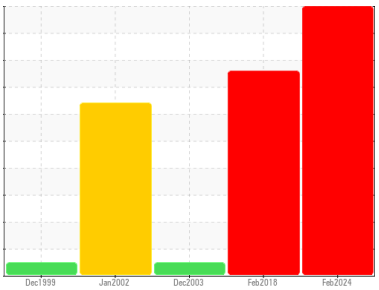
PROBLEM SUMMARY

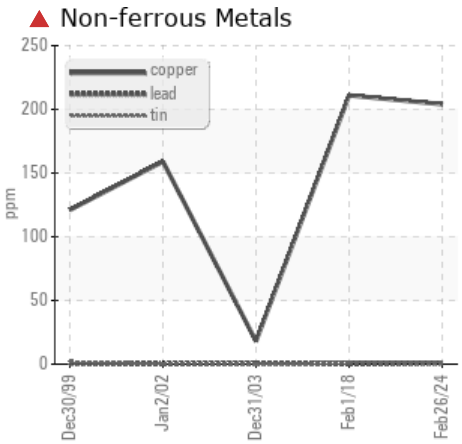
Sample Rating Trend

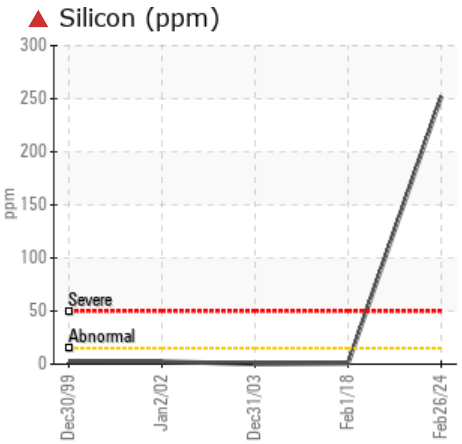


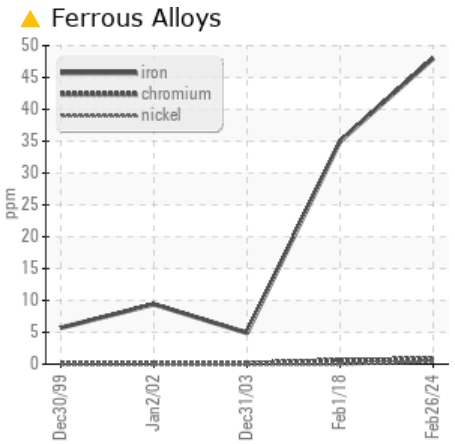
WEAR

Machine Id
IMM058 (S/N A08P216)
Component
Hydraulic System
Fluid
MOBIL DTE 10 EXCEL 46 (--- GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>20	▲ **48**	▲ 35	5
Copper	ppm	ASTM D5185m	>20	▲ **204**	▲ 211	18
Silicon	ppm	ASTM D5185m	>15	▲ **252**	<1	<1

Customer Id: SUMSCO
Sample No.: WC0887701
Lab Number: 06210710
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WEAR

01 Feb 2018 Diag: Jonathan Hester

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is abnormal. The copper level is severe. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid.

view report

NORMAL

31 Dec 2003 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The condition of oil is suitable for further service.

view report

WEAR

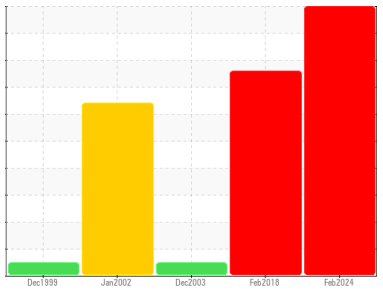
02 Jan 2002 Diag: Doug Bogart

No corrective action is recommended at this time. Resample at the next service interval to monitor.The copper level is severe. In the absence of other wear metals, suspect copper from source other than wear. All other component wear rates are normal. There is a moderate amount of silt (particulates 5 to 15 microns in size) present in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
IMM058 (S/N A08P216)
Component
Hydraulic System
Fluid
MOBIL DTE 10 EXCEL 46 (--- GAL)

DIAGNOSIS

▲ Recommendation
We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear
The iron level is abnormal. The copper level is severe.

▲ Contamination
Elemental level of silicon (Si) above normal indicating ingress of seal material. 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		**WC0887701**	WCI2287384	WCI2038225
Sample Date		Client Info		**26 Feb 2024**	01 Feb 2018	31 Dec 2003
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **48**	▲ 35	5
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	<1	0
Lead	ppm	ASTM D5185m	>20	**<1**	0	<1
Copper	ppm	ASTM D5185m	>20	▲ **204**	▲ 211	18
Tin	ppm	ASTM D5185m	>20	**<1**	1	0
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

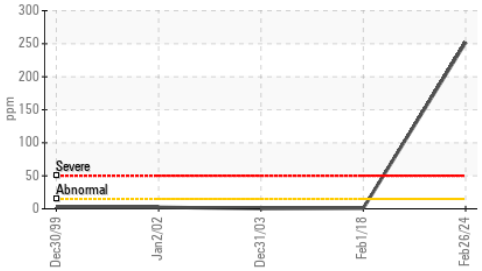
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	<1	0
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	<1
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**2**	0	0
Calcium	ppm	ASTM D5185m		**129**	107	146
Phosphorus	ppm	ASTM D5185m		**506**	458	560
Zinc	ppm	ASTM D5185m		**666**	687	782
Sulfur	ppm	ASTM D5185m		**6579**	7084	7315

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **252**	<1	<1
Sodium	ppm	ASTM D5185m		**2**	4	2
Potassium	ppm	ASTM D5185m	>20	**1**	2	3

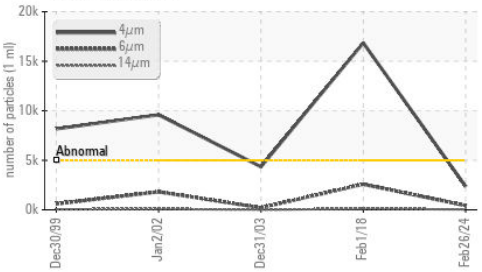
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**2370**	▲ 16849	4343
Particles >6µm		ASTM D7647	>1300	**432**	▲ 2581	203
Particles >14µm		ASTM D7647	>160	**31**	106	8
Particles >21µm		ASTM D7647	>40	**7**	30	1
Particles >38µm		ASTM D7647	>10	**1**	5	0
Particles >71µm		ASTM D7647	>3	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**18/16/12**	▲ 21/19/14	19/15/10

OIL ANALYSIS REPORT

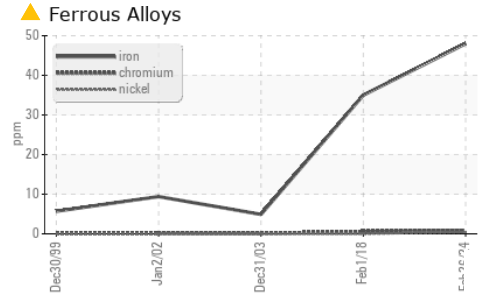
Silicon (ppm)



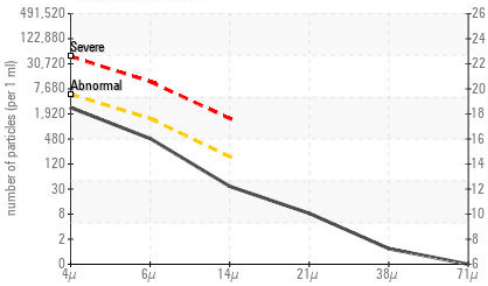
Particle Trend



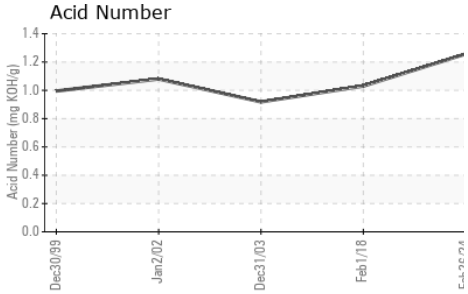
Ferrous Alloys



Particle Count



Acid Number



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.257**	1.030	0.918

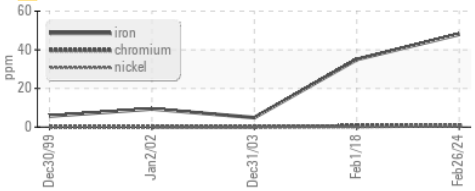
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.6	**45.8**	46.35	46.17

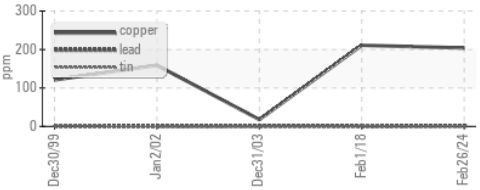
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

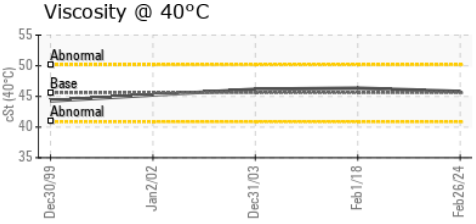
Ferrous Alloys



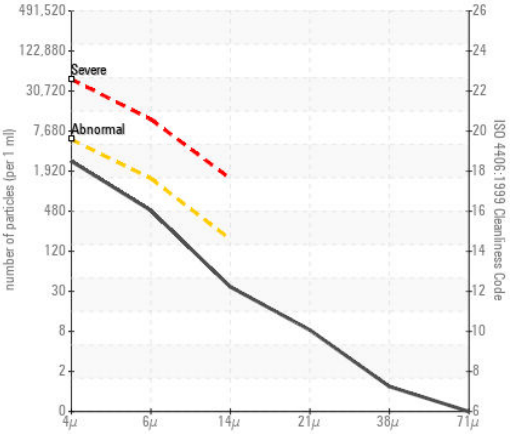
Non-ferrous Metals



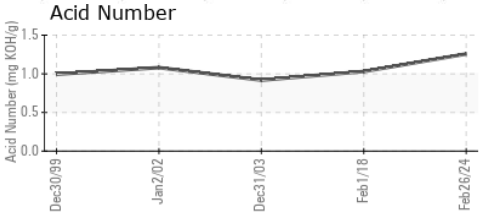
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887701
Lab Number : 06210710
Unique Number : 11083574
Test Package : IND 2

Received : 14 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Angela Borella

Certificate L2367

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)

Sumitomo Electric Wiring Systems
2687 Old Gallatin Road, Plant 5
Scottsville, KY
US 42164
Contact: BILLY CARDER
bcarder@sewsus.com
T: (270)237-5419
F: (270)237-9476