



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**944033**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0115473</b>	GFL0106975	GFL0089739
Sample Date		Client Info		<b>10 Apr 2024</b>	06 Jan 2024	12 Sep 2023
Machine Age	hrs	Client Info		<b>3900</b>	21368	20950
Oil Age	hrs	Client Info		<b>3900</b>	418	819
Filter Age	hrs	Client Info		<b>3900</b>	418	819
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>18</b>	19	4
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	<1	3
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>35	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

There is no indication of any contamination in the oil.

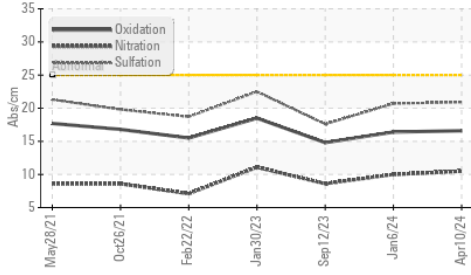
Silicon	ppm	ASTM D5185m	>+100	<b>2</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	8	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>1.5</b>	1.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	10.0	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	20.7	17.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

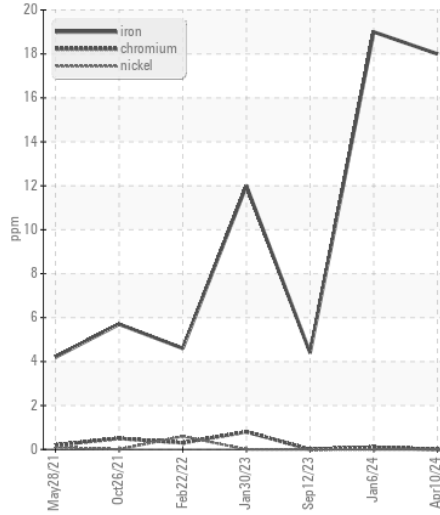
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>16</b>	16	5
Boron	ppm	ASTM D5185m	50	<b>3</b>	3	27
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>56</b>	56	51
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>828</b>	864	601
Calcium	ppm	ASTM D5185m	1510	<b>1015</b>	1036	1638
Phosphorus	ppm	ASTM D5185m	780	<b>990</b>	1055	797
Zinc	ppm	ASTM D5185m	870	<b>1149</b>	1243	999
Sulfur	ppm	ASTM D5185m	2040	<b>3122</b>	2974	2999
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	16.4	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>8.9</b>	8.6	7.9
Visc @ 100°C	cSt	ASTM D445	15.1	<b>12.8</b>	12.6	14.5

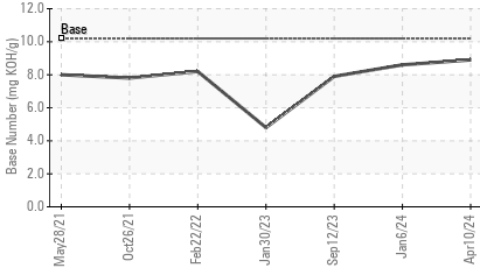
**FT-IR (Direct Trend)**



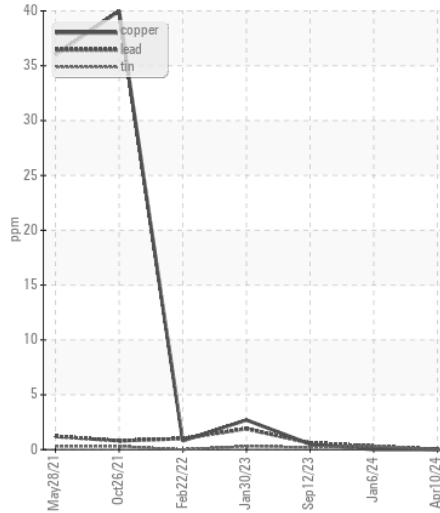
**Ferrous Alloys**



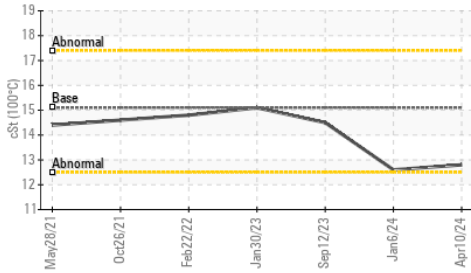
**Base Number**



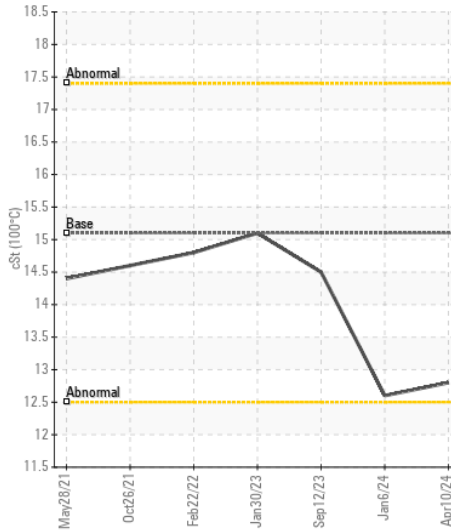
**Non-ferrous Metals**



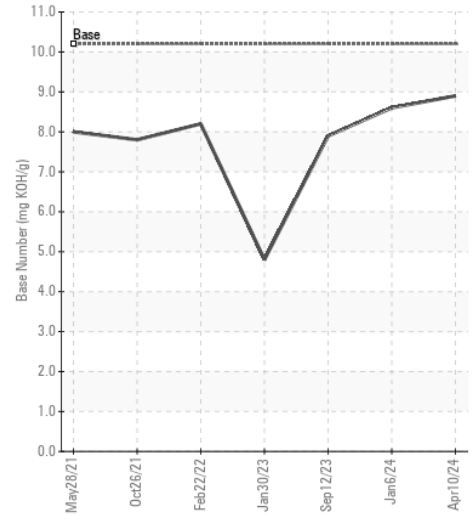
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115473  
**Lab Number** : 06148209  
**Unique Number** : 10978287  
**Test Package** : FLEET

**Received** : 15 Apr 2024  
**Tested** : 16 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Sean Felton

**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)

T:  
F: