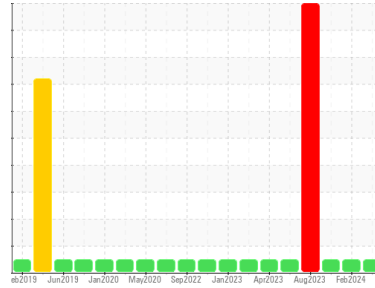




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(50AK4A)**  
Machine Id  
**929087-260320**  
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>GFL0108047</b>	GFL0108080	GFL0090658
Sample Date	Client Info	<b>26 Feb 2024</b>	12 Feb 2024	05 Sep 2023
Machine Age	hrs Client Info	<b>25874</b>	25857	25700
Oil Age	hrs Client Info	<b>25717</b>	117	600
Oil Changed	Client Info	<b>Changed</b>	Not Changd	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	2.6
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>9</b>	8	11
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >5	<b>2</b>	1	<1
Titanium	ppm ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>5</b>	8	4
Lead	ppm ASTM D5185m >40	<b>3</b>	0	1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	1
Tin	ppm ASTM D5185m >15	<b>0</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>2</b>	3	4
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	54	59
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	1
Magnesium	ppm ASTM D5185m 1010	<b>1036</b>	841	931
Calcium	ppm ASTM D5185m 1070	<b>1087</b>	986	1175
Phosphorus	ppm ASTM D5185m 1150	<b>1084</b>	942	1018
Zinc	ppm ASTM D5185m 1270	<b>1275</b>	984	1271
Sulfur	ppm ASTM D5185m 2060	<b>3373</b>	2757	3705

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>3</b>	11	5
Sodium	ppm ASTM D5185m	<b>3</b>	4	4
Potassium	ppm ASTM D5185m >20	<b>0</b>	0	2

## INFRA-RED

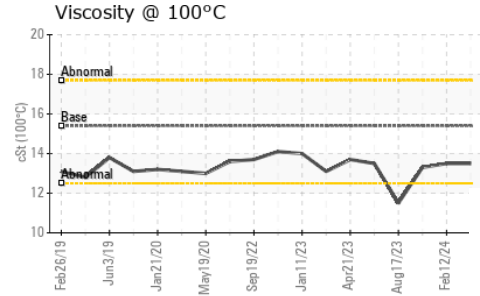
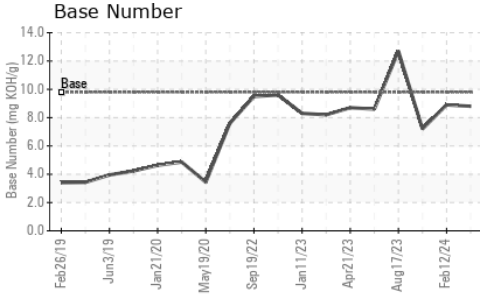
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.3</b>	0.3	0.8
Nitration	Abs/cm *ASTM D7624 >20	<b>7.1</b>	7.0	10.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.2</b>	18.2	21.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.9</b>	14.8	17.9
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	8.9	7.2



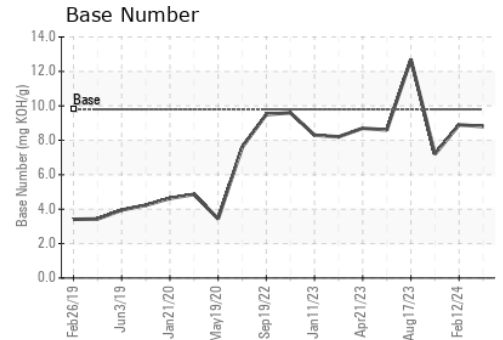
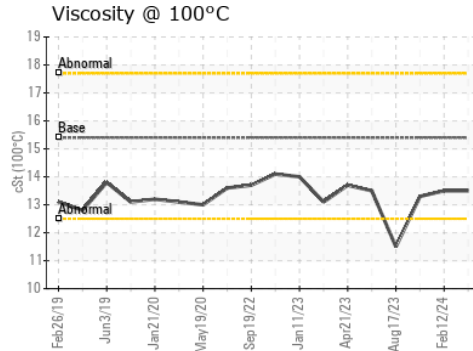
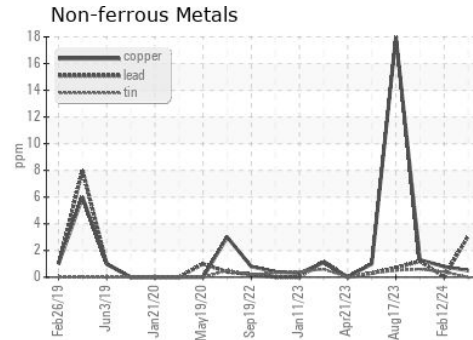
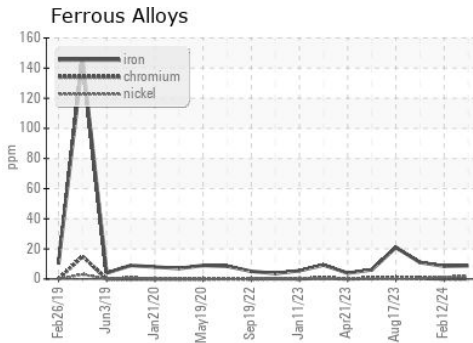
# OIL ANALYSIS REPORT



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	13.5	13.3

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0108047  
 Lab Number : 06109295  
 Unique Number : 10912792  
 Test Package : FLEET

Received : 05 Mar 2024  
 Tested : 06 Mar 2024  
 Diagnosed : 06 Mar 2024 - Wes Davis

GFL Environmental - 836 - Kansas City Hauling  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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: