



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

Area  
**(TDG4541)**  
Machine Id  
**733023**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0092185</b>	GFL0092116	GFL0084712
Sample Date		Client Info		<b>07 Feb 2024</b>	22 Nov 2023	21 Jun 2023
Machine Age	hrs	Client Info		<b>1790</b>	1210	47
Oil Age	hrs	Client Info		<b>1210</b>	1210	0
Filter Age	hrs	Client Info		<b>1210</b>	600	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>13</b>	18	26
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	<1
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>12</b>	15	9
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	5	14
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</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**

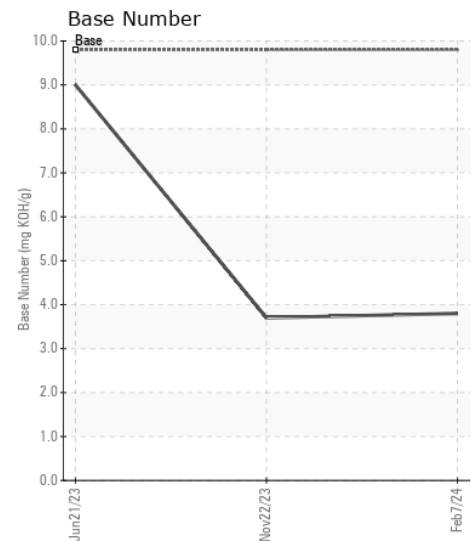
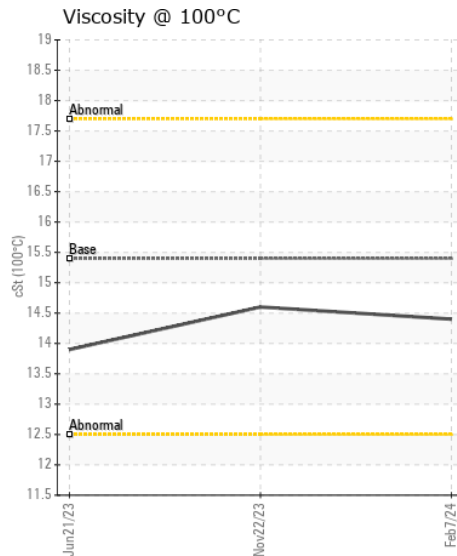
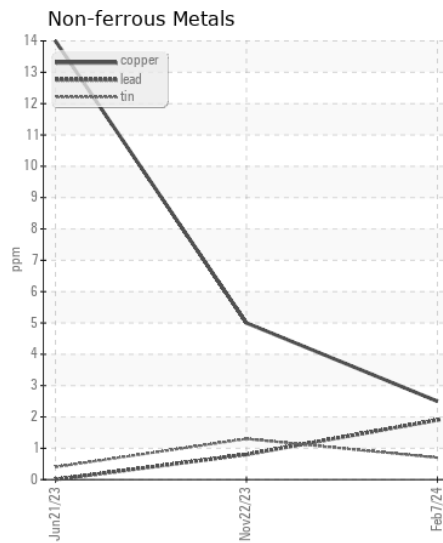
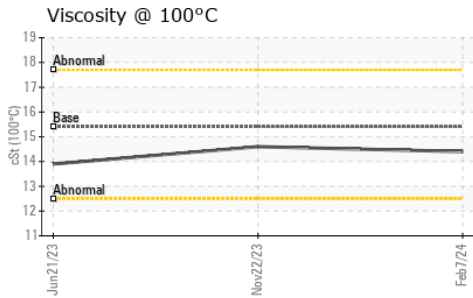
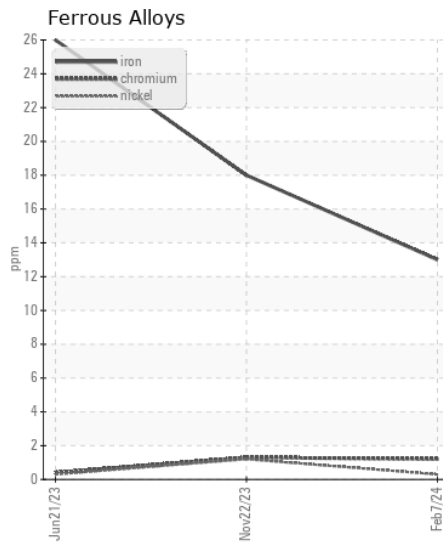
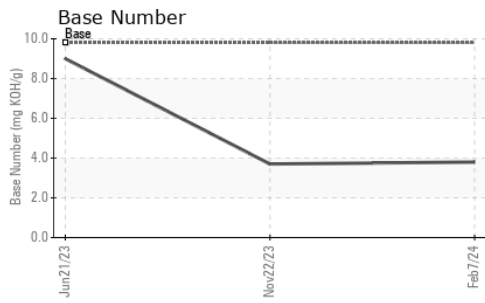
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	11	32
Potassium	ppm	ASTM D5185m	>20	<b>45</b>	64	36
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</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	11.5	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.0</b>	22.9	20.3
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>8</b>	4	4
Boron	ppm	ASTM D5185m	0	<b>9</b>	5	37
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>51</b>	54	45
Manganese	ppm	ASTM D5185m	0	<b>4</b>	3	12
Magnesium	ppm	ASTM D5185m	1010	<b>566</b>	572	716
Calcium	ppm	ASTM D5185m	1070	<b>1417</b>	1574	1047
Phosphorus	ppm	ASTM D5185m	1150	<b>595</b>	634	715
Zinc	ppm	ASTM D5185m	1270	<b>864</b>	949	870
Sulfur	ppm	ASTM D5185m	2060	<b>2133</b>	2685	2802
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.9</b>	18.8	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>3.8</b>	3.7	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	14.6	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092185  
**Lab Number** : 06084643  
**Unique Number** : 10872088  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Sean Felton

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Apolinar Zacarias  
 pzacariascano@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: