



# OIL ANALYSIS REPORT

Sample Rating Trend

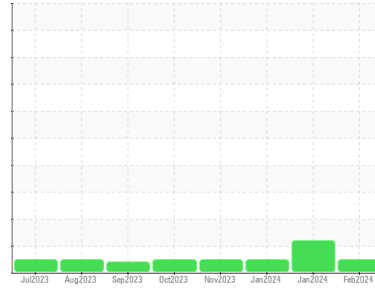
**NORMAL**



Machine Id  
**733020**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- QTS)**



## 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>GFL0109788</b>	GFL0103282	GFL0103279
Sample Date	Client Info		<b>26 Feb 2024</b>	24 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info	<b>1390</b>	1207	1095
Oil Age	hrs	Client Info	<b>0</b>	1207	0
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>13</b>	56	9
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	3	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	2	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	54	1
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	3	2
Copper	ppm	ASTM D5185m >35	<b>2</b>	16	1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>30</b>	12	22
Barium	ppm	ASTM D5185m 5	<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m 50	<b>54</b>	62	54
Manganese	ppm	ASTM D5185m 0	<b>2</b>	12	<1
Magnesium	ppm	ASTM D5185m 560	<b>594</b>	808	558
Calcium	ppm	ASTM D5185m 1510	<b>1624</b>	1391	1570
Phosphorus	ppm	ASTM D5185m 780	<b>779</b>	830	831
Zinc	ppm	ASTM D5185m 870	<b>1051</b>	1033	981
Sulfur	ppm	ASTM D5185m 2040	<b>2800</b>	2434	2507

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>7</b>	22	4
Sodium	ppm	ASTM D5185m	<b>2</b>	8	6
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	181	0

## INFRA-RED

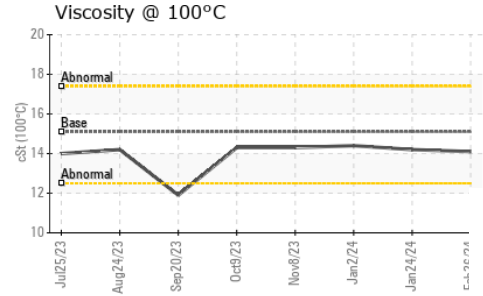
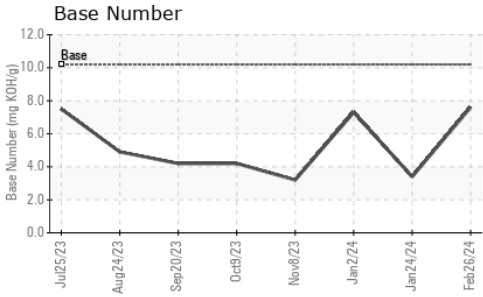
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	12.5	7.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.8</b>	26.5	19.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	23.4	15.0
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.6</b>	▲ 3.4	7.3



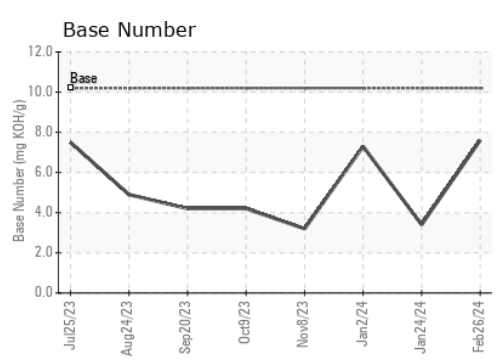
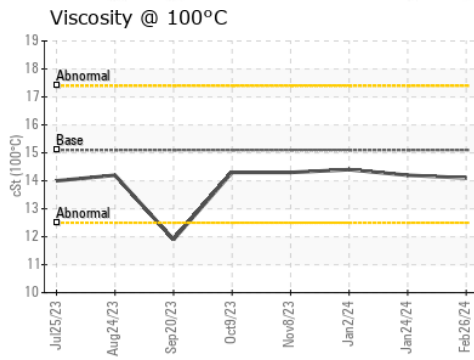
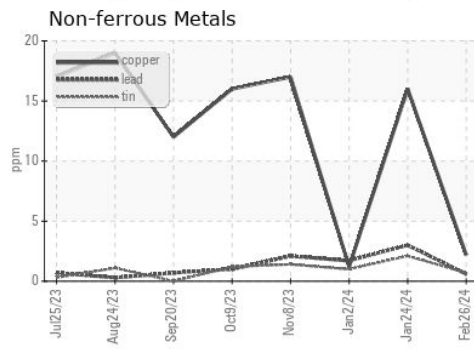
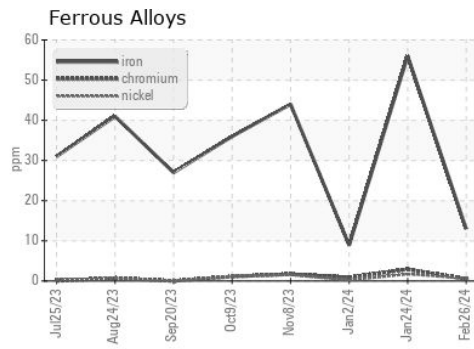
# OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.1</b>	14.2	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109788 **Received** : 28 Feb 2024  
**Lab Number** : **06102837** **Tested** : 29 Feb 2024  
**Unique Number** : 10901067 **Diagnosed** : 29 Feb 2024 - Wes Davis  
**Test Package** : FLEET

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

Certificate L2367  
 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)