

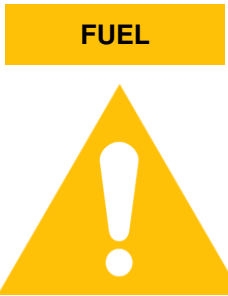
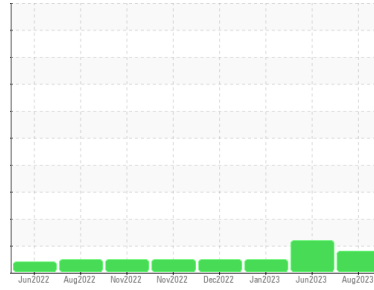


PROBLEM SUMMARY



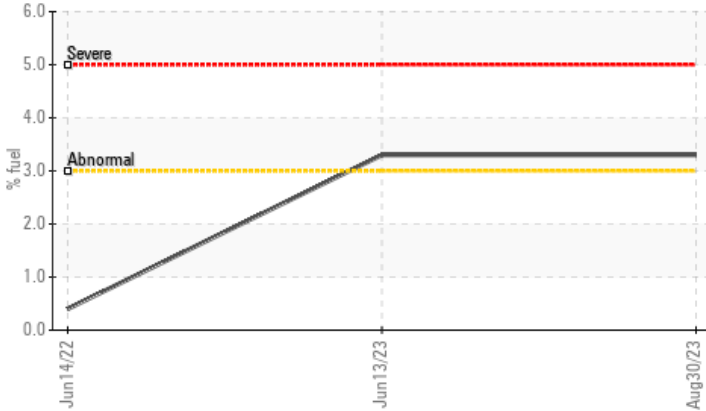
Area
MONTGOMERY
 Machine Id
MACK 420048
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Fuel Dilution



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Fuel	%	ASTM D3524	>3.0	▲ 3.3	▲ 3.3	<1.0

Customer Id: GFL955
 Sample No.: GFL0089876
 Lab Number: 05941181
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

13 Jun 2023 Diag: Wes Davis

FUEL



The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. 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.

[view report](#)



06 Jan 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



16 Dec 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)





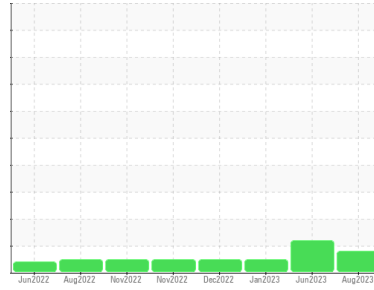
OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Area
MONTGOMERY
 Machine Id
MACK 420048
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0089876	GFL0079687	GFL0070096
Sample Date	Client Info	30 Aug 2023	13 Jun 2023	06 Jan 2023
Machine Age	hrs	5539	5217	4258
Oil Age	hrs	322	959	165
Oil Changed	Client Info	Not Chngd	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	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 >120	68	36	5
Chromium	ppm	ASTM D5185m >20	1	<1	0
Nickel	ppm	ASTM D5185m >5	<1	1	<1
Titanium	ppm	ASTM D5185m >2	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	5	2	0
Lead	ppm	ASTM D5185m >40	0	0	0
Copper	ppm	ASTM D5185m >330	4	3	<1
Tin	ppm	ASTM D5185m >15	1	1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	3	3	7
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	60	64	59
Manganese	ppm	ASTM D5185m 0	1	1	0
Magnesium	ppm	ASTM D5185m 1010	909	986	874
Calcium	ppm	ASTM D5185m 1070	1041	1165	1058
Phosphorus	ppm	ASTM D5185m 1150	919	979	962
Zinc	ppm	ASTM D5185m 1270	1177	1226	1151
Sulfur	ppm	ASTM D5185m 2060	2797	3006	2762

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	8	7	4
Sodium	ppm	ASTM D5185m	7	4	2
Potassium	ppm	ASTM D5185m >20	7	3	2
Fuel	%	ASTM D3524 >3.0	▲ 3.3	▲ 3.3	<1.0

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >4	1.1	0.9	0.2
Nitration	Abs/cm	*ASTM D7624 >20	9.8	10.2	6.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.5	21.2	18.0

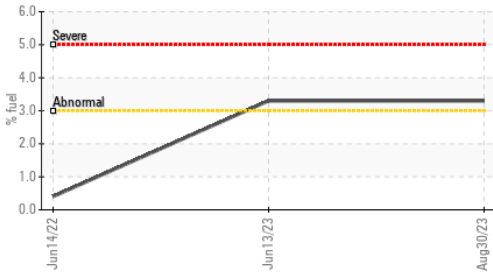
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.4	16.5	13.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	4.9	6.6	8.5

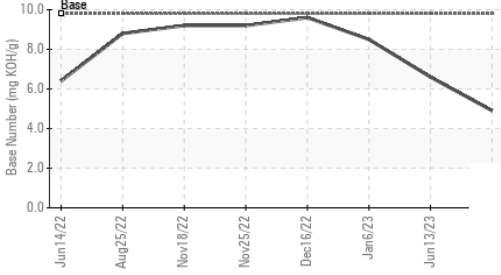


OIL ANALYSIS REPORT

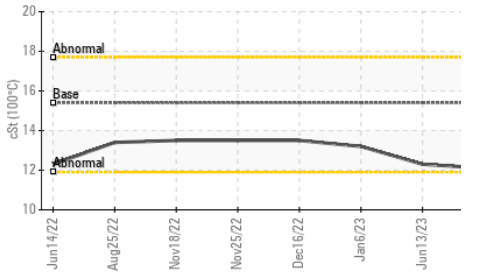
▲ Fuel Dilution



Base Number



Viscosity @ 100°C

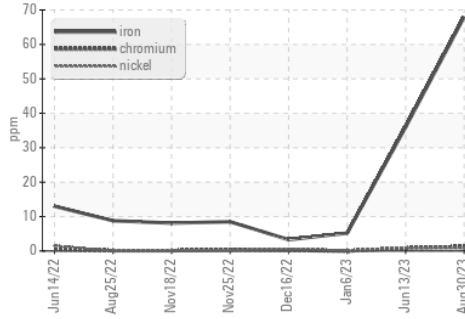


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

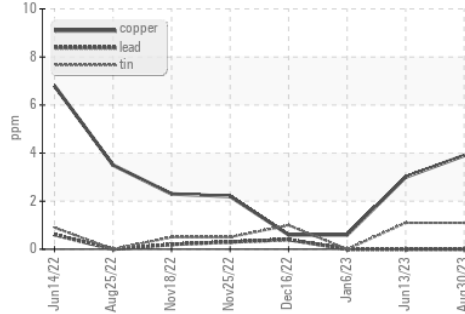
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.1 ▲	12.3

GRAPHS

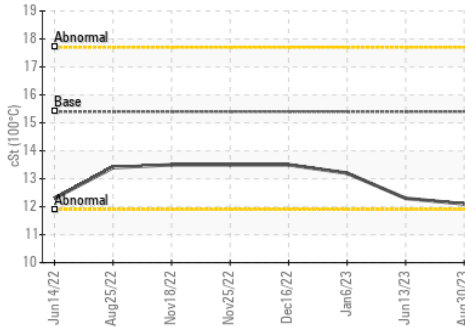
Ferrous Alloys



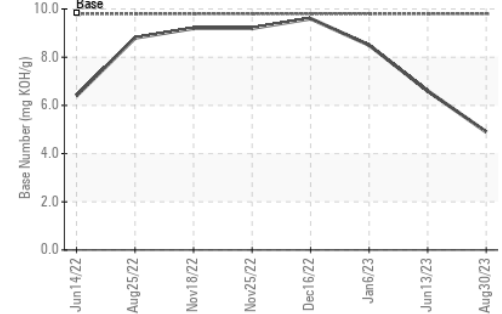
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0089876 **Received** : 01 Sep 2023
Lab Number : 05941181 **Diagnosed** : 05 Sep 2023
Unique Number : 10631793 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 955 - Montgomery
 1121 Wilbanks St
 Montgomery, AL
 US 36108
 Contact: LISA REEVES

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:
F: