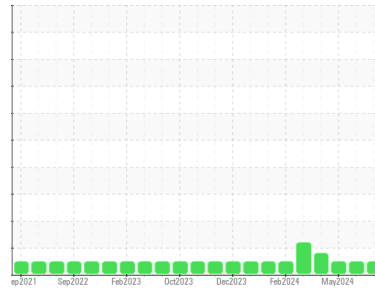




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(06J7UT)**  
 Machine Id  
**929092-260365**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (12 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>GFL0118215</b>	GFL0118210	GFL0118199	
Sample Date	Client Info	<b>12 Jul 2024</b>	21 Jun 2024	30 May 2024	
Machine Age	hrs	Client Info	<b>2913</b>	13664	13519
Oil Age	hrs	Client Info	<b>700</b>	700	700
Oil Changed	Client Info	<b>Not Changed</b>	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>6</b>	22	21
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>&lt;1</b>	2	2
Lead	ppm ASTM D5185m >25	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >100	<b>0</b>	<1	<1
Tin	ppm ASTM D5185m >4	<b>0</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>&lt;1</b>	<1	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>55</b>	59	58
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m 1010	<b>912</b>	1027	892
Calcium	ppm ASTM D5185m 1070	<b>1039</b>	1182	1046
Phosphorus	ppm ASTM D5185m 1150	<b>996</b>	1125	1000
Zinc	ppm ASTM D5185m 1270	<b>1198</b>	1376	1191
Sulfur	ppm ASTM D5185m 2060	<b>3406</b>	3913	3164

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	5
Sodium	ppm ASTM D5185m	<b>11</b>	7	5
Potassium	ppm ASTM D5185m >20	<b>11</b>	<1	4

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.5</b>	1.2	1.1
Nitration	Abs/cm *ASTM D7624 >20	<b>6.6</b>	9.0	8.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.4</b>	20.3	19.8

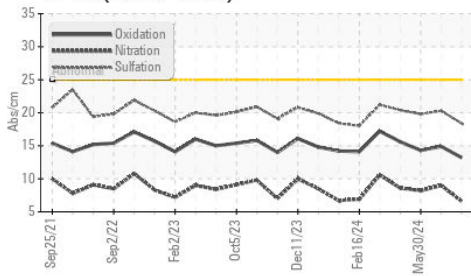
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.2</b>	14.9	14.3
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.5</b>	8.4	8.6

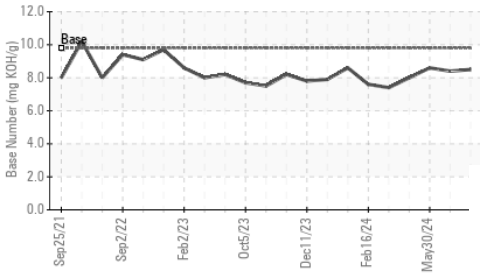


# OIL ANALYSIS REPORT

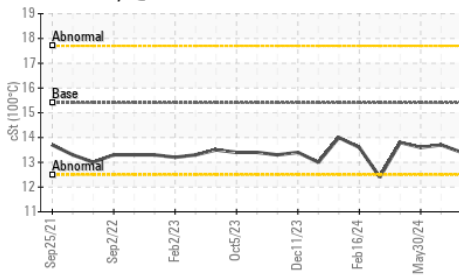
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

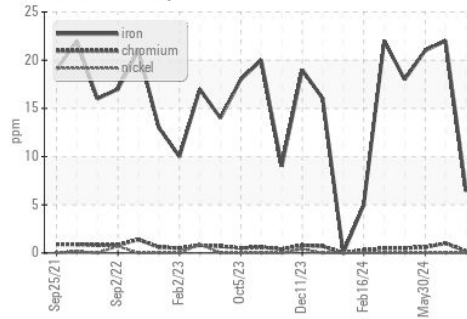


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

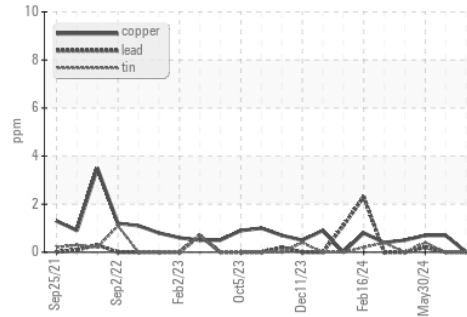
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.7

## GRAPHS

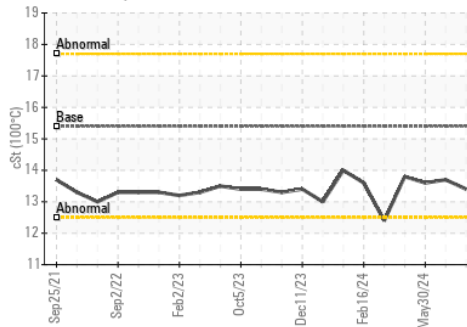
Ferrous Alloys



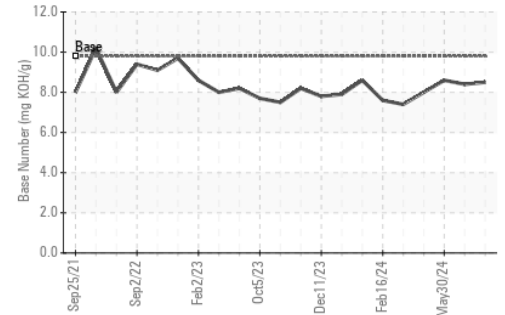
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0118215  
 Lab Number : 06238859  
 Unique Number : 11127693  
 Test Package : FLEET

Received : 17 Jul 2024  
 Tested : 17 Jul 2024  
 Diagnosed : 17 Jul 2024 - Wes Davis

GFL Environmental - 822 - Springfield Hauling  
 2120 West Bennett Street  
 Springfield, MO  
 US 65807

Contact: Dennis Moore  
 dennis.moore@gflenv.com  
 T: (417)403-3641

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)

F: