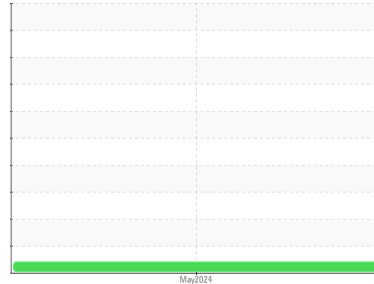


OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
506 SUPERLUBE
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

DIAGNOSIS

- Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.
- Wear**
All component wear rates are normal.
- Contamination**
Moderate concentration of visible dirt/debris present in the oil.
- Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TO10003236	---	---
Sample Date	Client Info		15 May 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	---	---
Chromium	ppm	ASTM D5185m >20	0	---	---
Nickel	ppm	ASTM D5185m >20	1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m >20	0	---	---
Lead	ppm	ASTM D5185m >20	0	---	---
Copper	ppm	ASTM D5185m >20	<1	---	---
Tin	ppm	ASTM D5185m >20	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	<1	---	---
Calcium	ppm	ASTM D5185m	37	---	---
Phosphorus	ppm	ASTM D5185m	8	---	---
Zinc	ppm	ASTM D5185m	14	---	---
Sulfur	ppm	ASTM D5185m	27	---	---

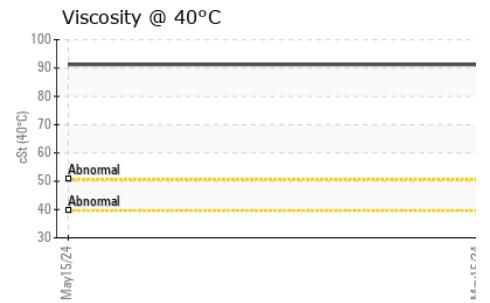
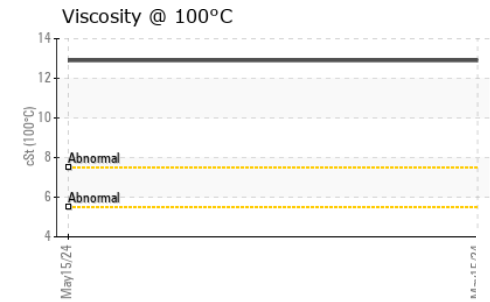
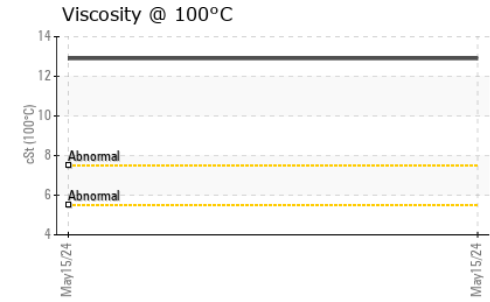
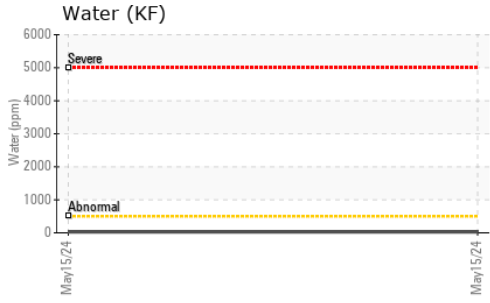
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	1249	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---
Water	%	ASTM D6304 >0.05	0.003	---	---
ppm Water	ppm	ASTM D6304 >500	27	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.089	---	---

OIL ANALYSIS REPORT

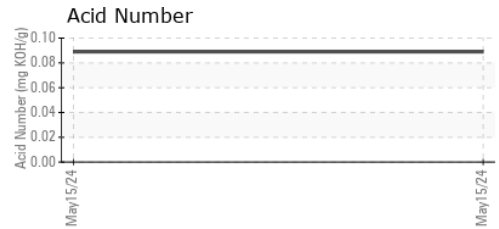
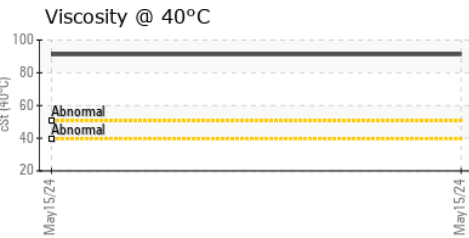
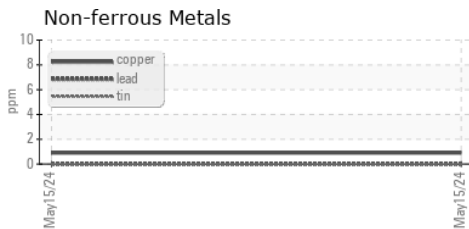
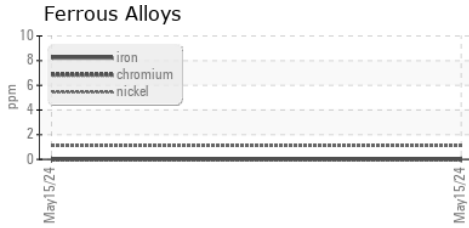


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91.2	---	---
Visc @ 100°C	cSt	ASTM D445	12.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270	139	---	---

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. : TO10003236 **Received** : 16 May 2024
Lab Number : **06181314** **Tested** : 20 May 2024
Unique Number : 11032640 **Diagnosed** : 20 May 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, 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:

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)