



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
HARRIS HRB10 HRB (S/N 2887)

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- 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		PTK0003256	PTK0003264	PTK0002688
Sample Date		Client Info		20 Sep 2022	23 Mar 2022	10 Dec 2021
Machine Age	hrs	Client Info		275209	26977	26542
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	19	20	6
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>10	3	2	1
Lead	ppm	ASTM D5185m	>10	1	2	<1
Copper	ppm	ASTM D5185m	>75	16	16	9
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

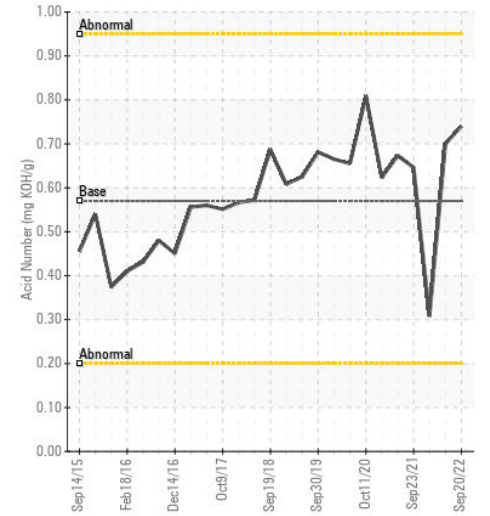
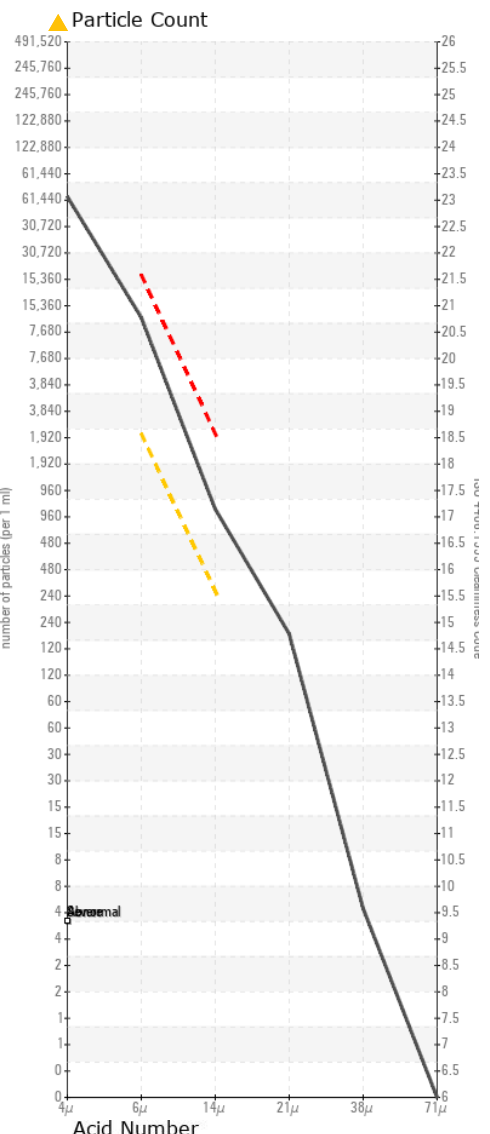
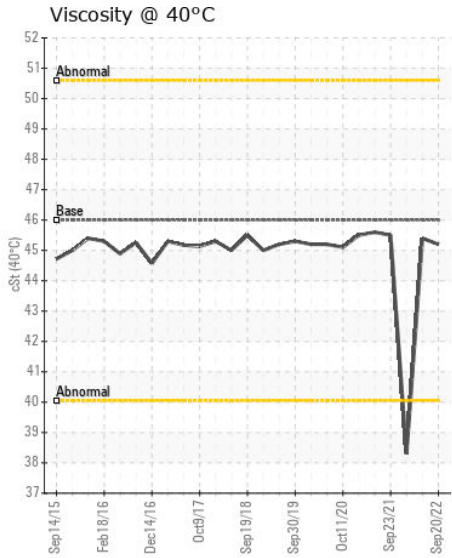
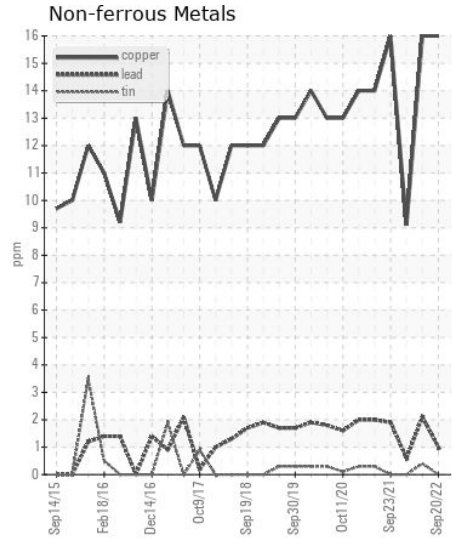
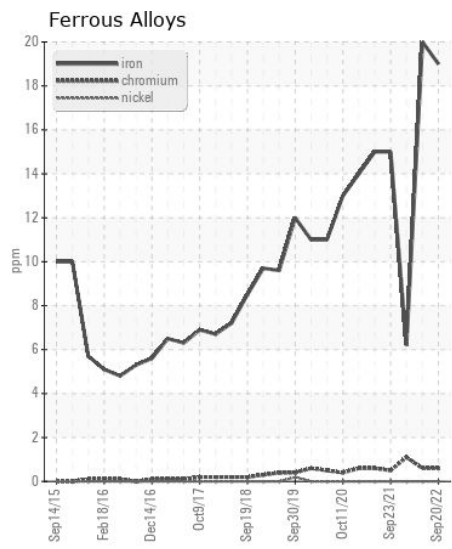
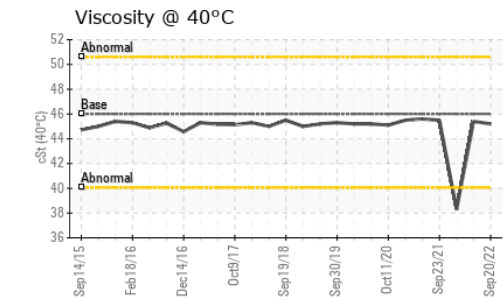
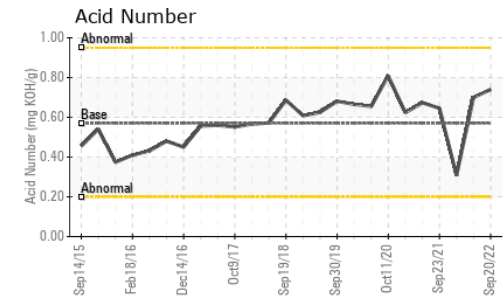
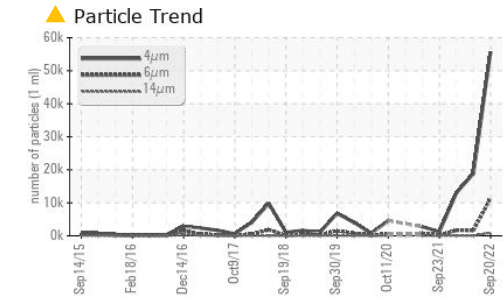
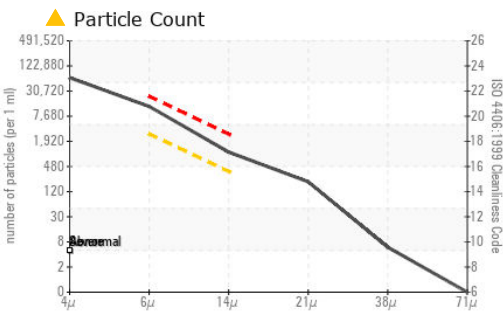
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	0	2	3
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		55680	18897	13060
Particles >6µm		ASTM D7647	>2500	▲ 11445	1618	1663
Particles >14µm		ASTM D7647	>320	▲ 932	43	69
Particles >21µm		ASTM D7647	>80	▲ 182	11	22
Particles >38µm		ASTM D7647	>20	5	0	2
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15	▲ 21/17	21/18/13	21/18/13
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

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

Sodium	ppm	ASTM D5185m		6	<1	1
Boron	ppm	ASTM D5185m	5	0	<1	3
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	25	33	35	13
Calcium	ppm	ASTM D5185m	200	39	28	121
Phosphorus	ppm	ASTM D5185m	300	294	294	318
Zinc	ppm	ASTM D5185m	370	325	343	343
Sulfur	ppm	ASTM D5185m	2500	4872	3687	1765
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.74	0.70	0.308
Visc @ 40°C	cSt	ASTM D445	46	45.2	45.4	38.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0003256
Lab Number : 05662282
Unique Number : 10166851
Test Package : MOB 2
Received : 10 Oct 2022
Tested : 11 Oct 2022
Diagnosed : 12 Oct 2022 - Jonathan Hester

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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)