

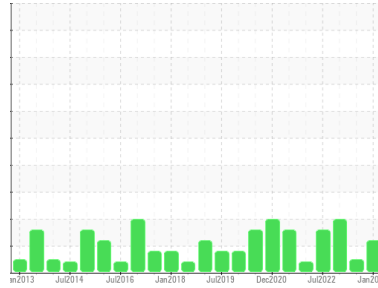


OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area
[604063214 SR]
 Machine Id
CRMB REFINER 5 (S/N 20059990)
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 68 (--- 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 high 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			WC0854126	WC0562492	WC0562119
Sample Date	Client Info			04 Jan 2024	06 Jul 2023	07 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

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

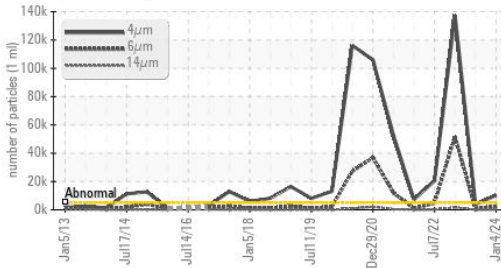
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	25	1	1	0
Calcium	ppm	ASTM D5185m	200	11	7	11
Phosphorus	ppm	ASTM D5185m	300	200	212	195
Zinc	ppm	ASTM D5185m	370	0	4	10
Sulfur	ppm	ASTM D5185m	2500	1846	2335	2097

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	1	2
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	1	<1	0

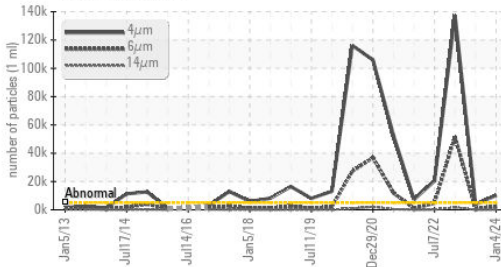
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 10219	3840	▲ 137479
Particles >6µm		ASTM D7647	>1300	▲ 2660	713	▲ 51735
Particles >14µm		ASTM D7647	>160	150	42	▲ 1675
Particles >21µm		ASTM D7647	>40	36	8	▲ 164
Particles >38µm		ASTM D7647	>10	3	0	7
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/19/14	19/17/13	▲ 24/23/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.76	0.76	0.86

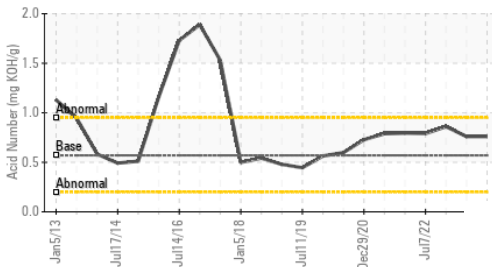
Particle Trend



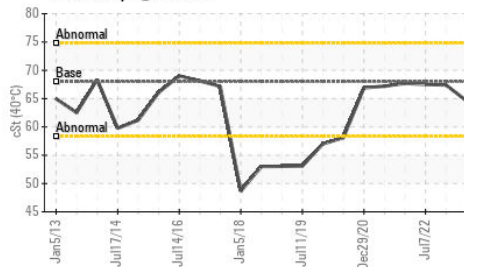
Particle Trend



Acid Number



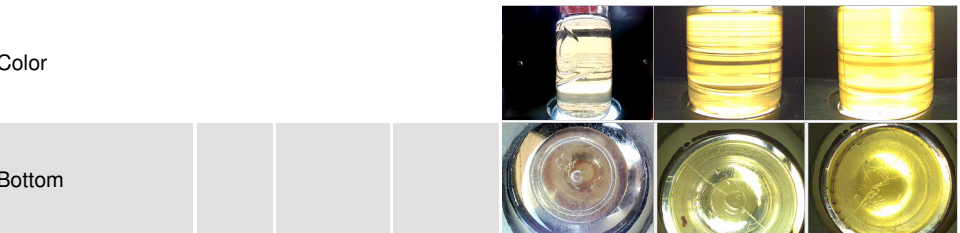
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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

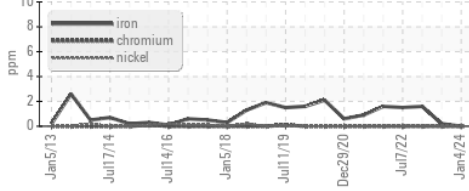
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	66.4	64.6	67.4

SAMPLE IMAGES

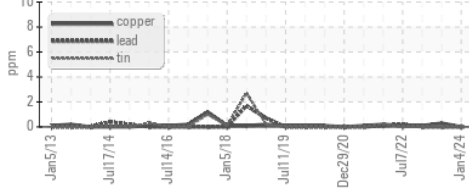


GRAPHS

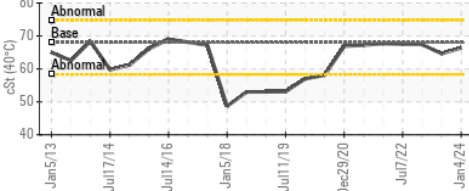
Ferrous Alloys



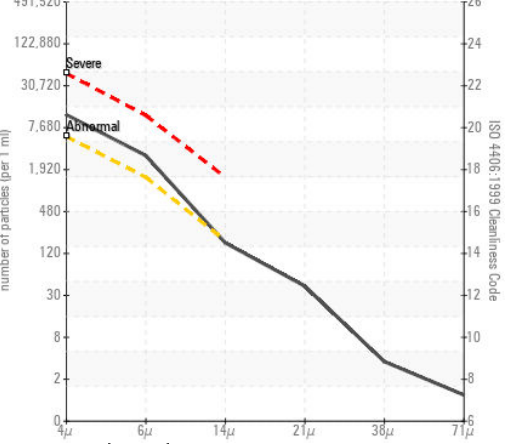
Non-ferrous Metals



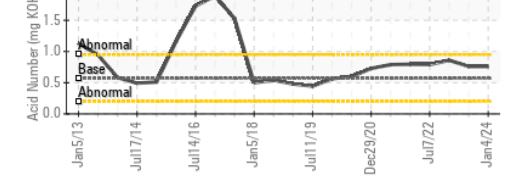
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0854126 **Received** : 18 Jan 2024
Lab Number : 06064318 **Diagnosed** : 21 Jan 2024
Unique Number : 10835700 **Diagnostician** : Don Baldrige
Test Package : IND 2

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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)