

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, BLOWDOWN

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Minor shrinkage cracks in floor judged to be acceptable.*
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, BLOWDOWN

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Gap between panel and air start tank judged to be acceptable.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Overhead light fixtures judged to be acceptable.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

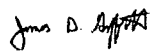
SEWS Anchorage Notes:

Two stanchion supports clamped to tank. One stanchion support is welded to the air receiver skid and other stanchion support is welded to a base plate which is anchored to the floor with four 3/8" CEA.

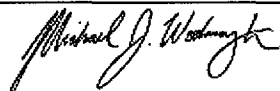
\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:

 James Griffith

Date: 10/16/2012



Michael Wodarczyk

10/16/2012

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, BLOWDOWN

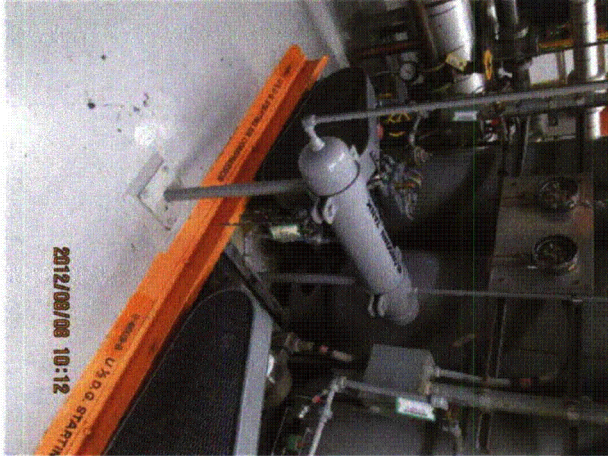
**Photos**



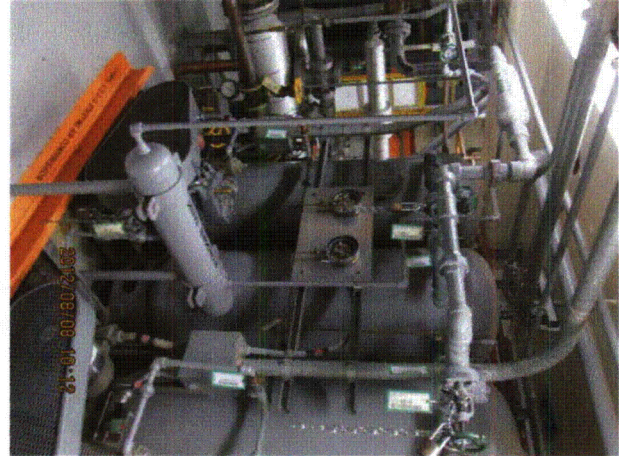
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20120808-QuadCities-2 153



20120808-QuadCities-2 154



20120808-QuadCities-2 155

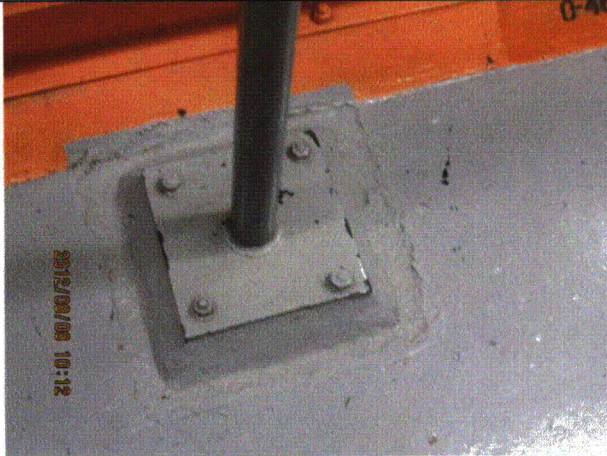
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

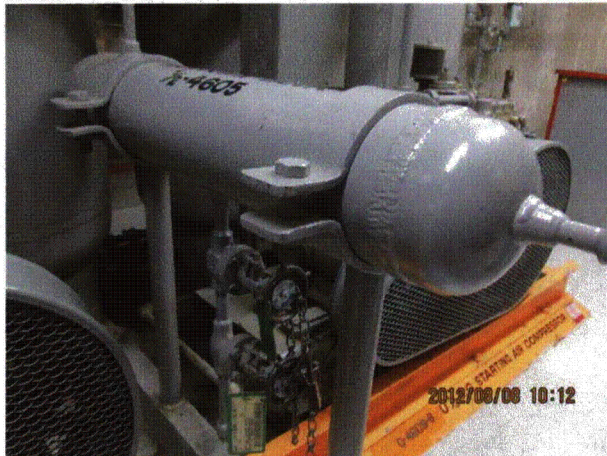
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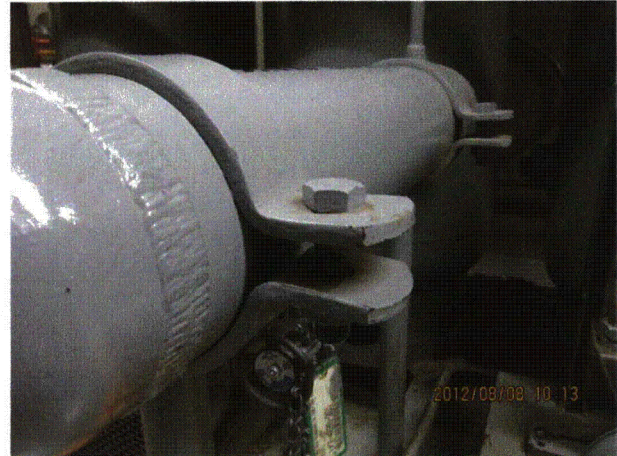
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20120808-QuadCities-2 158



20120808-QuadCities-2 159

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

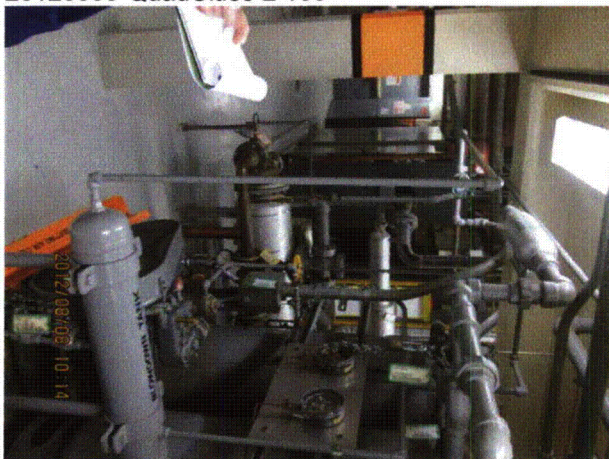
Equipment Description: TANK, BLOWDOWN



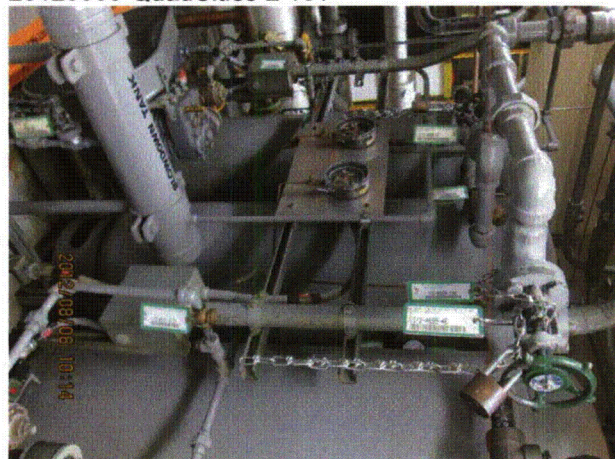
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20120808-QuadCities-2 162



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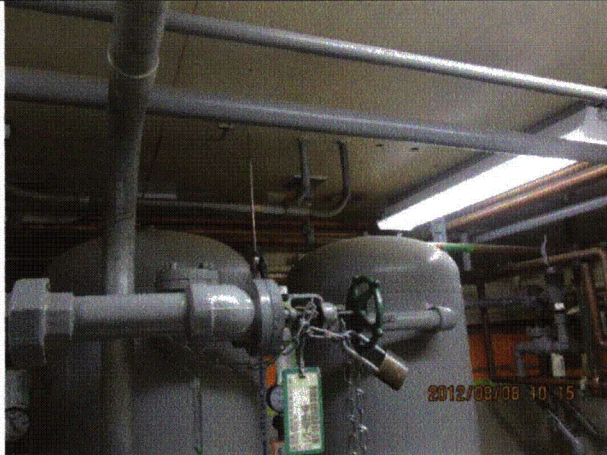
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

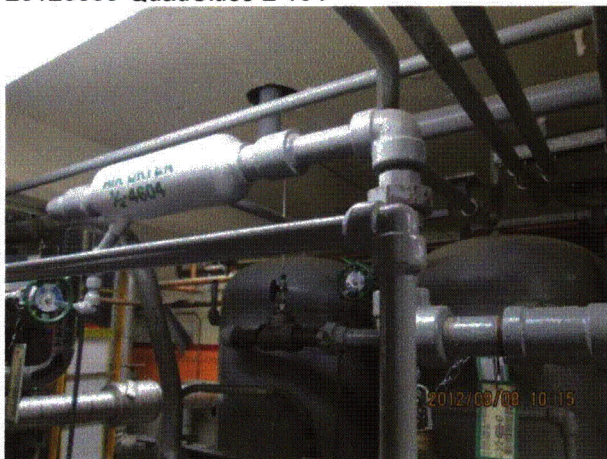
Equipment Description: TANK, BLOWDOWN



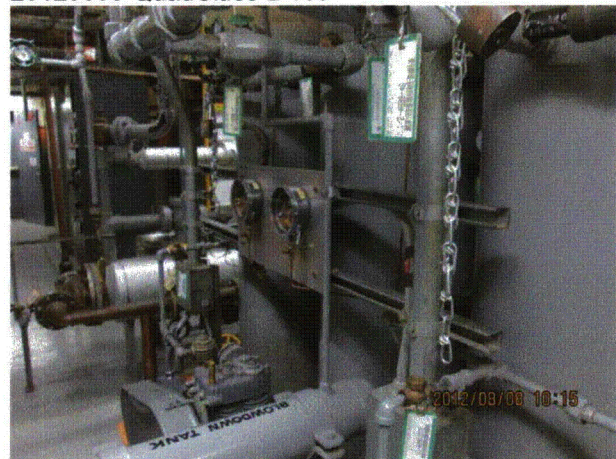
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20120808-QuadCities-2 166



20120808-QuadCities-2 167

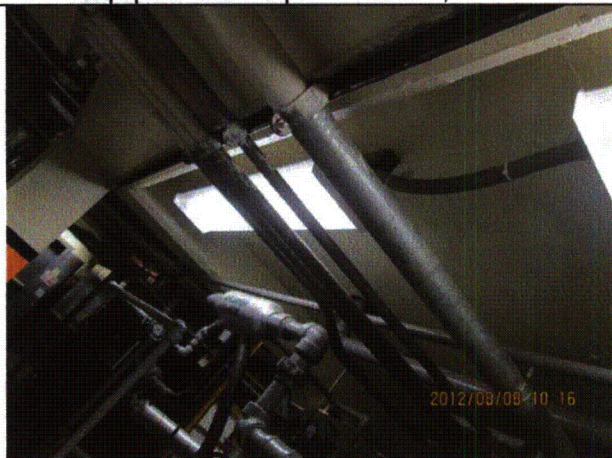
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

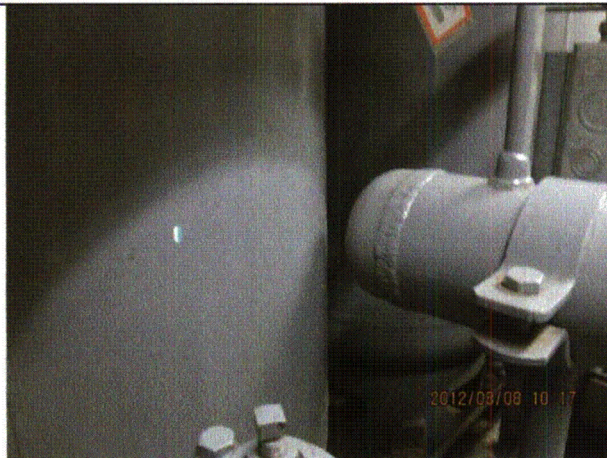
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Equipment Class: (21) Tanks and Heat Exchangers

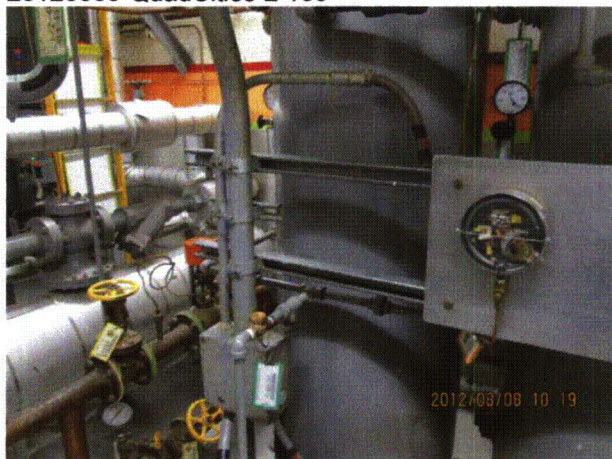
Equipment Description: TANK, BLOWDOWN



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20120808-QuadCities-2 171



20120808-QuadCities-2 172

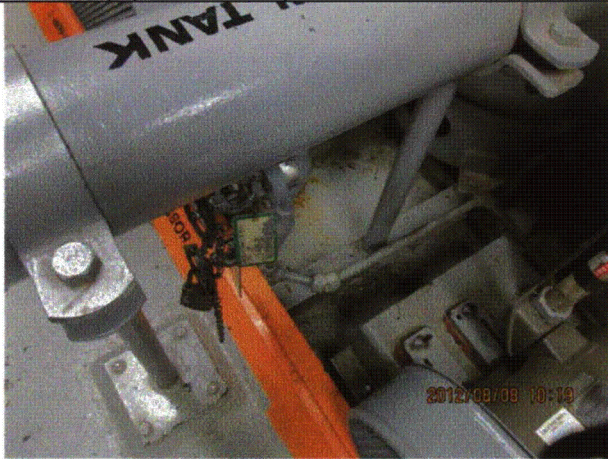
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4605

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, BLOWDOWN



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Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

- |  |                |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?  | No             |
| 2. Is the anchorage free of bent, broken, missing or loose hardware?   | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation?  | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?   | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  | Yes            |

**Interaction Effects**

- |   |     |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO

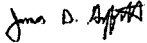
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead light fixtures judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

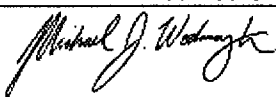
**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:  James Griffith Date: 10/16/2012

 Michael Wodarczyk 10/16/2012

Status:  Y  N  U

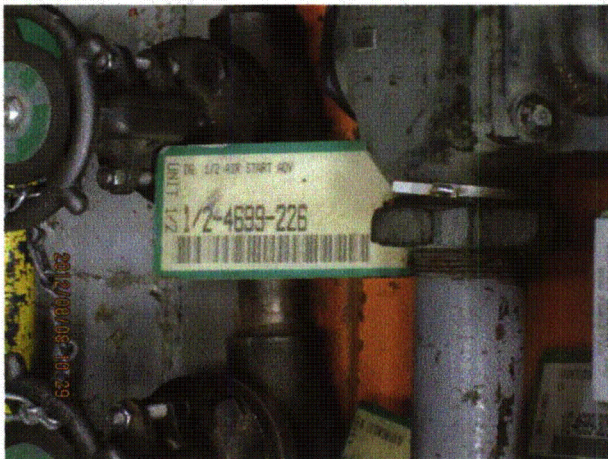
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4699-226

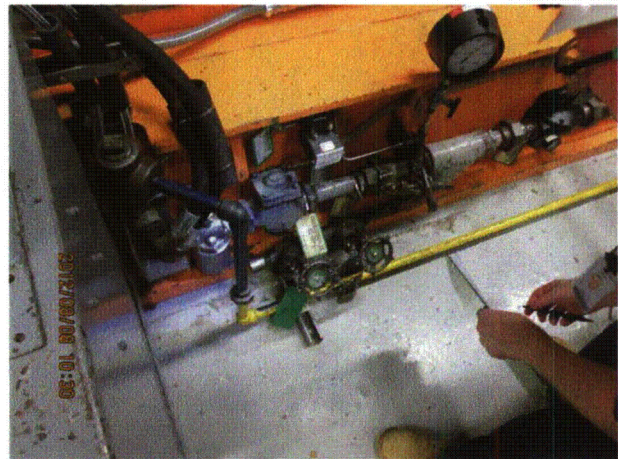
Equipment Class: (7) Fluid-Operated Valves

Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO

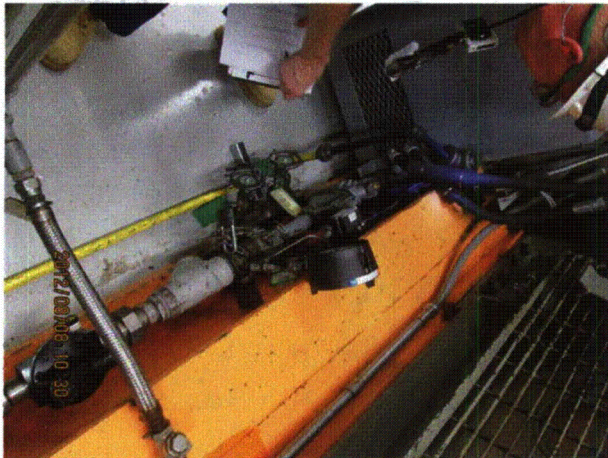
**Photos**



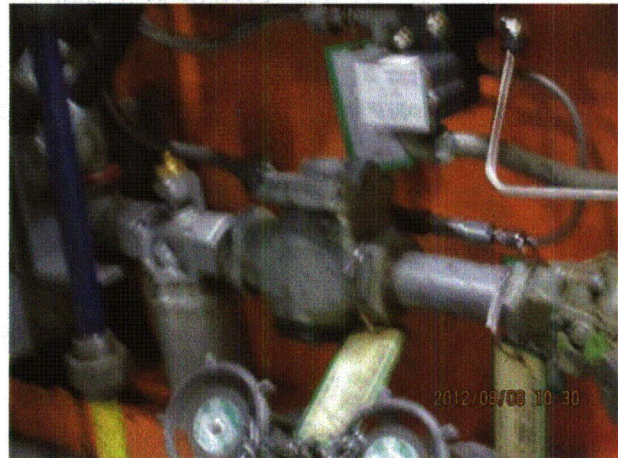
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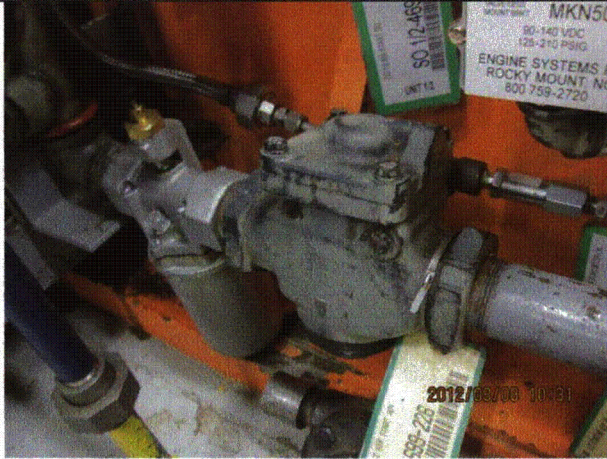
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

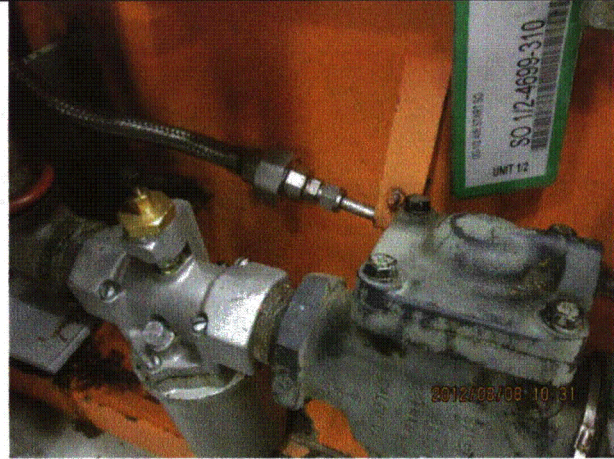
Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO



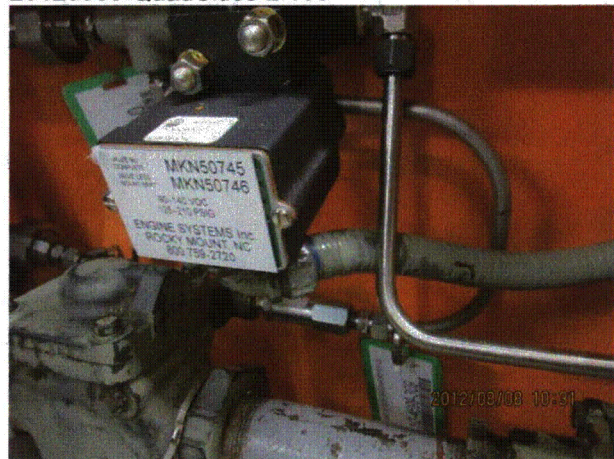
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20120808-QuadCities-2 197



20120808-QuadCities-2 198

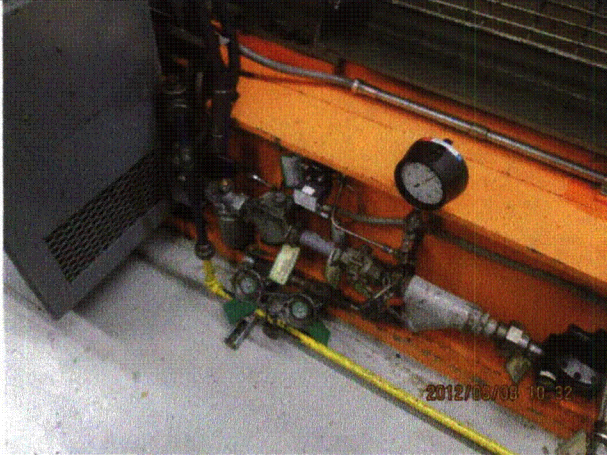
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

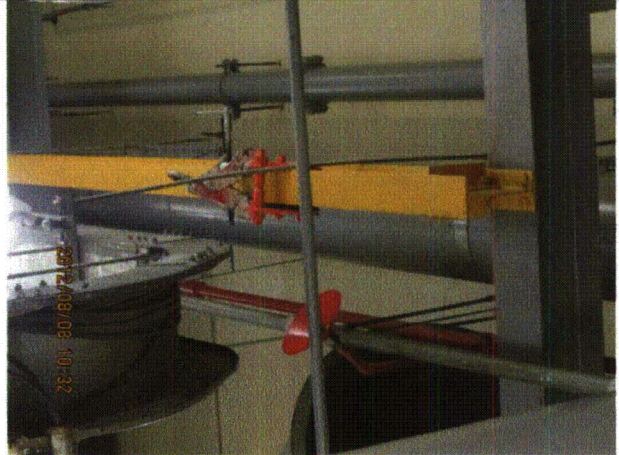
Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO



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20120808-QuadCities-2 202

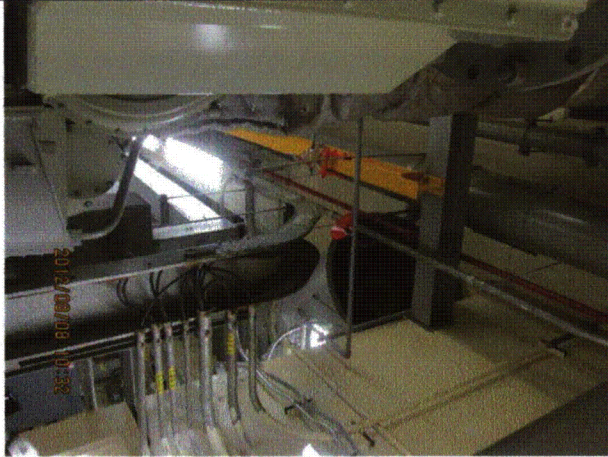
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

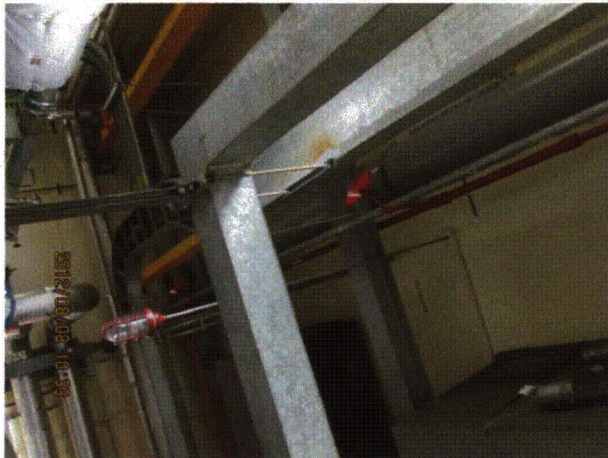
Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO



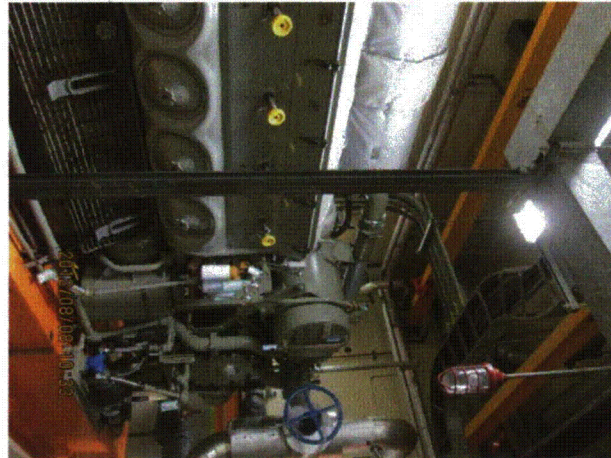
20120808-QuadCities-2 203



20120808-QuadCities-2 204



20120808-QuadCities-2 206



20120808-QuadCities-2 207

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

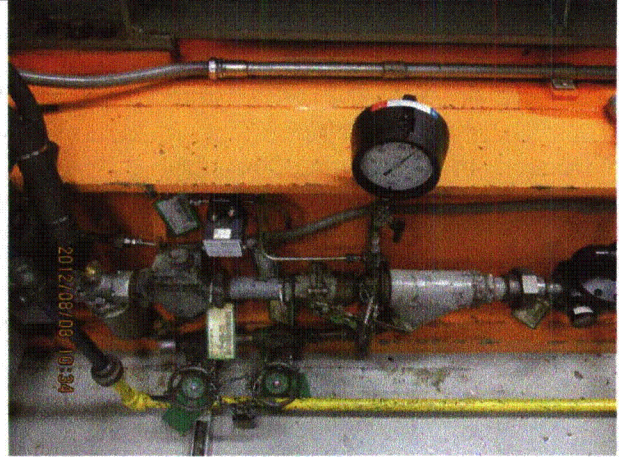
Equipment ID No.: 1/2-4699-226

Equipment Class: (7) Fluid-Operated Valves

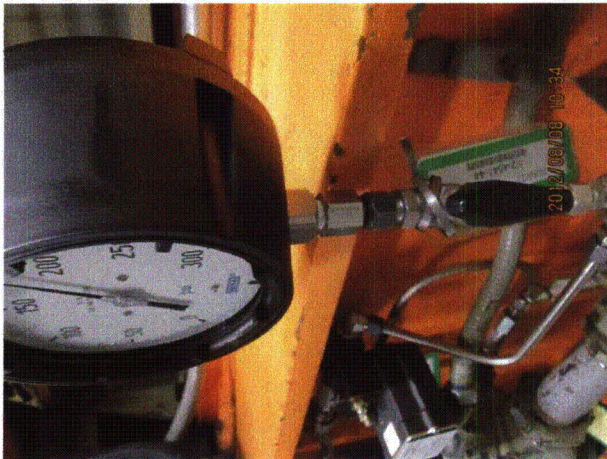
Equipment Description: VALVE, AIR START RELAY DG 1/2 AIR START AO



20120808-QuadCities-2 208



20120808-QuadCities-2 209



20120808-QuadCities-2 210

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Minor shrinkage cracks in floor judged to be acceptable.*
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes  
*Anchorage is shown on drawings B-203, Rev. T and B-204, Rev. Q.*  
*SQUG incorrectly identified anchorage. See IR 1402015.*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY

**Interaction Effects**

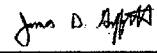
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead light fixtures judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

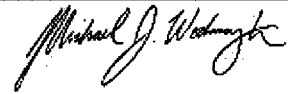
**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Small-diameter fire pipe in contact with tank. Pipe is flexible, tank is rigid. Judged to be acceptable.*

**Comments**

Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/8/2012

Evaluated by:  James Griffith Date: 10/4/2012

 Michael Wodarcyk 10/4/2012

Status:  Y  N  U

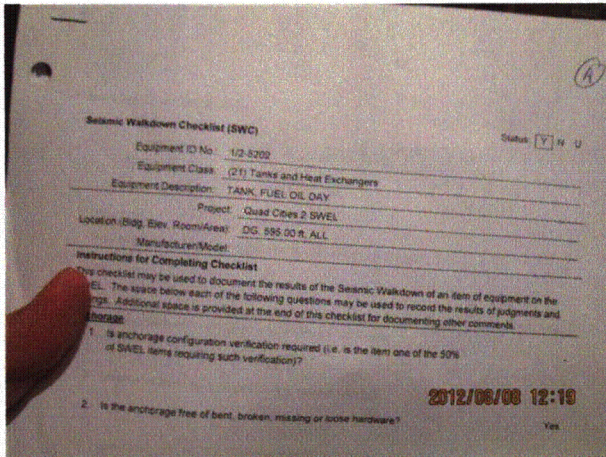
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY

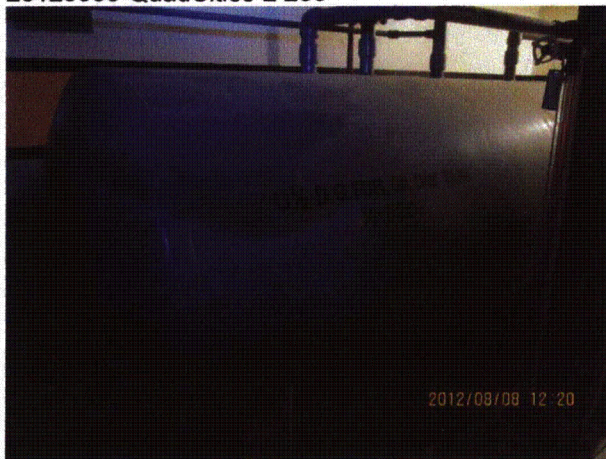
**Photos**



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20120808-QuadCities-2 232



20120808-QuadCities-2 233

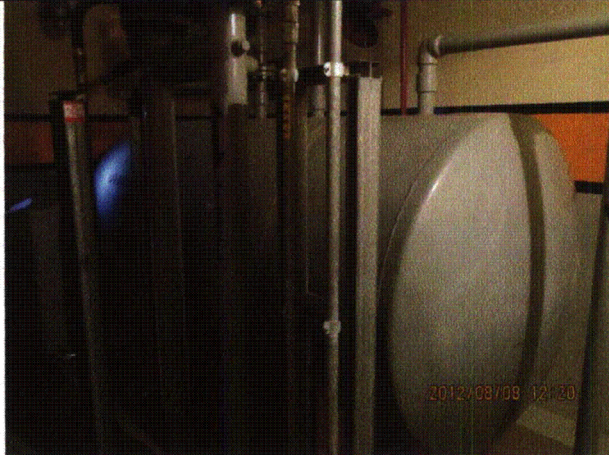
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



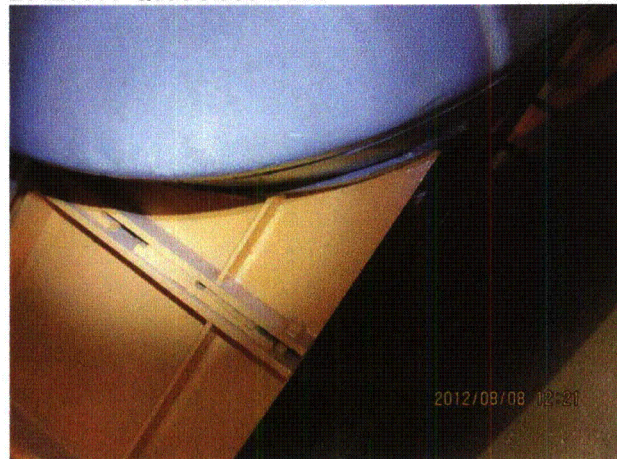
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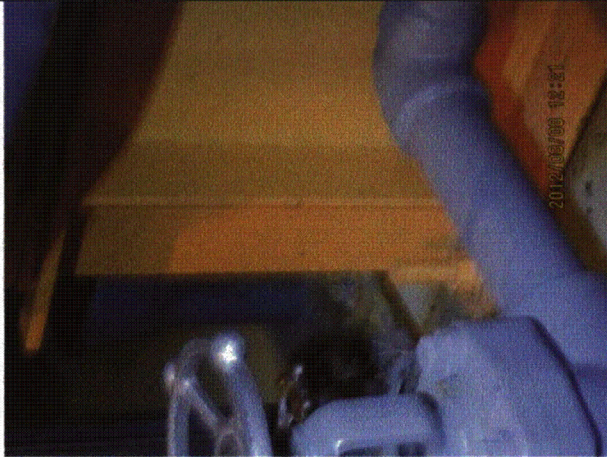
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**Seismic Walkdown Checklist (SWC)**

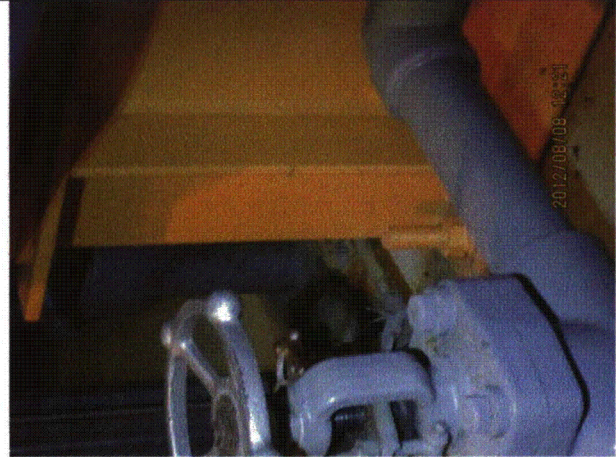
Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



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20120808-QuadCities-2 239



20120808-QuadCities-2 240



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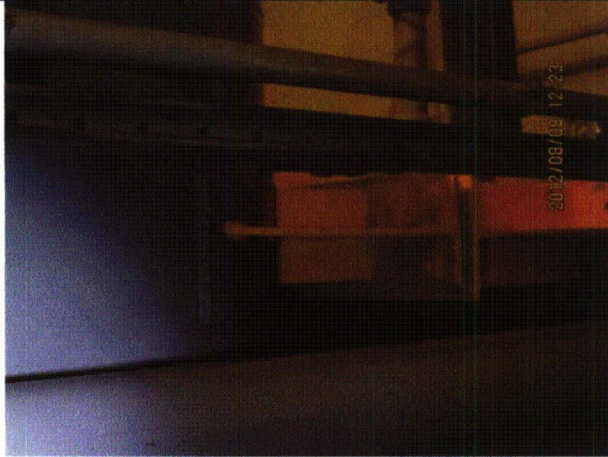
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**Seismic Walkdown Checklist (SWC)**

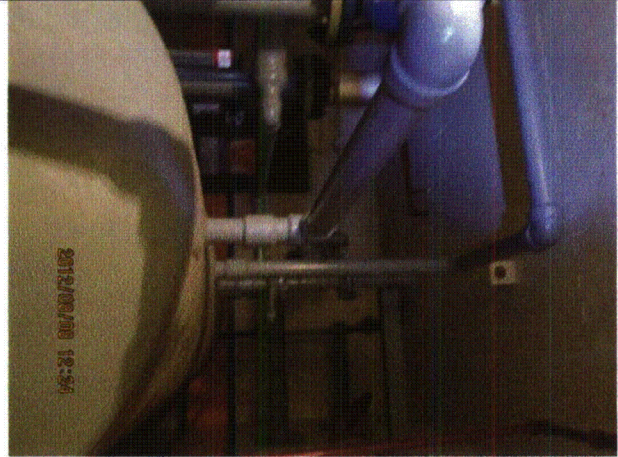
Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



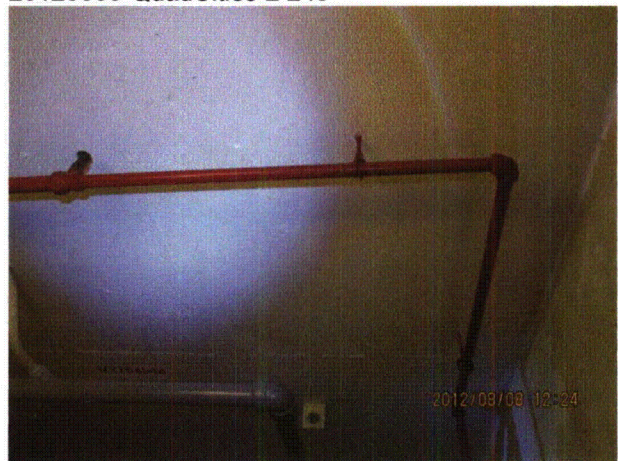
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20120808-QuadCities-2 243



20120808-QuadCities-2 244



20120808-QuadCities-2 245

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

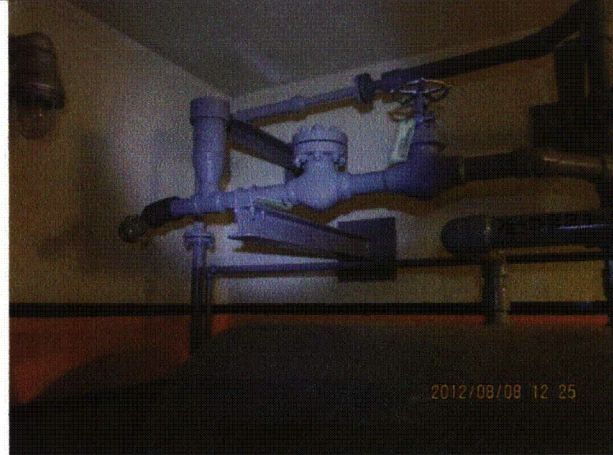
Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



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20120808-QuadCities-2 247



20120808-QuadCities-2 248



20120808-QuadCities-2 249

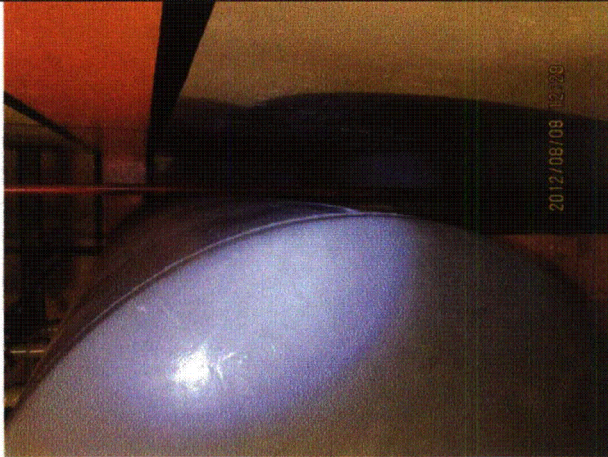
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

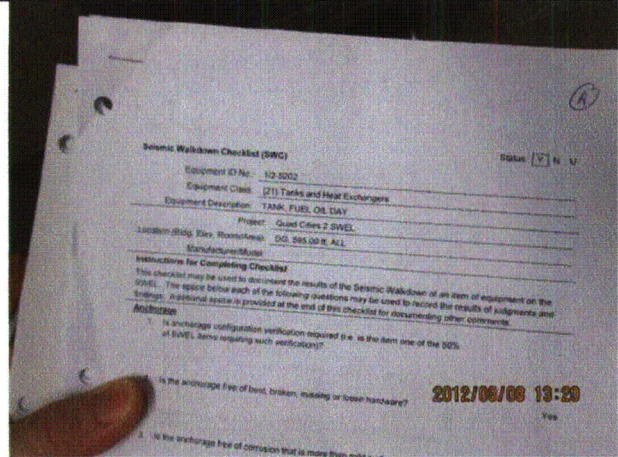
Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

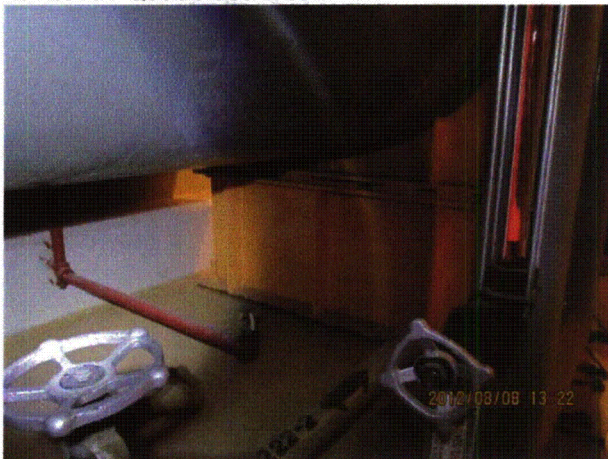
Equipment Description: TANK, FUEL OIL DAY



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20120808-QuadCities-2 315



20120808-QuadCities-2 316



20120808-QuadCities-2 317

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

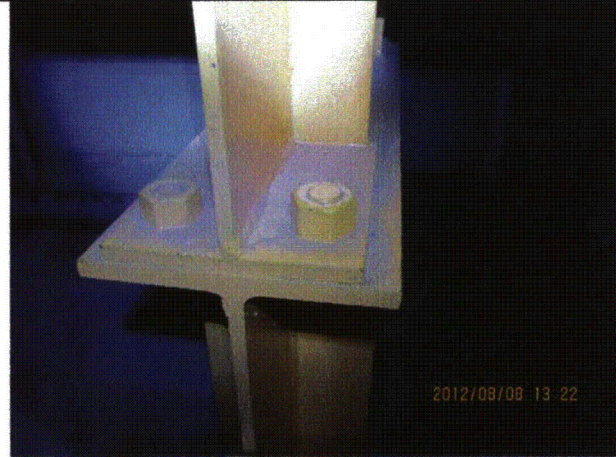
Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



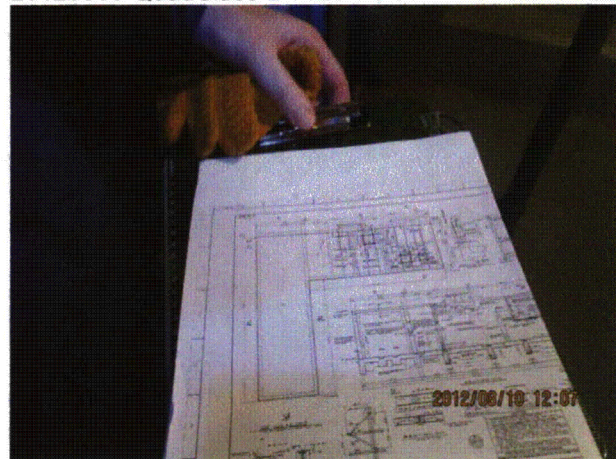
20120808-QuadCities-2 318



20120808-QuadCities-2 319



20120808-QuadCities-2 320



20120810-QuadCities-2 229



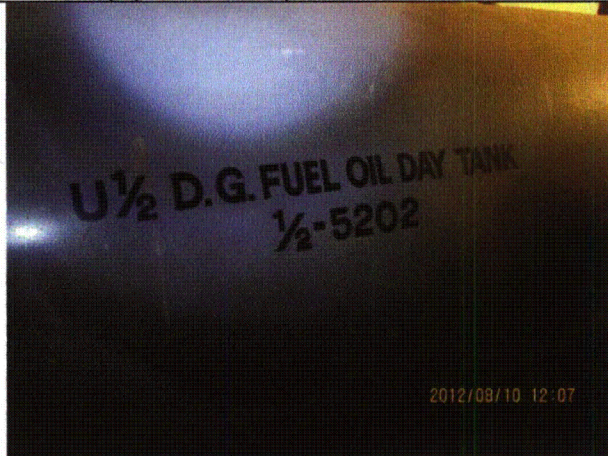
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5202

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: TANK, FUEL OIL DAY



20120810-QuadCities-2 230



20120810-QuadCities-2 231



20120810-QuadCities-2 232



20120810-QuadCities-2 233

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

Equipment Description: FEDG FUEL OIL TRANSFER PUMP

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Minor shrinkage cracks in floor judged to be acceptable.*
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

Equipment Description: FEDG FUEL OIL TRANSFER PUMP

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead light fixtures judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

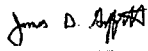
SEWS Anchorage Notes:

Small pump on a 27" long by 12" wide skid is anchored through a 2-1/2" high grout pad with four 1/2" CIP bolts.


\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:

 James Griffith

Date: 10/4/2012



Michael Wodarczyk

10/4/2012

Status:  Y  N  U

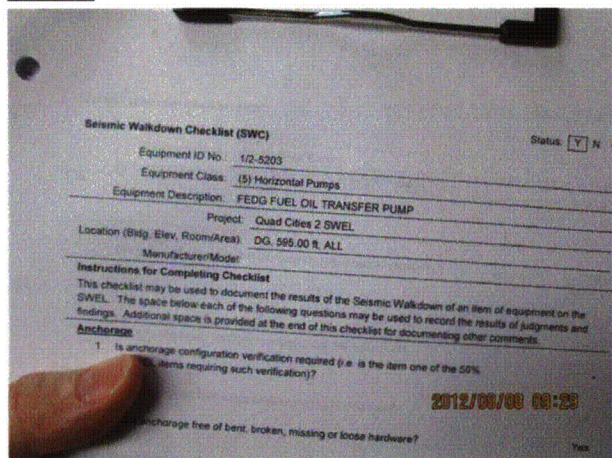
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

Equipment Description: FEDG FUEL OIL TRANSFER PUMP

**Photos**



20120808-QuadCities-2 085



20120808-QuadCities-2 086



20120808-QuadCities-2 087



20120808-QuadCities-2 088

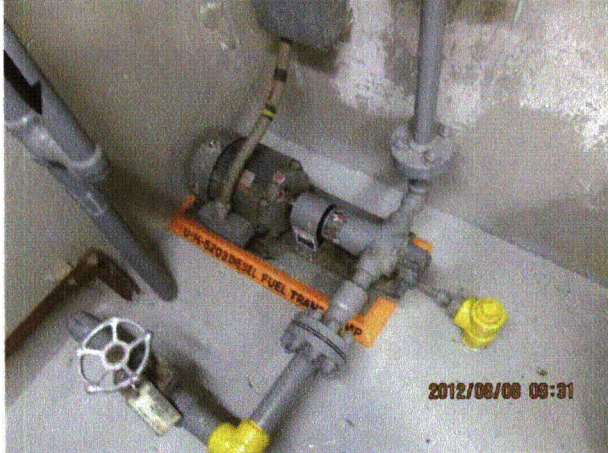
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

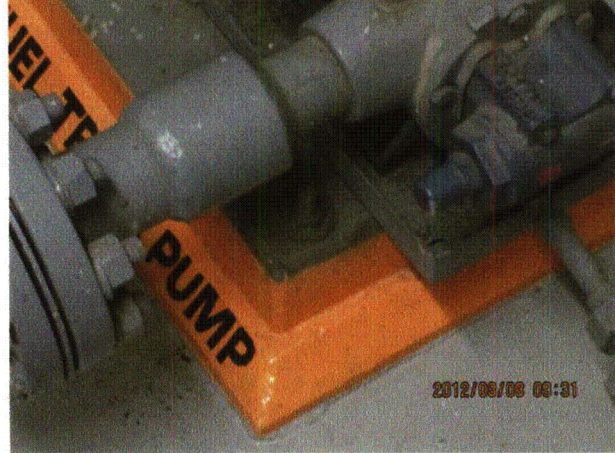
Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

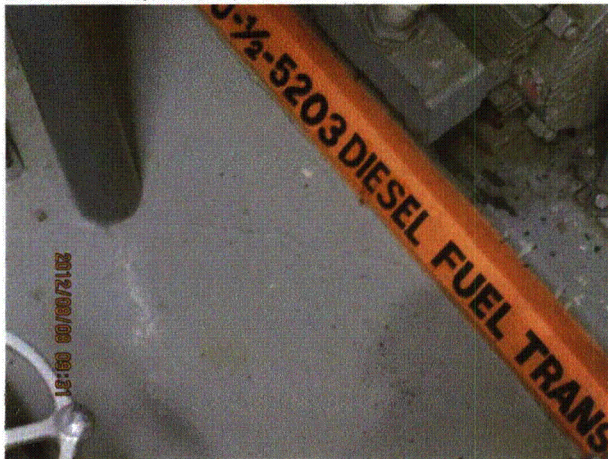
Equipment Description: FEDG FUEL OIL TRANSFER PUMP



20120808-QuadCities-2 089



20120808-QuadCities-2 090



20120808-QuadCities-2 091



20120808-QuadCities-2 092

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

Equipment Description: FEDG FUEL OIL TRANSFER PUMP



20120808-QuadCities-2 093



20120808-QuadCities-2 094



20120808-QuadCities-2 095



20120808-QuadCities-2 096

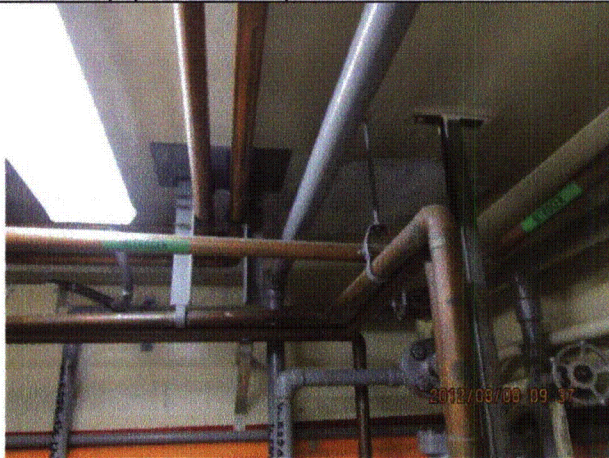
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

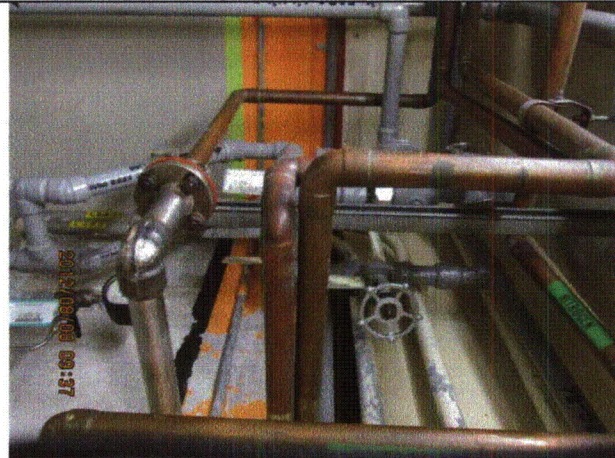
Equipment ID No.: 1/2-5203

Equipment Class: (5) Horizontal Pumps

Equipment Description: FEDG FUEL OIL TRANSFER PUMP



20120808-QuadCities-2 097



20120808-QuadCities-2 098

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Minor shrinkage cracks in ceiling judged to be acceptable.*
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead light fixtures judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

SEWS Anchorage Notes:

Fan within large duct supported by 4 rod hangers from ceiling. Fan also braced horizontally and has flexible joint at top.

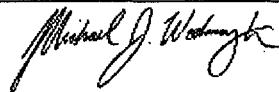
\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:

 James Griffith

Date: 10/4/2012



Michael Wodarczyk

10/4/2012

Status:  Y  N  U

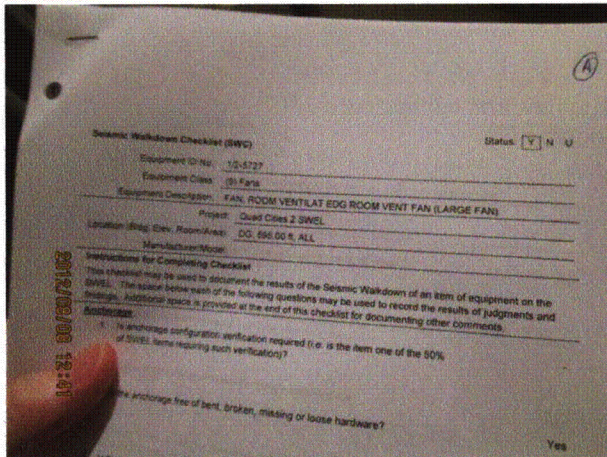
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)

**Photos**



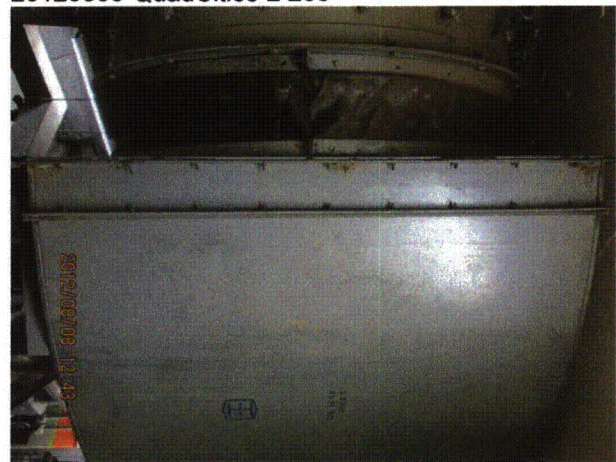
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20120808-QuadCities-2 256



20120808-QuadCities-2 257



20120808-QuadCities-2 258

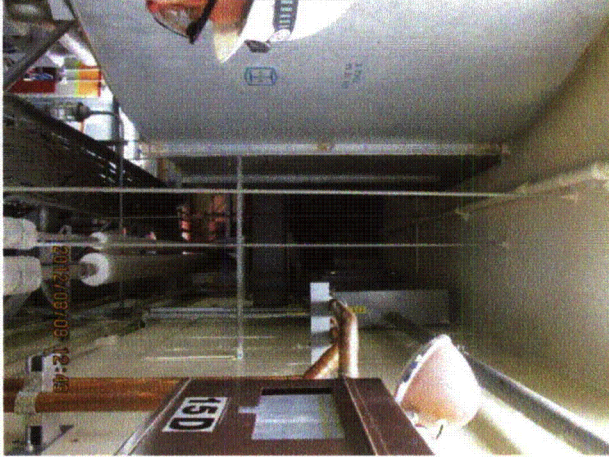
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

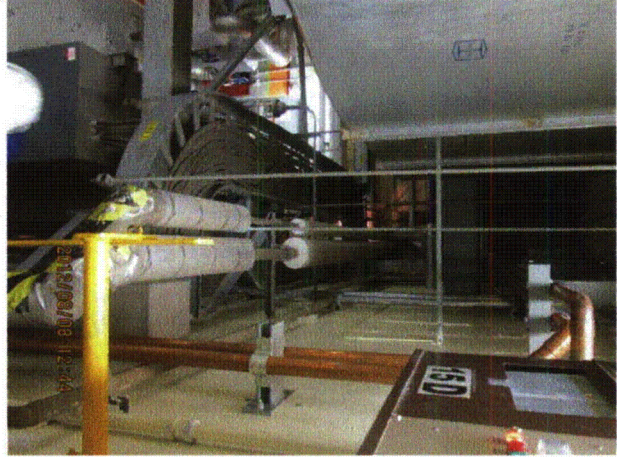
Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

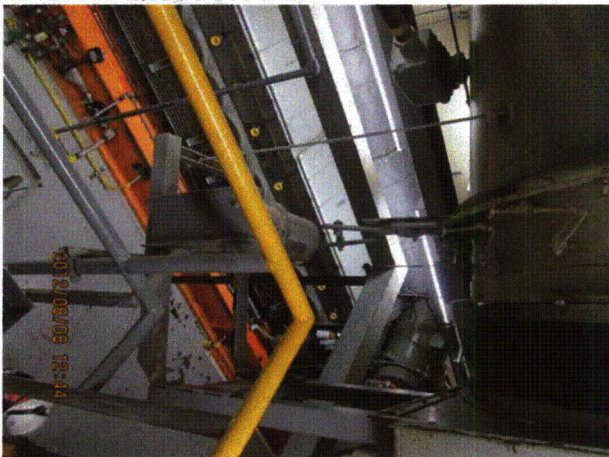
Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



20120808-QuadCities-2 259



20120808-QuadCities-2 260



20120808-QuadCities-2 261



20120808-QuadCities-2 262

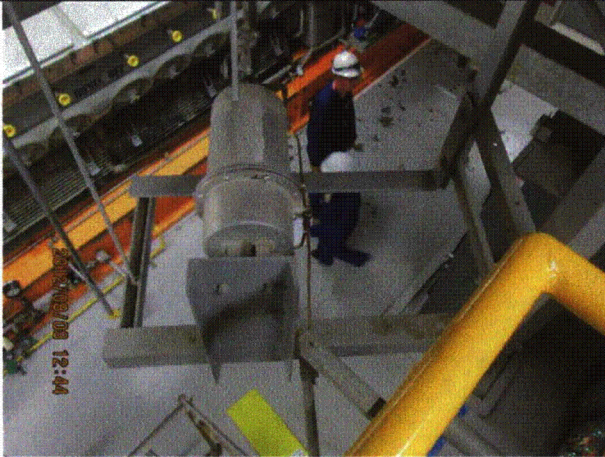
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



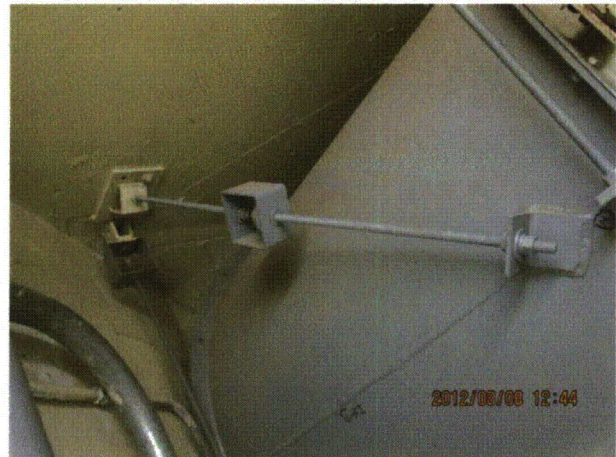
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20120808-QuadCities-2 264



20120808-QuadCities-2 265



20120808-QuadCities-2 266

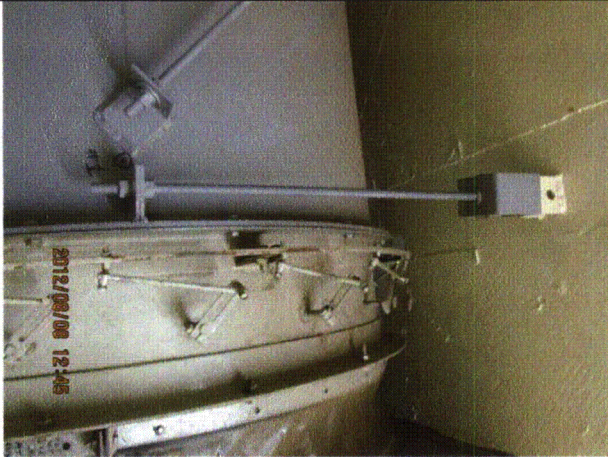
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



20120808-QuadCities-2 267



20120808-QuadCities-2 268



20120808-QuadCities-2 269



20120808-QuadCities-2 270

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



20120808-QuadCities-2 271



20120808-QuadCities-2 272



20120808-QuadCities-2 273



20120808-QuadCities-2 274

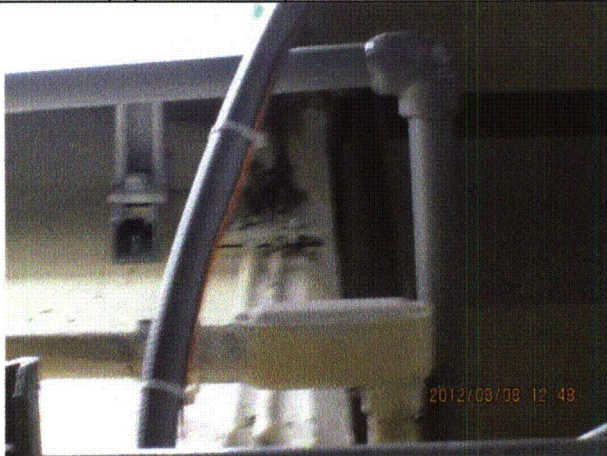
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

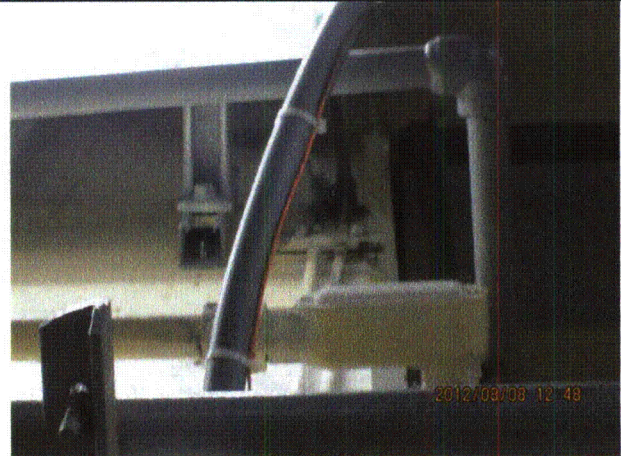
Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



20120808-QuadCities-2 275



20120808-QuadCities-2 276



20120808-QuadCities-2 277



20120808-QuadCities-2 278

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-5727

Equipment Class: (9) Fans

Equipment Description: FAN, ROOM VENTILAT EDG ROOM VENT FAN (LARGE FAN)



20120808-QuadCities-2 279



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

Equipment Description: DG, UNIT 1/2

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes  
*1 of 14 anchors is missing. Per Unit 1 enveloping anchorage analysis, minimum anchor safety factor for 14 anchor-configuration is greater than 9. Therefore, configuration with 1 anchor missing is judged to be acceptable. See IR 1398529.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Minor shrinkage cracks in floor judged to be acceptable.*
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

Equipment Description: DG, UNIT 1/2

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*All lighting fixtures well-supported. No masonry wall or lighting concerns.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Small number of hanger rods with minor bends judged to be acceptable.*

**Comments**

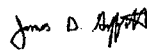
SEWS Anchorage Notes:

Anchored by 14 cast-in-place 1.25" diameter bolts.

\*\*\*\*\*

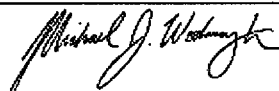
Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:



James Griffith

Date: 10/16/2012



Michael Wodarczyk

10/16/2012

Status:  Y  N  U

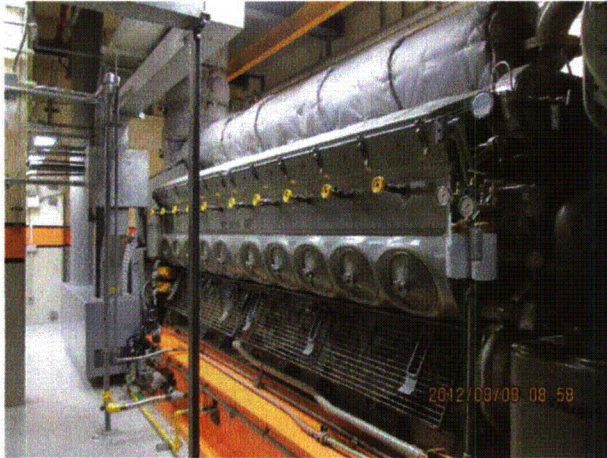
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

Equipment Description: DG, UNIT 1/2

**Photos**



20120808-QuadCities-2 035



20120808-QuadCities-2 036



20120808-QuadCities-2 037



20120808-QuadCities-2 038

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

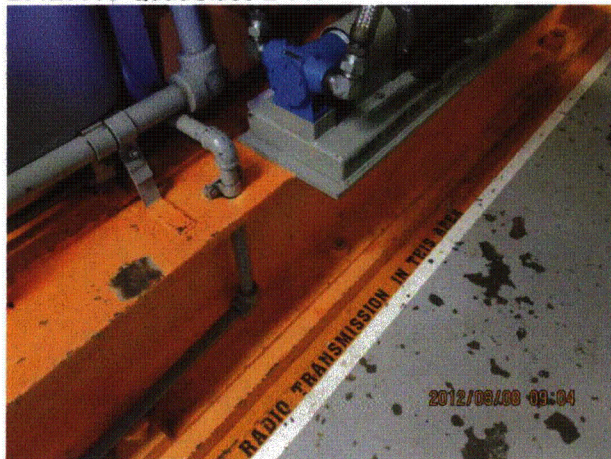
Equipment Description: DG, UNIT 1/2



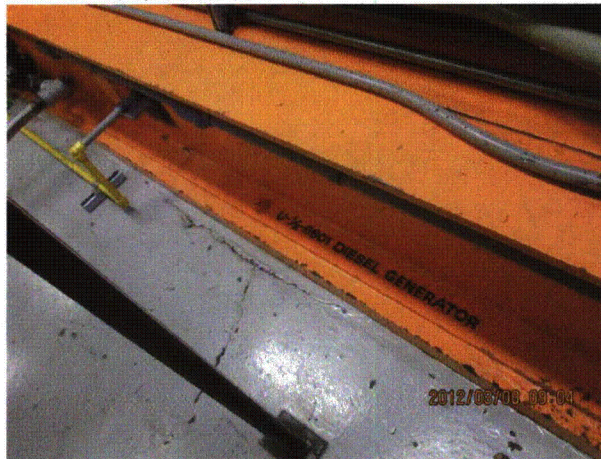
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20120808-QuadCities-2 041



20120808-QuadCities-2 042



20120808-QuadCities-2 043

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

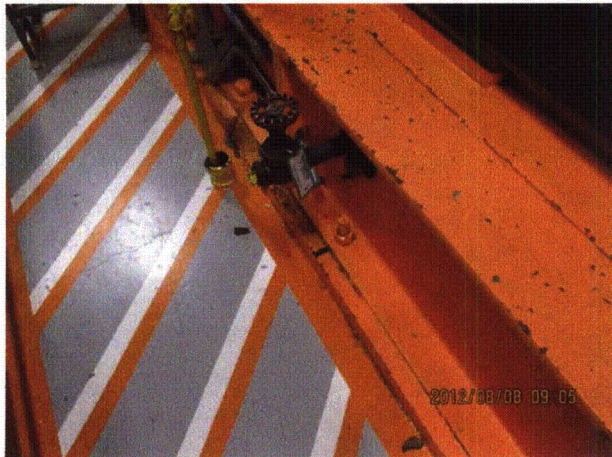
Equipment Description: DG, UNIT 1/2



20120808-QuadCities-2 044



20120808-QuadCities-2 045



20120808-QuadCities-2 046



20120808-QuadCities-2 047

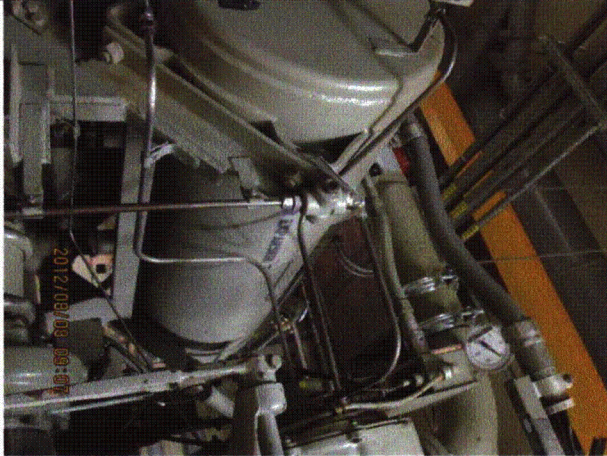
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**Seismic Walkdown Checklist (SWC)**

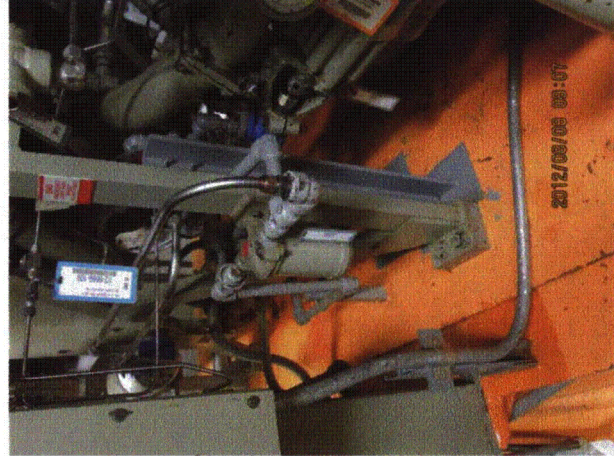
Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

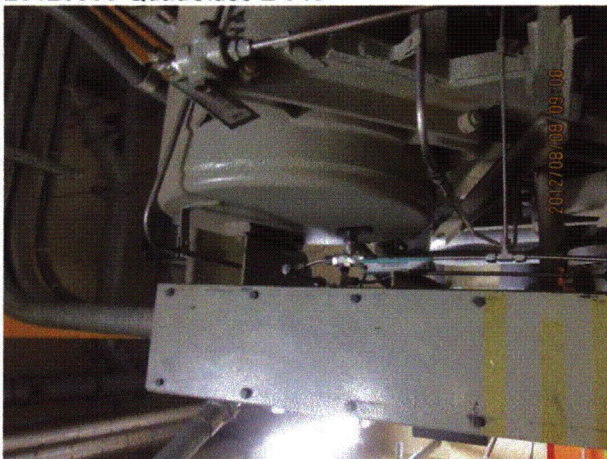
Equipment Description: DG, UNIT 1/2



20120808-QuadCities-2 048



20120808-QuadCities-2 049



20120808-QuadCities-2 050



20120808-QuadCities-2 051

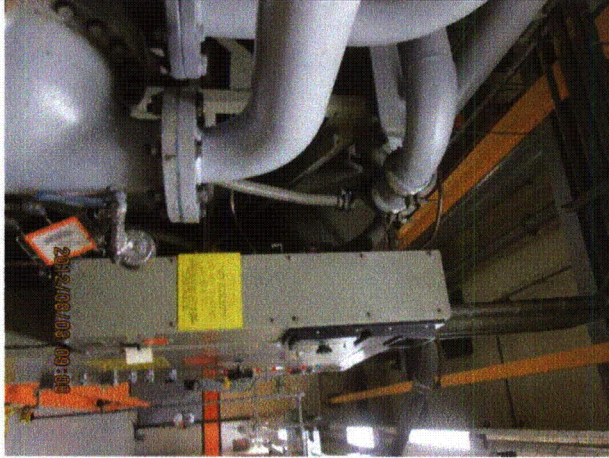
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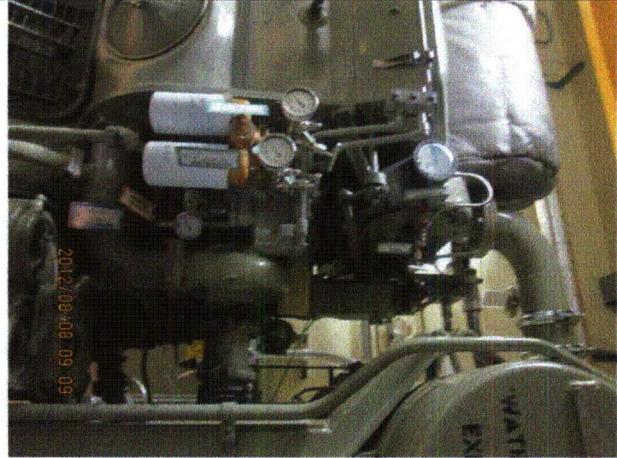
Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

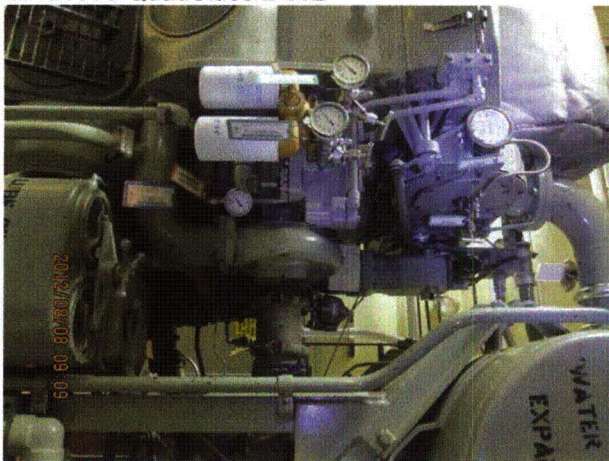
Equipment Description: DG, UNIT 1/2



20120808-QuadCities-2 052



20120808-QuadCities-2 053



20120808-QuadCities-2 054



20120808-QuadCities-2 055

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

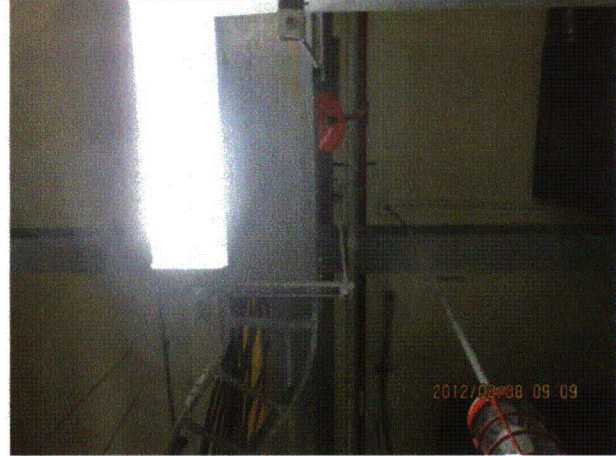
Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

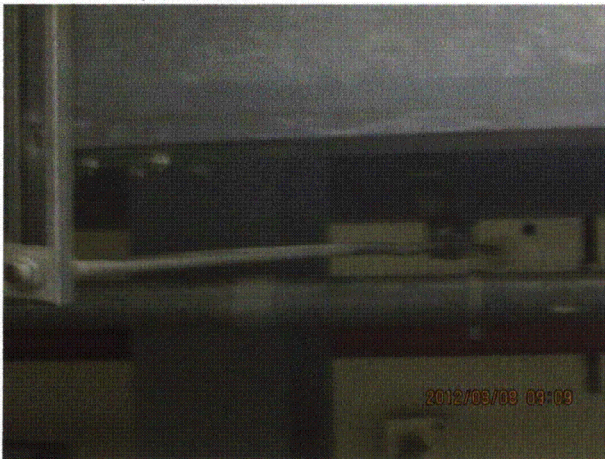
Equipment Description: DG, UNIT 1/2



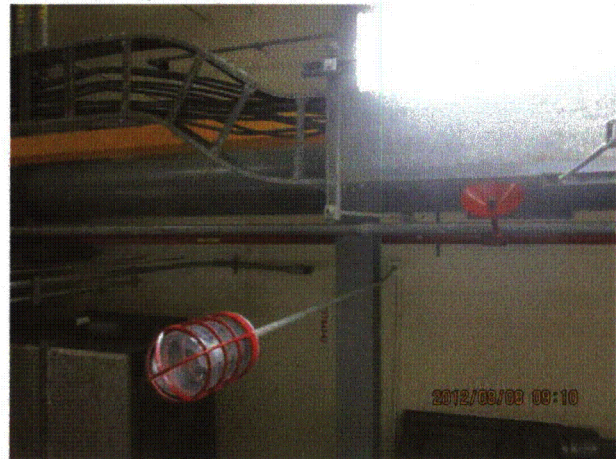
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20120808-QuadCities-2 057



20120808-QuadCities-2 058



20120808-QuadCities-2 059



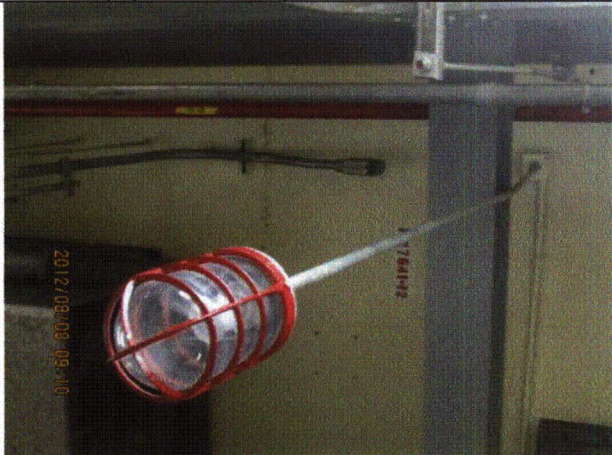
Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

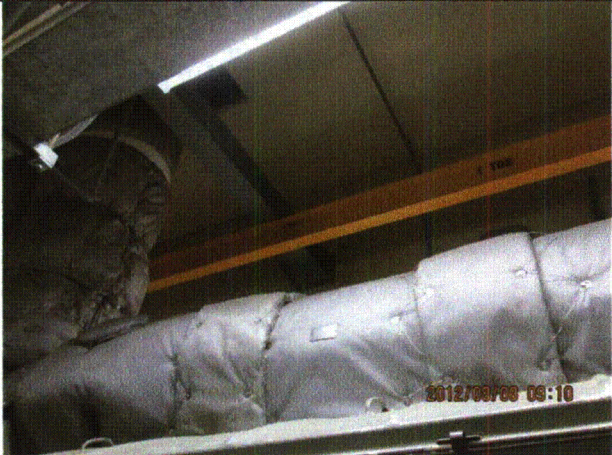
Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

Equipment Description: DG, UNIT 1/2



20120808-QuadCities-2 060



20120808-QuadCities-2 061



20120808-QuadCities-2 062



20120808-QuadCities-2 063

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

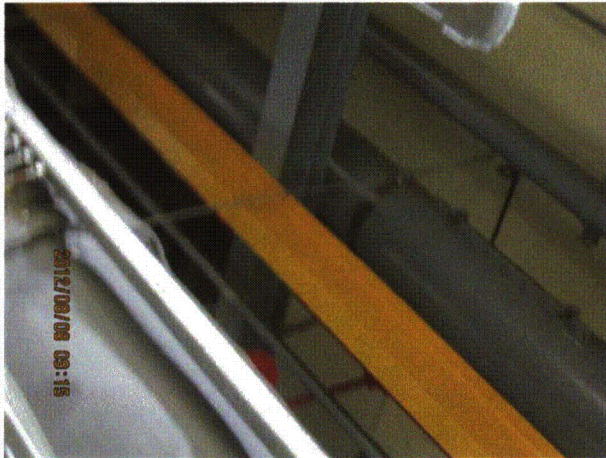
Equipment Description: DG, UNIT 1/2



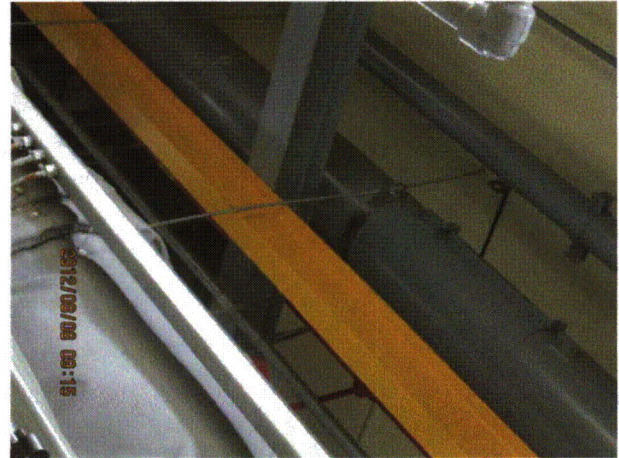
20120808-QuadCities-2 064



20120808-QuadCities-2 065



20120808-QuadCities-2 066



20120808-QuadCities-2 067

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6601

Equipment Class: (17) Engine-Generators

Equipment Description: DG, UNIT 1/2



20120808-QuadCities-2 068

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6654

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: HX, DG LUBE OIL

Project: Quad Cities 2 SWEL

Location (Bldg, Elev, Room/Area): DG, 595.00 ft, ALL

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable  
*Heat exchanger bolted to frame at bottom and clamped to frame at top.  
Frame fastened to DG skid.*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6654

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: HX, DG LUBE OIL

**Interaction Effects**



7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead light fixtures judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/8/2012

Evaluated by:  James Griffith Date: 10/4/2012  
 Michael Wodarczyk 10/4/2012

Status:  Y  N  U

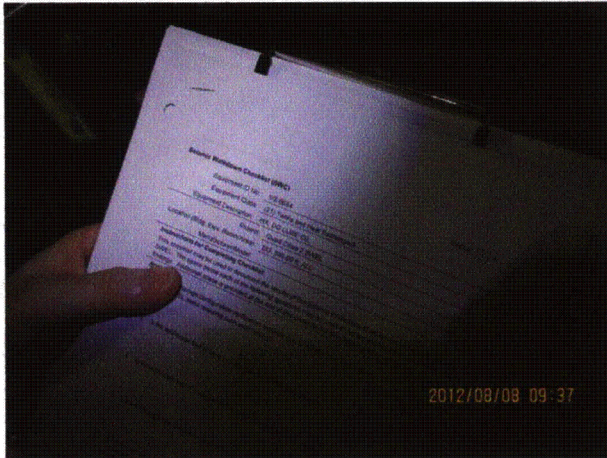
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1/2-6654

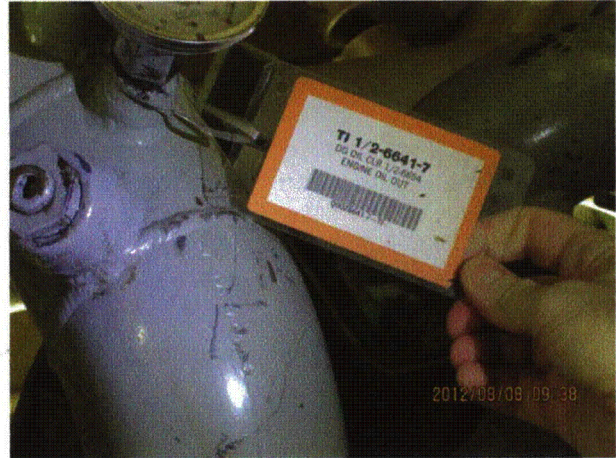
Equipment Class: (21) Tanks and Heat Exchangers

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**Photos**



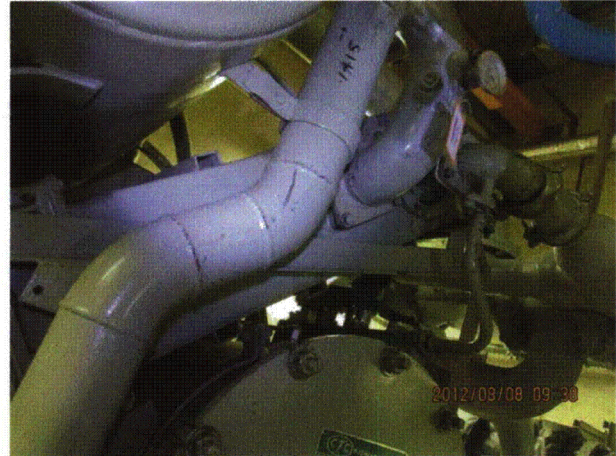
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Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

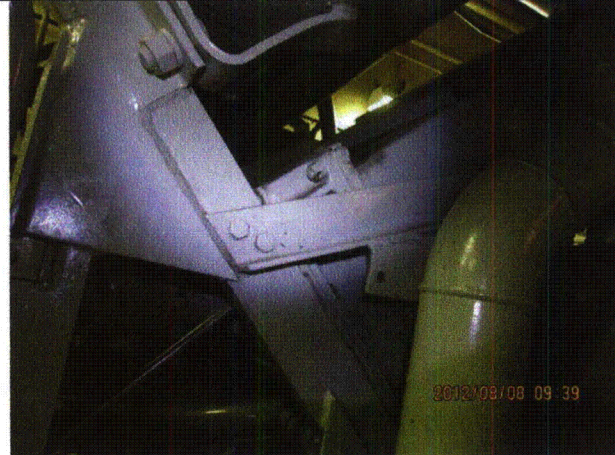
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Equipment Class: (21) Tanks and Heat Exchangers

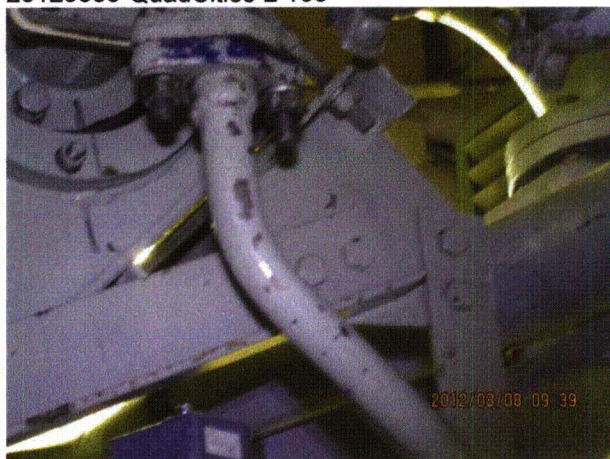
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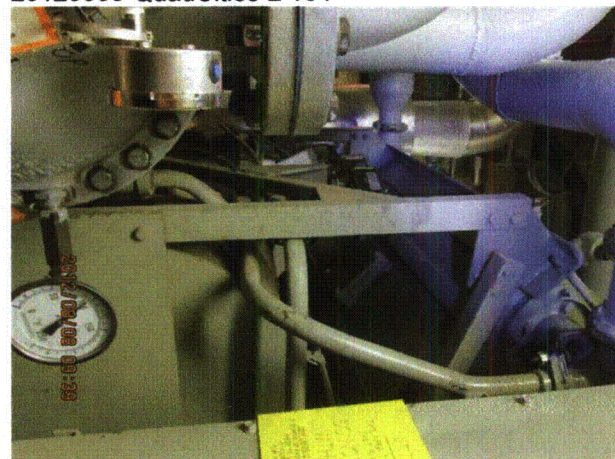
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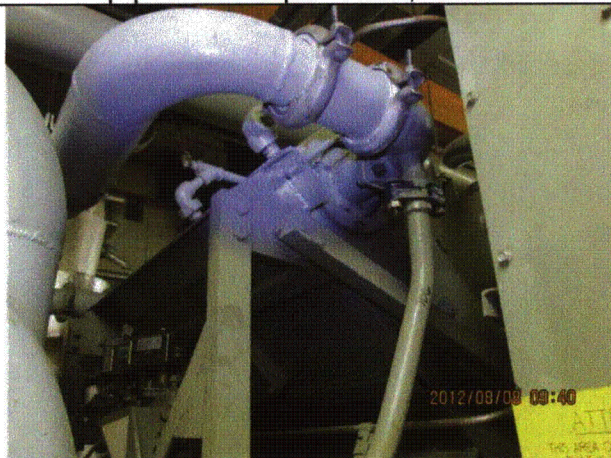
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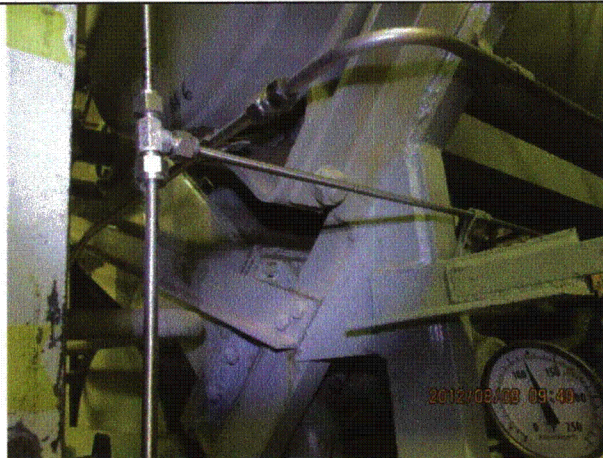
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Equipment Class: (21) Tanks and Heat Exchangers

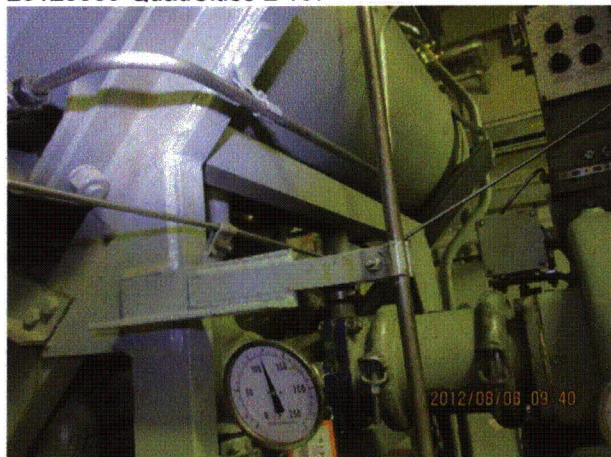
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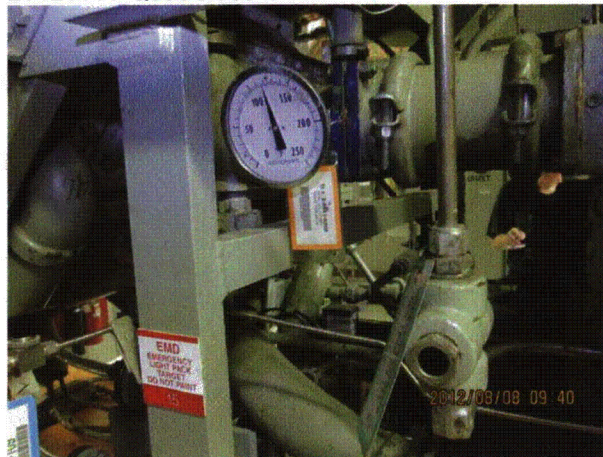
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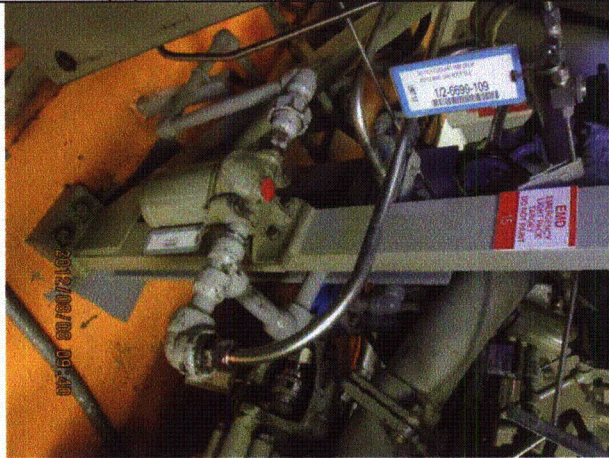
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**Seismic Walkdown Checklist (SWC)**

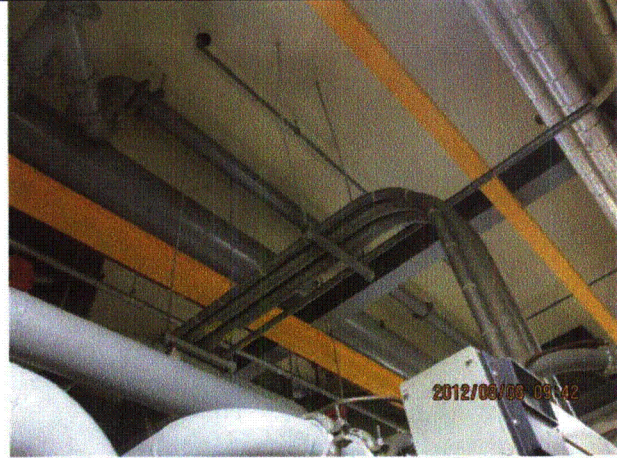
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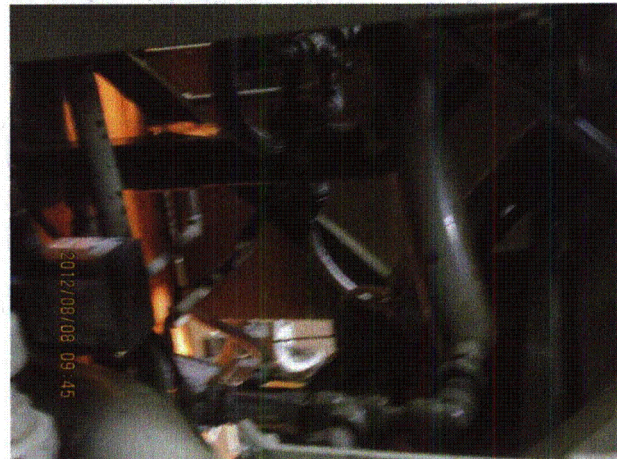
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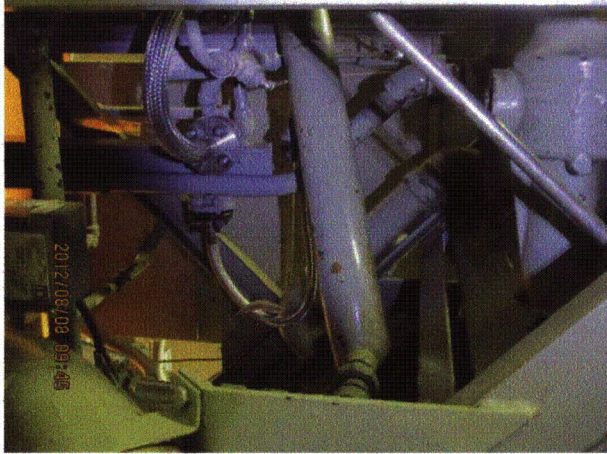
Status:  Y  N  U

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