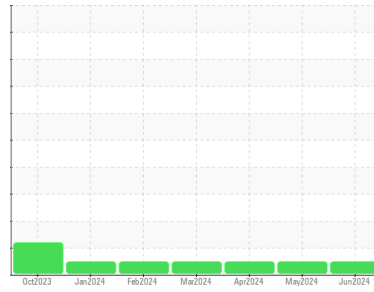




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(THX0606)**  
 Machine Id  
**934055**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Sample )

### 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>GFL0125213</b>	GFL0117828	GFL0117759
Sample Date	Client Info	<b>06 Jun 2024</b>	28 May 2024	24 Apr 2024
Machine Age	hrs Client Info	<b>2453</b>	29795	2113
Oil Age	hrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not 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>	14	12
Chromium	ppm ASTM D5185m >4	<b>0</b>	1	2
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	2
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>10</b>	21	19
Lead	ppm ASTM D5185m >30	<b>&lt;1</b>	3	1
Copper	ppm ASTM D5185m >35	<b>1</b>	2	2
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	2
Vanadium	ppm ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>27</b>	5	13
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>52</b>	56	56
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm ASTM D5185m 560	<b>626</b>	612	630
Calcium	ppm ASTM D5185m 1510	<b>1683</b>	1820	1918
Phosphorus	ppm ASTM D5185m 780	<b>844</b>	827	907
Zinc	ppm ASTM D5185m 870	<b>1032</b>	1038	1127
Sulfur	ppm ASTM D5185m 2040	<b>3053</b>	2946	3301

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>5</b>	0	8
Sodium	ppm ASTM D5185m	<b>6</b>	8	7
Potassium	ppm ASTM D5185m >20	<b>27</b>	62	51

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm *ASTM D7624 >20	<b>8.2</b>	11.0	10.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.2</b>	23.4	20.9

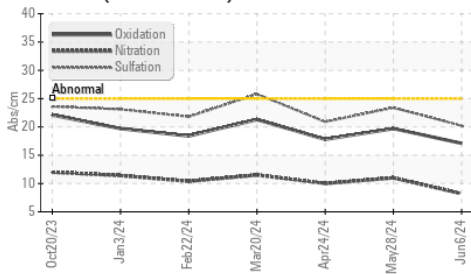
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.1</b>	19.7	17.8
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>7.7</b>	4.5	6.4

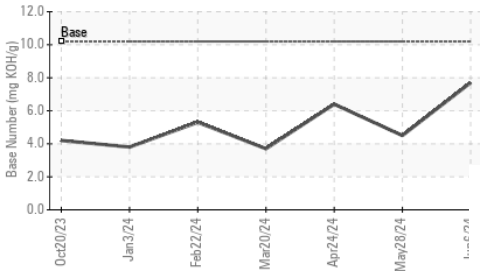


# OIL ANALYSIS REPORT

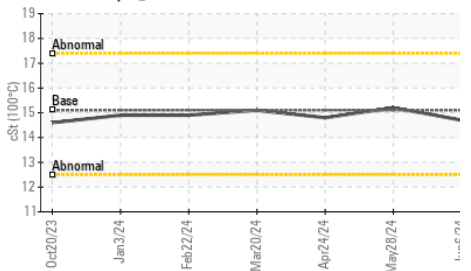
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

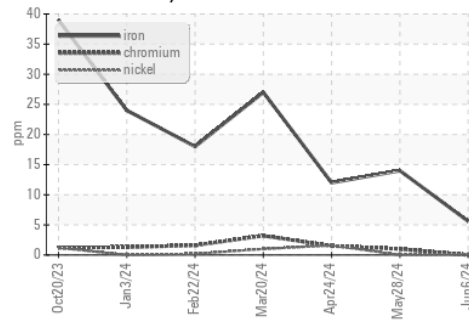


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

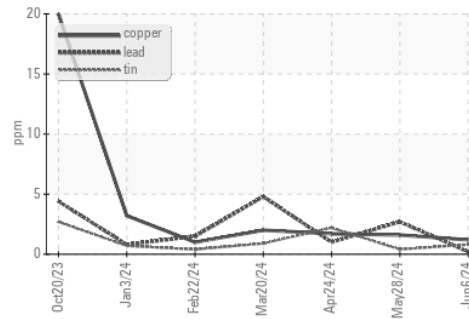
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	15.2

## GRAPHS

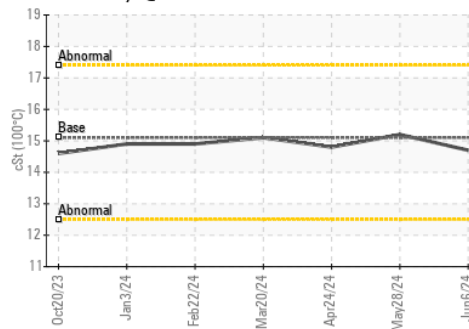
Ferrous Alloys



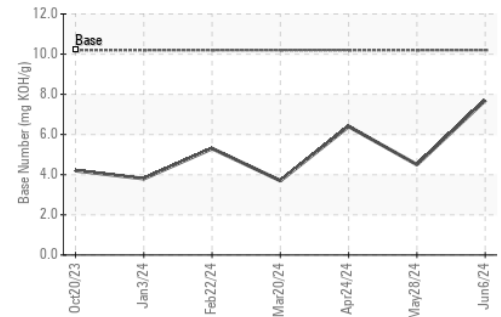
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0125213  
**Lab Number** : 06217626  
**Unique Number** : 11090490  
**Test Package** : FLEET

**Received** : 21 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Don Baldrige

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: TECHNICIAN ACCOUNT  
 wcgfldemo@gmail.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: