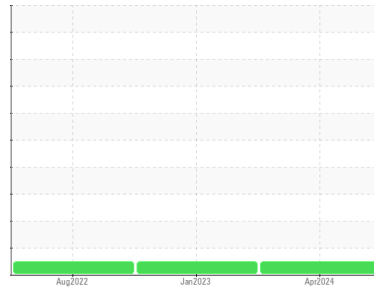




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

810061

Component

Diesel Engine

Fluid

PETRO CANADA 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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		GFL0117301	GFL0044546	GFL0044520
Sample Date	Client Info		30 Apr 2024	18 Jan 2023	03 Aug 2022
Machine Age	kms	Client Info	85183	1303	605
Oil Age	kms	Client Info	0	600	300
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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)	>90	71	25	53
Chromium	ppm	ASTM D5185(m)	>20	3	<1	2
Nickel	ppm	ASTM D5185(m)	>2	1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	1
Aluminum	ppm	ASTM D5185(m)	>20	6	5	12
Lead	ppm	ASTM D5185(m)	>40	0	7	16
Copper	ppm	ASTM D5185(m)	>330	4	256	571
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
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)		3	8	164
Barium	ppm	ASTM D5185(m)		0	0	8
Molybdenum	ppm	ASTM D5185(m)		58	62	104
Manganese	ppm	ASTM D5185(m)		<1	<1	6
Magnesium	ppm	ASTM D5185(m)		937	940	664
Calcium	ppm	ASTM D5185(m)		1038	1155	1530
Phosphorus	ppm	ASTM D5185(m)		938	1034	697
Zinc	ppm	ASTM D5185(m)		1142	1184	863
Sulfur	ppm	ASTM D5185(m)		2342	2339	1963
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	11	8	35
Sodium	ppm	ASTM D5185(m)		5	1	6
Potassium	ppm	ASTM D5185(m)	>20	4	5	15

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0.3	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.8	6.9	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	19.3	22.4

