

PROBLEM SUMMARY

Sample Rating Trend

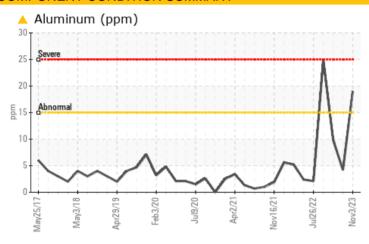


Machine Id **10678** Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (9 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 AB				ABNORMAL	NORMAL	NORMAL	
Aluminum	ppm	ASTM D5185m	>15	<u> </u>	4	10	

Customer Id: GFL095 Sample No.: GFL0092484 Lab Number: 06000369 Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

03 Aug 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. 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.



11 May 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. 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.



21 Feb 2023 Diag: Don Baldridge

WEAR



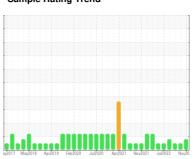
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id 10678 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (9 GAL)

DIAGNOSIS

Recommendation

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

📤 Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

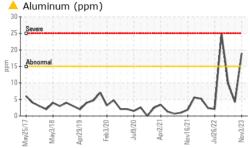
Fluid Condition

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

ν/2017 Μογ2018 Αρτ2019 Feb2020 Ju2020 Αρτ2021 Νον2021 Ju2022 Νον20							
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0092484	GFL0074612	GFL0074602	
Sample Date		Client Info		03 Nov 2023	03 Aug 2023	11 May 2023	
Machine Age	hrs	Client Info		19058		17534	
Oil Age	hrs	Client Info		349		17534	
Oil Changed		Client Info		Not Changd	Changed	Changed	
Sample Status				ABNORMAL	NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2	
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>75	36	46	62	
Chromium	ppm	ASTM D5185m	>5	1	2	3	
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1	
Titanium	ppm	ASTM D5185m	>2	<1	0	<1	
Silver	ppm	ASTM D5185m	>2	0	<1	<1	
Aluminum	ppm	ASTM D5185m	>15	<u> </u>	4	10	
Lead	ppm	ASTM D5185m	>25	1	<1	4	
Copper	ppm	ASTM D5185m	>100	1	0	2	
Tin	ppm	ASTM D5185m	>4	2	<1	1	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		<1	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	4	4	23	
Barium	ppm	ASTM D5185m	0	5	0	0	
Molybdenum	ppm	ASTM D5185m	60	62	71	76	
Manganese	ppm	ASTM D5185m	0	<1	<1	<1	
Magnesium	ppm	ASTM D5185m	1010	849	1104	1039	
Calcium	ppm	ASTM D5185m	1070	1002	1226	1275	
Phosphorus	ppm	ASTM D5185m	1150	971	1161	1068	
Zinc	ppm	ASTM D5185m	1270	1140	1506	1361	
Sulfur	ppm	ASTM D5185m	2060	2765	3835	3283	
CONTAMINAN	ITS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	8	9	
Sodium	ppm	ASTM D5185m		3	14	73	
Potassium	ppm	ASTM D5185m	>20	2	1	4	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.5	0.7	0.9	
Nitration	Abs/cm	*ASTM D7624	>20	9.1	11.4	12.9	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	22.8	26.4	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	20.1	23.9	
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.2	6.1	5.6	
(= • •)	99						



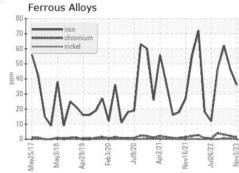
OIL ANALYSIS REPORT



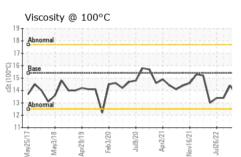
	VISUAL		method	limit/base	current
	White Metal	scalar	*Visual	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE
	Precipitate	scalar	*Visual	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML
	Odor	scalar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

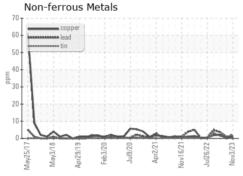
Base	ase A		FLUID PROPERTIES		limit/base	current	history1	history2
	L M	Visc @ 100°C	cSt	ASTM D445	15.4	13.0	13.6	14.4

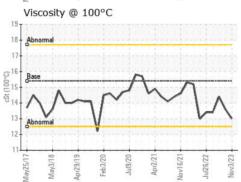
Base Number 12.0 Base Number (mg KOH/g) 7.9 8 0.1 0.0

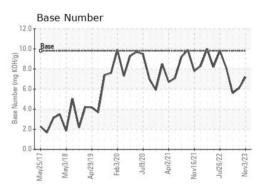


GRAPHS









history1

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

history2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

Test Package : FLEET

: GFL0092484 : 06000369 : 10728729

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Nov 2023 Diagnosed : 08 Nov 2023 : Don Baldridge Diagnostician

GFL Environmental - 095 - Atlanta West

2699 Cochran Industrial Blvd Douglasville, GA US 30127-1332 Contact: Darrell Welch darrell.welch@gflenv.com

T: (800)207-6618

* - 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)