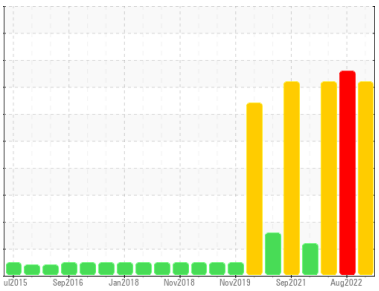
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
E83
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

The iron level is severe.

Contamination

There is a high 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 no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0109741**	PCA0078144	PCA0072035
Sample Date		Client Info		**16 Jan 2024**	17 Aug 2022	19 Apr 2022
Machine Age	hrs	Client Info		**12563**	11847	11498
Oil Age	hrs	Client Info		**11466**	10900	10900
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

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	**104**	291	187
Chromium	ppm	ASTM D5185m	>10	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	2	1
Lead	ppm	ASTM D5185m	>10	**<1**	2	1
Copper	ppm	ASTM D5185m	>75	**2**	2	1
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

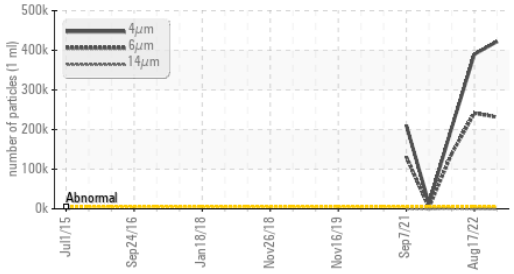
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	110	**55**	103	107
Barium	ppm	ASTM D5185m	0.0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0.0	**4**	5	5
Manganese	ppm	ASTM D5185m	1	**2**	4	3
Magnesium	ppm	ASTM D5185m	13	**52**	56	60
Calcium	ppm	ASTM D5185m	3610	**2493**	3200	3211
Phosphorus	ppm	ASTM D5185m	1192	**952**	1121	1144
Zinc	ppm	ASTM D5185m	1455	**1144**	1426	1421
Sulfur	ppm	ASTM D5185m	2641	**2997**	4456	3731

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**6**	8	8
Sodium	ppm	ASTM D5185m		**1**	6	4
Potassium	ppm	ASTM D5185m	>20	**0**	2	2

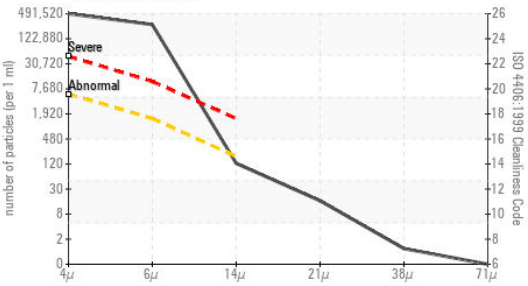
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**422225**	390101	204714
Particles >6µm		ASTM D7647	>1300	**231429**	241502	139255
Particles >14µm		ASTM D7647	>160	**110**	481	948
Particles >21µm		ASTM D7647	>40	**14**	4	2
Particles >38µm		ASTM D7647	>10	**1**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**26/25/14**	26/25/16	25/24/17

OIL ANALYSIS REPORT

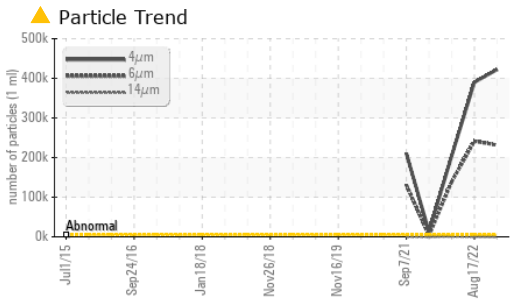
Particle Trend



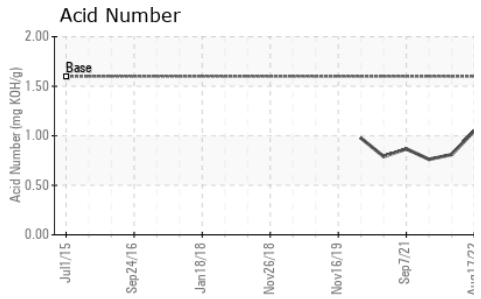
Particle Count



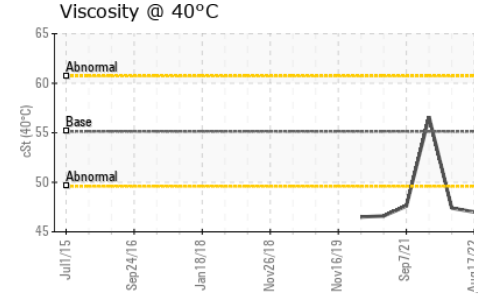
Particle Trend



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.6	**0.91**	1.05	0.81

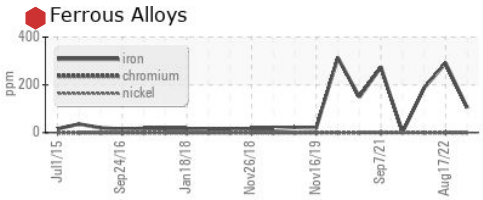
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.14	**46.8**	47.0	47.4

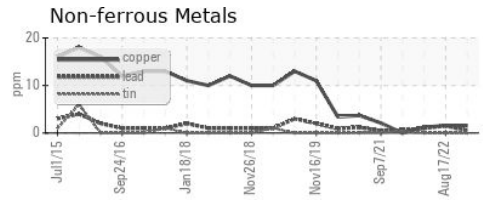
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

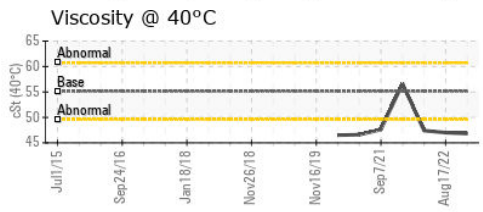
Ferrous Alloys



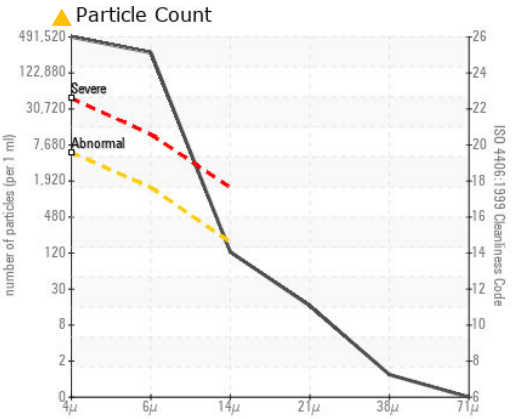
Non-ferrous Metals



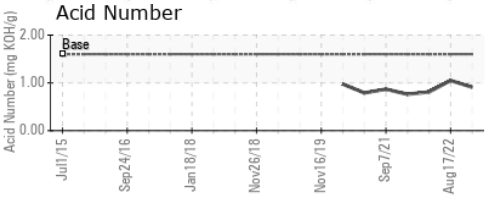
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109741
Lab Number : 06065561
Unique Number : 10836943
Test Package : MOB 2

Recieved : 19 Jan 2024
Diagnosed : 23 Jan 2024
Diagnostician : Don Baldridge

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)

G LOPES CONSTRUCTION
565 WINTHROP ST
TAUNTON, MA
US 02780
Contact: BUTCH MCGRATH
bmcgrath@glopes.com
T:
F:

Report Id: GLOTAU [WUSCAR] 06065561 (Generated: 01/23/2024 09:59:52) Rev: 1

Submitted By: MATT MANOLI