



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
1642
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

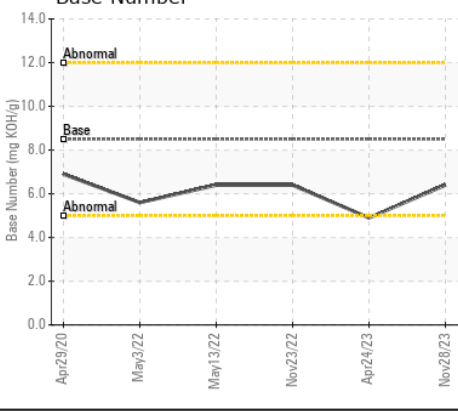
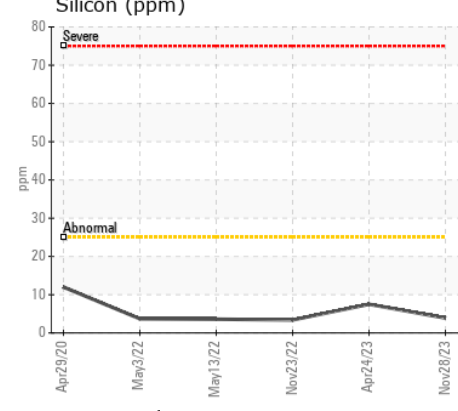
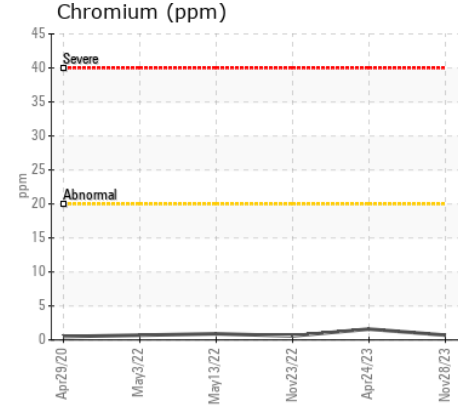
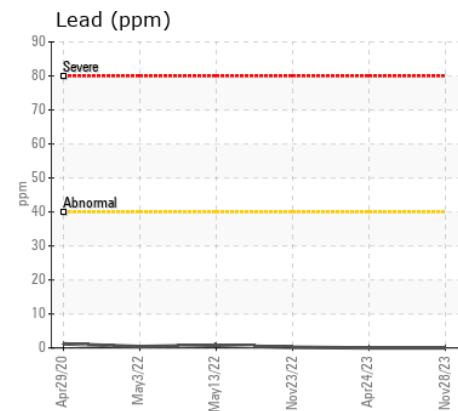
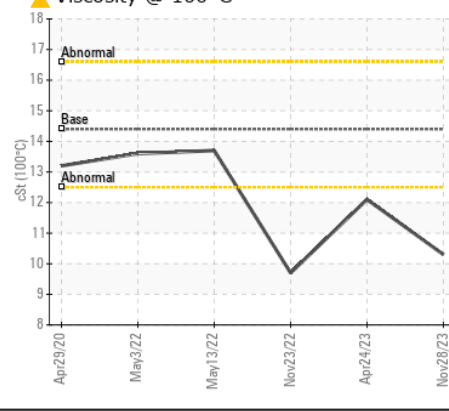
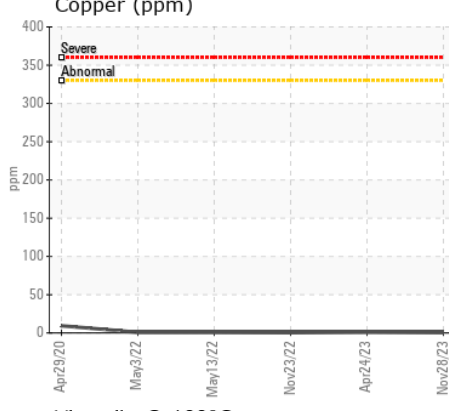
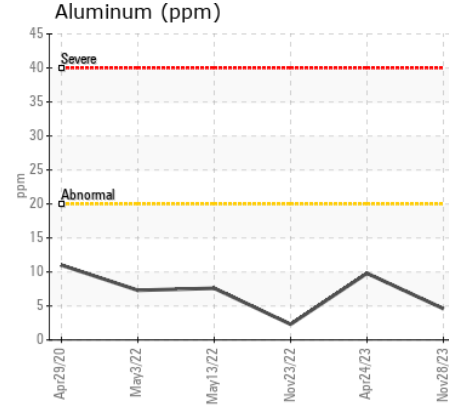
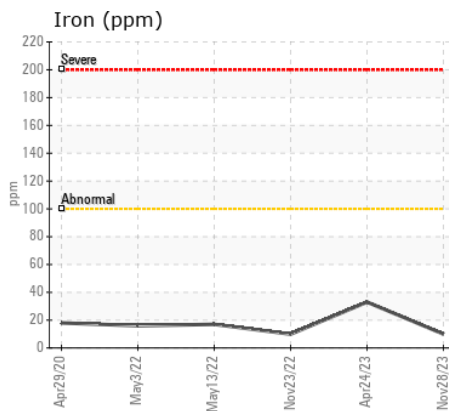
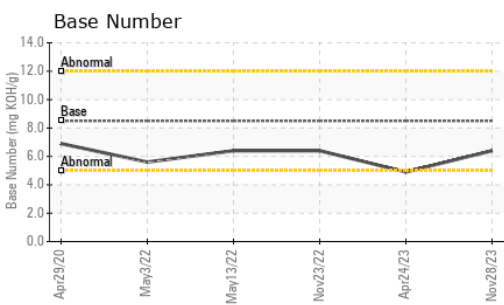
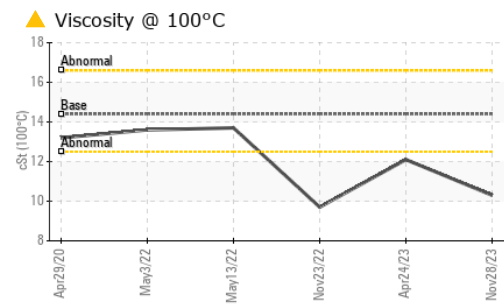
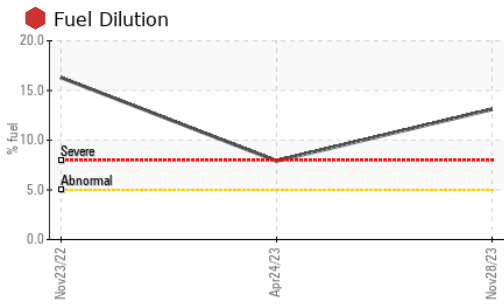
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0870719	WC0806644	WC0761175
Sample Date		Client Info		28 Nov 2023	24 Apr 2023	23 Nov 2022
Machine Age	mls	Client Info		204125	191019	184026
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	ABNORMAL	SEVERE

Iron	ppm	ASTM D5185m	>100	10	33	10
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	10	2
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>25	4	8	3
Potassium	ppm	ASTM D5185m	>20	4	27	14
Fuel	%	ASTM D3524	>5	13.1	7.9	16.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.2	12.3	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	25.9	19.2
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	2	26	19
Boron	ppm	ASTM D5185m	250	26	17	27
Barium	ppm	ASTM D5185m	10	3	2	0
Molybdenum	ppm	ASTM D5185m	100	67	86	60
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	106	37	29
Calcium	ppm	ASTM D5185m	3000	1602	2160	1531
Phosphorus	ppm	ASTM D5185m	1150	860	972	718
Zinc	ppm	ASTM D5185m	1350	991	1181	864
Sulfur	ppm	ASTM D5185m	4250	3092	3690	2915
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	23.0	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.4	4.9	6.4
Visc @ 100°C	cSt	ASTM D445	14.4	10.3	12.1	9.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0870719 **Received** : 12 Jan 2024
Lab Number : 06059779 **Diagnosed** : 16 Jan 2024
Unique Number : 10831161 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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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)