

# **OIL ANALYSIS REPORT**

### Sample Rating Trend



**NORMAL** 



# **ENGINE ROOM** C-4 (S/N 056-R02761)

Refrigeration Compressor **USPI 1009-68 SC (40 GAL)** 

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### **Fluid Condition**

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

52015 Jul2016 Jul2017 Sep2018 Oct2019 Oct2020 Feb2022 Jun22023						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0011357	USP0005729	USP0001687
Sample Date		Client Info		08 May 2024	17 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info		49465	47890	45689
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<1	<1	<1
Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Nickel	ppm	ASTM D5185m		0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	0
Lead	ppm	ASTM D5185m	>2	<1	1	0
Copper	ppm	ASTM D5185m	>8	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		0	1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		<1	0	0
Phosphorus	ppm	ASTM D5185m		1	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	0	10
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	1	1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Water	%	ASTM D6304	>0.01	0.004	0.003	0.002
ppm Water	ppm	ASTM D6304	>100	46	35	21.5
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	4268	3011	3838
Particles >6µm		ASTM D7647	>2500	632	545	991
Particles >14μm		ASTM D7647	>320	24	27	49
Particles >21µm		ASTM D7647	>80	3	7	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	19/16/12	19/16/12	19/17/13
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
A alial Niversia au (ANI)	I/OII/-	ACTM DOZA	0.005	0.014	0.014	0.014

Acid Number (AN)

0.014

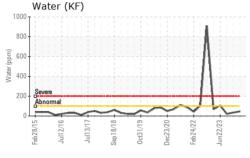
0.014

mg KOH/g ASTM D974 0.005

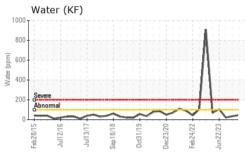
0.014

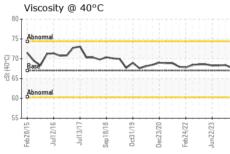


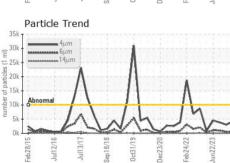
## **OIL ANALYSIS REPORT**

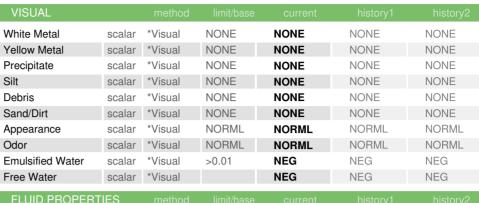


Par 35k T	ticle T	rend				170770		
30k -	4µ	m		1				
= 25k + ***** 20k + *****		A.		Λ				
25k -	ormal	/\		1		1		
10k - 6	Jima		١.	11		12	1_	•
Ok Line	91		Š	<u></u>	V <sub>S</sub>	22	V <sub>2</sub>	
Feb28/	Jul12/	Jul13/	Sep18/18	0ct31/	Dec23/20	Feb24/	Jun22/23	









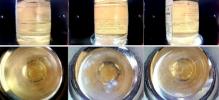
Visc @ 40°C	cSt	ASTM D445	67	67.7	68.4	68.3

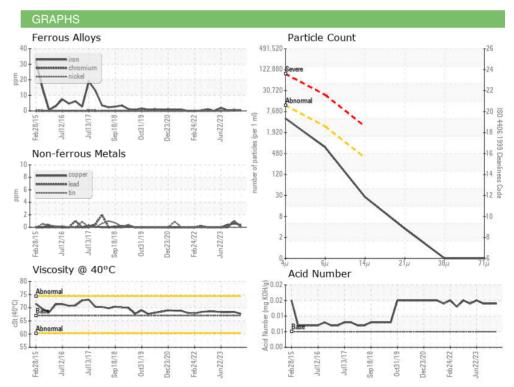
SAMPLE	IMAGES

Color

**Bottom** 











Certificate 12367

Laboratory Sample No.

Lab Number : 06175527 Unique Number : 11021580

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : USP0011357 Received : 10 May 2024

**Tested** : 13 May 2024 Diagnosed : 13 May 2024 - Doug Bogart **SMITHFIELD FOODS - GRAYSON** 

800 C W STEVENS BLVD GRAYSON, KY US 41143

Contact:

T:

F:

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)