

Machine Id  
**FREIGHTLINER 473915**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- 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>PCA0102922</b>	PCA0051544	PCA0039545
Sample Date	Client Info			<b>24 Jul 2023</b>	15 May 2021	26 Dec 2020
Machine Age	mls Client Info			<b>215409</b>	140219	127864
Oil Age	mls Client Info			<b>215409</b>	12355	30000
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
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>37</b>	55	42
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>3</b>	<1	2
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	7	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

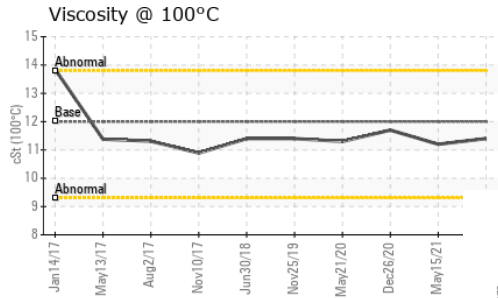
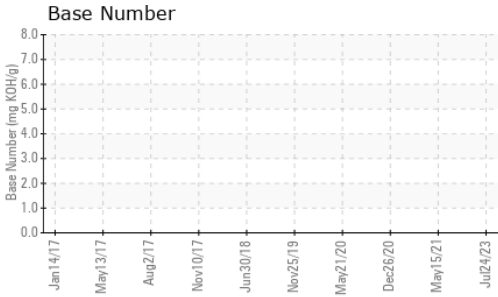
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>5</b>	13	7
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>59</b>	54	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	950	<b>895</b>	784	965
Calcium	ppm	ASTM D5185m	1050	<b>1277</b>	1377	1201
Phosphorus	ppm	ASTM D5185m	995	<b>1066</b>	1003	1080
Zinc	ppm	ASTM D5185m	1180	<b>1283</b>	1276	1347
Sulfur	ppm	ASTM D5185m	2600	<b>2998</b>	2464	2804

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	3
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	8	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.8</b>	1.4	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	12.2	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	23	21.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	17.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.4</b>	---	---

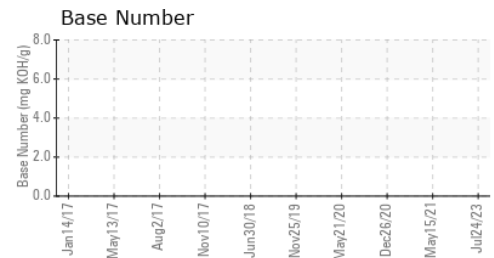
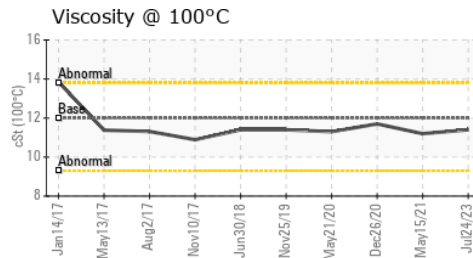
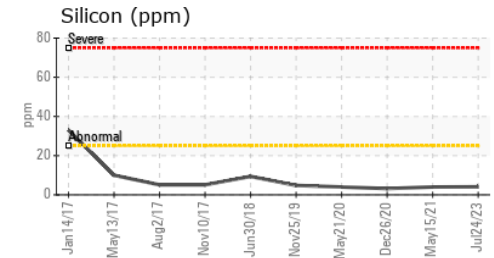
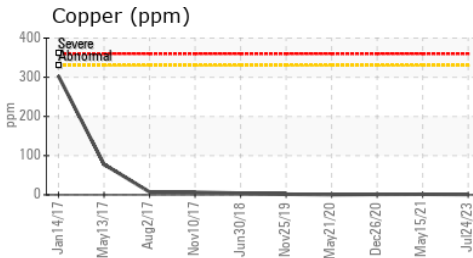
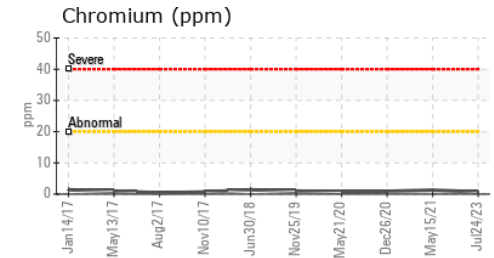
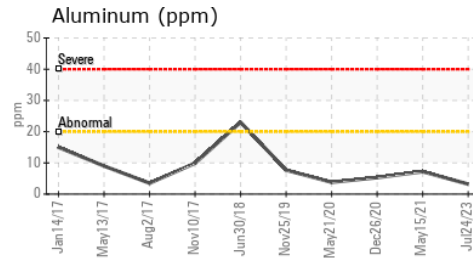
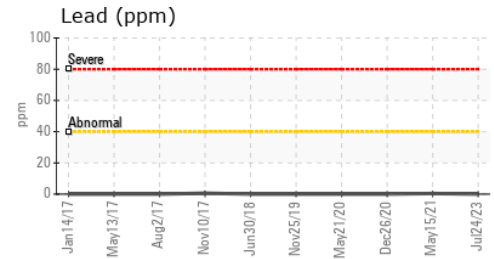
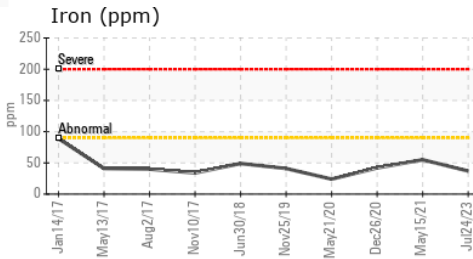
# OIL ANALYSIS REPORT



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	12.00	11.4	11.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0102922 **Received** : 10 Aug 2023  
**Lab Number** : 05921249 **Diagnosed** : 11 Aug 2023  
**Unique Number** : 10593163 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: ROSTY VITER  
 rviter@millertransgroup.com  
 T: (215)552-9832  
 F: (215)552-9892

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)