

OIL ANALYSIS REPORT

Area Slaughter Machine Io TYSDCS 4FES (S/N 930213)

Component Refrigeration Compressor Fluid

USPI 1009-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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.



Sample Rating Trend



NORMAL

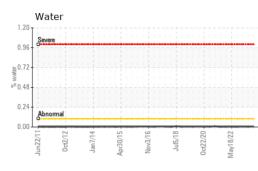
n2011 Oct2012 Jan2014 Apr2015 Nov2016 Jul2018 Oct2020 May2022

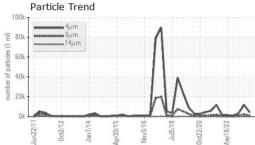
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP248953	USP245608	USP219462
Sample Date		Client Info		12 Jul 2023	13 Apr 2023	04 Jan 2023
Machine Age	hrs	Client Info		62381	61012	59694
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	1	1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	0	0	0
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	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		0	<1	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	<1	0
Phosphorus	ppm	ASTM D5185m		<1	0	1
Zinc	ppm	ASTM D5185m		0	<1	<1
Sulfur	ppm	ASTM D5185m	50	31	30	22
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	<1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.1	0.005	0.003	0.005
ppm Water	ppm	ASTM D6304	>1000	54.5	31.6	53.1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		4278	11676	3347
Particles >6µm		ASTM D7647		907	2154	719
Particles >14µm		ASTM D7647	>320	40	32	29
Particles >21µm		ASTM D7647		9	7	8
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	19/17/12	21/18/12	19/17/12
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.005	0.015	0.013	0.015

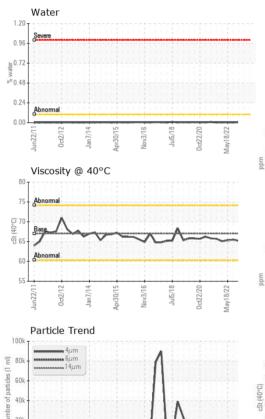
Contact/Location: RICHARD KOCH - IBPDAK01



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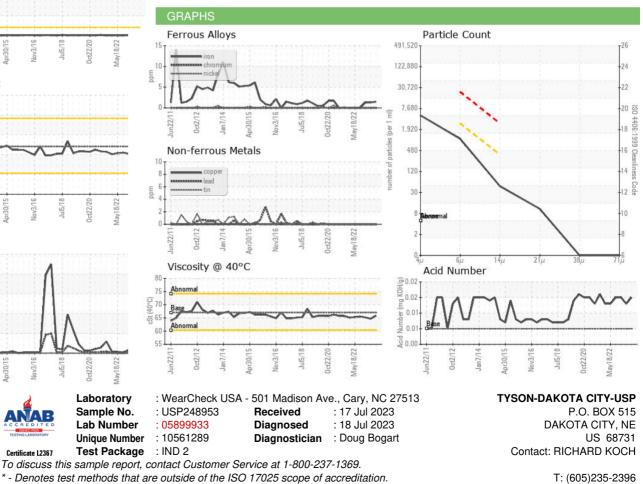
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	65.8	64.7	65.2
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				MHA MAREN ARE US AN ARE US AN AREA AREA AREA AREA AREA AREA AREA AR		

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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