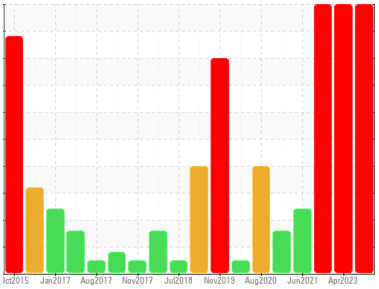
PROBLEM SUMMARY

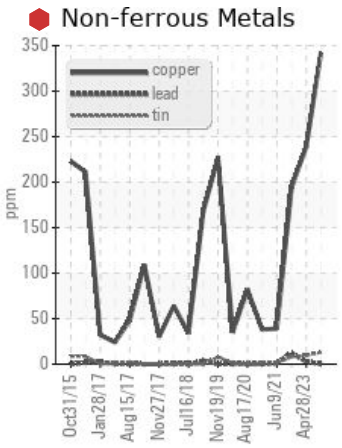
Area
OKLAHOMA/3/EG - EXCAVATOR
Machine Id
20.69L [OKLAHOMA^3^EG - EXCAVATOR]
Component
Left Final Drive
Fluid
MOBIL DELVAC 1350 (--- GAL)

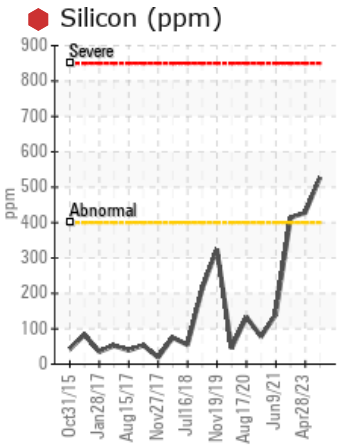
Sample Rating Trend

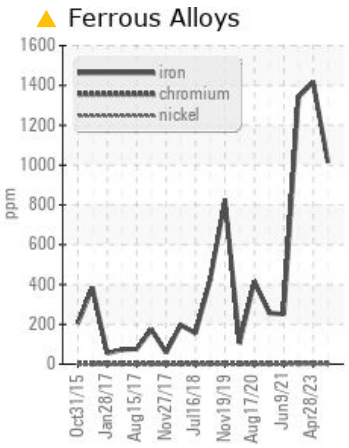


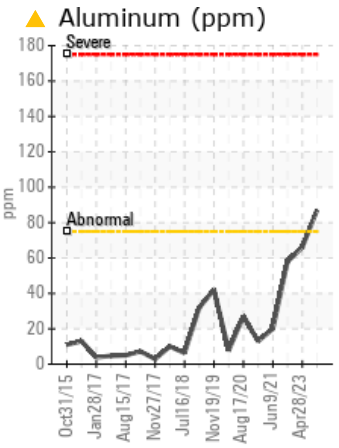
WEAR

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>800	▲ **1014**	▲ 1416	▲ 1342
Aluminum	ppm	ASTM D5185m	>75	▲ **87**	66	▲ 58
Copper	ppm	ASTM D5185m	>75	⬢ **342**	⬢ 239	⬢ 194
Tin	ppm	ASTM D5185m	>8	▲ **13**	▲ 10	▲ 8
Silicon	ppm	ASTM D5185m	>400	⬢ **527**	▲ 428	⬢ 414

Customer Id: SHEWIC
Sample No.: WC0834065
Lab Number: 05923759
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

28 Apr 2023 Diag: Angela Borella

WEAR

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.Copper ppm levels are severe. Iron and tin ppm levels are abnormal. Gear wear is indicated. Bearing and/or bushing wear is indicated. High concentration of dirt present in the oil. There is a light concentration of water present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

06 Dec 2022 Diag: Angela Borella

WEAR

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.Copper ppm levels are severe. Iron and aluminum and tin ppm levels are abnormal. Lead ppm levels are noted. Gear wear is indicated. Bearing and/or bushing wear is indicated. High concentration of dirt present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

09 Jun 2021 Diag: Don Baldridge

DIRT

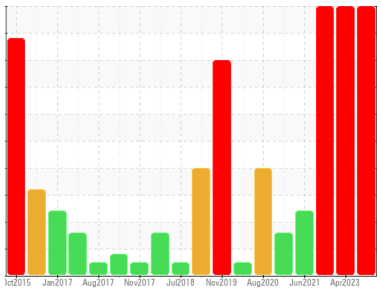
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Area
OKLAHOMA/3/EG - EXCAVATOR
Machine Id
20.69L [OKLAHOMA^3^EG - EXCAVATOR]
Component
Left Final Drive
Fluid
MOBIL DELVAC 1350 (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0834065**	WC0808046	WC0758652
Sample Date		Client Info		**05 Aug 2023**	28 Apr 2023	06 Dec 2022
Machine Age	hrs	Client Info		**12061**	11496	4973
Oil Age	hrs	Client Info		**361**	10466	2590
Oil Changed		Client Info		**N/A**	Changed	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	▲ **1014**	▲ 1416	▲ 1342
Chromium	ppm	ASTM D5185m	>10	**3**	4	4
Nickel	ppm	ASTM D5185m	>5	**2**	3	3
Titanium	ppm	ASTM D5185m	>15	**6**	5	5
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>75	▲ **87**	66	▲ 58
Lead	ppm	ASTM D5185m	>10	**<1**	3	▲ 12
Copper	ppm	ASTM D5185m	>75	⬢ **342**	⬢ 239	⬢ 194
Tin	ppm	ASTM D5185m	>8	▲ **13**	▲ 10	▲ 8
Antimony	ppm	ASTM D5185m	>50	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	<1

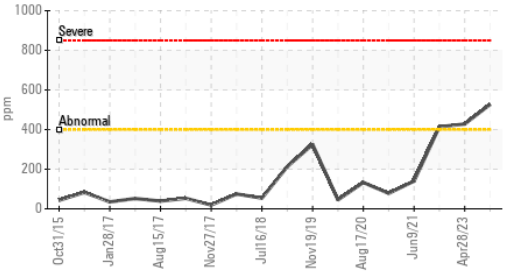
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**8**	7	11
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**3**	4	4
Manganese	ppm	ASTM D5185m		**9**	11	10
Magnesium	ppm	ASTM D5185m		**79**	63	58
Calcium	ppm	ASTM D5185m		**3508**	3354	3492
Phosphorus	ppm	ASTM D5185m		**1052**	1020	1031
Zinc	ppm	ASTM D5185m		**1242**	1268	1316
Sulfur	ppm	ASTM D5185m		**15686**	14612	15300

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	⬢ **527**	▲ 428	⬢ 414
Sodium	ppm	ASTM D5185m		**7**	7	8
Potassium	ppm	ASTM D5185m	>20	**28**	19	18

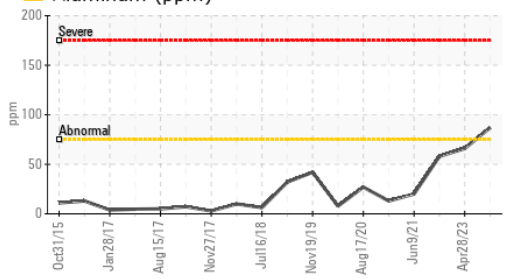
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	0.2%	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

OIL ANALYSIS REPORT

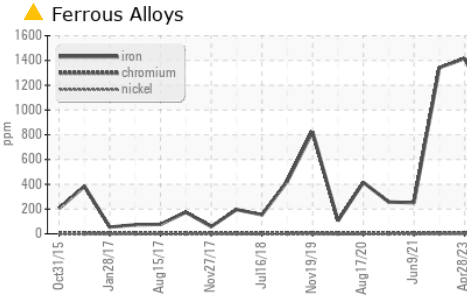
Silicon (ppm)



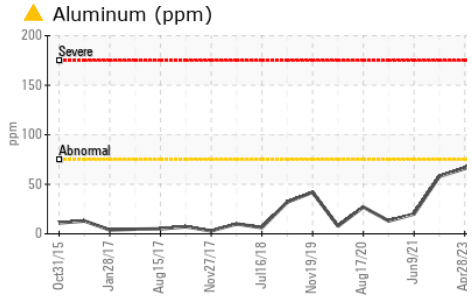
Aluminum (ppm)



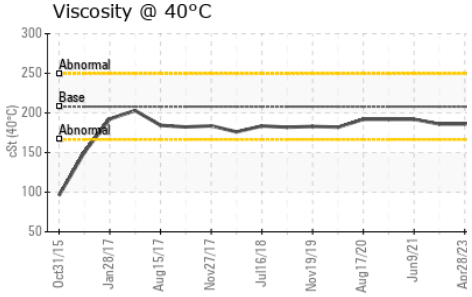
Ferrous Alloys



Aluminum (ppm)



Viscosity @ 40°C

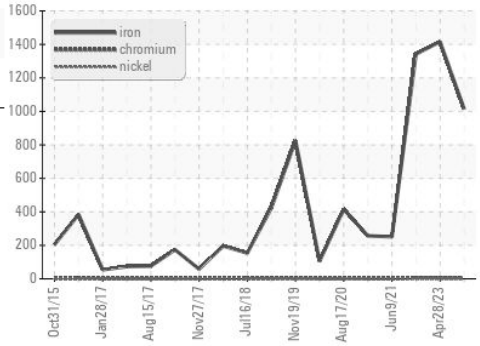


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	208	**193**	186	186

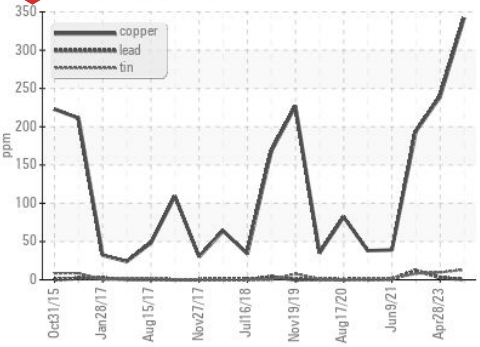
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

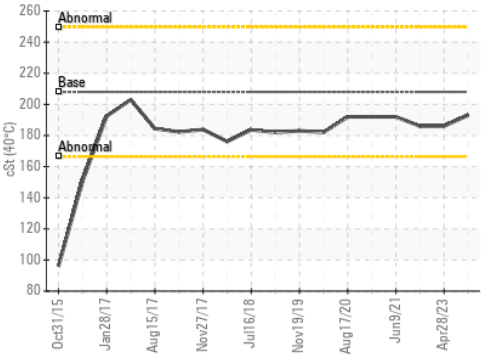
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0834065
Lab Number : 05923759
Unique Number : 10603706
Test Package : CONST

Received : 14 Aug 2023
Diagnosed : 15 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:

Report Id: SHEWIC [WUSCAR] 05923759 (Generated: 08/15/2023 14:26:08) Rev: 1

Submitted By: GARRETT ADAMS