

OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
EMPW
 Machine Id
260-12-1038 (S/N 820366)
 Component
Hydraulic System
 Fluid
TULCO LUBSOIL SUPER HYDRAULIC AW 68 (140 GAL)



DIAGNOSIS

Recommendation
 We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a light 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	TO5003290	---	---
Sample Date	Client Info	05 Jan 2024	---	---
Machine Age	hrs Client Info	5876	---	---
Oil Age	hrs Client Info	5876	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ATTENTION	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>20	1	---	---
Chromium ppm ASTM D5185m	>20	<1	---	---
Nickel ppm ASTM D5185m	>20	0	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m		0	---	---
Aluminum ppm ASTM D5185m	>20	2	---	---
Lead ppm ASTM D5185m	>20	0	---	---
Copper ppm ASTM D5185m	>20	14	---	---
Tin ppm ASTM D5185m	>20	0	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		0	---	---
Barium ppm ASTM D5185m		0	---	---
Molybdenum ppm ASTM D5185m		0	---	---
Manganese ppm ASTM D5185m		0	---	---
Magnesium ppm ASTM D5185m		67	---	---
Calcium ppm ASTM D5185m		94	---	---
Phosphorus ppm ASTM D5185m	425	343	---	---
Zinc ppm ASTM D5185m	500	347	---	---
Sulfur ppm ASTM D5185m	1900	3753	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	2	---	---
Sodium ppm ASTM D5185m		0	---	---
Potassium ppm ASTM D5185m	>20	1	---	---
Water % ASTM D6304	>0.05	0.007	---	---
ppm Water ppm ASTM D6304	>500	74	---	---

FLUID CLEANLINESS

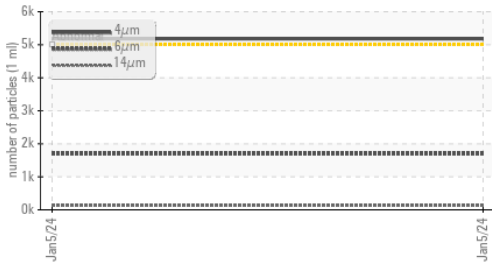
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	▲ 5180	---	---
Particles >6µm ASTM D7647	>1300	▲ 1697	---	---
Particles >14µm ASTM D7647	>160	128	---	---
Particles >21µm ASTM D7647	>40	30	---	---
Particles >38µm ASTM D7647	>10	2	---	---
Particles >71µm ASTM D7647	>3	0	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	▲ 20/18/14	---	---

FLUID DEGRADATION

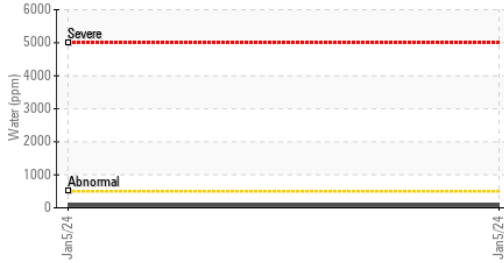
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	0.7	0.27	---	---

OIL ANALYSIS REPORT

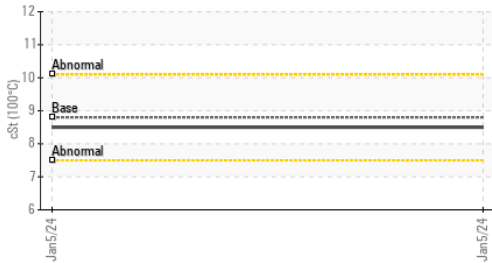
▲ Particle Trend



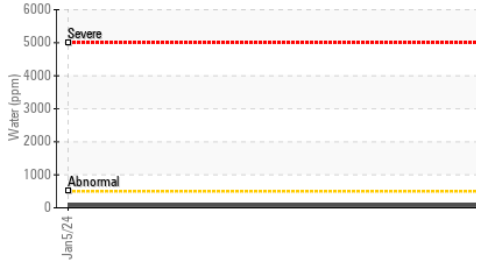
Water (KF)



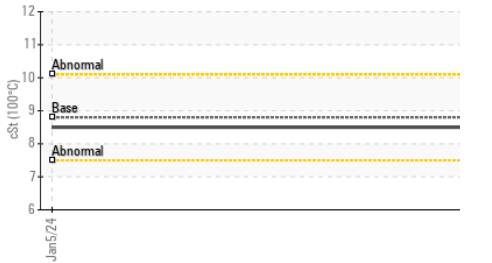
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



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	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

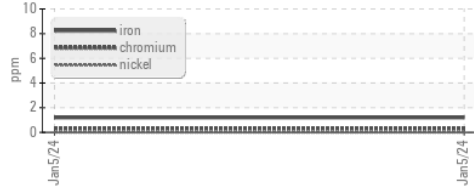
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	64.1	---
Visc @ 100°C	cSt	ASTM D445	8.8	8.5	---
Viscosity Index (VI)	Scale	ASTM D2270	102	102	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

Ferrous Alloys



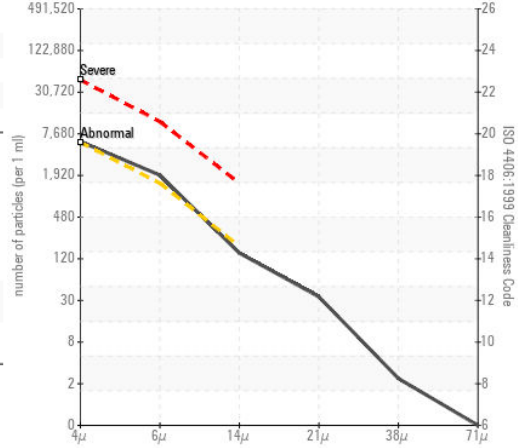
Non-ferrous Metals



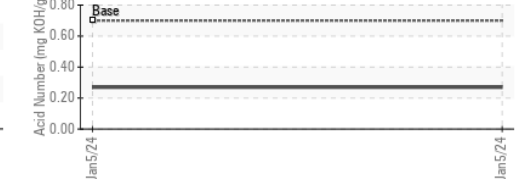
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO5003290 **Recieved** : 12 Jan 2024
Lab Number : 06060220 **Diagnosed** : 16 Jan 2024
Unique Number : 10831602 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

JAMAK FABRICATION
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 WEATHERFORD, TX
 US 76086
 Contact: LARRY NORRIS
 lano@jamak.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: