



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

Area  
**(KN5435)**  
Machine Id  
**11337**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

**RECOMMENDATION**

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0094493</b>	GFL0058874	GFL0072413
Sample Date		Client Info		<b>08 Jul 2024</b>	03 Jan 2024	07 Sep 2023
Machine Age	hrs	Client Info		<b>14765</b>	14765	14765
Oil Age	hrs	Client Info		<b>14059</b>	14059	14059
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>8</b>	13	6
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>4</b>	2	3
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>6	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

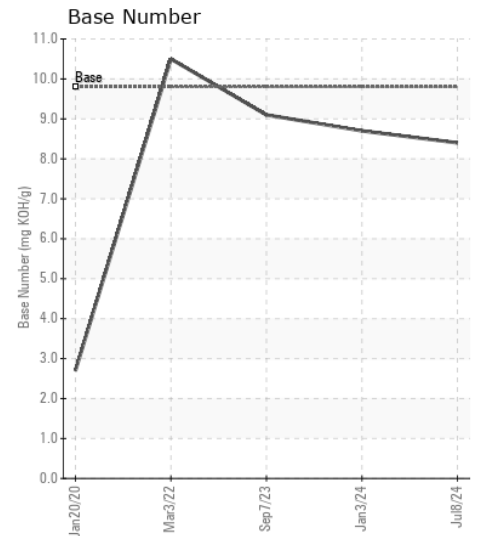
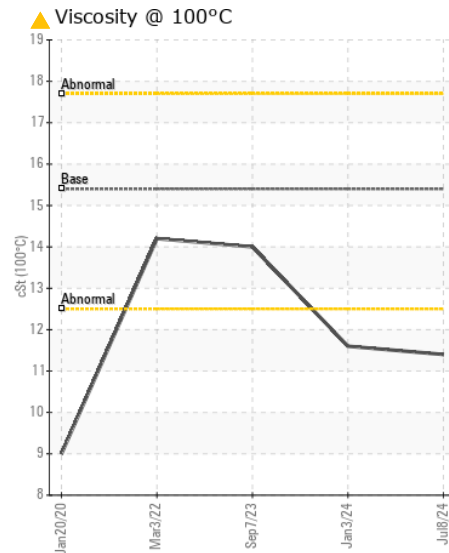
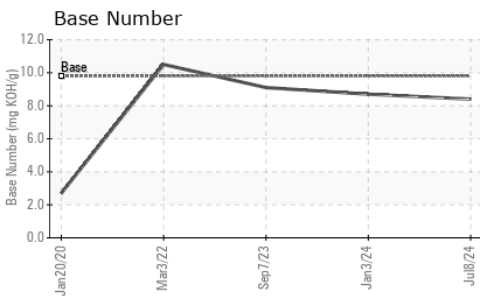
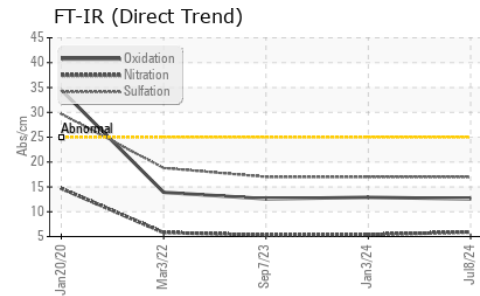
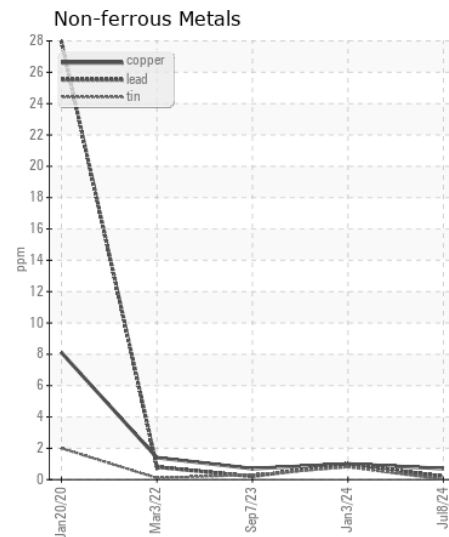
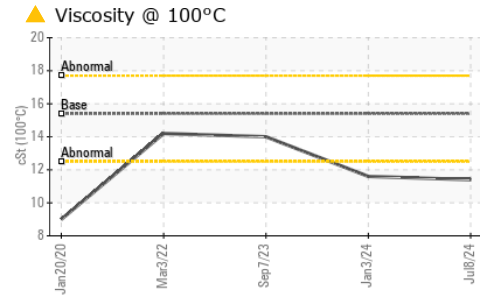
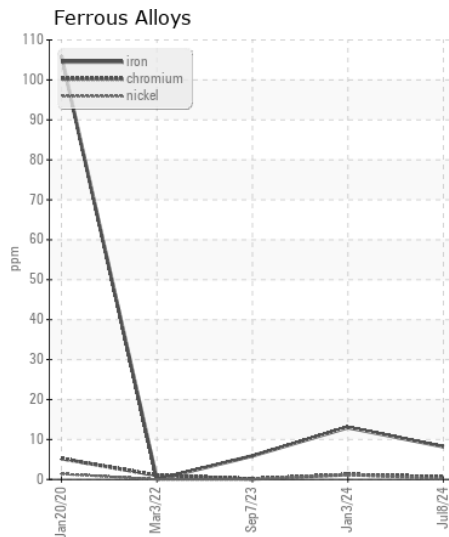
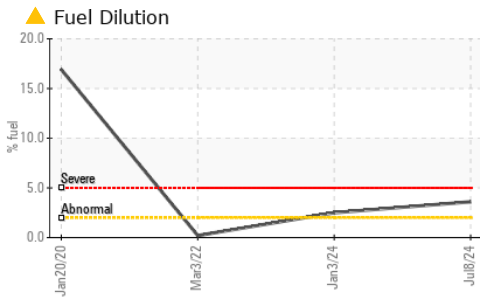
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	11
Fuel	%	ASTM D3524	>2.0	<b>▲ 3.6</b>	▲ 2.5	<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>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	5.4	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.0</b>	17.0	17.0
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	4
Boron	ppm	ASTM D5185m	0	<b>7</b>	13	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	57	59
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>870</b>	888	1046
Calcium	ppm	ASTM D5185m	1070	<b>1095</b>	1047	1318
Phosphorus	ppm	ASTM D5185m	1150	<b>995</b>	892	1091
Zinc	ppm	ASTM D5185m	1270	<b>1162</b>	1152	1335
Sulfur	ppm	ASTM D5185m	2060	<b>2733</b>	3332	3992
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.6</b>	12.9	12.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	8.7	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>▲ 11.4</b>	▲ 11.6	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0094493 **Received** : 12 Jul 2024  
**Lab Number** : 06234612 **Tested** : 16 Jul 2024  
**Unique Number** : 11123446 **Diagnosed** : 16 Jul 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: FUELDILUTION, PercentFuel )

**GFL Environmental - 119 - Williamston Hauling/TriEast**  
 1805 West Main Street  
 Williamston, NC  
 US 27892  
 Contact: Spencer Lignon  
 spencer.lignon@gflenv.com  
 T: (800)207-6618  
 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)