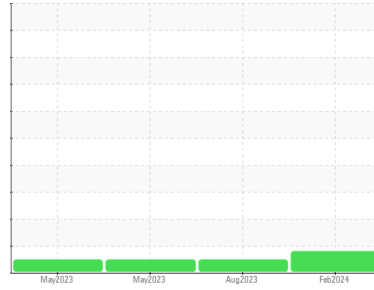


# OIL ANALYSIS REPORT

## Sample Rating Trend



**WEAR**



Area  
**(40241Z) Walgreens - Tractor**  
Machine Id  
**[Walgreens - Tractor] 136A62554**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (11 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

Valve wear is indicated. All other component wear rates are normal.

#### Contamination

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. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>PCA0103644</b>	PCA0093632	PCA0093659	
Sample Date	Client Info	<b>01 Feb 2024</b>	18 Aug 2023	25 May 2023	
Machine Age	mls	Client Info	<b>207094</b>	178896	151507
Oil Age	mls	Client Info	<b>29902</b>	27389	4412
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL	

### CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >2.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>20</b>	10	3
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>▲ 6</b>	0	0
Titanium	ppm ASTM D5185m	<b>5</b>	24	26
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>5</b>	5	<1
Lead	ppm ASTM D5185m >40	<b>3</b>	1	0
Copper	ppm ASTM D5185m >330	<b>20</b>	<1	<1
Tin	ppm ASTM D5185m >15	<b>1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>12</b>	18	52
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>49</b>	38	38
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 950	<b>805</b>	764	724
Calcium	ppm ASTM D5185m 1050	<b>1146</b>	1258	1314
Phosphorus	ppm ASTM D5185m 995	<b>968</b>	970	941
Zinc	ppm ASTM D5185m 1180	<b>1263</b>	1233	1170
Sulfur	ppm ASTM D5185m 2600	<b>2980</b>	4017	4068

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	4	4
Sodium	ppm ASTM D5185m	<b>3</b>	<1	<1
Potassium	ppm ASTM D5185m >20	<b>12</b>	10	<1

### INFRA-RED

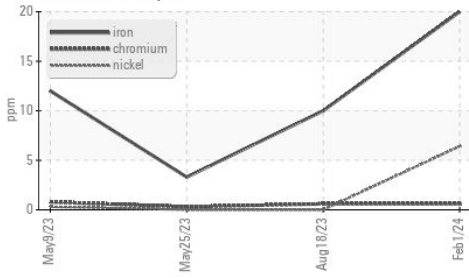
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>8.2</b>	7.9	5.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.9</b>	19.2	18.2

### FLUID DEGRADATION

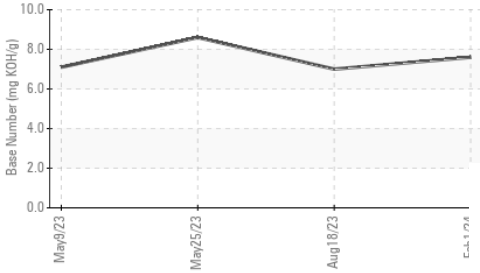
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.3</b>	15.0	13.2
Base Number (BN)	mg KOH/g ASTM D2896	<b>7.6</b>	7.0	8.6

# OIL ANALYSIS REPORT

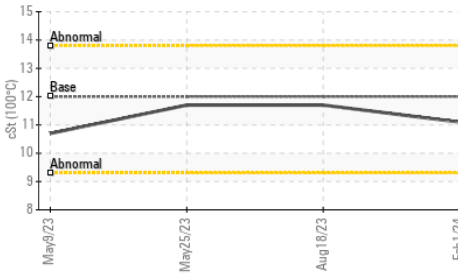
▲ Ferrous Alloys



Base Number



Viscosity @ 100°C

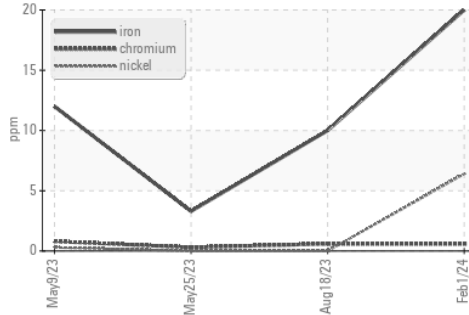


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

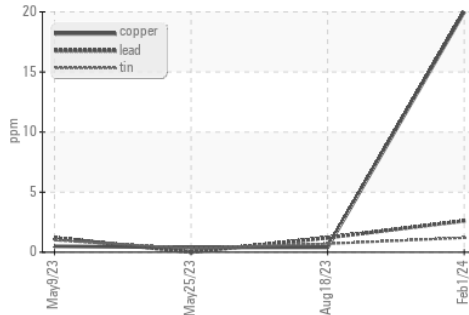
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.7

GRAPHS

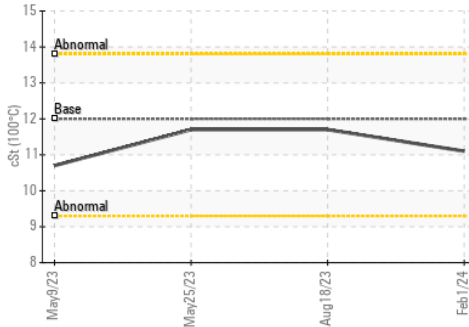
▲ Ferrous Alloys



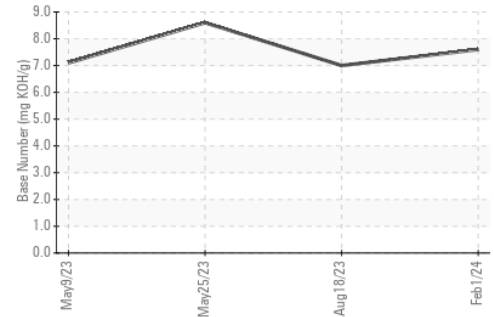
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0103644  
**Lab Number** : 06080524  
**Unique Number** : 10862615  
**Test Package** : FLEET

**Received** : 05 Feb 2024  
**Tested** : 06 Feb 2024  
**Diagnosed** : 07 Feb 2024 - Don Baldrige

**Transervice - Shop 1365 - Berkeley-Nazareth**  
 6813 Chrisphalt Drive  
 Bath Borough, PA  
 US 18014  
 Contact: Stephen Mackes  
 smackes@transervice.com  
 T: (610)837-8103  
 F: (610)837-8105

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)