

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
G.LOPES CONSTRUCTION INC./OFF-ROAD
Machine Id
E-34
Component
Left Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)



DIAGNOSIS

Recommendation

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

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0104592	---	---
Sample Date	Client Info		11 Oct 2023	---	---
Machine Age	hrs	Client Info	7847	---	---
Oil Age	hrs	Client Info	7847	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	1623	---	---
Chromium	ppm	ASTM D5185m >10	6	---	---
Nickel	ppm	ASTM D5185m >5	4	---	---
Titanium	ppm	ASTM D5185m >15	8	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >75	141	---	---
Lead	ppm	ASTM D5185m >10	<1	---	---
Copper	ppm	ASTM D5185m >75	10	---	---
Tin	ppm	ASTM D5185m >8	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	15	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 0	5	---	---
Manganese	ppm	ASTM D5185m 0	14	---	---
Magnesium	ppm	ASTM D5185m 9	86	---	---
Calcium	ppm	ASTM D5185m 3114	2649	---	---
Phosphorus	ppm	ASTM D5185m 1099	1068	---	---
Zinc	ppm	ASTM D5185m 1245	1096	---	---
Sulfur	ppm	ASTM D5185m 7086	6923	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	793	---	---
Sodium	ppm	ASTM D5185m	26	---	---
Potassium	ppm	ASTM D5185m >20	56	---	---

FLUID DEGRADATION

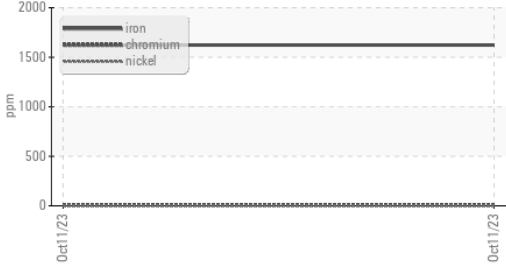
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	1.82	---	---

VISUAL

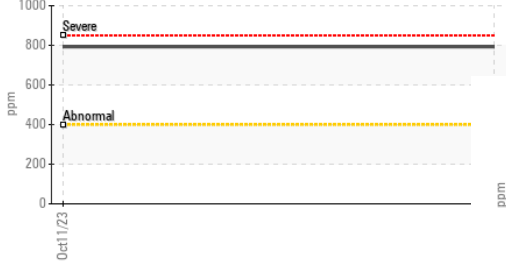
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---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

OIL ANALYSIS REPORT

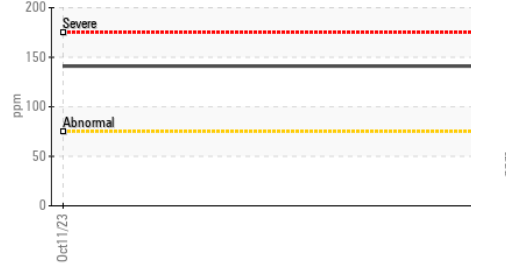
Ferrous Alloys



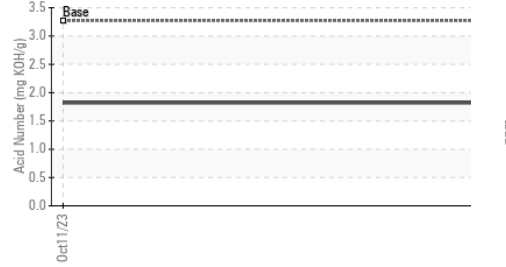
Silicon (ppm)



Aluminum (ppm)



Acid Number



Viscosity @ 40°C



FLUID PROPERTIES

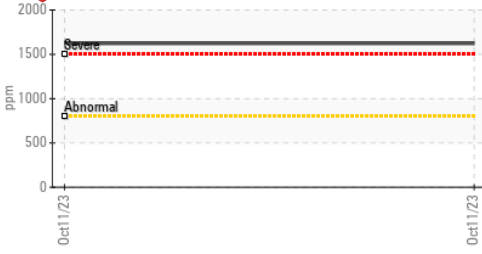
method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	213.9	101	---

SAMPLE IMAGES

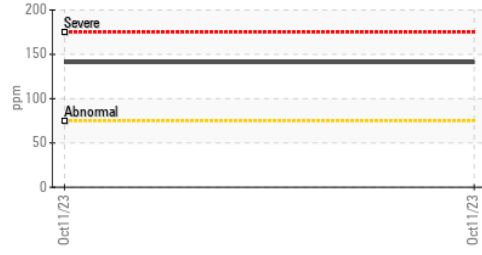
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

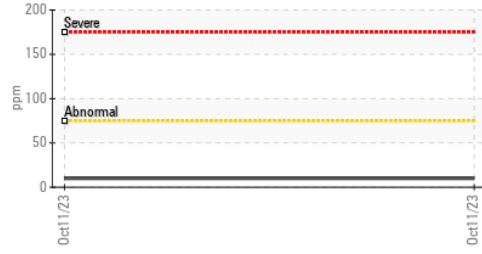
Iron (ppm)



Aluminum (ppm)



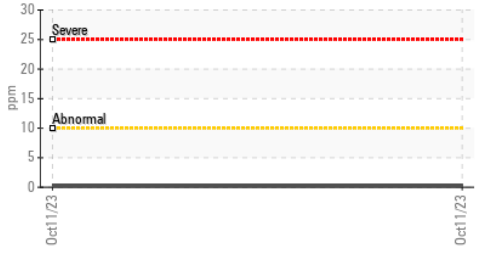
Copper (ppm)



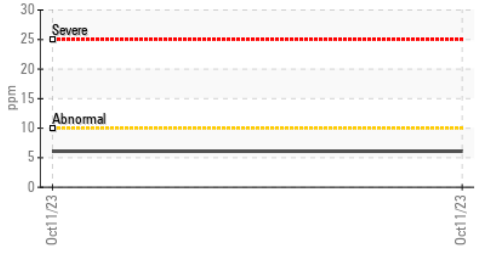
Viscosity @ 40°C



Lead (ppm)



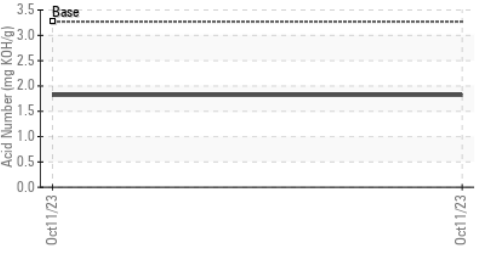
Chromium (ppm)



Silicon (ppm)



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104592 **Received** : 13 Oct 2023
Lab Number : 05978394 **Diagnosed** : 19 Oct 2023
Unique Number : 10695689 **Diagnostician** : Jonathan Hester
Test Package : MOB 2

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