



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
LIEBHERR 45
Component
Diesel Engine
Fluid
SAE 5W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

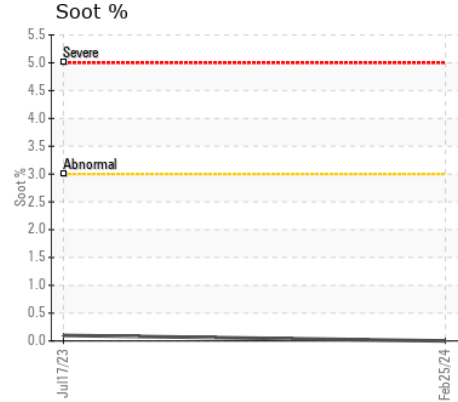
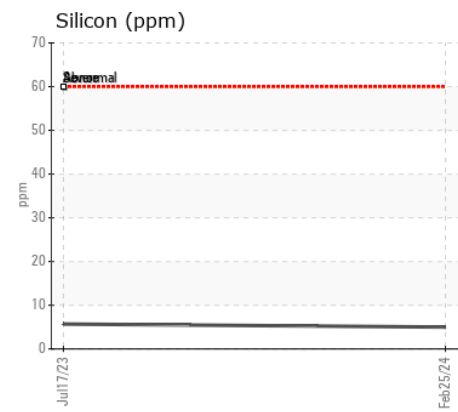
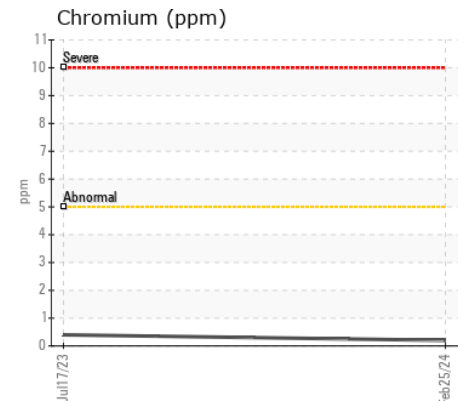
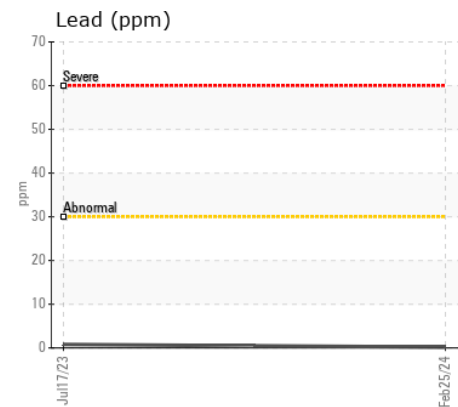
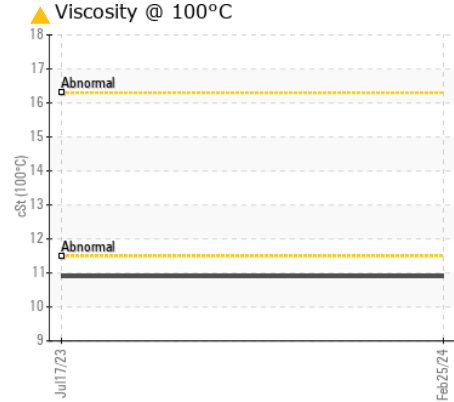
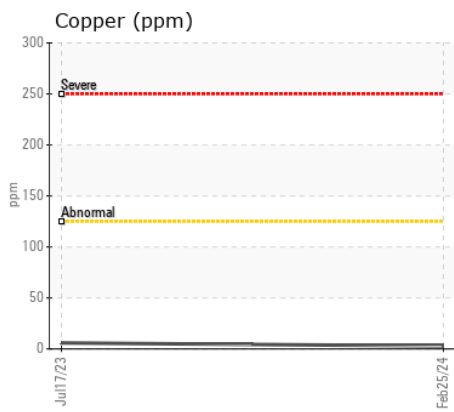
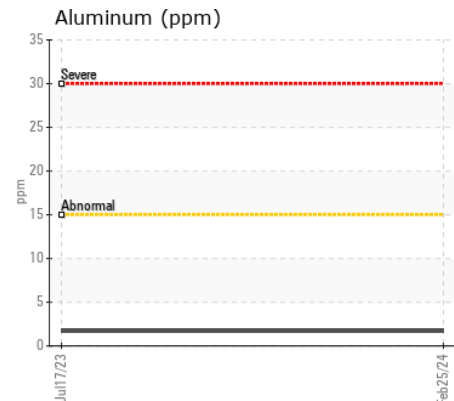
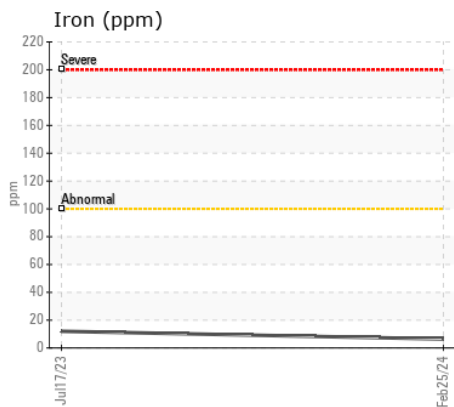
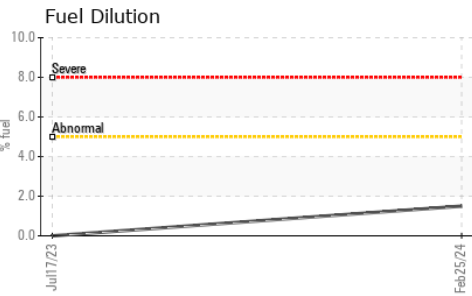
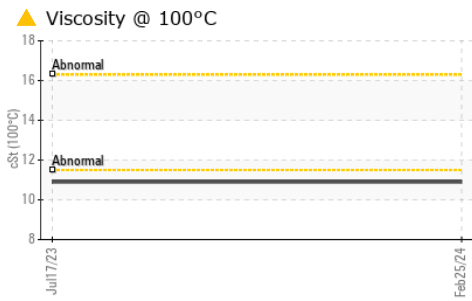
CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0685981	WC0685973	---
Sample Date		Client Info		25 Feb 2024	17 Jul 2023	---
Machine Age	hrs	Client Info		6644	5757	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---
<hr/>						
Iron	ppm	ASTM D5185(m)	>100	6	12	---
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>15	2	2	---
Lead	ppm	ASTM D5185(m)	>30	<1	<1	---
Copper	ppm	ASTM D5185(m)	>125	3	6	---
Tin	ppm	ASTM D5185(m)	>5	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
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Silicon	ppm	ASTM D5185(m)	>60	5	6	---
Potassium	ppm	ASTM D5185(m)	>20	<1	0	---
Fuel	%	ASTM D7593*	>5	1.5	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	9.7	11.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	22.7	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
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Sodium	ppm	ASTM D5185(m)		4	4	---
Boron	ppm	ASTM D5185(m)		29	18	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		59	62	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)		1079	1113	---
Calcium	ppm	ASTM D5185(m)		847	880	---
Phosphorus	ppm	ASTM D5185(m)		1026	980	---
Zinc	ppm	ASTM D5185(m)		1183	1215	---
Sulfur	ppm	ASTM D5185(m)		2955	2763	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.6	21.0	---
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 10.9	10.9	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0685981 **Received** : 26 Feb 2024
Lab Number : 02617952 **Tested** : 27 Feb 2024
Unique Number : 5735062 **Diagnosed** : 27 Feb 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

DeSantis Crane
 294 Fifty Rd
 Stoney Creek, ON
 CA L8E 5L1
 Contact: Adam
 adam@desantiscrane.com

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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F: