

## Machine Id **351003** Component **Diesel Engine** Filuid **PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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Metal levels are typical for a new component breaking in.

## CONTAMINATION

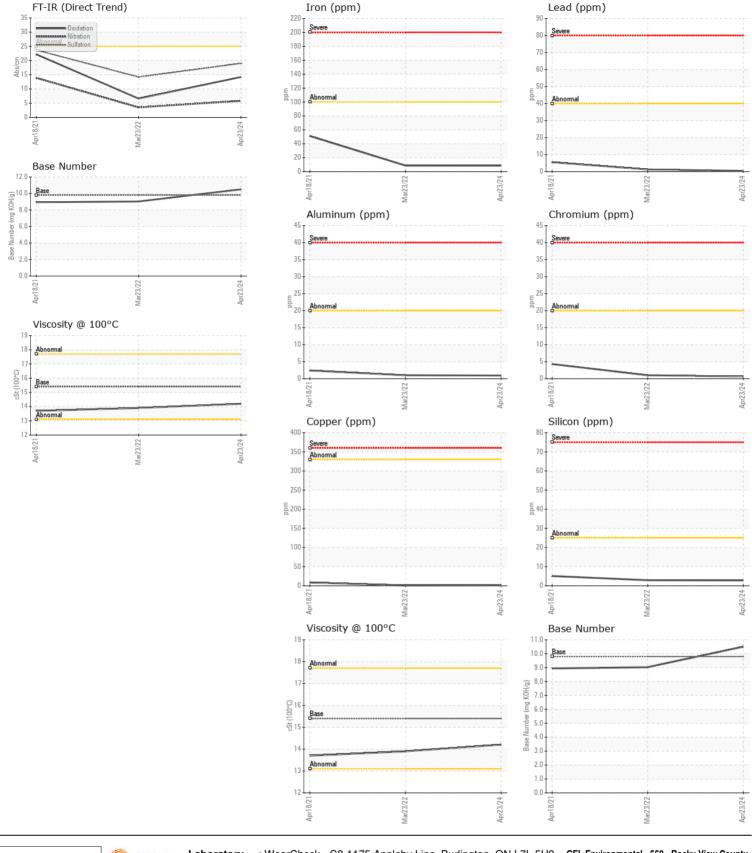
There is no indication of any contamination in the oil.

## **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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117268	GFL0049053	GFL0022178
Sample Date		Client Info		23 Apr 2024	23 Mar 2022	18 Apr 2021
Machine Age	kms	Client Info		94	204444	195476
Oil Age	kms	Client Info		94	0	0
Filter Age	kms	Client Info		94	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	8	9	51
Chromium	ppm	ASTM D5185(m)	>20	<1	1	4
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	2
Lead	ppm	ASTM D5185(m)	>40	<1	1	6
Copper	ppm	ASTM D5185(m)	>330	2	<1	8
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	3	3	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
Fuel	ppin	WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0	0.6
Nitration	Abs/cm	ASTM D7624*	>20	5.8	3.5	13.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	14.2	23.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		1	1	5
Boron	ppm	ASTM D5185(m)	0	5	3	28
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	57	64
Manganese	ppm	ASTM D5185(m)	0	0	<1	2
Magnesium	ppm	ASTM D5185(m)	1010	921	974	1142
Calcium	ppm	ASTM D5185(m)	1070	1040	1036	1039
Phosphorus	ppm	ASTM D5185(m)	1150	946	1033	1041
Zinc	ppm	ASTM D5185(m)	1270	1128	1192	1363
Sulfur	ppm	ASTM D5185(m)	2060	2443	2536	2824
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.2	6.6	22.2
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	10.50	9.03	8.94
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.2	13.9	13.7

Submitted By: GFL Calgary



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County CALA Sample No. : GFL0117268 Received :01 May 2024 220 Carmek Blvd Lab Number : 02 May 2024 : 02632515 Tested Rocky View County, AB ISO 17025:2017 Accredited Laboratory Unique Number : 5773668 : 02 May 2024 - Wes Davis CA T1X 1X1 Diagnosed Test Package : MOB 2 Contact: GFL Calgary To discuss this sample report, contact Customer Service at 1-800-268-2131. calgarymaintenance@gflenv.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Т: F: (403)369-6163

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

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