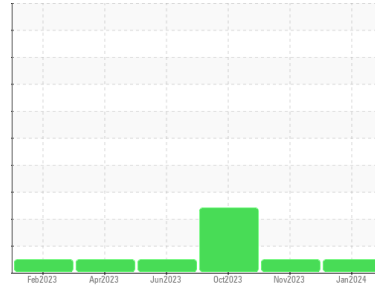




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**426150-SW4629**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Engine )

### 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>GFL0105541</b>	GFL0094153	GFL0094141
Sample Date	Client Info		<b>12 Jan 2024</b>	27 Nov 2023	17 Oct 2023
Machine Age	mls	Client Info	<b>344695</b>	344709	344689
Oil Age	mls	Client Info	<b>344695</b>	334709	344689
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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 >80	<b>12</b>	35	41
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>3</b>	4	▲ 7
Lead	ppm	ASTM D5185m >30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >150	<b>3</b>	13	13
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>49</b>	49	44
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 1010	<b>19</b>	97	87
Calcium	ppm	ASTM D5185m 1070	<b>2242</b>	2716	2379
Phosphorus	ppm	ASTM D5185m 1150	<b>1008</b>	1300	1107
Zinc	ppm	ASTM D5185m 1270	<b>1168</b>	1633	1344
Sulfur	ppm	ASTM D5185m 2060	<b>3352</b>	3970	3237

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>11</b>	16	▲ 29
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	3

## INFRA-RED

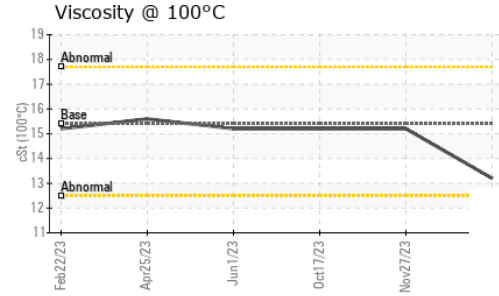
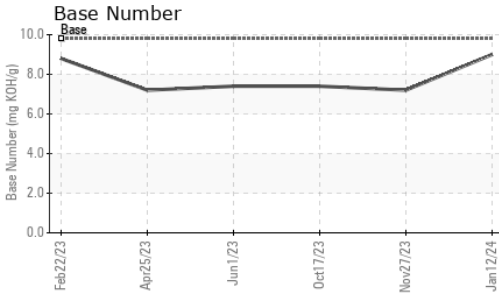
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.0</b>	8.1	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>14.5</b>	18.6	18.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>7.8</b>	11.7	11.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.0</b>	7.2	7.4



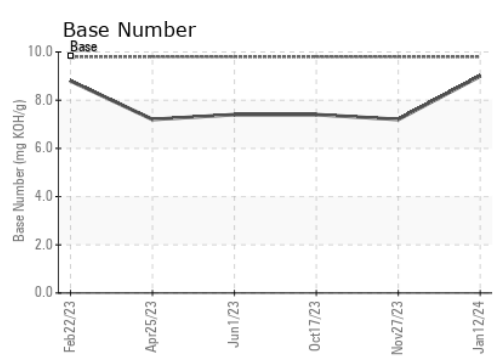
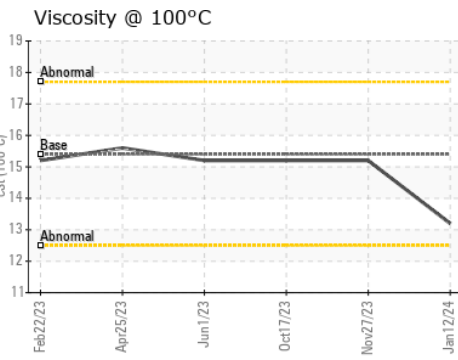
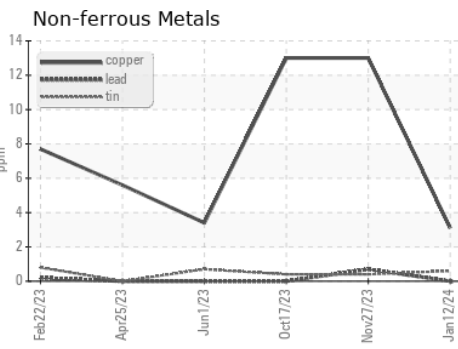
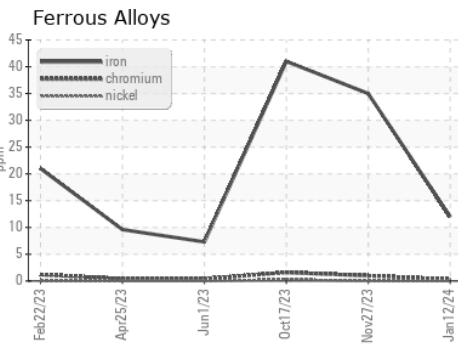
# OIL ANALYSIS REPORT



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	<b>13.2</b>	15.2	15.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0105541 **Received** : 22 Jan 2024  
**Lab Number** : **06066463** **Diagnosed** : 23 Jan 2024  
**Unique Number** : 10843140 **Diagnostician** : Angela Borella  
**Test Package** : FLEET

**GFL Environmental - 983 - Sugar Land Hauling**  
 16011 West Belfort Street  
 Sugar Land, TX  
 US 77498  
 Contact: Gino Griego  
 ggriego@gflenv.com  
 T: (720)999-0726  
 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)