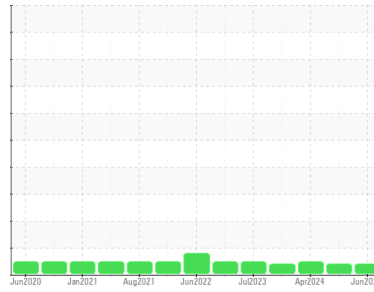




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
925006
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time. The fluid was specified as PETRO CANADA DURON SHP 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0113196	GFL0113234	GFL0113245
Sample Date	Client Info		25 Jun 2024	14 Jun 2024	16 Apr 2024
Machine Age	hrs	Client Info	17016	0	17016
Oil Age	hrs	Client Info	16485	22946	16485
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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) >120	8	4	6
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >5	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	3	1	2
Lead	ppm	ASTM D5185(m) >40	<1	0	0
Copper	ppm	ASTM D5185(m) >330	2	<1	<1
Tin	ppm	ASTM D5185(m) >15	0	0	0
Antimony	ppm	ASTM D5185(m)	<1	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) 0	25	35	96
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	42	36	3
Manganese	ppm	ASTM D5185(m) 0	<1	<1	0
Magnesium	ppm	ASTM D5185(m) 1010	475	448	51
Calcium	ppm	ASTM D5185(m) 1070	1572	1690	2105
Phosphorus	ppm	ASTM D5185(m) 1150	684	733	887
Zinc	ppm	ASTM D5185(m) 1270	822	874	1086
Sulfur	ppm	ASTM D5185(m) 2060	1890	2134	2690
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	4	5	3
Sodium	ppm	ASTM D5185(m)	3	2	3
Potassium	ppm	ASTM D5185(m) >20	1	<1	5
Fuel	%	ASTM D7593* >3.0	1.8	1.5	<1.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.5	0.1	0.8
Nitration	Abs/cm	ASTM D7624* >20	9.2	7.2	8.6
Sulfation	Abs./1mm	ASTM D7415* >30	22.8	22.1	21.7

