OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id
MCELROY 00112 - ISO 46
Component
New (Unused) Oil
Fluid
{not provided} (--- QTS)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO10002600**	---	---
Sample Date		Client Info		**16 Nov 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**NORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	**0**	---	---
Chromium	ppm	ASTM D5185m	>5	**<1**	---	---
Nickel	ppm	ASTM D5185m	>5	**<1**	---	---
Titanium	ppm	ASTM D5185m		**<1**	---	---
Silver	ppm	ASTM D5185m	>5	**0**	---	---
Aluminum	ppm	ASTM D5185m	>5	**2**	---	---
Lead	ppm	ASTM D5185m	>5	**<1**	---	---
Copper	ppm	ASTM D5185m	>5	**<1**	---	---
Tin	ppm	ASTM D5185m	>5	**0**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**<1**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	---	---
Barium	ppm	ASTM D5185m		**9**	---	---
Molybdenum	ppm	ASTM D5185m		**<1**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m		**89**	---	---
Calcium	ppm	ASTM D5185m		**66**	---	---
Phosphorus	ppm	ASTM D5185m		**318**	---	---
Zinc	ppm	ASTM D5185m		**370**	---	---
Sulfur	ppm	ASTM D5185m		**746**	---	---

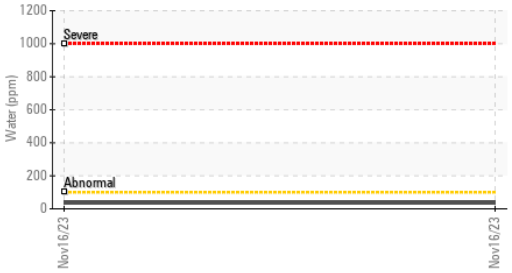
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	---	---
Sodium	ppm	ASTM D5185m		**0**	---	---
Potassium	ppm	ASTM D5185m	>20	**2**	---	---
Water	%	ASTM D6304		**0.003**	---	---
ppm Water	ppm	ASTM D6304		**35.5**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**2631**	---	---
Particles >6µm		ASTM D7647	>1300	**700**	---	---
Particles >14µm		ASTM D7647	>160	**50**	---	---
Particles >21µm		ASTM D7647	>40	**13**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**19/17/13**	---	---

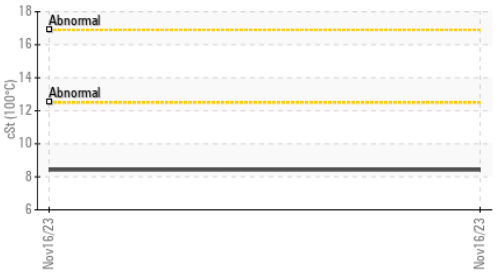
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.34**	---	---

OIL ANALYSIS REPORT

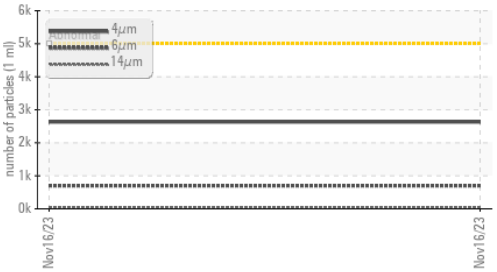
Water (KF)



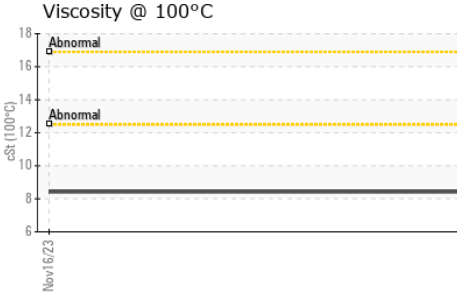
Viscosity @ 100°C



Particle Trend



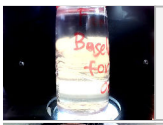
Viscosity @ 100°C



Viscosity @ 40°C

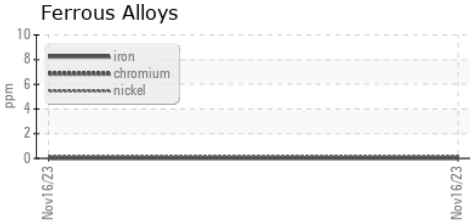
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual		**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**47.25**	---	---
Visc @ 100°C	cSt	ASTM D445		**8.42**	---	---
Viscosity Index (VI)	Scale	ASTM D2270		**155**	---	---

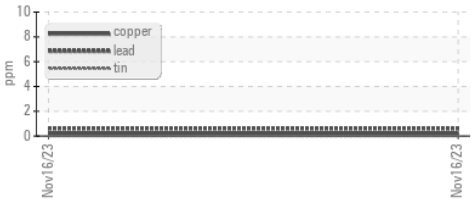
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

Ferrous Alloys

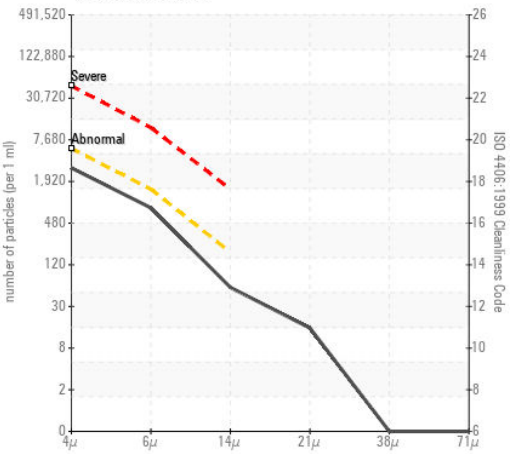


Non-ferrous Metals

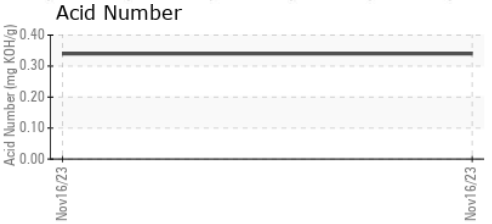


Viscosity @ 40°C

Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10002600 **Received** : 20 Nov 2023
Lab Number : 06012889 **Diagnosed** : 21 Nov 2023
Unique Number : 10752033 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

TULCO OILS INC (001-TULSA DIVISION)
5240 EAST PINE
TULSA, OK
US 74115
Contact: DYLAN COPE
dylancope@tulco.com
T: (800)375-2347
F: x: