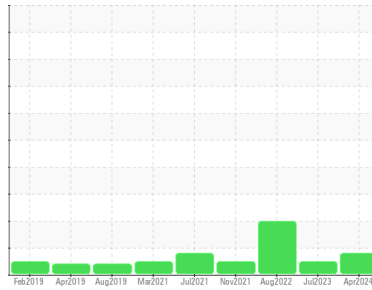


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
 Machine Id
L33
 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 < 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	PCA0122693	PCA0098413	PCA0071918
Sample Date	Client Info	23 Apr 2024	26 Jul 2023	02 Aug 2022
Machine Age	hrs	11383	9537	8246
Oil Age	hrs	6467	6085	6515
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	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	22	11	▲ 26
Chromium	ppm ASTM D5185m >10	0	0	<1
Nickel	ppm ASTM D5185m >10	0	<1	0
Titanium	ppm ASTM D5185m	<1	<1	<1
Silver	ppm ASTM D5185m	0	0	<1
Aluminum	ppm ASTM D5185m >10	3	3	3
Lead	ppm ASTM D5185m >10	0	<1	<1
Copper	ppm ASTM D5185m >75	2	2	6
Tin	ppm ASTM D5185m >10	0	0	<1
Antimony	ppm ASTM D5185m	---	---	---
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	55	57	55
Barium	ppm ASTM D5185m 0.0	0	<1	0
Molybdenum	ppm ASTM D5185m 0.0	3	4	2
Manganese	ppm ASTM D5185m 1	<1	0	<1
Magnesium	ppm ASTM D5185m 13	32	42	31
Calcium	ppm ASTM D5185m 3610	2432	2534	1499
Phosphorus	ppm ASTM D5185m 1192	970	999	837
Zinc	ppm ASTM D5185m 1455	1177	1207	1043
Sulfur	ppm ASTM D5185m 2641	3262	3046	2514

CONTAMINANTS

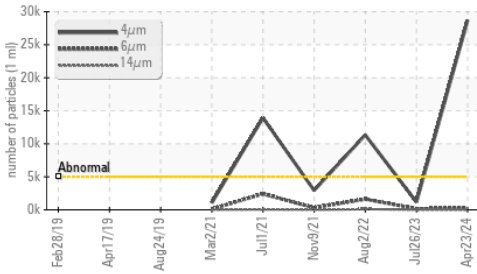
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	10	8	10
Sodium	ppm ASTM D5185m	3	0	2
Potassium	ppm ASTM D5185m >20	0	2	3

FLUID CLEANLINESS

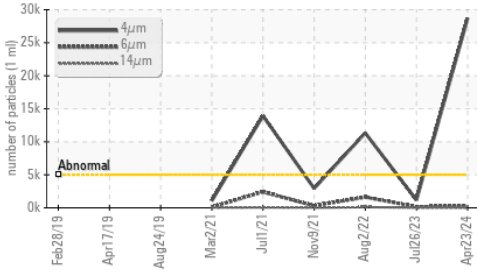
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 28679	1174	▲ 11329
Particles >6µm	ASTM D7647 >1300	240	156	● 1604
Particles >14µm	ASTM D7647 >160	3	15	102
Particles >21µm	ASTM D7647 >40	1	5	24
Particles >38µm	ASTM D7647 >10	0	1	2
Particles >71µm	ASTM D7647 >3	0	0	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/15/9	17/14/11	▲ 21/18/14

OIL ANALYSIS REPORT

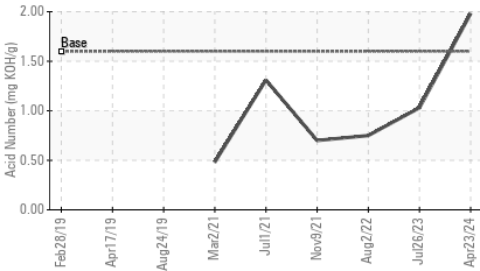
▲ Particle Trend



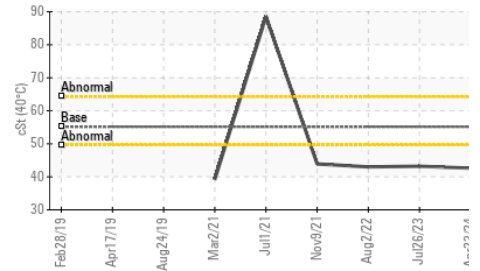
▲ Particle Trend



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.6	1.98	1.03	0.75

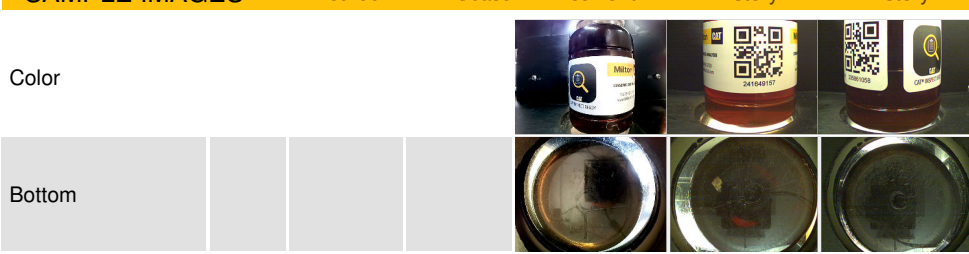
VISUAL

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	NEG

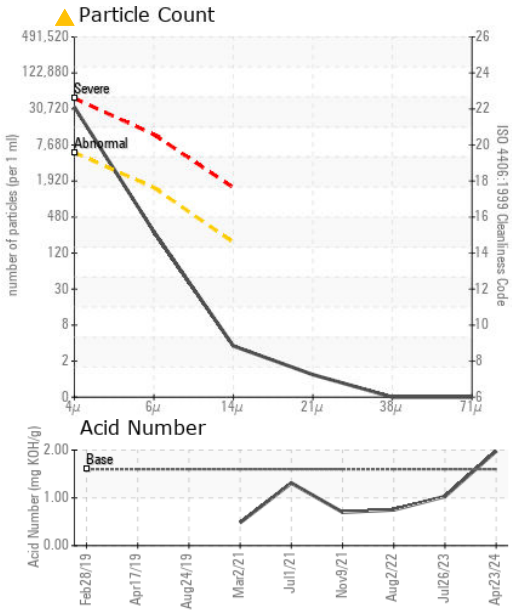
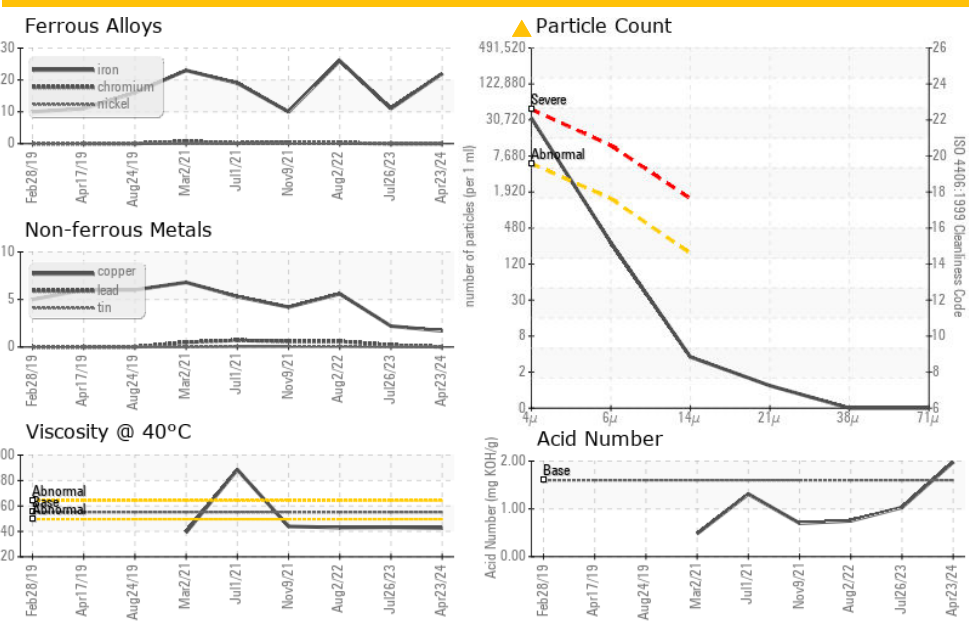
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 55.14	42.6	43.2	43.0

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122693
Lab Number : 06161400
Unique Number : 10996823
Test Package : MOB 2

Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 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)