

LIEBHERR

CONSTRUCTION EQUIPMENT



[[20240024]] LIEBHERR A934 037803-1006 - Hydraulic Sys

Sample No: LH0278545

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



SAMPLE INFORMATION

Sample Number	LH0278545	LH0242691	LH0177291	LHMC34713
Sample Date	24 Jan 2024	03 Nov 2022	01 Sep 2021	03 Aug 2010
Machine Hours	22142	19122	16343	4593
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	N/A	N/A
Sample Status	ABNORMAL	ATTENTION	NORMAL	ABNORMAL

METAL MANAGEMENT

P.O. BOX 460
SHERMAN, MS
US 38869
Contact: LIBBY HANCOCK



OIL CONDITION

Visc @ 40°C	cSt	41.7	39.5	40.0	51.5
Acid Number (AN)	mg KOH/g	---	---	---	1.33

T: (662)680-8119
F: (662)796-3105



CONTAMINATION

Water	%	0.042	NEG	NEG	NEG
Particles >4µm		61099	23123	5336	---
Particles >6µm		17358	7897	892	---
Particles >14µm		529	571	50	---
ISO 4406:1999 (c)		23/21/16	22/20/16	20/17/13	---
Silicon	ppm	<1	<1	<1	2
Sodium	ppm	<1	1	<1	4
Potassium	ppm	<1	<1	<1	2

Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



WEAR METALS

Iron	ppm	3	6	2	64
Copper	ppm	<1	2	1	8
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	<1	<1	0	<1
Chromium	ppm	<1	4	<1	2
Molybdenum	ppm	0	0	0	2
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	75	72	65	1654
Magnesium	ppm	3	1	<1	25
Zinc	ppm	633	587	614	724
Phosphorus	ppm	497	521	505	619
Barium	ppm	0	0	0	0
Boron	ppm	<1	<1	<1	8

Depot: METSHE
Unique No: 5720890
Signed: Bill Quesnel
Report Date: 01 Feb 2024

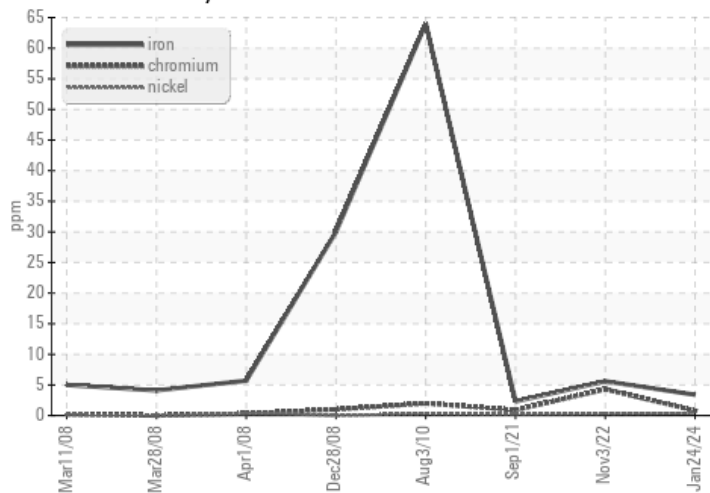
LIEBHERR

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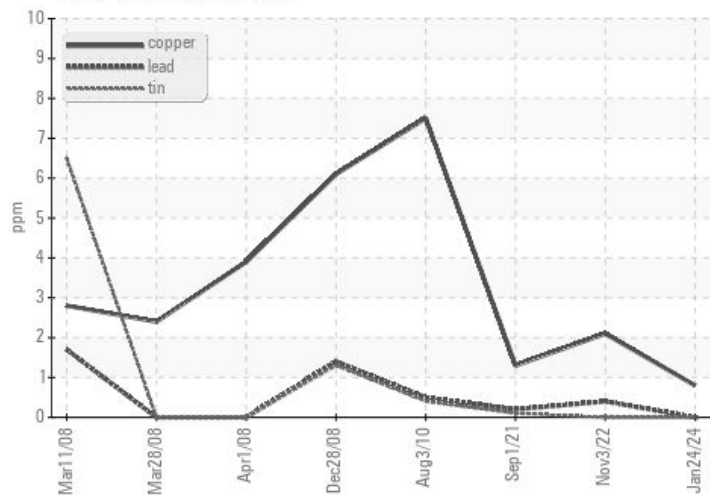


GRAPHS

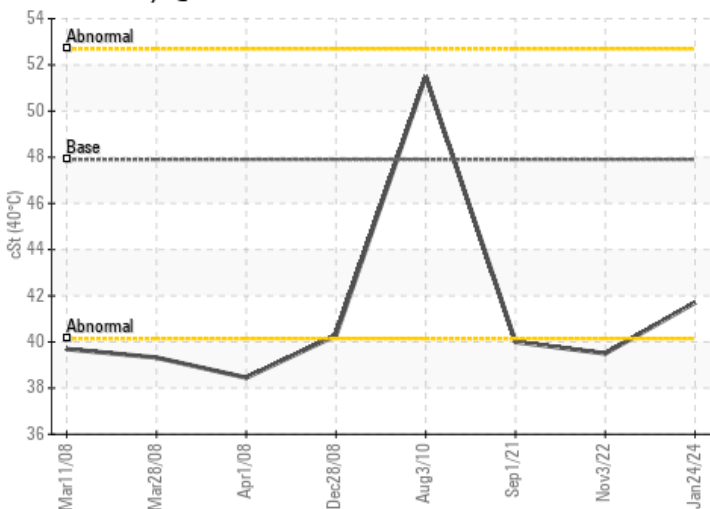
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

