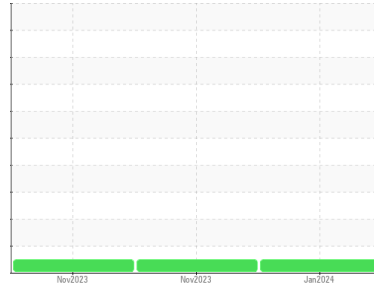




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
433008

Component
Natural Gas Engine

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

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0096728	GFL0096752	GFL0096748
Sample Date	Client Info		20 Jan 2024	27 Nov 2023	06 Nov 2023
Machine Age	hrs	Client Info	1546	28087	23517
Oil Age	hrs	Client Info	1200	0	0
Oil Changed		Client Info	N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	5	6	18
Chromium	ppm	ASTM D5185(m)	>4	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>35	2	1	3
Tin	ppm	ASTM D5185(m)	>4	<1	<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	16	27	22
Barium	ppm	ASTM D5185(m)	5	0	0	1
Molybdenum	ppm	ASTM D5185(m)	50	47	46	56
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	560	519	518	546
Calcium	ppm	ASTM D5185(m)	1510	1537	1482	1486
Phosphorus	ppm	ASTM D5185(m)	780	685	717	702
Zinc	ppm	ASTM D5185(m)	870	860	823	859
Sulfur	ppm	ASTM D5185(m)	2040	2091	2072	1998
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	7	8	21
Sodium	ppm	ASTM D5185(m)		5	4	6
Potassium	ppm	ASTM D5185(m)	>20	<1	2	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.1	7.9	9.4
Sulfation	Abs./1mm	ASTM D7415*	>30	20.3	19.6	20.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	17.4	16.4	17.3

