

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
SUMMIT SE HT 3
 Component
Heat Transfer Fluid
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the fluid. The amount and size of particulates present in the system are acceptable.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info		TO10003229	---	---
Sample Date	Client Info		17 Apr 2024	---	---
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	>200	0	---	---
Chromium	ppm	ASTM D5185m	>21	0	---	---
Nickel	ppm	ASTM D5185m	>21	1	---	---
Titanium	ppm	ASTM D5185m	>21	<1	---	---
Silver	ppm	ASTM D5185m	>21	0	---	---
Aluminum	ppm	ASTM D5185m	>21	0	---	---
Lead	ppm	ASTM D5185m	>21	0	---	---
Copper	ppm	ASTM D5185m	>21	0	---	---
Tin	ppm	ASTM D5185m	>21	0	---	---
Vanadium	ppm	ASTM D5185m		4	---	---
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		0	---	---
Phosphorus	ppm	ASTM D5185m		0	---	---
Zinc	ppm	ASTM D5185m		0	---	---
Sulfur	ppm	ASTM D5185m		9606	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	7	---	---
Sodium	ppm	ASTM D5185m	>21	0	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water	%	ASTM D6304	>0.0601	0.00	---	---
ppm Water	ppm	ASTM D6304	>601	0	---	---

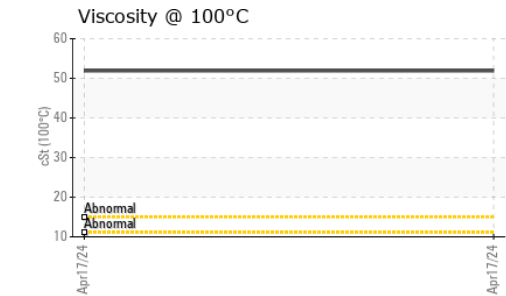
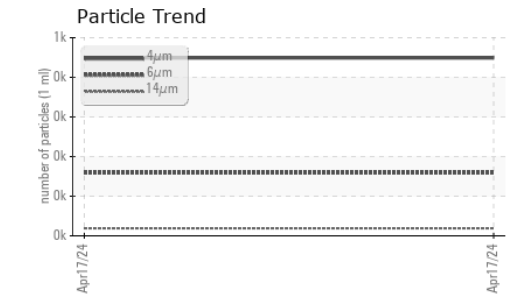
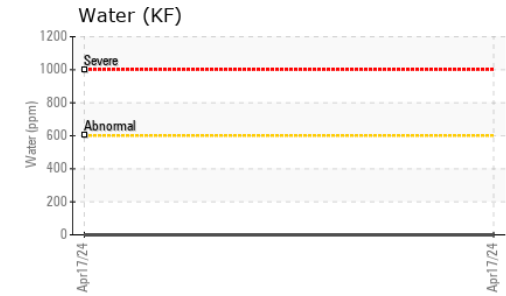
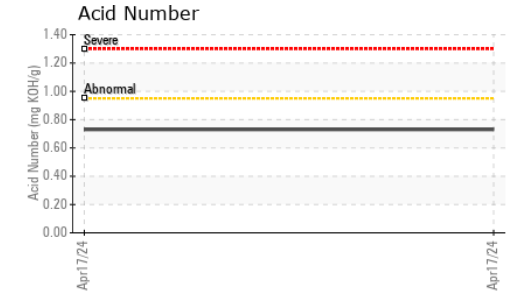
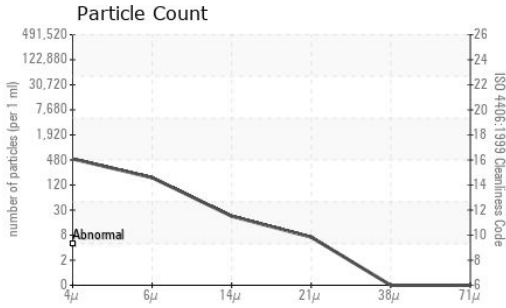
FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm		ASTM D7647		449	---	---
Particles >6µm		ASTM D7647	>10240000	159	---	---
Particles >14µm		ASTM D7647	>10240000	19	---	---
Particles >21µm		ASTM D7647	>2560000	6	---	---
Particles >38µm		ASTM D7647	>640000	0	---	---
Particles >71µm		ASTM D7647	>160000	0	---	---
Oil Cleanliness		ISO 4406 (c)	>--/30/30	16/14/11	---	---

FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	---	---
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OIL ANALYSIS REPORT



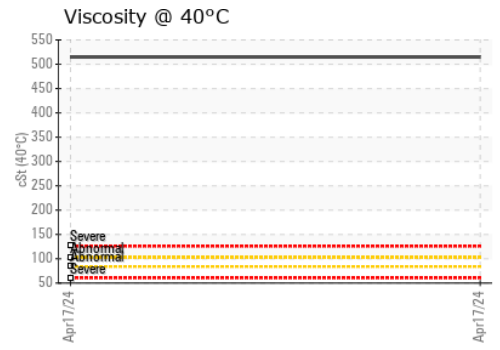
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.0601	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	515	---	---
Visc @ 100°C	cSt	ASTM D445	51.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270	162	---	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003229 **Received** : 22 Apr 2024
Lab Number : **06155924** **Tested** : 23 Apr 2024
Unique Number : 10991347 **Diagnosed** : 24 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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

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)