

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(357698)] LIEBHERR LH50M 125637-1216 - Hydraulic System

Sample No: LH0260570

Oil Type: PETRO CANADA ENVIRON MV 46



**RADIUS RECYCLING - SURREY**  
12301 MUSQUEAM DRIVE  
SURREY, BC  
CA V3V 3T2  
Contact: Service Manager



#### SAMPLE INFORMATION

Sample Number	LH0260570	LH0212575	LH0212561	LH0212547
Sample Date	05 Feb 2024	31 Aug 2023	10 Sep 2022	05 Apr 2022
Machine Hours	5010	4243	2241	1267
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	ATTENTION	ATTENTION



#### OIL CONDITION

Visc @ 40°C	cSt	40.6	40.6	41.6	42.5
Acid Number (AN)	mg KOH/g	---	0.67	1.04	1.35



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		342	312	999	1352
Particles >6µm		52	87	156	124
Particles >14µm		5	8	14	10
ISO 4406:1999 (c)		16/13/10	15/14/10	17/14/11	18/14/10
Silicon	ppm	2	2	2	2
Sodium	ppm	<1	1	1	<1
Potassium	ppm	1	<1	<1	1



#### WEAR METALS

PQ		0	0	---	---
Iron	ppm	53	55	43	29
Copper	ppm	3	4	3	3
Lead	ppm	1	<1	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	1	1	<1	<1
Molybdenum	ppm	0	0	<1	<1
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	559	668	903	1042
Magnesium	ppm	4	4	4	5
Zinc	ppm	279	346	443	526
Phosphorus	ppm	607	609	644	635
Barium	ppm	0	0	0	0
Boron	ppm	<1	1	<1	1

T:  
F:

#### Diagnosis

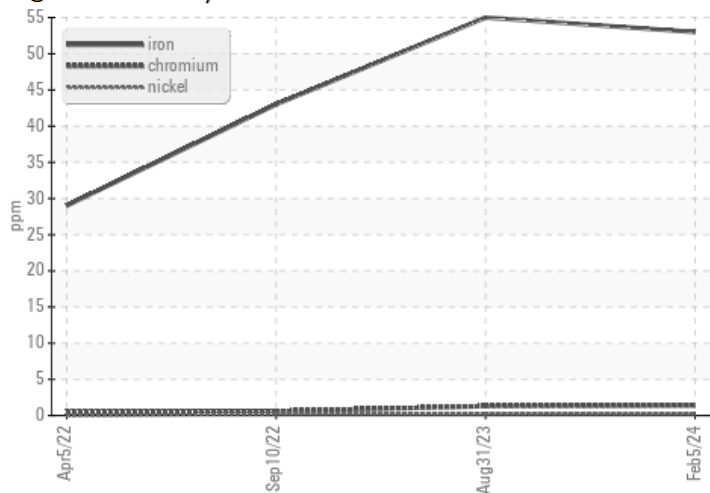
We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: SCH123SUR  
Unique No: 5735495  
Signed: Kevin Marson  
Report Date: 28 Feb 2024

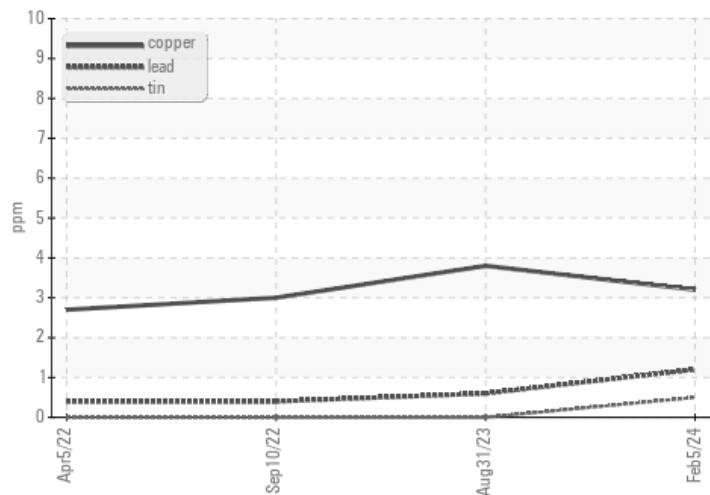


### GRAPHS

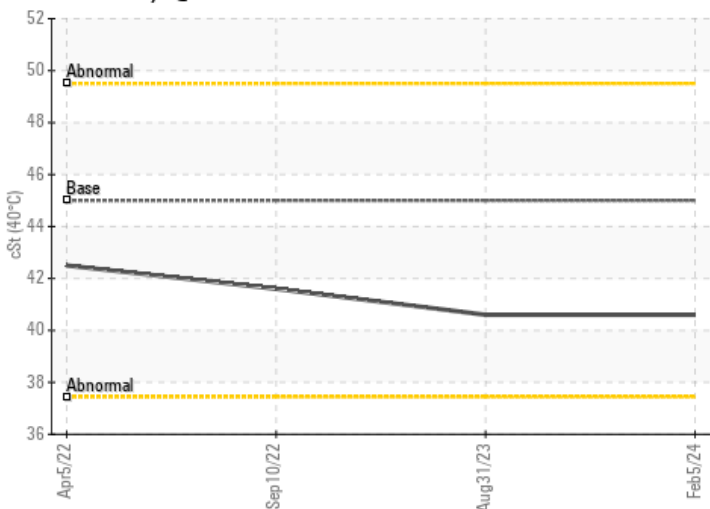
#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

