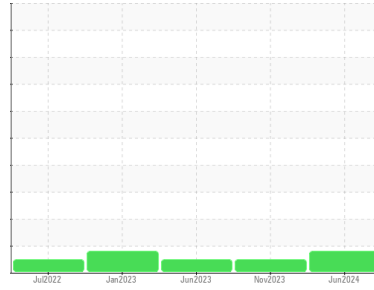


# OIL ANALYSIS REPORT

## Sample Rating Trend



**WEAR**



Area  
**(92463X) Walgreens - Tractor**  
 Machine Id  
**[Walgreens - Tractor] 136A62033**  
 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

The aluminum level is abnormal. 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>PCA0128184</b>	PCA0111792	PCA0097092
Sample Date	Client Info			<b>07 Jun 2024</b>	22 Nov 2023	19 Jun 2023
Machine Age	mls Client Info			<b>716915</b>	658872	579301
Oil Age	mls Client Info			<b>58043</b>	79571	60692
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	>5		<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	>80		<b>57</b>	44	40
Chromium	ppm ASTM D5185m	>5		<b>5</b>	4	4
Nickel	ppm ASTM D5185m	>2		<b>&lt;1</b>	<1	0
Titanium	ppm ASTM D5185m			<b>0</b>	0	0
Silver	ppm ASTM D5185m	>3		<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185m	>30		<b>▲ 31</b>	23	18
Lead	ppm ASTM D5185m	>30		<b>0</b>	0	0
Copper	ppm ASTM D5185m	>150		<b>6</b>	4	6
Tin	ppm ASTM D5185m	>5		<b>&lt;1</b>	<1	<1
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	2		<b>5</b>	3	1
Barium	ppm ASTM D5185m	0		<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	50		<b>65</b>	61	69
Manganese	ppm ASTM D5185m	0		<b>2</b>	<1	<1
Magnesium	ppm ASTM D5185m	950		<b>929</b>	864	915
Calcium	ppm ASTM D5185m	1050		<b>1217</b>	1038	1117
Phosphorus	ppm ASTM D5185m	995		<b>1051</b>	972	990
Zinc	ppm ASTM D5185m	1180		<b>1265</b>	1149	1232
Sulfur	ppm ASTM D5185m	2600		<b>2996</b>	2378	2713

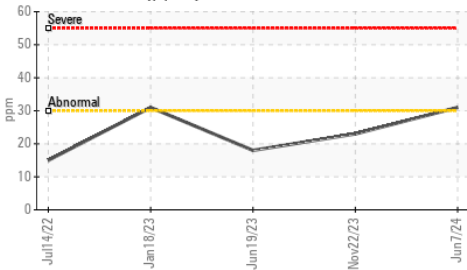
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>20		<b>9</b>	7	8
Sodium	ppm ASTM D5185m			<b>3</b>	2	<1
Potassium	ppm ASTM D5185m	>20		<b>4</b>	3	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3		<b>1.2</b>	1.3	0.8
Nitration	Abs/cm *ASTM D7624	>20		<b>11.1</b>	11.6	9.9
Sulfation	Abs/.1mm *ASTM D7415	>30		<b>24.6</b>	27.3	23.4

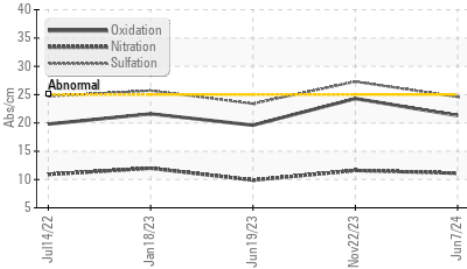
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		<b>21.3</b>	24.3	19.6
Base Number (BN)	mg KOH/g ASTM D2896			<b>4.5</b>	4.4	5.9

# OIL ANALYSIS REPORT

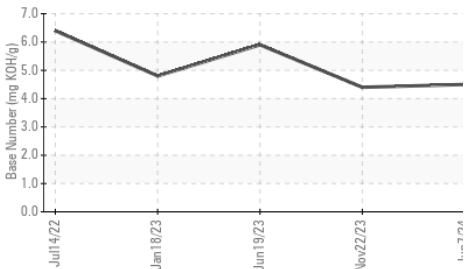
## ▲ Aluminum (ppm)



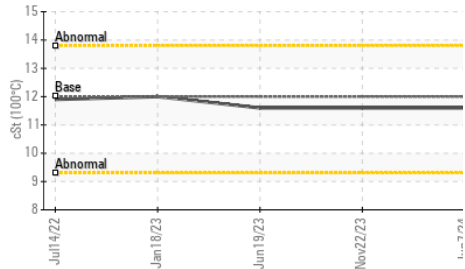
## FT-IR (Direct Trend)



## Base Number



## Viscosity @ 100°C

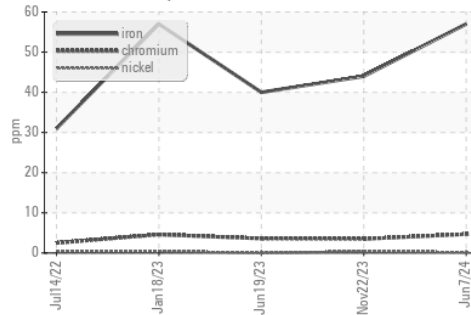


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

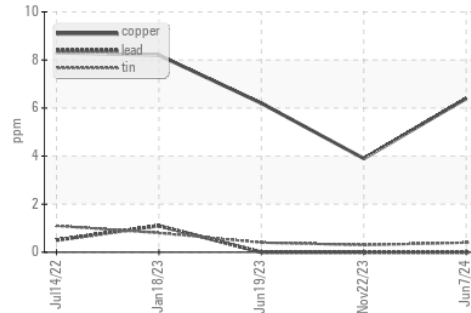
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.6

## GRAPHS

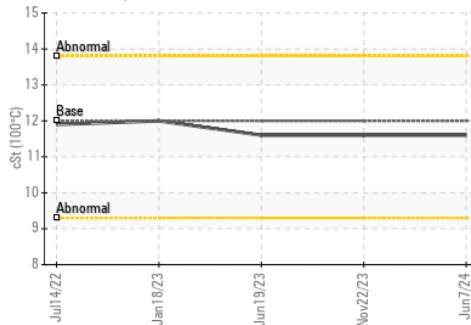
### Ferrous Alloys



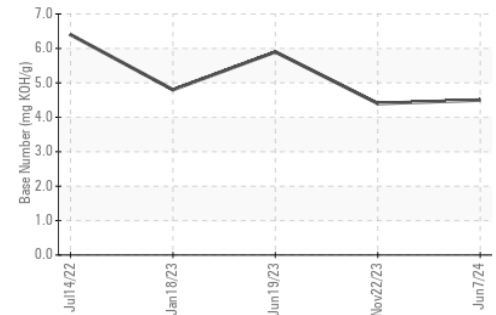
### Non-ferrous Metals



### Viscosity @ 100°C



### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0128184  
**Lab Number** : 06211361  
**Unique Number** : 11084225  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Don Baldrige

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass  
 101 Alliance Parkway  
 Williamston, SC  
 US 29697

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)

Contact: Sonny Boucher  
 sboucher@transervice.com  
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 F: (864)226-2329