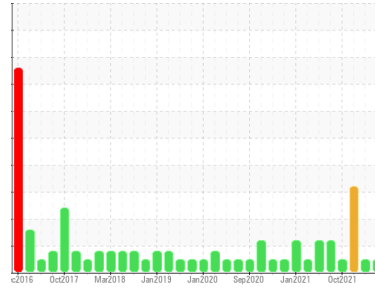




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3725

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		GFL0083641	GFL0074600	GFL0041222
Sample Date	Client Info		30 Jun 2023	10 May 2023	06 Feb 2022
Machine Age	hrs	Client Info	16874	16491	13719
Oil Age	hrs	Client Info	383	13430	0
Oil Changed	Client Info		Changed	Changed	Not Changed
Sample Status			NORMAL	NORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>3.0	<1.0	0.5	27.2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >75	20	48	87
Chromium	ppm	ASTM D5185m >5	<1	2	4
Nickel	ppm	ASTM D5185m >4	0	<1	<1
Titanium	ppm	ASTM D5185m >2	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >15	1	6	13
Lead	ppm	ASTM D5185m >25	0	0	<1
Copper	ppm	ASTM D5185m >100	1	0	10
Tin	ppm	ASTM D5185m >4	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	11	10	42
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	62	69	26
Manganese	ppm	ASTM D5185m 0	<1	<1	1
Magnesium	ppm	ASTM D5185m 1010	894	917	472
Calcium	ppm	ASTM D5185m 1070	1111	1033	1062
Phosphorus	ppm	ASTM D5185m 1150	992	996	595
Zinc	ppm	ASTM D5185m 1270	1236	1290	682
Sulfur	ppm	ASTM D5185m 2060	3540	3839	1958

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	5	6	13
Sodium	ppm	ASTM D5185m	58	62	42
Potassium	ppm	ASTM D5185m >20	3	4	7

INFRA-RED

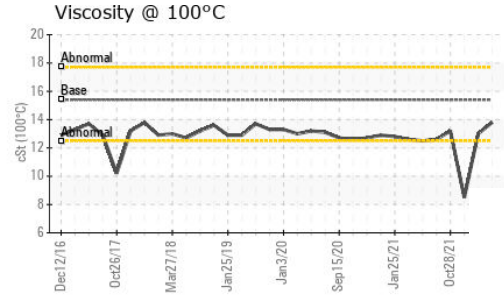
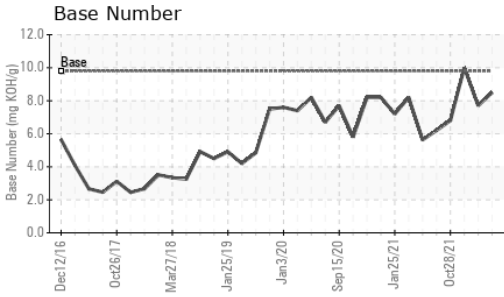
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >6	0.6	0.8	0.7
Nitration	Abs/cm	*ASTM D7624 >20	7.5	7.8	7.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.4	19.6	20.1

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.9	13.9	14.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.5	7.7	10



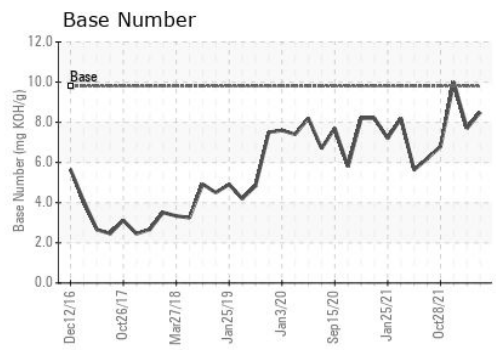
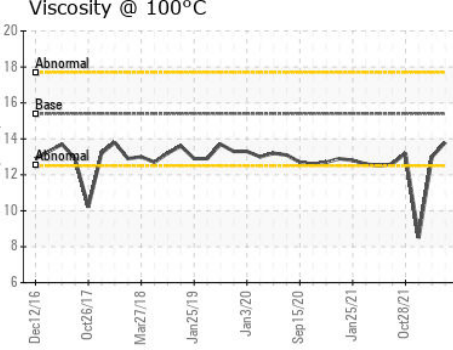
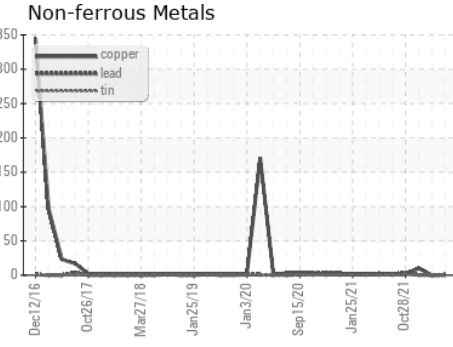
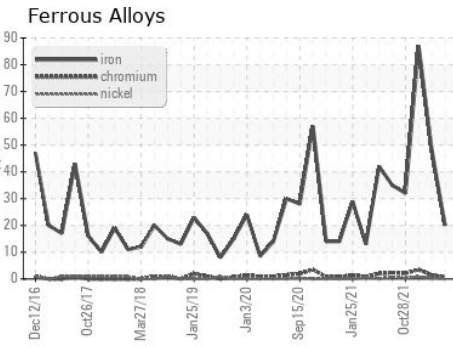
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.0 ▲ 8.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083641 **Received** : 07 Jul 2023
Lab Number : 05891966 **Diagnosed** : 07 Jul 2023
Unique Number : 10547776 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 F:

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)