



## LIEBHERR LW3372 - Hydraulic System

Sample No: LH0260626

Oil Type: PETRO CANADA ENVIRON MV 46

- JAM		RMATION				
Sample Number		LH0260626	LH0240783	LH0185847		
Sample Date		12 Jan 2024	07 Mar 2023	13 Mar 2021		Radius Recycling Canada Ltd.
Machine Hours		26525	25274	22169		12195 Musqueam Dr.
Oil Hours		0	0	0		Surrey, BC
Oil Changed		Not Changd	Not Changd	Not Changd		CA V3V 3T2
Sample Status		NORMAL	ATTENTION	ATTENTION		Contact: Chris Trinkunas
						ctrinkunas@rdus.com
	ONDITIO	N				T:
						F: (604)580-1922
Visc @ 40°C	cSt	0 40.5	○ 41.1	◯ 41.0		
11						Diagnosis
CON'	TAMINA1	TION				5
Water	%	NEG	NEG	NEG		Resample at the next service inte to monitor.All component wear rat
Particles >4µm	70	0 4723	O 9908	○ 6433		are normal. The system cleanline
Particles >6µm		398	0 985	0 271		is acceptable for your target ISO
Particles >14µm		0 390	0 57	0 10		4406 cleanliness code. The syste
ISO 4406:1999 (c	2)	19/16/12	20/17/13	20/15/10		and fluid cleanliness is acceptable
Silicon	ppm	○ <1	0 <1	0 <1		The condition of the oil is accepta
Shicon	ppm	$\bigcirc$ < 1				
Sodium	nnm		0 -1	0 -1		for the time in service.
Potassium	ppm ppm	0 0 <1 S	○ <1 ○ 0	○ <1 ○ 0		for the time in service.
Potassium	ppm	⊖ <1 S	0	0		tor the time in service.
Potassium WEA	ppm RMETAL ppm	<ul> <li>&lt;1</li> <li>S</li> <li>○ 7</li> </ul>	0	0		tor the time in service.
Sodium Potassium Iron Copper Lead	ppm R METAL ppm ppm	O <1 S 0 7 0 <1	<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> </ul>		for the time in service.
Potassium WEA Iron Copper	ppm <b>R METAL</b> ppm ppm ppm		0	0		for the time in service.
Potassium WEA Iron Copper Lead Tin	ppm <b>R METAL</b> ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ 0</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> </ul>		for the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum	ppm <b>R METAL</b> ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ 0</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ 0</li> </ul>		for the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum Chromium	ppm <b>R METAL</b> ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> </ul>		for the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum	ppm <b>R METAL</b> ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> </ul>		for the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel	ppm ppm ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> </ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> </ul>		for the time in service.
Potassium WEA Iron Copper Lead	ppm <b>R METAL</b> ppm ppm ppm ppm ppm ppm ppm pp		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul></td><td></td><td>tor the time in service.</td></li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul>		tor the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium	ppm <b>Ppm</b> ppm ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>0</li> <li>0</li> <li>0</li> </ul></td><td>Image: Section of the sectio</td><td>for the time in service.</td></li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>○ &lt;1</li> <li>0</li> <li>0</li> <li>0</li> </ul>	Image: Section of the sectio	for the time in service.
Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese	ppm ppm ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul>	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> </ul></td><td>Image: Section of the sectio</td><td>for the time in service.</td></li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> </ul>	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm		<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li< td=""><td>Image: Section of the sectio</td><td>for the time in service.</td></li<></ul></td></li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ 0</li> <li< td=""><td>Image: Section of the sectio</td><td>for the time in service.</td></li<></ul>	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium Canadium Calcium	ppm Ppm ppm ppm ppm ppm ppm ppm	<1 <ul> <li> <li> <li></li></li></li></ul>	<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul></td><td>Image: Section of the sectio</td><td>for the time in service.</td></li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul>	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium ADD	ppm ppm ppm ppm ppm ppm ppm ppm	<1	<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><math>\bigcirc 0</math> <math>\bigcirc 3</math> <math>\bigcirc &lt;1</math> <math>\bigcirc 0</math> <math>\bigcirc 0</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc 0</math> <math>\bigcirc 1</math> <math>\bigcirc 0</math> <math>\bigcirc 0</math> <math>\bigcirc 27</math> <math>\bigcirc 6</math></td><td>Image: Section of the sectio</td><td>for the time in service.</td></li></ul>	$\bigcirc 0$ $\bigcirc 3$ $\bigcirc <1$ $\bigcirc 0$ $\bigcirc 0$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc 0$ $\bigcirc 1$ $\bigcirc 0$ $\bigcirc 0$ $\bigcirc 27$ $\bigcirc 6$	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Molybdenum Nickel Titanium Silver Manganese Vanadium Calcium Magnesium Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	<ul> <li>&lt;1</li> <li>7</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;0</li> <li>&lt;1</li> &lt;</ul>	<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ &lt;1</li> <li>○ &lt;1</li></ul>	<ul> <li>○ 0</li> <li>○ 3</li> <li>○ &lt;1</li> <li>○ 0</li> <li>○ 1</li> <li>○ &lt;1</li> <li>○</li></ul>	Image: Section of the sectio	for the time in service.
Potassium Potassium WEA Iron Copper Lead Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium Calcium Magnesium	ppm ppm ppm ppm ppm ppm ppm ppm	<ul> <li>&lt;1</li> <li>7</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;1</li> <li>&lt;0</li> <li>&lt;1</li> &lt;</ul>	<ul> <li>○ 0</li> <li>○ 4</li> <li>○ &lt;1</li> <li>○ &lt;1<td><math>\bigcirc 0</math> <math>\bigcirc 3</math> <math>\bigcirc &lt;1</math> <math>\bigcirc 0</math> <math>\bigcirc 0</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc &lt;1</math> <math>\bigcirc 0</math> <math>\bigcirc 1</math> <math>\bigcirc 0</math> <math>\bigcirc 0</math> <math>\bigcirc 27</math> <math>\bigcirc 6</math></td><td>Image: Section of the sectio</td><td>for the time in service.</td></li></ul>	$\bigcirc 0$ $\bigcirc 3$ $\bigcirc <1$ $\bigcirc 0$ $\bigcirc 0$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc <1$ $\bigcirc 0$ $\bigcirc 1$ $\bigcirc 0$ $\bigcirc 0$ $\bigcirc 27$ $\bigcirc 6$	Image: Section of the sectio	for the time in service.

Depot:AMISURUnique No:5735506Signed:Wes DavisReport Date:28 Feb 2024

## **LIEBHERR** CONSTRUCTION EQUIPMENT



**GRAPHS** 

