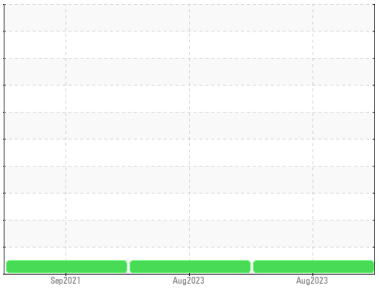
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
KANSAS/44/EG - EXCAVATOR
Machine Id
20.205L [KANSAS^44^EG - EXCAVATOR]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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		**WC0821616**	WC0745944	WC0584664
Sample Date		Client Info		**22 Aug 2023**	04 Aug 2023	01 Sep 2021
Machine Age	hrs	Client Info		**1217**	1217	11
Oil Age	hrs	Client Info		**1217**	1217	0
Oil Changed		Client Info		**Changed**	Changed	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**11**	12	<1
Chromium	ppm	ASTM D5185m	>10	**0**	<1	0
Nickel	ppm	ASTM D5185m	>10	**<1**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**0**	0	0
Lead	ppm	ASTM D5185m	>10	**<1**	0	0
Copper	ppm	ASTM D5185m	>75	**5**	5	1
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	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		**<1**	2	51
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**1**	0	<1
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**13**	16	0
Calcium	ppm	ASTM D5185m		**350**	354	158
Phosphorus	ppm	ASTM D5185m		**673**	724	671
Zinc	ppm	ASTM D5185m		**933**	969	836
Sulfur	ppm	ASTM D5185m		**2223**	2396	1542

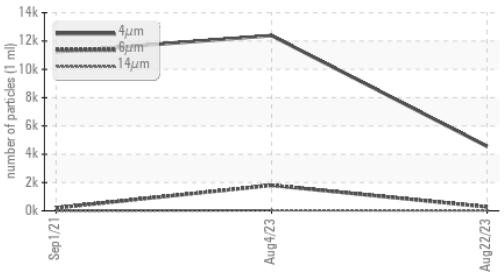
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**1**	2	0
Sodium	ppm	ASTM D5185m		**0**	4	<1
Potassium	ppm	ASTM D5185m	>20	**2**	1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**4550**	12383	11225
Particles >6µm		ASTM D7647	>2500	**279**	1801	208
Particles >14µm		ASTM D7647	>640	**19**	41	4
Particles >21µm		ASTM D7647	>160	**6**	5	2
Particles >38µm		ASTM D7647	>40	**0**	0	0
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	**19/15/11**	21/18/13	21/15/9

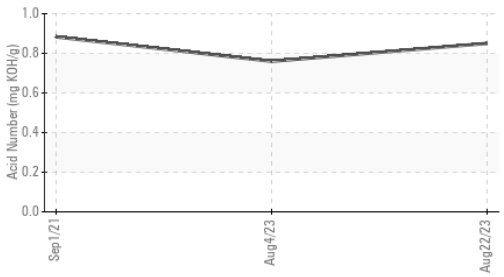
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.85**	0.760	0.883

OIL ANALYSIS REPORT

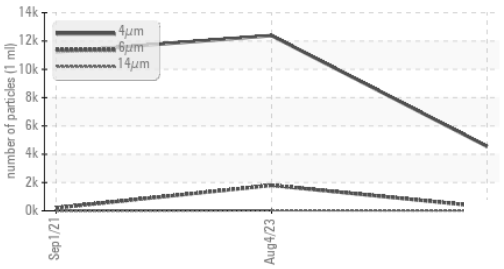
Particle Trend



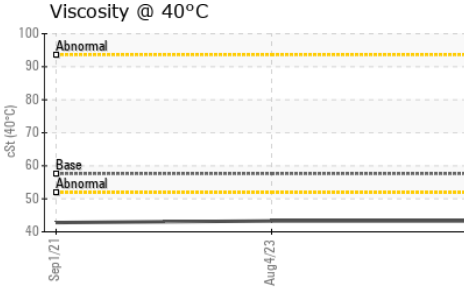
Acid Number



Particle Trend

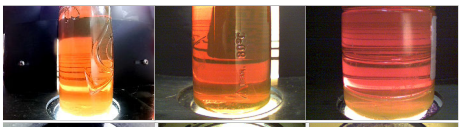
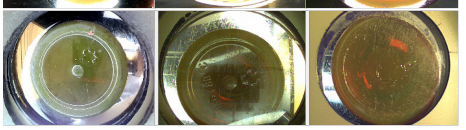


Viscosity @ 40°C



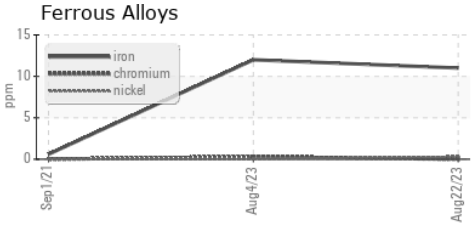
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	**43.3**	43.3	42.8

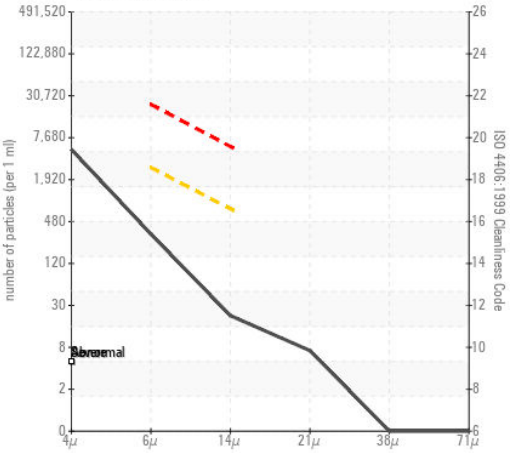
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

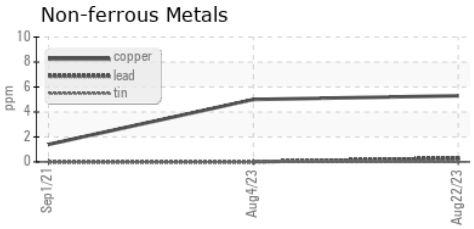
Ferrous Alloys



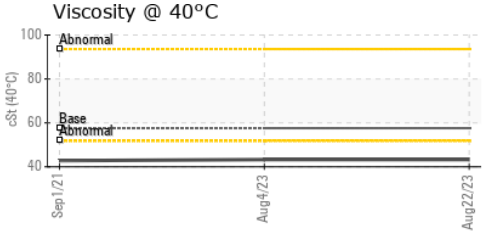
Particle Count



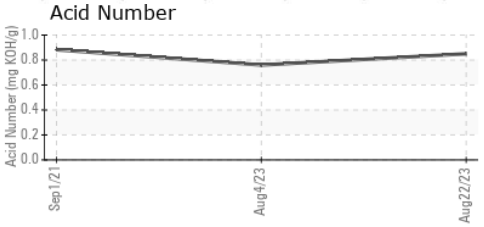
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0821616
Lab Number : 05936069
Unique Number : 10621340
Test Package : CONST

Received : 28 Aug 2023
Diagnosed : 29 Aug 2023
Diagnostician : Don Baldridge

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)

SHERWOOD CONSTRUCTION CO INC
3219 WEST MAY ST
WICHITA, KS
US 67213
Contact: DOUG KING
doug.king@sherwood.net
T: (316)617-3161
F: x: