



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR HS8100 184920

Component
2 Winch

Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

Free water present.

FLUID CONDITION

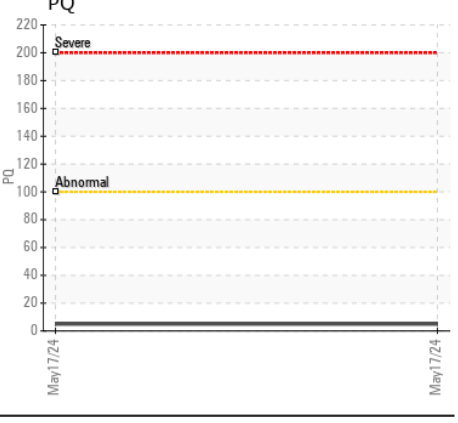
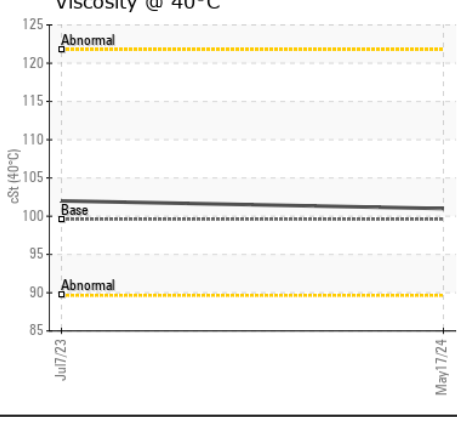
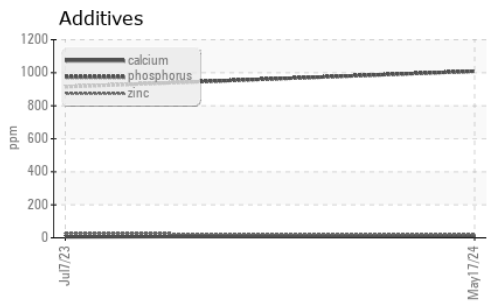
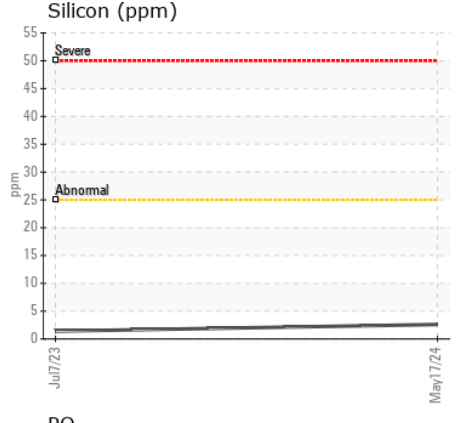
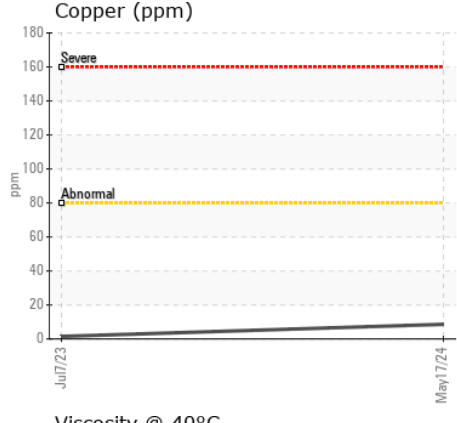
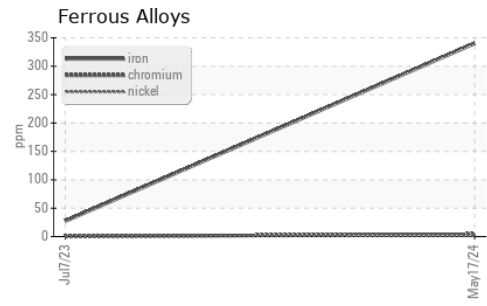
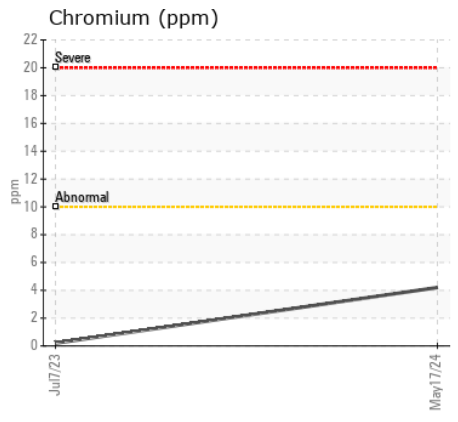
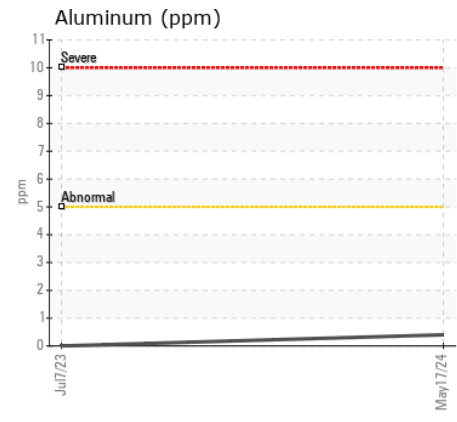
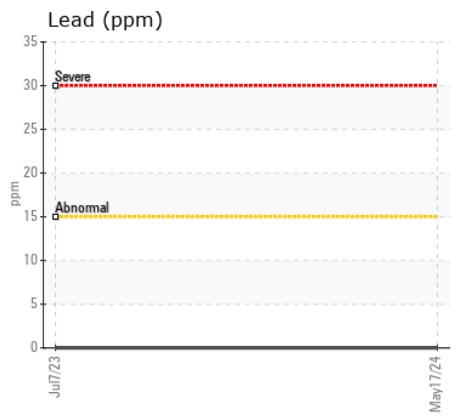
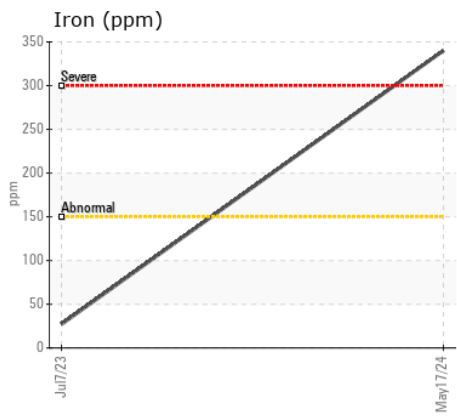
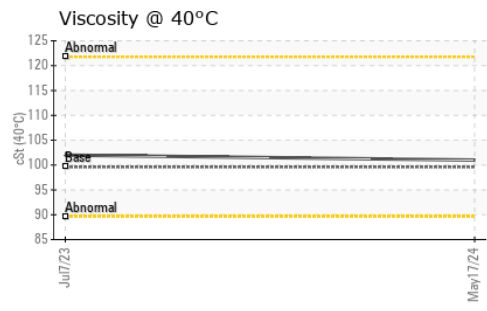
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0289639	LH0261794	---
Sample Date		Client Info		17 May 2024	07 Jul 2023	---
Machine Age	hrs	Client Info		16088	14431	---
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				ABNORMAL	NORMAL	---

PQ		ASTM D8184*		5	---	---
Iron	ppm	ASTM D5185(m)	>150	340	27	---
Chromium	ppm	ASTM D5185(m)	>10	4	<1	---
Nickel	ppm	ASTM D5185(m)	>10	1	<1	---
Titanium	ppm	ASTM D5185(m)		<1	<1	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>5	<1	0	---
Lead	ppm	ASTM D5185(m)	>15	0	0	---
Copper	ppm	ASTM D5185(m)	>80	9	2	---
Tin	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

Silicon	ppm	ASTM D5185(m)	>25	3	1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	Visual*	NONE	LIGHT	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
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	---

Sodium	ppm	ASTM D5185(m)		<1	<1	---
Boron	ppm	ASTM D5185(m)	328	86	117	---
Barium	ppm	ASTM D5185(m)	1	0	0	---
Molybdenum	ppm	ASTM D5185(m)		0	<1	---
Manganese	ppm	ASTM D5185(m)		2	<1	---
Magnesium	ppm	ASTM D5185(m)	1	4	4	---
Calcium	ppm	ASTM D5185(m)	7	12	6	---
Phosphorus	ppm	ASTM D5185(m)	1145	1009	915	---
Zinc	ppm	ASTM D5185(m)	3	21	26	---
Sulfur	ppm	ASTM D5185(m)	17909	18578	18238	---
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	101	102	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0289639 **Received** : 29 May 2024
Lab Number : 02638606 **Tested** : 30 May 2024
Unique Number : 5787768 **Diagnosed** : 31 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PQ)

HIGGS & HIGGS
 RR # 4
 ST THOMAS, ON
 CA N5P 3S8
 Contact: Bernie Higgs

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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