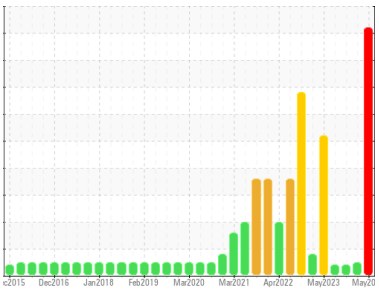
PROBLEM SUMMARY

Sample Rating Trend

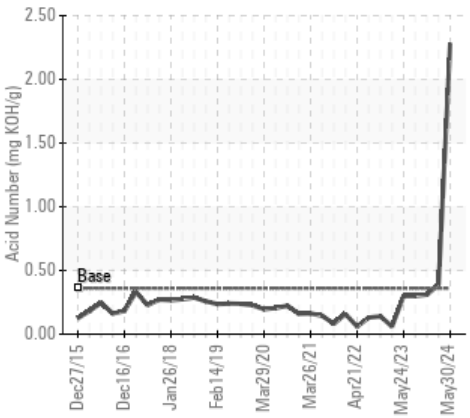


WATER

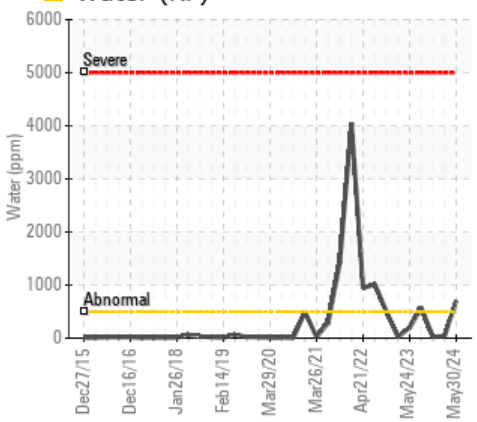
Machine Id
HOCK CUTTER 2 NK
Component
Hydraulic System
Fluid
USPI FG HYD 46 (--- LTR)

COMPONENT CONDITION SUMMARY

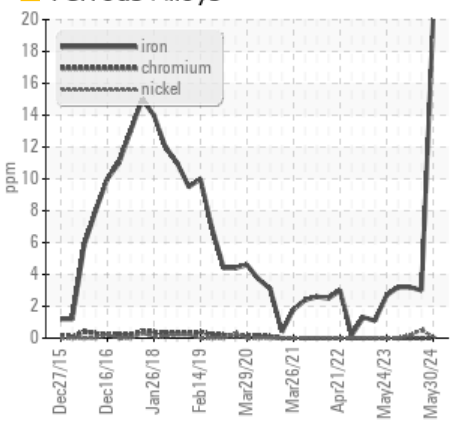
▲ Acid Number



▲ Water (KF)



▲ Ferrous Alloys



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component. We advise an early resample to confirm this situation. Insufficient sample was received to conduct or confirm all the routine laboratory tests.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ **20**	3	3
Water	%	ASTM D6304	>0.05	▲ **0.070**	0.003	0.002
ppm Water	ppm	ASTM D6304	>500	▲ **700**	39	24
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	▲ **2.28**	0.39	0.31
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Free Water	scalar	*Visual		▲ **>10%**	NEG	NEG

Customer Id: TYSDAKSLA
Sample No.: USPM36424
Lab Number: 06199223
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component.
Resample	---	---	?	We advise an early resample to confirm this situation.

HISTORICAL DIAGNOSIS

NORMAL

27 Feb 2024 Diag: Doug Bogart
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

VIS DEBRIS

27 Nov 2023 Diag: Doug Bogart
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

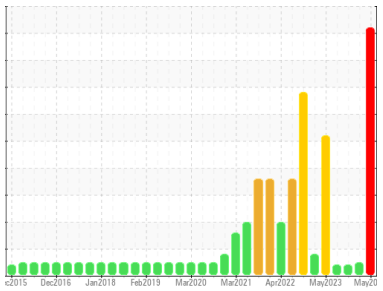
VIS DEBRIS

22 Aug 2023 Diag: Doug Bogart
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
HOCK CUTTER 2 NK
Component
Hydraulic System
Fluid
USPI FG HYD 46 (--- LTR)

DIAGNOSIS

Recommendation
We advise that you follow the water drain-off procedure for this component. We advise an early resample to confirm this situation. Insufficient sample was received to conduct or confirm all the routine laboratory tests.

Wear
An increase in the iron level is noted.

Contamination
Excessive free water present. There is a moderate amount of visible silt present in the sample.

Fluid Condition
The AN level is above the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM36424**	USPM30191	USPM31453
Sample Date		Client Info		**30 May 2024**	27 Feb 2024	27 Nov 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **20**	3	3
Chromium	ppm	ASTM D5185m	>20	**0**	0	0
Nickel	ppm	ASTM D5185m	>20	**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	<1	0
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**0**	<1	<1
Tin	ppm	ASTM D5185m	>20	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	<1
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**0**	2	<1
Calcium	ppm	ASTM D5185m		**0**	2	1
Phosphorus	ppm	ASTM D5185m	725	**512**	539	474
Zinc	ppm	ASTM D5185m		**0**	0	0
Sulfur	ppm	ASTM D5185m	625	**577**	565	496

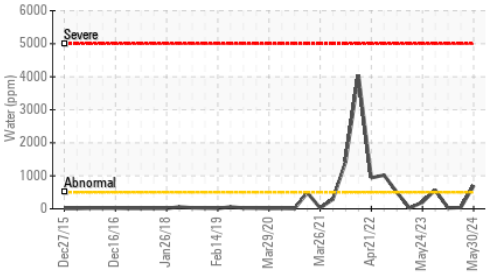
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**7**	8	11
Sodium	ppm	ASTM D5185m		**1**	1	0
Potassium	ppm	ASTM D5185m	>20	**1**	<1	2
Water	%	ASTM D6304	>0.05	▲ **0.070**	0.003	0.002
ppm Water	ppm	ASTM D6304	>500	▲ **700**	39	24

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	964	---
Particles >6µm		ASTM D7647	>1300	**---**	248	---
Particles >14µm		ASTM D7647	>160	**---**	11	---
Particles >21µm		ASTM D7647	>40	**---**	2	---
Particles >38µm		ASTM D7647	>10	**---**	0	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	17/15/11	---

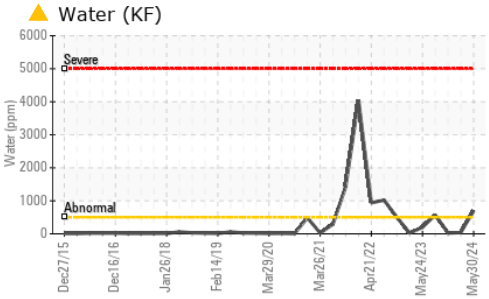
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	▲ **2.28**	0.39	0.31

OIL ANALYSIS REPORT

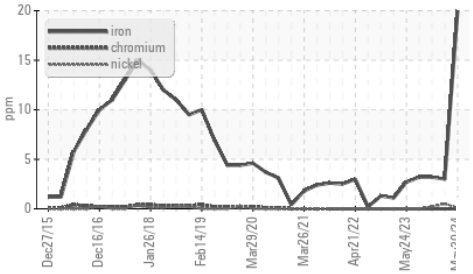
Water (KF)



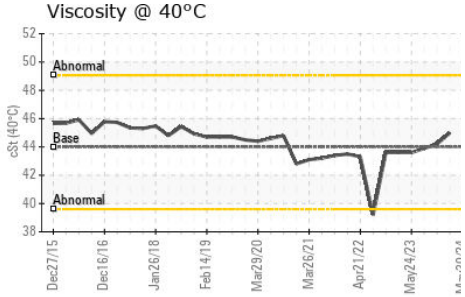
Water (KF)



Ferrous Alloys



Viscosity @ 40°C



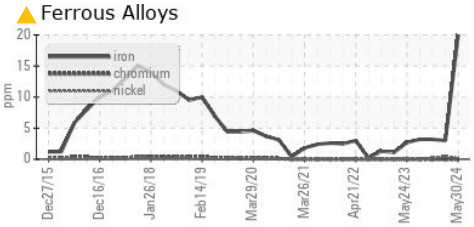
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
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	>0.05	**0.2%**	NEG	NEG
Free Water	scalar	*Visual		▲ **>10%**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44	**---**	45.0	44.2

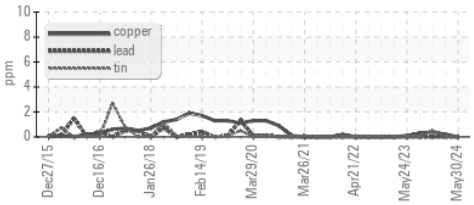
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

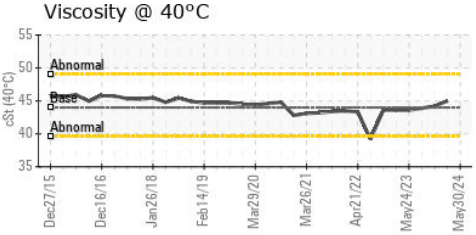
Ferrous Alloys



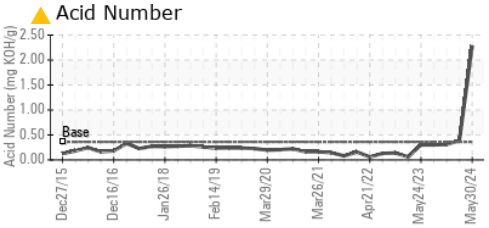
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36424
Lab Number : 06199223
Unique Number : 11061346
Test Package : IND 2

Received : 04 Jun 2024
Tested : 11 Jun 2024
Diagnosed : 11 Jun 2024 - Doug Bogart

TYSON - DAKOTA CITY SLAUGHTER

DAKOTA CITY, NE
US
Contact:
doug.bogart@wearcheck.com
T:
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)