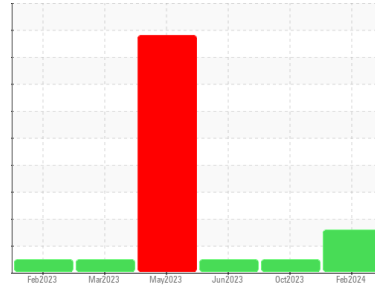


# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Area  
**(51484Z) Walgreens - Tractor**  
Machine Id  
**[Walgreens - Tractor] 136A63399**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (40 QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. 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.

### 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>PCA0094350</b>	PCA0094335	PCA0094366
Sample Date	Client Info	<b>14 Feb 2024</b>	15 Oct 2023	28 Jun 2023
Machine Age	mls	<b>216580</b>	162130	125453
Oil Age	mls	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	Not Chngd
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	0.0

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	<b>42</b>	53	37
Chromium	ppm ASTM D5185m >5	<b>4</b>	5	3
Nickel	ppm ASTM D5185m >2	<b>1</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >30	<b>37</b>	76	69
Lead	ppm ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >150	<b>63</b>	45	116
Tin	ppm ASTM D5185m >5	<b>1</b>	1	1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>4</b>	5	4
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>91</b>	58	58
Manganese	ppm ASTM D5185m 0	<b>2</b>	2	1
Magnesium	ppm ASTM D5185m 950	<b>1315</b>	881	855
Calcium	ppm ASTM D5185m 1050	<b>1639</b>	1263	1213
Phosphorus	ppm ASTM D5185m 995	<b>1386</b>	794	956
Zinc	ppm ASTM D5185m 1180	<b>1732</b>	1187	1186
Sulfur	ppm ASTM D5185m 2600	<b>3657</b>	1966	2828

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>▲ 29</b>	11	7
Sodium	ppm ASTM D5185m	<b>0</b>	4	2
Potassium	ppm ASTM D5185m >20	<b>75</b>	148	130

## INFRA-RED

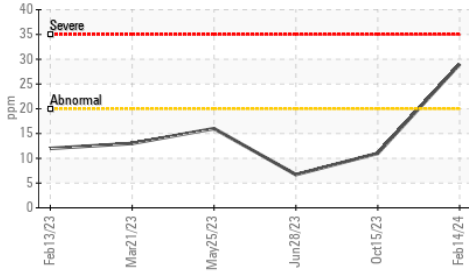
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.6</b>	0.9	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>9.5</b>	10.9	5.1
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.7</b>	23.0	18.2

## FLUID DEGRADATION

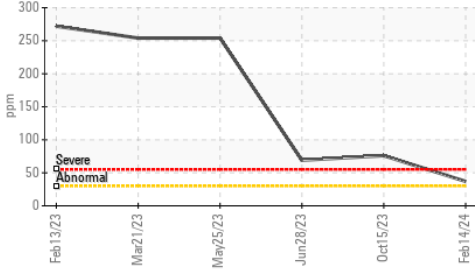
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.6</b>	22.8	14.2
Base Number (BN)	mg KOH/g ASTM D2896	<b>5.9</b>	3.9	9.5

# OIL ANALYSIS REPORT

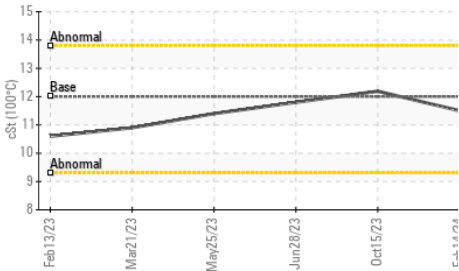
▲ Silicon (ppm)



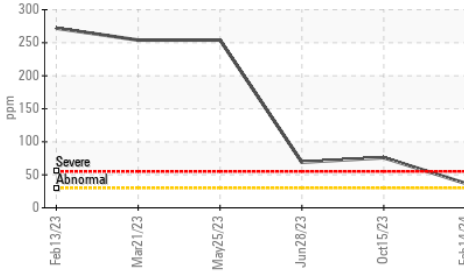
Aluminum (ppm)



Viscosity @ 100°C



Aluminum (ppm)

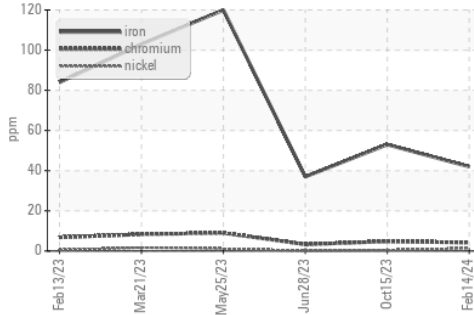


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

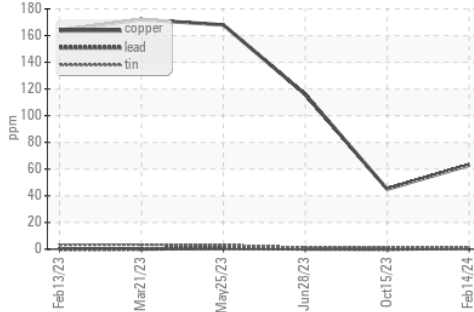
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.5	12.19

## GRAPHS

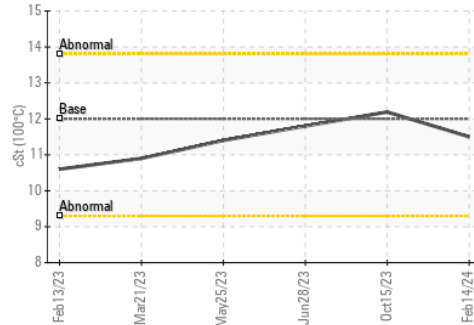
Ferrous Alloys



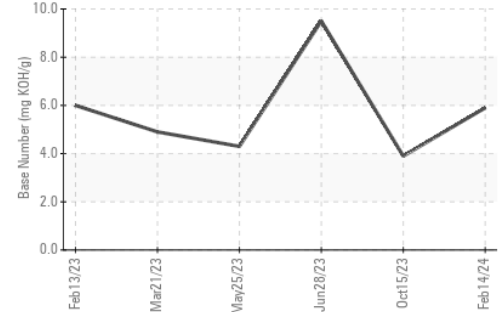
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0094350  
**Lab Number** : 06090793  
**Unique Number** : 10883646  
**Test Package** : FLEET

**Received** : 15 Feb 2024  
**Tested** : 19 Feb 2024  
**Diagnosed** : 19 Feb 2024 - Jonathan Hester

**Transervice - Shop 1363 - Berkeley-Orlando**  
 2455 Premier Row  
 Orlando, FL  
 US 32809

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)

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