

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id

SUMMIT SE HT 4

Heat Transfer Fluid

{not provided} (--- GAL)

Recommendation

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

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.

				Apr2024		
				Aprzu24		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO10003230		
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	0		
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		3		
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		8436		
CONTAMINANT	S	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		6		
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 CLEANLII	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		32182		
Particles >6µm		ASTM D7647	>10240000	11954		
Particles >14μm		ASTM D7647	>10240000	826		
Particles >21μm		ASTM D7647	>2560000	181		
Particles >38μm		ASTM D7647	>640000	9		
Particles >71μm		ASTM D7647	>160000	1		
Oil Cleanliness		ISO 4406 (c)	>/30/30	22/21/17		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2

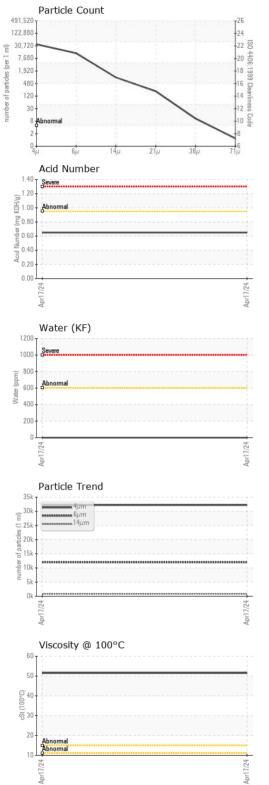
Acid Number (AN)

mg KOH/g ASTM D8045

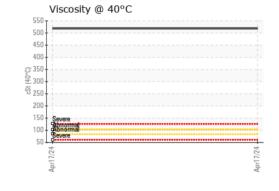
0.65



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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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		518		
Visc @ 100°C	cSt	ASTM D445		51.5		
Viscosity Index (VI)	Scale	ASTM D2270		161		
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image





Certificate 12367

Laboratory Sample No.

: TO10003230 Lab Number : 06155925 Unique Number : 10991348

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Diagnosed

: 22 Apr 2024 : 23 Apr 2024

: 24 Apr 2024 - Jonathan Hester Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

TULSA, OK US 74115 Contact: DYLAN COPE dylancope@tulco.com T: (800)375-2347 F: x:

TULCO OILS INC (001-TULSA DIVISION)

* - 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)

5240 EAST PINE