



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
BACKHUS WT-4
 Component
Hydraulic System
 Fluid
ESSO NUTO H ISO 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001304	VCP393446	VCP341185
Sample Date		Client Info		11 Jul 2024	18 Sep 2023	12 Jun 2023
Machine Age	hrs	Client Info		2228	1982	1736
Oil Age	hrs	Client Info		246	990	736
Filter Age	hrs	Client Info		246	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	20	25	24
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	3	<1
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	4	7	6
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

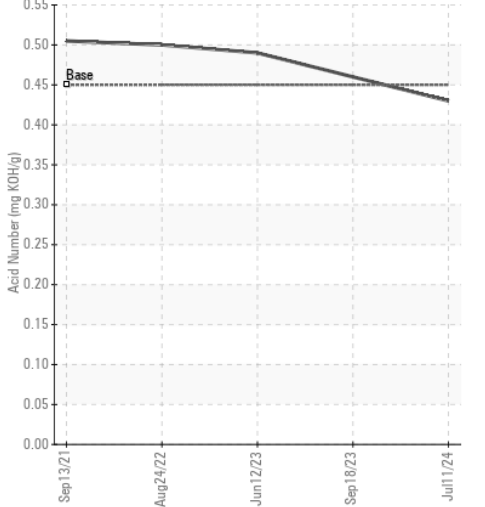
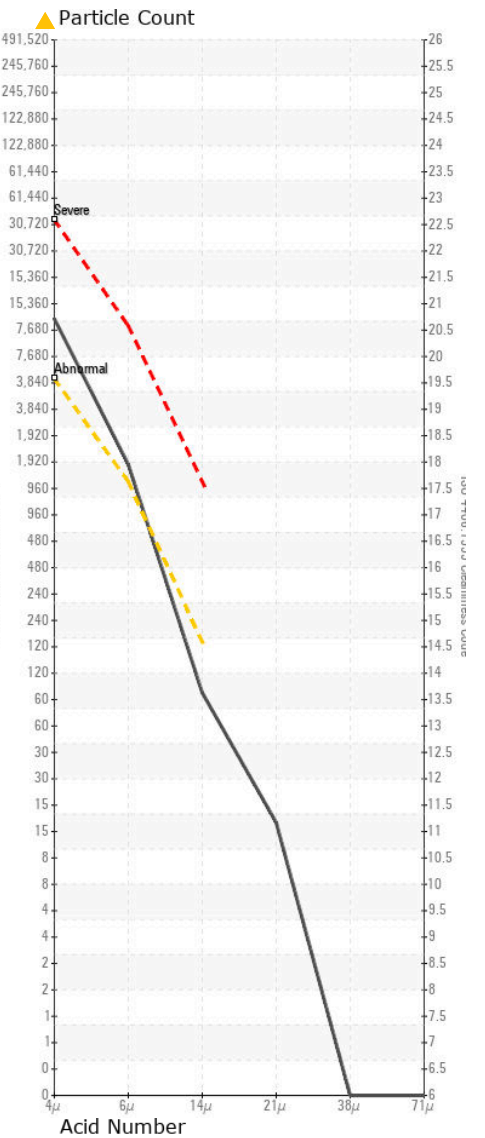
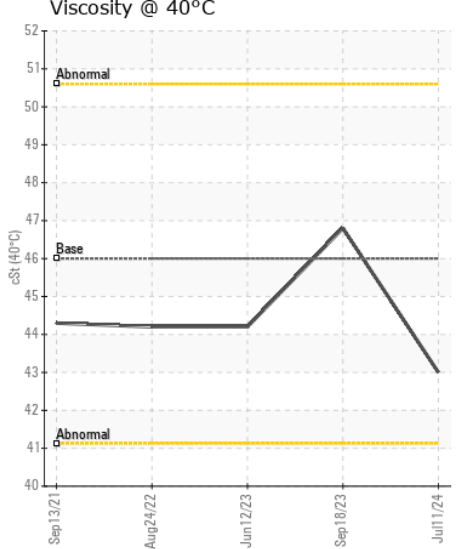
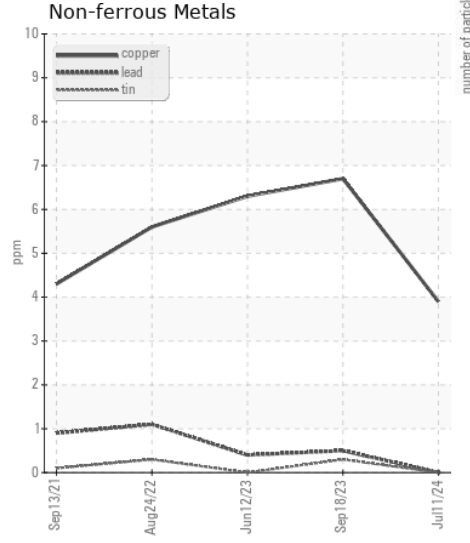
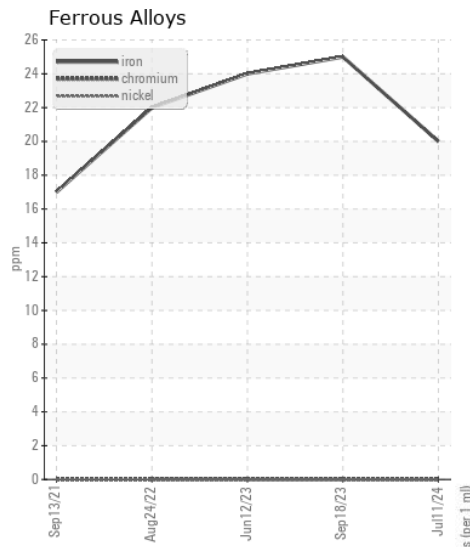
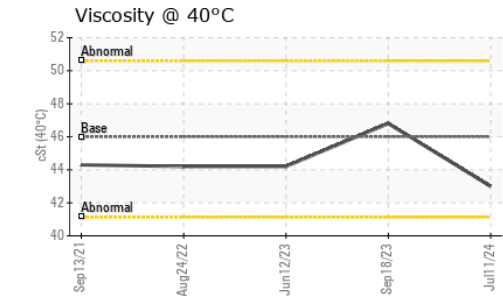
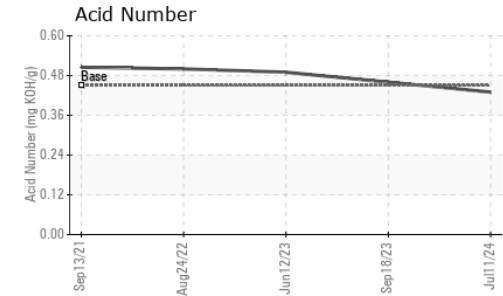
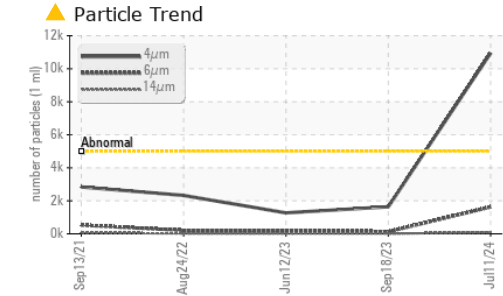
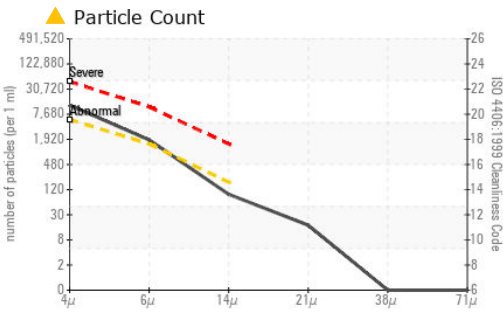
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	2
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 10950	1637	1269
Particles >6µm		ASTM D7647	>1300	● 1629	131	203
Particles >14µm		ASTM D7647	>160	82	10	15
Particles >21µm		ASTM D7647	>40	15	3	5
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/18/14	18/14/10	17/15/11
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		1	<1	<1
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	24	40	48
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	5	4	2	<1
Calcium	ppm	ASTM D5185m	50	67	57	65
Phosphorus	ppm	ASTM D5185m	330	384	398	422
Zinc	ppm	ASTM D5185m	410	444	441	477
Sulfur	ppm	ASTM D5185m	2700	4893	2953	3583
Acid Number (AN)	mg KOH/g	ASTM D8045	0.45	0.43	0.46	0.49
Visc @ 40°C	cSt	ASTM D445	46	43.0	46.8	44.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : ML0001304
 Lab Number : 06237678
 Unique Number : 11126512
 Test Package : CONST

Received : 16 Jul 2024
 Tested : 17 Jul 2024
 Diagnosed : 18 Jul 2024 - Don Baldrige

MARYLAND ENVIRONMENTAL SERVICES
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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)