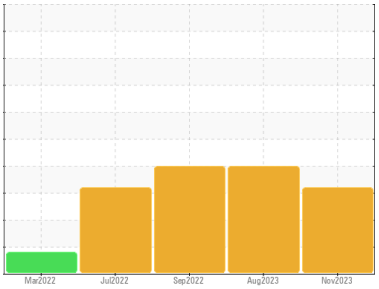
PROBLEM SUMMARY

Area
OKLAHOMA/102
Machine Id
20.526L [OKLAHOMA^102]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

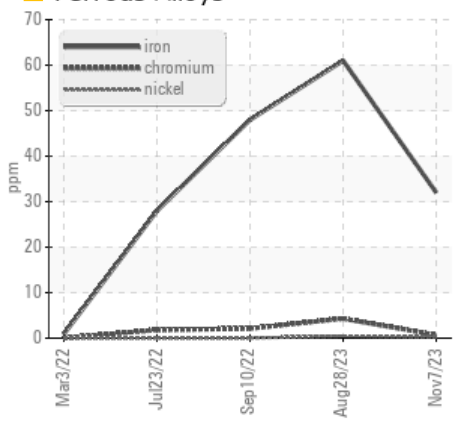
Sample Rating Trend



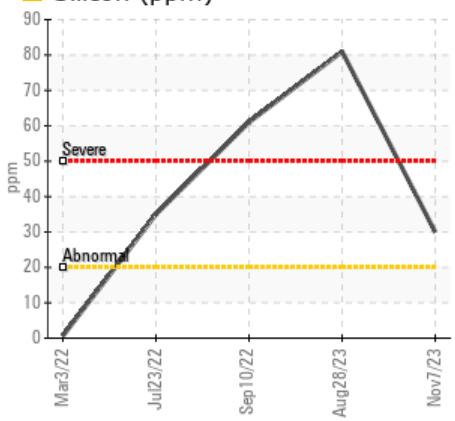
DIRT

COMPONENT CONDITION SUMMARY

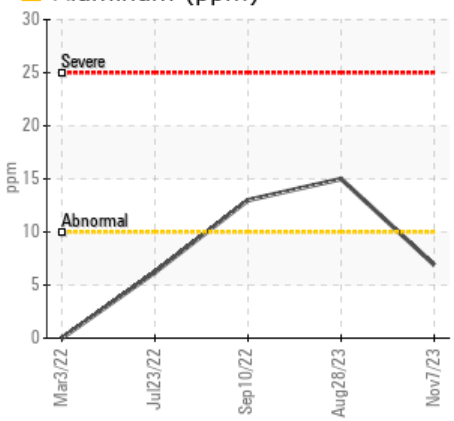
▲ Ferrous Alloys



▲ Silicon (ppm)



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ **32**	▲ 61	▲ 48
Aluminum	ppm	ASTM D5185m	>10	▲ **7**	▲ 15	▲ 13
Silicon	ppm	ASTM D5185m	>20	▲ **30**	▲ 81	▲ 61

Customer Id: SHEWIC
Sample No.: WC0857274
Lab Number: 06009055
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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

28 Aug 2023 Diag: Don Baldridge

DIRT

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid.

view report

10 Sep 2022 Diag: Doug Bogart

DIRT

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid.

view report

23 Jul 2022 Diag: Jonathan Hester

DIRT

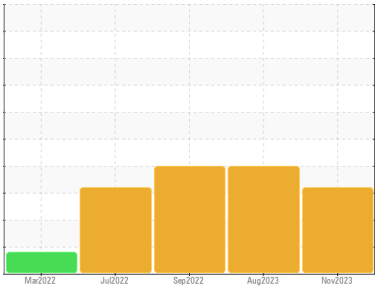
We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Area
OKLAHOMA/102
Machine Id
20.526L [OKLAHOMA^102]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0857274**	WC0834078	WC0738543
Sample Date		Client Info		**07 Nov 2023**	28 Aug 2023	10 Sep 2022
Machine Age	hrs	Client Info		**1868**	1724	1006
Oil Age	hrs	Client Info		**1868**	1724	1006
Oil Changed		Client Info		**Changed**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **32**	▲ 61	▲ 48
Chromium	ppm	ASTM D5185m	>10	**<1**	4	2
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	▲ **7**	▲ 15	▲ 13
Lead	ppm	ASTM D5185m	>10	**<1**	1	<1
Copper	ppm	ASTM D5185m	>75	**17**	25	16
Tin	ppm	ASTM D5185m	>10	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**6**	9	3
Barium	ppm	ASTM D5185m		**7**	0	3
Molybdenum	ppm	ASTM D5185m		**1**	1	1
Manganese	ppm	ASTM D5185m		**<1**	2	2
Magnesium	ppm	ASTM D5185m		**11**	10	9
Calcium	ppm	ASTM D5185m		**1386**	1699	1145
Phosphorus	ppm	ASTM D5185m		**873**	842	796
Zinc	ppm	ASTM D5185m		**1071**	1123	1021
Sulfur	ppm	ASTM D5185m		**3256**	3461	2716

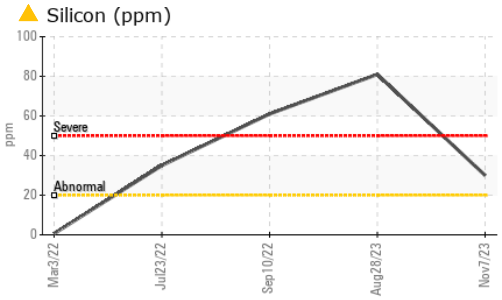
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ **30**	▲ 81	▲ 61
Sodium	ppm	ASTM D5185m		**0**	6	3
Potassium	ppm	ASTM D5185m	>20	**3**	2	3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**6685**	124845	190581
Particles >6µm		ASTM D7647	>2500	**2495**	▲ 8314	▲ 6452
Particles >14µm		ASTM D7647	>640	**177**	32	95
Particles >21µm		ASTM D7647	>160	**26**	7	13
Particles >38µm		ASTM D7647	>40	**0**	0	0
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	**20/18/15**	▲ 24/20/12	▲ 25/20/14

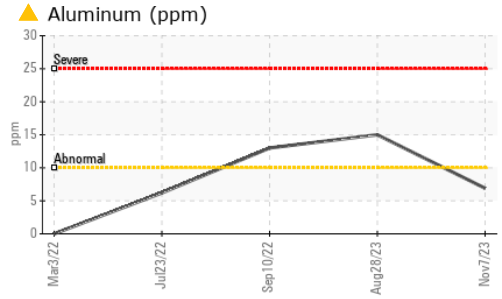
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.70**	0.93	0.92

OIL ANALYSIS REPORT

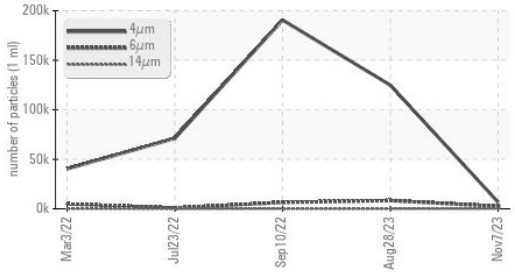
Silicon (ppm)



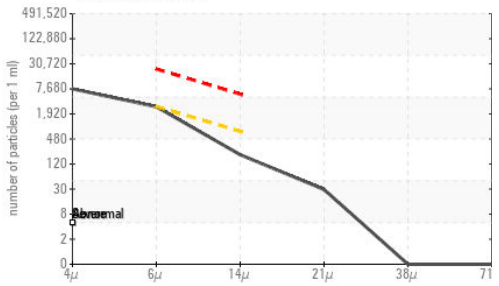
Aluminum (ppm)



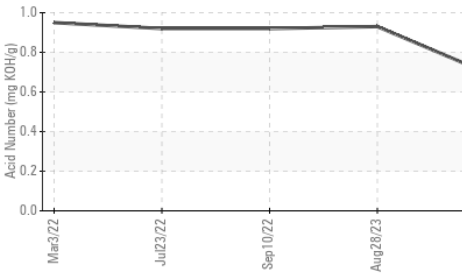
Particle Trend



Particle Count



Acid Number



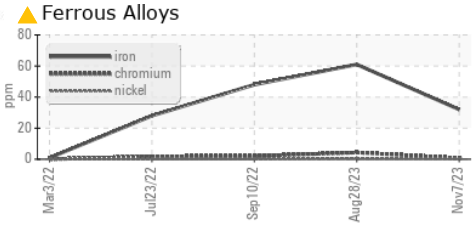
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	**56.7**	59.7	54.0

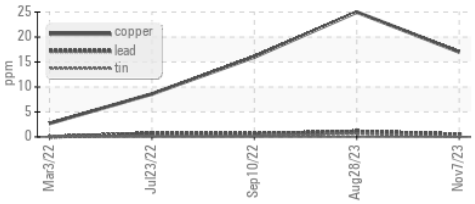
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

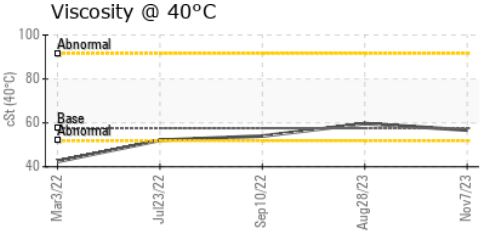
Ferrous Alloys



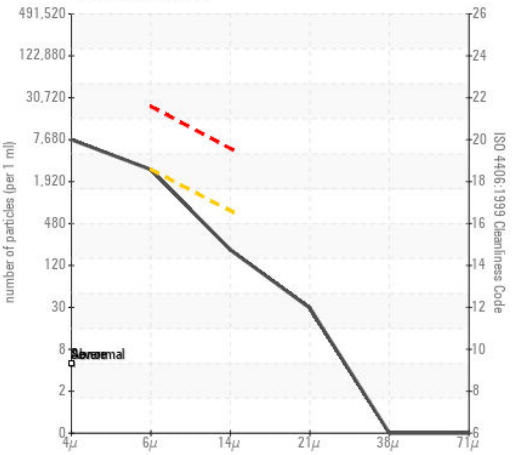
Non-ferrous Metals



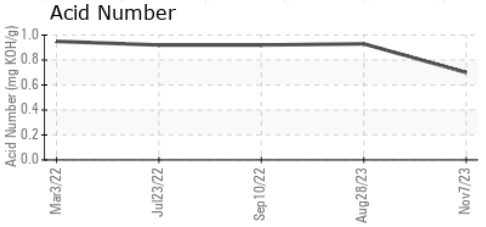
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857274 **Received** : 15 Nov 2023
Lab Number : 06009055 **Diagnosed** : 19 Nov 2023
Unique Number : 10742817 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: PrtCount)

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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WICHITA, KS
US 67213
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F: x:

Report Id: SHEWIC [WUSCAR] 06009055 (Generated: 11/19/2023 09:56:10) Rev: 1

Submitted By: RUSTY RILEY