

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

SUMMIT SE HT 2 Component Heat Transfer Fluid

Fluid {not provided} (--- GAL)

# DIAGNOSIS

### A Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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

There is a moderate amount of visible silt present in the sample.

## Fluid Condition

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

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO10003228		
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				ABNORMAL		
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	0		
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		2		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 0 0	history1 	history2 
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0	history1  	history2  
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0 0	history1   	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0 0 0 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 0 0 0 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 0 0 0 0 0 0 0 4105	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           0 </td <td>history1</td> <td>history2</td>	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current           0           3	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 1 ppm 2 ppm 2 ppm 3 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4	method           ASTM D5185m	limit/base	current           0           20           3           0	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base 	current           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           20           0           0           3           0           0           0	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current           0           0           0           0           0           0           0           0           0           0           0           0           0           0           20           0           0           3           0           0           0           0           0           0.00	history1                              history1	history2                        history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current           0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D5185m	limit/base	current           0.00           0           current	history1  history1 <td>history2                        history2  </td>	history2                        history2



# **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	A MODER		
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		604		
Visc @ 100°C	cSt	ASTM D445		61.3		
Viscosity Index (VI)	Scale	ASTM D2270		171		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image

Bottom

GRAPHS



no image

no image

TULCO OILS INC (001-TULSA DIVISION) Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Sample No. : TO10003228 : 22 Apr 2024 5240 EAST PINE Lab Number : 06155926 Tested : 24 Apr 2024 TULSA, OK Unique Number : 10991349 Diagnosed : 24 Apr 2024 - Jonathan Hester US 74115 Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI) Contact: DYLAN COPE Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. dylancope@tulco.com T: (800)375-2347 \* - 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) F: x:

Contact/Location: DYLAN COPE - UCTULTUL