



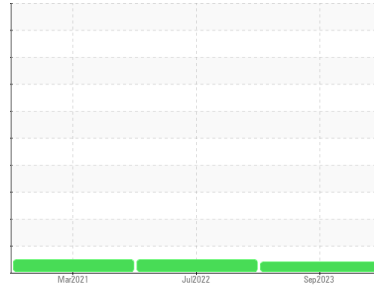
# PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

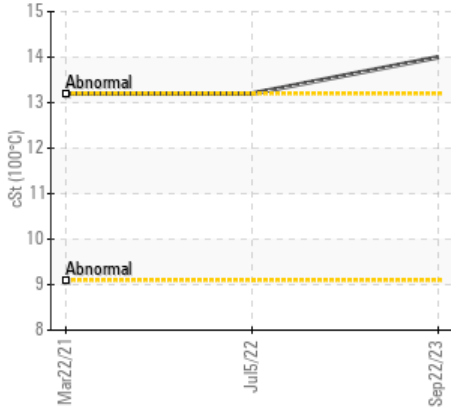


Area  
**Watkins Block Truck Shop Omaha**  
 Machine Id  
**74 [Watkins Block Truck Shop Omaha]**  
 Component  
**Rear Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

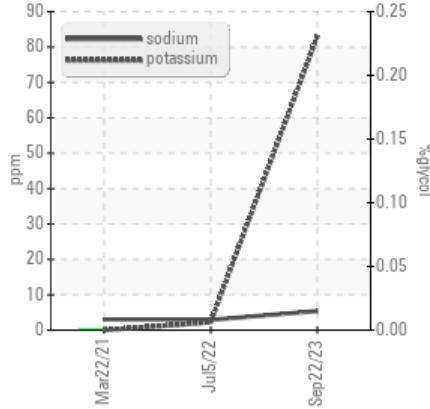


## COMPONENT CONDITION SUMMARY

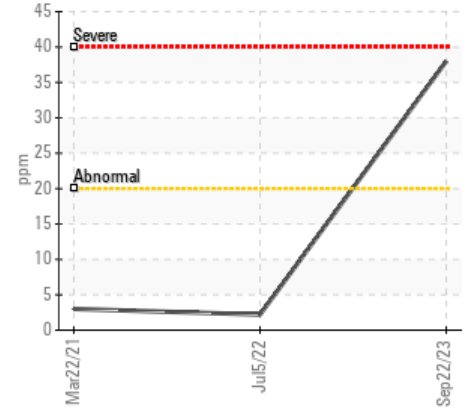
### ▲ Viscosity @ 100°C



### Glycol Contamination



### Aluminum (ppm)



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	NORMAL	NORMAL
Visc @ 100°C	cSt	▲ 14.0	13.2	13.2

Customer Id: WATOMATS  
 Sample No.: SBP0005011  
 Lab Number: 05964048  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

### 05 Jul 2022 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 22 Mar 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

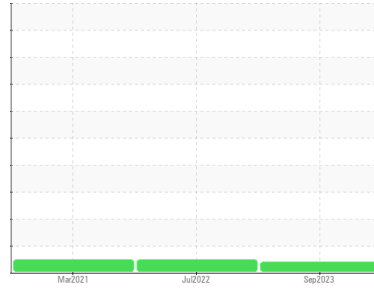
view report





# OIL ANALYSIS REPORT

## Sample Rating Trend



## VISCOSITY



Area  
**Watkins Block Truck Shop Omaha**  
 Machine Id  
**74 [Watkins Block Truck Shop Omaha]**  
 Component  
**Rear Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### 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. No other contaminants were detected in the oil.

#### Fluid Condition

The oil viscosity is higher than normal. 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>SBP0005011</b>	SBP0000241	SBP84425030
Sample Date	Client Info	<b>22 Sep 2023</b>	05 Jul 2022	22 Mar 2021
Machine Age	hrs	<b>1106</b>	883	642
Oil Age	hrs	<b>223</b>	241	240
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

### CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	0.0

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>48</b>	6	5
Chromium	ppm ASTM D5185m >20	<b>6</b>	<1	0
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>38</b>	2	3
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	<1	1
Copper	ppm ASTM D5185m >330	<b>18</b>	1	1
Tin	ppm ASTM D5185m >15	<b>1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>4</b>	122	214
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>66</b>	15	67
Manganese	ppm ASTM D5185m	<b>2</b>	<1	0
Magnesium	ppm ASTM D5185m	<b>891</b>	763	686
Calcium	ppm ASTM D5185m	<b>1299</b>	1545	1451
Phosphorus	ppm ASTM D5185m	<b>1012</b>	827	760
Zinc	ppm ASTM D5185m	<b>1302</b>	919	798
Sulfur	ppm ASTM D5185m	<b>2832</b>	3976	---

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	6	5
Sodium	ppm ASTM D5185m	<b>5</b>	3	3
Potassium	ppm ASTM D5185m >20	<b>83</b>	2	0
Chlorine	ppm ASTM D5185m	<b>---</b>	---	0

### INFRA-RED

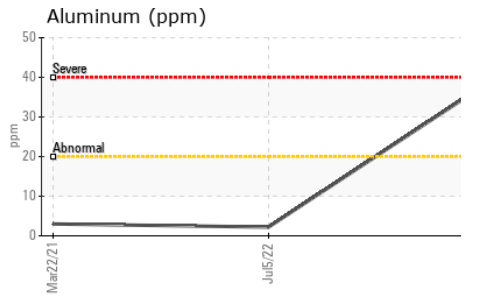
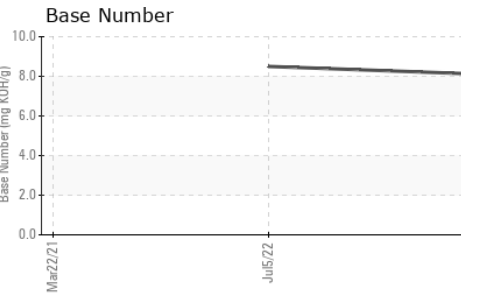
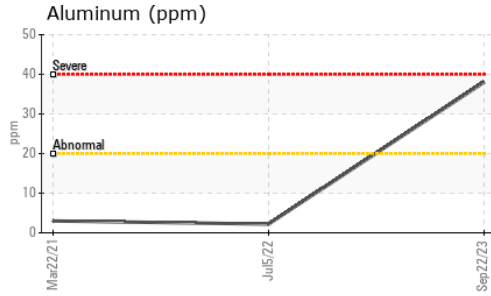
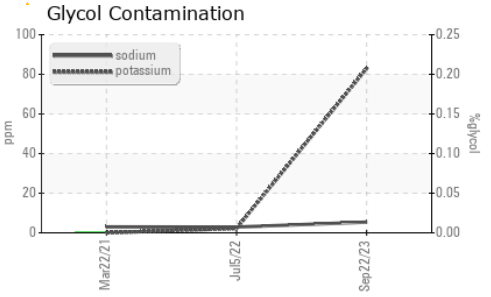
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.1	0.39
Nitration	Abs/cm *ASTM D7624 >20	<b>7.3</b>	9.3	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.5</b>	20.7	---

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.0</b>	14.3	---
Base Number (BN)	mg KOH/g ASTM D2896	<b>8.1</b>	8.5	---



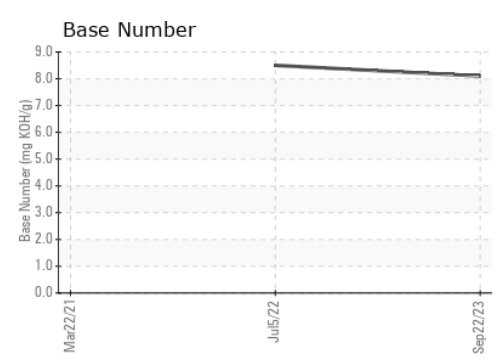
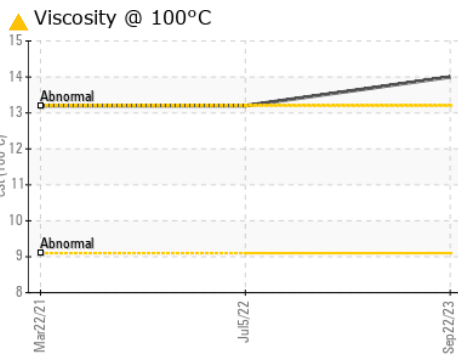
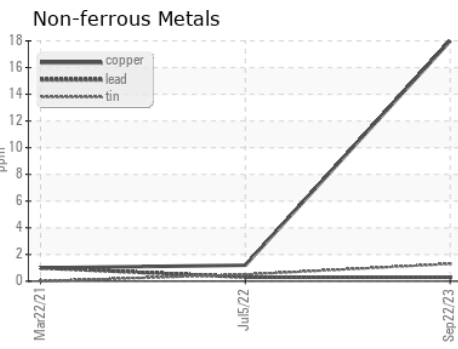
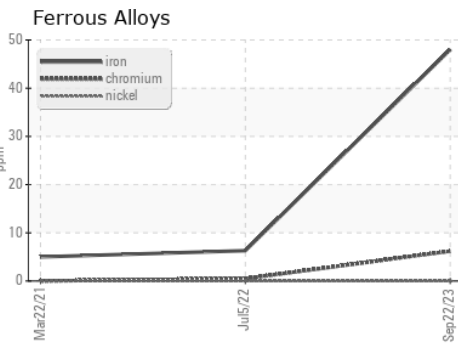
# OIL ANALYSIS REPORT



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	▲ 14.0	13.2	13.2

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005011 **Received** : 28 Sep 2023  
**Lab Number** : 05964048 **Diagnosed** : 01 Oct 2023  
**Unique Number** : 10670599 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**Watkins Block Truck Shop Omaha - 602227**  
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 US 68138  
 Contact: Dave Hozba  
 daveh@watkinsconcreteblock.com  
 T: (402)894-6518  
 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)