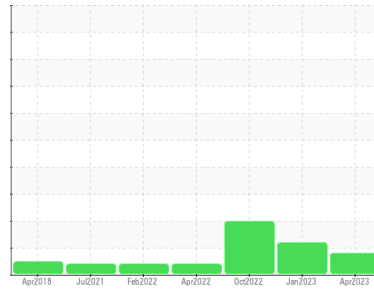




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id MAIN HYDRAULIC TANK

Component
Hydraulic System
Fluid

AW HYDRAULIC OIL ISO 32 (200 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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		WC0750424	WC0755655	WC0701724
Sample Date	Client Info		20 Apr 2023	16 Jan 2023	08 Oct 2022
Machine Age	yrs	Client Info	0	0	0
Oil Age	yrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<1	2	1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	6	6	6
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	5	6	8
Barium	ppm	ASTM D5185m	5	0	<1	2
Molybdenum	ppm	ASTM D5185m	5	5	6	6
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	25	12	12	13
Calcium	ppm	ASTM D5185m	200	130	124	127
Phosphorus	ppm	ASTM D5185m	300	326	309	309
Zinc	ppm	ASTM D5185m	370	379	384	392
Sulfur	ppm	ASTM D5185m	2500	1059	1074	1135

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	6	4	2
Sodium	ppm	ASTM D5185m		2	0	<1
Potassium	ppm	ASTM D5185m	>20	2	3	3
Water	%	ASTM D6304	>0.05	NEG	NEG	NEG

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 10135	▲ 20632	▲ 32240
Particles >6µm	ASTM D7647	>1300	▲ 1268	▲ 1817	▲ 9054
Particles >14µm	ASTM D7647	>160	▲ 50	▲ 36	▲ 801
Particles >21µm	ASTM D7647	>40	▲ 16	▲ 9	▲ 164
Particles >38µm	ASTM D7647	>10	▲ 1	▲ 1	▲ 10
Particles >71µm	ASTM D7647	>3	▲ 0	▲ 1	▲ 1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/17/13	▲ 22/18/12	▲ 22/20/17

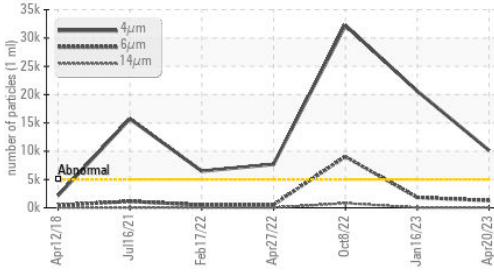
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.30	0.31	0.32

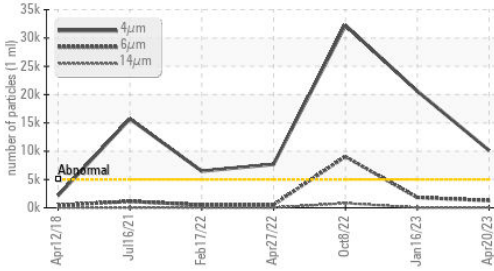


OIL ANALYSIS REPORT

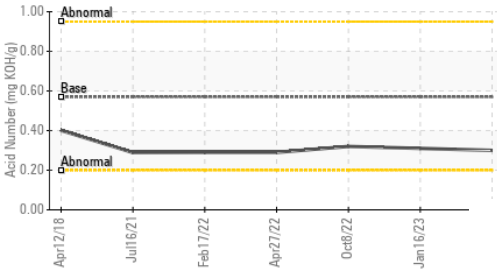
▲ Particle Trend



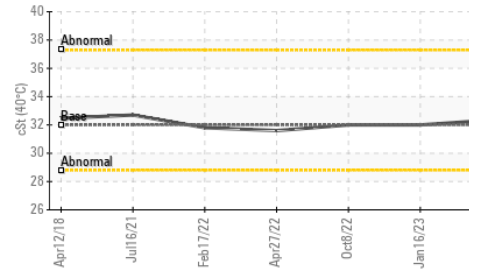
▲ Particle Trend



Acid Number



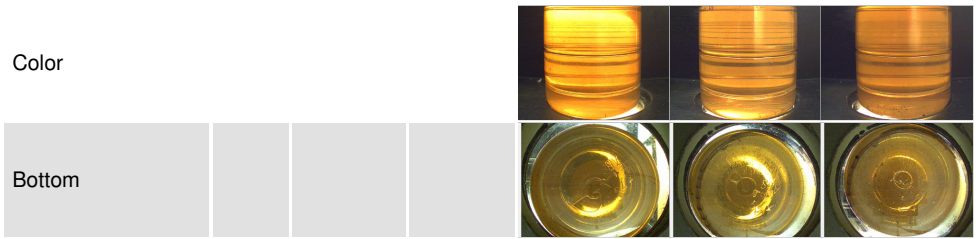
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

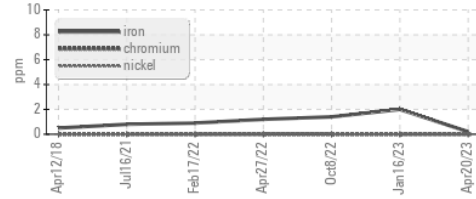
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	32.0	32.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

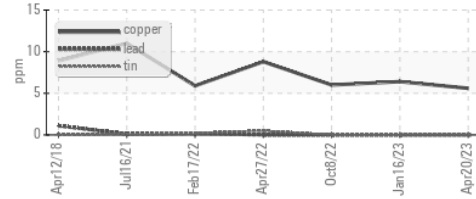


GRAPHS

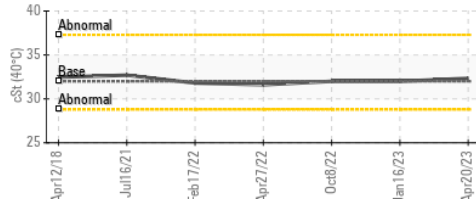
Ferrous Alloys



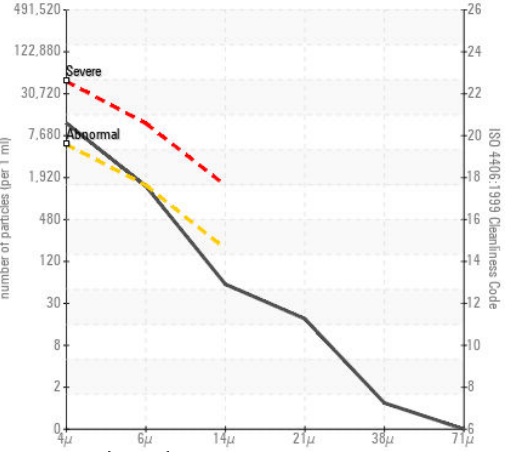
Non-ferrous Metals



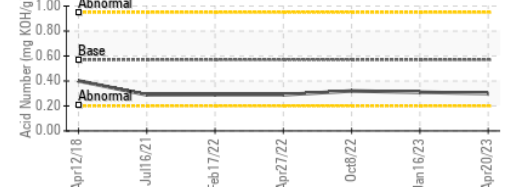
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0750424 **Received** : 05 May 2023
Lab Number : 05839207 **Diagnosed** : 10 May 2023
Unique Number : 10458010 **Diagnostician** : Jonathan Hester
Test Package : PLANT

ALL METALS PROCESSING & LOGISTICS
 100 ALL METALS DR
 CARTERSVILLE, GA
 US 30120
 Contact: JASON WEISS
 jasonweiss@allmetals.com
 T: (770)427-7379
 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)