OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Contracting
Machine Id
7606 7606
Component
Right Chain Drive
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

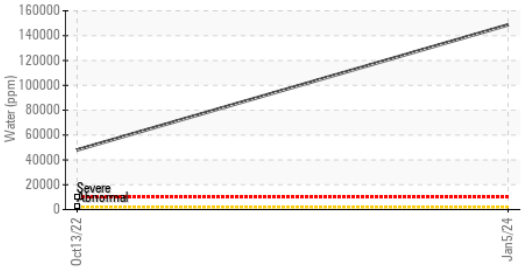
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

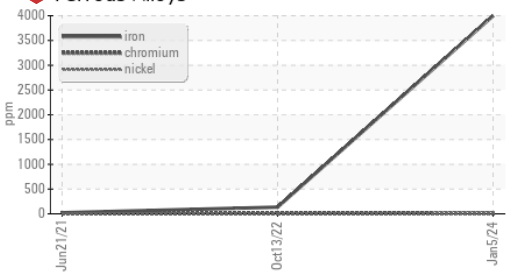
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0885972**	WC0744673	WC0596420
Sample Date		Client Info		**05 Jan 2024**	13 Oct 2022	21 Jun 2021
Machine Age	hrs	Client Info		**3635**	3207	2517
Oil Age	hrs	Client Info		**434**	1245	318
Filter Age	hrs	Client Info		**434**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Filter Changed		Client Info		**Not Changd**	Not Changd	N/A
Sample Status				**SEVERE**	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>200	● **3999**	135	22
Chromium	ppm	ASTM D5185m	>10	**8**	2	<1
Nickel	ppm	ASTM D5185m	>10	**16**	<1	<1
Titanium	ppm	ASTM D5185m		**124**	1	<1
Silver	ppm	ASTM D5185m		**0**	0	1
Aluminum	ppm	ASTM D5185m		▲ **1389**	9	0
Lead	ppm	ASTM D5185m		**6**	2	<1
Copper	ppm	ASTM D5185m		**8**	3	1
Tin	ppm	ASTM D5185m		**6**	3	<1
Vanadium	ppm	ASTM D5185m		**4**	1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m		● **4649**	49	20
Potassium	ppm	ASTM D5185m	>20	**884**	10	<1
Water	%	ASTM D6304	>0.2	● **14.87**	● 4.80	---
ppm Water	ppm	ASTM D6304	>2000	● **148700**	● 48000	---
Particles >4µm		ASTM D7647	>20000	**3315**	---	951
Particles >6µm		ASTM D7647	>5000	**1806**	---	518
Particles >14µm		ASTM D7647	>640	**307**	---	88
Particles >21µm		ASTM D7647	>160	**104**	---	30
Particles >38µm		ASTM D7647	>40	**16**	---	5
Particles >71µm		ASTM D7647	>10	**2**	---	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**19/18/15**	---	17/16/14
Silt	scalar	*Visual	NONE	**MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	▲ MILKY	LAYRD
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	● **0.2%**	● 0.2%	NEG
Sodium	ppm	ASTM D5185m	>158	**348**	6	5
Boron	ppm	ASTM D5185m	250	**35**	55	87
Barium	ppm	ASTM D5185m	10	**18**	0	0
Molybdenum	ppm	ASTM D5185m	100	**14**	36	39
Manganese	ppm	ASTM D5185m		**41**	2	<1
Magnesium	ppm	ASTM D5185m	450	**614**	408	420
Calcium	ppm	ASTM D5185m	3000	**1813**	1347	1475
Phosphorus	ppm	ASTM D5185m	1150	**766**	685	645
Zinc	ppm	ASTM D5185m	1350	**749**	866	777
Sulfur	ppm	ASTM D5185m	4250	**5389**	2751	1960
Visc @ 40°C	cSt	ASTM D445	115	**95.3**	104	99.9

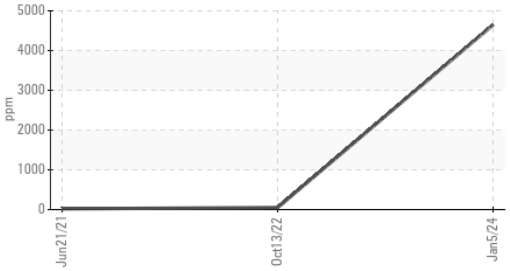
Water (KF)



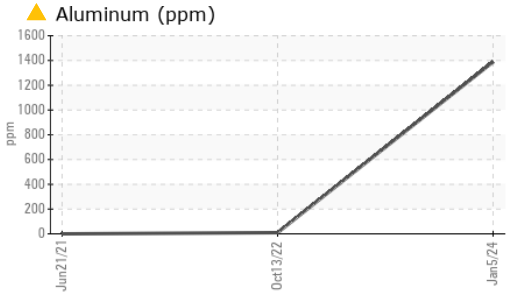
Ferrous Alloys



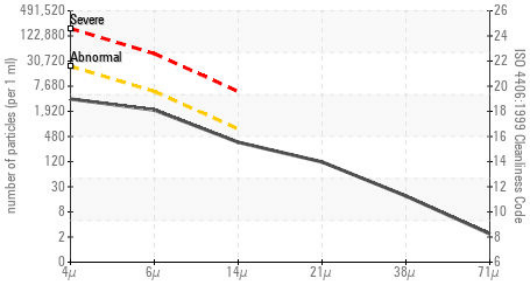
Silicon (ppm)



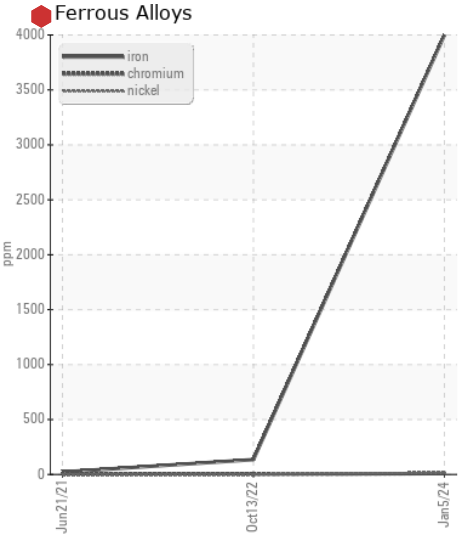
Aluminum (ppm)



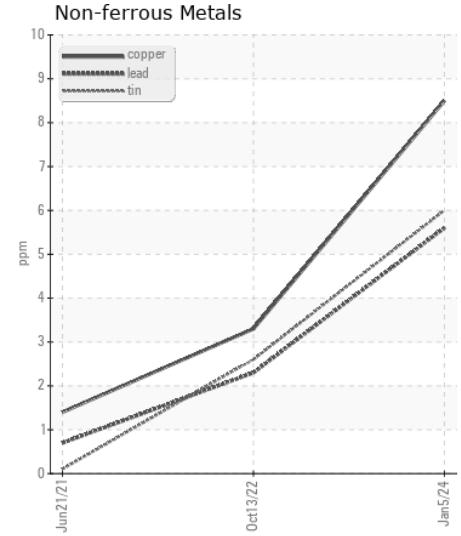
Particle Count



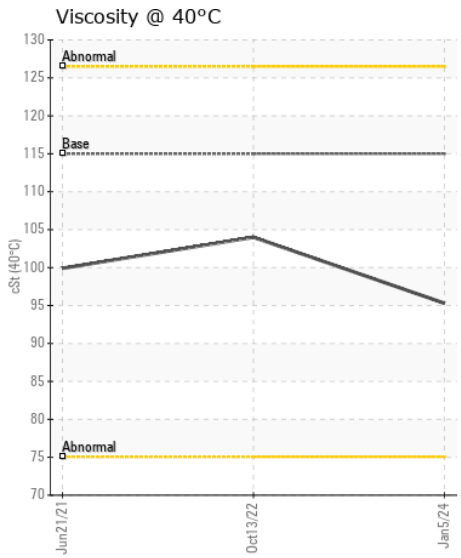
Ferrous Alloys



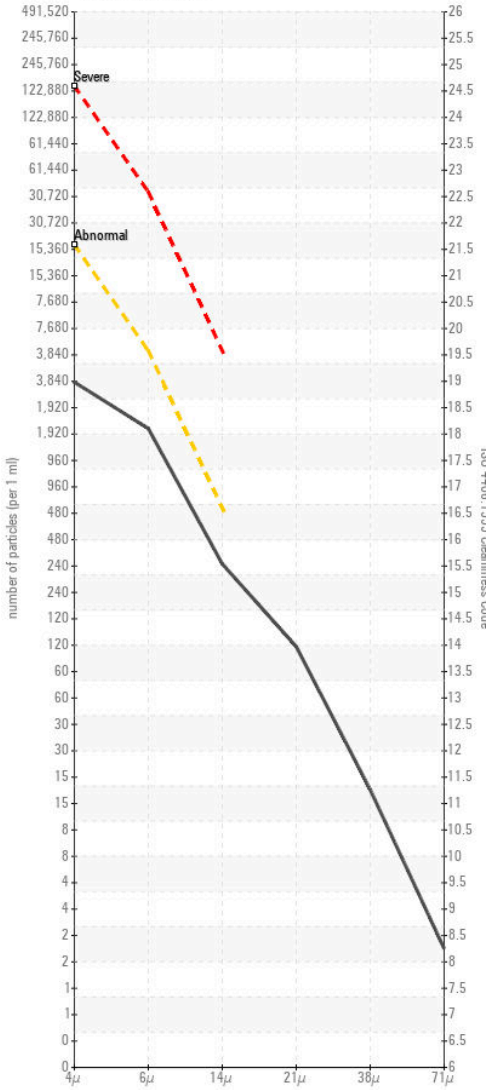
Non-ferrous Metals



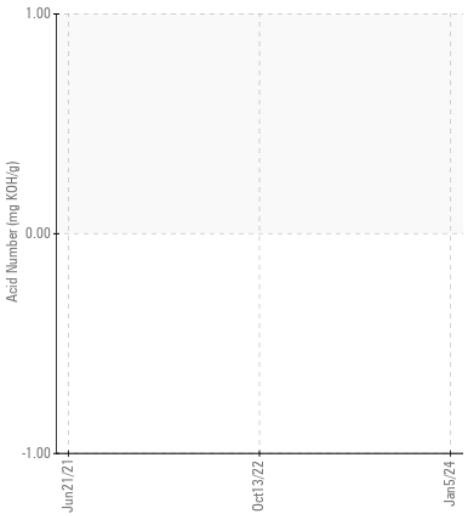
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0885972 **Recieved** : 09 Jan 2024
Lab Number : 06055824 **Diagnosed** : 12 Jan 2024
Unique Number : 10821773 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: KF, PrtCount)

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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