

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id **425009** Component **Diesel Engine** Filuid **PETRO CANADA DURON SHP 15W40 (--- GAL)**

RE	COMN	IENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

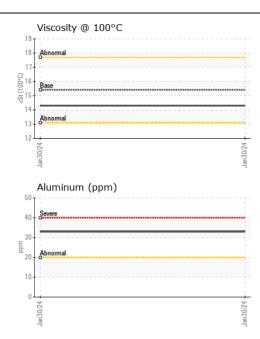
CONTAMINATION

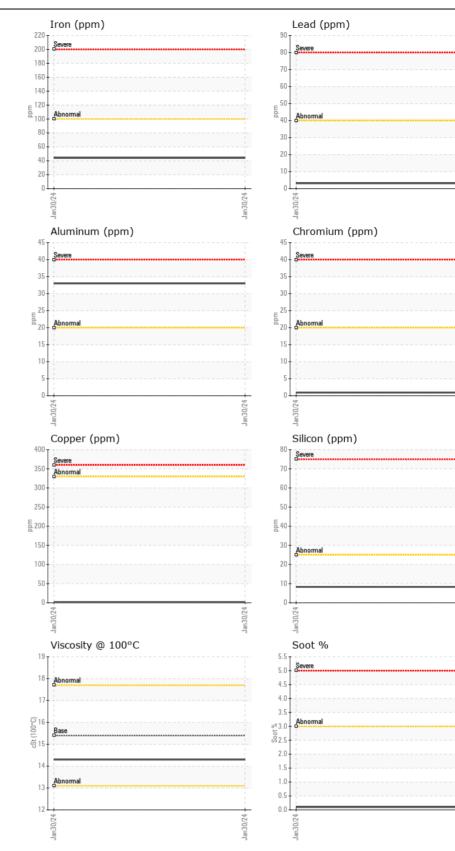
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0098012		
	Sample Date		Client Info		30 Jan 2024		
	Machine Age	kms	Client Info		476670		
	Oil Age	kms	Client Info		8454		
	Filter Age	kms	Client Info		8454		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
	Iron	ppm	ASTM D5185(m)	>100	44		
	Chromium	ppm	ASTM D5185(m)	>20	<1		
	Nickel	ppm	ASTM D5185(m)	>4	1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	33		
	Lead	ppm	ASTM D5185(m)	>40	3		
	Copper	ppm	ASTM D5185(m)	>330	2		
	Tin	ppm	ASTM D5185(m)	>15	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Silicon	ppm	ASTM D5185(m)	>25	8		
	Potassium	ppm	ASTM D5185(m)	>20	64		
	Fuel	ppiii	WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	20.L	NEG		
	Soot %	%	ASTM D7844*	>3	0.1		
	Nitration	Abs/cm	ASTM D7624*	>20	9.5		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Sodium	ppm	ASTM D5185(m)		3		
	Boron	ppm	ASTM D5185(m)	0	6		
	Barium	ppm	ASTM D5185(m)	0	0		
	Molybdenum	ppm	ASTM D5185(m)	60	60		
	Manganese	ppm	ASTM D5185(m)	0	<1		
	Magnesium	ppm	ASTM D5185(m)	1010	976		
	Calcium	ppm	ASTM D5185(m)	1070	1178		
	Phosphorus	ppm	ASTM D5185(m)	1150	1027		
	Zinc	ppm	ASTM D5185(m)	1270	1198		
	Sulfur	ppm	ASTM D5185(m)	2060	2660		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4		
	Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.3		

FLUID CONDITION

The condition of the oil is acceptable for the time in service.







 Accredited Laboratory
 Unique Number
 : 5733029
 Diagnosed
 : 15 Feb 2024 - Wes Davis

 Test Package
 : MOB 1 (Additional Tests: Visual)

 To discuss this sample report, contact Customer Service at 1-800-268-2131.

 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

 Validity of results and interpretation are based on the sample and information as supplied.

: GFL0098012

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Received

Tested

: 15 Feb 2024

: 15 Feb 2024

GFL Environmental - 593 4421 Boban Drive Nanaimo, BC CA V9T 6A6 Contact: Patrick Rutti prutti@gflenv.com T: (250)739-3345 F:

Laboratory

Sample No.

Lab Number : 02615919