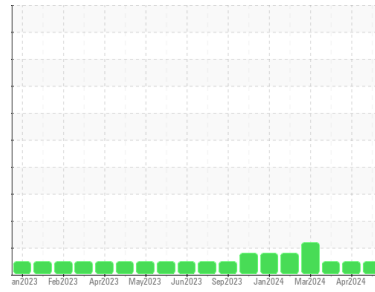




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(62A0YYT) TALLASSEE**  
 Machine Id  
**913044**  
 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>GFL0088606</b>	GFL0080697	GFL0092436
Sample Date	Client Info		<b>20 May 2024</b>	11 Apr 2024	03 Apr 2024
Machine Age	hrs	Client Info	<b>4543</b>	4305	4243
Oil Age	hrs	Client Info	<b>2263</b>	2025	1963
Oil Changed	Client Info		<b>Not Changed</b>	N/A	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 >120	<b>15</b>	7	6
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	1
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>8</b>	8	10
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>65</b>	58	63
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 1010	<b>966</b>	916	1060
Calcium	ppm	ASTM D5185m 1070	<b>1076</b>	1057	1181
Phosphorus	ppm	ASTM D5185m 1150	<b>1045</b>	968	1127
Zinc	ppm	ASTM D5185m 1270	<b>1251</b>	1173	1356
Sulfur	ppm	ASTM D5185m 2060	<b>3343</b>	3395	4157

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	5	4
Sodium	ppm	ASTM D5185m	<b>4</b>	4	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	14	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.5</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	6.4	5.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.3</b>	18.8	18.4

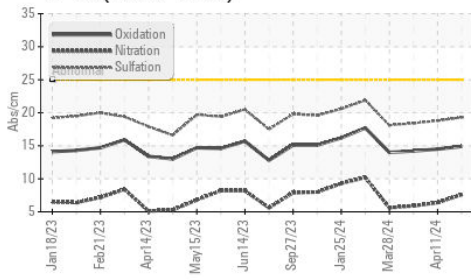
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.9</b>	14.5	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.7</b>	8.1	8.4

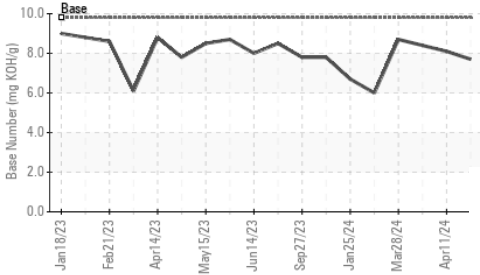


# OIL ANALYSIS REPORT

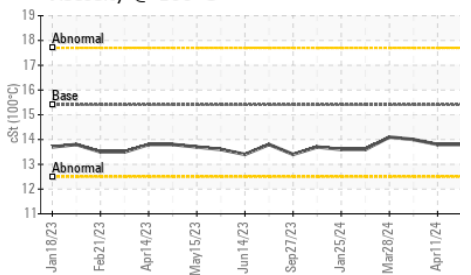
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

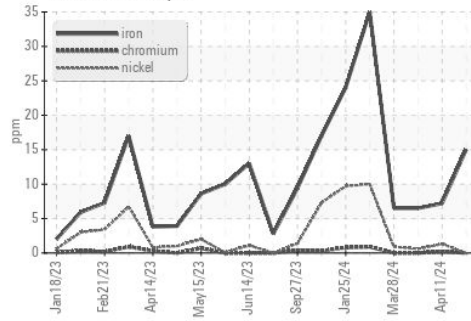


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

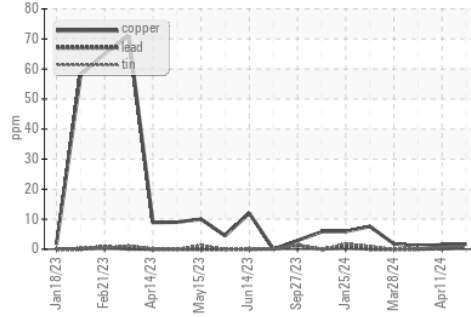
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.8

## GRAPHS

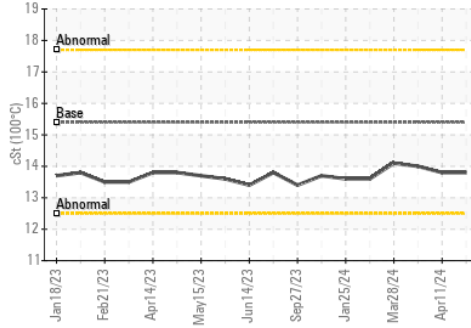
Ferrous Alloys



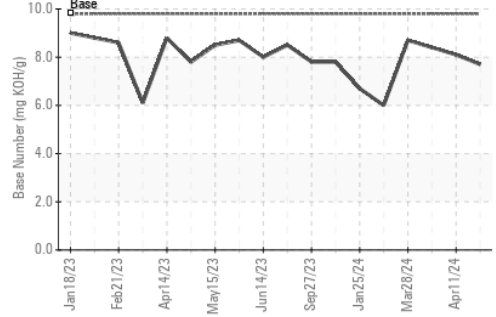
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0088606 **Received** : 21 May 2024  
**Lab Number** : 06187176 **Tested** : 23 May 2024  
**Unique Number** : 11043928 **Diagnosed** : 23 May 2024 - Wes Davis  
**Test Package** : FLEET

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee  
 Multiple Sites  
 Montgomery, AL  
 US 36108  
 Contact: BRANDON HURST  
 brandonhurst@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)