

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 123295-1253 - Hydraulic System

Sample No: LH0277023

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



JOHN ROSS & SONS LTD.
 85 GLASSY AVENUE
 TRURO, NS
 CA B2N 6Z1
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0277023	LH0260372	LH0224255	LH0194612
Sample Date	19 Oct 2023	14 Jun 2023	21 Apr 2022	23 Sep 2021
Machine Hours	5676	5074	0	2168
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Not Changd	N/A
Sample Status	SEVERE	SEVERE	ABNORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	41.4	41.3	42.5	42.3



CONTAMINATION

Particles >4µm		5892	13523	12994	1534
Particles >6µm		1636	3426	2970	273
Particles >14µm		111	145	175	15
ISO 4406:1999 (c)		20/18/14	21/19/14	21/19/15	18/15/11
Silicon	ppm	3	3	2	2
Sodium	ppm	4	3	3	2
Potassium	ppm	<1	2	1	2



WEAR METALS

PQ		9	10	0	0
Iron	ppm	162	121	72	54
Copper	ppm	7	6	4	4
Lead	ppm	1	1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	2	2	1	<1
Molybdenum	ppm	4	5	5	0
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	<1
Manganese	ppm	2	2	1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1155	1144	1242	1307
Magnesium	ppm	60	62	69	6
Zinc	ppm	692	695	721	678
Phosphorus	ppm	580	654	651	609
Barium	ppm	<1	0	0	0
Boron	ppm	14	14	18	<1

T:
F:

Diagnosis

The oil change at the time of sampling has been noted. 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 severe. 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: JOHTRU
 Unique No: 5669504
 Signed: Kevin Marson
 Report Date: 30 Oct 2023



GRAPHS

