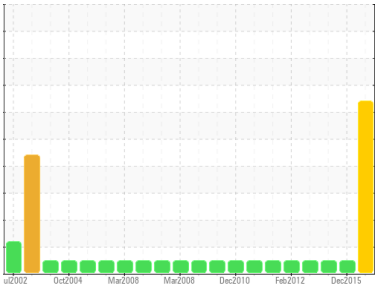
GREASE ANALYSIS

Sample Rating Trend



WEAR

Area
CRANES
Machine Id
Slew Bearing - Aft Crane Counter weight (S/N Sample Tag MA-04001)
Component
Grease
Fluid
{not provided} (--- LTR)

DIAGNOSIS

Recommendation

We advise that you check for visible metal particles in the grease. We advise that you check all areas where dirt can enter the system. We recommend that you re-grease the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type and NLGI grade of the grease on your next sample.

Wear

PQ levels are abnormal. Iron ppm levels are marginal. Moderate concentration of visible metal present. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Abnormal wear is indicated.

Grease Condition

The grease is no longer serviceable as a result of the abnormal and/or severe wear.

Contaminants

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC**	PC351015	PC
Sample Date		Client Info		**31 Dec 2023**	09 Dec 2015	06 Nov 2013
Machine Age	hrs	Client Info		**0**	0	0
Grease Age	hrs	Client Info		**0**	0	0
Grease Serviced		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>200	▲ **339**	---	---
Iron	ppm	ASTM D5185(m)	>250	▲ **168**	25	2
Chromium	ppm	ASTM D5185(m)	>10	**1**	<1	0
Nickel	ppm	ASTM D5185(m)	>5	**2**	1	<1
Cadmium	ppm	ASTM D5185(m)		**0**	0	0
Titanium	ppm	ASTM D5185(m)		**3**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Lead	ppm	ASTM D5185(m)	>25	**2**	5	<1
Copper	ppm	ASTM D5185(m)	>75	**1**	<1	<1
Tin	ppm	ASTM D5185(m)	>5	**0**	0	0
Silver	ppm	ASTM D5185(m)	>5	**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**3**	3	<1
Magnesium	ppm	ASTM D5185(m)		**24**	2	0
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)		**22**	3	<1
Phosphorus	ppm	ASTM D5185(m)		**25**	43	10
Zinc	ppm	ASTM D5185(m)		**26**	40	1
Antimony	ppm	ASTM D5185(m)		**10**	18	0

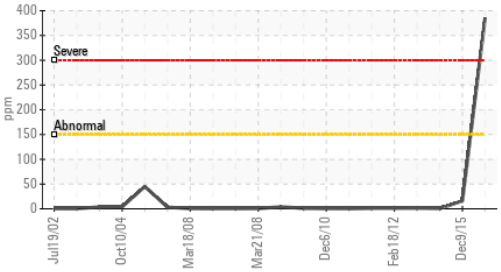
THICKENER/SOAP		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)		▲ **151**	6	<1
Barium	ppm	ASTM D5185(m)		**4**	4	<1
Calcium	ppm	ASTM D5185(m)		**452**	145	29
Sodium	ppm	ASTM D5185(m)		**23**	13	11
Lithium	ppm	ASTM D5185(m)		**82**	160	249
Sulfur	ppm	ASTM D5185(m)		**659**	658	422

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>150	▲ **385**	16	<1
Potassium	ppm	ASTM D5185(m)		**3**	<1	0

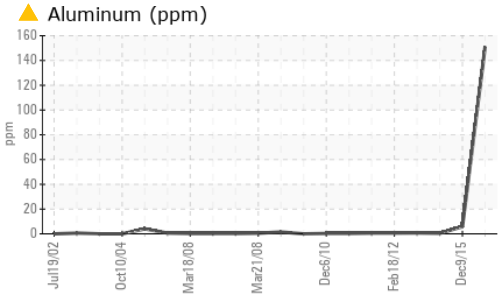
GREASE CONDITION		method	limit/base	current	history1	history2
Grease Color		Visual*		**Black**	---	---
Texture		In-house*		**Stringy**	---	---
NLGI Consistency	NLGI Scale	SKF Method*		**1**	---	---

GREASE ANALYSIS

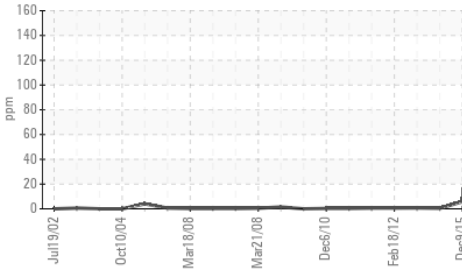
Silicon (ppm)



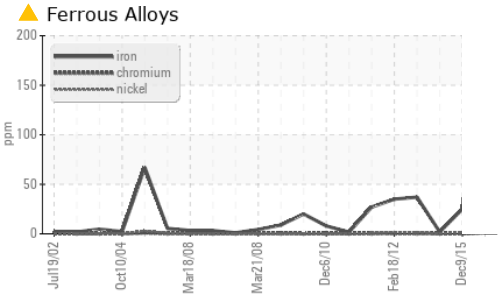
Aluminum (ppm)



Aluminum (ppm)



Ferrous Alloys

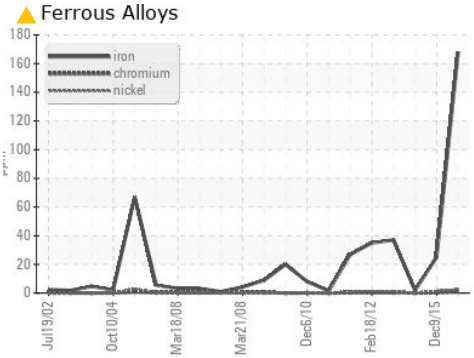


SAMPLE IMAGES

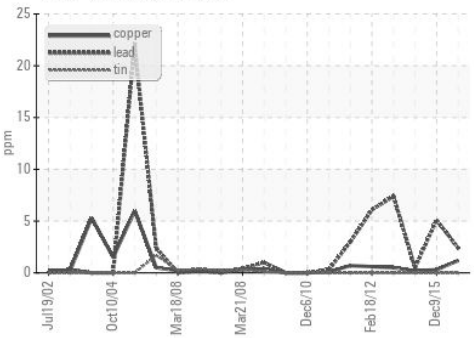
	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter				no image	no image

GRAPHS

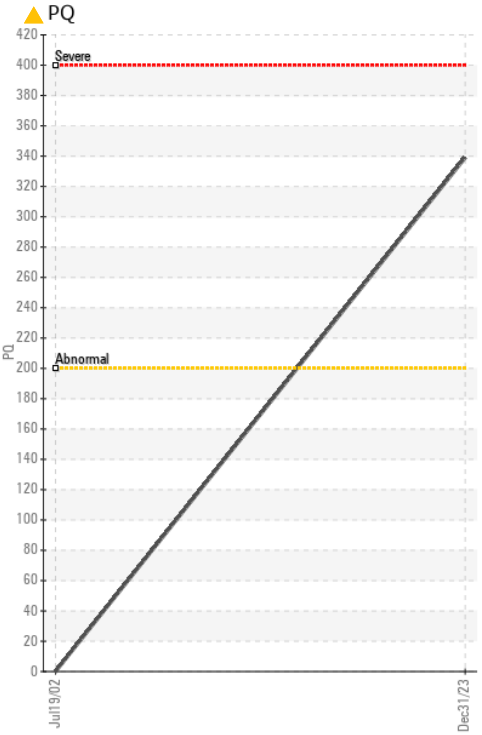
Ferrous Alloys



Non-ferrous Metals



PQ



Grease Appearance (Magn: 10X)

ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: PC	**Recieved**	: 17 Jan 2024
Lab Number	: 02609592	**Diagnosed**	: 19 Jan 2024
Unique Number	: 5710678	**Diagnostician**	: Bill Quesnel
Test Package	: GRS 1 (Additional Tests: BottomAnalysis)		

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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