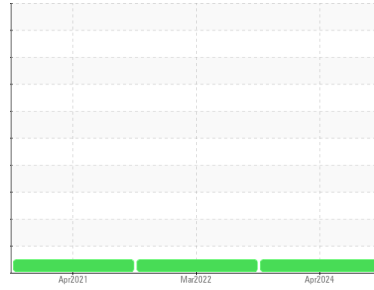




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

351003

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

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.

SAMPLE INFORMATION

	method	limit/base	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
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
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
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
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
Lithium	ppm	ASTM D5185(m)		<1	0	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	3	3	5
Sodium	ppm	ASTM D5185(m)		1	1	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1

INFRA-RED

	method	limit/base	current	history1	history2	
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

