



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
{UNASSIGNED}
Machine Id
934031
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0094335	---	---
Sample Date	Client Info	14 Sep 2023	---	---
Machine Age	hrs Client Info	147	---	---
Oil Age	hrs Client Info	147	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		NORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>50	37	---	---
Chromium ppm ASTM D5185m	>4	<1	---	---
Nickel ppm ASTM D5185m	>2	<1	---	---
Titanium ppm ASTM D5185m		<1	---	---
Silver ppm ASTM D5185m	>3	0	---	---
Aluminum ppm ASTM D5185m	>9	8	---	---
Lead ppm ASTM D5185m	>30	<1	---	---
Copper ppm ASTM D5185m	>35	16	---	---
Tin ppm ASTM D5185m	>4	<1	---	---
Vanadium ppm ASTM D5185m		<1	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	0	35	---	---
Barium ppm ASTM D5185m	0	0	---	---
Molybdenum ppm ASTM D5185m	60	47	---	---
Manganese ppm ASTM D5185m	0	13	---	---
Magnesium ppm ASTM D5185m	1010	757	---	---
Calcium ppm ASTM D5185m	1070	1103	---	---
Phosphorus ppm ASTM D5185m	1150	761	---	---
Zinc ppm ASTM D5185m	1270	881	---	---
Sulfur ppm ASTM D5185m	2060	3054	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>+100	32	---	---
Sodium ppm ASTM D5185m		5	---	---
Potassium ppm ASTM D5185m	>20	31	---	---

INFRA-RED

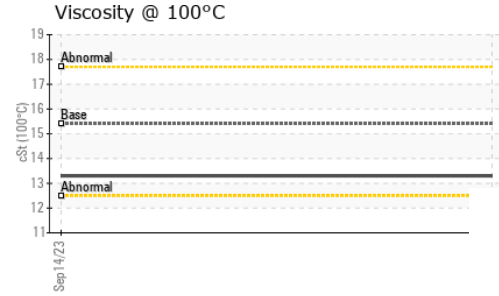
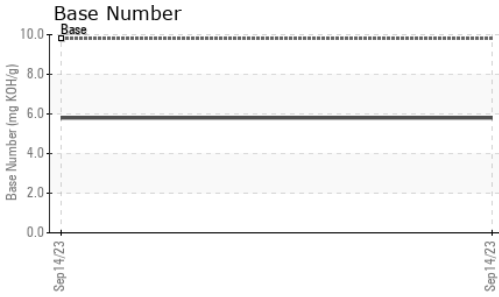
method	limit/base	current	history1	history2
Soot % *ASTM D7844		0.1	---	---
Nitration Abs/cm *ASTM D7624	>20	8.3	---	---
Sulfation Abs/.1mm *ASTM D7415	>30	25.8	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation Abs/.1mm *ASTM D7414	>25	25.7	---	---
Base Number (BN) mg KOH/g ASTM D2896	9.8	5.8	---	---



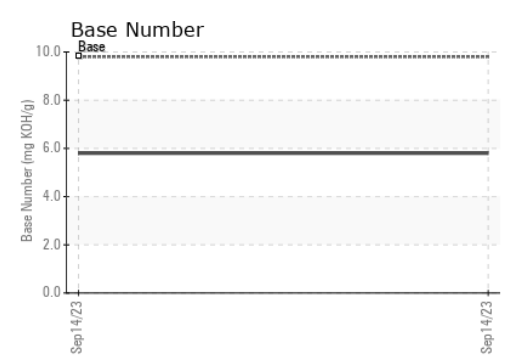
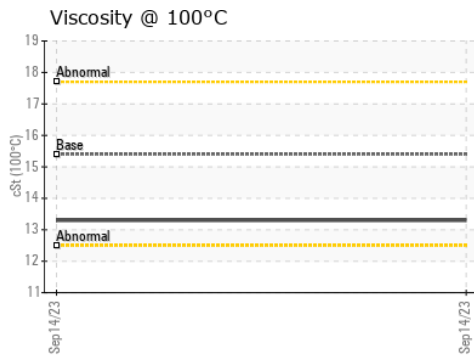
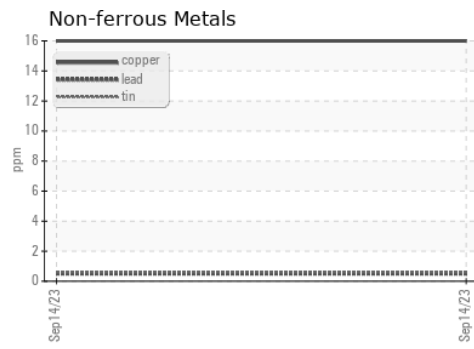
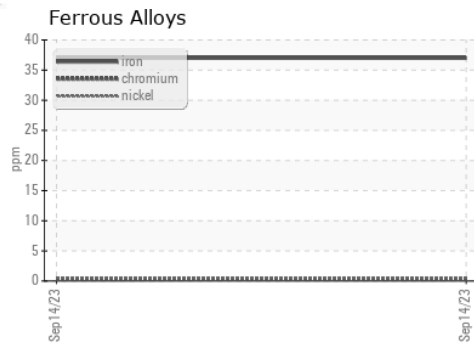
OIL ANALYSIS REPORT



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0094335 **Received** : 18 Sep 2023
Lab Number : **05953745** **Diagnosed** : 20 Sep 2023
Unique Number : 10654958 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 010 - Stockbridge
 1280 Rum Creek Parkway
 Stockbridge, GA
 US 30281
 Contact: JOSHUA TINKER
 joshuatinker@gflenv.com
 T:
 F:

Certificate L2367
 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)