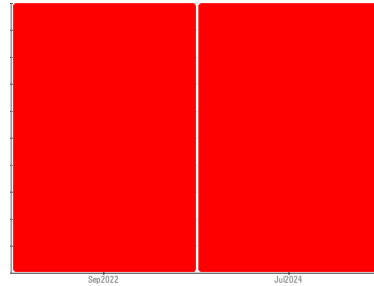


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
E60
Component
Right Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear

Gear wear is indicated.

▲ Contamination

There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0122642	PCA0078022	---
Sample Date	Client Info		02 Jul 2024	28 Sep 2022	---
Machine Age	hrs	Client Info	12277	11005	---
Oil Age	hrs	Client Info	12277	11005	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			SEVERE	SEVERE	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 8597	▲ 3761	---
Chromium	ppm	ASTM D5185m >10	▲ 37	▲ 22	---
Nickel	ppm	ASTM D5185m >5	▲ 15	7	---
Titanium	ppm	ASTM D5185m >15	42	18	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >75	● 560	● 294	---
Lead	ppm	ASTM D5185m >10	6	<1	---
Copper	ppm	ASTM D5185m >75	61	39	---
Tin	ppm	ASTM D5185m >8	0	0	---
Vanadium	ppm	ASTM D5185m	2	<1	---
Cadmium	ppm	ASTM D5185m	2	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	25	16	---
Barium	ppm	ASTM D5185m 0	3	6	---
Molybdenum	ppm	ASTM D5185m 0	10	6	---
Manganese	ppm	ASTM D5185m 0	65	29	---
Magnesium	ppm	ASTM D5185m 9	94	70	---
Calcium	ppm	ASTM D5185m 3114	1657	2766	---
Phosphorus	ppm	ASTM D5185m 1099	929	1067	---
Zinc	ppm	ASTM D5185m 1245	903	1300	---
Sulfur	ppm	ASTM D5185m 7086	10766	14014	---

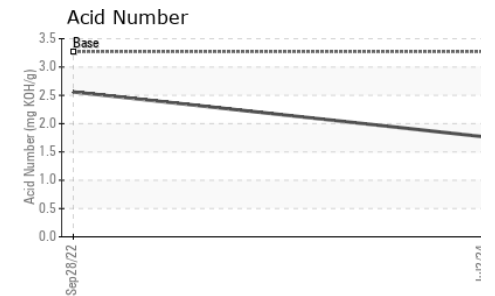
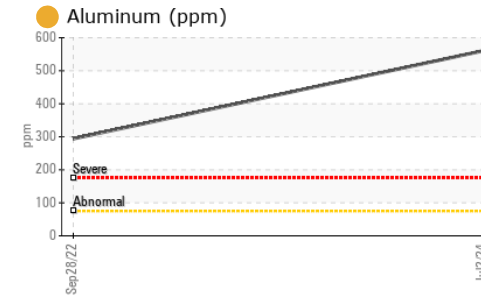
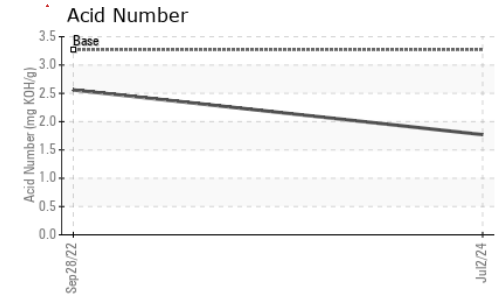
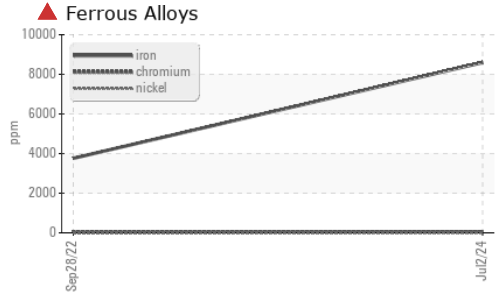
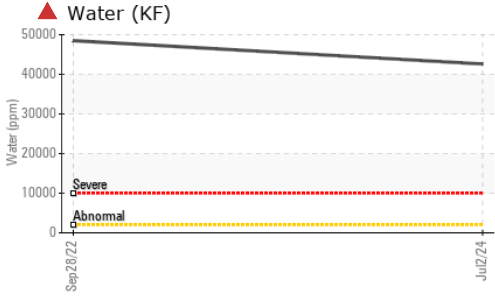
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	▲ 2757	▲ 1885	---
Sodium	ppm	ASTM D5185m	124	82	---
Potassium	ppm	ASTM D5185m >20	192	106	---
Water	%	ASTM D6304 >0.2	▲ 4.26	▲ 4.85	---
ppm Water	ppm	ASTM D6304 >2000	▲ 42600	▲ 48500	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	1.77	2.56	---



OIL ANALYSIS REPORT



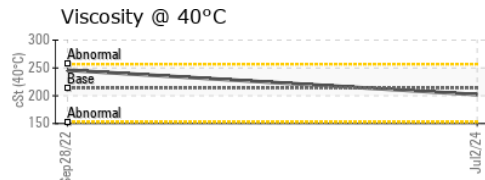
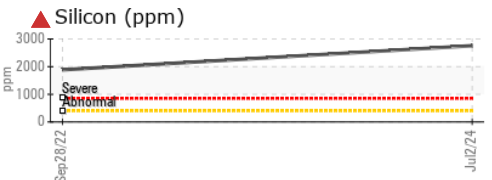
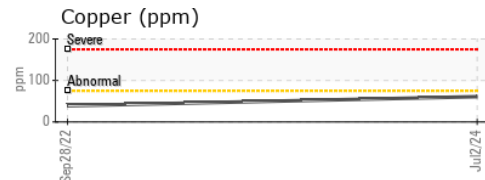
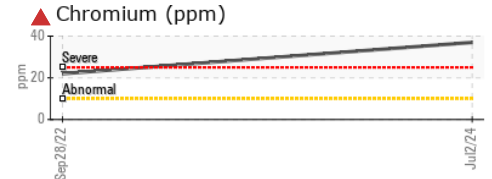
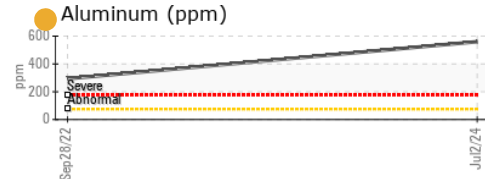
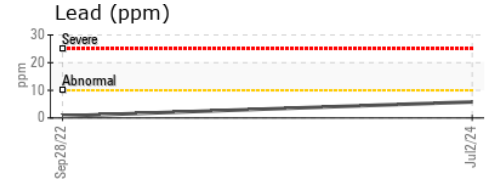
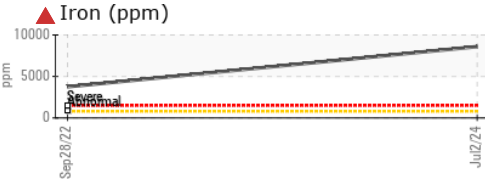
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	202	246

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122642 **Received** : 08 Jul 2024
Lab Number : 06230321 **Tested** : 09 Jul 2024
Unique Number : 11113814 **Diagnosed** : 10 Jul 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KF)

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)