

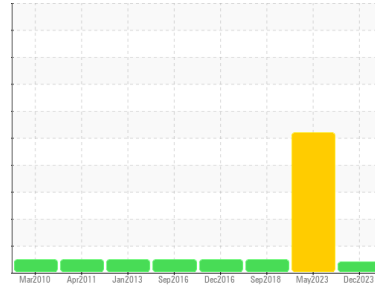
OIL ANALYSIS REPORT

Sample Rating Trend

VIS DEBRIS



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
L67
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0109863	PCA0090579	PCA82420026
Sample Date	Client Info	20 Dec 2023	09 May 2023	21 Sep 2018
Machine Age	hrs	29479	29236	23198
Oil Age	hrs	12388	12803	---
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	16	▲ 31	15
Chromium	ppm ASTM D5185m >10	6	▲ 17	0
Nickel	ppm ASTM D5185m >10	<1	<1	0
Titanium	ppm ASTM D5185m	<1	<1	---
Silver	ppm ASTM D5185m	0	0	---
Aluminum	ppm ASTM D5185m >10	3	▲ 8	1
Lead	ppm ASTM D5185m >10	2	2	4
Copper	ppm ASTM D5185m >75	5	5	9
Tin	ppm ASTM D5185m >10	<1	<1	0
Vanadium	ppm ASTM D5185m	<1	0	---
Cadmium	ppm ASTM D5185m	<1	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 110	82	93	30
Barium	ppm ASTM D5185m 0.0	7	2	0
Molybdenum	ppm ASTM D5185m 0.0	6	7	0
Manganese	ppm ASTM D5185m 1	<1	<1	---
Magnesium	ppm ASTM D5185m 13	63	69	32
Calcium	ppm ASTM D5185m 3610	2701	2833	1287
Phosphorus	ppm ASTM D5185m 1192	1045	1014	1015
Zinc	ppm ASTM D5185m 1455	1221	1306	1123
Sulfur	ppm ASTM D5185m 2641	5788	5635	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	11	▲ 22	6
Sodium	ppm ASTM D5185m	6	4	1
Potassium	ppm ASTM D5185m >20	3	5	1

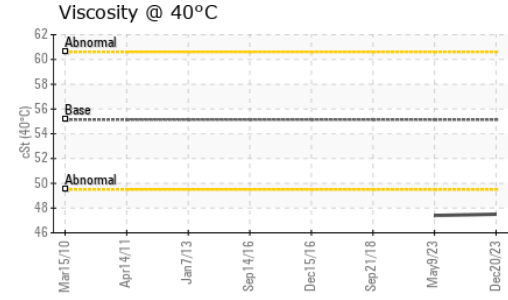
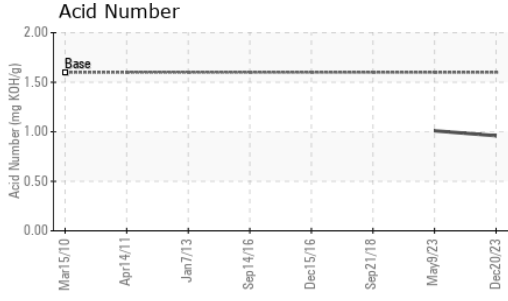
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	▲ 192265	---
Particles >6µm	ASTM D7647 >1300	---	▲ 77615	---
Particles >14µm	ASTM D7647 >160	---	12	---
Particles >21µm	ASTM D7647 >40	---	1	---
Particles >38µm	ASTM D7647 >10	---	0	---
Particles >71µm	ASTM D7647 >3	---	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	▲ 25/23/11	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.6	0.96	1.01	---

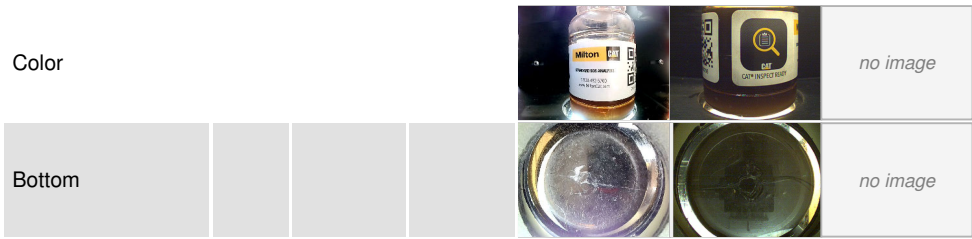
OIL ANALYSIS REPORT



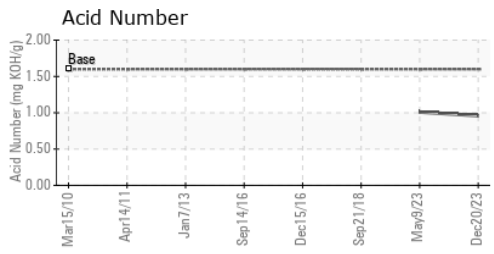
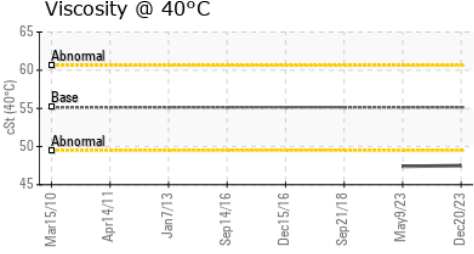
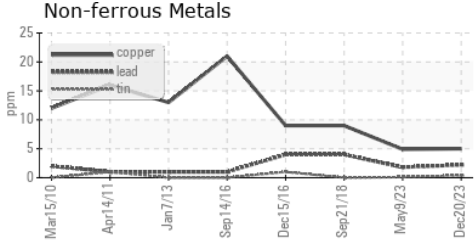
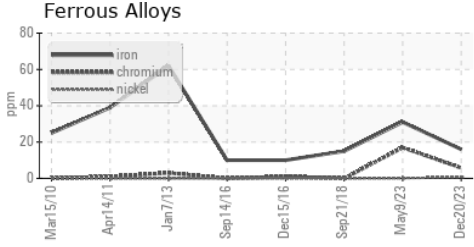
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	▲ MODER	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.14	47.5	47.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109863 **Received** : 22 Dec 2023
Lab Number : 06043161 **Diagnosed** : 27 Dec 2023
Unique Number : 10803769 **Diagnostician** : Jonathan Hester
Test Package : MOB 2

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)