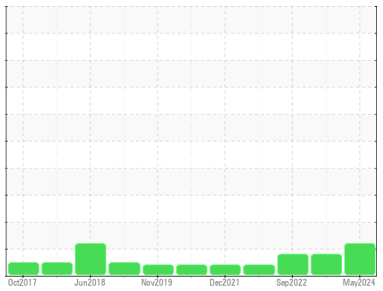
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
GCPK ENTRY
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

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

Wear
All component wear rates are normal.

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

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PTK0005299**	PTK0004433	PTK0003592
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
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**6**	<1	1
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	**10**	6	4
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
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	**54**	47	50
Phosphorus	ppm	ASTM D5185m	300	**351**	346	332
Zinc	ppm	ASTM D5185m	370	**424**	443	411
Sulfur	ppm	ASTM D5185m	2500	**935**	992	963

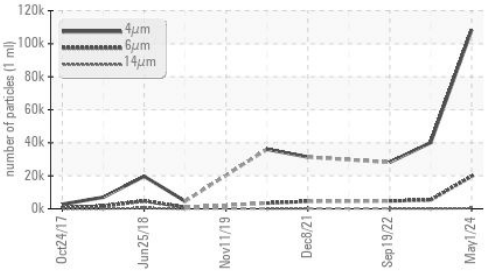
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**<1**	<1	<1
Sodium	ppm	ASTM D5185m		**2**	0	<1
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**108254**	40060	28172
Particles >6µm		ASTM D7647	>2500	▲ **19750**	▲ 5318	● 4694
Particles >14µm		ASTM D7647	>320	▲ **361**	145	188
Particles >21µm		ASTM D7647	>80	**49**	32	40
Particles >38µm		ASTM D7647	>20	**3**	1	1
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15	▲ **21/16**	▲ 20/14	● 19/15

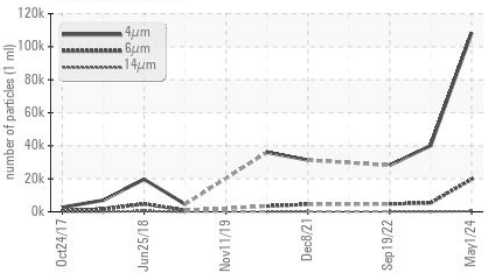
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	**0.35**	0.35	0.38

OIL ANALYSIS REPORT

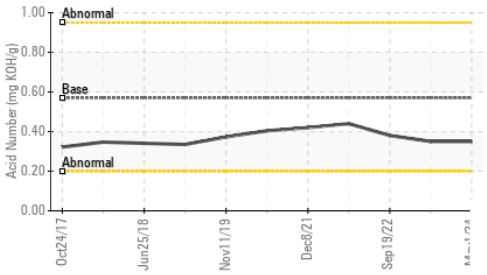
Particle Trend



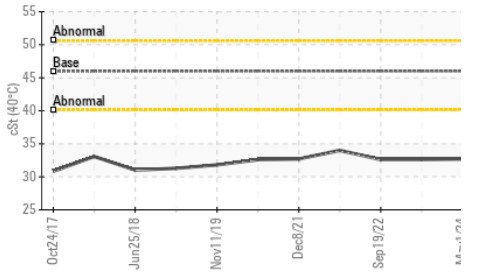
Particle Trend



Acid Number

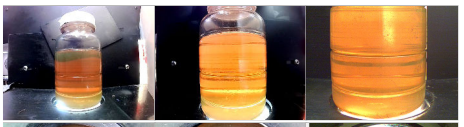


Viscosity @ 40°C



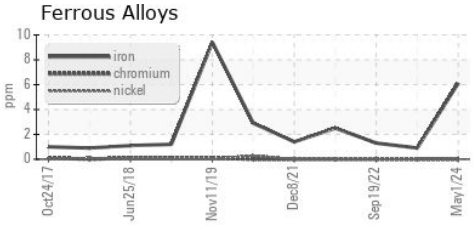
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**32.7**	32.6	32.6

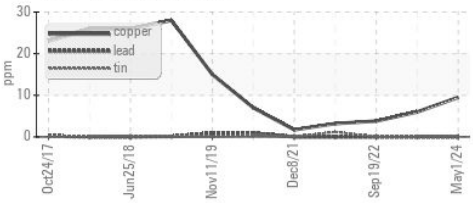
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

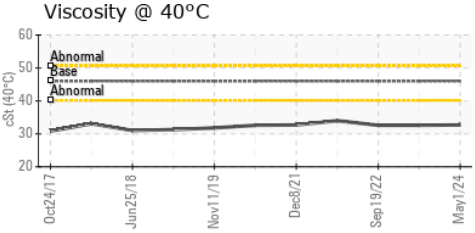
Ferrous Alloys



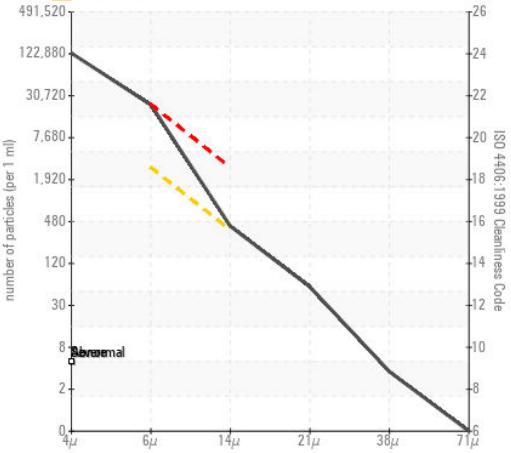
Non-ferrous Metals



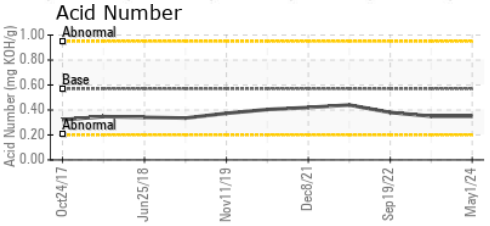
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0005299
Lab Number : 06234842
Unique Number : 11123676
Test Package : MOB 2

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Don Baldridge

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)

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GRANITE CITY, IL
US 62040
Contact: Rudy Villar
Rudy.Villar@Heidtman.com
T:
F:

Report Id: HEIGRA [WUSCAR] 06234842 (Generated: 07/15/2024 12:56:18) Rev: 2

Submitted By: AUSTIN GOUGH