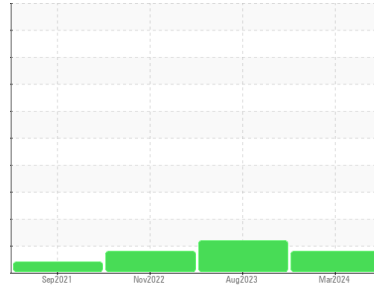




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[22325]
 Machine Id
40-165

Component
Hydraulic System

Fluid
CONOCO MEGAFLOW AW 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 6 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	WC0836158	WC0802388	WC0709385
Sample Date	Client Info	15 Mar 2024	17 Aug 2023	29 Nov 2022
Machine Age	hrs	4100	3543	3065
Oil Age	hrs	2100	478	1065
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	14	13	11
Chromium	ppm ASTM D5185m >10	<1	<1	<1
Nickel	ppm ASTM D5185m >10	0	0	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	3	4	0
Lead	ppm ASTM D5185m >10	8	3	3
Copper	ppm ASTM D5185m >75	13	11	12
Tin	ppm ASTM D5185m >10	<1	0	0
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	0	0
Barium	ppm ASTM D5185m	3	1	0
Molybdenum	ppm ASTM D5185m	<1	0	<1
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	20	22	20
Calcium	ppm ASTM D5185m	185	186	179
Phosphorus	ppm ASTM D5185m	280	274	263
Zinc	ppm ASTM D5185m	316	317	314
Sulfur	ppm ASTM D5185m	1055	1173	915

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	6	5	5
Sodium	ppm ASTM D5185m	2	2	0
Potassium	ppm ASTM D5185m >20	2	0	2

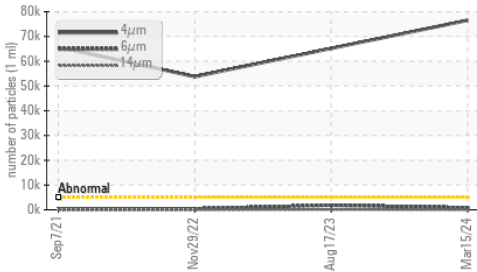
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 76533	▲ 65182	▲ 53770
Particles >6µm	ASTM D7647 >1300	791	● 1838	381
Particles >14µm	ASTM D7647 >160	36	111	10
Particles >21µm	ASTM D7647 >40	7	29	3
Particles >38µm	ASTM D7647 >10	2	1	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 23/17/12	▲ 23/18/14	▲ 23/16/10

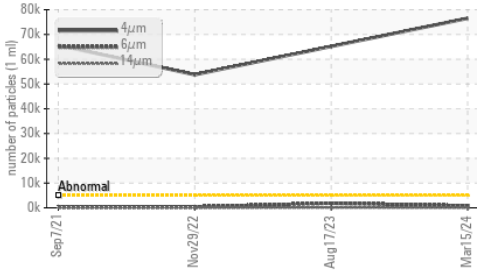


OIL ANALYSIS REPORT

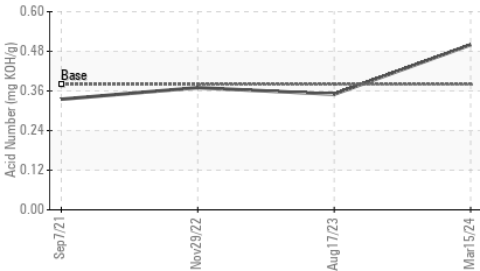
▲ Particle Trend



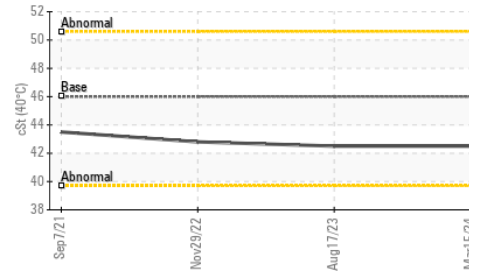
▲ Particle Trend



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.38	0.50	0.35	0.37

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	42.5	42.5	42.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color

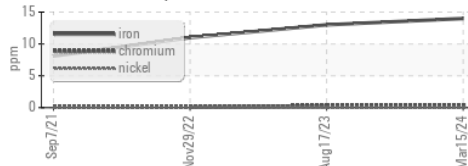


Bottom

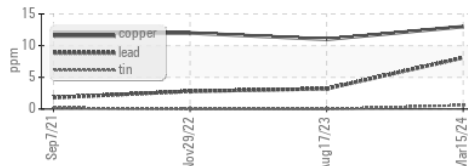


GRAPHS

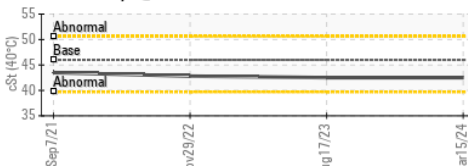
Ferrous Alloys



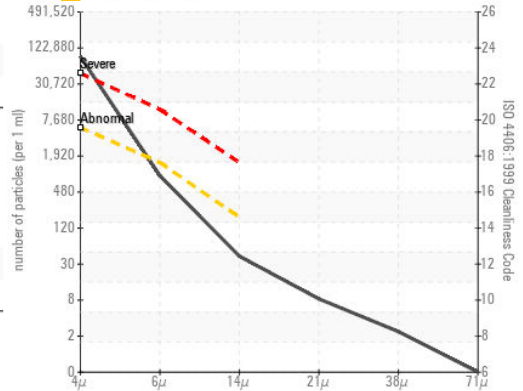
Non-ferrous Metals



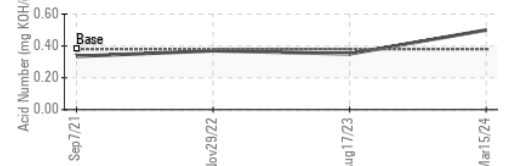
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836158 **Received** : 29 Mar 2024
Lab Number : **06133188** **Tested** : 01 Apr 2024
Unique Number : 10952653 **Diagnosed** : 03 Apr 2024 - Jonathan Hester
Test Package : CONST

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: BEN CALDWELL
 kevin.marson@wearcheck.com
 T: (918)728-5749
 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)