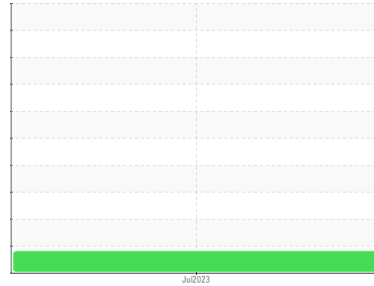




# PROBLEM SUMMARY

Area  
**SCHTRUCK**  
 Machine Id  
**6392 [SCHTRUCK]**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (10 GAL)**

Sample Rating Trend

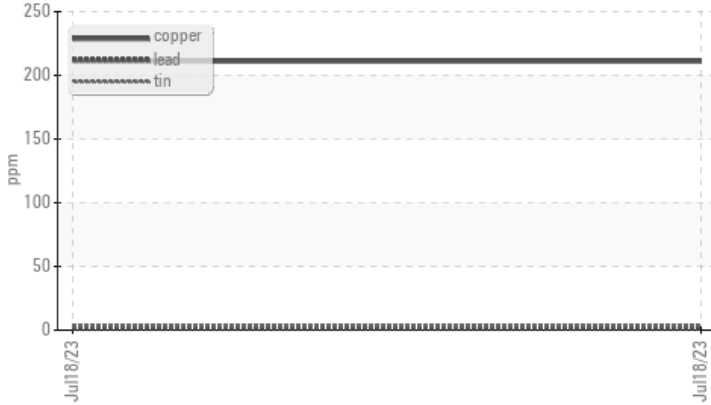


**WEAR**

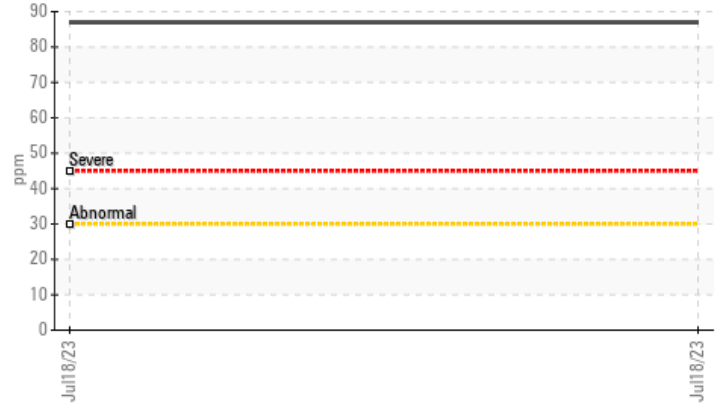


## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



### Aluminum (ppm)



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Copper	ppm	ASTM D5185m	>30	<b>▲ 211</b>	---	---

Customer Id: SCHPLA  
 Sample No.: SBP0004724  
 Lab Number: 05905145  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**SCHTRUCK**  
 Machine Id  
**6392 [SCHTRUCK]**

Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (10 GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>SBP0004724</b>	---	---
Sample Date	Client Info	<b>18 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>37645</b>	---
Oil Age	hrs	Client Info	<b>37645</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	---
Glycol	WC Method		<b>NEG</b>	---

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>85</b>	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	---
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>30	<b>87</b>	---
Lead	ppm	ASTM D5185m	>30	<b>2</b>	---
Copper	ppm	ASTM D5185m	>30	<b>▲ 211</b>	---
Tin	ppm	ASTM D5185m	>15	<b>4</b>	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>38</b>	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	60	<b>46</b>	---
Manganese	ppm	ASTM D5185m	0	<b>5</b>	---
Magnesium	ppm	ASTM D5185m	1010	<b>572</b>	---
Calcium	ppm	ASTM D5185m	1070	<b>1881</b>	---
Phosphorus	ppm	ASTM D5185m	1150	<b>747</b>	---
Zinc	ppm	ASTM D5185m	1270	<b>914</b>	---
Sulfur	ppm	ASTM D5185m	2060	<b>2237</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>9</b>	---
Sodium	ppm	ASTM D5185m		<b>8</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>231</b>	---

## INFRA-RED

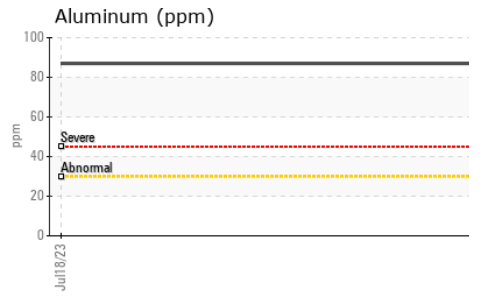
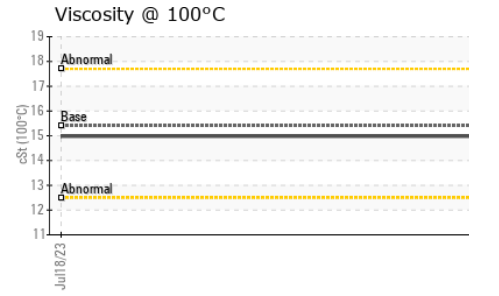
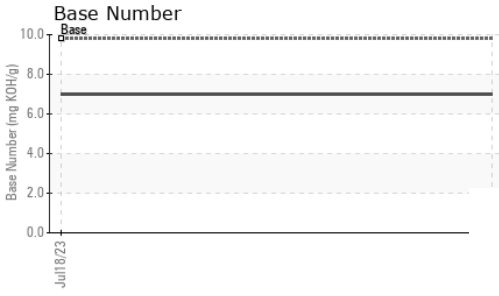
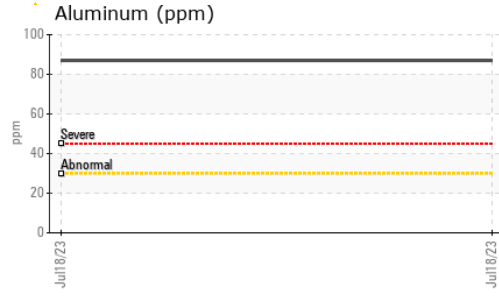
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.0</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.1</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>25.9</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.0</b>	---



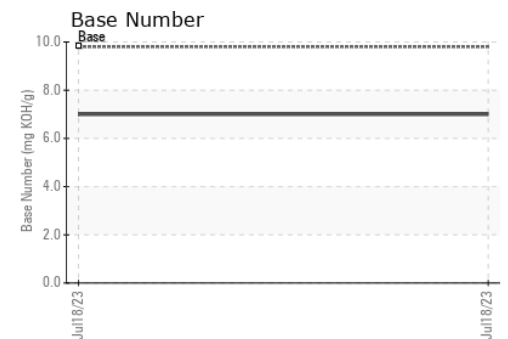
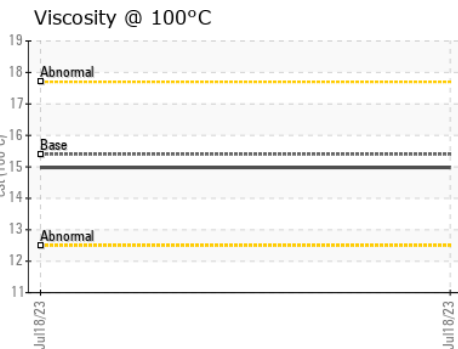
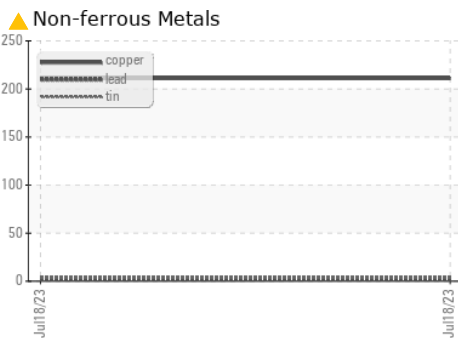
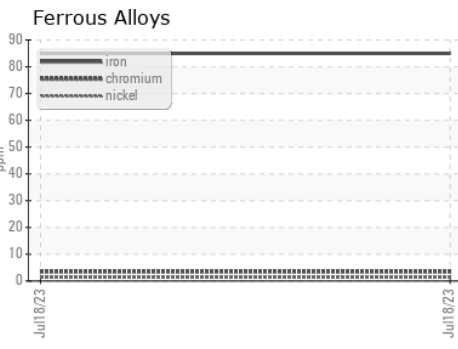
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.98</b>	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0004724 **Received** : 24 Jul 2023  
**Lab Number** : **05905145** **Diagnosed** : 27 Jul 2023  
**Unique Number** : 10566501 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**SCHMIDT TRANSPORTATION - 605449**  
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 Plattsmouth, NE  
 US 68048  
 Contact: NICK DOTY  
 doty@liquidtrucking.com  
 T: (402)949-9398  
 F:

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)