



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L566 054116-1484

Component
Hydraulic System

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

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0281151	LH0135631	---
Sample Date		Client Info		04 Jan 2024	22 Dec 2021	---
Machine Age	hrs	Client Info		9598	5482	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	6	6	---
Chromium	ppm	ASTM D5185(m)	>10	<1	2	---
Nickel	ppm	ASTM D5185(m)	>10	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	---
Lead	ppm	ASTM D5185(m)	>10	2	3	---
Copper	ppm	ASTM D5185(m)	>75	7	5	---
Tin	ppm	ASTM D5185(m)	>10	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

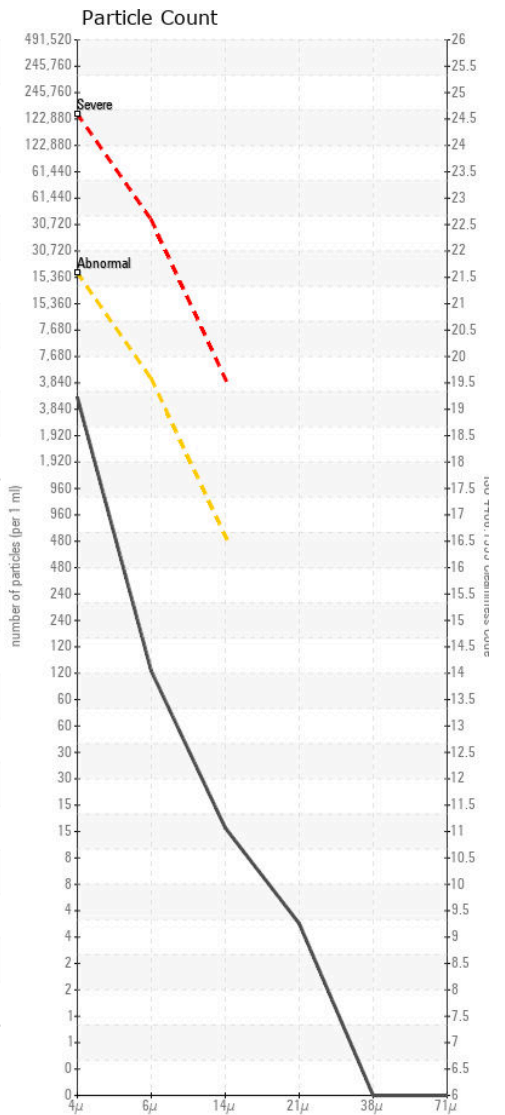
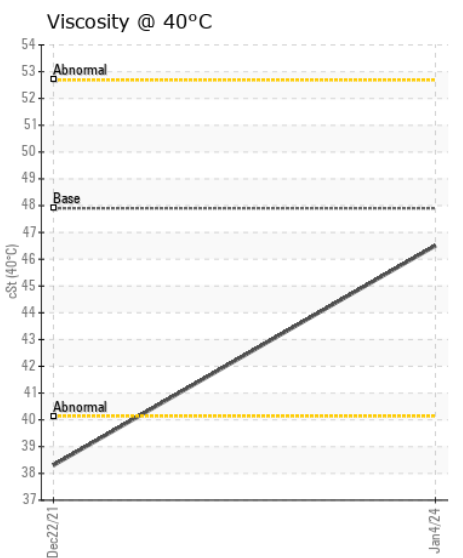
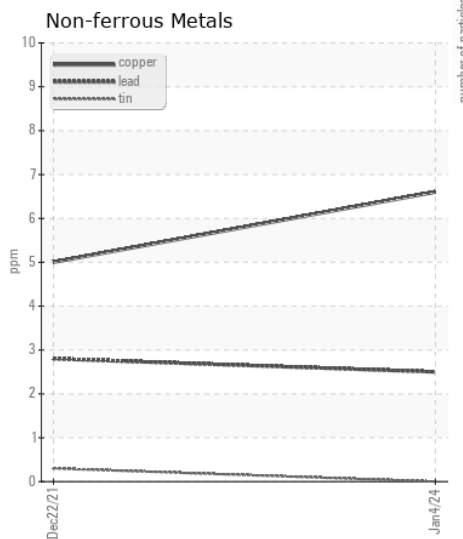
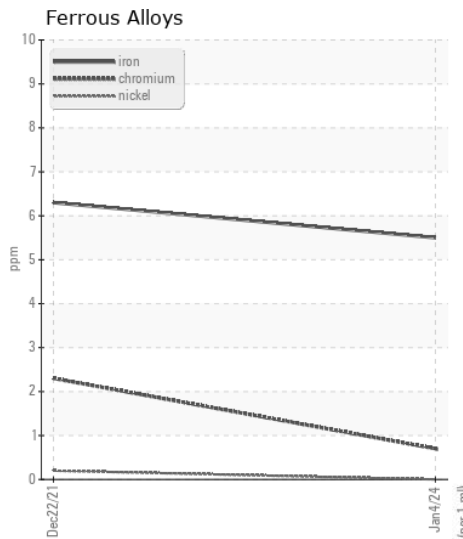
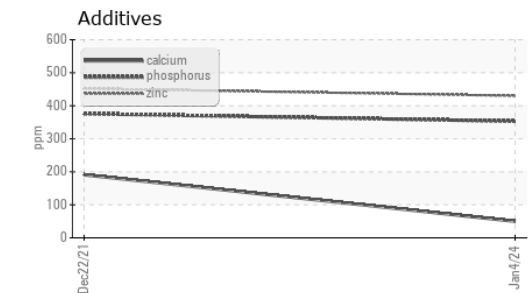
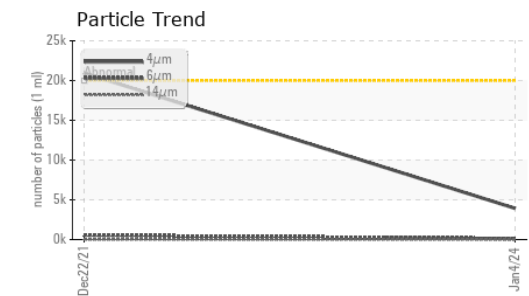
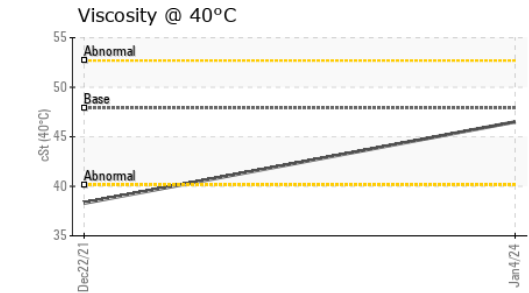
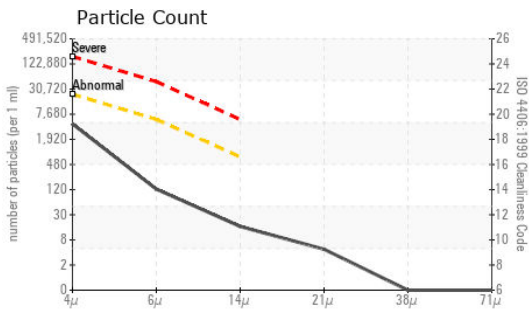
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	<1	2	---
Potassium	ppm	ASTM D5185(m)	>20	2	4	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	3926	▲ 20944	---
Particles >6µm		ASTM D7647	>5000	109	530	---
Particles >14µm		ASTM D7647	>640	14	20	---
Particles >21µm		ASTM D7647	>160	4	6	---
Particles >38µm		ASTM D7647	>40	0	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/14/11	▲ 22/16/11	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

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.

Sodium	ppm	ASTM D5185(m)		<1	<1	---
Boron	ppm	ASTM D5185(m)	0	0	<1	---
Barium	ppm	ASTM D5185(m)	0	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	---
Manganese	ppm	ASTM D5185(m)	1	0	0	---
Magnesium	ppm	ASTM D5185(m)	0	1	2	---
Calcium	ppm	ASTM D5185(m)	100	50	191	---
Phosphorus	ppm	ASTM D5185(m)	670	353	376	---
Zinc	ppm	ASTM D5185(m)	850	430	452	---
Sulfur	ppm	ASTM D5185(m)	1600	844	1150	---
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	46.5	38.3	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0281151 **Received** : 10 Jan 2024
Lab Number : 02607879 **Diagnosed** : 12 Jan 2024
Unique Number : 5708965 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

Abbycel Substrate Ltd.
 3545 Ross Road
 Abbotsford, BC
 CA V4X 1M6
 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.

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F: