



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(355226)
Machine Id
LIEBHERR R938 053191-1650
Component
Swing Drive
Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284896	LH0195720	LH0242610
Sample Date		Client Info		13 Feb 2024	26 Jul 2023	24 Nov 2022
Machine Age	hrs	Client Info		3960	3133	2095
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		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>750	272	328	262
Chromium	ppm	ASTM D5185(m)	>10	3	4	4
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>5	0	<1	0
Copper	ppm	ASTM D5185(m)	>250	<1	<1	0
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

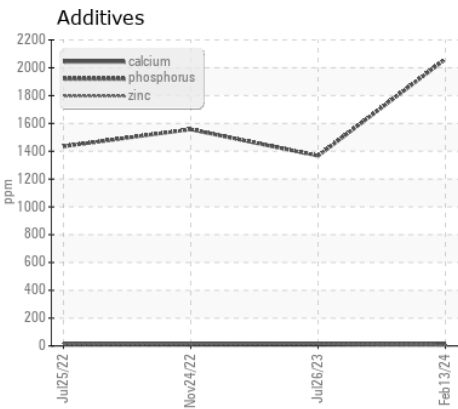
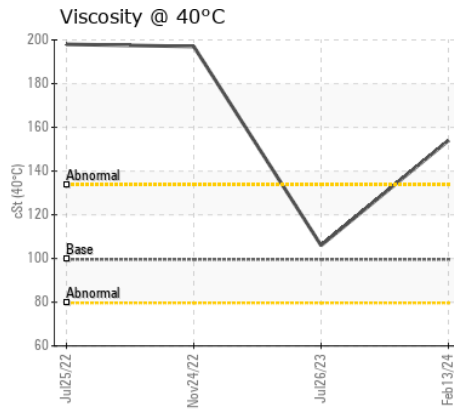
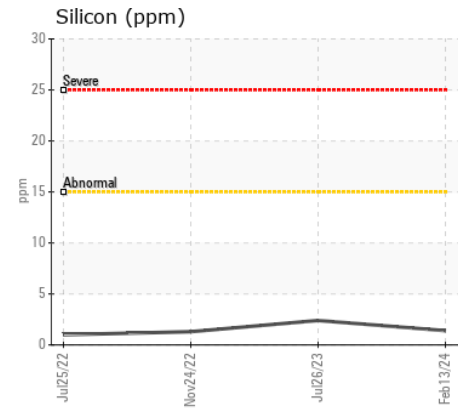
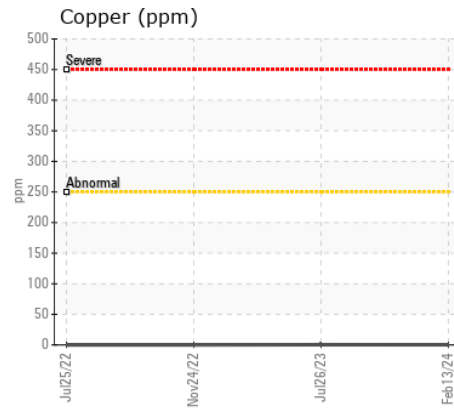
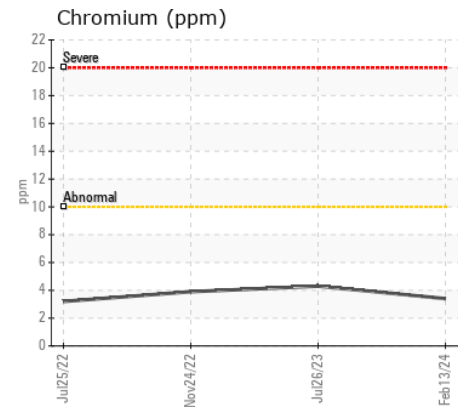
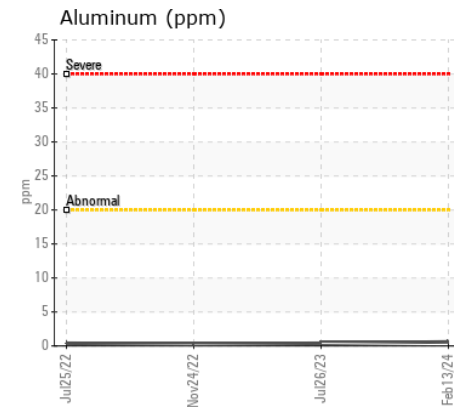
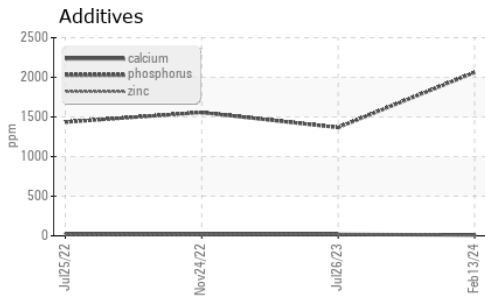
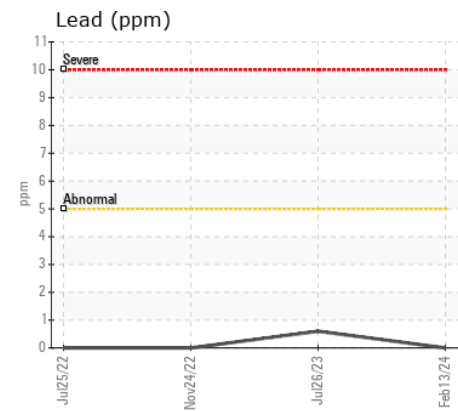
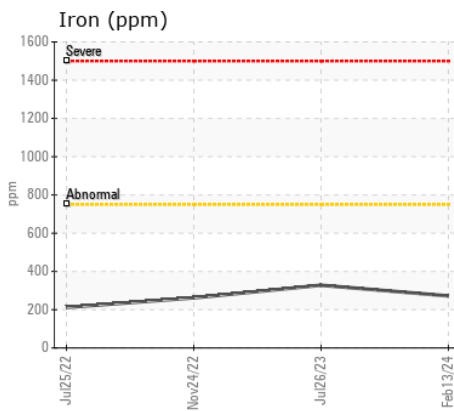
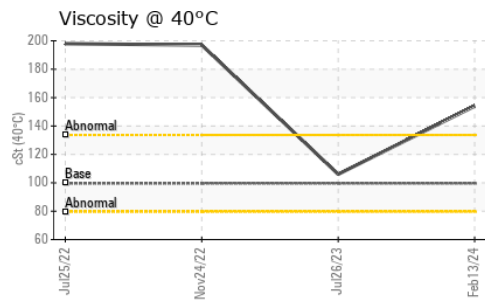
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	1	2	1
Potassium	ppm	ASTM D5185(m)	>20	8	0	3
Water		WC Method	>0.2	NEG	NEG	NEG
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

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	2	6
Boron	ppm	ASTM D5185(m)	328	76	227	3
Barium	ppm	ASTM D5185(m)	1	<1	2	11
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		2	3	4
Magnesium	ppm	ASTM D5185(m)	1	<1	1	0
Calcium	ppm	ASTM D5185(m)	7	11	18	16
Phosphorus	ppm	ASTM D5185(m)	1145	2062	1367	1557
Zinc	ppm	ASTM D5185(m)	3	5	14	13
Sulfur	ppm	ASTM D5185(m)	17909	24835	20998	26841
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	154	106	197



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284896
Lab Number : 02617478
Unique Number : 5734588
Test Package : MOB 1
Received : 22 Feb 2024
Tested : 22 Feb 2024
Diagnosed : 22 Feb 2024 - Wes Davis

THOMAS CAVANAGH CONSTRUCTION LTD
 RR # 2, 9094 CAVANAGH ROAD
 ASHTON, ON
 CA K0A 1B0
 Contact: Keith

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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