

CERTIFICATION OF WORK

(To be completed by the Contractor and saved in the Contractor's CMMS)

INSPECTION, TESTING, AND CERTIFICATION OF WORK

(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID/Building: PA118

Date of Visit: 2019 JUNE 28

Contractor Personnel on Site:

1. JUSTIN ACE SUPERVISOR
2. _____
3. _____
4. _____
5. _____
6. _____

Work Performed:

Inspection, Testing, and Certification

1. Annual Crane Testing
2. Asset# 6920 WO# 9072 & 9184
3. _____
4. _____

CERTIFICATION OF WORK

To be signed by the Contractor:

Print Name: Dog Hansen Date: 6-28-19

Signed: [Signature]

To be signed by Facility Manager:

By signing the Certification of Work, the said government representative signature does not constitute acceptance of any work performed by the contractor, it only acknowledges that the contractor was on-site during the identified timeline:

Print Name/Rank: ACE TESTIN WS-09 Date: 2019 JUNE 28

Signed: [Signature]

E-Mail: TESTIN.M.ACE.CIV@MAIL.MIL

MAINMAN ASSESSMENT REPORT

KONECRANES[®]
Lifting Businesses[™]

Report created: Jun 28, 2019, 7:43:50 PM

Customer and Service Information

Customer	Tidewater Inc		
Business Location	Erie USARC, Conneaut Lake		
Address	6467 Mike Wood Blvd, Conneaut Lake		
Agreement	U242 - Erie USARC		
Service Request	1-89476667822		
Description	ERI - June 2019 MAINMAN Assessment w/ Routine Maintenance on 1 asset		
PO Number	Karlee Demain		
Billing Type	Fixed		
Customer Contact	Karlee Demain 703-565-8472 karlee.demain@tideh2o.net	Konecranes Contact	Betsy Nogrady-Lake 5854810717 betsy.nogrady-lake@konecranes.com

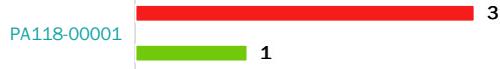
Summary

Service Request Status:	Completed
Service Products:	Routine Maintenance, MAINMAN Assessment
Assets Serviced:	1

Findings and Actions

Findings and Actions by Asset (Top 5)

3 Safety Risks



1 Repaired Items

3 Quotes

Note! The condition of certain components on serviced/inspected cranes cannot be directly verified through visual inspection without further disassembly and/or the use of other inspection methods. These advanced services are excluded from the scope of this service. Inspection frequency for these components should follow OEM recommendations and/or governing regulations. These components are listed separately and identified as follows:

Undetermined Conditions (Unable to Inspect - Not in Scope)

Findings and Actions (1 Assets)

 PA118-00001

Monorail system - 1 trolley electric wire rope hoist

Manufacturer	HOMEMADE	Model	Unknown
Serial Number	Unknown	Span	50ft
Criticality	N/A	Lift	20ft
Site Location	PA118-00001	Volt/Ph/Hz	208-3-60
Capacity/SWL	10 Ton	Environment	N/A

Service Products Routine Maintenance & MAINMAN Assessment /  Comment

Maintenance log book

 **Markings** – Visual assessment **Documentation** – Visual assessment

Trolley

Structure

 **Trolley intermediate structure** – Visual assessment

Trolley idle side

 **Trolley idle side structure** – Visual assessment **Trolley idle wheel and bearings** – Visual assessment, Lubricate, Operational assess... **Trolley idle wheel and bearings** – Visual assessment, Lubricate, Operational assess... **Trolley bumpers** – Visual assessment **Rail sweeps** – Visual assessment

Trolley driving side

 **Trolley driving side structure** – Visual assessment **Trolley driving wheel and bearings** – Visual assessment, Lubricate, Operational as... **Trolley driving wheel and bearings** – Visual assessment, Lubricate, Operational as... **Open gear transmission** – Visual assessment, Lubricate, Operational assessment **Trolley bumpers** – Visual assessment **Rail sweeps** – Visual assessment

Trolley traversing machinery

 **Traversing gear** – Visual assessment, Lubricate, Operational assessment **Traversing coupling** – Visual assessment, Lubricate, Operational assessment **Traversing motor** – Visual assessment, Lubricate, Clean, Operational assessment **Protection guards and covers** – Visual assessment

Hoisting machinery

 **Hoisting gear** – Visual assessment, Lubricate, Operational assessment

! Hoisting gear - internal	Quote
Date Reported: Jun 28, 2019	
Technician: Donald Hanson	
Task Type: Visual assessment	
Fault Code: Other fault	
Risk: Safety Risk	
Recommendation: Disassemble/Inspect	
Comment: The hoist is overdue Doran internal hoist gear case inspection & load test. This was brought to the attention of and, requested by WS 9 Steve Busija.	
✓ Hoisting coupling – Visual assessment, Lubricate, Clean, Operational assessment	
✓ Hoisting motor – Visual assessment, Lubricate, Clean, Operational assessment	
✓ Hoisting brake - holding	Repaired
Date Reported: Jun 28, 2019	
Technician: Donald Hanson	
Task Type: Visual assessment	
Fault Code: Other fault	
Risk: Safety Risk	
Recommendation: Repair	
Comment: The hoist brake coil set screw was loose. I tightened it into place.	
✓ Hoisting brake - control – Adjust, Visual assessment, Clean, Operational assessment	
✓ Rope drum – Visual assessment, Operational assessment	
✓ Rope drum bearings – Visual assessment, Lubricate, Operational assessment	
✓ Rope clamps – Visual assessment	
✓ Rope anchorage – Visual assessment	
Hoisting wire rope	Notification
Date Reported: Jun 28, 2019	
Technician: Donald Hanson	
Task Type: Lubricate	
Fault Code: Acceptable	
Risk: No direct risk	
Recommendation: No Action	
Comment: I lubricated the wire rope	
Hook block	
✓ Hook block structure and markings – Visual assessment	
Rope sheave and bearings	Notification
Date Reported: Jun 28, 2019	
Technician: Donald Hanson	
Task Type: Lubricate	
Fault Code: Acceptable	
Risk: No direct risk	
Recommendation: No Action	
Comment: I lubricated The upper and lower sheave bearings	
✓ Crosshead – Visual assessment, Operational assessment	
✓ Thrust ball bearing – Lubricate, Operational assessment	

✓ **Hook forging** – Visual assessment

! **Hook forging - internal**

Date Reported: Jun 28, 2019
Technician: Donald Hanson
Task Type: Visual assessment
Fault Code: Other fault
Risk: **Safety Risk**
Recommendation: Analyze / Survey / Assessment
Comment: An NDT inspection of the hook is recommended.

Quote

✓ **Latch** – Visual assessment, Operational assessment

Electrics

Power supply

✓ **Runway mainline disconnect** – Visual assessment, Operational assessment

✓ **Trolley power supply** – Visual assessment, Operational assessment

✓ **Tow arm** – Visual assessment

✓ **Collector assembly** – Visual assessment, Operational assessment

✓ **Conductor** – Visual assessment

✓ **Pendant power supply** – Visual assessment, Operational assessment

✓ **Connection box** – Visual assessment

✓ **Festoon cable** – Visual assessment

Control system

✓ **Trolley cubicle** – Visual assessment

✓ **General wiring and conduits** – Visual assessment

✓ **Operation control** – Visual assessment, Operational assessment

✓ **Hoist cubicle** – Visual assessment

! **General wiring and conduits**

Date Reported: Jun 28, 2019
Technician: Donald Hanson
Task Type: Visual assessment
Fault Code: Other fault
Risk: **Safety Risk**
Recommendation: Repair
Comment:
The wiring from the collector assembly passes through an opening that is not bushed

Quote

✓ **Operation control** – Visual assessment, Operational assessment

✓ **Pushbutton pendant** – Visual assessment, Operational assessment

✓ **Pushbutton pendant cable** – Visual assessment

✓ **Hoisting limit switches** – Visual assessment, Adjust, Operational assessment

✓ **Operation control** – Visual assessment, Operational assessment

Runway

Beam

✓ **End stops** – Visual assessment

MAINMAN ASSESSMENT REPORT

KONECRANES[®]
Lifting Businesses[™]



Jun 28, 2019 Justin Ace, Customer



Jun 28, 2019 Donald Hanson, Technician

Undetermined Conditions: Unable to Inspect - Not in Scope (1 Assets)

 PA118-00001

Monorail system - 1 trolley electric wire rope hoist

Jun 25, 2019

! Hoisting gear - internal	Notification
Fault Code: Not in Scope	
Risk: Undetermined Condition	
Recommendation: Disassemble/Inspect	
Comment: Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations	
! Hoisting coupling - internal	Notification
Fault Code: Not in Scope	
Risk: Undetermined Condition	
Recommendation: Disassemble/Inspect	
Comment: Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations	
! Mechanical load brake	Notification
Fault Code: Not in Scope	
Risk: Undetermined Condition	
Recommendation: Disassemble/Inspect	
Comment: Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations	
! Hook nut and locking parts	Notification
Fault Code: Not in Scope	
Risk: Undetermined Condition	
Recommendation: Disassemble/Inspect	
Comment: Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations	
! Hook forging - internal	Notification
Fault Code: Not in Scope	
Risk: Undetermined Condition	
Recommendation: Disassemble/Inspect	
Comment: Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations	

Component Condition

- ✓ Acceptable (No issues detected)
- ! Need Attention

Findings and Actions

Safety Risk **WARNING**

Indicates an unsafe condition. Failure to remedy such condition before continued operation of the identified asset may result in personal injury, including death, or property damage.

Production Risk

Indicates an inefficient condition. Failure to remedy such condition before continued operation of the identified asset may result in inefficient asset performance or an interruption in production.

Undetermined Condition

Unable to Inspect - Not in Scope

Indicates that the component condition could not be directly verified through visual inspection without further disassembly and/or the use of other inspection methods.

These advanced services are generally excluded from the scope of typical compliance and preventive maintenance inspections. Consultation Services may be added to a Service Program or offered on a stand-alone basis to assess the condition of these components.

Inspection frequency for these components should follow OEM recommendations and/or governing regulations. If these are not readily available, Konecranes recommendations may be used.

If no records are available, disassembly/inspections of these components should be carried out without delay to determine their current condition and to establish a baseline for subsequent inspections.

Undetermined Condition

Not able to Complete

Indicates that the component condition could not be directly verified through visual inspection as a result of asset configuration and/or obstruction. In this case, the visual inspection was part of the service scope but it was not completed.

Improvement Opportunity

Indicates a potential opportunity to improve the safety, productivity, application or useful life of the asset.

Acceptable / Repaired Item

Component condition is verified by Konecranes service technician. No actions required. If a component or other object has been repaired within the service visit, green color code is shown as well.

Repaired Items correspond to those repairs performed by, observed by or reported to the Konecranes Technician during the delivery of the referenced Service Request.

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