



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[593756]
Machine Id
LIEBHERR HS8100 184996
Component
1 Winch
Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284986	LH0261251	LH0239654
Sample Date		Client Info		26 Jan 2024	04 May 2023	29 Jul 2022
Machine Age	hrs	Client Info		12043	10190	8773
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	29	34	▲ 1374
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	▲ 18
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	6
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	2
Lead	ppm	ASTM D5185(m)	>15	0	<1	4
Copper	ppm	ASTM D5185(m)	>80	6	21	▲ 95
Tin	ppm	ASTM D5185(m)		0	<1	6
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

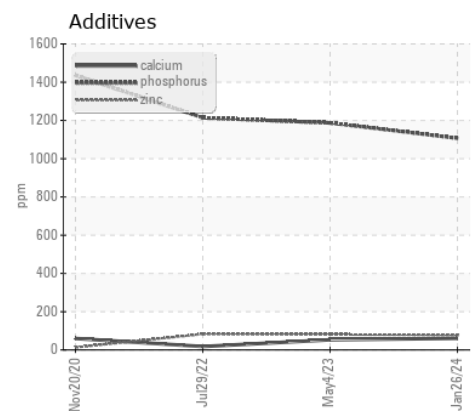
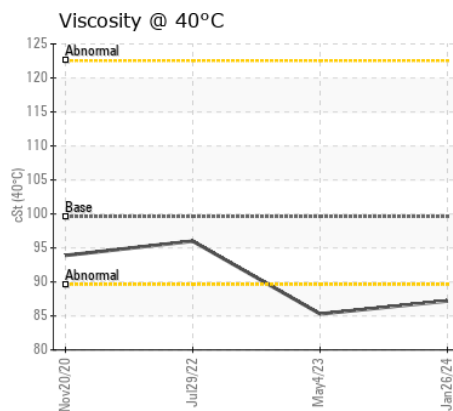
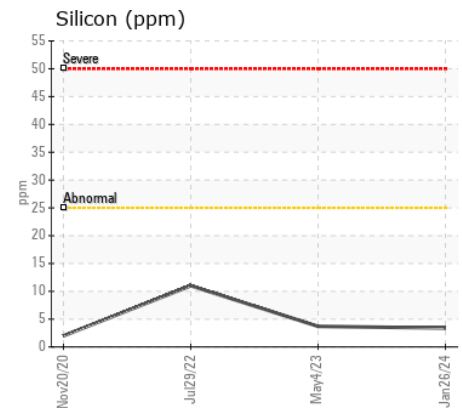
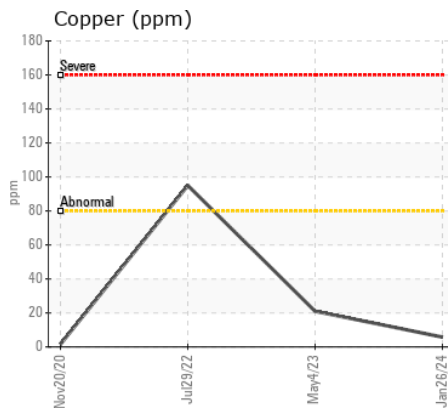
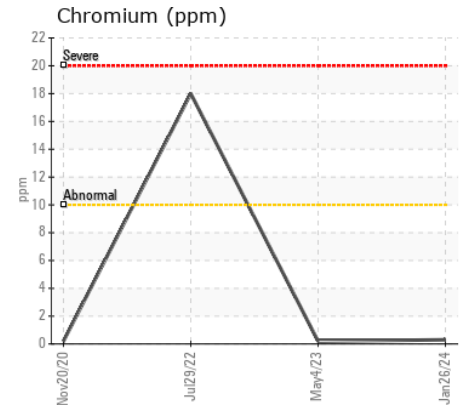
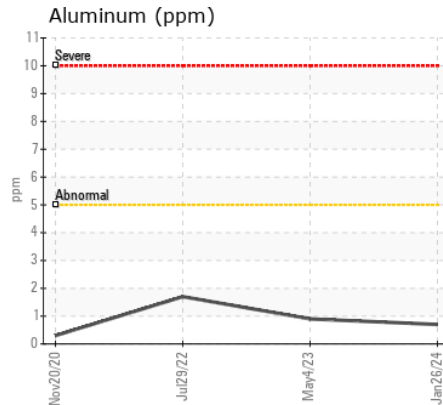
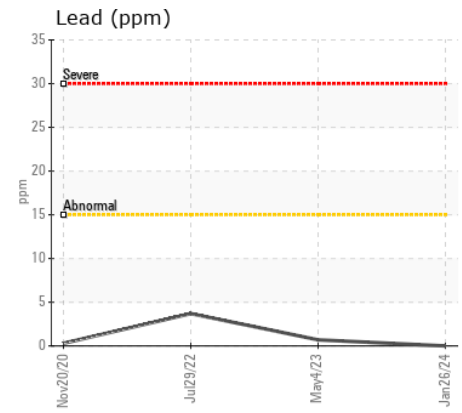
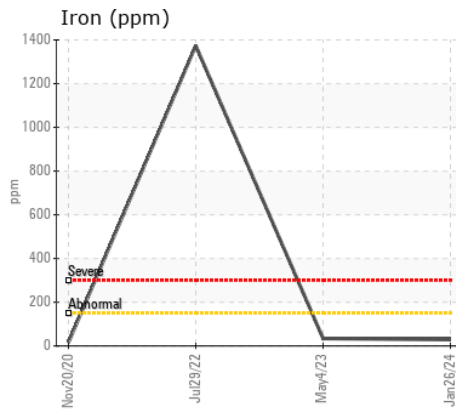
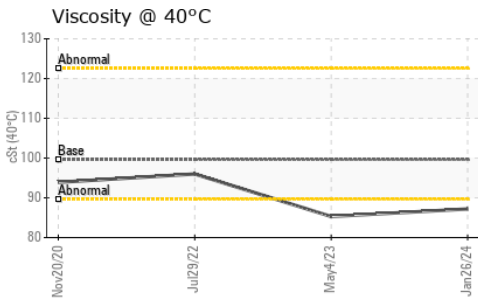
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	11
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	▲ LAYRD
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	▲ .5%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	<1	2
Boron	ppm	ASTM D5185(m)	328	251	220	205
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	11
Magnesium	ppm	ASTM D5185(m)	1	9	3	3
Calcium	ppm	ASTM D5185(m)	7	61	53	18
Phosphorus	ppm	ASTM D5185(m)	1145	1107	1187	1214
Zinc	ppm	ASTM D5185(m)	3	78	81	83
Sulfur	ppm	ASTM D5185(m)	17909	18454	17905	20841
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	87.2	85.3	96.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284986
Lab Number : 02619995
Unique Number : 5737105
Test Package : MOB 1
Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Wes Davis

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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