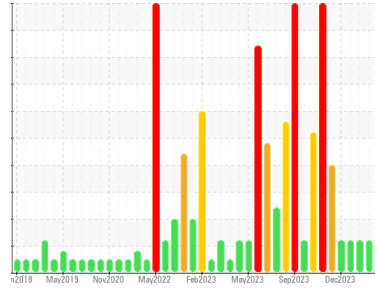




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area (DUW950)

Machine Id 10630

Component Diesel Engine

Fluid PETRO CANADA DURON SHP 15W40 (7 GAL)

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels remain high. Test for glycol is negative.

### 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>GFL0115708</b>	GFL0112304	GFL0109931
Sample Date	Client Info	<b>25 Mar 2024</b>	19 Feb 2024	08 Feb 2024
Machine Age	hrs	<b>7169</b>	6924	6836
Oil Age	hrs	<b>245</b>	413	325
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Not Chngd
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	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	<b>15</b>	15	6
Chromium	ppm ASTM D5185m >5	<b>1</b>	1	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>3</b>	2	2
Lead	ppm ASTM D5185m >25	<b>&lt;1</b>	0	0
Copper	ppm ASTM D5185m >100	<b>1</b>	2	<1
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>12</b>	15	21
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>67</b>	69	69
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>866</b>	808	844
Calcium	ppm ASTM D5185m 1070	<b>1092</b>	953	950
Phosphorus	ppm ASTM D5185m 1150	<b>951</b>	920	975
Zinc	ppm ASTM D5185m 1270	<b>1154</b>	1085	1131
Sulfur	ppm ASTM D5185m 2060	<b>3001</b>	2728	2795

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	6	7
Sodium	ppm ASTM D5185m	<b>82</b>	331	277
Potassium	ppm ASTM D5185m >20	<b>7</b>	27	26
Glycol	% *ASTM D2982	<b>NEG</b>	NEG	NEG

## INFRA-RED

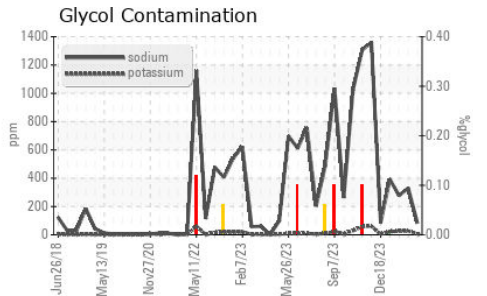
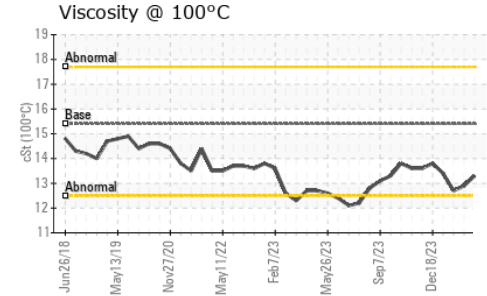
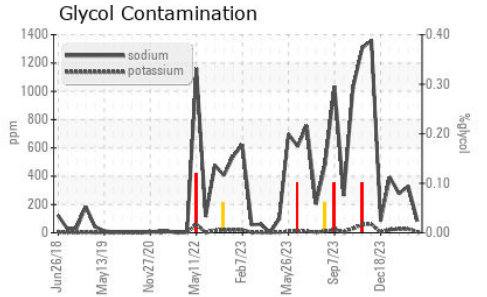
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.5</b>	0.5	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>6.7</b>	7.2	6.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.5</b>	18.7	17.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.1</b>	13.4	12.4
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.1</b>	8.7	9.0



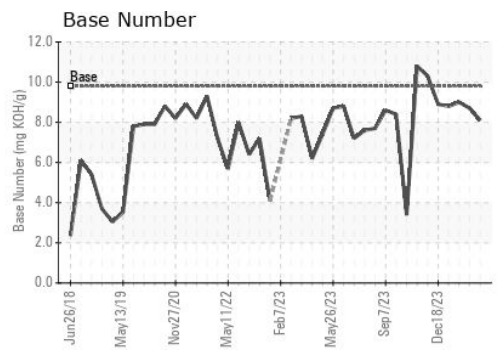
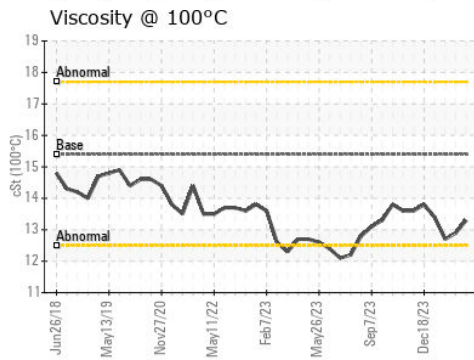
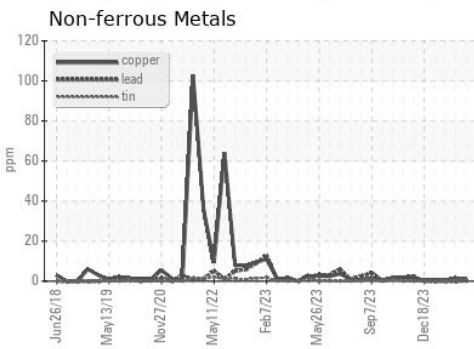
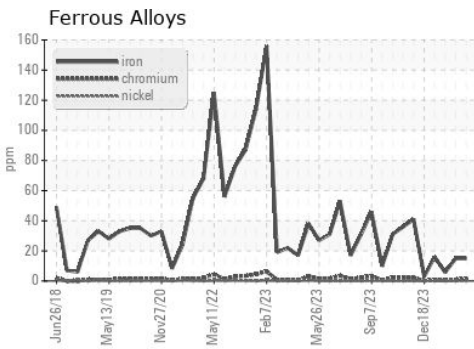
# OIL ANALYSIS REPORT



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	13.3	12.9

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115708 **Received** : 26 Mar 2024  
**Lab Number** : 06129170 **Tested** : 02 Apr 2024  
**Unique Number** : 10943321 **Diagnosed** : 02 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@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)