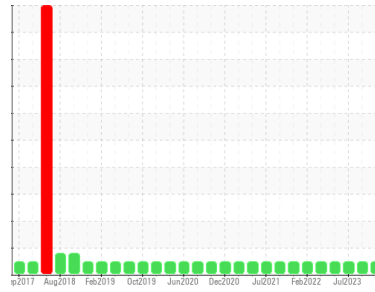




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2668C PETERBILT 567**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (48 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>GFL0117512</b>	GFL0089326	GFL0087128
Sample Date	Client Info		<b>02 Apr 2024</b>	07 Aug 2023	12 Jul 2023
Machine Age	hrs	Client Info	<b>7543</b>	5828	5639
Oil Age	hrs	Client Info	<b>0</b>	0	0
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>14</b>	7	8
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	2	4
Lead	ppm	ASTM D5185m >30	<b>15</b>	<1	<1
Copper	ppm	ASTM D5185m >35	<b>4</b>	2	1
Tin	ppm	ASTM D5185m >4	<b>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>17</b>	14	17
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>56</b>	55	53
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>652</b>	592	540
Calcium	ppm	ASTM D5185m 1510	<b>1786</b>	1798	1625
Phosphorus	ppm	ASTM D5185m 780	<b>884</b>	755	747
Zinc	ppm	ASTM D5185m 870	<b>1077</b>	1015	980
Sulfur	ppm	ASTM D5185m 2040	<b>2884</b>	2986	2678

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>12</b>	15	15
Sodium	ppm	ASTM D5185m	<b>8</b>	7	6
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	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>13.2</b>	10.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>29.8</b>	22.4	21.7

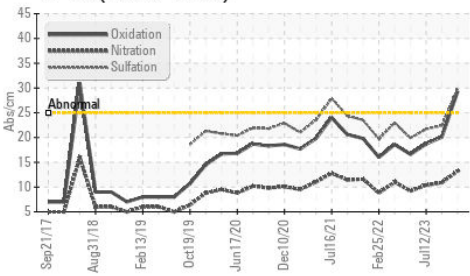
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>29.3</b>	20.1	18.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>3.0</b>	5.0	6.7

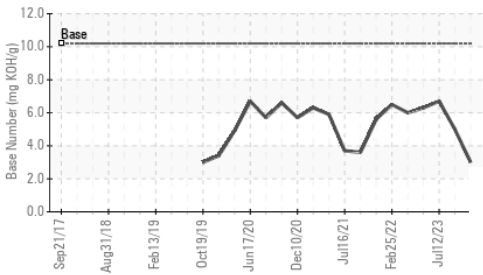


# OIL ANALYSIS REPORT

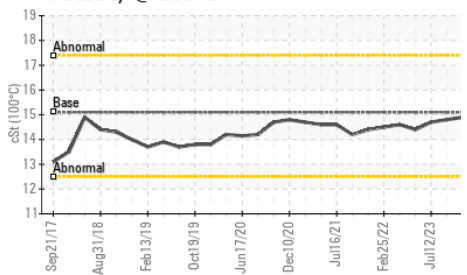
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

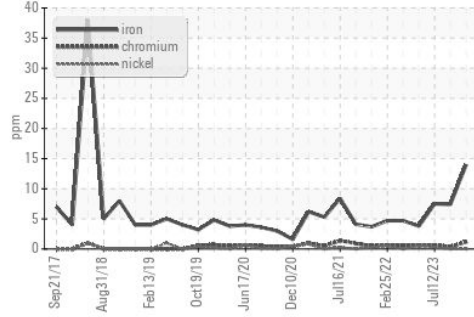


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

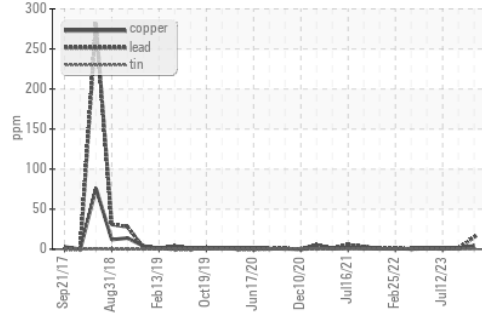
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.9	14.8

## GRAPHS

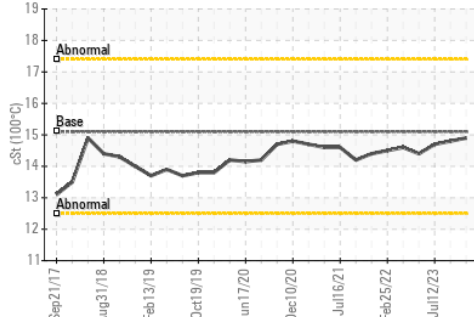
Ferrous Alloys



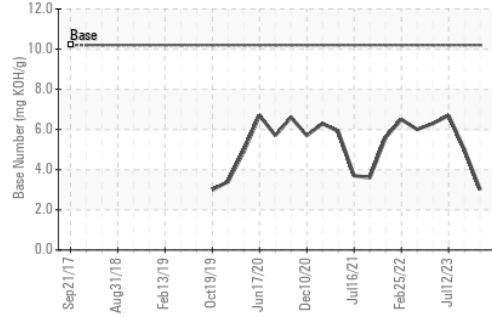
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0117512      **Received** : 03 Apr 2024  
**Lab Number** : 06137084      **Tested** : 03 Apr 2024  
**Unique Number** : 10956549      **Diagnosed** : 05 Apr 2024 - Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 001 - Raleigh(CNG)**  
 3741 Conquest Drive  
 Garner, NC  
 US 27529  
 Contact: Craig Johnson  
 craig.johnson@gflenv.com  
 T: (919)662-7100  
 F: (919)662-7130

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)