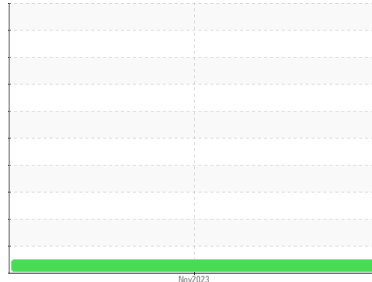


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
MCELROY 00116 - 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			TO10002601	---	---
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	---	---

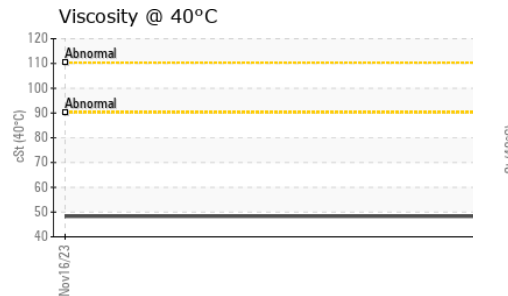
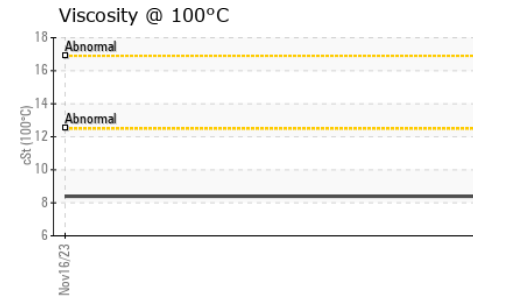
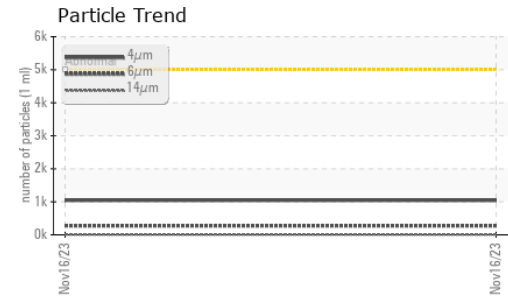
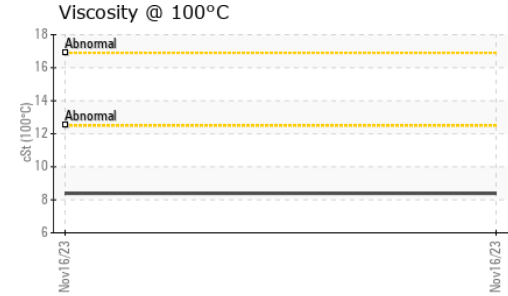
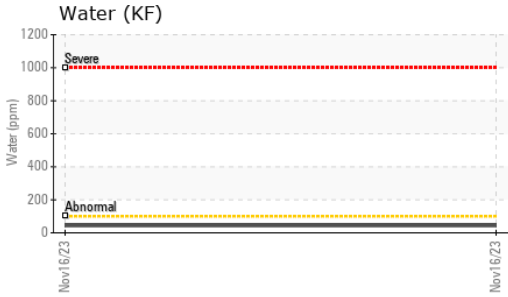
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		9	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		90	---	---
Calcium	ppm	ASTM D5185m		68	---	---
Phosphorus	ppm	ASTM D5185m		326	---	---
Zinc	ppm	ASTM D5185m		374	---	---
Sulfur	ppm	ASTM D5185m		750	---	---

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		0.004	---	---
ppm Water	ppm	ASTM D6304		43.8	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1044	---	---
Particles >6µm		ASTM D7647	>1300	275	---	---
Particles >14µm		ASTM D7647	>160	10	---	---
Particles >21µm		ASTM D7647	>40	2	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/10	---	---

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

OIL ANALYSIS REPORT



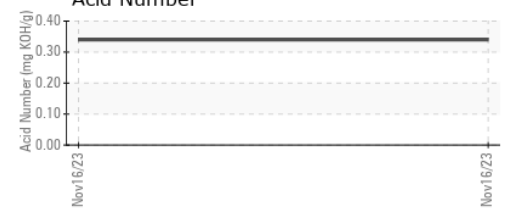
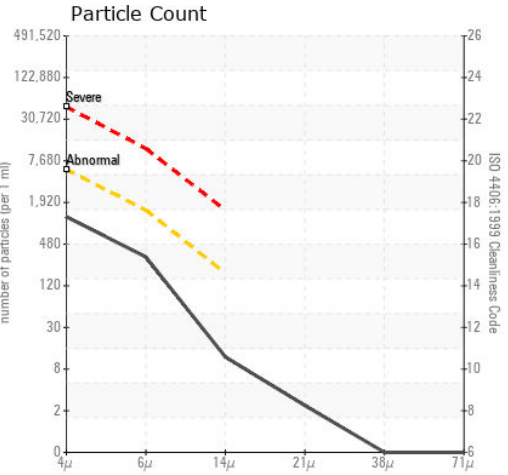
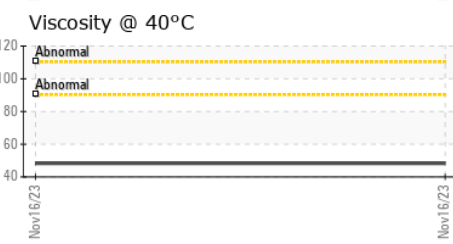
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	48.28	---	---
Visc @ 100°C	cSt	ASTM D445	8.39	---	---
Viscosity Index (VI)	Scale	ASTM D2270	150	---	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10002601 **Received** : 20 Nov 2023
Lab Number : 06012892 **Diagnosed** : 21 Nov 2023
Unique Number : 10752036 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI)

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:

Certificate L2367
 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)