

## **OIL ANALYSIS REPORT**

# **SLAUGHTER** FES TYSAMAS 7 FES (S/N K523/NB)

## Component **Refrigeration Compressor** USPI 1009-68 SC (--- GAL)

### Recommendation

This is a baseline FTIR on the submitted sample. Ester content estimated at 1.0%.





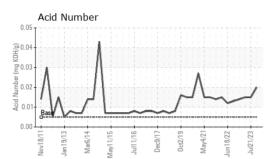
## 

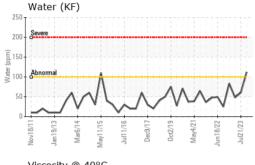
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0003548	USP0003554	USP0001045
Sample Date		Client Info		15 Nov 2023	14 Nov 2023	21 Jul 2023
Machine Age	hrs	Client Info		11754	11754	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8		11	13
Chromium	ppm	ASTM D5185m	>2		<1	<1
Nickel	ppm	ASTM D5185m			0	6
Titanium	ppm	ASTM D5185m			0	0
Silver	ppm	ASTM D5185m	>2		0	0
Aluminum	ppm	ASTM D5185m	>3		1	0
Lead	ppm	ASTM D5185m	>2		0	<1
Copper	ppm	ASTM D5185m	>8		<1	<1
Tin	ppm	ASTM D5185m	>4		0	0
Vanadium	ppm	ASTM D5185m			0	0
Cadmium	ppm	ASTM D5185m			0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m			0	0
Barium	ppm	ASTM D5185m			0	0
Molybdenum	ppm	ASTM D5185m			0	0
Manganese	ppm	ASTM D5185m			0	0
Magnesium	ppm	ASTM D5185m			<1	<1
Calcium	ppm	ASTM D5185m			2	2
Phosphorus	ppm	ASTM D5185m			0	0
Zinc	ppm	ASTM D5185m			0	0
Sulfur	ppm	ASTM D5185m	50		11	29
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15		1	1
Sodium	ppm	ASTM D5185m			0	0
Potassium	ppm	ASTM D5185m	>20		<1	<1
Water	%	ASTM D6304	>0.01	NEG	0.011	0.006
ppm Water	ppm	ASTM D6304	>100		112	60.7
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0		
Nitration	Abs/cm	*ASTM D7624		2.4		
Sulfation	Abs/.1mm	*ASTM D7415		30.4		

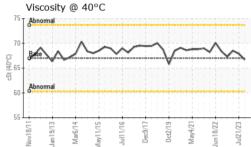
### Sample Rating Trend



# **OIL ANALYSIS REPORT**

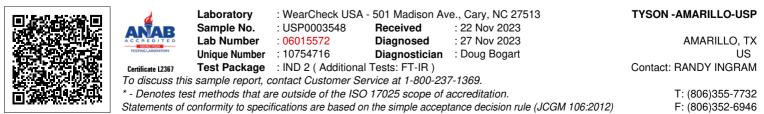






FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			91107	60559
Particles >6µm		ASTM D7647	>2500		<b>9</b> 942	<b>6678</b>
Particles >14µm		ASTM D7647	>320		285	244
Particles >21µm		ASTM D7647	>80		52	45
Particles >38µm		ASTM D7647	>20		1	0
Particles >71µm		ASTM D7647	>4		0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15		▲ 24/20/15	<b>2</b> 3/20/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		8.9		
Acid Number (AN)	mg KOH/g	ASTM D974	0.005		0.02	0.015
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67		66.7	67.9
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color						
					1 BAN	

Bottom



Contact/Location: RANDY INGRAM - TYSAMA