

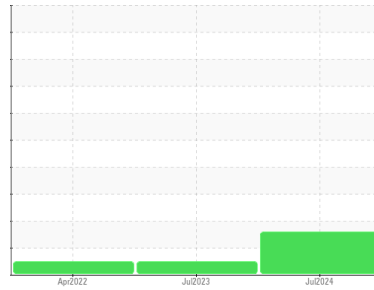


OIL ANALYSIS REPORT



Area
OKLAHOMA/102
Machine Id
69.104L [OKLAHOMA^102]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (37 GAL)

Sample Rating Trend



ISO



DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0935154	WC0792427	WC0665202
Sample Date	Client Info		11 Jul 2024	20 Jul 2023	06 Apr 2022
Machine Age	hrs	Client Info	2900	2190	10
Oil Age	hrs	Client Info	2900	2190	10
Oil Changed	Client Info		N/A	Not Changd	Not Changd
Sample Status			ABNORMAL	NORMAL	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	5	4	2
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >10	0	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	<1	<1	0
Aluminum	ppm	ASTM D5185m >10	4	2	1
Lead	ppm	ASTM D5185m >10	<1	4	<1
Copper	ppm	ASTM D5185m >75	<1	1	<1
Tin	ppm	ASTM D5185m >10	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	38	0	<1
Barium	ppm	ASTM D5185m	0	4	0
Molybdenum	ppm	ASTM D5185m	1	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	21	14	10
Calcium	ppm	ASTM D5185m	3177	3765	2974
Phosphorus	ppm	ASTM D5185m	984	1265	997
Zinc	ppm	ASTM D5185m	1245	1510	1213
Sulfur	ppm	ASTM D5185m	4475	5480	3396

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	6	6	4
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	2	2	2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		51809	2867	3509
Particles >6µm	ASTM D7647	>2500	▲ 19884	782	531
Particles >14µm	ASTM D7647	>640	▲ 2055	57	33
Particles >21µm	ASTM D7647	>160	▲ 452	11	8
Particles >38µm	ASTM D7647	>40	7	0	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	▲ 23/21/18	19/17/13	19/16/12

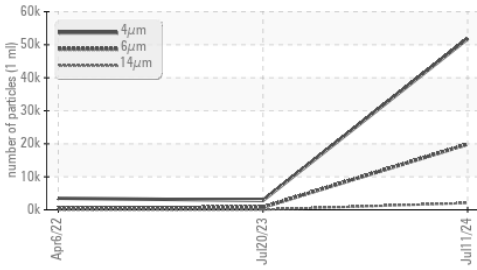
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.47	1.69	1.89

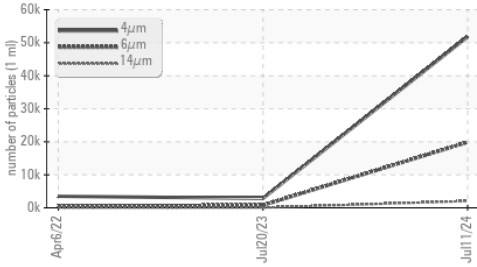


OIL ANALYSIS REPORT

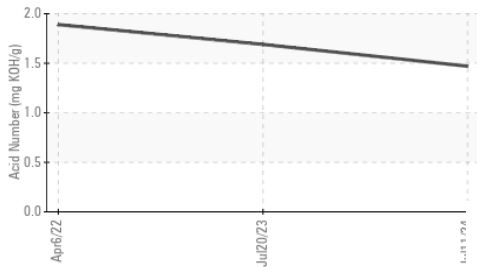
▲ Particle Trend



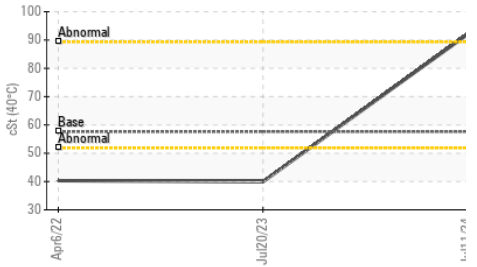
▲ Particle Trend



Acid Number



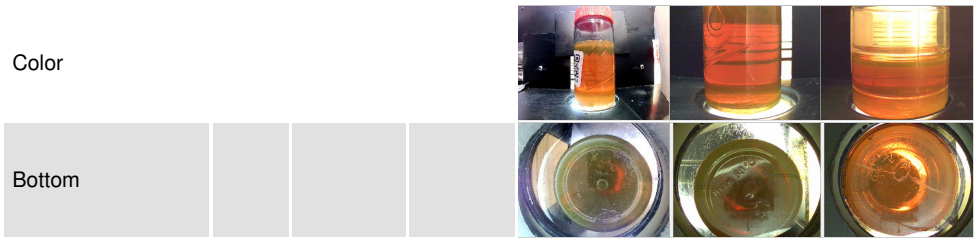
Viscosity @ 40°C



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

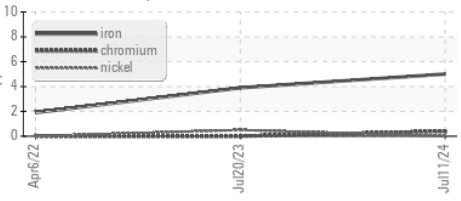
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	57.6	92.0	39.9	40.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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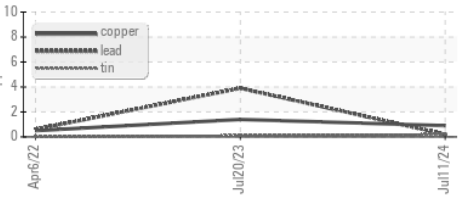


GRAPHS

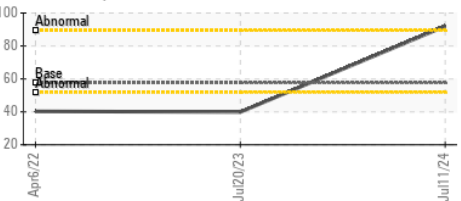
Ferrous Alloys



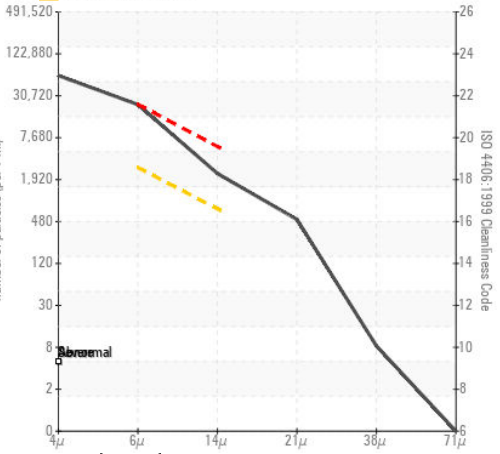
Non-ferrous Metals



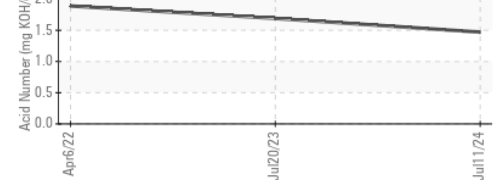
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0935154 **Received** : 18 Jul 2024
Lab Number : 06240215 **Tested** : 19 Jul 2024
Unique Number : 11129049 **Diagnosed** : 20 Jul 2024 - Wes Davis
Test Package : CONST

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

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)