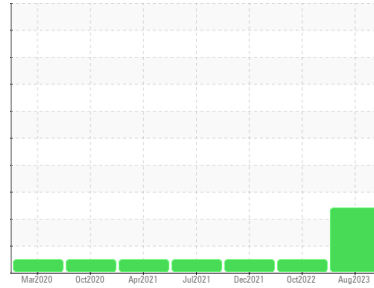




Machine Id
158278586

Component
Diesel Engine

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



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0104226	PCA0080722	PCA0063486
Sample Date	Client Info		28 Aug 2023	04 Oct 2022	13 Dec 2021
Machine Age	mls	Client Info	124363	111944	107657
Oil Age	mls	Client Info	0	0	20000
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	19	5	7
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	<1	0
Aluminum	ppm	ASTM D5185m >20	3	2	0
Lead	ppm	ASTM D5185m >40	<1	<1	0
Copper	ppm	ASTM D5185m >330	2	1	1
Tin	ppm	ASTM D5185m >15	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	9	33	5
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 50	57	95	62
Manganese	ppm	ASTM D5185m 0	<1	<1	0
Magnesium	ppm	ASTM D5185m 950	732	820	928
Calcium	ppm	ASTM D5185m 1050	966	969	1116
Phosphorus	ppm	ASTM D5185m 995	825	902	1041
Zinc	ppm	ASTM D5185m 1180	1036	1099	1157
Sulfur	ppm	ASTM D5185m 2600	2805	3378	2614

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	3	2
Sodium	ppm	ASTM D5185m	1	<1	1
Potassium	ppm	ASTM D5185m >20	6	10	3
Fuel	%	ASTM D3524 >5	17.2	<1.0	<1.0

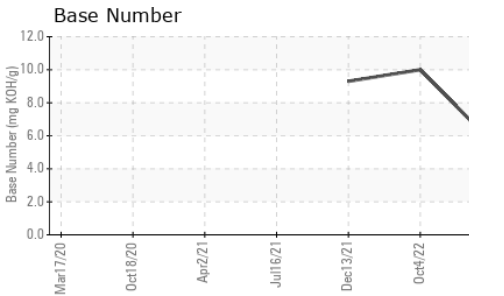
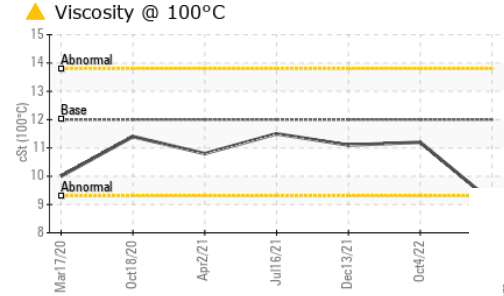
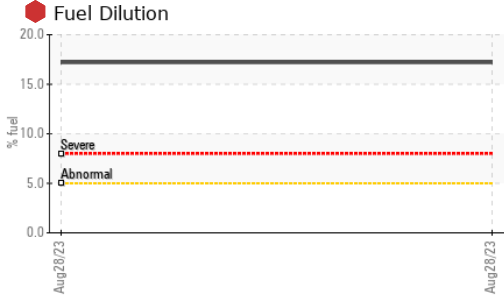
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.2	0.3
Nitration	Abs/cm	*ASTM D7624 >20	10.2	6.8	7.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.8	19.6	19.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	24.8	15.5	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	5.6	10.0	9.3

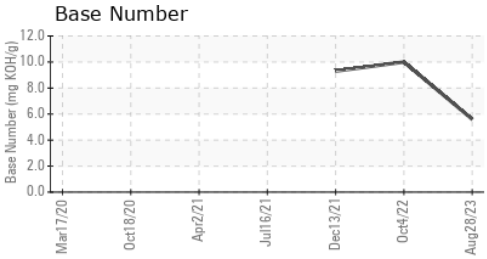
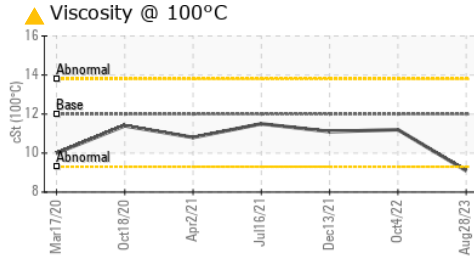
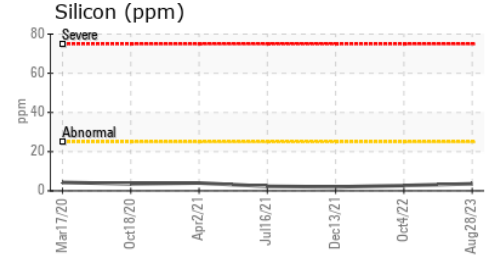
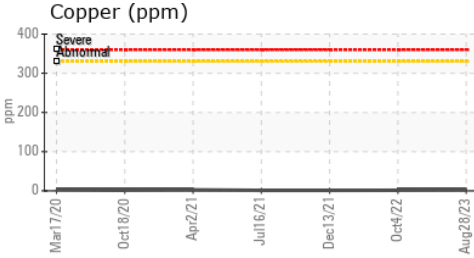
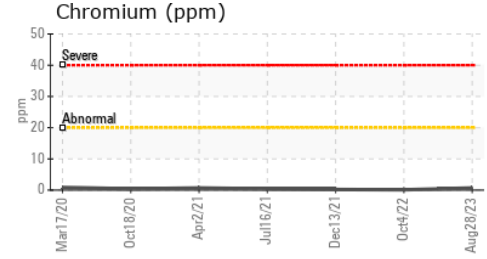
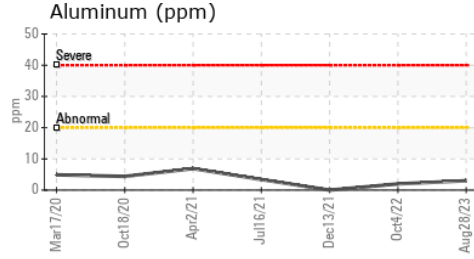
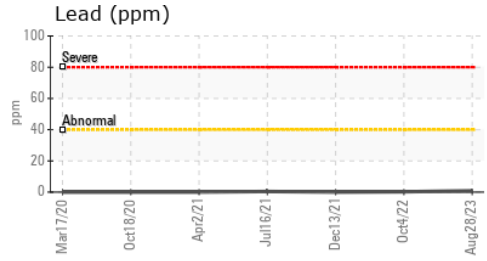
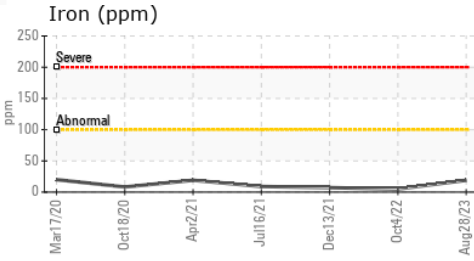
OIL ANALYSIS REPORT



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	▲ 9.1	11.2	11.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104226 **Received** : 20 Sep 2023
Lab Number : 05956185 **Diagnosed** : 21 Sep 2023
Unique Number : 10657398 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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

Certificate L2367
 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:
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