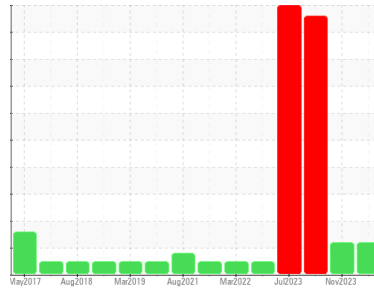




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
8133
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0119026	GFL0101713	GFL0090614
Sample Date	Client Info		13 Jun 2024	24 Nov 2023	18 Aug 2023
Machine Age	hrs	Client Info	16665	16333	15813
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	0.0	▲ 0.464

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	35	7	11
Chromium	ppm	ASTM D5185(m)	>5	2	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	4	1	2
Lead	ppm	ASTM D5185(m)	>30	<1	2	7
Copper	ppm	ASTM D5185(m)	>150	8	14	● 177
Tin	ppm	ASTM D5185(m)	>5	0	0	<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	9	2	9
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	53	64	118
Manganese	ppm	ASTM D5185(m)	0	2	0	<1
Magnesium	ppm	ASTM D5185(m)	950	804	905	760
Calcium	ppm	ASTM D5185(m)	1050	937	968	873
Phosphorus	ppm	ASTM D5185(m)	995	841	957	946
Zinc	ppm	ASTM D5185(m)	1180	998	1112	996
Sulfur	ppm	ASTM D5185(m)	2600	2233	2484	2341
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	15	3	7
Sodium	ppm	ASTM D5185(m)		25	● 264	● 1780
Potassium	ppm	ASTM D5185(m)	>20	1	1	▲ 10
Fuel	%	ASTM D7593*	>5	▲ 5.8	<1.0	<1.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.6	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.5	5.9	10.0
Sulfation	Abs./1mm	ASTM D7415*	>30	20.7	18.3	19.4

