.76	124.0
5	18.21	29.46	9.93	7.75	125.7
10	16.00	29.89	10.30	7.71	124.6
15	14.25	29.97	10.35	7.67	120.9
20	12.29	30.31	10.13	7.62	114.1
25	11.06	30.55	10.17	7.57	111.4
30	10.86	30.60	9.92	7.52	108.9
35	9.38	30.98	9.96	7.50	106.4
40	8.78	31.05	9.88	7.46	102.8
45	8.74	31.05	9.55	7.43	100.1
50	8.64	31.05	9.46	7.42	99.2

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 6DATE 7/10/99TIME 10:50PERSONNEL: RB/DT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 10DEPTH TO REAPPEARANCE: 10DEPTH TO BOTTOM: 42

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	19.47	29.27	10.13	7.79	131.1
5	19.38	29.29	10.30	7.77	134.1
10	17.20	29.45	10.23	7.69	126.6
15	13.68	29.98	10.23	7.66	118.6
20	12.45	30.22	10.33	7.63	116.6
25	10.68	30.58	9.90	7.54	102.4
30	10.48	30.61	9.77	7.51	106.2
35	10.13	30.70	9.70	7.48	104.7
40	9.44	30.84	9.60	7.44	102.3

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 5DATE 7/10/90 TIME 1105PERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10DEPTH TO REAPPEARANCE: 16DEPTH TO BOTTOM: 50

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l) ⁹
2	19.53	29.23	10.02	7.74	131.0
5	19.46	29.25	10.51	7.74	136.1
10	15.69	29.72	10.50	7.68	126.7
15	14.07	29.95	10.58	7.64	123.2
20	12.32	30.25	10.61	7.60	119.8
25	11.32	30.42	10.31	7.54	114.6
30	9.99	30.72	10.11	7.48	109.0
35	9.47	30.80	9.69	7.43	102.9
40	8.73	30.96	9.30	7.37	97.7
45	8.50	31.02	8.93	7.35	93.0
50	8.45	31.02	8.12	7.32	90.2

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 7DATE 7/10/90 TIME 11:22PERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9DEPTH TO REAPPEARANCE: 9DEPTH TO BOTTOM: 43

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	19.27	29.37	9.17	7.69	116.4
5	19.24	29.28	10.21	7.69	131.7
10	18.62	29.35	10.42	7.68	132.8
15	13.08	30.12	10.56	7.61	120.0
20	11.19	30.42	10.07	7.54	110.5
25	11.01	30.47	9.79	7.52	107.5
30	10.10	30.65	9.83	7.46	106.0
35	9.21	30.87	9.61	7.43	101.5
40	8.70	30.98	9.41	7.37	97.8

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. SPINDLE

DATE 7/10/98 TIME 11:40 Am

PERSONNEL: PB/DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 7

DEPTH TO REAPPEARANCE: 7

DEPTH TO BOTTOM: 17

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l) <u>96</u>
2	19.34	29.28	10.09	7.70	131.6
5	19.31	29.30	10.39	7.68	134.3
10	19.24	29.28	10.48	7.67	135.0
15	18.40	29.37	10.63	7.66	134.7

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 13DATE 7/10/90 TIME 1150PERSONNEL: PB/PTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 7DEPTH TO REAPPEARANCE: 7DEPTH TO BOTTOM: 43

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.39	29.39	9.94	7.65	126.7
5	18.20	29.45	10.09	7.64	127.9
10	15.94	29.79	10.58	7.61	128.0
15	13.75	29.99	10.40	7.58	120.7
20	11.81	30.36	10.54	7.53	112.8
25	11.55	30.39	10.20	7.50	113.2
30	10.34	30.65	10.15	7.44	110.8
35	9.94	30.77	9.80	7.43	105.9
40	9.20	30.91	9.75	7.40	103.6
43	9.16	30.94	9.55	7.38	101.2

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. REN2 BEVERLY

DATE 7/10/90 TIME 12:03

PERSONNEL: PB/DI

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8

DEPTH TO REAPPEARANCE: 8

DEPTH TO BOTTOM: 34

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.86	29.31	9.65	7.61	124.5
5	18.76	29.32	10.09	7.59	129.0
10	17.43	29.38	10.47	7.56	129.9
15	14.57	29.78	10.37	7.53	122.2
20	13.57	30.01	10.37	7.52	119.8
25	12.91	30.13	10.23	7.48	116.6
30	12.15	30.26	10.10	7.43	114.0
34	11.53	30.44	9.12	7.36	100.6

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 19

DATE 7/10/98 TIME 12:20

PERSONNEL: PB/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 7

DEPTH TO REAPPEARANCE: 7

DEPTH TO BOTTOM: 37

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l) %
2	19.80	29.27	9.96	7.60	130.5
5	19.69	29.27	10.33	7.60	134.4
10	18.23	29.39	10.61	7.59	134.2
15	16.32	29.53	10.25	7.53	124.4
20	12.45	30.16	10.03	7.48	112.3
25	11.15	30.49	9.76	7.45	107.3
30	10.87	30.53	9.58	7.40	105.4
35	10.48	30.64	9.38	7.35	101.6

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED/GREEN DEU B5DATE 10/20/90 TIME 8:35 AMPERSONNEL: PB/DT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 11DEPTH TO REAPPEARANCE: 11DEPTH TO BOTTOM: 51

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (mg/l)
2	13.94	31.67	9.53	7.95	113.5
5	13.79	31.75	~~9.88~~ 9.88	8.02	116.6
10	13.75	31.80	10.02	8.04	118.0
15	13.68	31.82	10.11	8.05	118.7
20	13.51	31.83	10.15	8.06	119.7
25	11.61	31.98	10.21	8.08	114.8
30	11.19	31.95	10.05	8.05	111.8
35	11.13	31.94	9.84	8.03	109.5
40	10.40	31.96	9.90	8.00	108.1
45	10.17	31.96	9.67	8.00	105.5
50	8.79	31.98	9.05	7.93	95.1

COMMENTS: _____

LOCATION NO.

RED 2 M HEAD

DATE _____

5/20/99

TIME

8:50 AM

PERSONNEL:

PB 10T

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 12

DEPTH TO REAPPEARANCE: 12

DEPTH TO BOTTOM:

30

COMMENTS:

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 3 CHAPPEL LEDGEDATE 02/20/98 TIME 9:05 AMPERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 16DEPTH TO REAPPEARANCE: 16DEPTH TO BOTTOM: 57

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~97~~) <u>98</u>
2	14.05	31.85	9.14	8.01	108.3
5	13.90	31.87	9.36	8.05	110.4
10	13.64	31.86	9.48	8.07	111.1
15	13.58	31.85	9.48	8.07	111.0
20	13.31	31.87	9.51	8.07	110.7
25	12.94	31.89	9.50	8.06	109.8
30	12.62	31.91	9.48	8.06	108.7
35	11.96	31.93	9.46	8.04	106.9
40	10.15	32.00	9.42	8.01	102.0
45	8.78	32.00	9.93	7.96	94.0
50	8.74	31.98	8.67	7.94	91.4
55	8.20	31.99	8.37	7.90	87.1

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B3 BAKERS ISLANDDATE 9/20/98 TIME 9:24 AmPERSONNEL: PB/DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 17DEPTH TO REAPPEARANCE: 17DEPTH TO BOTTOM: 58

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	~~TDS~~ (g/l) %
2	14.04	31.64	8.57	7.99	102.9
5	14.63	31.75	8.77	8.05	105.3
10	14.44	31.70	8.90	8.08	106.2
15	14.26	31.80	8.95	8.08	106.2
20	13.80	31.83	9.00	8.08	105.8
25	13.13	31.82	9.07	8.07	105.0
30	12.77	31.89	8.96	8.06	103.3
35	12.65	31.88	8.88	8.05	102.0
40	10.83	31.97	8.97	8.01	99.6
45	9.02	32.07	8.37	7.97	89.1
50	8.09	32.08	8.26	7.94	85.4
55	7.96	32.01	7.79	7.91	80.7
58	7.87	32.04	7.63	7.89	78.7

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. AB EAGLE ISLAND

DATE 9/20/98 TIME 9:45 AM

PERSONNEL: PE/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 16

DEPTH TO REAPPEARANCE: 16

DEPTH TO BOTTOM: 50

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (mg/l)
2	13.91	31.79	9.94	8.03	105.3
5	13.79	31.83	9.07	8.06	106.7
10	13.36	31.85	9.20	8.06	107.2
15	13.13	31.89	9.23	8.07	107.1
20	12.95	31.92	9.23	8.06	106.7
25	12.69	31.91	9.21	8.05	105.8
30	11.97	31.96	9.21	8.04	104.2
35	11.41	31.98	9.08	8.03	101.6
40	9.09	32.07	8.66	7.98	91.2
45	8.90	32.03	8.39	7.96	88.4
50	8.89	32.10	8.11	7.95	85.0

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 5 CONEY LEDGEDATE 8/21/98 TIME 9:02 AMPERSONNEL: PB/OT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 13DEPTH TO REAPPEARANCE: 13DEPTH TO BOTTOM: 53

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~mg/l~~) %
2	15.20	31.80	9.09	8.04	110.0
5	15.02	31.92	9.40	8.08	113.5
10	14.91	31.95	9.52	8.10	114.8
15	14.46	31.87	9.69	8.09	115.6
20	14.13	31.91	9.77	8.11	115.7
25	13.32	31.96	9.84	8.11	114.6
30	13.25	31.97	9.78	8.11	114.0
35	12.93	32.02	9.73	8.09	112.4
40	11.16	32.12	9.80	8.05	108.2
45	9.53	32.13	8.77	8.00	94.2
50	9.42	32.09	8.57	7.98	89.7

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 7 (EAST OF OUTFALL)DATE 09/21/98 TIME 9:20 AMPERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 14DEPTH TO REAPPEARANCE: 14DEPTH TO BOTTOM: 43

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (mg/l) <u>26</u>
2	15.36	31.83	8.78	8.18	106.7
5	15.20	31.88	8.95	8.22	108.9
10	14.96	31.89	9.21	8.24	111.1
15	14.45	31.95	9.31	8.23	111.1
20	14.09	31.94	9.35	8.23	110.6
25	13.31	31.99	9.37	8.21	109.2
30	12.72	31.99	9.33	8.19	107.3
35	12.29	32.00	9.26	8.18	105.5
40	11.84	32.02	9.21	8.16	104.1

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 134DATE 8/21/99 TIME 9:30 amPERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 13DEPTH TO REAPPEARANCE: 13DEPTH TO BOTTOM: 38

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	15.46	31.89	8.29	8.04	102.3
5	15.34	31.92	8.63	8.10	104.9
10	15.12	31.93	8.76	8.13	106.0
15	14.78	31.90	8.87	8.14	106.5
20	14.22	31.95	8.95	8.14	106.2
25	14.03	31.96	8.94	8.14	105.6
30	12.48	31.97	9.07	8.09	103.0
35	12.05	31.98	8.80	8.07	99.2

COMMENTS: _____

LOCATION NO.

DATE _____

TIME

PERSONNEL:

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE:

DEPTH TO REAPPEARANCE:

DEPTH TO BOTTOM:

COMMENTS:

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. R&D 2 SALEM NECKDATE 7/21/90 TIME 9:56 AMPERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11DEPTH TO REAPPEARANCE: 11DEPTH TO BOTTOM: 31

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~g/L~~) ⁹ ₆
2	14.88	31.79	8.19	8.02	98.6
5	14.84	31.79	8.23	8.03	99.0
10	14.90	31.88	8.29	8.07	99.8
15	14.91	31.91	8.32	8.08	100.1
20	14.52	31.86	8.37	8.05	99.9
25	13.54	31.95	8.42	8.05	98.3
30	13.46	31.94	8.26	8.05	96.2

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 18DATE 8/21/99 TIME 10:10 AMPERSONNEL: PB 101SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10DEPTH TO REAPPEARANCE: 10DEPTH TO BOTTOM: 36

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~mg/l~~) ²
2	15.43	31.77	7.68	7.95	93.4
5	15.35	31.75	7.77	7.99	94.4
10	14.74	31.75	7.92	7.79	94.9
15	14.54	31.79	7.86	8.00	93.7
20	14.29	31.84	7.81	8.02	92.7
25	12.40	32.00	8.00	8.01	90.8
30	12.14	31.99	7.66	7.96	86.3
35	11.95	31.97	7.35	7.94	82.8

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. 2/6 BEN B5DATE 9/25/98TIME 9²⁵ AMPERSONNEL: PB/OT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 12DEPTH TO REAPPEARANCE: 12DEPTH TO BOTTOM: 46

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (9/25) 96
2	13.90	31.66	9.99	7.79	119.0
5	13.907	31.79	10.24	7.79	120.9
10	13.84	31.84	10.43	7.79	122.9
15	13.61	31.89	10.51	7.76	123.1
20	13.35	31.91	10.36	7.73	120.5
25	13.17	31.93	10.19	7.72	118.2
30	12.87	31.94	10.02	7.69	115.4
35	12.70	31.94	9.80	7.68	112.5
40	12.44	31.96	9.51	7.65	108.6
45	11.92	31.99	9.23	7.60	104.1

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 2 M HEAD

DATE 9/25/98 TIME 9:30 AM

PERSONNEL: PB/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10

DEPTH TO REAPPEARANCE: 10

DEPTH TO BOTTOM: 20

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~g/l~~) %
2	14.13	31.82	9.96	7.72	118.8
5	14.04	31.83	10.27	7.75	121.6
10	13.92	31.84	10.41	7.76	122.9
15	13.90	31.85	10.46	7.76	123.3
20	13.86	31.86	10.40	7.76	122.3

COMMENTS: 20' DEPTA?

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 3

DATE 7/25/98 TIME 9⁴⁷ AM

PERSONNEL: PB/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12

DEPTH TO REAPPEARANCE: 12

DEPTH TO BOTTOM: 52

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (~~g/l~~) ^g
2	14.04	31.83	9.71	7.75	115.2
5	13.93	31.86	10.01	7.77	118.3
10	13.91	31.86	10.18	7.77	120.3
15	13.89	31.86	10.25	7.77	120.8
20	13.88	31.86	10.21	7.76	120.3
25	13.71	31.89	10.13	7.74	118.7
30	13.19	31.94	9.88	7.70	114.5
35	12.84	31.95	9.57	7.68	109.8
40	12.28	31.96	9.18	7.61	104.7
45	11.17	32.03	8.01	7.56	89.3
50	10.60	32.02	7.58	7.49	82.5

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 4

DATE 9/25/98 TIME 10⁰⁶ AM

PERSONNEL: RB/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 15 ft

DEPTH TO REAPPEARANCE: 15 ft

DEPTH TO BOTTOM: 50

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	JDS (~~gta~~) ⁹ ₀
2	14.55	31.80	9.01	7.79	107.8
5	14.49	31.81	9.22	7.80	110.1
10	14.43	31.82	9.28	7.80	110.6
15	14.17	31.86	9.34	7.79	110.7
20	14.05	31.88	9.33	7.77	110.3
25	13.67	31.89	9.18	7.74	107.7
30	13.49	31.91	9.00	7.72	104.9
35	12.69	31.95	8.73	7.67	100.0
40	11.99	32.02	8.35	7.63	94.2
45	11.70	31.99	8.02	7.60	90.8
50	10.93	32.04	7.60	7.54	84.0

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 6

DATE 9/25/98 TIME 10²⁵ AM

PERSONNEL: RB/OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12

DEPTH TO REAPPEARANCE: 12

DEPTH TO BOTTOM: ~~31~~ 29

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (mg/l)
2	14.35	31.79	8.35	7.77	99.7
5	14.29	31.82	8.64	7.78	102.8
10	14.13	31.86	8.75	7.77	103.6
15	14.04	31.87	8.77	7.76	103.6
20	13.91	31.89	8.76	7.76	103.3
25	13.82	31.89	8.74	7.74	102.9
29	13.73	31.89	8.68	7.73	102.0

COMMENTS: P.O. PROBE READS? (FLAT TEMP.)

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 5DATE 9/25/90 TIME 10³⁷ AMPERSONNEL: PB/PT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 12DEPTH TO REAPPEARANCE: 12DEPTH TO BOTTOM: 52

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.30	31.86	7.75	7.74	92.8
5	14.33	31.85	8.15	7.75	97.1
10	14.14	31.89	8.33	7.76	98.9
15	13.85	31.85	8.45	7.74	99.5
20	13.80	31.87	8.43	7.72	99.2
25	13.73	31.89	8.37	7.71	98.1
30	13.68	31.89	8.26	7.71	96.9
35	13.60	31.93	8.14	7.69	95.5
40	12.55	31.99	7.89	7.65	90.2
45	11.47	32.05	7.42	7.56	82.5
50	10.74	32.06	5.84	7.46	63.9

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 7

DATE 9/25/98 TIME 11:00 AM

PERSONNEL: PB1 DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 13

DEPTH TO REAPPEARANCE: 13

DEPTH TO BOTTOM: 41

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.45	31.48	7.55	7.66	90.4
5	14.39	31.70	7.79	7.70	92.9
10	14.28	31.91	7.85	7.74	93.2
15	14.20	31.92	7.82	7.74	92.8
20	14.07	31.92	7.83	7.74	92.7
25	13.76	31.91	7.87	7.71	92.5
30	13.66	31.91	7.79	7.69	91.3
35	13.13	32.02	7.53	7.66	87.2
40	11.96	32.04	7.24	7.57	81.3
41					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. GREEN 13

DATE 9/25/98 TIME 11:15 AM

PERSONNEL: PB/PT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 14

DEPTH TO REAPPEARANCE: 14

DEPTH TO BOTTOM: 35

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.53	31.89	6.92	7.75	83.0
5	14.47	31.91	7.22	7.76	86.3
10	14.36	31.89	7.28	7.76	86.7
15	14.29	31.89	7.28	7.76	86.5
20	14.19	31.89	7.25	7.74	86.0
25	13.88	31.85	7.38	7.74	87.1
30	13.45	31.94	7.21	7.66	83.9
35	12.29	32.00	5.85	7.53	65.4

COMMENTS: _____

LOCATION NO.

SPINLE

DATE

9/25/90

TIME

11:35 AM

PERSONNEL:

PB/DT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE:

10'

DEPTH TO REAPPEARANCE:

10

DEPTH TO BOTTOM:

14

COMMENTS:

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 2 SALEM NECKDATE 9/25/92 TIME 11:45 AMPERSONNEL: PB/OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11DEPTH TO REAPPEARANCE: 11DEPTH TO BOTTOM: 28

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (mg/l)
2	13.91	31.81	6.07	7.73	71.6
5	13.85	31.85	6.21	7.74	73.4
10	13.76	31.87	6.29	7.74	74.0
15	13.67	31.90	6.38	7.74	75.2
20	13.44	31.92	6.66	7.70	77.8
25	13.27	31.92	6.58	7.67	76.4
28	12.81	32.03	6.36	7.61	73.6

COMMENTS: D.O. READS LOW (PROBABLY
NiCd PROBLEMS)

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. RED 18

DATE 9/25/90 TIME 11 57 am

PERSONNEL: RB/DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10'

DEPTH TO REAPPEARANCE: 10'

DEPTH TO BOTTOM: 34

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	~~TDS~~ (~~mg/l~~) ⁹ / ₁₀
2	14.57	31.82	6.49	7.71	76.8
5	14.44	31.83	6.65	7.70	77.2
10	14.02	31.78	6.64	7.70	78.3
15	13.87	31.80	6.56	7.69	77.1
20	13.77	31.84	6.54	7.70	76.9
25	13.20	31.96	6.49	7.67	75.2
30	12.42	32.01	5.45	7.53	60.2
34	12.39	32.02	4.90	7.50	55.7

COMMENTS: D.O. READS LOW POSSIBLE

Ni Cd PROBLEM.

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. BS (R/G Bell)DATE 6/1/99 TIME 10:05 APERSONNEL: MA PC DT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 13'

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
(Surface) 0	16.6			7.96	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B4 (Red 2)

DATE 8/1/99 TIME 10:15A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 14'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
Surface) 0	16.4		~~7.83~~	7.83	

COMMENTS: _____

LOCATION NO. A7 (Green 3)

DATE 6/1/99 TIME 10:20A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 13'

DEPTH TO BOTTOM: _____

[illegible]

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B3 (Red 4)DATE 6/1/99 TIME 1030APERSONNEL: MA PC DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____DEPTH TO REAPPEARANCE: 14'DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
0	16.2			7.81	

COMMENTS: _____

LOCATION NO. A6 (Red)

PERSONNEL: MA PL DT

DEPTH TO REAPPEARANCE: 14'

[illegible]

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B2 (Green 5)

DATE 6/1/99 TIME 10:45 A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 11'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
(Surface) 0	16.3			7.85	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A5 (Green 7)DATE 6/1/99 TIME 10:50APERSONNEL: MA PK DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____DEPTH TO REAPPEARANCE: 9'DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
Surface) 0	16.6			7.76	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A3 (Spindle)

DATE 6/1/99 TIME 11:00 A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 9'

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
0 (surface)	16.6			7.80	

COMMENTS: SKIPPED AY BOIL

LOCATION NO. A1 (Green 13)

DATE 6/1/99 TIME 11:05 A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 7'

DEPTH TO BOTTOM: _____

[illegible]

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B1 (Red 2)

DATE 6/1/99 TIME 11:10A

PERSONNEL: MA PC DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO REAPPEARANCE: 7'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2					
5					
10					
15					
Surface) 0	17.5			7.80	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A2 (Red 10)

DATE 6/1/99 TIME 11:15 A

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: _____

DEPTH TO BOTTOM: _____

[illegible]

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. P16 Ball B5

DATE 6/22/99 TIME 8:25A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 18 feet

DEPTH TO REAPPEARANCE: 18 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.7	—	8.09	8.09	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Rid #2 (B4)

DATE 6/22/99 TIME 8:30 A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 14 feet

DEPTH TO REAPPEARANCE: 17 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.4°	—	—	8.14	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 3 (A7)

DATE 6/22/99 TIME 8:40 A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11 feet

DEPTH TO REAPPEARANCE: 11 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>45</u>					
<u>Surface</u>	<u>16.7</u>	<u>—</u>	<u>—</u>	<u>8.16</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Rid 4 (B33)

DATE 6/22/99 TIME 8:50 AM

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 13 feet

DEPTH TO REAPPEARANCE: 13 feet

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
<u>Surface</u>	<u>16.7</u>	<u>—</u>	<u>—</u>	<u>8.12</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Bid 4 (AL)

DATE 6/22/99 TIME 9 AM

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9 feet

DEPTH TO REAPPEARANCE: 9 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>17.4</u>	<u>-</u>	<u>-</u>	<u>8.14</u>	<u>-</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 5 (132)

DATE 6/22/99 TIME 9:05^{AM}

PERSONNEL: DT m.v.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8 feet

DEPTH TO REAPPEARANCE: 8 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>17.4</u>	<u>—</u>	<u>—</u>	<u>8.10</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 7 (A5)

DATE 6/22/99 TIME 9:15 A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8 feet

DEPTH TO REAPPEARANCE: 8 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
10					
15					
Surface	16.3	—	—	8.06	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 13 (A1)

DATE 6/22/99 TIME 9:30 A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10 feet

DEPTH TO REAPPEARANCE: 10 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>17.0</u>	<u>—</u>	<u>—</u>	<u>8.09</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Spindle (43)

DATE 6/22/99 TIME 9:10

PERSONNEL: DT m4

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11 feet

DEPTH TO REAPPEARANCE: 11 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>17.7</u>	<u>—</u>	<u>—</u>	<u>8.06</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2 (B1)

DATE 6/22/99 TIME 9:45 A

PERSONNEL: DT mA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8 feet

DEPTH TO REAPPEARANCE: 8 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>17.4</u>	<u>—</u>	<u>—</u>	<u>8.04</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Reel 18 (A2)

DATE 6/22/99 TIME 9:50 A

PERSONNEL: DT MA

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8 feet

DEPTH TO REAPPEARANCE: 8 feet

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	18.0	—	—	8.10	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. R/G Bell B5DATE 7/20/99 TIME 8:20 AMPERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 17'DEPTH TO REAPPEARANCE: 17'DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.3	—	—	8.14	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2DATE 7/20/99 TIME 8:30 APERSONNEL: MA. D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 16'DEPTH TO REAPPEARANCE: 16'DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.2	—	—	7.95	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 3

DATE 7/20/99 TIME 8:35 A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 17'

DEPTH TO REAPPEARANCE: 17'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>16.6</u>	<u>—</u>	<u>—</u>	<u>7.89</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 4

DATE 7/20/99 TIME 8:45

PERSONNEL: MA O.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 20'

DEPTH TO REAPPEARANCE: 20'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.4	—	—	8.29	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 6DATE 7/20/99TIME 8:55 APERSONNEL: MA D.T.

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 20' 14'DEPTH TO REAPPEARANCE: 20' 14'DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>16.7</u>	<u>—</u>	<u>—</u>	<u>8.14</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 5

DATE 7/20/99 TIME 9:00 AM

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 15'

DEPTH TO REAPPEARANCE: 15'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.4	—	—	7.88	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 7

DATE 7/20/99 TIME 9:05A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH: _____
DEPTH TO DISAPPEARANCE: 14'

DEPTH TO REAPPEARANCE: 14'

DEPTH TO BOTTOM: _____

[illegible]

COMMENTS: _____

file:wp50\forms\ocean;09/01/94

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 13

DATE 7/20/99 TIME 9:15A

PERSONNEL: MA DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 15'

DEPTH TO REAPPEARANCE: 15'

DEPTH TO BOTTOM: _____

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>16.4</u>	<u>—</u>	<u>—</u>	<u>7.88</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Spindle

DATE 7/20/99 TIME 9:20 A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 14' hit bottom

DEPTH TO REAPPEARANCE: 14'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.4	—	—	7.89	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2

DATE 7/26/99 TIME 9:30 A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 13'

DEPTH TO REAPPEARANCE: 13'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
~~2~~					
~~5~~					
~~10~~					
~~15~~					
Surface	16.7	—	—	7.84	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Re 218

DATE 7/20/99 TIME 9:35A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 13'

DEPTH TO REAPPEARANCE: 13'

DEPTH TO BOTTOM: —

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
<u>2</u>					
<u>5</u>					
<u>10</u>					
<u>15</u>					
<u>Surface</u>	<u>16.5</u>	<u>—</u>	<u>—</u>	<u>7.91</u>	<u>—</u>

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. R/G Bell BSDATE 8/23/99 TIME 9:45 APERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12'DEPTH TO REAPPEARANCE: 12'DEPTH TO BOTTOM: 49'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.33	35.1	9.35	7.98	—
5	16.98	35.1	9.26	8.01	—
10	16.9	35.1	9.22	8.02	—
15	16.9	35.1	9.05	8.02	—
20	16.8	35.1	8.89	8.01	
25	16.8	35.1	8.80	8.01	
30	16.7	35.1	8.67	8.00	
35	16.7	35.1	8.60	7.99	
40	16.6	35.1	8.45	7.98	
45	16.5	35.1	8.30	7.98	
~~50~~ 49	16.5	35.2	8.05	7.96	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 3DATE 8/23/99 TIME 10:15 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8^{ft}DEPTH TO REAPPEARANCE: 7^{ft}DEPTH TO BOTTOM: 58^{ft}

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.6	34.9	9.84	8.07	—
5	17.2	34.9	9.98	8.07	—
10	17.1	35.0	9.45	8.04	—
15	16.9	35.1	9.00	8.04	—
20	16.8	35.1	8.86	8.04	—
25	16.8	35.1	8.82	8.04	—
30	16.6	35.1	8.64	8.02	—
35	16.6	35.1	8.43	8.02	—
40	16.6	35.1	8.42	8.02	—
45	16.5	35.1	8.37	8.01	—
50	14.5	35.1	7.57	7.89	—
55	11.1	35.2	5.00	7.54	—
58	10.9	35.3	4.53	7.51	—
					—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 4 B3DATE 8/23/99 TIME 10:40 APERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 15'DEPTH TO REAPPEARANCE: 14'DEPTH TO BOTTOM: 55'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.4	35.0	8.86	8.09	—
5	17.2	35.1	8.86	8.08	—
10	17.1	35.2	8.82	8.08	—
15	17.0	35.2	8.75	8.07	—
20	16.9	35.2	8.66	8.07	—
25	16.9	35.2	8.60	8.06	—
30	16.9	35.2	8.48	8.04	—
35	16.7	35.2	8.29	8.03	—
40	16.7	35.2	8.33	8.03	—
45	16.4	35.2	8.22	8.00	—
50	15.9	35.2	7.95	7.95	—
55	12.4	35.2	6.20	7.67	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 6 A 6

DATE 8/23/99 TIME 10:50 A

PERSONNEL: MA DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8'

DEPTH TO REAPPEARANCE: 7'

DEPTH TO BOTTOM: 39'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.4	35.1	9.46	8.09	—
5	17.2	35.1	9.50	8.08	—
10	17.1	35.1	9.14	8.06	—
15	16.9	35.2	8.85	8.04	—
20	16.9	35.2	8.73	8.05	—
25	16.9	35.2	8.61	8.05	—
30	16.9	35.2	8.36	8.04	—
35	16.7	35.2	8.23	8.01	—
~~39~~	16.0	35.2	7.89	7.96	—
~~45~~					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 5DATE 8/23/99 TIME 11:05 APERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 7 ftDEPTH TO REAPPEARANCE: 7 ftDEPTH TO BOTTOM: 55 ft

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.3	35.1	9.95	8.09	—
5	17.8	35.1	10.0	8.09	—
10	17.3	35.1	10.0	8.09	—
15	17.2	35.1	9.96	8.08	—
20	17.1	35.1	8.84	8.02	—
25	17.0	35.1	8.95	8.03	—
30	16.9	35.1	8.72	8.02	—
35	16.6	35.2	8.30	8.00	—
40	16.1	35.2	8.06	7.98	—
45	15.7	35.2	7.83	7.94	—
50	14.5	35.2	7.00	7.83	—
55	11.7	35.2	4.01	7.47	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 7 AsDATE 8/23/99 TIME 11:20 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 8'DEPTH TO REAPPEARANCE: 7'DEPTH TO BOTTOM: 43'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.5	34.6	9.49	8.00	—
5	17.3	34.6	9.55	8.01	—
10	17.3	35.1	9.83	8.08	—
15	17.2	35.1	9.81	8.09	—
20	17.2	35.1	9.59	8.09	—
25	17.0	35.1	9.15	8.07	—
30	17.0	35.2	8.96	8.07	—
35	16.9	35.2	8.87	8.06	—
40	16.5	35.1	8.10	8.01	—
~~40~~ 43	15.8	35.2	7.23	7.91	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2 M Head NeckDATE 8/23/99 TIME 10^APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9'DEPTH TO REAPPEARANCE: 9'DEPTH TO BOTTOM: 33'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.4	35.0	9.85	8.05	—
5	17.2	35.0	9.78	8.05	—
10	17.1	35.1	9.60	8.04	—
15	17.0	35.1	9.29	8.05	—
20	16.9	35.2	9.09	8.05	—
25	16.8	35.2	8.96	8.06	—
30	16.7	35.2	8.78	8.04	—
~~35~~ 33	16.7	35.2	8.57	8.02	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 13 A1

DATE 8/24/99 TIME 9:20 A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11'

DEPTH TO REAPPEARANCE: 11'

DEPTH TO BOTTOM: 40'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.8	35.2	10.01	8.02	—
5	17.6	35.2	10.01	8.04	—
10	17.2	35.2	9.56	8.05	—
15	16.9	35.3	9.12	8.03	—
20	16.8	35.3	8.84	8.02	—
25	16.8	35.3	8.68	8.02	—
30	16.6	35.3	8.27	7.99	—
35	16.3	35.2	7.62	7.97	—
40	16.0	35.2	7.23	7.91	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. SpindleDATE 8/24/99 TIME 9:40 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10'DEPTH TO REAPPEARANCE: 10'DEPTH TO BOTTOM: 17'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.1	35.1	9.40	8.05	—
5	17.9	35.1	9.32	8.04	—
10	17.9	35.1	9.18	8.02	—
15	17.5	35.2	8.747	7.93	—

COMMENTS: _____

Secchi Disk on rock, move to side

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2 B1DATE 8/21/99 TIME 9:50 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9'DEPTH TO REAPPEARANCE: 9'DEPTH TO BOTTOM: 32'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.8	34.9	8.93	8.00	—
5	18.2	35.0	9.23	8.03	—
10	17.7	35.1	9.32	8.05	—
15	17.7	35.1	9.32	8.06	—
20	17.6	35.1	9.41	8.07	—
25	17.3	35.2	9.48	8.10	—
30	17.0	35.1	8.53	8.05	—
32	—	—	—	—	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Bd 12 A2DATE 2/24/99 TIME 10:05 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 9^{ft}DEPTH TO REAPPEARANCE: 9^{ft}DEPTH TO BOTTOM: 37^{ft}

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.7	35.0	8.85	8.03	-
5	18.4	35.0	8.91	8.01	-
10	18.0	35.1	8.96	8.02	-
15	17.6	35.1	8.63	8.01	-
20	16.6	35.2	7.62	7.97	-
25	16.5	35.2	7.51	7.97	-
30	16.6	35.2	7.47	7.97	-
35	16.6	35.2	7.41	7.97	-
~~40~~					-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. R/G Bell (BS)DATE 9/13/99 TIME 10:30APERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12'DEPTH TO REAPPEARANCE: 12'DEPTH TO BOTTOM: 43'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.1	32.8	9.39	8.01	—
5	18.0	33.2	9.57	8.05	—
10	17.9	33.3	9.52	8.68	—
15	17.9	33.4	9.46	8.08	—
20	16.7	33.6	9.10	8.04	
25	16.3	33.6	9.08	8.03	
30	15.6	33.7	9.06	8.00	
35	14.3	33.8	8.41	7.87	
40	14.1	33.8	7.47	7.83	
43	12.7	34.0	6.89	7.74	

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 2 (34)DATE 9/3/99 TIME 10:45 APERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11'DEPTH TO REAPPEARANCE: 11'DEPTH TO BOTTOM: 29'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.6	33.3	9.50	8.08	-
5	17.7	33.4	9.58	8.11	-
10	17.4	33.4	9.57	8.10	-
15	16.9	33.4	9.53	8.09	-
20	16.6	33.6	9.52	8.09	-
25	15.7	33.7	9.22	8.02	-
~~30~~ 29	14.6	33.9	8.69	7.85	-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 3 (A7)

DATE 9/13/99 TIME 11A

PERSONNEL: MA DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 10'

DEPTH TO REAPPEARANCE: 10'

DEPTH TO BOTTOM: 52'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.5	33.2	9.07	8.02	—
5	17.3	33.2	9.29	8.03	—
10	17.1	33.2	9.18	8.03	—
15	17.0	33.4	9.29	8.05	—
20	16.4	33.6	8.94	8.02	—
25	14.5	33.8	8.26	7.96	—
30	14.3	33.9	7.96	7.91	—
35	14.1	33.9	7.71	7.89	—
40	12.9	33.9	7.18	7.82	—
45	12.4	33.9	7.00	7.80	—
50	11.6	34.1	6.63	7.74	—
~~50~~ 52	11.4	34.1	6.47	7.72	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 4 (B3)

DATE 9/13/99 TIME 11:20 A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12'

DEPTH TO REAPPEARANCE: 12'

DEPTH TO BOTTOM: 52'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.1	33.2	9.30	8.11	—
5	17.7	33.1	9.55	8.12	—
10	17.6	33.2	9.71	8.12	—
15	17.2	33.3	9.35	8.08	—
20	16.8	33.4	9.17	8.07	—
25	15.9	33.6	8.80	8.02	—
30	~~14.4~~ 14.4	33.8	8.28	7.94	—
35	13.6	33.8	7.87	7.89	—
40	12.5	34.1	7.30	7.82	—
45	11.5	34.1	6.76	7.75	—
50	11.4	34.1	6.57	7.75	—
52					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Rid 6 (A6)

DATE 9/14/99 TIME 9:50A

PERSONNEL: MA D.T.

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 14'

DEPTH TO REAPPEARANCE: 14'

DEPTH TO BOTTOM: 32'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.7	33.4	9.44	8.10	-
5	17.6	33.4	9.49	8.10	-
10	17.5	33.4	9.49	8.10	-
15	17.5	33.4	9.45	8.10	-
20	17.3	33.4	9.40	8.08	-
25	16.4	33.6	9.09	8.02	-
30	15.2	33.7	8.01	7.91	-
32	14.5	33.9	7.17	7.86	-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 5 (B2)DATE 9/14/99 TIME 10AMPERSONNEL: MA D.T.SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 12'DEPTH TO REAPPEARANCE: 12'DEPTH TO BOTTOM: 49'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.5	33.2	9.57	8.10	-
5	17.5	33.4	9.53	8.12	-
10	17.4	33.4	9.39	8.09	-
15	17.1	33.4	8.90	8.07	-
20	16.9	33.4	8.77	8.05	-
25	16.2	33.5	8.59	8.02	-
30	15.2	33.7	7.80	7.93	-
35	14.5	33.7	7.65	7.91	-
40	13.3	33.9	7.10	7.82	-
45	12.2	34.0	6.19	7.73	-
49	12.1	34.0	5.86	7.72	-

COMMENTS: _____

DO Sat in air @ 98.8

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 7 (AS)DATE 9/14/99 TIME 10:15APERSONNEL: MA OTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11'DEPTH TO REAPPEARANCE: 11'DEPTH TO BOTTOM: 39

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.6	33.0	9.46	8.07	—
5	17.5	33.3	9.69	8.12	—
10	17.5	33.4	9.53	8.11	—
15	17.2	33.4	9.16	8.08	—
20	16.4	33.5	8.80	8.02	—
25	15.3	33.7	8.06	7.95	—
30	13.8	33.9	7.38	7.87	—
35	13.1	34.0	6.65	7.80	—
39	13.0	34.0	6.34	7.77	—

COMMENTS: Air Temp 18.2°C

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 13 (A1)DATE 9/14/99 TIME 10:25 APERSONNEL: MA DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 11'DEPTH TO REAPPEARANCE: 11'DEPTH TO BOTTOM: 34'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.3	33.3	9.13	8.12	-
5	18.2	33.4	9.21	8.12	-
10	17.9	33.4	9.38	8.12	-
15	17.6	33.3	9.28	8.09	-
20	17.5	33.4	9.08	8.05	-
25	14.8	33.7	~~7.15~~ 7.15	7.88	-
30	14.2	33.8	6.63	7.83	-
34	14.0	33.9	6.53	7.81	-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. SpindleDATE 9/14/99 TIME 10:40 APERSONNEL: MA DTSECCHI DISK DEPTH: 11'
DEPTH TO DISAPPEARANCE:DEPTH TO REAPPEARANCE: 11'DEPTH TO BOTTOM: 11'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	17.9	33.2	9.25	8.10	—
5	17.8	33.3	9.40	8.11	—
~~10~~	17.8	33.3	9.40	8.11	—
~~15~~					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Rd 2 (B1)DATE 9/14/99 TIME 10:50 APERSONNEL: MA DT

SECCHI DISK DEPTH: _____

DEPTH TO DISAPPEARANCE: 9'DEPTH TO REAPPEARANCE: 9'DEPTH TO BOTTOM: 27'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.1	33.1	8.77	8.05	—
5	18.1	33.1	8.81	8.06	—
10	17.5	33.3	8.92	8.04	—
15	17.3	33.3	8.86	8.03	—
20	17.0	33.3	8.66	8.01	—
25	16.8	33.4	8.41	8.00	—
~~20~~ 27	16.7	33.4	8.23	7.98	—

COMMENTS: air temp 20.9°C

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Red 13 (A2)DATE 9/14/99 TIME 11:00 AMPERSONNEL: MA OT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 9'DEPTH TO REAPPEARANCE: 9'DEPTH TO BOTTOM: 32'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	18.3	33.0	8.49	8.02	—
5	18.5	33.3	8.98	8.08	—
10	18.1	33.2	9.23	8.08	—
15	17.9	33.3	9.49	8.12	—
20	17.3	33.3	9.12	8.04	—
25	~~16.1~~ 16.1	33.5	8.30	7.97	—
30	15.0	33.7	~~7.95~~ 6.56	7.83	—
32	14.9	33.8	6.09	7.79	—

COMMENTS: Air temp 19.1°C 98% Saturation

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B5 R/G BellDATE 6/8/00 TIME 9:26APERSONNEL: MA / DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'DEPTH TO REAPPEARANCE: 6'DEPTH TO BOTTOM: 51'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.2	29.7	9.54	7.90	-
5	13.2	30.2	9.54	7.91	-
10	12.6	30.4	9.82	7.95	-
15	12.1	30.5	10.22	7.98	-
20	12.0	30.6	10.48	7.99	-
25	11.9	30.6	10.24	7.92	-
30	11.9	30.6	10.20	7.92	-
35	11.8	30.7	10.17	7.98	-
40	11.8	30.7	10.11	7.98	-
45	11.8	30.7	9.61	7.95	-
50	11.8	30.7	9.53	7.95	-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B4 Red 2DATE 6/8/00 TIME 9:35APERSONNEL: MA / DTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 5'DEPTH TO REAPPEARANCE: 5'DEPTH TO BOTTOM: 30'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.8	29.3	9.51	7.89	—
5	13.4	29.7	9.30	7.90	—
10	13.3	30.1	9.25	7.91	—
15	13.1	30.3	9.26	7.92	—
20	12.5	30.4	9.34	7.94	—
25	11.8	30.5	9.83	7.99	—
30	11.8	30.6	9.89	7.99	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A7 Green 3

DATE 6/8/00 TIME 9:50 A

PERSONNEL: MA / DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'

DEPTH TO REAPPEARANCE: 5'

DEPTH TO BOTTOM: 45'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.9	29.2	8.93	7.87	—
5	13.4	29.7	8.84	7.88	—
10	13.3	29.8	8.81	7.90	—
15	13.8	30.1	8.98	7.94	—
20	12.5	30.4	9.13	7.96	—
25	12.0	30.5	9.41	8.06	—
30	11.9	30.7	9.40	7.99	—
35	11.9	30.7	9.30	7.98	—
40	11.8	30.8	9.11	7.96	—
45	11.7	30.8	8.94	7.96	—

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. B3 Red 4DATE 6/2/00 TIME 10^APERSONNEL: MA DOTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 7'DEPTH TO REAPPEARANCE: 6'DEPTH TO BOTTOM: 54'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.3	29.9	7.80	7.96	—
5	13.2	30.4	7.77	7.96	—
10	12.9	30.5	7.74	7.97	—
15	12.6	30.6	7.65	7.97	—
20	12.2	30.6	7.61	7.97	—
25	12.0	30.6	7.68	7.98	—
30	11.9	30.6	7.68	7.98	—
35	11.9	30.6	7.65	7.99	—
40	11.8	30.6	7.59	7.98	—
45	11.6	30.8	7.36	7.97	—
50	11.6	30.8	7.05	7.95	—
54	11.6	30.8	6.93	7.95	—

COMMENTS: DO may not be accurate

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A6 Re LDATE 6/8/00 TIME 10:15 APERSONNEL: MM DOTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'DEPTH TO REAPPEARANCE: 5'DEPTH TO BOTTOM: 40'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.6	29.2	6.04	7.88	-
5	13.4	30.0	6.00	7.89	-
10	13.1	30.2	5.92	7.92	-
15	12.8	30.4	5.92	7.94	-
20	12.4	30.5	6.02	7.98	-
25	12.4	30.5	6.02	7.98	-
30	12.3	30.5	5.96	7.98	-
35	12.3	30.5	5.92	7.98	-
40	12.3	30.5	5.84	7.98	-

COMMENTS: DO may not be accurate (MM)

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. A2 Rd 18

DATE 8/8/00 TIME 11:25 A

PERSONNEL: MA / DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'

DEPTH TO REAPPEARANCE: 5'

DEPTH TO BOTTOM: 28'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.8	28.5	9.66	7.73	—
5	14.1	28.4	9.49	7.72	—
10	13.7	29.5	9.37	7.76	—
15	13.2	30.2	9.18	7.76	—
20	13.2	30.2	9.05	7.78	—
25	13.1	30.3	9.11	7.80	—
<u>28</u>					—

COMMENTS: Recal DO % Sat @ 22.3° 100%

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Re 2DATE 6/8/00TIME 11:40 APERSONNEL: MA 1 DT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE: 6'DEPTH TO REAPPEARANCE: 5'DEPTH TO BOTTOM: 24'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.8	28.6	8.48	7.77	-
5	13.3	29.9	8.38	7.81	-
10	13.2	30.3	8.52	7.87	-
15	13.1	30.3	8.64	7.87	-
20	13.0	30.4	8.62	7.88	-
24	12.8	30.5	8.48	7.87	-
~~30~~					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. _____

Spindle

DATE

6/8/00

TIME

12:00

PERSONNEL:

MA IPT

SECCHI DISK DEPTH:

DEPTH TO DISAPPEARANCE:

6'

DEPTH TO REAPPEARANCE:

5'

DEPTH TO BOTTOM:

13'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.4	28.4	7.97	7.80	-
5	14.0	28.8	7.76	7.81	-
10	13.5	29.7	7.77	7.86	-
~~15~~					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 7DATE 6/8/00 TIME 1215PPERSONNEL: MA/PTSECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'DEPTH TO REAPPEARANCE: 5'DEPTH TO BOTTOM: 36'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	13.8	29.3	7.48	7.75	-
5	13.4	29.8	7.38	7.81	-
10	13.2	30.2	7.32	7.86	-
15	12.9	30.4	7.26	7.88	-
20	12.6	30.6	7.33	7.91	-
25	11.9	30.7	7.49	7.92	-
30	11.8	30.8	7.50	7.93	-
35	11.7	30.8	7.42	7.92	-
X					

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 13

DATE 6/8/00 TIME 12:30P

PERSONNEL: MS / DT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'

DEPTH TO REAPPEARANCE: 5'

DEPTH TO BOTTOM: 32'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.3	29.4	6.66	7.83	-
5	13.5	30.0	6.63	7.86	-
10	13.4	30.2	6.79	7.89	-
15	13.2	30.4	6.93	7.92	-
20	12.4	30.6	6.97	7.92	-
25	12.1	30.7	6.95	7.93	-
30	12.0	30.8	6.81	7.92	-
~~35~~					-

COMMENTS: _____

SOUTH ESSEX SEWERAGE DISTRICT

LOCATION NO. Green 5

DATE 6/8/00 TIME 12:45 P

PERSONNEL: MA / OT

SECCHI DISK DEPTH:
DEPTH TO DISAPPEARANCE: 6'

DEPTH TO REAPPEARANCE: 5'

DEPTH TO BOTTOM: 48'

DEPTH (ft)	TEMP. (C)	SALINITY (ppt)	D.O. (mg/l)	pH (S.U.)	TDS (g/l)
2	14.6	29.3	5.98	7.85	—
5	14.3	29.4	5.96	7.85	—
10	~~14~~ 13.1	30.3	5.97	7.89	—
15	13.0	30.3	5.97	7.91	—
20	12.9	30.4	5.98	7.91	—
25	12.5	30.6	6.05	7.91	—
30	12.0	30.7	6.12	7.95	—
35	11.9	30.7	6.16	7.95	—
40	11.9	30.8	6.17	7.95	—
45	11.7	30.8	6.12	7.94	—

COMMENTS: _____

