



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

Machine Id  
**933026**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (28 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0121931</b>	GFL0106841	GFL0078140
Sample Date		Client Info		<b>14 May 2024</b>	07 Mar 2024	09 Jan 2024
Machine Age	hrs	Client Info		<b>6052</b>	5435	4887
Oil Age	hrs	Client Info		<b>48244</b>	48244	600
Filter Age	hrs	Client Info		<b>48244</b>	48244	600
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>5</b>	4	8
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<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>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>35	<b>1</b>	<1	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

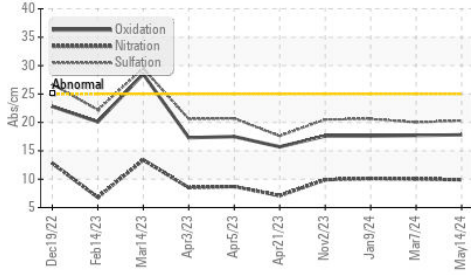
Silicon	ppm	ASTM D5185m	>+100	<b>8</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	10.0	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	20.0	20.6
Silt	scalar	*Visual	NONE	<b>NONE</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**

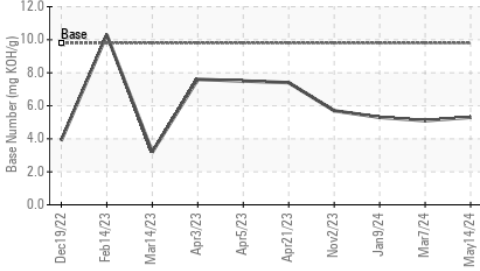
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	6	6
Boron	ppm	ASTM D5185m	0	<b>5</b>	11	10
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>54</b>	48	49
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>587</b>	481	521
Calcium	ppm	ASTM D5185m	1070	<b>1764</b>	1527	1536
Phosphorus	ppm	ASTM D5185m	1150	<b>777</b>	693	761
Zinc	ppm	ASTM D5185m	1270	<b>976</b>	856	932
Sulfur	ppm	ASTM D5185m	2060	<b>2766</b>	2407	2345
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	17.7	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.3</b>	5.1	5.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.5	14.4

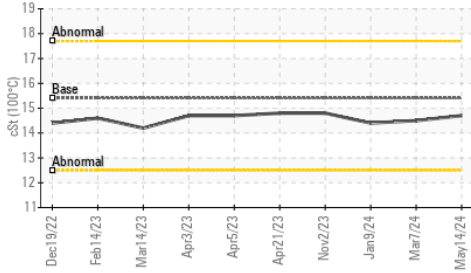
**FT-IR (Direct Trend)**



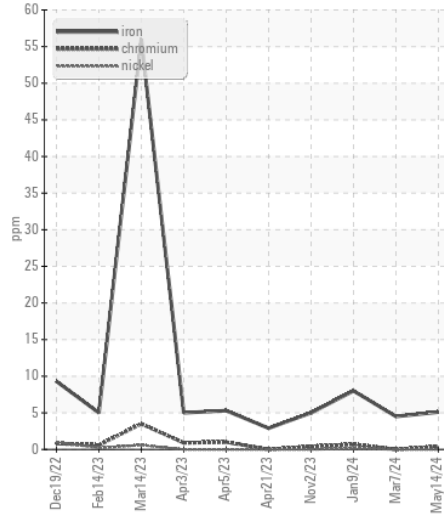
**Base Number**



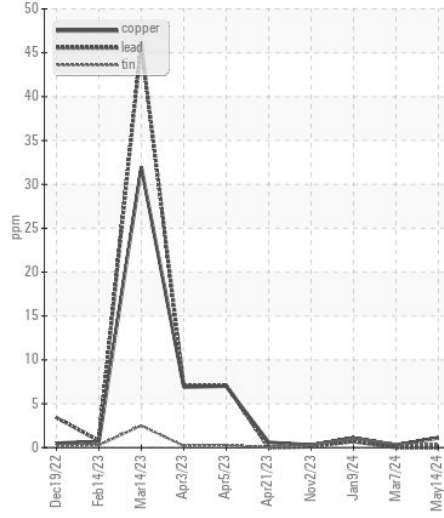
**Viscosity @ 100°C**



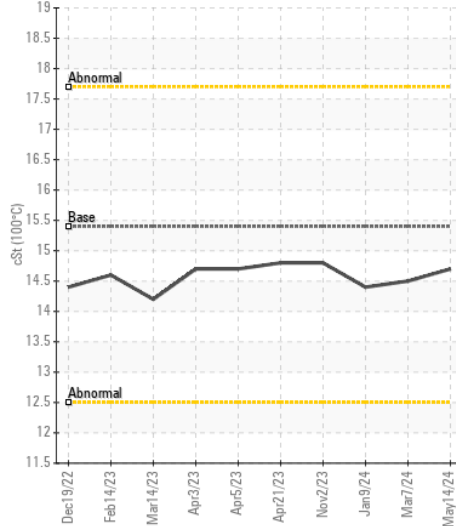
**Ferrous Alloys**



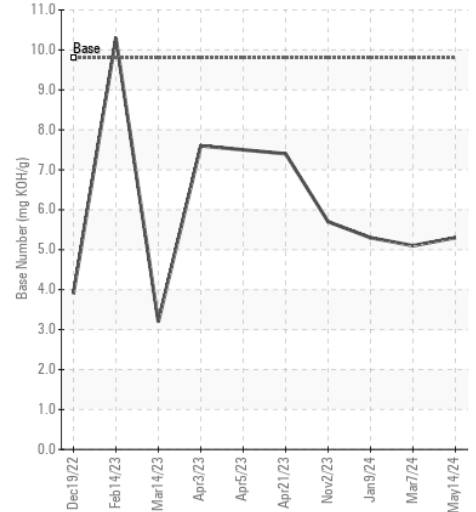
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121931  
**Lab Number** : 06188810  
**Unique Number** : 11045562  
**Test Package** : FLEET

**Received** : 23 May 2024  
**Tested** : 24 May 2024  
**Diagnosed** : 28 May 2024 - Don Baldrige

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Jose Gonzalez  
 jgonzalez2@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)