

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P021 Equip. Class¹ 18Equipment Description RHR Instrument RackLocation: Bldg. REACTOR Floor El. 87 Room, Area SE Diagonal Unit 2

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
There is one anchor missing on the south side of the support for Instrument Rack 2H21-P021 (CR 515727). There is a good deal of debris in the hole, so it is unsure whether the anchor is broken off, removed or was never installed. There are seven other anchors in good condition, and the rack frame is very stiff.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P021 Equip. Class¹ 18

Equipment Description RHR Instrument Rack

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

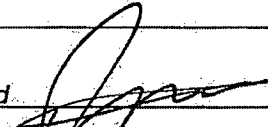
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

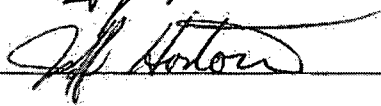
Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

Area Walk-By performed for component 2E21-C001B.

Evaluated by: John McFarland  Date: 09/11/2012

Jeff Horton  09/11/2012

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P021 Equip. Class¹ 18

Equipment Description RHR Instrument Rack

Status: Y N U

Photographs



Figure 1 – Equipment ID No (2H21-P021)

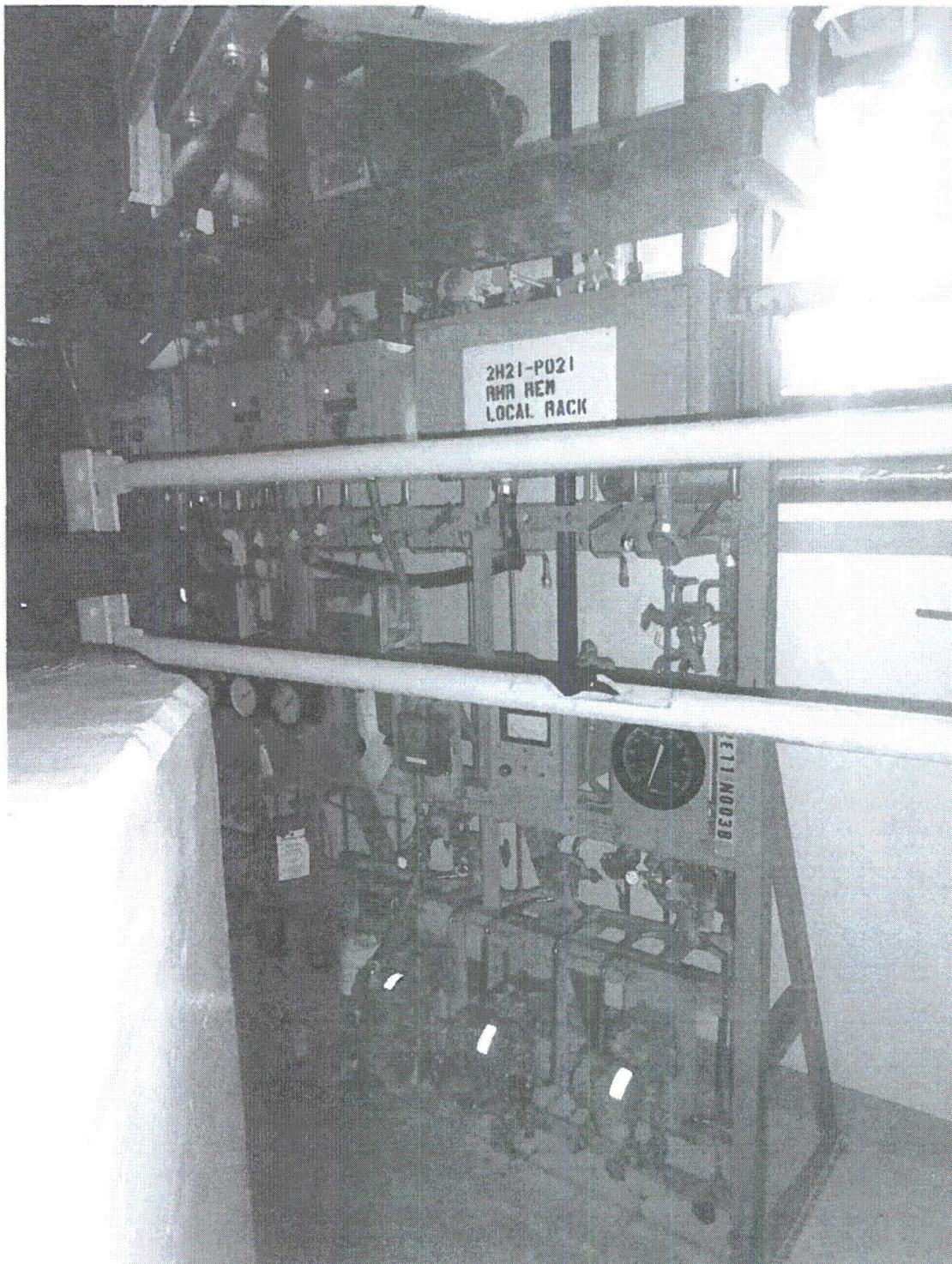


Figure 2 – Equipment Elevation (2H21-P021)



Figure 3 – Missing Anchor on Rack Support (2H21-P021)

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P410 Equip. Class¹ 18Equipment Description JET PUMP INSTR RACKLocation: Bldg. REACTOR Floor El. 130 Room, Area R107A

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
There are four anchors of the 10 anchors that have cut washers. The cutting of these washers has no affect on the ability of these four anchors to carry the seismic loads applied to them during a seismic event. Therefore, the anchorage is seismically acceptable.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is mild surface corrosion on one of the anchors. SWE's determined that this is seismically acceptable due to minimal corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P410 Equip. Class: 18

Equipment Description JET PUMP INSTR RACK

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

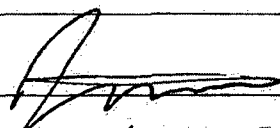
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U


Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

None

Evaluated by: John McFarland  Date: 9/17/12

Jeff Horton  9/17/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P410 Equip. Class' 18

Equipment Description JET PUMP INSTR RACK

Photographs



Figure 1 Equipment ID (2H21-P410)

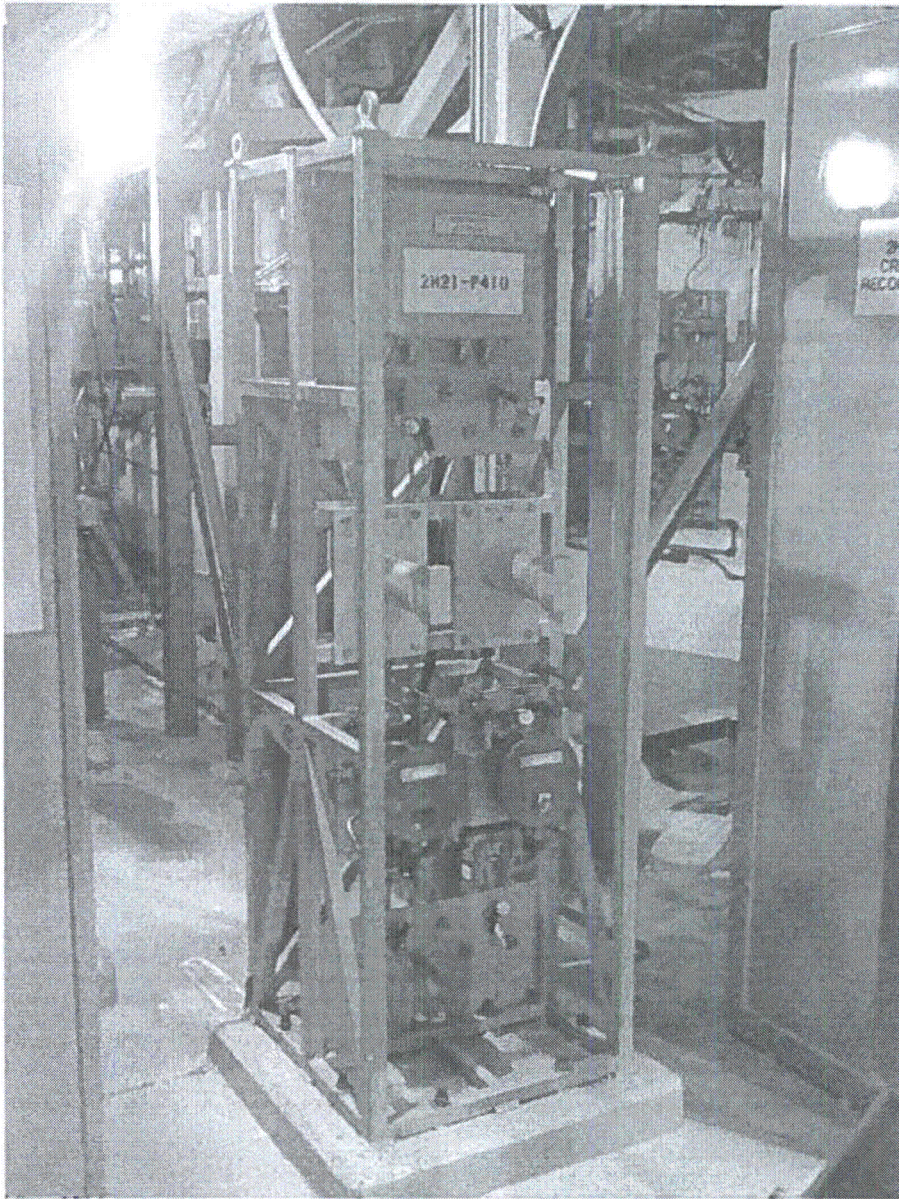


Figure 2 Picture of Full Rack

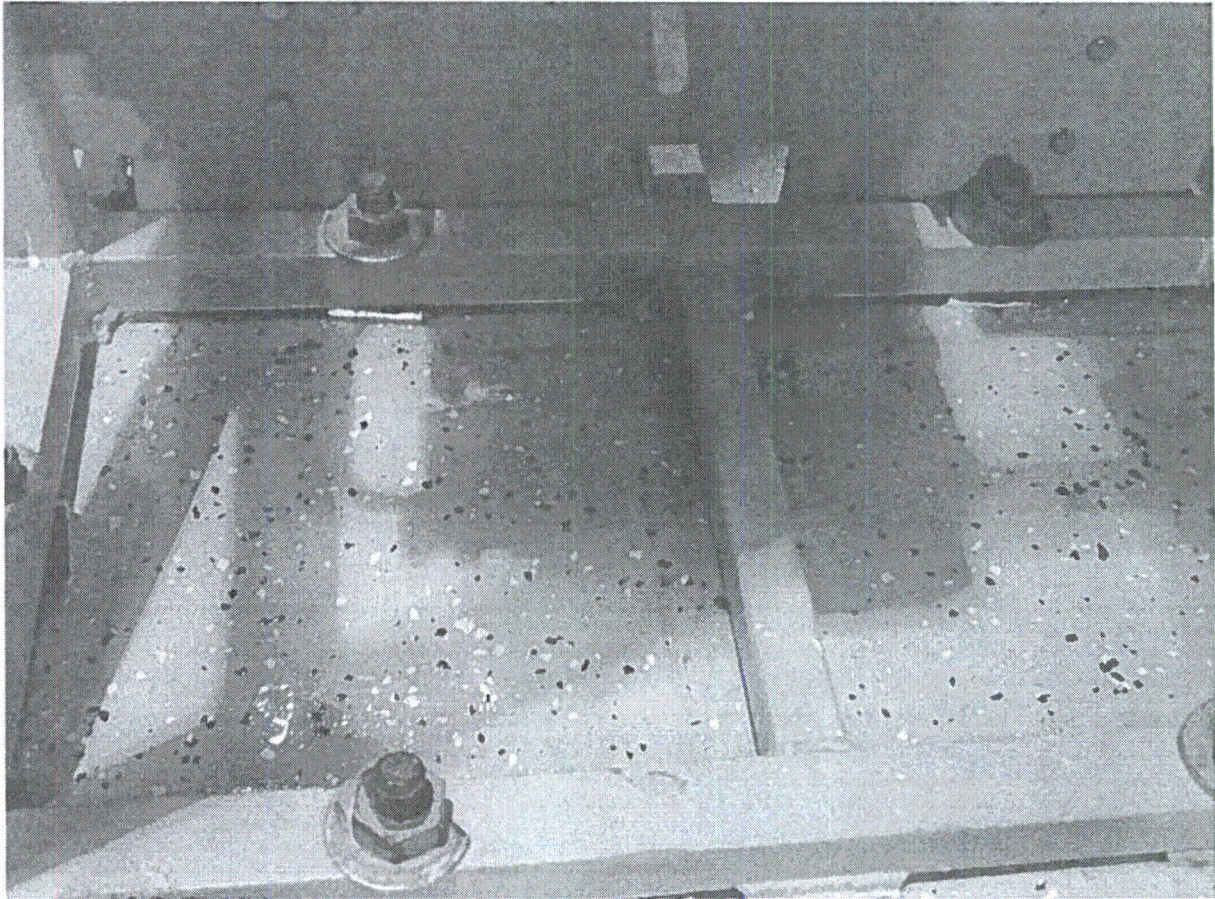


Figure 3 View of Anchors with Cut Washers



Figure 4 Additional Anchor with Cut Washer

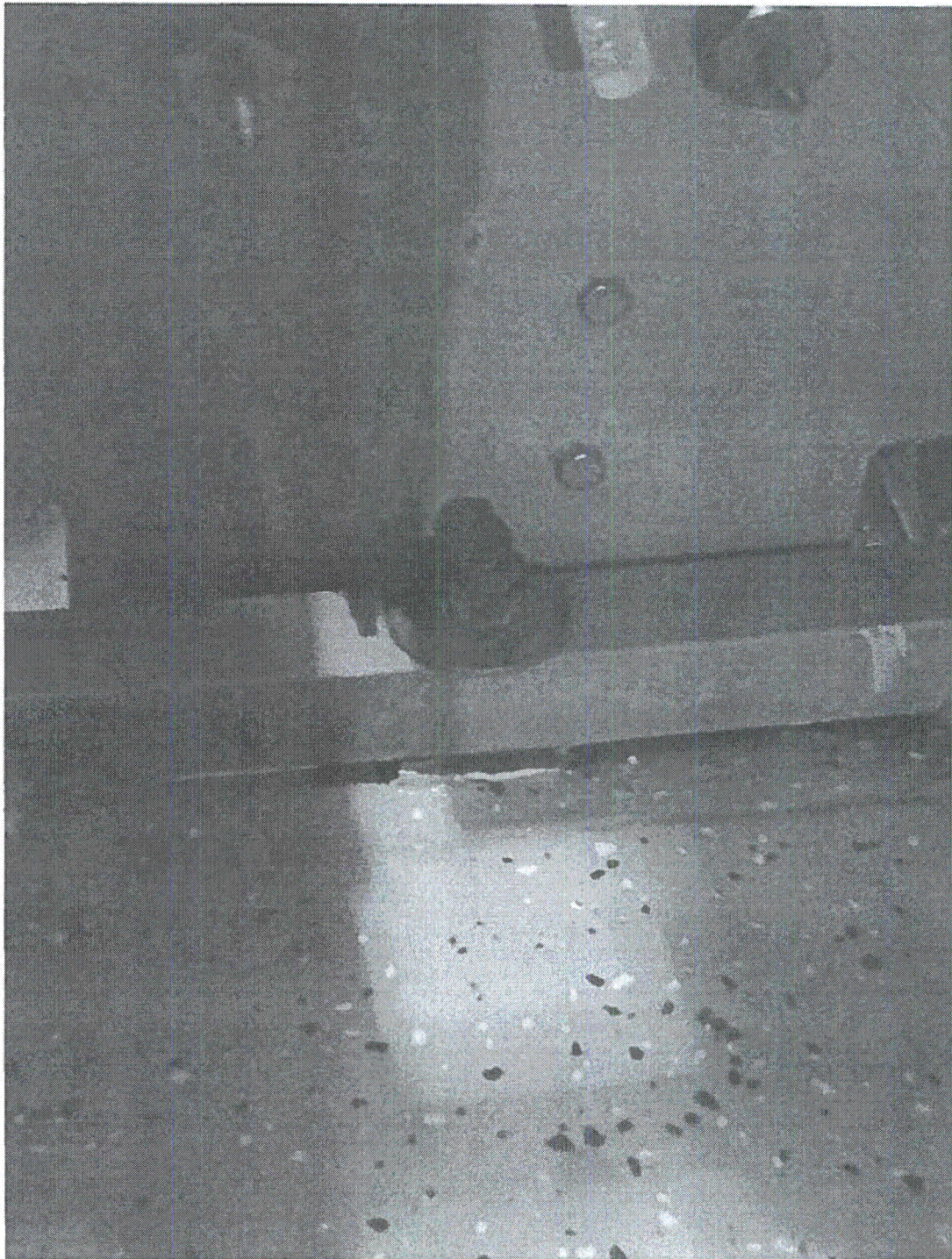


Figure 5 Corroded Anchor

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P404A Equip. Class¹ 18Equipment Description RX VESSEL INSTR RACKLocation: Bldg. REACTOR Floor El. 158 Room, Area RG-R17

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

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.)
The anchorage was compared against the SQUG package dated 2/18/94. Y N U N/A

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

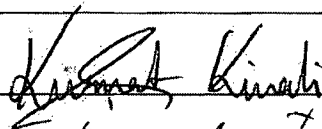
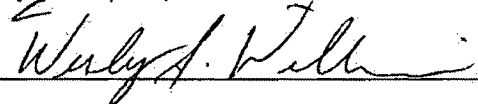
¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P404A Equip. Class¹ 18Equipment Description RX VESSEL INSTR RACK**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
One hole clamp behind the rack is missing for one of the cables. However, this is judged not to be a seismic concern since this is rather a thick cable and the span is short.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)*None.*Evaluated by: KURSAT KINALIDate: 9/25/2012WESLEY WILLIAMS9/25/2012

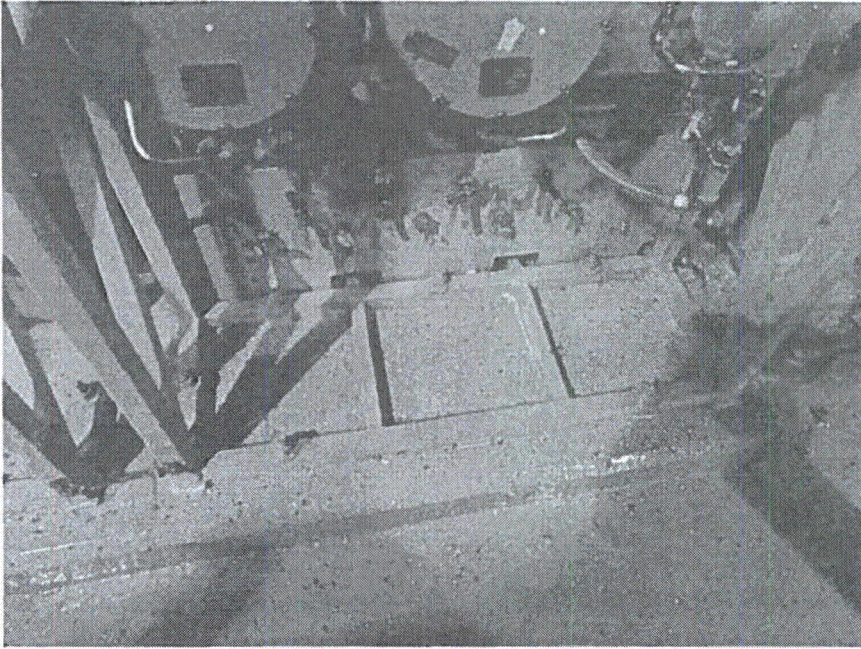
Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P404A Equip. Class¹ 18

Equipment Description RX VESSEL INSTR RACK

Photographs





Seismic Walkdown Checklist (SWC)Equipment ID No. 2T48-N009A Equip. Class¹ 19Equipment Description Torus Water Temperature ElementLocation: Bldg. REACTOR Floor El. 87 Room, Area Torus Room Bay 9

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
The equipment is an inline component, so there is no anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T48-N009A Equip. Class 19

Equipment Description Torus Water Temperature Element

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
There is a conduit running past the component to the wall that passes approximately 1" from the equipment. The conduit is attached to the same support as the temperature element, so the two components will move together. Since there will be no differential seismic motion between them, there is no potentially adverse seismic condition.
- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

None

Evaluated by: John McFarland

Date: 09/26/2012

Jeff Horton

09/26/2012

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T48-N009A Equip. Class¹ 19

Equipment Description Torus Water Temperature Element

Photographs

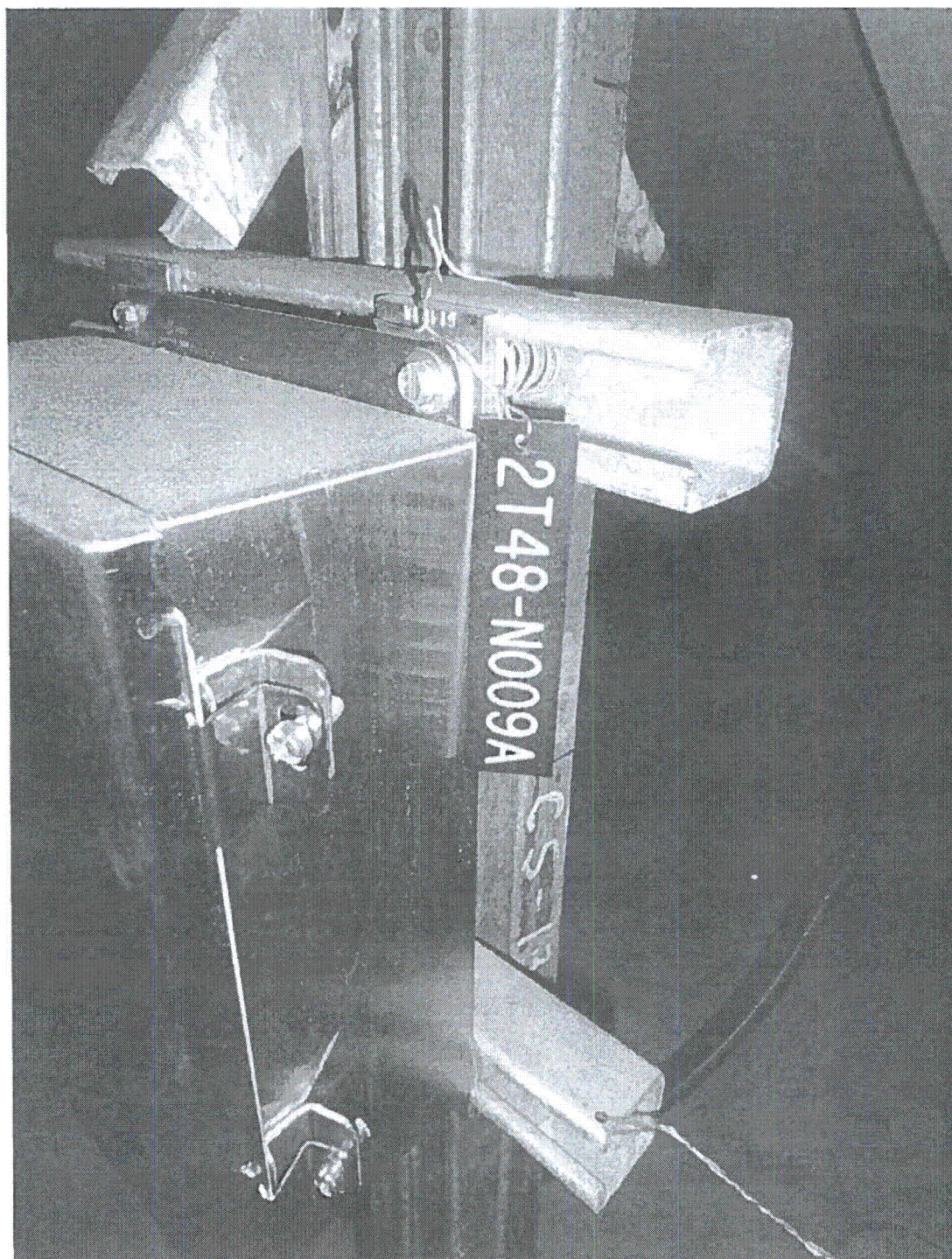


Figure 1 – Equipment ID No (2T48-N009A)

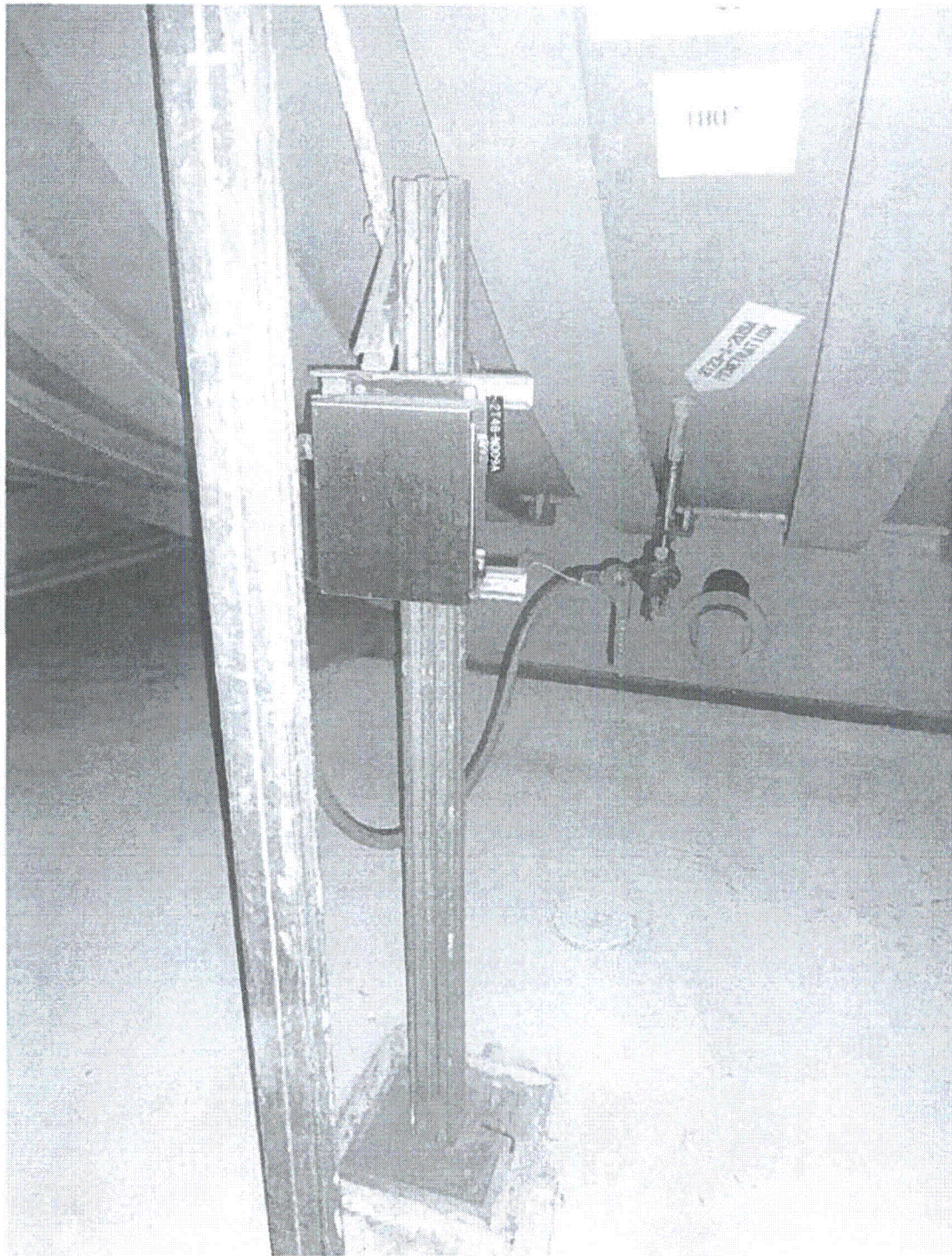


Figure 2 – Equipment Elevation (2T48-N009A)

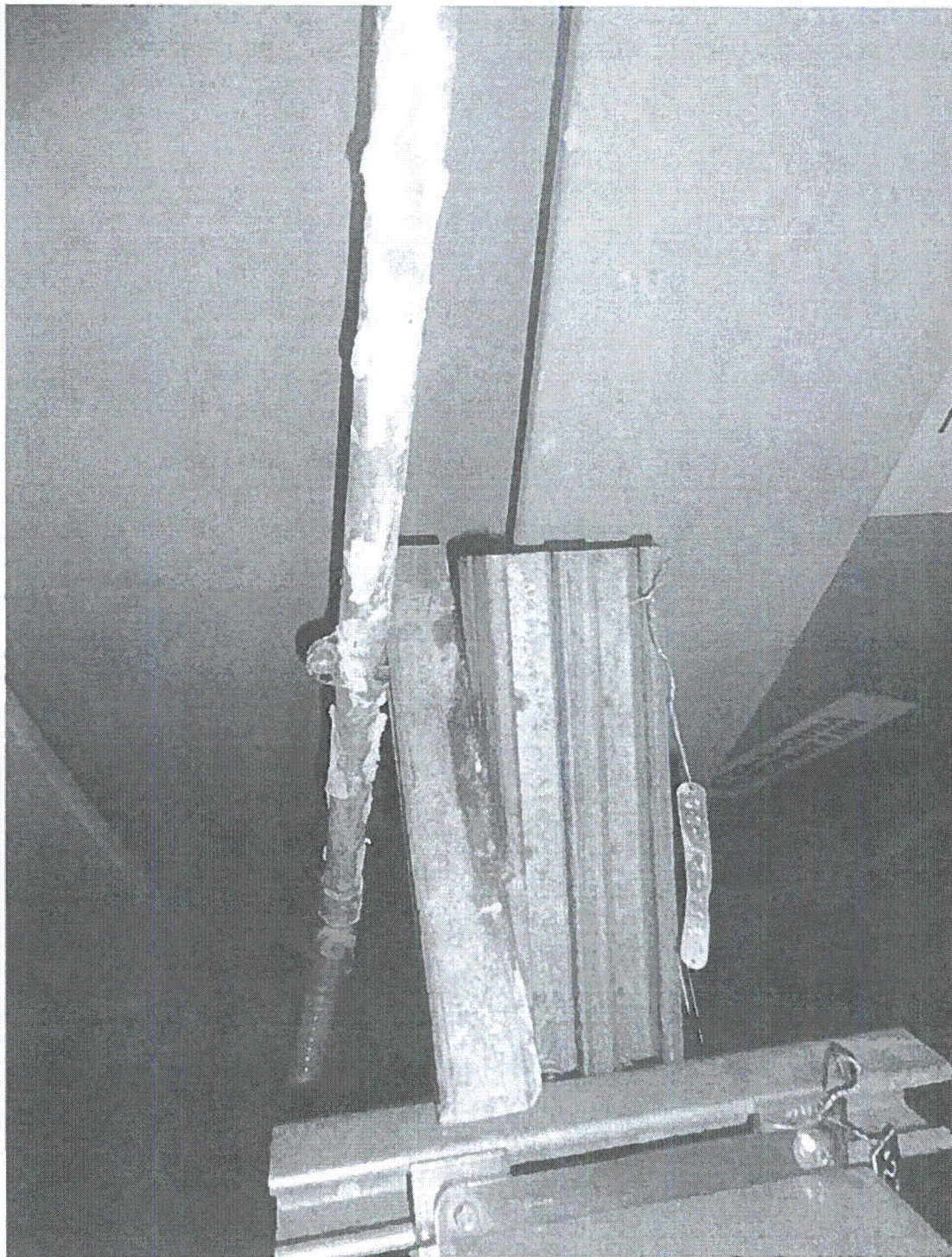


Figure 3 – Gap Between Conduit and Component (2T48-N009A)

Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N019A Equip. Class¹ 19Equipment Description HPCI PUMP ROOM COOLER TELocation: Bldg. REACTOR Floor El. 87 Room, Area HPCI Room

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
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.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N019A Equip. Class¹ 19

Equipment Description HPCI PUMP ROOM COOLER TE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
The overhead crane was evaluated during SQUG walkdowns for the item in this rom (2E41-C002) and found to be seismically adequate.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

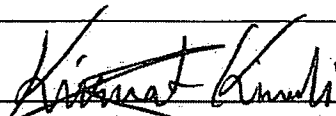
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

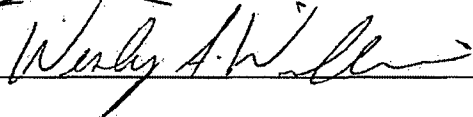
Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

Area walkby was performed within the package for 2E21-C001B.

Evaluated by: KURSAT KINALI  Date: 9/24/2012

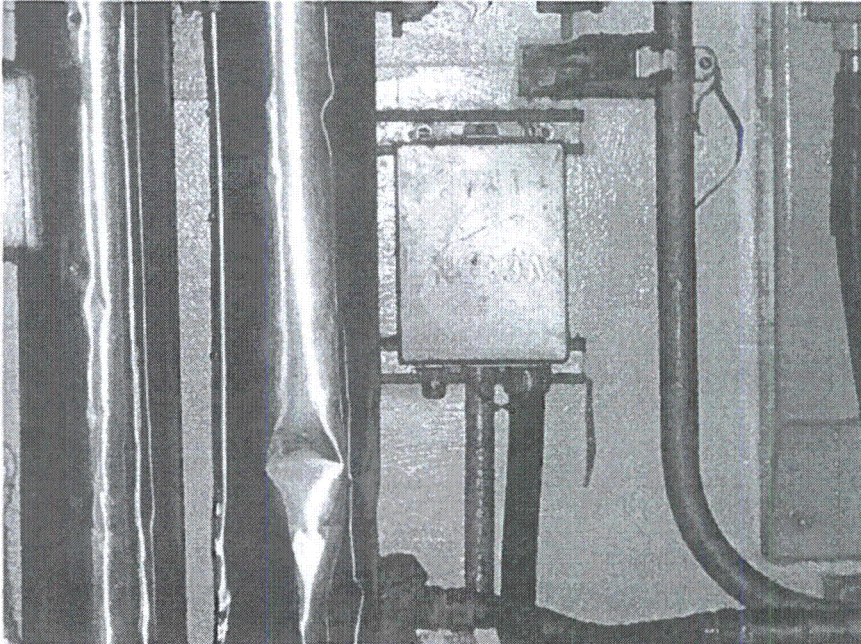
WESLEY WILLIAMS  9/24/2012

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N019A Equip. Class¹ 19

Equipment Description HPCI PUMP ROOM COOLER TE

Photographs



Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N020A Equip. Class¹ 19Equipment Description: CS/RHR Pump Room Cooler TELocation: Bldg. REACTOR Floor El. 108 Room, Area SE Diagonal

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
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.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
The top left anchor does not have full engagement of the bolt. The end of the bolt is approximately 1/16" below the nut. The other three bolts are fully engaged 3/8" dia. anchors, and have enough capacity to support the small, light component. Therefore, there is no potentially adverse seismic condition.

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N020A Equip. Class¹ 19Equipment Description CS/RHR Pump Room Cooler TE**Interaction Effects**7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U **Other Adverse Conditions**11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U **Comments** (Additional pages may be added as necessary)*None.*Evaluated by: John McFarlandDate: 09/26/2012Jeff Horton09/26/2012

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N020A Equip. Class¹ 19

Equipment Description CS/RHR Pump Room Cooler TE

Photographs

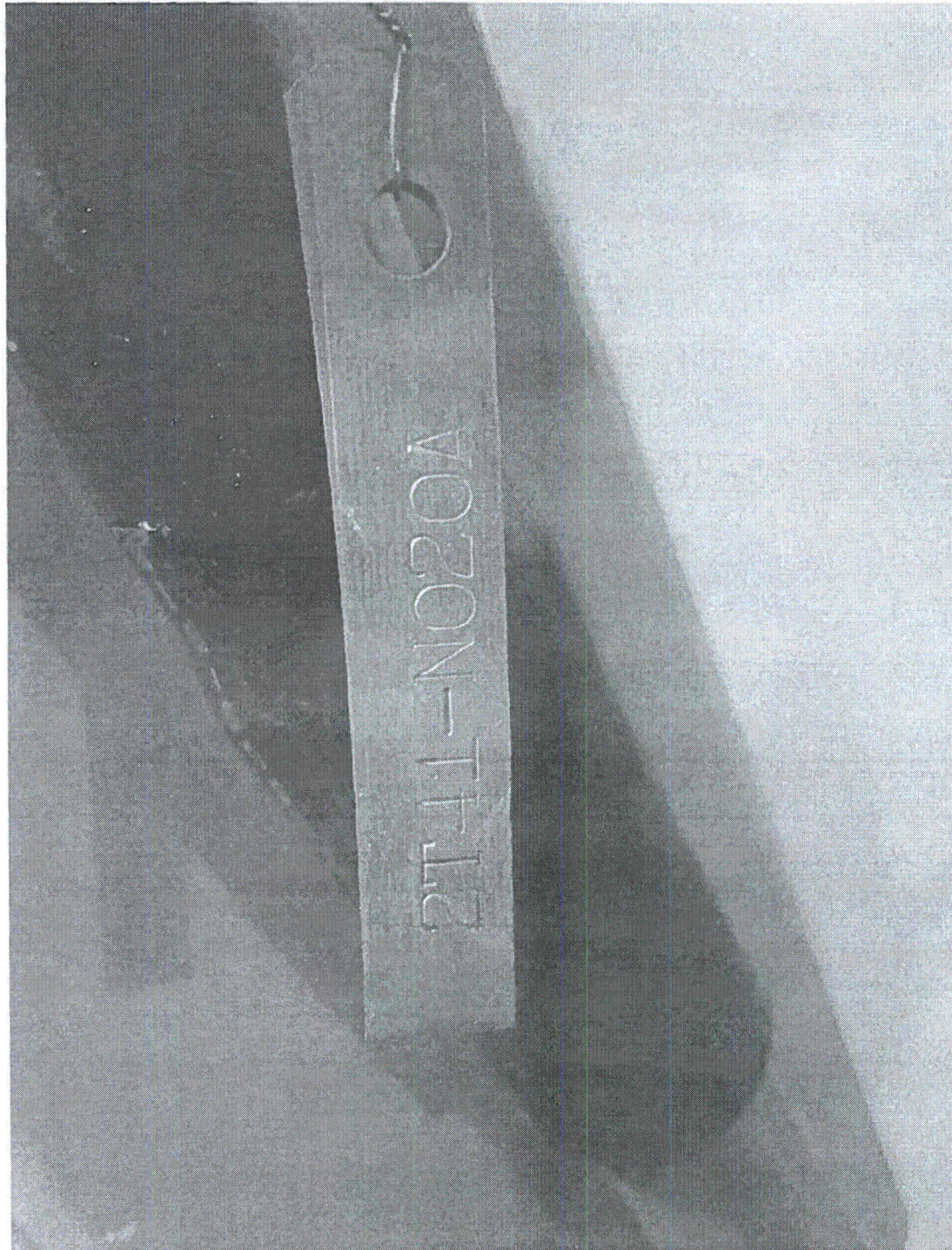


Figure 1 – Equipment ID No (2T41-N020A)



Figure 2 – Equipment Elevation (2T41-N020A)

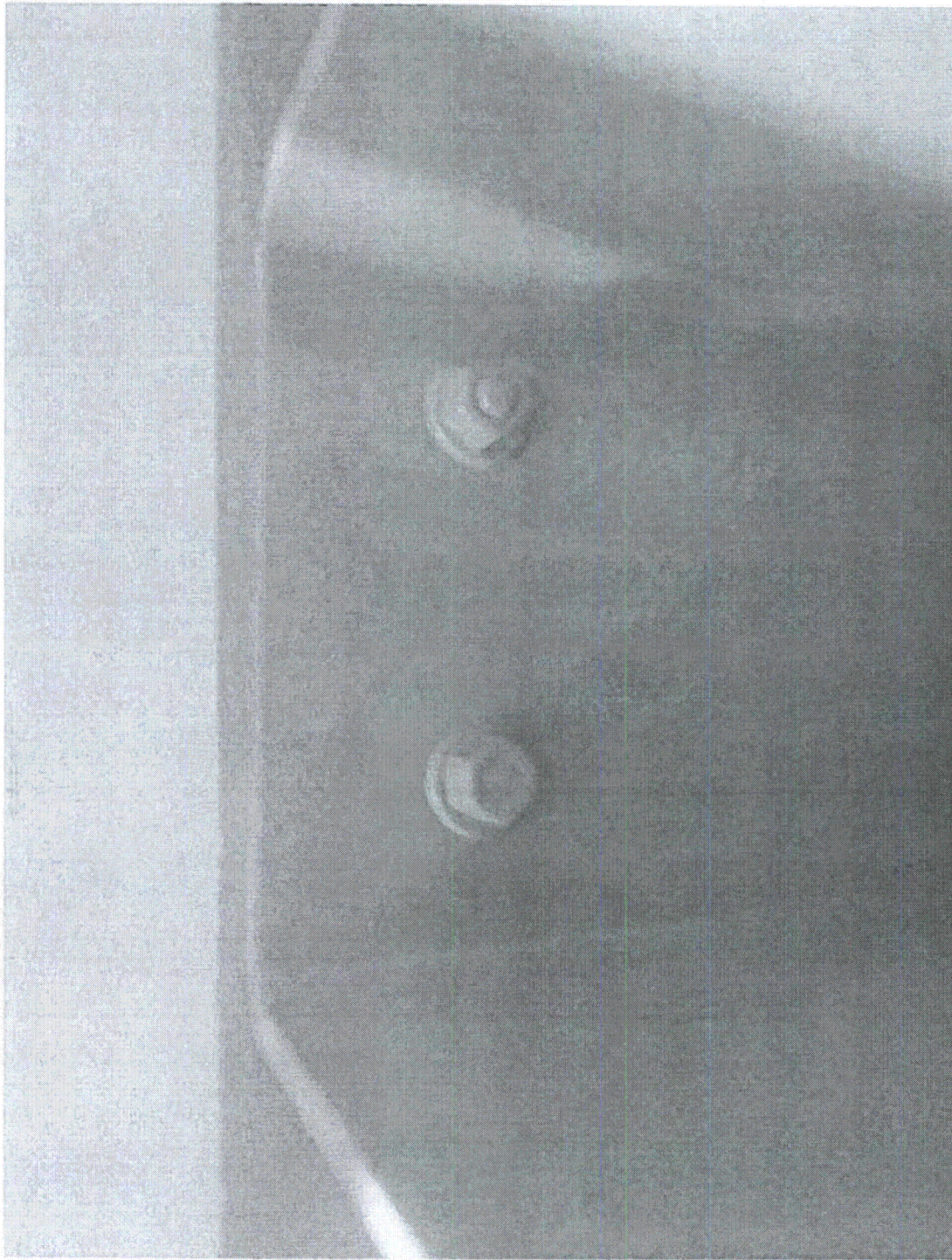


Figure 3 – Bolt Lacking Full Thread Engagement (2T41-N020A)

Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N021A Equip. Class¹ 19Equipment Description CS/RHR PUMP RM COOLER TELocation: Bldg. REACTOR Floor El. 119' Room, Area NE Diagonal Room

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
SEWS Package 2T41-N021A does not specifically address anchorage of component.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N021A Equip. Class 19Equipment Description CS/RHR PUMP RM COOLER TE**Interaction Effects**7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
SEWs package describes that a pull test was performed on Emergency Lights Tag No. 2R42E107 above the subject component and it was acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U **Other Adverse Conditions**11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U **Comments** (Additional pages may be added as necessary)

Component tag is barely visible. The tag is a small embossed tag. The companion junction box has a tag number written on it but the ink is fading.

Low Dose Warning area sign has one corner loose. SWE's have determined that this flexible light weight sign will cause no damage to the component. Therefore, the loose sign is seismically acceptable.

Evaluated by: John McFarlandDate: 9/24/12Jeff Horton9/24/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N021A Equip. Class¹ 19

Equipment Description CS/RHR PUMP RM COOLER TE

Photographs

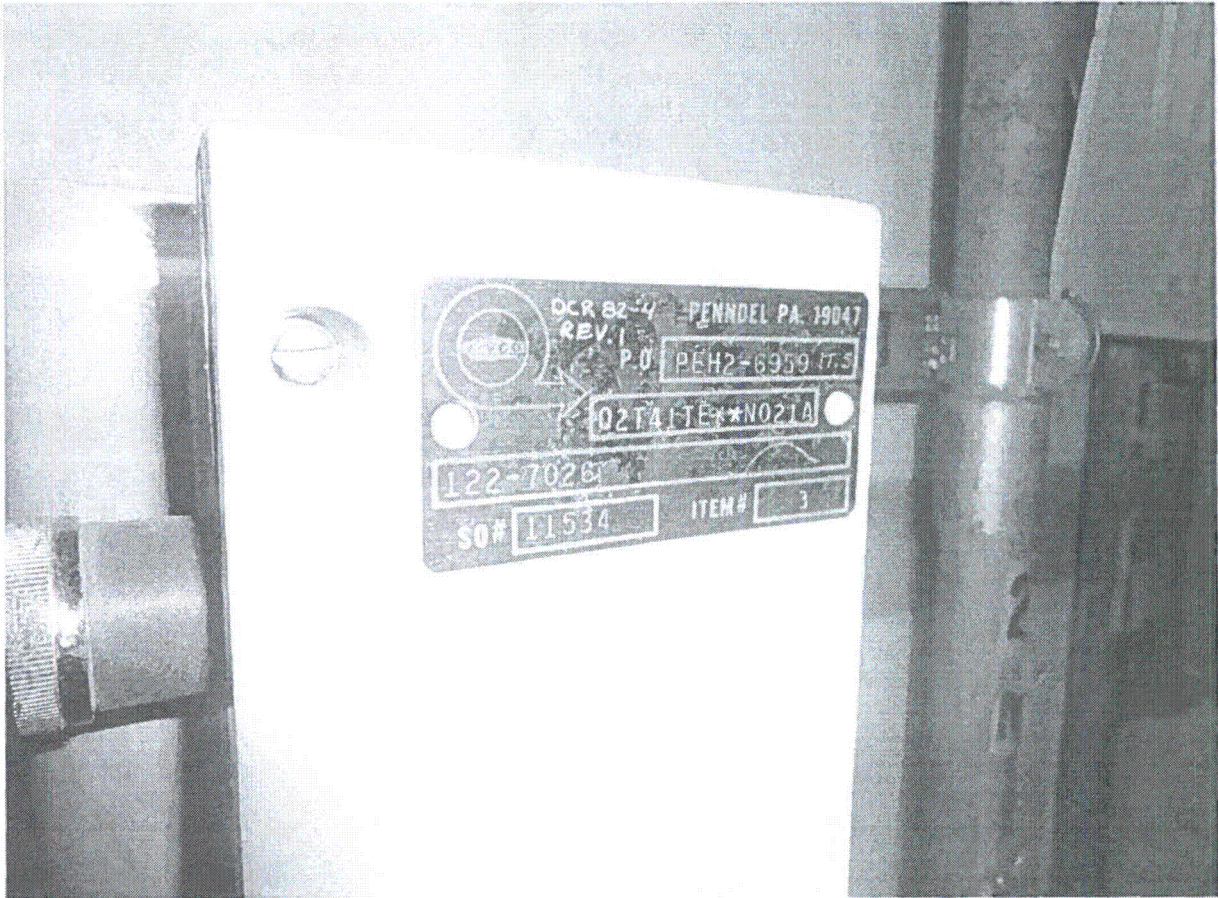


Figure 1 Equipment ID: 2T41-N021A

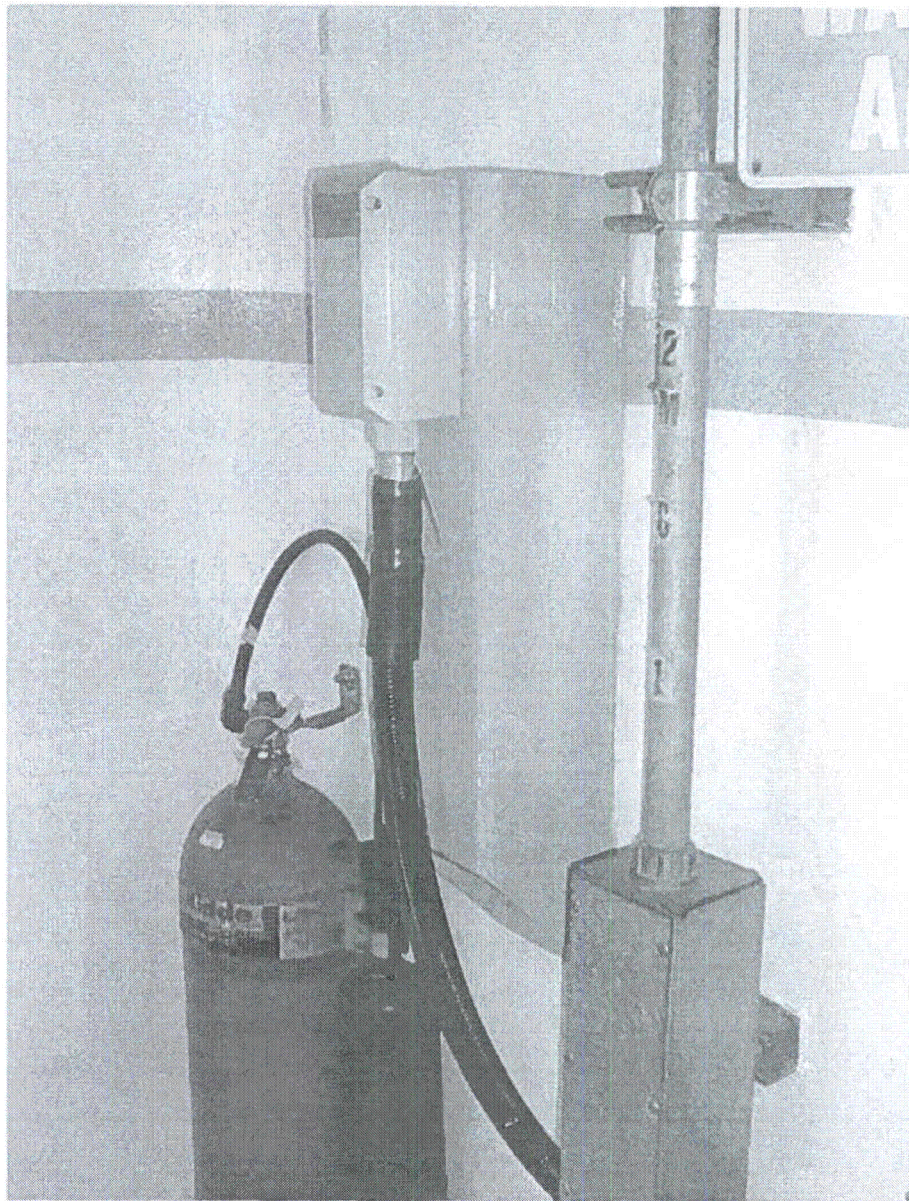


Figure 2 Component Anchorage to Wall



Figure 3: Companion Junction Box for 2T41-N021A
Note: Fading ink with component number.

Seismic Walkdown Checklist (SWC)Equipment ID No. 2T41-N022A Equip. Class¹ 19Equipment Description RCIC PUMP ROOM COOLER TELocation: Bldg. REACTOR Floor El. 87 Room, Area NW Diagonal (on the platform)

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
One of the four spring nuts behind the equipment attaching it to the unistrut is not fully in compression and sits sideways. However, this is judged not be a seismic concern by SWEs since the other three spring nuts are in compression. The unistrut is welded to the embedded wall plate. Right bottom corner bolt does not have a washer installed. However this is not a seismic concern since the bolt hole is not oversized.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N022A Equip. Class¹ 19

Equipment Description RCIC PUMP ROOM COOLER TE

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A


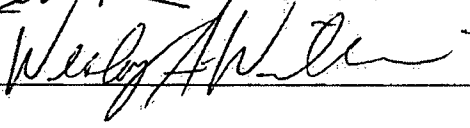
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

*Platform area walkby was performed within this package, i.e., 2T41-N022A.
Floor at 87' area walkby was performed within the package for 2E51-C001.*

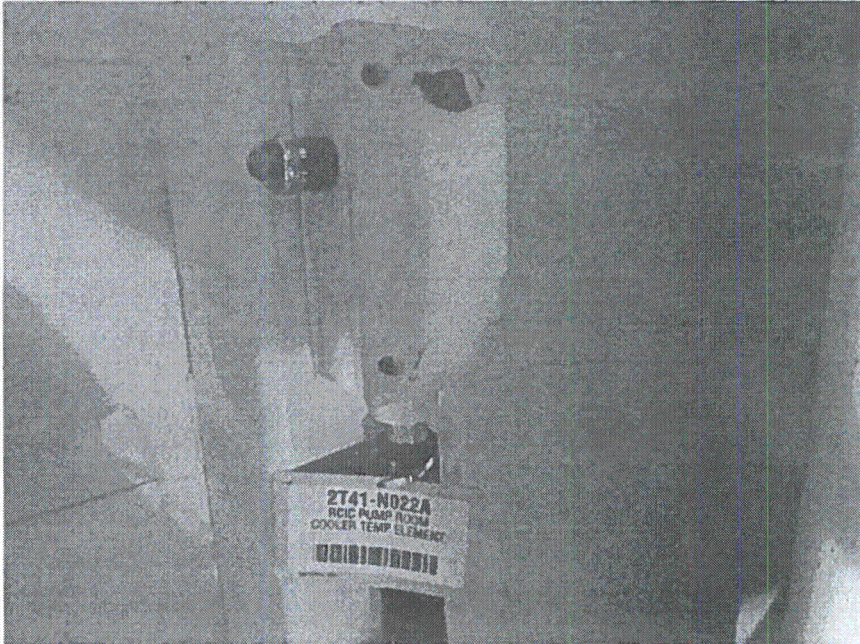
Evaluated by: KURSAT KINALI  Date: 9/25/2012
WESLEY WILLIAMS  9/25/2012

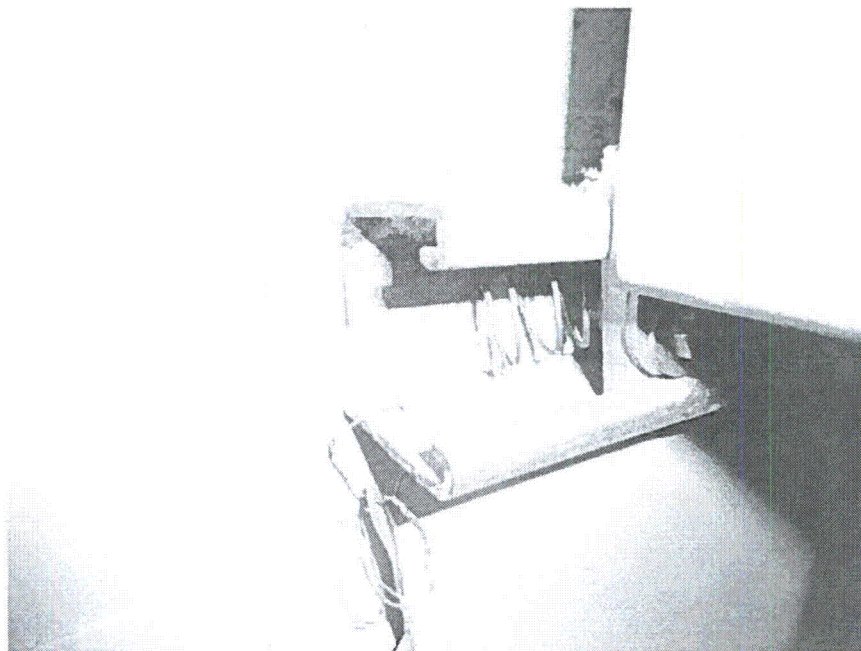
Seismic Walkdown Checklist (SWC)

Equipment ID No. 2T41-N022A Equip. Class¹ 19

Equipment Description RCIC PUMP ROOM COOLER TE

Photographs





Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P173 Equip. Class¹ 20Equipment Description SHUTDOWN INSTRUMENT PANELLocation: Bldg. REACTOR Floor El. 130 Room, Area 2R103

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
Panel and enclosure to panel opened per work order SNC427042.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Anchorage consistent with that shown in SEWS package for equipment dated 02/16/1994.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2H21-P173 Equip. Class¹ 20

Equipment Description SHUTDOWN INSTRUMENT PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Panel is located inside large steel enclosure, only open from the top. Conduit and overhead equipment in area directly above is adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U
Components inside panel were inspected visually in accordance with the direction provided in the FAQ related to opening panels.

Comments (Additional pages may be added as necessary)

See 2C82-P001 for AWC information.

Evaluated by: Juan Vizcaya  Date: 09/18/2012

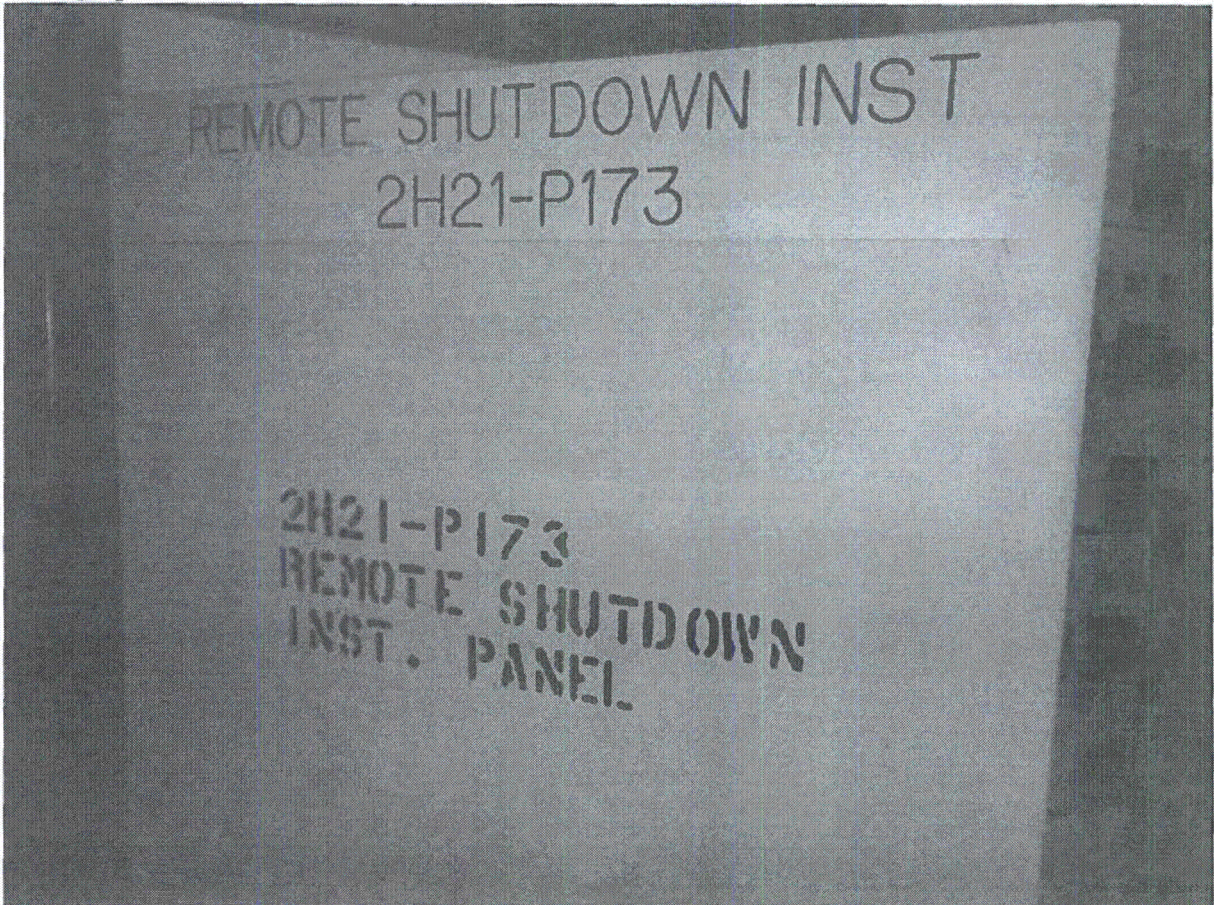
Patrick Kelly  09/18/2012

Seismic Walkdown Checklist (SWC)

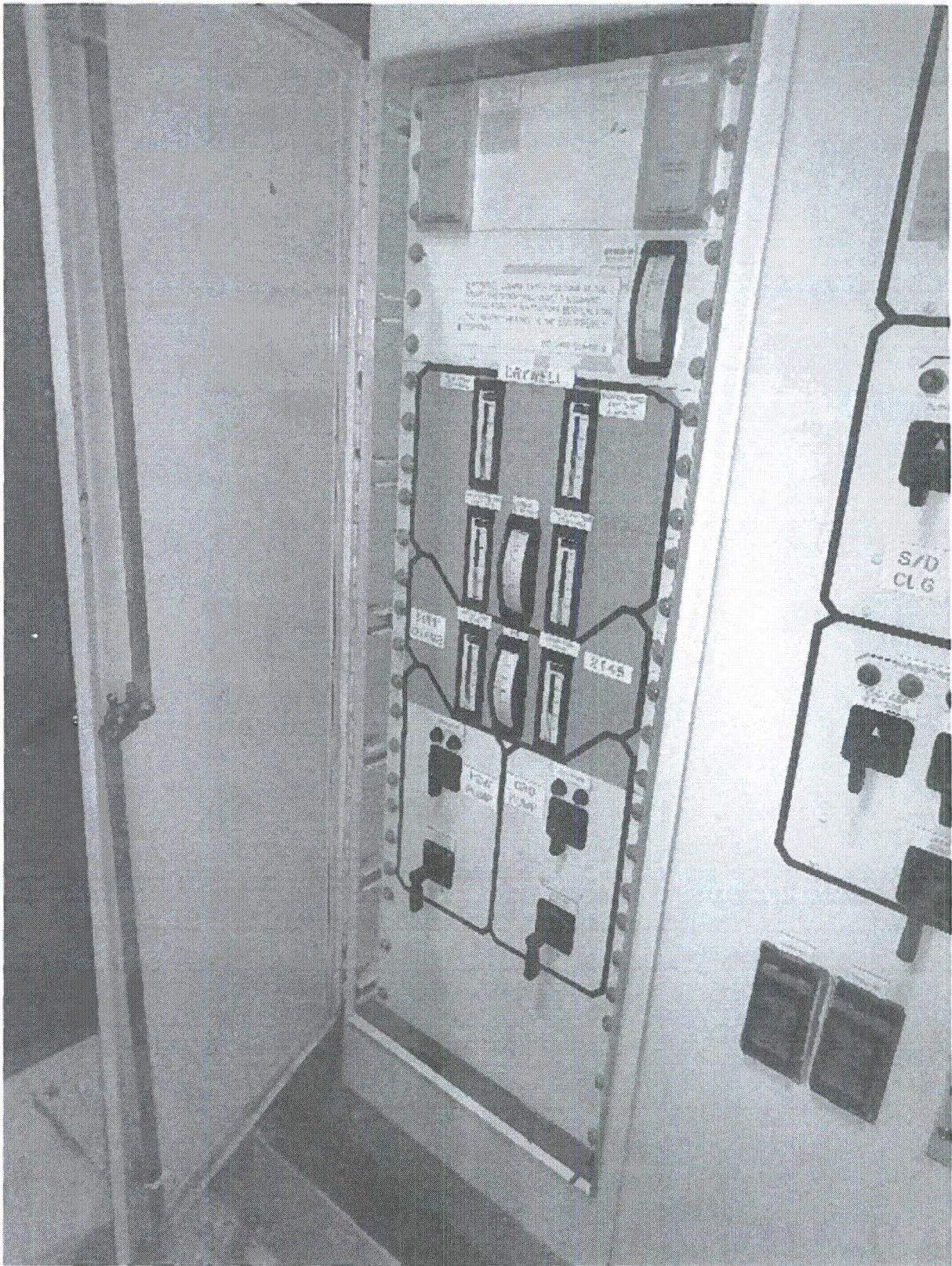
Equipment ID No. 2H21-P173 Equip. Class¹ 20

Equipment Description SHUTDOWN INSTRUMENT PANEL

Photographs



1: Equipment MPL# (2H21-P173)



2: Equipment Elevation (2H21-P173)

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P202 Equip. Class¹ 20Equipment Description DG 1C RELAY PANEL 1ALocation: Bldg. DIESEL Floor El. 130 Room, Area SWITCHGEAR ROOM 2G

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
Panels were openend per work order SNC427042.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Anchorage consists of welds from the base of the panel to embedded steel in the concrete pad.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Anchorage is consistent with SEWS package, dated 02/17/1994 and SCNH-93-088, Rev. 0.
Originally identified as an A-46 and IPEEE outlier due to potential impact to adjacent panels. DCR 91-144 details plates to be installed to connect the top of 2H21-P202 to the adjacent panels. The walkdown verified these plates were installed.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)Equipment ID No. 2H21-P202 Equip. Class¹ 20Equipment Description DG 1C RELAY PANEL 1A**Interaction Effects**

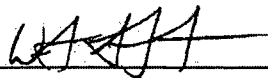

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead light is properly supported with wire ties. Light is not directly over the panel and is judged not to be a seismic concern for the panel.
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Rigid raceways 2E23439 and 2E23438 are adequately supported at the cabletray and at the top of the panel
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

None.

Evaluated by: Winston StewartDate: 09/17/2012Patrick Kelly09/17/2012

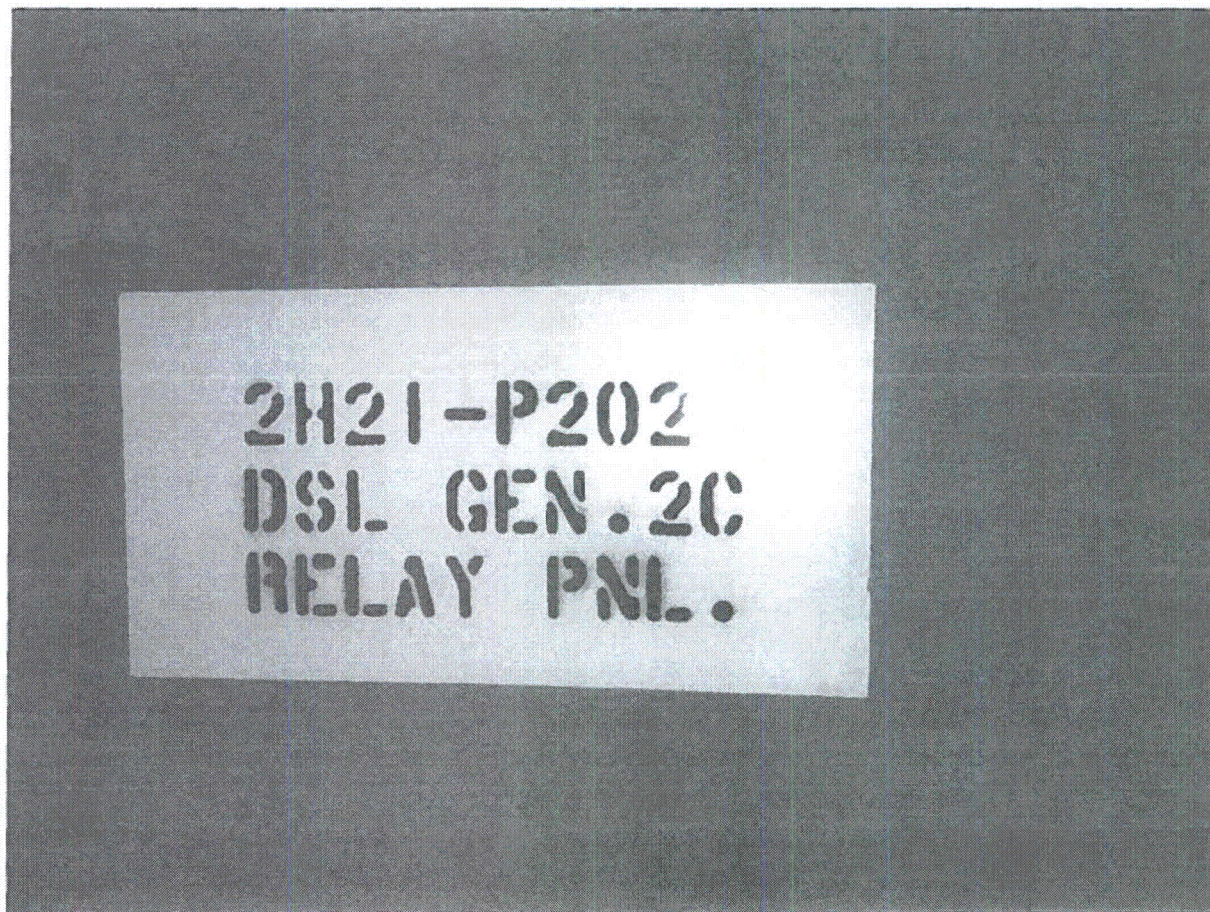
Status: Y N U

Seismic Walkdown Checklist (SWC)

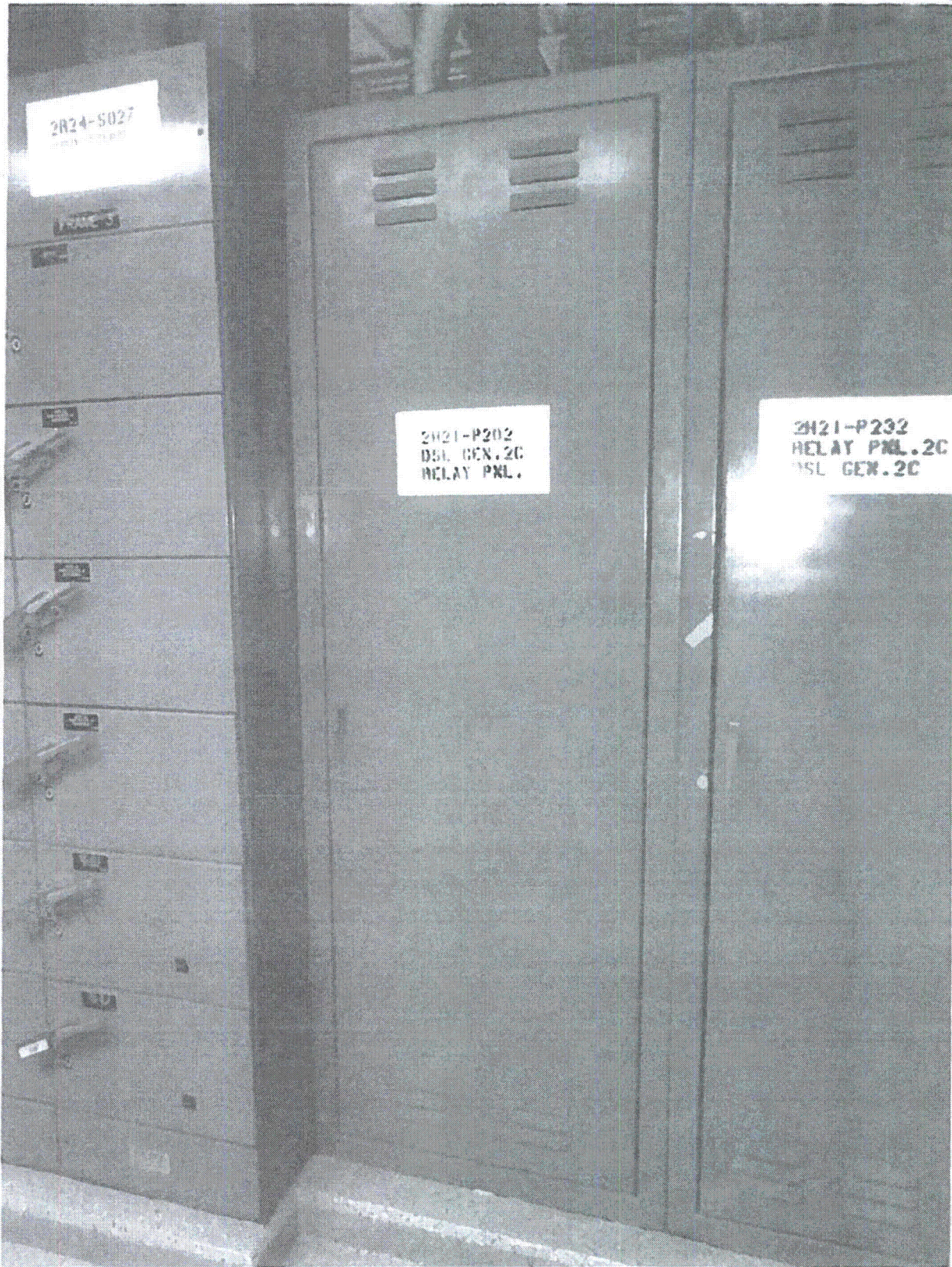
Equipment ID No. 2H21-P202 Equip. Class: 20

Equipment Description DG 1C RELAY PANEL 1A

Photographs



1: Equipment MPL# (2H21-P202)



2: Equipment Elevation (2H21-P202)

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2R43-P001C Equip. Class¹ 20

Equipment Description DG 1C CONT PANEL

Location: Bldg. DIESEL Floor El. 130 Room, Area DIESEL GENERATOR ROOM 2C

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
Panels were opened per work order SNC427042.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Anchorage verified using calculation SCNH-99-406, Rev. 0. A SEWS package dated 10/25/1988 is included within the body of the calculation. There are fillet welds present inside the west side of the panel, northwest section. There are plug welds at the holes of the angle base of the panel. Two holes are not plug welded, which are located at the northwest section (south end of that section) and the southwest section (north end of that section). See photograph 3.

Calculation SNCH-99-406, Rev. 0 provides the SQUG evaluation for this control panel. The SQUG evaluation only takes credit for welds on the outside of the panel. The interior fillet and plug welds are not considered as part of the anchorage in the calculation. The addition of the plug welds and interior welds only increases the capacity of the panel anchorage. Therefore, it is consistent with the plant documentation.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2R43-P001C Equip. Class¹ 20

Equipment Description DG 1C CONT PANEL

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
There is an overhead ceiling light directly over the control panel and adjacent to raceway 2E23374. The light is properly attached at the top with wire ties. The light could potentially swing and impact the raceway, however, the raceway is rigid and the impact will not cause damage to cables within the raceway. The light is judged to not be a seismic concern.

- 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Two rigid raceways (2E23374 and 2E23373) connect to cable tray 2LBA806 with adequate flexibility. A 4" diameter RGS conduit (2E23719 and a 1" diameter RGS conduit connect to the top of the control panel and are next supported approximately 8'-0" above to a strut support. This is not viewed as a seismic concern because the available length of conduit provides adequate flexibility.

- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

- 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

See 2R43-S001C for AWC information.

There are two missing screws on the back panels (one on each individual bottom panel) of the equipment. CR 518617 has been written to install these screws.

Evaluated by: Winston Stewart  Date: 09/17/2012

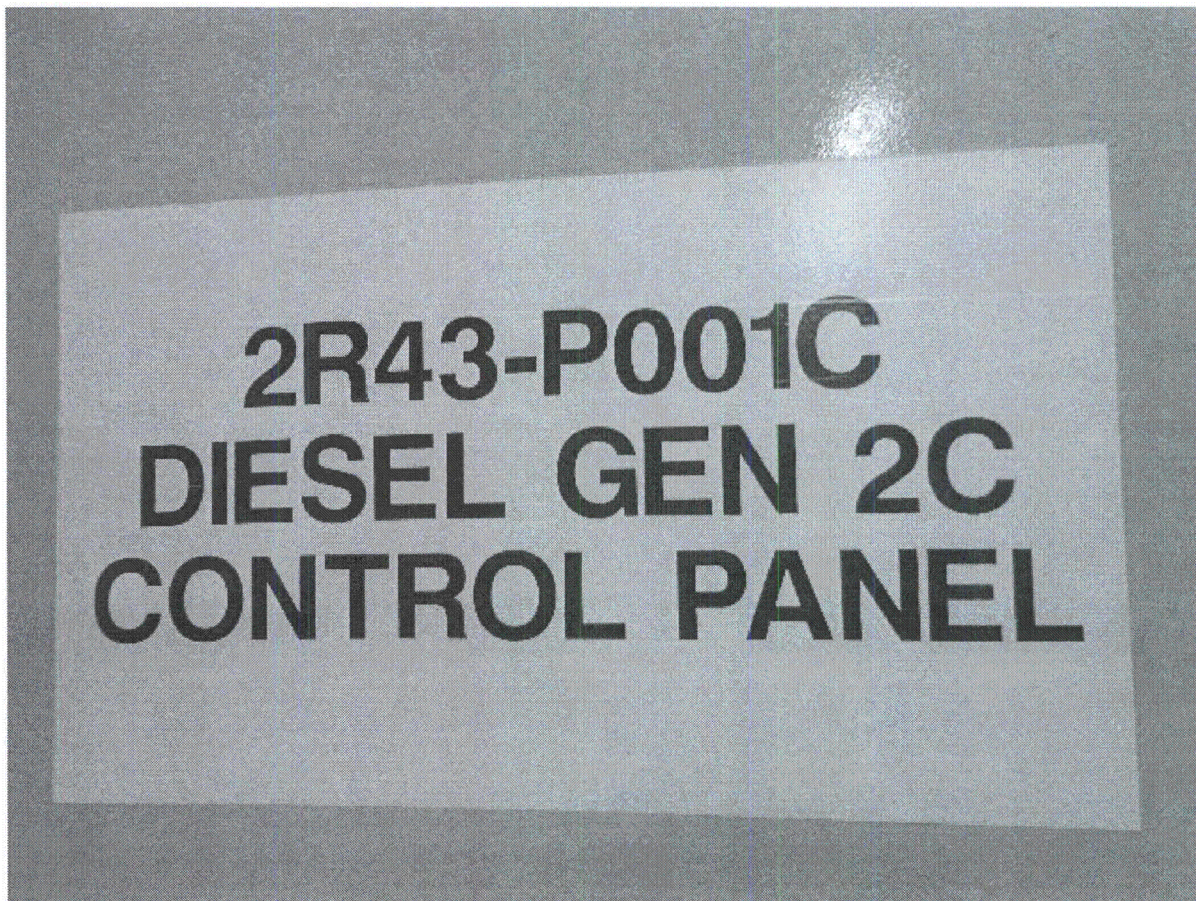
Patrick Kelly  09/17/2012

Seismic Walkdown Checklist (SWC)

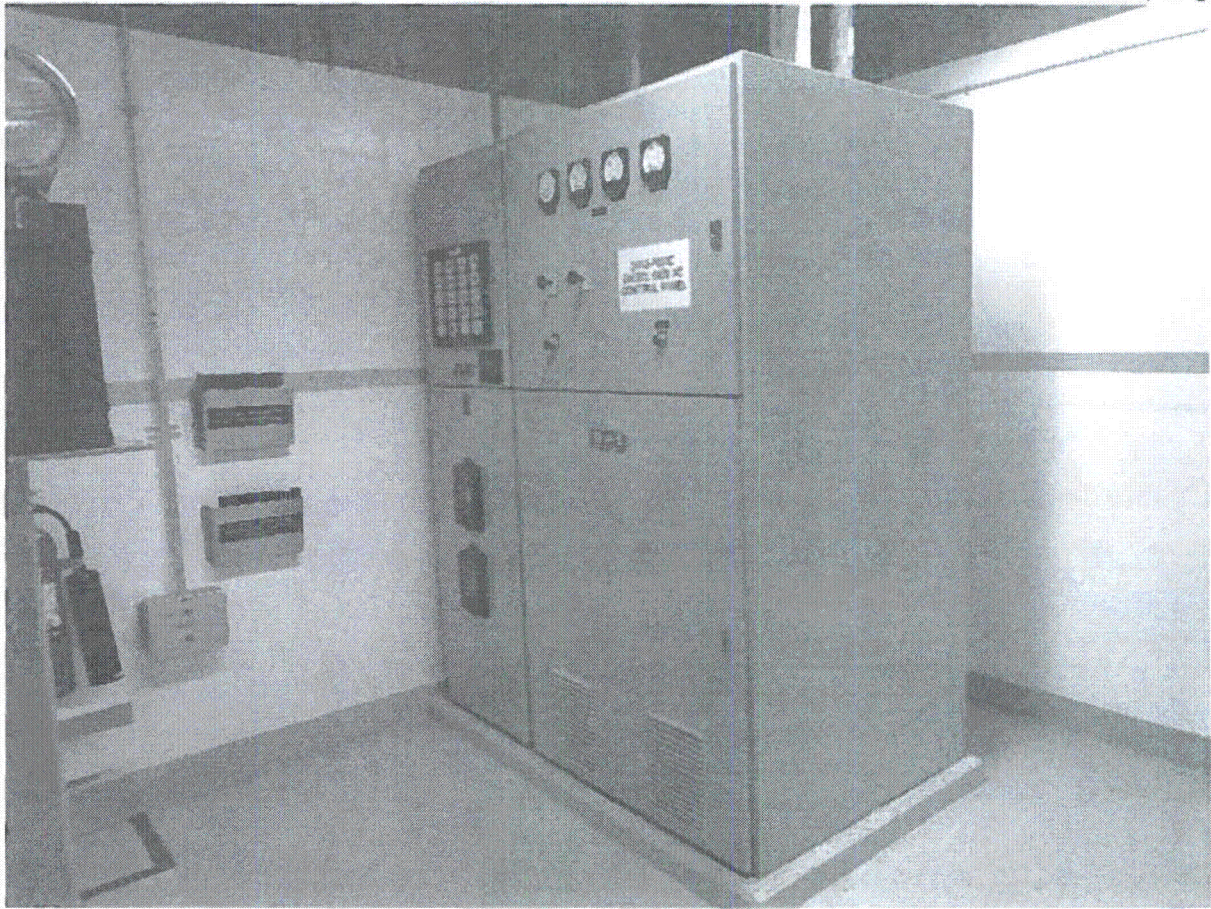
Equipment ID No. 2R43-P001C Equip. Class¹ 20

Equipment Description DG 1C CONT PANEL

Photographs



1: Equipment MPL# (2R43-P001C)



2: Equipment Elevation (2R43-P001C)



3: Missing Plug Welds (2R43-P001C)

Seismic Walkdown Checklist (SWC)Equipment ID No. 2C82-P001 Equip. Class¹ 20Equipment Description REMOTE SHUTDOWN PANELLocation: Bldg. REACTOR Floor El. 130 Room, Area 107A

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
Panel opened per work order SNC427042
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Anchorage is consistent with vendor drawing S-28871 and SEWS package dated 02/16/1994.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2C82-P001 Equip. Class¹ 20

Equipment Description REMOTE SHUTDOWN PANEL

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
The panel is enclosed on all sides and protected by an overhanging plate on the north and south sides.

- 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

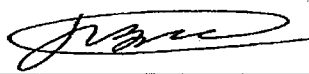
- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

- 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U
There are several cables not properly secured inside the panel (see photograph 3). Movement of the cables will not adversely affect the seismic capacity of the panel anchorage and the cables are not located near any safety-related components that could be damaged by impact from the cables. It is judged to be seismically adequate.
Components inside panel were inspected visually in accordance with the direction provided in the FAQ related to opening panels.

Comments (Additional pages may be added as necessary)

The caulk around the door seam of the panel is poorly installed or degraded (see photograph 4). This is not a seismic concern.

Evaluated by: Juan Vizcaya  Date: 09/18/2012

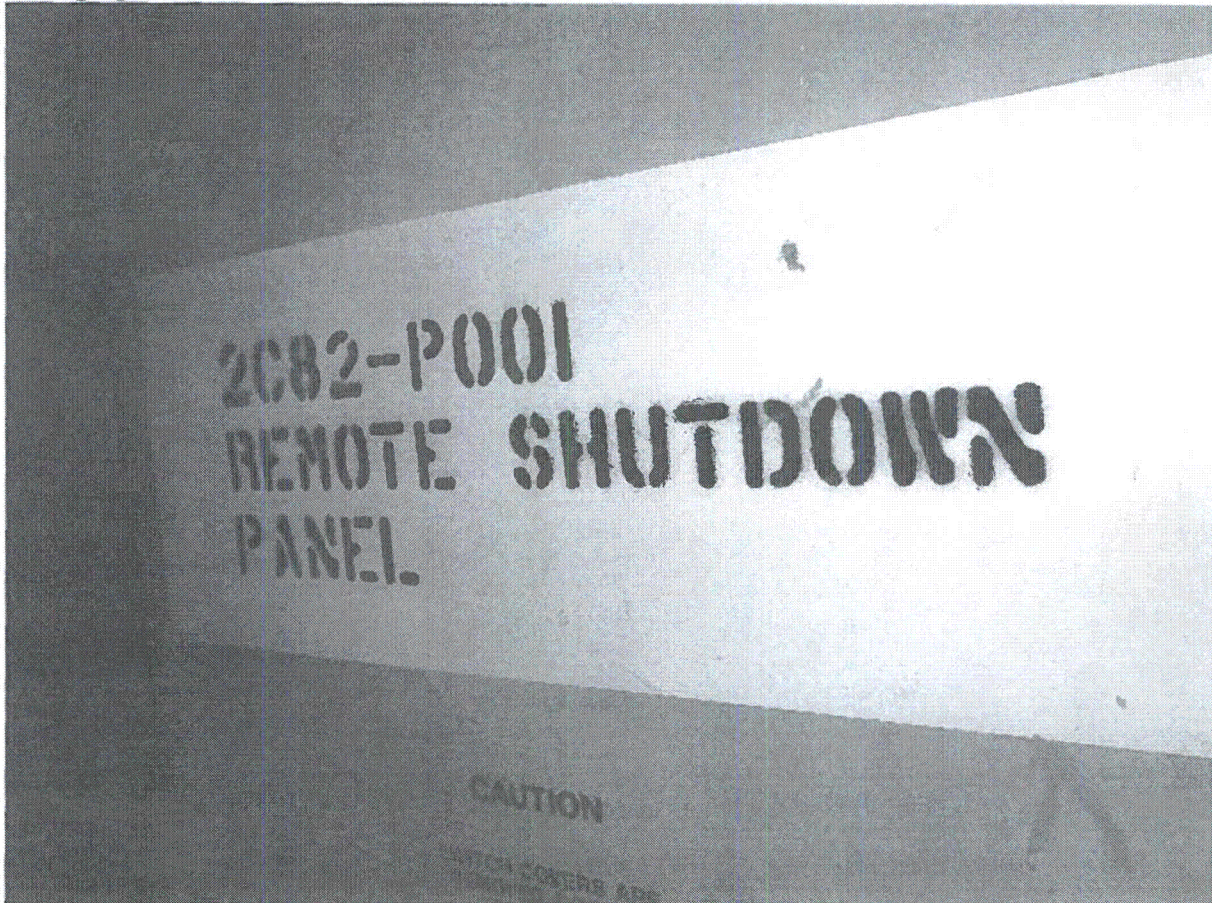
Patrick Kelly  09/18/2012

Seismic Walkdown Checklist (SWC)

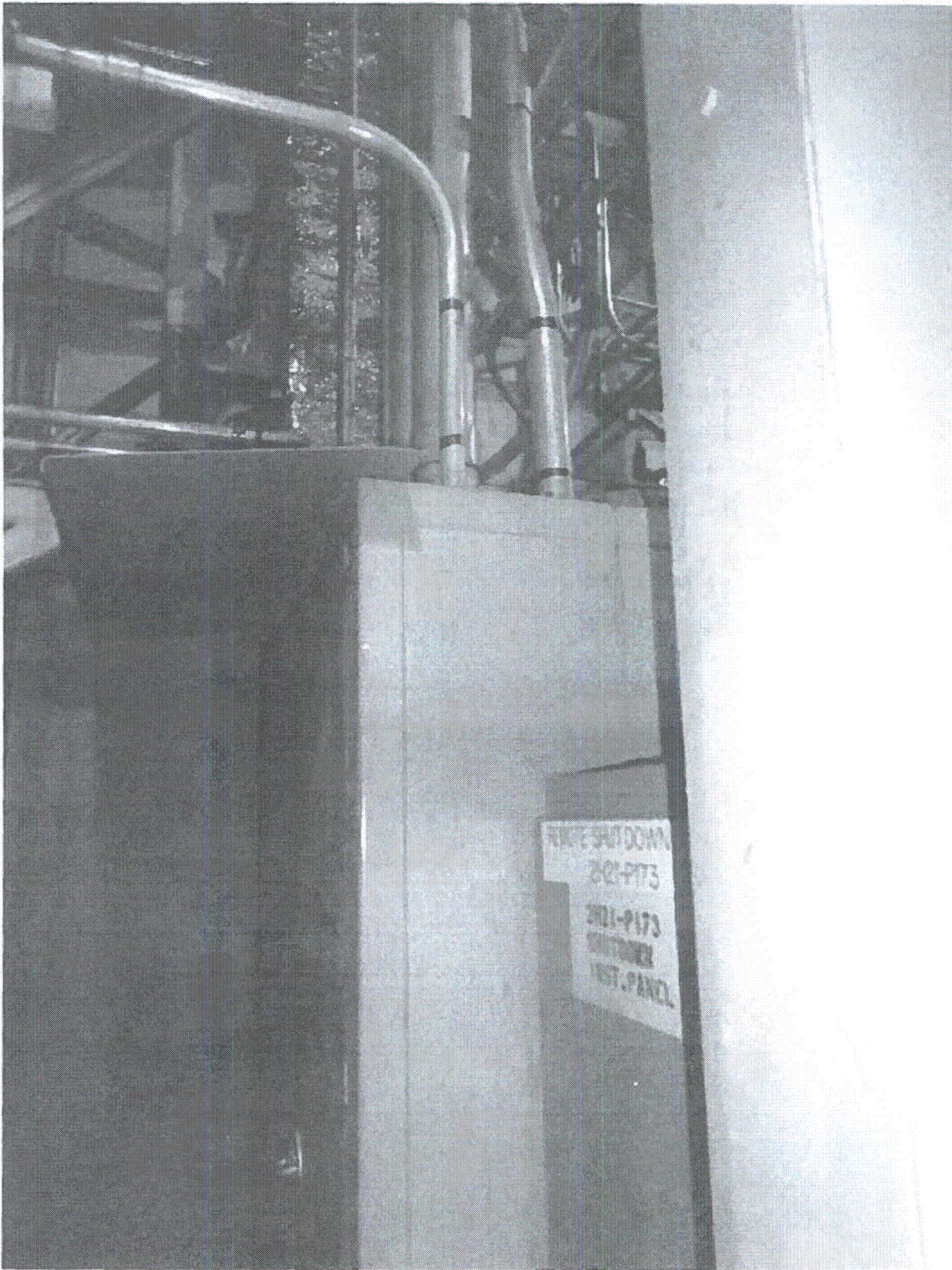
Equipment ID No. 2C82-P001 Equip. Class¹ 20

Equipment Description REMOTE SHUTDOWN PANEL

Photographs



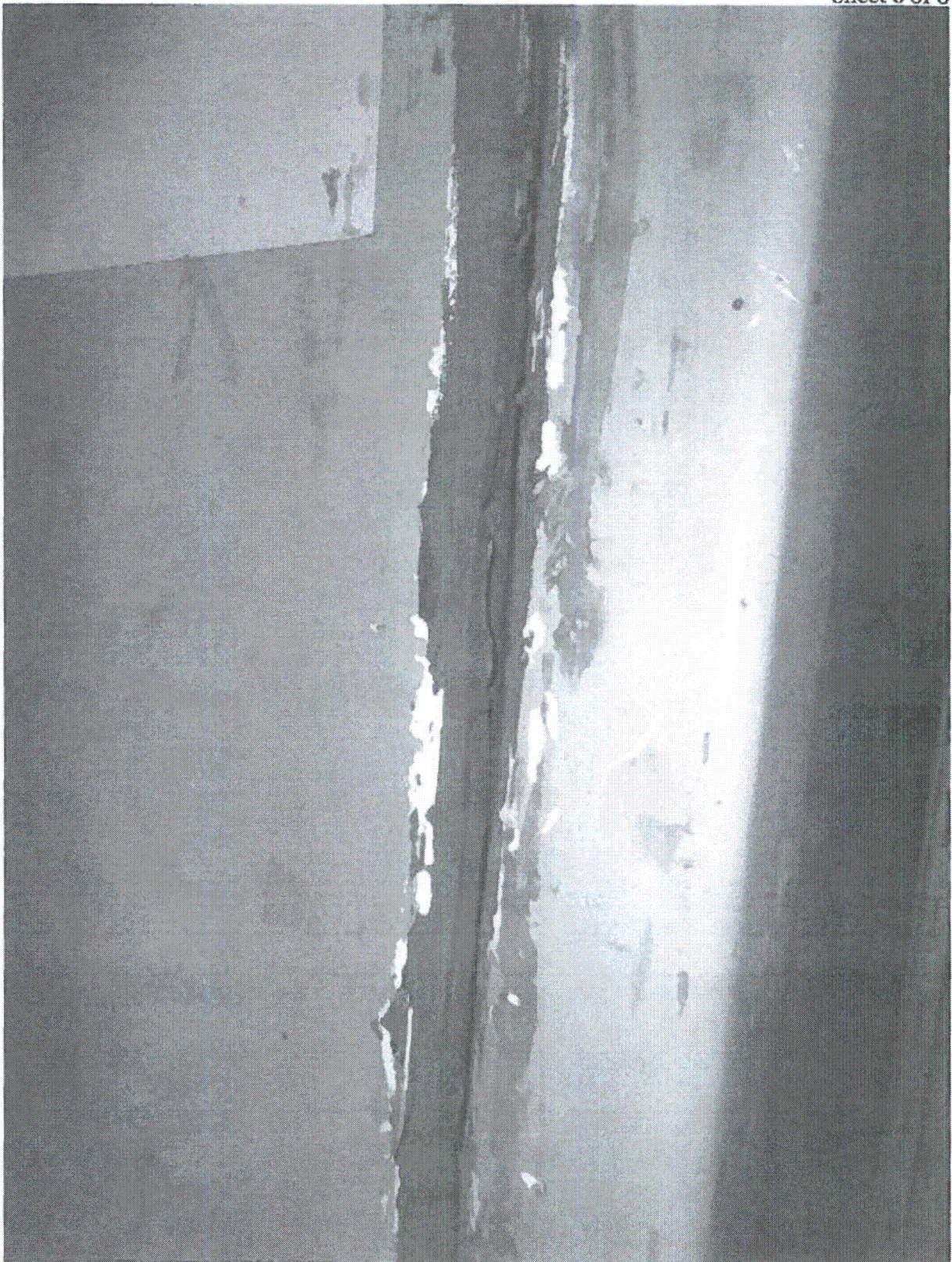
1: Equipment MPL# (2C82-P001)



2: Equipment Elevation (2C82-P001)



3: Loose Cables Inside Cabinet (2C82-P001)



4: Degraded Caulk Around Door Seam (2C82-P001)

Status: Y N U **Seismic Walkdown Checklist (SWC)**Equipment ID No. 2R43-B001A Equip. Class¹ 21Equipment Description DIESEL 2A AIR COOLANT HEAT EXCHANGERLocation: Bldg. DIESEL Floor El. 130 Room, Area DIESEL GENERATOR ROOM 2A

Manufacturer, Model, Etc. (optional but recommended) _____

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 the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
The heat exchanger is bolted to a steel pedestal, which is welded to the deisel generator steel framing.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Equipment is welded to steel beams supporting the diesel generator (see photograph 3).

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.) Y N U N/A

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2R43-B001A Equip. Class¹ 21

Equipment Description DIESEL 2A AIR COOLANT HEAT EXCHANGER

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Lube oil heat exchanger (2R43-B002A) and jacket water heat exchanger (2R43-B003A) are supported by the 2R43-B001A heat exchanger pipe with welded steel pedestals between them (see photograph 4). The three systems will act together during a seismic event and will not cause impact to one another. This is not a seismic concern.

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

- 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
6" diameter pipe which is attached to main pipe for heat exchanger is not fixed laterally and will be able to move laterally during seismic event. This is not a seismic concern.

- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

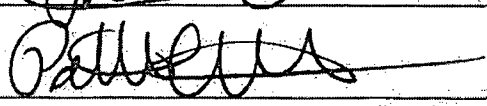
Other Adverse Conditions

- 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

See 2R43-S001A for AWC information.

Evaluated by: Juan Vizcaya  Date: 09/25/2012

Patrick Kelly  09/25/2012

Status: Y N U

Seismic Walkdown Checklist (SWC)

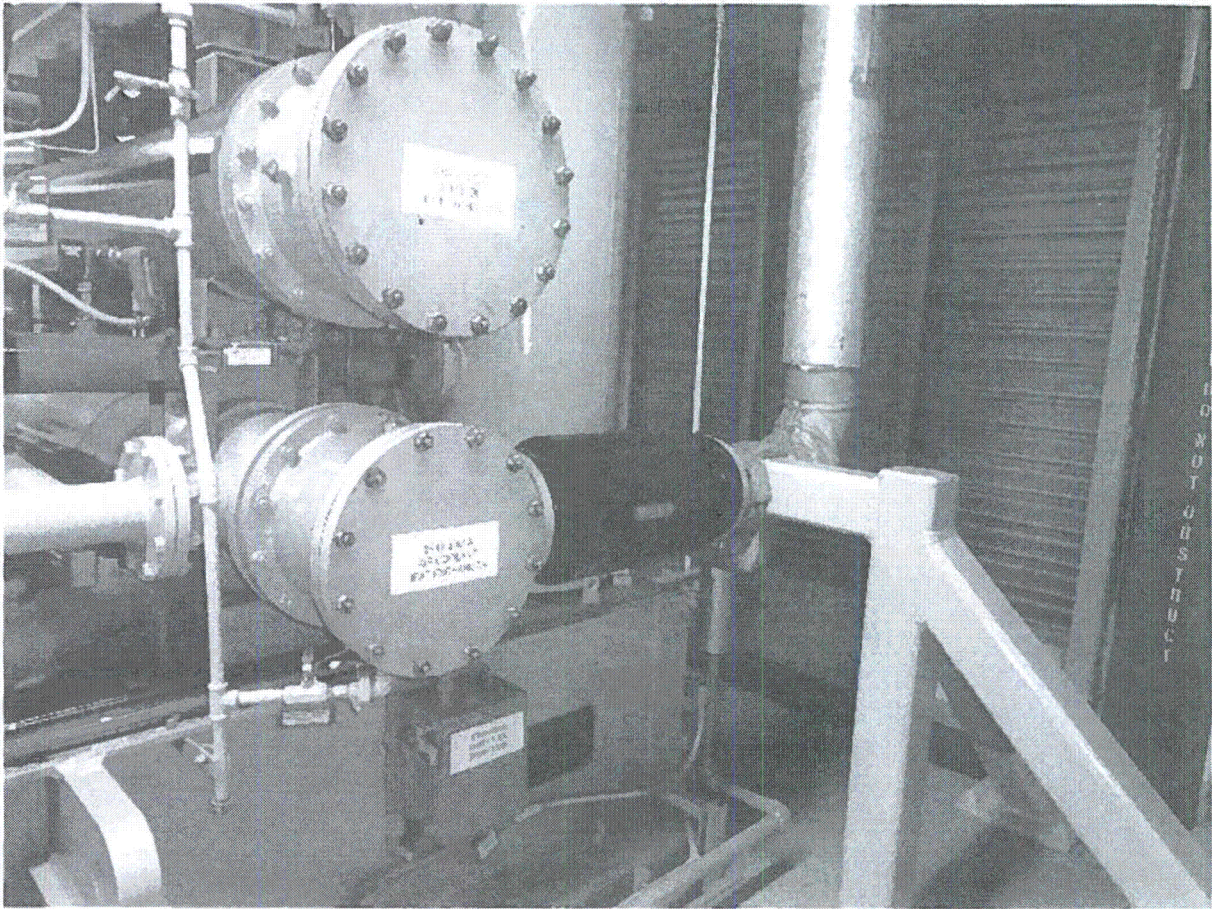
Equipment ID No. 2R43-B001A Equip. Class¹ 21

Equipment Description DIESEL 2A AIR COOLANT HEAT EXCHANGER

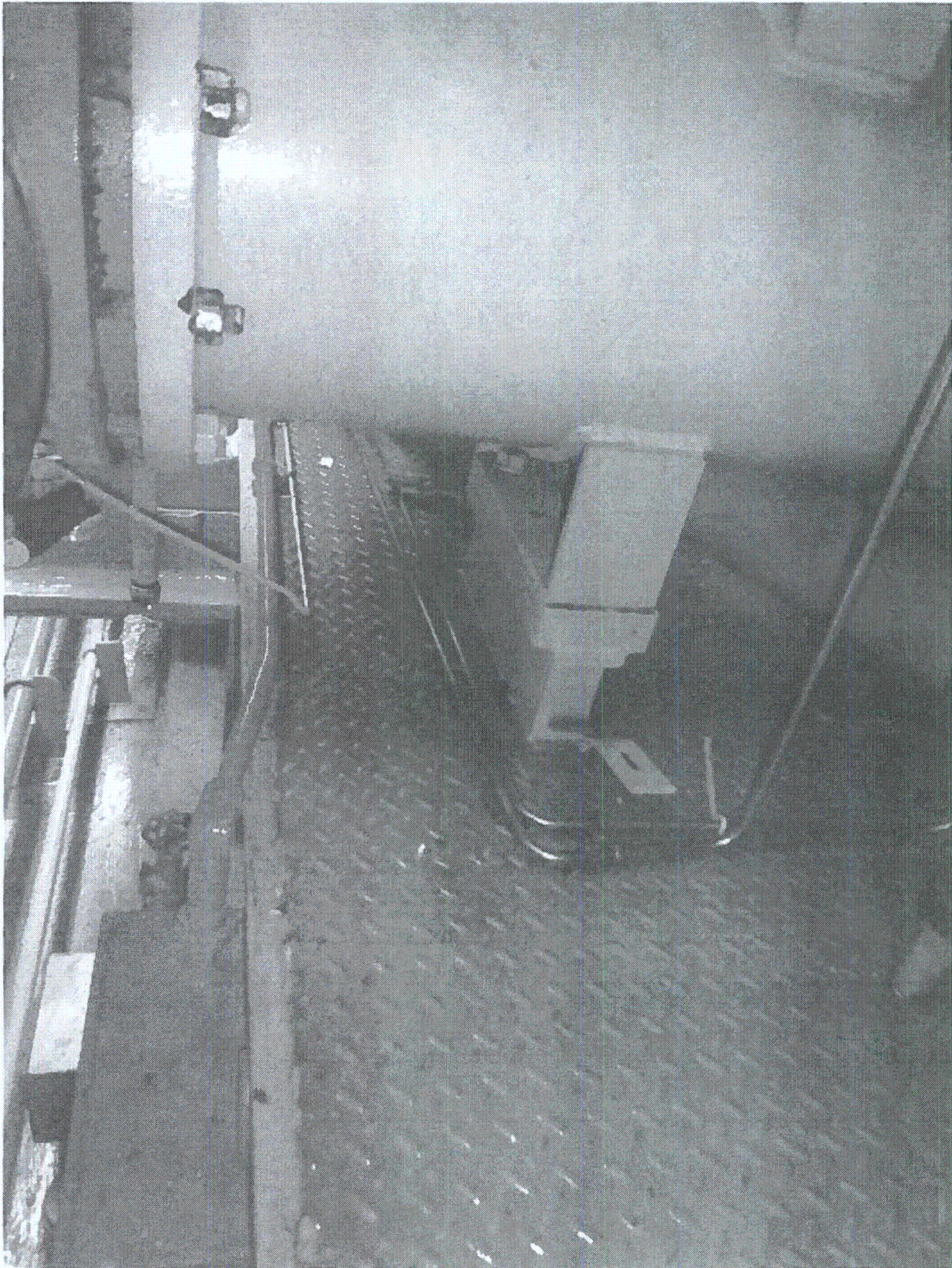
Photographs



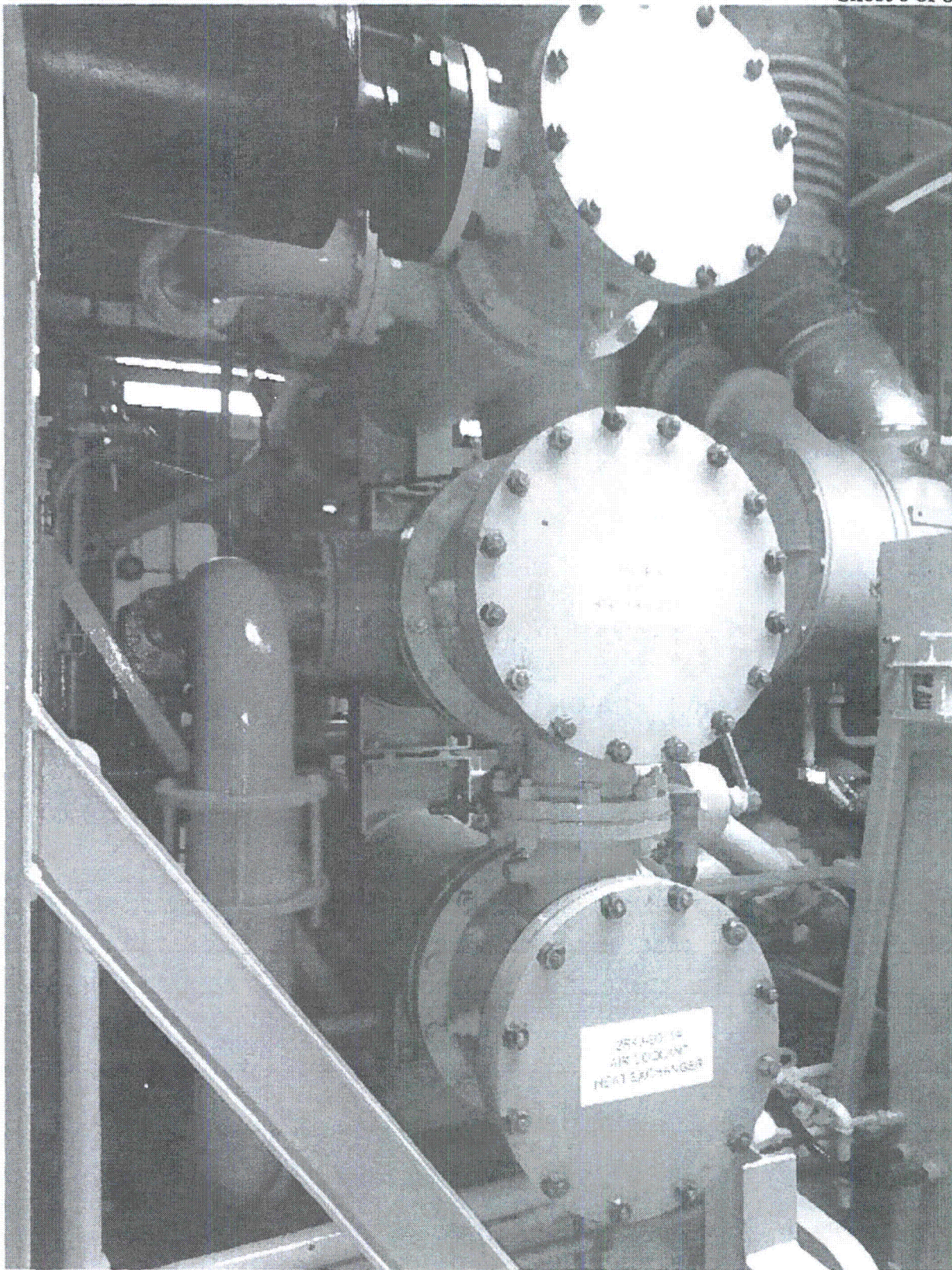
1: Equipment MPL# (2R43-B001A)



2: Equipment Elevation (2R43-B001A)



3: Support Pedestal (2R43-B001A)



4: Three Heat Exchange System Supported Together (2R43-B001A)