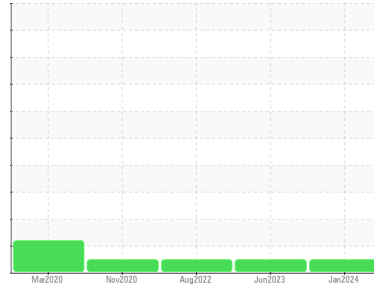


# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Machine Id  
**302141**  
 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>PCA0110640</b>	PCA0083830	PCA0071771
Sample Date	Client Info			<b>20 Jan 2024</b>	22 Jun 2023	08 Aug 2022
Machine Age	mls	Client Info		<b>149255</b>	125192	90349
Oil Age	mls	Client Info		<b>24063</b>	34843	20663
Oil Changed	Client Info			<b>Not Chngd</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>41</b>	44	30
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	3	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	2
Titanium	ppm	ASTM D5185m		<b>20</b>	53	1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	2	<1
Aluminum	ppm	ASTM D5185m	>20	<b>14</b>	16	13
Lead	ppm	ASTM D5185m	>40	<b>0</b>	4	<1
Copper	ppm	ASTM D5185m	>330	<b>4</b>	6	4
Tin	ppm	ASTM D5185m	>15	<b>1</b>	3	2
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	2	1
Cadmium	ppm	ASTM D5185m		<b>0</b>	2	<1

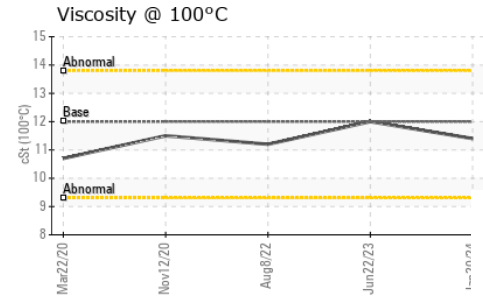
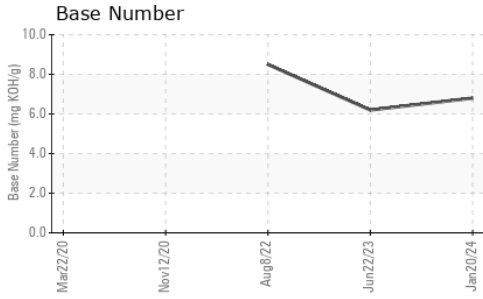
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>29</b>	18	3
Barium	ppm	ASTM D5185m	0	<b>26</b>	19	<1
Molybdenum	ppm	ASTM D5185m	50	<b>75</b>	19	61
Manganese	ppm	ASTM D5185m	0	<b>0</b>	3	2
Magnesium	ppm	ASTM D5185m	950	<b>1136</b>	446	952
Calcium	ppm	ASTM D5185m	1050	<b>1556</b>	1280	1111
Phosphorus	ppm	ASTM D5185m	995	<b>1374</b>	751	1041
Zinc	ppm	ASTM D5185m	1180	<b>1654</b>	935	1253
Sulfur	ppm	ASTM D5185m	2600	<b>4328</b>	3092	3403

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	7
Sodium	ppm	ASTM D5185m		<b>0</b>	6	3
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	17	11

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	1.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	14.4	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	30.9	22.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	26.9	18.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.8</b>	6.2	8.5

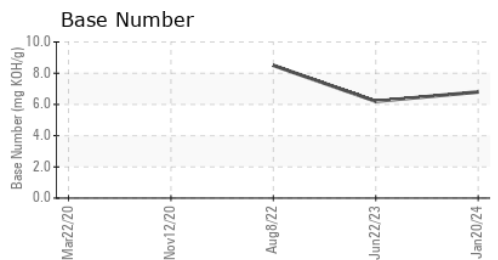
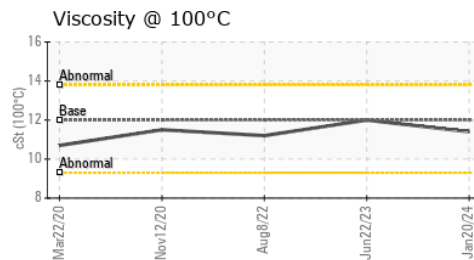
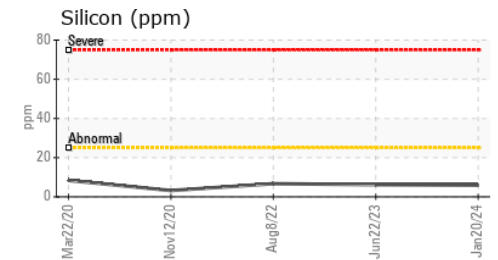
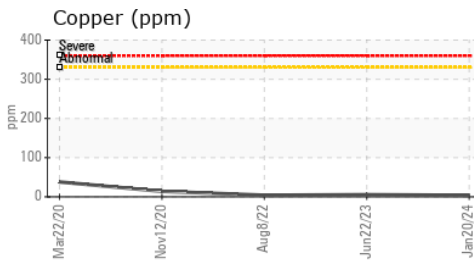
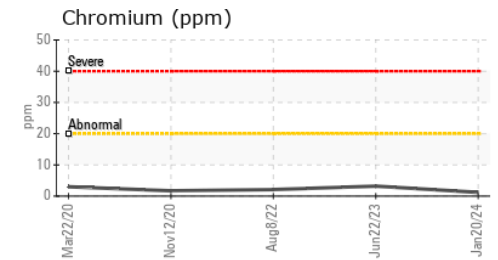
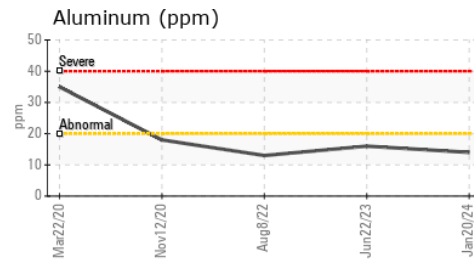
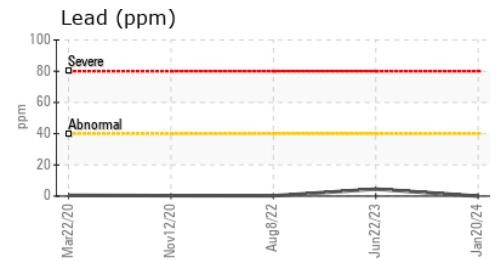
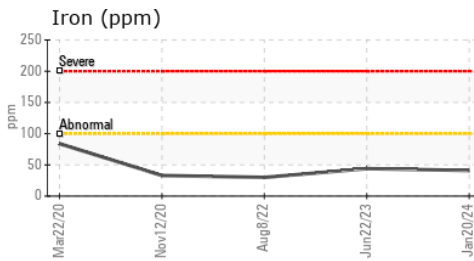
# OIL ANALYSIS REPORT



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	12.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110640 **Received** : 09 Feb 2024  
**Lab Number** : 06084528 **Tested** : 10 Feb 2024  
**Unique Number** : 10871973 **Diagnosed** : 12 Feb 2024 - Don Baldrige  
**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)