

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.06-009e

Date e-Submission: 4/21/06

Date of Letter: 4/21/06

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for March 2006**
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 4/21/06. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.06-009e
April 21, 2006

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for March 2006**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the March 2006 Groundwater Permit Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on April 21, 2006.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2006 MAR MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

3/1/2006

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2006 Mar Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2006 MAR MONTHLY

3. Sampling Month & Frequency

Fill all empty fields as Not-Detected

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	160	3.0	2.0
TSS MG/L	120	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	870	1000	10
CHLORIDE MG/L	120	120	5.0



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

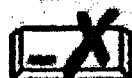
2. Tax Identification Number

2006 MAR DAILY

3. Sampling Month & Frequency

A. Facility Information

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PILGRIM POWER STATION

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ROCKY HILL ROAD

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MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

3/1/2006

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

WWTP INSTRUMENTATION

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2006 Mar Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2006 MAR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	4410					7.0		
2	3600					7.0		
3	2980					7.0		
4	1330					7.0		
5	740					7.1		
6	3960					7.0		
7	4440					7.0		
8	4220					7.0		
9	5130					7.1		
10	3270					7.0		
11	890					7.1		
12	1840					7.1		
13	2410					7.1		
14	2630					7.0		
15	4180					6.9		
16	4220					7.0		
17	1830					7.0		
18	2030					7.0		
19	1450					7.0		
20	3510					7.0		



Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2006 MAR DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	4670					7.0		
22	5620					7.0		
23	5360					7.0		
24	4530					7.0		
25	1800					7.1		
26	1760					7.0		
27	6610					7.1		
28	5620					7.1		
29	5960					7.1		
30	5520					7.1		
31	3260					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
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Important:
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Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronically and want to attach additional comments, select the check box.

☐

<https://edep>

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

1) THE EFFLUENT RESULT FOR TOTAL SUSPENDED SOLIDS IS ACTUALLY LESS THAN (<) THE DETECTION LIMIT.

2) THE CONCENTRATIONS OF BOD AND TSS IN THE EFFLUENT OF THE MARCH 2006 SAMPLES ARE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

[my homepage](#) [start new](#) [continue current](#) [my profile](#) [help](#) [log out](#)

Signature

Please check the form(s) you wish to accept.

Comments - 1 Form(s)

☒ **CERTIFICATION OF PERSON MAKING SUBMITTAL**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

I accept

I do not accept

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 67204
Date and Time Submitted: 4/21/2006 10:04:47 AM
User Email : jscheff@entergy.com

DEP Transaction ID: 67204
Date and Time Submitted: 4/21/2006 10:04:47 AM
User Email : jscheff@entergy.com

DEP Transaction ID: 67204
Date and Time Submitted: 4/21/2006 10:04:47 AM
User Email : jscheff@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2006 Mar Monthly)
Daily Log Sheet(2006 MAR DAILY)
Form Name: Comments

print receipt

cancel

**Environmental Protection
Correspondence Control Sheet**

Document # **ENV2.06-006e**

Date e-Submission: 3/21/06

Date of Letter: 3/22/06

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for February 2006**
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 3/21/06. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

Stephen J. Bethay
Director, Nuclear Assessment

ENV 2.06-006e

March 22, 2006

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for February 2006**

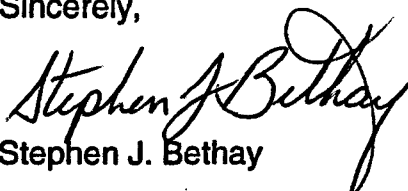
To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the February 2006 Groundwater Permit Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on March 21, 2006.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2006 FEB MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
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forms on the
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key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

2/17/2006

a. Date Sampled (mm/dd/yyyy)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2006 FEB MONTHLY
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	120	3.0	2.0
TSS MG/L	110	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	880	940	10
CHLORIDE MG/L	150	150	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

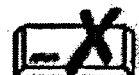
2. Tax identification Number

2006 FEB DAILY

3. Sampling Month & Frequency

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(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

2/17/2006

a. Date Sampled (mm/dd/yyyy)

PNPS WWTP

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2006 FEB DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	5880					7.0		
2	3730					7.0		
3	5240					7.0		
4	1450					6.9		
5	1620					6.9		
6	5310					7.0		
7	5460					7.0		
8	5280					6.9		
9	4610					6.9		
10	3650					6.9		
11	760					7.0		
12	2040					7.0		
13	5100					7.5		
14	5290					7.0		
15	3750					7.0		
16	4400					7.0		
17	3750					7.0		
18	810					7.0		
19	1790					7.1		
20	660					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2006 FEB DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	3820					7.0		
22	5160					7.0		
23	3390					7.0		
24	2980					7.1		
25	1600					7.0		
26	1360					7.0		
27	3480					7.0		
28	4380					7.0		
29								
30								
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

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Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronically and want to attach additional comments, select the check box.

☐

<https://edep>

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

JACOB J. SCHEFFER

a. Signature

03/16/2006

b. Date (mm/dd/yyyy)

Reporting Package Comments

1) THE EFFLUENT ANALYTICAL RESULT FOR TOTAL SUSPENDED SOLIDS (TSS) WAS ACTUALLY LESS THAN (<) THE DETECTION LIMIT.

2) IN ACCORDANCE WITH PERMIT REQUIREMENTS, THE CONCENTRATIONS OF BOD AND TSS IN THE WWTP EFFLUENT SAMPLES FOR FEBRUARY 2006 ARE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

my homepage	start new	continue current	my profile	help	log out
-----------------------------	---------------------------	----------------------------------	----------------------------	----------------------	-------------------------

Signature

Comments - 1 Form(s)

✓CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

[next](#) 

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Version: 4.8.4.0

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.06-003e

Date e-Submission: 2/14/06

Date of Letter: 2/15/06

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for January 2006
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 2/14/06. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.06-003e

Stephen J. Bethay
Director, Nuclear Assessment

February 15, 2006

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for January 2006**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the January 2006 Groundwater Discharge Report in accordance with the subject permit. This report includes the quarterly oil and grease analysis, and the semi-annual VOC and monitoring well analysis data. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on February 14, 2006.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink that reads "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

**Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report**

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2006 JAN MONTHLY
3. Sampling Month & Frequency

A. Facility Information

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1. Facility name, address:

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a. Name

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b. Street Address

PLYMOUTH

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MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/13/2006

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2006 Jan Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

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2006 JAN MONTHLY

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D. Contaminant Analysis Information

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- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	86	2.0	2.0
TSS MG/L	53	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	880	890	10
CHLORIDE MG/L	140	150	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2006 QUARTERLY 1

3. Sampling Month & Frequency

A. Facility Information

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2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/13/2006

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2006 Quarterly 1

☐ All forms for submittal have been completed.

- 2 ☐ This is the last selection.

- 3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

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389

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2006 QUARTERLY 1

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D. Contaminant Analysis Information

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- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant
Units

OIL & GREASE

MG/L

2. Influent

4.4

3. Effluent

1.0

4. Effluent Method
Detection Limit

1.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2006 JAN DAILY

3. Sampling Month & Frequency

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02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/13/2006

a. Date Sampled (mm/dd/yyyy)

PNPS WWTP

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2006 Jan Daily

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2006 JAN DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	3590					7.5		
2	1610					7.5		
3	7950					7.2		
4	7820					7.1		
5	4690					7.1		
6	3180					7.0		
7	1340					7.0		
8	1390					7.1		
9	4850					7.1		
10	4960					7.1		
11	4220					7.1		
12	5090					7.1		
13	3790					7.0		
14	6010					7.1		
15	1780					7.0		
16	4530					7.0		
17	3180					7.0		
18	2390					6.9		
19	1080					7.0		
20	2290					6.9		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2006 JAN DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	1540					6.9		
22	690					7.0		
23	4930					7.0		
24	4460					7.0		
25	6020					7.1		
26	3700					7.0		
27	4510					7.0		
28	1580					7.0		
29	1270					7.1		
30	4580					7.1		
31	5890					7.0		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

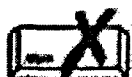
2. Tax identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/13/2006

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Semi-Annual 2

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in $\mu\text{g/l}$.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
ACETONE UG/L	NS	NS	NS
BENZENE UG/L	1	1	1
1,1 DICHLOROETHANE UG/L	1	1	1
1,2 DICHLOROETHANE UG/L	1	1	1
1,1 DICHLOROETHYLENE UG/L	1	1	1
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1
ETHYL BENZENE UG/L	1	1	1
METHYLENECHLORIDE UG/L	5	5	5
TOLUENE UG/L	30	1	1
O-XYLENE UG/L	1	1	1
P/M XYLENE UG/L	1	1	1
CARBON TETRACHLORIDE UG/L	1	1	1
CHLOROFORM UG/L	1	1	1
2-BUTANONE (MEK) UG/L	NS	NS	NS



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS
TRICHLOROETHYLENE UG/L	1	1	1
TETRACHLOROETHYLENE UG/L	1	1	1
1,1,1 TRICHLOROETHANE UG/L	1	1	1
VINYLCHLORIDE UG/L	1	1	1
STYRENE UG/L	NS	NS	NS
CHLOROBENZENE UG/L	1	1	1
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS
CHLOROETHANE UG/L	10	10	10
1,2-DICHLOROPROPANE UG/L	1	1	1
DIBROMOCHLOROMETHANE UG/L	1	1	1
1,1,2-TRICHLOROETHANE UG/L	1	1	1
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2
BROMODICHLOROMETHANE UG/L	1	1	1
BROMOFORM UG/L	1	1	1



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

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2. Tax Identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
1,1,2,2-TETRACHLOROETHANE UG/L	1	1	1
CHLOROMETHANE UG/L	10	10	10
BROMOMETHANE UG/L	10	10	10
CARBONDISULFIDE UG/L	NS	NS	NS
2-HEXANONE UG/L	NS	NS	NS
ACROLEIN UG/L	NS	NS	NS
ACRYLONITRILE UG/L	NS	NS	NS
TRANS-1,3-DICHLOROPROPENE UG/L	1	1	1
CIS-1,3-DICHLOROPROPENE UG/L	1	1	1



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 SEMI-ANNUAL 2
3. Sampling Month & Frequency

A. Facility Information

Important:
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forms on the
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use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/12/2006

a. Date Sampled (mm/dd/yyyy)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2005 Semi-Annual 2

☐ All forms for submittal have been completed.

- 2 ☒ This is the last selection.

- 3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant	3	5	6	5. Well #	6. Well #	7. Well #
Units	2. Well #	3. Well #	4. Well #			
PH	5.8	5.5	5.5			
S.U.						
TOTAL DISSOLVED SOLIDS	38	240	310			
MG/L						
AMMONIA-N	0.19	0.23	0.15			
MG/L						
NITRATE-N	0.2	4.1	8.6			
MG/L						
TOTAL NITROGEN(NO3+NO2+TKN)	0.2	4.1	8.6			
MG/L						
STATIC WATER LEVEL	44.00	62.25	63.21			
FEET						
SPECIFIC CONDUCTANCE	98	500	590			
UMHOS/C						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
ACETONE UG/L	NS	NS	NS			
BENZENE UG/L	1	1	1			
1,1 DICHLOROETHANE UG/L	1	1	1			
1,2 DICHLOROETHANE UG/L	1	1	1			
1,1 DICHLOROETHYLENE UG/L	1	1	1			
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS			
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1			
ETHYL BENZENE UG/L	1	1	1			
METHYLENECHLORIDE UG/L	5	5	5			
TOLUENE UG/L	1	1	1			
O-XYLENE UG/L	1	1	1			
P/M XYLENE UG/L	1	1	1			
CARBON TETRACHLORIDE UG/L	1	1	1			
CHLOROFORM UG/L	2	3	1			
2-BUTANONE (MEK) UG/L	NS	NS	NS			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS			
TRICHLOROETHYLENE UG/L	1	1	1			
TETRACHLOROETHYLENE UG/L	1	1	1			
1,1,1 TRICHLOROETHANE UG/L	1	1	1			
VINYLCHLORIDE UG/L	1	1	1			
STYRENE UG/L	NS	NS	NS			
CHLOROBENZENE UG/L	1	1	1			
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS			
CHLOROETHANE UG/L	10	10	10			
1,2-DICHLOROPROPANE UG/L	1	1	1			
DIBROMOCHLOROMETHANE UG/L	1	1	1			
1,1,2-TRICHLOROETHANE UG/L	1	1	1			
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2			
BROMODICHLOROMETHANE UG/L	1	1	1			
BROMOFORM UG/L	1	1	1			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEMI-ANNUAL 2

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
1,1,2,2-TETRACHLOROETHANE UG/L	1	1	1			
CHLOROMETHANE UG/L	10	10	10			
BROMOMETHANE UG/L	10	10	10			
CARBONDISULFIDE UG/L	NS	NS	NS			
2-HEXANONE UG/L	NS	NS	NS			
ACROLEIN UG/L	NS	NS	NS			
ACRYLONITRILE UG/L	NS	NS	NS			
TRANS-1,3-DICHLOROPROPENE UG/L	1	1	1			
CIS-1,3-DICHLOROPROPENE UG/L	1	1	1			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax Identification Number

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing electronically and want to attach additional comments, select the check box.

☐

- 1) The effluent BOD and TSS values are both less than (<) the detection limit.
- 2) The effluent value for oil and grease is less than (<) the detection limit.
- 3) All Influent and effluent VOC values are less than (<) the detection limit except for influent toluene and influent chlorobenzene.
- 4) The following VOCs were also analyzed but were not listed on Form E-VOC Analysis Information:
 - a) dichlorobenzenes: <1 for Influent and effluent values
 - b) trichlorofluoromethane: <1 for Influent and effluent values
- 5) On the Monitoring Well Data Report-VOC Analysis Information Form, all values are less than (<) the detection limit except for chloroform at well #3 and well #5.
- 6) The following VOCs were also analyzed, but were not listed on the Monitoring Well Data Report-VOC Analysis Form:
 - a) dichlorobenzenes: all wells less than (<) the detection limit
 - b) trichlorofluoromethane: all wells less than (<) the detection limit.
- 7) In accordance with permit requirements, the concentrations of BOD and TSS in the WWTP effluent samples for January 2006 are not in excess of 15% of the BOD and TSS concentrations in the influent samples.

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Signature

Please check the form(s) you wish to accept.

Comments - 1 Form(s)

☒ **CERTIFICATION OF PERSON MAKING SUBMITTAL**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

[MassDEP Home](#) [Contacts](#) [Feedback](#) [Tour](#) [Privacy](#)

Version: 4.6.0.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 60350
Date and Time Submitted: 2/14/2006 8:32:48 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 60350
Date and Time Submitted: 2/14/2006 8:32:48 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 60350
Date and Time Submitted: 2/14/2006 8:32:48 AM
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User Email : lmedeir@entergy.com

DEP Transaction ID: 60350
Date and Time Submitted: 2/14/2006 8:32:48 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

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Tax Identification Number: 640900523
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Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360

Discharge Monitoring Report(1 - 2006 Jan Monthly)
Discharge Monitoring Report(1 - 2006 Quarterly 1)
Discharge Monitoring Report - VOC(1 - 2005 Semi-Annual 2)
Discharge Monitoring Report - VOC(3 - 2005 Semi-Annual 2)
Discharge Monitoring Report - VOC(2 - 2005 Semi-Annual 2)
Daily Log Sheet(2006 JAN DAILY)
Monitoring Well Data Report(1 - 2005 Semi-Annual 2)
Monitoring Well Data Report - VOC(2 - 2005 Semi-Annual 2)
Monitoring Well Data Report - VOC(1 - 2005 Semi-Annual 2)
Monitoring Well Data Report - VOC(3 - 2005 Semi-Annual 2)
Form Name: Comments

print receipt

cancel

**Environmental Protection
Correspondence Control Sheet**

Document # **ENV2.06-001e**

Date e-Submission: 1/16/06

Date of Letter: 1/16/06

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for December 2005
Electronic & Hard Copy Submission**

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 1/16/06. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.06-001e
January 16, 2006

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

Re: Groundwater Discharge Permit SE #2-389
Discharge Report for December 2005

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the December 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on January 16, 2006.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 DEC MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

12/16/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/RI ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Dec Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 DEC MONTHLY

3. Sampling Month & Frequency

Fill all empty fields as Not-Detected

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	84	2.0	2.0
TSS MG/L	74	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	1000	1000	10
CHLORIDE MG/L	150	140	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 DEC DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:
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1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

12/16/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/RI ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Dec Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2005 DEC DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	5530					7.0		
2	4230					7.2		
3	2490					7.0		
4	2460					7.0		
5	5160					7.0		
6	6580					7.1		
7	7040					7.0		
8	3830					7.2		
9	520					6.9		
10	1880					7.0		
11	2050					7.0		
12	3420					6.9		
13	4720					7.0		
14	4220					7.1		
15	5420					7.0		
16	1480					7.0		
17	1500					7.0		
18	1680					7.0		
19	3890					7.6		
20	5490					7.6		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2005 DEC DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	3390					7.6		
22	1490					7.4		
23	650					7.2		
24	730					7.2		
25	1340					7.2		
26	1420					7.2		
27	1620					7.2		
28	3990					7.0		
29	3670					7.1		
30	2520					7.1		
31	4860					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax identification Number

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



Any person
signing a
document
under 314 CMR
5.14(1) or (2)
shall make the
following
certification

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing
electronic-ally
and want to
attach
additional
comments,
select the
check box.

☐

- 1) EFFLUENT VALUES FOR BOD AND TSS ON THE MONTHLY FORM WERE ACTUALLY LESS THAN (<) THE ANALYTICAL DETECTION LIMIT.
- 2) AS REQUIRED BY THE DISCHARGE PERMIT, THE CONCENTRATIONS OF BOD AND TSS IN THE EFFLUENT OF THE DECEMBER 2005 SAMPLES WERE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

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Signature

Ground Water Permit - 2 Form(s)

✓CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

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Version: 4.5.1.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 58164
Date and Time Submitted: 1/16/2006 8:18:21 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 58164
Date and Time Submitted: 1/16/2006 8:18:21 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 58164
Date and Time Submitted: 1/16/2006 8:18:21 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Dec Monthly)
Daily Log Sheet(2005 DEC DAILY)
Form Name: Certification & Comments

print receipt

cancel

**Environmental Protection
Correspondence Control Sheet**

Document # **ENV2.05-028e**

Date e-Submission: 12/15/05

Date of Letter: 12/16/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for November 2005
Electronic & Hard Copy Submission**

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 12/15/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

Stephen J. Bethay
Director, Nuclear Assessment

ENV 2.05-028e

December 16, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for November 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the November 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on December 15, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

11/16/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Nov Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 NOV MONTHLY

3. Sampling Month & Frequency

Fill all empty fields as Not-Detected

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	130	2.0	2.0
TSS MG/L	110	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	620	730	10
CHLORIDE MG/L	120	120	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 NOV DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

5088308323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

11/16/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Nov Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 NOV DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	2510					7.5		
2	1440					7.5		
3	6780					7.5		
4	2790					7.4		
5	2190					7.4		
6	2180					7.4		
7	6960					7.4		
8	6130					7.5		
9	5350					7.5		
10	5250					7.5		
11	2100					7.4		
12	2210					7.3		
13	1320					7.4		
14	5160					7.0		
15	7750					7.1		
16	6570					6.8		
17	9740					6.9		
18	9740					7.0		
19	6390					7.0		
20	3380					7.0		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 NOV DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	9350					7.1		
22	6060					7.1		
23	3650					7.1		
24	1640					7.1		
25	1700					7.1		
26	870					7.0		
27	3160					7.1		
28	5980					7.1		
29	4510					7.2		
30	5900					7.1		
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
1. Permit Number
640900523
2. Tax Identification Number

Facility Information

PILGRIM POWER STATION		
a. Name		
ROCKY HILL ROAD		
b. Street Address		
PLYMOUTH	MA	02360
c. City	d. State	e. Zip Code

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature	b. Date (mm/dd/yyyy)

Reporting Package Comments

- A) MONTHLY EFFLUENT VALUES FOR BIOCHEMICAL OXYGEN DEMAND (BOD) AND TOTAL SUSPENDED SOLIDS (TSS) ARE LESS THAN (<) THE DETECTION LIMIT.
- B) THE CONCENTRATIONS OF BOD AND TSS IN THE EFFLUENT OF THE NOVEMBER 2005 SAMPLES ARE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

If you are filing electronic-ally and want to attach additional comments, select the check box.

☐

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Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 2 Form(s)

☒ **CERTIFICATION OF PERSON MAKING SUBMITTAL**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

I accept

I do not accept

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Version: 4.4.5.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 56315
Date and Time Submitted: 12/15/2005 3:29:17 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 56315
Date and Time Submitted: 12/15/2005 3:29:17 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 56315
Date and Time Submitted: 12/15/2005 3:29:17 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Nov Monthly)
Daily Log Sheet(2005 NOV DAILY)
Form Name: Certification & Comments

print receipt

cancel

**Environmental Protection
Correspondence Control Sheet**

Document # **ENV2.05-026e**

Date e-Submission: 11/16/05

Date of Letter: 11/17/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for October 2005
Electronic & Hard Copy Submission**

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 11/16/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-026e

November 17, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for October 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the October 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on November 16, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 OCT MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

10/7/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Oct Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 OCT MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	130	3.0	2.0
TSS MG/L	100	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	810	1000	10
CHLORIDE MG/L	100	100	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 QUARTERLY 4
3. Sampling Month & Frequency

A. Facility Information

Important:
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1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

10/7/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Quarterly 4

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 QUARTERLY 4
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
OIL & GREASE MG/L	10.0	2.2	0.5



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2005 OCT DAILY
3. Sampling Month & Frequency

A. Facility Information

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key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

10/7/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Oct Daily

☐ All forms for submittal have been completed.

- 2 ☒ This is the last selection.

- 3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2005 OCT DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	640					7.5		
2	1550					7.5		
3	5700					7.4		
4	4640					7.5		
5	4470					7.5		
6	5830					7.4		
7	5330					7.4		
8	2880					7.4		
9	4380					7.4		
10	1570					7.4		
11	5010					7.5		
12	4580					7.5		
13	6980					7.3		
14	2060					7.4		
15	6390					7.4		
16	2050					7.4		
17	5310					7.4		
18	4770					7.5		
19	4420					7.5		
20	5220					7.4		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 OCT DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	4230					7.4		
22	1600					7.5		
23	2490					7.4		
24	5580					7.3		
25	12110					7.4		
26	8310					7.2		
27	6490					7.4		
28	1350					7.4		
29	800					7.4		
30	2220					7.2		
31	2540					7.2		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
1. Permit Number
640900523
2. Tax Identification Number

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Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronically and want to attach additional comments, select the check box.

☐

<https://edep>

Facility Information

PILGRIM POWER STATION		
a. Name		
ROCKY HILL ROAD		
b. Street Address		
PLYMOUTH	MA	02360
c. City	d. State	e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature	b. Date (mm/dd/yyyy)

Reporting Package Comments

- 1) EFFLUENT TSS ON THE OCT. MONTHLY REPORT IS ACTUALLY LESS THAN (<) THE DETECTION LIMIT.
- 2) THE CONCENTRATIONS OF BOD AND TSS IN THE EFFLUENT OF THE OCTOBER 2005 SAMPLES ARE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

my homepage	start new	continue current	my profile	help	log out
-----------------------------	---------------------------	----------------------------------	----------------------------	----------------------	-------------------------

Signature

Ground Water Permit - 3 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

[next](#)

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 54238
Date and Time Submitted: 11/16/2005 3:56:04 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 54238
Date and Time Submitted: 11/16/2005 3:56:04 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 54238
Date and Time Submitted: 11/16/2005 3:56:04 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 54238
Date and Time Submitted: 11/16/2005 3:56:04 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Quarterly 4)
Discharge Monitoring Report(1 - 2005 Oct Monthly)
Daily Log Sheet(2005 OCT DAILY)
Form Name: Certification & Comments

print receipt

cancel

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-021e

Date e-Submission: 10/17/05

Date of Letter: 10/19/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for September 2005
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 10/17/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-021e

October 19, 2005

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for September 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the September 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on October 17, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in cursive script that reads "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO

ENVIRONMENTAL PROTECTION
CORRESPONDENCE REVIEW SIGNATURE SHEET

Title: **WWTP Groundwater Permit Monthly Discharge Monitoring Report for September 2005**

N/A
Site Vice President

Date: _____

Information is accurate, complete, and consistent with ENGCO business planning strategy.
Effect on safety and reliability of the plant has been evaluated adequately.
Preserves PNPS regulation for conservative decision making.


Explain:

N/A
Director, Operations & Plant Manager

Date: _____

Effect on safety and reliability of the plant has been evaluated adequately.
Information is accurate, complete, and consistent with ENGCO business planning strategy.
Preserves PNPS regulation for conservative decision making.

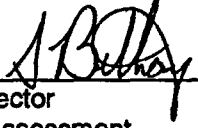
Explain:

John J. Whalley 
WWTP Chief Operator
Operations Dept.

Date: 10/17/05

Effect on safety and reliability of the plant has been evaluated adequately.
Information is accurate, complete, and correct with PNPS business planning strategy.
Information was reviewed before electronic submission.

Explain:

Stephen J. Bethay 
Director
Nuclear Assessment

Date: 10/19/05

Consistent with PNPS strategy governing regulatory activities.
Information is accurate and complete.
Information has received proper review for actual content, commitment ownership, and fiscal oversight.

Explain:

Jacob J. Scheffer 
Superintendent
Environmental Protection

Date: 10/17/05

Applicable regulatory documents have been considered in content of letter.
Information is consistent with other regulatory strategies and commitments.
Information is accurate and complete.
Information is consistent with ENGCO Environment Compliance Management Policy.

Explain: Report is consistent with Groundwater Permit requirements and e-DEP submission requirements.

Jacob J. Scheffer 
DMR Preparer
Environmental Protection

Date: 10/17/05

Information is accurate and complete.
Source documents verified.
Commitments are identified and owners assigned.
Letter is grammatically correct and free of typographical errors.

Explain: Reviewed the initial information and completed electronic forms.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEP MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

9/15/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Sep Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEP MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	78	2.0	2.0
TSS MG/L	13	2.3	2.0
TOTAL DISSOLVED SOLIDS MG/L	920	880	10
CHLORIDE MG/L	110	110	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

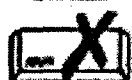
2. Tax identification Number

2005 SEP DAILY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

9/15/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Sep Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEP DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	5560					7.0		
2	1960					7.0		
3	2370					7.0		
4	1240					7.0		
5	1200					7.1		
6	6300					7.1		
7	4830					7.1		
8	4470					7.1		
9	5390					7.1		
10	580					7.1		
11	2280					7.1		
12	4760					7.1		
13	4850					7.1		
14	6000					7.1		
15	6250					7.0		
16	2170					7.0		
17	3030					7.1		
18	2200					7.1		
19	6140					7.0		
20	6690					7.0		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2005 SEP DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	5520					7.0		
22	4660					7.1		
23	3410					7.0		
24	6510					7.0		
25	1620					7.0		
26	5260					7.0		
27	6510					7.1		
28	8150					7.1		
29	4870					7.1		
30	5170					7.3		
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
1. Permit Number
640900523
2. Tax identification Number

Facility Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

PILGRIM POWER STATION
a. Name
ROCKY HILL ROAD
b. Street Address
PLYMOUTH
c. City
MA
d. State
02360
e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing electronically and want to attach additional comments, select the check box.

☐

DAILY FLOW READING WERE TAKEN BY CONTINUOUS RECORDER AT THE PILGRIM WWTP.

DAILY EFFLUENT PH READINGS WERE TAKEN AT THE PILGRIM WWTP AT THE POINT OF DISCHARGE.

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SEARCH MASS.GOV

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homepage](#)
[current
submittal](#)[online forms](#)[data
converter tool](#)[instructions](#)[contacts](#)[feedback
survey](#)[tour the site](#)[exit eDEP](#)

Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 2 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

[dep home](#) • [calendar](#) • [new additions](#) • [search](#) • [site map](#) • [privacy policy](#)
[contact eDEP](#)

Version 4.2.1.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 51768
Date and Time Submitted: 10/17/2005 3:28:36 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 51768
Date and Time Submitted: 10/17/2005 3:28:36 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 51768
Date and Time Submitted: 10/17/2005 3:28:36 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:

Tax Identification Number: 640900523

location: ROCKY HILL ROAD

Address: PLYMOUTH

ZIP: 02360

Form Name: Ground Water Permit

Facility Information:

Tax Identification Number: 640900523

location: ROCKY HILL ROAD

Address: PLYMOUTH

ZIP: 02360

Discharge Monitoring Report(1 - 2005 Sep Monthly)

Daily Log Sheet(2005 SEP DAILY)

Form Name: Certification & Comments



**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-019e

Date e-Submission: 9/20/05

Date of Letter: 9/22/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for August 2005**
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 9/20/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-019e

September 22, 2005

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for August 2005**

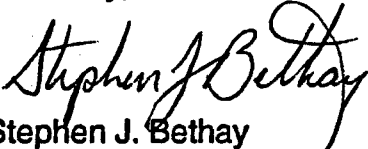
To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the August 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on September 20, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 AUG MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

8/19/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Aug Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 AUG MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	72	3	2.0
TSS MG/L	140	4.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	860	840	10
CHLORIDE MG/L	100	99	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

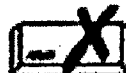
2. Tax Identification Number

2005 QUARTERLY 3

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

8/19/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Quarterly 3

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 QUARTERLY 3

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant
Units

OIL & GREASE
MG/L

2. Influent

150

3. Effluent

1.3

4. Effluent Method
Detection Limit

0.5



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

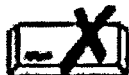
2. Tax identification Number

2005 AUG DAILY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
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1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

8/19/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Aug Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 AUG DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	5910					6.8		
2	5400					6.9		
3	5570					6.9		
4	5080					6.9		
5	2910					6.9		
6	2120					6.9		
7	1500					6.9		
8	4520					6.9		
9	6120					6.9		
10	7440					6.9		
11	8540					6.9		
12	3930					6.9		
13	3690					6.9		
14	3090					6.9		
15	3750					6.9		
16	5630					6.9		
17	5920					6.9		
18	5160					6.9		
19	2010					6.7		
20	2040					6.8		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 AUG DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	1900					6.9		
22	6060					6.9		
23	3640					7.0		
24	5050					7.0		
25	5490					7.0		
26	4680					7.0		
27	1420					7.0		
28	2160					7.0		
29	5890					7.0		
30	6210					7.0		
31	5520					7.0		

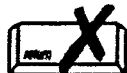


Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
1. Permit Number
640900523
2. Tax Identification Number

Important:
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only the tab key
to move your
cursor - do not
use the return
key.



Any person
signing a
document
under 314 CMR
5.14(1) or (2)
shall make the
following
certification

If you are filing
electronic-ally
and want to
attach
additional
comments,
select the
check box.

☐

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

According to discharge permit requirements, the monthly average concentrations of BOD and TSS in the discharge is not to exceed 15% of the monthly average concentrations of BOD and TSS in the Influent. The concentrations of BOD and TSS in the effluent of the August 2005 samples are not in excess of 15% of the BOD or TSS concentrations in the Influent samples.

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converter tool](#)[instructions](#)[contacts](#)[feedback
survey](#)[tour the site](#)[exit eDEP](#)

Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 3 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, in the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

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[contact eDEP](#)

Version 4.1.1.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 47527
Date and Time Submitted: 9/20/2005 1:11:46 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 47527
Date and Time Submitted: 9/20/2005 1:11:46 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 47527
Date and Time Submitted: 9/20/2005 1:11:46 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 47527
Date and Time Submitted: 9/20/2005 1:11:46 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Aug Monthly)
Discharge Monitoring Report(1 - 2005 Quarterly 3)
Daily Log Sheet(2005 AUG DAILY)
Form Name: Certification & Comments

PrintCancel

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-017e

Date e-Submission: 8/23/05

Date of Letter: 8/24/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for July 2005
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 8/23/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-017e

Stephen J. Bethay
Director, Nuclear Assessment

August 24, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for July 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the July 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on August 23, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in cursive script that reads "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JUL MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

7/26/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JUL MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	390	6.9	2.0
TSS MG/L	1600	4.7	2.0
TOTAL DISSOLVED SOLIDS MG/L	690	910	10
CHLORIDE MG/L	120	120	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

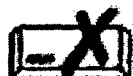
Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 JUL DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

7/26/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

--

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2005 JUL DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	5610					7.0		
2	1090					7.0		
3	880					6.9		
4	1570					6.9		
5	4050					6.9		
6	6010					6.9		
7	5360					7.0		
8	2550					6.9		
9	2390					6.9		
10	1820					6.9		
11	3900					7.0		
12	9790					7.0		
13	7470					7.0		
14	5040					7.0		
15	5860					7.0		
16	1610					7.0		
17	2110					6.9		
18	7100					6.9		
19	7690					7.0		
20	6030					6.9		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JUL DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	4590					6.9		
22	4870					6.9		
23	2300					6.9		
24	1400					6.9		
25	5730					6.9		
26	7090					6.9		
27	8670					6.9		
28	7350					6.8		
29	5210					6.9		
30	3090					6.9		
31	1540					6.9		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax identification Number

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

NO COMMENTS THIS MONTH.

If you are filing electronically and want to attach additional comments, select the check box.

☐

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converter tool](#)[instructions](#)[contacts](#)[feedback
survey](#)[tour the site](#)[exit eDEP](#)

Signature

Ground Water Permit - 2 Form(s)

✓CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under r direction or supervision in accordance with a system designed to assure that qualified pers properly gather and evaluate the information submitted. Based on my inquiry of the person persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, acc complete. I am aware that there are significant penalties for submitting false information, in the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date **Ne**[dep home](#) • [calendar](#) • [new additions](#) • [search](#) • [site map](#) • [privacy policy](#)
[contact eDEP](#)

Version 4.1.1.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 44955
Date and Time Submitted: 8/23/2005 10:35:13 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 44955
Date and Time Submitted: 8/23/2005 10:35:13 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 44955
Date and Time Submitted: 8/23/2005 10:35:13 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Jul Monthly)
Daily Log Sheet(2005 JUL DAILY)
Form Name: Certification & Comments

 Print

 Cancel

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-015e

Date e-Submission: 7/19/05

Date of Letter: 7/20/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for June 2005**
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 7/19/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

Stephen J. Bethay
Director, Nuclear Assessment

ENV 2.05-015e
July 20, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for June 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the June 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

This month's report includes quarterly, semi-annual and monitoring well information.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on July 19, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 JUN MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

6/3/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/ R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Jun Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JUN MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	450	2.0	2.0
TSS MG/L	1600	2.3	2.0
TOTAL DISSOLVED SOLIDS MG/L	880	950	10
CHLORIDE MG/L	210	240	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 QUARTERLY 2
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
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cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

6/29/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/ R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Quarterly 2

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 QUARTERLY 2

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant
Units

OIL & GREASE
MG/L

2. Influent

110

3. Effluent

0.5

4. Effluent Method
Detection Limit

0.5



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 JUN DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
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only the tab key
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use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

6/3/2005

a. Date Sampled (mm/dd/yyyy)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Jun Daily

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JUN DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	3750					7.1		
2	7830					7.1		
3	4670					7.1		
4	2160					7.0		
5	1470					7.0		
6	5820					7.0		
7	6300					7.0		
8	7060					7.0		
9	6230					6.9		
10	3420					6.9		
11	2220					6.9		
12	730					6.9		
13	4870					6.9		
14	5190					6.9		
15	5730					7.0		
16	6640					7.0		
17	4830					7.1		
18	2360					7.1		
19	520					7.1		
20	5330					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 JUN DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	7650					7.1		
22	5210					7.1		
23	7380					7.1		
24	2030					7.0		
25	2340					7.0		
26	2420					7.0		
27	5170					7.0		
28	6310					7.0		
29	5270					7.0		
30	7780					7.0		
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

6/3/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/ R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Semi-Annual 1

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
ACETONE UG/L	NS	NS	NS
BENZENE UG/L	1	1	1
1,1 DICHLOROETHANE UG/L	1	1	1
1,2 DICHLOROETHANE UG/L	1	1	1
1,1 DICHLOROETHYLENE UG/L	1	1	1
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1
ETHYL BENZENE UG/L	1	1	1
METHYLENECHLORIDE UG/L	5	5	5
TOLUENE UG/L	96	1	1
O-XYLENE UG/L	1	1	1
P/M XYLENE UG/L	1	1	1
CARBON TETRACHLORIDE UG/L	1	1	1
CHLOROFORM UG/L	1	1	1
2-BUTANONE (MEK) UG/L	NS	NS	NS



Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS
TRICHLOROETHYLENE UG/L	1	1	1
TETRACHLOROETHYLENE UG/L	1	1	1
1,1,1 TRICHLOROETHANE UG/L	1	1	1
VINYLCHLORIDE UG/L	1	1	1
STYRENE UG/L	NS	NS	NS
CHLOROBENZENE UG/L	2	1	1
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS
CHLOROETHANE UG/L	10	10	10
1,2-DICHLOROPROPANE UG/L	1	1	1
DIBROMOCHLOROMETHANE UG/L	1	1	1
1,1,2-TRICHLOROETHANE UG/L	1	1	1
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2
BROMODICHLOROMETHANE UG/L	1	1	1
BROMOFORM UG/L	1	1	1



Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
1,1,2,2-TETRACHLOROETHANE UG/L	1	1	1
CHLOROMETHANE UG/L	10	10	10
BROMOMETHANE UG/L	10	10	10
CARBONDISULFIDE UG/L	NS	NS	NS
2-HEXANONE UG/L	NS	NS	NS
ACROLEIN UG/L	NS	NS	NS
ACRYLONITRILE UG/L	NS	NS	NS
TRANS-1,3-DICHLOROPROPENE UG/L	1	1	1
CIS-1,3-DICHLOROPROPENE UG/L	1	1	1



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 SEMI-ANNUAL 1
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

6/29/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/ R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2005 Semi-Annual 1

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant	3	5	6	5. Well #	6. Well #	7. Well #
Units	2. Well #	3. Well #	4. Well #			
PH	6.4	5.8	5.4			
S.U.						
TOTAL DISSOLVED SOLIDS	58	230	220			
MG/L						
AMMONIA-N	0.25	0.34	0.17			
MG/L						
NITRATE-N	0.1	3.1	4.9			
MG/L						
TOTAL NITROGEN(NO3+NO2+TKN)	0.6	3.6	5.5			
MG/L						
STATIC WATER LEVEL	44.2	62.3	62.5			
FEET						
SPECIFIC CONDUCTANCE	120	430	420			
UMHOS/C						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
ACETONE UG/L	NS	NS	NS			
BENZENE UG/L	1	1	1			
1,1 DICHLOROETHANE UG/L	1	1	1			
1,2 DICHLOROETHANE UG/L	1	1	1			
1,1 DICHLOROETHYLENE UG/L	1	1	1			
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS			
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1			
ETHYL BENZENE UG/L	1	1	1			
METHYLENECHLORIDE UG/L	5	5	5			
TOLUENE UG/L	1	1	1			
O-XYLENE UG/L	1	1	1			
P/M XYLENE UG/L	1	1	1			
CARBON TETRACHLORIDE UG/L	1	1	1			
CHLOROFORM UG/L	1	3	1			
2-BUTANONE (MEK) UG/L	NS	NS	NS			



Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

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2005 SEMI-ANNUAL 1

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS			
TRICHLOROETHYLENE UG/L	1	1	1			
TETRACHLOROETHYLENE UG/L	1	1	1			
1,1,1 TRICHLOROETHANE UG/L	1	1	1			
VINYLCHLORIDE UG/L	1	1	1			
STYRENE UG/L	NS	NS	NS			
CHLOROBENZENE UG/L	1	1	1			
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS			
CHLOROETHANE UG/L	10	10	10			
1,2-DICHLOROPROPANE UG/L	1	1	1			
DIBROMOCHLOROMETHANE UG/L	1	1	1			
1,1,2-TRICHLOROETHANE UG/L	1	1	1			
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2			
BROMODICHLOROMETHANE UG/L	1	1	1			
BROMOFORM UG/L	1	1	1			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

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2005 SEMI-ANNUAL 1

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D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in $\mu\text{g/l}$.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant	3	5	6	5. Well #	6. Well #	7. Well #
Units	2. Well #	3. Well #	4. Well #			
1,1,2,2-TETRACHLOROETHANE	1	1	1			
UG/L						
CHLOROMETHANE	10	10	10			
UG/L						
BROMOMETHANE	10	10	10			
UG/L						
CARBONDISULFIDE	NS	NS	NS			
UG/L						
2-HEXANONE	NS	NS	NS			
UG/L						
ACROLEIN	NS	NS	NS			
UG/L						
ACRYLONITRILE	NS	NS	NS			
UG/L						
TRANS-1,3-DICHLOROPROPENE	1	1	1			
UG/L						
CIS-1,3-DICHLOROPROPENE	1	1	1			
UG/L						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax Identification Number

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

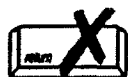
MA

d. State

02360

e. Zip Code

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



Any person
signing a
document
under 314 CMR
5.14(1) or (2)
shall make the
following
certification

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing
electronic-ally
and want to
attach
additional
comments,
select the
check box.

☐

1) THE EFFLUENT VALUE FOR BOD IS LESS THAN (<) THE DETECTION LIMIT.

2) THE EFFLUENT VALUE FOR THE QUARTERLY OIL AND GREASE SAMPLE IS LESS THAN (<) THE DETECTION LIMIT.

3) ALL INFLUENT AND EFFLUENT VOC VALUES ARE LESS THAN (<) THE DETECTION LIMIT EXCEPT FOR INFLUENT TOLUENE AND INFLUENT CHLOROBENZENE.

4) THE FOLLOWING VOCs WERE ALSO ANALYZED, BUT WERE NOT LISTED ON FORM E-VOC ANALYSIS INFORMATION:

A) DICHLOOROBENZENES: INFLUENT=3 UG/L, EFFLUENT <1 UG/L

B) TRICHLOROFLUOROMETHANE: INFLUENT AND EFFLUENT BOTH <1 UG/L

5) ON THE MONITORING WELL DATA REPORT-VOC ANALYSIS INFORMATION FORM, ALL VALUES ARE LESS THAN (<) THE DETECTION LIMIT EXCEPT FOR CHLOROFORM FOR WELL #3 AND WELL #5.

6) THE FOLLOWING VOCs WERE ALSO ANALYZED, BUT WERE NOT LISTED ON THE MONITORING WELL DATA REPORT-VOC ANALYSIS INFORMATION FORM:

A) DICHLOOROBENZENES: ALL WELLS<1 UG/L

B) TRICHLOROFLUOROMETHANE: ALL WELLS<1 UG/L

7) IN ACCORDANCE WITH PERMIT REQUIREMENTS, THE CONCENTRATIONS OF BOD AND TOTAL SUSPENDED SOLIDS (TSS) IN THE WWTP EFFLUENT SAMPLES FOR JUNE 2005 ARE NOT IN EXCESS OF 15% OF THE BOD AND TSS CONCENTRATIONS IN THE INFLUENT SAMPLES.

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Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 5 Form(s)

☒ **CERTIFICATION OF PERSON MAKING SUBMITTAL**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

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Version 4.1.1.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 42142
Date and Time Submitted: 7/19/2005 4:30:06 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 42142
Date and Time Submitted: 7/19/2005 4:30:06 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 42142
Date and Time Submitted: 7/19/2005 4:30:06 PM
User Email : lmedeir@entergy.com

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User Email : lmedeir@entergy.com

DEP Transaction ID: 42142
Date and Time Submitted: 7/19/2005 4:30:06 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360

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Tax Identification Number: 640900523
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Facility Information:

Tax Identification Number: 640900523

location: ROCKY HILL ROAD

Address: PLYMOUTH

ZIP: 02360

Discharge Monitoring Report(1 - 2005 Quarterly 2)

Discharge Monitoring Report(1 - 2005 Jun Monthly)

Discharge Monitoring Report - VOC(1 - 2005 Semi-Annual 1)

Discharge Monitoring Report - VOC(2 - 2005 Semi-Annual 1)

Discharge Monitoring Report - VOC(3 - 2005 Semi-Annual 1)

Daily Log Sheet(2005 JUN DAILY)

Monitoring Well Data Report(1 - 2005 Semi-Annual 1)

Monitoring Well Data Report - VOC(2 - 2005 Semi-Annual 1)

Monitoring Well Data Report - VOC(3 - 2005 Semi-Annual 1)

Monitoring Well Data Report - VOC(1 - 2005 Semi-Annual 1)

Form Name: Certification & Comments

Print

Cancel

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-012e

Date e-Submission: 6/21/05

Date of Letter: 6/22/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for May 2005
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 6/21/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-012e

Stephen J. Bethay
Director, Nuclear Assessment

June 22, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for May 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the May 2005 Groundwater Discharge Report in accordance with the subject permit. During May, the effluent value (1100 mg/l) for total dissolved solids (TDS) exceeded the permit limit of 1000 mg/l.

Since the influent TDS concentration at the WWTP was 740 mg/l, it is logical to conclude that the source of the elevated TDS had to be something at the WWTP, or a contaminated sample. The only known source of TDS at the WWTP is the MgOH injection being used for influent pH adjustment. The MgOH injection parameters were examined, and it was determined that the MgOH concentration and feed rate were within the recommended range for proper pH control. This is further corroborated by the fact that the effluent pH for the day the sample was taken was 7.0. If the MgOH was being overfed, the pH would have been higher.

We believe that the high TDS value was the result of a contaminated sample. We received the May sampling results on May 31st, and resampled on June 3rd. The results of the analysis of the June 3rd sample showed an influent TDS concentration of 880 mg/l and an effluent concentration of 950mg/l.

We will continue to closely monitor the TDS concentration values.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on June 21, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 MAY MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

5/13/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 May Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2005 MAY MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	420	2.0	2.0
TSS MG/L	1700	3.7	2.0
TOTAL DISSOLVED SOLIDS MG/L	740	1100	10
CHLORIDE MG/L	210	200	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2005 MAY DAILY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

5/13/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 May Daily

☐ All forms for submittal have been completed.

- 2 ☐ This is the last selection.

- 3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 MAY DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	11940					7.0		
2	12980					7.0		
3	13870					7.1		
4	14580					7.0		
5	13950					7.1		
6	12350					7.0		
7	9430					7.0		
8	7060					7.0		
9	8640					7.0		
10	9290					7.0		
11	7760					7.1		
12	7920					7.0		
13	6510					7.0		
14	2960					7.1		
15	2420					7.1		
16	8320					7.1		
17	4850					7.1		
18	6370					7.1		
19	5950					7.1		
20	4460					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 MAY DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	1220					7.1		
22	1460					7.1		
23	7430					7.1		
24	6300					7.1		
25	5880					7.1		
26	6590					7.2		
27	3100					7.1		
28	2550					7.1		
29	870					7.1		
30	2920					7.1		
31	7000					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax Identification Number

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Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronically and want to attach additional comments, select the check box.

☐

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

1) THE EFFLUENT VALUE FOR BOD SHOULD READ LESS THAN (<) 2.0.

2) THE EFFLUENT VALUE OF 1100 MG/L FOR TOTAL DISSOLVED SOLIDS (TDS) EXCEEDS THE PERMIT LIMIT OF 1000 MG/L.

SINCE THE INFLUENT TDS CONCENTRATION AT THE WWTP WAS 740 MG/L, IT IS LOGICAL TO CONCLUDE THAT THE SOURCE OF THE ELEVATED EFFLUENT TDS HAD TO BE SOMETHING AT THE WWTP OR A CONTAMINATED SAMPLE. THE ONLY KNOWN SOURCE OF TDS AT THE WWTP IS THE MGOH INJECTION BEING USED FOR INFLUENT PH ADJUSTMENT. THE MGOH INJECTION PARAMETERS WERE EXAMINED AND IT WAS DETERMINED THAT THE CONCENTRATION AND FEED RATE WERE WITHIN THE RECOMMENDED RANGE FOR PROPER PH CONTROL. THIS IS FURTHER CORROBORATED BY THE FACT THAT THE EFFLUENT PH FOR THE DAY THAT THE SAMPLE WAS TAKEN WAS 7.0. IF THE MGOH WAS BEING OVERFED, THE PH WOULD HAVE BEEN HIGHER.

WE BELIEVE THAT THE HIGH EFFLUENT TDS VALUE WAS THE RESULT OF A CONTAMINATED SAMPLE. WE RECEIVED THE RESULTS OF THE MAY SAMPLING ON MAY 31ST AND RESAMPLED ON JUNE 3RD. THE RESULTS OF THE ANALYSIS OF THE JUNE 3RD SAMPLE SHOWED AN INFLUENT TDS CONCENTRATION OF 880 MG/L AND AN EFFLUENT CONCENTRATION OF 950 MG/L.

WE WILL CONTINUE TO CLOSELY MONITOR THE TDS CONCENTRATION VALUES.

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Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 2 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

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Version 3.6.27.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 40060
Date and Time Submitted: 6/21/2005 3:25:54 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 40060
Date and Time Submitted: 6/21/2005 3:25:54 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 40060
Date and Time Submitted: 6/21/2005 3:25:54 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 May Monthly)
Daily Log Sheet(2005 MAY DAILY)
Form Name: Certification & Comments

A rectangular button with a dark background and the word "Print" in white text.A rectangular button with a dark background and the word "Cancel" in white text.

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-010e

Date e-Submission: 5/16/05

Date of Letter: 5/18/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for April 2005**
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 5/16/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-010e

May 18, 2005

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for April 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the April 2005 Groundwater Discharge Report in accordance with the subject permit. There were no permit exceedences this month.

The April TDS and chloride effluent values have dropped back down below the permit limit. In an effort to further investigate the cause of the high values we have experienced over the last three months, we sampled all three of the lift stations and the raw water coming into the station. This sampling showed the highest TDS concentration occurred in lift station "C", which is located in the rear of the cafeteria. This location is near the bottom of an incline and is therefore exposed to runoff from the site truck entrance. It may also be impacted by water softener chemicals from the cafeteria. A combination of runoff containing road salt and softener chemicals from the cafeteria may have contributed to the high reading over the past few months. We will continue to investigate this matter in an effort to determine if anything can be devised to prevent a future reoccurrence.

At approximately 6:00 p.m. on April 21, 2005, about 100 to 200 gallons of water overflowed from a septic system inspection/clean-out manhole (located on the south side of the Operations & Maintenance (O&M) building) and flowed into a storm drain. According to people who witnessed the incident, the water that flowed into the storm drain was clear and had no odor. As soon as the overflow was noticed the water to the O&M building was shut off. A drain cleaning contractor was brought in and the line from the manhole to the septic tank was cleaned out, and the system was returned to normal operation. This occurrence was reported to DEP and EPA Region I by telephone and electronic mail on April 22, 2005.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on May 16, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink that reads "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

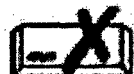
2. Tax identification Number

2005 APR MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

4/22/2005

a. Date Sampled (mm/dd/yyyy)

R.I. ANALYTICAL-SAIC

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Apr Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 APR MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	87	6.7	2.0
TSS MG/L	74	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	640	920	10
CHLORIDE MG/L	180	180	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

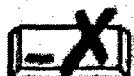
Groundwater Permit

Discharge Monitoring Report

389
1. Permit Number
640900523
2. Tax Identification Number
2005 Quarterly 1
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
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key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

4/22/2005

a. Date Sampled (mm/dd/yyyy)

R.I. ANALYTICAL-SAIC

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Quarterly 1

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 QUARTERLY 1
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
OIL & GREASE MG/L	5.2	0.7	0.5



Groundwater Permit

Daily Log Sheet

389

1. Permit Number

640900523

2. Tax Identification Number

2005 Apr Daily

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
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to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

4/22/2005

a. Date Sampled (mm/dd/yyyy)

R.I. ANALYTICAL-SAIC

b. Laboratory Name

VARIOUS

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Apr Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 APR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	3800					6.9		
2	2220					6.9		
3	2280					6.9		
4	5440					6.9		
5	6140					6.9		
6	5860					6.8		
7	6980					6.9		
8	7910					6.9		
9	1010					6.8		
10	2020					6.8		
11	6850					6.8		
12	9550					6.8		
13	8050					6.9		
14	9550					6.8		
15	10480					6.9		
16	6980					6.8		
17	5080					6.9		
18	10710					6.9		
19	14320					7.0		
20	14190					7.2		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 APR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	13640					7.2		
22	13990					7.1		
23	12420					7.1		
24	10350					7.0		
25	14650					7.0		
26	14510					7.1		
27	15780					7.1		
28	13770					7.1		
29	15420					7.1		
30	14240					7.1		
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax Identification Number

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

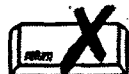
MA

d. State

02360

e. Zip Code

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing electronic-ally and want to attach additional comments, select the check box.

☐

The April TDS and chloride effluent values have dropped back down below the permit limit. In an effort to further investigate the cause of the high values we have experienced over the last three months, we sampled all three of the lift stations and the raw water coming into the station. This sampling showed the highest TDS concentration occurred in lift station "C", which is located in the rear of the cafeteria. This location is near the bottom of an incline and is therefore exposed to runoff from the site truck entrance. It may also be impacted by water softener chemicals from the cafeteria. A combination of runoff containing road salt and softener chemicals from the cafeteria may have contributed to the high reading over the past few months. We will continue to investigate this matter in an effort to determine if anything can be devised to prevent a future reoccurrence.

Scheffer, Jacob

From: Scheffer, Jacob
Sent: Tuesday, May 17, 2005 10:16 AM
To: 'Marybeth Chubb'
Cc: Whalley, John; 'Rick Rondeau'; Egan, Joseph
Subject: Additional Comment for April Groundwater Permit

Marybeth:

As I mentioned to you over the phone today, on May 16, 2005, I submitted Pilgrim's Groundwater Permit Discharge Monitoring Report for April via eDEP, and forgot to include a comment regarding a system overflow that occurred in April. Immediately following are the details of that occurrence.

At approximately 6:00 p.m. on April 21, 2005, about 100 to 200 gallons of water overflowed from a septic system inspection/clean-out manhole (located on the south side of the Operations & Maintenance (O&M) building) and flowed into a storm drain. According to people who witnessed the incident, the water that flowed into the storm drain was clear and had no odor. As soon as the overflow was noticed the water to the O&M building was shut off. A drain cleaning contractor was brought in and the line from the manhole to the septic tank was cleaned out, and the system was returned to normal operation. This occurrence was reported to DEP SERO (Rick Rondeau) and the EPA Regional Office by telephone and electronic mail on April 22, 2005.

If you have any questions about this occurrence, please call me at 508-830-8323.

Jay

5/17/2005

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homepage](#)
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submittal](#)[online forms](#)[data
converter tool](#)[instructions](#)[contacts](#)[feedback
survey](#)[tour the site](#)[exit eDEP](#)

Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 3 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

[dep home](#) • [calendar](#) • [new additions](#) • [search](#) • [site map](#) • [privacy policy](#)
[contact eDEP](#)

Version 3.6.27.0

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 36205
Date and Time Submitted: 5/16/2005 9:55:40 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 36205
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Date and Time Submitted: 5/16/2005 9:55:40 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
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Facility Information:
Tax Identification Number: 640900523
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Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1 - 2005 Apr Monthly)
Discharge Monitoring Report(1 - 2005 Quarterly 1)
Daily Log Sheet(2005 APR DAILY)
Form Name: Certification & Comments

A rectangular button with a dark background and the word "Print" in white text.A rectangular button with a dark background and the word "Cancel" in white text.

Scheffer, Jacob

From: Scheffer, Jacob
Sent: Monday, May 02, 2005 3:56
To: Whalley, John
Subject: April WWTP Effluent Values

John:

George Petersen called today with the April sampling results. They were all under the permit limits:

- TDS: 920 mg/l
- Chloride: 180 mg/l
- BOD: 6.7 mg/l
- TSS: 2.0 mg/l

Here are the results of the extra sampling:

- Town Water: TDS= 96 mg/l, Cl= 30 mg/l
- Lift Station A: TDS= 580 mg/l, Cl= 170 mg/l
- Lift Station B: TDS= 650 mg/l, Cl= 250 mg/l
- Lift Station C: TDS= 750 mg/l, Cl= 240 mg/l

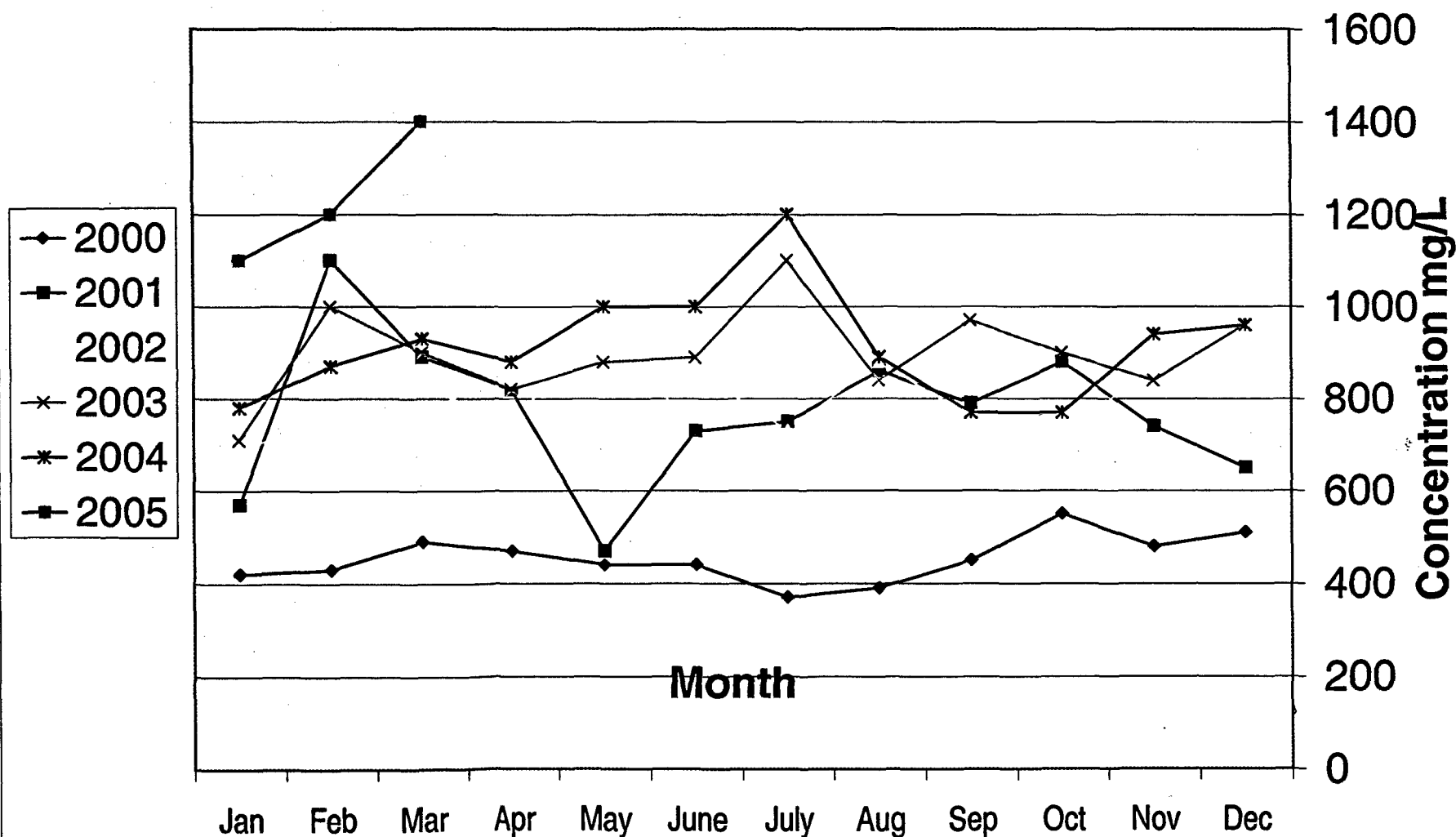
He will fax the results to us soon.

Call me when you get a chance and we will discuss the results.

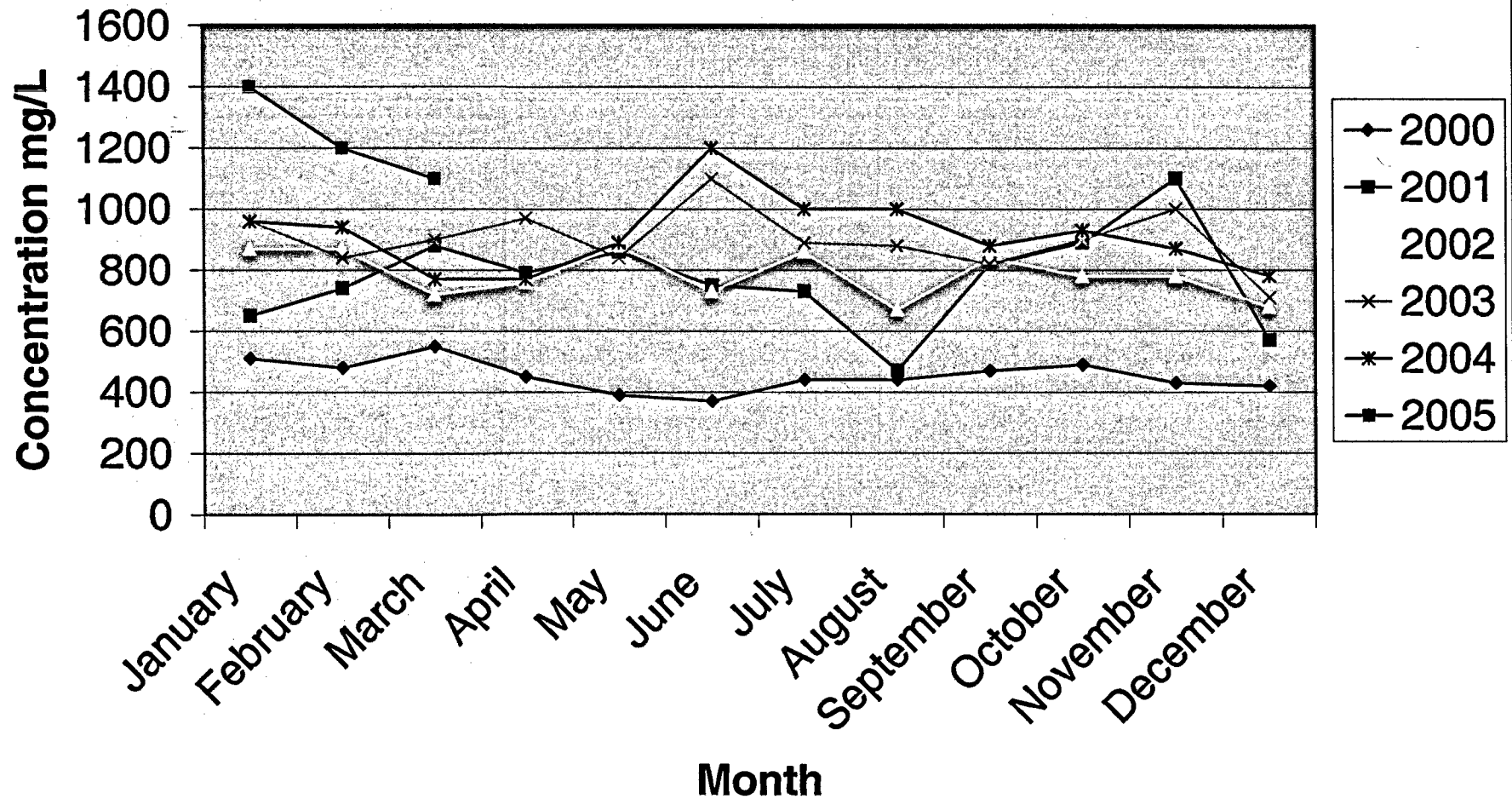
Jay

5/2/2005

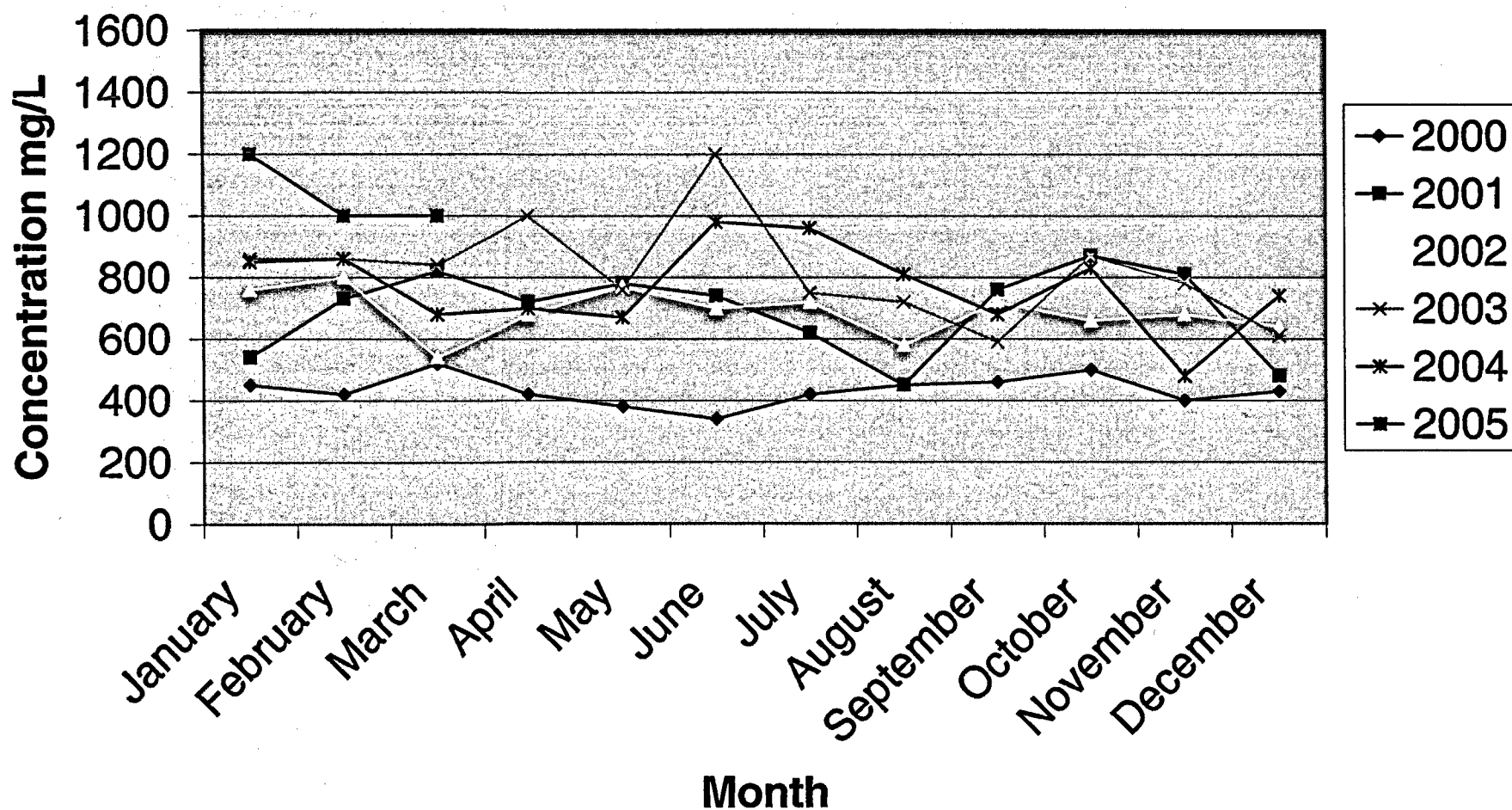
Pilgrim Station WWTP TDS Effluent Summary January 2000 through March 2005



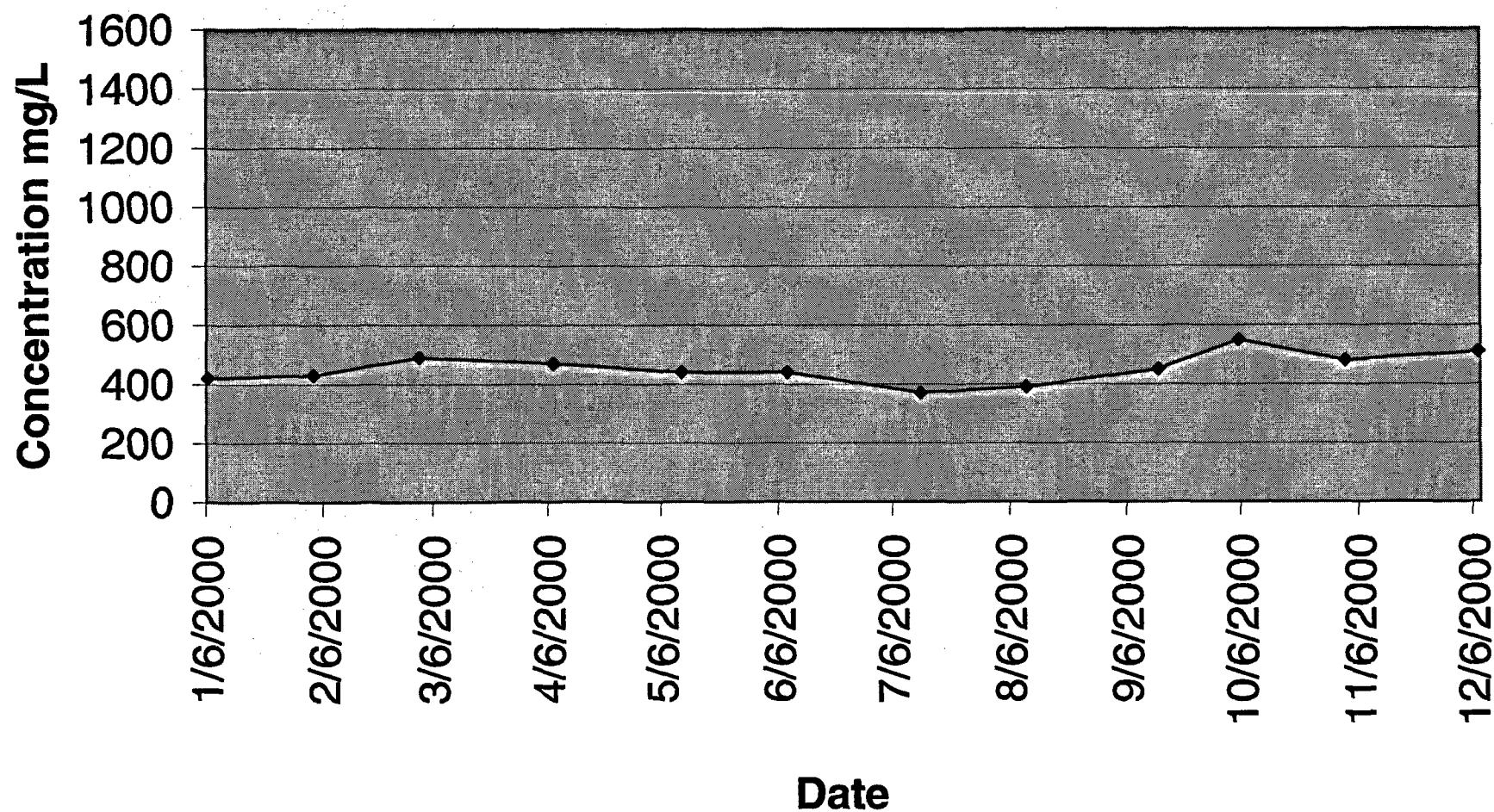
Pilgrim Station WWTP TDS Effluent Summary January 2000 through March 2005



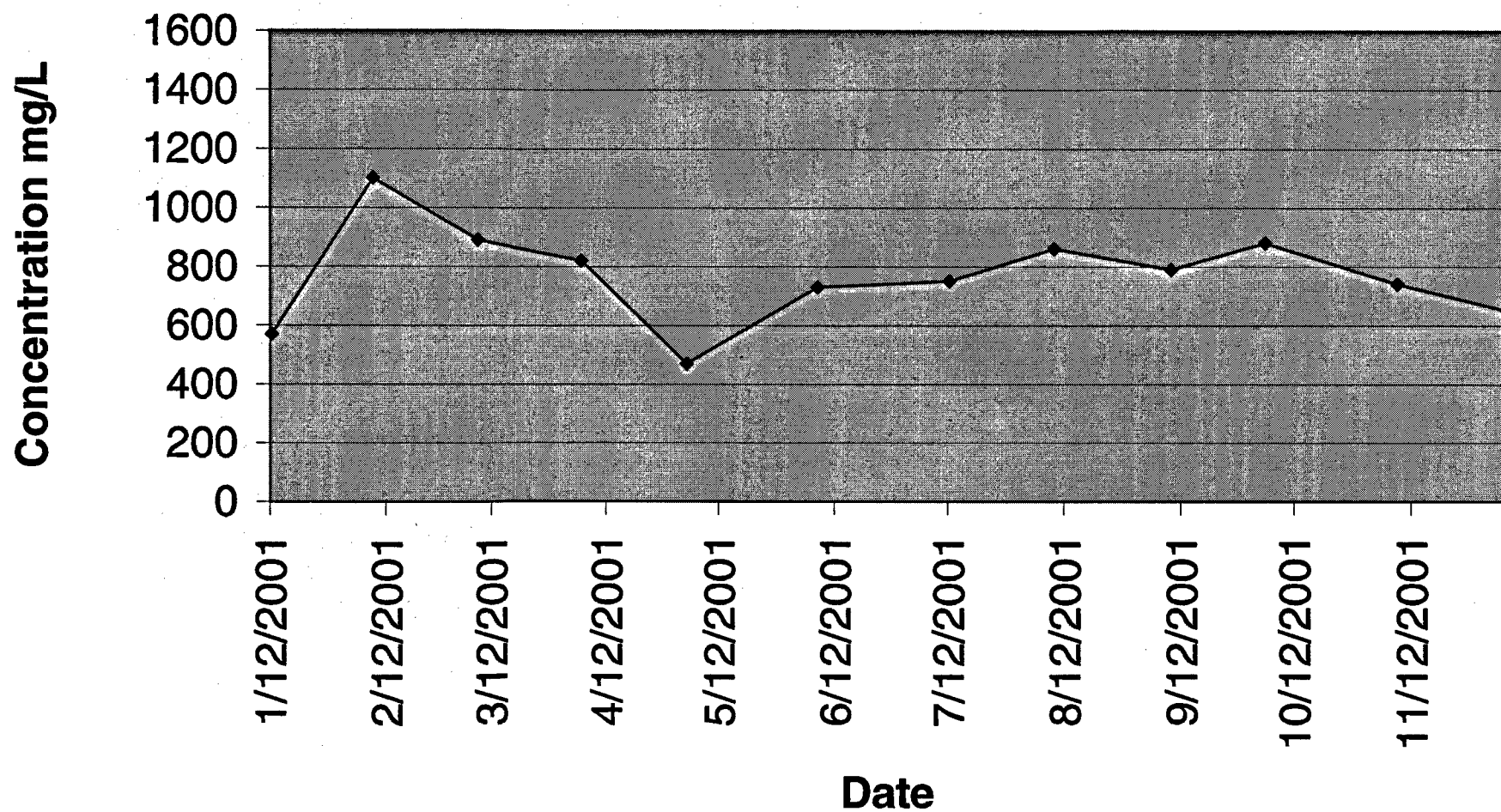
Pilgrim Station WWTP TDS Influent Summary January 2000 through March 2005



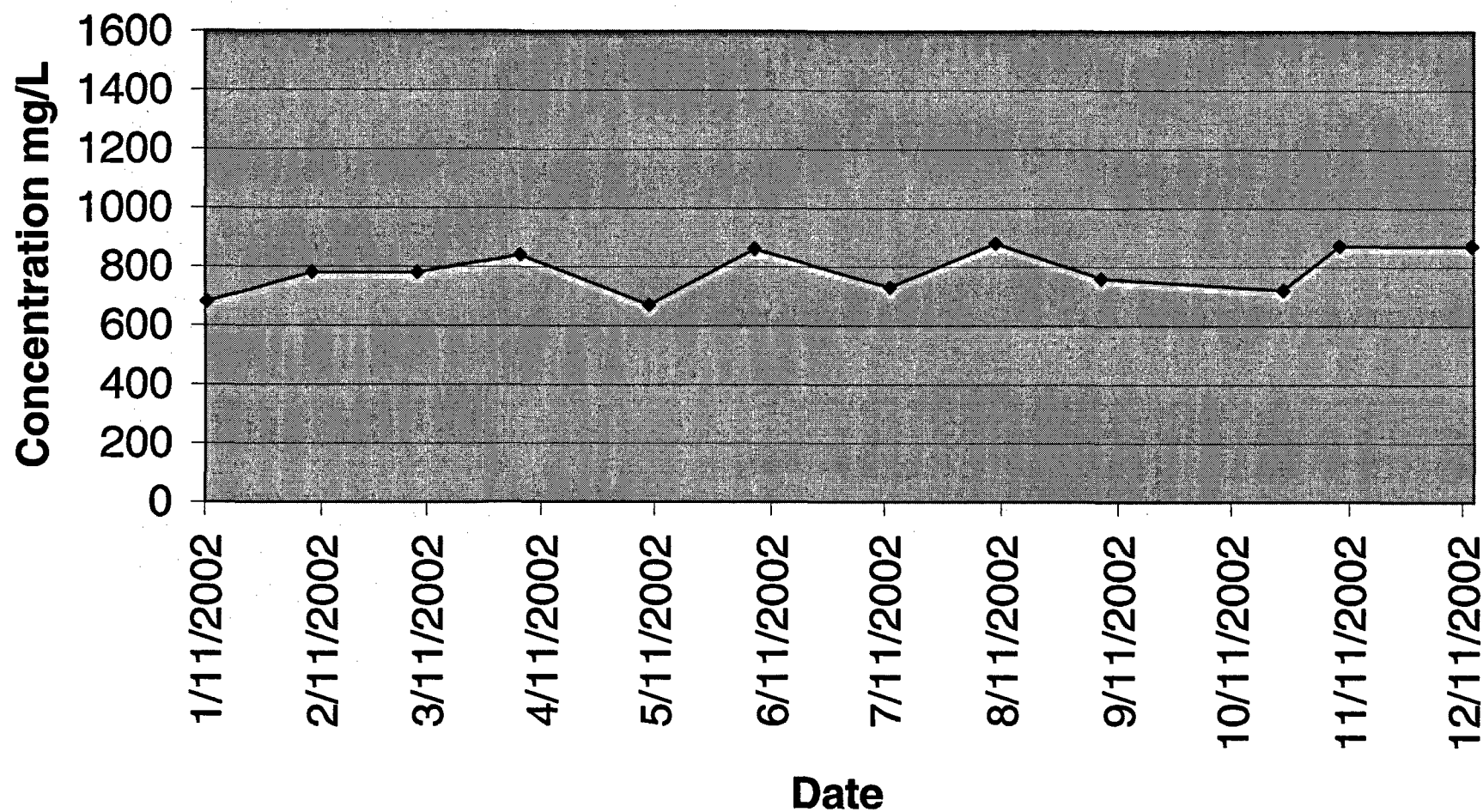
Pilgrim Station WWTP TDS Effluent Summary January through December 2000



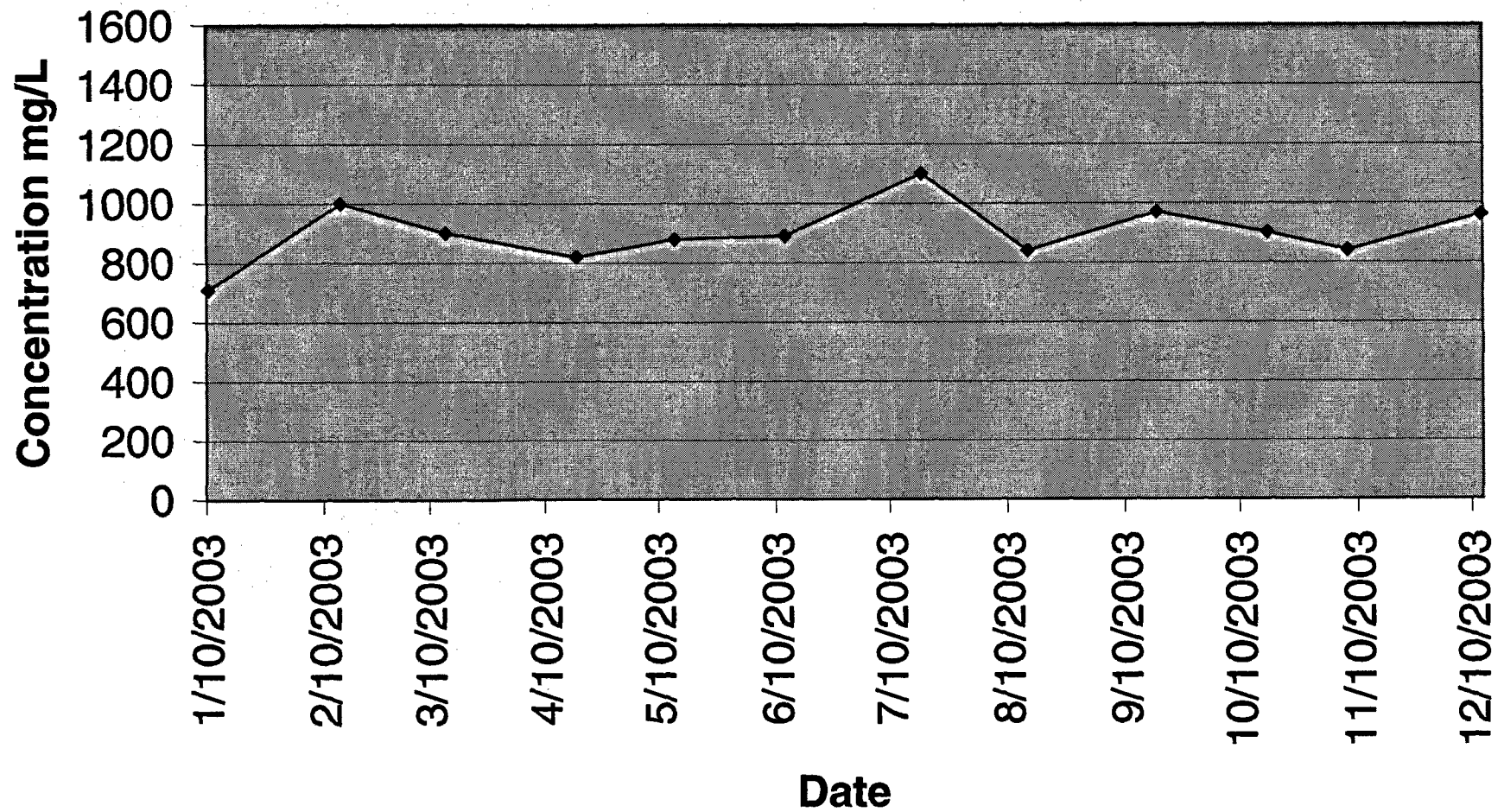
Pilgrim Station WWTP Effluent Summary January through December 2001



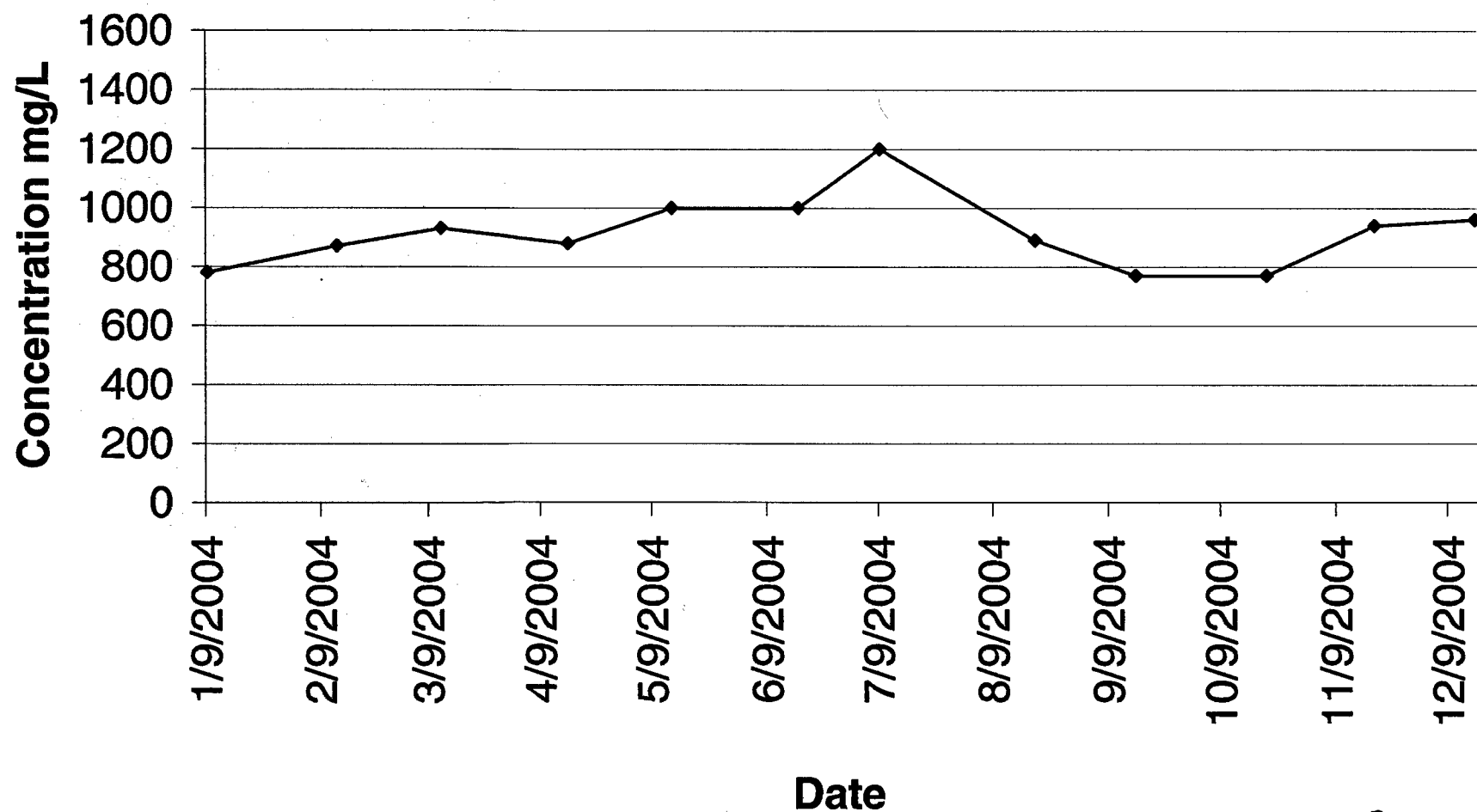
Pilgrim Station WWTP Effluent Summary January through December 2002



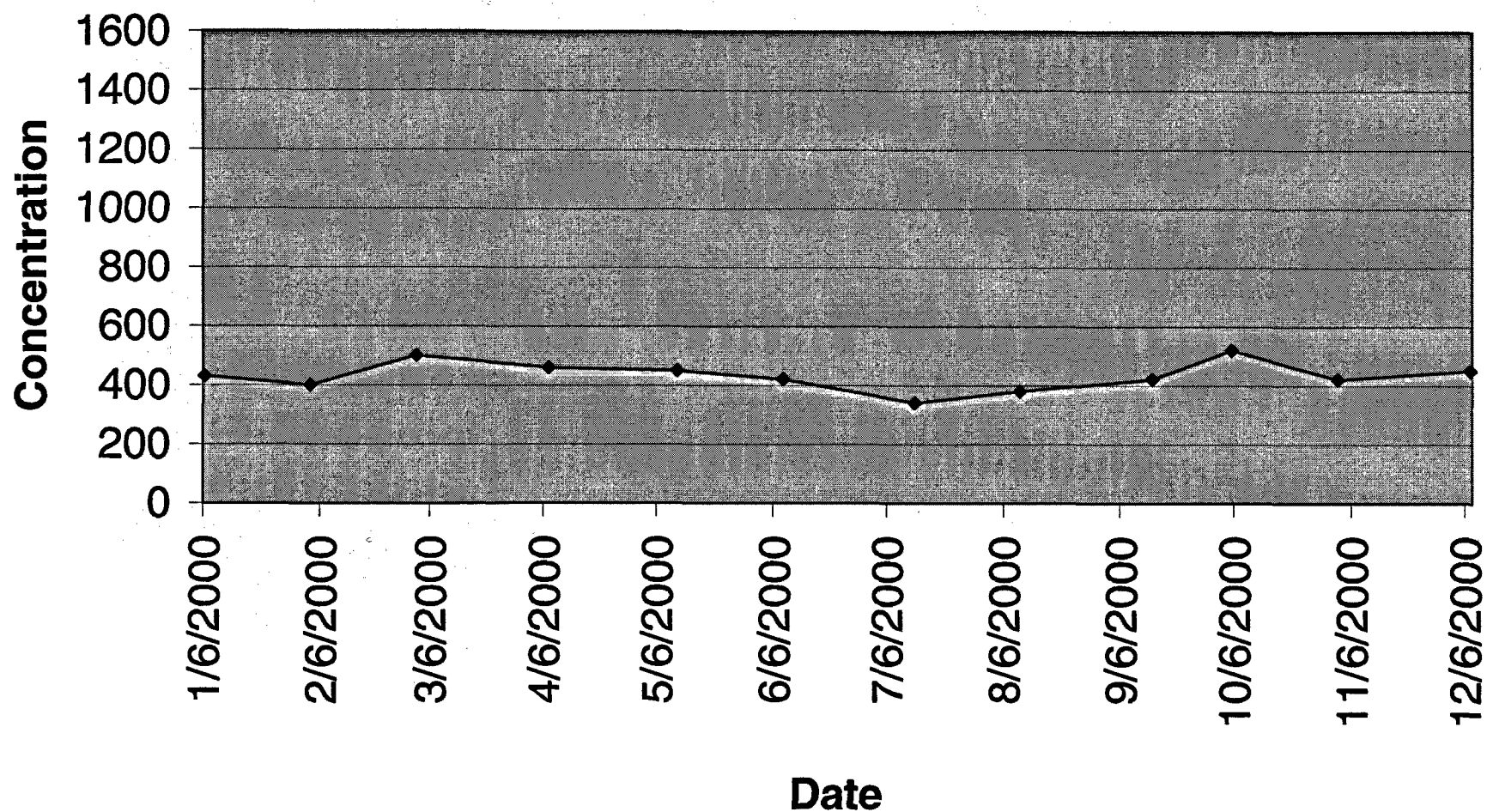
Pilgrim Station WWTP Effluent Summary January through December 2003



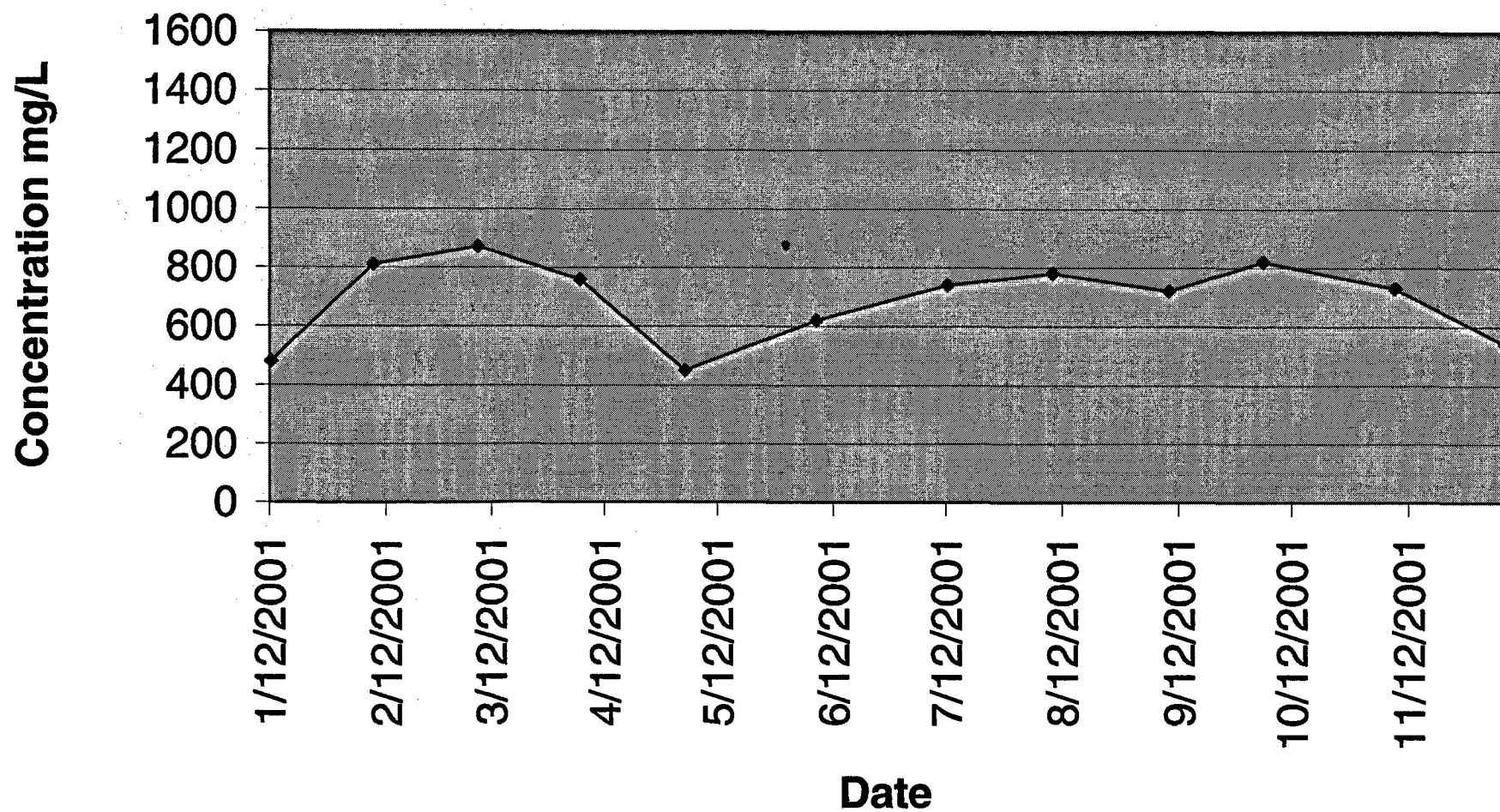
Pilgrim Station WWTP Effluent Summary January through December 2004



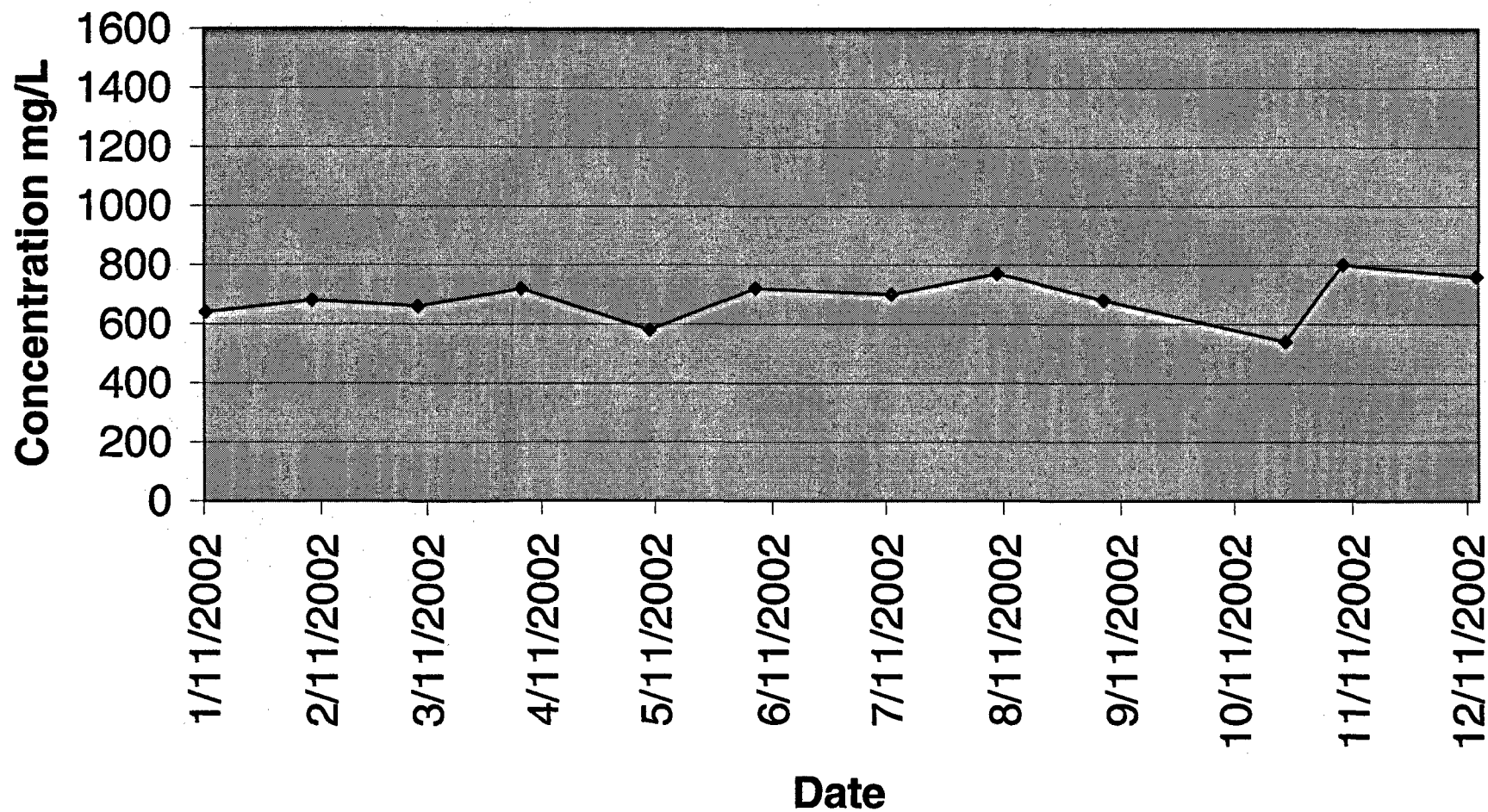
Pilgrim Station WWTP TDS Influent Summary January through December 2000



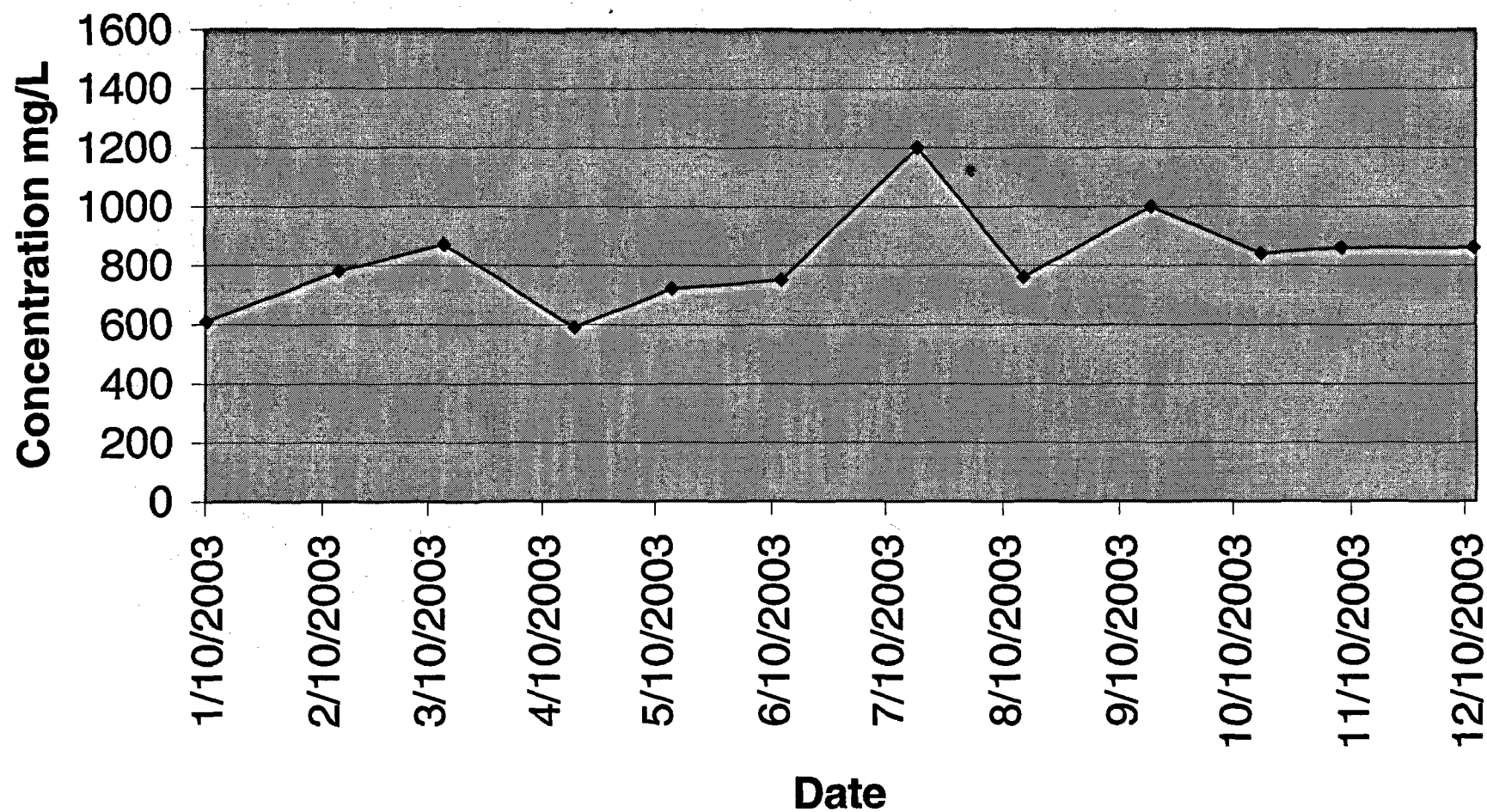
Pilgrim Station WWTP TDS Influent Summary January through December 2001



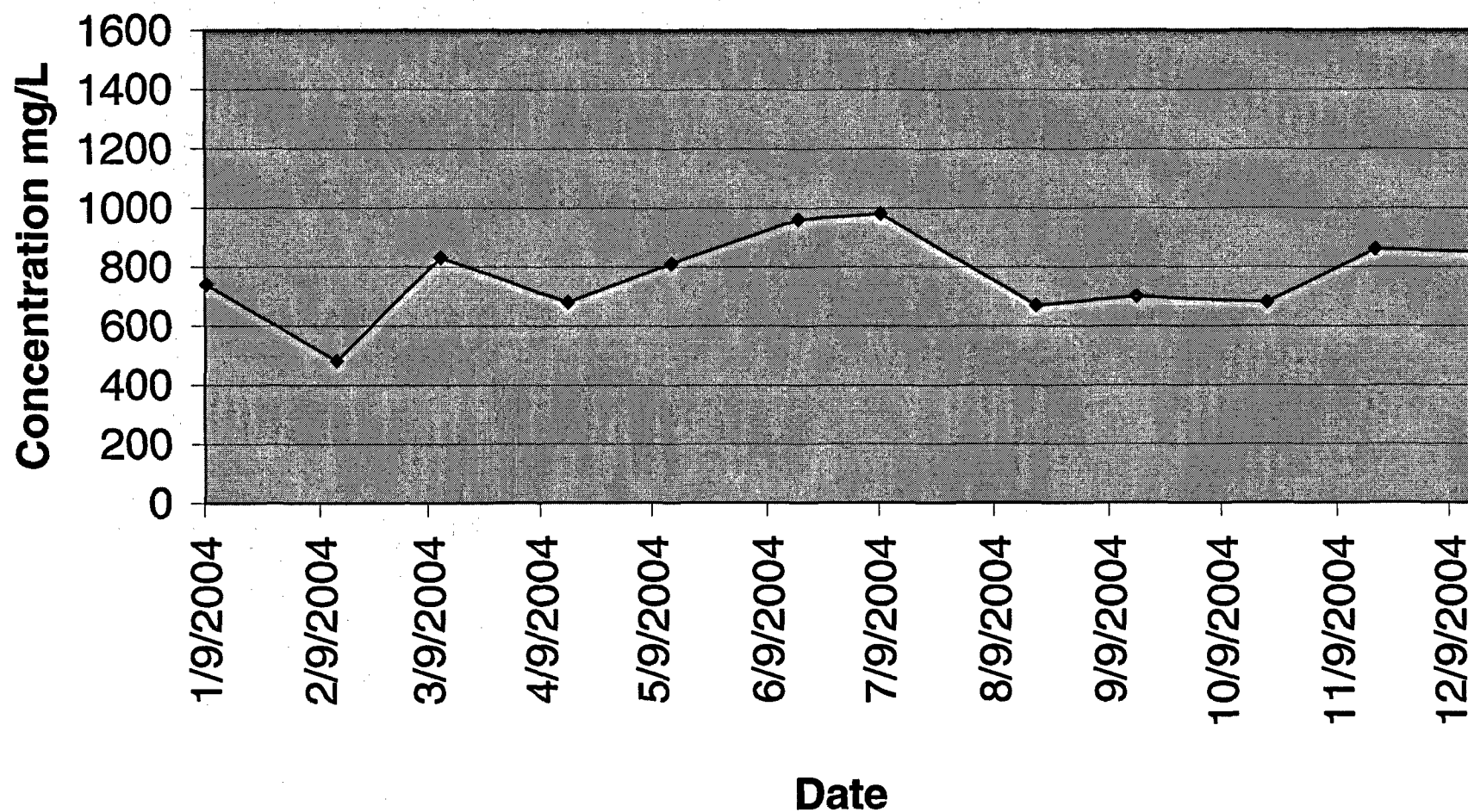
Pilgrim Station WWTP TDS Influent Summary January through December 2002



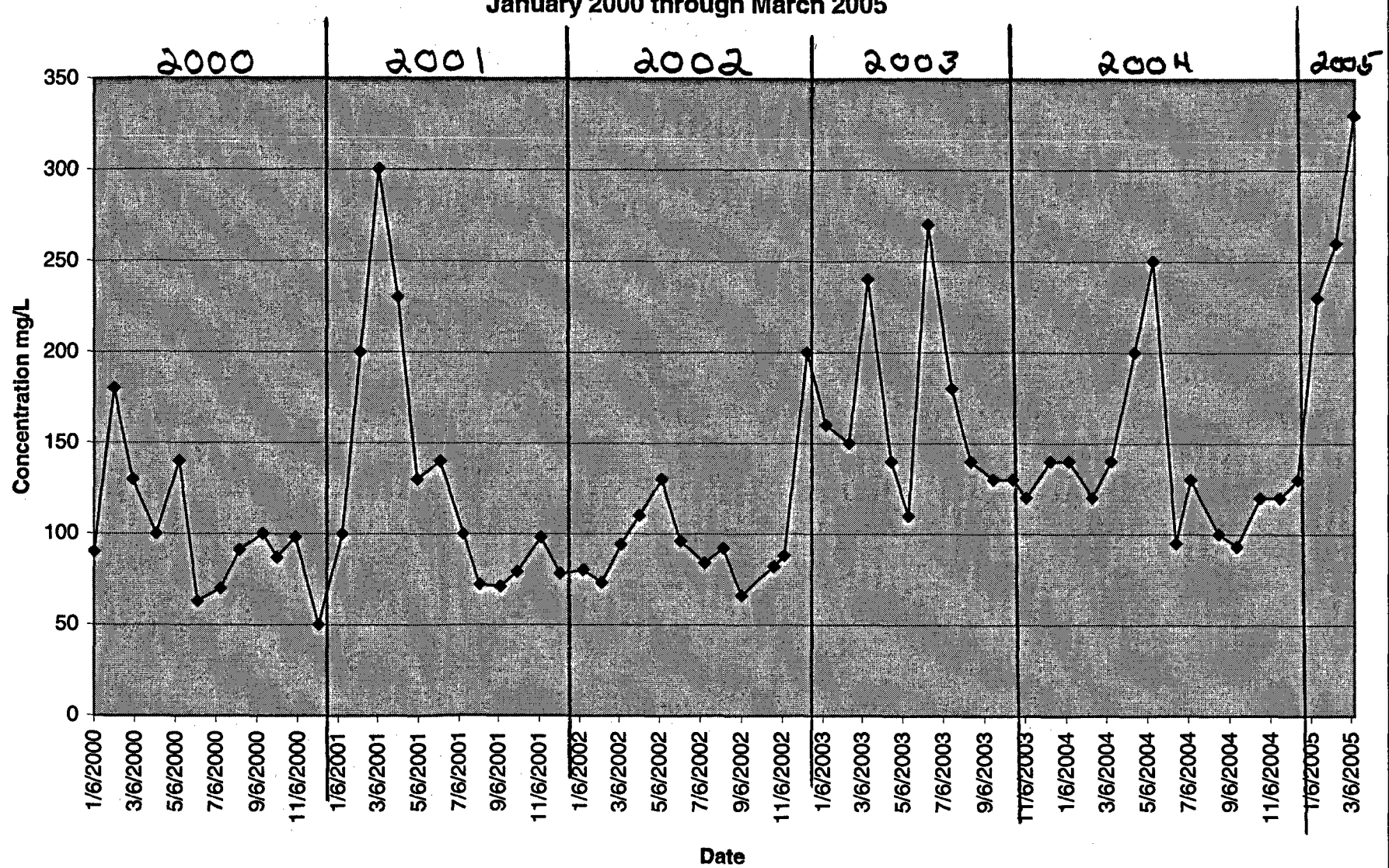
Pilgrim Station WWTP TDS Influent Summary January through December 2003



Pilgrim Station WWTP TDS Influent Summary January through December 2004



Pilgrim Station WWTP Chloride Effluent Summary
January 2000 through March 2005



Originator: Scheffer, Jacob J**Originator Phone:** 8323**Originator Group:** Environmental Mgmt**Operability Required:** N**Supervisor Name:** Bethay, Stephen J**Reportability Required:** N**Discovered Date:** 04/27/2005 07:48**Initiated Date:** 04/27/2005 07:57

Condition Description:

During process of cleaning the piping between septic tank #2 and lift station "B", the pump float in the lift station became disengaged (broken grommet). This did not result in an overflow and it is not reportable.

Immediate Action Description:

Float was temporarily reconnected and the lift station is operable.

Suggested Action Description:

Make permanent repairs to float.

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-009e

Date e-Submission: 4/22/05

Date of Letter: 4/22/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for March 2005
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 4/22/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-009e
April 22, 2005

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for March 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the March 2005 Groundwater Discharge Report in accordance with the subject permit. The effluent limit for total dissolved solids (TDS) of 1000 mg/l was exceeded by 400 mg/l. This was most likely a result of the infiltration of road salt into the system, which caused the influent TDS value to be higher than the permit limit. At the wastewater treatment plant, magnesium hydroxide is added for pH control, which resulted in the effluent TDS value exceeding the permit limit. The effluent limit for chloride (250 mg/l) was also exceeded. At the WWTP, the influent value for chloride was 360 mg/l, and since the WWTP is not designed for chloride removal, the effluent value was 330 mg/l. The high influent value for chloride is a further indicator of salt infiltration. In March, road salt was widely used at Pilgrim due to adverse weather conditions. Please see the comment section of the enclosed report for a description of the efforts being taken to further investigate this matter.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on April 22, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink that reads "Stephen J. Bethay".

Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 MAR MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
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1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

3/10/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Mar Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 MAR MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	200	3.6	3.0
TSS MG/L	300	ND	2.0
TOTAL DISSOLVED SOLIDS MG/L	1200	1400	10
CHLORIDE MG/L	360	330	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

Daily Log Sheet

389

1. Permit Number

640900523

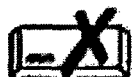
2. Tax identification Number

2005 Mar Daily

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

3/10/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R. I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Mar Daily

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 MAR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	4460					7.0		
2	4080					7.0		
3	4760					7.0		
4	2940					6.9		
5	840					6.9		
6	1000					6.9		
7	2850					6.9		
8	5400					6.9		
9	4430					6.8		
10	5760					6.9		
11	5420					6.8		
12	2260					6.8		
13	1520					6.8		
14	3980					6.9		
15	5530					6.9		
16	5110					6.9		
17	5460					6.9		
18	5290					6.9		
19	850					6.9		
20	1230					6.9		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 MAR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	5350					7.0		
22	5500					7.0		
23	6070					7.0		
24	5950					6.9		
25	5440					6.9		
26	2110					6.9		
27	1390					6.8		
28	6250					6.8		
29	7540					7.0		
30	6080					6.9		
31	5460					7.0		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389
1. Permit Number
640900523
2. Tax Identification Number

Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



Any person
signing a
document
under 314 CMR
5.14(1) or (2)
shall make the
following
certification

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing
electronic-ally
and want to
attach
additional
comments,
select the
check box.

☐

THE EFFLUENT LIMITS FOR TOTAL DISSOLVED SOLIDS (TDS) AND CHLORIDE WERE EXCEEDED IN MARCH.

THE INFLUENT VALUE FOR TDS WAS 1200 MG/L, WHICH EXCEEDS THE PERMIT EFFLUENT LIMIT OF 1000 MG/L, AND SINCE THE FACILITY WAS NOT DESIGNED TO REMOVE TDS AND, IN ADDITION, MAGNESIUM HYDROXIDE IS ADDED AT THE WWTP FOR PH CONTROL IT IS NOT SURPRISING THAT THE EFFLUENT VALUE OF 1400 MG/L EXCEEDED THE PERMIT LIMIT.

THE INFLUENT VALUE FOR CHLORIDE (360 MG/L) WAS ALSO HIGHER THAN THE PERMIT EFFLUENT LIMIT OF 250 MG/L, AND, SINCE THE WWTP WAS NOT DESIGNED TO REMOVE CHLORIDE, THE EFFLUENT VALUE OF 330 MG/L EXCEEDED THE PERMIT LIMIT.

WE BELIEVE THAT THE PRIMARY CAUSE OF THE HIGH INFLUENT TDS AND CHLORIDE VALUES IS THE INFILTRATION INTO THE SYSTEM OF ROAD SALT, WHICH WAS USED EXTENSIVELY AT THE SITE THIS WINTER. PILGRIM IS INVESTIGATING OTHER POTENTIAL SOURCES OF THE HIGH TDS AND CHLORIDE VALUES. WE PLAN TO SAMPLE THE RAW WATER COMING INTO THE STATION AND WE WILL ATTEMPT TO OBTAIN RAW WATER DATA GOING BACK FIVE YEARS FROM THE TOWN OF PLYMOUTH. ON APRIL 22, 2005, WE ALSO PLAN TO SAMPLE EACH LIFT STATION FOR BOD, TSS, TDS AND CHLORIDE TO DETERMINE IF THE PROBLEM IS BEING GENERATED BY A PARTICULAR SECTION OF THE PLANT. ALONG WITH SAIC, WE ARE EXAMINING THE PAST FIVE YEARS WORTH OF INFLUENT AND EFFLUENT DATA FROM THE WWTP TO SEE IF THERE IS A DISCERNABLE PATTERN OR TREND. WE WILL KEEP DEP INFORMED OF OUR PROGRESS IN THESE MATTERS.

Mass.gov[mass.gov home](#) • [online services](#) • [state agencies](#)

SEARCH MASS.GOV

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submittal](#)[online forms](#)[data
converter tool](#)[instructions](#)[contacts](#)[feedback
survey](#)[tour the site](#)[exit eDEP](#)

Signature

Please check the form(s) you wish to accept.

Ground Water Permit - 2 Form(s)

☒ CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date

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[contact eDEP](#)

Version 3.5.3.1

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 34429
Date and Time Submitted: 4/22/2005 11:07:29 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 34429
Date and Time Submitted: 4/22/2005 11:07:29 AM
User Email : lmedeir@entergy.com

DEP Transaction ID: 34429
Date and Time Submitted: 4/22/2005 11:07:29 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1)
Daily Log Sheet(2005 MAR DAILY)
Form Name: Certification & Comments

A rectangular button with a dark background and light text, labeled "Print".A rectangular button with a dark background and light text, labeled "Cancel".

Scheffer, Jacob

From: Whalley, John
Sent: Tuesday, April 19, 2005 6:57 PM
To: Scheffer, Jacob
Subject: RE: Comments for March WWTP Report

On Friday, April 22, 2005, we will sample all 3 lift stations and the town water supply for BOD, TSS, TDS, and Cl. We will also be performing our regular monthly samples that day. We also took grab samples for chloride on 4/4/05 to determine trend increasing on influent - results were INF 470 mg/L and EFF 360 mg/L. Snow banks were still melting at this time. We also determined the water softener used in the Support Bldg is INHIBITOR N from Barclay Chemical Inc MSDS number BXGRN. That is all the info I have at this point. I agree with what you wrote except add the other samples we are doing for each lift station and remove the part about sampling the septic tanks. I'll try to come see you Thursday morning. Call with any questions.

John

-----Original Message-----

From: Scheffer, Jacob
Sent: Monday, April 18, 2005 4:42 PM
To: Whalley, John
Subject: Comments for March WWTP Report

John:

Here is what I was thinking of using for the comment section of the monthly report:

"The effluent limits for total dissolved solids (TDS) and chloride were exceeded in March. The influent value for TDS was 1200 mg/l and since the facility was not designed to remove TDS and magnesium hydroxide is added at the WWTP for pH control it is not surprising that the effluent limit was exceeded. The influent value for chloride (360 mg/l) was also higher than the permit effluent limit of 250 mg/l, and, since the WWTP was not designed to remove chloride, the effluent value of 330 mg/l exceeded the permit limit.

We believe that the primary cause of the high influent TDS and chloride values is the infiltration into the system of road salt, which was used extensively at the site this winter. Pilgrim is also investigating other potential sources of the high values. We plan to sample the raw water coming into the station and we will attempt to obtain raw water data going back five years from the Town of Plymouth. We also plan to sample each lift station and septic tank for TDS and chloride to determine if the problem is being generated by a particular section of the plant. Along with SAIC, we are examining the past five years worth of influent and effluent data from the WWTP to see if there is a discernable pattern or trend. We will keep DEP informed of our progress in these matters."

Any comments?

Jay

4/20/2005

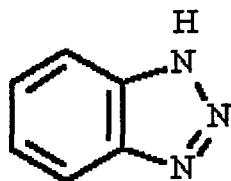
BENZOTRIAZOLE**CAS # 95-14-7**

Synonym: - 1,2,3 Benzotriazole
1,2-Aminoazophenylene
Azimidobenzene
Aziminobenzene
Benzene Azimide
2,3 Diazaindole

Trade Name: - BT / BT-PG Formula: - $C_6H_5N_3$

Off-white to light yellow solid.

Assay 98.0% min.



Application: - Corrosion Inhibitors. Photographic chemical, intermediate for dyes, coupling agents, fungicides, pharmaceuticals, and miscellaneous chemicals.

Request Technical Bulletin COR4315.

BARCLAY CHEMICAL INC -- INHIBITOR N

MSDS Safety Information

FSC: 6850
 MSDS Date: 11/09/1992
 MSDS Num: BXGRN
 LIIN: 00N059278
 Product ID: INHIBITOR N
 MFN: 01
 Responsible Party
 Cage: 1HA92
 Name: BARCLAY CHEMICAL CO INC
 Address: 150 COOLIDGE AVE
 City: WATERTOWN MA 02172
 Info Phone Number: 617-926-3400
 Emergency Phone Number: 800-424-9300 (CHEMTREC)
 Published: Y

Contractor Summary

Cage: 1HA92
 Name: BARCLAY CHEMICAL CO
 Address: 150 COOLIDGE AVE
 City: WATERTOWN MA 02172
 Phone: 617-926-3400

Ingredients

Cas: 95-14-7
 RTECS #: DM1225000
 Name: 1H-BENZOTRIAZOLE; (1-H BENZOTRIAZOLE)
 % Wt: <5
 OSHA PEL: 15 MG/M3 (MFR)
 ACGIH TLV: 10 MG/M3 (MFR)

Cas: 7632-00-0
 RTECS #: RA1225000
 Name: NITROUS ACID, SODIUM SALT; (SODIUM NITRITE) (CERCLA)
 % Wt: 20-40
 OSHA PEL: N/K (FP N)
 ACGIH TLV: N/K (FP N)
 EPA Rpt Qty: 100 LBS
 DOT Rpt Qty: 100 LBS

Name: SUPP DATA:HEMOGLOBIN OCCURS SPONT AFTER TERMINATION OF EXPOS, MOD
 CYANOSIS NEED BE TREATED ONLY BY SUPPORTIVE

Name: ING 3:MEASURES SUCH AS BED REST & OXYGEN INHALATION.

Health Hazards Data

Handling and Disposal

Fire and Explosion Hazard Information

Flash Point Text: NONE
 Extinguishing Media: MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).

Fire Fighting Procedures: USE NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N).

Control Measures

Physical/Chemical Properties

B.P. Text: >212F,>100C

M.P/F.P Text: 10F,-12C

Vapor Pres: SUPP DATA

Spec Gravity: 1.3

PH: 9-10

Evaporation Rate & Reference: SAME AS WATER

Solubility in Water: 100%

Appearance and Odor: LIQUID, PALE YELLOW SOLUTION; FAINT ODOR.

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: NONE SPECIFIED BY MANUFACTURER.

Materials To Avoid: INCOMPAT W/ACIDS, AMMONIUM SALTS, AMINES, ACTIVATED CARBON, CYANIDES & REDUCING AGENTS. MAY REACT W/SECONDARY OR (SUPDAT)

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

HAZCOM Label

Product ID: INHIBITOR N

Cage: 1HA92

Company Name: BARCLAY CHEMICAL CO

Street: 150 COOLIDGE AVE

City: WATERTOWN MA

Zipcode: 02172

Health Emergency Phone: 800-424-9300 (CHEMTREC)

Label Required IND: Y

Date Of Label Review: 05/04/1995

Status Code: C

Label Date: 05/04/1995

Origination Code: G

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: WARNING

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Moderate

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: ACUTE:OVEREXPOSURE MAY INCLUDE SKIN IRRITATION, NAUSEA, HEADACHE, REDUCTION OF BLOOD'S OXYGEN CARRYING CAPACITY W/CYANOSIS, WEAKNESS OR SHORTNESS OF BREATH BY FORMATION OF METHEMOGLOBIN. TOXIC EFFECTS DESCRIBED IN ANIMALS FROM SHORT EXPOSURES INCLUDE CYANOSIS & VASODILATION. MAY BE ABSORBED THROUGH SKIN. CHRONIC:NONE LISTED BY MANUFACTURER.

=====
Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of America should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.



FACSIMILE TRANSMITTAL SHEET

TO: Bob Maher c/o John Whalley
Jay Scheffer

FROM: George Petersen

COMPANY:
Entergy

DATE:
4/12/05

FAX NUMBER:
508 830-8939, (-8575), (-8529)

TOTAL NO. OF PAGES INCLUDING COVER:
4

FAX: 508 830 8960 508 830 8146

PHONE NUMBER: SENDER'S REFERENCE NUMBER:

RE: Resample April 05 -- Chloride only

YOUR REFERENCE NUMBER:
Work Order# 0503-03675

☒ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Attached is the re-sampled monitoring results for samples collected 4/4/05. As shown in the table below, the chloride result shows the chloride exceeding the 250 mg/L effluent limitation by 110 mg/L.

As we discussed last week, the source of elevated chloride may be the deicing agents (salt) being used in response to the near record snow falls during these months. With the heavy rain over the weekend of April 2 and 3, it's possible some runoff might have entered the sanitary system at manhole cover locations.

Parameter	Effluent Limit	Effluent Result	Exceedance?
Chloride	470 mg/L	360	Yes

3-25-05FAX.DOC

10 MAIN STREET
LAKEVILLE, MA 02347

(508) 923-5100

FAX (508) 923-5101



R.I. Analytical

Specialists in Environmental Services

Page 1 of 2

CERTIFICATE OF ANALYSIS

SAIC Engineering
Attn: Ms. Lisa Reynolds
10 Main Street
Lakeville, MA 02347

Date Received: 04/04/2005
Date Reported: 04/11/2005
P.O. #: 4400054573
Work Order # 0504-05065

DESCRIPTION: TWO WASTEWATER SAMPLES

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

SAIC Engineering
Date Received: 04/04/2005
Work Order #: 0504-05065

Approved by: 

Data Reporting

Sample # 001
SAMPLE DESCRIPTION: INFLUENT #1
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 04/04/2005 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
CHLORIDE	470	5.0	mg/l	EPA 300.0	04/08/2005	ML

Sample # 002
SAMPLE DESCRIPTION: EFFLUENT #1
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 04/04/2005 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
CHLORIDE	360	5.0	mg/l	EPA 300.0	04/08/2005	ML

4/8/05

SAIC Meeting

Joe Cantwell J. Whalley T. Schetter
George Peterson R. Maher T. Egan

Data from 2000 - 2001

TSS & TDS - both rose in 2001

2000 ~ 430 TDS (Inf) 450 TDS (EFF)

Schedule to pump effluent septic tanks on a quarterly basis.

Anything from cafeteria that may add to the system.

Mag water goes into septic system.

No results from Cl analysis.

Septic tank #2, (L.S.B) will be desludged next week (4/11/05)

No filter or bio system to treat TDS

(*) We should look at raw water data going back 5 yrs.

(*) Look at past five years of data & graph it.

(*) Sample each lift station.
(BOD, TSS, TDS, Cl)

(*) Sample raw water.



FACSIMILE TRANSMITTAL SHEET

TO:	Bob Maher and Jay Scheffer c/o John Whalley	FROM:	George Petersen
COMPANY:	Entergy	DATE:	4/5/05
FAX NUMBER:	508 830-8529	TOTAL NO. OF PAGES INCLUDING COVER:	1
PHONE NUMBER:	508 830 8960/508 830 8146	SENDER'S REFERENCE NUMBER:	
RE:	Conference Call - Friday, 4/8/05	YOUR REFERENCE NUMBER:	Work Order# 0503-03675
<input type="checkbox"/> URGENT <input type="checkbox"/> FOR REVIEW <input type="checkbox"/> PLEASE COMMENT <input type="checkbox"/> PLEASE REPLY <input type="checkbox"/> PLEASE RECYCLE			

NOTES/COMMENTS:

As we discussed yesterday, SAIC will set up a conference call for this Friday, April 8, 2005 at 10 AM to review possible corrective action alternatives to address the elevated Total Dissolved Solids (TDS) and elevated chloride concentrations exceeding the effluent limitation criteria, per the DEP's issued discharge permit.

For the third consecutive month, the monthly monitoring results for samples collected at the WWTF reported the effluent TDS concentration exceeding the effluent limitation of 1,000 mg/L and the chloride result exceeding the 250 mg/L effluent limitation.

To call into the conference call - dial 1-800-366-7242. Listen to the instructions of the voice prompt and when asked to enter a pass code followed by the # sign, enter the pass code 5118 #. The voice prompt will ask you to identify yourself by name followed by the # sign; the system will automatically enter you into the meeting.

It is not necessary for all participants at the Pilgrim Station to be in one conference room, the conference call will be set up with multiple phone lines to allow for each participant to call in from their office or remote location.

4-5-05FAX.DOC

10 MAIN STREET
LAKEVILLE, MA 02347

(508) 923-5100

FAX (508) 923-5101

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-007e

Date e-Submission: 3/21/05

Date of Letter: 3/24/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: Monthly Groundwater Permit DMR for February 2005
Electronic & Hard Copy Submission

Summary: Submission of monthly Discharge Monitoring Report (DMR) required by provisions of our Groundwater Permit. This report was submitted electronically using eDEP on 3/21/05. The report was also sent in hard copy form to the Plymouth Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

ENV 2.05-007e

March 24, 2005

Stephen J. Bethay
Director, Nuclear Assessment

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for February 2005**

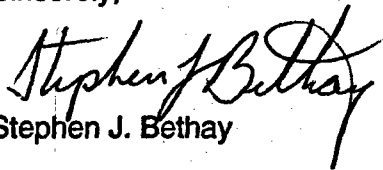
To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the February 2005 Groundwater Discharge Report in accordance with the subject permit. The effluent limit for total dissolved solids (TDS) of 1000 mg/l was exceeded by 200 mg/l. This was most likely a result of the infiltration of road salt into the system, which caused the influent TDS value to be equal to the permit limit. At the wastewater treatment plant, magnesium hydroxide is added for pH control, which resulted in the effluent TDS value exceeding the permit limit. The effluent limit for chloride (250 mg/l) was also exceeded. At the WWTP, the influent value for chloride was 270 mg/l, and since the WWTP is not designed for chloride removal, the effluent value was 260 mg/l. The high influent value for chloride is a further indicator of salt infiltration. In February, road salt was widely used at Pilgrim due to adverse weather conditions.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on March 21, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,


Stephen J. Bethay

JJS/dm

Enclosure: Pilgrim Nuclear Power Station's Monthly
Groundwater Discharge Report

cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 FEB MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

2/11/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Feb Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax Identification Number
2005 FEB MONTHLY
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	100	3.0	3.0
TSS MG/L	160	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	1000	1200	10
CHLORIDE MG/L	270	260	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax Identification Number
2005 FEB DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

2/11/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Feb Daily

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2005 FEB DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	4150					7.1		
2	5830					7.0		
3	1680					7.0		
4	3260					7.1		
5	2790					7.2		
6	200					7.2		
7	4850					7.2		
8	4620					7.1		
9	6150					7.1		
10	4980					7.1		
11	6020					7.0		
12	2860					7.0		
13	1470					7.0		
14	2290					7.0		
15	7980					7.0		
16	3740					7.0		
17	4930					7.1		
18	5600					7.1		
19	1380					7.1		
20	1950					7.0		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 FEB DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	870					7.0		
22	5260					7.0		
23	4980					7.2		
24	4570					7.1		
25	5280					7.2		
26	650					7.1		
27	1620					7.1		
28	4730					6.9		
29								
30								
31								



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax identification Number

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.

☐

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

1) THE EFFLUENT VALUES FOR BOD AND TSS LISTED ON THE DISCHARGE MONITORING REPORT FORM ARE ACTUALLY LESS THAN (<) THE DETECTION LIMIT.

2) IN FEBRUARY THE EFFLUENT VALUES FOR TOTAL DISSOLVED SOLIDS (TDS) AND CHLORIDE EXCEEDED PERMIT LIMITS.

THE INFLUENT VALUE FOR TDS WAS AT THE PERMIT LIMIT OF 1000 MG/L AND SINCE MGOH IS ADDED AT THE WWTP FOR PH CONTROL, THE EFFLUENT LIMIT WAS EXCEEDED BY 200 MG/L.

THE INFLUENT VALUE FOR CHLORIDE OF 270 MG/L EXCEEDED THE PERMIT OF 250 MG/L, AND SINCE THE WWTP IS NOT DESIGNED FOR CHLORIDE REMOVAL THE EFFLUENT CONCENTRATION OF 260 MG/L EXCEEDED THE PERMIT LIMIT.

WE BELIEVE THAT THE HIGH INFLUENT VALUES WERE CAUSED BY THE INFILTRATION OF ROAD SALT INTO THE SYSTEM. ROAD SALT WAS USED EXTENSIVELY AT THE FACILITY IN FEBRUARY DUE TO THE ADVERSE WEATHER CONDITIONS. PILGRIM HAS ATTEMPTED TO IMPROVE THE SEALS OF THE LIFT STATION COVERS.

THE PERMIT EXCEEDENCES WERE DISCUSSED WITH RICHARD RONDEAU OF DEP'S SOUTHEAST REGIONAL OFFICE ON MARCH 3, 2005.

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Signature

Ground Water Permit - 2 Form(s)

✓CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date **Next**[dep home](#) • [calendar](#) • [new additions](#) • [search](#) • [site map](#) • [privacy policy](#)
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Version 3.5.3.1

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 31847
Date and Time Submitted: 3/21/2005 1:42:20 PM
User Email : lmedeir@entergy.com

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Date and Time Submitted: 3/21/2005 1:42:20 PM
User Email : lmedeir@entergy.com

DEP Transaction ID: 31847
Date and Time Submitted: 3/21/2005 1:42:20 PM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1)
Daily Log Sheet(2005 FEB DAILY)
Form Name: Certification & Comments

**Environmental Protection
Correspondence Control Sheet**

Document # ENV2.05-005e

Date e-Submission: 2/24/05

Date of Letter: 2/25/05

Distribution

S. J. Bethay
R. Maher

V. Nutter (WPO)
J. J. Scheffer

J. J. Whalley
J. W. Egan

Title/Description: **Monthly Groundwater Permit DMR for January 2005
Electronic & Hard Copy Submission**

Summary: Submission of monthly Discharge Monitoring Report (DMR)
required by provisions of our Groundwater Permit. This
report was submitted electronically using eDEP on 2/24/05.
The report was also sent in hard copy form to the Plymouth
Board of Health

Lead Engineer: J. J. Scheffer

Action: None



Entergy Nuclear Operations, Inc.
Pilgrim Station
600 Rocky Hill Road
Plymouth, MA 02360

Stephen J. Bethay
Director, Nuclear Assessment

ENV 2.05-005e

February 25, 2005

Plymouth Board of Health
Plymouth Town Hall
11 Lincoln Street
Plymouth, MA 02360

**Re: Groundwater Discharge Permit SE #2-389
Discharge Report for January 2005**

To Whom It May Concern:

Entergy Nuclear Operations, Inc. hereby submits the January 2005 Groundwater Discharge Report in accordance with the subject permit. The effluent limit for total dissolved solids (TDS) of 1000 mg/l was exceeded by 100 mg/l. This was most likely a result of the infiltration of road salt into the system, which caused the influent TDS value to be equal to the permit limit. At the wastewater treatment plant, magnesium hydroxide is added for pH control, which resulted in the effluent TDS value exceeding the permit limit. In January, road salt was widely used at Pilgrim due to adverse weather conditions.

This report was submitted electronically to the MA Department of Environmental Protection using eDEP on February 24, 2005.

Should you have any questions regarding this report, please contact Mr. Jacob Scheffer (508-830-8323), or Mr. Joseph Egan (508-830-8915) of Pilgrim's Environmental Protection Group.

Sincerely,

A handwritten signature in black ink that reads "Stephen J. Bethay".
Stephen J. Bethay

JJS/dm

Enclosure: PNPS's Monthly Groundwater Discharge Report
cc: R. Rondeau, DEP SERO



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389
1. Permit Number
640900523
2. Tax identification Number
2005 JAN MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:
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cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/14/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES, INC.

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2005 Jan Monthly

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2005 JAN MONTHLY

3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND"
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
BOD MG/L	220	3.0	3.0
TSS MG/L	770	2.0	2.0
TOTAL DISSOLVED SOLIDS MG/L	1000	1100	10
CHLORIDE MG/L	220	230	5.0



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax identification Number

2005 JAN DAILY

3. Sampling Month & Frequency

A. Facility Information

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1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/14/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES, INC.

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2005 Jan Daily

☐ All forms for submittal have been completed.

- 2 ☐ This is the last selection.

- 3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389

1. Permit Number

640900523

2. Tax Identification Number

2005 JAN DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	2310					7.6		
2	1140					7.6		
3	5630					7.7		
4	4750					7.7		
5	4310					7.4		
6	7040					7.4		
7	3500					7.3		
8	1680					7.3		
9	1710					7.3		
10	5960					7.3		
11	5680					7.3		
12	6560					7.2		
13	5030					7.3		
14	5270					7.3		
15	1440					7.3		
16	1200					7.3		
17	5370					7.1		
18	6160					7.1		
19	2470					7.0		
20	4790					7.2		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

389
1. Permit Number
640900523
2. Tax identification Number
2005 JAN DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information (cont.)

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
21	5090					7.2		
22	910					7.3		
23	1700					7.3		
24	4520					7.3		
25	7830					7.3		
26	5530					7.1		
27	5500					7.0		
28	4750					7.1		
29	1000					7.1		
30	2580					7.1		
31	4900					7.1		



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

A. Facility Information

Important:
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cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/14/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES, INC.

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2004 Semi-Annual 2

☐ All forms for submittal have been completed.

2 ☐ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
ACETONE UG/L	NS	NS	NS
BENZENE UG/L	1	1	1
1,1 DICHLOROETHANE UG/L	1	1	1
1,2 DICHLOROETHANE UG/L	1	1	1
1,1 DICHLOROETHYLENE UG/L	1	1	1
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1
ETHYL BENZENE UG/L	1	1	1
METHYLENECHLORIDE UG/L	5	5	5
TOLUENE UG/L	34	1	1
O-XYLENE UG/L	NS	NS	NS
P/M XYLENE UG/L	NS	NS	NS
CARBON TETRACHLORIDE UG/L	1	1	1
CHLOROFORM UG/L	4	1	1
2-BUTANONE (MEK) UG/L	NS	NS	NS



Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS
TRICHLOROETHYLENE UG/L	1	1	1
TETRACHLOROETHYLENE UG/L	1	1	1
1,1,1 TRICHLOROETHANE UG/L	1	1	1
VINYLCHLORIDE UG/L	1	1	1
STYRENE UG/L	NS	NS	NS
CHLOROBENZENE UG/L	4	1	1
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS
CHLOROETHANE UG/L	10	10	10
1,2-DICHLOROPROPANE UG/L	1	1	1
DIBROMOCHLOROMETHANE UG/L	1	1	1
1,1,2-TRICHLOROETHANE UG/L	1	1	1
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2
BROMODICHLOROMETHANE UG/L	1	1	1
BROMOFORM UG/L	1	1	1



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DISCHARGE MONITORING REPORT

389

1. Permit Number

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2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

E. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.

1. Parameter/Contaminant Units	2. Influent	3. Effluent	4. Effluent Method Detection Limit
1,1,2,2-TETRACHLOROETHANE UG/L	1	1	1
CHLOROMETHANE UG/L	10	10	10
BROMOMETHANE UG/L	10	10	10
CARBONDISULFIDE UG/L	NS	NS	NS
2-HEXANONE UG/L	NS	NS	NS
ACROLEIN UG/L	NS	NS	NS
ACRYLONITRILE UG/L	NS	NS	NS
TRANS-1,3-DICHLOROPROPENE UG/L	1	1	1
CIS-1,3-DICHLOROPROPENE UG/L	1	1	1



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Facility name, address:

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

2. Contact information:

JACOB J. SCHEFFER

a. Name of Facility Contact Person

(508) 830-8323

b. Telephone Number

jscheff@entergy.com

c. e-mail address

3. Sampling information:

1/18/2005

a. Date Sampled (mm/dd/yyyy)

VARIOUS

c. Analysis Performed By (Name)

SAIC/R.I. ANALYTICAL LABORATORIES, INC.

b. Laboratory Name

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2004 Semi-Annual 2

☐ All forms for submittal have been completed.

2 ☒ This is the last selection.

3 ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax Identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- TNTC = too numerous to count.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant	3	5	6	5. Well #	6. Well #	7. Well #
Units	2. Well #	3. Well #	4. Well #			
PH	5.6	5.2	5.4			
S.U.						
TOTAL DISSOLVED SOLIDS	74	560	170			
MG/L						
AMMONIA-N	0.1	0.1	0.1			
MG/L						
NITRATE-N	1.2	2.5	2.8			
MG/L						
TOTAL NITROGEN(NO3+NO2+TKN)	1.2	2.5	2.8			
MG/L						
STATIC WATER LEVEL	45.9	64.0	65.2			
FEET						
SPECIFIC CONDUCTANCE	85	900	250			
UMHOS/C						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

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2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in µg/l.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
ACETONE UG/L	NS	NS	NS			
BENZENE UG/L	1	1	1			
1,1 DICHLOROETHANE UG/L	1	1	1			
1,2 DICHLOROETHANE UG/L	1	1	1			
1,1 DICHLOROETHYLENE UG/L	1	1	1			
CIS-1,2-DICHLOROETHYLENE UG/L	NS	NS	NS			
TRANS 1,2 DICHLOROETHYLENE UG/L	1	1	1			
ETHYL BENZENE UG/L	1	1	1			
METHYLENECHLORIDE UG/L	5	5	5			
TOLUENE UG/L	1	1	1			
O-XYLENE UG/L	NS	NS	NS			
P/M XYLENE UG/L	NS	NS	NS			
CARBON TETRACHLORIDE UG/L	1	1	1			
CHLOROFORM UG/L	2	3	1			
2-BUTANONE (MEK) UG/L	NS	NS	NS			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

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2004 SEMI-ANNUAL 2

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- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant Units	3 2. Well #	5 3. Well #	6 4. Well #	5. Well #	6. Well #	7. Well #
4-METHYL-2-PENTANONE (MIBK) UG/L	NS	NS	NS			
TRICHLOROETHYLENE UG/L	1	1	1			
TETRACHLOROETHYLENE UG/L	1	1	1			
1,1,1 TRICHLOROETHANE UG/L	1	1	1			
VINYLCHLORIDE UG/L	1	1	1			
STYRENE UG/L	NS	NS	NS			
CHLOROBENZENE UG/L	1	1	1			
METHYL TERTIARY BUTYL ETHER UG/L	NS	NS	NS			
CHLOROETHANE UG/L	10	10	10			
1,2-DICHLOROPROPANE UG/L	1	1	1			
DIBROMOCHLOROMETHANE UG/L	1	1	1			
1,1,2-TRICHLOROETHANE UG/L	1	1	1			
2-CHLOROETHYL VINYL ETHER UG/L	2	2	2			
BROMODICHLOROMETHANE UG/L	1	1	1			
BROMOFORM UG/L	1	1	1			



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

MONITORING WELL DATA REPORT

389

1. Permit Number

640900523

2. Tax identification Number

2004 SEMI-ANNUAL 2

3. Sampling Month & Frequency

D. VOC Analysis Information

- If VOCs are present, please indicate the amounts of the individual compounds in $\mu\text{g/l}$.
- For "0", below detection limit, or not detected, enter "ND".
- For greater than (>) or less than (<) value, enter number only and note greater than (>) or less than (<) in the Comments section.
- NS = Not Sampled.
- DRY = Not enough water in well to sample.

1. Parameter/Contaminant	3	5	6	5. Well #	6. Well #	7. Well #
Units	2. Well #	3. Well #	4. Well #			
1,1,2,2-TETRACHLOROETHANE	1	1	1			
UG/L						
CHLOROMETHANE	10	10	10			
UG/L						
BROMOMETHANE	10	10	10			
UG/L						
CARBONDISULFIDE	NS	NS	NS			
UG/L						
2-HEXANONE	NS	NS	NS			
UG/L						
ACROLEIN	NS	NS	NS			
UG/L						
ACRYLONITRILE	NS	NS	NS			
UG/L						
TRANS-1,3-DICHLOROPROPENE	1	1	1			
UG/L						
CIS-1,3-DICHLOROPROPENE	1	1	1			
UG/L						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

389

1. Permit Number

640900523

2. Tax Identification Number

Facility Information

PILGRIM POWER STATION

a. Name

ROCKY HILL ROAD

b. Street Address

PLYMOUTH

c. City

MA

d. State

02360

e. Zip Code

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



Any person
signing a
document
under 314 CMR
5.14(1) or (2)
shall make the
following
certification

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. Signature

b. Date (mm/dd/yyyy)

Reporting Package Comments

If you are filing
electronic-ally
and want to
attach
additional
comments,
select the
check box.

☐

A) THE JANUARY TOTAL DISSOLVED SOLIDS (TDS) EFFLUENT VALUE OF 1100 MG/L EXCEEDED THE PERMIT LIMIT OF 1000 MG/L. WE BELIEVE THAT THIS WAS THE RESULT OF INFILTRATION INTO THE SYSTEM OF ROAD SALT, WHICH WAS USED EXTENSIVELY IN JANUARY DUE TO ADVERSE WEATHER CONDITIONS. THE ELEVATED VALUE FOR CHLORIDE IS ALSO INDICATIVE THAT INFILTRATION MAY HAVE OCCURRED.

B) THE EFFLUENT VALUES FOR BOD AND TSS WERE BOTH LESS THAN (<) THE DETECTION LIMIT.

C) ALL INFLUENT AND EFFLUENT VOC VALUES ARE LESS THAN (<) THE DETECTION LIMIT EXCEPT FOR BENZENE, CHLOROFORM, TOLUENE AND CHLOROBENZENE.

D) THE FOLLOWING VOCs WERE ALSO ANALYZED, BUT WERE NOT LISTED ON FORM E:

- 1) TRICHLOROFLUOROMETHANE-INFLUENT & EFFLUENT BOTH <1 UG/L
- 2) DICHLOROBENZENES-INFLUENT=3 UG/L, EFFLUENT=1 UG/L
- 3) XYLENES-INFLUENT & EFFLUENT BOTH <1 UG/L

E) ON THE MONITORING WELL DATA REPORT-CONTAMINANT ANALYSIS INFORMATION FORM, ALL WELL VALUES FOR AMMONIA-N ARE <1 UG/L.

F) ON THE MONITORING WELL DATA REPORT-VOC ANALYSIS INFORMATION FORM, ALL VALUES LISTED SHOULD BE PRECEDED BY A LESS THAN (<) SIGN EXCEPT FOR CHLOROFORM.

G) THE FOLLOWING VOCs WERE ALSO ANALYZED BUT WERE NOT LISTED ON THE MONITORING WELL DATA REPORT FORM:

- 1) TRICHLOROFLUOROMETHANE-<1 UG/L ALL WELLS
- 2) DICHLOROBENZENES-<1 UG/L ALL WELLS
- 3) XYLENES-<1 UG/L ALL WELLS

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Signature

Ground Water Permit - 4 Form(s)

✓CERTIFICATION OF PERSON MAKING SUBMITTAL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By entering my name I acknowledge that I have read and agree with the certification statement.

NAME Date **Next**[dep home](#) • [calendar](#) • [new additions](#) • [search](#) • [site map](#) • [privacy policy](#)
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Version 3.5.3.1

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 29828
Date and Time Submitted: 2/24/2005 8:20:38 AM
User Email : lmedeir@entergy.com

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Date and Time Submitted: 2/24/2005 8:20:38 AM
User Email : lmedeir@entergy.com

Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Form Name: Ground Water Permit

Facility Information:
Tax Identification Number: 640900523
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Facility Information:
Tax Identification Number: 640900523
location: ROCKY HILL ROAD
Address: PLYMOUTH
ZIP: 02360
Discharge Monitoring Report(1)
Discharge Monitoring Report - VOC(2)
Discharge Monitoring Report - VOC(3)
Discharge Monitoring Report - VOC(1)
Daily Log Sheet(2005 JAN DAILY)
Monitoring Well Data Report(1)
Monitoring Well Data Report - VOC(1)

Monitoring Well Data Report - VOC(2)
Monitoring Well Data Report - VOC(3)
Form Name: Certification & Comments

