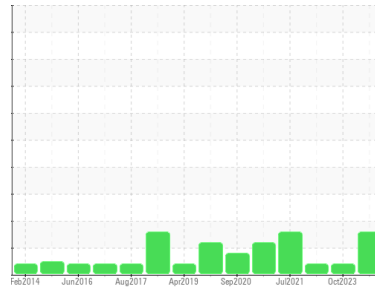




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area

ENGINE ROOM

Machine Id

SOUTH MYCOM HS-1 (S/N 2536124)

Component

Refrigeration Compressor

Fluid

SUMMIT RAB 68 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The oil viscosity is higher than normal. Confirmed. The AN level is acceptable for this fluid. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0006346	USP0003416	USP238599
Sample Date	Client Info		06 Apr 2024	28 Oct 2023	22 Nov 2021
Machine Age	hrs	Client Info	0	0	5294
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 >8	0	<1	1
Chromium	ppm	ASTM D5185m >2	0	<1	0
Nickel	ppm	ASTM D5185m	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	<1	0	<1
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	2	<1	0
Tin	ppm	ASTM D5185m >4	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

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	0
Manganese	ppm	ASTM D5185m	1	0	0
Magnesium	ppm	ASTM D5185m	<1	0	0
Calcium	ppm	ASTM D5185m	<1	0	0
Phosphorus	ppm	ASTM D5185m	0	0	0
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	1	0	78

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	0	0
Sodium	ppm	ASTM D5185m	2	0	0
Potassium	ppm	ASTM D5185m >20	1	0	0
Water	%	ASTM D6304 >0.01	0.003	0.002	0.001
ppm Water	ppm	ASTM D6304 >100	26	24.7	0.00

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 56408	5588	9258
Particles >6µm	ASTM D7647	>2500	▲ 14878	1375	1638
Particles >14µm	ASTM D7647	>320	248	44	52
Particles >21µm	ASTM D7647	>80	27	6	8
Particles >38µm	ASTM D7647	>20	0	0	0
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/21/15	20/18/13	20/18/13

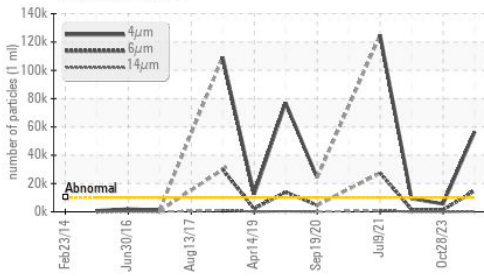
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.014	0.014	0.014

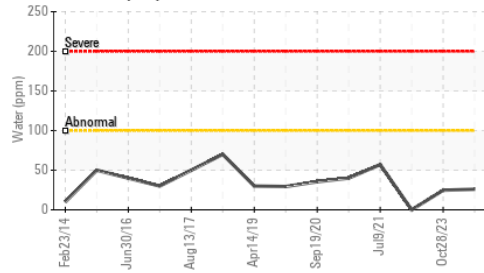


OIL ANALYSIS REPORT

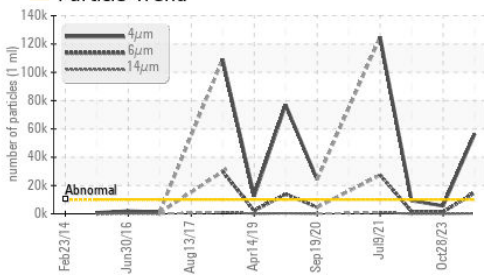
Particle Trend



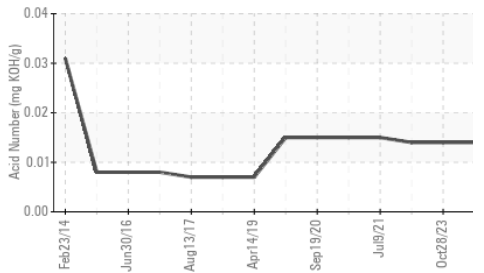
Water (KF)



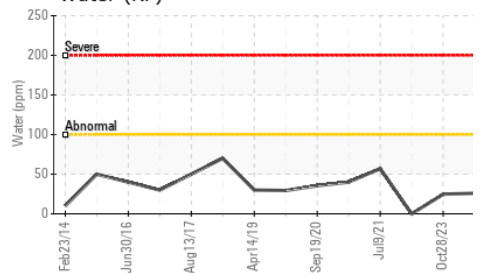
Particle Trend



Acid Number



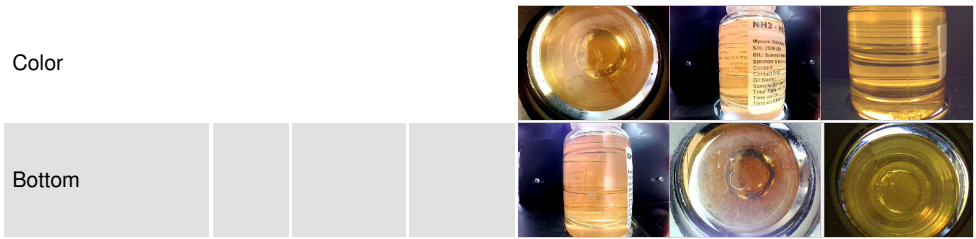
Water (KF)



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	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

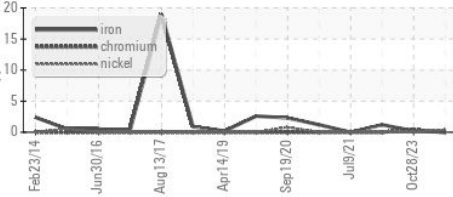
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	▲ 88.3	▲ 99.07	▲ 86.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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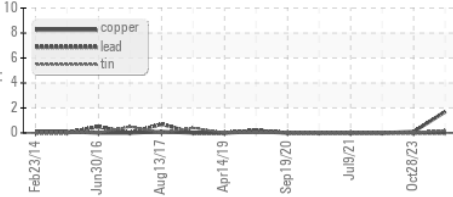


GRAPHS

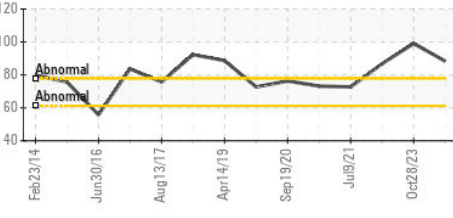
Ferrous Alloys



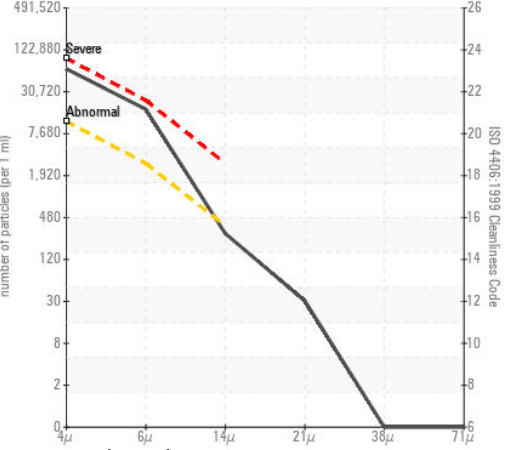
Non-ferrous Metals



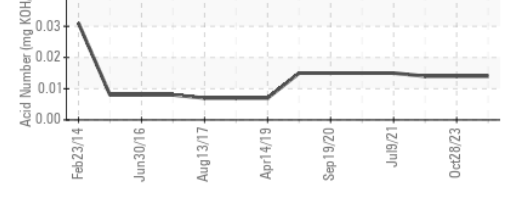
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0006346 **Received** : 16 Apr 2024
Lab Number : 06150474 **Tested** : 17 Apr 2024
Unique Number : 10980552 **Diagnosed** : 17 Apr 2024 - Doug Bogart
Test Package : IND 2

FARMLAND FOODS INC - SMITHFIELD
 MONMOUTH, IL
 US
 Contact:

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)