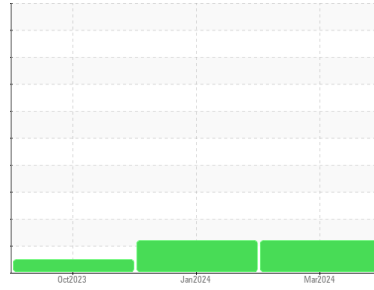


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**FUEL**


Area  
**Walgreens - Tractor**  
 Machine #  
**[Walgreens - Tractor] 136A63364**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON UHP E6 10W40 (11 GAL)**

**DIAGNOSIS**
**Recommendation**

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

**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. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

**Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0117878</b>	PCA0105447	PCA0105441
Sample Date	Client Info			<b>15 Mar 2024</b>	11 Jan 2024	30 Oct 2023
Machine Age	mls	Client Info		<b>82406</b>	71588	62600
Oil Age	mls	Client Info		<b>25000</b>	25000	17500
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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>33</b>	23	18
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	3	2
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	4	6
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>32</b>	24	17
Lead	ppm	ASTM D5185m	>40	<b>7</b>	5	3
Copper	ppm	ASTM D5185m	>330	<b>8</b>	7	11
Tin	ppm	ASTM D5185m	>15	<b>3</b>	3	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>4</b>	7	9
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>64</b>	57	59
Manganese	ppm	ASTM D5185m	0	<b>2</b>	1	1
Magnesium	ppm	ASTM D5185m	80	<b>948</b>	857	816
Calcium	ppm	ASTM D5185m	2400	<b>1193</b>	1059	1149
Phosphorus	ppm	ASTM D5185m	750	<b>1051</b>	987	965
Zinc	ppm	ASTM D5185m	840	<b>1309</b>	1240	1222
Sulfur	ppm	ASTM D5185m	2130	<b>3413</b>	2826	2959

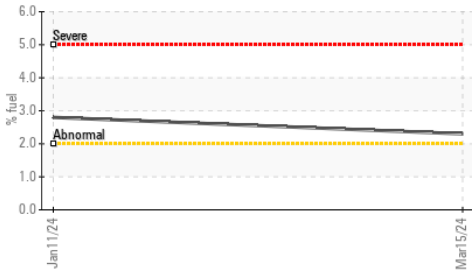
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>13</b>	12	12
Sodium	ppm	ASTM D5185m		<b>2</b>	3	0
Potassium	ppm	ASTM D5185m	>20	<b>93</b>	59	44
Fuel	%	ASTM D3524	>2.0	<b>▲ 2.3</b>	▲ 2.8	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	8.6	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	20.3	20.0

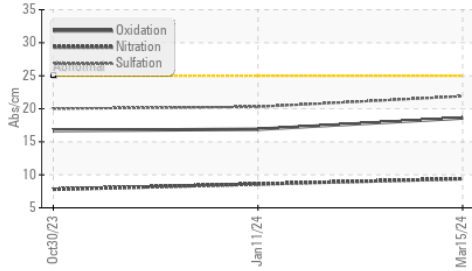
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	16.9	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	<b>5.5</b>	6.7	7.9

# OIL ANALYSIS REPORT

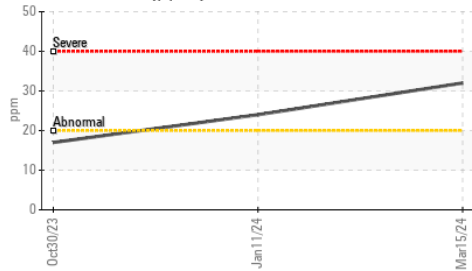
### ▲ Fuel Dilution



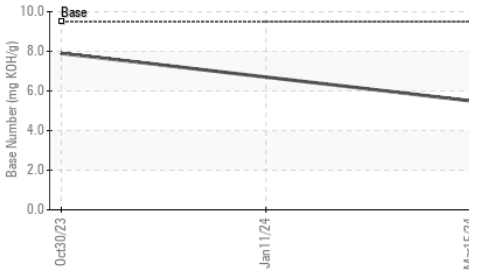
### ● FT-IR (Direct Trend)



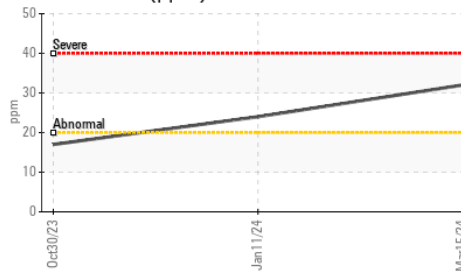
### Aluminum (ppm)



### Base Number



### Aluminum (ppm)

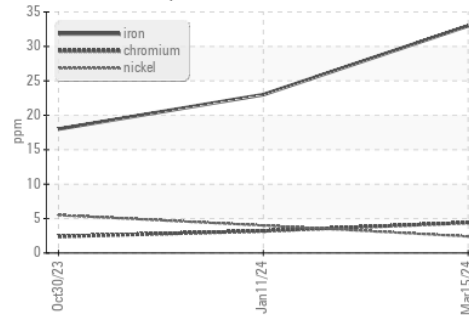


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

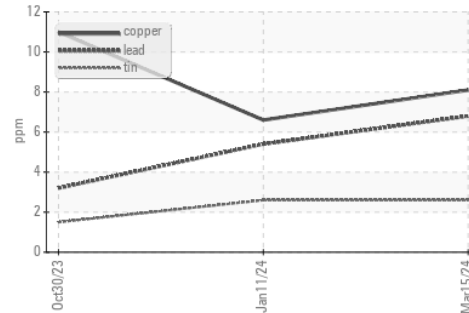
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.2	▲ 11.1	▲ 11.0

### GRAPHS

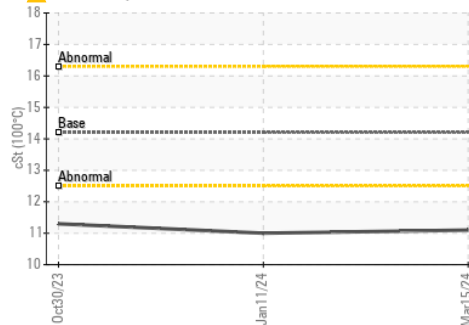
#### Ferrous Alloys



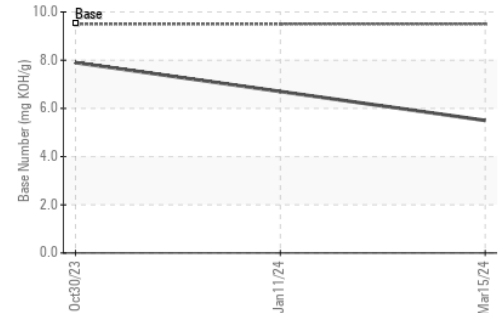
#### Non-ferrous Metals



#### ▲ Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PCA0117878

**Lab Number** : 06149958

**Unique Number** : 10980036

**Test Package** : FLEET ( Additional Tests: PercentFuel )

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)

**Received** : 16 Apr 2024

**Tested** : 19 Apr 2024

**Diagnosed** : 19 Apr 2024 - Wes Davis

**Transervice - Shop 1366 - Berkeley-Woodland**

2370 East Main Street

Woodland, CA

US 95776

Contact: Gary Mann

gmann@transervice.com

T: (530)666-7771

F: (530)406-7971