



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LB35 115696

Component
Drilling Drive

Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (130 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0274865	LH0251773	---
Sample Date		Client Info		29 Feb 2024	01 Mar 2023	---
Machine Age	hrs	Client Info		2999	2015	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	53	64	---
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	---
Lead	ppm	ASTM D5185(m)	>5	0	0	---
Copper	ppm	ASTM D5185(m)	>50	<1	<1	---
Tin	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	VLITE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

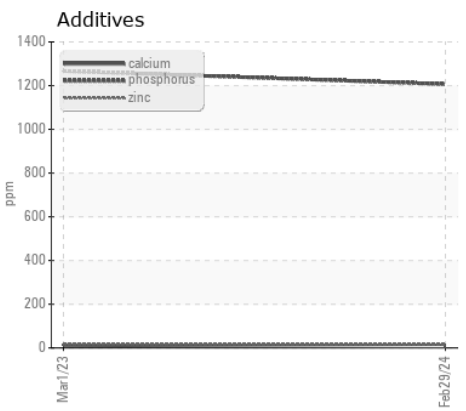
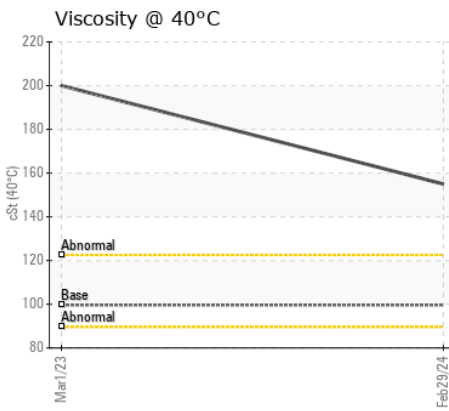
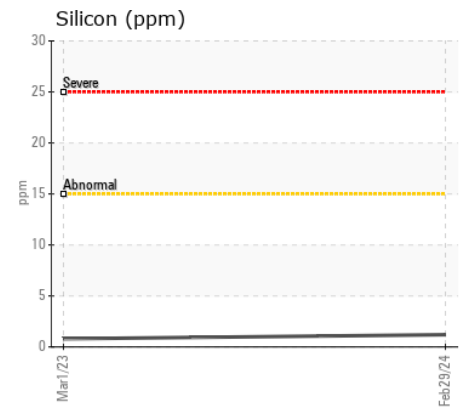
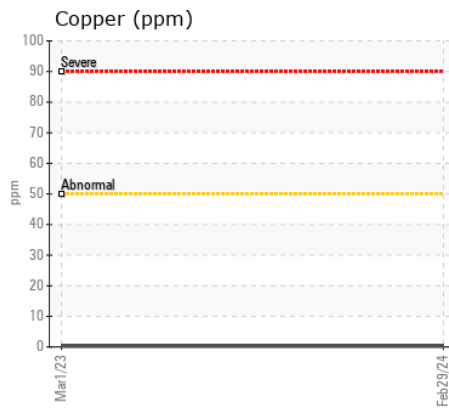
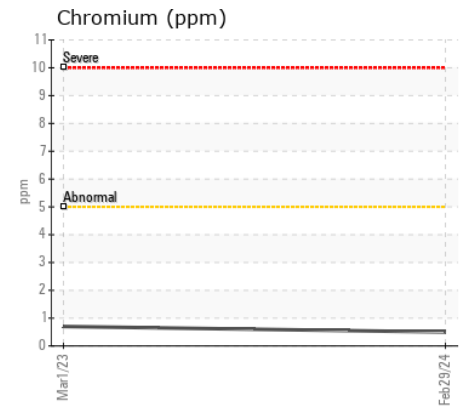
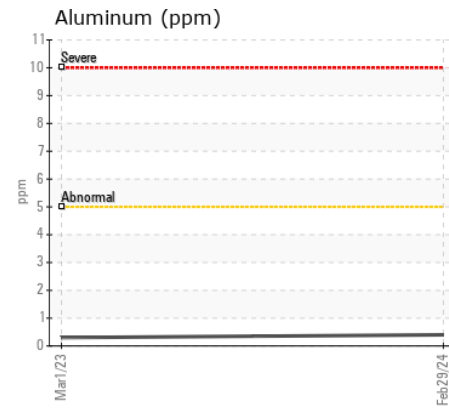
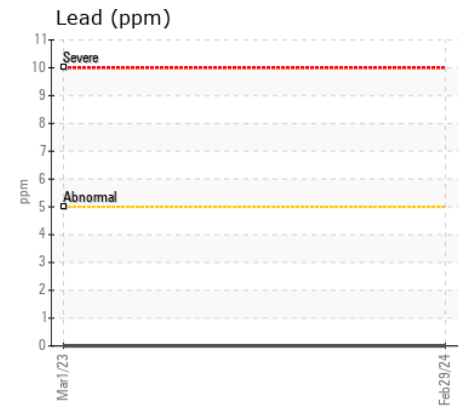
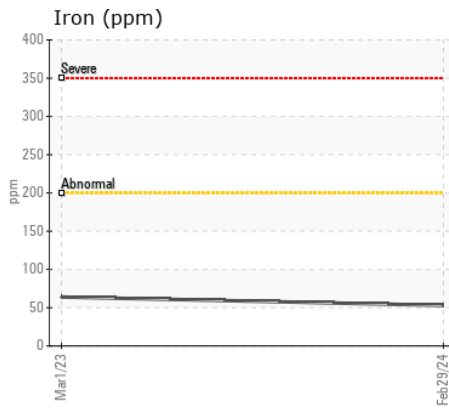
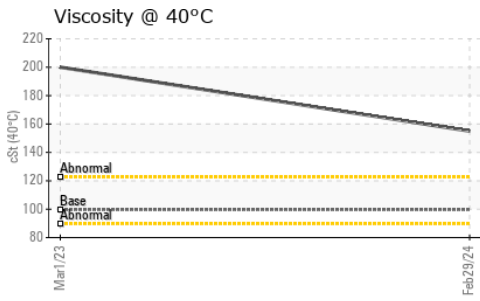
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	1	<1	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	4	---
Boron	ppm	ASTM D5185(m)	328	100	1	---
Barium	ppm	ASTM D5185(m)	1	0	0	---
Molybdenum	ppm	ASTM D5185(m)		0	0	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)	1	1	<1	---
Calcium	ppm	ASTM D5185(m)	7	7	13	---
Phosphorus	ppm	ASTM D5185(m)	1145	1207	1267	---
Zinc	ppm	ASTM D5185(m)	3	15	18	---
Sulfur	ppm	ASTM D5185(m)	17909	24725	28249	---
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	155	200	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0274865 **Received** : 04 Mar 2024
Lab Number : 02619653 **Tested** : 04 Mar 2024
Unique Number : 5736763 **Diagnosed** : 04 Mar 2024 - Kevin Marson
Test Package : MOB 1

ASTRO SHORING
 645 CORONATION DRIVE
 SCARBOROUGH, ON
 CA M1E 2K4
 Contact: Service Manager

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: