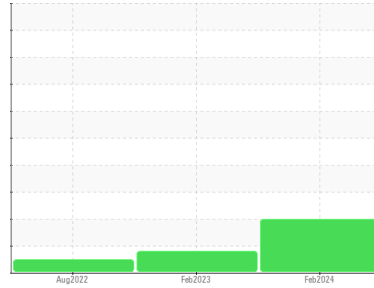


# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**721562**  
 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**

Cylinder, crank, or cam shaft wear is indicated.

**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>PCA0119050</b>	PCA0093284	PCA0076735
Sample Date	Client Info			<b>16 Feb 2024</b>	25 Feb 2023	27 Aug 2022
Machine Age	mls	Client Info		<b>118426</b>	0	35353
Oil Age	mls	Client Info		<b>118426</b>	0	35353
Oil Changed	Client Info			<b>Changed</b>	N/A	Not Changd
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
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>▲ 124</b>	▲ 189	88
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	6	4
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	1	0
Titanium	ppm	ASTM D5185m		<b>3</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>21</b>	54	36
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>29</b>	200	224
Tin	ppm	ASTM D5185m	>15	<b>2</b>	6	5
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>4</b>	16	26
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>58</b>	43	42
Manganese	ppm	ASTM D5185m	0	<b>2</b>	6	5
Magnesium	ppm	ASTM D5185m	950	<b>916</b>	531	489
Calcium	ppm	ASTM D5185m	1050	<b>1213</b>	1656	1688
Phosphorus	ppm	ASTM D5185m	995	<b>1110</b>	733	672
Zinc	ppm	ASTM D5185m	1180	<b>1359</b>	936	919
Sulfur	ppm	ASTM D5185m	2600	<b>2392</b>	1738	1773

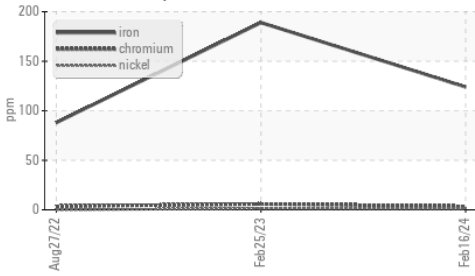
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	10	8
Sodium	ppm	ASTM D5185m		<b>2</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>41</b>	136	98

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.9</b>	1.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>18.8</b>	19.6	15.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.7</b>	29.8	25.9

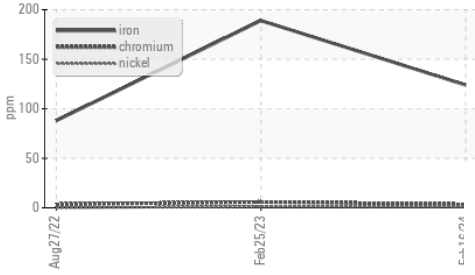
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>37.2</b>	40.7	31.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 2.0</b>	3.8	6.5

# OIL ANALYSIS REPORT

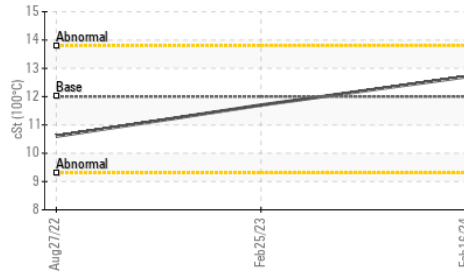
## ▲ Ferrous Alloys



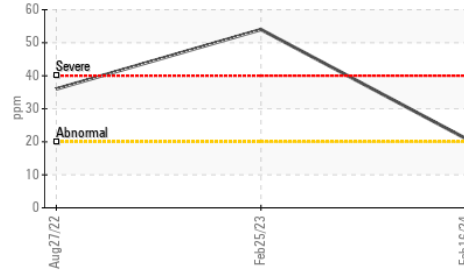
## ▲ Ferrous Alloys



## Viscosity @ 100°C



## Aluminum (ppm)



## VISUAL

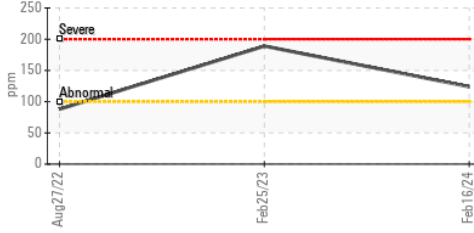
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

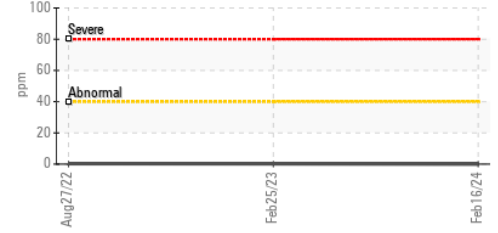
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	12.7	11.7

## GRAPHS

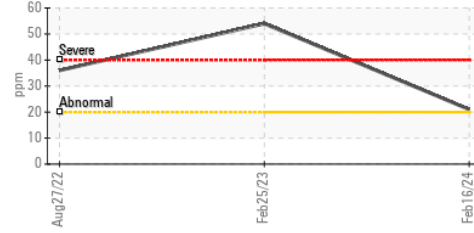
### ▲ Iron (ppm)



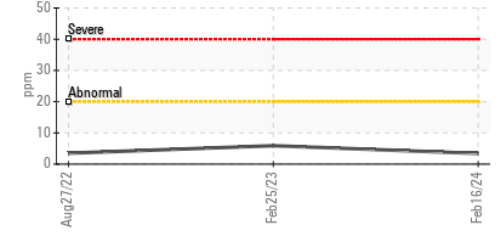
### Lead (ppm)



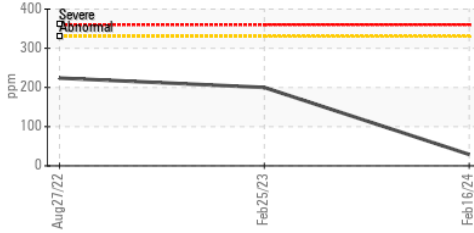
### Aluminum (ppm)



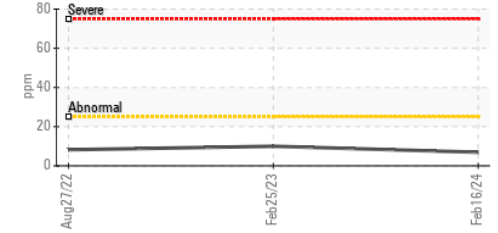
### Chromium (ppm)



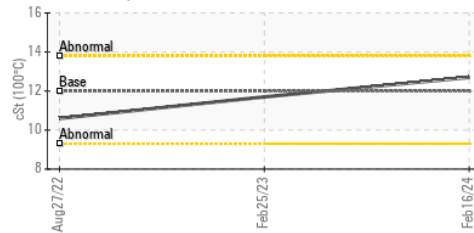
### Copper (ppm)



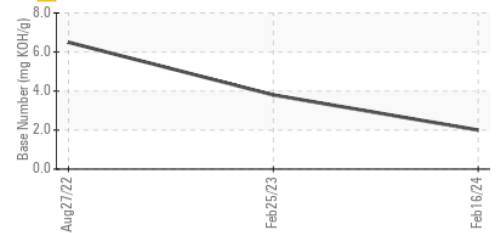
### Silicon (ppm)



### Viscosity @ 100°C



### ▲ Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0119050 **Received** : 04 Mar 2024  
**Lab Number** : 06107128 **Tested** : 04 Mar 2024  
**Unique Number** : 10910625 **Diagnosed** : 06 Mar 2024 - Jonathan Hester  
**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)