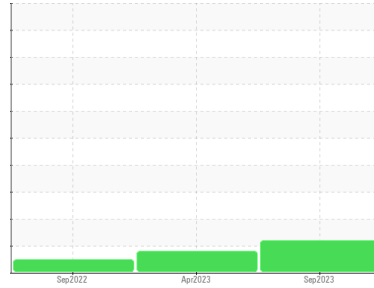


# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**736808**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. 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 level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0105792</b>	PCA0097749	PCA0079720
Sample Date	Client Info			<b>19 Sep 2023</b>	28 Apr 2023	29 Sep 2022
Machine Age	mls	Client Info		<b>170723</b>	127107	56509
Oil Age	mls	Client Info		<b>0</b>	10000	56509
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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	>100	<b>80</b>	▲ 131	137
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	6	7
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>19</b>	58	89
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>25</b>	69	231
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	9
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

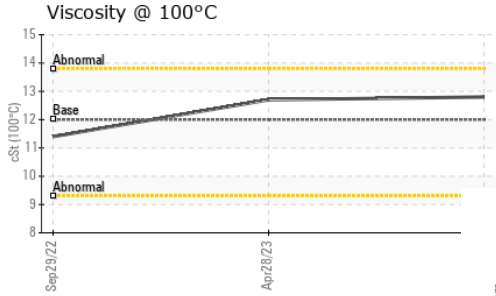
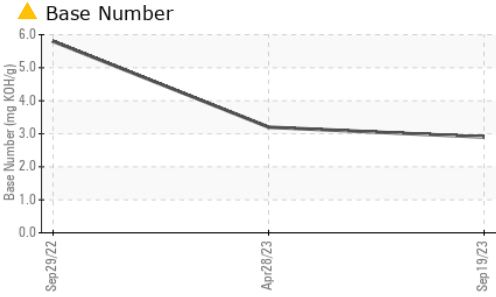
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>1</b>	8	20
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>61</b>	65	45
Manganese	ppm	ASTM D5185m	0	<b>2</b>	4	6
Magnesium	ppm	ASTM D5185m	950	<b>953</b>	887	554
Calcium	ppm	ASTM D5185m	1050	<b>1244</b>	1357	1754
Phosphorus	ppm	ASTM D5185m	995	<b>927</b>	980	722
Zinc	ppm	ASTM D5185m	1180	<b>1244</b>	1263	907
Sulfur	ppm	ASTM D5185m	2600	<b>2291</b>	2450	2027

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	9	10
Sodium	ppm	ASTM D5185m		<b>4</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>42</b>	118	231

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.4</b>	1.5	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>18.0</b>	17.2	17.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.3</b>	27.1	28.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>35.2</b>	32.7	37.4
Base Number (BN)	mg KOH/g	ASTM D2896		▲ <b>2.9</b>	3.2	5.8

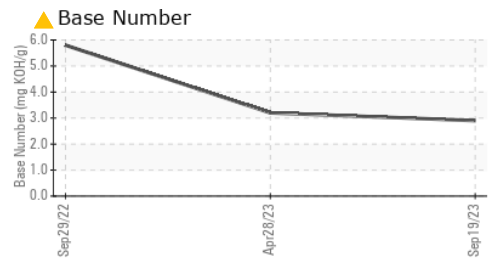
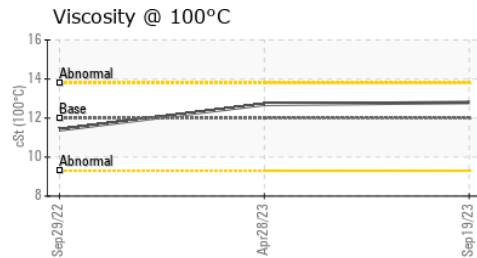
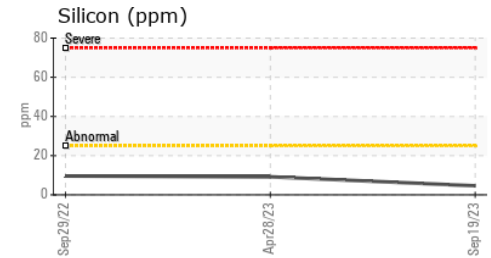
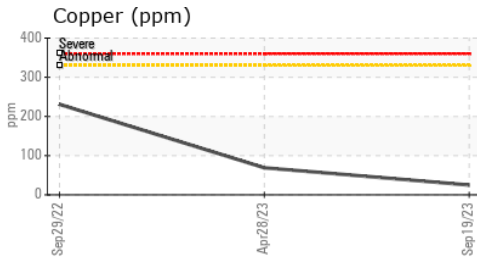
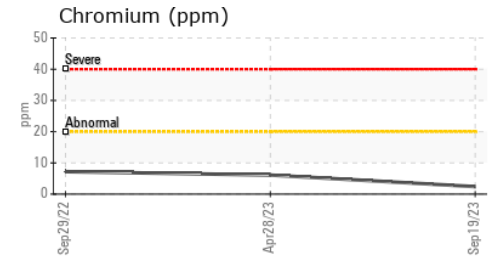
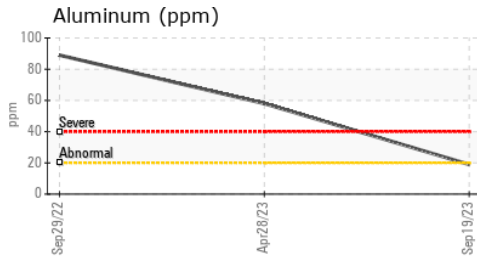
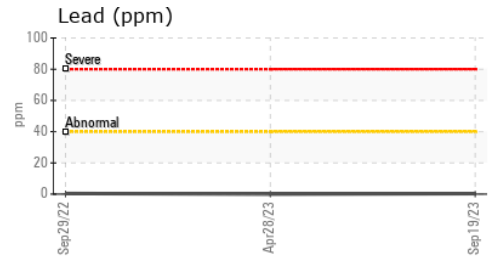
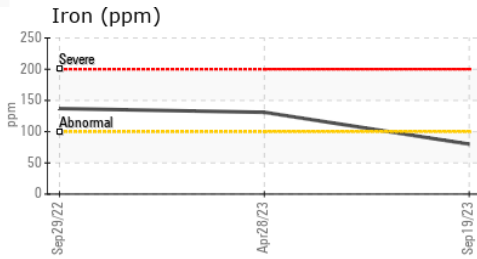
# OIL ANALYSIS REPORT



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	12.8	12.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105792 **Received** : 08 Nov 2023  
**Lab Number** : 06001296 **Diagnosed** : 09 Nov 2023  
**Unique Number** : 10729656 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #114**  
 63 REPAUPO STATION ROAD  
 LOGAN TOWNSHIP, NJ  
 US 08085  
 Contact: ED DAVIS  
 edavis@millertransgroup.com  
 T: (856)214-3521  
 F: (856)214-3663

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)