



LIEBHERR

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL

ATTENTION

NORMAL



Area

(363880)

Machine Id

LIEBHERR L550 064917-1756

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX AW 46 (--- GAL)

RECOMMENDATION

We advise that you check for visible metal particles in the oil. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290600	LH0279050	LH
Sample Date		Client Info		19 Jun 2024	22 Jan 2024	13 Nov 2023
Machine Age	hrs	Client Info		7104	5982	5500
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	NORMAL

WEAR

Light concentration of visible metal present.

Iron	ppm	ASTM D5185(m)	>20	11	11	10
Chromium	ppm	ASTM D5185(m)	>10	5	4	3
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	1	2	1
Lead	ppm	ASTM D5185(m)	>10	4	4	5
Copper	ppm	ASTM D5185(m)	>75	2	2	2
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

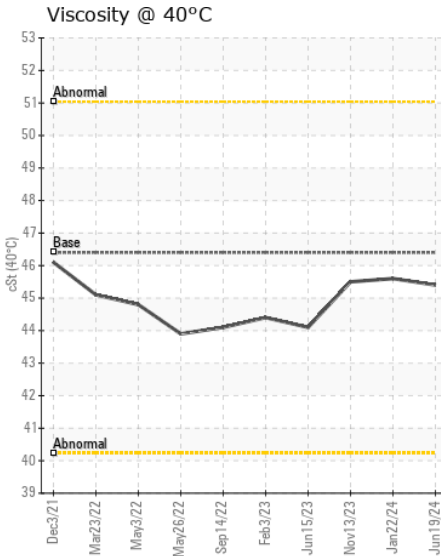
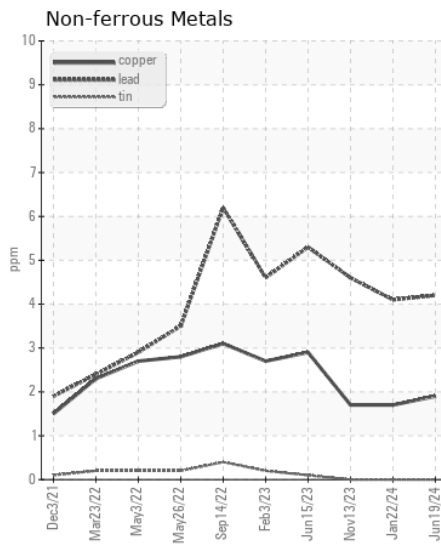
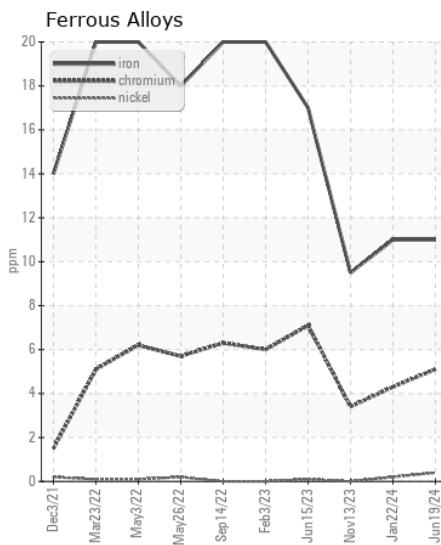
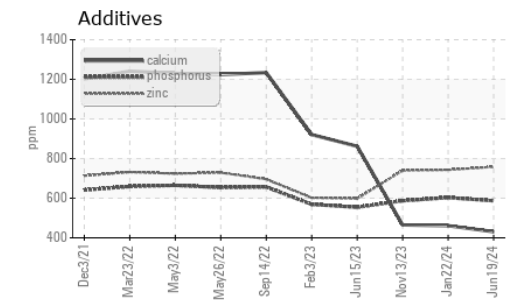
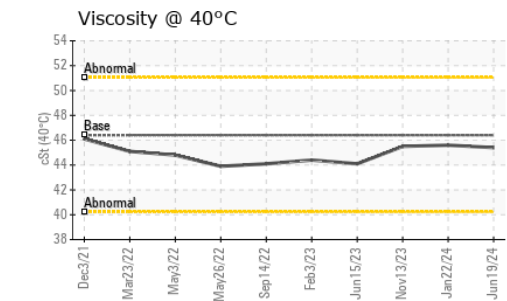
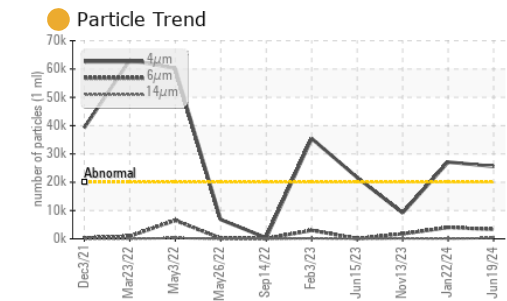
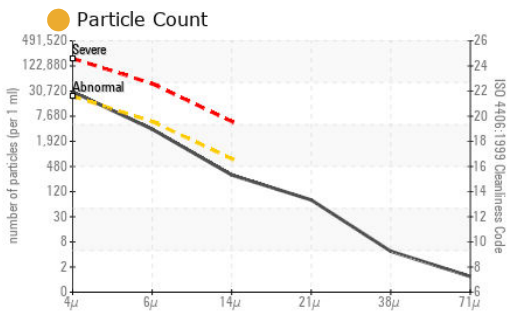
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	● 25568	● 27115	9162
Particles >6µm		ASTM D7647	>5000	3282	4019	1765
Particles >14µm		ASTM D7647	>640	264	82	153
Particles >21µm		ASTM D7647	>160	67	12	34
Particles >38µm		ASTM D7647	>40	4	2	2
Particles >71µm		ASTM D7647	>10	1	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 22/19/15	● 22/19/14	20/18/14
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.

Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	<1	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	0	8	9	9
Calcium	ppm	ASTM D5185(m)	50	431	461	465
Phosphorus	ppm	ASTM D5185(m)	330	587	603	587
Zinc	ppm	ASTM D5185(m)	430	758	743	740
Sulfur	ppm	ASTM D5185(m)	760	2218	2392	2252
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	45.4	45.6	45.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0290600
Lab Number : 02645284
Unique Number : 5802823
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter)

ARMAND DUHAMEL et FILS INC.
 778 RUE DE L' EGLISE
 ST-IGNACE-STANDBRIDGE, QC
 CA J0J 1Y0
 Contact:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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F: