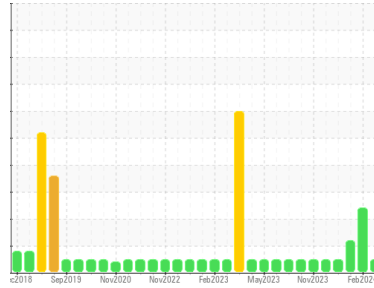




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(87J4TW)**  
Machine Id  
**726037-310027**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>GFL0114036</b>	GFL0109828	GFL0103267	
Sample Date	Client Info	<b>18 Mar 2024</b>	15 Feb 2024	25 Jan 2024	
Machine Age	hrs	Client Info	<b>15323</b>	15206	15064
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed	
Sample Status		<b>NORMAL</b>	SEVERE	ABNORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2	
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	>100	<b>9</b>	47	10
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	▲ 5
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	5	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	12
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	<b>5</b>	4	47
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	54	15
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>888</b>	826	814
Calcium	ppm	ASTM D5185m	1070	<b>1139</b>	921	1184
Phosphorus	ppm	ASTM D5185m	1150	<b>1012</b>	874	697
Zinc	ppm	ASTM D5185m	1270	<b>1202</b>	1118	878
Sulfur	ppm	ASTM D5185m	2060	<b>3271</b>	2522	2271

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	4
Sodium	ppm	ASTM D5185m		<b>10</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	7
Fuel	%	ASTM D3524	>5	<b>1.2</b>	▲ 11.5	0.7

## INFRA-RED

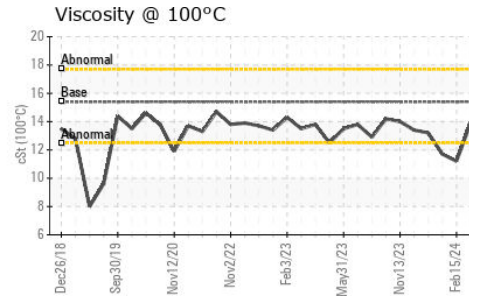
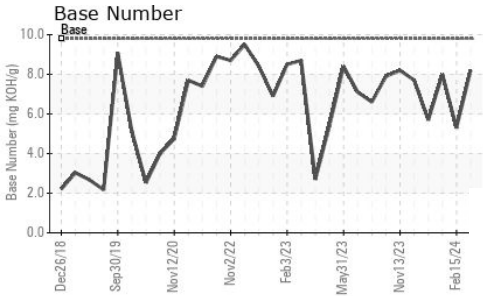
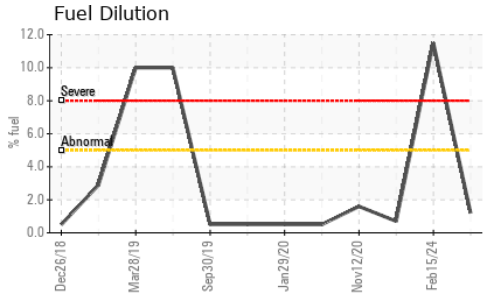
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	1.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	14.5	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	26.5	22.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.1</b>	26.5	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	5.3	8.0



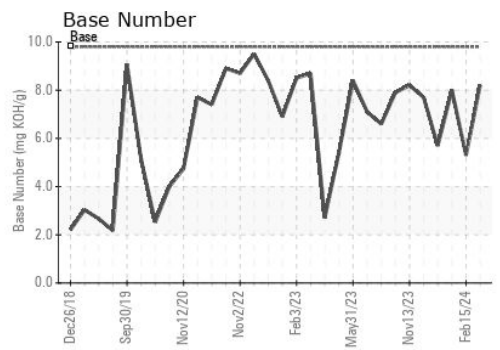
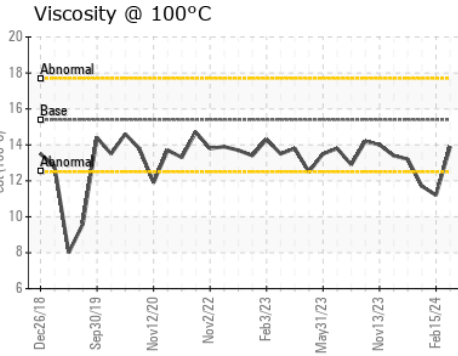
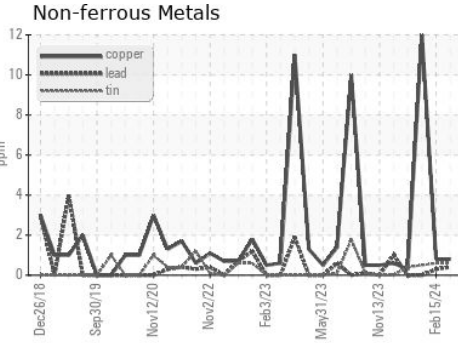
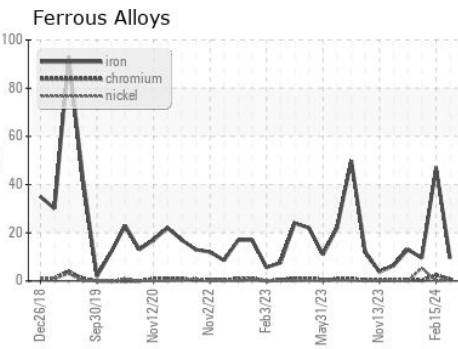
# OIL ANALYSIS REPORT



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	<b>13.9</b>	▲ 11.2   ● 11.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114036      **Received** : 20 Mar 2024  
**Lab Number** : **06123483**      **Tested** : 22 Mar 2024  
**Unique Number** : 10937634      **Diagnosed** : 22 Mar 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**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)