MOB 1 WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
7295
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

We advise that you check for faulty combustion and a possible overheat condition. The oil change at the time of sampling has been noted.

WEAR

All component wear rates are normal.

CONTAMINATION

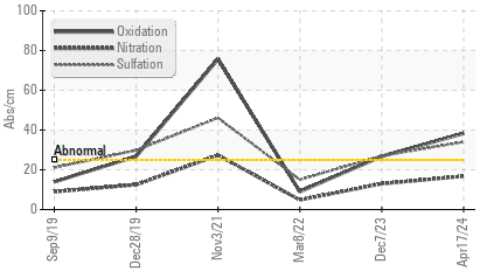
There is an abnormal level of sulfation indicated. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

FLUID CONDITION

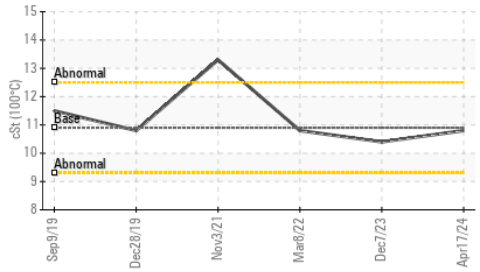
A small degree of oil oxidation was indicated. The oil is no longer serviceable.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0924029	WC0853053	WC0654463
Sample Date		Client Info		17 Apr 2024	07 Dec 2023	08 Mar 2022
Machine Age	kms	Client Info		220118	214748	173631
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>90	79	41	27
Chromium	ppm	ASTM D5185(m)	>20	3	2	2
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	10	9	8
Lead	ppm	ASTM D5185(m)	>40	6	6	5
Copper	ppm	ASTM D5185(m)	>330	3	2	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	5	4
Potassium	ppm	ASTM D5185(m)	>20	16	12	12
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	16.8	13.0	4.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	▲ 34.0	27.0	15.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		3	2	2
Boron	ppm	ASTM D5185(m)	250	30	33	49
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	71	72	4
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	450	106	98	691
Calcium	ppm	ASTM D5185(m)	3000	1897	1912	1283
Phosphorus	ppm	ASTM D5185(m)	1150	871	915	689
Zinc	ppm	ASTM D5185(m)	1350	1026	1027	750
Sulfur	ppm	ASTM D5185(m)	4250	2650	3003	2404
Oxidation	Abs/.1mm	ASTM D7414*	>25	▲ 38.3	26.8	9.0
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	10.8	10.4	10.8

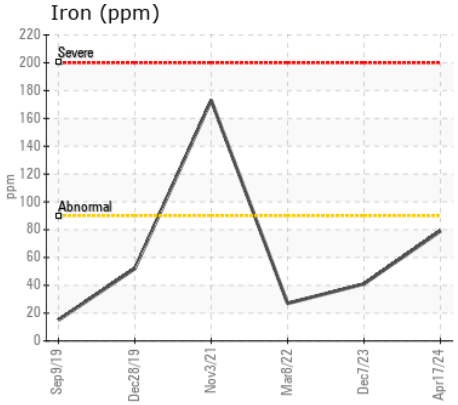
FT-IR (Direct Trend)



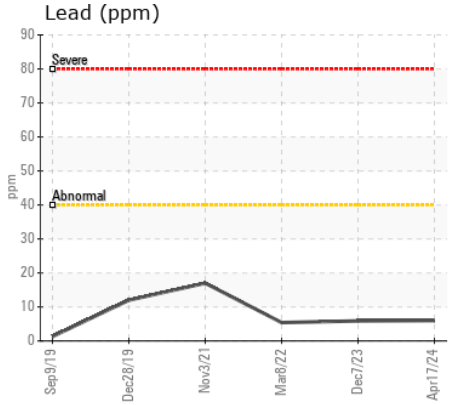
Viscosity @ 100°C



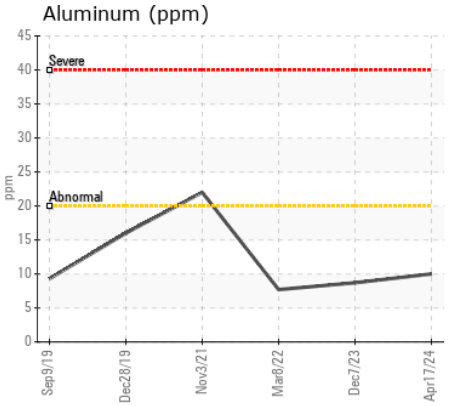
Iron (ppm)



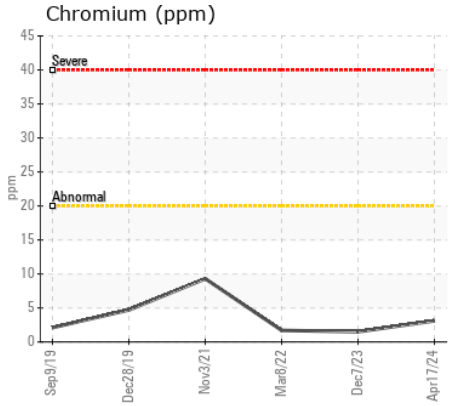
Lead (ppm)



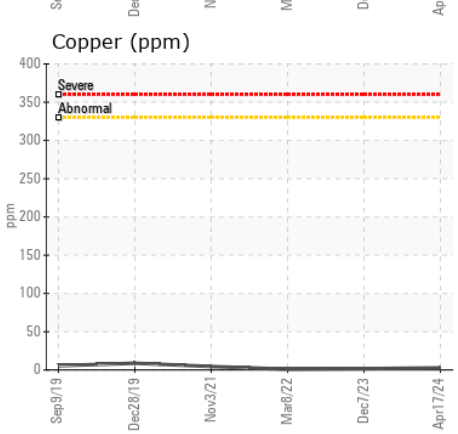
Aluminum (ppm)



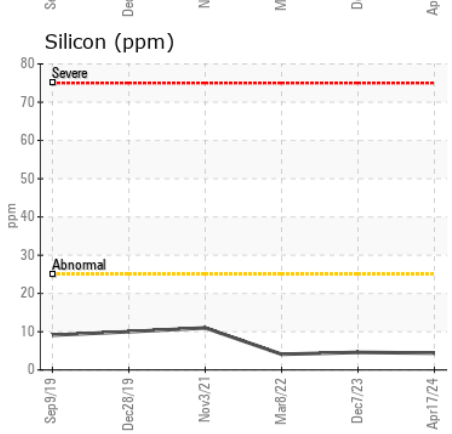
Chromium (ppm)



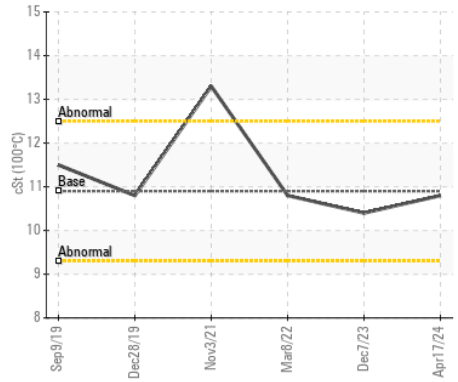
Copper (ppm)



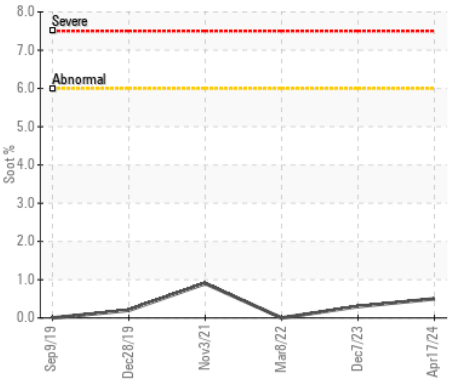
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0924029
Lab Number : 02629431
Unique Number : 5762563
Test Package : MOB 1

Received : 17 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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