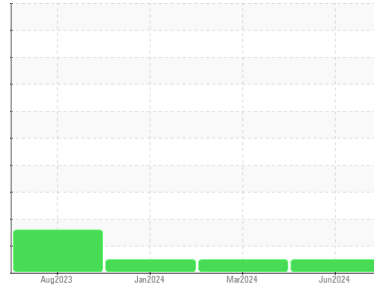




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**729089-13135**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0103576</b>	GFL0103551	GFL0085342
Sample Date	Client Info		<b>12 Jun 2024</b>	06 Mar 2024	02 Jan 2024
Machine Age	hrs	Client Info	<b>7758</b>	7118	923
Oil Age	hrs	Client Info	<b>7758</b>	0	649
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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 >80	<b>71</b>	24	50
Chromium	ppm	ASTM D5185m >5	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>4</b>	1	4
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >150	<b>2</b>	1	2
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	<1	4
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>65</b>	61	62
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1051</b>	1056	1044
Calcium	ppm	ASTM D5185m 1070	<b>1158</b>	1143	1102
Phosphorus	ppm	ASTM D5185m 1150	<b>1139</b>	1086	1168
Zinc	ppm	ASTM D5185m 1270	<b>1401</b>	1334	1420
Sulfur	ppm	ASTM D5185m 2060	<b>3272</b>	3579	3181

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>15</b>	9	23
Sodium	ppm	ASTM D5185m	<b>9</b>	5	7
Potassium	ppm	ASTM D5185m >20	<b>4</b>	1	3

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.1</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.3</b>	9.6	10.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.6</b>	20.4	24.0

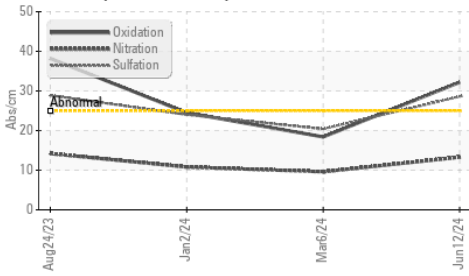
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>32.2</b>	18.4	24.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>4.6</b>	8.0	6.7

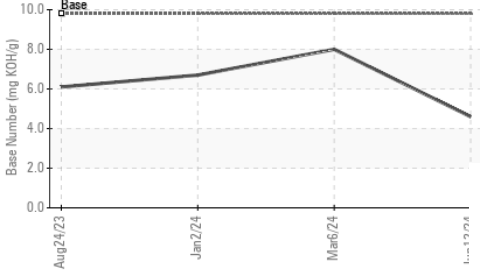


# OIL ANALYSIS REPORT

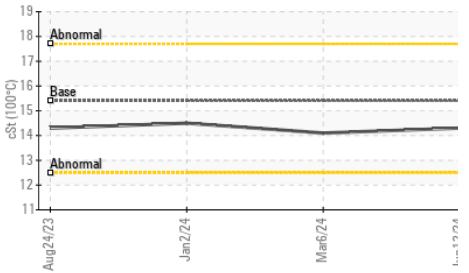
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

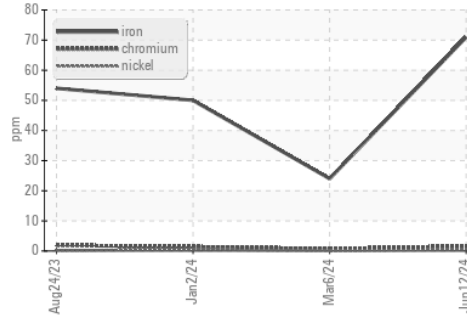


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

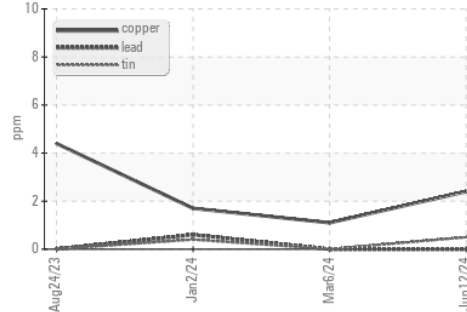
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.1

## GRAPHS

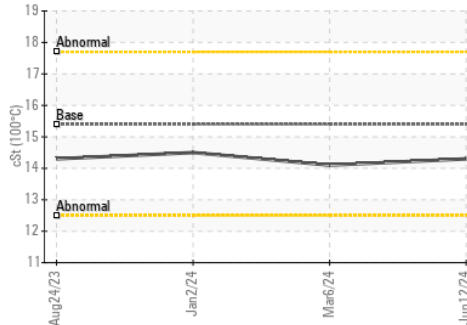
Ferrous Alloys



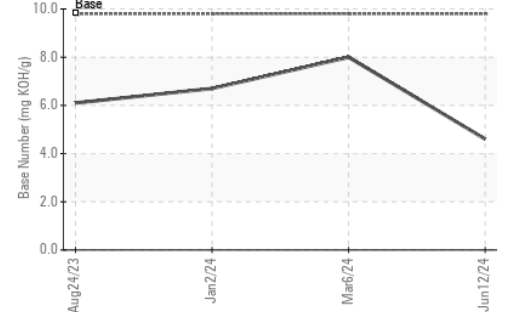
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0103576  
 Lab Number : 06217578  
 Unique Number : 11090442  
 Test Package : FLEET

GFL Environmental - 958A - Chillicothe Wigan  
 19908 N. State Rd 29  
 Chillicothe, IL  
 US 61523  
 Contact: Bryan Link  
 blink@gflenv.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)

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F: