



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
THUNDER SPIRIT [200009532]
 Machine Id
NX015565 (S/N NOT GIVEN)
 Component
Hydraulic System
 Fluid
SHELL TELLUS S4 VX 32 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		NX015565	---	---
Sample Date		Client Info		08 May 2024	---	---
Machine Age	hrs	Client Info		56687	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ATTENTION	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		17	---	---
Iron	ppm	ASTM D5185m	>20	12	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>20	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>20	<1	---	---
Lead	ppm	ASTM D5185m	>20	4	---	---
Copper	ppm	ASTM D5185m	>20	0	---	---
Tin	ppm	ASTM D5185m	>20	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

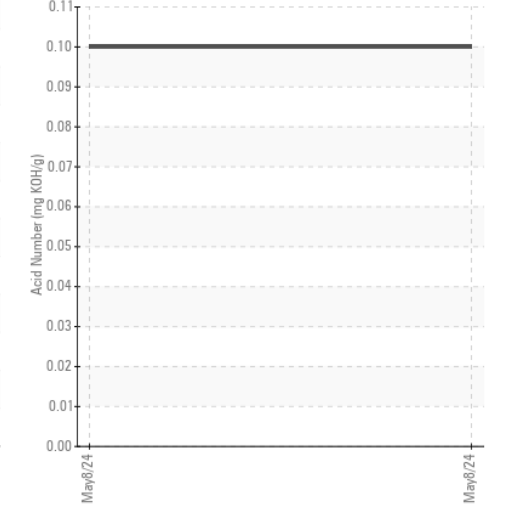
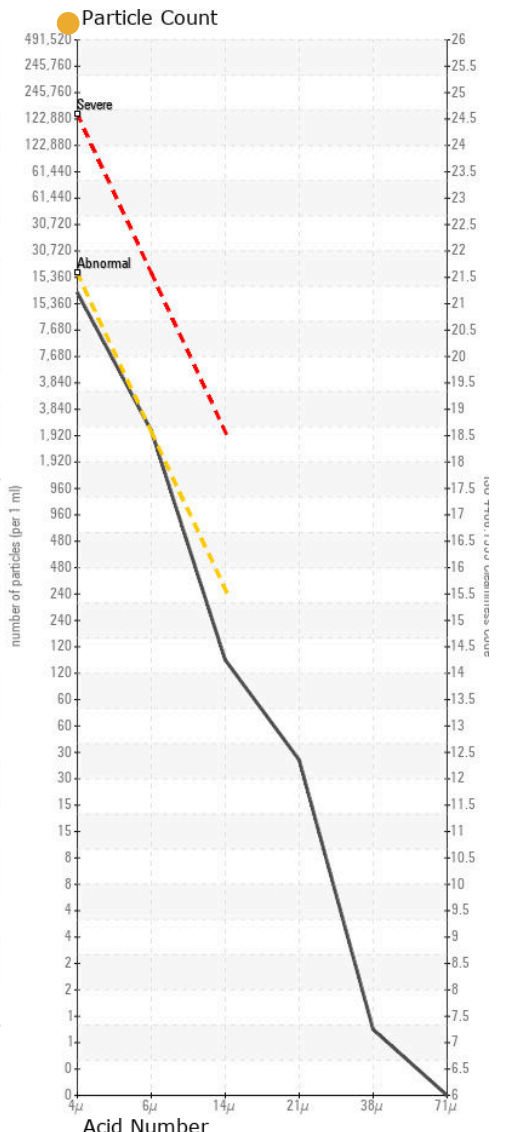
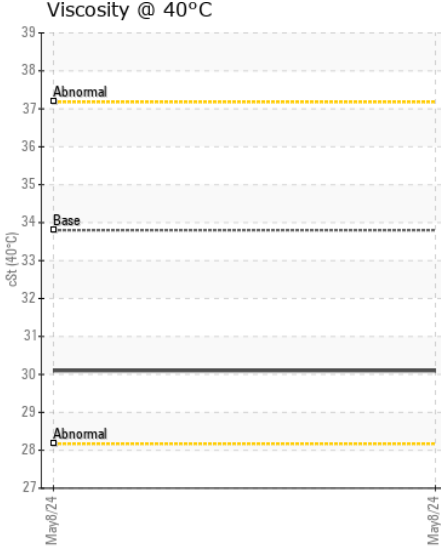
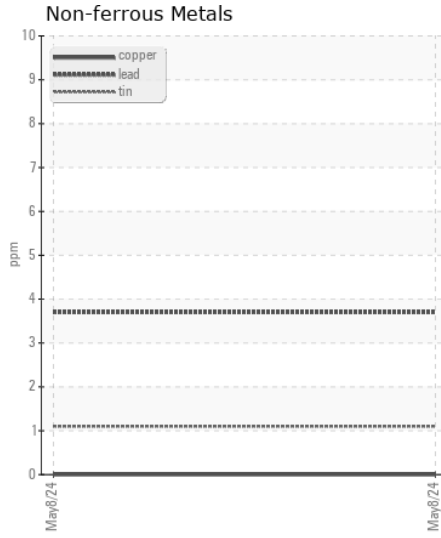
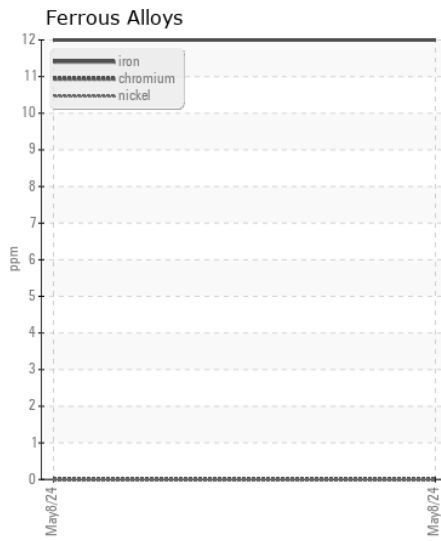
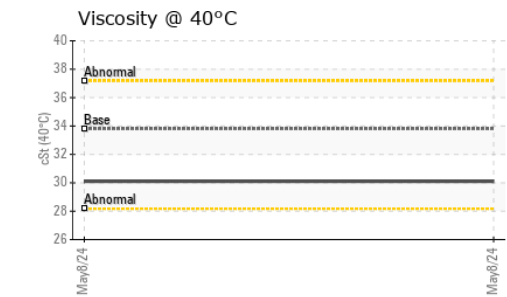
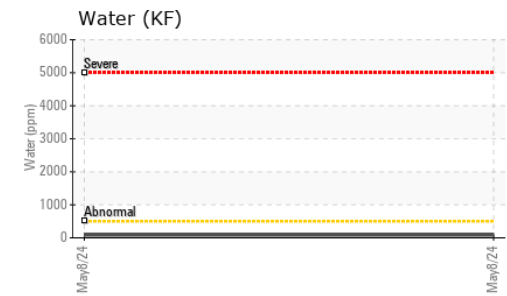
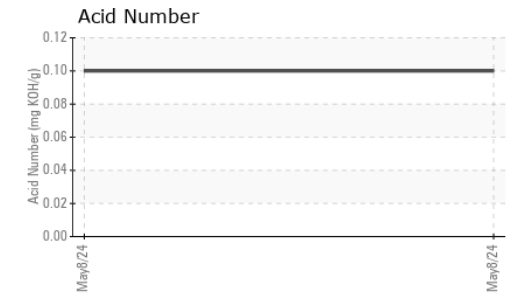
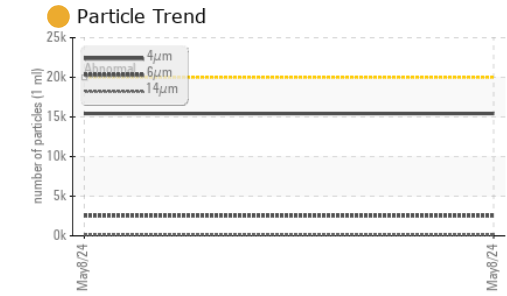
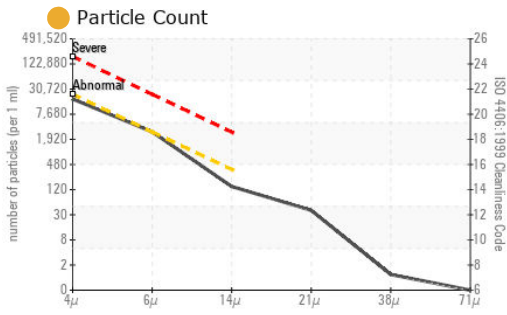
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	3	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water	%	ASTM D6304	>0.05	0.008	---	---
ppm Water	ppm	ASTM D6304	>500	86	---	---
Particles >4µm		ASTM D7647	>20000	15428	---	---
Particles >6µm		ASTM D7647	>2500	2534	---	---
Particles >14µm		ASTM D7647	>320	126	---	---
Particles >21µm		ASTM D7647	>80	34	---	---
Particles >38µm		ASTM D7647	>20	1	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>21/18/15	21/19/14	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		0	---	---
Calcium	ppm	ASTM D5185m		0	---	---
Phosphorus	ppm	ASTM D5185m		581	---	---
Zinc	ppm	ASTM D5185m		47	---	---
Sulfur	ppm	ASTM D5185m		937	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.10	---	---
Visc @ 40°C	cSt	ASTM D445	33.8	30.1	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : NX015565 **Received** : 24 May 2024
Lab Number : 06190446 **Tested** : 29 May 2024
Unique Number : 11047198 **Diagnosed** : 29 May 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PQ)

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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)