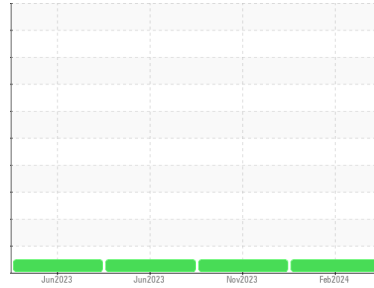




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**733022**

Component  
**Natural Gas Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0092166</b>	GFL0092045	GFL0084595
Sample Date	Client Info		<b>01 Feb 2024</b>	29 Nov 2023	22 Jun 2023
Machine Age	hrs	Client Info	<b>2469</b>	1913	5621
Oil Age	hrs	Client Info	<b>3708</b>	600	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	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>6</b>	6	36
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>1</b>	<1	1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	3	8
Lead	ppm	ASTM D5185m >30	<b>1</b>	<1	0
Copper	ppm	ASTM D5185m >35	<b>2</b>	<1	18
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>6</b>	7	12
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m 50	<b>52</b>	51	50
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	13
Magnesium	ppm	ASTM D5185m 560	<b>531</b>	564	775
Calcium	ppm	ASTM D5185m 1510	<b>1530</b>	1585	1186
Phosphorus	ppm	ASTM D5185m 780	<b>666</b>	729	673
Zinc	ppm	ASTM D5185m 870	<b>935</b>	1009	936
Sulfur	ppm	ASTM D5185m 2040	<b>2355</b>	2571	2815

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	4	37
Sodium	ppm	ASTM D5185m	<b>7</b>	5	4
Potassium	ppm	ASTM D5185m >20	<b>9</b>	8	31

## INFRA-RED

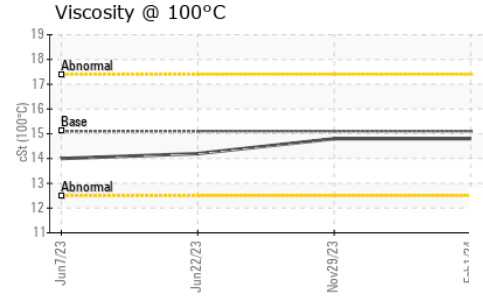
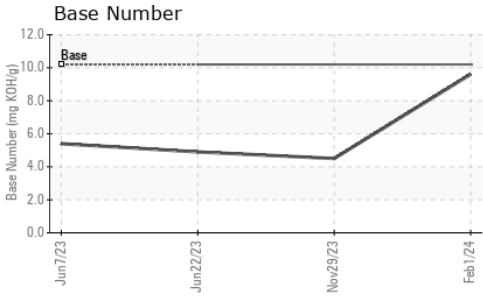
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.9</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.4</b>	11.1	11.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	21.2	22.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.8</b>	18.1	20.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>9.6</b>	4.5	4.9



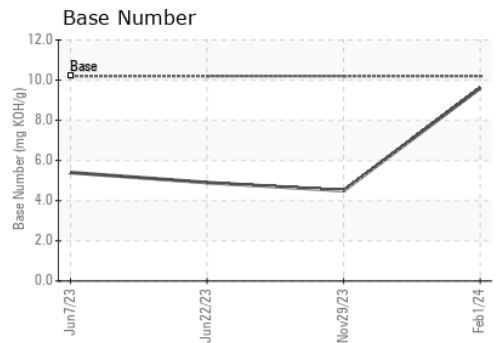
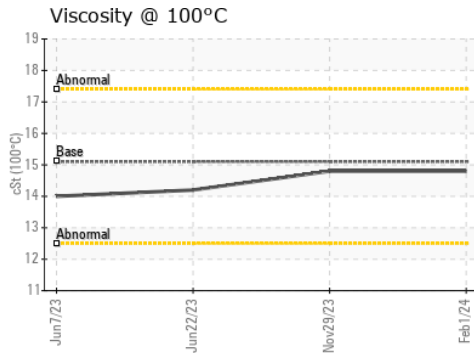
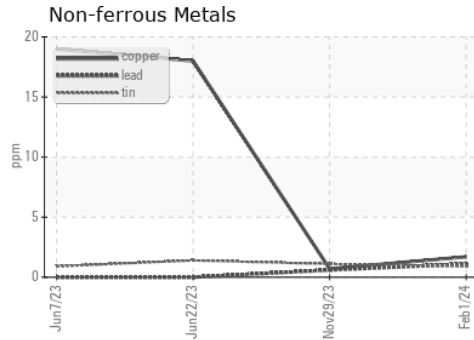
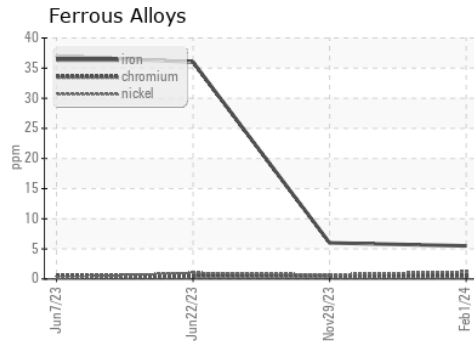
# OIL ANALYSIS REPORT



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	>0.1	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>14.8</b>	14.8	14.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092166  
**Lab Number** : 06081890  
**Unique Number** : 10869335  
**Test Package** : FLEET

**Received** : 06 Feb 2024  
**Tested** : 07 Feb 2024  
**Diagnosed** : 07 Feb 2024 - Wes Davis

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Apolinar Zacarias  
 pzacariascano@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)

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F: