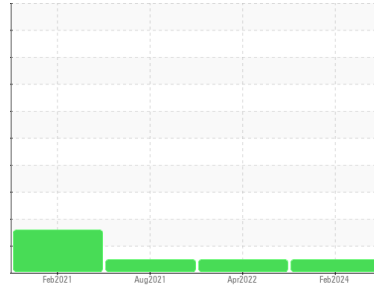


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**T310**  
 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>PCA0116112</b>	PCA0058874	PCA0054618
Sample Date	Client Info		<b>22 Feb 2024</b>	11 Apr 2022	04 Aug 2021
Machine Age	mls	Client Info	<b>228495</b>	100540	75219
Oil Age	mls	Client Info	<b>100540</b>	0	0
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	>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	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>26</b>	36	24
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	9	7
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	4
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
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>2</b>	3	7
Barium	ppm	ASTM D5185m 0	<b>34</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>61</b>	60	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>874</b>	919	973
Calcium	ppm	ASTM D5185m 1050	<b>1023</b>	1139	1181
Phosphorus	ppm	ASTM D5185m 995	<b>936</b>	1088	1022
Zinc	ppm	ASTM D5185m 1180	<b>1191</b>	1289	1227
Sulfur	ppm	ASTM D5185m 2600	<b>2785</b>	2152	2332

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>11</b>	11	7
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>7</b>	17	18

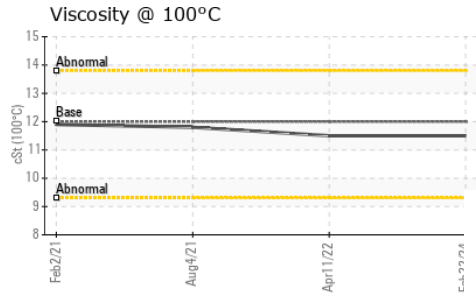
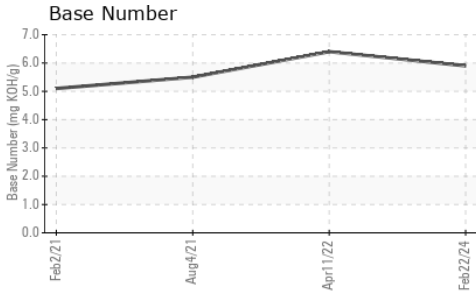
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.7	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.5</b>	11.0	10.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.9</b>	24.0	22.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.1</b>	19.3	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.9</b>	6.4	5.5

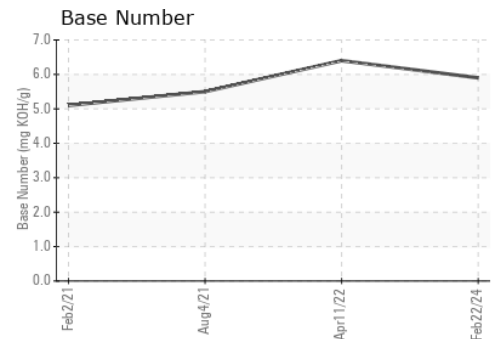
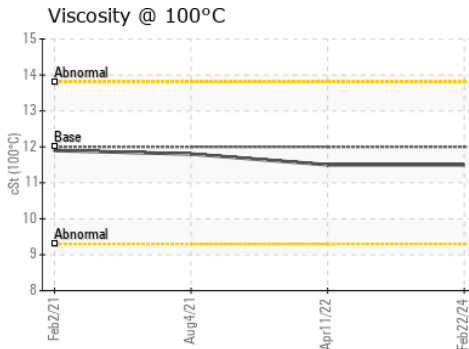
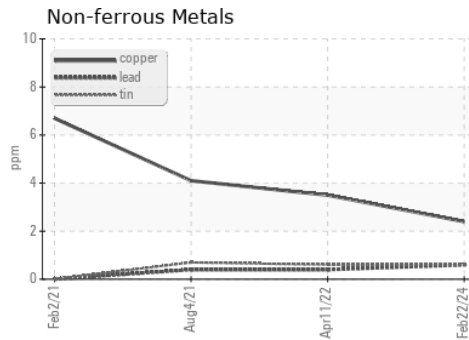
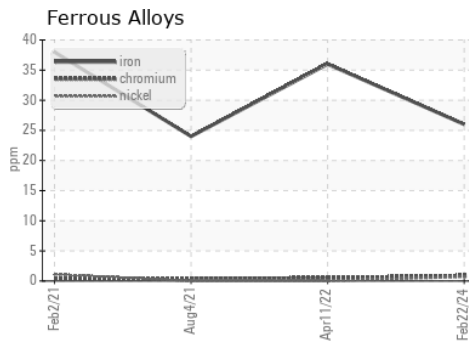
# OIL ANALYSIS REPORT



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	<b>11.5</b>	11.5	11.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0116112      **Received** : 26 Feb 2024  
**Lab Number** : 06099889      **Tested** : 27 Feb 2024  
**Unique Number** : 10898119      **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**NW WHITE & CO - SPECIAL SERVICE DIVISION**  
 100 INDEPENDENCE BLVD  
 COLUMBIA, SC  
 US 29210  
 Contact: George Edwards  
 gedwards@nwwhite.com

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)

T:  
F: