



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
015-0073 - TROLLEY
Component
Gearbox
Fluid
ISO 360 (--- GAL)

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

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

FLUID CONDITION

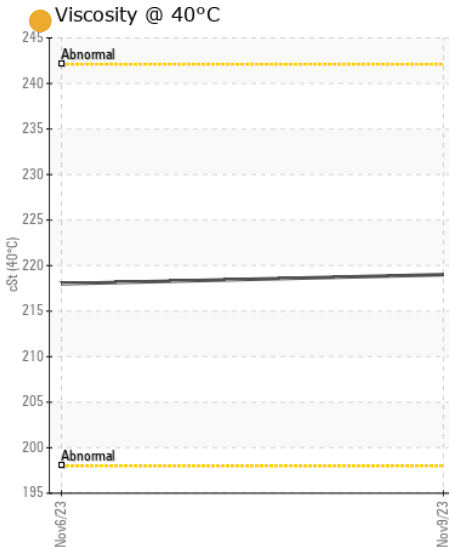
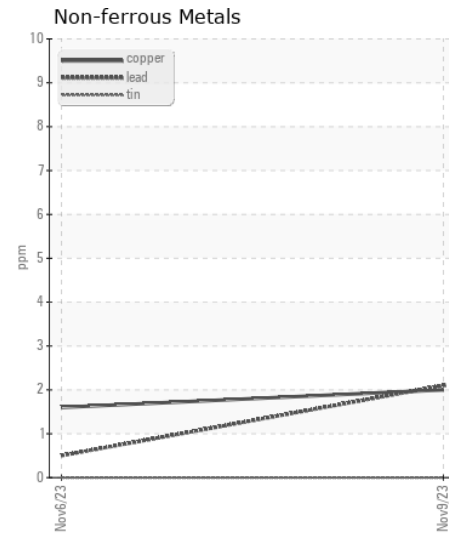
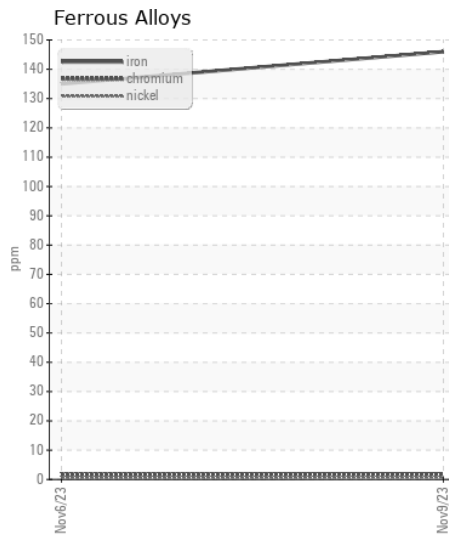
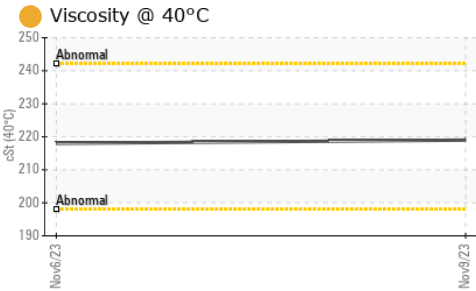
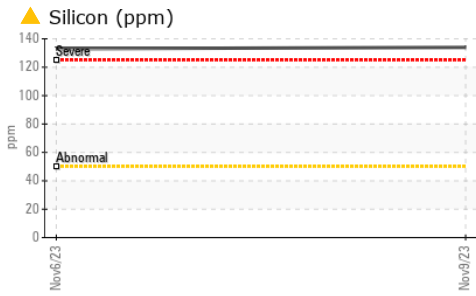
Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0750611	WC0868361	---
Sample Date		Client Info		09 Nov 2023	06 Nov 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				ABNORMAL	ABNORMAL	---

Iron	ppm	ASTM D5185m	>200	146	135	---
Chromium	ppm	ASTM D5185m	>10	2	2	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	2	---
Lead	ppm	ASTM D5185m	>50	2	<1	---
Copper	ppm	ASTM D5185m	>200	2	2	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

Silicon	ppm	ASTM D5185m	>50	▲ 134	▲ 133	---
Potassium	ppm	ASTM D5185m	>20	3	3	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	MODER	---
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	>0.2	NEG	NEG	---

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m		6	5	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		1	2	---
Manganese	ppm	ASTM D5185m		4	3	---
Magnesium	ppm	ASTM D5185m		1	1	---
Calcium	ppm	ASTM D5185m		22	21	---
Phosphorus	ppm	ASTM D5185m		240	233	---
Zinc	ppm	ASTM D5185m		47	45	---
Sulfur	ppm	ASTM D5185m		24078	23708	---
Visc @ 40°C	cSt	ASTM D445		● 219	218	---



Certificate L2367

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

Sample No. : WC0750611

Lab Number : 06014661

Unique Number : 10753805

Test Package : CONST

Received : 21 Nov 2023

Tested : 23 Nov 2023

Diagnosed : 24 Nov 2023 - Don Baldrige

SHIMMICK CONSTRUCTION

5535 TRAILHEAD DRIVE

CHATTANOOGA, TN

US 37415

Contact: DANIEL LISELLA

daniel.lisella@shimmick.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)