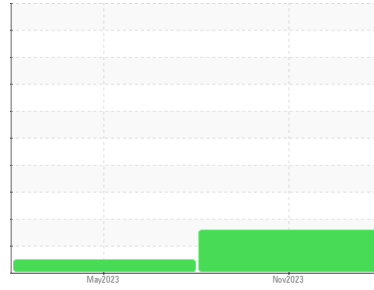




PROBLEM SUMMARY

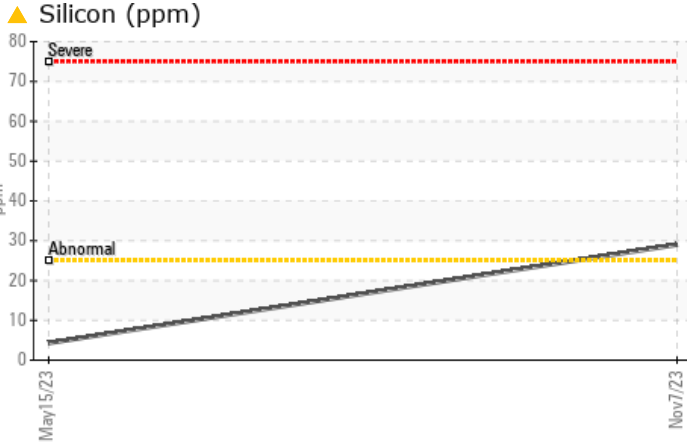
Sample Rating Trend



Area
(TB7367) S0916A-Suamico
 Machine Id
410020

Component
Front Center Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (42 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. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Silicon	ppm	ASTM D5185m	>25	▲ 29	4	---

Customer Id: GFL916A
 Sample No.: GFL0095962
 Lab Number: 06008007
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

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

15 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.

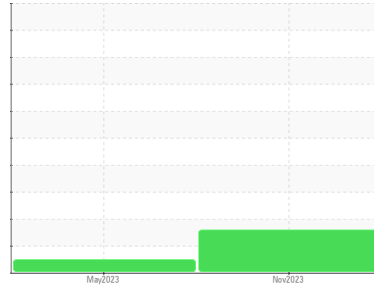
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
(TB7367) S0916A-Suamico
 Machine Id
410020

Component
Front Center Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (42 QTS)

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 indicating ingress of seal material.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0095962	GFL0074814	---
Sample Date	Client Info			07 Nov 2023	15 May 2023	---
Machine Age	hrs	Client Info		4095	4061	---
Oil Age	hrs	Client Info		288	137	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	<1.0	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	19	9	---
Chromium	ppm	ASTM D5185m	>20	3	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	0	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	5	5	---
Lead	ppm	ASTM D5185m	>40	<1	1	---
Copper	ppm	ASTM D5185m	>330	<1	0	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	12	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	69	60	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	1074	955	---
Calcium	ppm	ASTM D5185m	1070	1213	1212	---
Phosphorus	ppm	ASTM D5185m	1150	1155	1079	---
Zinc	ppm	ASTM D5185m	1270	1367	1333	---
Sulfur	ppm	ASTM D5185m	2060	3449	4031	---

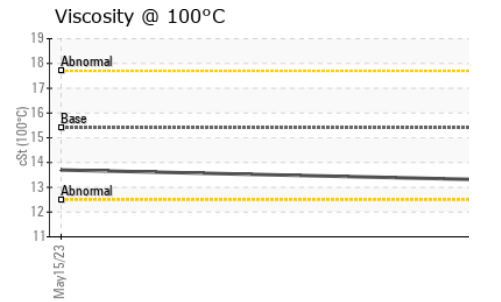
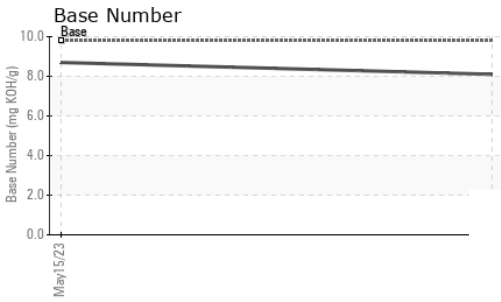
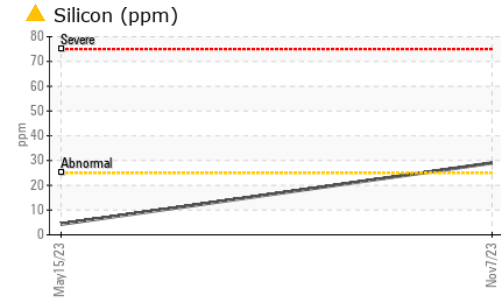
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	▲ 29	4	---
Sodium	ppm	ASTM D5185m		4	2	---
Potassium	ppm	ASTM D5185m	>20	13	7	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.4	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	14.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.1	8.7	---



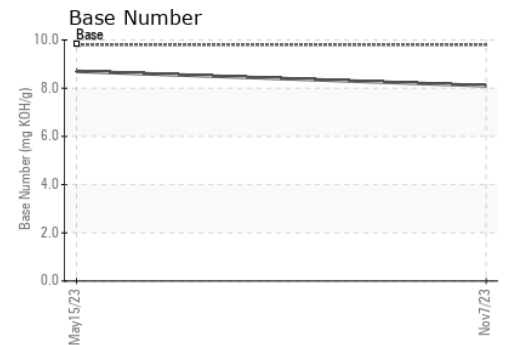
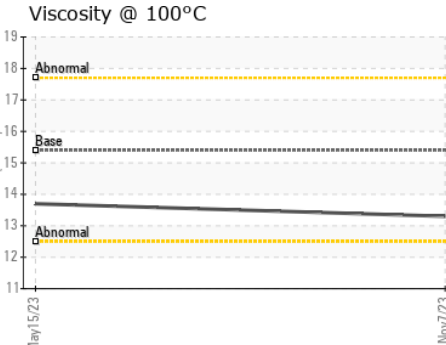
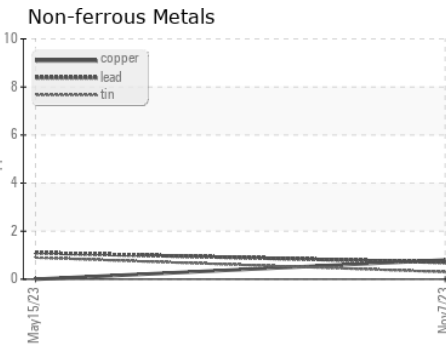
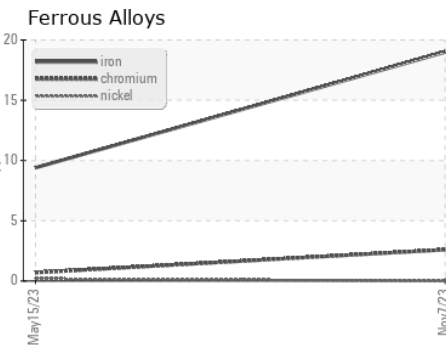
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0095962 Received : 15 Nov 2023
 Lab Number : 06008007 Diagnosed : 16 Nov 2023
 Unique Number : 10741769 Diagnostician : Sean Felton
 Test Package : FLEET

GFL Environmental - 916A - Suamico
 2300 Deerfield Ave E
 Suamico, WI
 US 54313
 Contact: NICHOLAS WEIDNER
 nweidner@gflenv.com

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)

T:
F: