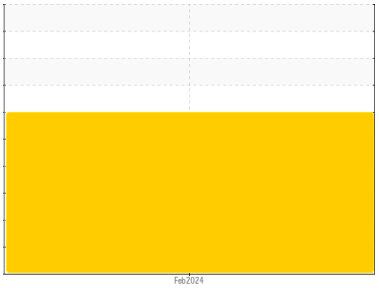
PROBLEM SUMMARY

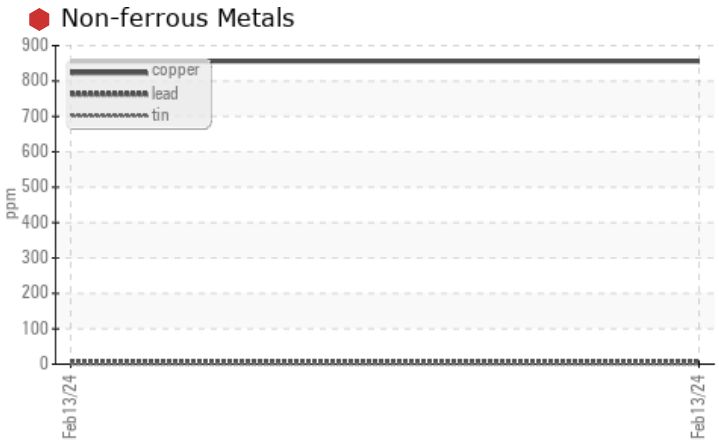
Sample Rating Trend



WEAR

Machine Id
T259
Component
Transmission
Fluid
TULCO LUBSOIL TO-4 30 (40 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Copper	ppm	ASTM D5185m	>200	**856**	---	---

Customer Id: KLXLON
Sample No.: TO50002070
Lab Number: 06097308
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

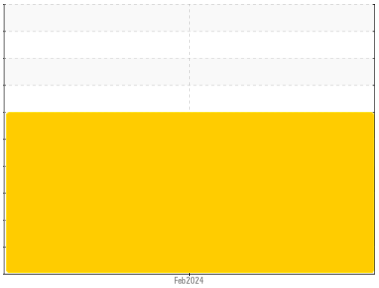
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
T259
Component
Transmission
Fluid
TULCO LUBSOIL TO-4 30 (40 GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
The copper level is severe. Clutch disc wear or oil cooler leaching indicated.

Contamination
There is no indication of any contamination in the fluid.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO50002070**	---	---
Sample Date		Client Info		**13 Feb 2024**	---	---
Machine Age	hrs	Client Info		**4407**	---	---
Oil Age	hrs	Client Info		**1237**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**SEVERE**	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**14**	---	---
Iron	ppm	ASTM D5185m	>200	**14**	---	---
Chromium	ppm	ASTM D5185m	>10	**0**	---	---
Nickel	ppm	ASTM D5185m		**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>50	**1**	---	---
Lead	ppm	ASTM D5185m	>50	**8**	---	---
Copper	ppm	ASTM D5185m	>200	**856**	---	---
Tin	ppm	ASTM D5185m	>10	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

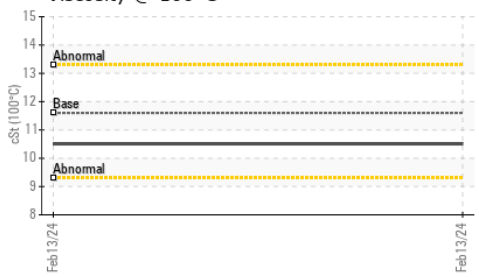
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**15**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**211**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m	9	**0**	---	---
Calcium	ppm	ASTM D5185m	4500	**2856**	---	---
Phosphorus	ppm	ASTM D5185m	1150	**902**	---	---
Zinc	ppm	ASTM D5185m	1250	**1074**	---	---
Sulfur	ppm	ASTM D5185m	4500	**6644**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**13**	---	---
Sodium	ppm	ASTM D5185m		**4**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---

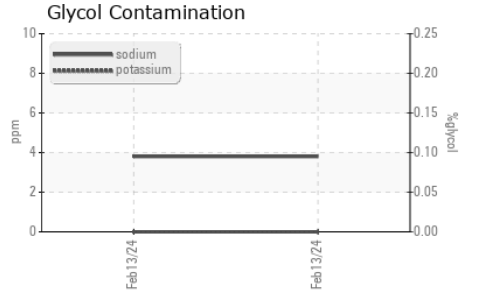
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.28	**0.76**	---	---

OIL ANALYSIS REPORT

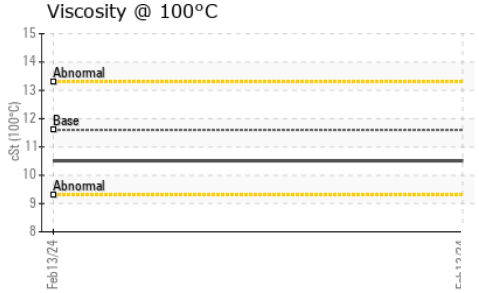
Viscosity @ 100°C



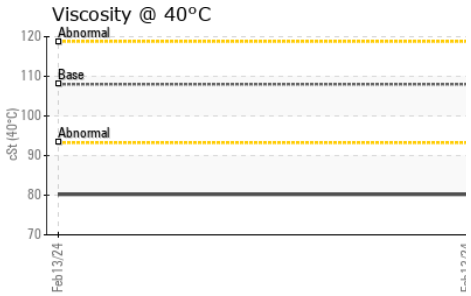
Glycol Contamination



Viscosity @ 100°C



Viscosity @ 40°C



PQ

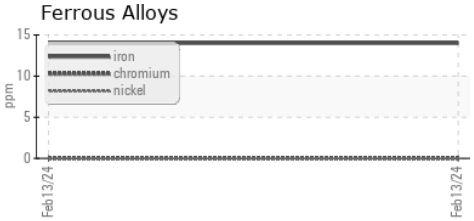
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	108	**80.2**	---	---
Visc @ 100°C	cSt	ASTM D445	11.6	**10.51**	---	---
Viscosity Index (VI)	Scale	ASTM D2270	94	**115**	---	---

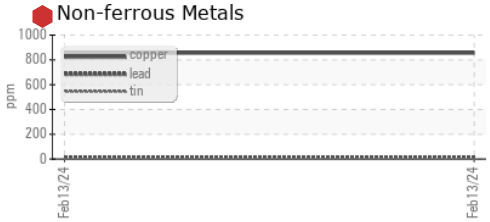
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

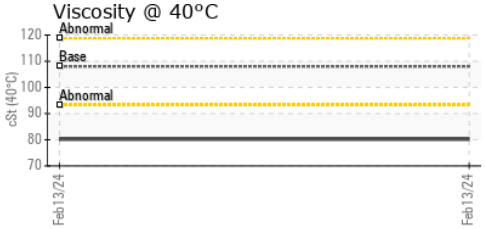
Ferrous Alloys



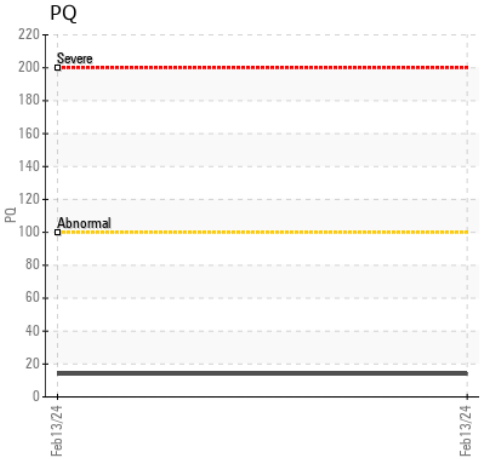
Non-ferrous Metals



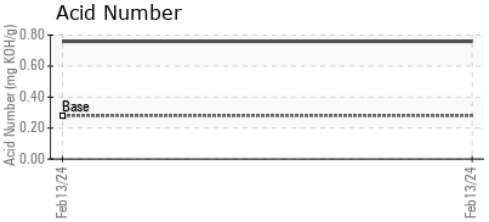
Viscosity @ 40°C



PQ



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002070 **Received** : 22 Feb 2024
Lab Number : 06097308 **Tested** : 27 Feb 2024
Unique Number : 10890161 **Diagnosed** : 27 Feb 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: Glycol, KV100, PQ, VI)

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)

KLX ENERGY SERVICES
5104 ESTES PKWY
LONGVIEW, TX
US 75603
Contact: DUSTIN TREST
dustin.trest@klx.com
T:
F:

Report Id: KLXLON [WUSCAR] 06097308 (Generated: 02/27/2024 23:59:17) Rev: 1

Submitted By: LESTER GRAY