

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
130098

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0113400	---	---
Sample Date	Client Info	07 Dec 2023	---	---
Machine Age	mls	Client Info	0	---
Oil Age	mls	Client Info	0	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---
Water	WC Method	>0.2	NEG	---
Glycol	WC Method		NEG	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	▲ 125	---
Chromium	ppm	ASTM D5185m	>20	2	---
Nickel	ppm	ASTM D5185m	>4	<1	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>20	▲ 23	---
Lead	ppm	ASTM D5185m	>40	3	---
Copper	ppm	ASTM D5185m	>330	258	---
Tin	ppm	ASTM D5185m	>15	6	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	86	---
Barium	ppm	ASTM D5185m	0	4	---
Molybdenum	ppm	ASTM D5185m	50	18	---
Manganese	ppm	ASTM D5185m	0	4	---
Magnesium	ppm	ASTM D5185m	950	101	---
Calcium	ppm	ASTM D5185m	1050	1099	---
Phosphorus	ppm	ASTM D5185m	995	852	---
Zinc	ppm	ASTM D5185m	1180	1096	---
Sulfur	ppm	ASTM D5185m	2600	2668	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	▲ 54	---
Sodium	ppm	ASTM D5185m		3	---
Potassium	ppm	ASTM D5185m	>20	6	---

INFRA-RED

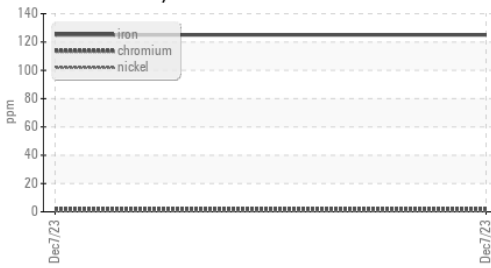
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	---

FLUID DEGRADATION

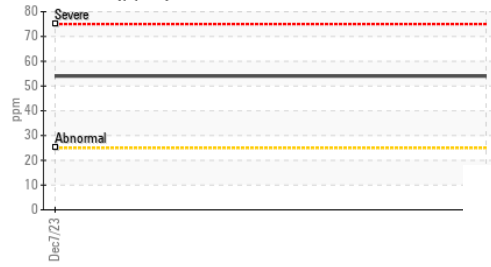
method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.3	---

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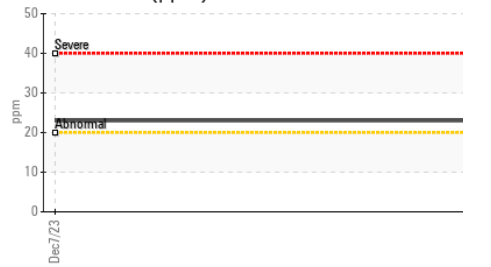
▲ Ferrous Alloys



▲ Silicon (ppm)



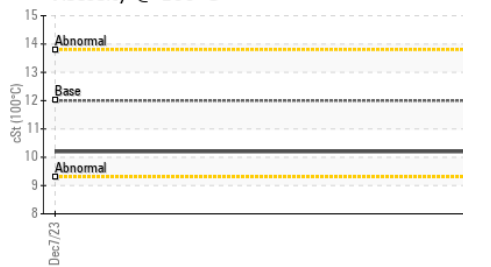
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

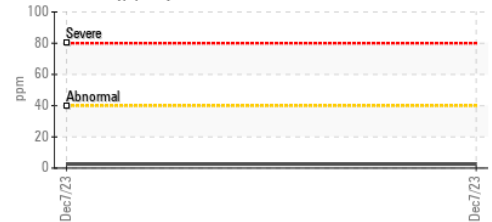
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	12.00	10.2	---	---

GRAPHS

▲ Iron (ppm)



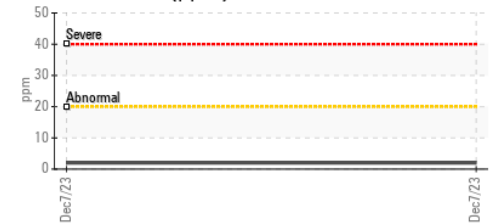
Lead (ppm)



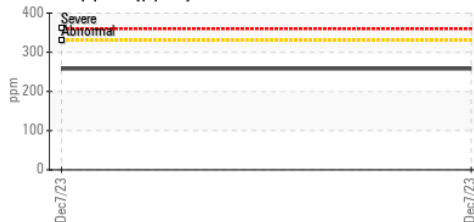
▲ Aluminum (ppm)



Chromium (ppm)



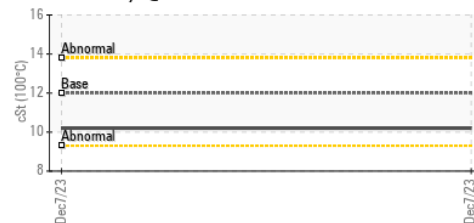
▲ Copper (ppm)



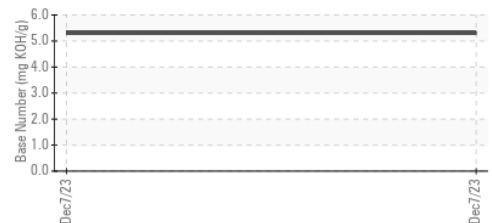
▲ Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0113400 **Recieved** : 13 Dec 2023
Lab Number : 06034033 **Diagnosed** : 18 Dec 2023
Unique Number : 10789262 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #119
 39 INDUSTRIAL AVE
 HASBROUCK HEIGHTS, NJ
 US 07604
 Contact: MIKE LONGETTE
 mlongette@millertransgroup.com

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)

T: (201)528-7053