



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

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.

Test	UOM	Method	Limit/Abn	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	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				SEVERE	SEVERE	---

WEAR

Gear wear is indicated.

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	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

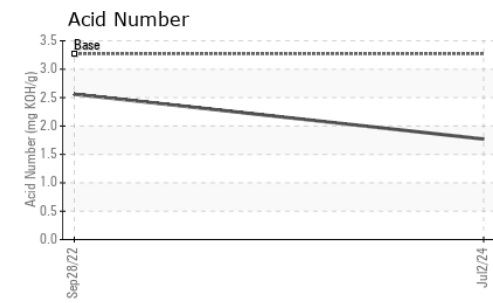
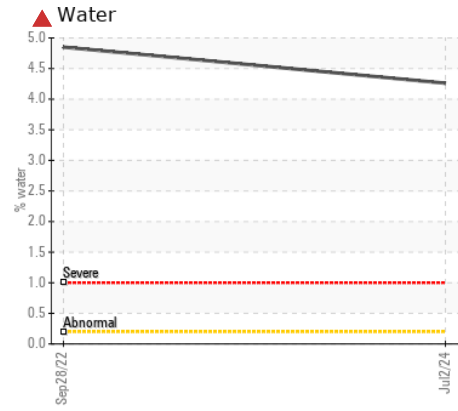
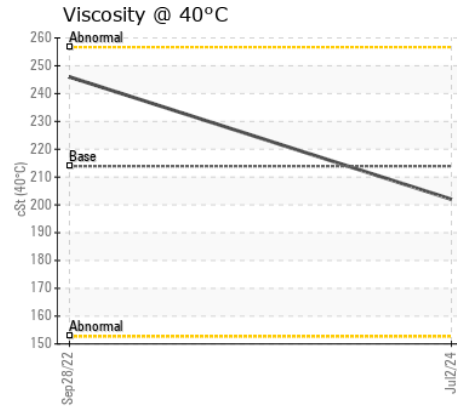
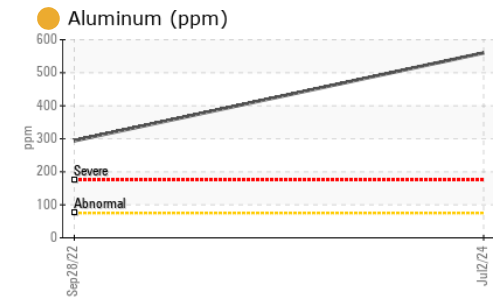
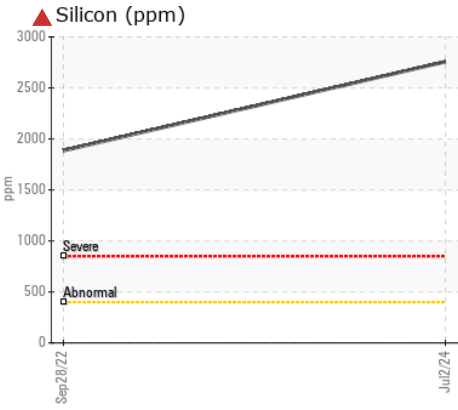
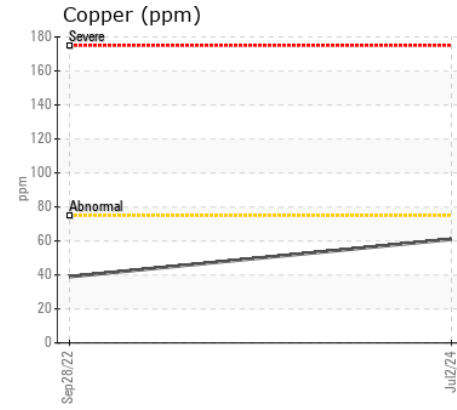
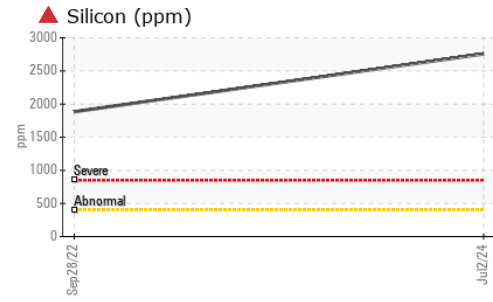
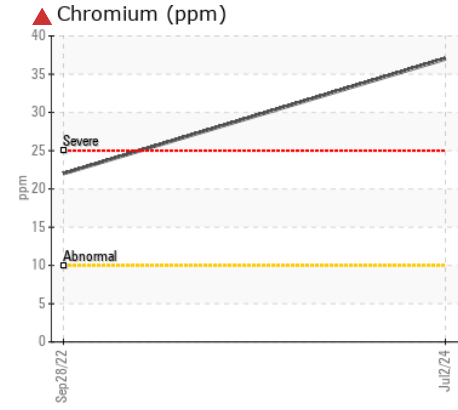
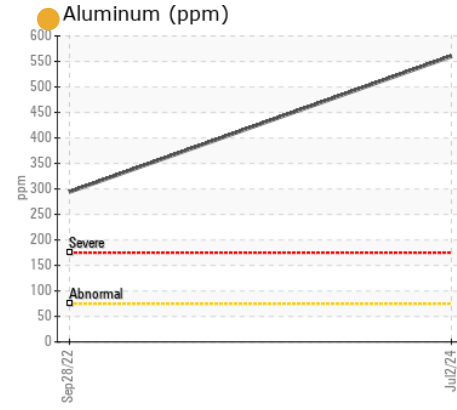
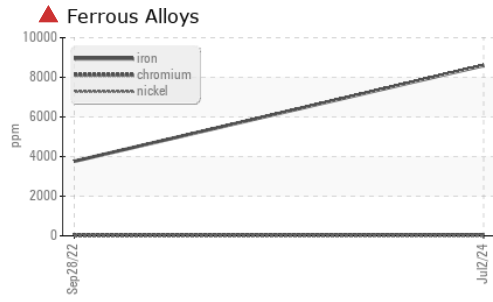
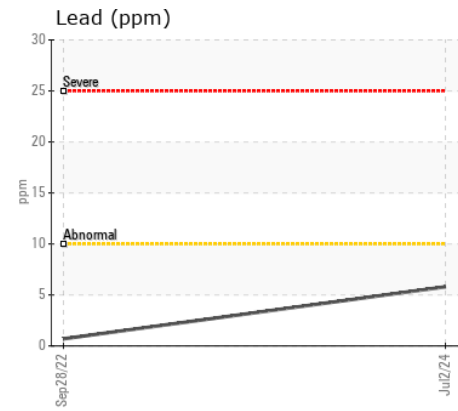
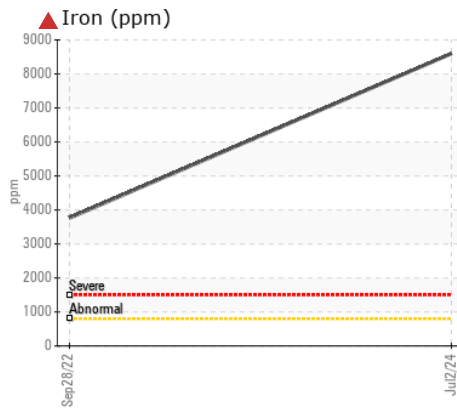
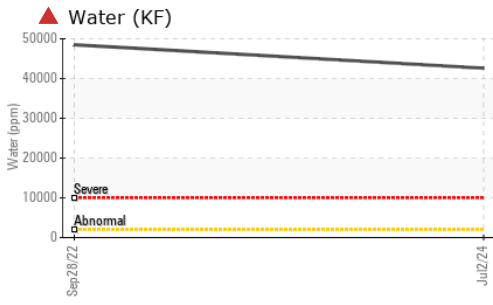
There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>400	▲ 2757	▲ 1885	---
Potassium	ppm	ASTM D5185m	>20	192	106	---
Water	%	ASTM D6304	>0.2	▲ 4.26	▲ 4.85	---
ppm Water	ppm	ASTM D6304	>2000	▲ 42600	▲ 48500	---
Silt	scalar	*Visual	NONE	MODER	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	▲ 0.2%	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		124	82	---
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	---
Acid Number (AN)	mg KOH/g	ASTM D8045	3.27	1.77	2.56	---
Visc @ 40°C	cSt	ASTM D445	213.9	202	246	---



Certificate L2367

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)