



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

Machine Id  
**929086-205277**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0046831</b>	GFL0046833	GFL0037279
Sample Date		Client Info		<b>02 Dec 2022</b>	17 Nov 2022	07 Dec 2021
Machine Age	hrs	Client Info		<b>10247</b>	10123	8305
Oil Age	hrs	Client Info		<b>124</b>	1818	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
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	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>6</b>	19	76
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	7
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	▲ 5
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	1	7
Lead	ppm	ASTM D5185m	>40	<b>1</b>	5	10
Copper	ppm	ASTM D5185m	>330	<b>27</b>	102	139
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**

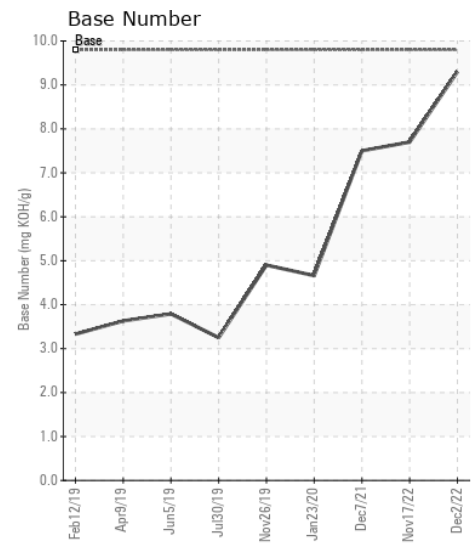
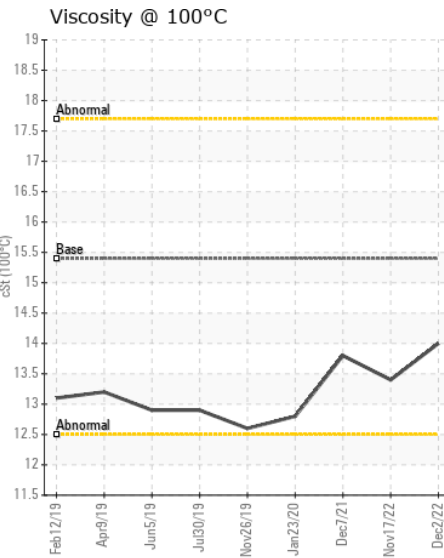
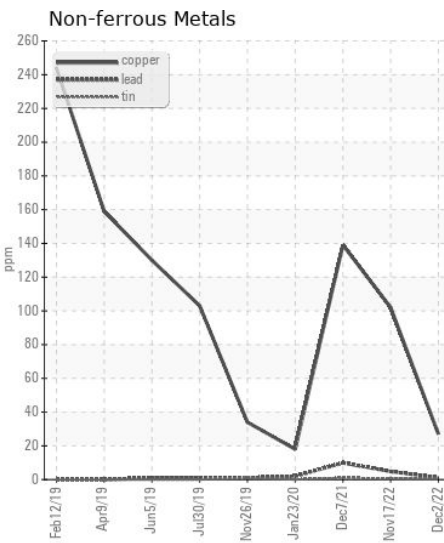
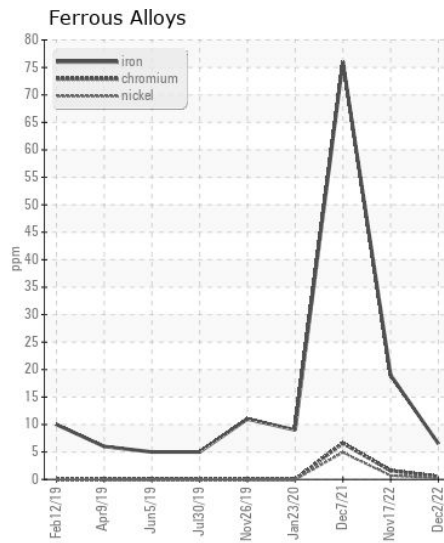
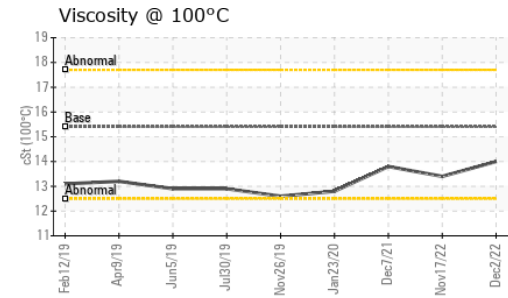
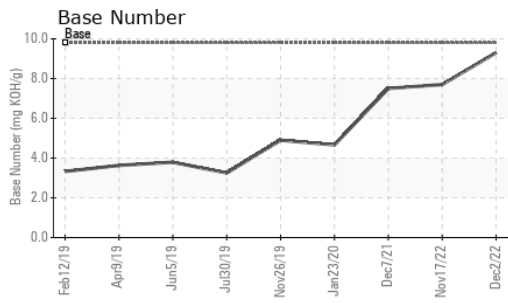
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	14
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	7
Fuel		WC Method	>5	<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	>3	<b>0.1</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	10.2	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	23.0	22.3
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>12</b>	27	▲ 350
Boron	ppm	ASTM D5185m	0	<b>7</b>	11	19
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	67	94
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>926</b>	1008	719
Calcium	ppm	ASTM D5185m	1070	<b>1123</b>	1185	1430
Phosphorus	ppm	ASTM D5185m	1150	<b>1020</b>	1017	1042
Zinc	ppm	ASTM D5185m	1270	<b>1243</b>	1329	1201
Sulfur	ppm	ASTM D5185m	2060	<b>3671</b>	3165	2489
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	19.5	18
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.3</b>	7.7	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.0</b>	13.4	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0046831 **Received** : 06 Dec 2022  
**Lab Number** : 05710201 **Diagnosed** : 07 Dec 2022  
**Unique Number** : 10244776 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 814 - Little Rock Hauling**  
 4005 Hwy 161 N.  
 Little Rock, AR  
 US 72117  
 Contact: Brad Koenig  
 bkoenig@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: