



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
2
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

The iron level is severe.

CONTAMINATION

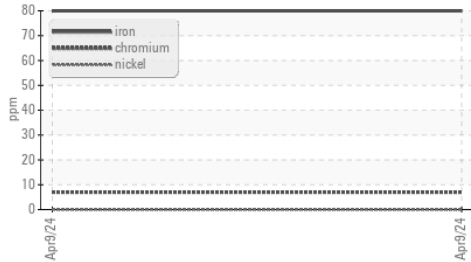
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

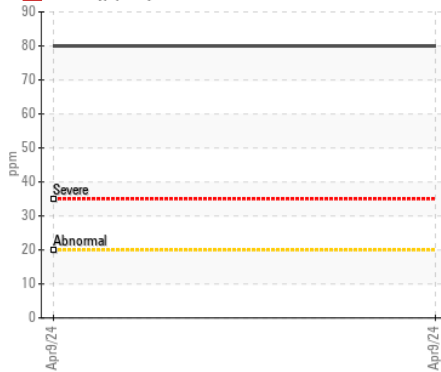
The oil viscosity is lower than normal. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0035152	---	---
Sample Date		Client Info		09 Apr 2024	---	---
Machine Age	hrs	Client Info		4778	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>20	▲ 80	---	---
Chromium	ppm	ASTM D5185m	>10	7	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	● 15	---	---
Lead	ppm	ASTM D5185m	>10	5	---	---
Copper	ppm	ASTM D5185m	>75	22	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>20	▲ 21	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	▲ MODER	---	---
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	---	---
Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m	5	0	---	---
Barium	ppm	ASTM D5185m	5	0	---	---
Molybdenum	ppm	ASTM D5185m	5	0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	25	24	---	---
Calcium	ppm	ASTM D5185m	200	119	---	---
Phosphorus	ppm	ASTM D5185m	300	381	---	---
Zinc	ppm	ASTM D5185m	370	443	---	---
Sulfur	ppm	ASTM D5185m	2500	4237	---	---
Visc @ 40°C	cSt	ASTM D445	46	▲ 37.5	---	---

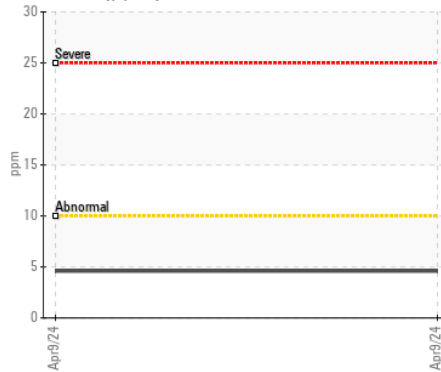
▲ Ferrous Alloys



▲ Iron (ppm)



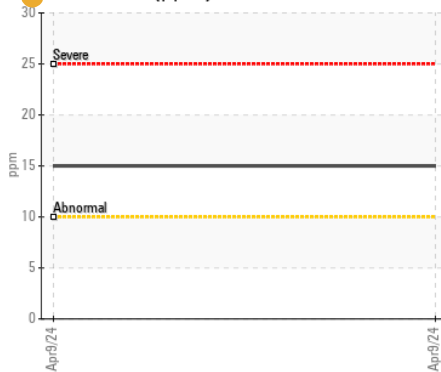
Lead (ppm)



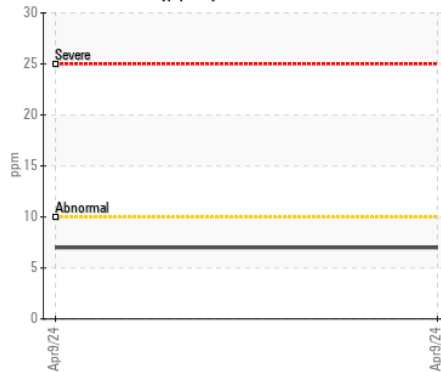
▲ Viscosity @ 40°C



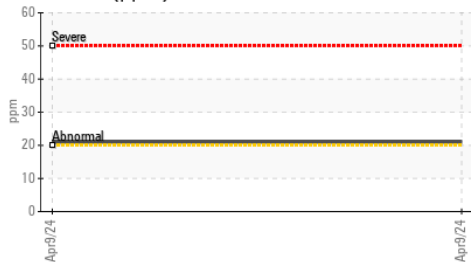
● Aluminum (ppm)



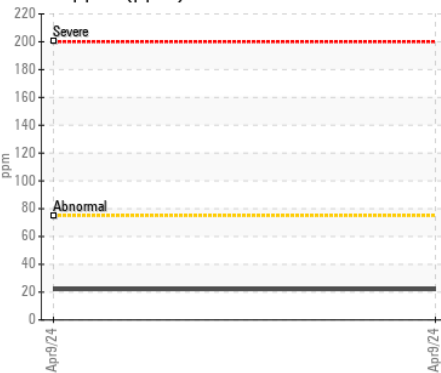
Chromium (ppm)



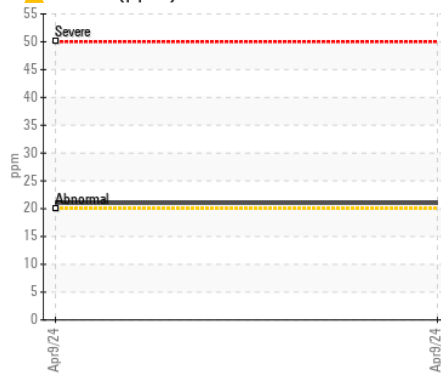
▲ Silicon (ppm)



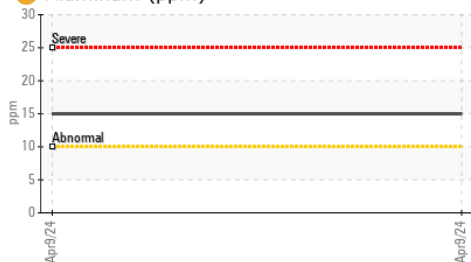
Copper (ppm)



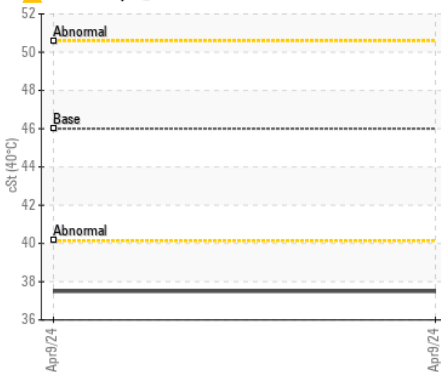
▲ Silicon (ppm)



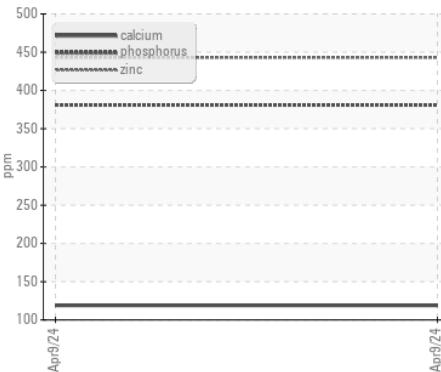
● Aluminum (ppm)



▲ Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : DC0035152
 Lab Number : 06232656
 Unique Number : 11116149
 Test Package : MOB 1
 Received : 10 Jul 2024
 Tested : 16 Jul 2024
 Diagnosed : 16 Jul 2024 - Jonathan Hester

TOBAR CONSTRUCTION
 5005 POWDER MILL RD
 BELTSVILLE, MD
 US 20705
 Contact: JOSE CALDERON
 jcalderon@tobarconstruction.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)