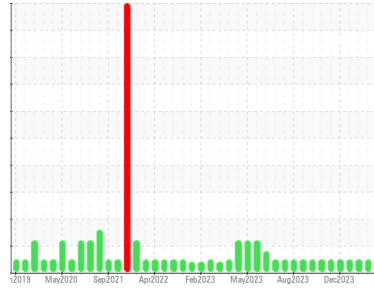




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(DUX582)**

Machine Id  
**10690**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (7 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	history1	history2
Sample Number	Client Info			<b>GFL0115676</b>	GFL0112350	GFL0109939
Sample Date	Client Info			<b>12 Apr 2024</b>	29 Feb 2024	30 Jan 2024
Machine Age	hrs	Client Info		<b>422</b>	128	20431
Oil Age	hrs	Client Info		<b>152</b>	298	139
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	<b>17</b>	44	16
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	10	4
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>100	<b>0</b>	2	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>8</b>	8	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	62	58
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>822</b>	884	845
Calcium	ppm	ASTM D5185m	1070	<b>1027</b>	1017	965
Phosphorus	ppm	ASTM D5185m	1150	<b>963</b>	1044	976
Zinc	ppm	ASTM D5185m	1270	<b>1093</b>	1216	1140
Sulfur	ppm	ASTM D5185m	2060	<b>3001</b>	3107	2852

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	9	5
Sodium	ppm	ASTM D5185m		<b>2</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	1

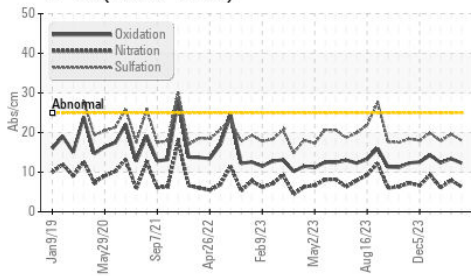
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.8</b>	1.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.3</b>	8.0	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	19.6	17.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.3</b>	13.4	12.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	7.8	6.7

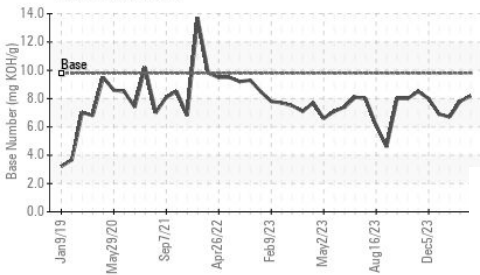


# OIL ANALYSIS REPORT

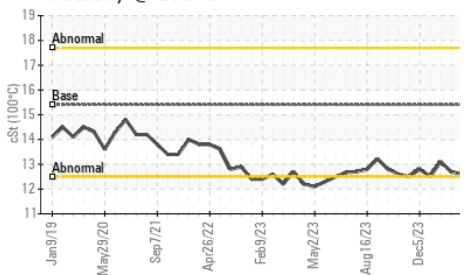
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

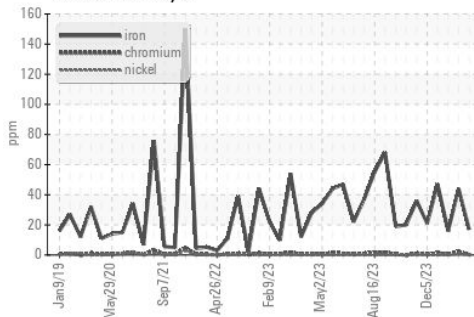


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

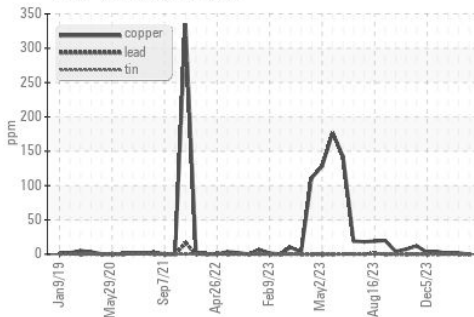
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	12.7

## GRAPHS

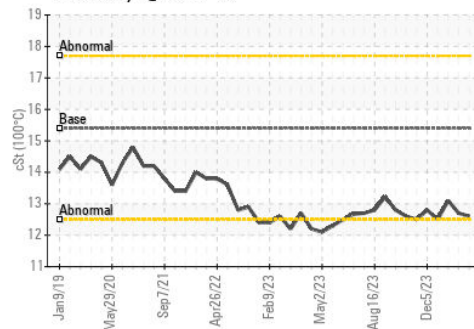
Ferrous Alloys



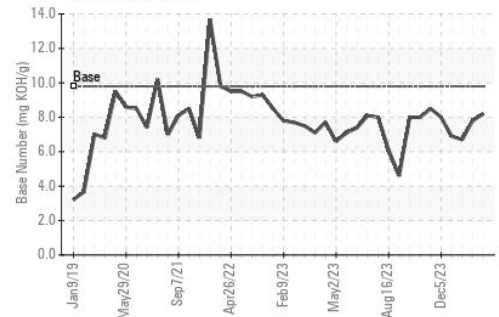
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0115676  
 Lab Number : 06148235  
 Unique Number : 10978313  
 Test Package : FLEET

Received : 15 Apr 2024  
 Tested : 15 Apr 2024  
 Diagnosed : 15 Apr 2024 - Wes Davis

GFL Environmental - 010 - Stockbridge  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: TECHNICIAN ACCOUNT  
 wcgfldemo@gmail.com

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: