

# OIL ANALYSIS REPORT

## Sample Rating Trend

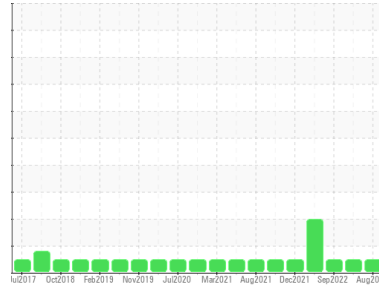
**NORMAL**



Machine Id  
**VOLVO 26546 (S/N 4V4N139EH9HN992211)**

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>PCA0088729</b>	PCA0076941	PCA0079862
Sample Date	Client Info		<b>21 Aug 2023</b>	02 Dec 2022	22 Sep 2022
Machine Age	mls	Client Info	<b>516625</b>	455207	20000
Oil Age	mls	Client Info	<b>20000</b>	20000	20000
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>21</b>	32	12
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>1</b>	9	8
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>5</b>	3	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	3	1
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>2</b>	3	<1
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>69</b>	52	46
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>1025</b>	814	834
Calcium	ppm	ASTM D5185m 1050	<b>1180</b>	1203	1135
Phosphorus	ppm	ASTM D5185m 995	<b>1081</b>	965	951
Zinc	ppm	ASTM D5185m 1180	<b>1313</b>	1189	1145
Sulfur	ppm	ASTM D5185m 2600	<b>3660</b>	3192	2992

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	11	9
Sodium	ppm	ASTM D5185m	<b>7</b>	13	6
Potassium	ppm	ASTM D5185m >20	<b>1</b>	3	0

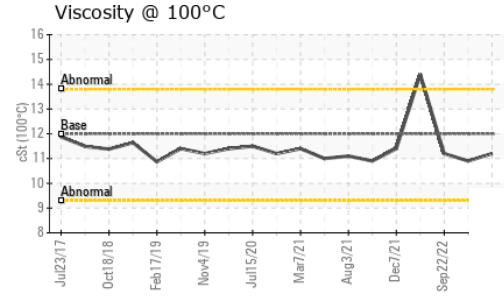
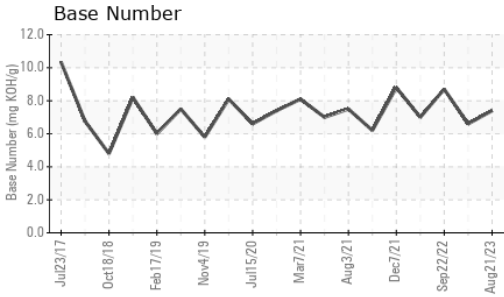
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.4</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.2</b>	10.2	8.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	24.0	20.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.7</b>	19.4	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	<b>7.4</b>	6.6	8.7

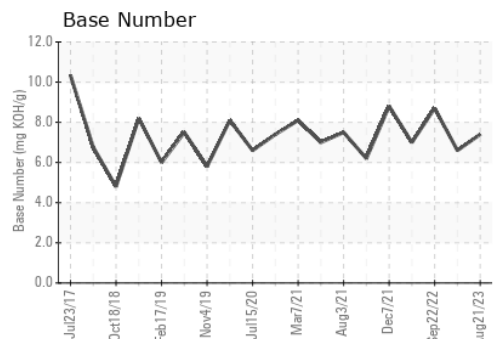
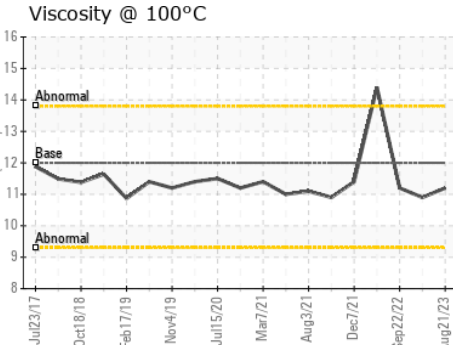
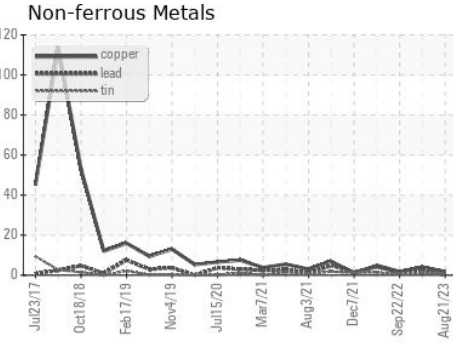
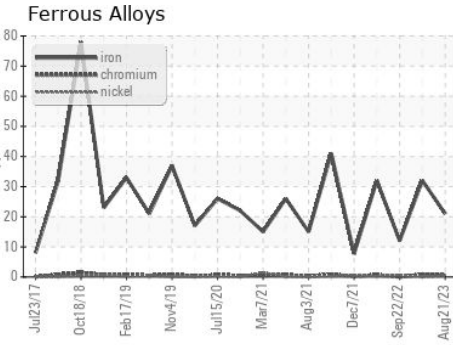
# OIL ANALYSIS REPORT



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	10.9	11.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0088729 **Received** : 01 Sep 2023  
**Lab Number** : 05940567 **Diagnosed** : 01 Sep 2023  
**Unique Number** : 10631179 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**PERDUE FARMS - SALISBURY**  
 7036 ZION CHURCH ROAD  
 SALISBURY, MD  
 US 21802  
 Contact: RICHARD O'NEAL  
 richard.oneal@perdue.com  
 T: (410)543-3628  
 F: (410)341-2164

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)