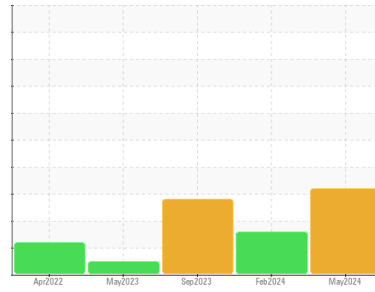




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
1300 (S/N AII385392)
 Component
Air Compressor
 Fluid
USPI AIR 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is approaching the top-end of the recommended limit.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USPM36407	USPM30318	USPM29801
Sample Date	Client Info		29 May 2024	28 Feb 2024	25 Sep 2023
Machine Age	hrs	Client Info	0	0	23808
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 >70	2	<1	1
Chromium	ppm	ASTM D5185m >15	<1	0	0
Nickel	ppm	ASTM D5185m >6	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	1	0
Lead	ppm	ASTM D5185m >20	<1	<1	0
Copper	ppm	ASTM D5185m >80	2	1	2
Tin	ppm	ASTM D5185m >15	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	<1
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 0	<1	0	0
Calcium	ppm	ASTM D5185m 0	0	0	8
Phosphorus	ppm	ASTM D5185m 1	6	7	14
Zinc	ppm	ASTM D5185m 0	8	7	25
Sulfur	ppm	ASTM D5185m 0	0	13	40

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >12	<1	<1	<1
Sodium	ppm	ASTM D5185m	<1	<1	<1
Potassium	ppm	ASTM D5185m >20	2	<1	0
Water	%	ASTM D6304 >0.2	0.048	0.030	0.031
ppm Water	ppm	ASTM D6304 >2000	480	304	310.5

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 23654	---	9661
Particles >6µm	ASTM D7647	>2500	▲ 12120	---	● 4337
Particles >14µm	ASTM D7647	>320	▲ 2190	---	▲ 1036
Particles >21µm	ASTM D7647	>80	▲ 403	---	▲ 264
Particles >38µm	ASTM D7647	>20	13	---	8
Particles >71µm	ASTM D7647	>4	1	---	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/21/18	---	▲ 20/19/17

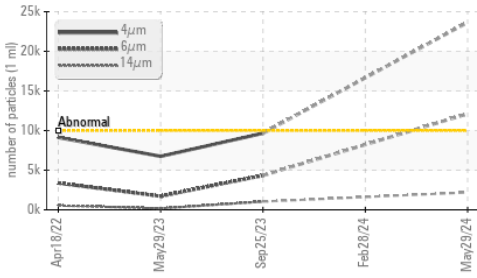
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	▲ 1.158	▲ 1.30	▲ 1.81

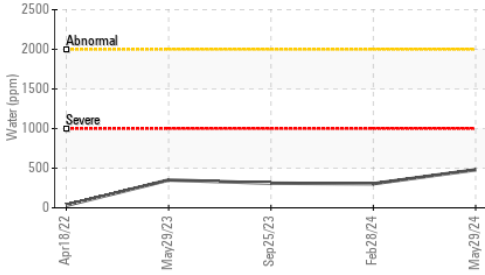


OIL ANALYSIS REPORT

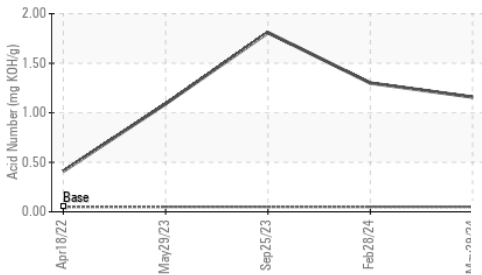
▲ Particle Trend



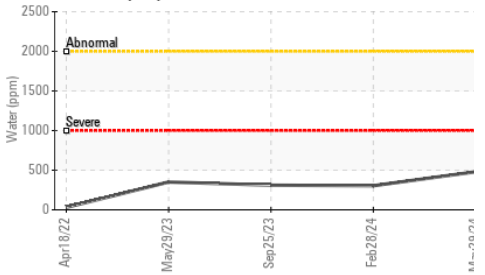
Water (KF)



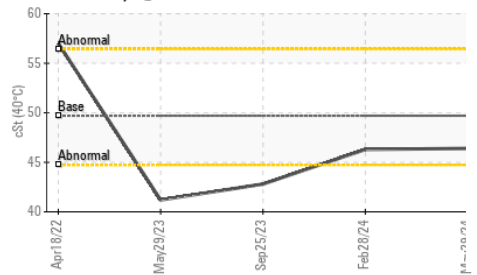
▲ Acid Number



Water (KF)



Viscosity @ 40°C

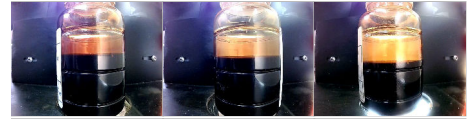


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

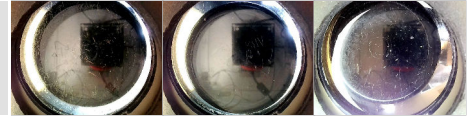
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49.7	46.4	46.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

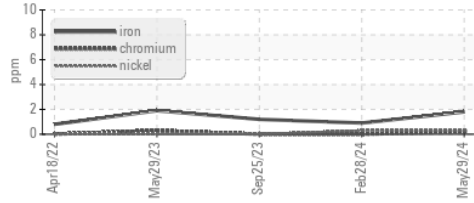


Bottom

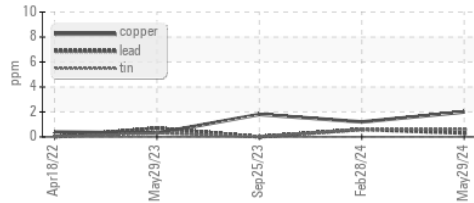


GRAPHS

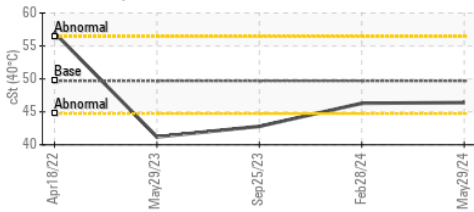
Ferrous Alloys



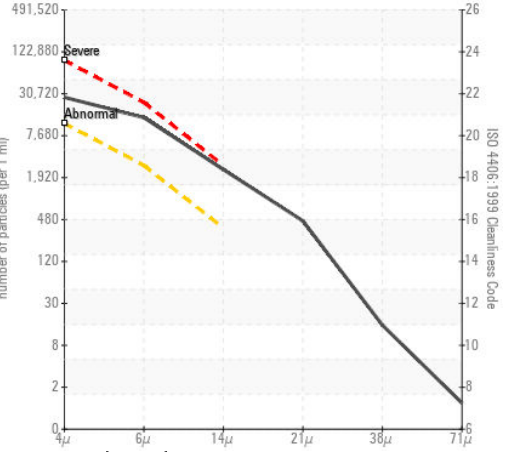
Non-ferrous Metals



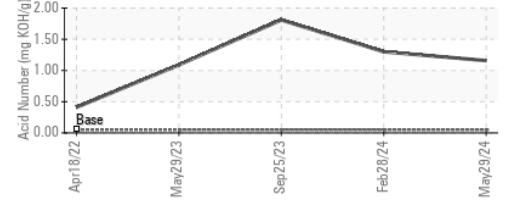
Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USPM36407
 Lab Number : 06198215
 Unique Number : 11060338
 Test Package : IND 2

Received : 03 Jun 2024
 Tested : 06 Jun 2024
 Diagnosed : 06 Jun 2024 - Doug Bogart

CARGILL FEED & NUTRITION - MILTON
 1425 E HIGH ST
 MILTON, WI
 US 53563

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)

Contact: Sean Bertrand
 sean_bertrand@cargill.com

T:
 F: