



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LINKBELT 33**  
Component  
**Diesel Engine**  
Fluid  
**SAE 15W40 (--- GAL)**

## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0917739</b>	---	---
Sample Date		Client Info		<b>04 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>22484</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

## WEAR

Chromium ppm levels are abnormal. Ring wear is indicated.

Iron	ppm	ASTM D5185(m)	>75	<b>43</b>	---	---
Chromium	ppm	ASTM D5185(m)	>4	<b>▲ 4</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>54	<b>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>240	<b>4</b>	---	---
Tin	ppm	ASTM D5185(m)	>5	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

There is a moderate concentration of dirt present in the oil. High amount of ingressed dirt has caused abrasive wear to the component.

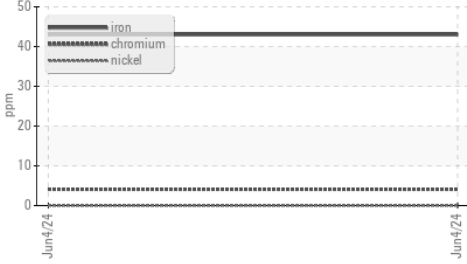
Silicon	ppm	ASTM D5185(m)	>35	<b>▲ 55</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.4</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.1</b>	---	---
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

## FLUID CONDITION

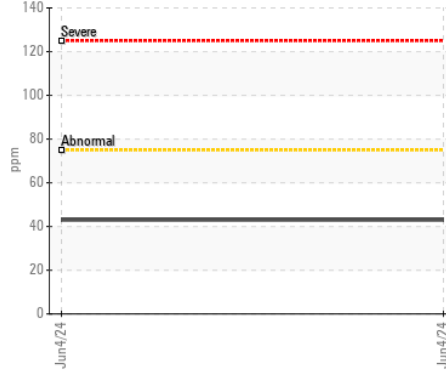
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)	>57	<b>8</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>2</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>57</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>924</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1006</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>1011</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1131</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2461</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.9</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>12.3</b>	---	---

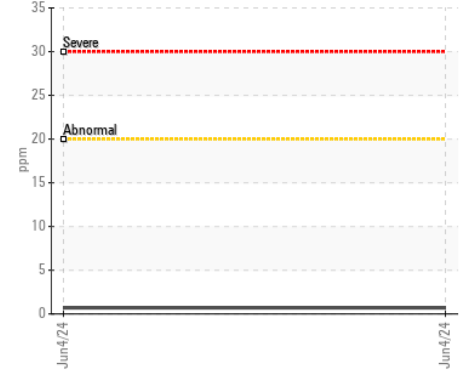
▲ Ferrous Alloys



Iron (ppm)



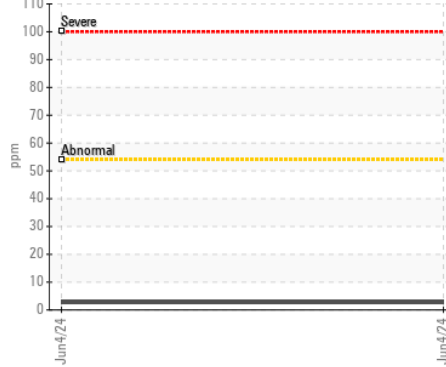
Lead (ppm)



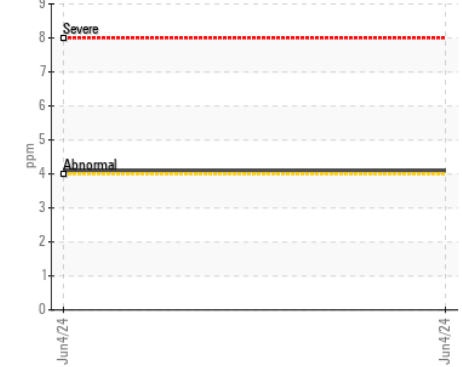
▲ Silicon (ppm)



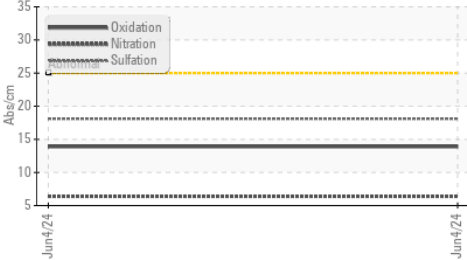
Aluminum (ppm)



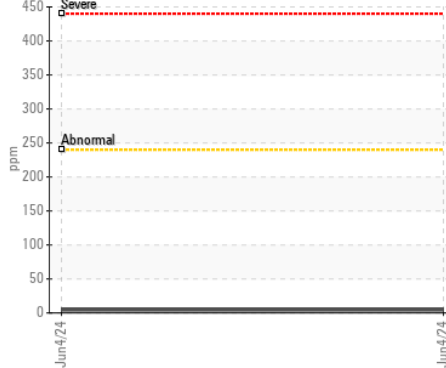
▲ Chromium (ppm)



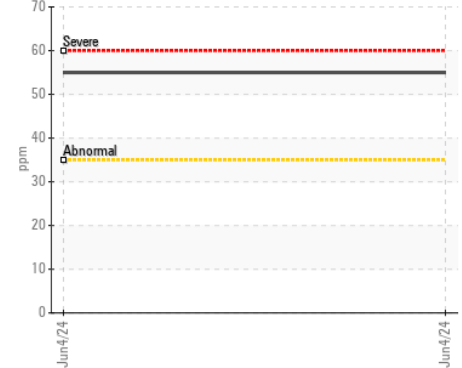
FT-IR (Direct Trend)



Copper (ppm)



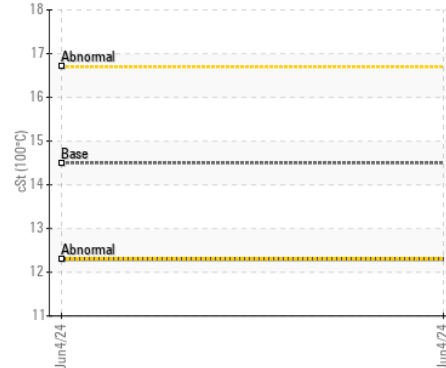
▲ Silicon (ppm)



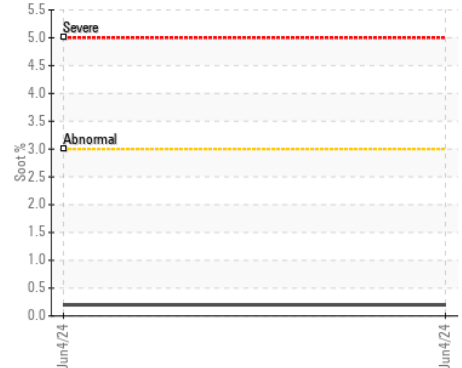
Viscosity @ 100°C



Viscosity @ 100°C



Soot %



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0917739 **Received** : 05 Jun 2024  
**Lab Number** : 02639813 **Tested** : 06 Jun 2024  
**Unique Number** : 5788975 **Diagnosed** : 06 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**DeSantis Crane**  
 294 Fifty Rd  
 Stoney Creek, ON  
 CA L8E 5L1  
 Contact: Adam  
 adam@desantiscrane.com

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.