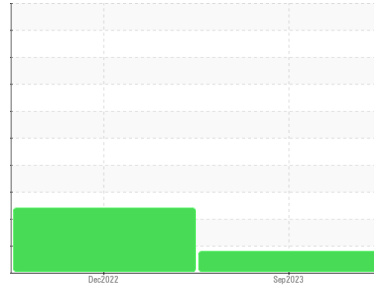


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./OFF-ROAD
 Machine Id
E-104
 Component
Hydraulic System
 Fluid
PETRO CANADA DURATRAN (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a high amount of silt (particulates < 6 microns in size) 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	PCA0104750	PCA0083409	---
Sample Date	Client Info	20 Sep 2023	06 Dec 2022	---
Machine Age	hrs	Client Info	9015	0
Oil Age	hrs	Client Info	9015	0
Oil Changed	Client Info	N/A	N/A	---
Sample Status		ABNORMAL	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	15	▲ 33
Chromium	ppm	ASTM D5185m >10	8	▲ 17
Nickel	ppm	ASTM D5185m >10	0	0
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >10	1	1
Lead	ppm	ASTM D5185m >10	0	0
Copper	ppm	ASTM D5185m >75	1	3
Tin	ppm	ASTM D5185m >10	0	0
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 110	57	7
Barium	ppm	ASTM D5185m 0.0	0	0
Molybdenum	ppm	ASTM D5185m 0.0	2	2
Manganese	ppm	ASTM D5185m 1	0	<1
Magnesium	ppm	ASTM D5185m 13	53	17
Calcium	ppm	ASTM D5185m 3610	2022	278
Phosphorus	ppm	ASTM D5185m 1192	794	460
Zinc	ppm	ASTM D5185m 1455	1057	550
Sulfur	ppm	ASTM D5185m 2641	3194	2113

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	8	4
Sodium	ppm	ASTM D5185m	3	1
Potassium	ppm	ASTM D5185m >20	4	0

FLUID CLEANLINESS

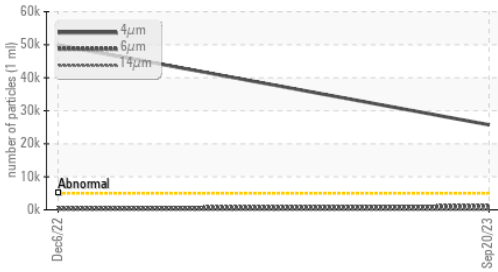
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 25742	▲ 49865	---
Particles >6µm	ASTM D7647 >1300	1138	486	---
Particles >14µm	ASTM D7647 >160	31	10	---
Particles >21µm	ASTM D7647 >40	5	3	---
Particles >38µm	ASTM D7647 >10	1	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/17/12	▲ 23/16/10	---

FLUID DEGRADATION

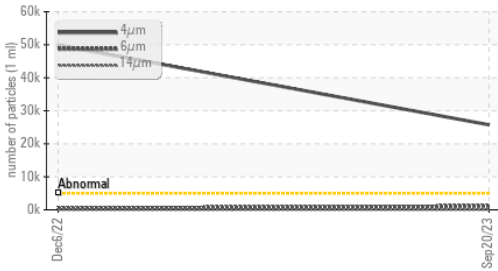
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.6	0.84	0.43

OIL ANALYSIS REPORT

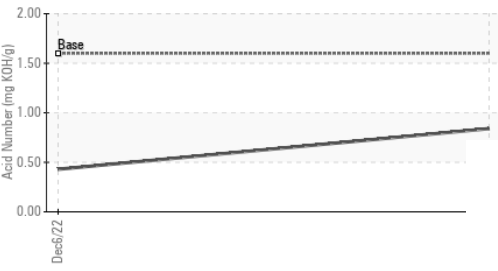
▲ Particle Trend



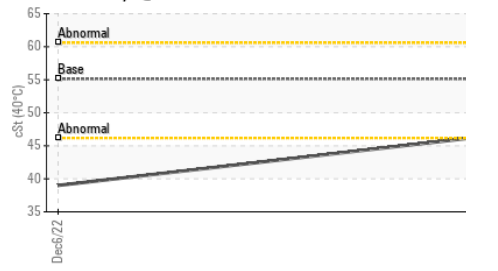
▲ Particle Trend



Acid Number



Viscosity @ 40°C



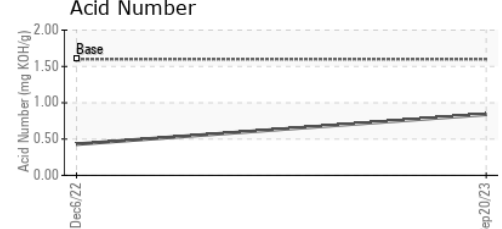
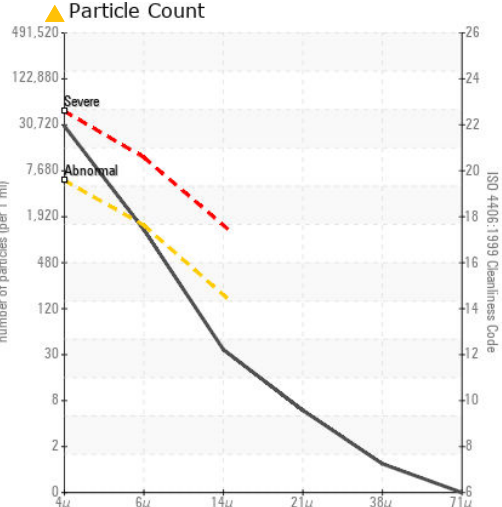
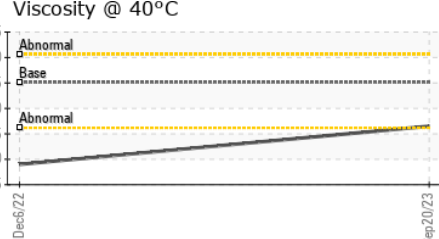
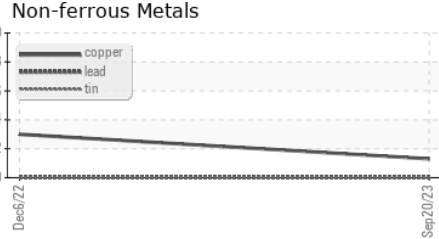
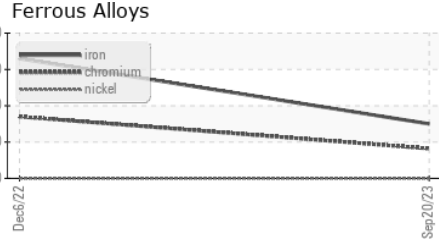
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	55.14	46.5	39.0	---

SAMPLE IMAGES

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104750 **Received** : 22 Sep 2023
Lab Number : 05958605 **Diagnosed** : 24 Sep 2023
Unique Number : 10659818 **Diagnostician** : Doug Bogart
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)

T:
F: