



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

Machine Id  
**944024**  
 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>GFL0119107</b>	GFL0115485	GFL0106966
Sample Date		Client Info		<b>10 Jul 2024</b>	22 Mar 2024	16 Dec 2023
Machine Age	hrs	Client Info		<b>23584</b>	23584	23061
Oil Age	hrs	Client Info		<b>23584</b>	523	694
Filter Age	hrs	Client Info		<b>23584</b>	523	694
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>14</b>	20	0
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>6</b>	2	2
Lead	ppm	ASTM D5185m	>30	<b>1</b>	1	0
Copper	ppm	ASTM D5185m	>35	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
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.

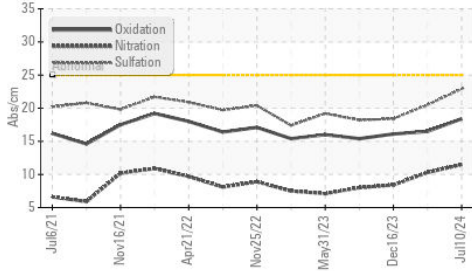
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>22</b>	9	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.3</b>	1.5	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.5</b>	10.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	20.5	18.4
Silt	scalar	*Visual	NONE	<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**

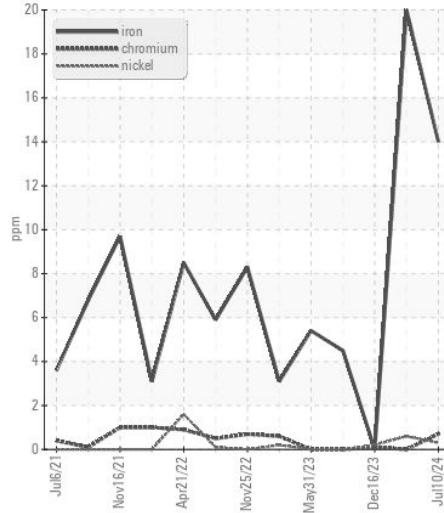
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>26</b>	17	2
Boron	ppm	ASTM D5185m	50	<b>4</b>	4	21
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>57</b>	59	47
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>628</b>	875	580
Calcium	ppm	ASTM D5185m	1510	<b>1498</b>	1062	1460
Phosphorus	ppm	ASTM D5185m	780	<b>886</b>	1035	810
Zinc	ppm	ASTM D5185m	870	<b>1077</b>	1242	980
Sulfur	ppm	ASTM D5185m	2040	<b>2589</b>	3403	2499
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.4</b>	16.5	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>5.1</b>	8.7	7.5
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.7</b>	12.7	14.7

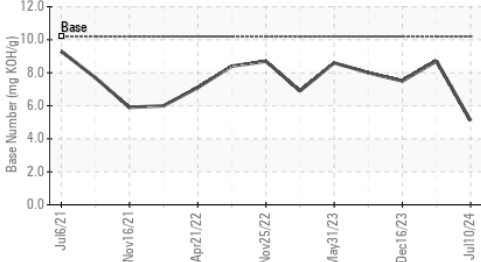
**FT-IR (Direct Trend)**



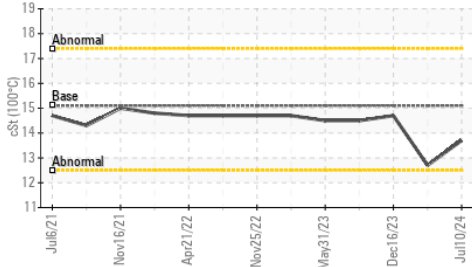
**Ferrous Alloys**



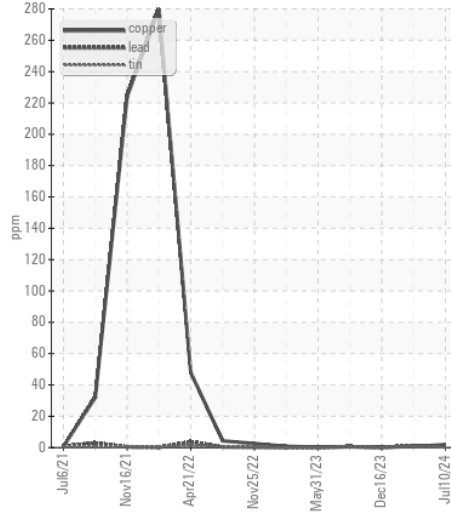
**Base Number**



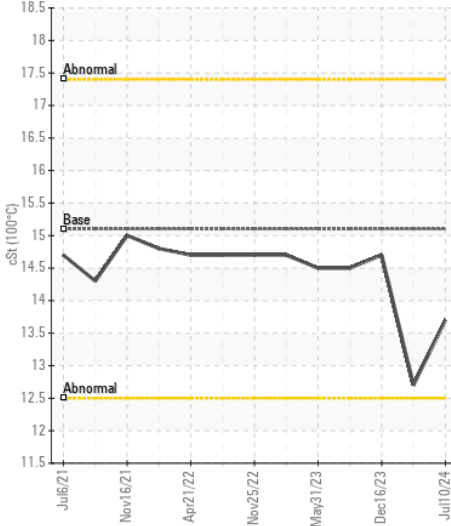
**Viscosity @ 100°C**



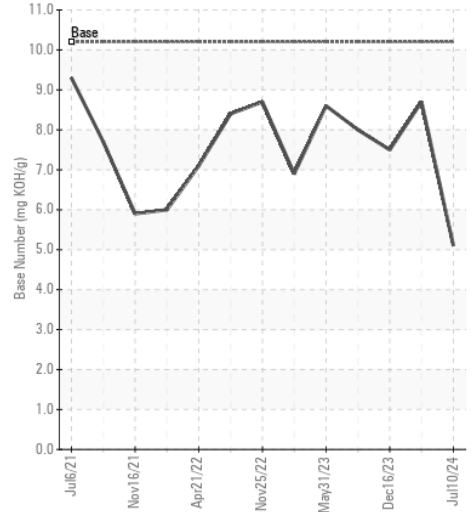
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : GFL0119107

**Lab Number** : 06234544

**Unique Number** : 11123378

**Test Package** : FLEET

**Received** : 12 Jul 2024

**Tested** : 12 Jul 2024

**Diagnosed** : 15 Jul 2024 - Don Baldridge

**GFL Environmental - 882 - Gainesville**

5002 SW 41st Blvd

Gainesville, FL

US 32608

Contact: ROBERT CLARK

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T:

F:

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)