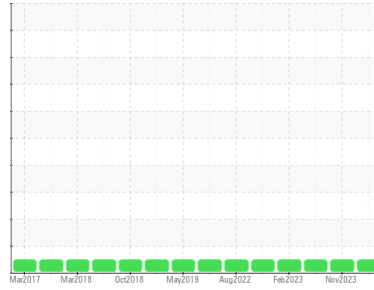




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
4516

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0102665	GFL0097637	GFL0090577
Sample Date	Client Info		02 Mar 2024	16 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info	12502	22176	11621
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Changed	N/A
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	32	29	47
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	1
Lead	ppm	ASTM D5185(m)	>40	3	3	6
Copper	ppm	ASTM D5185(m)	>330	9	12	23
Tin	ppm	ASTM D5185(m)	>15	<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)	2	7	4	7
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	61	61	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	981	987	969
Calcium	ppm	ASTM D5185(m)	1050	1092	1079	1122
Phosphorus	ppm	ASTM D5185(m)	995	1018	1020	1017
Zinc	ppm	ASTM D5185(m)	1180	1218	1221	1215
Sulfur	ppm	ASTM D5185(m)	2600	2684	2537	2353
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	3	4
Sodium	ppm	ASTM D5185(m)		3	3	4
Potassium	ppm	ASTM D5185(m)	>20	1	0	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.3	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	9.6	9.2	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	22.9	26.4

