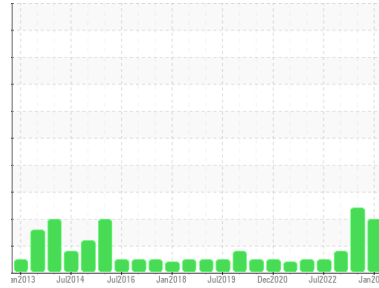




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[604063218 S/R]
 Machine Id
CRMB REFINER 8 (S/N 20060182)
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 68 (--- 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 moderate amount of particulates 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	WC0854129	WC0562486	WC0605713
Sample Date	Client Info	04 Jan 2024	06 Jul 2023	07 Jan 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ATTENTION	ATTENTION	ATTENTION

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	0
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	<1	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	<1	<1	0
Magnesium	ppm ASTM D5185m 25	<1	<1	<1
Calcium	ppm ASTM D5185m 200	6	4	4
Phosphorus	ppm ASTM D5185m 300	267	220	575
Zinc	ppm ASTM D5185m 370	50	6	298
Sulfur	ppm ASTM D5185m 2500	1780	2323	1770

CONTAMINANTS

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

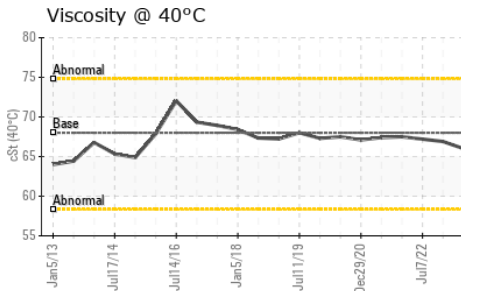
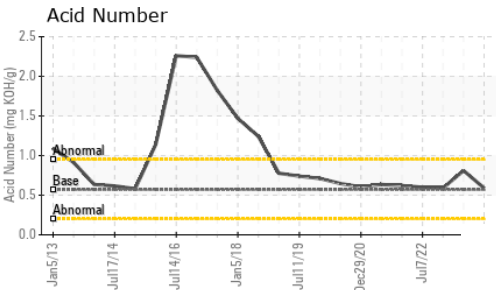
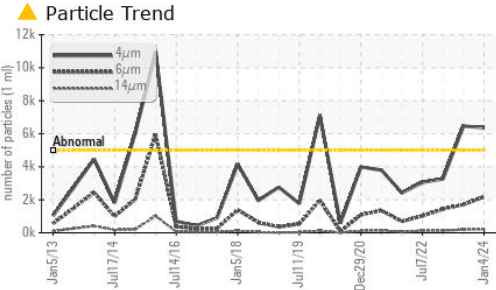
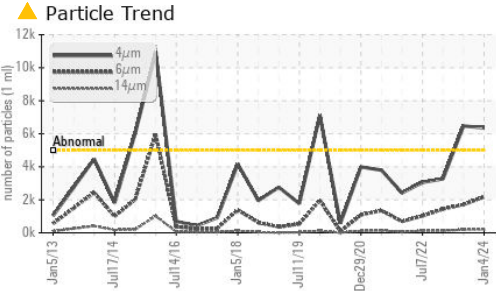
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 6354	▲ 6473	3269
Particles >6µm	ASTM D7647 >1300	▲ 2181	▲ 1712	▲ 1441
Particles >14µm	ASTM D7647 >160	▲ 209	▲ 189	130
Particles >21µm	ASTM D7647 >40	▲ 71	▲ 72	22
Particles >38µm	ASTM D7647 >10	9	▲ 11	2
Particles >71µm	ASTM D7647 >3	1	2	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/18/15	▲ 20/18/15	▲ 19/18/14

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.57	0.59	0.81	0.59

OIL ANALYSIS REPORT

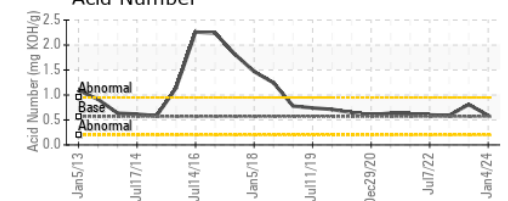
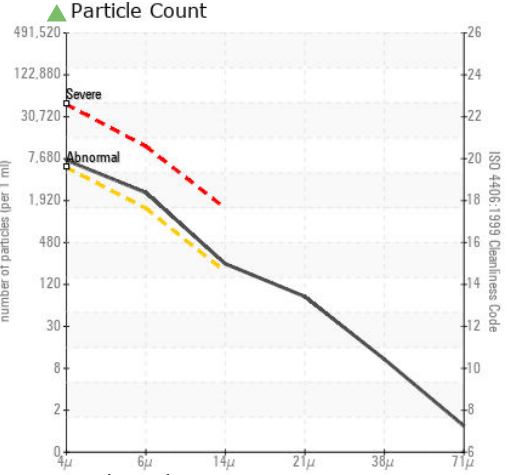
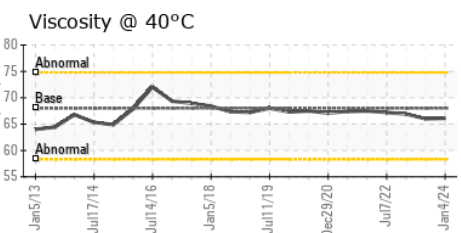
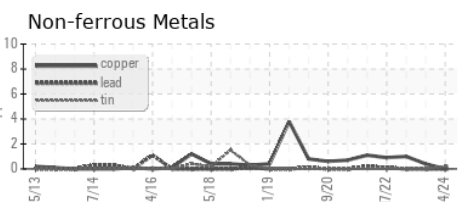
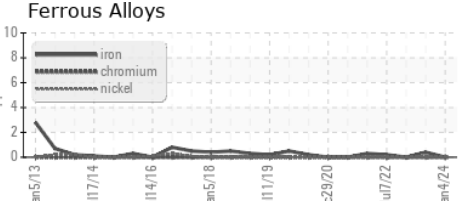


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	66.1	66.0	66.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0854129 **Received** : 18 Jan 2024
Lab Number : **06064315** **Diagnosed** : 21 Jan 2024
Unique Number : 10835697 **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)