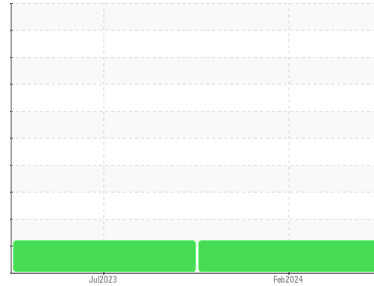


OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
G.LOPES CONSTRUCTION INC./OFF-ROAD
 Machine Id
L-63
 Component
Front Left Final Drive
 Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. Resample at the next service interval to monitor. NOTE: one of two samples received with same ID and sampling date.

Wear
 Gear wear is indicated. All other component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0098335	PCA0090749	---
Sample Date	Client Info		14 Feb 2024	03 Jul 2023	---
Machine Age	hrs	Client Info	1924	343	---
Oil Age	hrs	Client Info	1924	343	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 753	▲ 662	---
Chromium	ppm	ASTM D5185m >10	2	3	---
Nickel	ppm	ASTM D5185m >10	<1	0	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	3	5	---
Lead	ppm	ASTM D5185m >25	0	<1	---
Copper	ppm	ASTM D5185m >50	48	46	---
Tin	ppm	ASTM D5185m >10	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	0	0	---
Barium	ppm	ASTM D5185m 0	13	5	---
Molybdenum	ppm	ASTM D5185m 0	10	10	---
Manganese	ppm	ASTM D5185m 0	8	8	---
Magnesium	ppm	ASTM D5185m 9	10	11	---
Calcium	ppm	ASTM D5185m 3114	2721	3112	---
Phosphorus	ppm	ASTM D5185m 1099	1042	1071	---
Zinc	ppm	ASTM D5185m 1245	1167	1281	---
Sulfur	ppm	ASTM D5185m 7086	4523	4777	---

CONTAMINANTS

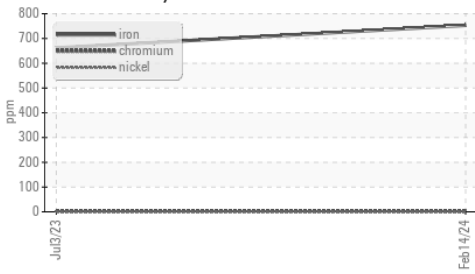
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	5	6	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	2	2	---

FLUID DEGRADATION

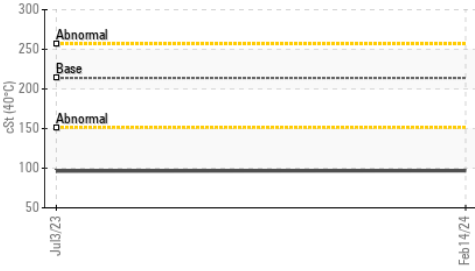
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	1.66	1.86	---

OIL ANALYSIS REPORT

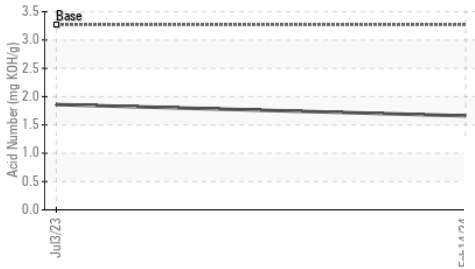
▲ Ferrous Alloys



▲ Viscosity @ 40°C



Acid Number



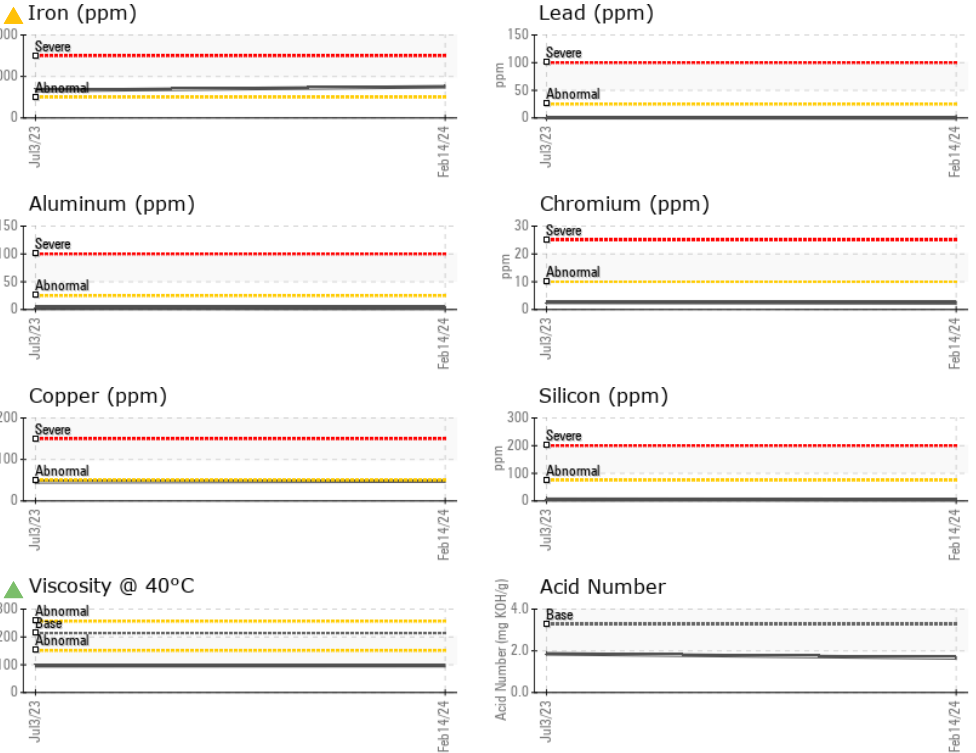
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 @ 40°C	cSt	ASTM D445	213.9 ▲ 96.8	▲ 96.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color	no image		no image
Bottom	no image		no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098335
Lab Number : **06093151**
Unique Number : 10886004
Test Package : MOB 2

Received : 19 Feb 2024
Tested : 20 Feb 2024
Diagnosed : 21 Feb 2024 - Don Baldrige

G LOPES CONSTRUCTION
 565 WINTHROP ST
 TAUNTON, MA
 US 02780
 Contact: BUTCH MCGRATH
 bmcgrath@glopes.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: