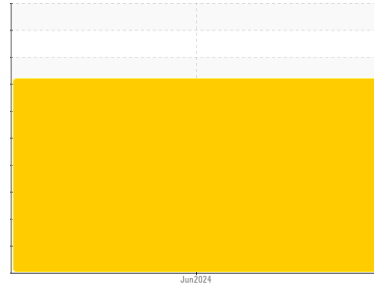




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
{UNASSIGNED}

Machine Id

TC-3

Component

Hydraulic System

Fluid

TDH FLUID SAE 75W80 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 75W80. Please confirm.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KFS0006057	---	---
Sample Date	Client Info		11 Jun 2024	---	---
Machine Age	hrs	Client Info	4581	---	---
Oil Age	hrs	Client Info	1000	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	15	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >10	1	---	---
Lead	ppm	ASTM D5185m >10	0	---	---
Copper	ppm	ASTM D5185m >75	6	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 10	3	---	---
Barium	ppm	ASTM D5185m 10	0	---	---
Molybdenum	ppm	ASTM D5185m 10	<1	---	---
Manganese	ppm	ASTM D5185m	1	---	---
Magnesium	ppm	ASTM D5185m 100	40	---	---
Calcium	ppm	ASTM D5185m 3500	2143	---	---
Phosphorus	ppm	ASTM D5185m 1150	818	---	---
Zinc	ppm	ASTM D5185m 1150	915	---	---
Sulfur	ppm	ASTM D5185m 5000	2986	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	4	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

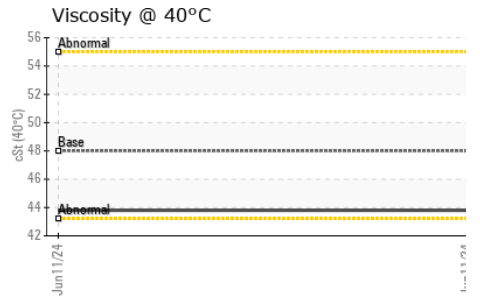
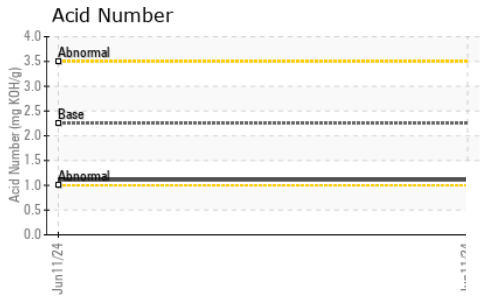
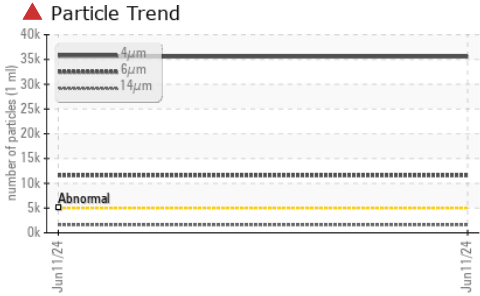
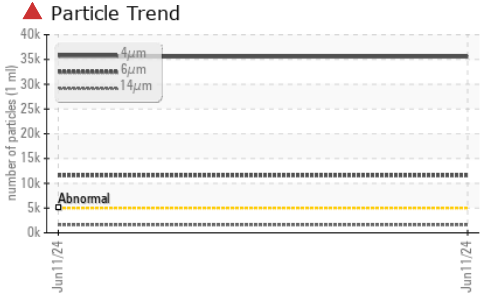
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 35553	---	---
Particles >6µm	ASTM D7647	>1300	▲ 11588	---	---
Particles >14µm	ASTM D7647	>160	▲ 1595	---	---
Particles >21µm	ASTM D7647	>40	▲ 415	---	---
Particles >38µm	ASTM D7647	>10	11	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/21/18	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.25	1.11	---	---

OIL ANALYSIS REPORT



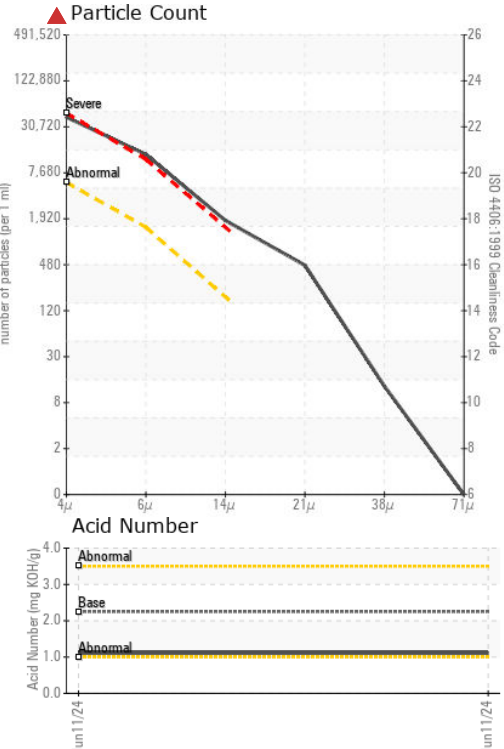
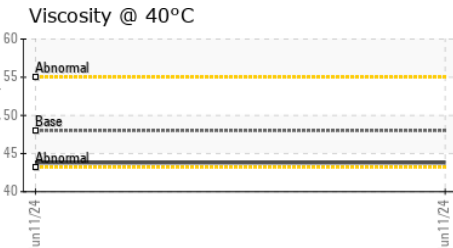
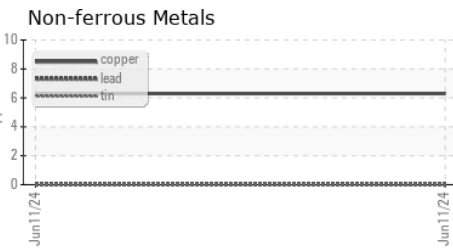
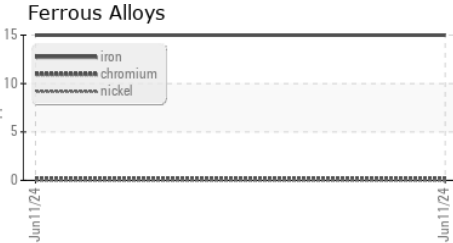
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 48	43.8	---	---

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. : KFS0006057 **Received** : 26 Jun 2024
Lab Number : 06221150 **Tested** : 27 Jun 2024
Unique Number : 11099347 **Diagnosed** : 27 Jun 2024 - Wes Davis
Test Package : MOB 2

HARNES LLC
 855 N JAMES CAMPBELL BLVD
 COLUMBIA, TN
 US 38401
 Contact: BILL ENYART
 bill.enyart@selectharness.com
 T: (931)797-5353
 F:

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)