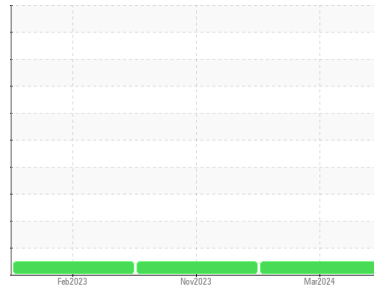


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**228293**  
 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>PCA0110685</b>	PCA0097355	PCA0083849
Sample Date	Client Info			<b>31 Mar 2024</b>	26 Nov 2023	19 Feb 2023
Machine Age	mls	Client Info		<b>71811</b>	59994	34368
Oil Age	mls	Client Info		<b>11817</b>	25356	34368
Oil Changed	Client Info			<b>Not 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>19</b>	32	26
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>51</b>	15	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	10	11
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>50</b>	88	193
Tin	ppm	ASTM D5185m	>15	<b>3</b>	5	2
Vanadium	ppm	ASTM D5185m		<b>1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

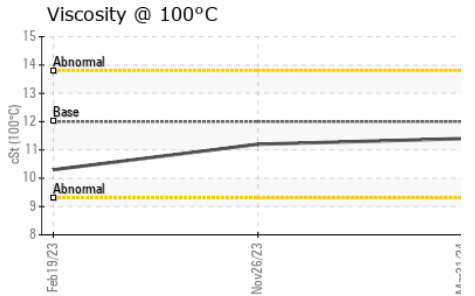
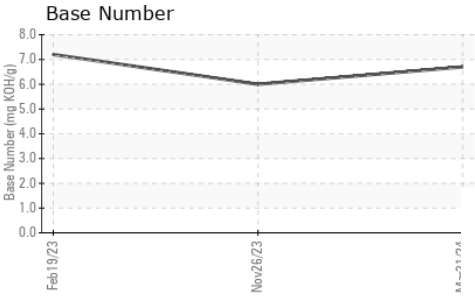
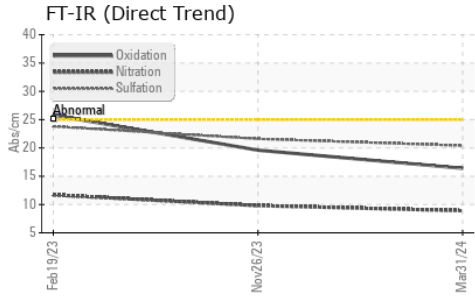
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>51</b>	8	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>24</b>	52	20
Manganese	ppm	ASTM D5185m	0	<b>1</b>	1	3
Magnesium	ppm	ASTM D5185m	950	<b>554</b>	877	256
Calcium	ppm	ASTM D5185m	1050	<b>1542</b>	1417	859
Phosphorus	ppm	ASTM D5185m	995	<b>910</b>	974	367
Zinc	ppm	ASTM D5185m	1180	<b>1156</b>	1216	432
Sulfur	ppm	ASTM D5185m	2600	<b>3217</b>	2579	718

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	4
Sodium	ppm	ASTM D5185m		<b>4</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	20	28

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	9.8	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	21.6	23.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	19.6	25.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.7</b>	6.0	7.2

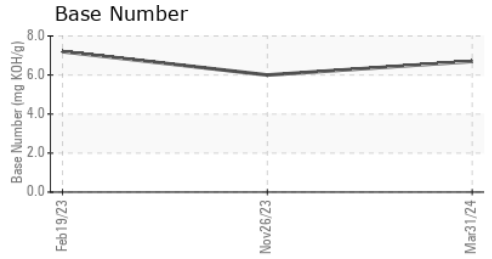
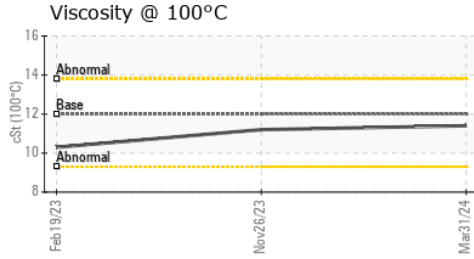
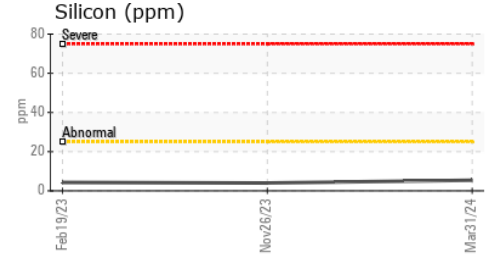
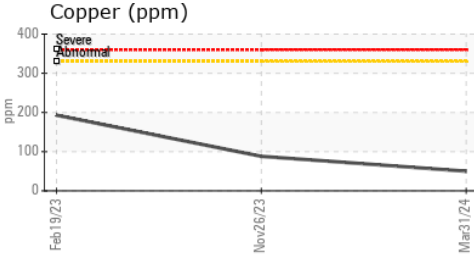
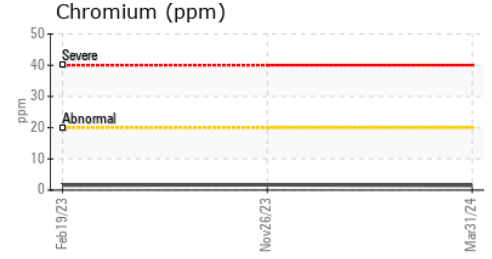
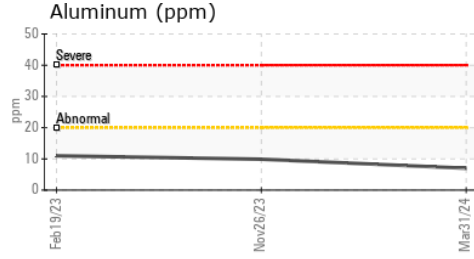
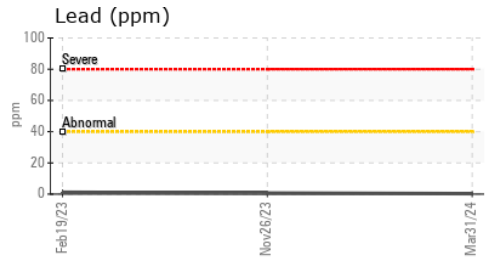
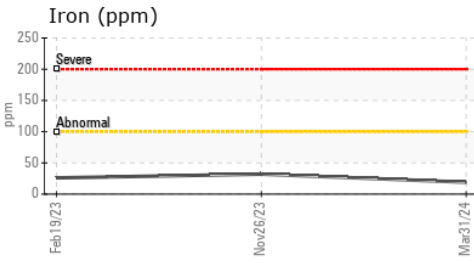
# OIL ANALYSIS REPORT



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	11.2	10.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110685      **Received** : 08 Apr 2024  
**Lab Number** : 06140888      **Tested** : 08 Apr 2024  
**Unique Number** : 10965696      **Diagnosed** : 10 Apr 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #123**  
 66 KELLER AVENUE  
 LANCASTER, PA  
 US 17601  
 Contact: RON ROBERTS  
 roberts@millertransgroup.com  
 T: (717)945-6205  
 F: (717)945-5818

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)