

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R934 048907-1550 - Hydraulic System

Sample No: LH0281062

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



SAMPLE INFORMATION

Sample Number	LH0281062	LH0242064	LH0260549	LH0226687
Sample Date	24 Jan 2024	11 Oct 2023	07 Jul 2023	16 Mar 2023
Machine Hours	5470	4991	4540	4080
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	SEVERE	ABNORMAL	ABNORMAL

REGAHR CONTRACTING

6547 MT. LEHMAN ROAD

ABBOTSFORD, BC

CA V4X 2G5

Contact: Service Manager



OIL CONDITION

Visc @ 40°C	cSt	42.1	42.3	41.2	41.0

T:

F:



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		6027	50390	5071	10675
Particles >6µm		1673	9050	1536	1641
Particles >14µm		80	414	126	63
ISO 4406:1999 (c)		20/18/13	23/20/16	20/18/14	21/18/13
Silicon	ppm	5	6	6	6
Sodium	ppm	2	4	4	3
Potassium	ppm	1	<1	3	1

Diagnosis

We recommend that you drain the oil from the component if this has not already been done. 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. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WEAR METALS

PQ		5	12	7	1
Iron	ppm	87	123	87	62
Copper	ppm	6	8	8	7
Lead	ppm	<1	2	1	1
Tin	ppm	0	0	0	0
Aluminum	ppm	1	<1	1	1
Chromium	ppm	1	2	2	2
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	1	2	2	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	326	555	659	780
Magnesium	ppm	2	3	4	4
Zinc	ppm	545	665	640	653
Phosphorus	ppm	458	553	580	606
Barium	ppm	0	<1	<1	0
Boron	ppm	<1	<1	<1	<1

Depot: REGABB

Unique No: 5720948

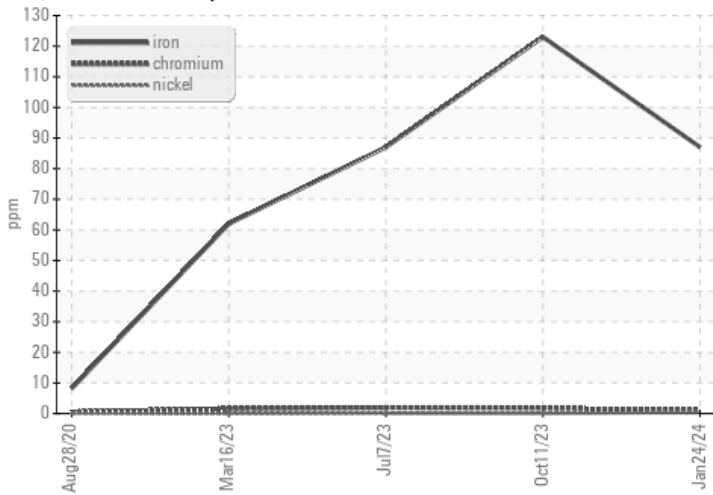
Signed: Bill Quesnel

Report Date: 31 Jan 2024

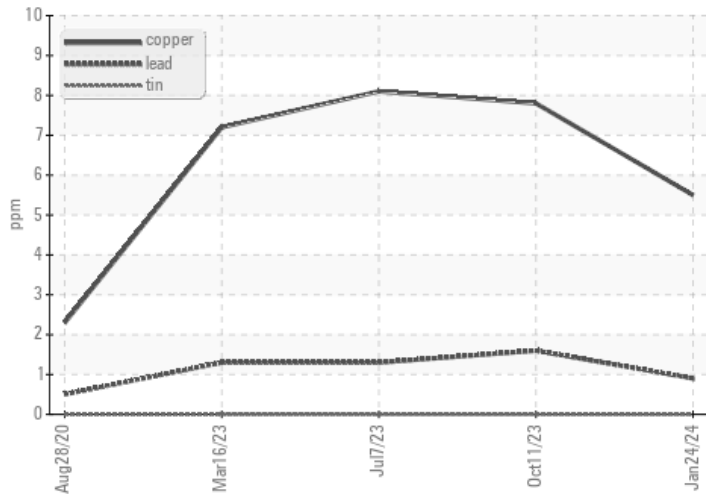


GRAPHS

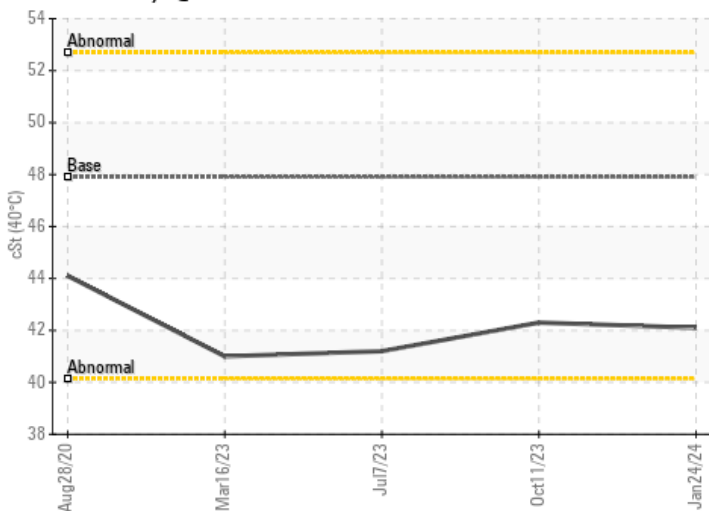
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

