



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH80M 122402-1218
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 22 (--- GAL)

RECOMMENDATION

Nous vous recommandons de vérifier la présence de particules métalliques visibles dans l'huile. Confirm the source of the lubricant being utilized for top-up/fill. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0279322	LH0279417	LH0274206
Sample Date		Client Info		12 Jan 2024	23 Dec 2023	21 Oct 2023
Machine Age	hrs	Client Info		16708	9463	8989
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	NORMAL

WEAR

Présence d'une faible concentration de métal visible.

Iron	ppm	ASTM D5185(m)	>60	15	13	14
Chromium	ppm	ASTM D5185(m)	>40	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	1	1	<1
Lead	ppm	ASTM D5185(m)	>5	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>15	3	3	3
Tin	ppm	ASTM D5185(m)	>5	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

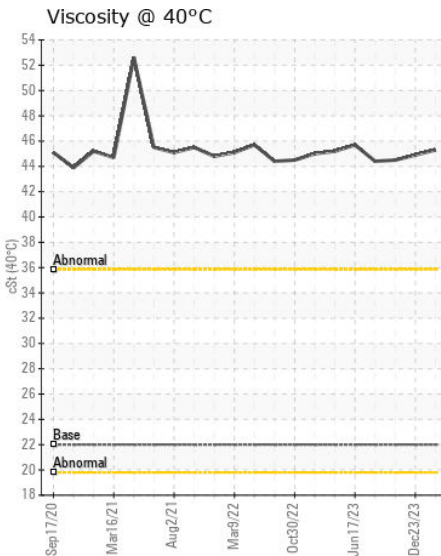
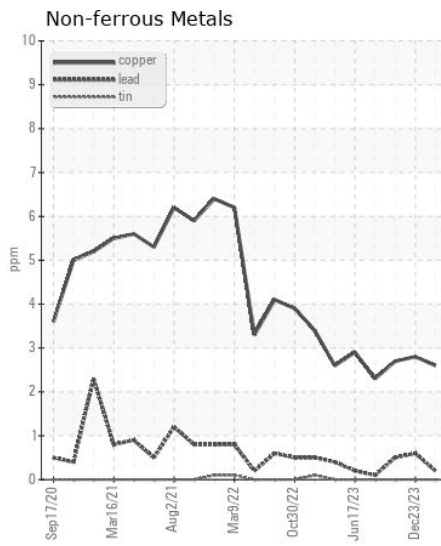
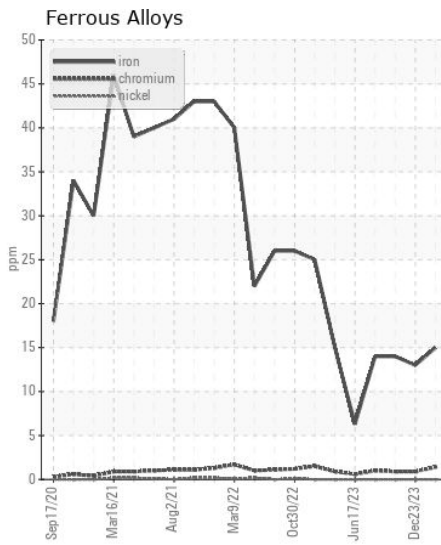
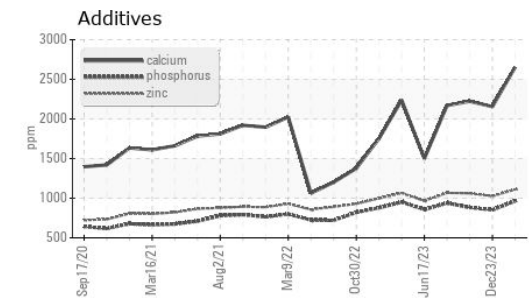
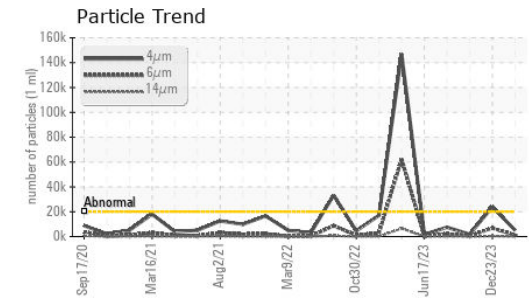
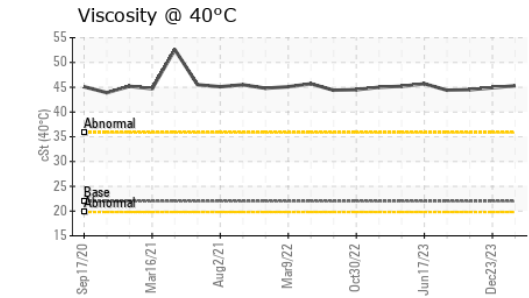
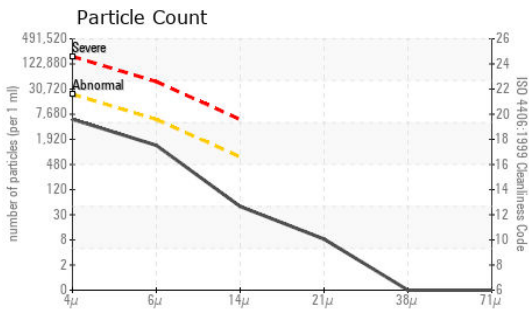
La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La propreté du système et du fluide est acceptable.

Silicon	ppm	ASTM D5185(m)	>15	3	5	5
Potassium	ppm	ASTM D5185(m)	>20	<1	1	4
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	5053	▲ 23940	1844
Particles >6µm		ASTM D7647	>5000	1207	▲ 6782	437
Particles >14µm		ASTM D7647	>640	42	363	21
Particles >21µm		ASTM D7647	>160	7	20	4
Particles >38µm		ASTM D7647	>40	0	1	1
Particles >71µm		ASTM D7647	>10	0	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/17/13	▲ 22/20/16	18/16/12
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	.2%	NEG

FLUID CONDITION

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. La viscosité de l'échantillon se situe dans la portée de l'SAE 75W80; nous vous conseillons de vérifier.

Sodium	ppm	ASTM D5185(m)		3	2	4
Boron	ppm	ASTM D5185(m)	0	5	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	2	<1	<1
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	32	21	22
Calcium	ppm	ASTM D5185(m)	50	2652	2155	2223
Phosphorus	ppm	ASTM D5185(m)	330	965	852	883
Zinc	ppm	ASTM D5185(m)	430	1109	1026	1062
Sulfur	ppm	ASTM D5185(m)	760	3737	3310	3365
Visc @ 40°C	cSt	ASTM D7279(m)	22.0	45.3	44.9	44.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ARCELORMITTAL LONG PRODUITS CANADA
Sample No. : LH0279322 **Received** : 16 Jan 2024 3185 ROUTE MARIE-VICTORIN
Lab Number : 02609013 **Diagnosed** : 17 Jan 2024 CONTRECOEUR, QC
Unique Number : 5710099 **Diagnostician** : Kevin Marson CA J0L 1C0
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter) Contact: Danny Drouin
 danny.drouin@arcelormittal.com

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.