



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L586 068244

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0288164	LH0278463	LH0278596
Sample Date		Client Info		25 Apr 2024	22 Mar 2024	21 Feb 2024
Machine Age	hrs	Client Info		9033	5517	8026
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	2	6	9
Chromium	ppm	ASTM D5185(m)	>5	<1	1	2
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	1
Lead	ppm	ASTM D5185(m)	>15	0	<1	4
Copper	ppm	ASTM D5185(m)	>10	<1	<1	1
Tin	ppm	ASTM D5185(m)	>2	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

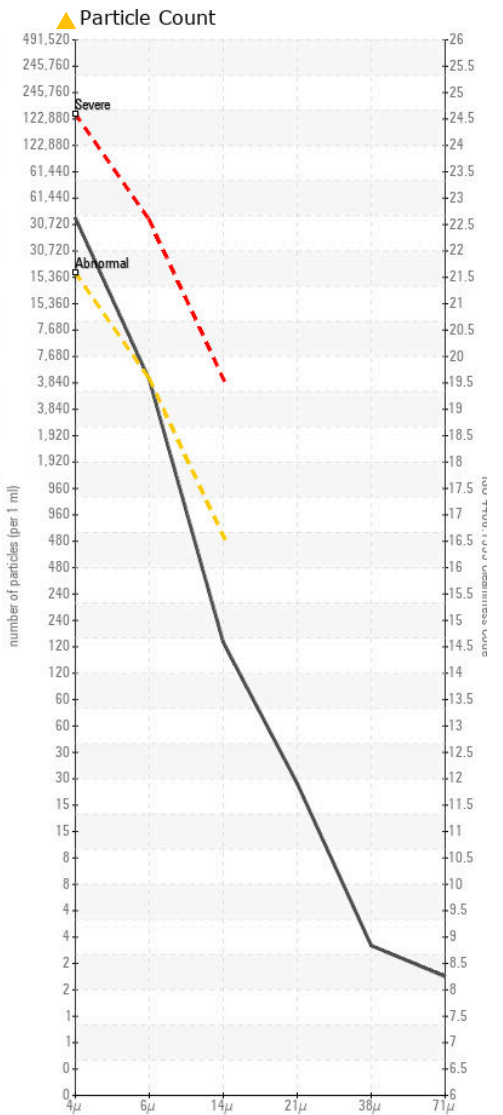
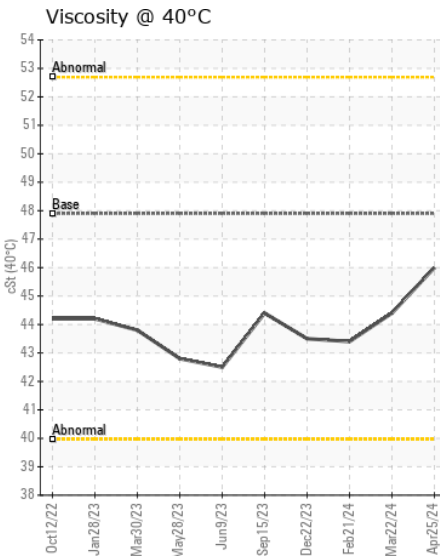
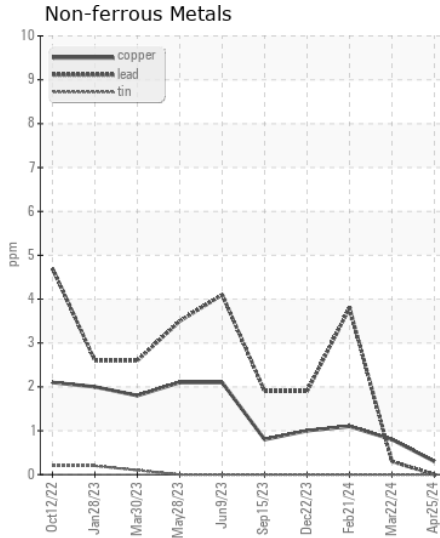
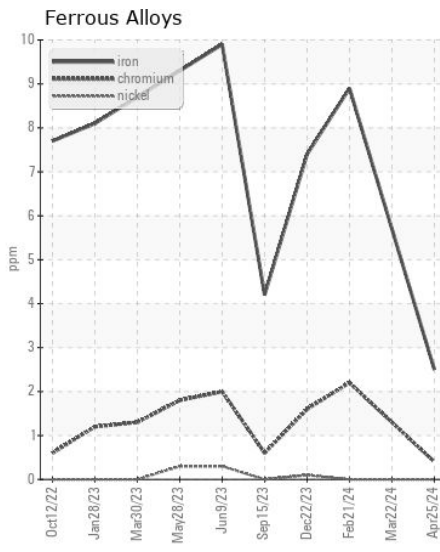
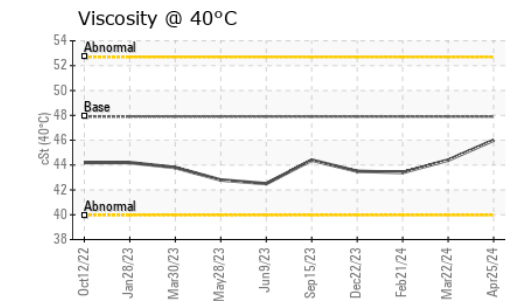
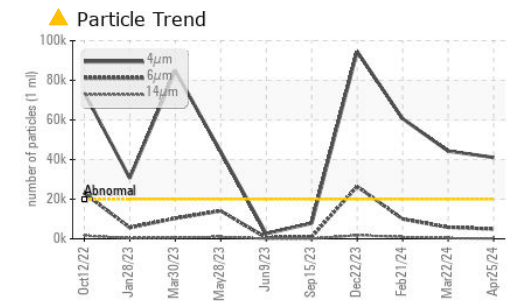
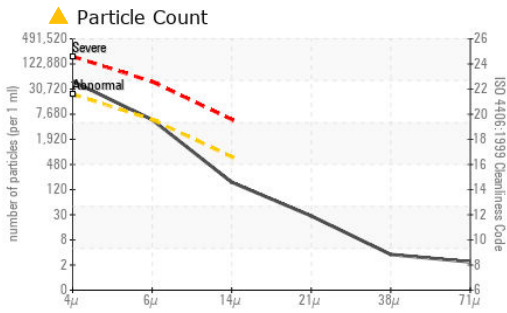
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	0	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 41050	▲ 44270	▲ 60599
Particles >6µm		ASTM D7647	>5000	4941	● 5814	● 9993
Particles >14µm		ASTM D7647	>640	159	● 312	● 902
Particles >21µm		ASTM D7647	>160	25	● 66	● 243
Particles >38µm		ASTM D7647	>40	3	● 3	● 13
Particles >71µm		ASTM D7647	>10	2	● 1	● 1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 23/19/14	▲ 23/20/15	▲ 23/20/17
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	VLITE	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

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		0	0	<1
Boron	ppm	ASTM D5185(m)	0	<1	<1	0
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	4	11	17
Calcium	ppm	ASTM D5185(m)	100	114	146	189
Phosphorus	ppm	ASTM D5185(m)	670	623	610	607
Zinc	ppm	ASTM D5185(m)	850	806	792	760
Sulfur	ppm	ASTM D5185(m)	1600	1478	1691	1708
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	46.0	44.4	43.4



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0288164
Lab Number : 02633176
Unique Number : 5774329
Test Package : MOB 1 (Additional Tests: PrtCount)

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*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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