



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**EB#3 Unité Hydraulique Bât 318 OUEST H1 (S/N # Équipement: E4506)**

Component  
**Hydraulic System**

Fluid  
**ESSO NUTO H ISO 46 (300 LTR)**

## RECOMMENDATION

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		WC0922068	WC22128018	WC22125982
Sample Date		Client Info		24 Apr 2024	10 Jan 2018	17 Sep 2017
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				NORMAL	SEVERE	NORMAL

## WEAR

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

Iron	ppm	ASTM D5185(m)	>20	5	6	5
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0	0
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	1	1	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 n'y a aucun indice de contamination dans l'huile.

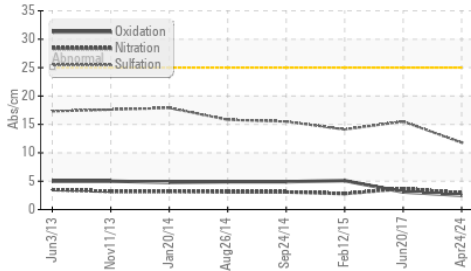
Silicon	ppm	ASTM D5185(m)	>15	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Water		WC Method	>0.05	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		2.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*		11.8	---	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	LIGHT	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*	>0.05	NEG	NEG	NEG

## FLUID CONDITION

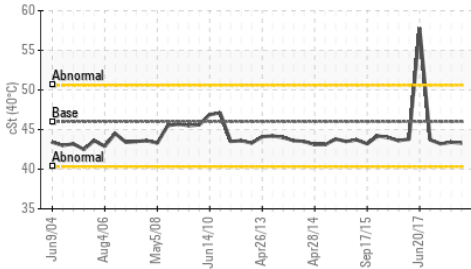
L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)	0	0	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	5	0	0	0
Calcium	ppm	ASTM D5185(m)	50	48	30	30
Phosphorus	ppm	ASTM D5185(m)	330	337	331	346
Zinc	ppm	ASTM D5185(m)	410	421	429	431
Sulfur	ppm	ASTM D5185(m)	2700	4762	2440	2400
Oxidation	Abs/.1mm	ASTM D7414*		2.5	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46	43.3	43.4	43.2

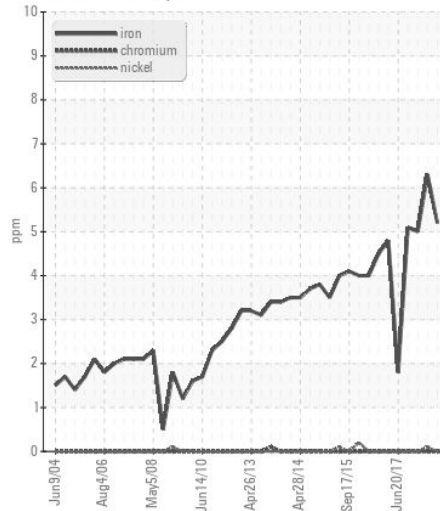
**FT-IR (Direct Trend)**



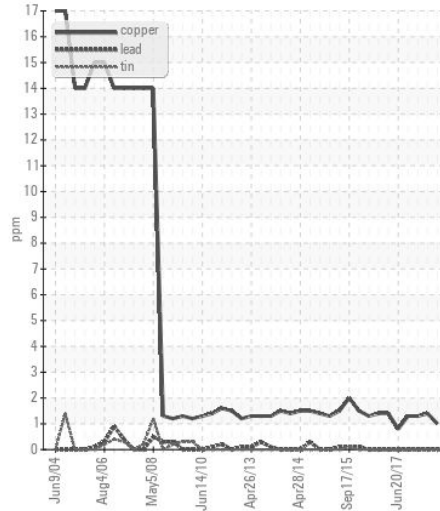
**Viscosity @ 40°C**



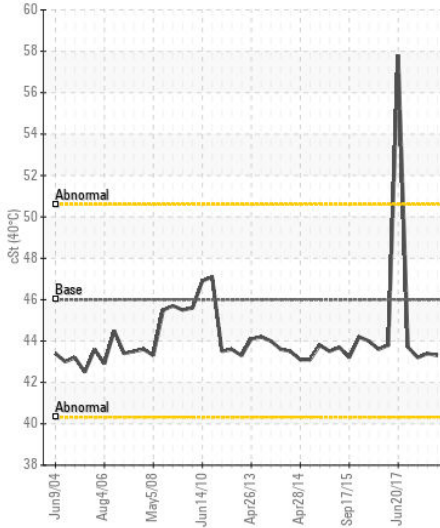
**Ferrous Alloys**



**Non-ferrous Metals**



**Viscosity @ 40°C**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0922068  
**Lab Number** : 02631959  
**Unique Number** : 5773112  
**Test Package** : IND 1 ( Additional Tests: FT-IR )

**Rio Tinto - USINE VAUDREUIL Hydrate 1**  
 1955 BD. MELLON, EDIFICE 401  
 JONQUIERE, QC  
 CA G7S 4L2  
 Contact: Yannick Bilodeau  
 yannickbilodeau@riotinto.com  
 T:  
 F: (418)699-2421

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.