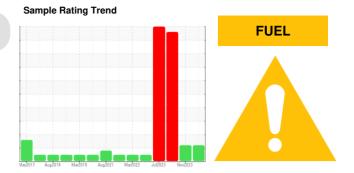






Machine Id 8133 Diesel Engine

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.

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 INFORM	1ATION	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	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	▲ 0.464
WEAR METALS	3	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
CONTAMINANT	ΓS	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	<u> </u>
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



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02644004 Unique Number : 5801543

: GFL0119026

: 25 Jun 2024 Received **Tested** Diagnosed

: 26 Jun 2024 : 26 Jun 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW 8409 -15th Street NW Edmonton, AB **CA T6P 0B8** Contact: Tim Greig

> tgreig@gflenv.com T: (780)231-0521