



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Contracting
Machine Id
5520 5520
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 10 (20 GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0937935	WC0808933	WC0688279
Sample Date		Client Info		11 Jun 2024	19 Apr 2023	10 May 2022
Machine Age	hrs	Client Info		12720	12218	3759
Oil Age	hrs	Client Info		31	1286	773
Filter Age	hrs	Client Info		31	1286	773
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	▲ 37	▲ 24	▲ 22
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	<1	1	1
Lead	ppm	ASTM D5185m	>10	<1	0	2
Copper	ppm	ASTM D5185m	>75	12	12	9
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

High concentration of visible dirt/debris present in the oil.

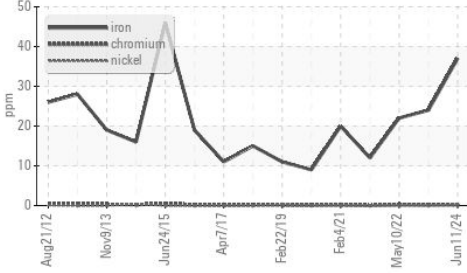
Silicon	ppm	ASTM D5185m	>20	6	4	4
Potassium	ppm	ASTM D5185m	>20	4	2	4
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		---	107798	---
Particles >6µm		ASTM D7647	>1300	---	▲ 14588	---
Particles >14µm		ASTM D7647	>160	---	▲ 206	---
Particles >21µm		ASTM D7647	>40	---	27	---
Particles >38µm		ASTM D7647	>10	---	2	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>-/17/14	---	▲ 24/21/15	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ HEAVY	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%	▲ 0.2%

FLUID CONDITION

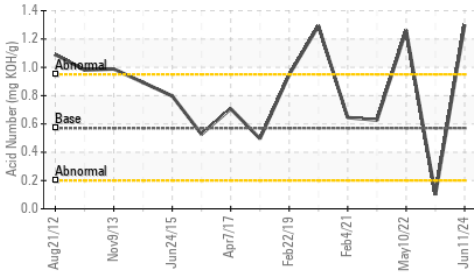
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	2	<1
Boron	ppm	ASTM D5185m	5	0	4	19
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	1	1	2
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	25	413	315	346
Calcium	ppm	ASTM D5185m	200	121	155	257
Phosphorus	ppm	ASTM D5185m	300	836	709	768
Zinc	ppm	ASTM D5185m	370	968	804	927
Sulfur	ppm	ASTM D5185m	2500	4899	4603	3624
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	1.30	0.10	1.26
Visc @ 40°C	cSt	ASTM D445	10	37.8	41.9	38.7

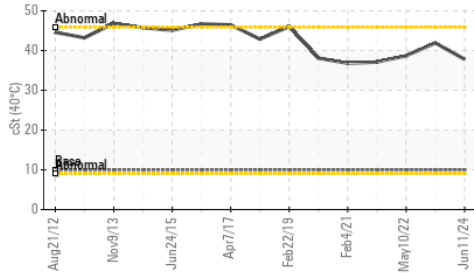
▲ Ferrous Alloys



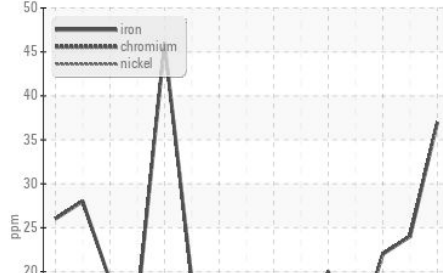
Acid Number



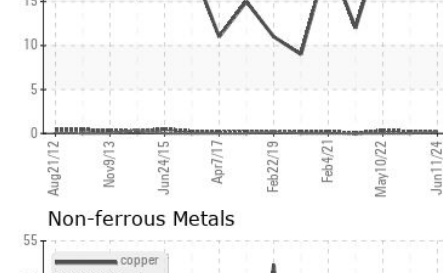
Viscosity @ 40°C



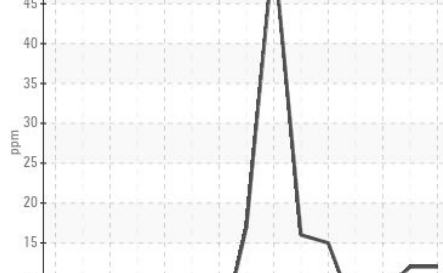
▲ Ferrous Alloys



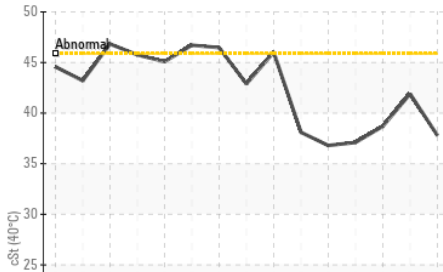
Acid Number



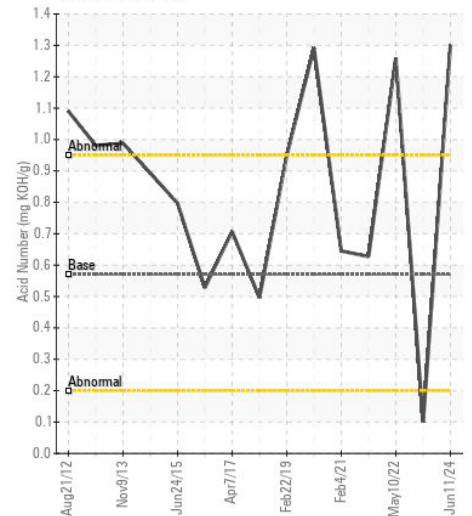
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0937935
Lab Number : 06209951
Unique Number : 11082815
Test Package : CONST
Received : 14 Jun 2024
Tested : 17 Jun 2024
Diagnosed : 17 Jun 2024 - Don Baldrige

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509

Contact: Leigh Dennis
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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)