



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**LIEBHERR L550 038130**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0286970</b>	LH0202904	LH0239574
Sample Date		Client Info		<b>02 Apr 2024</b>	18 May 2023	15 Aug 2022
Machine Age	hrs	Client Info		<b>10460</b>	9860	9173
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<b>0</b>	21	23
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	5	5
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	2	2
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	4	5
Copper	ppm	ASTM D5185(m)	>75	<b>0</b>	6	7
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

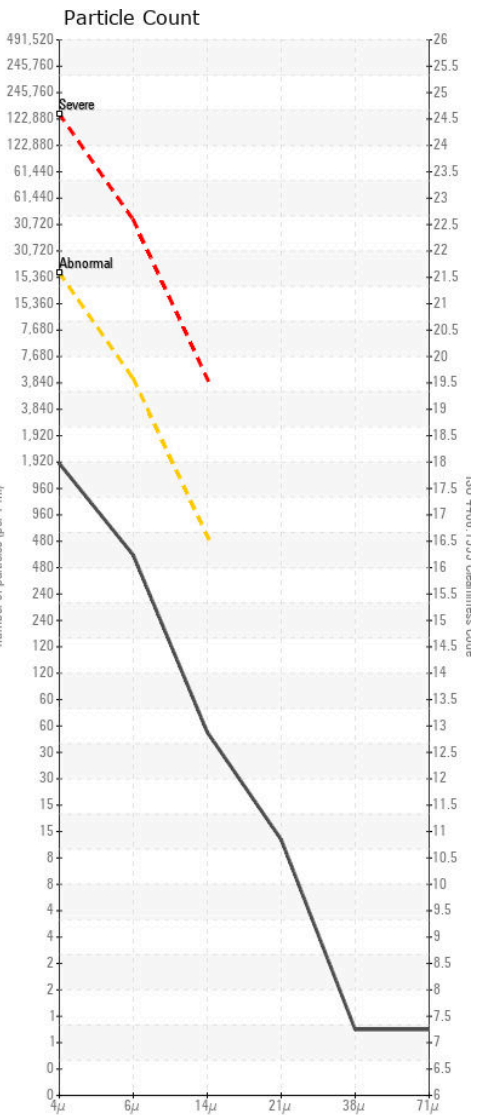
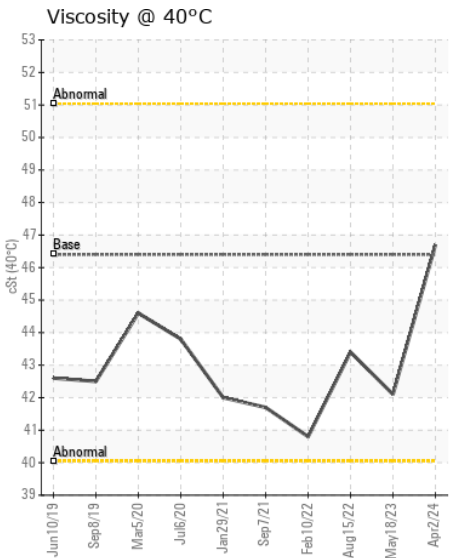
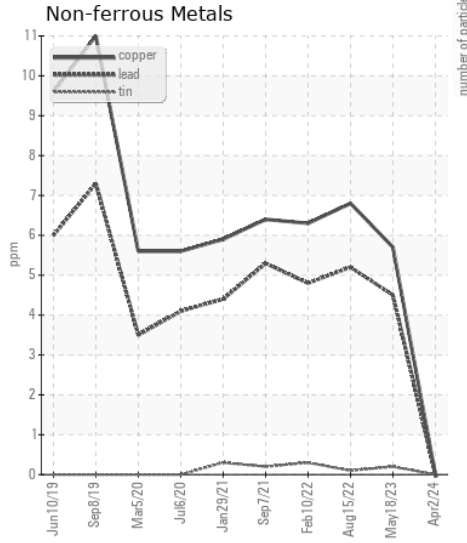
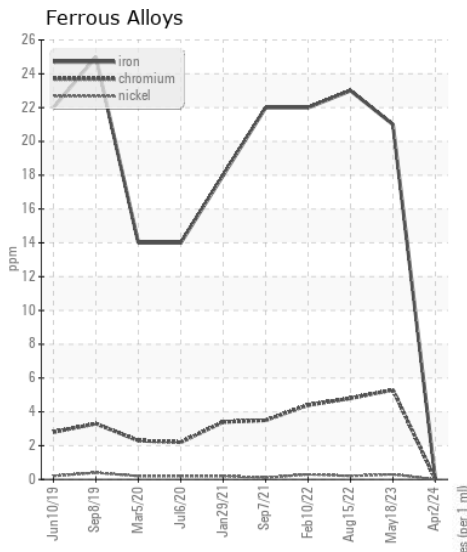
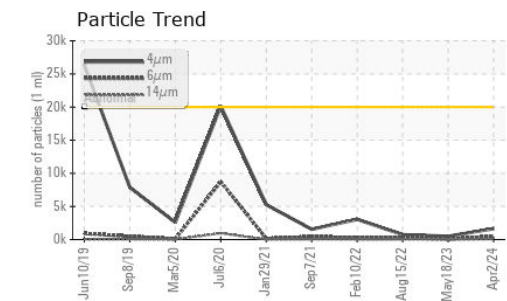
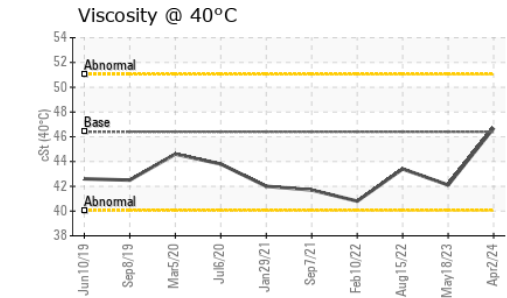
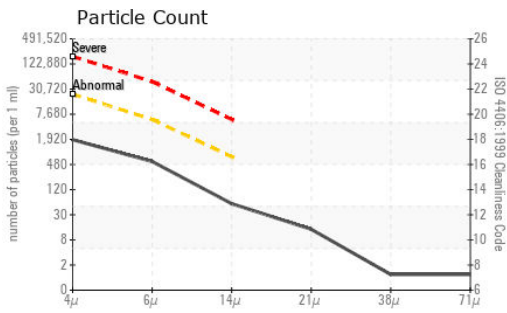
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	<b>0</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>1649</b>	493	737
Particles >6µm		ASTM D7647	>5000	<b>497</b>	61	278
Particles >14µm		ASTM D7647	>640	<b>49</b>	8	32
Particles >21µm		ASTM D7647	>160	<b>12</b>	3	6
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	1
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/16/13</b>	16/13/10	17/15/12
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>0</b>	4	4
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	4	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	2	<1
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	28	15
Calcium	ppm	ASTM D5185(m)	50	<b>101</b>	474	515
Phosphorus	ppm	ASTM D5185(m)	330	<b>626</b>	595	577
Zinc	ppm	ASTM D5185(m)	430	<b>823</b>	689	691
Sulfur	ppm	ASTM D5185(m)	760	<b>1474</b>	1901	2000
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>46.7</b>	42.1	43.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0286970 **Received** : 09 Apr 2024  
**Lab Number** : 02627716 **Tested** : 10 Apr 2024  
**Unique Number** : 5760848 **Diagnosed** : 10 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PrtCount )

**D & G LANDSCAPING**  
 1341 COKER  
 GREELY, ON  
 CA K4P 1A1  
 Contact: Maintenance

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: