



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id

GCS-3 ENTRY

Component

Hydraulic System

Fluid

AW HYDRAULIC OIL ISO 46 (300 GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PTK0005296	PTK0004432	PTK0003597
Sample Date		Client Info		01 May 2024	28 Aug 2023	19 Sep 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	1	0	0
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	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	3	<1	<1
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

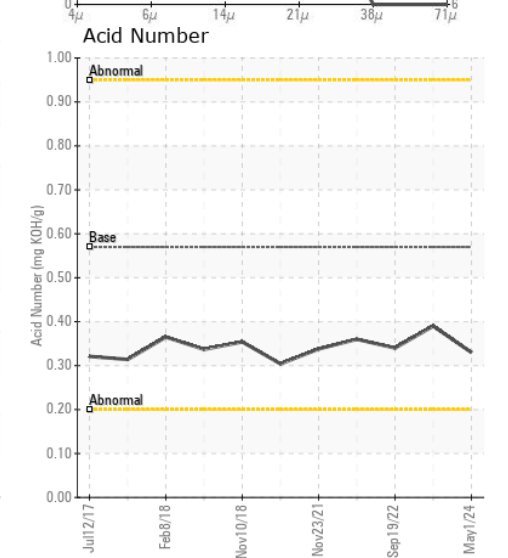
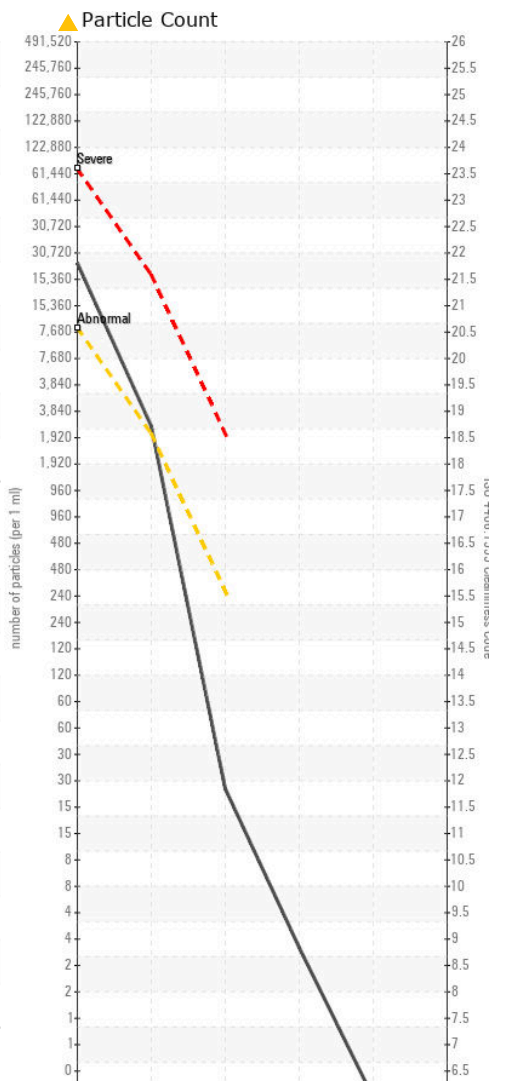
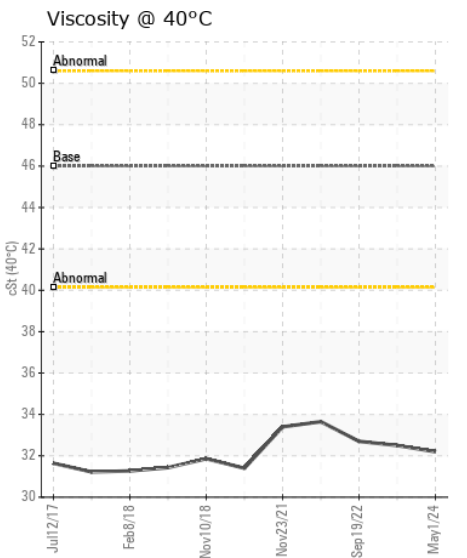
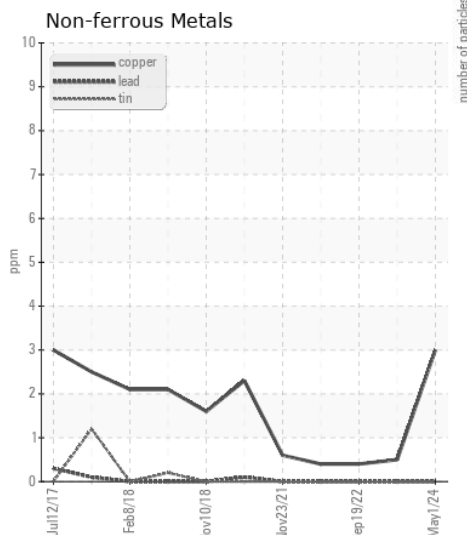
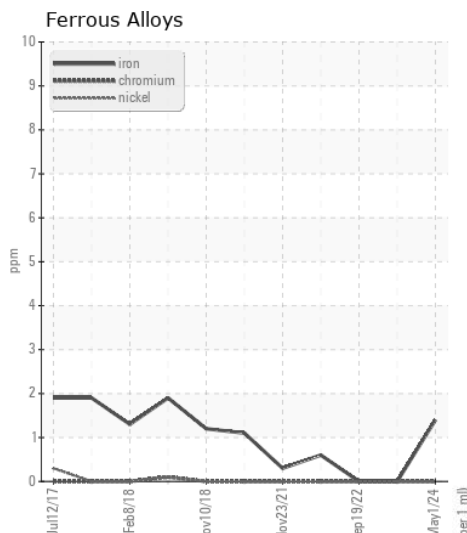
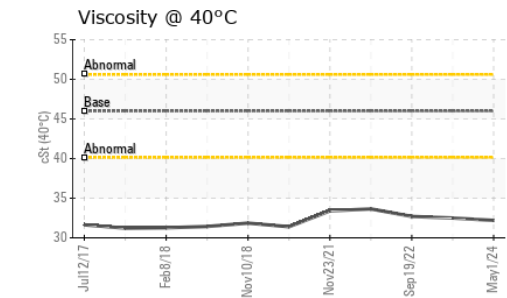
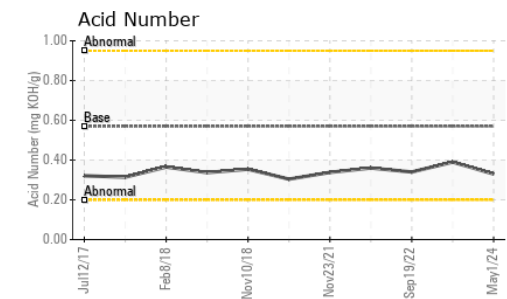
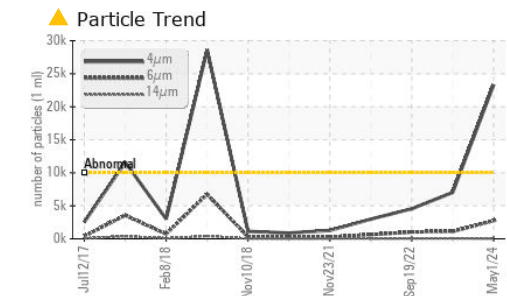
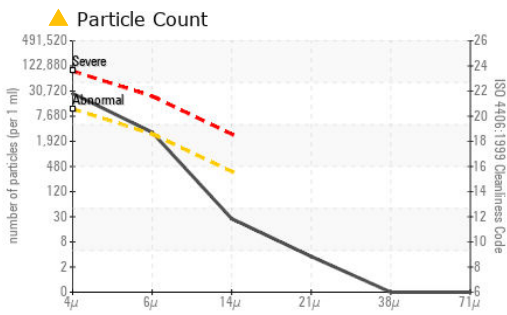
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	0	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	▲ 23328	7021	4547
Particles >6µm		ASTM D7647	>2500	▲ 2754	1116	1030
Particles >14µm		ASTM D7647	>320	24	59	42
Particles >21µm		ASTM D7647	>80	3	15	7
Particles >38µm		ASTM D7647	>20	0	1	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 22/19/12	20/17/13	19/17/13
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	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	0	4	0
Calcium	ppm	ASTM D5185m	200	34	54	59
Phosphorus	ppm	ASTM D5185m	300	354	357	362
Zinc	ppm	ASTM D5185m	370	421	447	456
Sulfur	ppm	ASTM D5185m	2500	955	1001	1059
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.33	0.39	0.34
Visc @ 40°C	cSt	ASTM D445	46	32.2	32.5	32.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0005296 **Received** : 12 Jul 2024
Lab Number : 06234845 **Tested** : 15 Jul 2024
Unique Number : 11123679 **Diagnosed** : 15 Jul 2024 - Don Baldridge
Test Package : MOB 2

HEIDTMAN STEEL
 10 NORTHGATE INDUSTRIAL DR
 GRANITE CITY, IL
 US 62040
 Contact: RUSS BARTHELEMY
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 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)