



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
T.M.B.
Machine Id
5502-CVD-006

Component
6 Gearbox
Fluid
ESSO SPARTAN EP 220 (20 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		WC0842802	WC0902397	WC0884529
Sample Date		Client Info		01 May 2024	29 Feb 2024	05 Dec 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				NORMAL	NORMAL	SEVERE

WEAR

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

Iron	ppm	ASTM D5185(m)	>200	163	78	▲ 549
Chromium	ppm	ASTM D5185(m)	>15	2	<1	7
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	5	3	▲ 45
Lead	ppm	ASTM D5185(m)	>100	0	0	0
Copper	ppm	ASTM D5185(m)	>200	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>25	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.

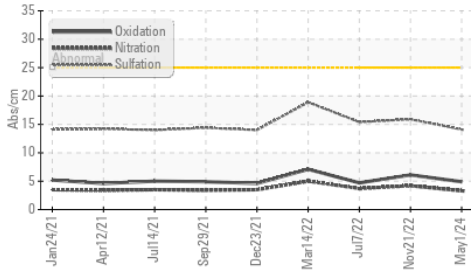
Silicon	ppm	ASTM D5185(m)	>50	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		3.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*		14.1	---	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	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

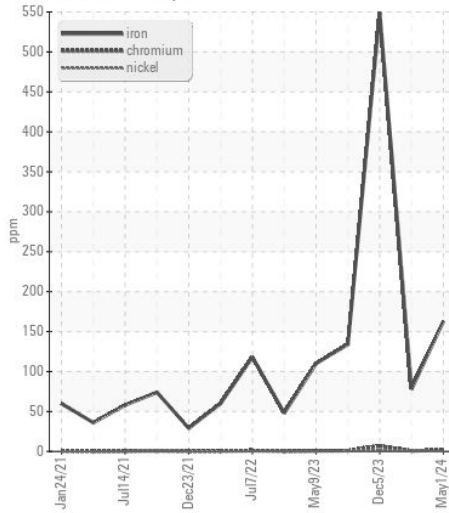
L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)		2	<1	21
Boron	ppm	ASTM D5185(m)	.5	39	37	30
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	3
Magnesium	ppm	ASTM D5185(m)	0	<1	0	3
Calcium	ppm	ASTM D5185(m)	1.7	<1	1	16
Phosphorus	ppm	ASTM D5185(m)	250	354	351	304
Zinc	ppm	ASTM D5185(m)	.3	4	3	27
Sulfur	ppm	ASTM D5185(m)		12508	12838	14297
Oxidation	Abs/.1mm	ASTM D7414*		4.9	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	220	213	214	227

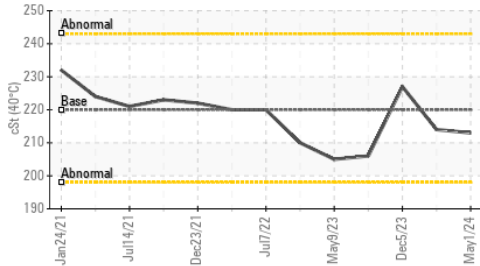
FT-IR (Direct Trend)



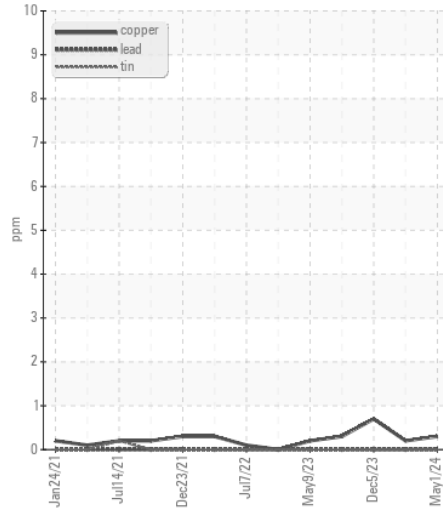
Ferrous Alloys



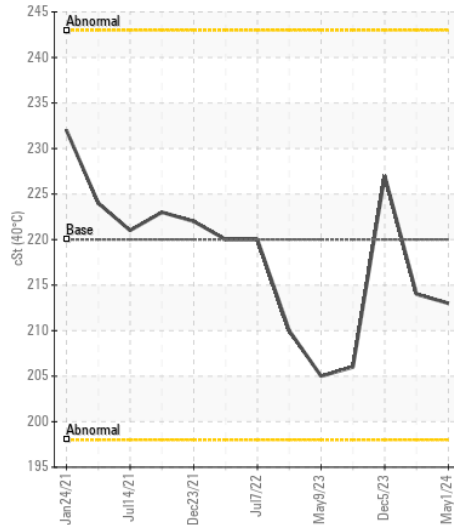
Viscosity @ 40°C



Non-ferrous Metals



Viscosity @ 40°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0842802
Lab Number : 02632945
Unique Number : 5774098
Test Package : IND 1 (Additional Tests: FT-IR)
Received : 02 May 2024
Tested : 02 May 2024
Diagnosed : 03 May 2024 - Kevin Marson

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.