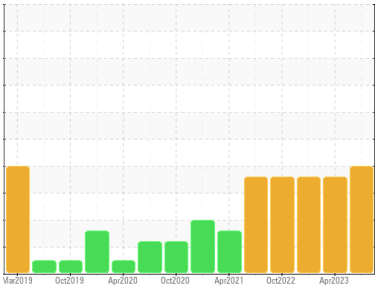
PROBLEM SUMMARY

Area
OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL
Machine Id
69.10 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL]
Component
Steering
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

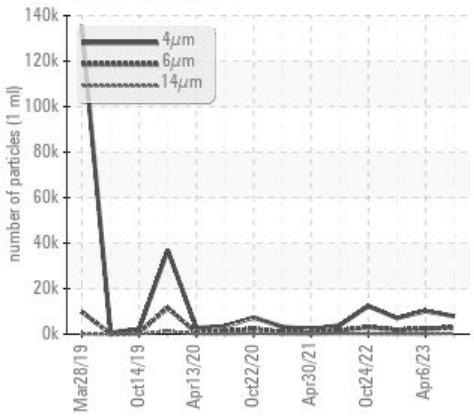
Sample Rating Trend



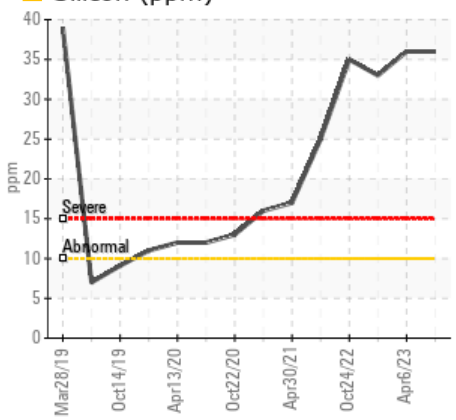
DIRT

COMPONENT CONDITION SUMMARY

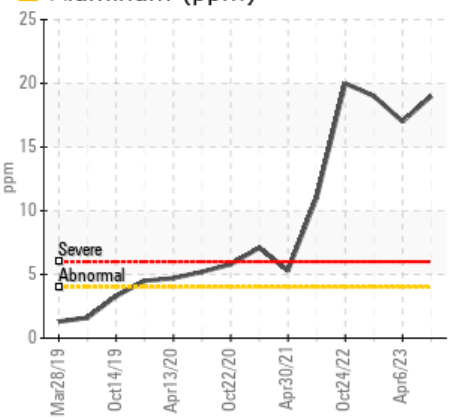
Particle Trend



Silicon (ppm)



Aluminum (ppm)



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>4	▲ **19**	▲ 17	▲ 19
Silicon	ppm	ASTM D5185m	>10	▲ **36**	▲ 36	▲ 33
Particles >6µm		ASTM D7647	>640	▲ **2857**	▲ 2380	▲ 1884
Particles >14µm		ASTM D7647	>80	▲ **259**	▲ 88	▲ 105
Particles >21µm		ASTM D7647	>20	▲ **67**	15	17
Oil Cleanliness		ISO 4406 (c)	>--/16/13	▲ **20/19/15**	▲ 21/18/14	▲ 20/18/14

Customer Id: SHEWIC
Sample No.: WC0778383
Lab Number: 05923304
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
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

06 Apr 2023 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.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the fluid. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The condition of the fluid is acceptable for the time in service.

view report

21 Dec 2022 Diag: Angela Borella

DIRT

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

view report

24 Oct 2022 Diag: Don Baldridge

DIRT

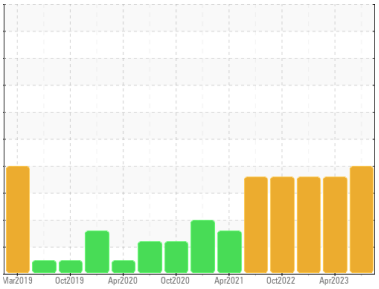
We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the fluid.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

view report

OIL ANALYSIS REPORT

Area
OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL
Machine Id
69.10 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL]
Component
Steering
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. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the fluid. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0778383**	WC0800810	WC0769705
Sample Date		Client Info		**05 Aug 2023**	06 Apr 2023	21 Dec 2022
Machine Age	hrs	Client Info		**9867**	9135	8996
Oil Age	hrs	Client Info		**8662**	8662	8662
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>60	**9**	10	10
Chromium	ppm	ASTM D5185m	>12	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>6	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>4	▲ **19**	▲ 17	▲ 19
Lead	ppm	ASTM D5185m	>12	**<1**	0	<1
Copper	ppm	ASTM D5185m	>30	**3**	2	3
Tin	ppm	ASTM D5185m		**<1**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**38**	36	34
Barium	ppm	ASTM D5185m		**1**	0	0
Molybdenum	ppm	ASTM D5185m		**4**	4	4
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**64**	62	60
Calcium	ppm	ASTM D5185m		**2705**	2954	3098
Phosphorus	ppm	ASTM D5185m		**906**	982	992
Zinc	ppm	ASTM D5185m		**1103**	1189	1209
Sulfur	ppm	ASTM D5185m		**5031**	5714	5819

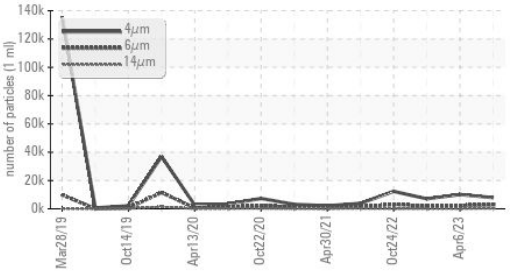
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>10	▲ **36**	▲ 36	▲ 33
Sodium	ppm	ASTM D5185m		**7**	6	5
Potassium	ppm	ASTM D5185m	>20	**6**	5	8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**7883**	10101	7077
Particles >6µm		ASTM D7647	>640	▲ **2857**	▲ 2380	▲ 1884
Particles >14µm		ASTM D7647	>80	▲ **259**	▲ 88	▲ 105
Particles >21µm		ASTM D7647	>20	▲ **67**	15	17
Particles >38µm		ASTM D7647	>4	**1**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/16/13	▲ **20/19/15**	▲ 21/18/14	▲ 20/18/14

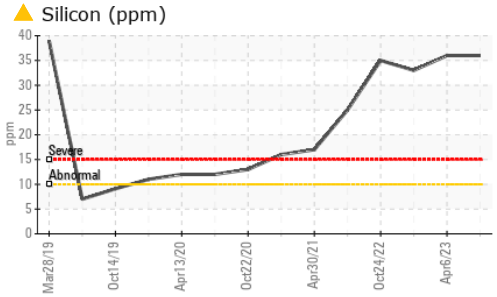
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.54**	1.43	1.369

OIL ANALYSIS REPORT

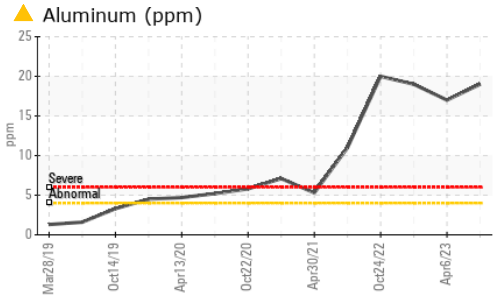
Particle Trend



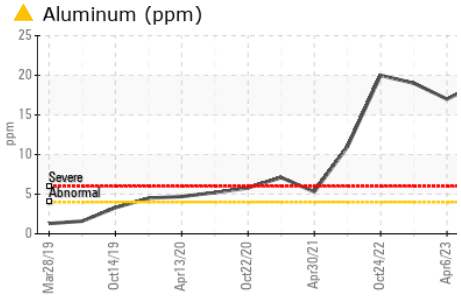
Silicon (ppm)



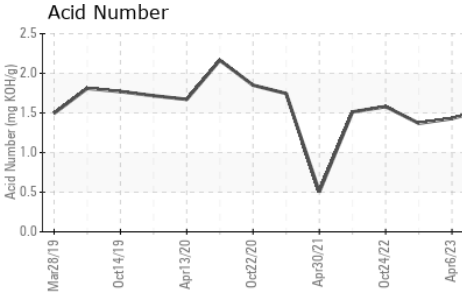
Aluminum (ppm)



Aluminum (ppm)



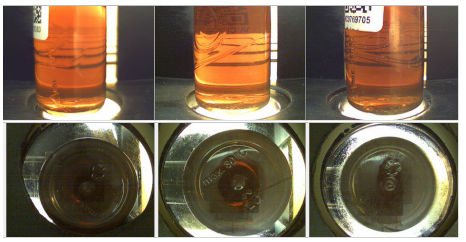
Acid Number



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		**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

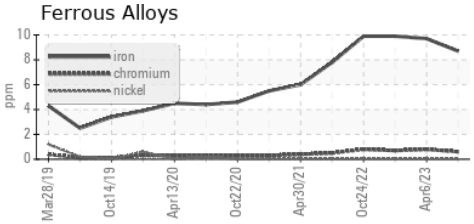
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	**86.3**	85.7	85.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

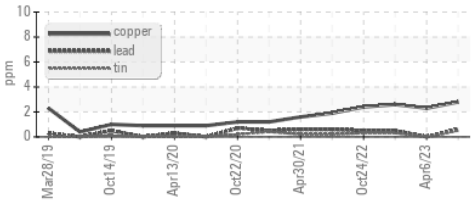


GRAPHS

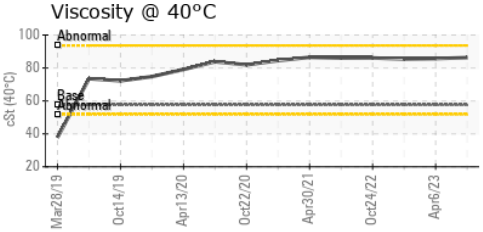
Ferrous Alloys



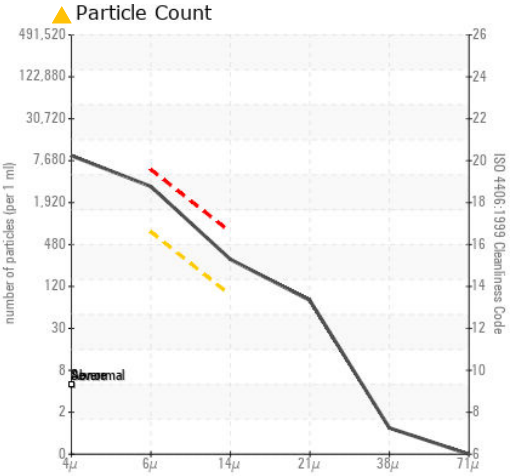
Non-ferrous Metals



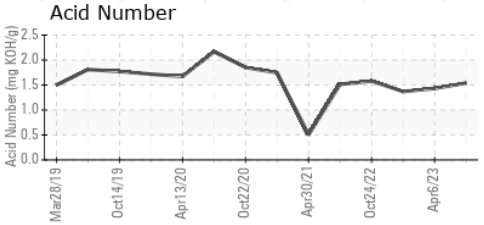
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0778383 **Received** : 14 Aug 2023
Lab Number : 05923304 **Diagnosed** : 15 Aug 2023
Unique Number : 10603251 **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)

SHERWOOD CONSTRUCTION CO INC
3219 WEST MAY ST
WICHITA, KS
US 67213
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Report Id: SHEWIC [WUSCAR] 05923304 (Generated: 08/15/2023 12:07:21) Rev: 1

Submitted By: GARRETT ADAMS