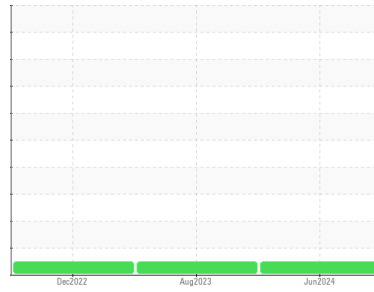


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**DT796**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### 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. No other contaminants were detected 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>PCA0089202</b>	PCA0074020	PCA0080980
Sample Date	Client Info			<b>17 Jun 2024</b>	18 Aug 2023	21 Dec 2022
Machine Age	mls Client Info			<b>133409</b>	103036	78459
Oil Age	mls Client Info			<b>30373</b>	24577	13754
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	>110	<b>47</b>	32	11
Chromium	ppm	ASTM D5185m	>4	<b>3</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>43</b>	26	8
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>8</b>	4	2
Tin	ppm	ASTM D5185m	>4	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

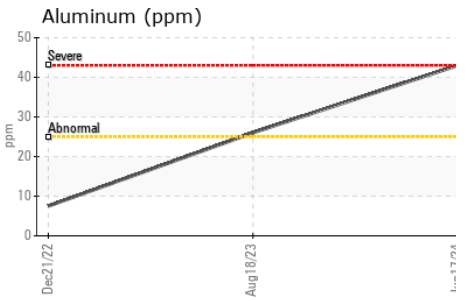
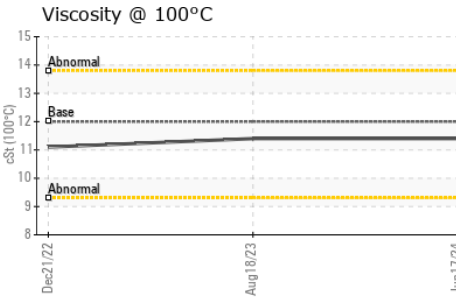
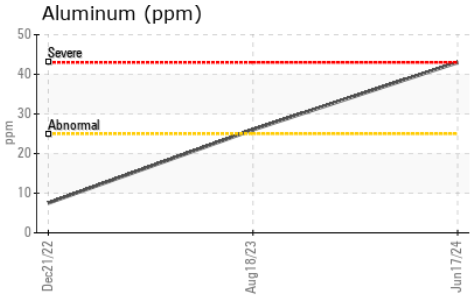
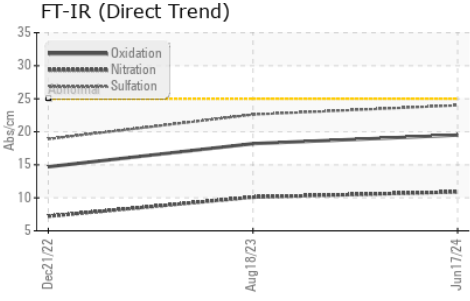
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>4</b>	3	10
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	2
Molybdenum	ppm	ASTM D5185m	50	<b>68</b>	67	62
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	0
Magnesium	ppm	ASTM D5185m	950	<b>987</b>	975	911
Calcium	ppm	ASTM D5185m	1050	<b>1184</b>	1096	1169
Phosphorus	ppm	ASTM D5185m	995	<b>1051</b>	1046	1022
Zinc	ppm	ASTM D5185m	1180	<b>1319</b>	1306	1236
Sulfur	ppm	ASTM D5185m	2600	<b>2746</b>	2920	2835

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>9</b>	6	1
Sodium	ppm	ASTM D5185m		<b>2</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>65</b>	49	19

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	0.7	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	10.1	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.0</b>	22.6	18.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	18.2	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.6</b>	5.6	8.5

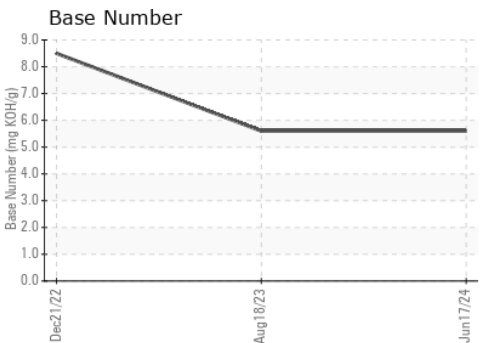
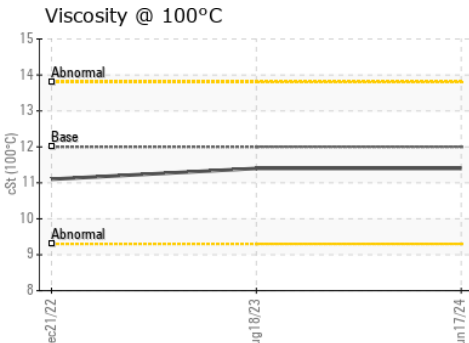
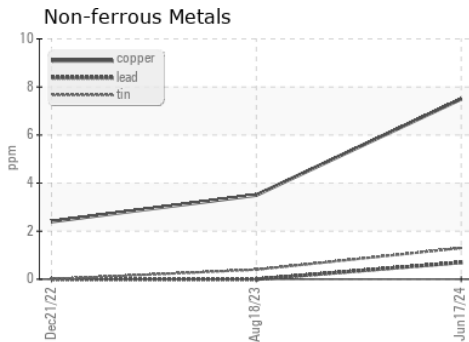
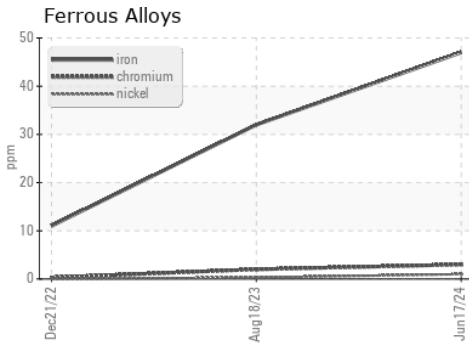
# OIL ANALYSIS REPORT



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	11.4	11.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0089202  
**Lab Number** : 06223114  
**Unique Number** : 11101311  
**Test Package** : FLEET

**Received** : 28 Jun 2024  
**Tested** : 28 Jun 2024  
**Diagnosed** : 30 Jun 2024 - Don Baldrige

**NW WHITE & CO - GREER DIVISION**  
 1060 ROGERS BRIDGE RD  
 DUNCAN, SC  
 US 29334  
 Contact: Matt Quinlan  
 mquinlan@nwwhite.com  
 T: (864)905-8506  
 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)