



# PROBLEM SUMMARY

Area  
**ENGINE ROOM 2ND DECK [60513085]**  
 Machine Id  
**55-K-6140C INSTRUMENT & G/S AIR**  
 Component  
**2 Filter**  
 Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (114 LTR)**

Sample Rating Trend



WEAR PARTICLES



## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

We recommend that you drain the filter from the component if this has not already been done. An inspection for the source(s) of wear may be warranted at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	---	---
Ferrous Rolling	Scale 0-10	ASTM D7684	<b>3</b>		

Customer Id: CUSANY  
 Sample No.: WC1234567  
 Lab Number: 01234567  
 Test Package: FLTRO



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Bill Quesnel CLS,OMA II,MLA-III,LLA-I +1  
 (289)291-4641 x4641  
[Bill.Quesnel@wearcheck.com](mailto:Bill.Quesnel@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	An inspection for the source(s) of wear may be warranted at this time.
Change Fluid	---	---	?	We recommend that you drain the filter from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR PARTICLES

Area  
**ENGINE ROOM 2ND DECK [60513085]**  
 Machine Id  
**55-K-6140C INSTRUMENT & G/S AIR**  
 Component  
**2 Filter**  
 Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (114 LTR)**



## DIAGNOSIS

### Recommendation

We recommend that you drain the filter from the component if this has not already been done. An inspection for the source(s) of wear may be warranted at this time. We recommend an early resample to monitor this condition.

### Wear Particles

The filter contained a light concentration of ferrous cutting wear particles. The particles were analysed by ICP. The most likely alloy matches are Low alloy steel 40XX, Low alloy steel 44XX and Low alloy steel 50XX.

### Contaminants

There is no indication of any contamination in the filter.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		<b>PP</b>	---	---
Sample Date	Client Info		<b>10 Apr 2019</b>	---	---
Machine Age	cyc Client Info		<b>0</b>	---	---
Oil Age	cyc Client Info		<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185(m)		<b>219</b>	---	---
Chromium	ppm ASTM D5185(m)		<b>0</b>	---	---
Nickel	ppm ASTM D5185(m)		<b>0</b>	---	---
Titanium	ppm ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m)		<b>1</b>	---	---
Lead	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m)		<b>0</b>	---	---
Tin	ppm ASTM D5185(m)		<b>3</b>	---	---
Antimony	ppm ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm ASTM D5185(m)		<b>0</b>	---	---

## FERROGRAPHY

	method	limit/base	current	history 1	history 2
Ferrous Rubbing	Scale 0-10 ASTM D7684		<b>1</b>		
Ferrous Sliding	Scale 0-10 ASTM D7684				
Ferrous Cutting	Scale 0-10 ASTM D7684				
Ferrous Rolling	Scale 0-10 ASTM D7684		<b>3</b>		
Ferrous Break-in	Scale 0-10 ASTM D7684				
Ferrous Spheres	Scale 0-10 ASTM D7684				
Ferrous Black Oxides	Scale 0-10 ASTM D7684				
Ferrous Red Oxides	Scale 0-10 ASTM D7684				
Ferrous Corrosive	Scale 0-10 ASTM D7684				
Ferrous Other	Scale 0-10 ASTM D7684				
Nonferrous Rubbing	Scale 0-10 ASTM D7684				
Nonferrous Sliding	Scale 0-10 ASTM D7684				
Nonferrous Cutting	Scale 0-10 ASTM D7684				
Nonferrous Rolling	Scale 0-10 ASTM D7684				
Nonferrous Other	Scale 0-10 ASTM D7684				
Sand/Dirt	Scale 0-10 ASTM D7684		<b>1</b>		
Fibres	Scale 0-10 ASTM D7684		<b>1</b>		
Spheres	Scale 0-10 ASTM D7684				
Other	Scale 0-10 ASTM D7684				
Patch Weight	mg ASTM D7684		<b>18</b>	---	---



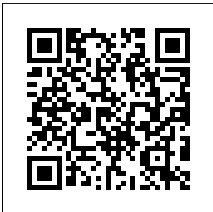
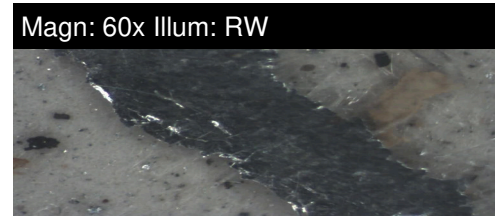
# OIL ANALYSIS REPORT

ADDITIVES	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m) 0	<b>8</b>	---	---
Barium	ppm	ASTM D5185(m) 850	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m) 0	<b>14</b>	---	---
Zinc	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Sulfur	ppm	ASTM D5185(m) 210	<b>0</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>0</b>	---	---

CONTAMINANTS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	<b>4</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>98</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC1234567      **Received** : 11 Apr 2019  
**Lab Number** : **01234567**      **Diagnosed** : 17 Apr 2019  
**Unique Number** : 12345678      **Diagnostician** : Bill Quesnel  
**Test Package** : FLTRO ( Additional Tests: ICP, ICP-DIGEST )  
*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.*

**Cusany Logistics Inc.**  
 1212 Industrial Place  
 Centerville, OH  
 USA 75900  
 Contact: Jim Leduc  
 jim.leduc@cusanylogisticsinc.com  
 T: (305)555-1212  
 F: (305)555-1222

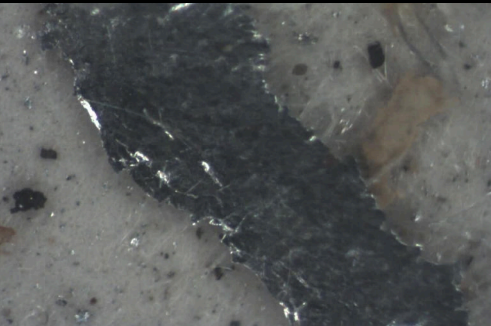
# FILTER REPORT

Area  
**ENGINE ROOM 2ND DECK [60513085]**  
 Machine Id  
**55-K-6140C INSTRUMENT & G/S AIR**  
 Component  
**2 Filter**  
 Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (114 LTR)**

Magn: 10x Illum: RW



Magn: 60x Illum: RW



Magn: 10x Illum: RW



FERROGRAPHY		method	limit/base	current	history 1	history 2
Ferrous Rubbing	Scale 0-10	ASTM D7684		█ 1		
Ferrous Sliding	Scale 0-10	ASTM D7684				
Ferrous Cutting	Scale 0-10	ASTM D7684				
Ferrous Rolling	Scale 0-10	ASTM D7684		▲ 3		
Ferrous Break-in	Scale 0-10	ASTM D7684				
Ferrous Spheres	Scale 0-10	ASTM D7684				
Ferrous Black Oxides	Scale 0-10	ASTM D7684				
Ferrous Red Oxides	Scale 0-10	ASTM D7684				
Ferrous Corrosive	Scale 0-10	ASTM D7684				
Ferrous Other	Scale 0-10	ASTM D7684				
Nonferrous Rubbing	Scale 0-10	ASTM D7684				
Nonferrous Sliding	Scale 0-10	ASTM D7684				
Nonferrous Cutting	Scale 0-10	ASTM D7684				
Nonferrous Rolling	Scale 0-10	ASTM D7684				
Nonferrous Other	Scale 0-10	ASTM D7684				
Sand/Dirt	Scale 0-10	ASTM D7684		█ 1		
Fibres	Scale 0-10	ASTM D7684		█ 1		
Spheres	Scale 0-10	ASTM D7684				
Other	Scale 0-10	ASTM D7684				
Patch Weight	mg	ASTM D7684		18	---	---

### WEAR

The filter contained a light concentration of ferrous cutting wear particles. The particles were analysed by ICP. The most likely alloy matches are Low alloy steel 40XX, Low alloy steel 44XX and Low alloy steel 50XX.

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