



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



Area  
**(P4019D)**  
Machine Id  
**429043-402480**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0081087</b>	GFL0081073	GFL0055561
Sample Date		Client Info		<b>30 Jan 2024</b>	12 May 2023	04 Jan 2023
Machine Age	hrs	Client Info		<b>22223</b>	21588	0
Oil Age	hrs	Client Info		<b>635</b>	1200	0
Filter Age	hrs	Client Info		<b>635</b>	1200	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	>120	<b>22</b>	8	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	<1	0
Lead	ppm	ASTM D5185m	>40	<b>2</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>1</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**

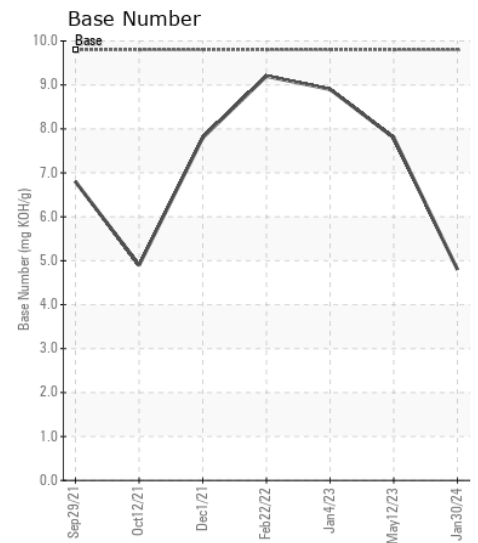
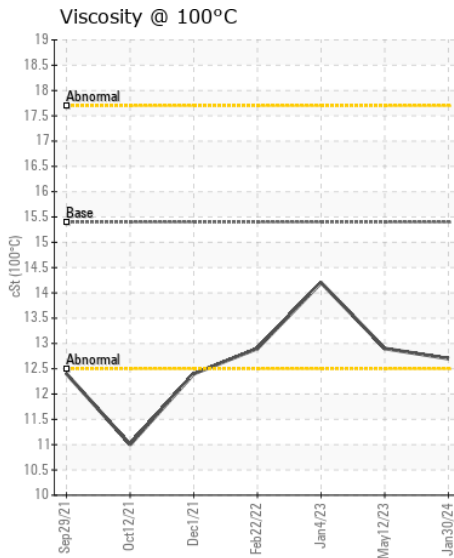
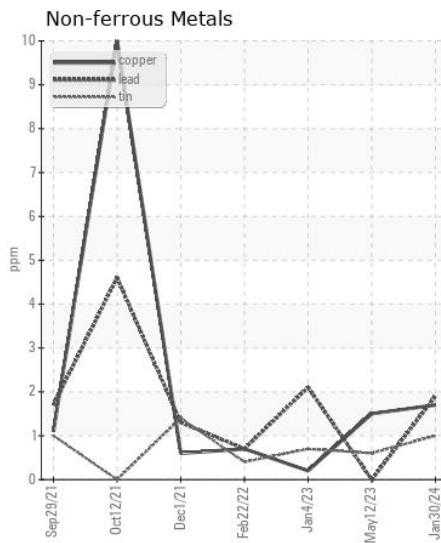
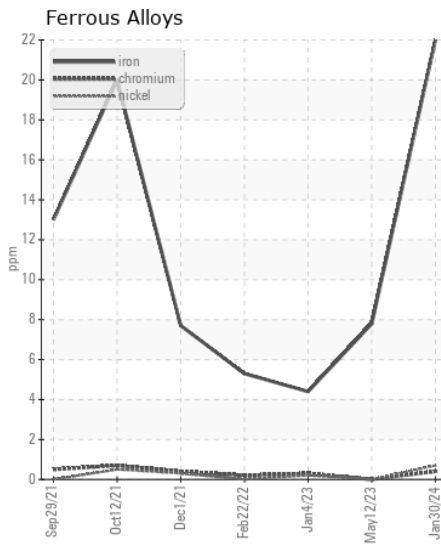
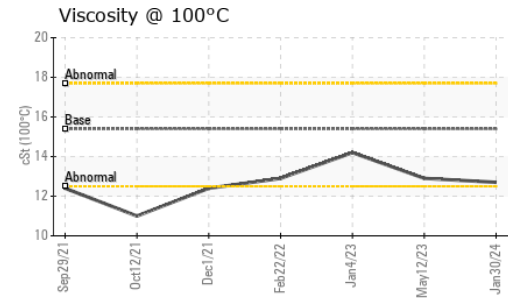
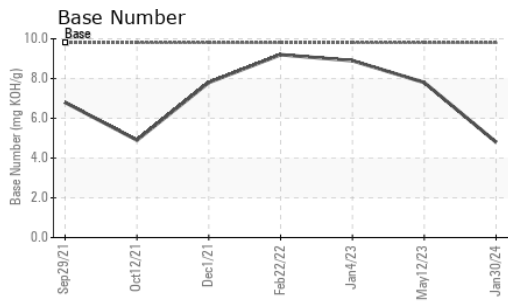
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	<1	8
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	>4	<b>0.5</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	9.0	5.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	19.2	17.8
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>4</b>	3	2
Boron	ppm	ASTM D5185m	0	<b>7</b>	<1	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>48</b>	59	49
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>540</b>	940	857
Calcium	ppm	ASTM D5185m	1070	<b>1278</b>	1094	794
Phosphorus	ppm	ASTM D5185m	1150	<b>720</b>	1012	823
Zinc	ppm	ASTM D5185m	1270	<b>926</b>	1244	1030
Sulfur	ppm	ASTM D5185m	2060	<b>2504</b>	3483	3024
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	16.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.8</b>	7.8	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.7</b>	12.9	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0081087 **Received** : 31 Jan 2024  
**Lab Number** : 06075580 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857671 **Diagnostician** : Angela Borella  
**Test Package** : FLEET

**GFL Environmental - 885 - Orlando**  
 1263 W Landstreet Rd  
 Orlando, FL  
 US 32824  
 Contact: Brian Bou Diaz  
 bboudiaz@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: