



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



Machine Id  
**929041**  
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>GFL0098071</b>	GFL0080377	GFL0071281
Sample Date		Client Info		<b>08 Feb 2024</b>	18 Sep 2023	06 Jul 2023
Machine Age	hrs	Client Info		<b>12072</b>	11490	11306
Oil Age	hrs	Client Info		<b>582</b>	11490	11306
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>22</b>	11	28
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>2</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>11</b>	0	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	1	3
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

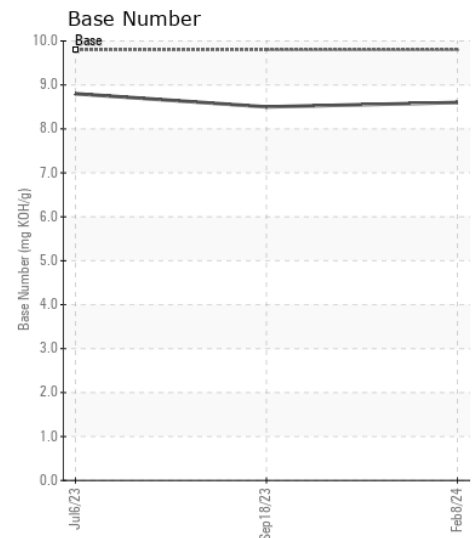
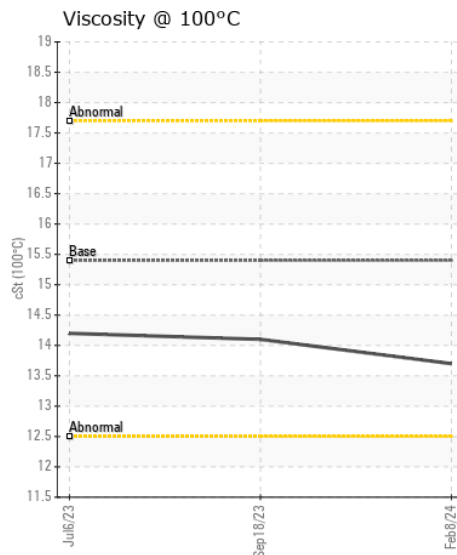
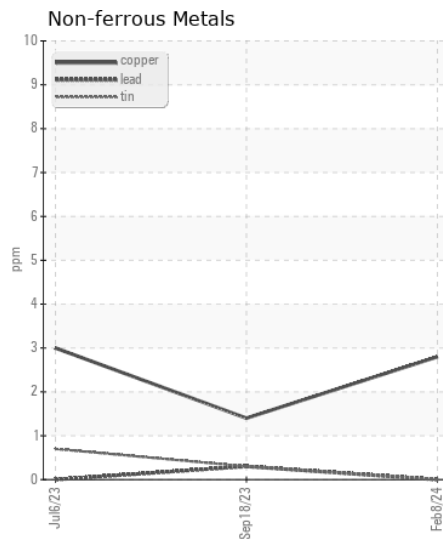
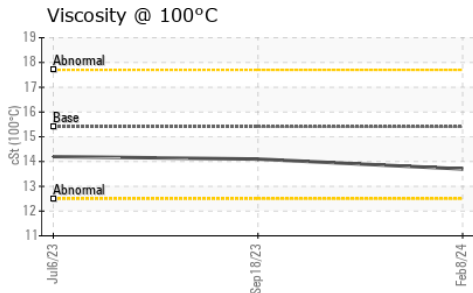
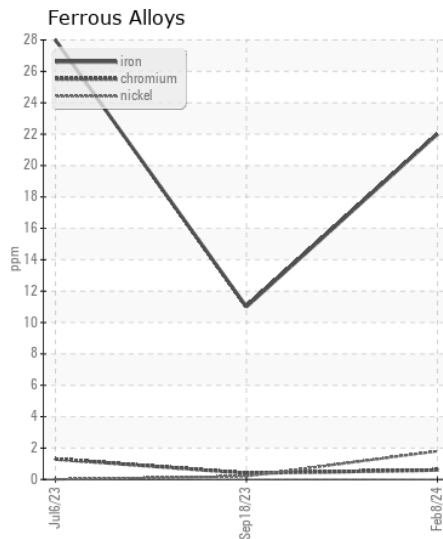
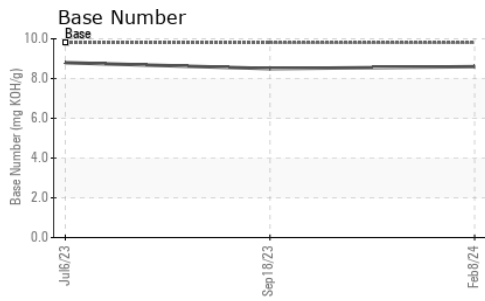
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	14
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	<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	>4	<b>0.6</b>	0.5	1.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	7.3	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	18.6	22.0
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>3</b>	1	6
Boron	ppm	ASTM D5185m	0	<b>8</b>	<1	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>52</b>	58	63
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>807</b>	874	991
Calcium	ppm	ASTM D5185m	1070	<b>988</b>	1011	1106
Phosphorus	ppm	ASTM D5185m	1150	<b>894</b>	982	1041
Zinc	ppm	ASTM D5185m	1270	<b>1040</b>	1157	1260
Sulfur	ppm	ASTM D5185m	2060	<b>2873</b>	3045	3518
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.2</b>	15.0	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.6</b>	8.5	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	14.1	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098071  
**Lab Number** : 06086903  
**Unique Number** : 10874348  
**Test Package** : FLEET

**Received** : 13 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Sean Felton

**GFL Environmental - 932 - Muskego HC**  
 W144 S6400 College Ct.  
 Muskego, WI  
 US 53150

Contact: Brian Schlomann  
 brian.schlomann@gflenv.com

T: (262)510-4586

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)