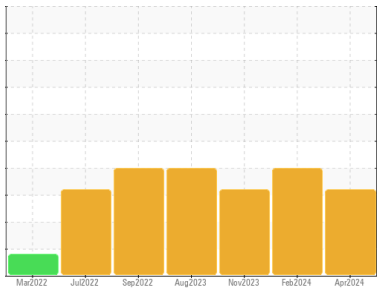
OIL ANALYSIS REPORT

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		**WC0848868**	WC0864294	WC0857274
Sample Date		Client Info		**05 Apr 2024**	19 Feb 2024	07 Nov 2023
Machine Age	hrs	Client Info		**2469**	2236	1868
Oil Age	hrs	Client Info		**500**	1868	1868
Oil Changed		Client Info		**Changed**	N/A	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

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	▲ **27**	▲ 40	▲ 32
Chromium	ppm	ASTM D5185m	>10	**2**	3	<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	● **5**	● 8	● 7
Lead	ppm	ASTM D5185m	>10	**0**	4	<1
Copper	ppm	ASTM D5185m	>75	**10**	16	17
Tin	ppm	ASTM D5185m	>10	**0**	0	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		**24**	18	6
Barium	ppm	ASTM D5185m		**0**	0	7
Molybdenum	ppm	ASTM D5185m		**<1**	<1	1
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**14**	14	11
Calcium	ppm	ASTM D5185m		**2568**	2147	1386
Phosphorus	ppm	ASTM D5185m		**973**	896	873
Zinc	ppm	ASTM D5185m		**1178**	1047	1071
Sulfur	ppm	ASTM D5185m		**5138**	3540	3256

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ **27**	▲ 44	▲ 30
Sodium	ppm	ASTM D5185m		**4**	5	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**77225**	103388	6685
Particles >6µm		ASTM D7647	>2500	**1712**	▲ 5290	2495
Particles >14µm		ASTM D7647	>640	**41**	7	177
Particles >21µm		ASTM D7647	>160	**7**	2	26
Particles >38µm		ASTM D7647	>40	**0**	0	0
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	**23/18/13**	▲ 24/20/10	20/18/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.35**	1.27	0.70

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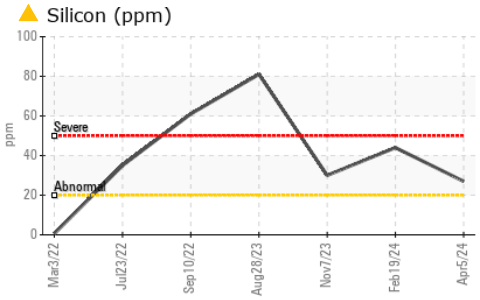
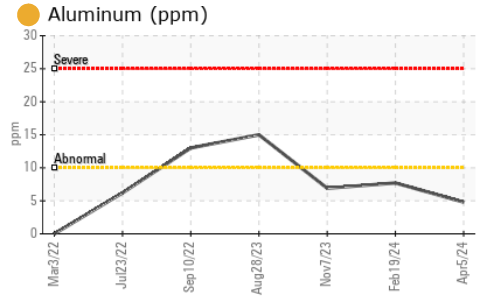
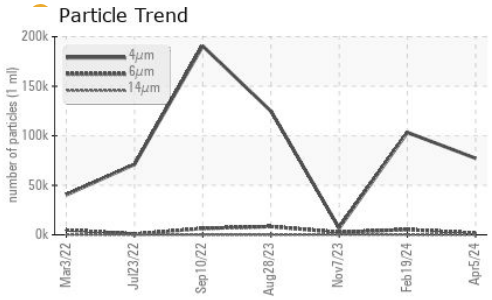
Silicon (ppm)



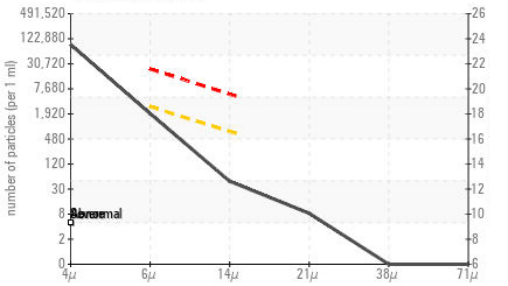
Aluminum (ppm)



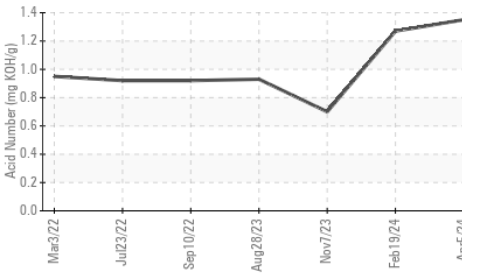
Particle Trend



Particle Count



Acid Number



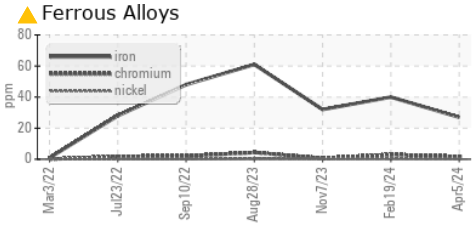
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	**83.2**	72.9	56.7

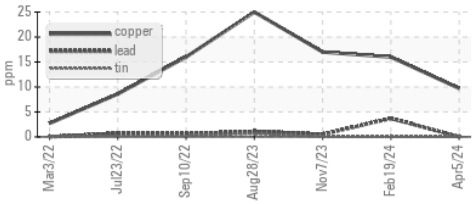
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

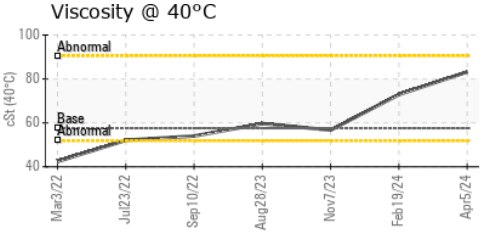
Ferrous Alloys



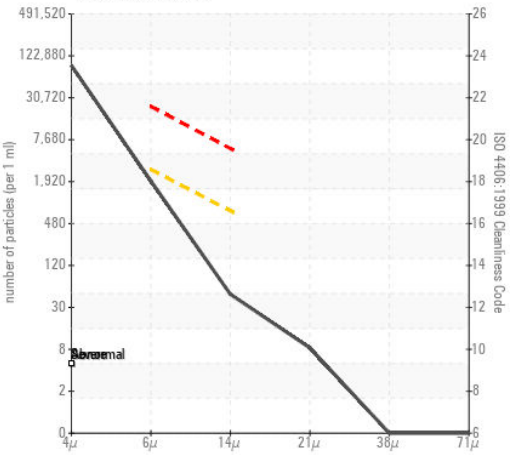
Non-ferrous Metals



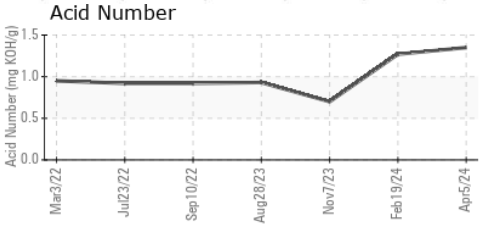
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0848868
Lab Number : 06160287
Unique Number : 10995710
Test Package : CONST

Received : 25 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 26 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)

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] 06160287 (Generated: 04/26/2024 14:31:22) Rev: 1

Submitted By: PATRICIA BIBLE