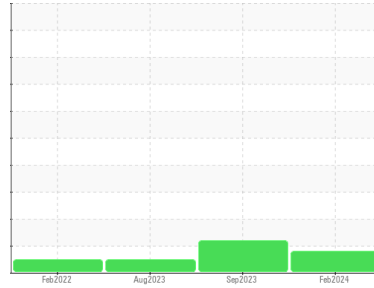




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
759M
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (36 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated.

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		GFL0110064	GFL0084949	GFL0085033
Sample Date	Client Info		08 Feb 2024	25 Sep 2023	17 Aug 2023
Machine Age	hrs	Client Info	18945	17954	17618
Oil Age	hrs	Client Info	991	17954	17618
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >75	▲ 93	9	44
Chromium	ppm	ASTM D5185m >5	2	<1	2
Nickel	ppm	ASTM D5185m >4	<1	0	<1
Titanium	ppm	ASTM D5185m >2	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >15	14	2	10
Lead	ppm	ASTM D5185m >25	28	<1	11
Copper	ppm	ASTM D5185m >100	7	4	3
Tin	ppm	ASTM D5185m >4	3	<1	1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	8	10	48
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	82	65	74
Manganese	ppm	ASTM D5185m 0	1	1	<1
Magnesium	ppm	ASTM D5185m 1010	1326	965	1051
Calcium	ppm	ASTM D5185m 1070	1506	1096	1370
Phosphorus	ppm	ASTM D5185m 1150	1429	1047	1152
Zinc	ppm	ASTM D5185m 1270	1772	1270	1443
Sulfur	ppm	ASTM D5185m 2060	3047	3140	3723

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	12	8	11
Sodium	ppm	ASTM D5185m	34	▲ 132	22
Potassium	ppm	ASTM D5185m >20	0	6	1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	0.5	0.1	0.3
Nitration	Abs/cm	*ASTM D7624 >20	14.9	5.8	12.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	32.7	17.8	27.6

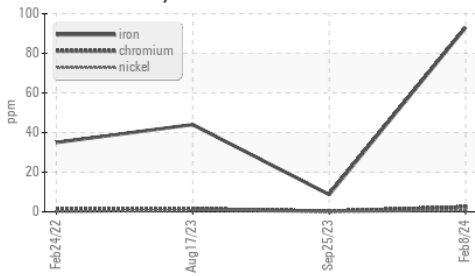
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	39.3	13.8	30.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	6.3	8.9	6.1

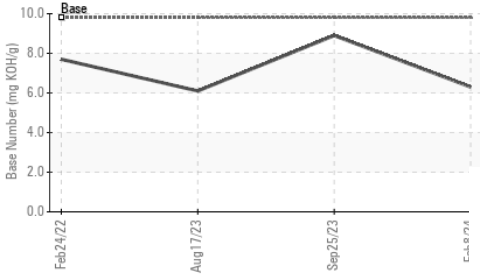


OIL ANALYSIS REPORT

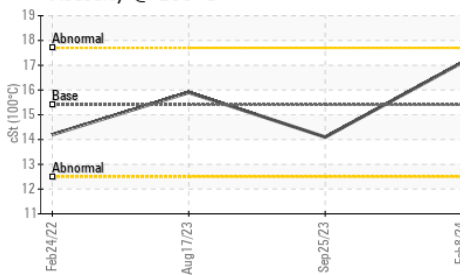
▲ Ferrous Alloys



Base Number



Viscosity @ 100°C

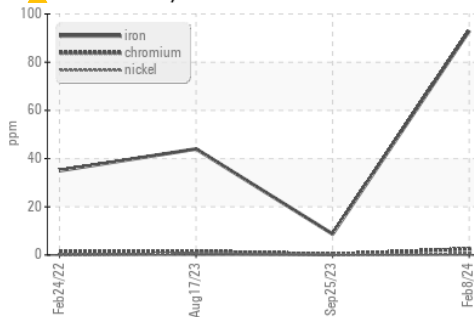


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

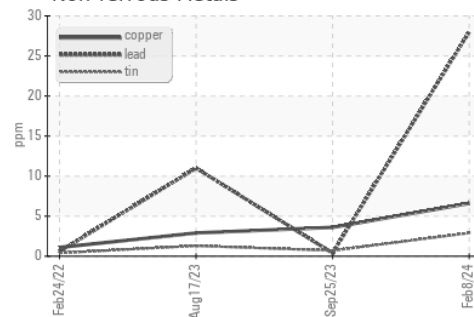
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	17.1	14.1

GRAPHS

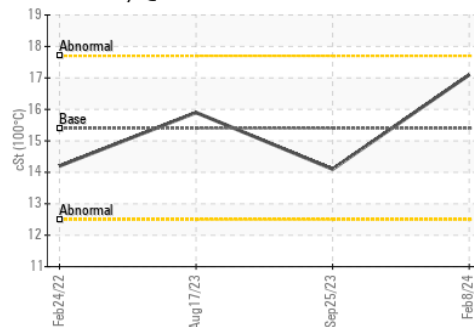
▲ Ferrous Alloys



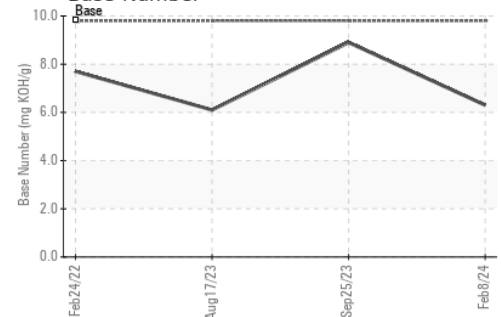
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0110064
 Lab Number : 06085837
 Unique Number : 10873282
 Test Package : FLEET

Received : 12 Feb 2024
 Tested : 13 Feb 2024
 Diagnosed : 13 Feb 2024 - Don Baldrige

GFL Environmental - 468 - Dearborn
 3051 Schaefer Rd
 Dearborn, MI
 US 48126
 Contact:

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: