

PROBLEM SUMMARY

Sample Rating Trend

DEGRADATION

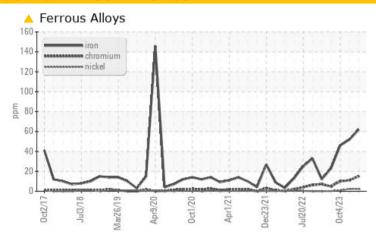


Machine Id **10774C**

Component **Natural Gas Engine**

PETRO CANADA DURON GEO LD 15W40 (30 QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
Iron	ppm	ASTM D5185m	>50	△ 62	<u>^</u> 52	46		
Chromium	ppm	ASTM D5185m	>4	<u> </u>	<u> </u>	<u> </u>		
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	△ 0.6	△ 1.9	2.8		

Customer Id: GFL030 Sample No.: GFL0090071 Lab Number: 05997775 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

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

12 Oct 2023 Diag: Don Baldridge

DEGRADATION



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. Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN level is low.



04 Oct 2023 Diag: Don Baldridge

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The chromium 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 suitable for further service.

view report

20 Mar 2023 Diag: Jonathan Hester

NORMAL



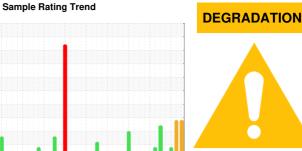
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

DT



Machine Id 10774C Component

Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (30 QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

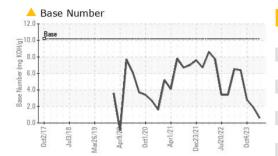
▲ Fluid Condition

The BN level is low.

CAMPLE INCODE	. ქენე შემენ ამ							
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		GFL0090071	GFL0090116	GFL0090095		
Sample Date		Client Info		02 Nov 2023	12 Oct 2023	04 Oct 2023		
Machine Age	mls	Client Info		190800	16080	190204		
Oil Age	mls	Client Info		600	600	0		
Oil Changed		Client Info		Changed	Changed	N/A		
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
WEAR METAL	S	method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	62	<u>^</u> 52	46		
Chromium	ppm	ASTM D5185m	>4	<u> </u>	<u> 11</u>	<u></u> 10		
Nickel	ppm	ASTM D5185m	>2	2	2	1		
Titanium	ppm	ASTM D5185m		<1	<1	0		
Silver	ppm	ASTM D5185m	>3	0	0	0		
Aluminum	ppm	ASTM D5185m	>9	5	5	3		
Lead	ppm	ASTM D5185m	>30	16	13	12		
Copper	ppm	ASTM D5185m	>35	3	2	1		
Tin	ppm	ASTM D5185m	>4	1	1	1		
Vanadium	ppm	ASTM D5185m		<1	0	0		
Cadmium	ppm	ASTM D5185m		0	<1	0		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	5	4	5		
Barium	ppm	ASTM D5185m	5	0	10	0		
Molybdenum	ppm	ASTM D5185m	50	68	62	66		
Manganese	ppm	ASTM D5185m	0	2	2	1		
Magnesium	ppm	ASTM D5185m	560	730	639	767		
	ppm	ASTM D5185m	1510	1890	1772	1869		
Phosphorus		ASTM D5185m ASTM D5185m	780	1890 868	1772 895	1869 952		
Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	780 870	1890 868 1162	1772 895 1061	1869 952 1215		
Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	780	1890 868	1772 895	1869 952		
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	780 870	1890 868 1162	1772 895 1061	1869 952 1215		
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	780 870 2040	1890 868 1162 2353	1772 895 1061 2410	1869 952 1215 2724		
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	780 870 2040 limit/base	1890 868 1162 2353 current	1772 895 1061 2410 history1	1869 952 1215 2724 history2		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	780 870 2040 limit/base >+100	1890 868 1162 2353 current	1772 895 1061 2410 history1	1869 952 1215 2724 history2		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	780 870 2040 limit/base >+100	1890 868 1162 2353 current 17 26	1772 895 1061 2410 history1 17	1869 952 1215 2724 history2 16 17		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	780 870 2040 limit/base >+100 >20	1890 868 1162 2353 current 17 26 1	1772 895 1061 2410 history1 17 17	1869 952 1215 2724 history2 16 17		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	780 870 2040 Iimit/base >+100 >20 Iimit/base	1890 868 1162 2353 current 17 26 1	1772 895 1061 2410 history1 17 17 4 history1	1869 952 1215 2724 history2 16 17 2 history2		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D5185m	780 870 2040 Iimit/base >+100 >20 Iimit/base	1890 868 1162 2353 current 17 26 1 current 0.1	1772 895 1061 2410 history1 17 17 4 history1	1869 952 1215 2724 history2 16 17 2 history2 0.1		
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	780 870 2040 limit/base >+100 >20 limit/base	1890 868 1162 2353 current 17 26 1 current 0.1 18.2	1772 895 1061 2410 history1 17 17 4 history1 0 13.9	1869 952 1215 2724 history2 16 17 2 history2 0.1 12.4		
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	780 870 2040 limit/base >+100 >20 limit/base >20 >30	1890 868 1162 2353 current 17 26 1 current 0.1 18.2 34.2	1772 895 1061 2410 history1 17 17 4 history1 0 13.9 30.1	1869 952 1215 2724 history2 16 17 2 history2 0.1 12.4 27.6		

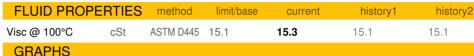


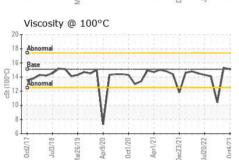
OIL ANALYSIS REPORT

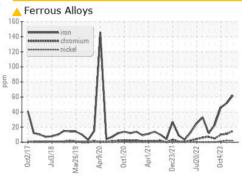


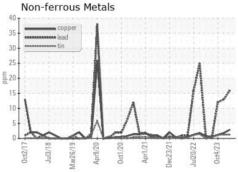
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

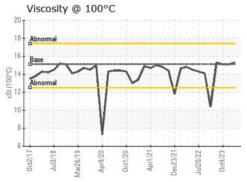
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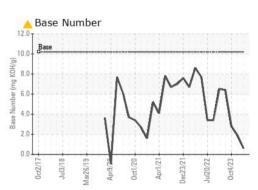
















Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : FLEET

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

: GFL0090071 : 05997775 : 10726135

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

Received Diagnosed Diagnostician : Don Baldridge

: 03 Nov 2023 : 06 Nov 2023 GFL Environmental - 030 - Conway Myrtle Beach

3010 HWY 378 Conway, SC US 29527

Contact: CHET STROSCHINE

cstroschine@gflenv.com T:

* - 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)

F: