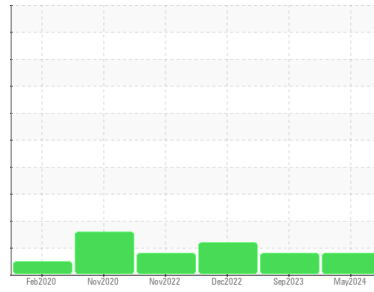


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
 Machine Id
E218
 Component
Hydraulic System
 Fluid
PETRO CANADA DURATRAN (--- GAL)

Sample Rating Trend



ISO



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0110073	PCA0104755	PCA0083340
Sample Date	Client Info		22 May 2024	27 Sep 2023	12 Dec 2022
Machine Age	hrs	Client Info	11497	11497	10838
Oil Age	hrs	Client Info	9147	9577	9210
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

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	4	6	6
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	1	<1	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >10	<1	<1	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >75	<1	2	2
Tin	ppm	ASTM D5185m >10	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 110	121	91	69
Barium	ppm	ASTM D5185m 0.0	0	0	0
Molybdenum	ppm	ASTM D5185m 0.0	4	4	6
Manganese	ppm	ASTM D5185m 1	<1	<1	0
Magnesium	ppm	ASTM D5185m 13	60	67	62
Calcium	ppm	ASTM D5185m 3610	3245	2774	2833
Phosphorus	ppm	ASTM D5185m 1192	1095	989	1023
Zinc	ppm	ASTM D5185m 1455	1316	1259	1193
Sulfur	ppm	ASTM D5185m 2641	3568	3296	4325

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	17	11	6
Sodium	ppm	ASTM D5185m	<1	2	0
Potassium	ppm	ASTM D5185m >20	0	0	2

FLUID CLEANLINESS

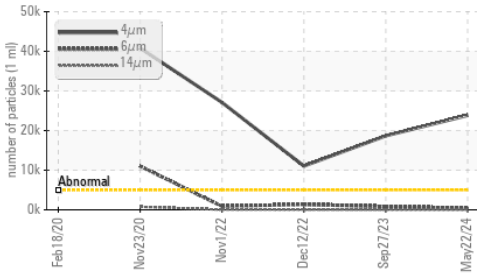
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 23842	▲ 18679	▲ 11049
Particles >6µm	ASTM D7647	>1300	410	835	● 1359
Particles >14µm	ASTM D7647	>160	7	39	50
Particles >21µm	ASTM D7647	>40	2	8	8
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/16/10	▲ 21/17/12	▲ 21/18/13

FLUID DEGRADATION

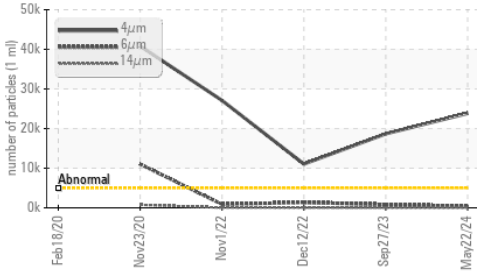
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.6	1.14	1.05	1.34

OIL ANALYSIS REPORT

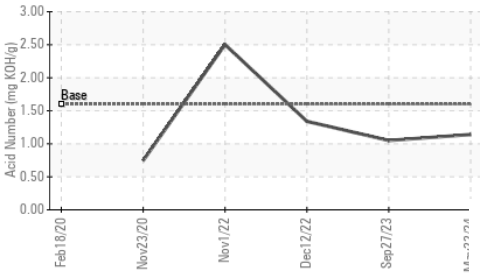
▲ Particle Trend



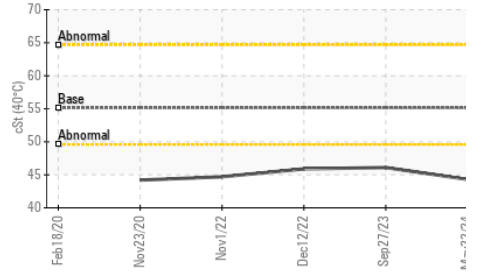
▲ Particle Trend



Acid Number



Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	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	44.3	46.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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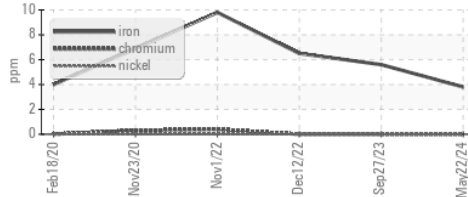
Color

Bottom

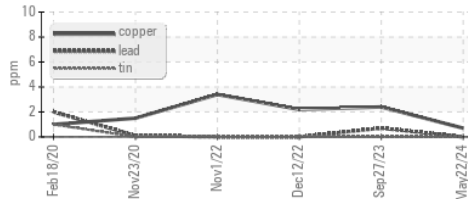


GRAPHS

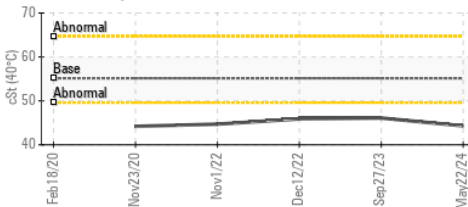
Ferrous Alloys



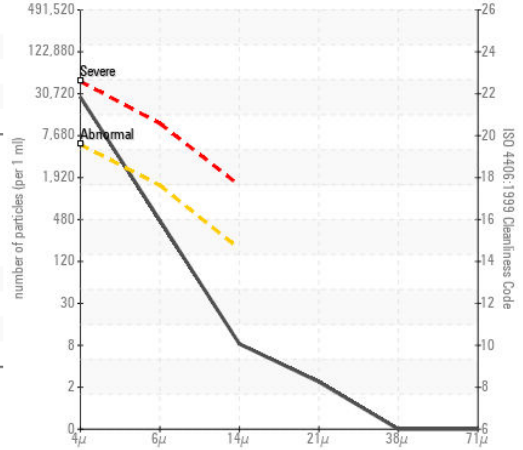
Non-ferrous Metals



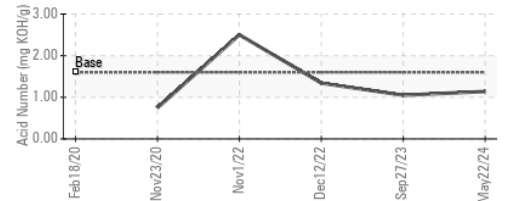
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0110073

Lab Number : 06191001

Unique Number : 11047753

Test Package : MOB 2

Received : 24 May 2024

Tested : 29 May 2024

Diagnosed : 29 May 2024 - Wes Davis

G LOPES CONSTRUCTION

565 WINTHROP ST

TAUNTON, MA

US 02780

Contact: BUTCH MCGRATH

bmcgrath@glopes.com

T:

F:

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)