

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 2 System ID: SAND DRAIN Examined: ☒ In Place  
☐ Removed

What is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote

## \* Photo See Remarks

☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 91"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts		X		Debris
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks: Light source integral to VideoscopeElectronic Video Record Retained in Records Management

Examiner: <u>Mike Griffin / Michael Sullivan</u>	Level <u>II</u>	Date <u>02/01/07</u>	<b>ISI Group Evaluation Required?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Initials: <u>TMG</u>
Examiner: <u>Dave King</u>	Level <u>III</u>	Date <u>02/01/07</u>	
Reviewer: <u>Wesley / F.T. Underkofler</u>	RI	Date <u>2/1/07</u>	
Remarks: <u>Little change from 1787</u>			

Experience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-001**

**Page 2 of 2**

#### **Supplemental Information**

**Comments for Sand Drain inspection at Bay #2**

1. No screen was evident at the end of the drain tubing. There was no obvious obstruction at the tube inlet.
2. Air flow was noted moving in the direction of the sand cushion.
3. Small stone type particle debris was noted in 10% to 15% of the tube length. While extensive, it does not appear that these obstructions would impede the flow of water that may come from the sand cushion area.
4. A tubing kink exists at 91" from the tubing inlet
5. A tubing joint was noted at 44" from the tubing inlet and appears to be functional.
6. Overall tube length is approximately 167"

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 4 System ID: SAND DRAIN Examined: ☒ In Place  
☐ Removed

What is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote

## \* Photo See Remarks

☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 87"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts			X	
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks: Light source integral to videoscope.Electronic Video Record Retained in Records ManagementExaminer: Mike Griffin / [Signature] Level II Date 02/01/07Examiner: Dave King / [Signature] Level III Date 02/01/07Reviewer: [Signature] / F.T. Underoffree RT Date 2/1/07Remarks: Water was observed in 1987

ISI Group  
Evaluation  
Required?

☐ Yes ☒ NoInitials: TMGExperience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-002**

**Page 2 of 2**

#### **Supplemental Information**

**Comments for Sand Drain inspection at Bay #4**

1. Screen intact with approximately 40% of the screen area clear.  
Approximately 60% of the screen area has sand or other deposit impingement.
2. Air flow noted in the direction of the sand cushion.
3. Kink noted at approximately 87" from the drain tube entry.
4. Minor debris noted including what appears to be a nail.
5. Joint at 49" from tube entry appears to be functional.
6. Overall tube length was not measured for this tube due to scaffold obstruction and radiation dose consideration.

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 6 System ID: SAND DRAIN Examined: ☒ In Place  
☐ Removed

What is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote

## \* Photo See Remarks

☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 88"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts			X	
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks: Light source integral to videoscopeElectronic Video Record Retained in Records ManagementExaminer: Mike Griffin / Michael Griffin Level II Date 02/01/07Examiner: Dave King / i Level III Date 02/01/07Reviewer: P.T. Underhill / P. T. Underhill RI Date 2/1/07Remarks: Little degradation 1987ISI Group  
Evaluation  
Required?☐ Yes ☒ NoInitials: MMGExperience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-003**

**Page 2 of 2**

#### **Supplemental Information**

**Comments for Sand Drain inspection at Bay #6**

1. Screen appears to be intact with sand and other deposit impingements noted over approximately 98% of the screen surface area.
2. Kink noted at approximately 88" from the tube entry.
3. Joint noted at approximately 42" from tube entry. Joint appears to be intact and functional.
4. Overall length of drain tube is approximately 162" from tube entry.
5. No conclusive air flow was noted in this tube.

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 8 System ID: SAND DRAIN Examined: ☒ In Place  
☐ Removed

What is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote

## \* Photo See Remarks

☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 96"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts			X	
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks:

light source integral to video scope  
Electronic Video Record Retained in Records Management

Examiner: Mike Griffin / Michael Griffin Level II Date 02/01/07  
 Examiner: Dave King / Dave King Level III Date 02/01/07  
 Reviewer: F. T. Underkofler / F. T. Underkofler RI Date 2/1/07  
 Remarks: Little change from 1987

ISI Group  
Evaluation  
Required?

☐ Yes ☒ No

Initials: TMGExperience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-004**

**Page 2 of 2**

#### **Supplemental Information**

Comments for Sand Drain inspection at Bay #8

1. Screen intact with approximately 40% of the surface area clear and approximately 60% included by sand or other deposits.
2. Kink noted at approximately 96" from tube entry.
3. Joint noted at 47" from tube entry. Joint appears to be intact and functional.
4. Overall length of tube is approximately 172" measured from tube entry.
5. No conclusive air flow was noted in this tube.



Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 10 System ID: SAND DRAIN Examined: ☒ In Place☐ RemovedWhat is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote

## \* Photo See Remarks

☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 94"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts			X	
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks:

light source integral to video scope  
Electronic Video Record Retained in Records Management

Examiner: <u>Mike Griffin / Michael Griffin</u>	Level <u>II</u>	Date <u>02/01/07</u>	ISI Group Evaluation Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Initials: <u>TMG</u>
Examiner: <u>Dave King / [Signature]</u>	Level <u>III</u>	Date <u>02/01/07</u>	
Reviewer: <u>F. T. [Signature]</u>	<u>RI</u>	Date <u>2/1/07</u>	
Remarks: <u>Little damage from 1987</u>			

Experience Hours Credit: 4.0

## Supplemental Report Sheet

### Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064

Code Programs NDE Report #: 07-005

Page 2 of 2

#### Supplemental Information

Comments for Sand Drain inspection at Bay #10

1. Screen appears to have a slight gap between the screen surface and the tube end. Screen is intact with approximately 98% of the screen surface area included by sand and other impinged material.
2. Kink noted at approximately 94" from tube entry.
3. Joint noted at 44" from tube entry. Joint has a significant gap in the coupling, but appears to be intact and functional.
4. Overall tube length is approximately 166".
5. No conclusive air flow was noted.

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 12 System ID: SAND DRAIN Examined: ☒ In Place☐ RemovedWhat is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe):

☐ Installed Lighting☒ Temporary Lighting\*

Remote Visual Examination Aids Used (Describe):

OLYMPUS FIBER SCOPE IPLEX MODEL

## Method

☐ Direct☒ Remote\* Photo *See Remarks*☐ None☐ Attached

## Sketch

☒ None☐ Attached

Indications	Acceptable	Recordable	N/A	Remarks/Observations
Cracks			X	
Physical Damage		X		Kink at 87"
Erosion/Corrosion			X	
Arc Strikes			X	
Loose Parts		X		light debris
Missing Parts			X	
Excessive Movement			X	
Alignment			X	
Clearances			X	
Thread Damage			X	
Loose Bolting			X	
Fractured Bolting			X	
Thread Engagement			X	
Evidence of Leakage			X	
Degraded Coatings			X	
Other (Explain)		X		See Attached

(\*) Remarks: light source integral to video scope  
Electronic Video Record Retained in Records Management

Examiner: Mike Griffin Level II Date 02/01/07  
 Examiner: Dave King Level II Date 02/01/07  
 Reviewer: F.T. Wood Date 2/1/07  
 Remarks: Little change from 087

ISI Group  
Evaluation  
Required?

☐ Yes ☒ No

Initials: TMGExperience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-006**

**Page 2 of 2**

#### **Supplemental Information**

Comments for Sand Drain inspection at Bay #12

1. Slight gap noted between the screen and tube end. Screen is intact with approximately 30% of the area clear and approximately 70% of the screen area included with sand and other impinged material.
2. Kink noted at approximately 87" from tube entry.
3. Minor debris noted.
4. Joint noted at 45" from tube entry. Joint has a gap but appears to be intact and functional.
5. Overall tube length is approximately 167".
6. Small air flow noted in direction of the sand cushion.

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 14 System ID: SAND DRAIN Examined: ☒ In Place☐ RemovedWhat is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe): Remote Visual Examination Aids Used (Describe):  
☐ Installed Lighting OLYMPUS FIBER SCOPE IPLEX MODEL  
☒ Temporary Lighting\*

Method		* Photo See Remarks		Sketch	
<input type="checkbox"/> Direct	<input checked="" type="checkbox"/> Remote	<input type="checkbox"/> None	<input type="checkbox"/> Attached	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Attached
Indications	Acceptable	Recordable	N/A	Remarks/Observations	
Cracks			X		
Physical Damage		X		Kink at 72" minor screen damage	
Erosion/Corrosion			X		
Arc Strikes			X		
Loose Parts		X		Debris / string	
Missing Parts			X		
Excessive Movement			X		
Alignment			X		
Clearances			X		
Thread Damage			X		
Loose Bolting			X		
Fractured Bolting			X		
Thread Engagement			X		
Evidence of Leakage			X		
Degraded Coatings			X		
Other (Explain)		X		See Attached	

(\*) Remarks: light source integral to video scope  
Electronic Video Record Retained in Records Management

Examiner: <u>Mike Griffin / Michael Griffin</u>	Level <u>II</u>	Date <u>02/01/07</u>	ISI Group Evaluation Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Initials: <u>TMG</u>
Examiner: <u>Dave King / Jeff King</u>	Level <u>III</u>	Date <u>02/01/07</u>	
Reviewer: <u>F. T. Vachon / Jeff King</u>	<u>RI</u>	Date <u>2/1/07</u>	
Remarks: <u>little change from 1987</u>			

Experience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-007**

**Page 2 of 2**

#### **Supplemental Information**

**Comments for Sand Drain inspection at Bay #14**

1. Screen intact and 100% clear. Minor damage to screen.
2. Minor debris noted.
3. Air flow noted in direction of sand cushion.
4. Kink noted at approximately 72" from tube entry.
5. Joint noted at approximately 47" from tube entry. Joint appears to be intact and functional.
6. Overall tube length is approximately 163".

Vermont Yankee  
Non-Code Internal Visual Examination  
Report Form for Components and Piping

Work Order No.: 51081726 01Drawing No/Rev.: G-191481 Rev 2Page 1 of 2 Date: 02/01/07

## Component and/or Piping

Component ID: Sand drain tube BAY 16 System ID: SAND DRAIN Examined: ☒ In Place  
☐ Removed  
What is Being Examined: SAND DRAIN TUBE INTERNALS

## Visual Aids

Light Source (Describe): ☐ Installed Lighting Remote Visual Examination Aids Used (Describe):  
☒ Temporary Lighting\* OLYMPUS FIBER SCOPE IPLEX MODEL

Method		* Photo See Remarks		Sketch	
<input type="checkbox"/> Direct	<input checked="" type="checkbox"/> Remote	<input type="checkbox"/> None	<input type="checkbox"/> Attached	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Attached
Indications	Acceptable	Recordable	N/A	Remarks/Observations	
Cracks			X		
Physical Damage		X		Kink at 93"	
Erosion/Corrosion			X		
Arc Strikes			X		
Loose Parts			X		
Missing Parts			X		
Excessive Movement			X		
Alignment			X		
Clearances			X		
Thread Damage			X		
Loose Bolting			X		
Fractured Bolting			X		
Thread Engagement			X		
Evidence of Leakage			X		
Degraded Coatings			X		
Other (Explain)		X		See Attached	
(*) Remarks: <u>light source integral to Video Scope</u> <u>Electronic Video Record Retained in Records Management</u>					

Examiner: <u>Mike Griffin / Michael Griffin</u>	Level <u>II</u>	Date <u>02/01/07</u>	ISI Group Evaluation Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Initials: <u>TMG</u>
Examiner: <u>Dave King / [Signature]</u>	Level <u>III</u>	Date <u>02/01/07</u>	
Reviewer: <u>F.T. [Signature]</u>	<u>RI</u>	Date <u>2/1/07</u>	
Remarks: <u>Water was secured in 1987</u>			

Experience Hours Credit: 4.0

## **Supplemental Report Sheet**

### **Vermont Yankee Non-Code Internal Visual Examination Procedure NE 8064**

**Code Programs NDE Report #: 07-008**

**Page 2 of 2**

#### **Supplemental Information**

Comments for Sand Drain inspection at Bay #16

1. Screen intact approximately 80% clear and approximately 20% included by impinged material.
2. Double kink noted at approximately 93" from tube entry.
3. Air flow noted in the direction of the sand cushion.
4. Joint at approximately 48" from tube entry. Joint appears to have a slight gap but otherwise intact and functional.
5. Overall tube length is approximately 164".