



PROBLEM SUMMARY

Sample Rating Trend

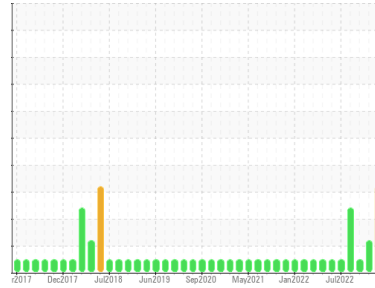
COOL CHEMICALS



Machine Id
2606C PETERBILT

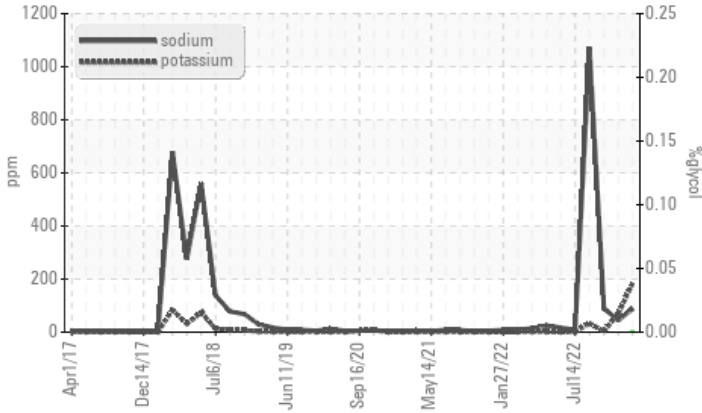
Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (48 QTS)

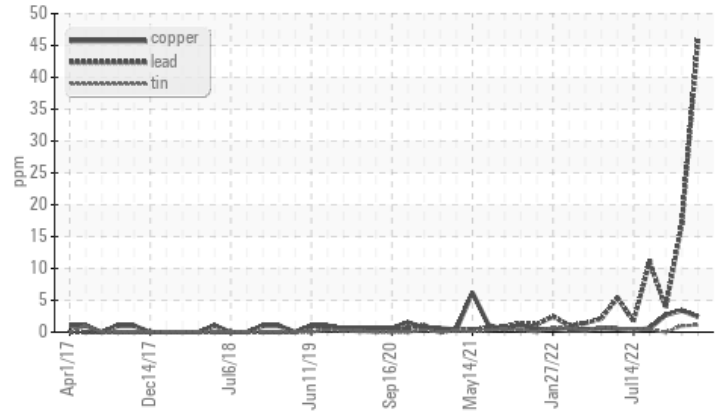


COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



▲ Non-ferrous Metals



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Lead	ppm	ASTM D5185m	>30	▲ 46	17	4
Sodium	ppm	ASTM D5185m		▲ 88	45	89
Potassium	ppm	ASTM D5185m	>20	▲ 186	▲ 70	3

Customer Id: GFL001
Sample No.: GFL0094724
Lab Number: 06010562
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
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jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

20 Sep 2023 Diag: Jonathan Hester

COOL CHEMICALS



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. 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.

[view report](#)



10 Apr 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. 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](#)



15 Aug 2022 Diag: Jonathan Hester

COOL CHEMICALS



We advise that you check for possible coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

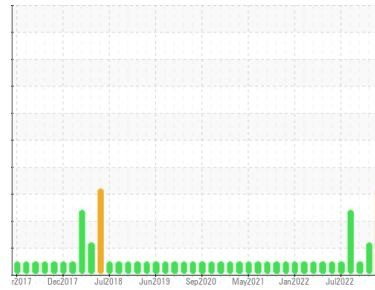
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
2606C PETERBILT

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (48 QTS)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

The lead level is abnormal. All other component wear rates are normal.

Contamination

Sodium and/or potassium levels are high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0094724	GFL0056745	GFL0056653	
Sample Date	Client Info	16 Nov 2023	20 Sep 2023	10 Apr 2023	
Machine Age	hrs	Client Info	23053	22658	21443
Oil Age	hrs	Client Info	0	0	1050
Oil Changed	Client Info	Changed	Changed	Changed	
Sample Status		ABNORMAL	ABNORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	47	35	15
Chromium	ppm	ASTM D5185m >4	5	4	1
Nickel	ppm	ASTM D5185m >2	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >9	6	3	2
Lead	ppm	ASTM D5185m >30	46	17	4
Copper	ppm	ASTM D5185m >35	2	3	3
Tin	ppm	ASTM D5185m >4	1	1	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 50	14	13	9
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	56	55	53
Manganese	ppm	ASTM D5185m 0	1	2	<1
Magnesium	ppm	ASTM D5185m 560	638	625	540
Calcium	ppm	ASTM D5185m 1510	1753	1794	1629
Phosphorus	ppm	ASTM D5185m 780	827	775	692
Zinc	ppm	ASTM D5185m 870	1074	1023	963
Sulfur	ppm	ASTM D5185m 2040	2569	2978	2906

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	21	20	13
Sodium	ppm	ASTM D5185m	88	45	89
Potassium	ppm	ASTM D5185m >20	186	70	3
Glycol	%	*ASTM D2982	0.0	---	---

INFRA-RED

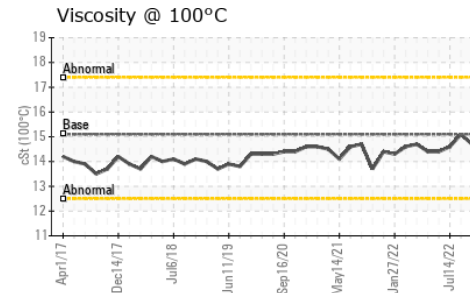
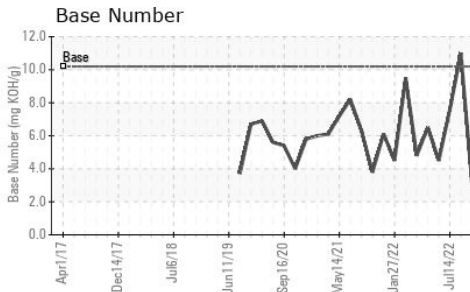
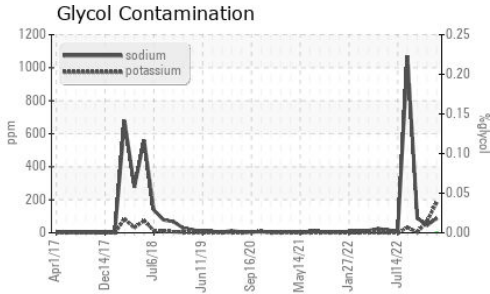
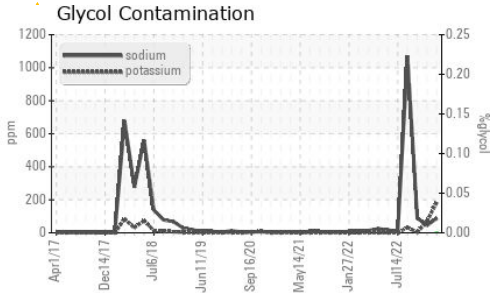
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0.1	0	0
Nitration	Abs/cm	*ASTM D7624 >20	12.6	11.9	11.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.8	26.4	22.7

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	25.7	23.3	19.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	3.1	4.0	3.1



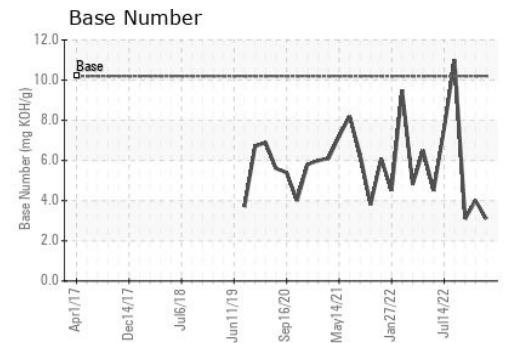
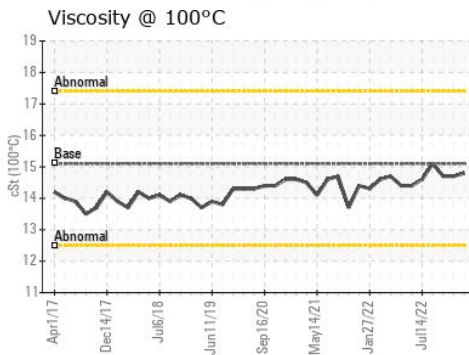
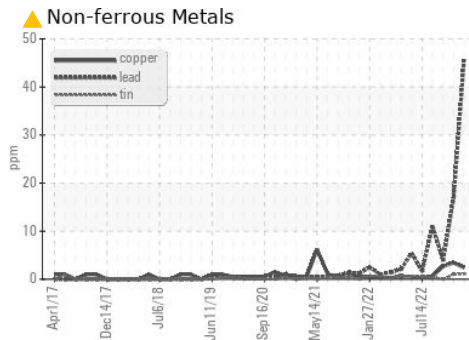
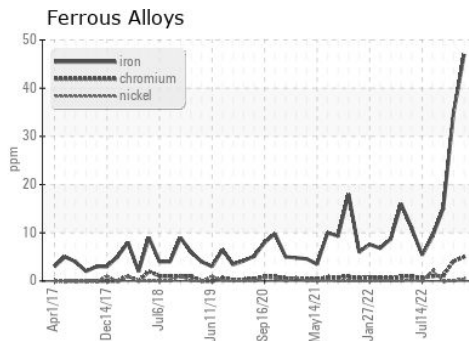
OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0094724 Received : 17 Nov 2023
 Lab Number : 06010562 Diagnosed : 21 Nov 2023
 Unique Number : 10749706 Diagnostician : Jonathan Hester
 Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529
 Contact: Craig Johnson
 craig.johnson@gflenv.com
 T: (919)662-7100
 F: (919)662-7130

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)