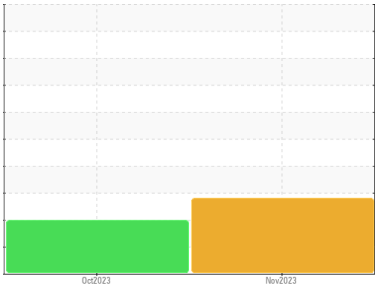
PROBLEM SUMMARY

Sample Rating Trend

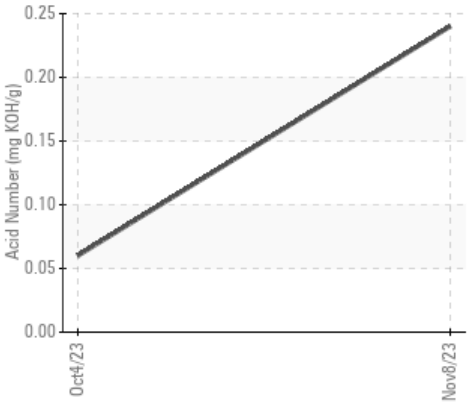


DEGRADATION

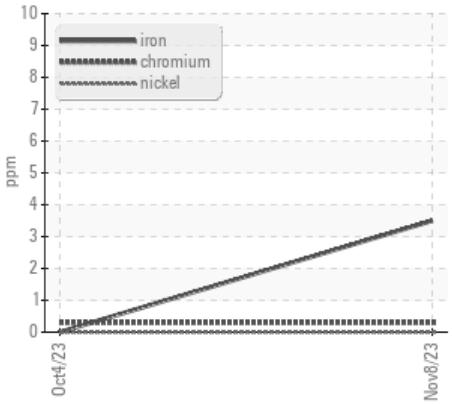
Machine Id
C-1 (S/N 2023074)
Component
Refrigeration Compressor
Fluid
20382 USPI FG CLT 68 FLUID (100 GAL)

COMPONENT CONDITION SUMMARY

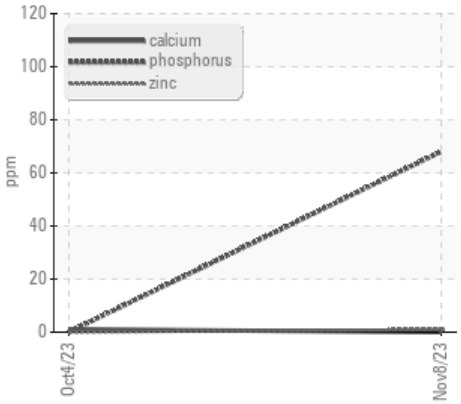
Acid Number



Ferrous Alloys



Additives



RECOMMENDATION

We advise an early resample to confirm this situation.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ABNORMAL	---
Iron	ppm	ASTM D5185m	>8	▲ **4**	0	---
Phosphorus	ppm	ASTM D5185m		▲ **68**	0	---
Sulfur	ppm	ASTM D5185m		▲ **56**	0	---
Acid Number (AN)	mg KOH/g	ASTM D974		▲ **0.24**	0.06	---

Customer Id: POESAI
Sample No.: USPM27102
Lab Number: 06015182
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We advise an early resample to confirm this situation.

HISTORICAL DIAGNOSIS

04 Oct 2023 Diag: Doug Bogart

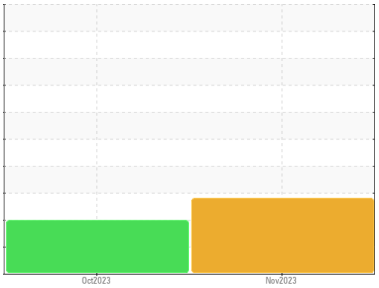
WATER

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Confirmed. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
C-1 (S/N 2023074)
Component
Refrigeration Compressor
Fluid
20382 USPI FG CLT 68 FLUID (100 GAL)

DIAGNOSIS

Recommendation
We advise an early resample to confirm this situation.

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
Additive levels indicate the addition of a different brand or type of oil. The AN level is at the top-end of the recommended limit. Confirmed.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM27102**	USPM27101	---
Sample Date		Client Info		**08 Nov 2023**	04 Oct 2023	---
Machine Age	mths	Client Info		**0**	0	---
Oil Age	mths	Client Info		**1**	12	---
Oil Changed		Client Info		**N/A**	Changed	---
Sample Status				**ATTENTION**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	▲ **4**	0	---
Chromium	ppm	ASTM D5185m	>2	**<1**	<1	---
Nickel	ppm	ASTM D5185m		**0**	0	---
Titanium	ppm	ASTM D5185m		**0**	0	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>3	**0**	0	---
Lead	ppm	ASTM D5185m	>2	**0**	0	---
Copper	ppm	ASTM D5185m	>8	**0**	0	---
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**	<1	---
Magnesium	ppm	ASTM D5185m		**0**	0	---
Calcium	ppm	ASTM D5185m		**0**	1	---
Phosphorus	ppm	ASTM D5185m		▲ **68**	0	---
Zinc	ppm	ASTM D5185m		**1**	0	---
Sulfur	ppm	ASTM D5185m		▲ **56**	0	---

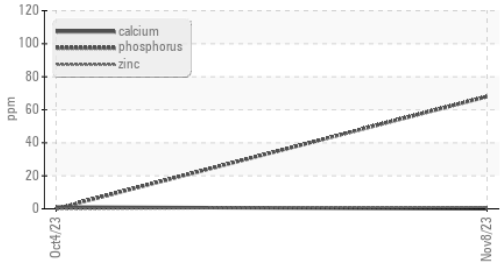
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**0**	0	---
Sodium	ppm	ASTM D5185m		**<1**	0	---
Potassium	ppm	ASTM D5185m	>20	**0**	0	---
Water	%	ASTM D6304	>0.01	**0.003**	▲ 0.037	---
ppm Water	ppm	ASTM D6304	>100	**39**	▲ 371	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**592**	---	---
Particles >6µm		ASTM D7647	>2500	**144**	---	---
Particles >14µm		ASTM D7647	>320	**12**	---	---
Particles >21µm		ASTM D7647	>80	**4**	---	---
Particles >38µm		ASTM D7647	>20	**1**	---	---
Particles >71µm		ASTM D7647	>4	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**16/14/11**	---	---

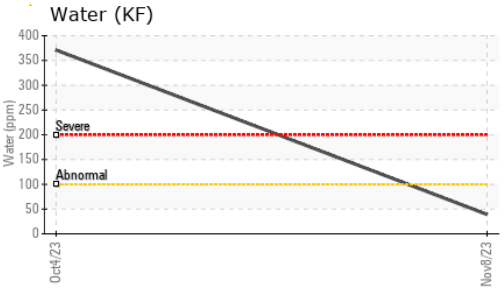
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		▲ **0.24**	0.06	---

OIL ANALYSIS REPORT

Additives

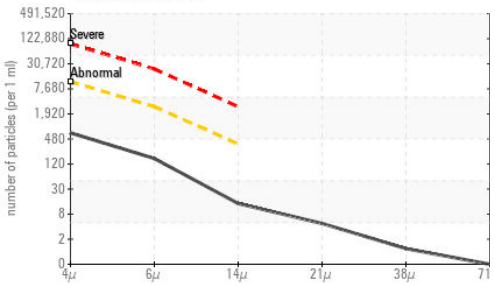


Water (KF)

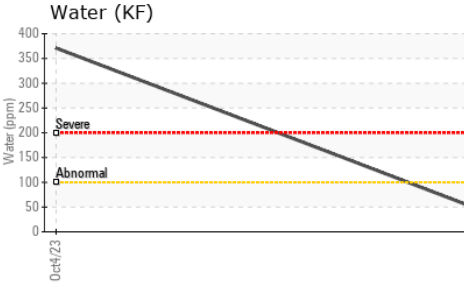


Particle Trend

Particle Count

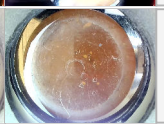


Water (KF)



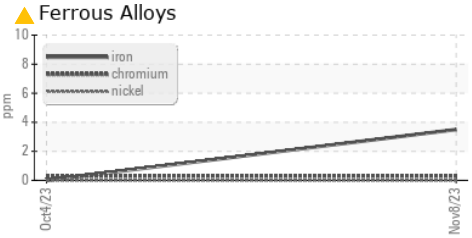
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	---
Sand/Dirt	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		**65.8**	64.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

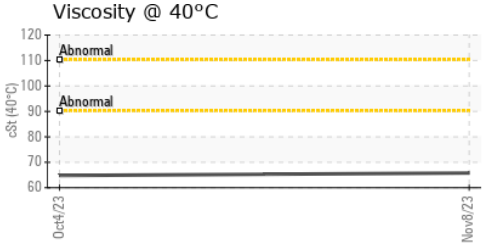
GRAPHS

Ferrous Alloys

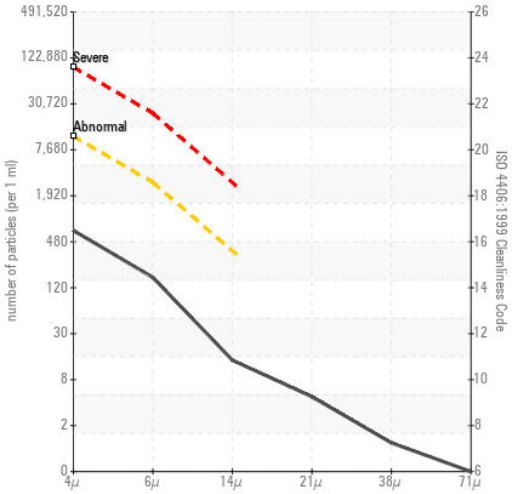


Non-ferrous Metals

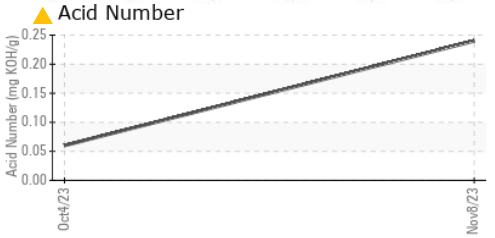
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM27102
Lab Number : 06015182
Unique Number : 10754326
Test Package : IND 2

Received : 22 Nov 2023
Diagnosed : 28 Nov 2023
Diagnostician : Doug Bogart

POET PURE - ST JOSEPH MO
2811 S 11TH ST
SAINT JOSEPH, MO
US 64503
Contact: Service Manager
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)