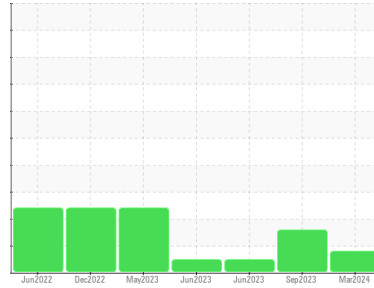


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
G.LOPES CONSTRUCTION INC./OFF-ROAD
Machine Id
L-96
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)

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 moderate amount of silt (particulates < 14 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	PCA0109940	PCA0104656	PCA0098312
Sample Date	Client Info	22 Mar 2024	05 Sep 2023	28 Jun 2023
Machine Age	hrs	6491	5682	5682
Oil Age	hrs	6491	5682	5682
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	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	6	5	4
Chromium	ppm ASTM D5185m >10	<1	0	0
Nickel	ppm ASTM D5185m >10	<1	0	0
Titanium	ppm ASTM D5185m	<1	0	<1
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	3	2	<1
Lead	ppm ASTM D5185m >10	1	0	0
Copper	ppm ASTM D5185m >75	6	4	4
Tin	ppm ASTM D5185m >10	1	0	0
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 110	16	13	11
Barium	ppm ASTM D5185m 0.0	1	7	14
Molybdenum	ppm ASTM D5185m 0.0	4	2	2
Manganese	ppm ASTM D5185m 1	<1	0	0
Magnesium	ppm ASTM D5185m 13	32	36	41
Calcium	ppm ASTM D5185m 3610	1621	1416	1363
Phosphorus	ppm ASTM D5185m 1192	845	769	752
Zinc	ppm ASTM D5185m 1455	1070	972	957
Sulfur	ppm ASTM D5185m 2641	2650	2663	2603

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	8	6	5
Sodium	ppm ASTM D5185m	0	<1	<1
Potassium	ppm ASTM D5185m >20	3	<1	<1

FLUID CLEANLINESS

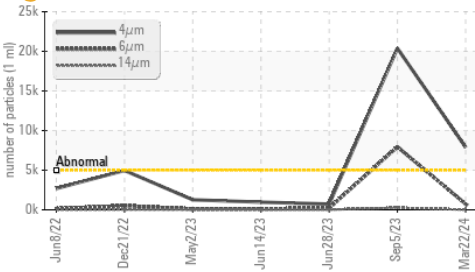
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	7897	▲ 20382	725
Particles >6µm	ASTM D7647 >1300	737	▲ 7944	223
Particles >14µm	ASTM D7647 >160	23	▲ 259	16
Particles >21µm	ASTM D7647 >40	5	30	5
Particles >38µm	ASTM D7647 >10	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	20/17/12	▲ 22/20/15	17/15/11

FLUID DEGRADATION

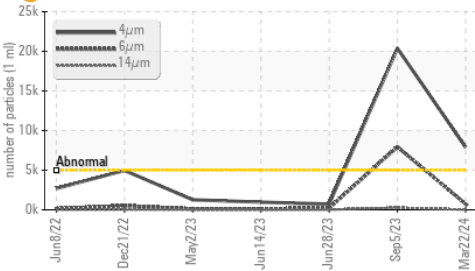
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.6	1.07	1.401	0.93

OIL ANALYSIS REPORT

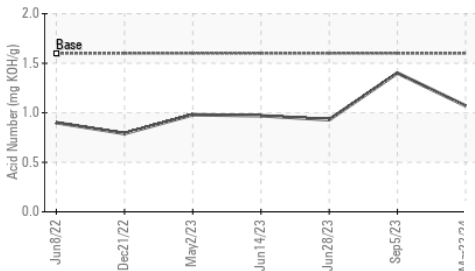
Particle Trend



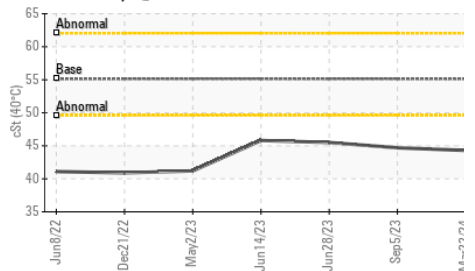
Particle Trend



Acid Number



Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
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	44.3	44.7	45.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

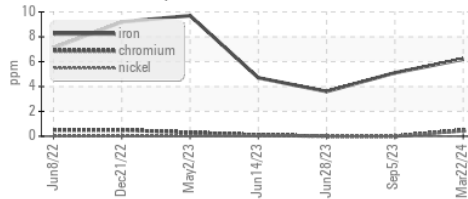


Bottom

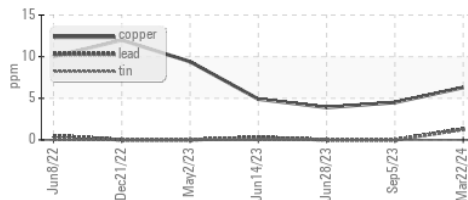


GRAPHS

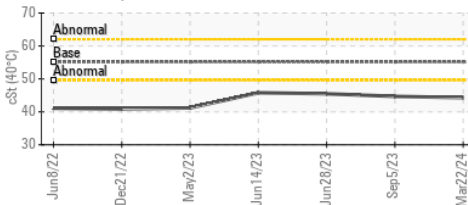
Ferrous Alloys



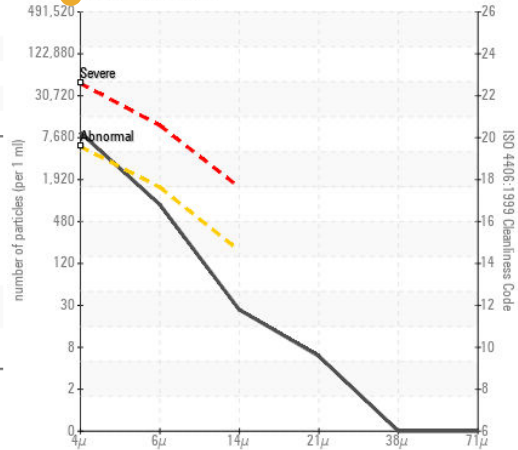
Non-ferrous Metals



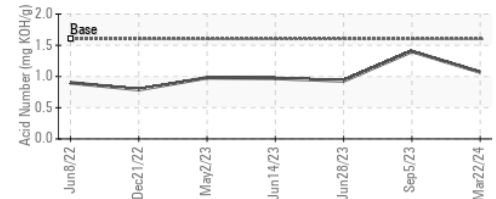
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109940
Lab Number : **06129370**
Unique Number : 10943521
Test Package : MOB 2

Received : 26 Mar 2024
Tested : 27 Mar 2024
Diagnosed : 29 Mar 2024 - Don Baldrige

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)

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F: