



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
T.M.B.
Machine Id
5502-UHO-019 (S/N 12)
Component
12 Hydraulic System
Fluid
AMERICAN CHEMICAL TECH. ECOSAFE FR-46 (400 LTR)

RECOMMENDATION

Nous recommandons le remplacement des filtres de ce composant. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0912934	WC0826362	WC0826368
Sample Date		Client Info		07 Apr 2024	20 Sep 2023	14 Jun 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

Les taux d'usure de tous les composants sont normaux.

Iron	ppm	ASTM D5185(m)	>20	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>20	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	1	2	1
Tin	ppm	ASTM D5185(m)	>20	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

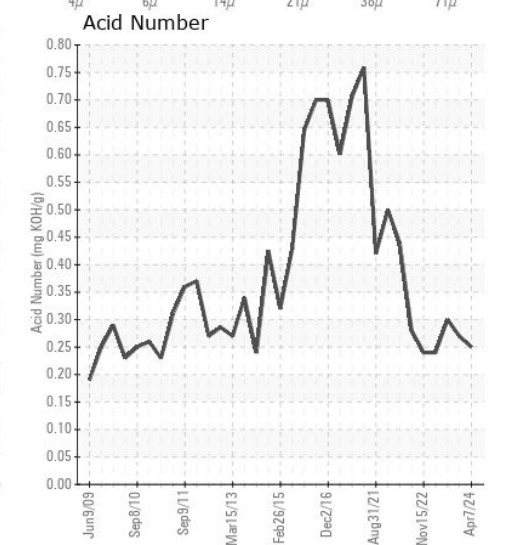
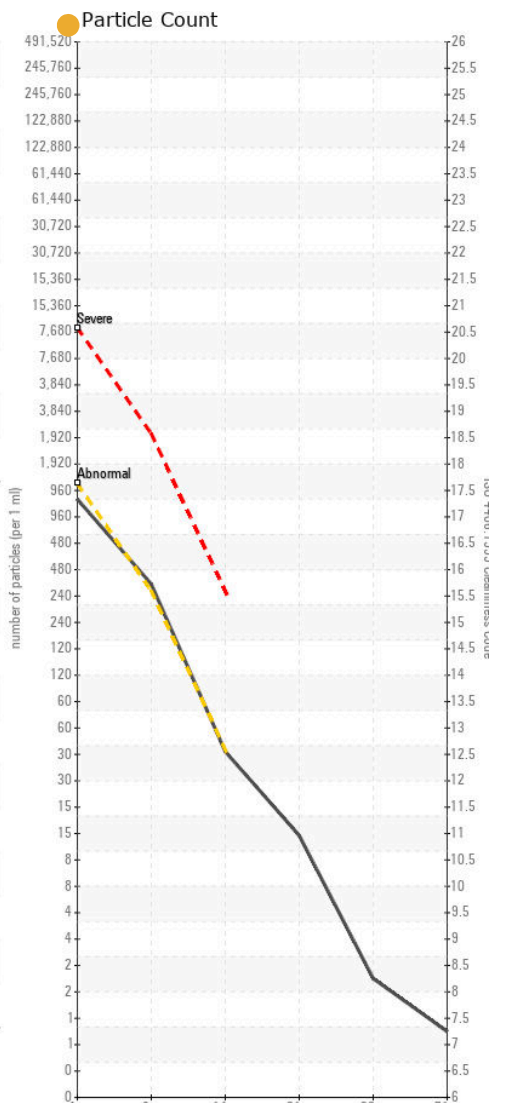
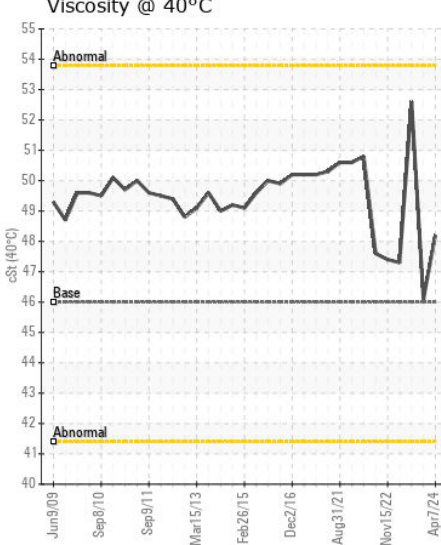
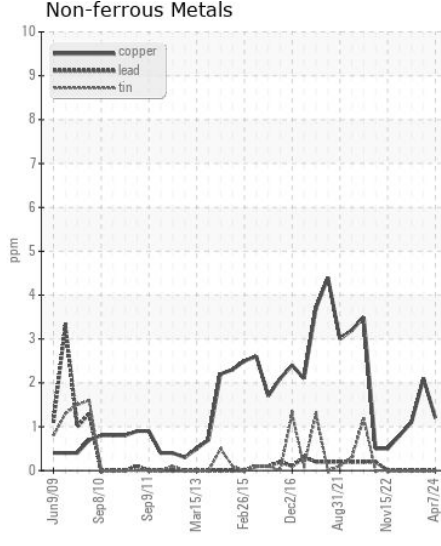
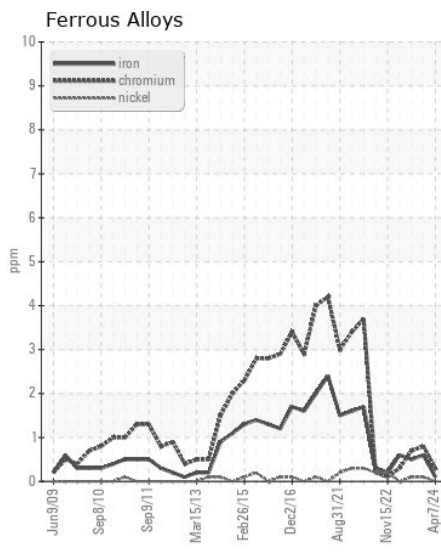
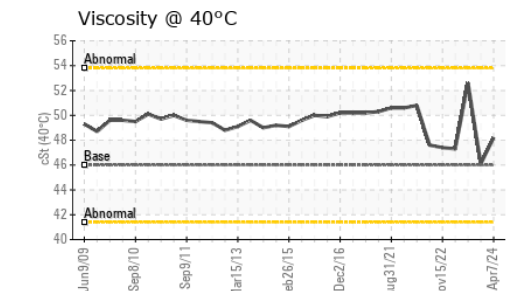
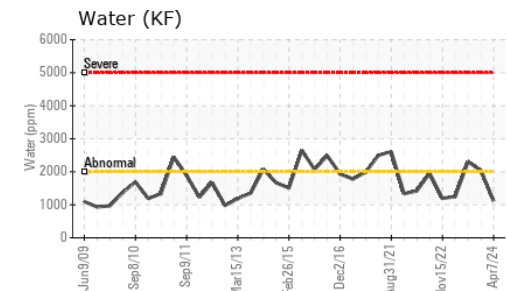
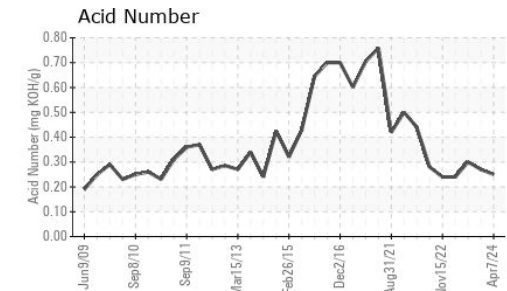
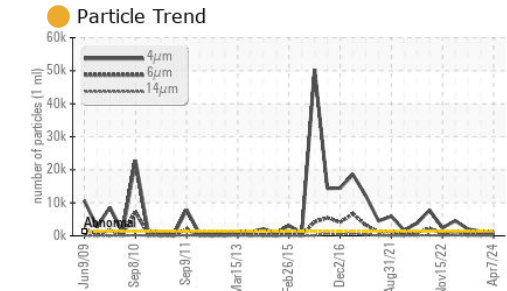
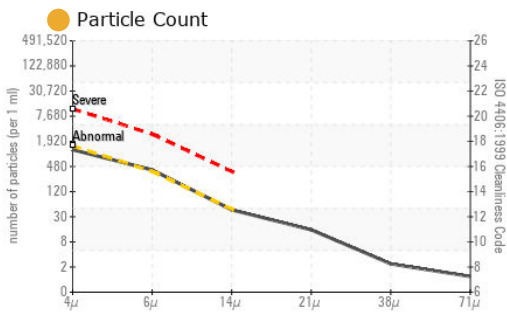
Il y a une légère quantité de limon (particules de 4 à 14 microns) dans l'huile. La teneur en eau est négligeable.

Silicon	ppm	ASTM D5185(m)	>15	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water	%	ASTM D6304*	>0.2	0.111	0.204	0.230
ppm Water	ppm	ASTM D6304*	>2000	1116	2040.6	2301.9
Particles >4µm		ASTM D7647	>1300	1062	● 1387	● 2010
Particles >6µm		ASTM D7647	>320	349	● 525	▲ 667
Particles >14µm		ASTM D7647	>40	39	● 54	▲ 87
Particles >21µm		ASTM D7647	>10	13	● 15	▲ 30
Particles >38µm		ASTM D7647	>3	2	0	1
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/12	17/16/12	● 18/16/13	▲ 18/17/14
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*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Le AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation.

Sodium	ppm	ASTM D5185(m)		<1	2	1
Boron	ppm	ASTM D5185(m)		<1	<1	1
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	0	<1
Calcium	ppm	ASTM D5185(m)		0	<1	<1
Phosphorus	ppm	ASTM D5185(m)		623	611	648
Zinc	ppm	ASTM D5185(m)		2	3	4
Sulfur	ppm	ASTM D5185(m)		2898	2870	2913
Acid Number (AN)	mg KOH/g	ASTM D974*		0.25	0.27	0.30
Visc @ 40°C	cSt	ASTM D7279(m)	46	48.2	46.1	52.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0912934
Lab Number : 02627345
Unique Number : 5760477
Test Package : IND 2 (Additional Tests: KF)
Received : 08 Apr 2024
Tested : 10 Apr 2024
Diagnosed : 10 Apr 2024 - Wes Davis

RTA - ALMA
 3000 RUE DES PINS OUEST, BATISSE 7103 MEZZALINE
 ALMA, QC
 CA G8B 6T3
 Contact: Guy Dufour
 guy.dufour-almacou@riotinto.com
 T:
 F: (418)480-6004

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.