



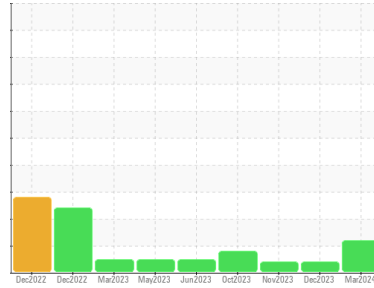
# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area  
**(GAP707)**  
Machine Id  
**413041**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**



## DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0103431</b>	GFL0074625	GFL0074634
Sample Date	Client Info			<b>24 Mar 2024</b>	08 Dec 2023	20 Nov 2023
Machine Age	hrs	Client Info		<b>3468</b>	3068	2934
Oil Age	hrs	Client Info		<b>0</b>	134	88
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<b>&lt;1.0</b>	<1.0	0.3
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	>120	<b>13</b>	2	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>▲ 12</b>	2	4
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	0	3
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<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>6</b>	8	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>56</b>	52	56
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>754</b>	738	727
Calcium	ppm	ASTM D5185m	1070	<b>959</b>	875	889
Phosphorus	ppm	ASTM D5185m	1150	<b>900</b>	837	835
Zinc	ppm	ASTM D5185m	1270	<b>1077</b>	1023	1023
Sulfur	ppm	ASTM D5185m	2060	<b>2773</b>	2535	2823

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	3	3
Sodium	ppm	ASTM D5185m		<b>4</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	1	3

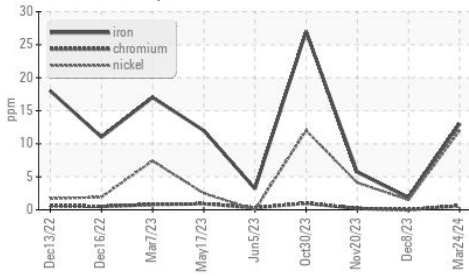
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	<b>0.4</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	5.1	5.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	16.6	16.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	11.8	11.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.9</b>	6.8	7.0

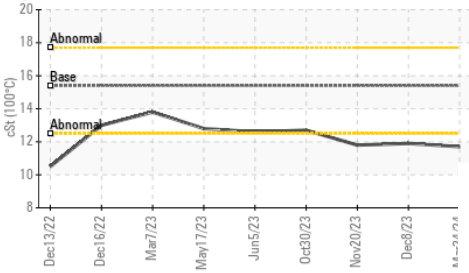


# OIL ANALYSIS REPORT

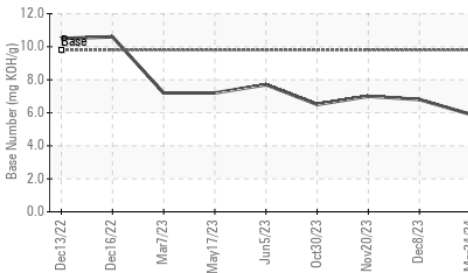
### ▲ Ferrous Alloys



### ● Viscosity @ 100°C



### Base Number

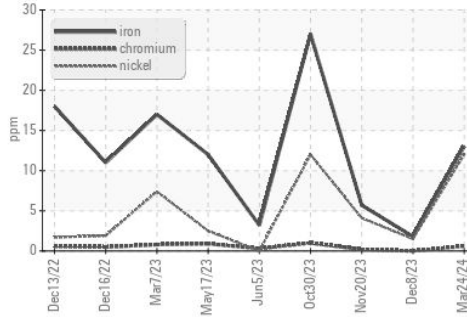


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

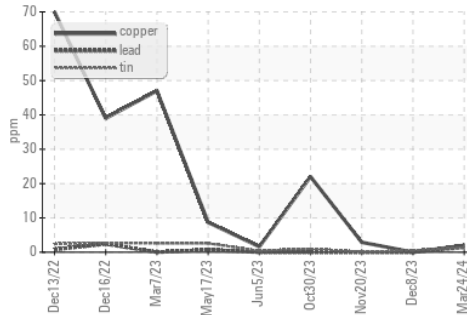
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.7	● 11.9

### GRAPHS

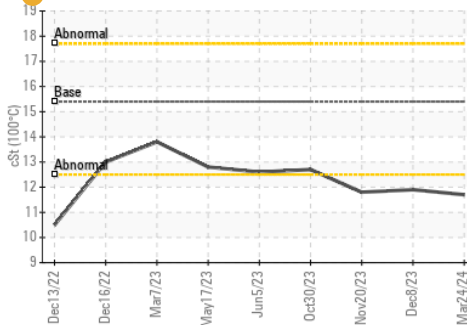
#### ▲ Ferrous Alloys



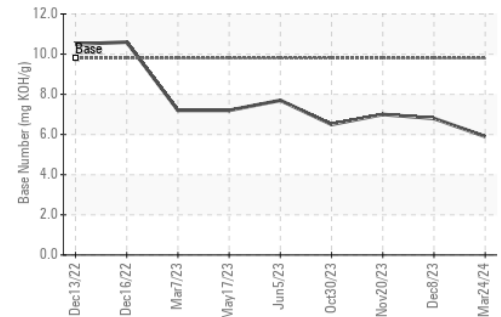
#### Non-ferrous Metals



#### ● Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103431  
**Lab Number** : 06129142  
**Unique Number** : 10943293  
**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)