



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 066526-1826

Component
Hydraulic System

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

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0238242	VCP	LH0238246
Sample Date		Client Info		03 Mar 2024	21 Sep 2023	27 Jan 2023
Machine Age	hrs	Client Info		2500	2000	1000
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	11	8	7
Chromium	ppm	ASTM D5185(m)	>10	3	2	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	2	0
Aluminum	ppm	ASTM D5185(m)	>10	1	<1	<1
Lead	ppm	ASTM D5185(m)	>10	4	4	3
Copper	ppm	ASTM D5185(m)	>75	2	2	1
Tin	ppm	ASTM D5185(m)	>10	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

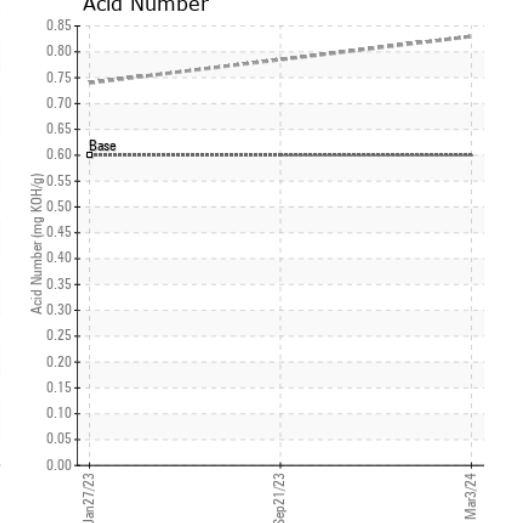
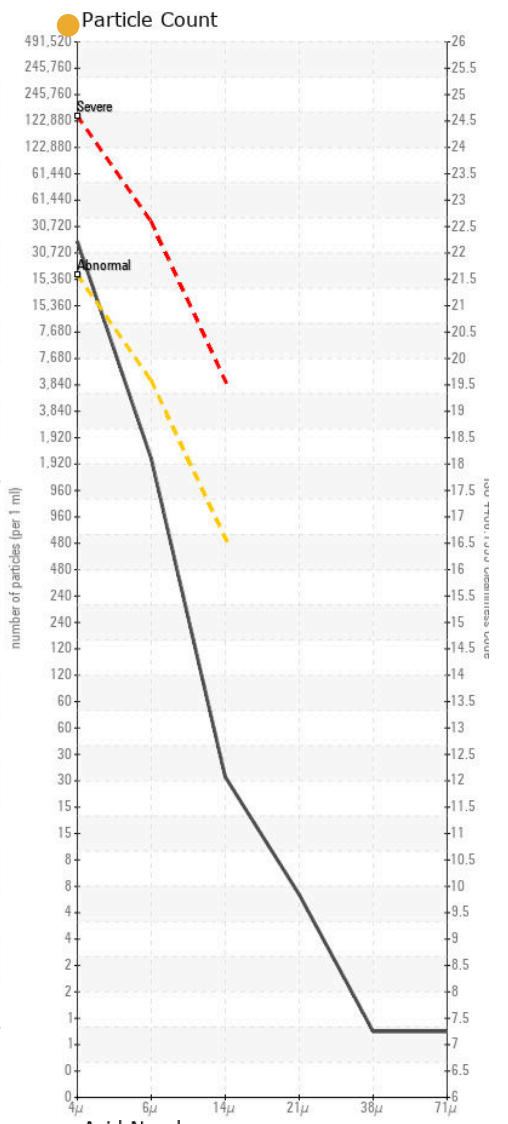
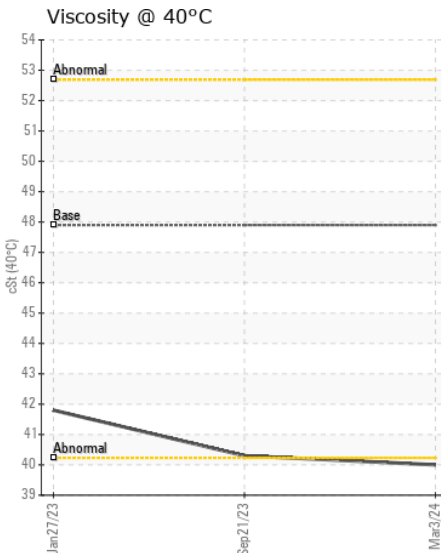
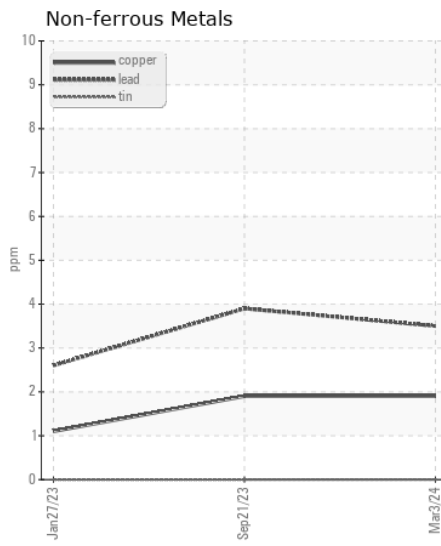
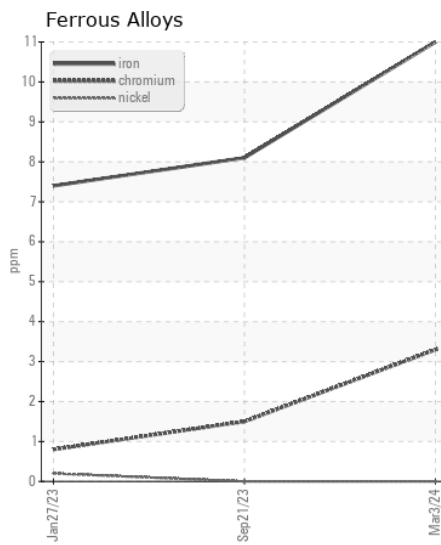
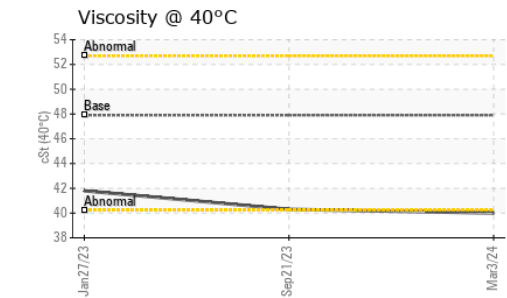
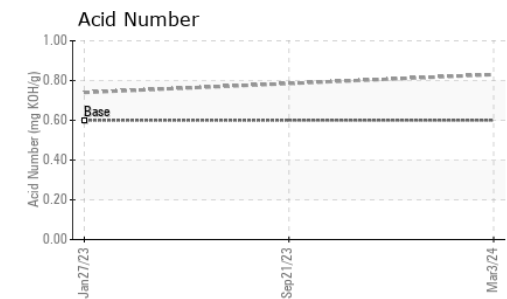
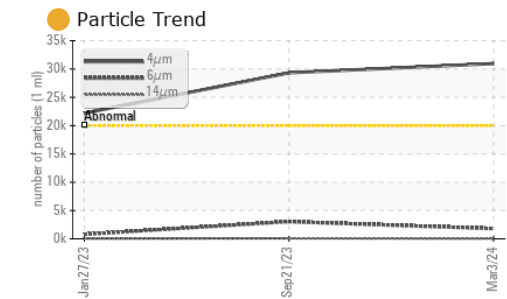
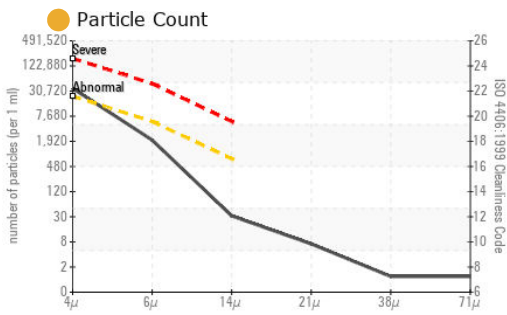
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	1	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	30958	29331	22201
Particles >6µm		ASTM D7647	>5000	1802	3035	786
Particles >14µm		ASTM D7647	>640	28	82	22
Particles >21µm		ASTM D7647	>160	6	17	4
Particles >38µm		ASTM D7647	>40	1	3	0
Particles >71µm		ASTM D7647	>10	1	2	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/18/12	22/19/14	22/17/12
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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		1	2	<1
Boron	ppm	ASTM D5185(m)	0	11	12	1
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	12	12	<1
Manganese	ppm	ASTM D5185(m)	1	0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	149	155	4
Calcium	ppm	ASTM D5185(m)	100	646	661	711
Phosphorus	ppm	ASTM D5185(m)	670	544	538	518
Zinc	ppm	ASTM D5185(m)	850	615	629	544
Sulfur	ppm	ASTM D5185(m)	1600	2501	2402	2506
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.83	---	0.74
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	40.0	40.3	41.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0238242 **Received** : 04 Mar 2024
Lab Number : 02619722 **Tested** : 05 Mar 2024
Unique Number : 5736832 **Diagnosed** : 05 Mar 2024 - Wes Davis
Test Package : MOBCE (Additional Tests: TAN MAN)

INDUSTRIES TL T
 144 RUE LAROUCHE
 SAINTE MONIQUE, QC
 CA G0W 2T0
 Contact: Service Manager

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.

T:
F: