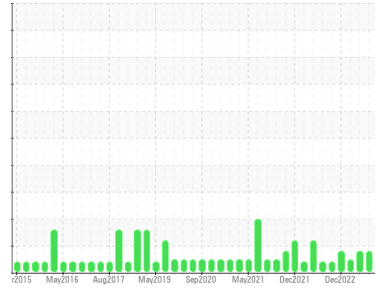


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**


Machine Id  
**2406**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (10 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>PCA0095851</b>	PCA0095833	PCA0077271
Sample Date	Client Info		<b>13 Nov 2023</b>	28 Aug 2023	24 May 2023
Machine Age	hrs	Client Info	<b>24357</b>	23860	23296
Oil Age	hrs	Client Info	<b>584</b>	584	584
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	MARGINAL	ABNORMAL

**CONTAMINATION**

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	▲ 2.1	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>20</b>	15	14
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>2</b>	2	▲ 10
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	11	7
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	3
Tin	ppm	ASTM D5185m >15	<b>0</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 0	<b>6</b>	6	16
Barium	ppm	ASTM D5185m 0	<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>71</b>	71	70
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m 1010	<b>764</b>	874	955
Calcium	ppm	ASTM D5185m 1070	<b>1077</b>	1167	1254
Phosphorus	ppm	ASTM D5185m 1150	<b>957</b>	991	1109
Zinc	ppm	ASTM D5185m 1270	<b>1095</b>	1226	1302
Sulfur	ppm	ASTM D5185m 2060	<b>3370</b>	3692	3983

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	8	10
Sodium	ppm	ASTM D5185m	<b>0</b>	2	5
Potassium	ppm	ASTM D5185m >20	<b>7</b>	14	10

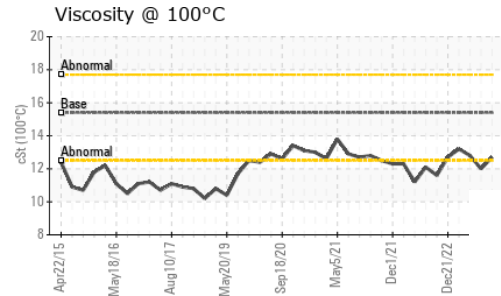
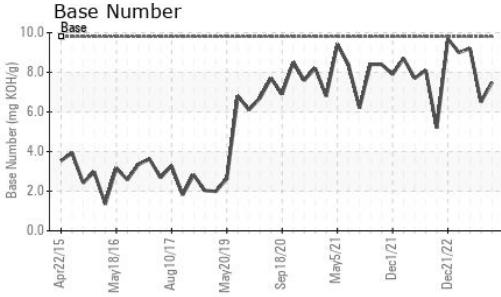
**INFRA-RED**

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.4</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.7</b>	8.5	6.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	18.4	18.4

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.6</b>	14.1	13.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.5</b>	6.5	9.2

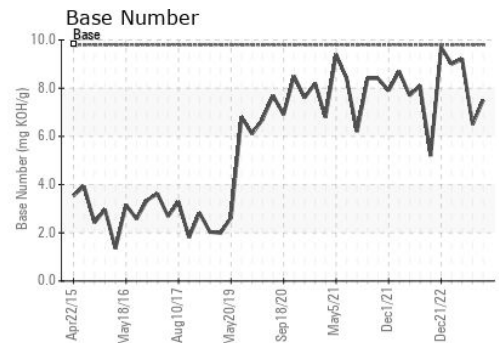
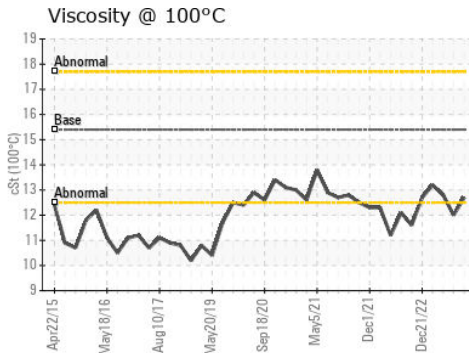
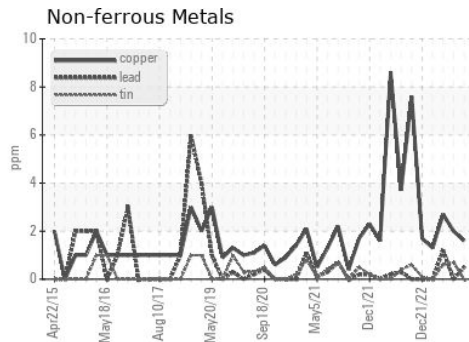
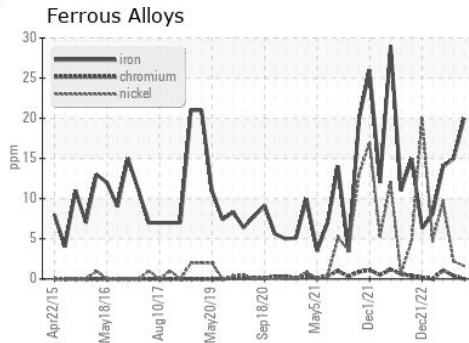
# OIL ANALYSIS REPORT



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>12.7</b>	12.0	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0095851  
**Lab Number** : **06009007**  
**Unique Number** : 10742769  
**Test Package** : FLEET

**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)