LIEBHERR
CONSTRUCTION EQUIPMENT

LIEBHERR R918LC 047212-1721 - Hydraulic System

Sample No: LH0286416

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL

WESTERRA ENTERPRISES INC.
33171 2ND AVENUE
MISSION, BC
CA V2V 6T8
Contact: Service Manager

T:
F:

Sample Information

Sample Number		**LH0286416**	LH0284031	LH0221996	---
Sample Date		**15 Jun 2024**	01 Mar 2024	11 Mar 2022	---
Machine Hours		**3540**	3066	1505	---
Oil Hours		**0**	0	0	---
Oil Changed		**Not Changd**	Not Changd	Not Changd	---
Sample Status		**NORMAL**	NORMAL	NORMAL	---

Oil Condition

Visc @ 40°C	cSt	**41.9**	42.3	43.6	---

Contamination

Water	%	**NEG**	NEG	NEG	---
Particles >4µm		**267**	4066	6112	---
Particles >6µm		**38**	845	210	---
Particles >14µm		**4**	42	17	---
ISO 4406:1999 (c)		**15/12/9**	19/17/13	20/15/11	---
Silicon	ppm	**6**	6	6	---
Sodium	ppm	**2**	2	1	---
Potassium	ppm	**<1**	<1	<1	---

Wear Metals

Iron	ppm	**10**	10	8	---
Copper	ppm	**6**	6	4	---
Lead	ppm	**<1**	<1	<1	---
Tin	ppm	**0**	0	<1	---
Aluminum	ppm	**<1**	1	<1	---
Chromium	ppm	**<1**	<1	<1	---
Molybdenum	ppm	**0**	0	0	---
Nickel	ppm	**<1**	<1	<1	---
Titanium	ppm	**0**	0	0	---
Silver	ppm	**0**	0	0	---
Manganese	ppm	**<1**	0	<1	---
Vanadium	ppm	**0**	0	0	---

Additives

Calcium	ppm	**943**	961	1085	---
Magnesium	ppm	**5**	5	6	---
Zinc	ppm	**655**	653	721	---
Phosphorus	ppm	**561**	568	628	---
Barium	ppm	**0**	0	0	---
Boron	ppm	**<1**	<1	<1	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.All component wear rates are normal. 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 condition of the oil is acceptable for the time in service.

Depot: SUMMIS
Unique No: 5814265
Signed: Kevin Marson
Report Date: 21 Jul 2024

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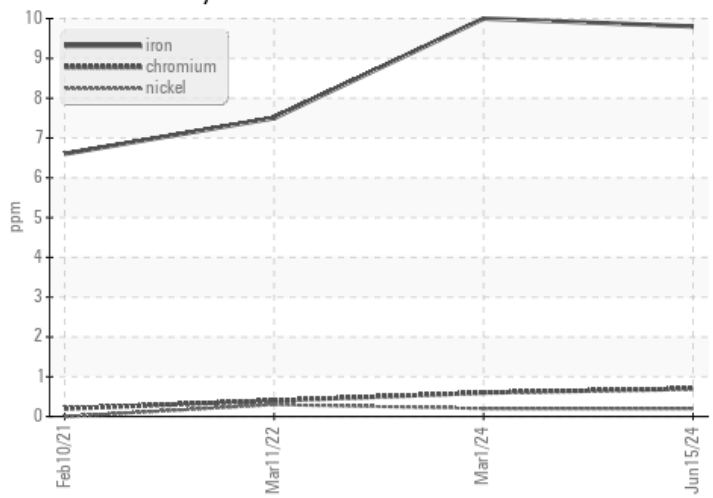
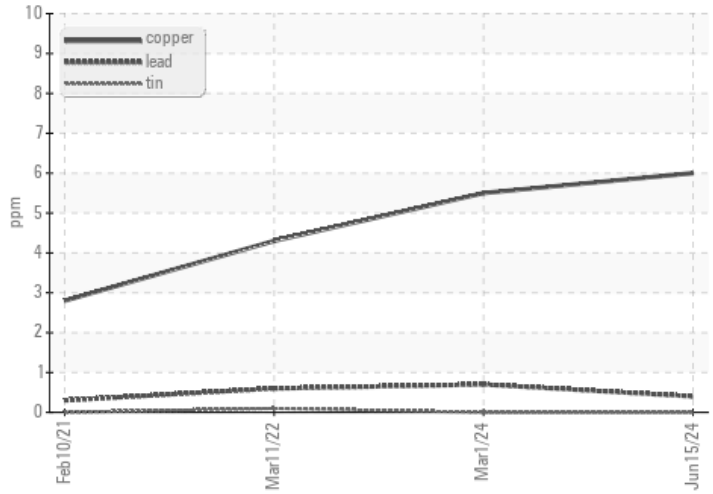
Graphs

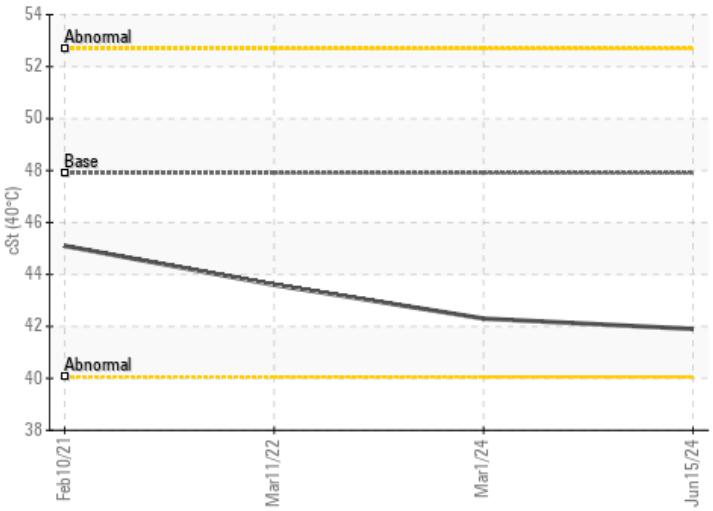
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count