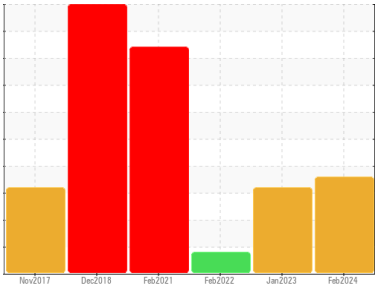
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
WQ
Machine Id
DODGE 00223
Component
Gearbox
Fluid
GEAR OIL ISO 220 (1 GAL)

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0721334**	WC0570397	WC0524334
Sample Date		Client Info		**25 Feb 2024**	17 Jan 2023	07 Feb 2022
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				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	▲ **433**	▲ 331	▲ 359
Chromium	ppm	ASTM D5185m	>15	**2**	1	2
Nickel	ppm	ASTM D5185m	>15	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**4**	1	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	● **67**	● 16	14
Lead	ppm	ASTM D5185m	>100	**1**	0	<1
Copper	ppm	ASTM D5185m	>200	**1**	<1	1
Tin	ppm	ASTM D5185m	>25	**<1**	0	0
Antimony	ppm	ASTM D5185m	>5	**---**	---	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

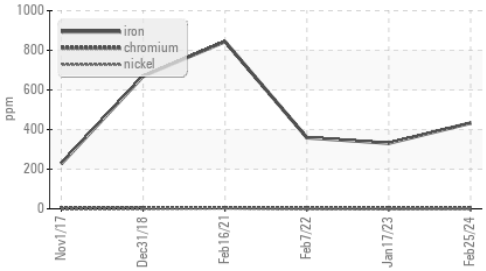
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**10**	9	5
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**5**	3	3
Magnesium	ppm	ASTM D5185m	50	**12**	4	5
Calcium	ppm	ASTM D5185m	50	**40**	17	15
Phosphorus	ppm	ASTM D5185m	350	**186**	159	181
Zinc	ppm	ASTM D5185m	100	**0**	13	2
Sulfur	ppm	ASTM D5185m	12500	**9446**	13591	13556

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	▲ **238**	▲ 67	47
Sodium	ppm	ASTM D5185m		**17**	2	2
Potassium	ppm	ASTM D5185m	>20	**28**	6	4

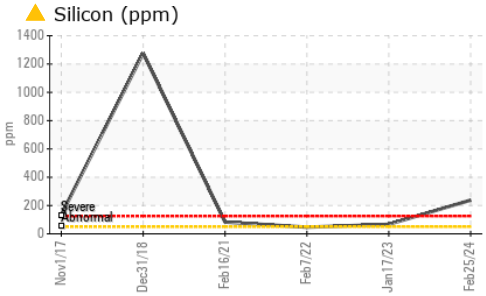
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**0.44**	0.40	0.32

OIL ANALYSIS REPORT

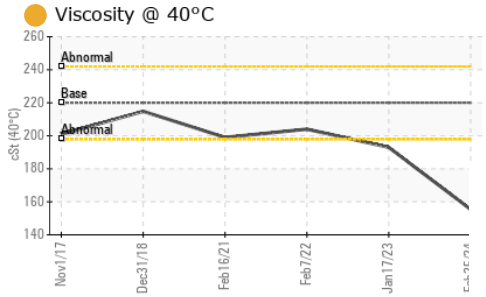
Ferrous Alloys



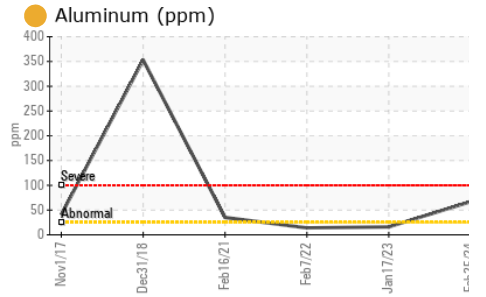
Silicon (ppm)



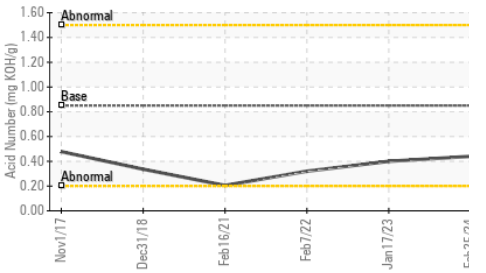
Viscosity @ 40°C



Aluminum (ppm)



Acid Number



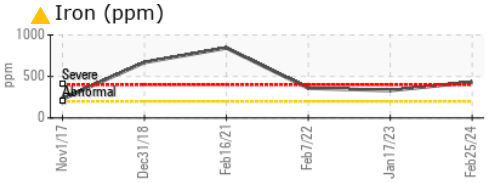
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**155.4**	193	204

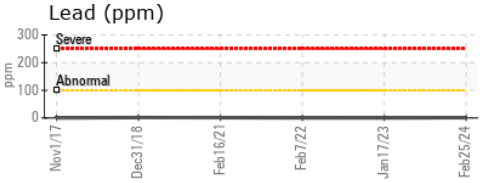
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

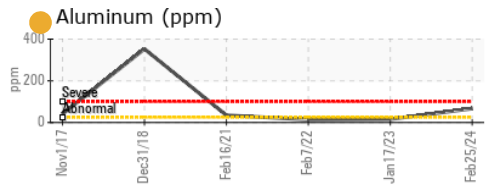
Iron (ppm)



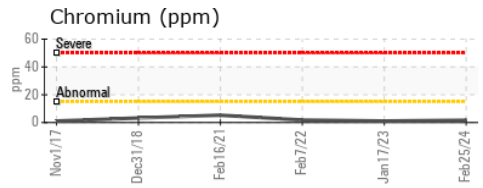
Lead (ppm)



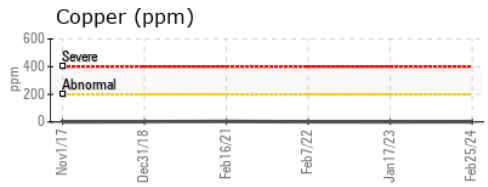
Aluminum (ppm)



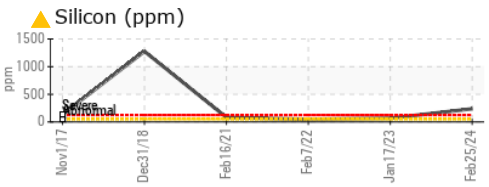
Chromium (ppm)



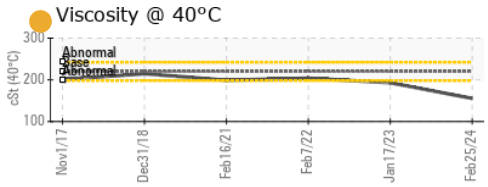
Copper (ppm)



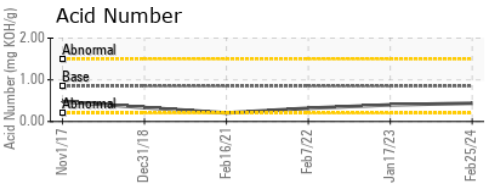
Silicon (ppm)



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0721334
Lab Number : 06100260
Unique Number : 10898490
Test Package : MOB 2

Received : 26 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - 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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