

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 039482 - Hydraulic System

Sample No: LH0280946

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



Sample Information

Sample Number	LH0280946	LH0218507	LH0218518	LH0191771
Sample Date	25 Apr 2024	01 Apr 2022	27 Nov 2021	09 Apr 2021
Machine Hours	17190	13123	12341	10557
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	SEVERE	SEVERE	SEVERE	ABNORMAL

CLOVERDALE FUEL LTD.
 PO BOX 3163
 LANGLEY, BC
 CA V3A 4R5
 Contact: Maintenance Manager



Oil Condition

Visc @ 40°C	cSt	43.3	40.9	38.9	38.8
		●	●	●	●

T: (604)534-4314
 F:



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		● 120884	● 6056	● 9340	● 4258
Particles >6µm		● 14331	● 1119	● 2477	● 561
Particles >14µm		● 43	● 120	● 292	● 63
ISO 4406:1999 (c)		24/21/13	20/17/14	20/18/15	19/16/13
Silicon	ppm	● 3	● 2	● 2	● 2
Sodium	ppm	● <1	● 1	● 1	● 1
Potassium	ppm	● <1	● 1	● <1	● <1

Diagnosis

We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. Re-sampling is suggested to confirm test results prior to significant maintenance activities being performed. Please indicate that this is a resample on your Sample Information Form (SIF). Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



Wear Metals

PQ		● 0	● 0	● 0	---
Iron	ppm	● 78	● 40	● 40	● 18
Copper	ppm	● <1	● 3	● 3	● 3
Lead	ppm	● 0	● 2	● 2	● 2
Tin	ppm	● 0	● <1	● <1	● 0
Aluminum	ppm	● <1	● <1	● <1	● <1
Chromium	ppm	● 2	● 2	● 2	● 2
Molybdenum	ppm	● <1	● <1	● <1	● <1
Nickel	ppm	● 0	<1	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	● <1	● <1	● <1	● <1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	● 57	● 72	● 103	● 116
Magnesium	ppm	● 2	● 2	● 2	● 2
Zinc	ppm	● 446	● 401	● 411	● 406
Phosphorus	ppm	● 399	● 341	● 342	● 308
Barium	ppm	● 0	● 0	● 0	● <1
Boron	ppm	● <1	● <1	● <1	● <1

Depot: CLOLAN
 Unique No: 5773967
 Signed: Kevin Marson
 Report Date: 03 May 2024

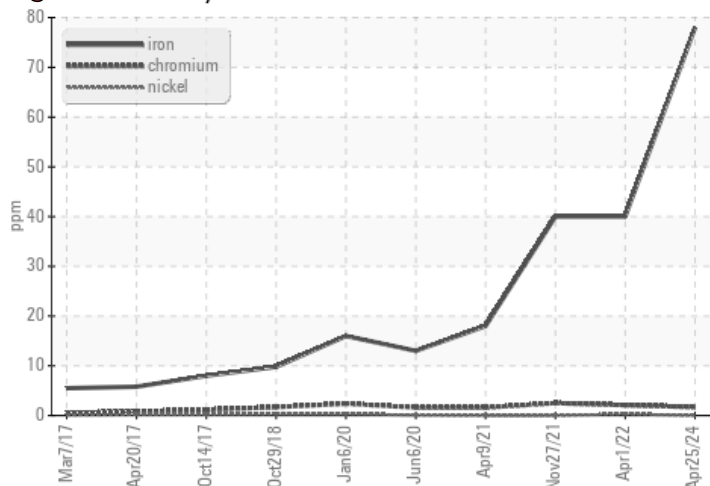
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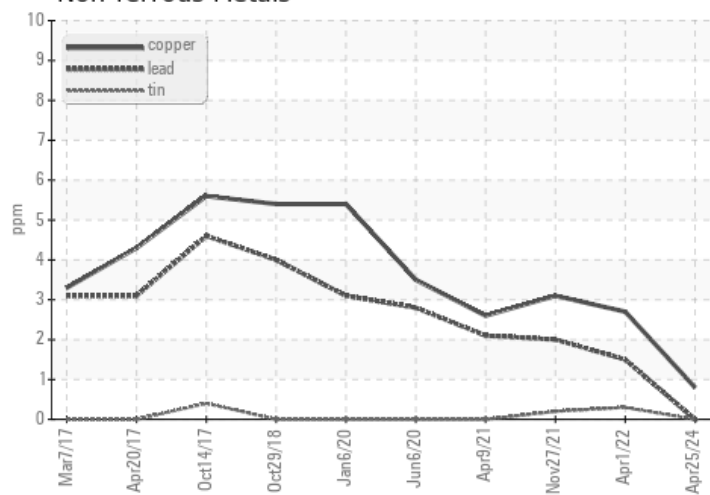


Graphs

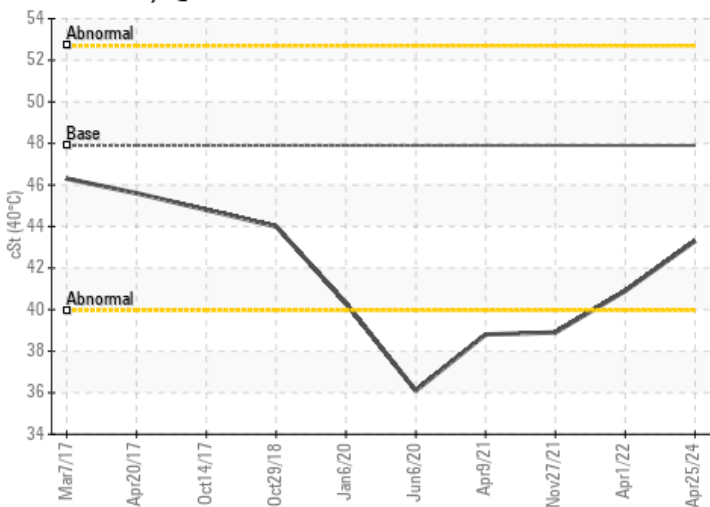
● Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



● Particle Count

