



Machine Id  
**723034-303005**  
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>GFL0122888</b>	GFL0108067	GFL0108143
Sample Date		Client Info		<b>18 Jun 2024</b>	19 Feb 2024	24 Jan 2024
Machine Age	hrs	Client Info		<b>22425</b>	22316	22196
Oil Age	hrs	Client Info		<b>22305</b>	120	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changd
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>8</b>	35	15
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	5	2
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>150	<b>13</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

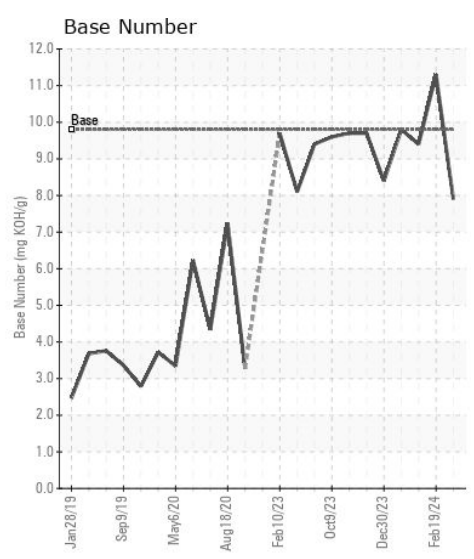
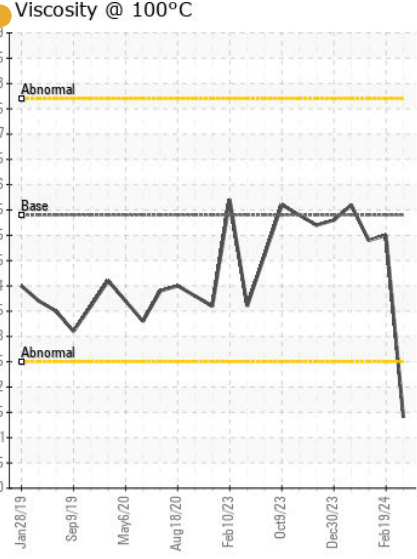
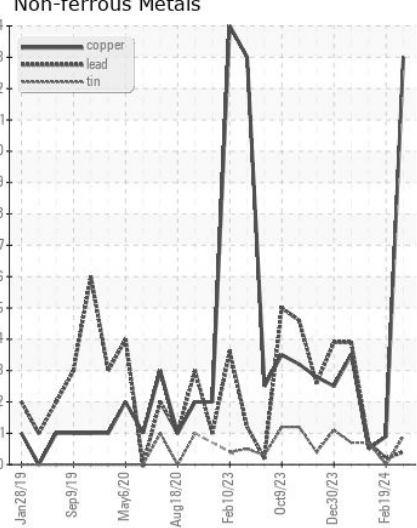
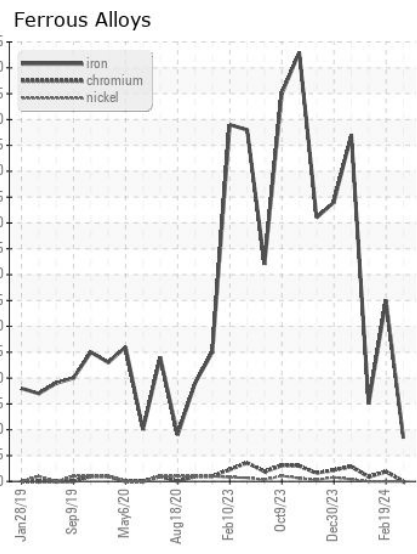
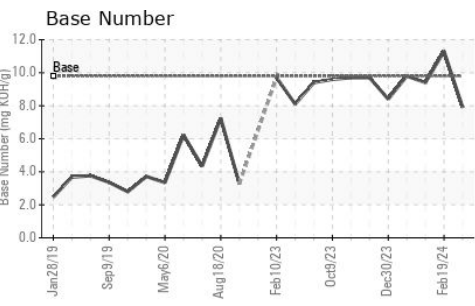
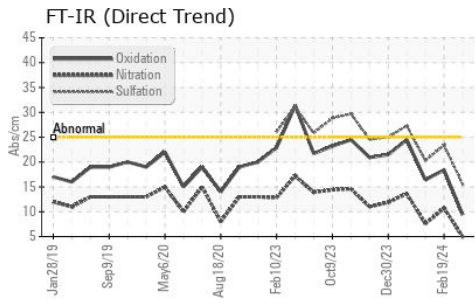
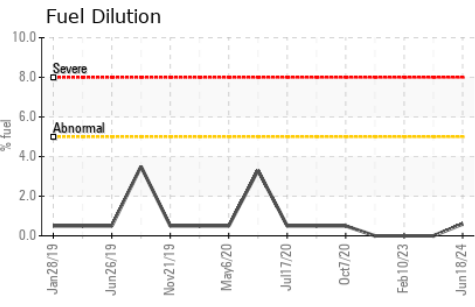
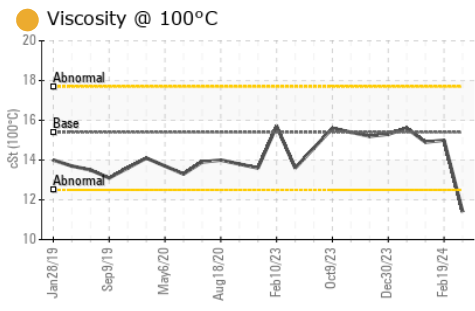
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>17</b>	22	7
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	0	2
Fuel	%	ASTM D3524	>5	<b>0.6</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>	1.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.0</b>	10.7	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.6</b>	23.4	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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>6</b>	626	170
Boron	ppm	ASTM D5185m	0	<b>6</b>	8	11
Barium	ppm	ASTM D5185m	0	<b>14</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>10</b>	82	57
Manganese	ppm	ASTM D5185m	0	<b>3</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>148</b>	1027	1035
Calcium	ppm	ASTM D5185m	1070	<b>2108</b>	1108	1081
Phosphorus	ppm	ASTM D5185m	1150	<b>954</b>	1059	1030
Zinc	ppm	ASTM D5185m	1270	<b>1088</b>	1314	1211
Sulfur	ppm	ASTM D5185m	2060	<b>4247</b>	2873	2827
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.4</b>	18.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.9</b>	11.3	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.4</b>	15.0	14.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122888  
**Lab Number** : 06217632  
**Unique Number** : 11090496  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: SARA PATRICK  
 spatrick@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)