



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

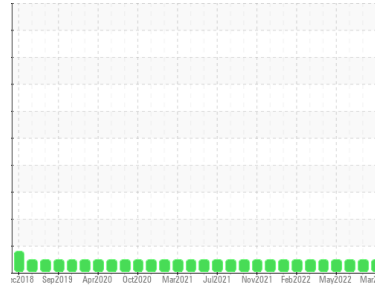


Area  
**(P656780)**

Machine Id  
**3815C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (8 GAL)**



## 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>GFL0096968</b>	GFL0096979	GFL0069706
Sample Date	Client Info	<b>14 Mar 2024</b>	15 Nov 2023	19 May 2023
Machine Age	hrs	<b>79427</b>	78758	77799
Oil Age	hrs	<b>79427</b>	77799	77799
Oil Changed	Client Info	<b>Changed</b>	Changed	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>5</b>	7	3
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	1	0
Nickel	ppm ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>3</b>	2	0
Lead	ppm ASTM D5185m >30	<b>1</b>	14	<1
Copper	ppm ASTM D5185m >35	<b>5</b>	2	<1
Tin	ppm ASTM D5185m >4	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>11</b>	8	29
Barium	ppm ASTM D5185m 5	<b>&lt;1</b>	10	0
Molybdenum	ppm ASTM D5185m 50	<b>62</b>	61	53
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 560	<b>635</b>	648	624
Calcium	ppm ASTM D5185m 1510	<b>1484</b>	1530	1568
Phosphorus	ppm ASTM D5185m 780	<b>820</b>	841	794
Zinc	ppm ASTM D5185m 870	<b>1046</b>	1048	1011
Sulfur	ppm ASTM D5185m 2040	<b>2626</b>	2758	2834

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>11</b>	38	38
Sodium	ppm ASTM D5185m	<b>13</b>	6	5
Potassium	ppm ASTM D5185m >20	<b>5</b>	3	2

## INFRA-RED

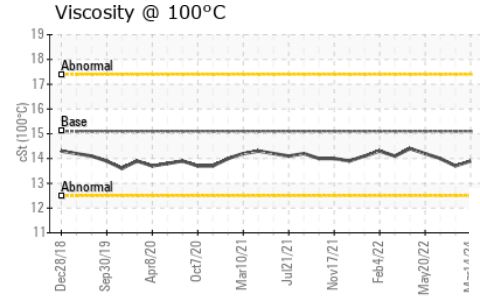
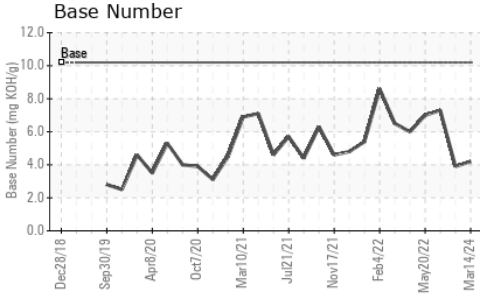
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm *ASTM D7624 >20	<b>10.4</b>	11.5	8.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.8</b>	26.3	19.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.6</b>	21.8	15.7
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>4.2</b>	3.9	7.3



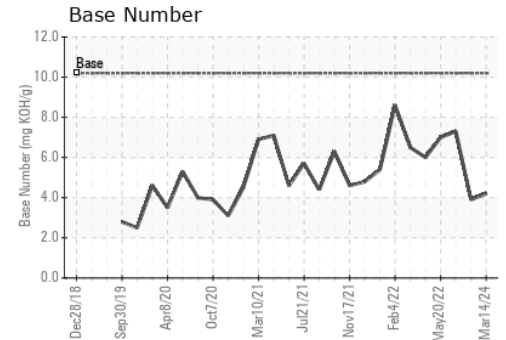
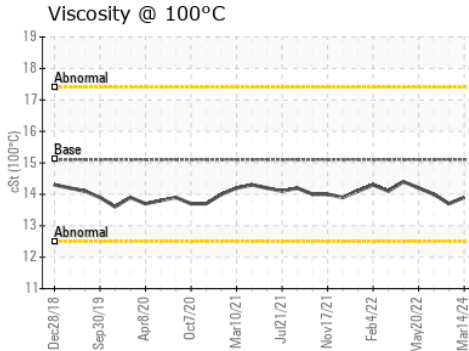
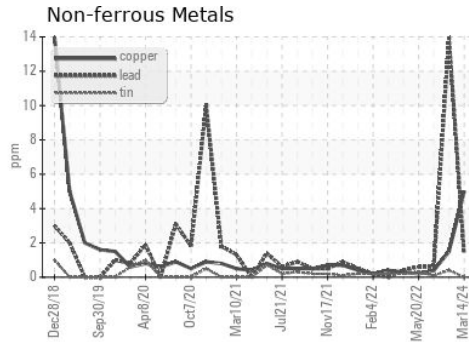
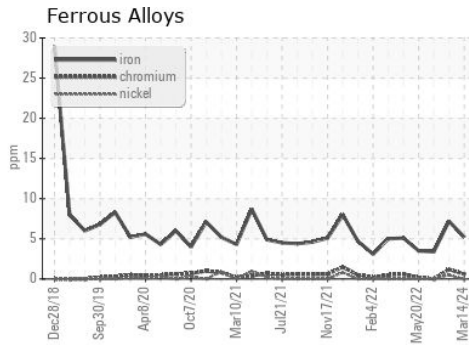
# OIL ANALYSIS REPORT



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	13.9	13.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0096968  
 Lab Number : 06120569  
 Unique Number : 10929402  
 Test Package : FLEET

Received : 18 Mar 2024  
 Tested : 19 Mar 2024  
 Diagnosed : 19 Mar 2024 - Wes Davis

GFL Environmental - 031 - Greenville/Spartanburg  
 1635 Antioch Church Rd  
 Piedmont, SC  
 US 29673  
 Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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)

T:  
F: