



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



Machine Id  
**4503M**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0100992</b>	GFL0100880	GFL0086904
Sample Date		Client Info		<b>28 May 2024</b>	26 Jan 2024	05 Oct 2023
Machine Age	mls	Client Info		<b>0</b>	266202	261721
Oil Age	mls	Client Info		<b>0</b>	0	261721
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	SEVERE	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>3</b>	6	1
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	9	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
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**

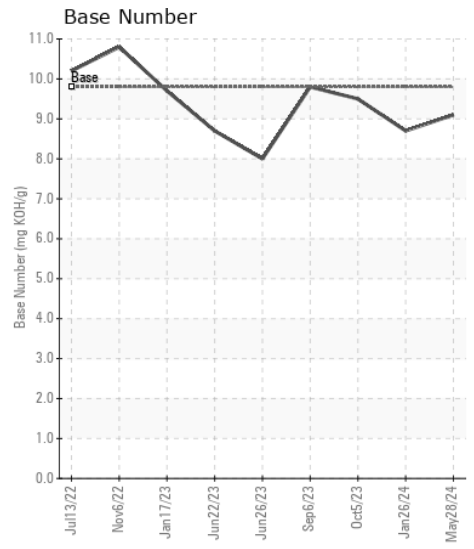
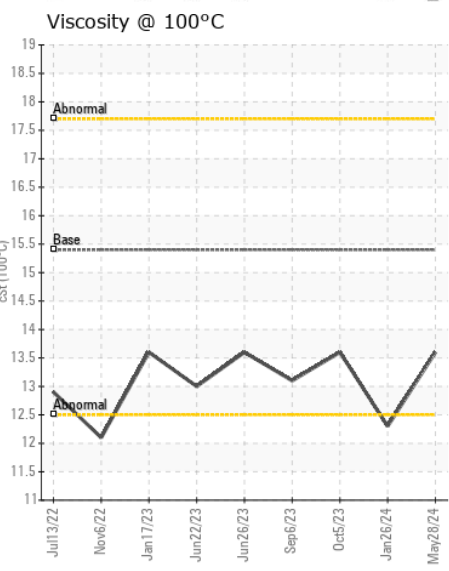
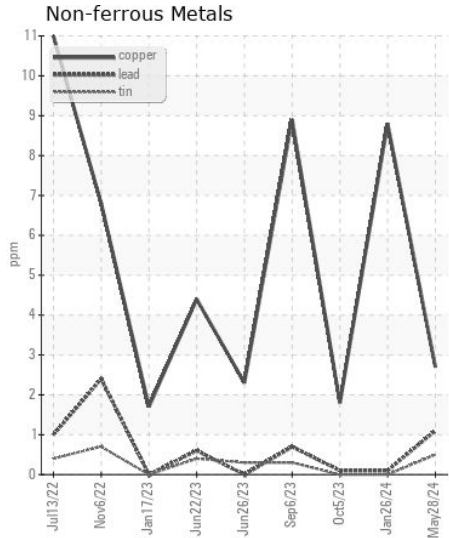
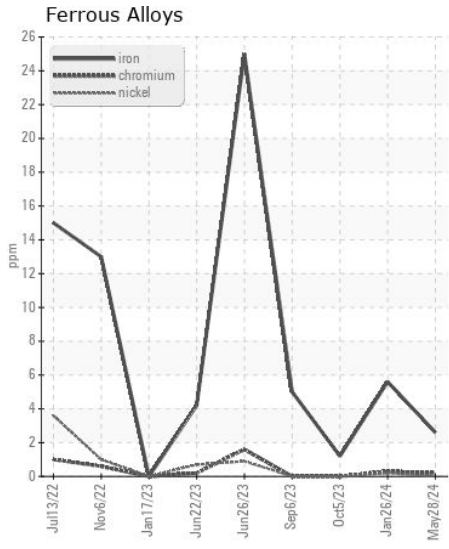
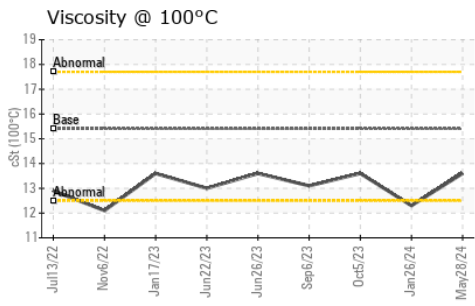
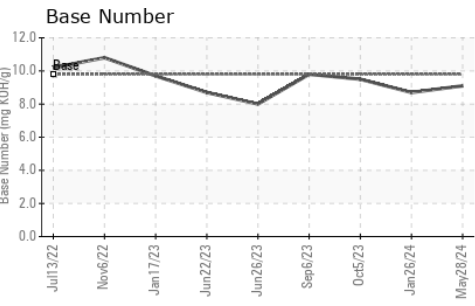
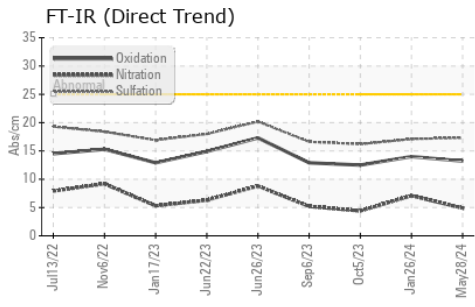
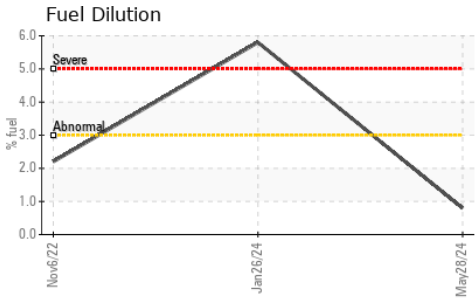
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Fuel	%	ASTM D3524	>3.0	<b>0.8</b>	▲ 5.8	<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>0.1</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.9</b>	7.1	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.3</b>	17.1	16.2
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>	2	<1
Boron	ppm	ASTM D5185m	0	<b>4</b>	2	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	12	<1
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	55	62
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>888</b>	784	868
Calcium	ppm	ASTM D5185m	1070	<b>1061</b>	918	1022
Phosphorus	ppm	ASTM D5185m	1150	<b>1021</b>	952	1002
Zinc	ppm	ASTM D5185m	1270	<b>1159</b>	1067	1195
Sulfur	ppm	ASTM D5185m	2060	<b>3478</b>	3050	3262
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	14.0	12.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.1</b>	8.7	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	▲ 12.3	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0100992 **Received** : 29 May 2024  
**Lab Number** : 06194781 **Tested** : 03 Jun 2024  
**Unique Number** : 11056904 **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 419 - Metro Saginaw**  
 6950 N Michigan  
 Saginaw, MI  
 US 48604  
 Contact: Jeremy Hines  
 jhines@gflenv.com  
 T: (800)684-1277  
 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)