



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR 45
Component
Diesel Engine
Fluid
SAE 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0917731	WC0685981	WC0685973
Sample Date		Client Info		15 May 2024	25 Feb 2024	17 Jul 2023
Machine Age	hrs	Client Info		7258	6644	5757
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	6	6	12
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	<1	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>125	2	3	6
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

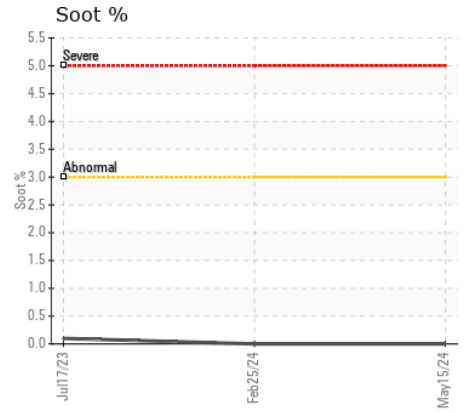
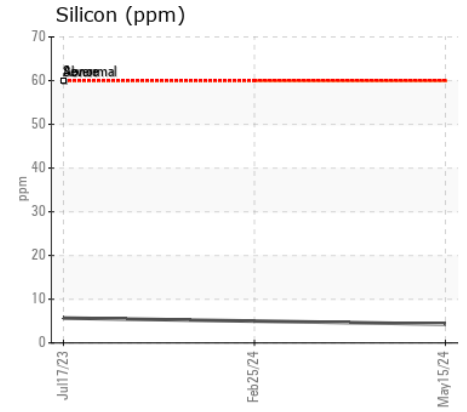
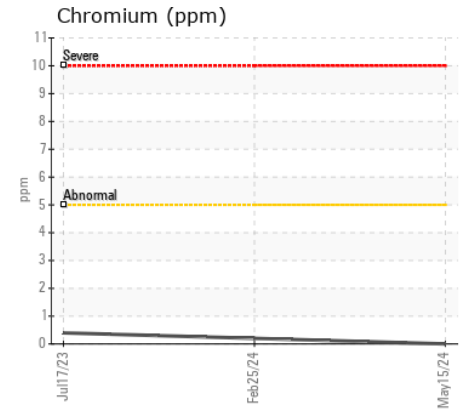
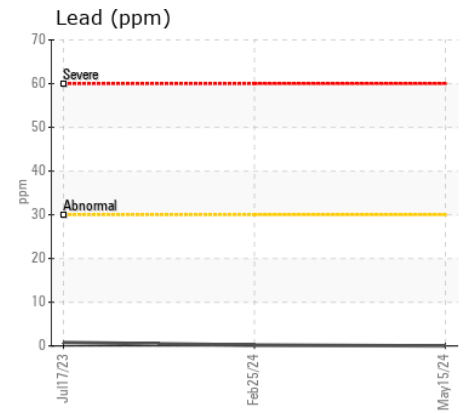
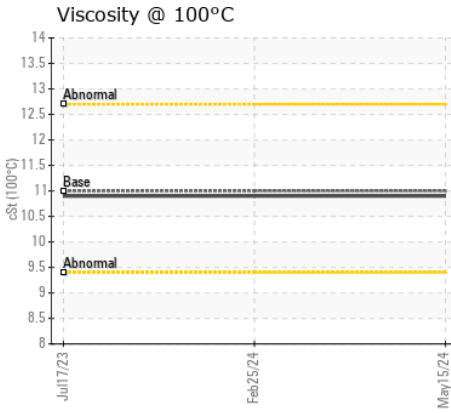
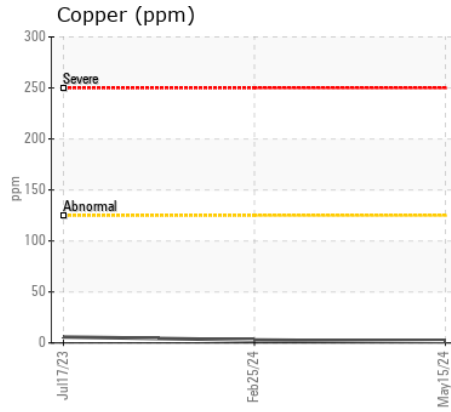
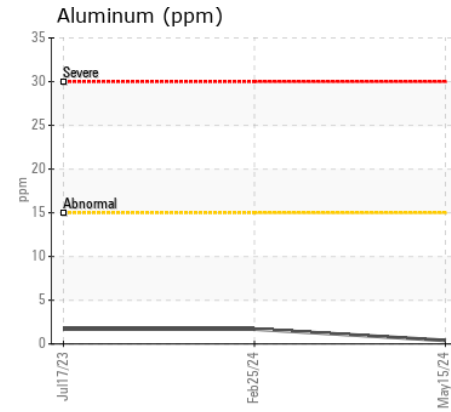
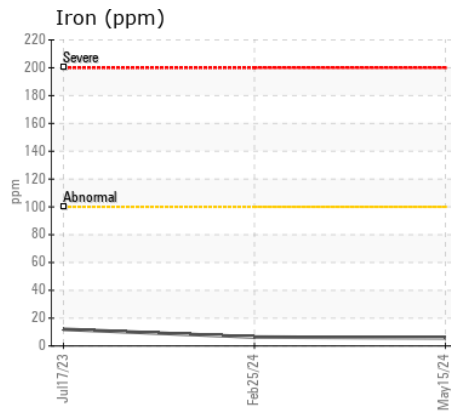
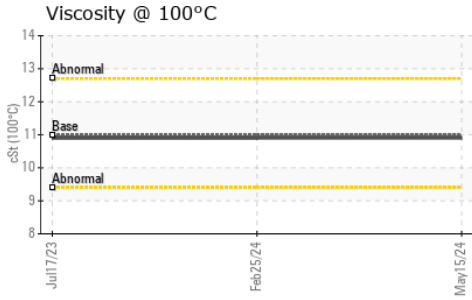
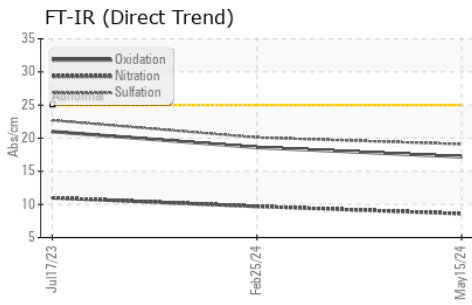
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	4	5	6
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Fuel		WC Method	>5	<1.0	1.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	8.6	9.7	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1	20.1	22.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	4	4
Boron	ppm	ASTM D5185(m)		50	29	18
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		62	59	62
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		1049	1079	1113
Calcium	ppm	ASTM D5185(m)		883	847	880
Phosphorus	ppm	ASTM D5185(m)		1026	1026	980
Zinc	ppm	ASTM D5185(m)		1166	1183	1215
Sulfur	ppm	ASTM D5185(m)		2746	2955	2763
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	18.6	21.0
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	10.9	▲ 10.9	10.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0917731 **Received** : 05 Jun 2024
Lab Number : 02639808 **Tested** : 05 Jun 2024
Unique Number : 5788970 **Diagnosed** : 06 Jun 2024 - Kevin Marson
Test Package : MOB 1

DeSantis Crane
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 Stoney Creek, ON
 CA L8E 5L1
 Contact: Adam
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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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