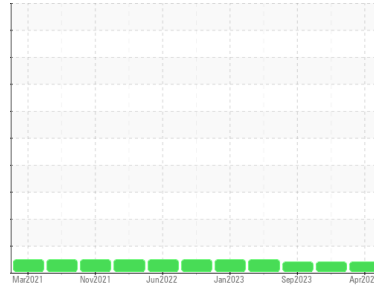




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
433 PELLET MILL
 Component
Gearbox
 Fluid
USPI FG GEAR 220 (35 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 oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USPM36839	USPM28053	USPM28054
Sample Date	Client Info		25 Apr 2024	27 Dec 2023	05 Sep 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	0	0	0
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	3	4	5
Copper	ppm	ASTM D5185m	>200	1	3	3
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
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	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	<1	0
Phosphorus	ppm	ASTM D5185m		558	562	577
Zinc	ppm	ASTM D5185m		0	<1	0
Sulfur	ppm	ASTM D5185m		879	854	1113

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	1	<1	1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.2	0.003	0.004	0.003
ppm Water	ppm	ASTM D6304	>2000	40	44	27.7

FLUID CLEANLINESS

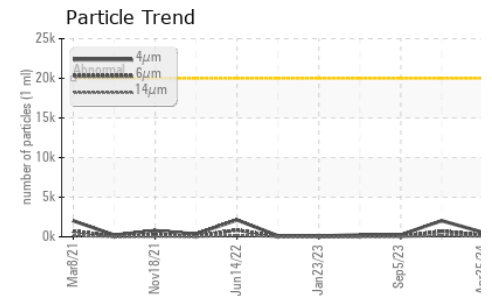
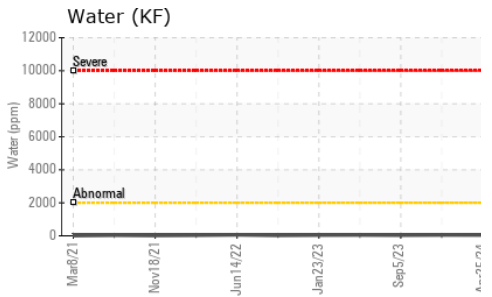
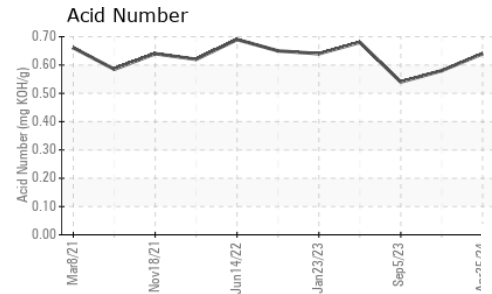
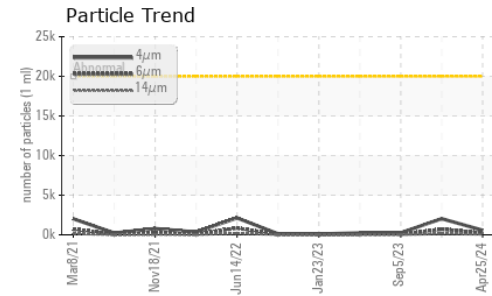
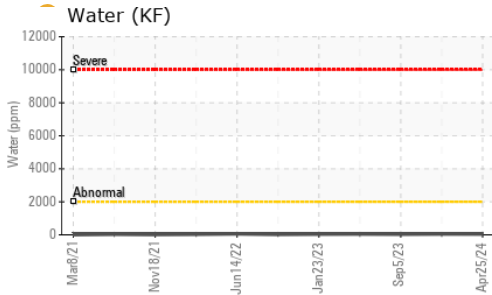
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	575	2036	254
Particles >6µm	ASTM D7647	>5000	195	714	78
Particles >14µm	ASTM D7647	>640	40	102	10
Particles >21µm	ASTM D7647	>160	14	41	5
Particles >38µm	ASTM D7647	>40	0	4	1
Particles >71µm	ASTM D7647	>10	0	1	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	16/15/12	18/17/14	15/13/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		0.64	0.58	0.54



OIL ANALYSIS REPORT



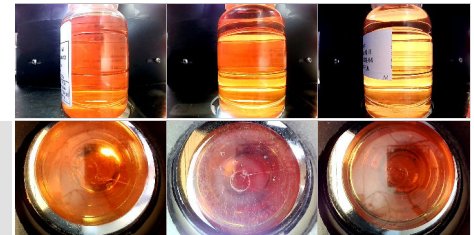
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	192	187	185

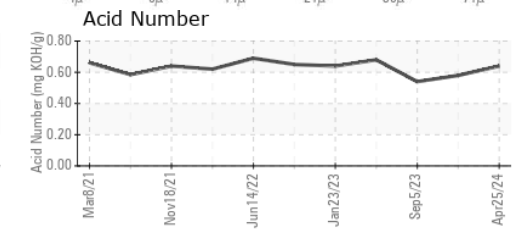
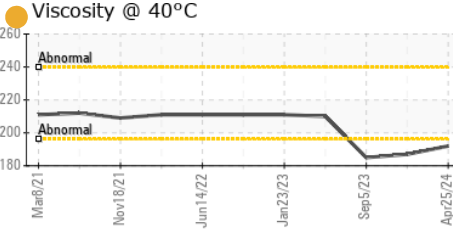
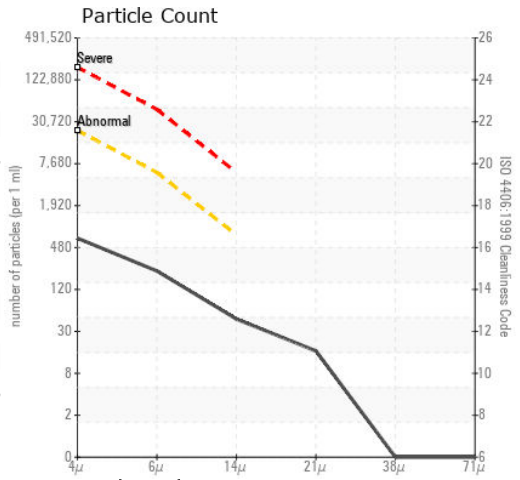
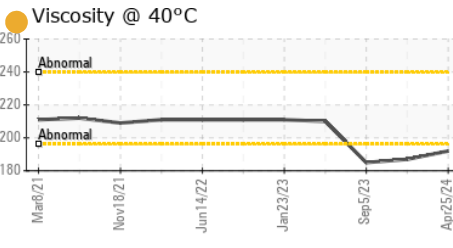
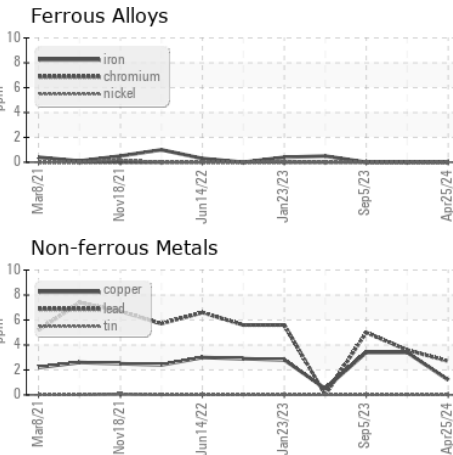
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USPM36839
 Lab Number : 06161475
 Unique Number : 10996898
 Test Package : IND 2

Received : 26 Apr 2024
 Tested : 30 Apr 2024
 Diagnosed : 30 Apr 2024 - Jonathan Hester

CARGILL ANIMAL NUTRITION - MOUNT JOY
 1088 E MAIN ST
 MT JOY, PA
 US 17552

Contact: SEAN BERTRAND
 Sean_Bertrand@cargill.com

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)

T:
F: