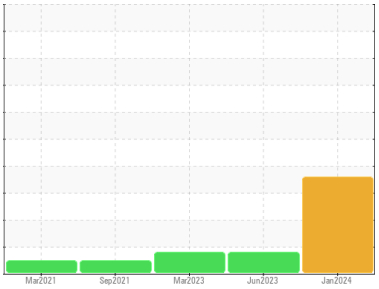
OIL ANALYSIS REPORT

Area
OKLAHOMA/102
Machine Id
69.102L [OKLAHOMA^102]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

Recommendation
Oil and 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 oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0873980**	WC0821849	WC0778374
Sample Date		Client Info		**08 Jan 2024**	16 Jun 2023	15 Mar 2023
Machine Age	hrs	Client Info		**5440**	5179	4832
Oil Age	hrs	Client Info		**500**	1927	2786
Oil Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

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	**9**	8	8
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	1	<1
Lead	ppm	ASTM D5185m	>10	**0**	2	1
Copper	ppm	ASTM D5185m	>75	**5**	<1	0
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

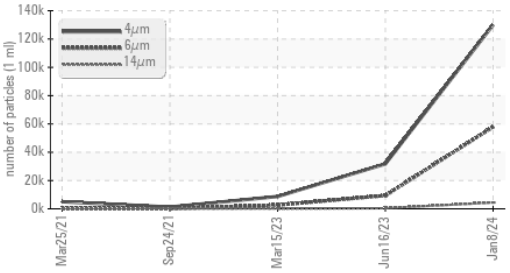
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**20**	23	21
Barium	ppm	ASTM D5185m		**0**	2	0
Molybdenum	ppm	ASTM D5185m		**3**	4	4
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**18**	36	36
Calcium	ppm	ASTM D5185m		**1569**	1381	1342
Phosphorus	ppm	ASTM D5185m		**856**	861	761
Zinc	ppm	ASTM D5185m		**1029**	1115	1041
Sulfur	ppm	ASTM D5185m		**3195**	3584	3068

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ **21**	4	4
Sodium	ppm	ASTM D5185m		**1**	<1	1
Potassium	ppm	ASTM D5185m	>20	**0**	<1	0

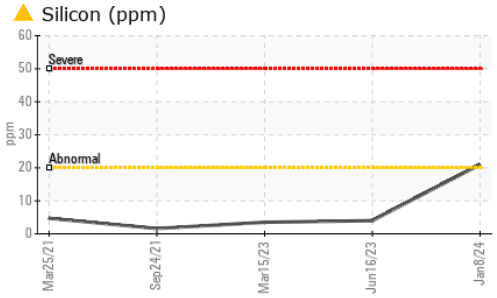
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**129979**	31759	8719
Particles >6µm		ASTM D7647	>2500	▲ **57890**	▲ 9396	▲ 2661
Particles >14µm		ASTM D7647	>640	▲ **4431**	414	161
Particles >21µm		ASTM D7647	>160	▲ **1050**	78	31
Particles >38µm		ASTM D7647	>40	▲ **41**	1	0
Particles >71µm		ASTM D7647	>10	**2**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	▲ **24/23/19**	▲ 22/20/16	▲ 20/19/15

OIL ANALYSIS REPORT

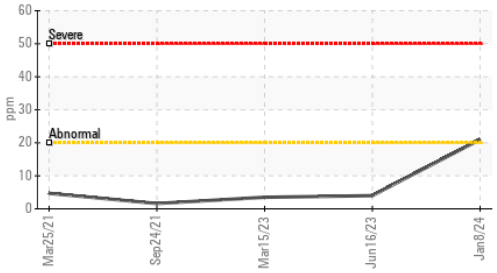
Particle Trend



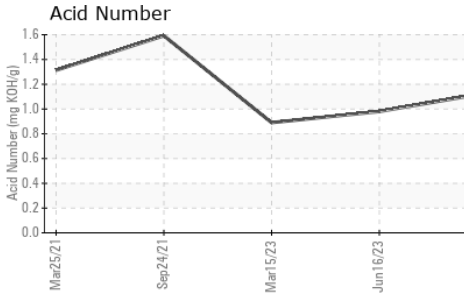
Silicon (ppm)



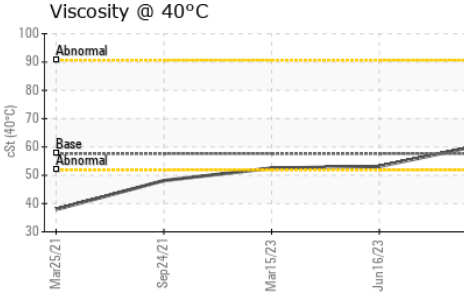
Silicon (ppm)



Acid Number



Viscosity @ 40°C

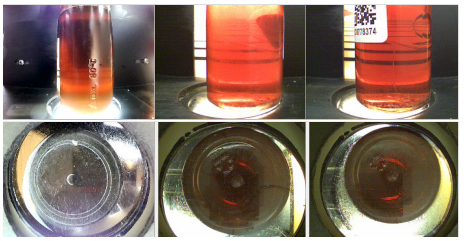


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.13**	0.98	0.89

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**LIGHT**	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

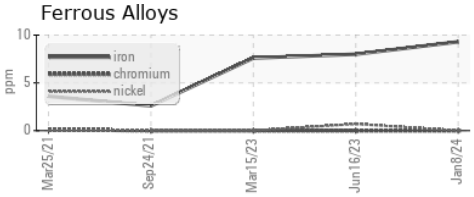
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	**61.1**	53.1	52.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

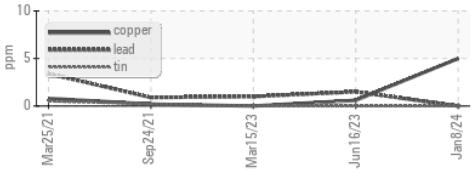


GRAPHS

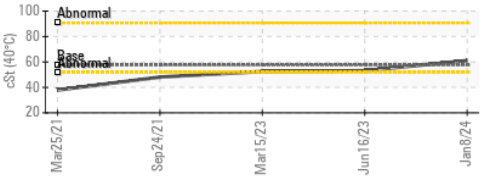
Ferrous Alloys



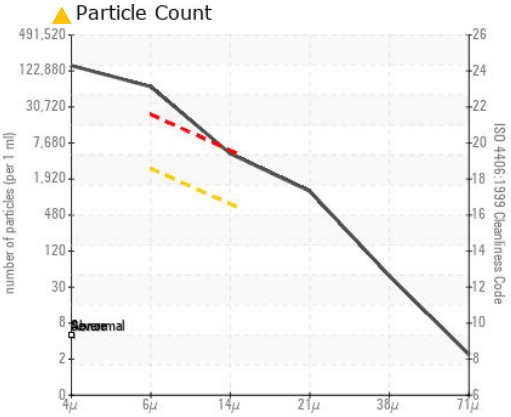
Non-ferrous Metals



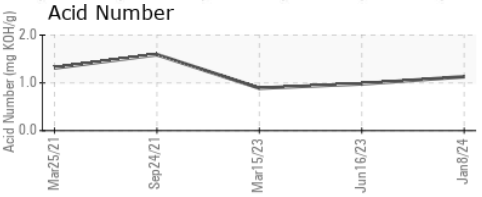
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0873980
Lab Number : 06060972
Unique Number : 10832354
Test Package : CONST

Recieved : 16 Jan 2024
Diagnosed : 17 Jan 2024
Diagnostician : Jonathan Hester

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] 06060972 (Generated: 01/17/2024 22:20:25) Rev: 1

Submitted By: BOBBY JONES