



OIL ANALYSIS REPORT

Sample Rating Trend

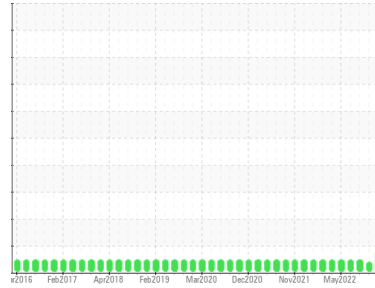
WEAR



Machine Id
2602C PETERBILT 567

Component
Natural Gas Engine

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



DIAGNOSIS

Recommendation

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

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0094741	GFL0089305	GFL0056582
Sample Date	Client Info		31 Jan 2024	21 Jul 2023	21 Feb 2023
Machine Age	hrs	Client Info	22156	20948	19896
Oil Age	hrs	Client Info	1208	1052	1565
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	23	11	10
Chromium	ppm	ASTM D5185m >4	2	2	<1
Nickel	ppm	ASTM D5185m >2	0	<1	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	6	3	3
Lead	ppm	ASTM D5185m >30	▲ 56	19	2
Copper	ppm	ASTM D5185m >35	8	5	<1
Tin	ppm	ASTM D5185m >4	1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	13	11	31
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	57	56	82
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	645	528	150
Calcium	ppm	ASTM D5185m 1510	1826	1759	2093
Phosphorus	ppm	ASTM D5185m 780	884	722	964
Zinc	ppm	ASTM D5185m 870	1106	984	1215
Sulfur	ppm	ASTM D5185m 2040	2655	2949	3715

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	19	17	31
Sodium	ppm	ASTM D5185m	14	9	6
Potassium	ppm	ASTM D5185m >20	2	2	2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	12.8	11.4	10.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.6	25.1	20.2

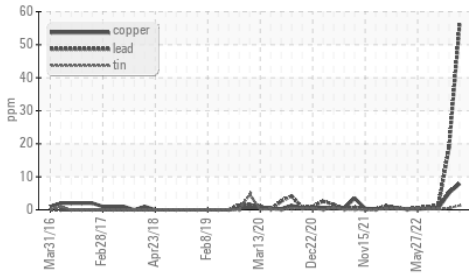
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	27.3	21.8	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	2.6	3.9	5.5

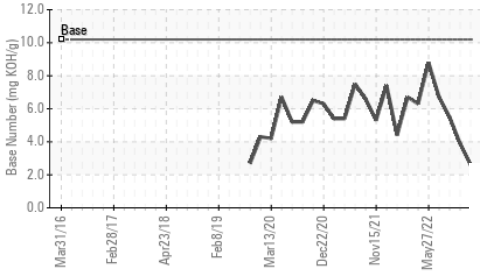


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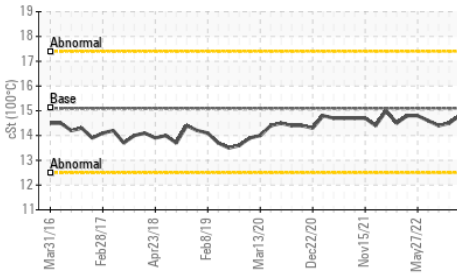
▲ Non-ferrous Metals



Base Number



Viscosity @ 100°C

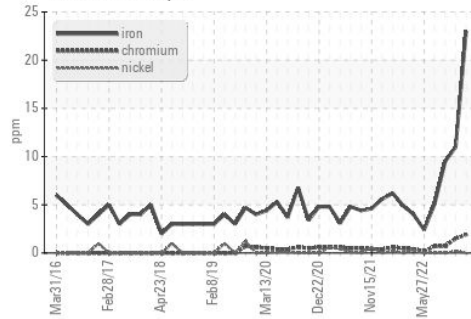


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

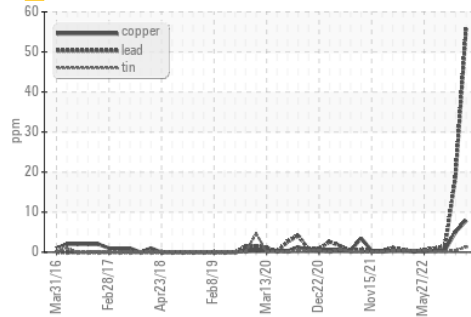
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.5

GRAPHS

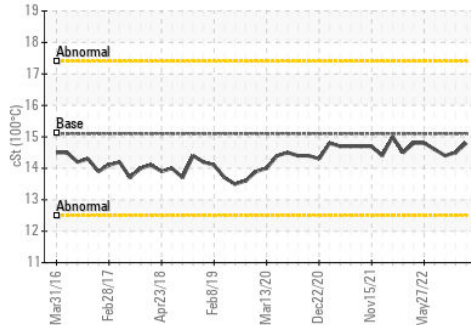
Ferrous Alloys



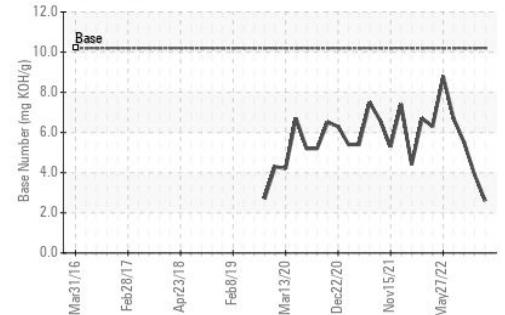
▲ Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0094741
 Lab Number : 06079568
 Unique Number : 10861659
 Test Package : FLEET

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)