

PROBLEM SUMMARY

Sample Rating Trend

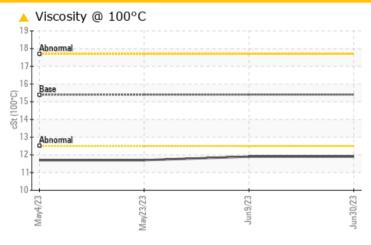
VISCOSITY

713028
Component

Diesel Engine

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status				ATTENTION	ATTENTION	ATTENTION		
Visc @ 100°C	cSt	ASTM D445	15.4	<u> </u>	△ 11.9	<u>▲</u> 11.7		

Customer Id: GFL821 Sample No.: GFL0076787 Lab Number: 05892063 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

09 Jun 2023 Diag: Sean Felton

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



23 May 2023 Diag: Sean Felton

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



04 May 2023 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.





OIL ANALYSIS REPORT

Sample Rating Trend

Mayb223 Mayb223 Jund223 Jund223





713028
Component

Diesel Engine

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

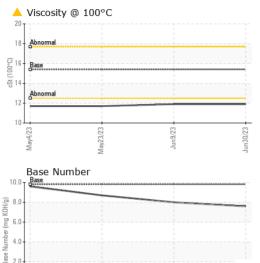
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

aAL)		May202	3 May2023	Jun2023 Ju	un2023	
SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		GFL0076787	GFL0065448	GFL0076801
Sample Date		Client Info		30 Jun 2023	09 Jun 2023	23 May 2023
Machine Age	hrs	Client Info		564	409	278
Oil Age	hrs	Client Info		564	409	200
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	ATTENTION	ATTENTION
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	43	31	24
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	<1	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	14	12	12
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	36	33	42
Barium	ppm	ASTM D5185m	0	3	0	2
Molybdenum	ppm	ASTM D5185m	60	49	47	45
Manganese	ppm	ASTM D5185m	0	6	5	5
Magnesium	ppm	ASTM D5185m	1010	875	854	852
Calcium	ppm	ASTM D5185m	1070	1258	1268	1233
Phosphorus	ppm	ASTM D5185m	1150	709	723	750
Zinc	ppm	ASTM D5185m	1270	917	926	920
Sulfur	ppm	ASTM D5185m	2060	2829	2782	2825
CONTAMINAN	ITS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	16	16	15
Sodium	ppm	ASTM D5185m		6	6	6
Potassium	ppm	ASTM D5185m	>20	4	4	2
INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	0.6	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	12.1	11.0	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	21.9	21.1
FLUID DEGRA	OATION	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.7	21.1	20.0
Base Number (BN)	mg KOH/g			7.6	8.0	8.7
(=)	99					



0.0

OIL ANALYSIS REPORT

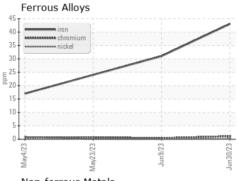


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPE	RTIES	method	limit/base	current	history 1	history 2

<u>11.9</u>

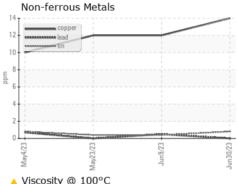
11.7

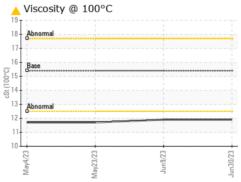
Visc @ 100°C **GRAPHS**

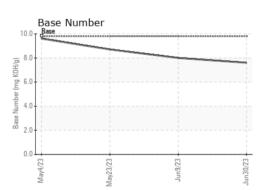


cSt

ASTM D445 15.4











Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10547873

: GFL0076787 : 05892063 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Jul 2023 Diagnosed : 09 Jul 2023 Diagnostician : Doug Bogart

GFL Environmental - 821 - Ozarks Hauling 33924 Olath Drive Lebanon, MO

US 65536 Contact: Landen Johnson landen.johnson@gflenv.com T: (417)664-0010

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)

Report Id: GFL821 [WUSCAR] 05892063 (Generated: 07/09/2023 15:13:10) Rev: 1

Contact/Location: GFL821, GFL824 and GFL829 - Landen Johnson - GFL821