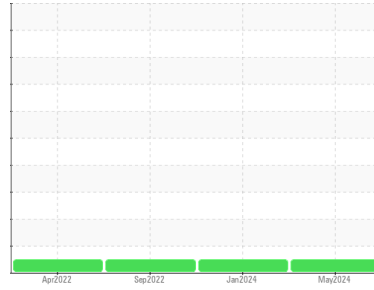




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

930020

Component

Diesel Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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		GFL0117351	GFL0084300	GFL0060174
Sample Date	Client Info		07 May 2024	04 Jan 2024	22 Sep 2022
Machine Age	hrs	Client Info	6473	5499	2318
Oil Age	hrs	Client Info	967	1010	1087
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	58	17	15
Chromium	ppm	ASTM D5185(m)	>20	3	1	1
Nickel	ppm	ASTM D5185(m)	>4	2	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	6	2	4
Lead	ppm	ASTM D5185(m)	>40	<1	<1	1
Copper	ppm	ASTM D5185(m)	>330	1	1	2
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)	50	8	12	8
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	61	55	56
Manganese	ppm	ASTM D5185(m)	0	2	<1	1
Magnesium	ppm	ASTM D5185(m)	560	551	571	612
Calcium	ppm	ASTM D5185(m)	1510	1657	1672	1684
Phosphorus	ppm	ASTM D5185(m)	780	706	715	792
Zinc	ppm	ASTM D5185(m)	870	904	921	972
Sulfur	ppm	ASTM D5185(m)	2040	1936	2055	2064
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	18	5	6
Sodium	ppm	ASTM D5185(m)		12	7	7
Potassium	ppm	ASTM D5185(m)	>20	2	<1	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.3	11.6	11.7
Sulfation	Abs.1mm	ASTM D7415*	>30	25.9	25.0	25.3

