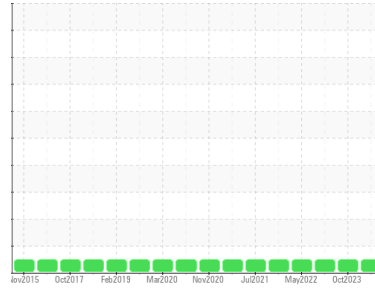


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
 Machine Id
E346
 Component
Hydraulic System
 Fluid
PETRO CANADA DURATRAN (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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	PCA0109945	PCA0109826	PCA0083105	
Sample Date	Client Info	26 Mar 2024	24 Oct 2023	12 Apr 2023	
Machine Age	hrs	Client Info	8296	8004	8004
Oil Age	hrs	Client Info	6895	6895	7000
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		NORMAL	NORMAL	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	31	27	33
Chromium	ppm ASTM D5185m >10	3	3	3
Nickel	ppm ASTM D5185m >10	0	<1	0
Titanium	ppm ASTM D5185m	<1	<1	<1
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	4	3	3
Lead	ppm ASTM D5185m >10	2	<1	2
Copper	ppm ASTM D5185m >75	25	22	22
Tin	ppm ASTM D5185m >10	<1	0	0
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 110	33	23	34
Barium	ppm ASTM D5185m 0.0	<1	0	0
Molybdenum	ppm ASTM D5185m 0.0	2	0	2
Manganese	ppm ASTM D5185m 1	<1	<1	<1
Magnesium	ppm ASTM D5185m 13	16	21	16
Calcium	ppm ASTM D5185m 3610	998	940	998
Phosphorus	ppm ASTM D5185m 1192	822	836	816
Zinc	ppm ASTM D5185m 1455	972	1044	1011
Sulfur	ppm ASTM D5185m 2641	3757	3925	4084

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	7	7	8
Sodium	ppm ASTM D5185m	3	1	2
Potassium	ppm ASTM D5185m >20	3	<1	2

FLUID CLEANLINESS

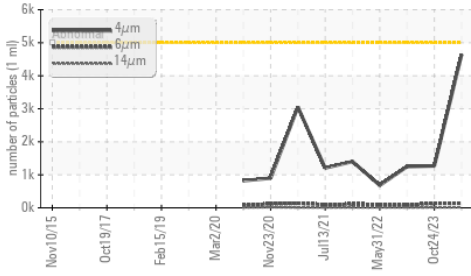
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	4642	1268	1249
Particles >6µm	ASTM D7647 >1300	134	131	86
Particles >14µm	ASTM D7647 >160	13	10	6
Particles >21µm	ASTM D7647 >40	4	2	2
Particles >38µm	ASTM D7647 >10	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	19/14/11	17/14/10	17/14/10

FLUID DEGRADATION

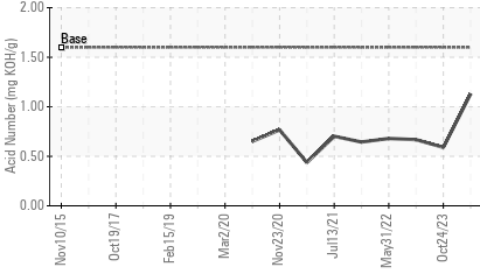
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.6	1.13	0.59	0.668

OIL ANALYSIS REPORT

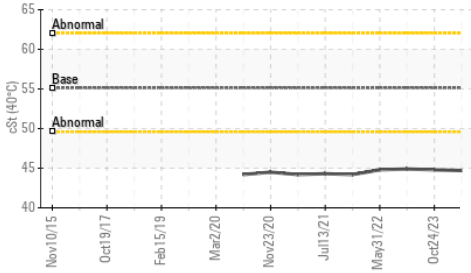
Particle Trend



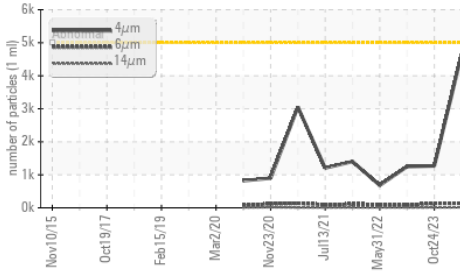
Acid Number



Viscosity @ 40°C



Particle Trend



PARAMETER	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	44.7	44.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

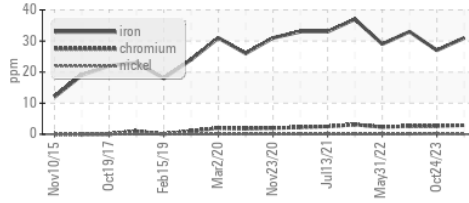


Bottom

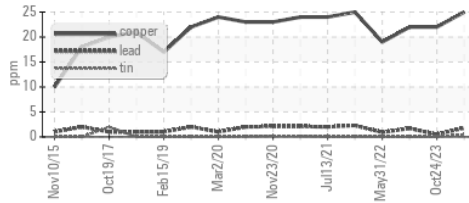


GRAPHS

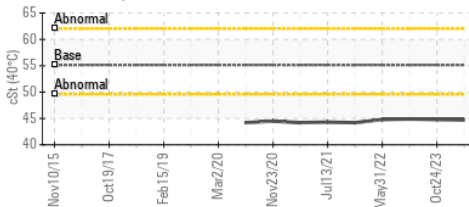
Ferrous Alloys



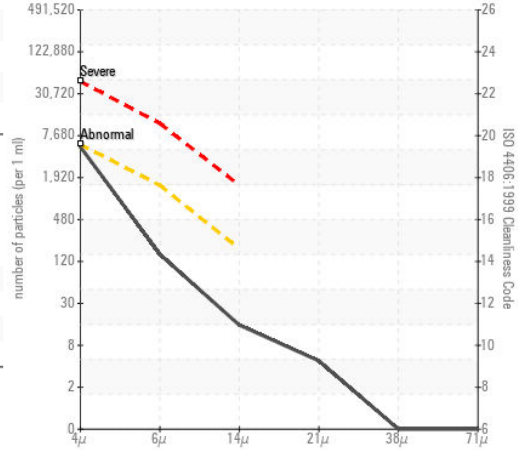
Non-ferrous Metals



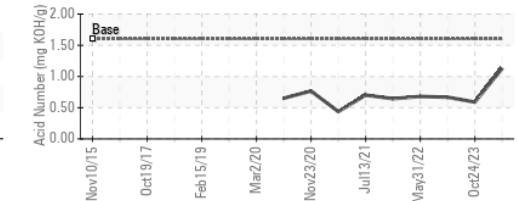
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109945
Lab Number : 06133195
Unique Number : 10952660
Test Package : MOB 2

Received : 29 Mar 2024
Tested : 03 Apr 2024
Diagnosed : 03 Apr 2024 - Jonathan Hester

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: