



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR R926LC 039817-1320**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0288058</b>	LH0284057	LH0242056
Sample Date		Client Info		<b>01 May 2024</b>	30 Jan 2024	17 Oct 2023
Machine Age	hrs	Client Info		<b>8532</b>	8073	7591
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>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>19</b>	23	19
Chromium	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>8	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>15	<b>6</b>	8	9
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
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

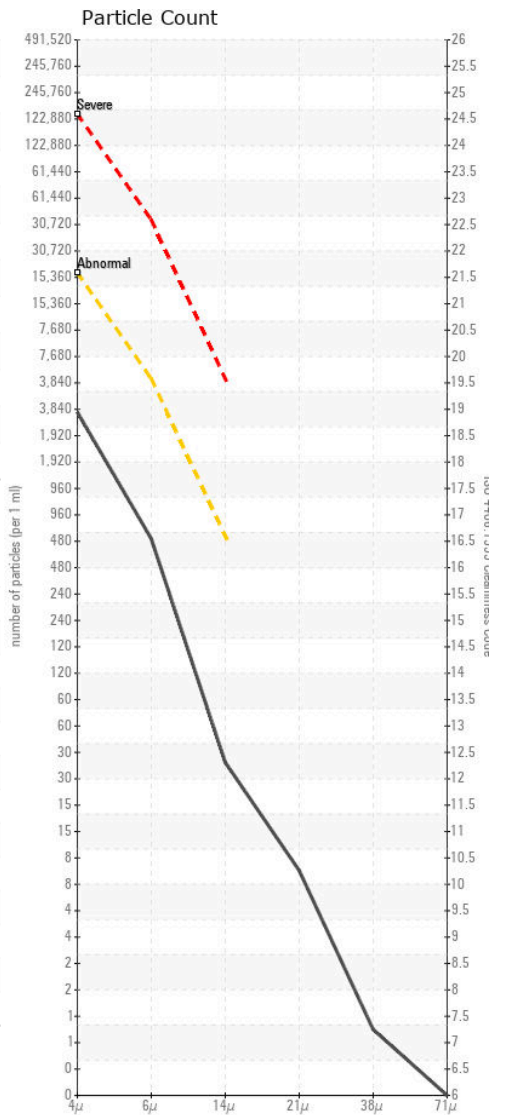
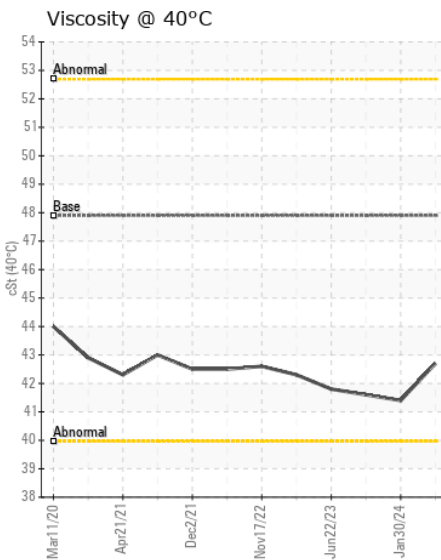
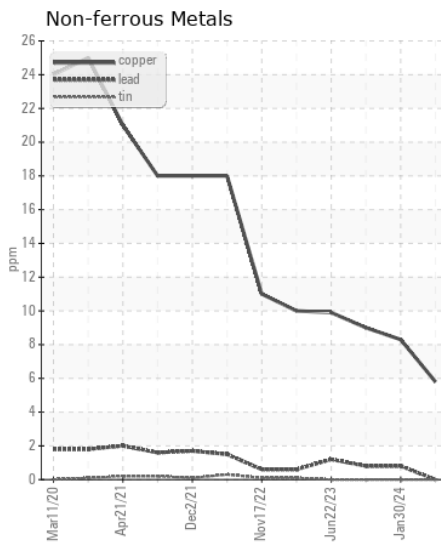
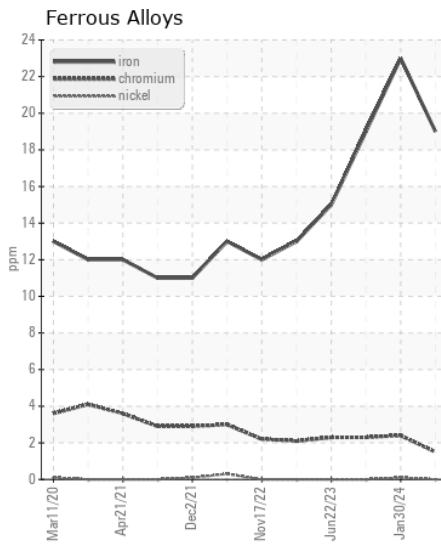
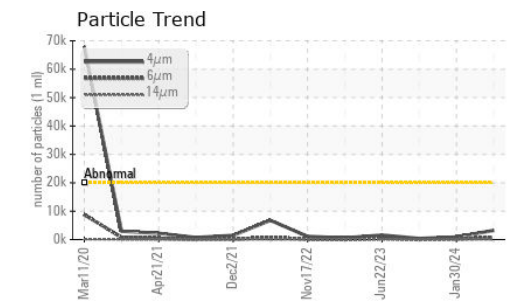
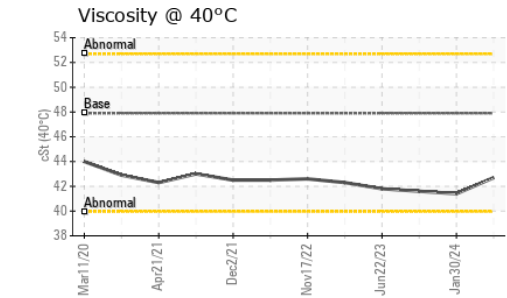
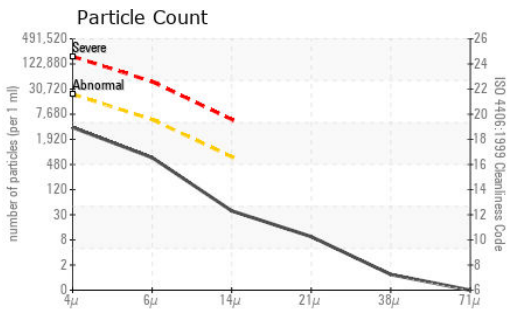
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>3230</b>	903	389
Particles >6µm		ASTM D7647	>5000	<b>615</b>	242	72
Particles >14µm		ASTM D7647	>640	<b>33</b>	30	8
Particles >21µm		ASTM D7647	>160	<b>8</b>	10	4
Particles >38µm		ASTM D7647	>40	<b>1</b>	1	2
Particles >71µm		ASTM D7647	>10	<b>0</b>	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>19/16/12</b>	17/15/12	16/13/10
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</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>3</b>	5	6
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	3	3
Calcium	ppm	ASTM D5185(m)	100	<b>181</b>	241	268
Phosphorus	ppm	ASTM D5185(m)	670	<b>592</b>	555	538
Zinc	ppm	ASTM D5185(m)	850	<b>750</b>	674	698
Sulfur	ppm	ASTM D5185(m)	1600	<b>1865</b>	1677	1604
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	<b>42.7</b>	41.4	41.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0288058 **Received** : 02 May 2024  
**Lab Number** : 02632888 **Tested** : 03 May 2024  
**Unique Number** : 5774041 **Diagnosed** : 03 May 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: PrtCount )

**ECOWASTE INDUSTRIES**  
 4 SPRUCE ST  
 NEW WESTMINSTER, BC  
 CA V3L 5G6  
 Contact: Service Manager

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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