MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
1533
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

WEAR

Cylinder, crank, or cam shaft wear is indicated.

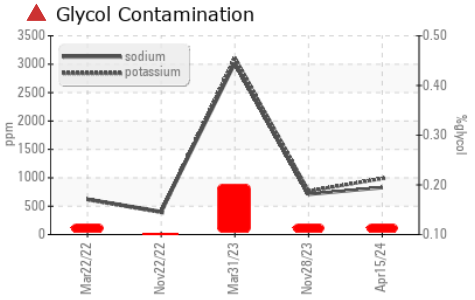
CONTAMINATION

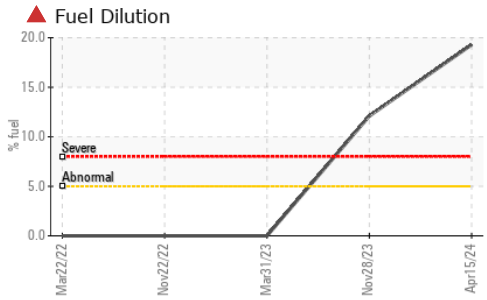
Sodium and/or potassium levels are high. There is a high amount of fuel present in the oil. There is a high concentration of glycol present in the oil.

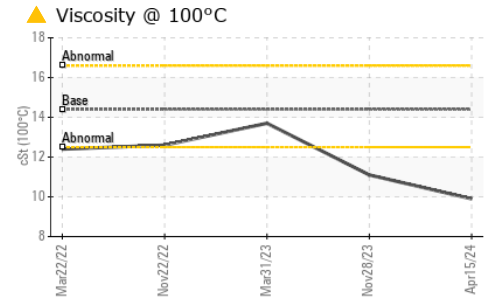
FLUID CONDITION

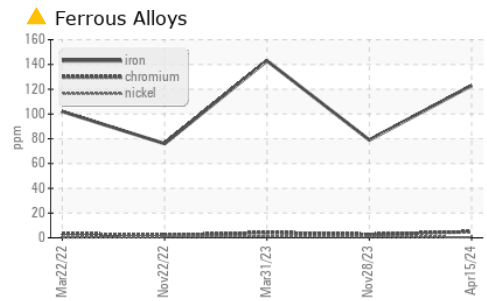
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

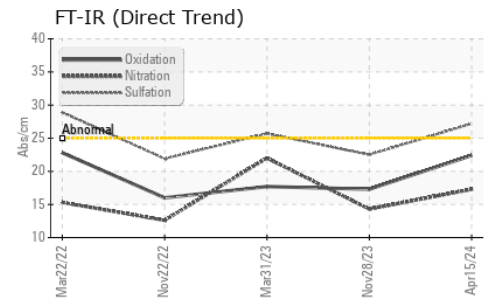
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0932822	WC0870712	WC0806653
Sample Date		Client Info		15 Apr 2024	28 Nov 2023	31 Mar 2023
Machine Age	mls	Client Info		0	183936	174141
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>100	▲ 123	79	▲ 143
Chromium	ppm	ASTM D5185m	>20	5	3	4
Nickel	ppm	ASTM D5185m	>4	<1	<1	1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	14	10	16
Lead	ppm	ASTM D5185m	>40	2	<1	0
Copper	ppm	ASTM D5185m	>330	9	8	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	10	8	13
Potassium	ppm	ASTM D5185m	>20	▲ 988	▲ 766	▲ 3114
Fuel	%	ASTM D3524	>5	▲ 19.3	▲ 12.1	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.12	▲ 0.12	▲ 0.20
Soot %	%	*ASTM D7844	>3	2.8	1.8	2.2
Nitration	Abs/cm	*ASTM D7624	>20	17.3	14.3	22.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	22.5	25.7
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>158	▲ 827	● 710	▲ 3015
Boron	ppm	ASTM D5185m	250	16	21	8
Barium	ppm	ASTM D5185m	10	<1	4	0
Molybdenum	ppm	ASTM D5185m	100	183	157	351
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m	450	130	138	80
Calcium	ppm	ASTM D5185m	3000	1714	1526	1911
Phosphorus	ppm	ASTM D5185m	1150	847	836	870
Zinc	ppm	ASTM D5185m	1350	964	952	1038
Sulfur	ppm	ASTM D5185m	4250	3412	3105	3363
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.4	17.3	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.0	10.2	22.6
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 9.9	▲ 11.1	13.7

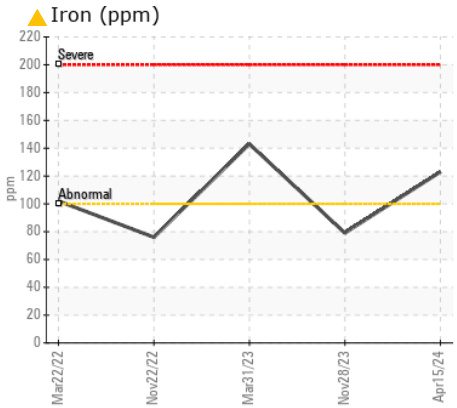


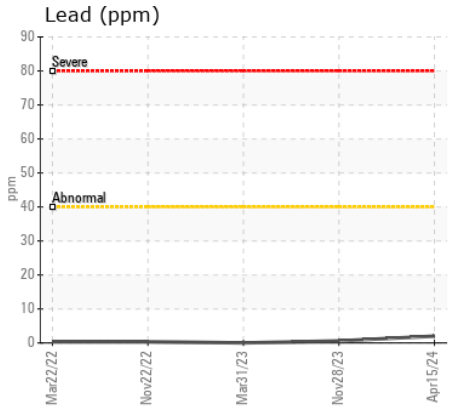


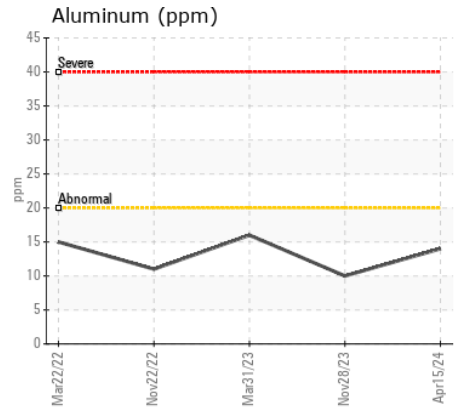


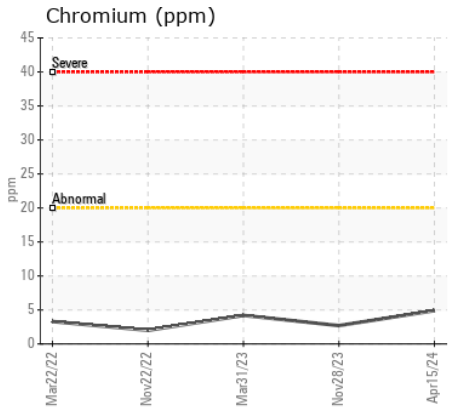


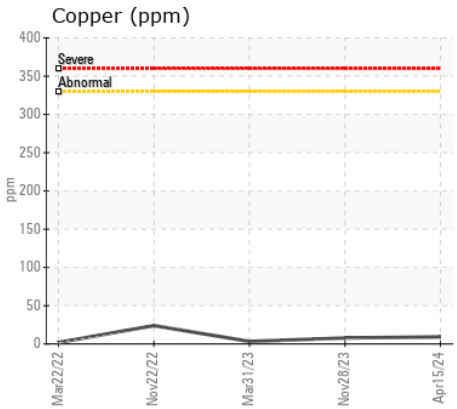


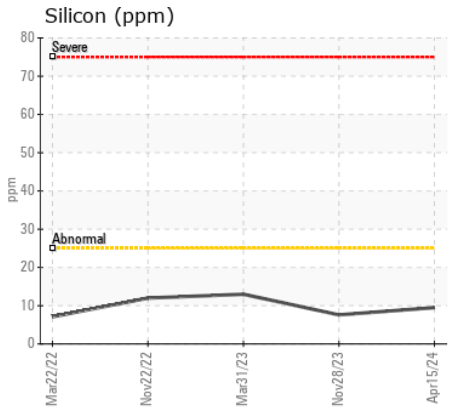


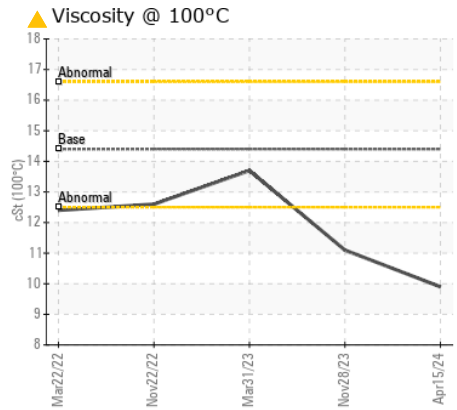


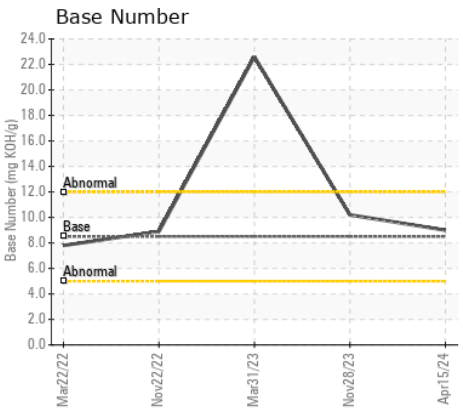












ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: WC0932822	**Received**	: 30 May 2024
Lab Number	: 06195129	**Tested**	: 04 Jun 2024
Unique Number	: 11057252	**Diagnosed**	: 04 Jun 2024 - Jonathan Hester
Test Package	: MOB 1 (Additional Tests: PercentFuel, TBN)		

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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