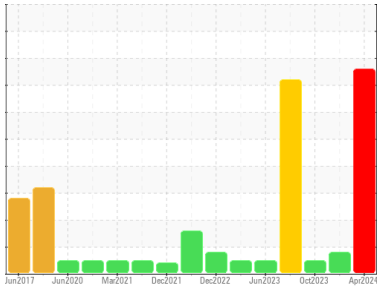
PROBLEM SUMMARY

Area
OKLAHOMA/102/EG - LOADER
Machine Id
45.38L [OKLAHOMA^102^EG - LOADER]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

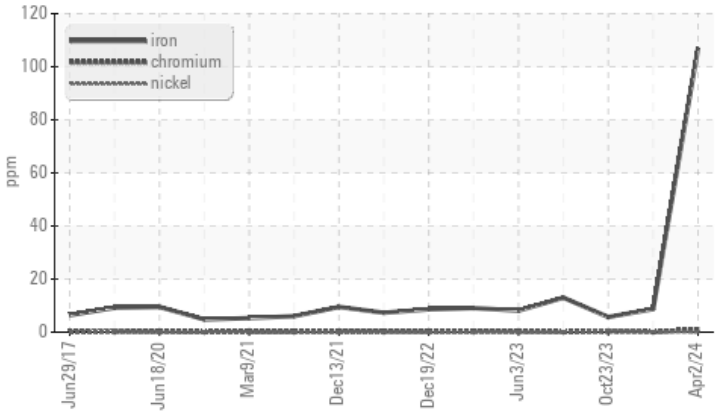
Sample Rating Trend



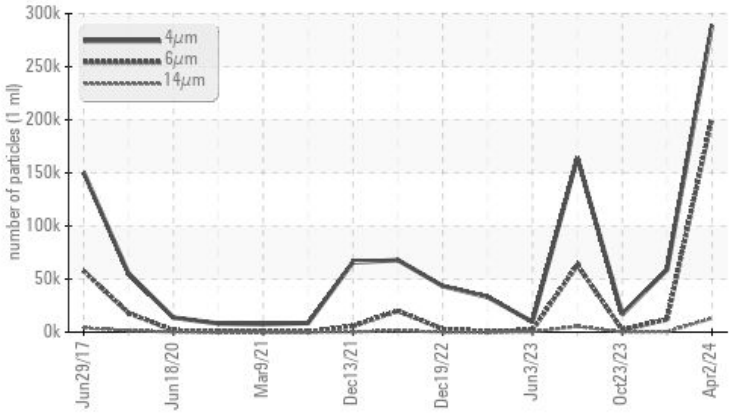
WEAR

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend you service the filters on this component. 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	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>20	▲ **107**	9	6
Particles >6µm		ASTM D7647	>2500	▲ **201474**	▲ 11997	2268
Particles >14µm		ASTM D7647	>640	▲ **13115**	496	128
Particles >21µm		ASTM D7647	>160	▲ **684**	108	34
Oil Cleanliness		ISO 4406 (c)	>--/18/16	▲ **25/25/21**	▲ 23/21/16	21/18/14

Customer Id: SHEWIC
Sample No.: WC0908757
Lab Number: 06139840
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 Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

ISO

21 Mar 2024 Diag: Wes Davis
The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

NORMAL

23 Oct 2023 Diag: Wes Davis
Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

ISO

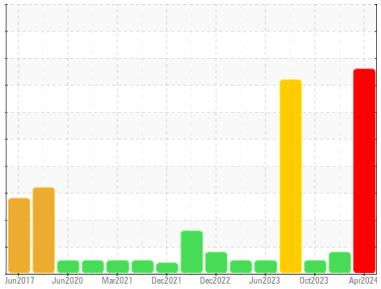
18 Sep 2023 Diag: Wes Davis
We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

OIL ANALYSIS REPORT

Area
OKLAHOMA/102/EG - LOADER
Machine Id
45.38L [OKLAHOMA^102^EG - LOADER]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

▲ Recommendation
The oil change at the time of sampling has been noted. We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear
A sharp increase in the iron level is noted. The iron level is severe.

▲ Contamination
There is a high amount of particulates 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		**WC0908757**	WC0914507	WC0857268
Sample Date		Client Info		**02 Apr 2024**	21 Mar 2024	23 Oct 2023
Machine Age	hrs	Client Info		**8540**	8905	8283
Oil Age	hrs	Client Info		**8540**	1000	500
Oil Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**SEVERE**	ABNORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **107**	9	6
Chromium	ppm	ASTM D5185m	>10	**1**	0	<1
Nickel	ppm	ASTM D5185m	>10	**0**	<1	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	4	3
Lead	ppm	ASTM D5185m	>10	**0**	<1	2
Copper	ppm	ASTM D5185m	>75	**1**	4	3
Tin	ppm	ASTM D5185m	>10	**<1**	<1	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		**114**	67	55
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**5**	<1	0
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**20**	18	18
Calcium	ppm	ASTM D5185m		**3493**	2901	2639
Phosphorus	ppm	ASTM D5185m		**1053**	1003	993
Zinc	ppm	ASTM D5185m		**1339**	1251	1247
Sulfur	ppm	ASTM D5185m		**5191**	4928	4486

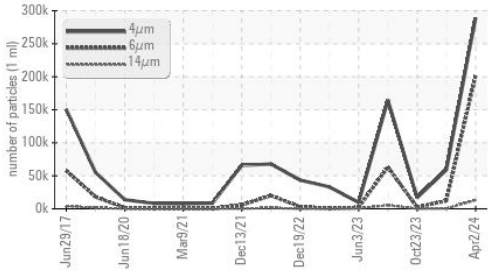
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**13**	12	10
Sodium	ppm	ASTM D5185m		**3**	7	6
Potassium	ppm	ASTM D5185m	>20	**1**	2	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**288990**	58964	16803
Particles >6µm		ASTM D7647	>2500	▲ **201474**	▲ 11997	2268
Particles >14µm		ASTM D7647	>640	▲ **13115**	496	128
Particles >21µm		ASTM D7647	>160	▲ **684**	108	34
Particles >38µm		ASTM D7647	>40	**1**	1	1
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	▲ **25/25/21**	▲ 23/21/16	21/18/14

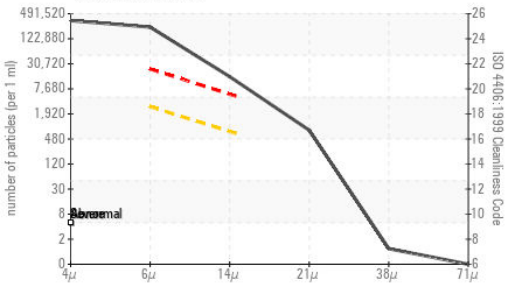
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.69**	0.80	0.86

OIL ANALYSIS REPORT

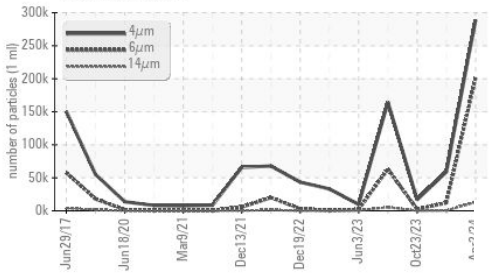
Particle Trend



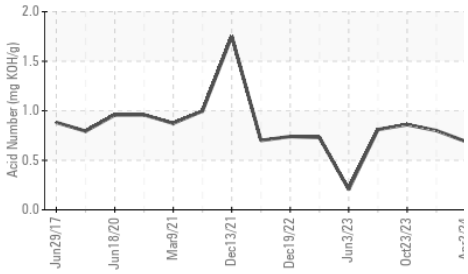
Particle Count



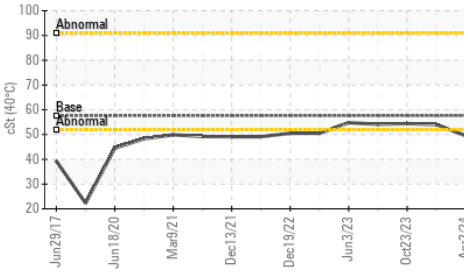
Particle Trend



Acid Number



Viscosity @ 40°C



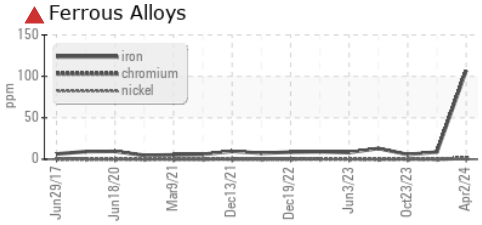
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**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	**49.5**	54.0	54.4

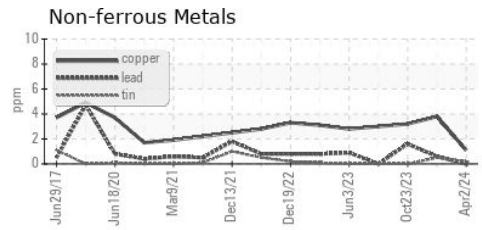
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

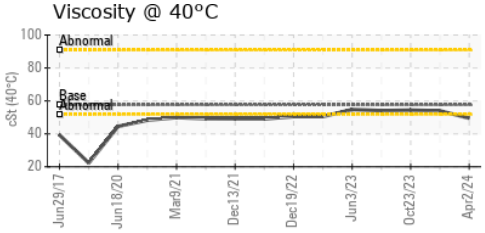
Ferrous Alloys



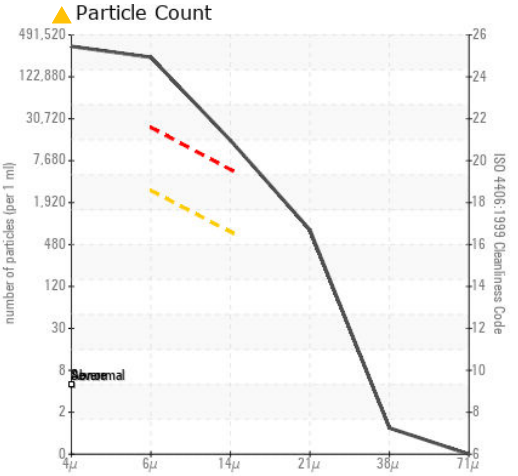
Non-ferrous Metals



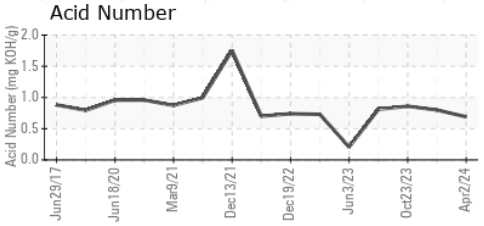
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0908757
Lab Number : 06139840
Unique Number : 10964648
Test Package : CONST (Additional Tests: PQ)

Received : 05 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 2024 - 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)

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Report Id: SHEWIC [WUSCAR] 06139840 (Generated: 04/08/2024 14:33:47) Rev: 1

Submitted By: SHAWN SOUTH