



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Garage
 Machine Id
3202-VMK-003 (S/N LGN97333-0500)
 Component
1 Hydraulic System
 Fluid
ESSO HYDRAUL EXTRA (35 LTR)

RECOMMENDATION

Vérifier les scelles et/ou les filtres pour des points d'entrée des contaminants. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Nous recommandons le remplacement des filtres de ce composant. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0908382	WC22124198	---
Sample Date		Client Info		29 Feb 2024	28 Dec 2016	---
Machine Age	hrs	Client Info		2844	830	---
Oil Age	hrs	Client Info		2844	365	---
Filter Age	hrs	Client Info		2844	365	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				SEVERE	ABNORMAL	---

WEAR

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

Iron	ppm	ASTM D5185(m)	>20	4	4	---
Chromium	ppm	ASTM D5185(m)	>20	<1	2	---
Nickel	ppm	ASTM D5185(m)	>20	0	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	---
Lead	ppm	ASTM D5185(m)	>20	1	8	---
Copper	ppm	ASTM D5185(m)	>20	2	15	---
Tin	ppm	ASTM D5185(m)	>20	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

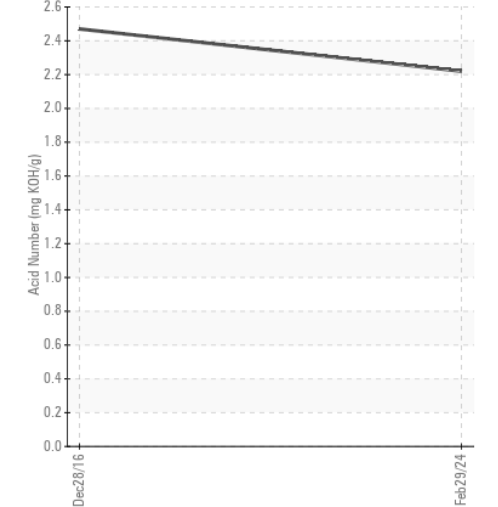
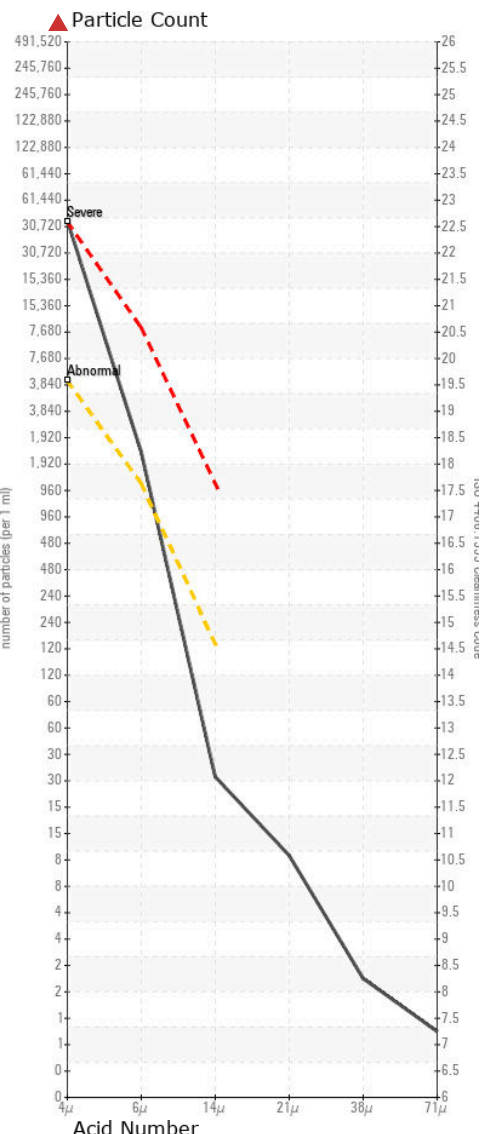
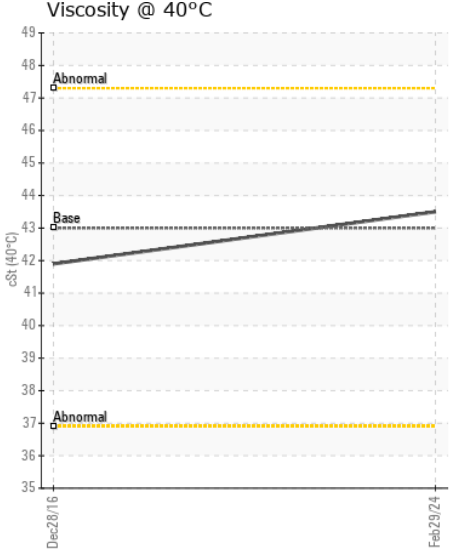
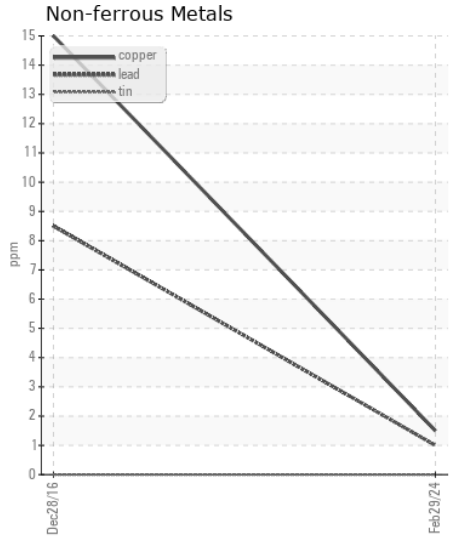
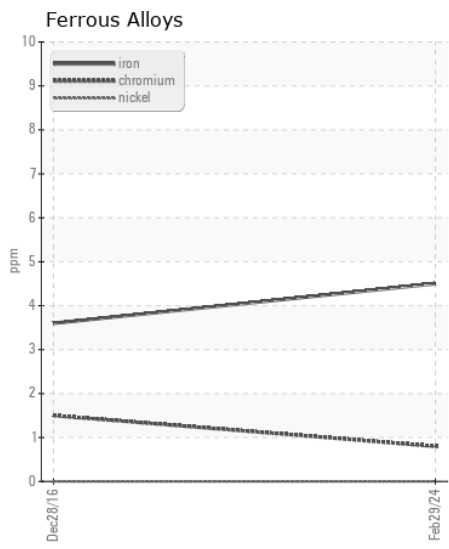
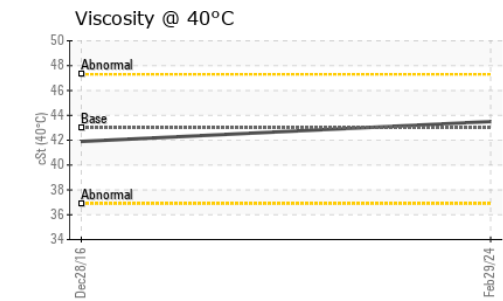
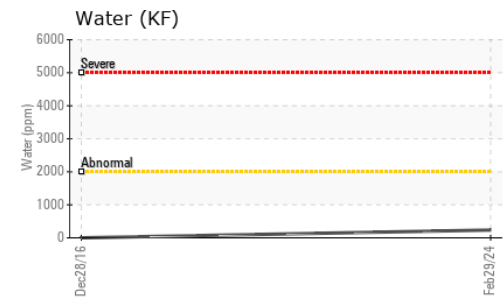
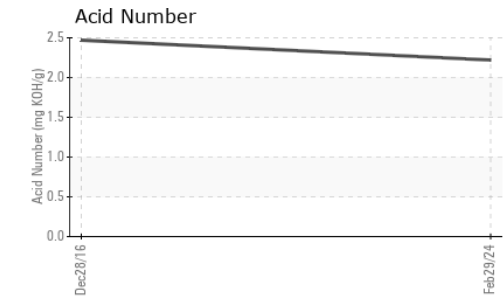
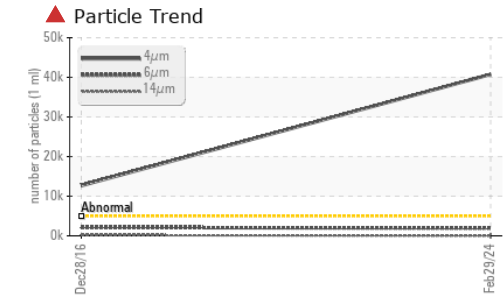
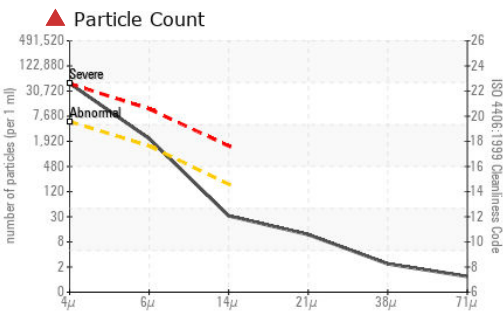
Il y a une grande quantité de limon (particules de 4 à 14 microns) dans l'huile. La teneur en eau est négligeable.

Silicon	ppm	ASTM D5185(m)	>15	3	9	---
Potassium	ppm	ASTM D5185(m)	>20	<1	0	---
Water	%	ASTM D6304*	>0.2	0.023	0.00	---
ppm Water	ppm	ASTM D6304*	>2000	237	0.00	---
Particles >4µm		ASTM D7647	>5000	▲ 40752	▲ 12663	---
Particles >6µm		ASTM D7647	>1300	● 1961	● 2101	---
Particles >14µm		ASTM D7647	>160	28	178	---
Particles >21µm		ASTM D7647	>40	10	46	---
Particles >38µm		ASTM D7647	>10	2	3	---
Particles >71µm		ASTM D7647	>3	1	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/18/12	▲ 21/18/15	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

Le AN est acceptable pour ce fluide. l'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

Sodium	ppm	ASTM D5185(m)		2	5	---
Boron	ppm	ASTM D5185(m)		3	<1	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		1	<1	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		29	6	---
Calcium	ppm	ASTM D5185(m)		3521	3573	---
Phosphorus	ppm	ASTM D5185(m)		1030	1065	---
Zinc	ppm	ASTM D5185(m)		1257	1268	---
Sulfur	ppm	ASTM D5185(m)		3224	3374	---
Acid Number (AN)	mg KOH/g	ASTM D974*		2.22	2.47	---
Visc @ 40°C	cSt	ASTM D7279(m)	43	43.5	41.9	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0908382
Lab Number : 02627329
Unique Number : 5760461
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: Jean-Denis Fortin
 jean-denis.fortin2@riotinto.com
 T: (418)720-7677
 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.