



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GCS-3 EXIT
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (60 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PTK0005295	PTK0004431	PTK0003598
Sample Date		Client Info		01 May 2024	28 Aug 2023	19 Sep 2022
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	2	4	4
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	8	12	12
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

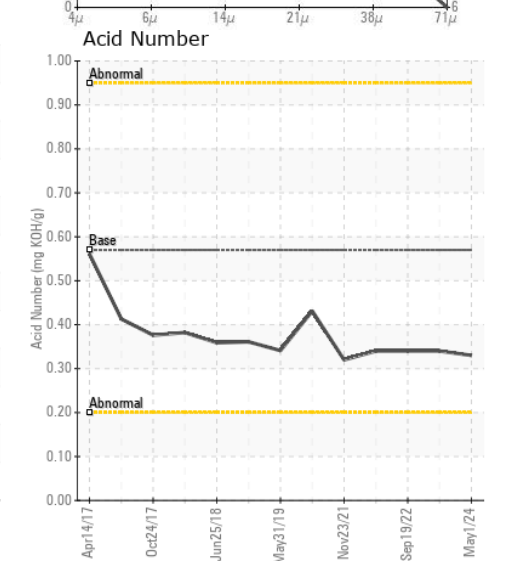
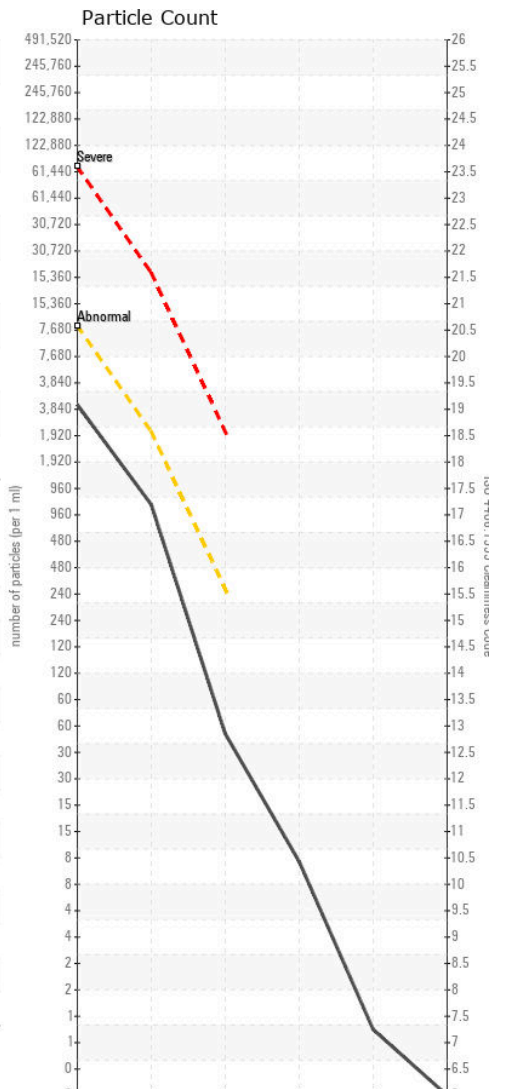
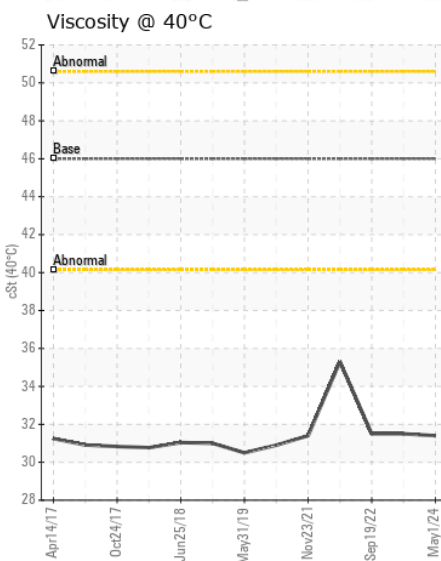
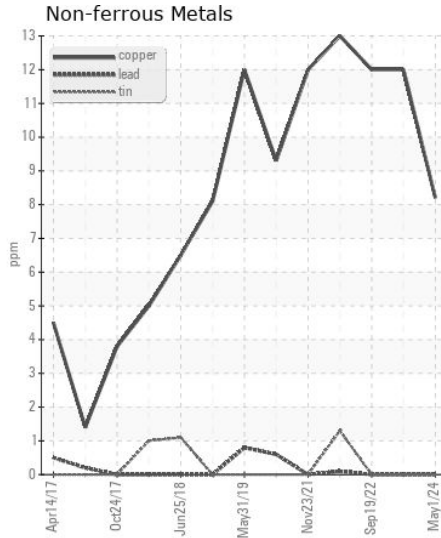
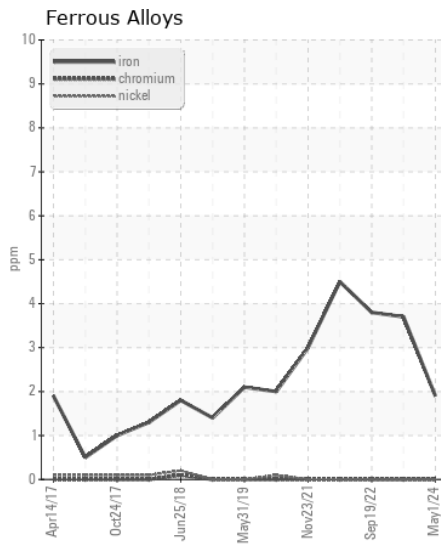
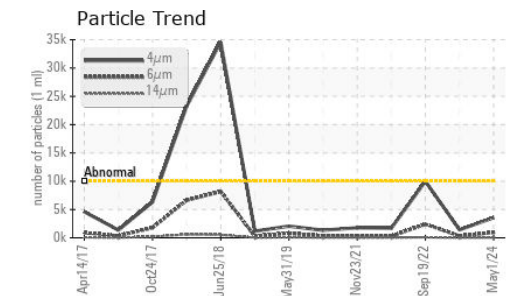
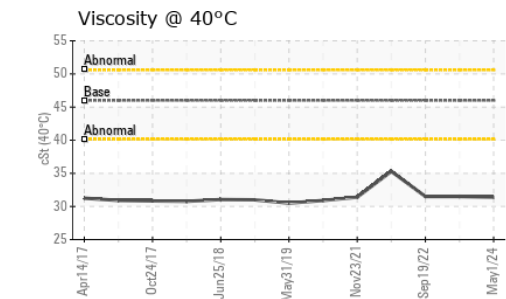
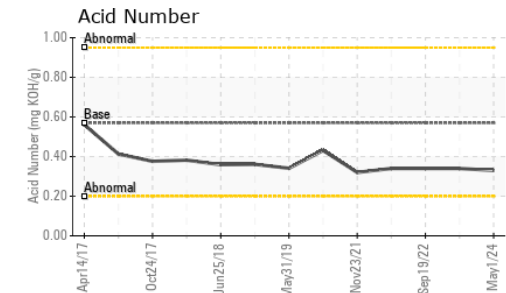
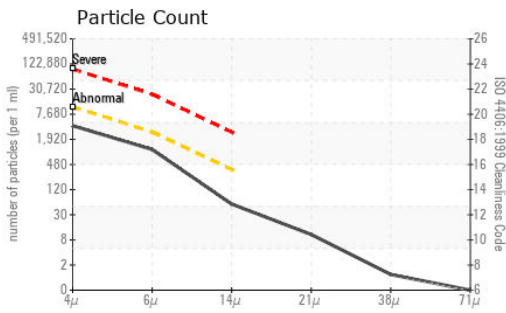
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	0	0	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	3558	1410	9985
Particles >6µm		ASTM D7647	>2500	962	330	2405
Particles >14µm		ASTM D7647	>320	48	29	96
Particles >21µm		ASTM D7647	>80	9	9	19
Particles >38µm		ASTM D7647	>20	1	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/17/13	18/16/12	20/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	0	<1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	6	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	<1	6	2
Calcium	ppm	ASTM D5185m	200	61	67	72
Phosphorus	ppm	ASTM D5185m	300	335	341	333
Zinc	ppm	ASTM D5185m	370	393	405	394
Sulfur	ppm	ASTM D5185m	2500	888	938	940
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.33	0.34	0.34
Visc @ 40°C	cSt	ASTM D445	46	31.4	31.5	31.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0005295 **Received** : 12 Jul 2024
Lab Number : 06234839 **Tested** : 15 Jul 2024
Unique Number : 11123673 **Diagnosed** : 15 Jul 2024 - Don Baldridge
Test Package : MOB 2

HEIDTMAN STEEL
 10 NORTHGATE INDUSTRIAL DR
 GRANITE CITY, IL
 US 62040
 Contact: MARK JACKSON
 mark.jackson@heidtman.com
 T: (618)798-5541
 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)