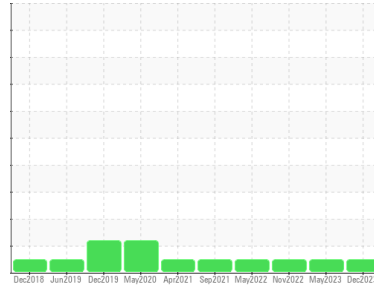


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**KENWORTH 8500**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All 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>PCA0073308</b>	PCA0088543	PCA0073454
Sample Date	Client Info		<b>04 Dec 2023</b>	08 May 2023	18 Nov 2022
Machine Age	mls	Client Info	<b>345066</b>	317152	288414
Oil Age	mls	Client Info	<b>27914</b>	28738	30505
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >165	<b>34</b>	28	25
Chromium	ppm	ASTM D5185m >5	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	2	<1
Lead	ppm	ASTM D5185m >150	<b>9</b>	4	0
Copper	ppm	ASTM D5185m >90	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >5	<b>0</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 2	<b>26</b>	5	10
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>33</b>	52	59
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>805</b>	932	910
Calcium	ppm	ASTM D5185m 1050	<b>1321</b>	1000	1041
Phosphorus	ppm	ASTM D5185m 995	<b>804</b>	962	988
Zinc	ppm	ASTM D5185m 1180	<b>946</b>	1240	1202
Sulfur	ppm	ASTM D5185m 2600	<b>3203</b>	3773	3671

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>7</b>	5	8
Sodium	ppm	ASTM D5185m	<b>1</b>	2	1
Potassium	ppm	ASTM D5185m >20	<b>12</b>	5	<1

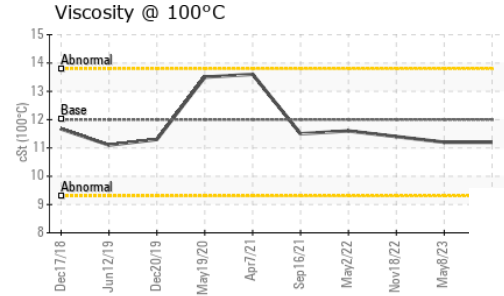
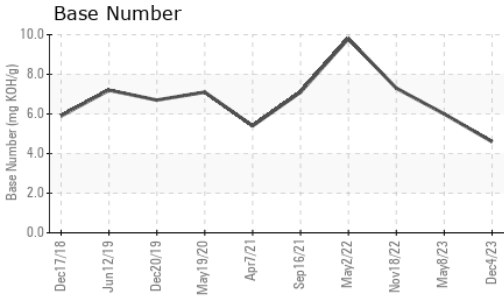
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >7.5	<b>0.7</b>	0.5	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.3</b>	10.3	11.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.5</b>	22.0	22.9

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.0</b>	20.1	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>4.6</b>	6.0	7.3

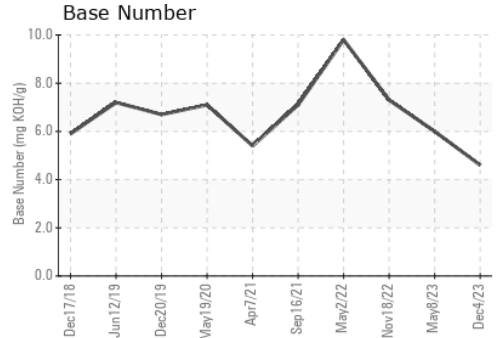
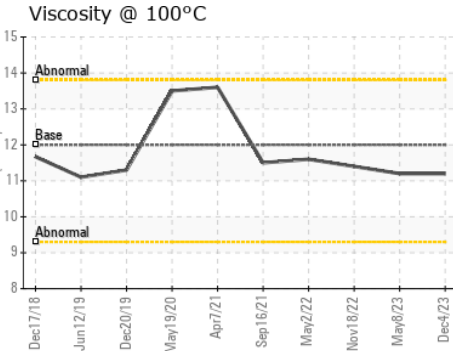
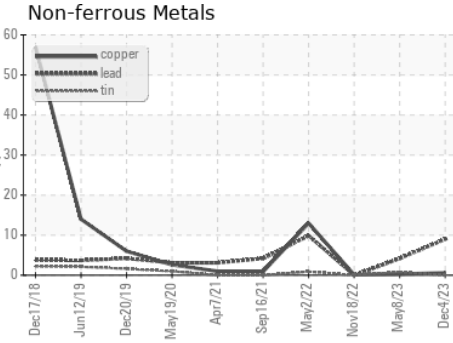
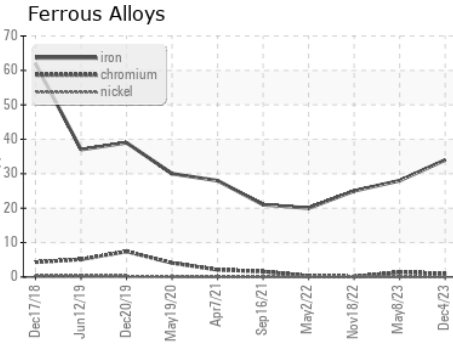
# OIL ANALYSIS REPORT



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	11.2	11.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0073308 **Recieved** : 10 Jan 2024  
**Lab Number** : 06056303 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10822252 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**MIDWEST MOTOR EXPRESS**  
 2169 MUSTANG DR  
 MOUNDS VIEW, MN  
 US 55112  
 Contact: FRANK DIETZ  
 frank.dietz@mmeinc.com  
 T: (763)225-6382  
 F: x:

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)