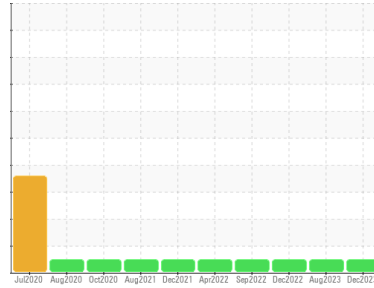


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**VOLVO VNR 2026787 (S/N 4V4WC9EH3LN270128)**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

## 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>PCA0094595</b>	PCA0094592	PCA0052363	
Sample Date	Client Info	<b>28 Dec 2023</b>	24 Aug 2023	16 Dec 2022	
Machine Age	mls	Client Info	<b>336337</b>	308000	249112
Oil Age	mls	Client Info	<b>28337</b>	28330	25325
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 >6.0	<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>23</b>	19	20
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >25	<b>1</b>	2	<1
Lead	ppm ASTM D5185m >40	<b>2</b>	<1	1
Copper	ppm ASTM D5185m >330	<b>6</b>	4	7
Tin	ppm ASTM D5185m >15	<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>2</b>	12	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>64</b>	44	60
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 950	<b>931</b>	617	872
Calcium	ppm ASTM D5185m 1050	<b>1241</b>	1636	1071
Phosphorus	ppm ASTM D5185m 995	<b>950</b>	789	953
Zinc	ppm ASTM D5185m 1180	<b>1231</b>	990	1148
Sulfur	ppm ASTM D5185m 2600	<b>2777</b>	2935	2502

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	6	4
Sodium	ppm ASTM D5185m	<b>8</b>	4	8
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	2	4

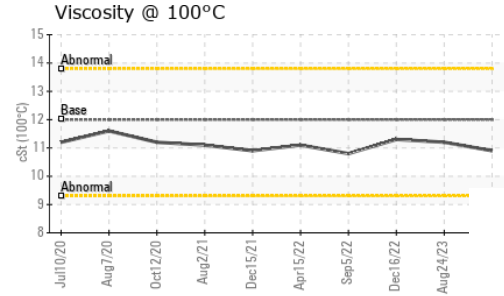
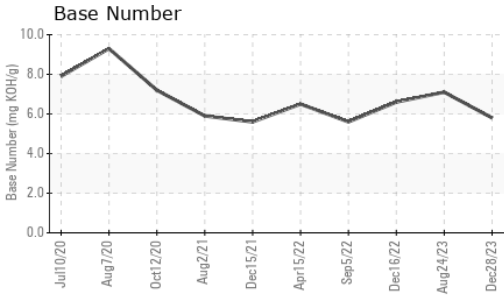
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.6</b>	0.4	0.5
Nitration	Abs/cm *ASTM D7624 >20	<b>10.1</b>	10.2	10.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.8</b>	21.8	20.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>18.2</b>	21.0	17.3
Base Number (BN)	mg KOH/g ASTM D2896	<b>5.8</b>	7.1	6.6

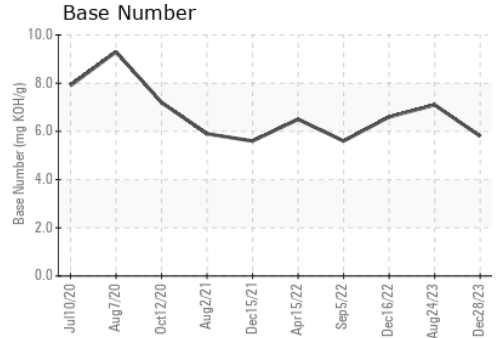
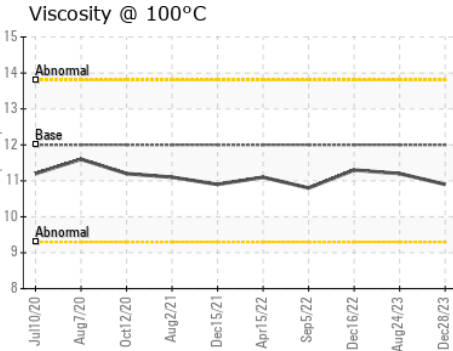
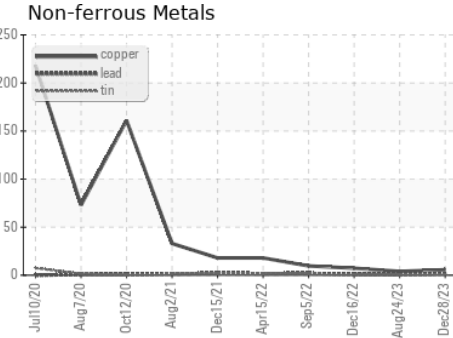
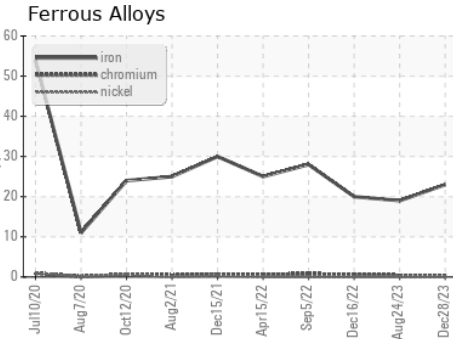
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.9	11.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0094595 **Received** : 02 Jan 2024  
**Lab Number** : 06049502 **Diagnosed** : 04 Jan 2024  
**Unique Number** : 10810110 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**PERDUE FARMS - WASHINGTON**  
 P.O. BOX 539  
 WASHINGTON, IN  
 US 47501  
 Contact: DEREK RYAN  
 derek.ryan@perdue.com  
 T: (812)257-3023  
 F:

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)