

Machine Id
HURKULES GRUNDER 62 SPINDLE
 Component
Lube System
 Fluid
MOBIL VELOCITE OIL NO.6 (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

Wear
 All component wear rates are normal.

Contamination
 There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal.

Fluid Condition
 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		ST46353	ST43722	ST43803
Sample Date	Client Info		26 Mar 2024	20 Dec 2023	27 Sep 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			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0
Chromium	ppm	ASTM D5185m	>20	0	1
Nickel	ppm	ASTM D5185m	>20	0	0
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m		0	0
Aluminum	ppm	ASTM D5185m	>20	0	2
Lead	ppm	ASTM D5185m	>20	2	0
Copper	ppm	ASTM D5185m	>20	0	0
Tin	ppm	ASTM D5185m	>20	<1	0
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0
Barium	ppm	ASTM D5185m		0	4
Molybdenum	ppm	ASTM D5185m		0	0
Manganese	ppm	ASTM D5185m		<1	0
Magnesium	ppm	ASTM D5185m		0	0
Calcium	ppm	ASTM D5185m		0	<1
Phosphorus	ppm	ASTM D5185m		202	212
Zinc	ppm	ASTM D5185m		0	0
Sulfur	ppm	ASTM D5185m		693	660

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ 31	▲ 23
Sodium	ppm	ASTM D5185m		1	0
Potassium	ppm	ASTM D5185m	>20	0	0
Water	%	ASTM D6304	>0.05	0.002	0.001
ppm Water	ppm	ASTM D6304	>500	22	11

FLUID CLEANLINESS

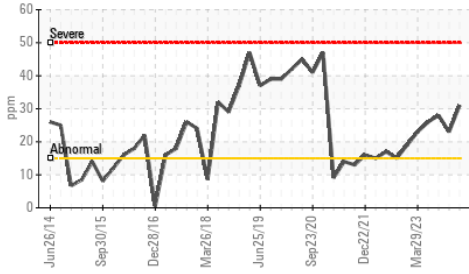
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2127	2038	● 2838
Particles >6µm	ASTM D7647	>640	732	791	● 1045
Particles >14µm	ASTM D7647	>160	74	79	118
Particles >21µm	ASTM D7647	>40	18	22	31
Particles >38µm	ASTM D7647	>10	1	1	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/14	● 18/17/13	● 18/17/13	● 19/17/14

FLUID DEGRADATION

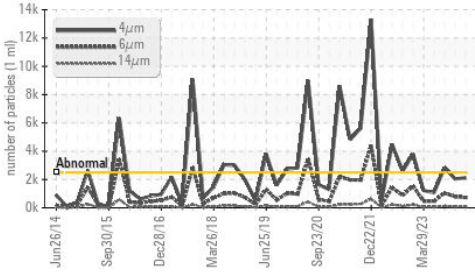
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.089	0.046

OIL ANALYSIS REPORT

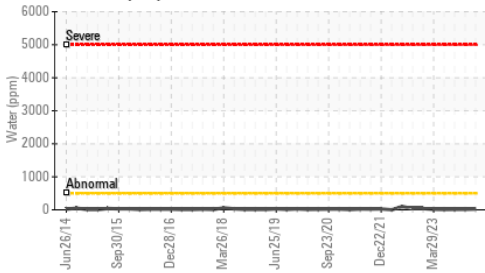
▲ Silicon (ppm)



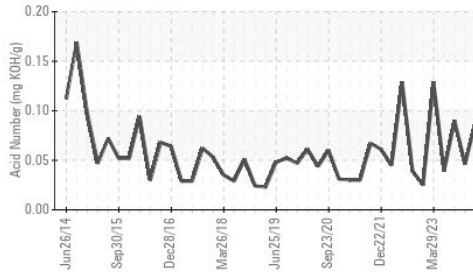
● Particle Trend



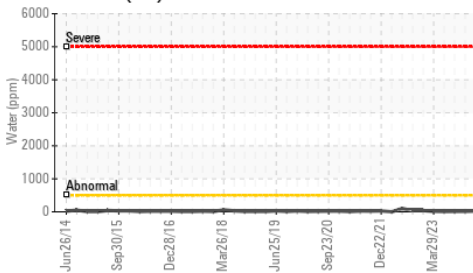
▲ Water (KF)



Acid Number



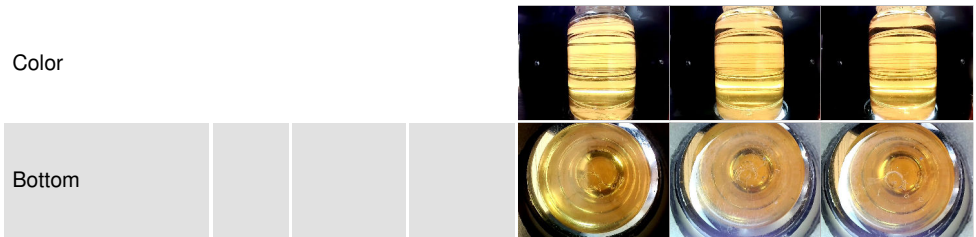
Water (KF)



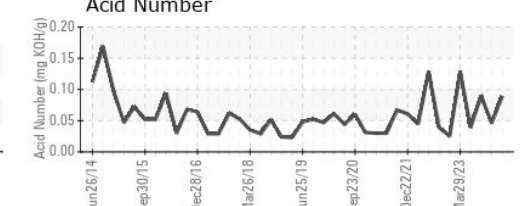
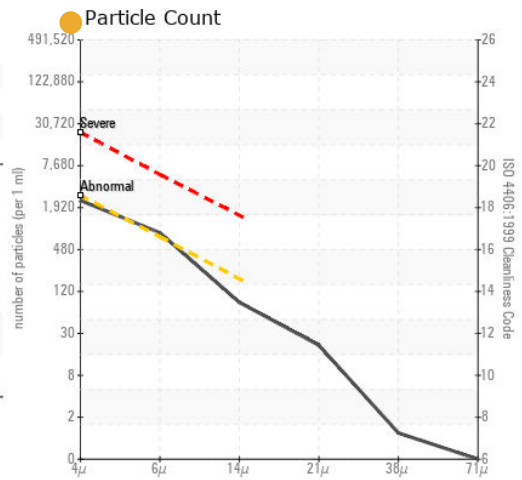
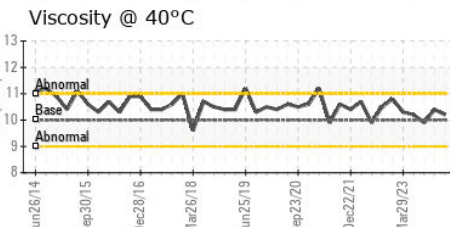
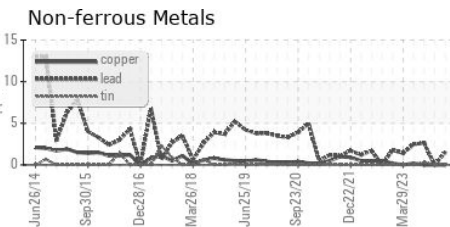
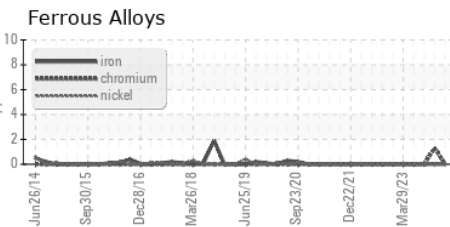
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	10	10.2	10.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST46353
Lab Number : 06137845
Unique Number : 10962653
Test Package : IND 2 (Additional Tests: KF)
Received : 03 Apr 2024
Tested : 04 Apr 2024
Diagnosed : 05 Apr 2024 - Don Baldrige

ZAPP PRECISION STRIP INC.
 266 SAMUEL BARNET BLVD.
 DARTMOUTH, MA
 US 02745
 Contact: Greg Walton
 greg.walton@zapp.com

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)

F: (508)998-6310