



# OIL ANALYSIS REPORT

Sample Rating Trend

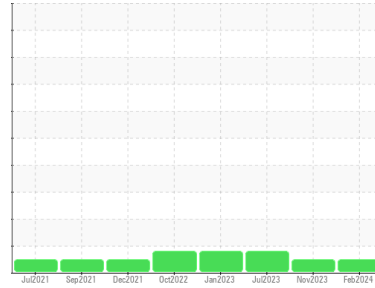
**NORMAL**



Machine Id  
**844007**

Component  
**Natural Gas Engine**

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



## 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>GFL0106985</b>	GFL0094243	GFL0085384
Sample Date	Client Info		<b>14 Feb 2024</b>	09 Nov 2023	28 Jul 2023
Machine Age	hrs	Client Info	<b>22084</b>	21535	1662
Oil Age	hrs	Client Info	<b>549</b>	2283	1662
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>---</b>	---	0.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>20</b>	5	5
Chromium	ppm	ASTM D5185m >4	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	1	82
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>2</b>	27	11
Barium	ppm	ASTM D5185m 5	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 50	<b>59</b>	52	53
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>836</b>	560	622
Calcium	ppm	ASTM D5185m 1510	<b>1000</b>	1499	1653
Phosphorus	ppm	ASTM D5185m 780	<b>963</b>	802	758
Zinc	ppm	ASTM D5185m 870	<b>1131</b>	950	1024
Sulfur	ppm	ASTM D5185m 2040	<b>2831</b>	2667	2869

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>2</b>	3	3
Sodium	ppm	ASTM D5185m	<b>19</b>	2	5
Potassium	ppm	ASTM D5185m >20	<b>6</b>	3	1

## INFRA-RED

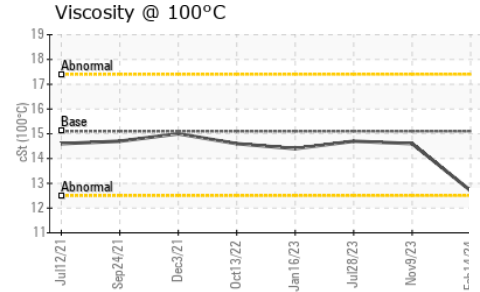
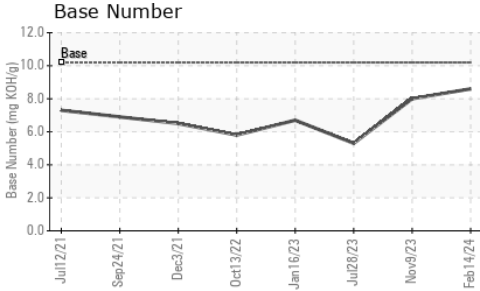
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>1.5</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	8.4	10.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.8</b>	18.8	20.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.6</b>	16.2	17.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.6</b>	8.0	5.3



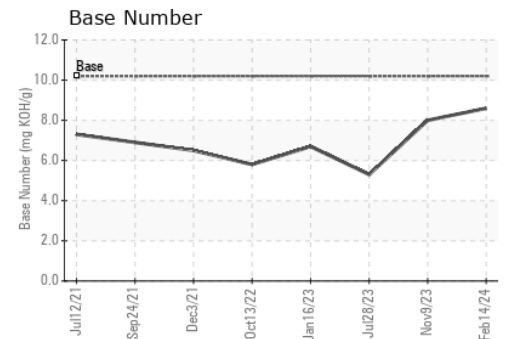
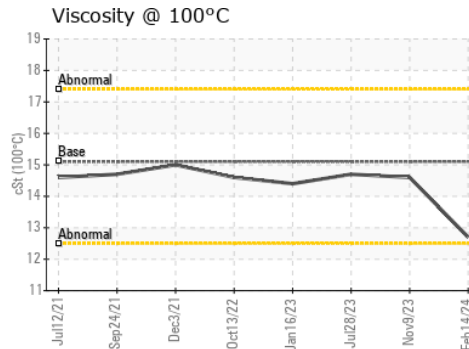
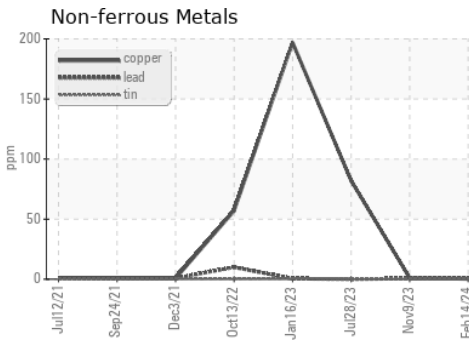
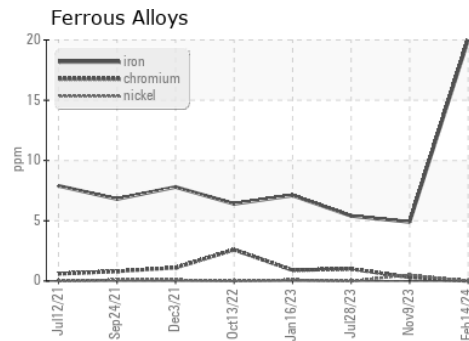
# OIL ANALYSIS REPORT



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	12.7	14.6	14.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0106985  
 Lab Number : 06093971  
 Unique Number : 10886824  
 Test Package : FLEET

Received : 20 Feb 2024  
 Tested : 21 Feb 2024  
 Diagnosed : 21 Feb 2024 - Don Baldrige

GFL Environmental - 882 - Gainesville  
 5002 SW 41st Blvd  
 Gainesville, FL  
 US 32608  
 Contact: ROBERT CLARK  
 robert.clark@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: