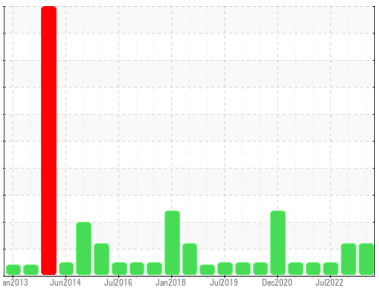
PROBLEM SUMMARY

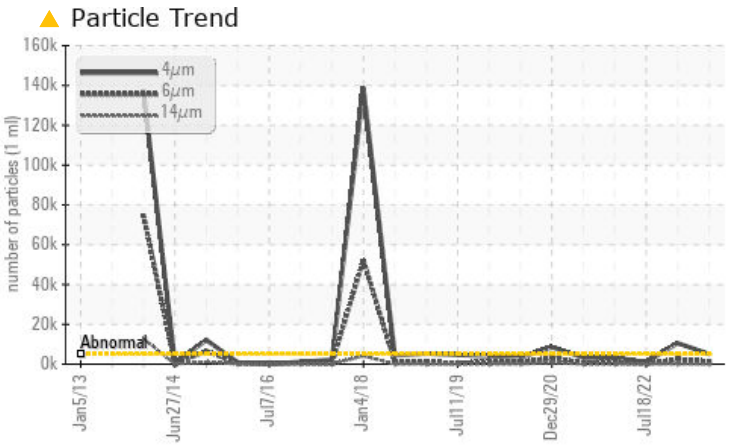
Sample Rating Trend



ISO

Area
[603778808 SR]
Machine Id
K REFINER 6 (S/N 20061424)
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	NORMAL
Particles >4µm		ASTM D7647	>5000	▲ **5048**	▲ 10594	918
Particles >6µm		ASTM D7647	>1300	▲ **1335**	▲ 2480	211
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/13**	▲ 21/18/14	17/15/11

Customer Id: MARSCHI
Sample No.: WC0605539
Lab Number: 05901251
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 Jun 2023 Diag: Doug Bogart

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

18 Jul 2022 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

17 Dec 2021 Diag: Angela Borella

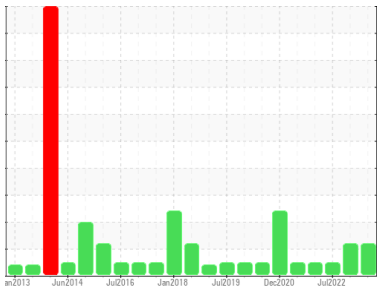
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
[603778808 SR]
Machine Id
K REFINER 6 (S/N 20061424)
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 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		**WC0605539**	WC0605546	WC0605689
Sample Date		Client Info		**17 Jul 2023**	23 Jun 2023	18 Jul 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ATTENTION**	ABNORMAL	NORMAL

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	0	1
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	**2**	3	0
Phosphorus	ppm	ASTM D5185m	300	**275**	220	189
Zinc	ppm	ASTM D5185m	370	**68**	4	0
Sulfur	ppm	ASTM D5185m	2500	**2278**	2286	2096

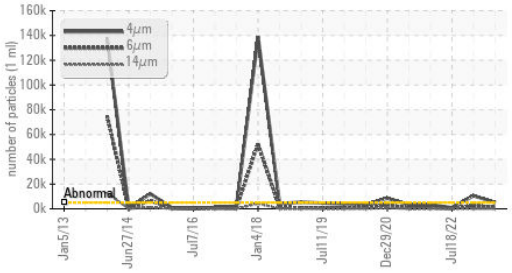
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	2	1
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5048**	▲ 10594	918
Particles >6µm		ASTM D7647	>1300	▲ **1335**	▲ 2480	211
Particles >14µm		ASTM D7647	>160	**74**	151	17
Particles >21µm		ASTM D7647	>40	**15**	35	3
Particles >38µm		ASTM D7647	>10	**0**	2	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/13**	▲ 21/18/14	17/15/11

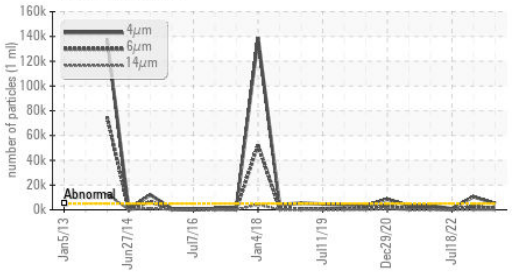
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	**0.65**	0.78	0.70

OIL ANALYSIS REPORT

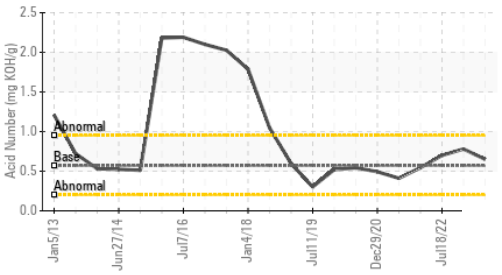
Particle Trend



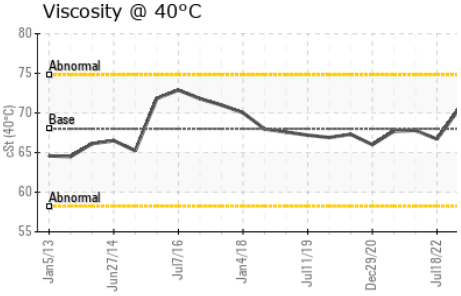
Particle Trend



Acid Number

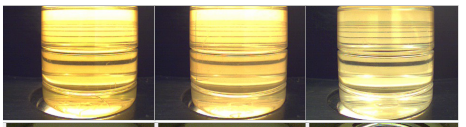
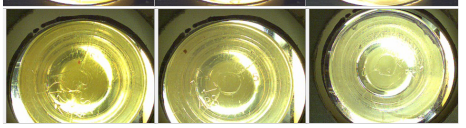


Viscosity @ 40°C



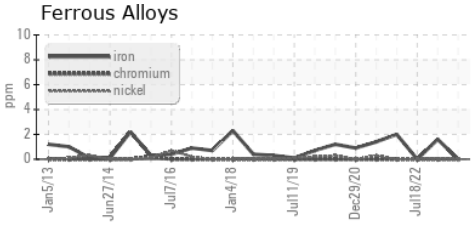
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**66.0**	70.4	66.7

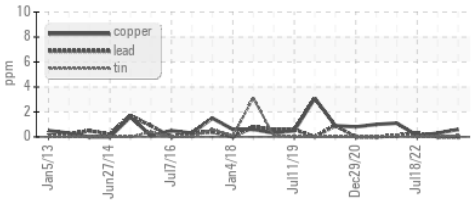
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

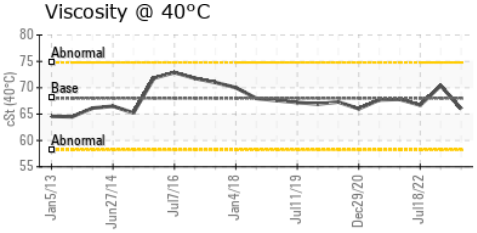
Ferrous Alloys



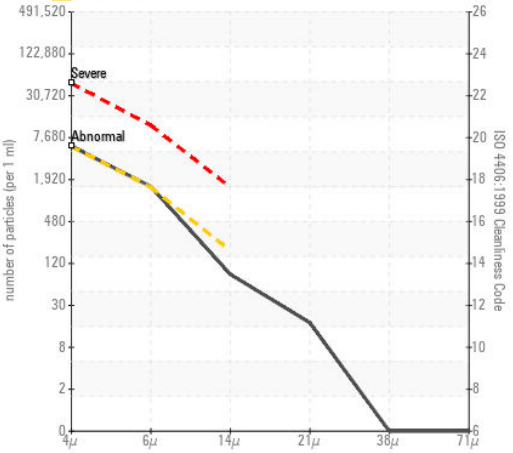
Non-ferrous Metals



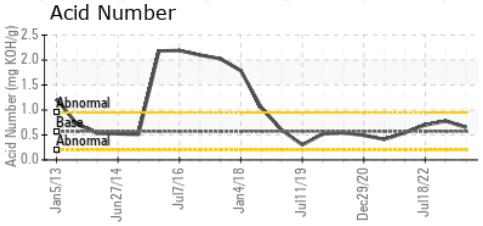
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0605539 **Received** : 18 Jul 2023
Lab Number : 05901251 **Diagnosed** : 19 Jul 2023
Unique Number : 10562607 **Diagnostician** : Doug Bogart
Test Package : IND 2

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)

MARS CHOCOLATE
2019 NORTH OAK PARK
CHICAGO, IL
US 60707
Contact: TONY FIORE
tony.fiore@effem.com
T: (773)745-2279
F: