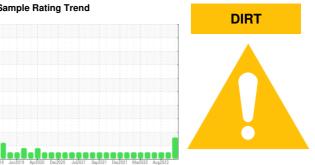


PROBLEM SUMMARY

Sample Rating Trend

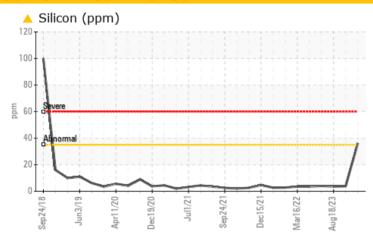


Machine Id **2720** Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (8 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS									
Sample Status				ABNORMAL	NORMAL	NORMAL			
Silicon	ppm	ASTM D5185m	>35	△ 36	4	4			

Customer Id: GFL031 Sample No.: GFL0050910 Lab Number: 06029863 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.

HISTORICAL DIAGNOSIS

20 Oct 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.



18 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.



17 May 2023 Diag: Wes Davis

NORMAL



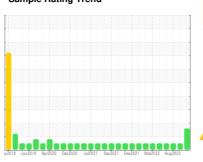
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id 2720 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (8 GAL)

DIAGNOSIS

Recommendation

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.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

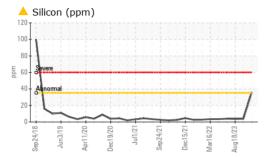
Fluid Condition

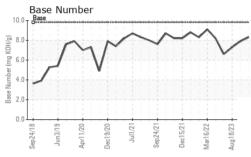
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

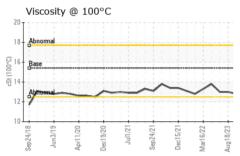
p2018 Jun2019 April200 Dec2020 Jul201 Sep2021 Dec2021 Mar2022 Aug/2023						
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0050910	GFL0050890	GFL0069782
Sample Date		Client Info		05 Dec 2023	20 Oct 2023	18 Aug 2023
Machine Age	hrs	Client Info		14215	14008	13617
Oil Age	hrs	Client Info		207	391	434
Oil Changed		Client Info		Changed	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
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>165	4	9	16
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	2
Lead	ppm	ASTM D5185m	>150	0	<1	<1
Copper	ppm	ASTM D5185m	>90	<1	2	4
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	21	14	12
Barium	ppm	ASTM D5185m	0	0	4	0
Molybdenum	ppm	ASTM D5185m	60	66	71	66
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	1010	873	889	900
Calcium	ppm	ASTM D5185m	1070	1104	1170	1170
Phosphorus	ppm	ASTM D5185m	1150	961	990	957
Zinc	ppm	ASTM D5185m	1270	1184	1239	1182
Sulfur	ppm	ASTM D5185m	2060	2904	3296	3346
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm		>35	△ 36	4	4
Sodium	ppm	ASTM D5185m		2	1	4
Potassium	ppm	ASTM D5185m	>20	<1	3	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>7.5	0.1	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.9	7.8	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	19.1	19.6
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	14.9	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.3	7.9	7.3



OIL ANALYSIS REPORT



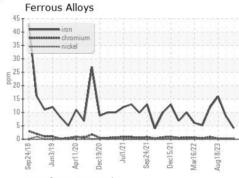


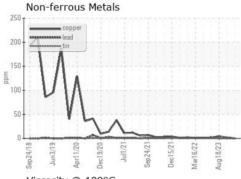


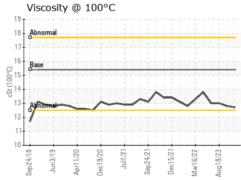
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

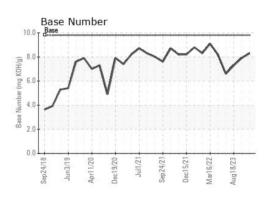
FLUID PROPE	ERITES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	12.8	13.0

GRAPHS













Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number** Test Package : FLEET

: GFL0050910 : 06029863

: 10779654

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Dec 2023 : 12 Dec 2023 Diagnosed Diagnostician : Don Baldridge

GFL Environmental - 031 - Greenville/Spartanburg 1635 Antioch Church Rd

Piedmont, SC US 29673

Contact: TECHNICIAN ACCOUNT catherine.anastasio@wearcheck.com

* - 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)

T:

F: