

Machine Id
FALK VAC-PAN-2

Component
Gearbox

Fluid
CASTROL AP GEAR LUBRICANT 85W140 (10 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. 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 high amount of particulates present in the oil.

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	ST43249	ST40737	ST44324
Sample Date	Client Info	03 Apr 2024	13 Apr 2023	20 Apr 2022
Machine Age	mths Client Info	0	0	0
Oil Age	mths Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >200	49	19	72
Chromium	ppm ASTM D5185m >15	0	0	<1
Nickel	ppm ASTM D5185m >15	0	<1	<1
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	<1
Aluminum	ppm ASTM D5185m >25	0	<1	2
Lead	ppm ASTM D5185m >100	0	0	<1
Copper	ppm ASTM D5185m >200	0	<1	<1
Tin	ppm ASTM D5185m >25	0	0	0
Antimony	ppm ASTM D5185m >5	---	---	---
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	33	14	55
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	4	4	7
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	0	4	2
Calcium	ppm ASTM D5185m	13	16	39
Phosphorus	ppm ASTM D5185m	291	538	517
Zinc	ppm ASTM D5185m	7	32	35
Sulfur	ppm ASTM D5185m	13261	23694	19810

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	4	<1	2
Sodium	ppm ASTM D5185m	1	<1	<1
Potassium	ppm ASTM D5185m >20	0	1	3
Water	% ASTM D6304 >0.2	0.001	0.009	0.004
ppm Water	ppm ASTM D6304 >2000	12	95.9	45.8

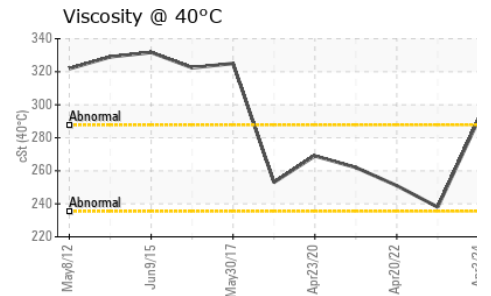
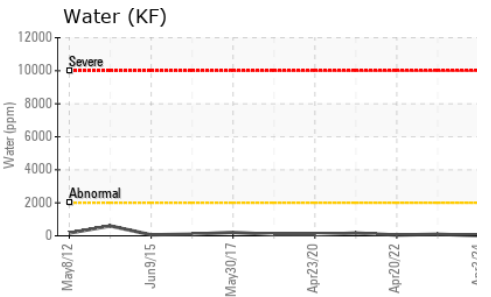
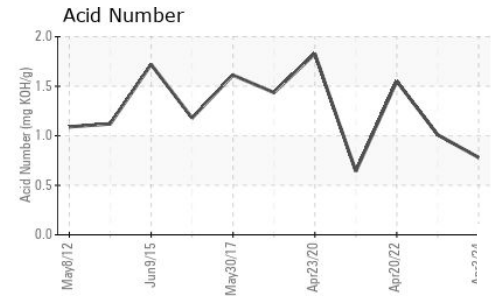
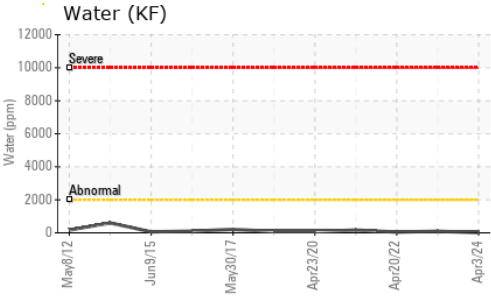
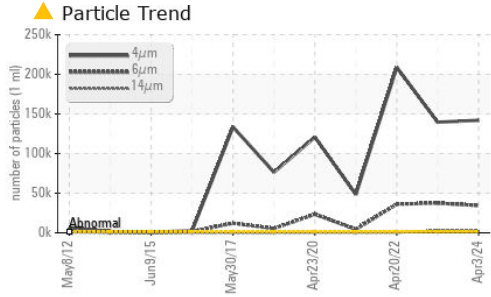
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	▲ 141990	▲ 139526	▲ 208697
Particles >6µm	ASTM D7647 >320	▲ 34531	▲ 37421	▲ 36116
Particles >14µm	ASTM D7647 >80	▲ 2364	▲ 3038	▲ 184
Particles >21µm	ASTM D7647 >20	▲ 874	▲ 967	16
Particles >38µm	ASTM D7647 >4	▲ 86	▲ 138	0
Particles >71µm	ASTM D7647 >3	▲ 8	▲ 8	0
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ 24/22/18	▲ 24/22/19	▲ 25/22/15

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.78	1.01	1.55

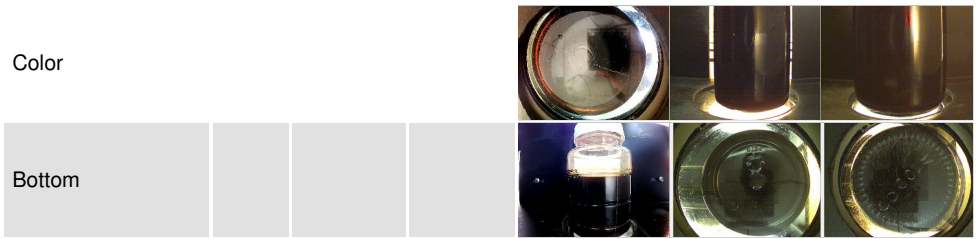
OIL ANALYSIS REPORT



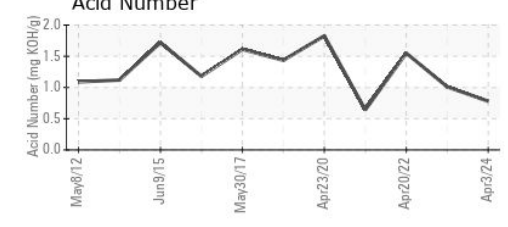
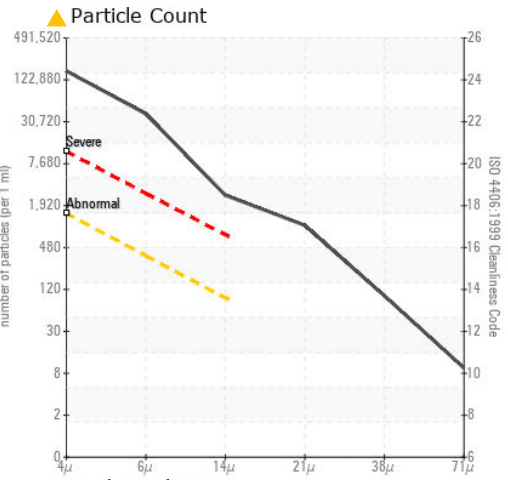
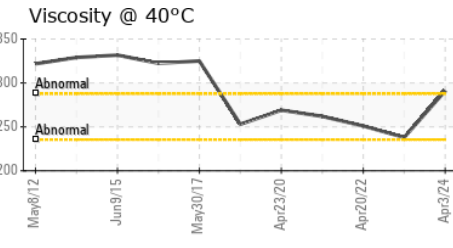
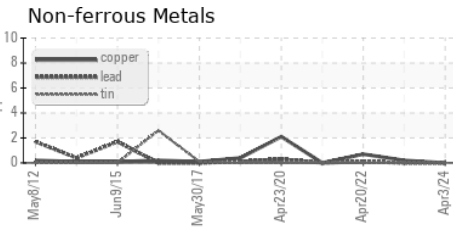
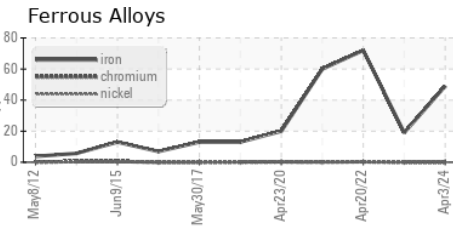
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	291	238	251

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST43249
Lab Number : 06143076
Unique Number : 10967884
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 09 Apr 2024
Tested : 10 Apr 2024
Diagnosed : 11 Apr 2024 - Jonathan Hester

HYDRAULIC SUPPLY COMPANY
 326 SE 1ST ST
 BELLE GLADE, FL
 US 33430

Contact: ROBERT RETALEATO
 r.retaleato@hydraulic-supply.com; rsr@hydraulic-supply.com
 T: (561)996-4431
 F: (561)996-8531