



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



Area  
**(28KK9A)**  
Machine Id  
**824014-101256**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0103340</b>	GFL0093699	GFL0070407
Sample Date		Client Info		<b>11 Jan 2024</b>	10 Oct 2023	26 Apr 2023
Machine Age	hrs	Client Info		<b>7810</b>	7776	7711
Oil Age	hrs	Client Info		<b>0</b>	0	600
Filter Age	hrs	Client Info		<b>0</b>	0	600
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>12</b>	9	18
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

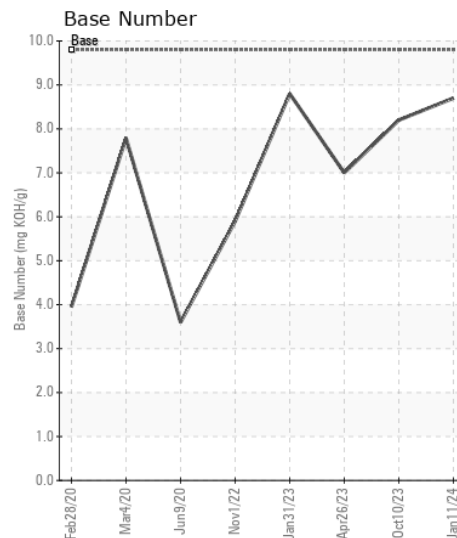
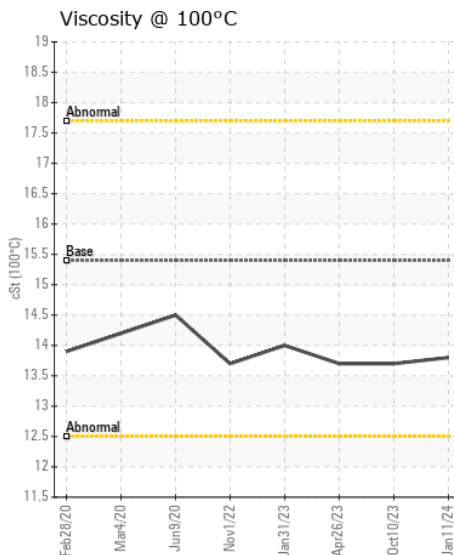
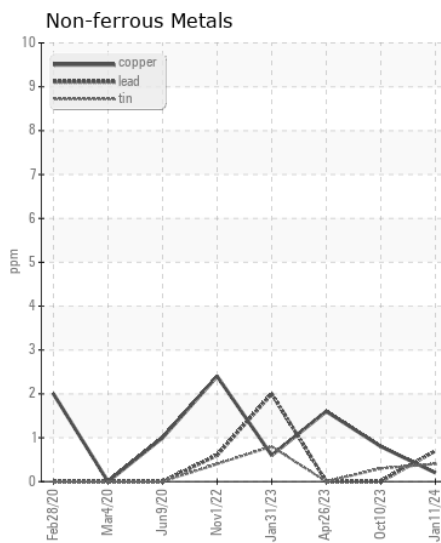
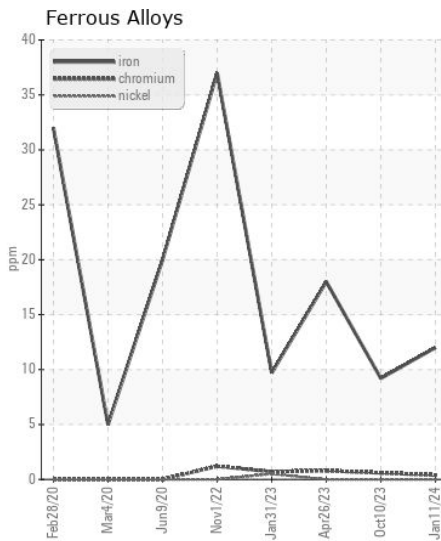
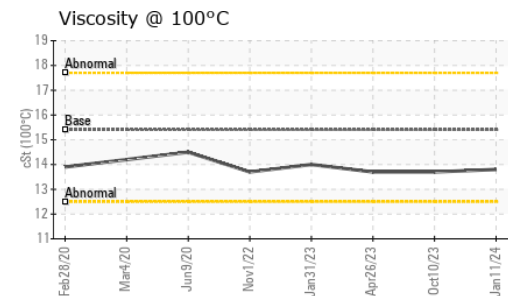
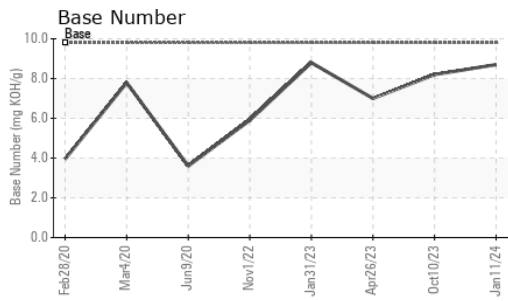
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.7</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	6.4	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	17.9	18.3
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	>0.2	<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>2</b>	4	5
Boron	ppm	ASTM D5185m	0	<b>7</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	57	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>939</b>	947	973
Calcium	ppm	ASTM D5185m	1070	<b>1063</b>	1015	1064
Phosphorus	ppm	ASTM D5185m	1150	<b>1110</b>	1004	1014
Zinc	ppm	ASTM D5185m	1270	<b>1289</b>	1234	1266
Sulfur	ppm	ASTM D5185m	2060	<b>3093</b>	2994	3602
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	14.0	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	8.2	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.7	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103340 **Received** : 16 Jan 2024  
**Lab Number** : 06060739 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832121 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: BRYAN SWANSON  
 bryanswanson@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)

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F: