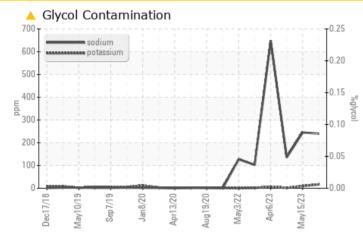


725051-361608

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	ATTENTION	ATTENTION	
Sodium	ppm	ASTM D5185m		<u> </u>	4 245	1 36	

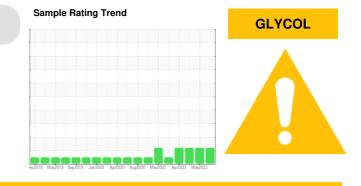
Customer Id: GFL865 Sample No.: GFL0083437 Lab Number: 05934757 Test Package: FLEET



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 customerservice@wearcheck.com



RECOMMENDE	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.			
Resample			?	We recommend an early resample to monitor this condition.			

HISTORICAL DIAGNOSIS



15 May 2023 Diag: Jonathan Hester

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



view report

18 Apr 2023 Diag: Jonathan Hester



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Sodium and/or potassium levels remain high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

06 Apr 2023 Diag: Jonathan Hester



We advise that you check for possible coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN level is low.





OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL

Machine Ic 725051-361608

Component **Diesel Engine**

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

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

GAL)		lec2018 May20	119 Sep2019 Jan2020 Ap	r2020 Aug2020 May2022 Apr2023	May2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0083437	GFL0065154	GFL0074198
Sample Date		Client Info		17 Aug 2023	15 May 2023	18 Apr 2023
Machine Age	hrs	Client Info		20925	20329	0
Oil Age	hrs	Client Info		20925	20329	0
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	24	16	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
		ACTI DELCE		0	0	0
Titanium	ppm	ASTM D5185m		U	0	0
Titanium Silver	ppm ppm	ASTM D5185m ASTM D5185m	>2	0	0	0
			>2 >25	-		
Silver	ppm	ASTM D5185m		0 4 2	0	0
Silver Aluminum Lead Copper	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25	0 4 2 4	0	0 <1 0 <1
Silver Aluminum Lead Copper Tin	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45	0 4 2 4 <1	0 3 1 <1 <1	0 <1 0 <1 0
Silver Aluminum Lead Copper Tin Vanadium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45 >85	0 4 2 4 <1 0	0 3 1 <1 <1 0	0 <1 0 <1 0 0
Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45 >85	0 4 2 4 <1	0 3 1 <1 <1	0 <1 0 <1 0
Silver Aluminum Lead Copper Tin Vanadium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45 >85	0 4 2 4 <1 0	0 3 1 <1 <1 0	0 <1 0 <1 0 0
Silver Aluminum Lead Copper Tin Vanadium Cadmium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45 >85 >4	0 4 2 4 <1 0 0	0 3 1 <1 <1 0 0 0 <u>history1</u> 2	0 <1 0 <1 0 0 0
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >45 >85 >4 limit/base 0	0 4 2 4 <1 0 0 0 current	0 3 1 <1 <1 0 0 0 history1	0 <1 0 <1 0 0 0 0 0 history2
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>25 >45 >85 >4 limit/base 0	0 4 2 4 <1 0 0 0 current 2	0 3 1 <1 <1 0 0 0 <u>history1</u> 2	0 <1 0 <1 0 0 0 0 history2 2
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>25 >45 >85 >4 limit/base 0 0 60	0 4 2 4 <1 0 0 0 <i>current</i> 2 0	0 3 1 <1 <1 <1 0 0 0 <u>history1</u> 2 0	0 <1 0 <1 0 0 0 0 history2 2 0
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >45 >85 >4 limit/base 0 0 60	0 4 2 4 <1 0 0 0 <i>current</i> 2 0 75	0 3 1 <1 <1 <1 0 0 0 history1 2 0 72	0 <1 0 <1 0 0 0 0 history2 2 0 64
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>25 >45 >85 >4 limit/base 0 0 60 0	0 4 2 4 <1 0 0 0 <i>current</i> 2 0 75 <1	0 3 1 <1 <1 <1 0 0 0 history1 2 0 72 <1	0 <1 0 <1 0 0 0 0 history2 2 0 64 <1
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>25 >45 >85 >4 limit/base 0 0 0 60 0 1010 1070 1150	0 4 2 4 <1 0 0 0 <i>current</i> 2 0 75 <1 1080	0 3 1 <1 <1 0 0 0 <u>history1</u> 2 0 72 <1 1037	0 <1 0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>25 >45 >85 >4 limit/base 0 0 0 60 0 1010 1070	0 4 2 4 <1 0 0 0 <u>current</u> 2 0 75 <1 1080 1206	0 3 1 <1 <1 0 0 0 <u>history1</u> 2 0 72 <1 1037 1117	0 <1 0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	5	5	3
Sodium	ppm	ASTM D5185m		<u> </u>	4 245	1 36
Potassium	ppm	ASTM D5185m	>20	17	10	2
Glycol	%	*ASTM D2982		NEG	NEG	NEG
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.3	8.5	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	20.9	17.2
FLUID DEGRAD		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	15.8	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.3	9.3	8.4



12

700

600

500

400

200

100

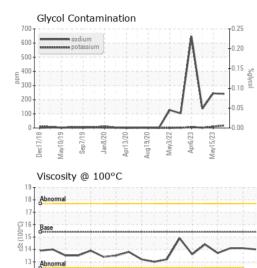
Dec17/18

Dec1

May10/19 Sen7/19

Glycol Contamination

OIL ANALYSIS REPORT

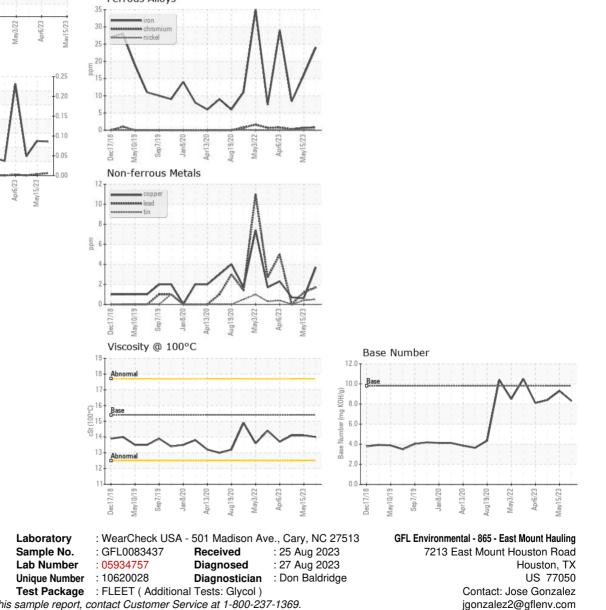


ua19/2(

ug19/20 Mav3/22

nr13/7

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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.1	14.1
GRAPHS						
Ferrous Alloys						



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)

Certificate L2367

Submitted By: TECHNICIAN ACCOUNT

Т:

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