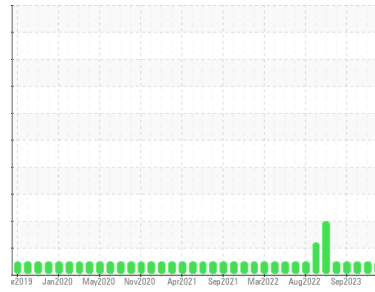




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(NH4187)**  
 Machine Id  
**AUTOCAR 3818C**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (9 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>GFL0109610</b>	GFL0087448	GFL0087519	
Sample Date	Client Info	<b>09 Apr 2024</b>	10 Jan 2024	05 Oct 2023	
Machine Age	hrs	Client Info	<b>13222</b>	12667	12099
Oil Age	hrs	Client Info	<b>1123</b>	568	1029
Oil Changed	Client Info	<b>Changed</b>	Not Changd	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>8</b>	8	15
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</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>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	6	5
Lead	ppm	ASTM D5185m	>30	<b>11</b>	3	18
Copper	ppm	ASTM D5185m	>35	<b>1</b>	2	4
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	<b>13</b>	7	10
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>56</b>	52	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>617</b>	574	615
Calcium	ppm	ASTM D5185m	1510	<b>1777</b>	1563	1681
Phosphorus	ppm	ASTM D5185m	780	<b>795</b>	721	852
Zinc	ppm	ASTM D5185m	870	<b>1026</b>	1010	1059
Sulfur	ppm	ASTM D5185m	2040	<b>2595</b>	2320	2686

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	8	7
Sodium	ppm	ASTM D5185m		<b>18</b>	5	11
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2

## INFRA-RED

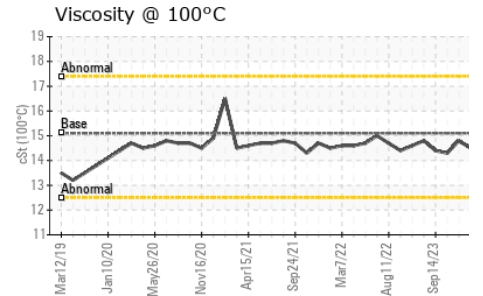
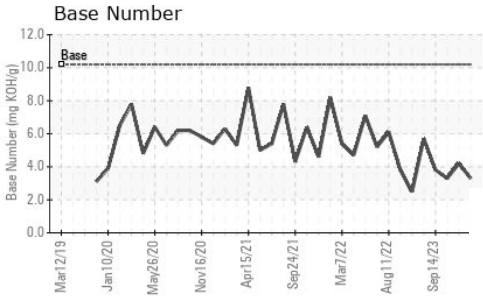
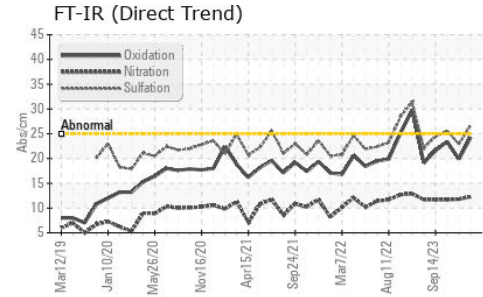
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.3</b>	11.8	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.7</b>	22.9	25.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.2</b>	19.9	23.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.3</b>	4.2	3.3



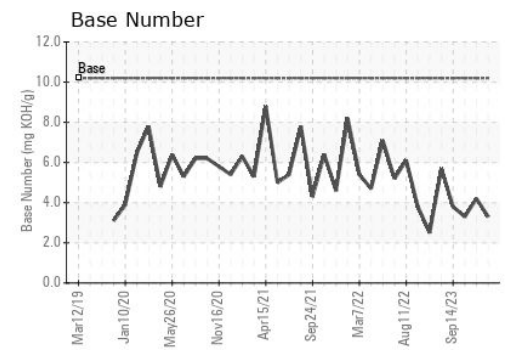
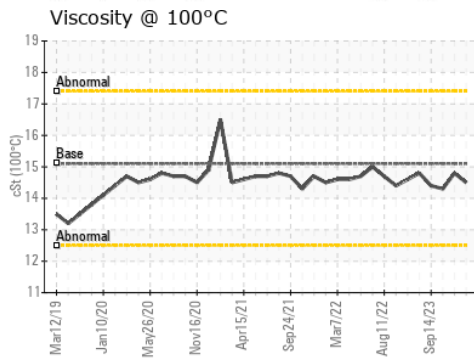
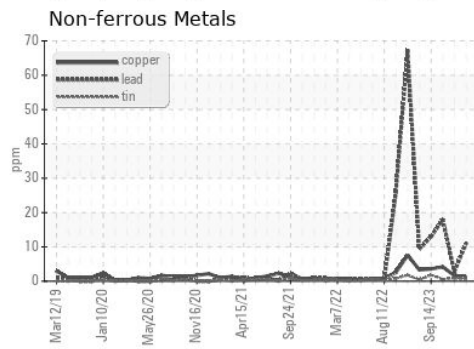
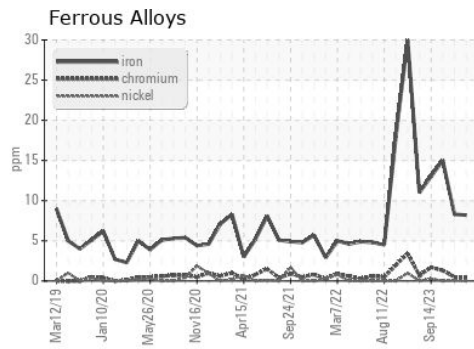
# OIL ANALYSIS REPORT



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	14.5	14.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109610      **Received** : 10 Apr 2024  
**Lab Number** : 06144912      **Tested** : 11 Apr 2024  
**Unique Number** : 10969720      **Diagnosed** : 11 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 331 - Columbus**  
 180 Ada Moore Rd  
 Columbus, NC  
 US 28722  
 Contact: Matt Segars  
 matt.segars@gflenv.com  
 T: (800)207-6618  
 F: (252)617-2494

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)