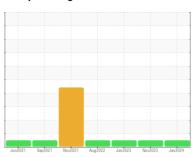


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 787M Component Diesel Engli

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

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

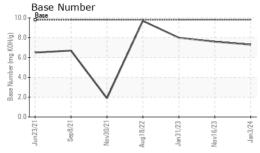
Fluid Condition

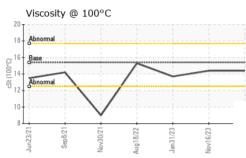
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Jun2021	Sep2021 Nov2021	Aug2022 Jan2023 Nov2023	Jan 2024	
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108809	GFL0101530	GFL0068618
Sample Date		Client Info		03 Jan 2024	16 Nov 2023	31 Jan 2023
Machine Age	hrs	Client Info		16979	16632	14587
Oil Age	hrs	Client Info		16632	14587	11595
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	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	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	38	36	14
Chromium	ppm	ASTM D5185m	>20	1	2	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	9
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m		<1	2	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m	7.0	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	66	65	63
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1113	953	892
Calcium	ppm	ASTM D5185m	1070	1241	1125	1103
Phosphorus	ppm	ASTM D5185m	1150	1208	1056	1010
Zinc	ppm	ASTM D5185m	1270	1487	1269	1211
Sulfur	ppm	ASTM D5185m	2060	3364	2908	2730
CONTAMINAN [*]	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	5	4
Sodium	ppm	ASTM D5185m		4	2	4
Potassium	ppm	ASTM D5185m	>20	9	15	19
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.2	1.2	0.7
Nitration	Abs/cm	*ASTM D7624	>20	12.5	11.5	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	23.9	20.8
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	20.2	17.7
Base Number (BN)		ASTM D2896			7.6	8.0
Dase Mulliber (DIV)	mg KOH/g	49 LINI D5030	9.8	7.3	7.0	0.0



OIL ANALYSIS REPORT

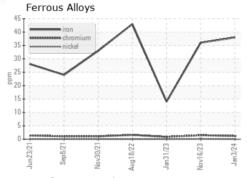


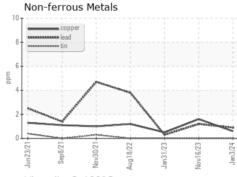


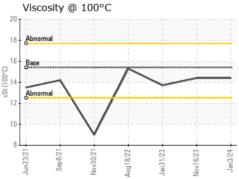
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

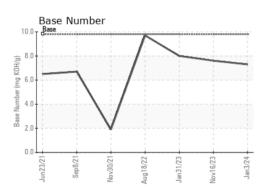
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.4	13.7	

GRAPHS













Certificate L2367

Laboratory

Sample No. Lab Number Test Package : FLEET

Unique Number : 10830409

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0108809 : 06059027

Recieved : 12 Jan 2024 Diagnosed

: 12 Jan 2024

Diagnostician : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

GFL Environmental - 415 - Michigan East

6200 Elmridge Sterling Heights, MI US 48313 Contact: Frank Wolak

fwolak@gflenv.com T: (586)825-9514

Submitted By: Frank Wolak