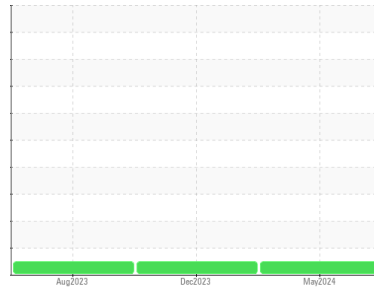


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
338750
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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			PCA0110703	PCA0097363	PCA0097392
Sample Date	Client Info			03 May 2024	15 Dec 2023	02 Aug 2023
Machine Age	mls Client Info			71597	53620	36289
Oil Age	mls Client Info			35308	17322	36289
Oil Changed	Client Info			Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	49	20	67
Chromium	ppm	ASTM D5185m	>20	3	1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		15	12	4
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	30	17	20
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	11	6	29
Tin	ppm	ASTM D5185m	>15	2	2	3
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

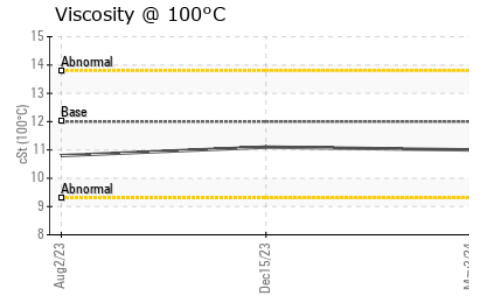
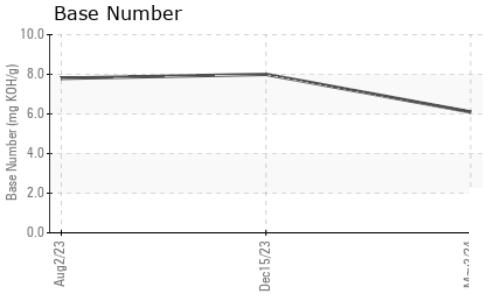
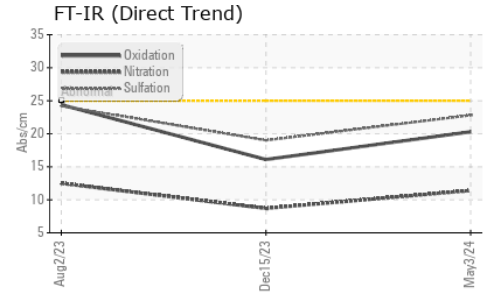
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	14	26	18
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	50	56	53	53
Manganese	ppm	ASTM D5185m	0	2	1	9
Magnesium	ppm	ASTM D5185m	950	883	915	685
Calcium	ppm	ASTM D5185m	1050	1364	1291	1614
Phosphorus	ppm	ASTM D5185m	995	943	1135	854
Zinc	ppm	ASTM D5185m	1180	1279	1310	1153
Sulfur	ppm	ASTM D5185m	2600	3458	3489	2893

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	5	8
Sodium	ppm	ASTM D5185m		2	<1	4
Potassium	ppm	ASTM D5185m	>20	56	27	36

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.4	8.7	12.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	19.0	24.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	16.1	24.4
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	8.0	7.8

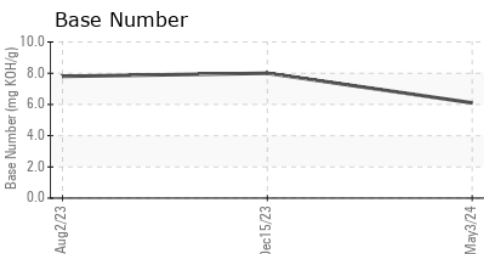
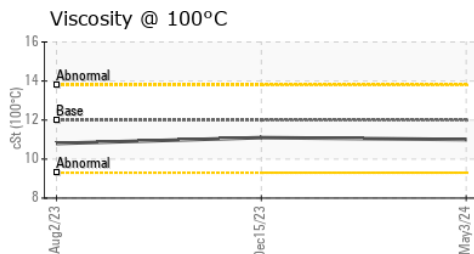
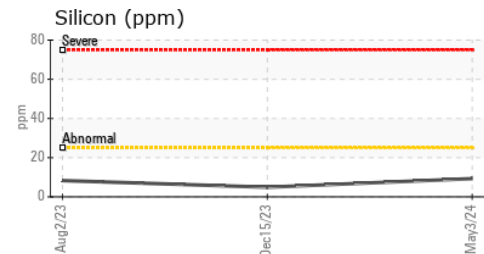
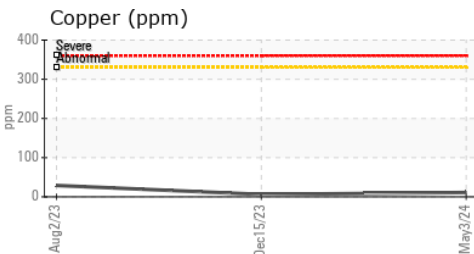
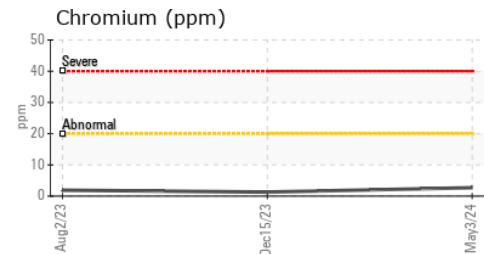
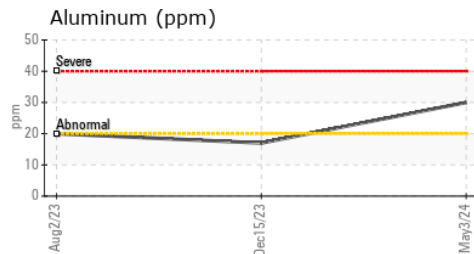
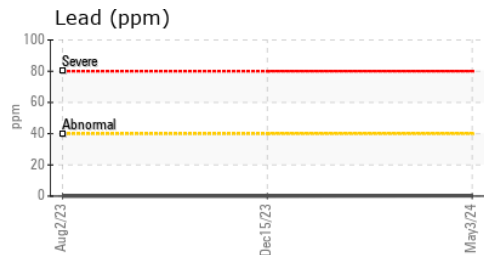
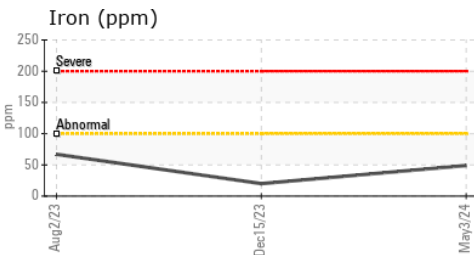
OIL ANALYSIS REPORT



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	11.0	11.1	10.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0110703 **Received** : 23 May 2024
Lab Number : **06188682** **Tested** : 24 May 2024
Unique Number : 11045434 **Diagnosed** : 24 May 2024 - Wes Davis
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)