



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



Area  
**(YA146576)**  
Machine Id  
**10904**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (27 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>GFL0111974</b>	GFL0098789	GFL0092504
Sample Date		Client Info		<b>21 Feb 2024</b>	04 Dec 2023	19 Aug 2023
Machine Age	hrs	Client Info		<b>14957</b>	0	0
Oil Age	hrs	Client Info		<b>14957</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>2</b>	48	27
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	6	13
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>4	<b>0</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**

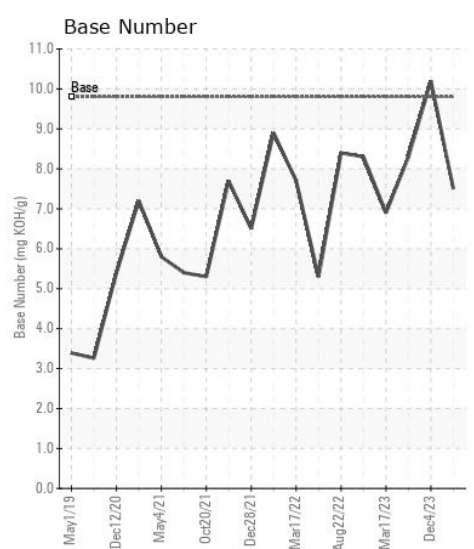
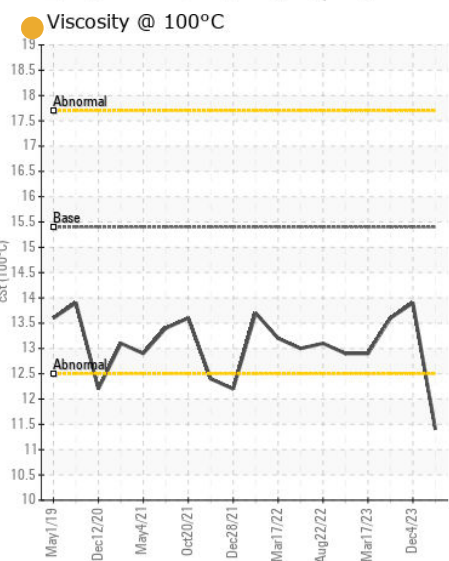
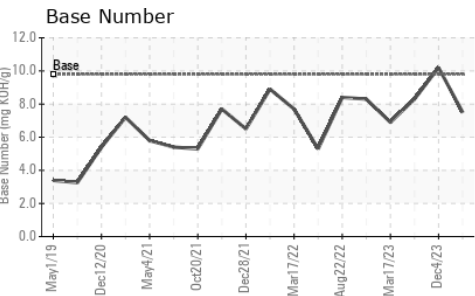
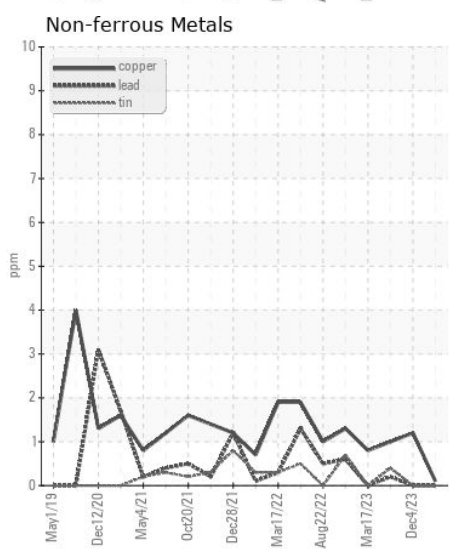
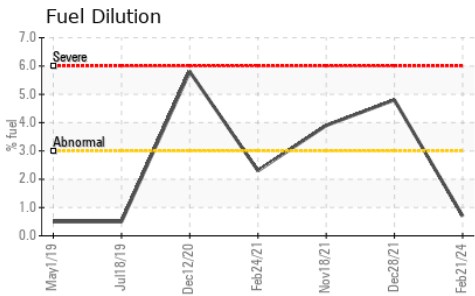
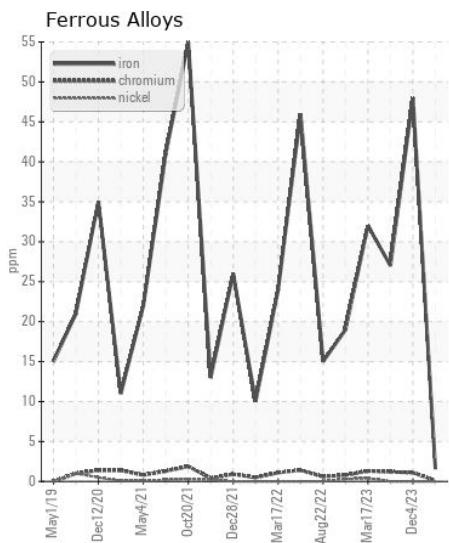
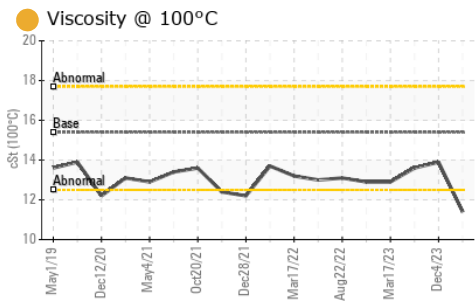
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	7	21
Fuel	%	ASTM D3524	>3.0	<b>0.7</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>	2.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	9.0	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.4</b>	22.2	19.4
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>11</b>	0	4
Boron	ppm	ASTM D5185m	0	<b>19</b>	12	1
Barium	ppm	ASTM D5185m	0	<b>8</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>13</b>	63	59
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>108</b>	877	938
Calcium	ppm	ASTM D5185m	1070	<b>1822</b>	1088	1219
Phosphorus	ppm	ASTM D5185m	1150	<b>880</b>	1001	1026
Zinc	ppm	ASTM D5185m	1270	<b>957</b>	1146	1268
Sulfur	ppm	ASTM D5185m	2060	<b>3553</b>	2874	3617
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.1</b>	13.8	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.5</b>	10.2	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.4</b>	13.9	13.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111974 **Received** : 26 Feb 2024  
**Lab Number** : 06100015 **Tested** : 28 Feb 2024  
**Unique Number** : 10898245 **Diagnosed** : 28 Feb 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 19DR - Deep Run/TriEast**  
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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)