MOB

LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(354957)
Machine Id
LIEBHERR R918LC 053128-1721
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (--- GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

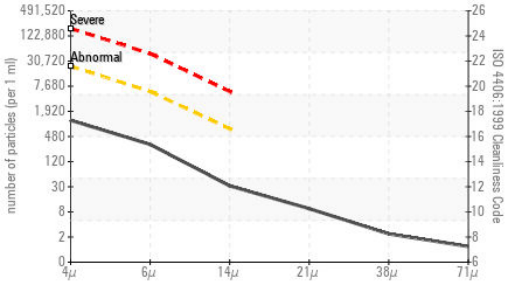
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

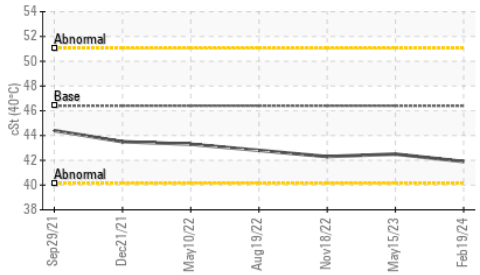
Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**LH**	LH0260747	LH0238808
Sample Date		Client Info		**19 Feb 2024**	15 May 2023	18 Nov 2022
Machine Age	hrs	Client Info		**3908**	2992	2436
Oil Age	hrs	Client Info		**0**	0	0
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>50	**11**	10	10
Chromium	ppm	ASTM D5185(m)	>15	**3**	2	2
Nickel	ppm	ASTM D5185(m)	>5	**<1**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	<1	<1
Silver	ppm	ASTM D5185(m)		**2**	0	0
Aluminum	ppm	ASTM D5185(m)	>8	**1**	<1	<1
Lead	ppm	ASTM D5185(m)	>5	**1**	<1	1
Copper	ppm	ASTM D5185(m)	>15	**6**	6	5
Tin	ppm	ASTM D5185(m)	>5	**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>25	**7**	8	8
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	<1
Water		WC Method	>0.1	**NEG**	NEG	NEG
Particles >4µm		ASTM D7647	>20000	**1029**	7457	724
Particles >6µm		ASTM D7647	>5000	**273**	2225	130
Particles >14µm		ASTM D7647	>640	**28**	180	20
Particles >21µm		ASTM D7647	>160	**8**	46	8
Particles >38µm		ASTM D7647	>40	**2**	2	2
Particles >71µm		ASTM D7647	>10	**1**	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**17/15/12**	20/18/15	17/14/11
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*	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**2**	2	2
Boron	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	**3**	3	3
Calcium	ppm	ASTM D5185(m)	50	**1193**	1268	1305
Phosphorus	ppm	ASTM D5185(m)	330	**612**	668	674
Zinc	ppm	ASTM D5185(m)	430	**705**	724	710
Sulfur	ppm	ASTM D5185(m)	760	**3880**	3851	3993
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	**41.9**	42.5	42.3

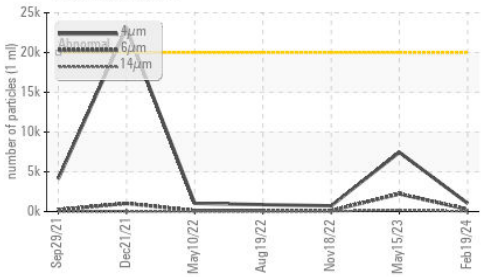
Particle Count



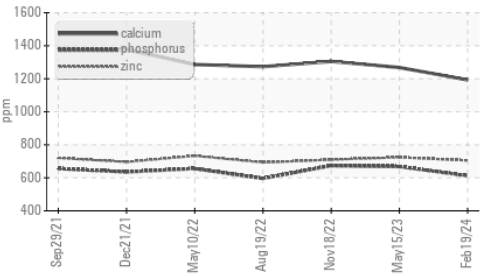
Viscosity @ 40°C



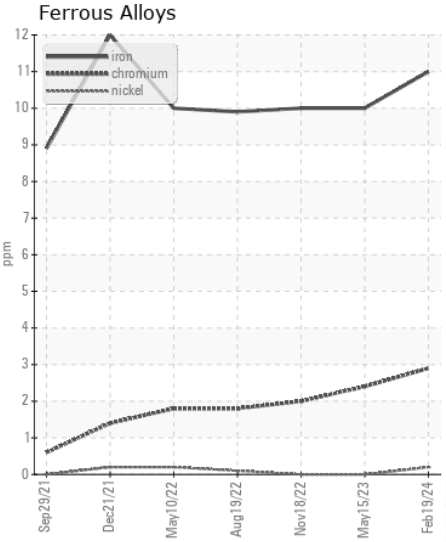
Particle Trend



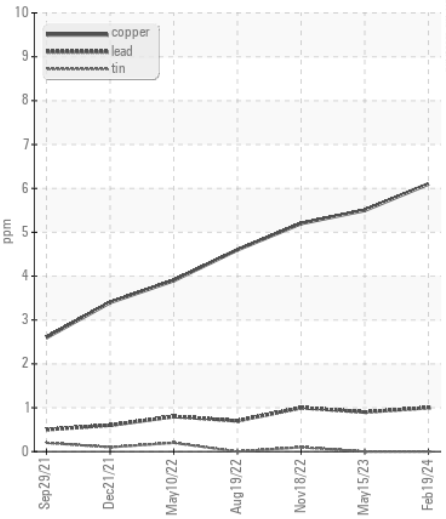
Additives



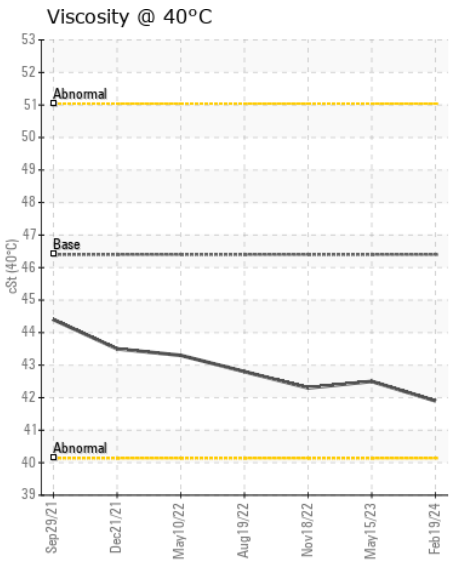
Ferrous Alloys



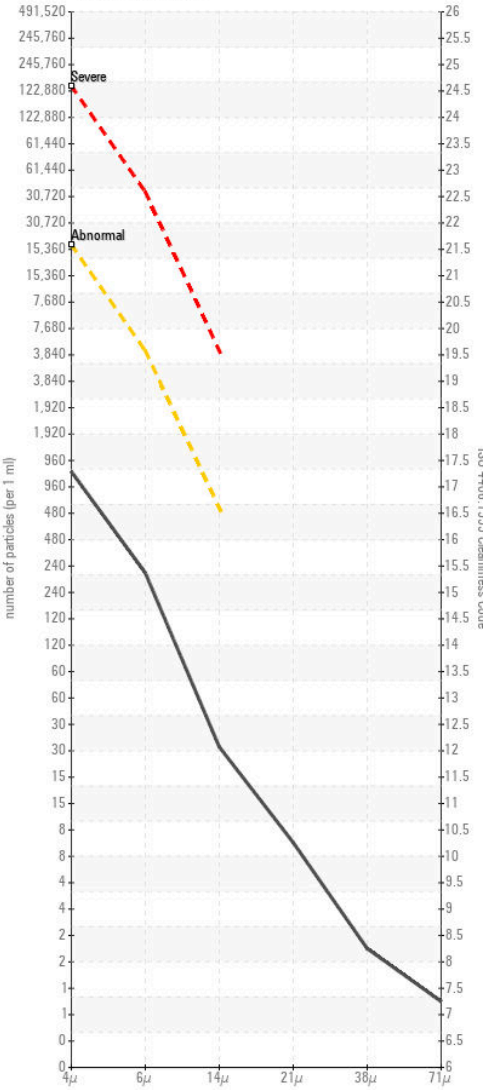
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02618971
Unique Number : 5736081
Test Package : MOB 1 (Additional Tests: PrtCount)

Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Kevin Marson

Polyexcave Inc.
787 Ch. Du Moine
St-Anne de Sorel, QC
CA J3P 5N3
Contact: Service Manager

T:
F:

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.