



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A924C 064062-1049

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (430 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284323	LH0274064	LH0261033
Sample Date		Client Info		19 Feb 2024	26 Oct 2023	14 Jun 2023
Machine Age	hrs	Client Info		14179	13784	13298
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>55	28	27	26
Chromium	ppm	ASTM D5185(m)	>5	4	4	4
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>3	1	<1	<1
Lead	ppm	ASTM D5185(m)	>4	1	<1	<1
Copper	ppm	ASTM D5185(m)	>10	9	9	9
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

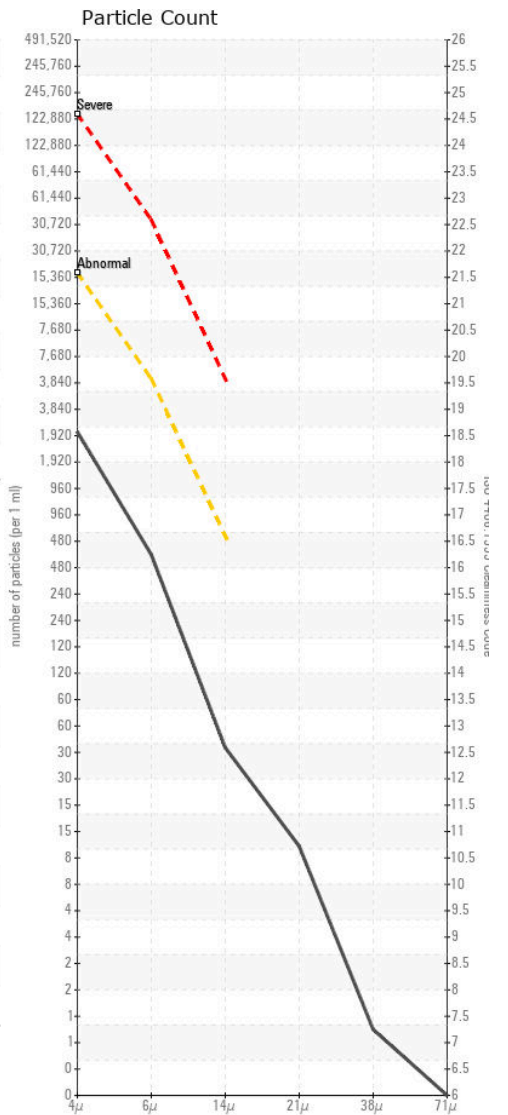
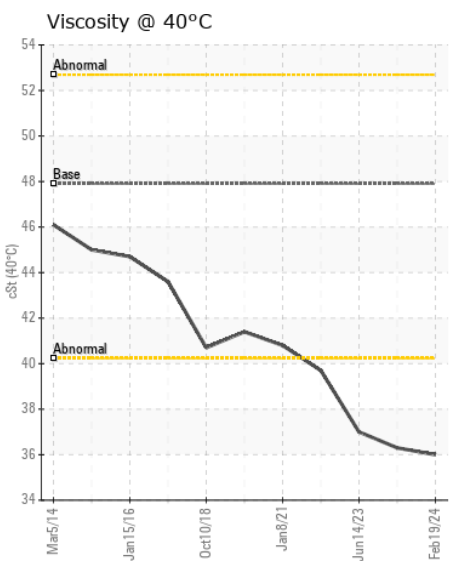
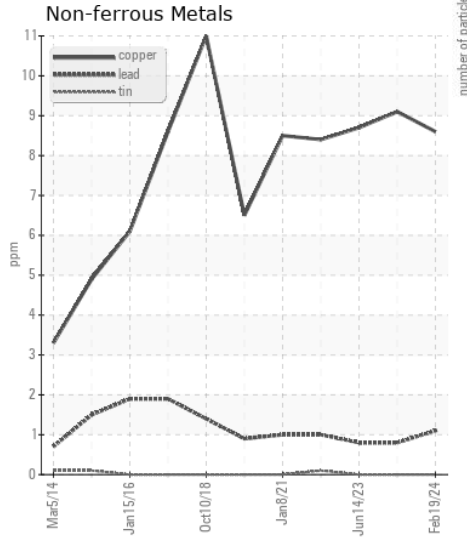
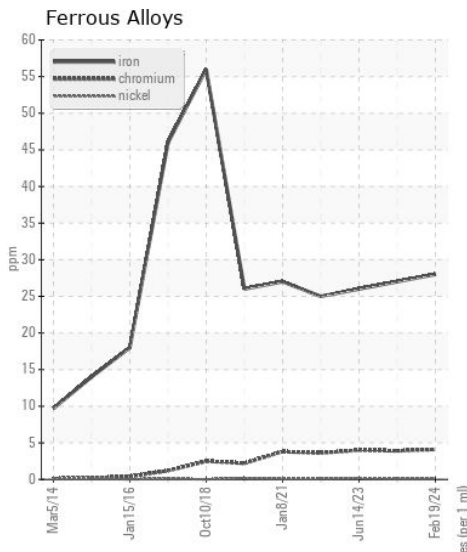
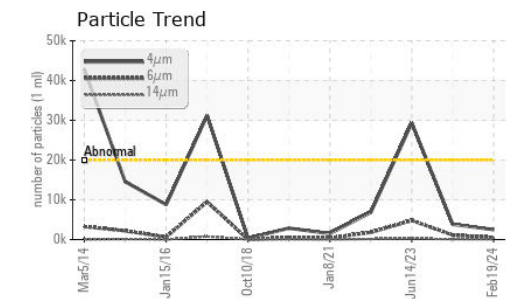
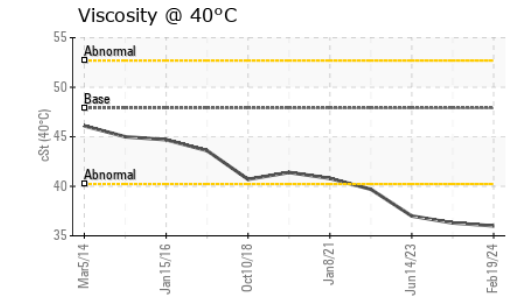
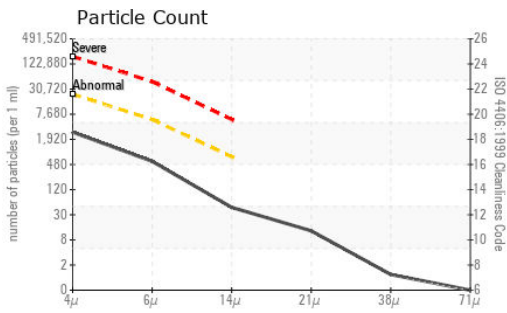
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>11	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	2496	3827	▲ 29313
Particles >6µm		ASTM D7647	>5000	500	1117	4801
Particles >14µm		ASTM D7647	>640	40	64	255
Particles >21µm		ASTM D7647	>160	11	13	91
Particles >38µm		ASTM D7647	>40	1	2	4
Particles >71µm		ASTM D7647	>10	0	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/16/12	19/17/13	▲ 22/19/15
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	2	1
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
Manganese	ppm	ASTM D5185(m)	1	0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	6	3	3
Calcium	ppm	ASTM D5185(m)	100	255	258	262
Phosphorus	ppm	ASTM D5185(m)	670	467	439	481
Zinc	ppm	ASTM D5185(m)	850	552	562	563
Sulfur	ppm	ASTM D5185(m)	1600	1402	1293	1337
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	36.0	36.3	37.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284323
Lab Number : 02617432
Unique Number : 5734542
Test Package : MOB 1 (Additional Tests: PrtCount)

MARCEL DUVAL FER ET METAUX INC.
 661 RANG STE-MARIE
 ST. SEBASTIEN, QC
 CA J0J 2C0
 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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