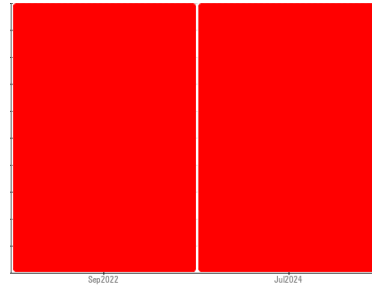


# OIL ANALYSIS REPORT



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
Machine Id  
**E60**  
Component  
**Left 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		<b>PCA0123015</b>	PCA0078028	---
Sample Date	Client Info		<b>02 Jul 2024</b>	28 Sep 2022	---
Machine Age	hrs	Client Info	<b>12277</b>	11250	---
Oil Age	hrs	Client Info	<b>12277</b>	11250	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>SEVERE</b>	SEVERE	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	<b>▲ 6195</b>	▲ 6168	---
Chromium	ppm	ASTM D5185m >10	<b>▲ 34</b>	▲ 30	---
Nickel	ppm	ASTM D5185m >5	<b>9</b>	11	---
Titanium	ppm	ASTM D5185m >15	<b>23</b>	39	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >75	<b>● 341</b>	● 624	---
Lead	ppm	ASTM D5185m >10	<b>1</b>	2	---
Copper	ppm	ASTM D5185m >75	<b>52</b>	20	---
Tin	ppm	ASTM D5185m >8	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>1</b>	1	---
Cadmium	ppm	ASTM D5185m	<b>2</b>	2	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>33</b>	44	---
Barium	ppm	ASTM D5185m 0	<b>2</b>	12	---
Molybdenum	ppm	ASTM D5185m 0	<b>8</b>	8	---
Manganese	ppm	ASTM D5185m 0	<b>52</b>	48	---
Magnesium	ppm	ASTM D5185m 9	<b>75</b>	100	---
Calcium	ppm	ASTM D5185m 3114	<b>2814</b>	2625	---
Phosphorus	ppm	ASTM D5185m 1099	<b>1036</b>	989	---
Zinc	ppm	ASTM D5185m 1245	<b>1283</b>	1174	---
Sulfur	ppm	ASTM D5185m 7086	<b>12245</b>	13358	---

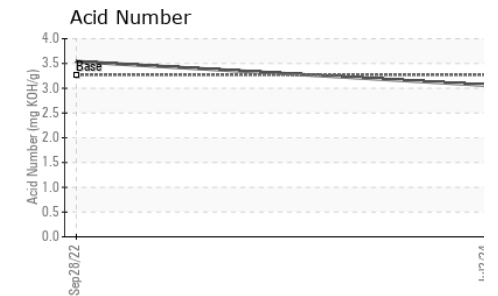
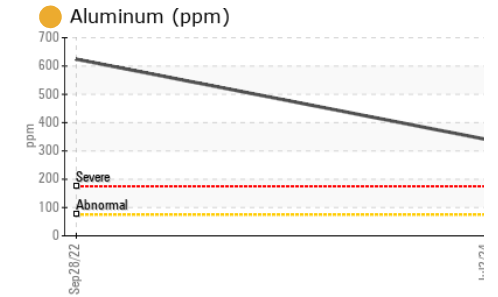
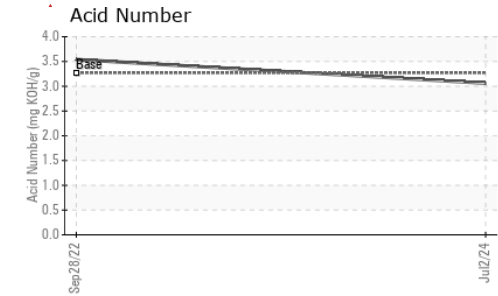
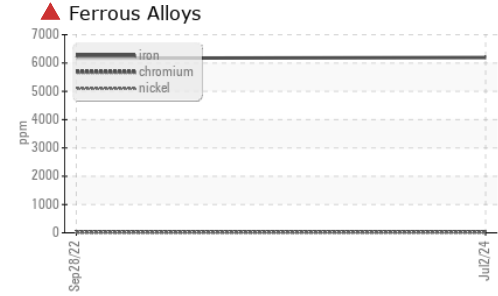
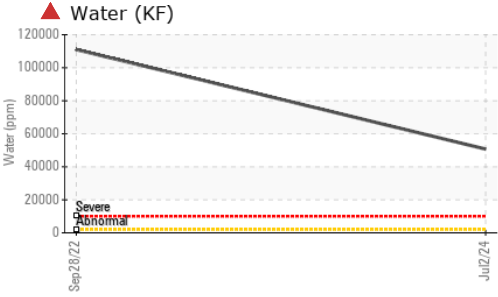
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	<b>▲ 2361</b>	▲ 3183	---
Sodium	ppm	ASTM D5185m	<b>106</b>	151	---
Potassium	ppm	ASTM D5185m >20	<b>143</b>	206	---
Water	%	ASTM D6304 >0.2	<b>▲ 5.07</b>	▲ 11.1	---
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 50700</b>	▲ 111000	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	<b>3.06</b>	3.54	---

# OIL ANALYSIS REPORT



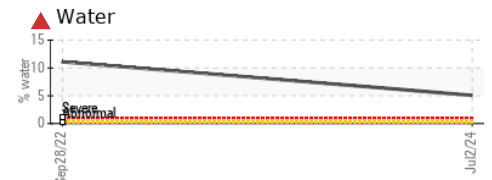
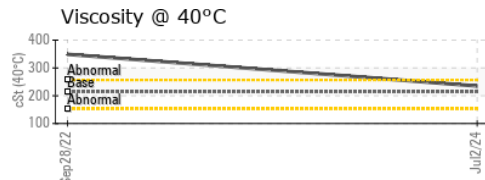
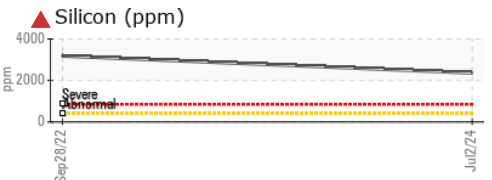
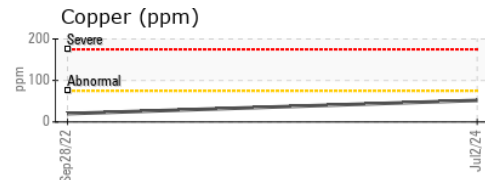
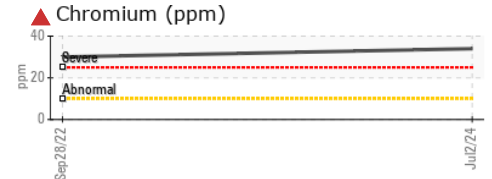
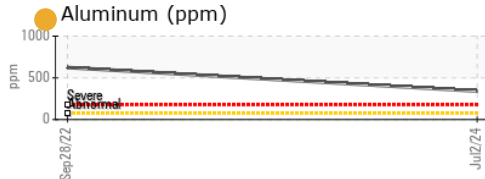
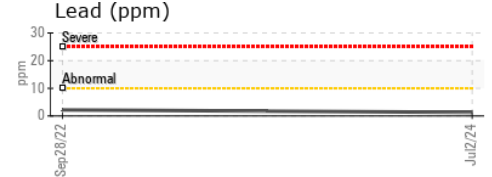
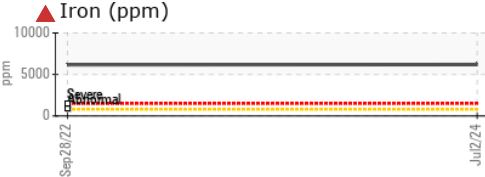
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	<b>MODER</b>	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	<b>235</b>	349

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0123015 **Received** : 08 Jul 2024  
**Lab Number** : **06230318** **Tested** : 09 Jul 2024  
**Unique Number** : 11113811 **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)

T:  
F: