

**Lead Craft:**

**PM No.:** PD-BLM-07ID

**Job Plan Descr:** BEAMLIN MECHANICAL UTILITIES MAINTENANCE

<b>Request Date:</b> 11/01/2017	<b>Work Order Type:</b> PM
<b>Group Leader:</b> John Gosman <b>Ext.:</b> 7832 <b>Cell:</b> 631/680-5487	<b>Work Planning:</b> Worker Planned Work
<b>Technical Supervisor:</b> Rich Iaccarino <b>Ext.:</b> 5262 <b>Cell:</b> 631/278-6603	<b>Work Order Status:</b> In Progress (INPRG)
<b>Engineer:</b> Themann, William O <b>Ext.:</b> 5377 <b>Cell:</b> 631/960-6523	<b>Actual Finish Date:</b>
<b>Scheduled Start Date:</b> 12/07/2017	<b>Priority:</b> 0
<b>Scheduled Finish Date:</b> 12/07/2017	

**Asset No.:**

**Asset Description:**

**Complex:**

**Location:** 0740-FIRST-P3-7-ID

**Location Description:** NSLS II - SST BEAMLIN

**Services:**

**Attachments:** N

**Manufacturer:**

**Serial No.:**

**Model No.:**

**Department:**

**Activity-Project:** 20472-21468

**BNL Delivery Bldg.:**

Equipment Notes:



# Utilities PM Work Order (PM Route)

Work Order No. PS101320

**Job Plan No:** BL-001

**Job Plan Descr:** BEAMLINE MECHANICAL UTILITIES  
MAINTENANCE

**Frequency:** 6 MONTHS

**Status:** ACTIVE

**Revision:** 2

**Technically Reviewed:** [ YES ]

**Job Plan Instructions**

**Task**      Summary /  
                 Long Descr

10

## ***Beamline Mechanical Utilities Preventative Maintenance Job Plan***

Technician WD THEMANN Life # 19656 Date 12/2/17

**CHECK UTILITIES PM WORK ORDER FOR ASSET LIST OF EQUIPMENT EFFECTED BY THIS JOB PLAN PRIOR TO STARTING THE WORK**

**VALVES:**

Visually inspect all manual and motorized valves of the DI water system, the compressed air system, the high capacity compressed air system, the gaseous nitrogen system, and the process chilled water system by observing the stem, packing nut, and connection fittings for any leakage.

Contact the Mechanical Utilities Technical Supervisor to resolve any leaks.

Note the BNL Tag ID of the valve(s) and briefly describe the resolution in the Comments Section below.

*Comments:*

---

---

---

**AUTO AIR-VENTS:**

Visually inspect all auto-air vents on the process chilled water supply system for leaks by observing the vent head and connection fittings.

Contact the Mechanical Utilities Technical Supervisor to resolve any leaks.

Note the BNL Tag ID of the valve(s) and briefly describe the resolution in the Comments Section below.

*Comments:*

---

---

---

**DI WATER FILTERS:**

Record the upstream and downstream line pressure of the DI water supply and return filters by noting the gauge pressures below.

*DI Water Supply Filter*

Task      Summary /  
Long Descr

Upstream: 84 PSIG      -1007  
Downstream: 80 PSIG

DI Water Return Filter

Upstream: ~~40-38~~ PSIG      -1081  
Downstream: 36 PSIG

Change the filter cartridge(s) if the difference in the upstream and downstream line pressure of either filter exceeds 4 PSID.

\_\_\_\_\_ Check here if a filter cartridge was changed out and record the new pressures.

DI Water Supply Filter

Upstream: \_\_\_\_\_ PSIG  
Downstream: \_\_\_\_\_ PSIG

DI Water Return Filter

Upstream: \_\_\_\_\_ PSIG  
Downstream: \_\_\_\_\_ PSIG

**COMPRESSED AIR FILTERS:**

Record the upstream and downstream line pressure of the compressed air system filter/regulator(s) by noting the gauge pressures below.

1/2" Compressed Air (INSIDE FOE) - 1172  
Upstream: 76 PSIG  
Downstream: 76 PSIG

1/2" Compressed Air (OTHER LOCATIONS IF REQUIRED) - 1186  
Upstream: 76 PSIG  
Downstream: 76 PSIG

High Capacity Compressed Air

Task      Summary /  
Long Descr

Upstream: 0 PSIG - 1408  
Downstream: 0 PSIG

Isolate the filter/regulator(s) and remove the filter bowl. Clean the filter bowl with a clean soft cloth. Examine the mesh filtering element for debris and clean as required. Replace the element and the bowl and return the filter/regulator(s) back to service at the pressures noted above.

**COMPRESSED AIR PRESSURE RELIEF VALVE(S):**

Using the test ring on top of the relief valve(s), test the valve(s) can exhaust line pressure when pulling the ring and the valve re-seats itself when the ring is released. Replace any relief valve(s) that does not re-seat itself when the test ring is released. Record the BNL Tag ID of any relief valve that was replaced below.

Pressure Relief Valve BNL Tag ID \_\_\_\_\_

**PROCESS CHILLED WATER SUPPLY STRAINERS:**

Use the blow down port or valve of each mesh strainer basket on the process chilled water supply system. Flush enough water out of the strainer to clear any debris that may be collected on the mesh basket.

**DI WATER SUPPLY AND PROCESS CHILLED WATER SUPPLY PRESSURE REGULATORS:**

Visually inspect each water pressure regulator to ensure it is functioning properly and is clear of leaks.

Comments:

---



---



---

**DI WATER SUPPLY AND PROCESS CHILLED WATER SUPPLY PRESSURE RELIEF VALVES:**

Visually inspect each water pressure relief valve to ensure it is clear of leaks and does not have any clogged discharge piping or drains.

Comments:

---



---



---

- 20 7IDA-CA-PRG-1172 7ID SST COMPRESSED AIR FILTER/REGULATOR COMBO
- 30 7IDF-PCHWR-AV-1349 7ID SST AUTO AIR VENT
- 40 7IDA-CUR-FL-1081 7ID SST DI WATER RETURN FILTER
- 50 7IDA-CUS-FL-1007 7ID SST DI WATER SUPPLY FILTER
- 60 7IDF-CA-PRG-1186 7ID SST COMPRESSED AIR FILTER/REGULATOR COMBO ✓
- 70 7IDF-CA-PRV-1189 7ID SST COMPRESSED AIR PRESSURE RELIEF VALVE ✓

<u>Task</u>	<u>Summary / Long Descr</u>
80	7IDF-PCHWR-AV-1310 7ID SST AUTO AIR VENT ✓
90	7IDF-PCHWR-AV-1317 7ID SST AUTO AIR VENT ✓
100	7IDF-PCHWR-AV-1336 7ID SST AUTO AIR VENT ✓
110	7IDF-PCHWS-STR-1264 7ID SST PCHW SUPPLY STRAINER ✓
120	7IDF-PCHWS-STR-1270 7ID SST PCHW SUPPLY STRAINER ✓
130	7IDF-PCHWS-STR-1287 7ID SST PCHW SUPPLY STRAINER ✓
140	7IDR-PCHWR-AV-1301 7ID SST AUTO AIR VENT ✓
150	7IDR-PCHWS-STR-1256 7ID SST PCHW SUPPLY STRAINER ✓
160	7IDF-PCHWS-STR-1213 7ID SST PCHW SUPPLY STRAINER ✓
170	7IDF-PCHWS-VLV-1265 7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1264 ✓
180	7IDF-PCHWS-VLV-1271 7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1270 ✓
190	7IDF-PCHWS-VLV-1288 7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1287 ✓
200	7IDF-PCHWS-VLV-1247 7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1213 ✓
210	7IDR-PCHWS-VLV-1257 7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1256 ✓
220	7IDA-CA-PRV-1173 7ID SST COMPRESSED AIR PRESSURE RELIEF VALVE —

HCA  
- 1468  
NOT ON  
ROUTE

**Asset List:**

<b>Asset No.:</b>	7IDF-PCHWS-VLV-1288	<b>Manufacturer:</b>	
<b>Asset Description:</b>	7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1287	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	
<b>Location:</b>	0740-FIRST-P3-7-ID	<b>Department:</b>	
<b>Location Description:</b>	NSLS II - SST BEAMLIN		
<b>Services:</b>			

**Equipment Notes:**

**Job Plan Complete:** Yes / No

**Asset Comments:**

---

<b>Asset No.:</b>	7IDF-PCHWS-VLV-1271	<b>Manufacturer:</b>	
<b>Asset Description:</b>	7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1270	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	
<b>Location:</b>	0740-FIRST-P3-7-ID	<b>Department:</b>	
<b>Location Description:</b>	NSLS II - SST BEAMLIN		
<b>Services:</b>			

**Equipment Notes:**

**Job Plan Complete:** Yes / No

**Asset Comments:**

---



Asset List:

Asset No.:	7IDF-PCHWR-AV-1349	Manufacturer:	SPIROTHERM
Asset Description:	7ID SST AUTO AIR VENT	Serial No.:	
Complex:		Model No.:	SPIROVENT VJ SERIES
Location:	0740-FIRST-P3-7-ID	Department:	
Location Description:	NSLS II - SST BEAMLIN		
Services:			

Equipment Notes:

INLINE & HORIZONTAL

Job Plan Complete: Yes / No

Asset Comments:

---

Asset No.:	7IDA-CUR-FL-1081	Manufacturer:	FILTERSOURCE
Asset Description:	7ID SST DI WATER RETURN FILTER	Serial No.:	
Complex:		Model No.:	OMG-20C-1
Location:		Department:	
Location Description:			
Services:			

Equipment Notes:

1 MICRON FILTER

Job Plan Complete: Yes / No

Asset Comments:

---

Asset No.:	7IDA-CUS-FL-1007	Manufacturer:	FILTERSOURCE
Asset Description:	7ID SST DI WATER SUPPLY FILTER	Serial No.:	
Complex:		Model No.:	OMG-20C-1
Location:		Department:	
Location Description:			
Services:			

Equipment Notes:

1 MICRON FILTER

Job Plan Complete: Yes / No

Asset Comments:

---

Asset List:

<b>Asset No.:</b>	7IDF-CA-PRG-1186	<b>Manufacturer:</b>	PARKER
<b>Asset Description:</b>	7ID SST COMPRESSED AIR FILTER/ REGULATOR COMBO	<b>Serial No.:</b>	TAGGED: 7IDR-CA-FL-1186 ON ROOF
<b>Complex:</b>		<b>Model No.:</b>	FB11-04WGC-SS
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

5 MICRON ELEMENT

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-CA-PRV-1189	<b>Manufacturer:</b>	KINGSTON
<b>Asset Description:</b>	7ID SST COMPRESSED AIR PRESSURE RELIEF VALVE	<b>Serial No.:</b>	TAGGED 7DR-CA-PRV-1189 ON ROOF
<b>Complex:</b>		<b>Model No.:</b>	MODEL 112CSS
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

85 PSIG SET PRESSURE

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWR-AV-1310	<b>Manufacturer:</b>	SPIROTHERM
<b>Asset Description:</b>	7ID SST AUTO AIR VENT	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	SPIROVENT VJ SERIES
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

INLINE & HORIZONTAL

Job Plan Complete: Yes / No

Asset Comments:

---

Asset List:

<b>Asset No.:</b>	7IDF-PCHWR-AV-1317	<b>Manufacturer:</b>	SPIROTHERM
<b>Asset Description:</b>	7ID SST AUTO AIR VENT	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	SPIROVENT VJ SERIES
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

INLINE & HORIZONTAL

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWR-AV-1336	<b>Manufacturer:</b>	SPIROTHERM
<b>Asset Description:</b>	7ID SST AUTO AIR VENT	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	SPIROVENT VJ SERIES
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

INLINE & HORIZONTAL

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWS-STR-1264	<b>Manufacturer:</b>	KECKLEY
<b>Asset Description:</b>	7ID SST PCHW SUPPLY STRAINER	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	STYLE E-150
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

20 MESH

Job Plan Complete: Yes / No

Asset Comments:

---

Asset List:

<b>Asset No.:</b>	7IDF-PCHWS-STR-1270	<b>Manufacturer:</b>	KECKLEY
<b>Asset Description:</b>	7ID SST PCHW SUPPLY STRAINER	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	STYLE E-150
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

20 MESH

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWS-STR-1287	<b>Manufacturer:</b>	KECKLEY
<b>Asset Description:</b>	7ID SST PCHW SUPPLY STRAINER	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	STYLE E-150
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

20 MESH

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDR-PCHWR-AV-1301	<b>Manufacturer:</b>	SPIROTHERM
<b>Asset Description:</b>	7ID SST AUTO AIR VENT	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	SPIROVENT VJ SERIES
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

INLINE & HORIZONTAL

Job Plan Complete: Yes / No

Asset Comments:

---

Asset List:

<b>Asset No.:</b>	7IDR-PCHWS-STR-1256	<b>Manufacturer:</b>	KECKLEY
<b>Asset Description:</b>	7ID SST PCHW SUPPLY STRAINER	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	STYLE E-150
<b>Location:</b>		<b>Department:</b>	
<b>Location Description:</b>			
<b>Services:</b>			

Equipment Notes:

20 MESH

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWS-STR-1213	<b>Manufacturer:</b>	KECKLEY
<b>Asset Description:</b>	7ID SST PCHW SUPPLY STRAINER	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	STYLE E-150
<b>Location:</b>	0740-FIRST-P3-7-ID	<b>Department:</b>	
<b>Location Description:</b>	NSLS II - SST BEAMLIN		
<b>Services:</b>			

Equipment Notes:

20 MESH

Job Plan Complete: Yes / No

Asset Comments:

---

<b>Asset No.:</b>	7IDF-PCHWS-VLV-1265	<b>Manufacturer:</b>	
<b>Asset Description:</b>	7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1264	<b>Serial No.:</b>	
<b>Complex:</b>		<b>Model No.:</b>	
<b>Location:</b>	0740-FIRST-P3-7-ID	<b>Department:</b>	
<b>Location Description:</b>	NSLS II - SST BEAMLIN		
<b>Services:</b>			

Equipment Notes:

Job Plan Complete: Yes / No

Asset Comments:

---

Asset List:

Asset No.:	7IDF-PCHWS-VLV-1247	Manufacturer:	
Asset Description:	7ID SST PCHW SUPPLY BLOWDOWN VALVE STR-1213	Serial No.:	
Complex:		Model No.:	
Location:	0740-FIRST-P3-7-ID	Department:	
Location Description:	NLS II - SST BEAMLIN		
Services:			

Equipment Notes:

Job Plan Complete: Yes / No

Asset Comments: \_\_\_\_\_

Check For BNL Asset ID# Tag and If Missing Note Below:

BNL Asset ID# Tag Missing: Yes / No

Comments:

*Hi cap - 1408 NOT ON ROUTE*

**Create Separate Work Order For Any Additional Work Required**

Work Order Created: Yes / No      Work Order No.: \_\_\_\_\_

**NOTE TO USER OF THIS PM WORK ORDER:** If this PM Work Order can be used to perform the PM but could be improved to better support the job, mark up the PM Work Order during or after the task so the PM Coordinator may incorporate changes to improve the PM the next time it is performed. This includes such changes as additional steps for clarification, additional data-taking steps and the order of the work steps.





**Utilities PM Work Order**  
*(PM Route)*

**Work Order No. PS101320**

**Worker** (only 1 signature required): \_\_\_\_\_

**Date:** \_\_\_\_\_

**Reviewed By:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Job Supervisor