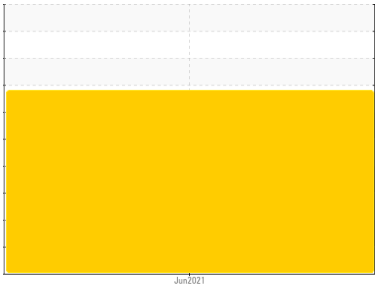
PROBLEM SUMMARY

Sample Rating Trend



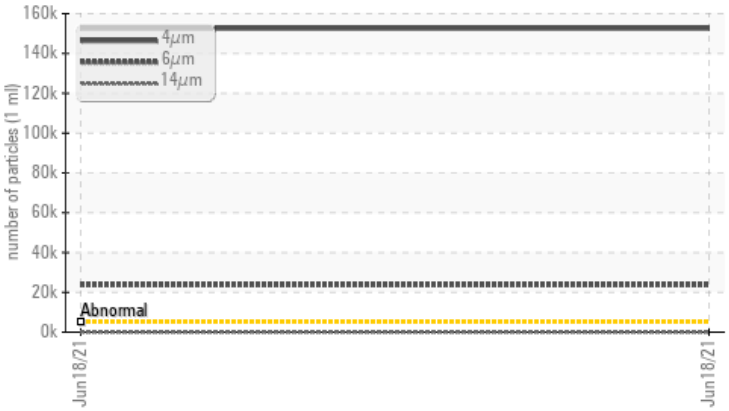
WEAR

Machine Id
40-96
Component
Hydraulic System
Fluid
CONOCOPHILLIPS AW46 (--- GAL)

COMPONENT CONDITION SUMMARY

Ferrous Alloys

Particle Trend



RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips aw46)

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Iron	ppm	ASTM D5185m	>20	**75**	---	---
Particles >4µm		ASTM D7647	>5000	**152582**	---	---
Particles >6µm		ASTM D7647	>1300	**23746**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**24/22/12**	---	---

Customer Id: MANTUL
Sample No.: WC0548819
Lab Number: 05288613
Test Package: MOBCE

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

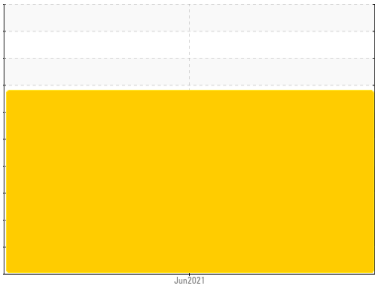
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	MISSED	Dec 10 2021	?	We advise that you inspect for the source(s) of wear.
Resample	MISSED	Dec 10 2021	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
40-96
Component
Hydraulic System
Fluid
CONOCOPHILLIPS AW46 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips aw46)

Wear
The iron level is severe.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0548819**	---	---
Sample Date		Client Info		**18 Jun 2021**	---	---
Machine Age	hrs	Client Info		**6363**	---	---
Oil Age	hrs	Client Info		**250**	---	---
Oil Changed		Client Info		**Not Changd**	---	---
Sample Status				**SEVERE**	---	---

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

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

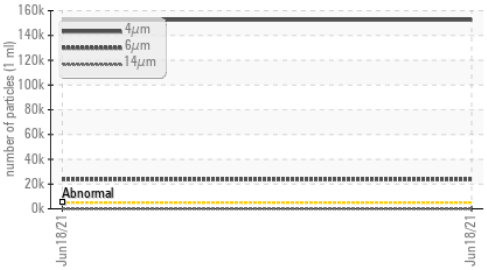
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**38**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**<1**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**8**	---	---
Calcium	ppm	ASTM D5185m		**1044**	---	---
Phosphorus	ppm	ASTM D5185m		**542**	---	---
Zinc	ppm	ASTM D5185m		**659**	---	---
Sulfur	ppm	ASTM D5185m		**1338**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**5**	---	---
Sodium	ppm	ASTM D5185m		**1**	---	---
Potassium	ppm	ASTM D5185m	>20	**1**	---	---

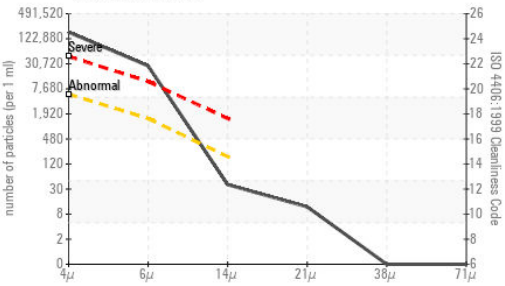
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**152582**	---	---
Particles >6µm		ASTM D7647	>1300	**23746**	---	---
Particles >14µm		ASTM D7647	>160	**34**	---	---
Particles >21µm		ASTM D7647	>40	**10**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**24/22/12**	---	---

OIL ANALYSIS REPORT

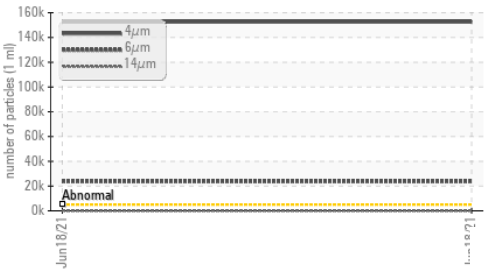
Particle Trend



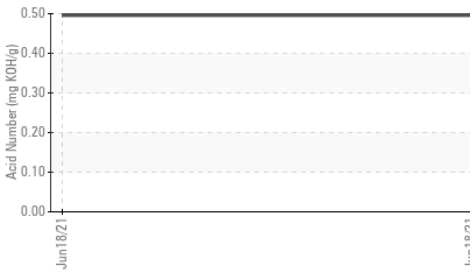
Particle Count



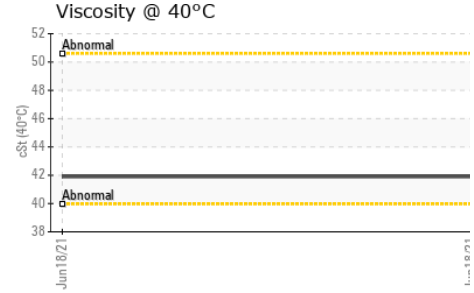
Particle Trend



Acid Number



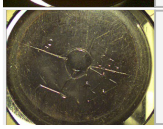
Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.496**	---	---

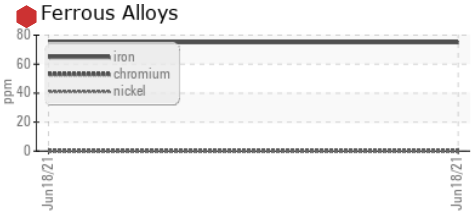
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**41.9**	---	---

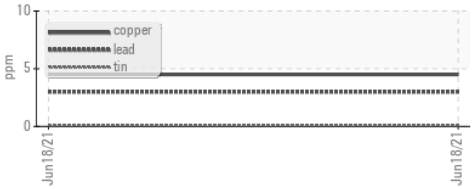
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

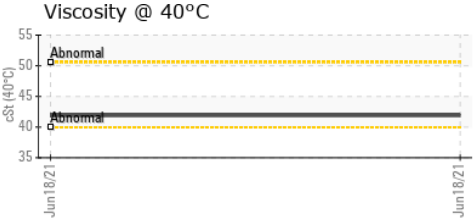
Ferrous Alloys



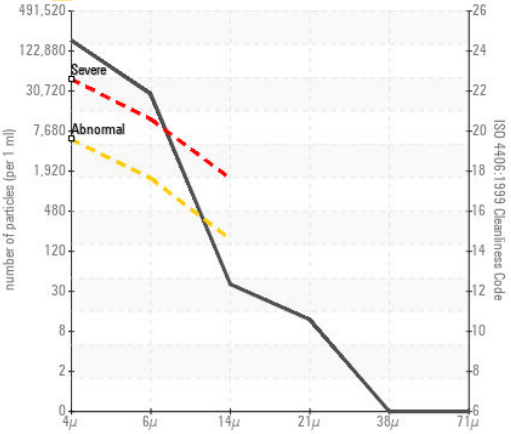
Non-ferrous Metals



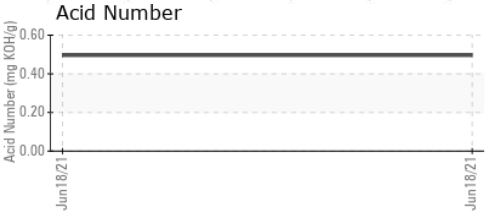
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0548819
Lab Number : 05288613
Unique Number : 9557551
Test Package : MOBCE

Received : 25 Jun 2021
Tested : 28 Jun 2021
Diagnosed : 29 Jun 2021 - Jonathan Hester

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)

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Report Id: MANTUL [WUSCAR] 05288613 (Generated: 02/27/2024 16:51:57) Rev: 1

Submitted By: WILL ANDERSON