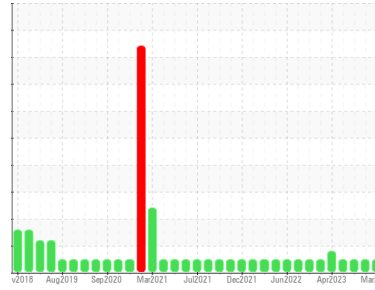


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**10875**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON SHP 15W40 (9 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>PCA0113465</b>	PCA0113428	PCA0095869
Sample Date	Client Info		<b>15 Mar 2024</b>	13 Feb 2024	22 Sep 2023
Machine Age	hrs	Client Info	<b>12173</b>	12063	11672
Oil Age	hrs	Client Info	<b>110</b>	391	656
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 >75	<b>10</b>	7	42
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	2
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >15	<b>3</b>	2	2
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >100	<b>1</b>	1	27
Tin	ppm	ASTM D5185m >4	<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 0	<b>19</b>	16	25
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>67</b>	60	75
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>704</b>	748	780
Calcium	ppm	ASTM D5185m 1070	<b>1393</b>	1205	1123
Phosphorus	ppm	ASTM D5185m 1150	<b>1084</b>	947	978
Zinc	ppm	ASTM D5185m 1270	<b>1218</b>	1162	1151
Sulfur	ppm	ASTM D5185m 2060	<b>3509</b>	3109	3122

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	6	7
Sodium	ppm	ASTM D5185m	<b>3</b>	6	56
Potassium	ppm	ASTM D5185m >20	<b>4</b>	2	33

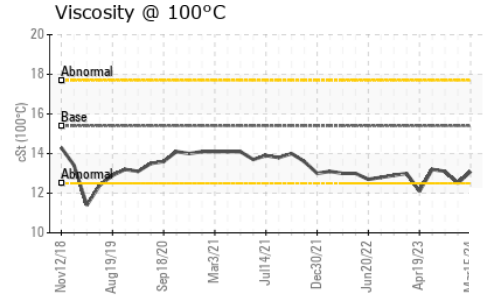
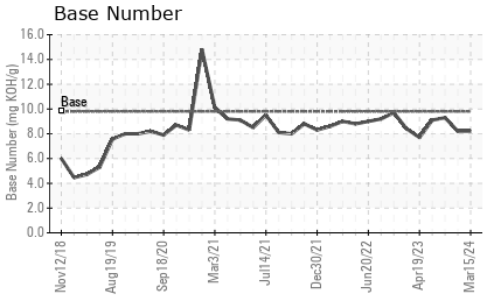
**INFRA-RED**

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.4</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.9</b>	6.6	5.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.4</b>	17.4	15.9

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.8</b>	12.9	11.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.2</b>	8.2	9.3

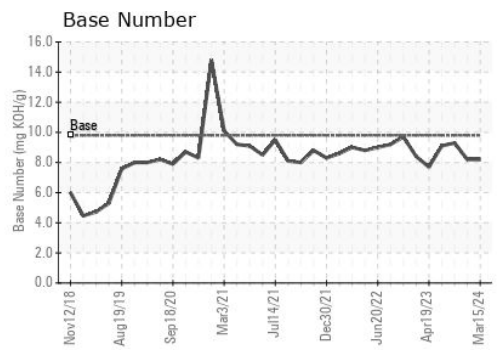
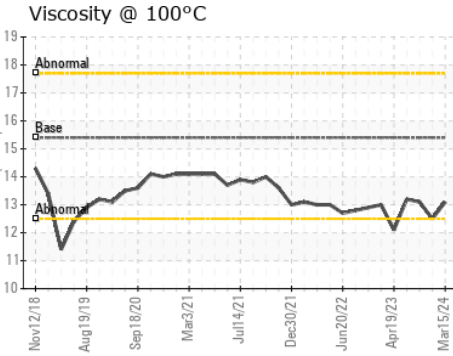
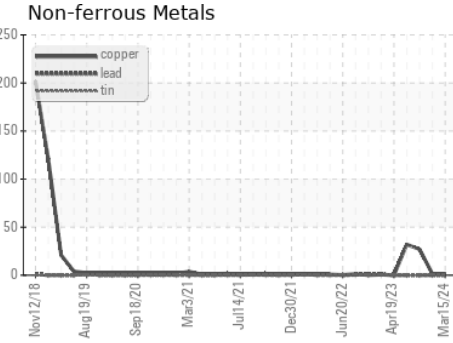
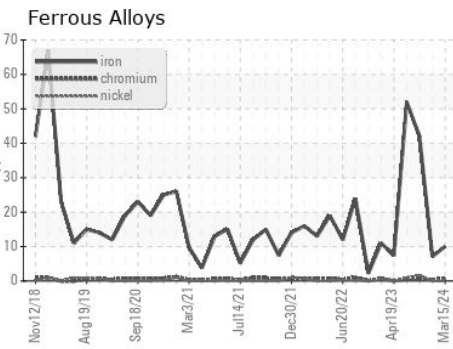
# OIL ANALYSIS REPORT



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	15.4	<b>13.1</b>	12.5	13.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0113465  
**Lab Number** : 06120632  
**Unique Number** : 10929465  
**Test Package** : FLEET

**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 19 Mar 2024 - Wes Davis

**GFL Environmental - 002 - Vance-Granville**  
 241 Vanco Mill Rd  
 Henderson, NC  
 US 27537  
 Contact: Cameron King  
 cameron.king@gflenv.com  
 T: (252)438-5333  
 F: (252)431-1635

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)