MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
TIMBCO 41
Component
Hydraulic System
Fluid
SAE 5W30 (300 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as (GENERIC) SAE 5W30, however, a fluid match indicates that this fluid is SAE 5W20 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

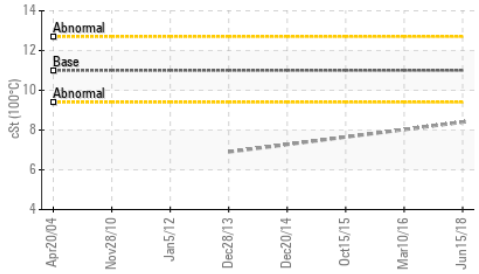
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

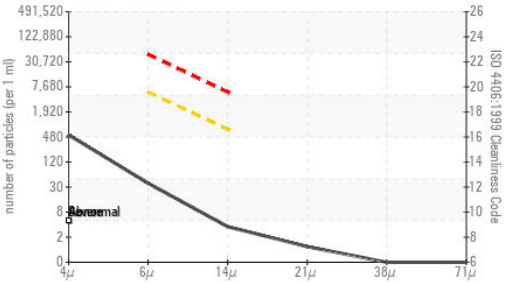
Viscosity of sample indicates oil is within SAE 5W20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0294223	WC932823	WC932473
Sample Date		Client Info		15 Jun 2018	10 Mar 2016	15 Oct 2015
Machine Age	hrs	Client Info		29172	27165	26500
Oil Age	hrs	Client Info		8600	6665	6000
Filter Age	hrs	Client Info		1800	665	2500
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>20	16	25	20
Chromium	ppm	ASTM D5185(m)	>10	<1	2	2
Nickel	ppm	ASTM D5185(m)		0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	1	1	1
Lead	ppm	ASTM D5185(m)	>10	1	2	2
Copper	ppm	ASTM D5185(m)	>75	8	20	17
Tin	ppm	ASTM D5185(m)	>10	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>20	4	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		472	1126	4761
Particles >6µm		ASTM D7647	>5000	33	143	1286
Particles >14µm		ASTM D7647	>640	3	5	106
Particles >21µm		ASTM D7647	>160	1	1	29
Particles >38µm		ASTM D7647	>40	0	0	2
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/19/16	16/12/9	17/14/10	19/17/14
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*	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		2	6	4
Boron	ppm	ASTM D5185(m)		86	20	19
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		40	26	25
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		58	28	25
Calcium	ppm	ASTM D5185(m)		2392	2630	2398
Phosphorus	ppm	ASTM D5185(m)		1350	1902	1809
Zinc	ppm	ASTM D5185(m)		1578	2250	2078
Sulfur	ppm	ASTM D5185(m)		4296	6304	6083
Visc @ 40°C	cSt	ASTM D7279(m)	60.0	46.6	▲ 40.3	41.0
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	▲ 8.4	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		157	---	---

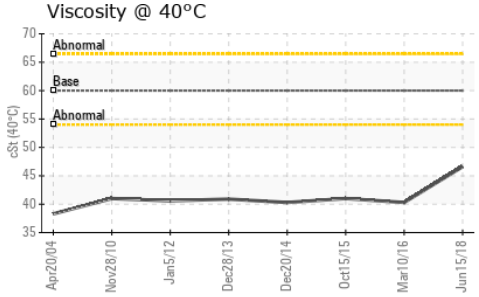
Viscosity @ 100°C



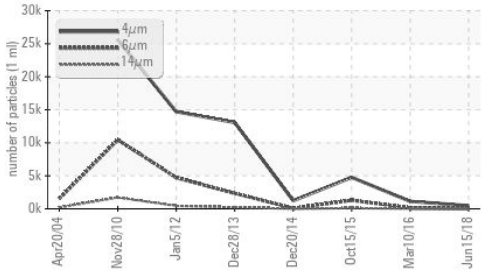
Particle Count



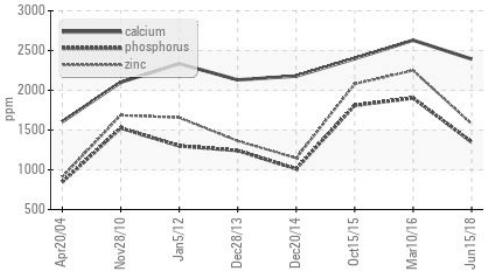
Viscosity @ 40°C



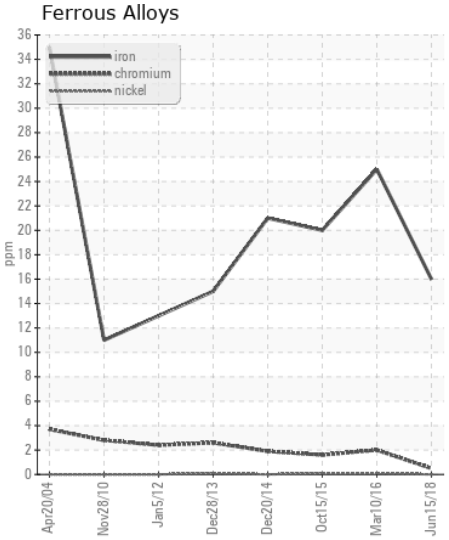
Particle Trend



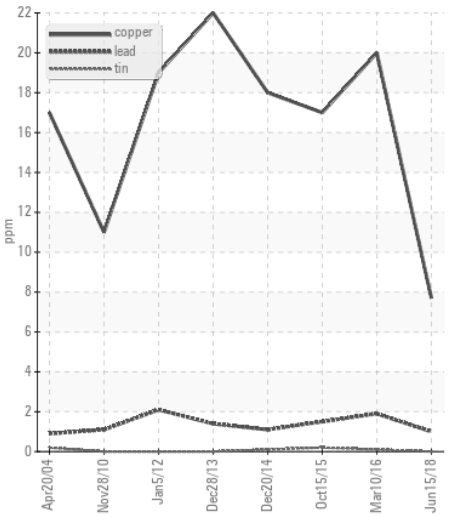
Additives



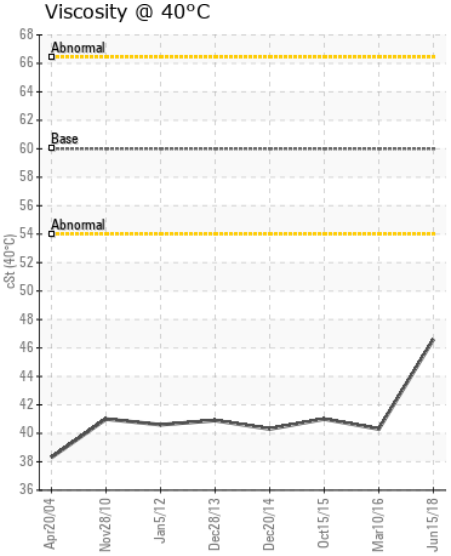
Ferrous Alloys



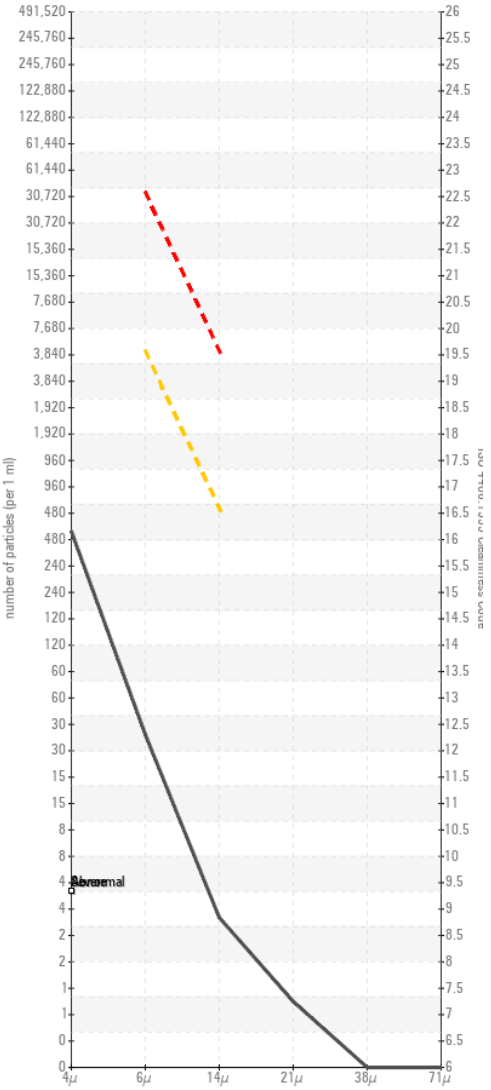
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



CALA
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0294223 **Received** : 21 Jun 2018
Lab Number : 02223662 **Tested** : 22 Jun 2018
Unique Number : 4706792 **Diagnosed** : 22 Jun 2018 - Kevin Marson
Test Package : MOB 2 (Additional Tests: KV100, VI)

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.

JSD LOGGING
964 HIGHWAY 11, PO BOX 40
PINEWOOD, ON
CA P0W 1K0
Contact: Sam Fuhrer
jsdlogging@gmail.com
T: (807)483-7799
F: (807)487-1280