



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	NORMAL	NORMAL	
Visc @ 100°C	cSt	ASTM D445	15.4	12.0	14.1	14.0	

Customer Id: GFL465 Sample No.: GFL0082788 Lab Number: 05920089 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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

RECOMMENDED	RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description			
Change Fluid			?	Oil and filter change at the time of sampling has been noted.			
Change Filter			?	Oil and filter change at the time of sampling has been noted.			

HISTORICAL DIAGNOSIS



11 Aug 2022 Diag: Wes Davis

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



view report

24 May 2022 Diag: Wes Davis



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Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

03 Mar 2022 Diag: Wes Davis





Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



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

	- UAL)	Mar2021	Jun2021 Sep2021 Dec20	21 Mar2022 May2022 Aug202	2 Aug2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0082788	GFL0053756	GFL0053784
Sample Date		Client Info		03 Aug 2023	11 Aug 2022	24 May 2022
Machine Age	hrs	Client Info		12637	11781	11213
Oil Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	15	7	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	2	1	<1
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	5	5
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	60	9	54	56
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	130	829	912
Calcium	ppm	ASTM D5185m	1070	2133	966	1177
Phosphorus	ppm	ASTM D5185m	1150	854	872	1008
Zinc	ppm	ASTM D5185m	1270	1089	1099	1241
Sulfur	ppm	ASTM D5185m	2060	3177	2557	2991
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	16	4	4
Sodium	ppm	ASTM D5185m		5	3	2
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
Fuel	%	ASTM D3524	>3.0	0.3	<1.0	<1.0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.4	1.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.0	12.4	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	26.3	20.0
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	21.4	15.8
Base Number (BN)	ma KOH/a	ASTM D2896	9.8	5.2	7.5	8.3

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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.



OIL ANALYSIS REPORT

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	VISUAL		methou	mill/base	current	riistory i	TIISTOL A
	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	*\/isual	NONE	NONE	NONE	NONE
- 23		scalar	*Visual	NORMI	NORM	NORMI	NORMI
Aug3	Odor	scalar	*\/isual	NORMI	NORMI	NORMI	NORMI
	Emulsified Water	scalar	*Visual		NEG	NEG	NEG
	Free Water	scalar	*Visual	20.L	NEG	NEG	NEG
			method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.0	14.1	14.0
	GRAPHS						
	Ferrous Alloys						
	16 14			1			
	12						
	10						
	6-		~				
	4						
	2-						
		Without and the second second	2				
	r13/2 18/2 p20/2	ec8/2 ar3/22	11/22	1g3/23			
	Ma Jun Ser	0 2	May	AL			
2	Non-ferrous Meta	als					
911/2	copper						
Au	8 - sessessesses lead						
	E						
	4						
	2	The second se		- Alexandream			
	0	Contraction of the local division of the loc	A REAL PROPERTY AND A REAL	The boll-strength			
	r13/21	ec8/21 ar3/22	24/22	g3/23			
	Ma Jur Sep	M D	May	Au			
	Viscosity @ 100°	С			Base Number		
	18 Abnormal			1	0.0 Base		
					8.0		~
	-16			B/HO>			
	Base			, Buj	6.0		
	ts 14			mber	4.0		
	13	\sim		se Nu			
	Abnormal	1	1 1		2.0		
	11				0.0		
	3/21-	8/21	4/22	3/23 -	3/21- 8/21-	8/21-	4/22 - 1/22 - 3/23 -
	Mar1. Jun 1. Sep 2(Dec Mar3	May24 Aug 1 1	Aug	Mar1. Jun1.	Dec Mar3	May2 ⁴ Aug11 Aug3
Laboratory	: WearCheck USA -	501 Madi	son Ave., Ca	ary, NC 275	13 GFL I	Environmental	- 465 - Pontiac
Sample No.	: GFL0082788	Receive	d :09	Aug 2023			888 Baldwin
Lab Number	: 05920089 • 10592003	Diagnos	ed :11 tician : Do	Aug 2023 n Baldridge			Pontiac, MI
Tost Package	· · FLEET (Additional	Toete: Fi	uciaii . D0	aroontEucl)	Contost	Diala Matthewa

 Certificate L2367
 Test Package
 : FLEET (Additional Tests: FuelDilution, PercentFuel)

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 * - 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)

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