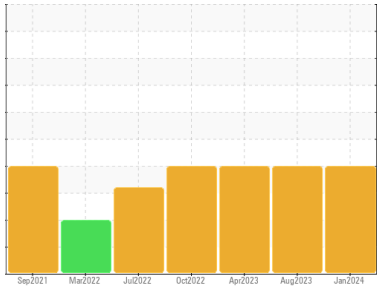
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
DICK LAVY
Machine Id
DICK LAVY 4837
Component
Transmission (Manual)
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
The oil is near the end of it`s useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

Wear
Bearing and/or gear wear is indicated.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the fluid.

Fluid Condition
The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0900869**	WC0843169	WC0815543
Sample Date		Client Info		**18 Jan 2024**	10 Aug 2023	10 Apr 2023
Machine Age	mls	Client Info		**371468**	309946	256407
Oil Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	▲ **298**	▲ 285	▲ 312
Chromium	ppm	ASTM D5185m	>5	**4**	5	5
Nickel	ppm	ASTM D5185m	>5	**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>7	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**19**	26	23
Lead	ppm	ASTM D5185m	>45	**<1**	0	<1
Copper	ppm	ASTM D5185m	>225	▲ **288**	▲ 246	▲ 271
Tin	ppm	ASTM D5185m	>10	**<1**	<1	<1
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		**234**	237	261
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**2**	<1	3
Manganese	ppm	ASTM D5185m		**27**	28	31
Magnesium	ppm	ASTM D5185m		**0**	<1	2
Calcium	ppm	ASTM D5185m		**198**	195	211
Phosphorus	ppm	ASTM D5185m		**1278**	1253	1254
Zinc	ppm	ASTM D5185m		**31**	29	31
Sulfur	ppm	ASTM D5185m		**986**	1074	2032

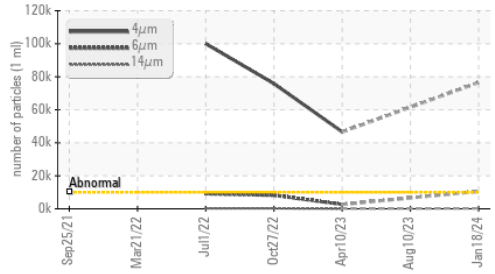
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	**11**	14	17
Sodium	ppm	ASTM D5185m		**0**	2	0
Potassium	ppm	ASTM D5185m	>20	**0**	<1	2
Water	%	ASTM D6304	>0.1	**0.042**	0.047	0.042
ppm Water	ppm	ASTM D6304	>1000	**423**	479.3	422.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **76549**	---	▲ 46590
Particles >6µm		ASTM D7647	>2500	▲ **10635**	---	● 2629
Particles >14µm		ASTM D7647	>320	**156**	---	36
Particles >21µm		ASTM D7647	>80	**22**	---	6
Particles >38µm		ASTM D7647	>20	**1**	---	0
Particles >71µm		ASTM D7647	>4	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/21/14**	---	▲ 23/19/12

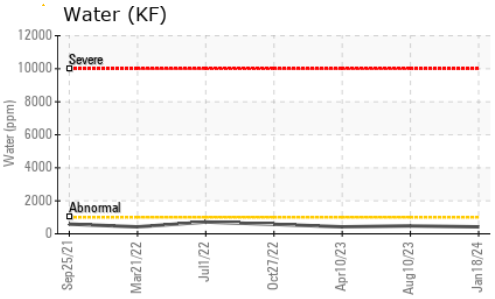
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **3.95**	▲ 3.72	▲ 4.11

OIL ANALYSIS REPORT

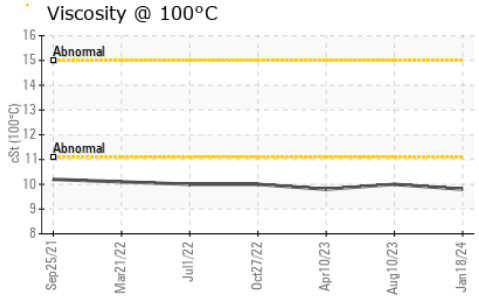
Particle Trend



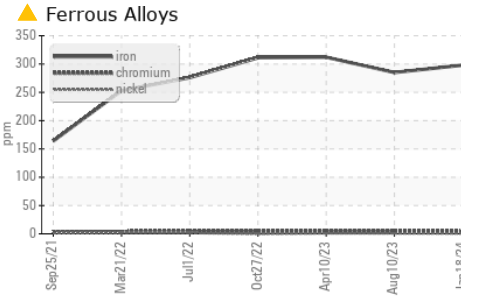
Water (KF)



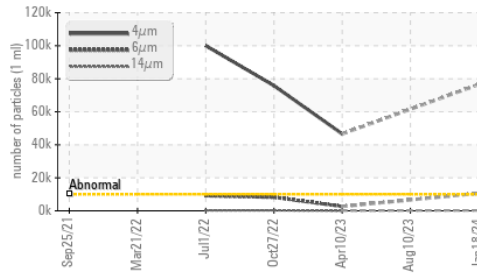
Viscosity @ 100°C



Ferrous Alloys



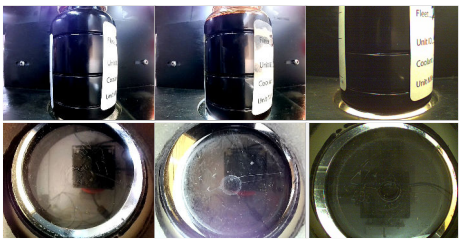
Particle Trend



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

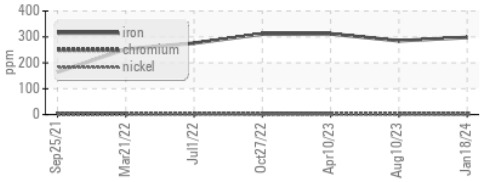
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**57.7**	57.8	57.8
Visc @ 100°C	cSt	ASTM D445		**9.8**	10.0	9.8
Viscosity Index (VI)	Scale	ASTM D2270		**155**	160	155

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

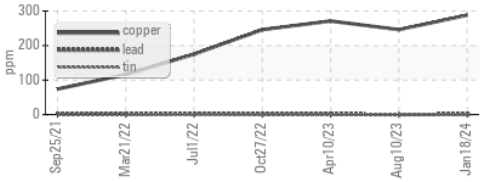


GRAPHS

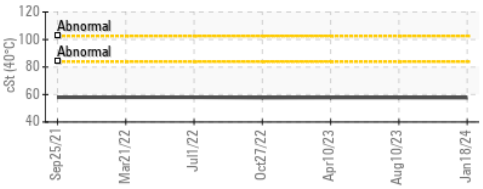
Ferrous Alloys



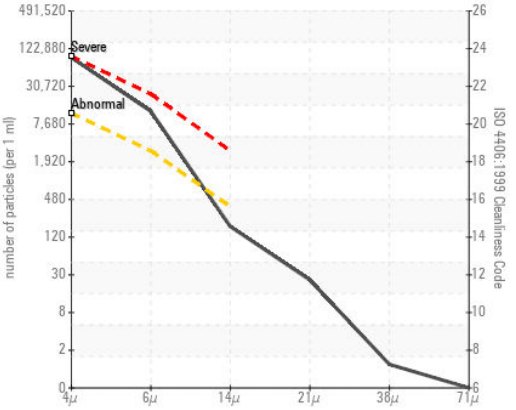
Non-ferrous Metals



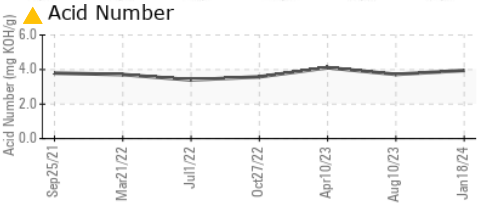
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900869 **Received** : 19 Mar 2024
Lab Number : 06123117 **Tested** : 20 Mar 2024
Unique Number : 10937268 **Diagnosed** : 21 Mar 2024 - Angela Borella
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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